

Dear Loyal Customer:

First, thank you for purchasing the Zaurus K-PDA and welcome to the Zaurus family. We are sure you will soon find that your new assistant will change your life and the way you do business. We would briefly like to share with you our vision.

Your Zaurus exists today thanks to an incredible amount of effort and determination from our entire Zaurus team (not to mention numerous pots of black coffee). Our team at Sharp has a dream to change the way we all do business. As a business person, you already know that access to information and people anytime, anywhere is the key to gaining a competitive edge in this fast-paced information age. We feel Zaurus is the tool that can deliver this to you. It is simple to use, has months of battery life, and fits in your pocket.

How did we come up with the idea for Zaurus? Many of us found that we were lugging around notebook computers to take notes, generate summaries, and report back to our office and clients. We also found that we had a lot of "down time" that could be put to better use; sitting on trains and planes, waiting for clients, and even in meetings. Now that we are using the Zaurus, we travel lighter, work smarter, and stay more in touch with our contacts and each other. Best of all, we have very little "down time" as our "Zauri" are always with us. Now you know why we say that "Zaurus means business anytime, anywhere".

We need your help to spread the word. Show a friend or someone at work how you use your Zaurus and what it can do for them. As more and more people start using the Zaurus, we can spend even more resources on developing new accessories, add-on software programs, and new versions of the Zaurus. Better yet, if you have a mobile staff or sales force that you would like to equip with Zauri, give us a call at 800-BE-SHARP. We'll show you how you can improve their efficiency and productivity as well as enable them to better keep in touch with their clients and each other.

Finally, let us know how you feel about your Zaurus. We look forward to getting letters from our users about how you use it and improvements you would like to see. We cannot promise to answer every letter, but you can be sure we read all of the suggestions you send us. We value feedback from our customers and try to incorporate as many requests as we can in our new products. Each of us takes an incredible amount of personal pride in our work and the Zaurus. We are all Zaurus users. We believe this makes a difference in the products we create. After using the Zaurus, we think you'll agree.

Thanks again for purchasing the Zaurus and sharing our dream. We look forward to shaping the future of the information age with you.

Sincerely,

The Z Team

Notices

- For any electronic memory device, data may be lost or altered under certain circumstances. Sharp strongly recommends that you keep separate written records of all important data.
- Sharp assumes no responsibility for data lost or altered as a result of improper use, repairs, defects, battery replacement/failures or any other cause.
- Sharp assumes no responsibility, directly or indirectly, for financial losses or claims from third parties resulting from the use of this product and any of its functions, such as stolen credit card numbers, loss or alteration of stored data, etc.
- Information provided in this manual is subject to change without notice.
- All company and/or product names are trademarks and/or registered trademarks of their respective holders.
- There are only two differences between the ZR-5700 and ZR-5800 models:
 - Memory capacity: ZR-5700 ... 1 MB
ZR-5800 ... 2 MB
 - Backlight: ZR-5700 ... Not supported
ZR-5800 ... Supported

- The display examples and keyboard illustrations used in this manual are taken from the ZR-5800, although they apply equally to both models.
- Unless otherwise specified, the information in this manual applies to both models.



The Zaurus will be referred to as the "unit" throughout this manual.

Check the contents

Please check the contents carefully. Your unit should come with the following:

- ZR-5700/ZR-5800 Main Unit
- Touch pen (installed)
- Operating batteries: LR6(AA) x 2
- Memory backup battery (installed): CR2032 x 1
- ZR-5700/ZR-5800 Operation Manual
- Spreadsheet and Communications Manual
- Registration Card

If there are problems with any of these contents, contact your Sharp dealer.

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Quick Start

This section should be read and all necessary operations performed before you start using your unit.

Important things to do

1. Complete and send in the registration card. This registers your purchase and allows us to notify you of new developments and products as they become available.
2. Read through this Quick Start section. It will quickly get you up and running. Refer to the rest of the manual for more details about particular operations.
3. If you have any particular questions about your unit, read through the list of commonly asked questions and answers. There is a good chance that any questions you have will be answered there.
4. When you need help with any operation, touch  at the left of the display. On-screen help is a topic-specific quick reference guide that explains features and their functions.

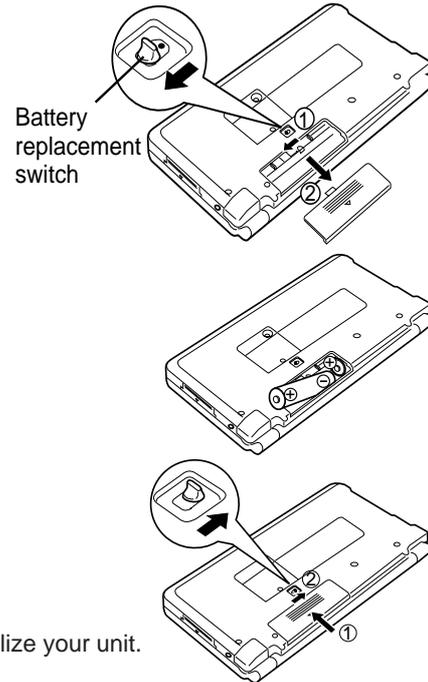
Installing the batteries

Before operation you will need to install the two operating batteries. The memory backup battery (CR2032) is installed at the factory and should last five years if operating batteries are replaced as required.

1. Set the battery replacement switch on the back to "REPLACE BATTERIES" (expose the red dot).
2. Slide the operating battery cover off.
3. Insert the two LR6(AA) operating batteries. Make sure the batteries are correctly aligned for polarity (+ and -).
4. Replace the operating battery cover.
5. Set the battery replacement switch to "NORMAL OPERATION".

On average, you can expect to get about two months of battery life. Actual battery life will vary depending on individual use.

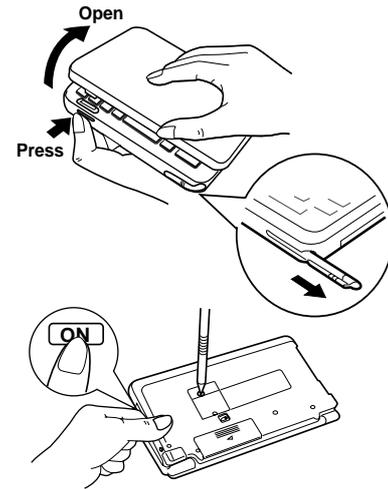
 If this is the first time you have installed batteries, you must also initialize your unit.



Initializing

Your unit must be initialized the first time it is used.

1. Press the lock button and open the display.
2. Remove the touch pen.
3. While holding down the **ON** key, push the RESET button on the back with the touch pen.
4. Touch **Yes** to initialize.
After initialization, the Start-up display appears.



Adjust LCD contrast

LCD contrast may sometimes need adjustment to suit certain lighting conditions.

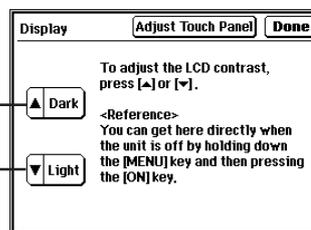
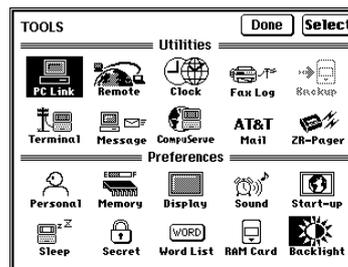
1. Touch  at the left of the display.

2. Touch  (under Preferences) twice.

3. To adjust LCD contrast, touch  or .

4. When you are satisfied with the setting, touch

.

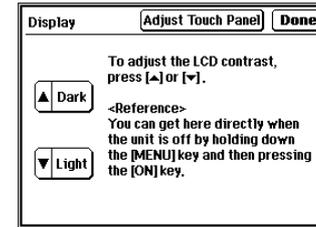


 If LCD contrast is too light or dark to see the display, you can adjust the contrast directly. Turn the unit off, hold down the  key and then press . Press  and  to adjust the contrast.

Adjusting the touch panel

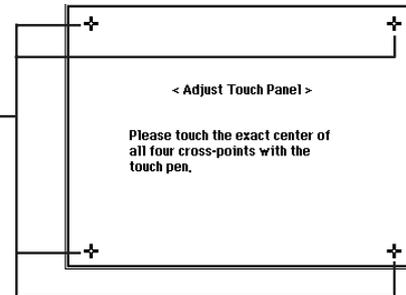
Each person holds a pen differently. The touch panel can be adjusted to respond correctly to your individual style of writing, drawing and selecting touch buttons.

1. Touch .
2. Touch  (under Preferences) twice.
3. Touch **Adjust Touch Panel**.
- ★ Press the **SPACE** key.



4. Touch the exact center of all four cross-points with the touch pen.

- As each cross-point is touched it will turn grey. When all four are touched, "Adjusted!" is displayed.
- If for some reason the adjustment fails, a "Sorry, please try again..." message is displayed. Touch the centers of all four cross-points again until "Adjusted!" is displayed.



Setting the time and date

For time-based functions to be effective, the built-in clock must be set to the correct Home City time and date.

1. Touch  and then touch  twice.
2. To select a different Home city, touch the Home City name.
New York, USA is the default Home City.
3. Select your city (if available) or a city in your time zone and then touch **Select**.

Use the scroll bars to see more cities.

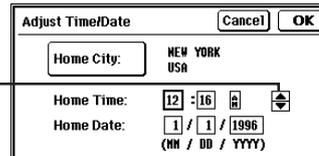
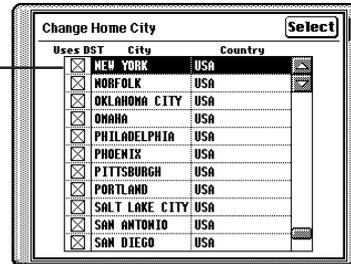
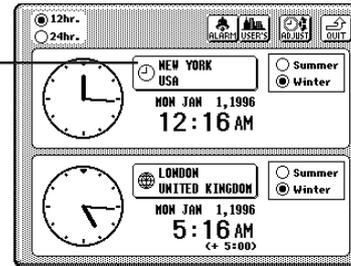
By default, all cities are set to observe daylight saving time (DST). If your city does not use DST, touch the check box to disable it.

4. Touch  to set the time and date for your Home City.

Touch each time/date field box and then use  to change the value.

Alternately, you can enter the values from the keyboard.

5. When you are finished touch **OK**.



Setting the start-up display

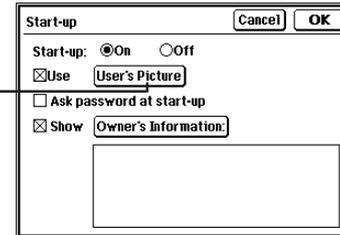
Each time the unit is turned on, it can display your name, telephone number and address on one of two graphic backgrounds.

1. Touch  and then touch  twice.

2. Select the required setting in each field.
Select User's Picture when you want to use your own original start-up picture.

For details, see p. 83.

3. Touch  to save your settings.



Start-up

Start-up: On Off

Use 

Ask password at start-up

Show 

Making your first entry

Your first entry will be a Contacts entry. The procedures described below can be used with other applications.

To make a new Contact 1 entry:

1. Touch  at the right of the display.
2. Touch  and select "New Business(1)".
"Business" is the default file name of Contact 1.

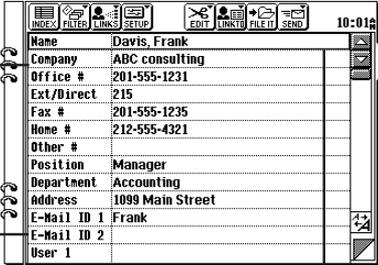
3. Enter a name.

- Select the Company field and enter a company name.
- Select the Address field and enter an address.

Touch a field name to select the field for data entry.

Dark outlines around a field indicate that it is selected.

4. When you complete the entry, press  to save it.



The screenshot shows a contact entry form with the following fields and values:

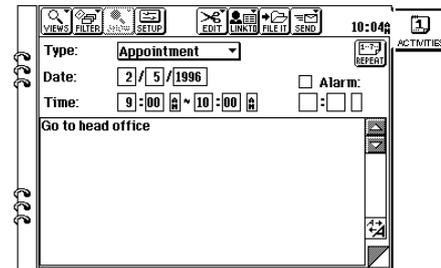
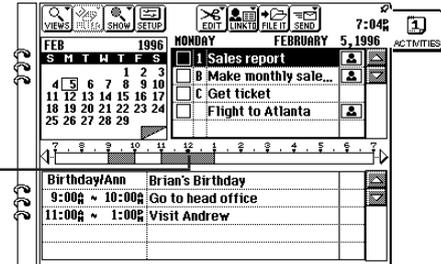
Name	Davis, Frank
Company	ABC consulting
Office #	201-555-1231
Ext./Birect	215
Fax #	201-555-1235
Home #	212-555-4321
Other #	
Position	Manager
Department	Accounting
Address	1099 Main Street
E-Mail ID 1	Frank
E-Mail ID 2	
User	1

Annotations in the image include:

- A line from the text "Select the Company field and enter a company name." pointing to the "Company" field.
- A line from the text "Select the Address field and enter an address." pointing to the "Address" field.
- A line from the text "Touch a field name to select the field for data entry." pointing to the "Company" field.
- A line from the text "Dark outlines around a field indicate that it is selected." pointing to the "Address" field.
- A line from the text "When you complete the entry, press ENTER to save it." pointing to the "ENTER" key icon.

Entering an appointment

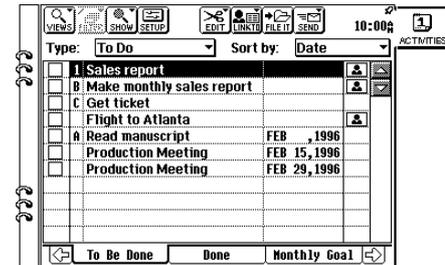
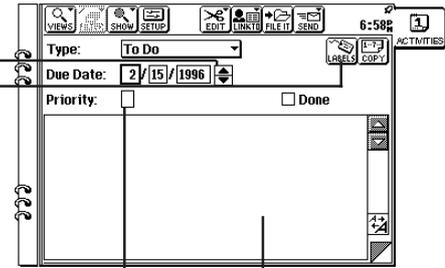
1. Touch  at the right of the display.
Touch  again if the Day view has not been displayed.
2. Touch and drag the pen across the start and end times of the appointment on the time bar. 
When you lift the pen, a new appointment will appear.
3. Touch the text box and enter a description.
4. When you complete your entry, press  .



Entering a To Do item

To Do lets you organize tasks and objectives.

1. Touch  at the right of the display.
2. Touch  and select "New To Do".
3. Touch the date box and then use  to select the due date (if the To Do item has one).
You can assign up to five labels to a task, then later use these to filter the item in a To Do list.
4. Enter a priority level (number or letter) as required.
5. Move to the text box and enter a description.
6. When you complete your entry, press  to save it.



Using the Calendar Views

Activities has five different calendar views: Day (initial default view), Week, Weekly Graph, Month and Year. These calendar views can be used to show Appointment, Birthday/Ann, Holiday and To Do entries.

To use the calendar views:

1. Touch  at the right of the display.
2. Touch  and, if necessary, select "Day" view.

The time bar shows your appointments and free time.

3. Touch any entry twice to see details or make changes.

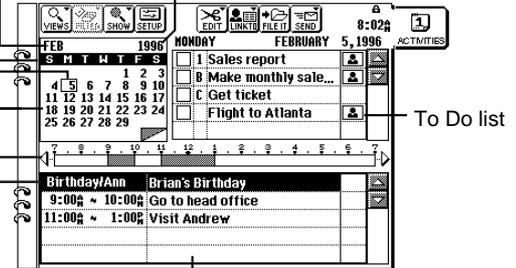
Touch any date to select that day. The flashing date indicates the currently selected date.

This box indicates today's date.

Touch here to view a week at a glance.

Touch here to see a month at a glance.

Touch here to see a year at a glance.

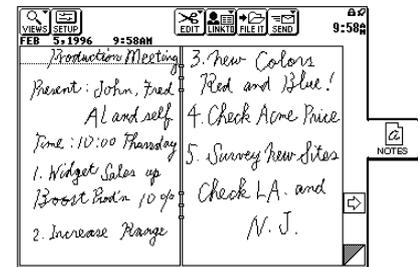
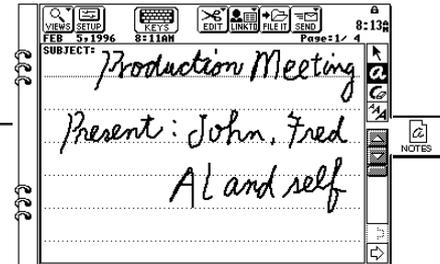


Displays Birthday/Ann, Holiday and Appointment entries for the Selected day.

Taking notes

Notes is an electronic writing pad that lets you make handwritten notes during meetings and appointments.

1. Touch  at the right of the display.
2. Touch  and select "New Note".
3. Use the touch pen to make your Notes entry.
The entire keyboard including  and others is disabled when entering Notes, so operations like ,  and  do not work.
Touch  to unlock the keyboard.
The keyboard is automatically unlocked when you select another application.
4. When you complete your Notes entry, touch  to unlock the keyboard (unless it is already unlocked) then press .
To give your entry a text title, touch  and select "Topic Title".



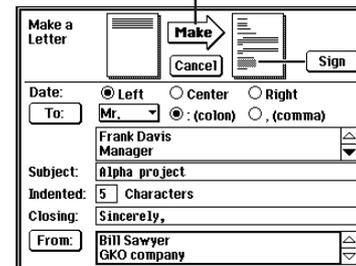
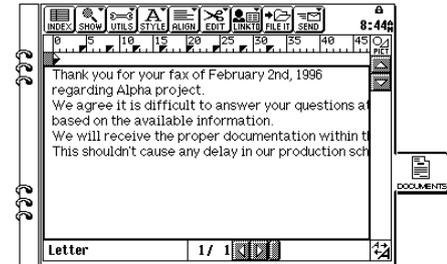
Making a letter

The "Make a Letter" feature converts an unformatted Documents entry into a professional looking business letter.

1. Touch  at the right of the display.
For details on making a Documents entry, see Documents on p. 165.
2. Select the entry you want to make into a letter, or create a new entry.
3. Touch  and select "Make a Letter".
 - Touch  to select a recipient.
 - Adjust other settings or simply accept the defaults.

 For details, see Make a Letter function on p. 177.

4. Touch  and the Documents entry will be converted into a letter.
5. When you complete your letter, press  to save it.



Searching for information

The search function lets you search for a keyword in the entries of selected applications.

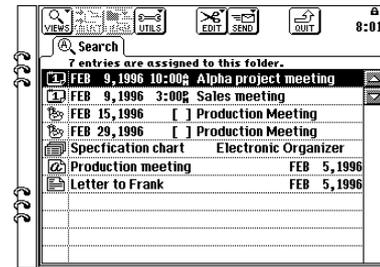
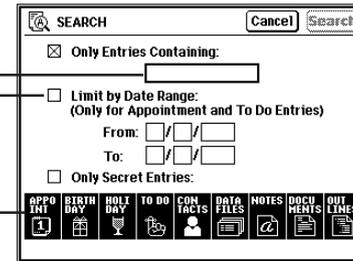
1. Touch  at the left of the display.
2. Enter a keyword in the "Only Entries Containing" field.

Select "Limit by Date Range" as required.

3. Select the applications you want to search.
All applications are selected for the search by default.

4. Touch **Search**.
Matching entries are assigned temporarily to the Search folder in Filer.

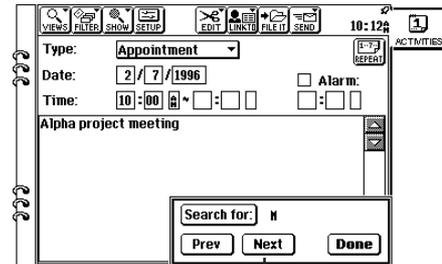
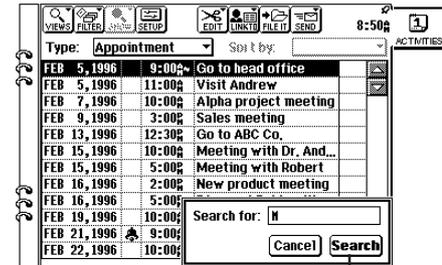
5. Touch the entry you want to view twice.



Finding an entry from the Index view

Keyword search lets you search for entries containing any word in Activities, Contacts, Data Files, Notes, Outline and Documents.

1. Select the application and go to the Index View.
2. Press **2nd** then **F**.
3. Enter the first few letters of the keyword (the word you are searching for).
4. Touch **Search** to jump to the first entry that contains the keyword.
5. Touch **Next** or **Prev** until you see the entry you are looking for.
Touch **Done** to end the search.



Editing an entry

Entries can be edited quickly and easily.

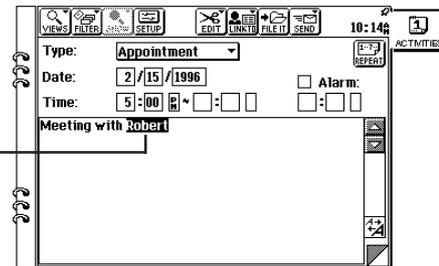
1. Display the entry you wish to edit in Detail View.
2. Make any necessary changes.

Use the scroll bars and cursor keys to move within the display, use **BS** and **DEL** to delete text, and make new entries from the keyboard.

You can also drag the pen over text to select it, then cut the text and paste it elsewhere, or just delete it.

3. When you complete your changes, press **ENTER** to save them.

If you want to save these changes as a new entry (and preserve the original) press **2nd** **ENTER**.

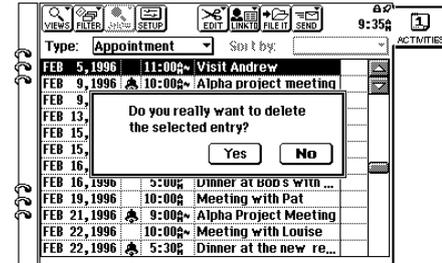


Deleting entries

You can delete single entries or specific groups of entries.

To delete a single entry:

1. Select the entry that you wish to delete in Index View or display it in Detail View.
2. Touch  and select **"Delete Entry"**.
("Delete Note" in Notes; "Delete Document" in Documents; "Delete Outline" in Outline)
3. Touch  to confirm the deletion.
Single entries can also be deleted by selecting the entry in Index View and pressing .



To delete multiple entries:

1. Select the application that you want to delete entries from.
2. Touch  and select **"Delete Group"**.
Use the pop-up menus to select the group entries for deletion.
3. Touch .
4. Touch  to confirm the deletion.



Assigning an entry to Filer folders

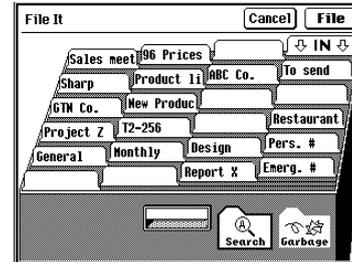
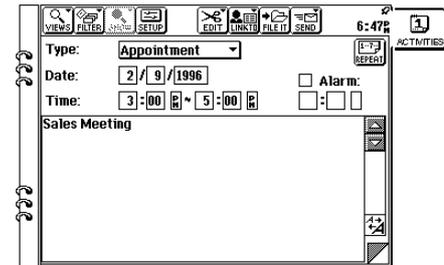
Filer allows you to group entries into folders. Filer entries are not copied or moved to the folder, they are just assigned to the folder.

1. Display the entry you wish to assign to a folder in Index or Detail View.

2. Touch .

3. Touch the folder(s) you want to assign the entry to.
 - You can select multiple folders.
 - Touch once to select a folder.
Touch again to cancel the selection.

4. Touch **File** when you finish selecting the folder(s).



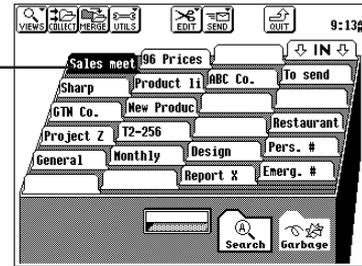
Using Filer

Filer allows you to manage information by subject instead of by entry type. Filer entries can be accessed and changed using the original application.

1. Touch  at the left of the display.

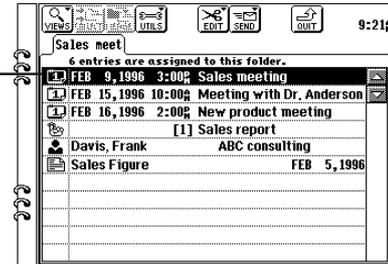
2. Touch a folder tab twice to view entries assigned to that folder.

You can also select a folder tab and press to view entries.



3. Touch an entry twice to examine it in Detail View.

You can also select the entry and press to see it in Detail View.

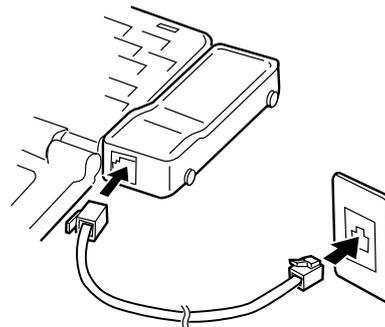


Sending a fax

With the optional CE-FM4 Fax/Modem connected to your unit, you can fax Filer, Documents, Notes or Scrapbook entries to a remote facsimile machine.

1. Connect your unit and the CE-FM4 Fax/Modem.
Make sure the Fax/Modem is plugged into a wall jack.
For details about connecting the CE-FM4, see the CE-FM4 manual.
2. Select a single entry or a Filer folder to be sent.
3. Touch  and select "Fax".
4. Touch and select a recipient from your Contacts file.
5. Touch .

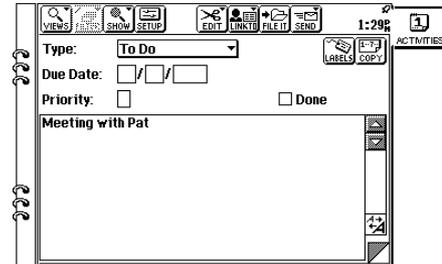
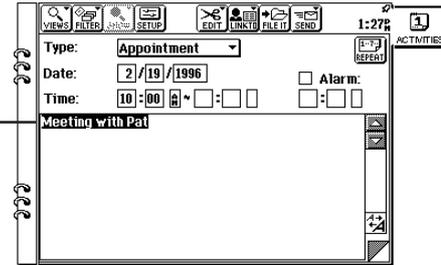
For details, see Faxes on p. 195.



Copying and pasting text

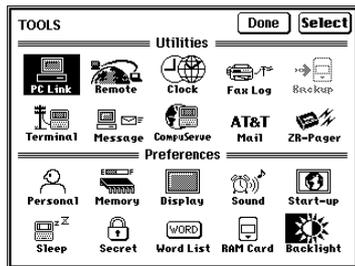
You can copy text from one place to another.

1. Display the entry you want to copy text from in Detail View.
Detail View.
2. Drag the touch pen over a word or sentence.
The text will be displayed in reverse (white on black) to indicate it is selected.
To cancel the selection, touch any unhighlighted area.
3. Touch  and select "Copy".
4. Display the entry you want to add the text to in Detail View.
Detail View.
5. Touch the required place of insertion.
(In Scrapbook, use the area tool  to select an area to paste into.)
6. Touch  and select "Paste".



Tools

Tools provides a range of utilities that let you customize your unit to your personal taste. Tools is also used to set up communications and peripheral operations.



Exchange data with a personal computer or use PC Link for the Sharp Electronic Organizer (OZ-7000/OZ-8000/YO-600/ZQ-5000 series).



Access and exchange data with a remote PC via a modem and phone line.



Check the time at home and abroad.



Check the status of sent faxes.



Make a backup copy of main memory onto a memory card.



Transfer data with a remote computer via a modem and phone line.



Send/receive messages (email) to a remote computer.



Connect to CompuServe.



Send and receive AT&T Mail messages.



Send and (with Pager card) receive Pager messages.



Enter your name, etc. and set your password and signature.



Check the amount of storage memory available.



Adjust the screen contrast and calibrate the touch panel.



Turn key and alarm sounds on and off.



Set the start-up display.



Set the sleep interval.



Show/hide secret entries.



Stores commonly used words or phrases.



Select the data source for applications.

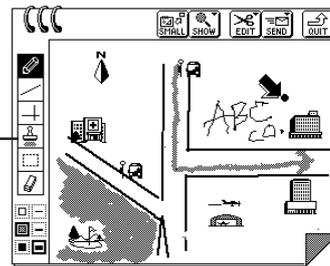


Control duration of the ZR-5800's Backlight.

Drawing pictures

Scrapbook lets you make quick handwritten notes, drawings and maps directly on the display.

1. Touch  at the left of the display.
2. Touch  and select **"New Entry"**.
You can also just start drawing.
3. Write whatever you like directly on the display with the touch pen.
You can also use the stamp function to insert some useful built-in pictures.
4. Press when you are finished drawing.

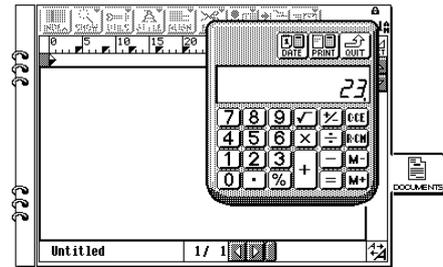


-  A similar drawing capability is available in Documents and the picture fields of Contacts and Data Files.

Using the Calculator

Calculator works as a standard 10-digit calculator.

1. Touch  at the left of the display.
2. Enter calculations by touching the key pad.
3. Touch  when finished.



Commonly asked Questions & Answers

Q: I currently also own a Sharp Wizard and would like to move my information from my Sharp Wizard to the ZR-5700/ZR-5800. How can I do it?

A: If you own an OZ-5000/OZ-6000/OZ-9000 series you can use wireless infrared transfer to move the information over:

- Line up the two units so the infrared ports are facing each other.
- On the ZR-5700/ZR-5800, select an application (e.g. Activities) and display the index of that application. (Note: Select "**Holiday Yearly by Day Index**" when transferring "**Ann2**" from the Organizer.)
- Select "**Unit to Unit**" from the SEND menu. Touch "**Receive**" and then "**OK**".
- On the Wizard, select the application (e.g. Schedule) and select "VIA INFRARED PORT" in SET UNIT TO UNIT PATH from the Global setting, then select "SEND ALL IN THIS MODE (FILE)" in UNIT TO UNIT TRANSFER.
- Repeat for each application you want to transfer. (See p. 218 for details.)

Be sure that the sending unit does not have a blank (no characters) Telephone/Contact or User File/Data File *field name* or else the Zaurus will not be able to receive information (an error message will appear).

If you own an OZ-8000/OZ-7000 series or YO-600/ZQ-5000 series Electronic Organizer you can get information using PC/Macintosh link software kits (OZ-791/792/793/890/892/893/895).

PC/Macintosh Link instructions:

- Transfer the data from the OZ-8000/7000, YO-600/ZQ-5000 series to the PC or Macintosh using the above software.
- Connect your cable to the PC and the ZR-5700/ZR-5800.
- Put your ZR-5700/ZR-5800 into a special import mode by touching **TOOLS**, and selecting **PC-Link** and **Cable (Import)**.
- Select the PC/Macintosh Link command to "Send data" to your Wizard.
The ZR-5700/ZR-5800 will "pretend" to be a Wizard for purposes of receiving the information.
- When finished, disconnect the ZR-5700/ZR-5800 and press ON to cancel PC-Link mode. (See p. 223 for details.)

**Q: What does PC card mean?
Can I use any PC card I find on the market
on my ZR-5700/ZR-5800?**

A: PC card (formally "PCMCIA") is an industry standard card format. Many popular PC cards available on the market are compatible with your ZR-5700/ZR-5800. Check with your Sharp dealer for more information, or call our automated fax-on-demand service **(612-397-8601)** to obtain a complete and up-to-date list of ZR-5700/ZR-5800 compatible PC cards.

Warning

Use only recommended PC cards. Attempt to use cards that are not recommended may result in damage to the main unit and/or data loss.

Memory cards:

In general, you will find that you can use most SRAM memory cards and Flash Memory cards. You can use SRAM cards for additional memory storage (for the built-in application's data) or for making a single complete backup of that data. In addition, you can load add-on software programs onto a memory card. Flash Memory cards can be used to store multiple archives of the built-in application data (for backup purposes) as well as for loading add-on software programs. Flash

Memory cards are good for backups because you can make multiple backups (space permitting) and they are more reliable than SRAM cards (they require no backup battery).

Communication cards, etc.:

Sharp has provided a number of drivers for many of the input/output cards. Note that certain high power cards require that you use the EA-23E AC adaptor in conjunction with these cards in order to prevent excessive battery consumption. Other cards require an add-on software program to be loaded onto the ZR-5700/ZR-5800.

**Q: I am using the CE-FM4 attachable Fax/
modem for my ZR-5700/ZR-5800. Exactly
where can I fax from?**

A: You can use virtually any standard phone line. This includes a jack on:

- The wall of your home or office
- New public pay phones found at hotels, airports, convention centers, etc.
- Many hotel room phones (commonly labeled "Data jack")
- GTE and AT&T air phones found on many commercial jets.

Just plug the included RJ-11 phone cable into the CE-FM4 modem and the phone jack.

Note that you cannot use this device with digital phone lines. Digital phone lines are likely to be found at your office, typically when you have a PBX system installed.

The basic rule to follow is that if you can use a standard fax machine on the phone line, then it is analog and can be used with the ZR-5700/ZR-5800/CE-FM4. Check with the proper facilities personnel in your company to be sure.

Q: My batteries only lasted about one month. Is this normal? How long should I expect them to last?

A: There is probably nothing wrong with your unit. Battery life will vary from user to user. A number of factors will affect battery life, including how much the unit is used. The battery life is rated at 70 hours of continuous use. Assuming an average of one hour per day of continuous use, you would get about two months of battery life. You can also use the optional EA-23E AC Adaptor or the CE-BK1 battery pack.

Q: How do I add software to my ZR-5700/ZR-5800 to expand its capabilities?

A: In general, ZR-5700/ZR-5800 Add-on software come on computer floppy disks (PC format). You will need a computer, of course, and either the ZR-5700/ZR-5800 PC-Link cable (see registration card special offer) or an infrared adaptor (such as CE-IR4). Note that if you own either the cable or an infrared adaptor for one of Sharp's various Wizards, it will also work.

To download an Add-on software program simply start the installation program included on the computer floppy disk. Follow the on-screen instructions to install the software. Once installed, you can access any Add-on software program by simply touching MORE and then touching the program icon in the MORE screen. Note that these Add-on software programs can be downloaded to the unit's internal memory or onto an optional PC memory card.

Q: How do I backup my important information?

A: It is important to always have a back-up of your important electronic information. Here are some ways to do this:

- You can print out a hard copy using the Sharp CE-IR1 infrared adaptor for printing. You will also need a PC-compatible printer (see page 192 for details).
- You can backup your entire unit using either a PC SRAM Memory card or a PC Flash Memory card. Flash Memory cards (space permitting) can hold multiple back-ups and require no battery backup system. In both cases, be sure the capacity of the card can handle the roughly 650 KB of user storage on ZR-5700 and 1700 KB on ZR-5800 (i.e. use 1 MB cards or higher).
- You can use an MS Windows or Macintosh data transfer utility program to back-up your data onto either a hard drive or a floppy disk. See the enclosed registration card for details about the free (\$6.95 S&H) software offer from Sharp as well as details about a transfer cable offer.

MS Windows is a registered trademark of Microsoft Corporation.

Macintosh is a registered trademark of Apple Computer, Inc.

Q: How do I exchange information with my personal computer? For example, can I take telephone numbers I already have in another software program and load them into my ZR-5700/ZR-5800? Can I take letters I have written on my ZR-5700/ZR-5800 and send them to my favorite word processing program?

A: Sharp offers both MS Windows and Macintosh transfer utility software that allows you to easily exchange information with your personal computer. This software can convert your ZR-5700/ZR-5800 information into computer formats that many popular software programs can read. In addition, you can save information from your favorite software programs using one of these formats and then transfer the information to the ZR-5700/ZR-5800 using this utility software.

Formats supported include:

.RTF (Rich Text Format), which many word processors support (e.g. MS Word).

.TXT (text), which almost all text-oriented programs support.

.CSV (Comma Separated Values), which many databases, PIMs, etc. support.

Note: CSV is for multi-field/multi-record informa-

tion. This utility software also allows you to "map" the fields to fit almost any program that supports CSV formats.

.BMP/PICT, which is used by many programs to exchange graphics files.

You can, of course, also use this software to back-up your information to your personal computer.

To get this software for just \$6.95 S&H, see the enclosed Registration Card for details.

Q: I can't seem to turn my unit on. I changed the batteries but still nothing happens. What should I do?

A: Check the following before sending the ZR-5700/ZR-5800 in for service:

Check that the battery replacement switch on the back of the unit is in the "NORMAL OPERATION" position. If the switch is in the "REPLACE BATTERIES" position, the unit cannot be turned on. Check or replace the operating batteries, even if you have just replaced the batteries. It is possible that the batteries were not fresh when you purchased them.

Press the RESET switch. If the unit has been

dropped, for example, it may have to be reset. This will not delete your data. If for any reason data is missing after resetting the unit, it was lost before you pressed the RESET switch, which simply re-starts the unit.

If none of the procedures above help, you should send the unit to a service center. Call 800-BE-SHARP for the nearest service center. Give the service center a call and ask for more information about getting your ZR-5700/ZR-5800 repaired.

Q: Why should I send in the registration card?

A: This is your way of registering your product with Sharp, and allows us to keep you informed about new products and software available for your unit. It also gives us valuable information about our users so that we can design products that continue to meet your needs. Sharp never sells its customer list, so registering your unit will not result in you receiving loads of new junk mail from other companies.

Q: I would like to use the Filer feature but I am afraid of using up memory. How does the Filer work? Does it make a copy of each entry?

A: When you assign an entry to a folder in the Filer, it uses only a negligible amount of extra memory. The unit doesn't actually make a copy of the entry, it simply assigns the entry to a folder. Entries are still stored in each individual application (Contacts, Documents, etc.). The Filer is a great way to organize your information and there is no reason not to use it.

Q: What is the Outlines application? Why would I want to use it sometimes instead of Documents?

A: The Outlines application allows you to group and categorize information using a hierarchical structure. Everyone has a lot of small but important pieces of information that have to be memorized or kept track of in a written record; for example, important personal information such as Social Security number, credit card numbers, various ID numbers, account numbers, clothing sizes, etc. Using the unit, you could make a number of Documents entries for each piece of

information, but a better way to manage the information would be to make a single Outlines file called "Personal information".

This file could then contain a number of headings (such as Car info., Travel info., Health info., Financial info., etc.), under which relevant pieces of information could be stored. This makes it easier to access information and prevents your unit from becoming cluttered with hundreds of individual entries.

Additional Outlines files could also be made, including a favorite movies list, project management file, price lists, product line-up and specification files, business plans, product proposals, and meeting notes.

Many types of information can be more easily and efficiently managed in an Outline structure.

Another use of Outlines is document preparation. Many times you might want to write a memo, letter, proposal, marketing plan, etc., but find it difficult to write an entire document from scratch. Outlines allows you to capture your thoughts and ideas, then rearrange and categorize them at any time. You can also copy an Outlines file and paste it into Documents to finish the document there, adding text to the major topics.

What your unit can do

Your new ZR-5700/ZR-5800 is a full-featured, pocket-sized information manager, designed to enhance any information-based task, whether in the home, at the office or on the road. Its large, easy-to-read screen and graphical user interface makes it very easy to use for novices and experienced users alike. Pen-based touch-panel operation offers tremendous user-friendliness in a pocket-size device.

Time Management

The ACTIVITIES application helps you manage your time better than ever:

- Appointment lets you record appointments, meetings and other date-based events
- Birthday/Ann lets you record anniversaries, birthdays and other important annual events
- Holiday lets you record your planned vacations and public holidays
- To Do helps you track tasks and goals according to priorities you assign
- Calendar displays all your Appointment, Birthday/Ann, Holiday and To Do items in convenient daily, weekly, monthly or yearly formats

Information Databases

Your unit allows you to store a wide range of information according to your needs:

- Contacts is used to store names, phone numbers and other information
- Data Files lets you set up custom databases
- Spreadsheets provides a full-featured spreadsheet utility

Letters & Documents

The unit offers powerful facilities for creating documents, letters and even hand-written notes:

- Documents provides sophisticated word processing and document formatting features
- Outlines lets you organize your ideas and information using topics and sub-topics
- Notes lets you make hand-written notes directly onto the screen using the touch-pen.

Desk Accessories

A variety of other functions are provided to make common tasks quick and convenient:

- Calculator performs standard mathematical and date calculations
- Scrapbook lets you create and edit pictures, drawings and maps
- Filer lets you group together entries from any applications except Spreadsheets

About this Manual

You will find two manuals with your unit. This manual is designed to help you quickly learn and understand the capabilities and operation of your unit. The other manual contains detailed explanations of Spreadsheets, Terminal, CompuServe, AT&T Mail and ZR-Pager.

Chapters

The chapters are organized by task type so you can focus your attention on the features that meet your needs.

Quick Start

Commonly asked Questions & Answers

These sections show you how to quickly set up and use the essential features of your unit.

Getting Started

Introduces part names and functions, and GUI features.

Desk Accessories:

Explains the desk accessories: Calculator; Scrapbook; Filer; Search; Help; Tools; and More. These are located at the left of the display, and can be selected whenever they are needed.

Fax & Information Exchange

Your unit allows you to send and receive information via a wide range of popular data methods and information services, including:

- Fax
- AT&T Mail
- CompuServe
- Pager
- Other systems and networks

Utilities

The unit offers additional utilities to manage and access your data easily:

- Clock displays both local and international time
- Filter selects only those entries you specify
- Search helps you find particular entries
- Cut & Paste lets you conveniently copy text and graphics between different applications

Your new unit offers even more features too numerous to mention here. But you can extend its capabilities even further by adding new functions via Add-on software. Features and enhancements such as these, together with remarkable user-friendliness, make the ZR-5700/ZR-5800 among the world's most powerful and sophisticated hand-held information managers.

General Operations:

Introduces operations that are common to all of the built-in applications. These operations are accessed through the tool bar at the top of the display and change to suit the application.

Time Management:

Explores Activities operations: Appointment; Birthday/Ann; Holiday; To Do; and the Calendar views. Activities helps you manage your time and keep track of important events.

Databases:

An introduction to Contacts and Data Files, personal databases which store information such as addresses and phone numbers, but can also be configured to manage other types of information.

Writing and Letters:

Shows you how to manage handwritten notes and create professional looking documents using the Notes and Documents features. Also explains how to use the Outlines feature.

Optional Accessories:

Introduces peripheral operations including: printing; data transfer with other units; sending faxes; data exchange with personal computers; optional Add-on software programs; and PC cards.

Appendices

- A. Key Notations
- B. Reset
- C. Troubleshooting
- D. Battery Replacement
- E. Specifications

Conventions used

The following keyboard and symbol conventions are used in this manual:

- **ACTIVITIES, CALC, SEARCH, ON, MENU, ENTER Done, Cancel** and other bold notations indicate buttons on the display that are touched with the touch pen, or keys on the keyboard that are pressed with a finger.
- Letters and numbers to be entered in examples are shown in italics, for example "*Lunch at 12:00*" indicates that "Lunch at 12:00" should be entered from the keyboard.
- Activities, Notes, Filer, Search and similar notations written with initial capitals are names of applications and accessories. If the associated touch buttons on the display are to be touched as part of a procedure, they will be written in bold uppercase, for example: touch **ACTIVITIES**, touch **NOTES** or touch **SEARCH**.
- Some keys have other functions that are accessed by pressing the key in combination with the ⇧ (Shift) or **2nd** key. For example: pressing ⇧ and also pressing the Return (↵) key inputs a tab.

- For a full list of key notations, see Appendix A.



Indicates a tip or important point.

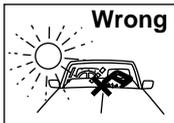


Indicates alternative methods. There is often more than one way that you can perform an operation.

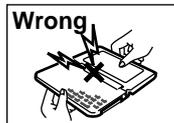
Caring for your unit

This unit contains delicate circuitry and a glass display panel which can be damaged if not cared for properly. The following precautions should ensure your unit gives you many years of reliable use.

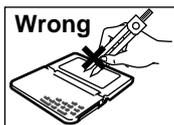
- Keep your unit away from extreme heat. Do not leave it on the dashboard of a car or near a heater. Do not leave it in any place that is extremely damp or dusty.



- Do not drop your unit or subject it to severe impacts. Bending the body can damage the circuitry. Do not use extreme force when pressing the display or keys.



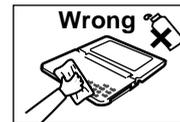
- Do not use sharp, pointed objects or your fingernails to touch the display screen. We recommend you use only the supplied touch pen to touch or write on the screen.



- Hard, sharp objects can scratch your unit, so ensure it is closed and/or protected when carried with other objects.



- Do not use solvents to clean your unit. Use only a soft, dry cloth.



- Do not carry your unit in your back pocket as it may break when you sit down. The display is made of glass and is particularly fragile.



- Replace the batteries as soon as they become weak. Failing to replace weak batteries may result in lost data or damage from battery leaks.

CHAPTER 1

Getting Started

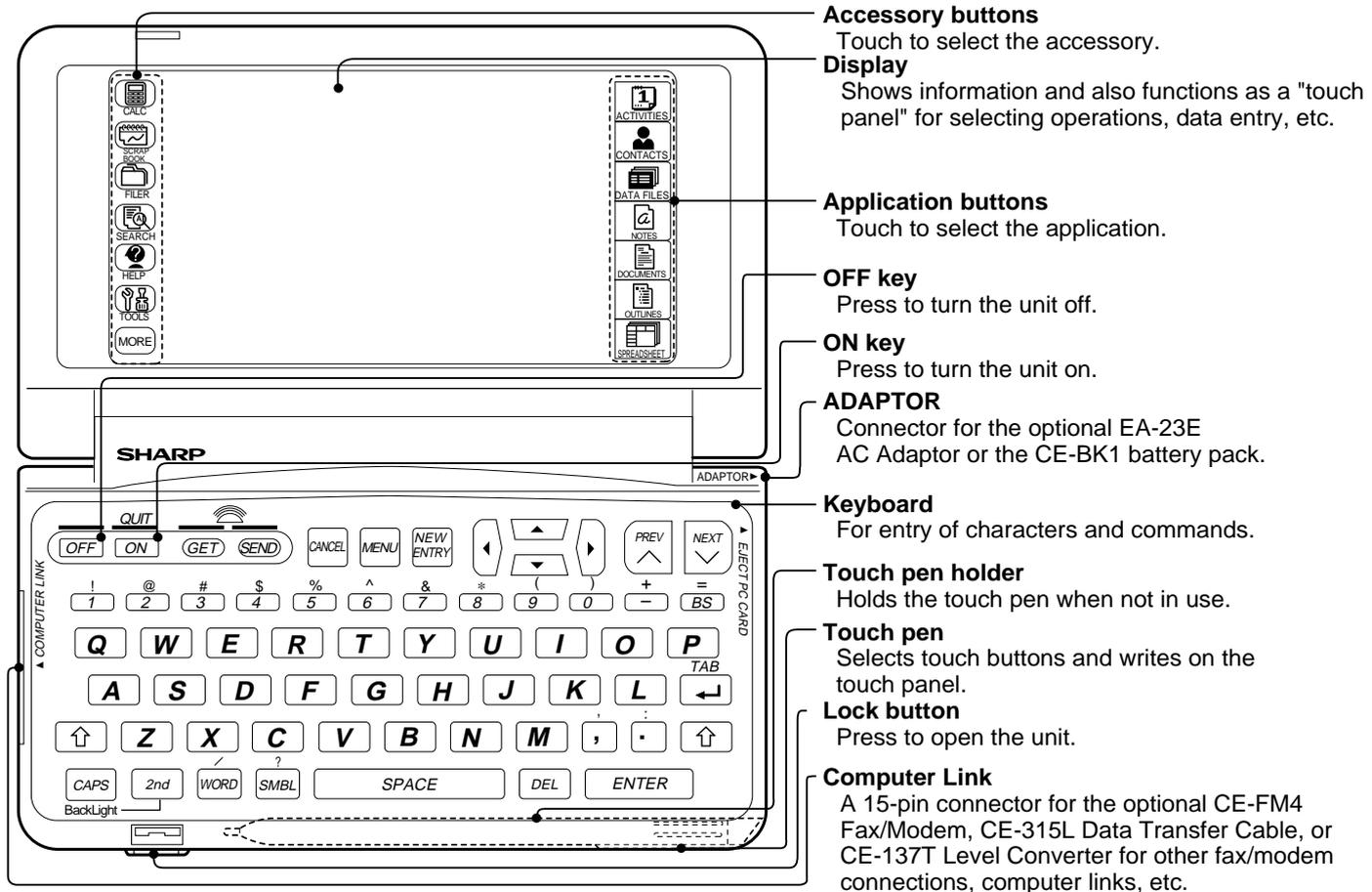
A major feature of the unit is its graphical user interface (GUI) which makes operation easy to understand through a combination of graphic images and text. The GUI is easy to use and provides a great deal of versatility. Operations can be entered using the touch pen on the display, pressing keys on the keyboard, or a combination of both.

Before Use

Before using your unit, the following operations are required. If you have not performed these operations, read the Quick Start section.

1. Battery installation ... see "Installing the batteries" on page 10.
2. Initializing ... see "Initializing" on page 11.
3. Adjusting the LCD contrast ... see "Adjust LCD contrast" on page 12.
4. Adjusting the touch panel ... see "Adjusting the touch panel" on page 13.
5. Setting the Clock ... see "Setting the time and date" on page 14.

Part Names and Functions



Accessory buttons

Touch to select the accessory.

Display

Shows information and also functions as a "touch panel" for selecting operations, data entry, etc.

Application buttons

Touch to select the application.

OFF key

Press to turn the unit off.

ON key

Press to turn the unit on.

ADAPTOR

Connector for the optional EA-23E AC Adaptor or the CE-BK1 battery pack.

Keyboard

For entry of characters and commands.

Touch pen holder

Holds the touch pen when not in use.

Touch pen

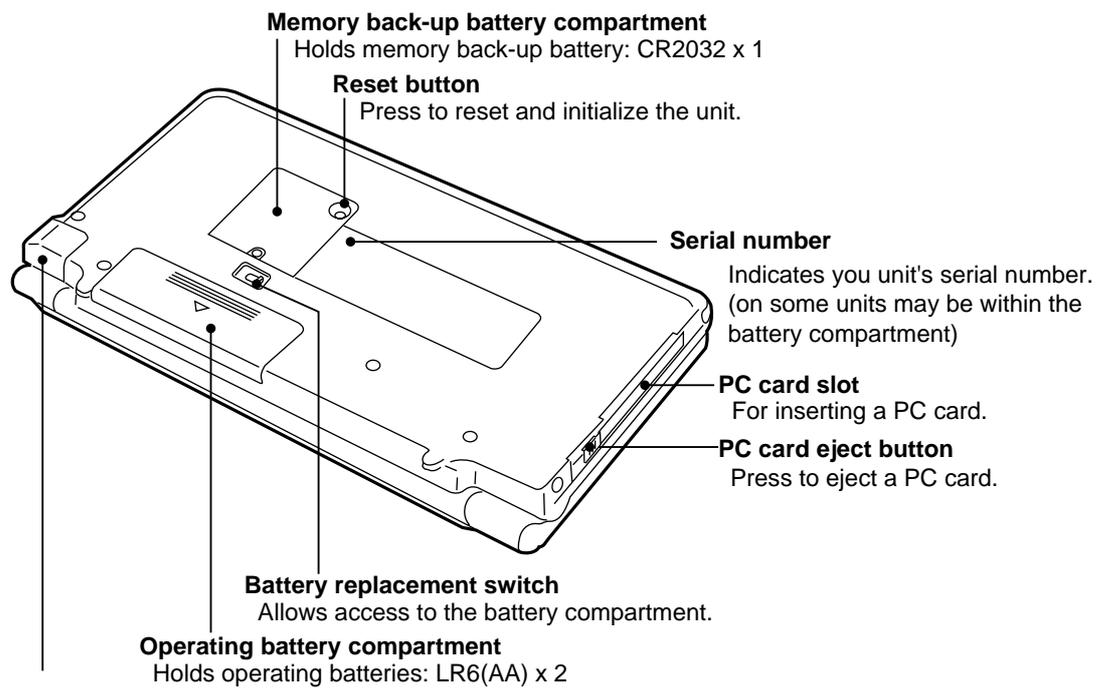
Selects touch buttons and writes on the touch panel.

Lock button

Press to open the unit.

Computer Link

A 15-pin connector for the optional CE-FM4 Fax/Modem, CE-315L Data Transfer Cable, or CE-137T Level Converter for other fax/modem connections, computer links, etc.



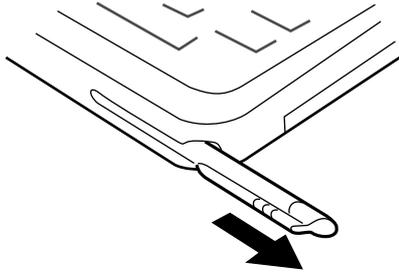
Infrared port

For wireless infrared communications with other units (including ZR-5700/ZR-5800, ZR-5000, OZ-9000/OZ-6000/OZ-5000 series) and optional Wireless Interfaces CE-IR1/IR4.

The unit will not operate if the battery replacement switch is in the "REPLACE BATTERIES" position.

Touch pen

The touch pen is stored at the right front of the keyboard.



To remove the touch pen, pull it in the direction shown by the arrow.

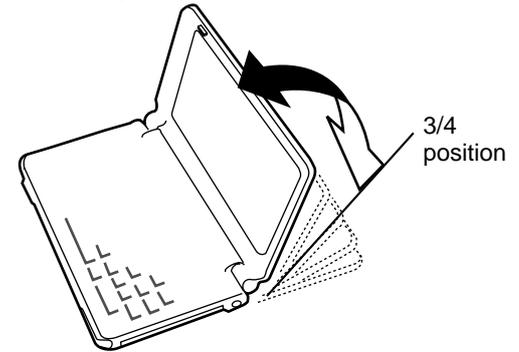
To replace the touch pen, push the pen back into place (in the opposite direction to the arrow). Check the ridge grip on the touch pen aligns correctly with the mounting slot.

Caution:

Use only the supplied touch pen to operate the display. Do not use pens, pencils or other sharp, pointed objects. Keep the touch pen and display clean to avoid scratches and damage to the display.

Display angle adjustment

The display can be adjusted to any angle that suits your reading style.



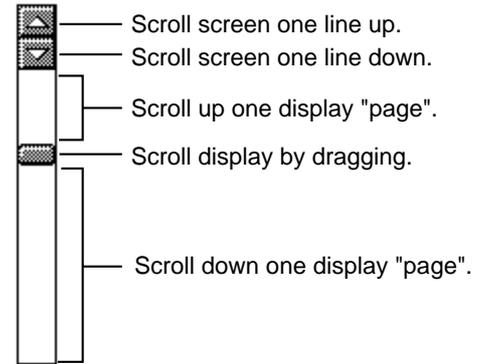
When attempting a wireless infrared transfer, be sure not to open the display more than 3/4 of the way, or the IR port may become blocked.

GUI operations

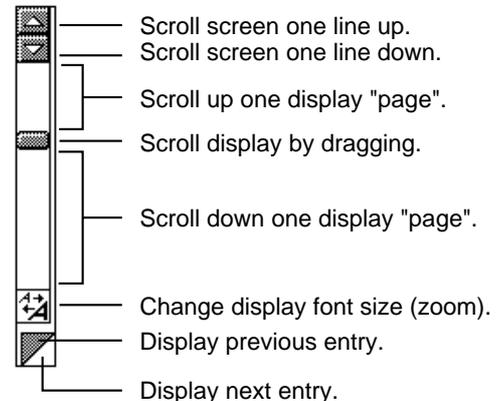
A key feature of the graphical user interface (GUI) is its system of displays and menus which can be used to quickly execute commands and perform operations.

- Insertion mode is used for all text input except time and dates. There is no overwrite mode.
- All Detail Views (except Notes and Scrapbook) have a blinking cursor.
- Selecting an application (except Activities and Spreadsheets) containing no entries brings up a New Entry display with a blinking cursor.
- Cut, Copy and Paste from the tool bar **EDIT** menu can be used to copy or move entries.
- In Detail View, the cursor can be moved to another field by touching the field or pressing the cursor keys.
- Selected text is indicated by highlighted (reverse) text.
- Detail View supports rapid cursor movements as follows:
 - 2nd ▲** Moves cursor to top of field
 - 2nd ▼** Moves cursor to bottom of field
 - 2nd ◀** Moves cursor to beginning of line
 - 2nd ▶** Moves cursor to end of line
- Pop-up menus, radio buttons and check boxes can only be used by touch operations.
- Touch scroll bars to move through displayed information. In Notes, one grid block is scrolled as one line.

Index View



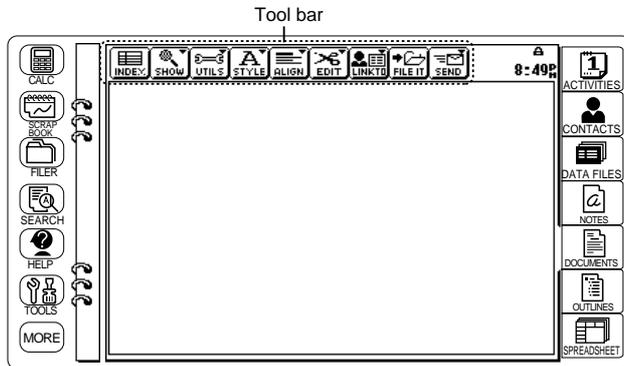
Detail View



Display layout

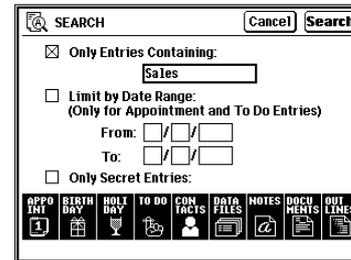
The display layout has the following features:

- The touch buttons at the left of the display provide access to accessories and utilities. **TOOLS** provides access to communications utilities and user settings. **MORE** provides access to optional Add-on software (if installed) in either the main memory or in a PC card.
- The touch buttons at the right of the display provide access to applications.
- The touch buttons along the top of the display are called the "tool bar" (application-specific tools).



Touch panel display

The display not only shows information, it is also a "touch panel" that lets the touch pen select functions and enter information. Some operations which are carried out by touch buttons can also be carried out by pressing keys on the keyboard. The touch button in bold at the right of the display has the same function as pressing the **ENTER** key (see Fig.) To store a setting for example, you can touch **OK** on the display or press **ENTER** on the keyboard. When a display symbol matches a key or symbol on the keyboard, either can be used. For example, touching **Cancel** functions the same as pressing **CANCEL**.



Touching this button is the same as pressing the **ENTER** key.

Display symbols

The following display symbols appear at the top right of the display to indicate various conditions:

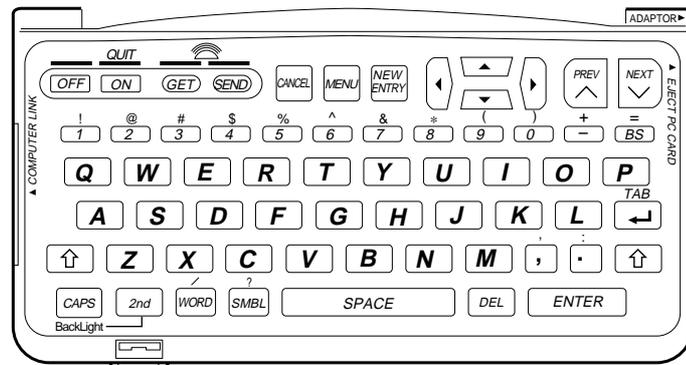
- XX:XX** Real time and date display. Touch to toggle between time and date display.
- BATT** Operating batteries are weak and need replacing.
- CARD** A PC card (RAM card) is currently selected as the data source.
- 2nd** **2nd** key has been pressed.
- CAPS** **CAPS** has been pressed, the keyboard is in caps lock mode, and all letters will be entered in uppercase. Press **CAPS** again to turn caps lock off.
- *** Indicates the current entry is secret and can only be accessed when the unit is unlocked.
- 🔒** The unit is locked. Entries marked as secret cannot be recalled until your unit is unlocked by entering a password.
- 🔔** Alarm sound is enabled.

 The display symbols may be hidden in some dialogue.

Keyboard layout

The keyboard is laid out in a standard QWERTY format, like a typewriter or computer.

- The  key has the same function as the Shift key on a typewriter or computer.
- The **CAPS** key has the same function as a Caps Lock key.
- The unit operates permanently in insertion mode except for entering the time and date (there is no overwrite mode).
- Symbols in white above a key, such as ' or :, can be used by holding down  and pressing the required key. Refer to Appendix A Key Notations.
- Special symbols and characters, such as ù and Ç, can be entered using the **SMBL** key. (See p. 116 for details.)



Detail View and Index View

The application tool bar across the top of the display normally offers a choice of either Detail View or Index View for examining unit entries. For a particular application, Detail View lets you examine the detailed contents of an entry, and Index View lets you examine a list of entry titles.

Name	Davis, Frank
Company	ABC consulting
Office #	201-555-1231
Ext/Direct	215
Fax #	201-555-1235
Home #	212-555-4321
Other #	
Position	Manager
Department	Accounting
Address	1099 Main Street
E-Mail ID 1	Frank
E-Mail ID 2	
User	1

Detail View

Show:	Business	Sort by:	Name
▲	Brown, Fre...	Ace Adverti...	201-555-8873
▲	Davis, Frank	ABC consult...	201-555-8899
	Flanagan, S...	Instant Per...	245-555-8787
	Harris, Eddie	Bigg Produc...	257-555-8879
	Innes, Geor...	Busy Bee D...	234-555-7788
	Lee, Marilyn	HK Traders	257-555-8833
▲	Sawyer, Bill	GK Co	201-555-4477
▲	Smith, Frank	CEO Beta C...	212-555-6473
▲	Smith, Jona...	Brown Corp...	201-555-4170
▲	Taylor, And...	NKC Co	234-555-8686
▲	Wallace, R...	Flash Corp	609-555-4455

Index View

Tool bar

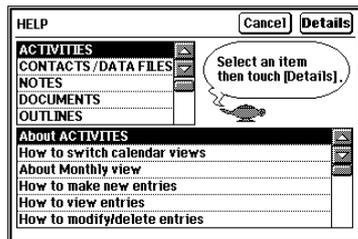
There is a special tool bar for each application. The tool bar is located across the top of the display and has the following features:

- A small pointer ("▼") in the upper right of a tool bar item indicates a menu will be displayed if it is touched.
- For some tool bar menus, current settings are indicated by a check mark "✓".
- Menus may be separated into categories by dashed lines.
- Menu items that lead to dialogue are followed by "...".
- If a particular tool bar item cannot be used for a specific screen, it is "faded" out.
- Tool bar menus can be accessed from the keyboard by pressing **MENU** then using the **PREV**, **NEXT**, **▼**, **▲**, **ENTER** and **CANCEL** keys.



Help Function

The built-in Help feature is a convenient, topic-specific, on-line reference source. You can view Help at any time by touching **HELP** at the left of the display. Messages are also displayed during normal operations for your guidance.

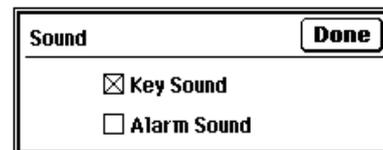


Key Sound

A sound (beep) is made each time a key or button is pressed or the display is touched. Key Sound enabled as the default setting.

To turn the key sound off:

1. Touch **TOOLS** and then touch **Sound** twice.



The Key Sound box is checked to show it is on.

2. Touch **Key Sound** (so the cross disappears) to turn the key sound off.
3. Touch **Done** to save the setting.

Save Battery Life

Sleep function

To conserve battery power, the Sleep function turns your unit off if it is not used for a set time period (the default setting is 15 minutes).

- Sleep is disabled when communicating with other devices to avoid interrupting data transfers.
- If you are storing an entry and the Sleep function turns off power before the entry is finished, data will not be lost. When you press **ON**, operation resumes from the state before power was turned off.
- When the unit is connected to the AC adaptor or battery pack, the Sleep function is disabled.

External power supply

Power can be supplied to your unit from the optional EA-23E AC adaptor or the CE-BK1 battery pack. The AC adaptor can be used whenever a normal AC electricity outlet is nearby. The battery pack can be used as an alternative power source when no AC power supply is available. This greatly increases your unit's portability by allowing you to operate your unit for long periods of time without depleting the operating batteries, e.g., while traveling on long journeys or working outdoors.

To use the EA-23E AC adaptor or CE-BK1 battery pack, first turn off the unit, then connect the plug to the ADAPTOR socket at the right of the keyboard, then turn your unit back on.



- When using the CE-BK1 battery pack, make sure the mode switch is set to OPERATION.
- If the operating batteries are not installed, or are depleted, the AC adaptor or battery pack will not supply power to the unit.
- Be sure to turn your unit off before disconnecting the AC adaptor or battery pack.
- Check that the AC adaptor or battery pack is connected when the unit is on, especially during data transfer. Disconnecting the unit will abort the data transfer.

Backlight Function

The ZR-5800 provides a built-in Backlight, which allows you to view the display and use the unit even in low-light conditions, eg. in a theater, restaurant, or business presentation. Press **2nd** and **CAPS** to illuminate the display. You can set up the Backlight duration. See page 90.

CHAPTER 2

Desk Accessories

The desk accessories along the left side of the display are handy utilities that round off the Application suite:

- Calculator can perform calculations on numbers entered from the display, keyboard, or from other entries.
- Scrapbook lets you make quick handwritten notes and drawings directly on the display. Scrapbook entries can be attached to Contacts or Data Files entries, or integrated into a document.
- Filer lets you manage your data and information by topic rather than by entry type.
- Search lets you locate a particular keyword from among many different entries.
- Help provides quick access to topic-specific help messages at any time.
- Tools provides many utilities such as Clock and PC Link.
- More accesses the PC card and the Add-on software setup functions. Full details are given in chapter 7.

Calculator

Calculator is a standard 10-digit calculator which:

- Performs mathematical operations, including square root, percentage and memory (R•CM, M- and M+).
- Can calculate dates and time durations, such as the number of days to project completion.
- Has a paperless printer mode which shows all calculations in a vertical column on the display.
- Performs operations on data copied from other entries.

To perform calculations:

1. Touch **CALC** at any time.
The calculator's key pad appears on the display.



2. Enter the calculation by touching the display keypad or using the keyboard number and symbol keys.
 - To clear an entered value, touch **C•CE** once.
 - To clear a calculator operation, touch **C•CE** twice.
 - Calculations are performed in order of entry, not by algebraic convention, i.e. $8+2\times 3 = (8+2)\times 3$, not $8+(2\times 3)$.

- M on the display indicates a number is stored in memory. Touch **R•CM** twice to clear the memory.
- Press **▶** to erase the last digit entered.
- E on the display indicates an error. Touch **C•CE** to clear errors.
- Touch **+/-** to change the sign of a displayed value.

3. To quit Calculator, touch **QUIT**.

Movable window display

Calculator opens as a movable window over the last display that was used. To move the Calculator display, touch the top left corner and drag it to the new location. After moving the Calculator display, make sure to return it to its original location. Otherwise, it may hide the paperless printer display when that mode is selected.

Paperless printer

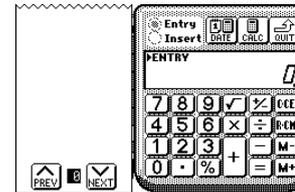
In the basic calculator mode, only calculation results are displayed. In paperless printer mode, the calculation steps are retained and you can edit the sequence:

- This allows you to change numbers and operators (+, -, x, ÷, =) and return to intermediate results so that you do not have to reenter entire calculations.

- =, M-, M+ and % terminate a calculation sequence. Any value entered after these keys begins a new calculation.
- Calculation steps are retained and can be recalled with **PREV** or **NEXT** (even after the display has been cleared with **C•CE**), until a new sequence is entered or all steps are deleted using **DEL**.
- Up to 50 steps can be stored in a calculation sequence.
- Functions are the same as for the basic calculator, except power calculations must be performed using repeated multiplication.

Using the paperless printer calculator:

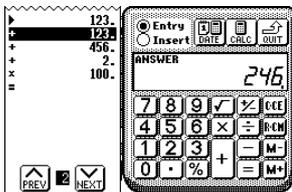
1. Touch **CALC** and select **PRINT**.



- Enter the calculation.
 - ▶ marks the starting entry.
 - The value on the key pad display is the value just entered or the final calculation result (indicated by ENTRY or ANSWER shown above the value).
- Touch "=" to get the result.

Using intermediate results:

- Touch **PREV** or **NEXT** until you reach the calculation line you want to check. The result up to and including the highlighted line is displayed.



- Touch **C•CE** once to return to the display of the final result, and touch **C•CE** again to clear the display.

Inserting new values:

- Move to the line above the point where you want to insert the new value.
- Touch **Insert**.
- Enter the operator and value to be inserted, then press **ENTER**.
- Press **ENTER** again to get the new result.

Changing part of a calculation:

- Move to the entry you want to change by touching **PREV** or **NEXT** (or pressing **PREV** or **NEXT** keys).
- Make sure that the **Entry** radio button is selected, then enter the new operator and value, and press **ENTER**.
- Press **ENTER** again to get the new result.

Deleting a line:

1. Move to the line you want to delete using **PREV** or **NEXT**.
2. Press **DEL**.
3. Press **ENTER** to get the new result.

Date calculations

Calculator can calculate the period of time (in days) between two specified dates. It can also calculate the date a specified number of days before or after a set start date.

Calculating the number of days between two dates:

1. Touch **DATE** to switch to the date calculator.



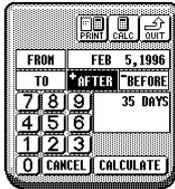
The current date is the default start date.

2. Touch **CANCEL** to clear the current date and enter a different start date, if desired.
 - Prefix single-digit months or dates with 0.
 - You can modify part of a date by touching it and then entering the required numbers.
3. Touch **TO**.
4. Enter the end date.
5. Touch **CALCULATE**.
The number of days between the two dates is shown.

ⓘ If you enter an invalid date, for example if you forget to enter the year, the operation will not be recognized and nothing will happen when you touch **CALCULATE**. If you make a mistake, touch **CANCEL** to return to the previous step.

Calculating the date from the number of days:

1. Touch **DATE** to switch to the date calculator.
The current date is the default start date.
2. Touch **CANCEL** to clear the current date and enter a different start date, if desired.
 - Prefix single-digit months or dates with 0.
 - You can modify part of a date by touching it and then entering the required numbers.
3. Touch **AFTER** to get a date in the future.
Touch **BEFORE** to get a date in the past.
4. Enter the number of days in the past or future.



5. Touch **CALCULATE** and the final date is displayed.

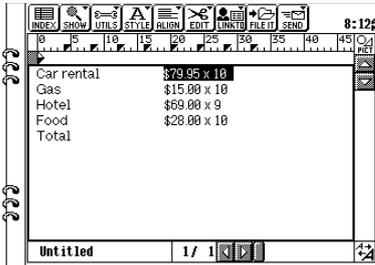
 You can continue to calculate other dates using the calculated date as a new start date. Press **+** or **-** keys and the calculated date is automatically entered in the **FROM** field. If you make a mistake, touch **CANCEL** to return to the previous step.

Data from other entries

You can perform calculations on numbers contained in other entries. You can also transfer calculated values into another entry.

From another entry to Calculator:

1. Select the entry with the data you want to calculate.
2. Drag the touch pen to highlight the calculation data.



3. Touch **EDIT** and select "**Copy**" to copy the data.
4. Touch **CALC** to open Calculator, then press **2nd V** to paste the calculation data. The copied calculation is performed and the result is displayed.

From Calculator to another entry:

1. After a calculation, touch the result to highlight it, then press **2nd C** to copy it.
2. Open an entry in Detail View, and touch the position where you want to enter the calculated value.
3. Touch **EDIT** and select "**Paste**".
The copied value is now included in the entry.

Error indicator E

The error indicator, E, appears when any of the following situations occur:

- Integer part of the rough result has 11 to 20 digits. For example: $4567890123 \times 456 = 208.2957896$ is displayed with E to indicate that $208.2957896 \times 10^{10} = 2,082,957,896,000$ is the rough result. Rough results are not available in paperless printer mode.
- Integer part of the result exceeds 20 digits.
- Integer part of the value in memory exceeds 10 digits.
- A number has been divided by 0.

Touch **C•CE** to clear the error indicator.

Scrapbook

Scrapbook lets you make quick hand-written notes, sketches and maps directly on the display. The stamp function lets you add built-in images of buildings, intersections and railways to make your maps more accurate and clear.

Scrapbook entries can be added to Contacts and Data Files entries as part of those databases, or can be included in Documents entries. For more information on adding Scrapbook entries to other entries, see p. 157 and p. 180.

Scrapbook entries take up much more space in memory than text, so it is a good idea to delete unwanted Scrapbook entries or copy them to a RAM card.

When  is displayed at the lower right of the display, Scrapbook is in Detail View and you can scroll the entries by touching .

Touching the upper left corner of  moves to the previous entry, and touching the lower right corner moves to the next entry.

Touching the display makes  disappear so you can change an entry.

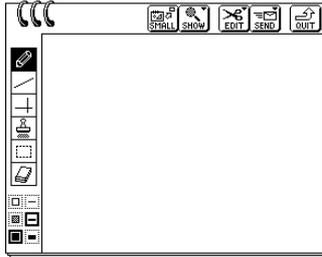
If Scrapbook is currently displayed and you select another application (or you touch **SMALL**), the Scrapbook display is reduced to a movable window. To move this window, touch the top left corner and drag it to the new location. To enlarge the Scrapbook window and continue drawing, touch **LARGE**. Scrapbook will remain on the display until you touch **QUIT**.

Making a new Scrapbook entry:

1. Touch **SCRAPBOOK**.
A "blank" page is displayed.
2. Use the touch pen to write or draw on the display.
 - Select drawing tools on the left.
 - Default drawing tool width is medium.
3. When you complete your entry, press **ENTER**.
The entry is saved and the display changes to Detail View. To make another entry, touch **EDIT** and select "**New Entry**" (or press **NEW ENTRY**).
4. To close Scrapbook, touch **QUIT**.

Drawing tools

The Scrapbook drawing tools add versatility to creating graphics. The pencil tool is the default selection when you first touch the display with the touch pen.



-  [Pencil] Draws freehand lines.
-  [Ruler] Draws straight lines.
-  [Grid] Draws the lines vertically or horizontally.
-  [Stamp] Inserts built-in stamps.
-  [Area] Defines areas for editing operations.
-  [Eraser] Deletes graphics.
-  [Pattern] Selects drawing pattern from white, hatch or black. White is useful for deleting details that cannot be easily removed by the eraser.
-  [Width] Sets width of drawing tools.

Finding entries

Scrapbook entries are saved in the order entered.

- To find a Scrapbook entry, touch  to step through all the entries (or press **PREV** or **NEXT**).
- You can also touch **SHOW** and select "**First Entry**" or "**Last Entry**" to move to the top or bottom of the entry list.

To edit an entry:

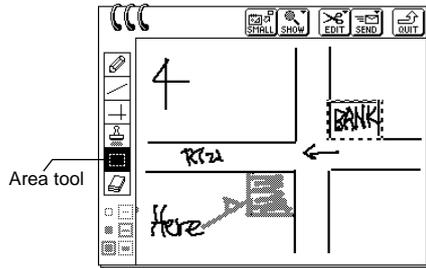
1. Display the entry you want to edit.
2. Select the drawing tool you want to use.
3. Make any required changes.
4. To save the changes and quit Scrapbook, touch **QUIT**.
To save the changes and remain in Scrapbook, press **ENTER**.

Selecting an area

The area tool lets you select a Scrapbook area for copying, deleting and other operations.

To select an area:

1. Display the entry you want to revise and select the area tool (☐).



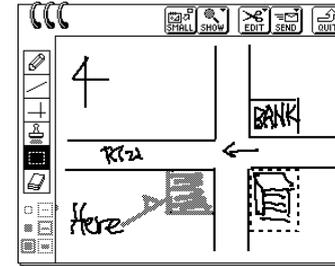
2. Drag the touch pen from the upper left to the lower right of the area you wish to select. A rectangular outline will indicate the selected area.
3. Perform the required operation on the selected area (as shown below). To deselect the area, touch anywhere in the drawing area or select another tool.
4. Complete your changes, then press **ENTER**.

Moving or copying graphics

Graphics sections can only be moved or copied within Scrapbook.

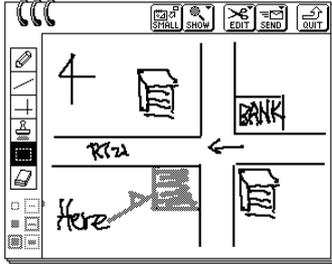
To move or copy graphics:

1. Touch the area tool and select the graphics area you want to copy or move.



2. Touch **EDIT** and select "**Cut**" (to move) or "**Copy**".
3. Select the area where you want to paste the graphics.

4. Touch **EDIT** and select "**Paste**".



Deleting sections of graphic entries:

1. Use the area tool to select the area to be deleted.
2. Press **DEL** to delete the selection.

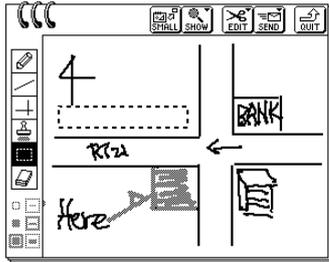
Adding text strings to Scrapbook

You can import text into Scrapbook from other application entries.

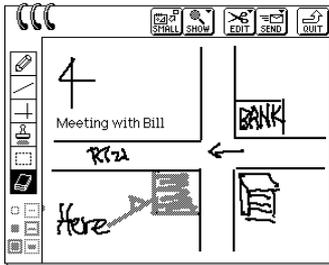
To add text strings to a Scrapbook entry:

1. Display the entry with the text you want to import.
2. Highlight the required text by dragging the touch pen.
3. Touch **EDIT** and select "**Copy**".
4. Touch **SCRAPBOOK** and display an entry. For a new entry, touch **EDIT** and select "**New Entry**".

5. Select the area where you want to place the text.



6. Touch **EDIT** and select "Paste".



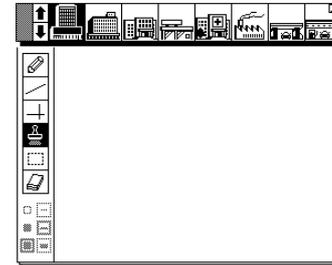
Text is pasted to fit the area you specify, and it is split over several lines if necessary. If the area is not large enough, only part of the text is pasted.

The Stamps tool

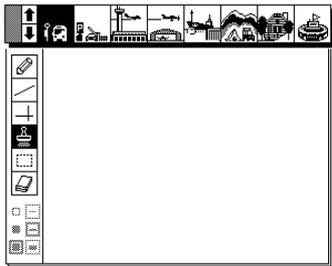
You can use the Stamp tool to add one of the 64 built-in stamps to your Scrapbook entry.

To use the stamp tool:

1. Display the entry you want to add a stamp to.
2. Touch the Stamp tool at the left.
The stamp menu appears at the top of the display.

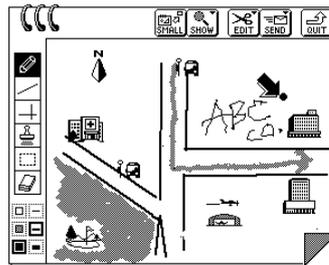


3. Touch the stamp you desire to select.
To scroll the stamp menu, touch **↑** or **↓** (or press **PREV** or **NEXT**).



4. Touch the location where you want the stamp inserted.
- The stamp can be dragged to any location until the pen is lifted from the display. Once the pen is lifted, the stamp is set and cannot be moved.
 - A stamp can be inserted in multiple locations.
 - To remove a stamp, select the stamp with the area tool, then press **DEL**.
 - The stamp menu is a movable window. To move the stamp menu, touch the left corner and drag to the new location.

5. When you complete your entry, press **ENTER**.



Deleting Scrapbook entries

Deleting a single Scrapbook entry:

1. Display the Scrapbook entry you want to delete.
2. Touch **EDIT** and select "**Delete Entry**".
- ★ Press **DEL**.
3. Touch **Yes** to confirm the deletion.

Deleting all Scrapbook entries:

1. Touch **SCRAPBOOK**.
2. Touch **EDIT** and select "**Delete Group**".
3. Touch **Delete**.
4. Touch **Yes** to confirm the deletion.

Filer

Filer is a unique, easy-to-use accessory that helps you manage your information by topics rather than by entry type. Filer folders let you organize information in a similar way to office folders.

For example, suppose you have a project called "Andromeda". You might have the names and phone numbers of three project personnel in a Contacts file, two pages of meeting notes in Notes, a project outline in Outlines, three To Do action items, and five meeting dates in Appointments.

With Filer, you can assign all entries related to the Andromeda project to a single folder. This folder can then be selected when you want to work specifically on Andromeda project information.

 You cannot assign Spreadsheets entries to Filer.

Assigning entries to folders

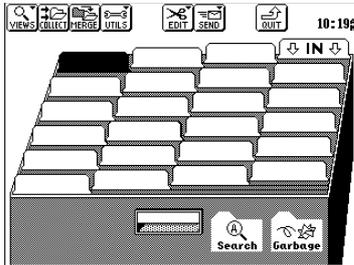
Before using Filer, you must first assign entries to the folders. There are three ways of assigning entries to a folder: you can assign a group of entries to one folder, you can assign individual entries to one or more folders, or you can make a new assigned entry. With all methods, the entries themselves are not moved or stored in the folder, they are just assigned to it. (Entries are retained in the applications that created them).

Collect related entries to one folder

The Collect function is used to assign entries linked by a common keyword to a specified folder. You can select the applications that are searched for the keyword.

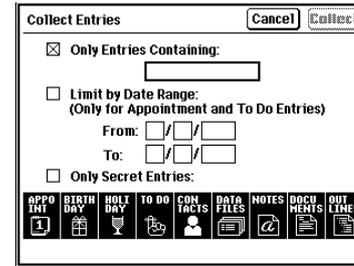
To collect related entries to one folder:

1. Touch **FILER**.



- Note the Search and Garbage folders at the front of Filer Drawer. The Search folder provides temporary storage for entries that match the keyword Search criteria. The Garbage folder provides temporary storage for deleted folder entries.

2. Touch a tab to specify the folder to hold the collected entries, then touch **COLLECT** in the tool bar.



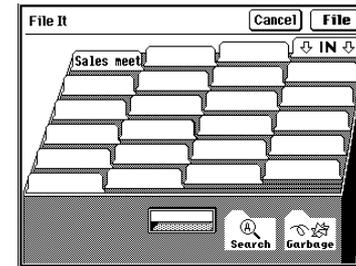
- If the selected folder contains entries and you touch **COLLECT**, a message indicates that if you proceed all existing entries will be unassigned from that folder. Touch **Yes** to proceed (or touch **No** to cancel and choose another folder).

3. Complete the Collect Entries display as required.
 - Enter a keyword of up to 16 characters in the "Only Entries Containing" field, using letters, numbers and symbols.
 - Check the Limit by Date Range box to set a date range (only for Appointments and To Do entries). The keyword is optional in this case.

- Touch the Only Secret Entries check box to collect only secret entries (not displayed if the unit is locked.) The keyword is optional in this case.
4. All applications are selected by default. Deselect any applications you do not need.
 5. Touch **Collect**.
A "Collecting" message appears.
 - A message indicates if no entries contain the keyword. You can try again using a different keyword, or touch **Cancel** to close the box.
 - All entries containing the keyword are assigned to the specified folder. The first ten characters of the keyword are displayed as the folder name (Untitled is displayed when entries are collected without specifying a keyword).
 - The folder name can be easily changed, see p. 72.

Assigning a single entry to multiple folders:

1. Display the entry that you want to assign to a folder.
2. Touch **FILE IT**.



3. Touch all the folders the entry is to be assigned to. Touch any folder again to deselect it.
 4. Touch **File**.
The "Filed!" message is displayed and the entry is assigned to the selected folder(s).
- ☞ If you assign the entry to an empty folder, the first ten characters from the first text field of the entry are shown on the name tab.

Naming or renaming folders:

1. In Filer Drawer, touch a tab to select the folder (except IN folder) that you want to name (or rename).
2. Touch **EDIT** and select "Folder Name".



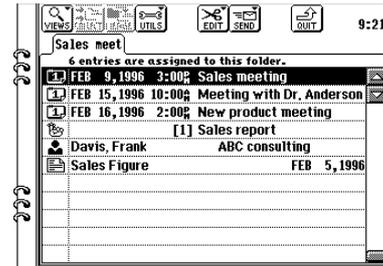
3. Enter any folder name of up to ten characters using letters, numbers and symbols.
4. Touch **OK** to save the folder name.

Viewing entries via Filer

Once an entry has been assigned to a Filer folder, it can be easily viewed so you can access information by topic rather than by entry type.

To view an entry from Filer:

1. Touch **FILER** and touch twice the tab of the folder that contains the entries you want to view.



- Only one folder can be opened at a time.
 - Folder entries are sorted by entry type.
 - If the folder has more than eleven entries, use the scroll bar to move to other entries.
2. Touch the desired entry twice. It will be shown in the entry mode of the original application.
 3. Touch **FILER** to return to the Filer Index.
 4. Touch **VIEWS** and select "Drawer" to return to Filer Drawer.

Editing folder entries

Once an entry is assigned to a Filer folder (or folders), any changes made to the entry in its source application will be reflected in all related folders. The entry is edited in the entry mode of the source application.

To edit a folder entry:

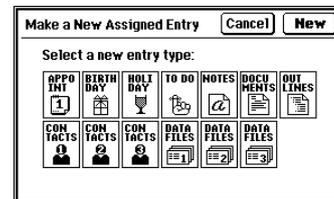
1. Open the desired folder.
2. Touch the entry to be edited twice. The display changes to the entry mode of the original application.
3. Make the desired changes to the entry.
4. When you complete your changes, press **ENTER** then touch **FILER** to return to the Filer Index.

New Assigned Entry

You can create a new assigned entry in another application directly from within Filer.

To make a new assigned entry:

1. Open the Filer Drawer then touch a tab.
2. Touch **EDIT** and select "New Assigned Entry".



The new entry will be assigned in the currently selected folder.

3. Select the new entry type and then touch **NEW**.
4. Create your new entry.

5. When you complete the entry, press **ENTER**. The new entry appears in the Index of the selected application and the entry is automatically assigned to the folder. Touch **FILER** to see the new entry in the Filer Index.

Delete an entry from Filer

Folder entries can be deleted directly from the Filer Index.

The deleted entry will be deleted from the original application and the Filer Index.

To delete a Filer Index entry:

1. In Filer Index, select the entry to be deleted.
2. Touch **EDIT** and select "**Delete Entry**".
3. Touch **Yes** to confirm the deletion. The entry is deleted and disappears from the Filer Index.

Removing entries from folders

If you assign an entry to the wrong folder, or no longer require a particular entry to be assigned to a folder, you can remove (unassign) single entries from folders. Removed entries are not deleted from the source application.

To remove a single entry from a folder:

1. From Filer Drawer, select the folder that contains the entry you want to remove.
2. In Filer Index, select the entry to be removed.
3. Touch **UTILS** and select "**Remove This Entry**".
A message indicates the entry has been removed.

Empty a folder

You can empty a folder. This will remove (unassign) all entries from the folder. Removed entries are not deleted from the original application.

To empty a folder:

1. In Filer Drawer, select the folder you want to empty.
2. Touch **UTILS** and select "**Empty This Folder**".
3. Touch **Yes** to confirm the folder is to be emptied.
The folder contents are removed and the name tab becomes blank, indicating an empty folder.

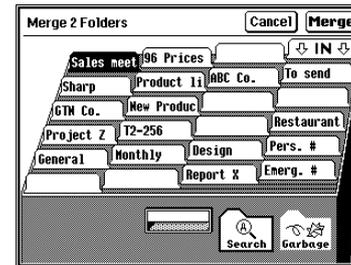
Merging (Moving) folders

At times, you may have two folders whose contents, names or purpose are duplicated. You might want to merge (combine) the two folders into a single folder.

- To delete all entries in a folder, an alternate method is to merge that folder with the Garbage folder, then touch **EDIT** and select "**Delete Garbage Contents**".
- To undo the deletion of a folder you can merge the Garbage folder with an empty folder.

To merge folders:

1. From Filer Drawer, select the first folder to be merged.
2. Touch **MERGE**.



3. Select the second (destination) folder that will be merged, and touch **Merge**. The contents of the first folder will be appended to the destination folder.
 - The name of the destination folder has priority.
 - If the folder contains duplicate entries, the duplicates will be removed.

Sending folders

You can send all entries assigned to a folder to another unit via infrared transmission or via optional cable. Sent folder entries will be assigned to the IN folder of the receiving unit. For more information about Unit to Unit transfers, see p. 220.

To send a folder to another unit via infrared transmission:

1. Press **GET** on the receiving unit.
 - ★ Touch **SEND** in the tool bar, select "**Unit to Unit**", and then select **Receive** and touch **OK**.
2. Touch **FILER** on the sending unit.
3. Select the folder in Filer Drawer.
4. Press **SEND**.

The folder entries will be sent to the receiving unit and assigned to the IN folder.

 - ★ Touch **SEND** in the tool bar and select "**Unit to Unit**", then select **Send** and touch **OK**.

Generate a Report

Generate a Report makes a new Documents based on the contents of a Filer folder. This makes a new Document entry containing information on entries assigned to a particular folder.

For example, you might want to fax a report on your activities for a specified week. The Collect tool can be used to gather your activities into a single folder with a set date range. You can then touch **SEND** and select "**Generate a Report**" to make a Documents report entry. In Documents, edit the report and then send it by fax.

Report format

Please note the following important points:

- The generated report page format is letter size, with all margins set at 1 inch and uses Elite (12 cpi) font.
- For Appointment, alarm time and repeat information are not included.
- For Birthday/Ann, reminder information is not included.
- For Contacts/Data Files, pictures and link information are not included.
- For Notes, drawings and modified time information are not included in the report.
- For Documents, pictures and header, footer and text style information are not included.
- For Outlines, topic text is not indented in accordance with the topic level.

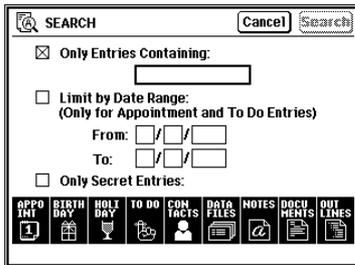
Search

The Search function lets you locate entries containing a specific keyword, even if you do not know the entry title or the application it was created in. The search can be limited to a specific date range for Appointments and To Do entries, or limited to secret entries. The Search function selects all applications as a default setting for the search, but you can deselect applications as desired. When the search is completed, entries that match the search criteria are assigned to the Search folder in Filer.

☞ You cannot use the search function in the Spreadsheets application.

To use the Search keyword function:

1. From any application, touch **SEARCH** at the left.



2. Enter the search keyword in the "Only Entries Containing" field. You can use up to 16 characters (letters, numbers and symbols).
3. Check the Limit by Date Range box to enter a search date range for Appointment and To Do entries.
4. Check the Only Secret Entries box to limit the search to Secret Entries.
5. Select the applications you want searched. All applications is the default selection.
6. Touch **Search**.
All entries that match the search criteria are assigned to the Search folder in Filer. The Search folder is displayed, and you can view its contents with Filer.

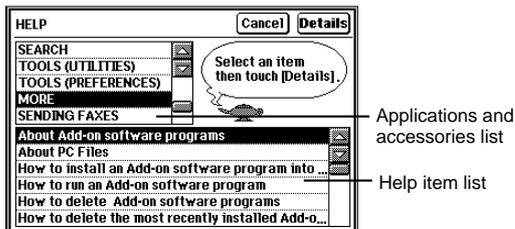
☞ In the application's Index View, it is also possible to use the Keyword Search function without touching **SEARCH**. See details in General Operations.

Help

The built-in Help feature is a convenient, on-line help and reference source. You can access Help at any time by touching the **HELP** button on the left of the display.

To use Help:

1. Touch **HELP**.

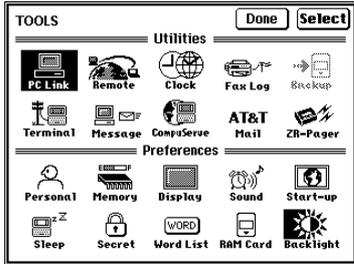


2. Select an application or accessory from the top list.
The current application is initially selected.
3. Select the Help item from the bottom list.
Use the scroll bars to move through the list.

4. When you complete your selection, touch **Details**.
5. Touch **Index** to return to the previous display.
Touch **Cancel** to exit the Help function.

Tools

Touching the Tools accessory produces the following display:



Utilities

The communications utilities ensure your unit is much more than just a hand-held personal information manager. They make your unit a powerful management and communications tool that links you to your busy world through PC links, terminal mode, data transfers, backups, faxes, messages, etc.

The utilities shown in the top half of the TOOLS display are: PC Link; Remote; Clock; Fax Log; Backup; Terminal; Message; CompuServe; AT&T Mail; and ZR-Pager. Clock is described on page 91 in this chapter and other Tools utilities are described in chapter 7, "Optional Accessories".

 Terminal, CompuServe, AT&T Mail and ZR-Pager are described in the manual provided separately.

Preferences

Preferences let you configure your unit to suit your own personal requirements.

Personal

Personal lets you enter your personal information for use at start-up, when sending faxes, making letters, etc.

To enter your personal information:

1. Touch **TOOLS** and touch **Personal** twice.

A screenshot of the 'Personal' information entry screen. It has a title bar with 'Personal' and buttons for 'Password', 'Sign', 'Cancel', and 'OK'. The form contains fields for 'Owner:', 'Company:', 'Position:', 'Phone #:', 'Fax #:', and 'Address:'. The 'Address:' field is a larger text area with a scroll bar on the right.

2. Enter your own information for owner (your name), company, position, phone number, fax number and address.
3. Touch **Password** to set the password. For more information on the password function, see p. 85.

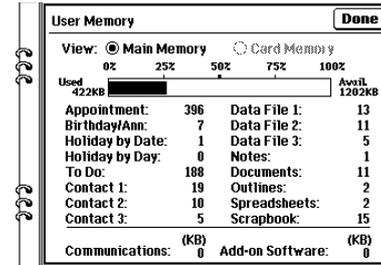
4. Touch **Sign** to enter your signature for use with the Make a Letter function in Documents. For more information on the signature function, see p. 179.
5. When you complete your Personal entry, touch **OK**.

Memory

The memory in your unit (ZR-5700: 1MB; ZR-5800: 2MB) provides you with a certain amount (ZR-5700: approx. 600 KB; ZR-5800: approx. 1,624 KB) to store your entries and Add-on software. If you get close to using all the available memory, certain features may not function. To avoid such problems, you should regularly check the available memory and free up space if necessary by deleting unwanted entries. The Memory function allows you to check the amount of memory available in the main unit (and the RAM card if installed).

To check the memory:

1. Touch **TOOLS** and touch **Memory** twice.



If a RAM card is installed, you can select Card Memory to check available memory on the card. If there is no RAM card installed, this button will be disable (unavailable).

2. When you complete your memory check, touch **Done**.
 - The Memory display might show a small amount of free memory available, but this may not be enough for some features to function.
 - If you set a value for Extra Workspace for Spreadsheets using the Setup menu (in Index View), this is indicated by the gray shaded portion in the memory graph.

Display

The Tools Display accessory can be used to:

- Adjust the contrast of the LCD display
- Adjust the touch panel display for best touch pen operation.

LCD contrast

The LCD contrast may sometimes require adjustment. For example, a setting that is good indoors may not be adequate when outside.

- You can also adjust the LCD contrast directly at start-up. Turn the unit off, hold down the **MENU** key then press **ON**.
- Press **SPACE** to go to Adjust Touch panel. For more information, see Quick Start.

Touch panel

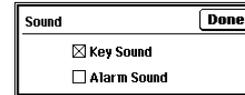
The touch panel should be adjusted to suit your style of writing, drawing and touching the display. For more information, see Quick Start.

Sound

The Tools Sound accessory is used to set Key Sound and Alarm Sound. Key Sound is set on as the default setting, so a beep sound is made each time a key or touch button is pressed or the display is touched. Alarm Sound is off as a default setting, but if you set a schedule or daily alarm, it is automatically turned on.

To change sound settings:

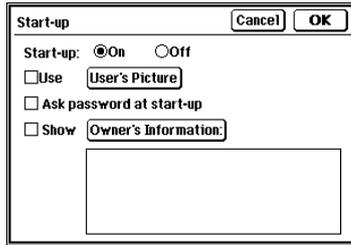
1. Touch **TOOLS** and touch **Sound** twice.



2. Touch **Key Sound** to turn it on or off.
3. Touch **Alarm Sound** to turn it on or off.
 - You must also set Daily alarms, see p. 93 or Appointment alarms, see p. 131.
4. When you complete your settings, touch **Done**.

Start-up

Start-up lets you configure the start-up display to suit your own requirements.



The Start-up display can be used to set the following:

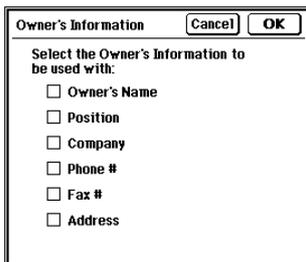
- Start-up: Can be set to On, Off.
- Picture: Globe is the default picture graphics. You can also touch User's Picture to make a graphic entry or load an entry through Scrapbook.
- Ask password at start-up: Start-up display can be set to ask for a password at start-up, thus protecting all entries. You must first register a password by touching Password in TOOLS Personal.

- Show Owner's Information: Start-up can be set to Show Owner's Information (increasing the chances of your unit being returned if it is lost). Your personal information must first be registered with TOOLS Personal, see p. 80.

To display owner's information at start-up:

1. Touch **TOOLS** and touch **Start-up** twice.
2. Touch **On** to set Start-up to On.
3. The start-up display picture will be the default Picture. To use a User's Picture, check the Use box and then touch User's Picture. You can then draw pictures or paste a picture from Scrapbook.
4. You can check the Ask password at start-up box. For more information on the Secret Password function, see p. 85.

5. Check the Show box, then touch the Owner's Information button.



6. Select the owner's information to be shown at start-up. When you complete your selection, touch **OK**.
 - Selecting the owner's information is only useful if you first use Tools Personal to enter your personal information.
7. Complete your Start-up display settings and touch **OK**. Your owner's information will now be shown at start-up.

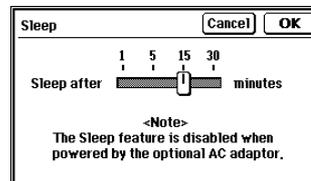
Sleep

Sleep turns the unit off if there is no activity within a set time period. This extends the life of the operating batteries.

- Default Sleep time period is 15 minutes.
- Sleep function is disabled if the unit is powered by the optional AC Adaptor EA-23E or the CE-BK1 battery pack.

To change the Sleep time period setting:

1. Touch **TOOLS** and touch **Sleep** twice.



2. Use the touch pen to touch and drag the Sleep setting. Sleep time can be set to 1, 5, 15 or 30 minutes.
3. When you complete your setting, touch **OK**.

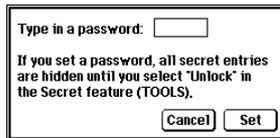
Secret

The Secret function keeps your information secure (hidden) requiring a password that you specify. Entries marked as secret are hidden until the password is entered. Individual entries can be marked as secret, or you can simply prevent access to the entire machine by requiring a password each time the unit is turned on. Marking entries as secret has no effect until a password is registered.

 If you forget your password, you will not be able to unlock your unit. To use the Secret function, you must delete the old password, and this will also delete all entries marked as secret. If you are worried you might forget your password, write it down and keep it in a safe place.

To register a password:

1. Touch **TOOLS** and touch **Personal** twice.
2. Touch **Password**.



Type in a password:

If you set a password, all secret entries are hidden until you select "Unlock" in the Secret feature (TOOLS).

3. Enter a password of up to seven characters using letters, numbers and symbols.
 - Choose your password carefully. We recommend you use an easy to remember word.
 - Password recognizes uppercase and lowercase. For example: *SECRET* is different from *Secret* or *secret*.
4. Touch **Set** to store the password.
5. Touch **OK**.

Marking entries as secret

You can mark any entry (except those in Scrapbook) as secret.

To mark an entry as secret:

1. Open the application and select the entry.
2. Open the entry you want to mark as secret.
3. Touch **EDIT** and select "**Secret Entry**".
An asterisk (*) appears in the top right corner to indicate this is a secret entry.

- ☞ If your unit is locked to hide secret entries, an entry which has just been marked as secret will still be displayed until you select another entry. Once you leave the entry marked as secret, it will be hidden with all other secret entries.

Accessing secret entries

Entries marked as secret are not shown in any application Index, and they cannot be accessed by any search method. To view secret entries, your unit must first be unlocked.

To unlock the unit:

1. Touch **TOOLS** and touch **Secret** twice.



2. Select **Unlock** and touch **OK**.
3. Enter your password and touch **Unlock**. The "Unlocked!" message is displayed.

To change a secret entry to a normal entry:

1. Unlock your unit with the procedure above.
2. Display the secret entry you want to make normal.
3. Touch **EDIT** and select "**Normal Entry**". The asterisk disappears from the top right corner and the entry is no longer secret.

Locking your unit

When a password has been registered, even if you unlock your unit using the procedure above, it will automatically lock itself each time you turn it off. This feature guards your secret entries in case you forget to lock your unit, and remains in effect as long as a password is registered.

To lock your unit:

1. Touch **TOOLS** and touch **Secret** twice.
2. Touch **Lock**.
🔒 is displayed to indicate your unit is locked.

Changing the password

To register a new password, you must first enter the current password, then enter the new password. To delete the current password, leave the new password field blank.

To change your password:

1. Touch **TOOLS** and touch **Personal** twice.
2. Touch **Password**.

Enter your password:

New password:

If you want to delete your password, please leave the new password field blank.

3. Enter your current password and enter the new password.
Leave New password blank if deleting the current password.
4. Touch **Set**.
5. Touch **OK**.
If you delete the current password, a message indicates that your unit is unlocked. Entries marked as secret are unprotected until a new password is registered.

If you forget your password

If you forget your password, to use the Secret function again you must delete all entries marked secret. If you have installed an optional RAM card which has the same password as the main unit, secret data on the card will also be deleted by this operation.

To delete all secret entries:

1. Touch **TOOLS** and touch **Secret** twice.
 2. Touch **Delete Secret Data**.
 3. Touch **Yes** to confirm deletion of all secret entries.
You will now be able to enter a new password.
-  If you set the Start-up display to Ask password at start-up, and then forget your password, you will be required to do an All Reset operation, which will cause the loss of all data on your unit. (See p. 234 for details).

RAM cards and the Secret function

If you use a RAM card in your unit, that card is also protected by your password. If you remove a RAM card and change your password, or register a password for the first time, you will not be able to use the card in your unit unless you re-register the original password, or delete your current password. It is therefore crucial to keep track of passwords used with specific RAM cards. Also, before you use a new RAM card for the first time, you must delete your current password or unit will not recognize the card.

- ☞ You cannot register a password for a Flash Memory card. However, if you archive unit data that includes a password into a Flash Memory card, the password is also stored in the card.

Word List

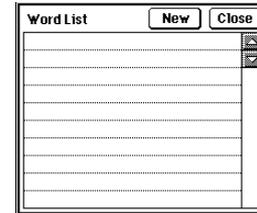
You may find that you must enter the same word many times, for example in lists, or you may need to write several memos or letters on the same topic. The WORD key lets you easily insert words, numbers, or phrases (up to 32 characters long) in any entry with the press of a key.

Word List entries

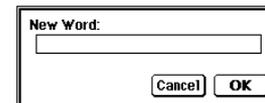
The Word list has no default words, so you must first register your own words or phrases.

To make Word list entries:

1. Touch **TOOLS** and touch **Word List** twice.



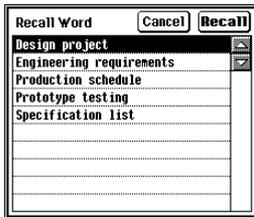
2. Touch **New**.



3. Enter a word, phrase or numbers (up to 32 characters) you want to recall with the **WORD** key.
4. Touch **OK**.
Repeat steps 2 and 3 to make other Word list entries.
The entries are registered and sorted alphabetically.
5. When you complete your entries, touch **Close**.

Using the **WORD** key:

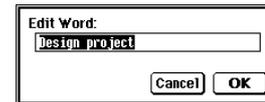
1. When entering or editing an entry, place the cursor where you want to enter a word.
2. Press the **WORD** key.



3. Select the word, phrase or number you want to insert. Use the scroll bar to move through the list.
 4. Touch **Recall**. The Word window closes and the word is inserted in the entry at the cursor position.
- ★ In step 3 above, touching the word twice also inserts it into the entry.

Editing a Word list entry

You can edit any Word list entry using a similar procedure to making Word list entries, but instead of touching **New** in step 2 on page 88, touch the word you want to edit twice.



Make any changes and then touch **OK**.

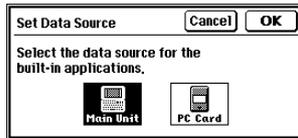
Deleting Word list entries

If you find you no longer need a particular Word list entry, it is easy to delete it from the Word list. Select the Word List entry in step 2 on page 88, press **DEL**, and then touch **Yes** to confirm.

RAM Card

When a RAM card is installed in the unit, you can select the RAM card or main unit to save and retrieve data.

1. Touch **TOOLS** and touch **RAM Card** twice.

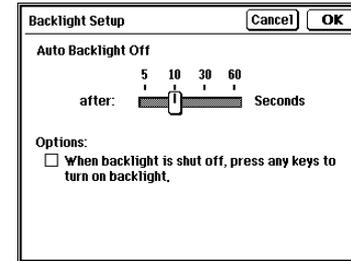


2. Select **Main Unit** or **PC Card**.
3. Touch **OK**.

Backlight set-up

You can specify how you want the Backlight of your ZR-5800 to operate.

1. Touch **TOOLS** and then touch **Backlight** twice.



2. Using the pen, drag the slider to the desired number of seconds after which you want the Backlight to turn off automatically.
OPTION: Touch the check box if you want the Backlight to come on automatically whenever you type or touch the display. This would be useful when using the unit for long periods in a dark location. If you turn off the unit, the Options box will be unchecked the next time you use the unit.
3. Touch **OK**.

Clock

Clock is a built-in, dual-display clock that shows the current time and date in your Home City and the time and date in another World City. When Clock is selected from Tools, the clock remains displayed until another application is selected.

You can choose from a built-in list of 212 cities. If you cannot find the city you require, you can make your own customized list of three User's Cities. Clock Home City time is used for all time-based operations.

- Home City selection is described in the Quick Start section. A similar procedure is used for World City.
- Daylight saving time (DST) is set as the default for all cities. You can change this setting for any city.

Daylight Saving Time

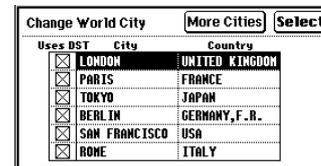
Cities that use daylight saving time (DST) normally set their time ahead one hour in the summer. If Uses DST is selected in either Change Home City or Change World City, and Summer is selected in World Clock display, the time will be advanced one hour. To disable DST, select Winter.

World City

World City display is very handy for international phone calls and overseas travel. Once you make your selection, World City time and date are automatically calculated from the time difference to your Home City.

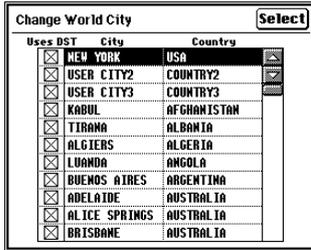
To select your World City:

1. Touch **TOOLS** and then touch **Clock** twice. London, UK is the default World City.
2. To select your own world city, touch the World City name button of the lower clock.



If World City has been set before, a list of the last six cities selected will be displayed.

3. Select your World City.
If the city you want is not on the list, touch **More Cities** and another list will appear.



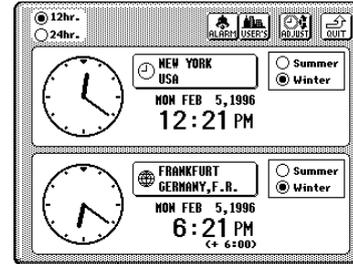
The first three cities are User's Cities you can specify. The rest of the list is in alphabetical order by country and by city.

4. Use the scroll bar to find your world city, then touch and highlight it. As a shortcut, enter the first letter of the country, e.g. enter *U* for United Kingdom.

As a default setting, Uses DST is set to on for all cities. If your world city doesn't use daylight saving time, touch the box to turn it off.

5. Complete your World City selection, then touch **Select**.

World Clock is displayed with Home City time on the upper clock and World City time on the lower clock.



6. If DST is currently in use for your World City, select **Summer**. If DST is not currently in use, select **Winter**.

User's City

To use cities that are not already listed, you can enter three cities of your own choice as User's Cities. These cities can then be selected as your Home City or World City.

To enter User's Cities:

1. Touch **TOOLS** and then touch **Clock** twice.
2. Touch **USER'S** at the top of the Clock display.

Set User's Cities		Cancel	OK
User's City 1	City:	NEW YORK	
<input checked="" type="checkbox"/> Uses DST	Country:	USA	
	GMT +/-:	-5	hours
User's City 2	City:	User's City 2	
<input checked="" type="checkbox"/> Uses DST	Country:	Country 2	
	GMT +/-:	0	hours
User's City 3	City:	User's City 3	
<input checked="" type="checkbox"/> Uses DST	Country:	Country 3	
	GMT +/-:	0	hours

New York, USA is set as the default User's City 1.

3. Enter User's City names, countries and GMT values from the keyboard.
 - GMT value is the time difference between the User's City time and Greenwich Mean Time (international time reference). Enter a value from -11.5 to +12, with 0.5 hours precision.
 - Uses DST is the default setting. If the city doesn't use DST, touch the box to deselect it.
4. Complete your User's City settings, then touch **OK**.
You can now select a User's City as Home or World City.

Setting daily alarms

Daily alarms are set like a regular alarm clock and sound even if your unit is turned off. You can set up to seven daily alarms (and these are separate from Activities alarms). This is handy when you need to quickly set a wake-up alarm, but do not want to make an Activities entry.

To set daily alarms:

1. Touch **TOOLS** and then touch **Clock** twice.
2. Touch **ALARM** at the top of the Clock display.

Set	Alarm #	Time
<input type="checkbox"/>	Daily Alarm 1	
<input type="checkbox"/>	Daily Alarm 2	
<input type="checkbox"/>	Daily Alarm 3	
<input type="checkbox"/>	Daily Alarm 4	
<input type="checkbox"/>	Daily Alarm 5	
<input type="checkbox"/>	Daily Alarm 6	
<input type="checkbox"/>	Daily Alarm 7	

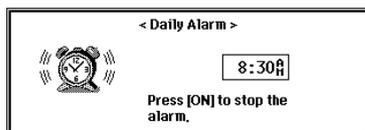
Daily Alarm 1:
 :

3. Touch and highlight the alarm you want to set.
 - Touch the Set box (a cross appears).
 - Touch \blacktriangledown to set the alarm time.

4. When you complete your daily alarm settings, touch **OK**.

⏏ appears at the top right of the display to show that alarms will sound at the set alarm times.

When an alarm sounds:



- Press **ON** to stop the alarm.
- After turning off the alarm, press **CANCEL** to go back to the previous screen.
- Alarms turn off automatically after 15 seconds.

To remove a set alarm:

1. Touch **TOOLS** and then touch **Clock** twice.
2. Touch **ALARM** at the top of the Clock display.
3. Touch and highlight the set alarm you want to remove.

4. Press **DEL**.
The set alarm time disappears.
5. When you complete your setting changes, touch **OK**.

Disabling alarm sound

Once you have set alarms, they will sound at the set times whether your unit is on or off. ⏏ at the top right of the display indicates if alarms are set. There may be times when you want to disable all set alarms.

To disable alarm sound:

1. Touch **TOOLS** and touch **Sound** twice.
2. Touch the Alarm Sound box to disable the alarm sound for all of the alarms.
⏏ disappears from the top right of the display and all set alarms will no longer be heard. However, alarms will still be indicated on the display at the set time, even if your unit is turned off.

👉 You can enable and disable each alarm by touching the corresponding check box. Even if an alarm time is set, the alarm will not sound if the box is unchecked.

MORE

You can install and manage add-on software and load PC files received via data transfer by touching **MORE**. For example, you could install some new software located on your PC card, use it for a while, then delete it if you decide not to use it anymore. Or you could convert a text file received by PC data transfer into a Documents entry.

For full details of using **MORE**, see p. 213.

Spreadsheets

The unit's Spreadsheets application is a sophisticated utility for managing financial, statistical and other numeric data in a flexible spreadsheet format. With its worksheets and editing features, Spreadsheets looks and feels similar to most of the popular spreadsheet programs currently available, so you can get used to it in no time. It even allows Spreadsheets data to be imported and exported between Microsoft Excel for compatibility with your home or office PC.

Spreadsheets offers a comprehensive range of powerful built-in functions, as well as built-in worksheet templates. You can use these together to quickly and easily:

- Create expense reports
- Analyze budgets
- Run a scenario analysis for forecasts
- Tabulate, summarize and chart data for any purpose.

For full details and instructions for using Spreadsheets, see the manual provided separately.

CHAPTER 3

General Operations

This section describes general operations that can be used with your unit. Contacts and Scrapbook are normally used for examples of these operations. However, the operations described can be applied to most applications and accessories (which are described in detail elsewhere in this manual). For a full explanation of Contacts, see Section 5 Databases. For a full explanation of Scrapbook, see Section 2 Desk Accessories.

Opening Applications and Accessories

To start using an application or accessory, touch the required touch button at the right or left side of the display. Each time you touch a button, the selected application or accessory will appear.

- Any application that is currently open on the display will be hidden when a new application is selected.
- You can return to any application at the exact point where you left off by touching it again.

Tool Bar Functions

The tool bar across the top of the display has many common functions as follows:

-   VIEWS/INDEX
-  FILTER
-  SHOW
-  LINKS
-  SETUP
-  EDIT
-  LINK TO
-  FILE IT
-  SEND

 A small pointer ("▼") on the upper right of a tool bar item indicates a menu will be displayed if touched.

Views/Index

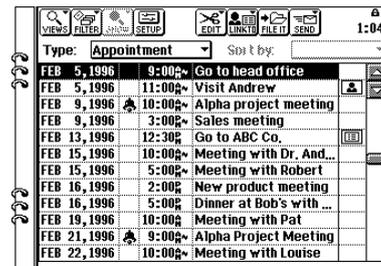
VIEWS/INDEX in the tool bar is used to select the display mode. Once an application is open, you can use VIEWS/INDEX to switch display modes. Each display mode has its own unique variations, functions and purposes.

Detail View

Detail View allows you to see the details for an entry. A basic Detail View is available for Contacts, Data Files, Documents and Outlines. More advanced Detail Views are available for Activities, Notes and Filer.

Index View

Index View shows a one line view for each entry, making it easier to find a particular entry.

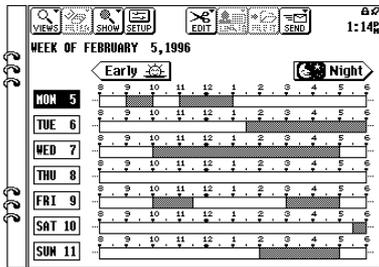


Type:	Appointment	Sort by:
FEB 5, 1996	9:00am	Go to head office
FEB 5, 1996	11:00am	Visit Andrew
FEB 9, 1996	10:00am	Alpha project meeting
FEB 9, 1996	3:00pm	Sales meeting
FEB 13, 1996	12:30pm	Go to ABC Co.
FEB 15, 1996	10:00am	Meeting with Dr. And...
FEB 15, 1996	5:00pm	Meeting with Robert
FEB 16, 1996	2:00pm	New product meeting
FEB 16, 1996	5:00pm	Dinner at Bob's with ...
FEB 19, 1996	10:00am	Meeting with Pat
FEB 21, 1996	9:00am	Alpha Project Meeting
FEB 22, 1996	10:00am	Meeting with Louise

To change Index/Detail View

To change the display mode for Activities:

1. Touch **ACTIVITIES**.
2. Touch **VIEWS** in the tool bar at the top of the display.
3. Use the touch pen to select the Detail View from the list in the menu.
For example, select "**Weekly Graph**".
The display should now be similar to that shown below.



4. Touch **VIEWS** and select an Index View from the list.
For example: touch **VIEWS** and select "**To Do Index**".
The display should now be similar to that shown below.

Type: To Do Sort by: Priority

<input type="checkbox"/>	1 Sales report			
<input type="checkbox"/>	4 Read manuscript	FEB	, 1996	
<input type="checkbox"/>	8 Make monthly sales report			
<input type="checkbox"/>	C Get ticket			
<input type="checkbox"/>	Flight to Atlanta			
<input type="checkbox"/>	Production Meeting	FEB 15, 1996		
<input type="checkbox"/>	Production Meeting	FEB 29, 1996		

To Be Done Done Monthly Goal

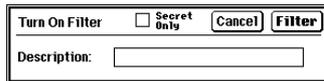
Filter

The Filter function lets you focus on entries that contain specific information. For example, you could recall all entries related to a particular company name. The Filter function does this by hiding all entries that do not match the filter criteria.

- Only Filtered entries can then be viewed or edited.
- The Filter function is available only for Appointments, Contacts and Data Files.

To turn on the filter for Appointments:

1. Touch **ACTIVITIES** and select Index or Detail View of Appointments.
2. Touch **FILTER** and select "Filter".



Turn On Filter Secret Only Cancel Filter

Description:

3. Enter the filter keyword.
 - For Appointments the keyword must be in the description field.
 - If a block of text is selected before touching **FILTER**, the text will be automatically displayed as the filter description.
 - Check the "Secret Only" box to filter only secret entries (not displayed if the unit is locked).

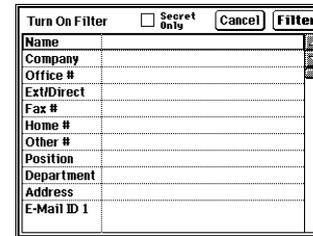
4. Touch **Filter**.

Filtered entries that match your criteria can be viewed in Index View.

A message indicates if no entries match your request.

To turn on the filter for Contacts and Data Files:

1. Open Contacts or Data Files in the Index or Detail View.
2. Touch **FILTER** and select "Filter".



Turn On Filter Secret Only Cancel Filter

Name	
Company	
Office #	
Ext/Direct	
Fax #	
Home #	
Other #	
Position	
Department	
Address	
E-Mail ID 1	

3. Select any field and enter the filter keyword.
 - Check the "Secret Only" box to extract only secret entries (not displayed if the unit is locked.)
4. Touch **Filter**.

Filtered entries that match your criteria can be viewed in Index View.

A message indicates if no entries match your request.

- ☞ If Filtering is on and a new entry is made or an entry is transferred from another device, the entry is displayed even if it does not match the filter criteria. To filter the new entry, you must turn the Filter off and then back on.

Turning the Filter off

To turn the Filter function off, touch the "Turn Off Filter" button at the bottom of the display. The "Turn Off Filter" button is movable. To move the button, touch the left side and drag it to the new location.

- ★ Touch **FILTER** and select "**Turn Off Filter**".

Deleting filtered entries

The Filter function makes it possible to delete a group of entries related to a specific topic. This can be helpful if you finish a project with many related entries. You can save time by deleting a filtered group instead of deleting individual entries.

In Contacts or Data Files:

1. Turn on Filter and use a keyword to filter the entries you want to delete (an example may be a company name).
2. Touch **EDIT** and select "**Delete Group**".
3. Make your deletion selections, then check the "Filtered Entries Only" box.
4. Touch **Delete** and then touch **Yes** to confirm deletion.

In Appointments:

1. Turn on Filter and use a keyword to filter the entries you want to delete (an example may be a company name).
2. Touch **EDIT** and select "**Delete Group**".
3. Touch **Delete** and then touch **Yes** to confirm deletion.

Show

The Show function is available with Activities, Documents, Outlines, Spreadsheets and Scrapbook. Show has the following special functions:

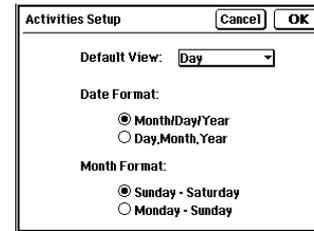
- Activities:
Today, A Specific Date, Labels
- Documents:
Show/Hide Ruler, Show/Hide Special Symbols, Print Preview, Header, Footer
- Outlines:
Show 1 Line Topics/Full Topics, Expand/Collapse Subtopics (2nd E), Expand Family, Collapse All
- Spreadsheets:
Hide Gridlines, Show Formulas, Hide Column/Row Labels, Show Full Screen, Show 10-Key Pad
- Scrapbook:
First Entry, Last Entry

These Show functions provide access to application-specific views, tools and functions. For more information, see the related section.

Set Up

The Set Up function is available for Activities, Contacts, Data Files and Notes. Set Up allows you to change the configuration of the applications as follows:

Activities



Use Set Up to select the following:

Default View

Day, Week or Month

Date Format

Month/Day/Year or Day. Month. Year

Month Format

Sunday-Saturday or Monday-Sunday

Contacts/Data Files

Use Set Up to select the following:

File Name

Enter the file name and number of fields

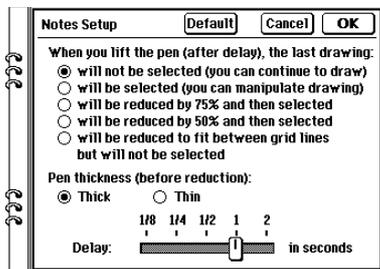
Field Name

View and change field names and field types (Text or Picture). Note that if you change a field type, current field data will be permanently deleted.

Index Form

Select three fields for the Index view and set the column width of these fields.

Notes



Use Set Up to select:

The last drawing action, Pen thickness and Drawing delay. Drawing delay is the time period that separates different drawing actions.

Edit

The EDIT function in the tool bar is available for all applications, Filer and Scrapbook. The EDIT function includes:

- New Entry
- Revert To Saved
- Delete Entry/Group
- Cut/Copy/Paste
- Secret/Normal Entry

New Entry

The EDIT New Entry function creates new entries in applications, Scrapbook and Filer, as follows:

- Activities: New Appointment, New Birthday/Ann, New Holiday, New To Do
- Contacts: New Business, New Contact 2, New Contact 3
- Data Files: New Data File 1, New Data File 2, New Data File 3
- Notes: New Note, Topic Title
- Documents: New Document, New Copy, Document Title
- Outlines: New Outline, New Topic
- Spreadsheets: New Worksheet, New Chart, Worksheet Title
- Scrapbook: New Entry
- Filer: New Assigned Entry, Folder Name

Revert to Saved

Revert to Saved cancels all changes and reverts to the original saved copy of an entry.

Delete Entry/Group

Described later in this section, see p. 113.

Cut/Copy/Paste

Described later in this section, see p. 114.

Secret/Normal Entry

The Secret/Normal function is used to designate an entry as Secret or Normal. Secret entries are protected by the password function and cannot be listed or viewed unless the unit has been unlocked with the password. Scrapbook data cannot be made into secret data. For more information, see Secret in Section 2 Desk Accessories.

Link To

The Link To function is a feature that allows entries in different applications to be linked together. This helps you to better manage your information and projects.

- Link To lets you link any entries to Contacts or Data Files entries.
- The Link To function is available for all applications.

Links

Contacts and Data Files also have a separate LINKS feature in the tool bar. Links provides Contacts and Data Files with the following functions:

- Show/Hide Linked Entry
- New Linked Entry
- Link by Searching
- Break Link
- Break All Links

The Link functions are used within Contacts and Data Files to establish and manage links to other application entries. For more information on Links, see p. 150.

File It

The File It function is used to file an entry with Filer. This allows the entry to be sorted by subject instead of by entry type. For more information, see Filer in Section 2 Desk Accessories.

Send

The Send function is used to send entries to other units or devices such as printers. Entries can either be sent directly by built-in infrared transmission or via optional cable. Some entries can also be sent by fax using the optional Fax/Modem CE-FM4. For more information see Section 7 Optional Accessories.

Send functions include:

Unit to Unit

Available for all applications, Scrapbook and Filer.

Print

Available for all applications (except for Spreadsheets), Scrapbook and Filer.

Fax

Available for Notes, Documents, Scrapbook and Filer.

The rest of this section explains general editing techniques used to make a new entry or to edit an existing entry in any application. Notes has additional features for working with text, see Section 6 Writing and Letters.

Fields

Many applications divide the display into field boxes. The types and number of fields vary for each application. The different field types include: text, date, time, picture and special fields. Contacts and Data Files let you define the number, type and names of fields, see p. 159.

You can enter any character into a text field:

- Text field size is limited only by the size of the entry. Text fields automatically adjust size to accommodate the number of lines entered.
- Dates entered in date fields should use the format in Activities Setup (MM/DD/YYYY or DD.MM.YYYY). For example, with MM/DD/YYYY you would enter *06231996* for June 23, 1996.
- Times are entered in time fields using the format used in Clock (12 hour or 24 hour). For example, with 12 hour format, for 9:00 AM, you would enter *0900A* (Enter A for AM or P for PM).
- For Contacts and Data Files, you can setup fields as picture fields. Pictures can be pasted from Scrapbook, Notes, Spreadsheets, or created and edited directly from the field.

Resume

While you are creating an entry, if you move to another application or turn the unit off before the entry is stored, your data will not be lost. When you return to the application previously used, or turn the unit back on, operation resumes at its most recent state.

Cursor

- The unit uses permanent insertion mode for all entries (except time and date fields).
- There is a blinking cursor in the Detail view of all applications except Notes.
- In date and time fields, touch the box to make it bold and then select the date or time with **◆**. You can also enter the date or time directly from the keyboard.

Entering text

Entering text from the keyboard is easy. The keyboard's QWERTY layout is similar to typewriters and computer keyboards.

Letters

Any standard letter (A to Z) can be entered by pressing the appropriate key. Letters are normally entered in lowercase. To enter uppercase letters, hold down either the **⇧** key while pressing the

letter key(s), or press the **CAPS** key to lock the keyboard in the CAPS mode (the CAPS symbol is displayed and any letters entered will be in uppercase). To enter lowercase letters while in CAPS mode, hold down **⇧** while pressing the letter key. Press **CAPS** again to turn CAPS mode off.

Numbers

Number keys are located on the keyboard above the letter keys. These keys enter numbers regardless of the CAPS mode. However, holding down **⇧** and pressing a number key enters the symbol printed above that key.

Symbols

The symbols that appear in white above some keys can be entered directly from the keyboard by holding down **⇧** and pressing the key. Other symbols are also available by pressing **SMBL**, see p. 112.

Moving text with Drag and Drop

(This function is available only in Activities, Contacts, Data Files and Documents.)
Select the text by dragging with the touch pen so it is highlighted. Touch the highlighted text and drag the touch pen to the new location. Lift the touch pen and the highlighted text will move to the new location.

Moving around the display

When working in an entry, the easiest way to move the cursor on the display is to touch the location with the touch pen. The cursor will immediately move to the selected position. You can also move the cursor around the display with the cursor keys: ◀, ▶, ▼, ▲. This may sometimes be more convenient when you are working from the keyboard. For rapid cursor movement, hold the cursor key down.

Advanced cursor key combinations are also available:

- 2nd** ◀ Move the cursor to the beginning of a line.
- 2nd** ▶ Move the cursor to the end of a line.
- 2nd** ▲ Move the cursor to the top of a field (or bottom of the previous field if already on the first line).
- 2nd** ▼ Moves the cursor to the bottom of the field (or top of the next field if already on the last line).

Moving between fields

You can move the cursor directly to the next field in an entry by touching the desired field name on the display, or by pressing ▼ or ▲. In either case, the cursor moves to the beginning of the desired field.

Inserting text

To insert new text in the middle of existing text, move the cursor to the correct position and begin typing. Text is entered in insertion mode only; there is no overwrite mode.

Deleting text

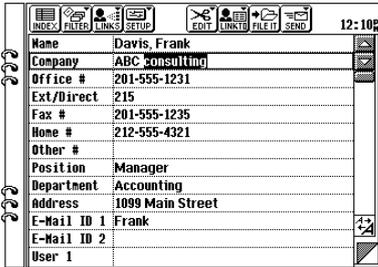
If you make a mistake while entering text, delete the mistake with the following keys:

- | | |
|--------------------|---|
| BS | Deletes the character before (to the left of) the cursor. |
| DEL | Deletes the character after the cursor. |
| ⇧ DEL | Deletes the entire line that the cursor is on. |
| ⇧ NEW ENTRY | Clears current field (except in Notes, Documents and Outlines). |

Blocks of text

Working with blocks of text is easy. The first step is to select the text to work with:

- Position the touch pen at the beginning of the required text and drag it to select and highlight (reverse) the text. Lift the pen to complete your selection.



The screenshot shows a contact information form with a vertical scroll bar on the right. The form fields are:

Name	Davis, Frank
Company	ABC Consulting
Office #	201-555-1231
Ext./Direct	215
Fax #	201-555-1235
Home #	212-555-4321
Other #	
Position	Manager
Department	Accounting
Address	1099 Main Street
E-Mail ID 1	Frank
E-Mail ID 2	
User 1	

- If text is selected, any new text that is entered will replace the selected text.

Deleting blocks of text

To delete blocks of text, touch and drag to select the text block, and then press **BS** or **DEL**.

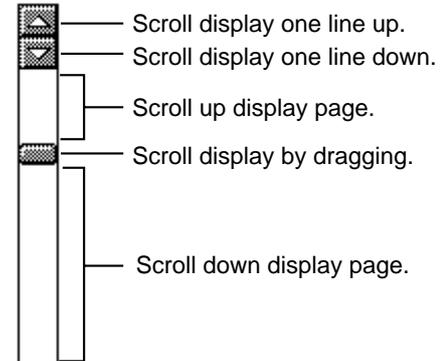
Cut, Copy and Paste

The Cut, Copy and Paste functions can be used for moving or copying blocks of text. For more information, see p. 114.

Scroll bars

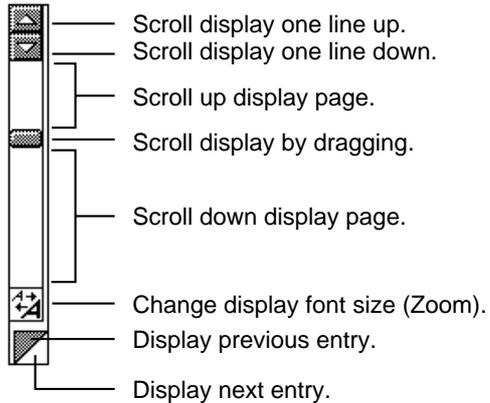
If a field contains more information than can be displayed, scroll bars can be used to move through the information. Many displays have vertical scroll bars. Some also have horizontal scroll bars that work in a similar manner.

Index View



Finding Specific Entries

Detail View



There are many ways to locate entries and information:

- Index View
- Keyword search
- Global search
- Using Filer
- By Date

Index View

The tool bar across the top of the display normally offers a choice of Detail View or Index View for viewing entries. Index View lets you view a list of entry titles for an application.

To use Index View to find entries:

1. Touch the desired application key.
 2. Touch **INDEX** or touch **VIEW** and select **INDEX**.
 - Touch the tab for the entry as required.
 - If the Index is full and the desired entry is not displayed, use the scroll bars to move through the list.
 3. When the desired entry is displayed, touch the entry to select it, and then press **ENTER** to see the entry in detail.
- ★ You can also touch the entry twice to see details.

Keyword Search

Keyword search lets you search for entries containing a particular keyword. The keyword does not distinguish between uppercase and lowercase, and can contain up to 16 characters (letters, numbers and symbols).

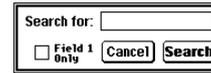
- ☞ You cannot search for entries in the Spreadsheets application using keyword search.

To use the keyword search:

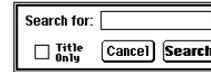
1. Select the Index View of an application.
2. Press **2nd** then **F**.
A Search window will appear. This window varies according to the application.
3. Enter the keyword directly from the keyboard.



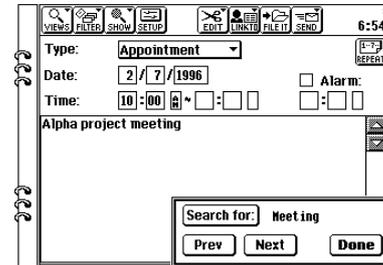
4. For Contacts and Data Files, select "Field 1 Only" to restrict the search to the Field 1 as required.



For Documents and Outlines, select "Title Only" to restrict the search to the Title as required.



5. Touch **Search** to begin the search.



Touch **Prev** or **Next** to go to other entries containing the keyword.

You can change the search criteria during a search by touching "Search for" and changing the keyword.

The search window is movable. To move the window, touch the top left corner and drag it to the new location.

6. Touch **Done** to close the keyword search.

Global Search

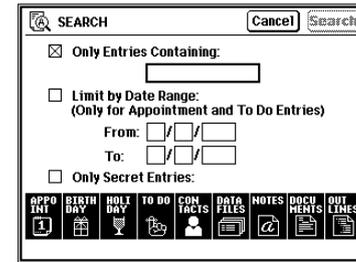
The global Search function lets you search any or all applications for a keyword. All entries found to contain the keyword are assigned to the Search folder in Filer. You can use Filer to examine these entries. For more information on Search, see Section 2 Desk Accessories.

- ☞ You cannot search for entries in the Spreadsheets using global search.

To use the global Search function:

1. Touch **SEARCH** at the left of the display.
2. Enter the keyword in the "Only Entries Containing" field.
 - Select "Limit by Date Range" and enter From and To dates to restrict the search to a date range for Appointments and To Do.

- Select "Only Secret Entries" to limit the search to secret entries. When the unit is locked, "Only Secret Entries" is not displayed.



3. All applications are selected for the search by default. Deselect applications that are not required.
4. Touch **Search** to begin the search.
 - After the search, the Search folder contents are shown in Index View.
 - To see the details of any entry in the Search folder, touch the entry twice. To return to the Search folder, touch **FILER** at the left of the display.

Using Filer

Filer lets you group entries by subject. For example, all entries relating to a particular project could be assigned to a single Filer folder, making it easy to open one or more of the entries when necessary. Entries can be grouped regardless of the application they were created in, and entries can belong to more than one folder. For more information on Filer, see Section 2 Desk Accessories.

By Date

Activities calendar views let you find information by date.

To use the calendar views:

1. Touch **ACTIVITIES**.
2. Touch **VIEWS** and select the desired view (Year, Month, Week, Weekly Graph or Day).
3. Locate the entry you require, then use **VIEWS** Details to view the entry.

Deleting Entries

Single entries can be deleted by two methods: either from the keyboard or using the tool bar EDIT function. Group entries can be deleted using the EDIT Delete Group function. This function lets you specify the group of entries to be deleted from pop-up menus.

Deleting single entries from the keyboard

1. Open the required application.
 2. Select the entry in Index View.
 3. Press **DEL** on the keyboard.
 4. Touch **Yes** to confirm the deletion.
- ★ Press **Y** or **N**.

Deleting single entries

The EDIT Delete Entry function in the tool bar can be used to delete single entries.

To delete single entries:

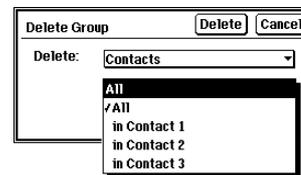
1. Open the required application.
2. Select the entry in Index View or display it in Detail View.
3. Touch **EDIT** and select "**Delete Entry**".
The EDIT menu may also offer Delete Note, Delete Document, Delete Outline or Delete Worksheet. These options all have a similar affect to Delete Entry.
4. Touch **Yes** to confirm the deletion.

Deleting group entries

The EDIT Delete Group function in the tool bar provides considerable flexibility when deleting group entries.

To delete groups of entries:

1. Open the desired application.
2. Touch **EDIT** and select "**Delete Group**".
3. Use the pop-up menus to make your group selection.



4. Touch **Delete** to begin the group deletion.
5. Touch **Yes** to confirm the deletion.

Cut, Copy and Paste

The Cut, Copy and Paste functions are available under EDIT in the tool bar. These functions let you move or copy blocks of text or completed entries:

- Cut** Moves the selected text or entry to the clipboard. (Clipboard contents are replaced.)
- Copy** Copies the selected text or entry to the clipboard. (Clipboard contents are replaced).
- Paste** Inserts the current clipboard contents at the cursor.

Copying or moving blocks of text

You can Cut, Copy and Paste blocks of text and selected areas of graphics. Text or graphics that are cut or copied are stored on the unit clipboard. Only one block of text or graphics can be stored in the clipboard at a time, and it will remain there until new text or graphics is cut or copied. You can paste text or graphics from the clipboard as many times as you wish.

To copy or move blocks of text:

1. Display an entry in Detail View.
 2. Drag the touch pen to select the text.
 3. To move blocks of text, touch **EDIT** and select "**Cut**" (or press **2nd X**).
To copy blocks of text, touch **EDIT** and select "**Copy**" (or press **2nd C**).
The text is copied to the clipboard.
 4. Move the cursor to the location where you want to place the text, in the same or another entry.
 5. Touch **EDIT** and select "**Paste**" (or press **2nd V**).
The text is now moved or copied to the new location.
-  Text that is highlighted before a Paste is completely replaced by the pasted text. Only numbers and operators can be pasted to Calculator (text that is pasted is ignored).

Copying or moving entries

The Cut, Copy and Paste functions also provide a convenient way to copy or move entire entries to other applications, including those stored on a RAM Card. The entries do not have to be in the same file or the same application.

However, graphic entries can only be copied or moved within Scrapbook or to picture fields in a Contacts or Data Files entry, or to a Documents entry or the start-up display. Pasting graphics entries to any other location will only display "«PICTURE»".

To copy or move an entry:

1. Display the entry you want to copy or move in Index View.
2. To move the entry, touch **EDIT** and select "**Cut**". Touch **Yes** to confirm the deletion.
To copy the entry, touch **EDIT** and select "**Copy**".
3. Select the destination application.
(You can also append to an existing entry. In Detail View, select the required position.)
4. Touch **EDIT** and select "**Paste**".

5. The entry is now moved or copied to the new location. Make any necessary changes to the moved/copied entry.

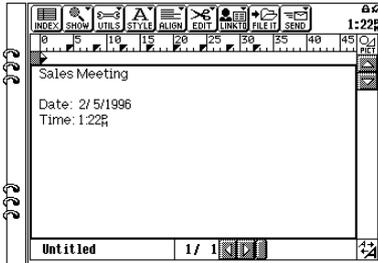


- In Outlines Detail View, to copy or move an entire outline, you must select the title. If you select a topic, only that topic and subtopics are copied.
- Only text data is pasted from a Documents entry to another application. Formatting is not copied, even if pasted within another Documents entry. If the entry is pasted into Documents and the original entry includes a tab, subsequent text will be pasted, but for other applications subsequent text will not be pasted.
- Once you have cut or copied something, do not attempt to drag and drop another item until you have pasted the first one. If you do so, the first item will be lost.

Time Stamp and Date Stamp

The Time Stamp and Date Stamp functions let you insert the current time and/or date into your data so that in the future you can verify when important events occurred.

- Time Stamp can be used by pressing **2nd T**.
- Date Stamp can be used by pressing **2nd D**.



Symbols and Special Characters

The symbols menu is a single-page menu display containing 136 symbols and accent characters (such as ¥, Ç, Ú, and Í). The last symbol used is the initial selection. These symbols and characters can be easily selected and inserted at the cursor when entering data or editing an entry.

To insert a symbol:

1. Move the cursor to the position where you want to insert a symbol or special character.
2. Press **SMBL** on the keyboard.
The Symbol menu appears.

<	¢	¼	à	è	Ó	Ü	α	∞	∅	§	▪
>	£	½	á	é	Ô	Ù	Γ	∞	∅	∞	▪
[¥	¿	â	ê	Õ	Ú	∂	∞	∅	∞	▪
]	℞	¡	ã	í	Ö	Û	∅	∞	∅	∞	∞
{	ƒ	!!	ä	ï	Ø	Ý	μ	∞	∞	∞	×
}	ˆ	Ä	ë	ì	Ó	∞	π	∞	∞	∞	∞
\	^	Á	Ç	í	Ô	∞	Σ	∞	∞	∞	∞
	ˆ	À	Ç	î	Õ	∞	σ	∞	∞	∞	∞
_	ˆ	Â	È	Ñ	∞	∞	τ	∞	∞	∞	∞
‘	ˆ	Ã	É	Ñ	∞	∞	∞	∞	∞	∞	∞
~	ˆ	Ä	Ê	Ö	Û	∞	∞	∞	∞	∞	∞
≈	-	ä	ë	ò	ú	∞	∞	∞	∞	∞	∞

3. Select the symbol you require from the menu and touch it twice. The symbol menu closes and the selected character is entered at the cursor position.
 4. If the symbol you selected is an accent mark (` , ´ , ¨ , ^ , ~ , ° or _), type the letter you want to enter with that accent mark. Only certain letters can be combined with each accent mark.
-  When printing, some symbols and characters may not print correctly (depending on the capabilities of your printer). Consult your printer manual.

CHAPTER 4

Time Management

The Activities application helps you to structure and manage your busy schedule. There are four activity types; **Appointment, Birthday/Ann, Holiday** and **To Do**. Activities has five different calendar views, each with a convenient, easy-to-use form. This chapter shows you how to make the time management features work best for you.

Calendar views

The Calendar views provide an overview of all your different Activities. (Appointment, To Do tasks, Birthdays/Anniversaries, and Holidays.)

Calendar views have two major roles:

- They provide a handy, accurate calendar that can show you any month from January 1901 to December 2099.
- They allow you to track and manage Appointments, Birthdays, Anniversaries, Holidays and To Do tasks.

Calendar view format

You can use the Activities Setup display to change the default calendar view to the one you find most convenient. You can change three settings:

- **Default View**
Day is the initial default view. Select the default view from: Day, Week or Month.
- **Date Format**
Month/Day/Year is the initial default date format. Select from: Month/Day/Year or Day.Month.Year. This date format is used for all time-based operations.

- **Month Format**
Sunday-Saturday is the initial default month format. Select from: Sunday-Saturday or Monday-Sunday. This setting is used for calendar views.

Changing Activities Setup

To change the Activities Setup:

1. In Activities, touch **SETUP** in the tool bar.

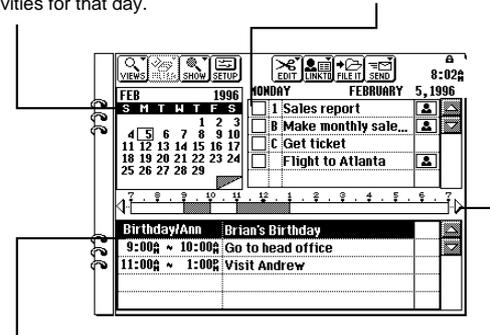
2. Make any desired changes.
3. When you complete your set up, touch **OK**.

Calendar views

Day view

The Day view is convenient for viewing all activities on a single day. It can be accessed directly from the Month, Week or Weekly Graph views by touching a date twice.

A Month calendar is displayed in the upper left for reference. The To Do list for the day is shown in the upper right. Use the scroll bars to move through the list.



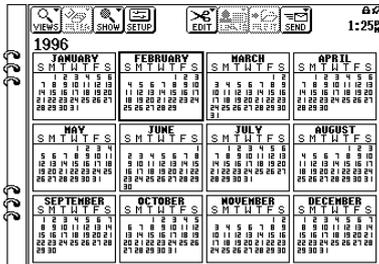
A Birthday/Ann, Holiday and Appointment list is shown at the bottom of the display. Use the scroll bars to move through the list. Touch an entry twice to see its details or to make changes.

The appointments line graph for the day is shown across the center. Touch \langle to display earlier appointment and \rangle to display later appointment. Shaded portions indicate appointments, black portions indicate conflicts.

- You can step through days by pressing **PREV** and **NEXT**.
- To record an appointment, drag the pen over the time bar (from start time to end time). When you lift the pen, a new appointment entry is opened with start and end times filled.

☞ If your unit is very low on available memory, To Do entries may not be correctly displayed in the Day view. A message will indicate this. Delete unwanted data, then select the Day view again.

Year view

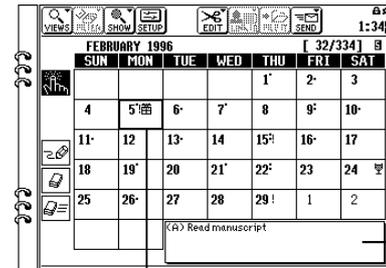


- Year view provides an overview of all months in a year. Note that no activities are indicated in this view.
- Press **PREV** or **NEXT** to see the previous or next

year.

- Touch any month twice within the selected year and the view changes to the selected month.

Month view



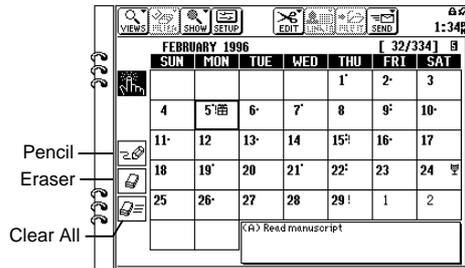
Today's date has a bold border.

- Appointments are indicated on dates with dots (•).
A top dot indicates an Early appointment (00:00 AM to 11:59 AM), a middle dot indicates a Day time appointment (12:00 PM to 05:59 PM) and a bottom dot indicates a Night appointment (06:00 PM to 11:59 PM).
- Birthday/Ann and Holiday entries are indicated with ☺ and ☹.
- ! indicates a To Do entry is due on that date.

- If you touch the Monthly Goal list (if displayed), the To Do Index is displayed.
- You can step sequentially through different months by pressing **PREV** or **NEXT**.
- The drawing tools (pencil, eraser, and clear all) at the left of the Month calendar let you make handwritten comments directly on the calendar.
- Touch  after completing your hand-written entry to return the Month calendar to the normal mode.

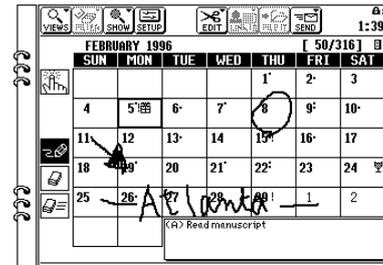
To write and draw on the Month calendar view:

1. In Activities, touch **VIEWS** and select "Month".



2. Press **PREV** and **NEXT** to select the desired Month calendar view.

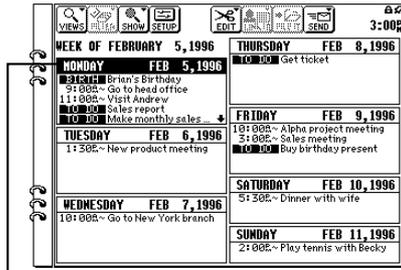
3. Use the pencil tool to write directly on the Month view. Use the eraser tool to remove unwanted drawings. Use the clear all tool to delete all drawings on this month.



4. When you complete your entry, press **ENTER**.

Week view

Week view shows your Activities events over a one-week period. To open the Week view, touch **VIEWS** and select **"Week"**.



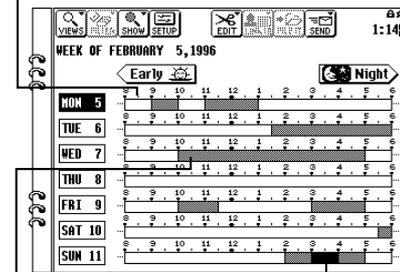
Selected date is highlighted.

- Press **PREV** or **NEXT** to display the preceding or following weeks.
- You can go to the Day view by touching a date twice.

Weekly Graph

The Weekly Graph view shows your appointments as line graphs over a one-week period. This lets you check for free time at a glance, and helps avoid conflicts.

Appointment times are indicated using 5-minute blocks.



Black portions indicate you have a conflict (more than one appointment in that period).

Shaded portions indicate times when you have appointments or other commitments.

- Touch **Early** or **Night** to see earlier or later appointments. Press **PREV** or **NEXT** to display the preceding or following weeks.
- You can change to a Day view by touching the day twice.
- To record an appointment, drag the pen over the time bar (from start time to end time) for the desired day.

Accessing entries using calendar views

Appointment, Birthday/Ann, Holiday and To Do entries can be accessed from the Day view.

- Overdue (due date has passed) To Do entries are always shown on Today's date.
- Monthly goals can only be accessed from the Month view.

In the Day view:

1. Select the desired entry.
 2. Touch **VIEW**s and select "Details" to examine the entry.
- ★ You can also touch the entry twice to view the details.

Selecting a date

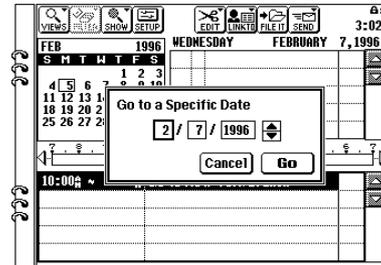
In any calendar view you can scroll to the previous or next time period (day, week, month or year) by pressing **PREV** or **NEXT**.

Show A Specific Date

Another convenient way of selecting a date is to touch **SHOW** and select "**A Specific Date**".

To show a Specific Date:

1. In Activities, select any calendar view.
2. Touch **SHOW** and select "**A Specific Date**".



3. Enter the date you require. Touch each date field box, then use \updownarrow to select a date, or enter directly from the keyboard.
4. To move to the selected date, touch **Go**.

Appointments

Appointments lets you enter meetings, conferences, parties and other important events. You can also set alarms to warn you of an impending appointment. This makes it easy to organize your day and always get to appointments on time. Appointment entries are indicated in the Month view by a dot to the right of the date.

Making new Appointment entries

Appointment entries have four components: date, time, alarm and description. When you touch **EDIT** and select "**New Appointment**", there are four basic steps to making new entries:

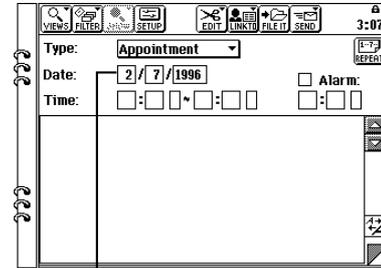
- Select the date.
The date selected in the calendar view is initially displayed in the Date field. To select another date, touch a date box so the border changes to bold, then use \blacktriangle to change the date.
- Enter the start and end time (optional).
- Select Alarm if desired. The start time is the default alarm time. To select a different alarm time, touch the alarm time boxes, and then use \blacktriangle to select the time.
- You must enter a description for each entry.

Making an Appointment entry

Example: Enter "Staff meeting" to be held from 8:30 a.m. to 11:30 a.m. on February 7, 1996.

To make the Appointment entry:

1. In a calendar view (day, week, weekly graph or month), select the required date (February 7, 1996).
2. Touch **EDIT** and select "**New Appointment**".



Previously selected date is entered.

3. Set the start and end times for the entry. Touch a time box, then use \blacktriangle to select the time. Set the start time to 830 AM and set the end time to 1130 AM. (Enter A for AM or P for PM.)

4. Set the Alarm as required. Check the Alarm box and the start time is selected as the default alarm time.
Set the alarm time to 815 AM.
 5. Enter *Staff meeting* as a description.
 6. To complete your entry, press **ENTER**.
- ★ Note that you can also create a new entry from the Day or Weekly Graph view by dragging the pen across the time bar.
This simplifies the time entry as the start and end times are automatically entered for you.

Finding entries

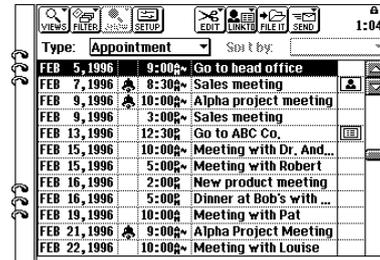
You can find an Appointment entry using the Calendar views, the Index View or a keyword search.

Using calendar views

You can access an Appointment entry directly from the Day view by touching the required entry twice.

To find an entry using Index View:

1. In Activities, touch **VIEWS** and select "**Appointment Index**".



Appointment entries are listed in chronological order. If you do not see the entry you are looking for, use the scroll bars to move through the list (or press **PREV** or **NEXT**) until you find it.

2. Touch the entry twice to view the details.

 Pressing **NEXT** or **PREV** steps through entries in Detail View.

Using keyword search

If you cannot remember the date of an Appointment entry, but you know a word that appears in the Description, you can locate the entry with a keyword search. For more information on keyword search, see p. 110.

Using a keyword to find an Appointment entry:

1. In the Appointment Index View, press **2nd** then **F**.
The Search box will automatically appear.
2. Enter the search keyword then touch **Search**.
The search function displays the first entry that contains the keyword. Touch **Prev** or **Next** to move to additional entries (if any) that contain the keyword.
3. When you find the desired entry, or to exit the search function, touch **Done**.

Editing Appointment entries

You can easily change the time, date, or description of an appointment. Cut, Copy and Paste can also be used to move appointments, see p. 115.

To edit an Appointment entry:

1. View the details of a particular entry.
2. Touch any field and make the required changes.
3. When you complete your changes, press **ENTER**.

Deleting a single entry

You can delete a single Appointment entry or groups of entries. For an explanation of deleting filtered entries, see p. 101.

Deleting a single entry:

1. Select the entry in Index View or in Day view. (Alternatively, display the entry in Detail View.)
 2. Touch **EDIT** and select "**Delete Entry**".
 3. Touch **Yes** to confirm the deletion.
- ★ You can also delete a single Appointment entry by selecting it in Index View or Day view and pressing **DEL**.

Deleting group entries

You can delete groups of Appointment entries by choosing from Delete All entries or specifying a deletion period.

- You cannot delete group entries if the unit is locked, see p. 86.
- You must be in a calendar view which includes the period you want to delete.
- Monday-Sunday is recognized as one week for deletion, even if the default format is Sunday-Saturday.

To delete groups of Appointment entries:

1. In Appointment Index or Detail View, touch **EDIT** and select "**Delete Group**".
2. Touch the **All** button and select the deletion type from the pop-up menu:
 - All
 - in Selected Year
 - in Selected Month
 - in Selected Week
 - in Selected Day
3. Touch **Delete**.

4. Touch **Yes** to confirm the deletion.

-  You cannot delete groups of entries if your unit is locked, see p. 86.
- ★ You can delete Appointment entries by selecting them in any calendar view and pressing **DEL**.

Making entries for recurring or extended events

The Appointment REPEAT function lets you copy entries to other dates without having to make new individual entries. This is convenient for appointments and meetings that are held regularly.

Repeat can also make entries that span a few days or a few weeks, such as a business trip or vacation.

Appointments created with the Repeat function can be individually edited later, like any other entry.

The REPEAT function has six different types of events:

- Daily:
Repeats an appointment on consecutive days.

- Daily (Work Days Only):
Repeats an appointment on consecutive work days (from Monday to Friday) only.
- Every Week:
Repeats an appointment on the same day each week
- Every Other Week:
Repeats an appointment on the same day every two weeks.
- Every Month (by Date):
Repeats an appointment on the same date each month. Events like "a meeting on the 10th of each month".
- Every Month (by Day of Week):
Repeats an appointment on the same day of each month, e.g. first Tuesday.

 The REPEAT function cannot be used on entries that were originally created with the Repeat function.

Using the Appointment Repeat function

Example: Enter a five-day vacation from March 5, 1996.

To use the Repeat function to enter a vacation:

1. From any calendar view, select the initial date for the entry (March 5, 1996).
2. Touch **EDIT** and select "New Appointment".
3. Enter *Vacation* as a description.
4. Touch **REPEAT** in the top right of the display.

Repeat This Entry [Cancel] [Repeat]

Frequency: Daily
 Daily (Work Days Only)
 Every Week
 Every Other Week
 Every Month
 Every Month (by Date)
 Last Day of Each Month
 Every Month (by Day of Week)
 Last Week of Each Month

From: MAR 5, 1996 (TUE)

To: [3] / [5] / 1996

Check the box to repeat the entry on the same day of the last week each month.

Check the box to repeat the entry on the last day of each month.

5. Select **Daily** from the list of options.
6. The entry date (MAR 5, 1996) is automatically entered as the From date. Select the final repeat date for the To field. Touch the day box, then touch ▲ four times (or enter 03 09 1996 from the keyboard).
7. Touch **Repeat**.
Your five-day vacation is now stored. Select a calendar view to confirm your vacation has been entered.

- To repeat an entry that has already been stored, display its details and then proceed from step 4.
- Repeated data has **RPT** shown at the right in Index or Day view.

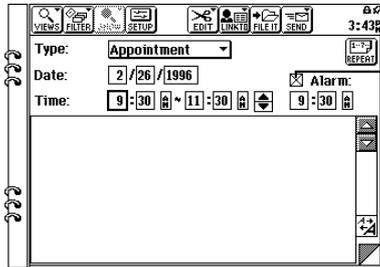
Editing and Deleting Repeat Appointments

When editing or deleting a Repeat Appointments entry, you can choose between repeating a single entry or all entries.

Appointment alarms

Alarms can be set to remind you of appointments.

- You can set an alarm for any Appointment entry that has a start time set.
- If the unit is off when an alarm is due, the alarm will still sound.
- After setting an event alarm,  appears in Index View.



Touch the Alarm time box then use  to select the time.



- To set an alarm for an entry that has already been stored, display the entry in Detail View, touch the Alarm check box and set the alarm time.
- You can also set daily alarms in Clock, see p. 91.

Clearing a set alarm

To clear an alarm that has been set for an Appointment entry, display the entry in Detail View, touch the Alarm box to deselect the Alarm, then press **ENTER** to save the change. You can also disable all set alarm sounds, see p. 82.

Birthday/Anniversary

Birthday/Ann helps you keep track of annual events, such as anniversaries and birthdays. Birthday/Ann entries are indicated in the Month calendar view by .

Reminder function

The Reminder function can be set to remind you of a birthday or anniversary. To set the Reminder function, check the Remind box and select **On That Day** or **7 Days before**. Whenever you turn on your unit within the Reminder period, the start-up display will include a Birthday/Ann Reminder message.

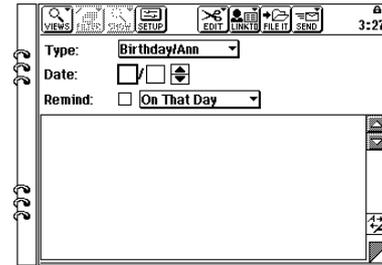
- When you no longer need a reminder, turn it off.
- If the Birthday/Ann entry is secret, the reminder message shows only ***. Unlock the unit to see the reminder details.

Making new entries in Birthday/Ann

Example: Enter Joe's Birthday on May 17 and set the remind function for 7 Days before.

To make a Birthday/Ann entry:

1. In Activities, touch **EDIT** and select "**New Birthday/Ann**".



2. Touch the date boxes, then use \blacktriangledown to enter May 17. Year is not required.
3. Enter *Joe's Birthday* as a description.
4. Touch the Remind check box and select "**7 Days before**" from the pop-up menu.
5. To complete the entry, press **ENTER**.

Finding Birthday/Ann entries

Birthday/Ann entries are stored in chronological order.

You can find a Birthday/Ann entry using the calendar views, the Index View, or a keyword search. Use the same procedure described in "Finding Appointment entries".

Editing and deleting entries

Editing Birthday/Ann entries

You can easily change the date or description of a Birthday/Ann entry. Use the same procedure described in "Editing Appointment entries".

Deleting single entries:

1. Select the entry in Index View or in Day view. (Alternatively, display the entry in Detail View.)
 2. Touch **EDIT** and select "**Delete Entry**".
 3. Touch **Yes** to confirm the deletion.
- ★ In Index View or Day view, you can also delete single entries by pressing **DEL** in step 2 above.

Deleting all Birthday/Ann entries:

1. Touch **EDIT** and select "**Delete Group**".
 2. Check that the selection is "**Birthday/Ann**" and "**All**".
 3. Touch **Delete**.
 4. Touch **Yes** to confirm the deletion.
-  You cannot delete groups of entries if the unit is locked, see p. 86.

Holiday

Holiday helps you keep track of annual holidays. Holidays are indicated in calendar views by 🗓️.

Making new entries

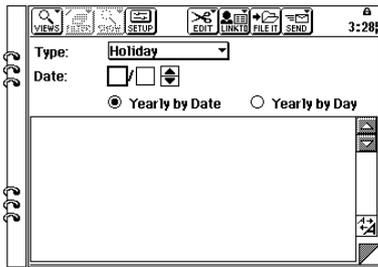
There are two types of Holiday entries, those like New Year's Day that occur on a specific date every year (Yearly by Date), and those like Mother's Day that occur on a specific day (Yearly by Day). Yearly by Date is the default entry type.

Yearly by Date Holiday

Example: Make a Holiday entry for New Year's Day.

To make a new Yearly by Date Holiday entry:

1. In Activities, touch **EDIT** and select "New Holiday".



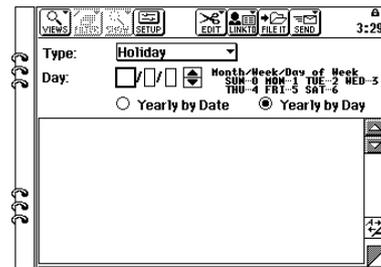
2. Check that **Yearly by Date** is selected.
3. Touch the Date boxes, then use ⬇️ to select 1 (month and day only, year is not required).
4. Enter *New Year's Day* as a description.
5. To complete the entry, press **ENTER**.

Yearly by Day Holiday

Example: Enter "Mother's Day" on the second Sunday in May.

Enter a new Yearly by Day Holiday:

1. In Activities, touch **EDIT** and select "New Holiday".
2. Select **Yearly by Day**.



3. Touch the Date boxes, then use \blacklozenge to select 520 (Month/Week/Day of week).
Day of week: SUN=0, MON=1, TUE=2, WED=3, THU=4, FRI=5, SAT=6
If "5" is entered for week, the last week (4th or 5th) is always selected.
"Last" is displayed in Index View.
4. Enter *Mother's Day* as the description.
5. To complete your entry, press **ENTER**.

Finding Holiday entries

Holiday entries are stored in chronological order.

To view details from the Index list:

1. In Activities, touch **VIEWS** and select "**Holiday Index**".
2. Touch the Yearly by Date or Yearly by Day tabs to view the desired Holiday Index.
3. Touch an entry to select it.
If the desired entry is not displayed, use the scroll bars to find the entry (or press **PREV** or **NEXT**).

4. Touch **VIEWS** and select "**Details**".

- ★ Touch the entry twice to examine details.

Using calendar views

In calendar views, Holiday entries are indicated by . You can access Holiday entries from calendar views by touching the desired entry twice, see p. 120.

Editing and deleting entries

Editing Holiday entries

You can easily change the date or description of a Holiday entry. Use the same procedure described in "Editing Appointment entries".

Deleting single entries:

1. Select the entry in Index View or in Day view.
 2. Touch **EDIT** and select "**Delete Entry**".
 3. Touch **Yes** to confirm the deletion.
- ★ In Index View or Day view you can also delete single entries by pressing **DEL** in step 2 above.

To Do

Deleting all Holiday entries:

1. In Index or Detail View, touch **EDIT** and select "**Delete Group**".
 2. Select Delete "**Holiday**", and "**All**", "**in Holiday by Date**" or "**in Holiday by Day**" from the pop-up menus.
 3. Touch **Delete**.
 4. Touch **Yes** to confirm the deletion.
-  You cannot delete groups of entries if the unit is locked, see p. 86.

To Do helps you meet deadlines and add structure and efficiency to your work. To Do lets you organize and track tasks and objectives, assign priority levels, and attach up to five labels to each entry so they can be grouped together. To Do entries are automatically categorized as To Be Done, Done or Monthly Goal. New To Do entries can have a due date, a description, and a priority level. The LABELS icon lets you define and assign labels that are used to manage tasks by project, personnel, etc.

Display of To Do entries in calendar views differs according to the Due Date field contents, as follows:

- Entries with no due date are shown on Today's date and are automatically carried forward each day until completed.
- Entries with a due date (month, day and year) are shown only on that date. Once a To Do with a due date is "past due" it will also carry forward until completed.
- Entries with a due date that has no day, but with a month and year, become Monthly Goals and appear in a box on the Month calendar view.

Priority levels

You can enter a number (0-9) or a letter (A-Z) in the priority field to indicate the task importance.

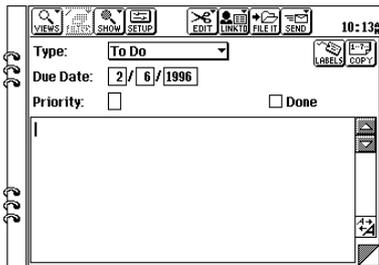
- Numbers have higher priority than letters.
- Do not use symbols or accented characters.
- Even though a lowercase letter has been entered, it will be saved as uppercase.

Making a new To Do entry

Example: Enter "Prepare Alpha project proposal for John" as a priority 1 To Do task.

To make a To Do entry:

1. From the Day view, touch **EDIT** and select "**New To Do**".
- ★ Press **2nd** then **NEW ENTRY**.



☞ Note that from the Calendar views, the currently selected date will automatically be entered into the new To Do. From the To Do detail view or Index view, no due date will be entered.

2. Use the cursor keys to move to the Priority field and enter 1.
3. Use the cursor keys to move to the description field and enter *Prepare Alpha project proposal for John* as a description.
4. To complete your entry, press **ENTER**.

☞ The date and priority fields are optional.

Entering a Monthly Goal

If you enter only the month and year for the Due Date (with no day), the entry becomes a Monthly Goal and is displayed in the Monthly Goal list of the Month calendar view.

Example: You must read a manuscript by the end of February.

To make a Monthly Goal entry:

1. Touch **EDIT** and select "**New To Do**".
2. Select the Due Date field, then use \blacktriangle to enter 2 as the month, skip the day and enter 1996 as the year.
3. Enter *Read manuscript* as a description.
4. To complete your entry, press **ENTER**.
The entry is displayed in the Monthly Goal To Do Index.

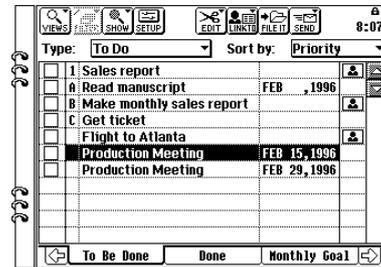
Finding To Do entries

Index View shows To Do entries sorted by date or priority. The default setting is Sort by Date. If you select Sort by Priority, entries with a set priority are displayed first (in order of number, then letter), followed by entries with no assigned priority.

You can select Sort by Priority to display an index sorted by priority. Select Sort by Date to return to the index sorted by date.

Use Index View to find a To Do entry:

1. Touch **VIEWS** and select "**To Do Index**".



2. Use the To Be Done, Done and Monthly Goal tabs to locate the entry you desire. If you do not see the entry immediately, use the scroll bars to move through the lists.
3. Touch the entry twice to see the details.

Using keywords

You can use a keyword search for any field, including Date and Priority, to directly access an entry.

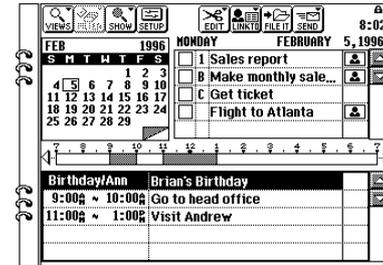
For more information, see General Operation.

Checking off completed entries

Once you achieve a target or goal, it is important to check off that entry as done so that you can focus on tasks that are still outstanding. Entries marked "Done" are sorted into the Done file and the completion date is indicated in the calendar views. You can check off completed entries using calendar views (check off completed entries while reviewing your daily schedule) or the To Do Index.

To check off To Do entries from Day view:

1. Select the Day view.
2. Select the date you want to check. The To Do list is in the upper right of the display. If the entry you want to check off is not shown, use the scroll bars to move through the list.



3. Touch the check box to the left of the To Do entry. If the box shows ✓, the entry is marked as completed on today's date and sorted to the Done file.

To check off To Do entries from Index or Detail View:

1. In Detail View, check the "Done" box. In To Do Index, touch the check box to the left. The box has a ✓ to indicate it is done.
 2. The entry is marked as completed with today's date and is sorted into the Done file.
- ☞ If you mistakenly check off an entry as completed, you can deselect the entry by touching the check box again. However, if you do this, the entry is saved without a due date.

Using Labels

Labels are fields you can specify that contain up to 12 characters. Labels are assigned to To Do entries and used to manage information by grouping tasks by project, personnel or other criteria.

- Up to 32 labels can be defined, and each To Do entry can have up to five labels assigned to it.
- Once a word is entered as a label, that word is automatically registered and sorted alphabetically in the label list (from which you assign entry labels).
- You can also add, edit and delete labels directly in the label list.

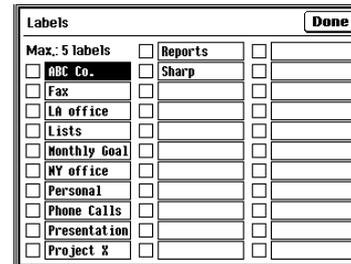
 Take care when adding labels directly to the list, as uppercase and lowercase letters are recognized as separate labels.

Making To Do entries with labels

Example: Enter "Call Frank about Alpha Project" on Mar 15, 1996.

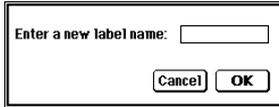
To make a To Do entry with labels:

1. In Activities, touch **EDIT** and select "**New To Do**".
2. Enter the date you require.
Touch a date box, then use  to select 3 15 1996.
3. Enter *Call Frank about Alpha Project* as a description.
4. Touch the **LABELS** icon.



Labels	Done
Max.: 5 labels	
<input type="checkbox"/> ABC Co.	<input type="checkbox"/> Reports
<input type="checkbox"/> Fax	<input type="checkbox"/> Sharp
<input type="checkbox"/> LA office	
<input type="checkbox"/> Lists	
<input type="checkbox"/> Monthly Goal	
<input type="checkbox"/> NY office	
<input type="checkbox"/> Personal	
<input type="checkbox"/> Phone Calls	
<input type="checkbox"/> Presentation	
<input type="checkbox"/> Project X	

Touch an empty label twice.



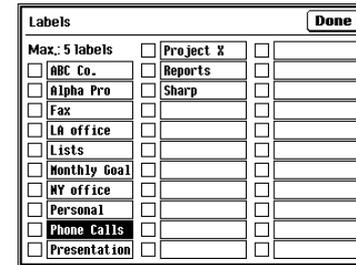
Enter a new label name:

Enter *Alpha Pro* and touch **OK** to register this label.

5. Touch another empty label twice.
Enter *Phone Calls* and touch **OK** to register the label.
6. To select these two labels, check the box to the left of Alpha Pro and Phone Calls so a cross appears.
7. Touch **Done** to complete the label entry and selection.
8. To complete the To Do entry, press **ENTER**.
The new entry is shown in the To Be Done Index.
Touch ⇨ and ⇩ to view the label tabs.

To assign labels using the Labels list:

1. Select the To Do entry in Detail View, then touch **SHOW** and select "**Labels**".



Labels		Done
Max.: 5 labels	<input type="checkbox"/> Project X	<input type="checkbox"/>
<input type="checkbox"/> ABC Co.	<input type="checkbox"/> Reports	<input type="checkbox"/>
<input type="checkbox"/> Alpha Pro	<input type="checkbox"/> Sharp	<input type="checkbox"/>
<input type="checkbox"/> Fax	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> LA office	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Lists	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Monthly Goal	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> NY office	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Personal	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Phone Calls	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Presentation	<input type="checkbox"/>	<input type="checkbox"/>

2. To assign a label to the To Do entry, touch the check box to the left.
 - Each entry can have a maximum of five labels.
 - The Labels list is sorted alphabetically and can contain a maximum of 32 labels.
3. When you complete your label selections, touch **Done**.

Reviewing the To Do list by Labels

You can check the entries assigned to a specific label.

To review To Do entries by label:

1. Touch **VIEWS** and select "**To Do Index**".
2. Touch the ⇄ (or ⇅) tab at the bottom of the To Do Index to display the Label tabs. Each time you touch the ⇄ or ⇅ tab, the display moves across three Labels.
3. Touch a Label's tab to see the list of To Do entries that have that label assigned.
4. When you have completed your review, touch ⇅ to return to the previous display.

Editing labels

In the Labels list, you can directly edit labels, add new labels or delete unused labels. If you edit a label, the change is reflected for all entries with that label assigned.

To edit the labels list:

1. From the To Do Detail View, touch **SHOW** and select "**Labels**".
2. To add a new label, touch a blank label twice. Enter the new label text, then touch **OK**.
3. To edit an existing label, touch the label twice. If the selected label is already assigned to an entry, touch **Yes** to confirm the selection. Make your changes directly to the label, then touch **OK**.
4. To delete a label, select the label in the list, then press **DEL**. Touch **Yes** to confirm deletion. If the label is currently in use, it cannot be deleted.
5. When you complete your Labels list changes, touch **Done**.

Copying a To Do entry

The COPY icon in the To Do Detail View lets you copy the entry. This feature is very convenient for making To Do entries that are repeated on a regular basis. You can define the frequency and set the copy period.

Frequency can be selected from: Daily, Daily (Work Days Only), Every Week, Every Other Week, Every Month (by Date) or Every Month (by Day of Week). Every Month is only available for Monthly Goal.

Check the Last Day of Each Month box to repeat the entry on the last day of each month.

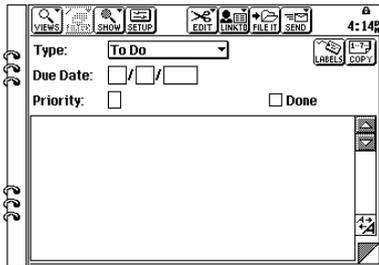
Check the Last Week of Each Month box to repeat the entry on the same day of the last week each month.

The Period is defined by selecting From and To dates. The due date is automatically selected as the From date.

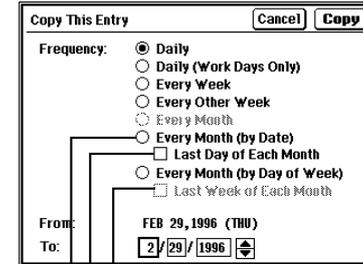
Example: Enter a Production Report that is due every other week starting on February 29, 1996, until the end of May.

To copy a To Do entry:

1. Touch **EDIT** and select "New To Do".



2. Touch the Due Date field, then use \blacktriangledown to select 2 29 1996 for Thursday February 29, 1996.
3. Enter *Production Report* as a description.
4. Touch **COPY** in the upper right of the display.



Last Week of Each Month for Last Week entry

Last Day of Each Month for Last Day entry

Every Month for Monthly goal entry

5. For frequency, select **Every Other Week**.
6. FEB 29, 1996 (THU) is automatically selected as the From date. Touch the To date, then use \blacktriangledown to select 5 30 1996.
7. Touch **Copy** to complete the entry. Use the To Do Index to check that the entry has been copied.

Editing and deleting To Do entries

Editing To Do entries

You can easily change the due date, priority or description of a To Do entry. Use the same procedure described in "Editing Appointment entries".

Deleting single To Do entries:

1. Select the entry in the To Do Index View or in Day view.
(Alternatively, display it in Detail View.)
 2. Touch **EDIT** and select "**Delete Entry**".
 3. Touch **Yes** to confirm the deletion.
- ★ In Index View or Day calendar view, you can also delete single entries by pressing **DEL**.

Deleting groups of To Do entries:

1. In Index View, select the file containing entries you want to delete.
2. Touch **EDIT** and select "**Delete Group**".

3. Select "**All**", "**in Current View**" or "**Checked as Done**".

4. Touch **Delete** and then touch **Yes** to confirm deletion.

 You cannot delete groups of To Do entries if the unit is locked, see p. 86.

Changing Activity type

You can change the Activity type if necessary. For example, you can change an Appointment entry to a To Do entry, and the opposite is also possible.

1. Display an Appointment entry in Detail View.
2. Touch **Type** and select "**To Do**" from the pop-up menu and touch "**OK**" to confirm the message.
3. Enter or change the other information if necessary.
4. Press **ENTER**.

CHAPTER 5

Databases

This section describes the use of Contacts and Data Files. These are personal database applications and they both have similar functions. The only difference between them is that they have different default file and field names for different types of information. These two applications are very flexible so you can manage a wide variety of personal information, from simple address books to a restaurant guide or a listing of your favorite movies. You can also, for example, make a simple "picture book" database for storing Scrapbook images.

Contacts and Data Files

Both applications have three files in which you can store information:

- The three files for Contacts (Business, Contact 2 and Contact 3) are set by default to work as simple, efficient address books.
- The three files for Data Files (Data File 1, Data File 2 and Data File 3) can be configured for many uses including a business card file, a restaurant guide (with maps) and other miscellaneous applications.

Examples

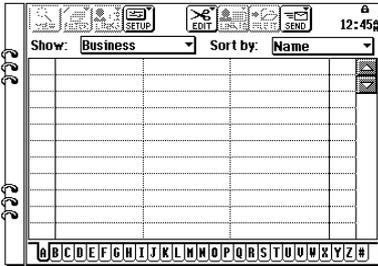
Procedures used for Contacts and Data Files operations are similar. Contacts will be used for the examples provided, but the procedures are the same for Data Files.

Selecting a file

Before beginning a particular database operation, you must first select the file you want to work with.

To select a **Contacts** file:

1. Touch **CONTACTS** at the right of the display.
2. If Detail View is displayed, touch **INDEX** at the top left to select Index View.



3. To choose the Contacts file for display, touch the **Show** button and select the file from the pop-up menu.
Choose from Business, Contact 2 or Contact 3.
- ★ Touching **CONTACTS** repeatedly steps through the three files.

4. To select the field used to sort the Index entries, touch the **Sort By:** button and select the field from the pop-up menu.
If you want to scroll the menu touch ▼ or ▲ in the bottom of the menu.
5. The current index tab is shown at the bottom of the display.
To display to entries beginning with a different letter, touch the appropriate tab. For example, if you touch the "H" tab, you will see the entries beginning with H at the top of the list.
If you want to move between Contacts entries and Data Files entries, touch the application key.

Making a new Contacts entry

When making new Contacts (or Data Files) entries, note the following:

- The first field must always contain information.
If you do not enter a description in the first field, "untitled" is displayed
- If the file is sorted by name, we recommend you enter the last name first so entries are sorted by last name. Use a comma (",") to separate last name and first name.
- You can only enter graphic images in a picture field, see p. 156.

Example: Enter Jonathan Smith of Brown Corporation in the Business (Contact 1) file.

To make the Business entry:

1. Touch **CONTACTS**.
2. Touch **EDIT** and select "**New Business(1)**".

INDEX	FILTER	LINKS	SETUP	EDIT	LINK TO	FILE IT	SEND	1/26
Name								
Company								
Office #								
Ext/Direct								
Fax #								
Home #								
Other #								
Position								
Department								
Address								
E-Mail ID 1								
E-Mail ID 2								
User 1								

3. Enter the required information into each field. Select the Name field and enter *Smith, Jonathan*. Move to the Company field and enter *Brown Corp*.
4. When you complete your entry, press **ENTER**.

Finding entries

Contacts and Data Files entries are stored alphabetically based on the contents of the currently selected sort field. You can find and display an entry by three methods:

- Using Index View
- Using Keyword search
- Using Direct search

Using Index View

Example: Find the Contacts Business file entry for Jonathan Smith of Brown Corporation.

To find the entry using Index View:

1. Touch **CONTACTS**.
If necessary, touch INDEX to display Index View.
2. Touch the **Show:** button and select "**Business**" (Contact 1) from the pop-up menu.

VIEW	FILTER	LINKS	SETUP	EDIT	LINK TO	FILE IT	SEND	1/26																		
Show:	Business	Sort by:	Name																							
Brown, Fr...	Ace Adverti...	201-556-8873																								
Davis, Frank	ABC consult...	201-353-8999																								
Flanagan, S...	Instant Per...	245-555-8787																								
Harris, Eddie	Bigg Produc...	257-555-8879																								
Innes, Geor...	Busy Bee D...	234-555-7788																								
Lee, Marilyn	HK Traders	257-555-8833																								
Sawyer, Bill	GK Co	201-556-4477																								
Smith, Frank	CEO Beta C...	212-444-6473																								
Smith, Jona...	Brown Corp...	201-353-4170																								
Taylor, And...	NKC Co.	234-555-8686																								
Wallace, R...	Flash Corp.	609-233-4455																								
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	#

3. Touch the "S" tab to find the required entry - Smith. If you cannot see the entry, use the scroll bars to move further through the list.
4. Select the entry, then touch **VIEW** to see the details.
 - ★ You can also touch the entry twice to see the details.

Keyword search

If you are not sure of the entry name, but you know a word that appears in the entry, then keyword search can be used to find it.

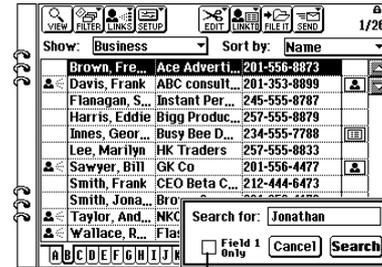
- The keyword search function does not distinguish between uppercase and lowercase letters.
- The search can be limited to Field 1 only. (Field 1 is set to Name Field by default)
- A message indicates if no entries contain the keyword.

For more information on keyword search, see p. 110.

To use keyword search to find an entry:

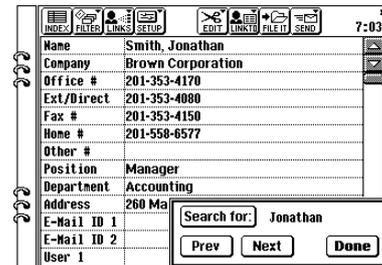
1. Select the Contacts Index View.
Touch the **Show:** button and select "**Business**" from the pop-up menu.

2. Press **2nd** then **F**.
3. Enter the keyword *Jonathan*.



Check the Field 1 Only box if required.

4. Touch **Search**.
The first entry that contains the keyword is displayed in Detail View.



- Touch **Next** or **Prev** to see other matching entries.
- Touch **Search for** to change the search criteria.
- Touch **Done** to close the search.

Direct search

In the Contacts or Data Files Index View, you can enter the first or the first few letters of the name to find the desired entry.

1. Select the Contacts Index View.
2. Enter the keyword *Smi* directly from the keyboard.

Go To window will be automatically displayed and the keyword you just typed will appear.



Use the touch pen and drag the Go To window to wherever you like.

3. Touch **OK**.
The first entry starting from the keyword will be selected in the Index View.

Filter function

The Filter function is available for both Contacts and Data Files. Filter function lets you filter your database files to display only entries with matching field content(s). For more information on the Filter function, see p. 100.

Link function

The Link function is a powerful feature that lets you link related information.

Any entry or document can be linked to any Contacts or Data Files entry. This allows you to do the following:

- You can jump directly to a Contacts or Data Files entry from a linked entry.
- While viewing a Contacts or Data Files entry, you can view a list of linked entries. You can also jump directly to any of these linked entries.

Linked Entries

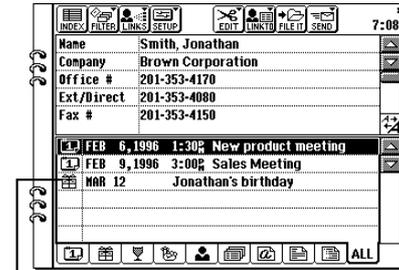
Before you can start using the Link function to find related entries, you must first establish the links.

From Contacts and Data Files, you can make links using:

- New Linked Entry
- Link by Searching

From all applications, you can make links to existing entries using:

- Link To



Linked entries can be viewed from a Contacts entry.

New Linked Entry

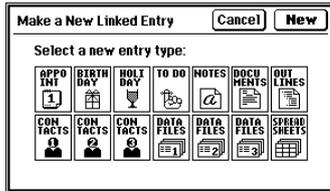
While viewing a Contacts (or Data Files) entry, you can create new entries that will automatically be linked to the Contacts (or Data Files).

To make a New Linked Entry:

1. Open the Contacts Business file and select the desired entry.

2. Touch **LINKS** and select "New Linked Entry".

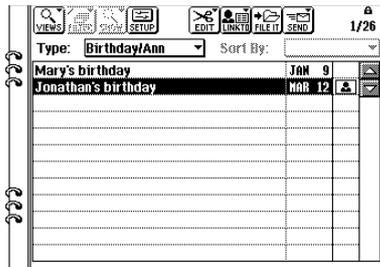
★ Press **2nd** then **NEW ENTRY**.



3. Select **BIRTHDAY** and then touch **New**.

4. Complete the Birthday entry and press **ENTER**.

The new Birthday entry is shown in Index View.



5. Then touch  at the right of the new Birthday entry.

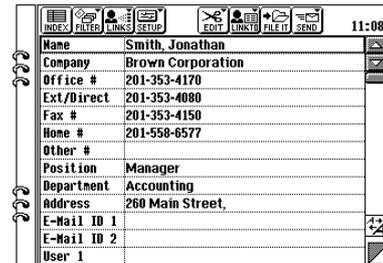
 If the entry is linked to only one Contacts entry, touch  and details of the Contacts entry is displayed. When the entry is linked to more than one Contacts entries, select the desired entry and then touch **Jump**.

Link by Searching

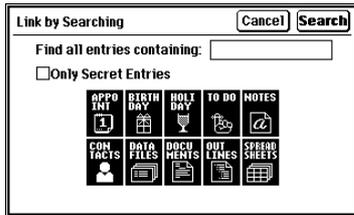
The Link by Searching function can link a Contacts or Data Files entry to all related entries that contain a keyword.

To use Link by Searching:

1. Open the Contacts Business file and select the entry to be linked to.

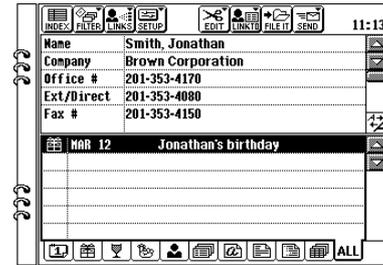


2. Touch **LINKS** and select "Link by Searching".



3. Enter the search keyword.
 - Search function does not distinguish between uppercase and lowercase letters.
 - You can limit the search to secret entries by checking the Only Secret Entries box.
4. As a default, all applications are selected for the search. Touch any application icon to deselect it.

5. Touch **Search**.



The search is completed and you can view the linked entries.

Viewing linked entries

To see Linked entries in the Contacts Detail View, touch **LINKS** and select "**Show Linked Entries**". This will be done automatically when you touch the Link icon to see the contacts entry in another application.

- Touch any application tab at the bottom of the display to see linked entries in that application.
- The ALL tab is always selected as the default.
- To conceal Linked entries, touch **LINKS** and select "**Hide Linked Entries**".

- In the Contacts Detail View, pressing **2nd** and **W** toggles the screen between Show Linked Entries and Hide Linked Entries.

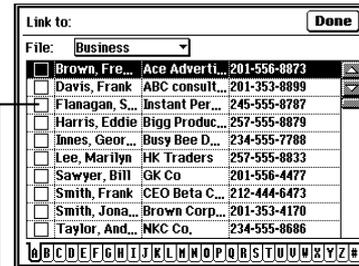
Link To function

The Link To function provides a method of linking entries from any application to Contacts or Data Files entries.

To use the Link To function from an Appointment entry:

1. Select the Appointment entry in Index or Detail View.
(You can also use the calendar Day view.)
2. Touch **LINK TO** and select "**Contacts**".

3. To make each link, check the link box to the left of the entry.
Repeat for as many linked entries as you desire.
You can also select a file using the "File:" pop-up menu.



Check the link boxes at left to make links.

4. When you complete your link selection, touch **Done**.
The Appointment entry is shown in Index View with  to the right.
5. To jump to the linked Contacts entry, touch  and select the desired entry, then touch **Jump**.

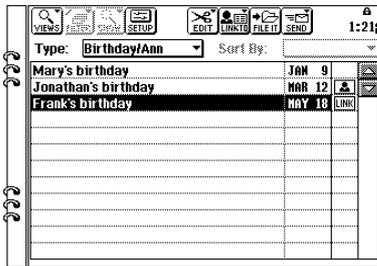
Jump To function

The Jump To function lets you move from entries in other applications to linked Contacts or Data Files entries.

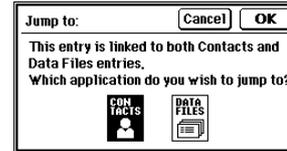
- If the entry in the other application has links to Contacts, you will see  to the right.
- If the entry has links to Data Files, you will see .
- If the entry has links to both Contacts and Data Files entries, you will see .

To use the Jump To function:

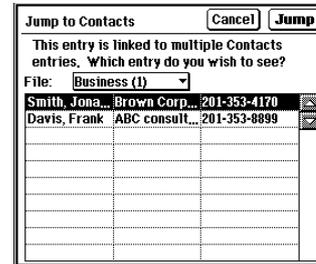
1. Select a Birthday/Ann Index entry with links.



2. Touch ,  or .
3. For , select CONTACTS or DATA FILES and touch **OK**.



If you jump to Contacts:



If there is only one link, the Jump To display above is not shown, and that entry is shown in Detail View.

4. If there is more than one link, select the required entry and then touch **Jump**. Otherwise, you will jump directly to the linked entry.
The linked Contacts (or Data Files) entry is shown in Detail View.

Breaking Links

You may want to break links you have made. For example, you may have made an incorrect link and want to break that link before making the correct link.

To break links you have made, select the linked entry and then touch **LINKS** and select "**Break Link**" or "**Break All Links**".

- **Break Link** lets you select and break an individual link.
- **Break All Links** lets you break all links to any entry.

Editing Contacts and Data Files entries

You can edit and delete Contacts and Data Files entries in a similar manner to other applications. For more information on editing and deleting, see General Operations, p. 105, 112.

To edit a Contacts entry:

1. Display the Contacts entry in Detail View.
2. Touch the desired field and make the changes directly to the field.
3. When you complete your changes, press **ENTER**.

 If you change the contents of the first field, the entry will be sorted again.

To delete a single Contacts entry:

1. Select the Contacts entry in Index View or display it in Detail View.
2. Touch **EDIT** and select "**Delete Entry**".
3. Touch **Yes** to confirm the deletion.

Picture fields

Deleting Groups of entries

You can use EDIT Delete Group to delete groups of Contacts or Data Files entries. Select group deletion from: All entries; all in Contact 1; all in Contact 2; or all in Contact 3. For more information, see p. 113.

You cannot use "Delete Group" if the unit is locked, so unlock it first with the Password function.

For files in both Contacts and Data Files, you can change text fields to picture fields, and new pictures can be created from these picture fields. These pictures can be hand-drawn maps, handwritten notes or signatures. Drawings created in Scrapbook can also be copied and pasted to picture fields.

To create a picture field:

1. In Contacts Index or Detail View, touch **SETUP** and select the file in which you want to create the picture field.

The screenshot shows a dialog box titled "Contact 1 Setup". At the top right of the dialog are "Cancel" and "OK" buttons. The main area contains two labels with corresponding input fields: "File Name:" followed by a text box containing "Business", and "Number of Fields:" followed by a text box containing "16". At the bottom of the dialog, there are three tabs: "File Name", "Field Name", and "Index Form".

2. Select the Field Name tab at the bottom.

Field	Type	Name
Field 1	Fixed	Name
Field 2	Text	Company
Field 3	Text	Office #
Field 4	Text	Ext./Direct
Field 5	Text	Fax #
Field 6	Text	Home #
Field 7	Text	Other #
Field 8	Text	Position
Field 9	Text	Department
Field 10	Text	Address

3. Move to the field that you want to change, and then select Picture.
4. Touch and edit the field name as desired.
5. When you complete your changes, touch **OK**. Touch **Yes** to confirm the changes. Check your changes in Contacts Detail View.

Adding a picture to an entry

To add a picture to any entry, that file must have at least one field set up as a picture field.

- Touch "Empty picture field" twice to open the picture drawing screen. You can then draw directly. After drawing, touch **OK**.

To add a picture to a Contacts entry:

1. Touch **SCRAPBOOK** and display the required drawing (if necessary, create the drawing).
2. Copy the drawing to clipboard. Touch **EDIT** and select "**Copy**" (or press **2nd C**).
3. Touch Contacts and move to the required picture field.

4. Touch **EDIT** and select "**Paste**" (or press **2nd V**) to paste the picture into the field.

INDEX FILTER LINKS SETUP		> EDIT LINK TO FILE IT SEND		7:23P
Ext/Direct	201-353-4080			
Fax #	201-353-4150			
Home #	201-558-6577			
Other #				
Position	Manager			
Department	Accounting			
Address	260 Main Street.			
E-Mail ID 1				
E-Mail ID 2				
Map	Touch to view picture.			
User 2				
User 3				
User 4				

The message in the field changes from "Empty picture field" to "Touch to view picture."

5. Touch the field to view or edit the picture.
- ★ In step 2, to save memory you can cut the drawing. This will cut the drawing from Scrapbook and copy it to the clipboard. Touch **EDIT** and select "**Cut**" (or press **2nd X**), then touch **Yes** to confirm.

☞ You can also copy or paste the Notes or Spreadsheets entries to Contacts by specifying a range.

Editing contents of picture fields

The contents of picture fields can be edited directly within Contacts or Data Files.

For example, you may want to edit the map in a map field.

To delete picture field contents:

1. Display the Contacts or Data Files entry and select the picture field with the contents you want to delete.
2. Press **DEL** and touch **Yes** to confirm deletion. Deleting a picture from a Contacts or Data Files picture field does not affect the original picture.
3. The picture is deleted and the field message now reads "Empty picture field".

Setup for Contacts and Data Files

You can customize Contacts or Data Files in the following three ways:

- File names:
 - Each file can have a new name of up to 10 characters.
- Fields:
 - You can change field names (up to 12 characters), field type (text or picture), and the number of fields that each entry can have (up to 16).
- Index View display:
 - For Index View, you can determine which three fields are displayed and adjust display widths for each field.

Configuring Contacts and Data Files

Contacts and Data Files can be configured using SETUP from the tool bar.
Changing Contacts set up:

1. Touch **CONTACTS**.
2. Touch **SETUP** and select Contact 1, 2 or 3.

Contact 1 Setup

File Name:

Number of Fields:

File Name Field Name Index Form

The File Name tab should be initially selected. If not, touch that tab to select it.

3. Touch the "File Name:" field to enter a new file name.
Touch "Number of Fields:" to enter a new number.
 - You can use up to 10 characters for File Name.
 - You can have up to 16 fields.
4. Touch the Field Name tab to select it.

Field	Fixed	Name	Type
Field 1	Fixed	Name	
Field 2	Text	Company	<input checked="" type="radio"/> Text
Field 3	Text	Office #	<input type="radio"/> Picture
Field 4	Text	Ext/Direct	
Field 5	Text	Fax #	
Field 6	Text	Home #	
Field 7	Text	Other #	
Field 8	Text	Position	
Field 9	Text	Department	
Field 10	Text	Address	

File Name Field Name Index Form

5. Select any field and enter the new name.
 - You can enter up to 12 characters for Field Name.
 - Select Text or Picture to change the field type. If you change the field type, all previous entries in that field are deleted.
 - The first field is always fixed as a text field. This cannot be changed.

- ☞ The field type for Field 1 is fixed as text. You can specify the field type as picture or text for any of the remaining 15 fields. Note that pictures use more space than text and memory is limited.

6. Touch the **Index Form** tab to select it.

7. Touch the **First Field:** button and select the First Field name from the pop-up menu.
- Index View can have up to three fields.
 - Repeat this process for the Second and Third Field.
8. Touch the field separator icons  and adjust them to suit your requirements.
9. To complete your changes, touch **OK**. Check your changes in the new Index View display.

Fax number field

The Fax number field is used by the fax function for automatic dialing. The Contacts Business file (Contact 1) has a Fax # field as a default setting, but Fax # field must be set up for Contact 2, 3 and Data Files. Use the above procedure to do this, but in step 5, enter Fax # as one of your fields.

- ☞ When entering fax numbers in the Fax # field, be sure to include hyphens in appropriate places. A hyphen is required following the area code for the fax function to pause and dial correctly.

This section explains the features of the powerful writing tools. These tools include: Notes, which lets you take handwritten notes and comments at meetings; Documents, a built-in word processor; and Outlines, a simple but powerful outline package for structuring your thoughts and ideas. Used together, these three applications provide powerful documentation capabilities in a convenient, hand-held device.

Notes

Notes provides a simple yet powerful means of recording information. Notes lets you easily record handwritten notes and drawings. This can be very convenient during meetings when you are too busy to enter text through the keyboard.

After your meeting is over, you can review your notes and comments, add titles from the keyboard and then use these notes as a reference while working with other applications such as Documents.

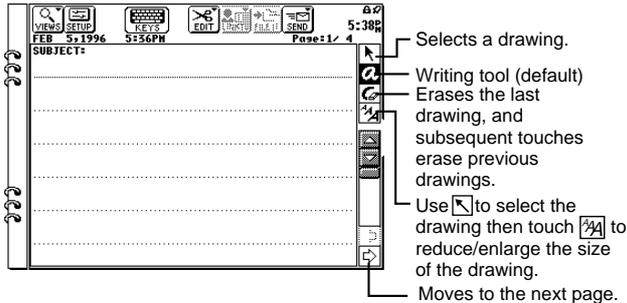
Taking Notes

Making a Notes entry at a meeting or appointment is very quick and easy. Notes has the following features:

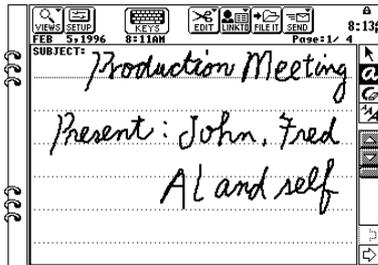
- The drawing tools are at the right.
- A drawing can be selected by touching it for a few seconds. It can then be moved, reduced or deleted.
- The first line becomes the default topic title.
- Use the scroll bars to move up and down the entry.
- Use ⏪ and ⏩ to move to other pages.
- Touch **VIEWS** and select **Show/Hide Grid Lines**.
- To link your Notes entry to Contacts or Data Files entries, touch **LINK TO**.

To make a Notes entry:

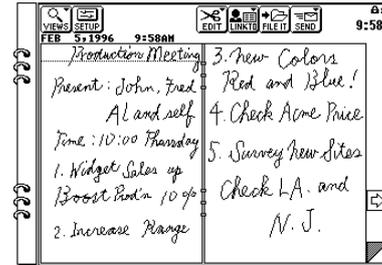
1. Touch **NOTES**.
2. Touch **EDIT** and select "New Note".



3. Use the touch pen to write your notes directly on the display.

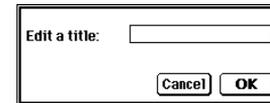


4. When you complete your Notes entry, touch **KEYS** to unlock the keyboard then press **ENTER**.



The first line is used as the title in the Index.

5. To change the title, touch **EDIT** and select "Topic Title".



6. Enter the title, then touch **OK**.

- When drawing lines across the screen, always draw from left to right; otherwise the line may not be stored correctly.
- If you want to write something at one edge of the screen and something else at the opposite edge, make sure the first item has registered before starting the second. Otherwise the items may not be stored correctly.

Notes window

If you touch **VIEW** and select "**Window**", Notes changes to a moveable window. You can still see the Notes window while you open and use other applications. This is very convenient because it allows you to transcribe Notes contents to other applications.

- To move the Notes window, touch the top left corner and drag the window to the new location.
- To close the window, touch **QUIT**.
- To return Notes to Review Notes display, touch **VIEW**.
- To move to the previous or next entry, touch .
- To turn pages within an entry, use the scroll bars or  .

Locking the keyboard

You may want to lock the keyboard to prevent accidental key input when you are using Notes.

- The keyboard is locked as the default setting.
- Touch **KEYS** at the top of the display to lock or unlock the keyboard. When the KEYS icon has a white background, the keyboard is locked, and when it is black, the keyboard is unlocked.
- When the keyboards is locked, all the keys including **OFF** do not operate.

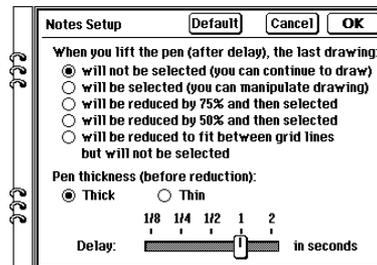
- To turn the Backlight on while the keyboard is locked in Notes, check the Option box beforehand in Tools Backlight. When the Backlight goes off, you can reactivate it simply by touching the display.
- Keyboard lock only works with Notes.

Changing Notes Setup

You can change Notes Setup to suit your own style.

To change Notes Setup:

1. Touch **SETUP**.



2. After drawing action can be selected from:
 - Will not be selected (you can continue to draw). (default)
 - Will be selected (you can manipulate drawing).
 - Will be reduced by 75% and then selected.

- Will be reduced by 50% and then selected.
 - Will be reduced to fit between grid lines but will not be selected.
-  • If "will be selected" is selected, your last drawing will be automatically selected with the area tool so you can move it or delete it.
- If "will be reduced to fit between grid lines but will not be selected" is selected, the entry window will be displayed. You can move the window by touching the box in its upper right corner. However the entry cannot be selected in this setting.
3. Pen Thickness (before reduction) can be selected from:
 - Thick
 - Thin
 4. Drawing delay can be set to 1/8, 1/4, 1/2, 1 or 2 seconds. Use the touch pen to touch and drag the bar.
Drawing delay determines when your handwriting becomes a single object for moving or deleting.
 5. If there are any problems, touch **Default** to return to the default settings.
 6. When you complete your setup, touch **OK**.

Review Notes

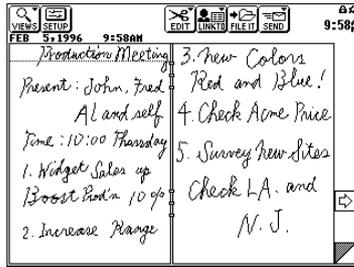
After your meeting, you can review your Notes entry, modify it as required and save it for future reference. The Review Notes function is also convenient for checking the layout of your Notes entry.

- Notes entries can contain up to eight "screens" (4 pages).
- The Review Notes mode provides a two-page view (half of a full Notes entry).
- You cannot edit in Review Notes so change to the Take Notes view.

To review your Notes entry:

1. Open the Notes entry.
2. Touch **IEWS** and select "**Review Notes**".
- ★ From the Index View, select the entry and press **ENTER** or touch the entry twice.

Documents



Touch  and  to change to other pages.
Touch  to change to other entries.

3. In Review Notes, touch the area to be edited and the display changes to Take Notes view.
4. When you complete your changes, press **ENTER**.

Edit Notes

- Use Delete Note to delete single entries.
 - Use Delete Group to delete all Notes entries.
- For detailed information, see General Operations on p. 112.

Documents is a built-in word processor that lets you set margins, tabs and indents. You can also select page size and change fonts. If you connect a printer to your unit, you can print out professional looking full-page letters, reports and other documents. The Make a Letter feature helps you produce high-quality letters with your own signature. You can use advanced editing techniques and the Check Spelling function helps you eliminate spelling mistakes.

To make a new Documents entry:

1. Touch **DOCUMENTS**.
2. Touch **EDIT** and select "**New Document**".
- ★ Press **NEW ENTRY**.
3. Enter the text for the new entry. Example:

To: Frank Smith, CEO Beta Corp.

Date: March 14 1996

Dear Frank,

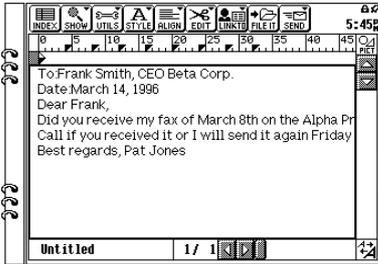
Did you receive my fax of March 8th on the Alpha Project? Call if you received it or I will send it again Friday.

Best regards, Pat Jones

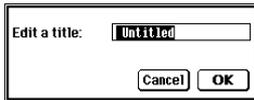
4. When you complete your entry, press **ENTER**.
The new entry is shown in Index View as Untitled.

To edit a Document title:

1. Display the Documents entry in Detail View.



2. Touch **EDIT** and select "**Document Title**".



- ★ Touch the title displayed at bottom left.
3. Edit the title.
When you complete your changes, touch **OK**.

4. To save your entry with the new title, press **ENTER**.

Making a new entry based on an existing entry

Once you have written the memo to Frank, you may need to write a similar memo to someone else. Rather than creating another new memo, you can make a copy of this existing memo and change the addressee's name and address.

To copy an existing Documents entry:

1. Select the entry in Index View.
2. Press **2nd ENTER** to copy that entry.
- ★ Touch **EDIT** and select "**New Copy**".
3. Make any necessary changes.
4. Touch **EDIT** and select "**Document Title**" to make a new title, then touch **OK**.
The default title of the new Document is "Untitled".
5. When you complete your changes, press **ENTER**.

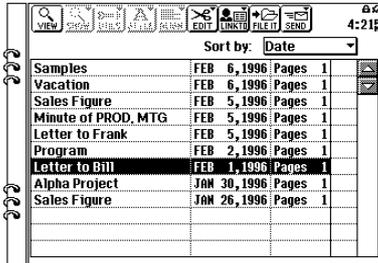
Finding entries

There are three ways to find an entry:

- Using Index View
- Using Keyword search
- Using the Search function

Using Index View to find a Documents entry:

1. Select the Documents Index View.



The screenshot shows a software interface with a menu bar at the top containing options like VIEW, SEARCH, INDEX, EDIT, LINKED, FILE, and SEND. Below the menu bar is a toolbar with icons for search, refresh, and other functions. A dropdown menu is open, showing 'Sort by: Date'. The main area displays a table of documents with columns for document name, date, and page count. The 'Letter to Bill' entry is highlighted.

	Sort by:	Date	
Samples	FEB	6, 1996	Pages 1
Vacation	FEB	6, 1996	Pages 1
Sales Figure	FEB	5, 1996	Pages 1
Minute of PROD. MTG	FEB	5, 1996	Pages 1
Letter to Frank	FEB	5, 1996	Pages 1
Program	FEB	2, 1996	Pages 1
Letter to Bill	FEB	1, 1996	Pages 1
Alpha Project	JAN	30, 1996	Pages 1
Sales Figure	JAN	26, 1996	Pages 1

2. To select the sort method, touch the **Sort by:** button, then select **Date** (shown in reverse chronological order by creation date) or **Title** (alphabetically) from the pop-up menu.
3. Use the scroll bars to move through the sorted Index and find the entry you require.
4. To display details, select the entry and touch **VIEW**.

Using Keyword search and the Search function.

For how to use keyword search and the Search function, see the General Operations chapter on p. 110.

Editing a Documents entry

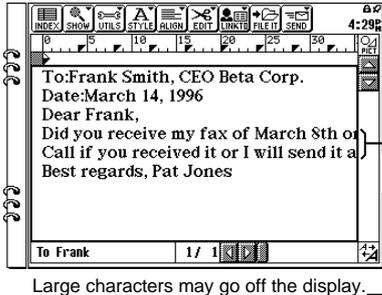
1. Select the entry in Detail View.
2. Make required changes directly to the entry. Use the scroll bars to move through the entry.
3. When you complete your changes, press **ENTER**.

Deleting Documents entries

For detailed information on deleting entries, see Chapter 3, General Operations on p. 112.

Changing display character size

In Documents Detail View, you can change the size of display characters by touching  at the bottom right. Each time you touch , the size cycles from 9 pt (default) to 12 pt to 7 pt and back to 9 pt.



Large characters may go off the display. Use the scroll bars to see them.

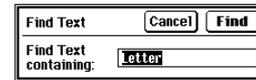
-  Changing display character size does not affect the size of printed text. The large character size is easier to read, but the small size lets you fit more text on the display.

Find Text

When editing a Documents entry in Detail View, you may want to find a specific text string to edit or delete. Find Text can find text strings of up to 20 characters (including spaces).

To use Find Text in a Documents entry:

1. Touch **UTILS** and select "**Find Text**" (or press **2nd** then **F**).



2. Enter the text string you want to find. Note that Find Text starts searching from the current cursor position.
3. Touch **Find**. The first matching text in the entry is highlighted. You can cut, copy, paste and edit as required.

4. To continue searching, repeat steps 1 and 3 above.
 - Find Text will continue from the last match.
 - The same text string can be used for many searches.
 - A message indicates if no matching text is found.

Text styles

Text styles add variety and emphasis to Documents entries.

- Text style is selected from the STYLE menu. A ✓ indicates current settings.
- Style is selected from Plain (default), Bold or Italic.
- Underline can be combined with Plain, Bold or Italic.
- Style settings remain in effect until another style is selected.
- Documents printed from your printer should also contain the text styles (consult your printer manual).

Text style keyboard shortcuts

You can use keyboard shortcuts to change text styles on the fly. Keyboard shortcuts (shown in the Style menu) are:

- Plain **(2nd Y)**
- Bold **(2nd O)**
- Italic **(2nd I)**
- Underline **(2nd U)**

To change the text style for a Documents entry:

1. Open a Documents entry in Detail View.
2. Move the cursor to the desired location.
3. Touch **STYLE** and select the text style.
For example, touch **Bold**.
4. Make your text entry.
The text is displayed in the selected style.

Changing the style for existing text

To change the style of existing text, select the text by dragging the pen across it, then choose the text style from the menu (or use keyboard shortcuts).

- The style cannot be changed for the Title field.
- Underline remains in effect until plain is selected.
- Inserted text assumes the style of the text block.

Align

The ALIGN menu lets you change the alignment of the paragraph containing the cursor. Text alignment can be selected from Left, Center or Right.

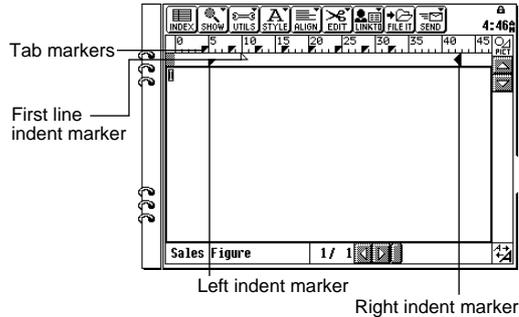
Tabs and indents

Tabs and indents let you format the appearance of text blocks. A tab changes an individual line, while an indent changes a paragraph and all following text until it is turned off or changed.

- Indents can be set from the left or the right.
- The first line of each paragraph can have a different indent setting to achieve special layout effects.

Setting tabs and indents

Tabs and indents are set using the ruler across the top of the display. The ruler is a standard feature with many word processors. The ruler is enabled with Show Ruler from the SHOW menu.

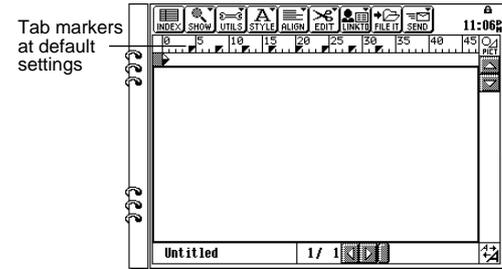


Tab settings

When entering text, you can enter a tab by pressing **⇧ TAB** ([↵]). This moves the cursor to the next tab position to the right and shifts following text. There are eight tab markers at default settings four characters apart. You can change the default tab settings by dragging the tab markers to new locations on the ruler.

To change tab settings:

1. To see the ruler, touch **SHOW** and select "**Show Ruler**".



2. Touch the tab marker you wish to change and drag it to the new position.

When you enter text with tabs, following text will now be affected by the new tab settings.

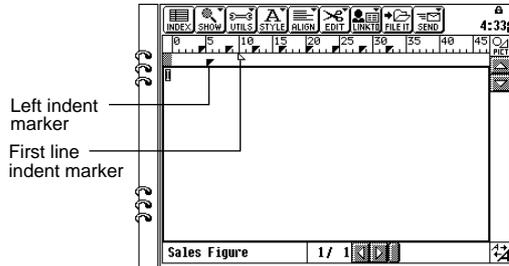
- ☞ Please avoid setting a tab marker at 0, as this can lead to problems during printing.

Indent settings

No Indent is the default setting. You can set different indents for individual paragraphs (which are preceded by a [↵]).

To change indent settings:

1. To see the ruler, touch **SHOW** and select **"Show Ruler"**.



2. Place the cursor in the paragraph you want indented.
3. To set the first line indent, touch the first line indent marker and drag it to the new position.

4. To set the left indent, touch the left indent marker and drag it to the new position.
5. To set the right indent, use the horizontal scroll bar to move to the right side, then touch the right indent marker and drag it to the new position.

☞ If Show Special Symbols is enabled, the indent indicator, "¶", is shown at the left of any paragraph that has an indent setting (first line, left or right).

Changing or canceling indents

You can change (or cancel) indent settings from those that were set earlier in a Documents entry. If you drag all indent markers back to their default positions, the indent indicator, "¶", is no longer displayed for that paragraph or following text.

To change indent settings:

1. Position the cursor in the paragraph (which is preceded by a [↵]) where you want the change to take effect.
 2. Touch the desired indent markers and drag them to the new positions. That paragraph and following text will assume the new layout.
-  New indent settings only start from a new paragraph (which is preceded by a [↵]).

Show/Hide Special Symbols

In the SHOW menu, Show/Hide Special Symbols has the following functions:

- Show Special Symbols - tab (⇨), return (↵), page (📄), indent (▮), center align and right align symbols are displayed.
- Hide Special Symbols - special symbols are hidden.

Word wrap

The built-in word wrap function automatically moves words that will not fit at the end of a line to a new line. This prevents words from being split, and there is no need to press [↵]. Word wrap is permanently selected.

Document size

So far you have worked only in the limited space of the display. However, you can make Documents entries that fit standard letter-size paper so you can print out full-size documents. For more information on printing, see p. 192.

Display size

The unit's display is smaller than standard letter-size paper. For paper sizes larger than the display, the display functions as a floating window that moves around the page. As you enter text, the display automatically shifts across the page. The scroll bars can be used to view text that is currently off the display. You can also press **PREV** or **NEXT** to view the previous or next Documents entry.

Page Setup

You can use UTILS Page Setup to set the following:

- Page size

Select a page size to suit your printer. If necessary, consult your printer manual. You can select from three standard page sizes:

A4:	21 cm x 29.7 cm
Letter:	8.5 inch x 11 inch (21.6 cm x 27.9 cm)
Legal:	8.5 inch x 14 inch (21.6 cm x 35.6 cm)

- Measure in

You can select from Inch (default) or cm.

If you change this setting, margin sizes are automatically converted for the selected system.

- Top, Bottom, Left, and Right Margin

Default margins have all been set to 1 inch. The minimum setting is 0.5 inch (1.27 cm).

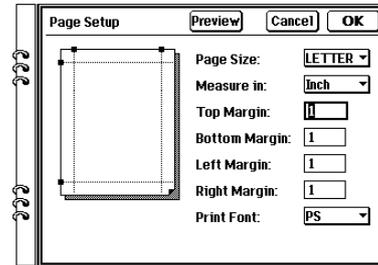
- Print Font

You can select the print font from PICA, ELITE or PS (default). Elite is a popular font set at 12 cpi (characters per inch). Pica is another popular font set at 10 cpi. PS is a proportional spacing font (spacing adjusts to suit text width) set at 12 cpi. You can fit more text on a page with a 12 cpi font than a 10 cpi font.

Selected fonts are not shown accurately on the display, and can only be seen when printed. However, you can use Print Preview to check the layout.

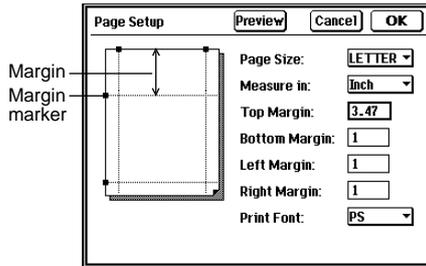
To change the page setup:

1. In Detail View touch **UTILS** and select "**Page Setup**".



2. Touch the **Page Size:** button and select A4, LETTER or LEGAL from the pop-up menu. Page size should match the size of the paper used with your printer.
 - Selecting a paper size that your printer is not set up for may delay or prevent printing. Consult your printer manual regarding printer set-up.
3. Touch the **Measure in:** button and select Inch or cm from the pop-up menu.

- Margin settings can be changed by touching a field and entering the new value directly from the keyboard.



You can also change the margin settings by dragging the markers on the Page Setup display to new positions. The margin line and field value will change.

- Select Print Font from PICA, ELITE or PS.
- When you complete your settings, touch **OK**.

- To check layout changes, touch **Preview** to toggle straight to Print Preview. From Print Preview you can toggle straight back to Page Setup.

- If you use PS font, some printers may not correctly print the display image because the font of the printer is different from the font of the unit. If this occurs, use Pica or Elite font for printing.

Inserting a page break

Page breaks are automatically inserted at the end of each page (according to page size) and indicated on the display by dotted lines. However, you can also manually insert a page break for layout purposes. Inserted page breaks are indicated by a **P** and dotted lines.

To insert a page break:

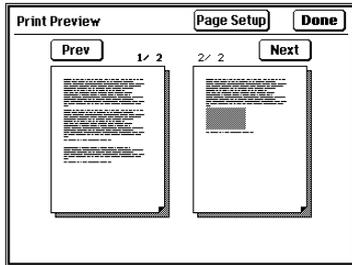
1. Position the cursor at the location where you want to insert a page break.
2. Touch **UTILS** and select "**Insert Page Break**".
P is entered at the cursor position and subsequent text is moved to a new page. To cancel the page break, place the cursor on **P** and press **DEL**.

Print Preview

You can use the Print Preview function to check that text is formatting properly when working with full-size pages. While you cannot read the text with this function, it is useful for indicating the full page layout.

To use Print Preview:

1. In Detail View, touch **SHOW** and select "**Print Preview**".



2. If you are working with a long document, touch **Prev** or **Next** to move to other pages.
 - The display changes in two page units.
 - To make page size, margin, or font changes, touch **Page Setup**.
3. To return to Detail View, touch **Done**.

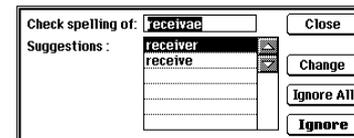
Check Spelling

The Check Spellings function lets you check the spelling of an entire Documents entry, or just a single word (entered from the keyboard or dragged in text.)

- **Change** accepts a suggestion for a spelling correction. Use the scroll bar to move through the suggestions.
- **Ignore** accepts the word being checked as OK.
- **Ignore All** accepts the word being checked as OK whenever it occurs throughout that entry.
- If you enter a new word, **Ignore** changes to **Suggest** so you can check the spelling.

To use the Check Spelling function:

1. Open the Documents entry in Detail View.
2. Touch **UTILS** and select "**Check Spelling**".
3. Select the starting point from "From the Beginning" or "From the Cursor Position" then touch **OK**.



4. Touch **Change**, **Ignore**, **Ignore All** or **Suggest** as needed.
5. When you complete your spelling check, touch **Close**.

Make a Letter function

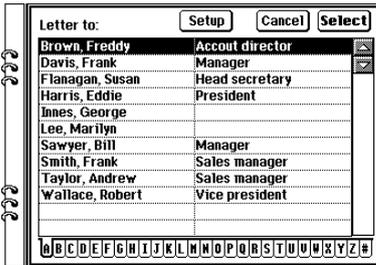
The Make a Letter function helps you format a Documents entry as a letter that is automatically dated, addressed and closed with your signature. The addressee can be selected from any file in Contacts and Data Files, or entered from the keyboard. Your layout changes are reflected in the layout preview at the top of the display. Once your Make a Letter format is established, it can easily be used to create other letters.

To use the Make a Letter function:

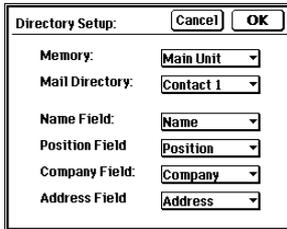
1. Enter the text of your letter as a Documents entry.
2. Touch **UTILS** and select "**Make a Letter**".

3. Select the date layout from Left (US), Center or Right (British). Changes should be reflected in the layout preview at the top.
4. Select the addressee title from the pop-up menu. The default title is Mr. Select either a colon (US) or comma (British) to follow the title.

5. Touch the "To:" button to open the Mail Directory.



6. Touch **Setup** in the Letter to display.



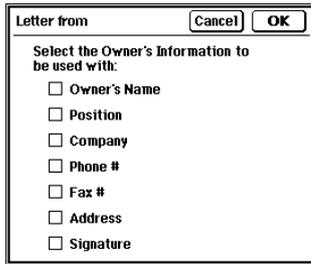
Set up the directory to suit your requirements.

- Memory can be selected from Main unit or PC card.
- Mail Directory can be selected from any file in Contacts or Data Files.

- Name, Position, Company and Address can be matched to any fields in the selected Mail Directory using pop-up menus. In the pop-up menus, touch ▲ or ▼ to scroll the menu, and if you want to leave the field blank, select "none". Complete your setup, then touch **OK**.

7. Select the addressee from the list. You can also enter the addressee directly from the keyboard after touching **Cancel** to return to the Make a Letter screen.
8. Enter the subject of the letter into the Subject field.
9. Enter the number of characters paragraphs should be indented.
10. Touch the Closing field and enter a closing phrase, such as: Yours sincerely, Best regards, etc.

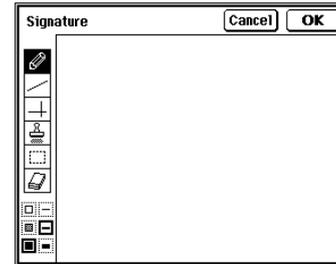
11. Touch the "From:" button.



Check the boxes as required for Owner's Name, Position, Company, etc. This enters the owner's information saved in the TOOLS Personal display. You can also select use of the owner's signature saved in the Personal display. For more information, see section 2, Desk Accessories.

When you complete your setup, touch **OK**.

12. If you want to use a different signature from the one saved under the Personal display, touch **Sign**.



Use the touch pen to write your signature. When you complete your signature, touch **OK**.

13. To complete your letter, touch **Make**. The letter will be displayed in Detail View. To save the completed letter, press **ENTER**.

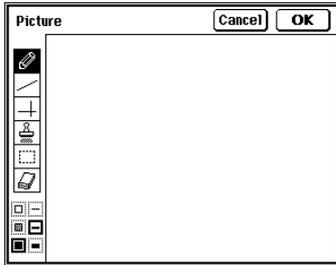
Documents with pictures

Documents entries can also contain pictures created with the Pictures function (similar to Scrapbook).

- The picture can be moved by touching it and dragging it to the new location.
- To make changes to the picture, touch it, and then touch **[PICT]**. The display changes to the Picture display so you can use the drawing tools to edit the picture.

To add a picture to your Documents entry:

1. In Documents Detail View, touch **[PICT]** above the vertical scroll bar.



2. Use the drawing tools to create your picture. When you complete your drawing, touch **OK**. For more information, see Scrapbook on p. 63.

3. Your document entry now contains the picture.

To save this entry, press **ENTER**.

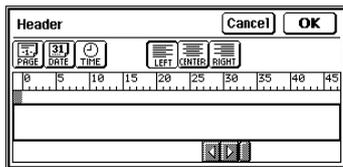
- Unused area of the picture are not inserted into the document entry to save space.
- To delete a picture, touch it and press **DEL**.
- You can also copy or paste single entries in the Scrapbook application or Notes or Spreadsheets entries to Documents entries by specifying a range.
- It is possible to copy or paste a Spreadsheets entry larger than the display width. However, if the pasted entry is modified, the unshown data will be deleted.
- If you copy a Worksheet created in Spreadsheets to a Documents entry by using "Copy Image", you may not be able to send the Documents entry to a PC or a Macintosh.

Headers and Footers

You can add headers and footers to your Documents entries. This adds important information, such as page number, time and/or date, to the top or bottom of each page. This is very handy when sending documents by fax. A similar process is used to add a header or a footer.

To add a header:

1. Create the body text of your document.
2. Touch **SHOW** and select "Header".



3. Touch the icons to select the header information.
[PAGE] Inserts the page number
[DATE] Inserts the current date
[TIME] Inserts the current time
Other characters and symbols, such as "-" can be inserted in headers and footers.
Touch [LEFT], [CENTER] or [RIGHT] to select the position of the header information.
Note that the header can contain two lines.

4. When you complete the header, touch **OK**.

- You can use a similar procedure to set a Footer.
- You can check headers and footers in the Print Preview screen.

Exchange Documents with PC Files

To copy a Documents entry to PC Files:

1. Select the Documents entry you want to copy to PC Files in Index View.
2. Touch **SEND** and select "Copy to PC Files".
3. Type the file name and the description for the created PC File.
4. Select "RTF" or "TXT".
5. Touch **OK**.

To get a Documents entry from PC Files:

1. Touch **SEND** and select "Get from PC Files".
2. Select "Main Unit" or "PC Card", to indicate the memory location of the PC File.
3. Select the PC File you want to copy to Documents.
4. Touch **OK**.
5. Type in a title for the newly created Documents entry.

6. Touch **OK**.

To replace a Documents entry with PC Files:

1. Select the Documents entry you want to replace with a PC File in Index View.
2. Touch **SEND** and select "**Replace with PC Files**".
3. Select "**Main Unit**" or "**PC Card**", to indicate the memory location of the PC File.
4. Select the PC File you want to copy to Documents.
5. Touch **OK**.
6. Touch **OK**, if the replacement information is correct.



- You can see the data created on a PC in MS Word in Documents or see a Documents entry on a PC in MS Word by using this Documents-PC Files conversion function.
For the details about PC Files, see p. 215.
- If you convert a Documents entry in RTF format to a PC File by selecting "Copy to PC File" and then get the converted PC File by selecting "Get from PC File", any graphics, center or right alignment information or header and footer information will be lost.

Outlines

Outlines is a simple, convenient tool to help you arrange your thoughts into a clear, easy-to-understand, hierarchical structure. This is ideal for organizing plans and ideas, and the order can be restructured whenever necessary.

The outline structure consists of topics that are promoted or demoted to different levels. The topic in the first line automatically becomes the title. Topics can have one or more subtopics, and these can be rearranged, grouped together, or even hidden from view, allowing you to manage large amounts of information easily and efficiently. Each topic in an outline is like an entry in other applications, and the outline can be thought of as a file holding those topics (or entries). You can enter, edit and delete topics while maintaining an overview of the entire outline.

Example outline

Below is an example of an Outlines entry in Detail View.



- Each individual topic heading is marked with a diamond.
- Each single topic can have more than one line and can contain up to 2,048 characters.

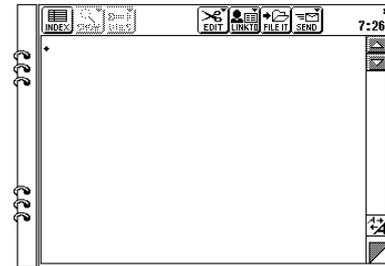
Creating an Outlines entry

A new Outlines entry can be created by entering the title and adding the different levels of topics and subtopics. When creating a new Outlines entry, use the following keys:

- [↵] To add a new line.
- [ENTER] To save the topic.
- [▶] To demote the topic one level.
- [◀] To promote the topic one level.

To make an Outlines entry:

1. Touch **OUTLINES**.
2. Touch **EDIT** and select "New Outline".



The new outline opens in Detail View.

3. Enter a title on the first line and press **ENTER**.
 4. Enter the first topic.
 5. To enter subsequent lines for any topic, press [↵]. When you complete all subsequent lines, press **ENTER**.
Second and subsequent lines of the topic are hidden and a flashing diamond prompts entry of a new topic. You can only see the first line of each topic, but you can store large amounts of information in one outline.
-  To view topic contents, touch **SHOW** and select "**Full Topics**". All lines are displayed for all topics. To return to the regular display, touch **SHOW** and select "**1 Line Topics**".
6. To save the Outline, press **ENTER** on a blank topic.

Finding outlines

Outlines are stored alphabetically by title. You can find a desired outline using several methods:

- Using Index View
Use the alphabetical sorting of the outline titles and the letter tabs to find the entry.
- Using Search function
Use the Search function at the left to find the entry.
- Using Keyword search
Press **2nd** then **F** in Index View, enter a keyword and touch **Search**.

These methods of finding entries are similar to those used for Documents entries. For more information, see p. 167.

Full Topics or 1 Line Topics

The SHOW menu lets you change your outline display as follows:

- 1 Line Topics (default setting) displays each topic as one line, and all subsequent lines are hidden.
- Full Topics displays all subsequent lines of multi-line topics and subtopics.

To display Full Topics:

1. Display the outline in Detail View.
2. Touch **SHOW** and select "**Full Topics**".
All subsequent lines of all topics are displayed.
Use the scroll bar to see topics off the display.

 Changing the Show settings for an outline does not affect other outlines. However, a new Outlines entry will use the last settings selected.

Revising outlines

Once an outline has been created, it is easy to revise either the topic text or the outline structure itself.

- Topics and subtopics can be revised individually.
- Restructuring is carried out in Detail View.

Selecting topics

Touch a topic to select it. A flashing diamond indicates the currently selected topic. You can also move between topics using the cursor keys.

- Press   to move directly to the last topic.
- Press   to move directly to the first topic (i.e. title).

To edit a topic:

1. Display the outline in Detail View.
2. Press  and  to move to the topic you want to edit.
You can only edit one topic at a time.
3. Press  to edit the topic.
When in 1 Line Topics view, hidden lines will be displayed. If the topic goes off the bottom of the screen, a scroll button appears on the scroll bar.
4. Enter your changes directly from the keyboard.
5. When you complete your changes, press **ENTER**.

Adding topics

As your plans and ideas grow, you may want to add topics to an existing outline.

To insert a new topic in an outline:

1. Display the outline entry in Detail View.
2. Touch the topic below which you will add the new topic (or use the cursor keys).
3. Touch **EDIT** and select "**New Topic**" (or press **2nd Q**).
I appears and begins flashing.
Press ◀ or ▶ to change the level of the new topic.
4. Enter the text for the new topic.
Only one new topic can be inserted at a time.
5. When you complete your changes, press **ENTER**.

- ★ You can also add a topic between existing topics by touching the location and entering the new topic from the keyboard. If the existing topics are parent topics, the added topic becomes a subtopic. However, if between subtopics, this topic will have the same level as the topic above it.

Moving topics

You can change a topic's position (even after it is saved).

To move a topic:

1. In Detail View, select the topic you want to move.
 2. Touch **UTILS** and select "**Move Family**" (or press **2nd W**).
The entire topic family is briefly highlighted, then replaced by **F** (for family).
 3. Touch the new location and the **F** moves.
 4. To complete the move, press **ENTER**.
F changes back to the full topic family contents.
-  Topics cannot move to a position above the title.

Joining two topics

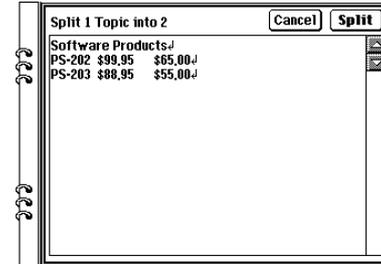
You can join a selected topic to the topic above it. If the entry is in 1 Line Topics mode, change to Full Topics first.

To join two topics:

1. In Detail View, select the topic you want to join to the one above it.
 2. Touch **UTILS** and select "**Join 2 Topics**". The selected topic is joined to the one above it. No space is inserted between the two joined topics, so you may want to edit the new joined topic and make changes, for example add a space, "and", etc.
-  If you attempt to join two topics that will exceed 2,048 characters when joined, a warning message will be displayed and the operation will be automatically canceled.

Splitting one topic into two

1. In Detail View, select the topic you want to split.
2. Touch **UTILS** and select "**Split 1 Topic into 2**".



The selected topic is displayed with the cursor positioned on the first character.

3. Move the cursor to the point where you want the topic split and touch **Split**. The old topic is split into two topics at the cursor position.
-  If a topic with subtopics is split, the subtopics are assigned to the new split topic.

Outline deletion

Deleting topics:

1. In Detail View, select the topic you want to delete.
 2. Press **DEL**.
 3. Touch **Yes** to confirm the deletion.
- ☞ If you select a topic for deletion, all subtopics below it will also be deleted. You may want to rearrange an outline beforehand to prevent this.

Deleting an outline:

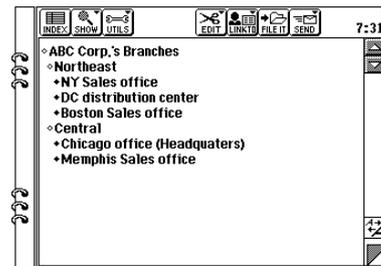
1. Select the outline.
 2. Touch **EDIT** and select "**Delete Outline**".
 3. Touch **Yes** to confirm the deletion.
- ★ You can also delete an outline by pressing **DEL** in step 2 above. To do this in Detail View, the title must be selected.

Deleting all outlines:

1. Touch **EDIT** and select "**Delete Group**". All Outlines is the only option.
 2. Touch **Delete**.
 3. Touch **Yes** to confirm the deletion.
- ☞ You cannot delete all outlines simultaneously if your unit is locked, see p. 86.

Using subtopics (children)

Outlines examples used so far have only contained one level of topics. This simple outline form may be all you need to organize your information. However, you can create other levels of topics (subtopics) for greater flexibility.



- Each subtopic belongs to the topic above it.
- Subtopics are created by pressing ► before entering the topic text. (Press ◀ to promote a subtopic).
- A subtopic can also have its own subtopics, and these can continue for 15 levels below the title.
- Topics are often referred to as "parents", subtopics as "children", and topics and subtopics as a "family".
- A white diamond indicates that the topic is a parent.

Expanding and Collapsing

You can expand and collapse an outline to concentrate on the topics and families that interest you.

- Expand/Collapse Subtopics toggles between Expand (show all subtopics) and Collapse (hide all subtopics).
- Expand Family shows all subtopics for a specific topic.
- Collapse All displays only 1st and 2nd level topics, hiding all other levels.

To collapse families:

1. Display the complete outline in Detail View.
2. Touch **SHOW** and select "**Collapse All**". All subtopics are collapsed and hidden.

To expand families:

1. Display the collapsed outline in Detail View.
2. Select the topic you want to expand.
3. Touch **SHOW** and select "**Expand Family**". All subtopics are displayed to all levels.

Restructuring families

You can move, delete, join and divide families just as you can topics. However, these operations affect the entire family (even if the topic is collapsed and subtopics are not visible), so proceed with caution.

Restrictions when working with families:

- You may not be able to change the level of a collapsed family in some situations. Other topics cannot be moved unless the family is expanded. Generally, if you have problems, expand all families and try again.
- You cannot insert a topic between a parent and its child at the same level as the parent.
- When moving topics (or families):
 - You cannot demote a topic more than one level below the topic directly above it.
 - Topics cannot be added below a collapsed family; you must expand the family first.
 - You cannot promote a topic one level if this would split up a parent and child. Move the selected topic to another location and then promote it.

- If you divide a topic that has subtopics (children), the second half of the divided topic will become the parent of these subtopics. The two parts of the original topic will remain on the same level.
- Do not try to join a topic with a collapsed topic above it. If you attempt this, you will be asked to confirm the action, and the topic will then be combined with the last topic in the preceding family. Expand the collapsed topic first to see what you are joining.

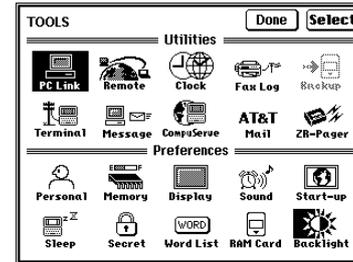
CHAPTER 7

Optional Accessories

This is a powerful pocket-size computer with many features that let you accomplish a broad range of tasks. Tools Utilities allow you to connect and transfer data to personal computers, and public information and message systems. You can log in to CompuServe, a popular on-line information service, and even send and receive messages via AT&T Mail and radio pager. You can even send faxes directly from Notes, Documents, Scrapbook and Filer. This chapter provides explanations and examples of the peripheral functions to get you up and running with these features.

Tools Utilities

These functions make the unit a powerful communications tool that keeps you connected to your busy world through backups, information services, electronic mail and messages, PC links, etc.



Tools Utilities include: PC Link, Remote, Clock, Fax Log, Backup, Terminal, Message, CompuServe, AT&T Mail and ZR-Pager. Clock is described in Chapter 2 "Desk Accessories" and Terminal, CompuServe, AT&T Mail and ZR-Pager are described in the manual provided separately.

Preferences

Preferences in the lower half of the Tools display let you configure operations to suit your personal needs. Preferences are described in Chapter 2 Desk Accessories.

Printing

This offers great flexibility in what you can print, from current display contents, to single entries and all entries in an application or a file. Printing options depend on the particular application you are using. The unit has built-in printer drivers (software that tells printers how to format and print data) for the following printers:

- Canon BJ-10e series
- IBM Proprinter series
- Epson FX-80, FX-850 and LQ series
- Hewlett Packard LaserJet II and III series
- Other (US Characters/International)

You can also print from printers with emulation modes for any of the above printers (consult your printer's manual for emulation modes). For information about other printers supported by the unit, consult your local Sharp dealer.

Paper source

The printer paper source can be selected from:

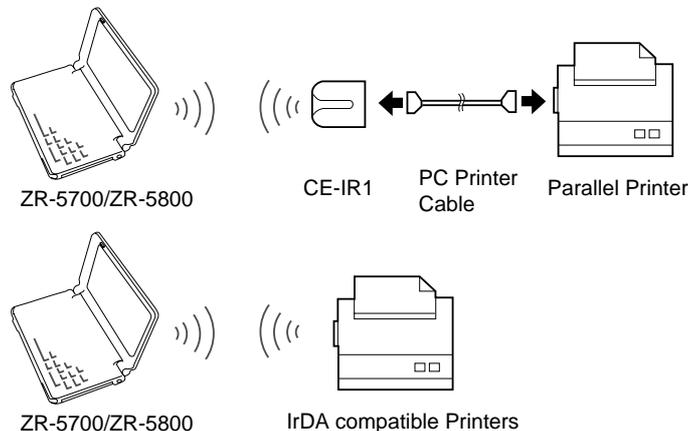
- Use Cut Paper
- Use Continuous Paper.

Printer connection

Because the ZR-5700/ZR-5800 supports industry standard IrDA, you can print directly to infrared printers that also support this, such as many new Hewlett Packard Printers.

A printer is connected to your unit via the optional Sharp CE-IR1 wireless interface:

- Printer Path is set to Wireless as a default setting.
- It is possible to change Printer Path to Cable (via a direct cable).
- Hardware compatibility between the CE-IR1 and your printer may affect the printing capability.
- For more details, see the CE-IR1 operation manual.



ZR-5700/ZR-5800

CE-IR1

PC Printer Cable

Parallel Printer

ZR-5700/ZR-5800

IrDA compatible Printers

No extra hardware needed to print to industry standard IrDA printers

Printing restrictions

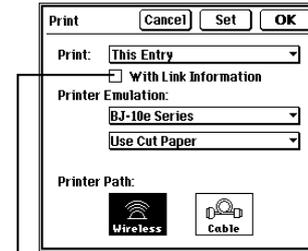
Text should always print, but printing of graphic images is determined by your particular printer's capabilities. Data may not print exactly as shown in your entry if the printer does not support the text styles used (italics, bold, etc.). Also, because of the way in which data sent by the unit is converted to characters on the printer, the final printed copy may not appear exactly the same as on your unit.

The following printing restrictions apply:

- LaserJets may not correctly print Documents containing Elite or PS fonts (Elite is available on the LaserJet III). If this occurs, select Pica. Optional printer-resident fonts (like those on a cartridge) cannot be used.
- Proprinter Series supports X24E. Printers that emulate other Proprinter models may not function properly.
- FX Series supports FX-80 and FX-850.
- LQ Series supports the LQ-510.
- If you use PS font, some printers may not correctly print the display image because the font of the printer is different from the font of the unit. If this occurs, use Pica or Elite font for printing.

To print an entry:

1. Select an application.
2. Select the entry to be printed.
3. Touch **SEND** and select "Print".



If the entry to be printed is a Contacts/Data Files entry, its linked entries are also printed.

4. Select the printer emulation from the pop-up menu. BJ-10e Series is the default setting.
5. Select Use Cut Paper (default) or Use Continuous Paper from the pop-up menu.

6. Select Printer Path from Wireless or Cable.
7. When using A4-size paper instead of the default Letter-size, press the **A** key. To return to Letter-size, press the **L** key. A small **A** appears at the top of the Print display when A4-size is selected.
 -  • When using Documents, the page size may be set as A4, LETTER or LEGAL using Page Setup.
 - The setting will be retained even after the unit is turned off or the reset button is pressed.
8. When you complete your settings, touch **OK**. Touch **Set** to save the print settings for future use.
- ★ You can press **2nd SEND** to print a single entry. However, the print display does not appear so you cannot change the settings. It will be printed with the current settings.

To print a specified group of entries:

1. Select an application.
2. Touch **SEND** and select “**Print**”.
3. Select group from the “Print:” pop-up menu. Select Printer Emulation and Printer Path, if required.
4. Touch **OK**.

Printing the current display

You can print a copy of almost any display. Exceptions are confirmation displays (Yes/No), messages, etc. Printing of graphic images depends on your printer’s capabilities.

To print the current display:

1. Go to the display you want to print.
2. Press **2nd P**.
 - Press **ON** at any time to cancel printing.
 - Message displayed during transfers or momentarily displayed cannot be printed.
 - With this operation, the print settings cannot be changed. If you need to change the settings, touch **SEND** and select “**Print**”.

Print Conditions

- To cancel printing at any time, press **ON**. All other key functions are inoperative.
- If you try to print a group of entries with your unit locked, only non-secret entries are printed. To print secret entries, you must first unlock your unit, see p. 86.
- Entries are printed in Detail View format. For example, collapsed Outlines topics would be printed without hidden subtopics, etc.
- When printing graphics, if there is a transfer problem or the print job is canceled while in progress, the printer might not function properly until it is turned off and on again.
- If you are in an application other than Documents, you must remove the paper manually after printing. If you are using a Hewlett Packard LaserJet Series printer, the paper will exit automatically after printing.
- All four pages of the Notes will be printed even if you have only drawn on one of them.

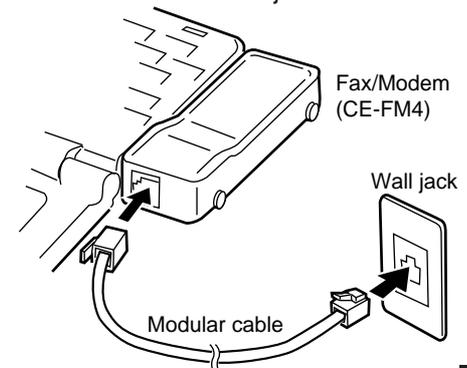
Faxes

With the optional Sharp CE-FM4 Fax/Modem connected to your unit, you can fax single Notes, Documents or Scrapbook entries, or an entire Filer folder. See the next section for more information about using PC card Fax/Modems.

 Fax communication over a cellular phone connection is typically less reliable than using a standard telephone connection. Please refer to your modem manual for information on your modem's support for cellular, as well as cellular communications guidelines.

Connecting the Fax/Modem:

1. Turn your unit off.
2. Connect the Fax/Modem to the Computer Link port.
For more information, see the CE-FM4 operation manual.
3. Use a modular telephone cable to connect the Fax/Modem to the wall jack.



4. Turn your unit on.

Fax Directory

Any of the three files in Contacts or Data Files can be designated as the fax directory. Each time you send a fax, the unit will allow you to select the fax recipient from the fax directory. Once selected, the unit will automatically use that person's fax number and extract other information for the cover sheet, etc. By default Contact 1 (Business) is selected as the fax directory.

To set up the fax directory:

1. From Notes, Documents, Scrapbook or Filer, select the entry to be sent as a fax.
2. Touch **SEND** and select "Fax".

3. Touch the "To:" button.

Fax to:	
ABC consulting	201-353-8899
Ace Advertizing	201-556-8873
Bigg Productions	257-555-8879
Brown Corporation	201-353-4170
Busy Bee Detailing	234-555-7788
CEO Beta Corp.	212-444-6473
Flash Corp.	609-233-4455
GK Co	201-556-4477
HK Traders	257-555-8833
Instant Personnel	245-555-8787
NKC Co.	234-555-8686

4. Touch **Setup**.

5. Set all fields to properly match your Contact data.

6. When you complete your directory set up, touch **OK**.

 Fax dialing address information can be entered manually without using the fax directory.

Setting fax options

To send faxes, the following Fax/Modem options must be configured correctly. If you use the CE-FM4 Fax/Modem, you can send faxes with the default settings. When dial tone is not used or dialing does not work properly with the default settings, change the Line Type to Pulse.

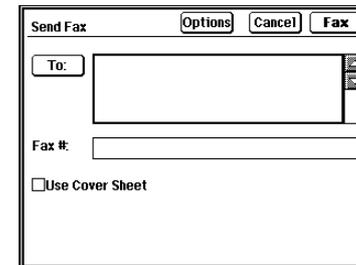
- Port: Select from 15-pin or PC card.
For the CE-FM4 Fax/Modem, select 15-pin.
- Line type: Select from Tone or Pulse.
Contact your telephone company if you are unsure of which to use.
- Volume: Select 1, 2 or 3 to adjust the speaker volume for dial/connect tones. Mute turns the speaker off. Speaker volume does not function with the CE-FM4 Fax/Modem.

Detect: Select Dial Tone for normal settings. If using a line without dial tone, e.g. PBX, select None.

Modem string: Check the Modem String box and enter specific Fax/Modem initialization commands if necessary. (When using CE-FM4, it is not necessary to set this.)

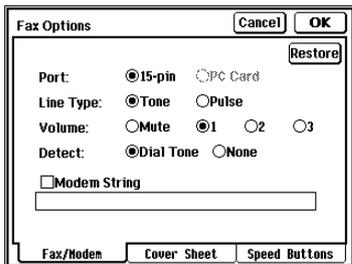
To configure the Fax/Modem:

1. From Notes, Documents, Scrapbook or Filer, select the entry to be sent as a fax.
2. Touch **SEND** and select “**Fax**”.



The screenshot shows a 'Send Fax' dialog box. At the top, there are three buttons: 'Options', 'Cancel', and 'Fax'. Below these is a 'To:' label followed by a list of contact names. Underneath is a 'Fax #' label followed by a text input field. At the bottom, there is a checkbox labeled 'Use Cover Sheet'.

3. To change the fax options, touch **Options**.



Set all fax options as required.

To cancel the new settings and return to the default settings, touch **Restore**.

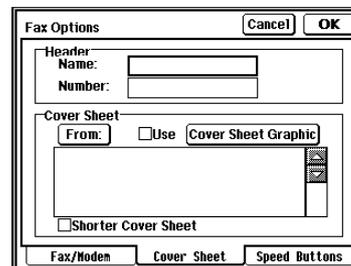
4. When you complete your settings, touch **OK**.

Cover sheets and headers

You can set up cover sheets and headers so that your name and phone number appear on each fax page.

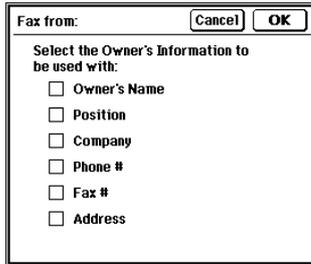
To set up cover sheets and headers:

1. Touch **SEND** and select “**Fax**”.
2. Touch **Options** and then touch the **Cover Sheet** tab at the bottom of the display.



3. Enter the sender's name and telephone number in the header fields.

4. Touch the “**From:**” button.



Fax from: [Cancel] [OK]

Select the Owner's Information to be used with:

- Owner's Name
- Position
- Company
- Phone #
- Fax #
- Address

5. Select the owner's information to be used with the fax cover sheet. As an alternative to step 4, enter “From” information in the text box. For more information, see p. 80. When you complete your selection, touch **OK**.
6. Check the Use Cover Sheet Graphic box as required. To make or edit cover sheet graphics, touch the Cover Sheet Graphic button. For more information, see Scrapbook on p. 63. When you complete your cover sheet graphic, touch **OK**.
7. Check the Shorter Cover Sheet box to use a shorter cover sheet with less blank space.

8. When you complete your Cover Sheet set up, touch **OK**.

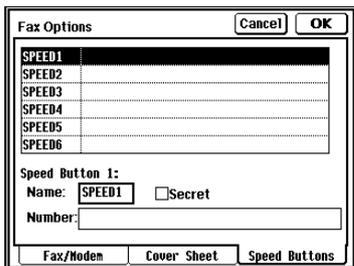
 Before sending a fax, check that the home time and date set in your unit are correct. By law, your name, fax number, time and date must appear on the top of each fax page sent (see the inside front cover of this manual). This information is inserted automatically if entered correctly.

Speed buttons

Frequently-dialed fax numbers can be assigned to one of the six Speed Buttons in the Dialing display. Touching a Speed Button dials that number automatically.

To set the Speed Buttons:

1. Touch **SEND** and select “**Fax**”.
2. Touch **Options** and then touch the **Speed Buttons** tab at the bottom of the display.



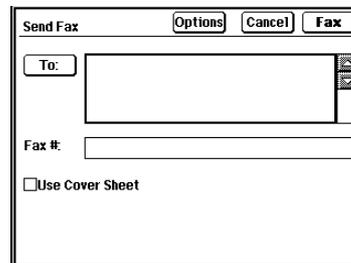
3. Select any of the six speed button fields in the list. You can now edit the name (6 characters) and enter a fax number in the Number fields below.
4. Speed Button numbers can be made secret. They are then displayed as asterisks so the digits cannot be read. To make any Speed Button secret, touch the Secret box.
5. When you complete your Speed Button settings, touch **OK**.

Sending a fax

You can fax a single Notes, Documents or Scrapbook entry, or you can fax an entire Filer folder. The fax can be dialed automatically or you can use manual dialing.

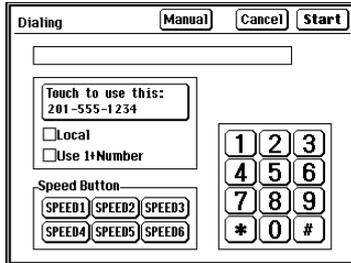
To send a fax:

1. From Notes, Documents or Scrapbook, select an entry, touch **SEND** and select **"Fax"**. From Filer, select a folder, touch **SEND** and select **"Fax"**.



2. Touch the **"To:"** button, select the recipient from the directory, and touch **Select**. To set up the fax directory, see p. 196.
- ★ You can enter the recipient's information directly into the To field, then touch Fax# and enter the fax number.

3. Check that the fax number is correct and has hyphens in the appropriate places.
4. Check that the Use Cover Sheet box as required. If you check this box, **Preview** appears at the top of the display.
5. Touch **Preview**.
The recipient's information from the Send Fax display is automatically entered into the cover sheet.
6. Touch **Fax**.



The directory fax number is displayed after “Touch to use this:”.

- Select Local or Use 1+Number.
- You can touch any of the Speed Buttons.

7. Complete your settings and touch **Start** to send the fax.
 - The unit does not have an automatic redial function. A message will indicate if the line is busy and the fax transmission will be terminated.
 - All four pages of the Notes will be faxed even if you have only drawn on one of them. When a fax transmission is completed without any errors, the fax mode closes automatically and the display returns to the last application used.

Some public phones need a special procedure.

1. Go through the normal steps for sending a Fax until "Dialing" dialog appears.
2. Pick up the pay phone handset, insert a credit card into the card slot, and then immediately pull it out.
3. Plug the phone cable into the data port and touch **Start** on the unit.
4. Do not hang up the handset until you confirm that the receiving fax machine has picked-up and you can hear its fax tone.

About fax numbers

You may sometimes find a fax number dials too quickly for a connection to be made. Dialing can be slowed by inserting commas in the fax number field (for example, after an area code) for that entry. Each comma inserts a one-half second dialing pause. To do this, open the entry and insert a comma in the appropriate place(s) in the fax number field.

Conditions for sending faxes

When sending Documents entries as faxes, certain conditions apply:

- Margin settings on the received fax may not match your Documents entry.
- A preset font is used (you cannot select the font or size).
- If legal size paper is selected and the receiving fax machine has roll paper, legal-size pages are printed. If the receiving fax uses single sheets, legal-size pages are printed across two single sheets.

Optional Cards

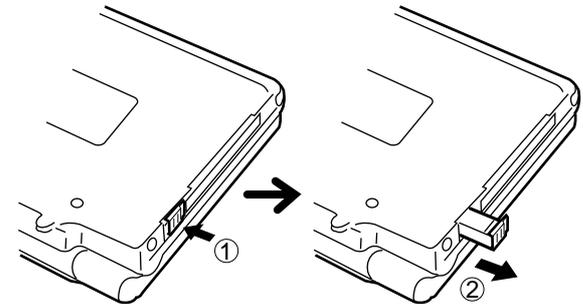
A range of optional cards are available to suit your unit. These include RAM cards, Flash Memory cards. (Not all types of PC card can be used.)

Warning

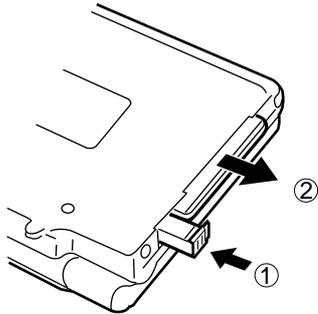
Use only recommended PC cards. Attempt to use cards that are not recommended may result in damage to the main unit and/or data loss.

Installing optional cards in the card slot:

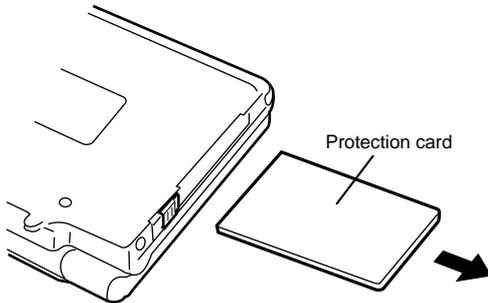
1. Turn your unit off and close it.
2. Press and release the eject button so it pops out.
 - Press the eject button fully before you release it, otherwise it might not pop out.



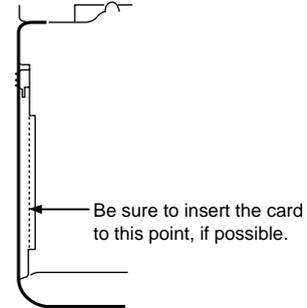
3. Push the eject button again so the protection card pops out.



4. Pull the protection card out.



5. Hold the card so its back faces the bottom of the unit. Insert the card fully into the card slot.



Using PC cards

The ZR-5700/ZR-5800 are extremely powerful and flexible products due in part to their industry standard PC card (formally "PCMCIA") Type II slot. This allows you to use cards such as;

- SRAM memory cards
- FLASH memory cards
- Fax/modem cards (including cards that can be used with your cellular phone).
- Pager Cards

Because the PC card standard was originally designed for use with personal computers, some limitations exist including the following:

- Not all PC card brands will work in the ZR-5700/ZR-5800. Be sure to use only recommended cards. You can get a list of these electronically (such as via CompuServe or the Internet) or from our Fax-on-demand service (612-397-8601). Attempts to use non-recommended cards may cause problems such as damage to the main unit or the card.

- Some cards, especially Fax/modem cards, require a lot of power. These cards will typically drain the batteries very quickly. We recommend using the AC adaptor or the external battery pack when possible. When the batteries are low, many cards will not work. Some cards may not work at all without the AC adaptor or external battery. If you will frequently be using a Fax/Modem card, you may want to consider using Lithium batteries which perform well under high-power drain conditions.



Even though the BATT symbol does not appear, some communication cards may not be used. In that case, replace the operating batteries with new ones.

We recommend that you use Lithium batteries or an external power supply while using high-power cards such as Fax/Modem cards.

Constant usage of many high-power Fax/Modem cards will deplete a fresh set of alkaline batteries in about 20 minutes, for example. Lithium batteries will perform significantly better under these conditions. Under normal operating conditions, however, Lithium batteries do not perform significantly better than alkaline batteries and may not be cost effective. Be sure to best match your battery selection to your particular usage.

- Be sure to turn the unit off before removing or inserting any cards or you may lose memory in either the unit or the card.
Store the protection card in a safe place and replace it in your unit when there is no other card installed.
- Additional types of cards may require the installation of an add-on software program before use.

Other notes

When a PC card is inserted, the unit may take a few extra seconds to turn on than normal.

When using SRAM cards, you may get a message warning you that the card battery is low. Be sure to change the card battery as soon as possible. While changing the battery be sure to do so without removing it from the main unit and while the unit is still on with this message showing or you will lose the data stored on the card. The ZR-5700/ZR-5800 will only provide enough power to protect the card during a battery change when this message is displayed on the screen. For more details, refer to the manual for the card.

SRAM and FLASH Memory Cards

The ZR-5700/ZR-5800 support up to 2MB SRAM cards and up to 16MB FLASH cards which provide you with different benefits as outlined below.

SRAM cards allow you to:

Store additional data created by the built-in application.

Install Add-on software programs and store the data created by these programs.

FLASH cards allow you to:

Create and store multiple backups (archives) of your main unit data and Add-on software programs (a complete backup).

Install Add-on software programs (but NOT the data created by these programs which will automatically be stored in the main memory).



A maximum of 2MB on a FLASH card can be used for Add-on software applications.

Notes about Memory cards

FLASH cards are ideal for backing up your ZR-5700/ZR-5800. They require no back-up battery and will back up everything in the main unit.

FLASH cards require more power than SRAM cards when being written to. When creating a backup or especially when installing Add-on software programs onto a FLASH card, try to use an external power supply such as the AC Adaptor in order to extend the life of the main unit batteries.

When memory cards reside in the main unit, they do slightly affect the battery life. The effect on the battery life depends upon the type of card and your usage.



- If a message appears that indicates there is a problem with the card, initialize the card. Note this will delete all data on the card.
- Never move the protection switch while the card is inserted in the unit.

SRAM cards

An SRAM card can be used to expand your unit's memory capacity. Additional Add-on software programs and additional data for the built-in applications can be stored on an SRAM card. It is important to note that SRAM cards DO NOT expand the amount of main memory but instead add a second memory bank, which can be accessed via the TOOLS menu.

Installing an SRAM card

Important: Before installing an SRAM card for the first time be sure to delete your password. After the card is installed you can re-enter your password. As a security precaution, you cannot install a card into your unit unless its password matches the unit's password. When you enter a new password while the card is installed, the password will be installed on both. See p. 85 for more details about passwords and the Secret Function.

To initialize a new SRAM card:

1. Install the card.
2. Press **ON**.
A message telling you this card needs to be initialized will appear.
3. Touch **Initialize**.
4. Touch **Yes** to confirm.

To initialize a previously used SRAM card:

1. Install the card.
2. Hold down **ON** while pressing and releasing the RESET switch.
3. Touch **No** when prompted to clear the main memory.
4. Touch **Yes** when prompted to clear the card memory.
Note that this will delete all data on the card.

To copy data to the SRAM card:

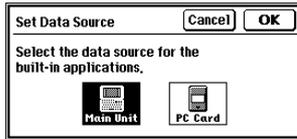
Note that although the data of the communications applications (those applications found under "TOOLS") will be copied to the SRAM card, it cannot be accessed from there. This data will, however, be copied back to the main memory if you ever decide to copy all data back from the SRAM card to the main memory.

1. Install the card and then turn the unit on.
2. First be sure your unit is unlocked and touch **TOOLS** then select "**Backup**".
3. Touch **Backup** to make a copy of the major built-in application data onto the card. Note that will delete ALL existing data on the card, including any installed Add-on software applications.
4. Touch **OK** to confirm. Note the unit will take a few seconds to re-start after this operation.

You can also copy the SRAM card data back into the main memory by selecting **Restore** in step 3. Note that using the Restore operation will delete ALL existing data in the main memory including any installed Add-on software applications.

To view and store data on an SRAM card:

1. Install the card and then turn the unit on.
2. Touch **TOOLS** and select **RAM Card**.



3. Select **PC Card** in the Set Data Source screen and touch **OK**.

CARD will appear at the top of the display to indicate you are now accessing the SRAM memory. Note that now all of the major built-in applications will be accessing the SRAM card memory. You can't set this individually for each application. To set it back again, you must use the steps above and select **Main Unit**.



Add-on software programs are not backed up when backing up to a SRAM card. However, the data associated with Add-on software programs is backed up. If you delete Add-on software programs from the unit, but wish to use the programs and their associated backed up data again, simply re-install the software programs either before or after you perform a Restore from the SRAM card.

Notes about SRAM cards

Note that when you set the data source to be the SRAM card, the communication applications on the ZR-5700/ZR-5800 (found in TOOLS) DO NOT use this memory for data storage. Thus when you switch the data source to the SRAM card but then touch TOOLS and then CompuServe, for example, the data you view and create for CompuServe will still reside in the main unit. This can be useful for the user who wants to "simulate" using the main memory and card memory as one. This user can use the main memory for these communications programs and use the card memory for the other applications without having to bother constantly changing the data source.

The Search and Filer features cannot cross data sources (Main unit and SRAM card). You cannot search across both memory locations, for example. You have to first switch the data source to the desired memory location. In the case of Filer, you will actually have two Filers; one in the main memory and one on the SRAM card memory.

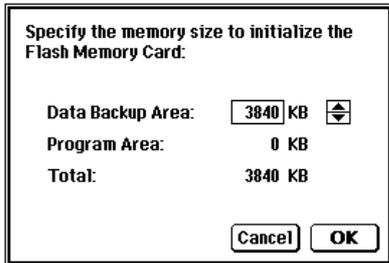
SRAM cards have a battery which holds the memory (just as the main unit does). Be sure to keep a separate backup of the card data on a Personal Computer, for example. See the precaution earlier in this section.

FLASH cards

Additional Add-on software programs and multiple backup (archive) files of your main unit can be stored on a FLASH card. FLASH cards cannot be used to provide additional memory for the built-in application as SRAM cards can. You cannot view backup (archive) files, just restore them to the main unit if necessary.

To initialize a new FLASH Card:

1. Install the card and then turn the unit on.
The following initializing screen will appear.



The screenshot shows a dialog box with a black border. The title is "Specify the memory size to initialize the Flash Memory Card:". Below the title, there are three rows of text: "Data Backup Area:" followed by a text box containing "3840" and "KB" and a small square icon with a vertical double-headed arrow; "Program Area:" followed by a text box containing "0" and "KB"; and "Total:" followed by a text box containing "3840" and "KB". At the bottom of the dialog box, there are two buttons: "Cancel" and "OK".

2. Touch ▲ and ▼ to adjust the memory partition size.
Data Backup Area is used for archives of the main unit. This size can be set for as much memory as the card has. Be sure that you leave enough space for Backup file. A full ZR-5800 uses about 1.7MB of space. A full ZR-5700 uses about 650KB of space.

Program Area is used for storing Add-on software programs and can be set to a maximum of approx. 2MB.

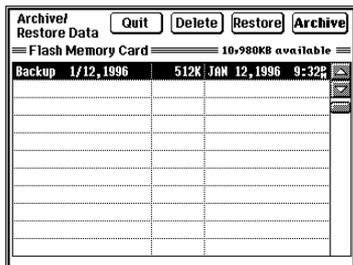
3. Touch **OK** to initialize the card.

To initialize a previously used FLASH Card:

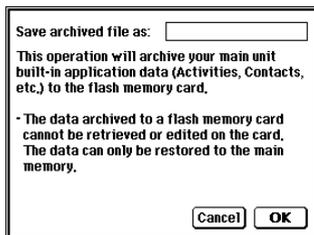
1. Install the card and then turn the unit on.
2. Touch **MORE**.
3. Touch **DELETE** and select "**Initialize Flash Memory Card**".

To backup your main unit data to a FLASH Memory card:

1. Make sure your unit is unlocked.
2. Touch **TOOLS** and then touch **Backup** twice.



3. Touch **Archive**.



4. Name this backup file.

5. Touch **OK**.

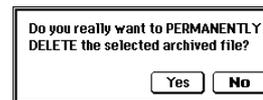
Note that the unit will take a few seconds to re-start after this operation.

Note that this operation backs up ALL main unit data, including Add-on software programs and their data. A backup operation does not delete your main unit data.

To delete an archive from a FLASH card:

First be sure your unit is unlocked.

1. Touch **TOOLS** and then touch **Backup** twice.
2. Select the Backup file you want to delete and then touch **Delete**.



3. Touch **Yes** to confirm the deletion.

To restore your main unit data from an archive file:

Note that this will delete ALL information stored in the main memory including Add-on software programs and their data.

First be sure your unit is unlocked.

1. Touch **TOOLS** and then touch **Backup** twice.
2. Select the Backup file you want to use to restore your main unit data and touch "**Restore**".



3. Touch **Yes** to confirm.

 If you back up ZR-5000 or ZR-5700 main unit data containing Add-on software program(s) onto the Flash memory card and restore it on a ZR-5800, the Add-on software program(s) will not work and vice versa.

Notes about FLASH cards

FLASH cards do not require a backup battery.

Add-on software programs installed onto a FLASH card automatically store their data onto the main memory.

Backup time depends on the amount of data stored in your unit.

Approximate backup and restore times when the unit memory is full:

ZR-5700

Backup: 1.5 minutes / Restore: 1 minute

ZR-5800

Backup: 3 minutes / Restore: 1.5 minutes

Fax/Modem cards

The PC card standard means you can use cellular ready and high speed Fax/Modem cards. Be sure to check out the accessory brochure included in your ZR-5700/ZR-5800 box for a list of compatible cards that you can use.

Notes about Fax/Modem cards

When using these Fax/Modem cards with the built-in communications software, be sure to set the modem settings to reflect this in each of these applications.

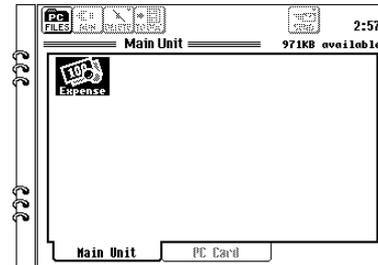
For increased cellular communications reliability with most cellular-ready modems, we recommend you consult your modem manual for the proper cellular modem initialization string.

For more information, see the Q&A on p. 36, the included accessory brochure, the CompuServe forum (GO ZAURUS), or our Fax-on-demand service at 612-397-8601.

The MORE area provides access to optionally purchased, Add-on software programs you install as well as a generic file storage area called "PC FILES".

Add-on software programs

Add-on software programs add functionality to your ZR-5700/ZR-5800. These programs are especially written for your ZR-5700/ZR-5800 by Sharp and independent software developers. You cannot run PC software on your ZR-5700/ZR-5800. Once installed, you can access and run these software programs from the MORE area by simply touching them twice.



For a list of currently available Add-on software programs for your ZR-5700/ZR-5800 and where you can purchase them:

- Call Sharp's 24 hour automated Fax-on-demand service at 612-397-8601
- Go to the ZAURUS forum on CompuServe and download the appropriate files from the Zaurus library.
- Call 800-BE-SHARP and request a free brochure.

The MORE tool bar:

[PC FILES]	Changes to the PC Files Index (see PC Files)
[RUN]	Executes the currently selected program (you can also simply double touch the program).
[DELETE]	Deletes all programs or the last installed program.

Installing Add-on software programs

In general, Add-on software programs are distributed on a PC and floppy disks. You then need to install the software using a PC Link cable or infrared adaptor. PC Installer software is usually included on the disk. You can select the main memory or card memory as the installation destination. It is also possible that you might download Add-on software (e.g. from CompuServe) or have software beamed to you

from another ZR-5700/ZR-5800. This software could be installed via the PC Files area (see PC Files).

See the directions included in the Add-on software program instruction manual for more details about installation.

Software on SRAM cards.

Up to 20 Add-on software programs can be installed into the ZR-5700/ZR-5800. You can also install up to 20 Add-on software programs onto an SRAM or FLASH memory card. Generally Add-on software programs installed on an SRAM card will give you a choice as to where you want to store the data created by the Add-on software program. You can set the data storage location to be the card or the main memory.

Software on FLASH cards.

Add-on software programs installed on FLASH cards, automatically store their data in the main memory. Program data cannot be stored on the FLASH card. Although the ZR-5700/ZR-5800 supports up to 16MB FLASH cards, only 2MB can be used for Add-on software programs.

Deleting add-on software programs

Using the delete tool, you can delete either all installed programs or the last installed program (farthest down and to the right in the MORE display). You cannot simply delete any individual program so be sure to install your program in order of importance when possible.

To delete Add-on software programs:

1. From the MORE display (on the Main unit or PC card), touch **DELETE**.
2. Select **“All Installed Programs”** or **“Last Installed Program”**.
3. Touch **Yes** to confirm the deletion.

Using Add-on software programs written for the ZR-5000

In general, all Add-on software programs designed for the ZR-5000 will also work with the ZR-5700/ZR-5800 except those built-into this unit including AT&T Mail, ZR-Pager, and CompuServe for Zaurus. If you insert a memory card that contains these programs, you won't be able to run them (nor will you need to as they are available in “Tools”).

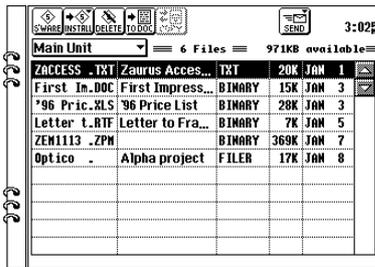
PC Files

From the MORE area of your ZR-5700/ZR-5800, you can access the PC Files area by touching the PC Files icon. PC Files enables you to easily communicate with people not using a ZR-5700/ZR-5800 (such as PC users in your office). PC Files area is a kind of “File Manager” that provides you with the following capabilities:

- You can temporarily store incompatible files that can't be used on your ZR-5700/ZR-5800 (such as an E-Mail attachment sent to you by a co-worker). Later you can use the Data Exchange Utility to move this file to your PC.
- You can convert ASCII text and RTF files to the Documents Application and you can convert Excel 3.0 and Excel 4.0 files to the Spreadsheets Application. These commands are available from the SEND menu in these applications. If you are receiving files from a PC user, ask them to send files in these formats if possible.
- You can attach these files to an E-mail attachment. Because you can store generic file formats here, these attachments very likely can be viewed by the recipient.

- You can install Add-on software programs from here (such as a program downloaded from a CompuServe Forum) to the main memory or to a memory card (SRAM or FLASH).
- You can beam files stored here to another ZR-5000 series.
- You can copy files to and from an SRAM memory card.
- You can upload files to a remote system using the Terminal mode.

As an example you may create a memo in Documents (with graphics) and then convert the file to an RTF file (compatible with MS Word). You could then attach this file to a CompuServe E-mail and send it to a co-worker who could then open the file using virtually any Word Processor. The same could be done with a Spreadsheets file.



 The files you have got into the PC Files area are listed in chronological order.

PC Files tool bar:

The PC Files tool bar includes the following functions:

- [S'WARE] Returns you to the MORE display
- [INSTALL] Installs an Add-on software program to the main memory or the PC memory card.
- [DELETE] Deletes the currently selected file.
- [TO DOC] Converts an ASCII text file to Documents.
- [COPY] Copies a file from the main memory to the SRAM card memory and vice versa.
- [SEND] Send the selected file to/from another ZR-5000 series via infrared transmission or via optional cable.

Getting Files into the PC Files area

There are a number of ways a file might be loaded into the PC FILES area including:

- Attachments detached from an E-Mail message (such as CompuServe, LAN E-Mail, etc.).
- Library files downloaded from CompuServe Forums.
- Files downloaded using the Terminal Software.

Data Exchange

- Files from your PC you downloaded directly using the Windows or Macintosh Data Exchange Utility or remotely using Sharp's remote access software.
- Files beamed (unit to unit) from another ZR-5000 series.

PC Files on Memory Cards

When an SRAM card is installed, there will be two PC Files areas; one in the main memory and one on the SRAM card. Note that FLASH memory cards do not have a PC Files area. You can only store Add-on software programs and data backup archives on FLASH cards.

Add-on software programs in PC Files

Add-on software programs cannot be executed from the PC Files area. You must first install this software to the MORE area and then run it from there. Simply select the program file and touch **INSTALL**.

-  When you convert a TXT or RTF PC File imported from a PC or Macintosh to a Documents entry by selecting "Get from PC File" (see p. 181), be sure the last three characters of the File Name are "TXT" or "RTF".

There are many different ways to exchange data, entries, folders, or all entries between your unit and other devices, including Sharp organizers and personal computers. The table below provides a summary of transfer devices, data types, and tasks suited to each device.

-  • Features and capabilities may vary depending upon the Sharp or third party software used.
- Sleep function is disabled in all transfer modes.
- Information about Printer, Fax, RAM card and Flash Memory card, are described in previous sections.
- Use only PC cards (RAM card/Flash Memory card) initialized by a ZR-5000 series. You cannot use PC cards initialized by any other devices, including PCs.

Transfer device	Data and transfer direction (←: from ZR-5700/ZR-5800, →: to ZR-5700/ZR-5800)			Peripherals required	Recommended tasks
	Main application data	Add-on software programs	PC Files		
Printer (See p. 192)	Single entry Entire file/ application Filer folder ←	NA	NA	CE-IR1 + PC Printer Cable None for IrDA compatible printers	Wireless transfer of printer data
Remote fax machine (See p. 195)	Single Notes, Documents, Scrapbook entries Filer folder ←	NA	NA	CE-FM4 or PC card modem	Send faxes
RAM Card (See p. 207)	All entries → ←	NA	Single file All files → ←	NA	Application memory and extra application features
Flash Memory Card (See p. 210)	All entries → ←	All programs → ←	All files → ←	NA	Memory for multiple archive files
Another ZR-5000 series (See p. 219)	Single entry Entire file/ application Filer folder → ←	NA	Single file All files → ←	None for infrared transfer; CE-315L for cable transfer.	Exchange data with other ZR-5000 series

Transfer device	Data and transfer direction (←: from ZR-5700/ZR-5800, →: to ZR-5700/ZR-5800)			Peripherals required	Recommended tasks
	Main application data	Add-on software programs	PC Files		
OZ-5000 OZ-6000 OZ-9000 series (See p. 226)	Single entry Entire file/ application Filer folder → ←	NA	NA	None for infrared transfer; CE-315L for cable transfer.	Exchange data with Sharp Organizers
Personal computer (See p. 223)	Single entry Entire file/ application Filer folder → ←	NA	Single file → ←	Software plus: * CE-IR4 or CE-137T+ null model cable or Link cable	File transfer with other personal computers
Remote computers, public E-mail services (See p. 226)	Differs depending on application			CE-FM4 or PC card modem *	

* Optional software may be required.

NA: Not applicable

Data Transfer with Other Sharp Devices

Your unit can transfer data with other Sharp Devices as follows:

- ZR-5700/ZR-5800 to ZR-5700/ZR-5800 via infrared transfer or cable.
- To/From ZR-5000 via infrared transfer or cable.
- To/From OZ-5000/OZ-6000/OZ-9000 series units via infrared transfer or cable.

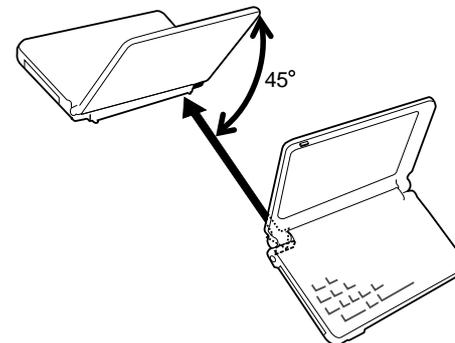
Data transfer between ZR-5700/ZR-5800s or with ZR-5000

Data can be transferred easily from one unit to another using the **GET** and **SEND** keys. You can also use SEND Unit to Unit via infrared port or Data Transfer Cable.

- Transfer procedures vary according to whether single entries, folders, files or all entries are transferred.
- Single entries or all entries can be transferred for Activities, Notes, Documents, Outlines, Spreadsheets (between ZR-5700/ZR-5800s only) and Scrapbook.
- Single entries or all file entries can be transferred for Contacts and Data Files.
- Single folders can be transferred from Filer.
- Single file can be transferred for PC Files.
- To transfer whole applications, files, or entries marked as secret, both units must be unlocked, see p. 86.

Wireless infrared transfer (Beaming)

- Wireless transfer is possible with another ZR-5700/ZR-5800, with a ZR-5000 unit or with a OZ-5000/OZ-6000/OZ-9000 series unit.
- No special hardware is required for wireless infrared Unit to Unit transfer.
- The units must be correctly aligned so their infrared ports face each other and are less than 50 cm (20 inches) apart, see p. 241.



- The units should not be more than three-quarters open during transfer or the infrared beam might be blocked.
- No special software setup is required to transfer single entries or folders using the **GET** and **SEND** keys.

- Keep the infrared port clean with a soft, dry cloth. Dust on the port restricts data transfer.
- Avoid direct sunlight.
- Infrared transfer is simple, but it is easily affected by ambient conditions such as external light, distance, transfer angle, etc. Received data should be confirmed after the transfer.

Quick transfer

Single entries can be quickly exchanged between two units at any time using the wireless infrared transfer.

To quickly transfer single entries:

1. Turn both units on.
2. On the sending unit, select the entry you want to send in Index View or Detail View.
3. Press **GET** on the receiving unit.
4. Press **SEND** on the sending unit.
The entry is transferred and added to the proper application data in the receiving unit. It will also be assigned to the IN folder in Filer.

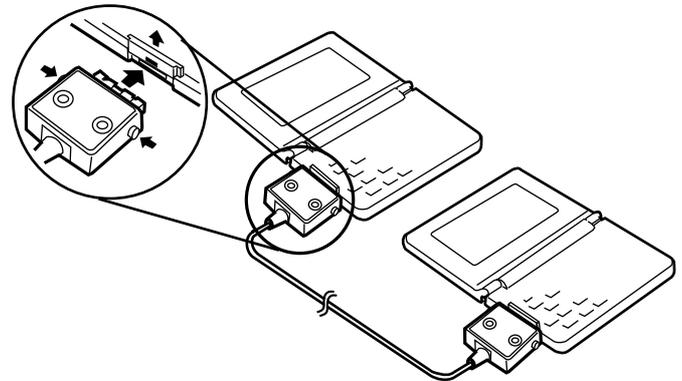
Unit to Unit transfer

Unit to Unit transfer lets you send:

- Single entries or all entries for Activities, Documents, Notes, Outlines, Spreadsheets and Scrapbook.
- Single entries or all file entries for Contacts and Data Files.
- Single files for PC Files.
- Filer folders.

For Unit to Unit transfer to take place correctly:

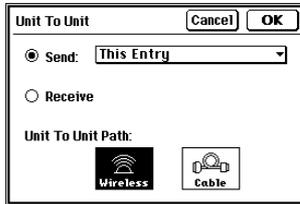
- Both units must use the same path; Cable or Wireless.
- If Cable is selected, connect the optional Data Transfer Cable CE-315L between the two units.



- Check the orientation of the cable when it is connected.
- Disconnect the cable as soon as the transfer is completed to conserve battery power.
- If Wireless is selected, correctly align the two units so that their infrared ports face each other and are less than 50 cm (20 inches) apart.

To perform a Unit to Unit data transfer:

1. Open the application.
2. Touch **SEND** and then select “Unit to Unit”.



3. Touch **Send** and select the entry/entries from the pop-up menu.
4. When sending Contacts or Data Files entries, check the With Link Information box as required.

5. Select the Unit to Unit Path from Wireless or Cable.
6. When you complete your settings and the other unit is ready to receive data, touch **OK** to transfer the data.

To receive a Unit to Unit data transfer:

1. Open the application you want to receive. If you are in the Contacts, Data Files or Holiday, also select the file.
2. Touch **SEND** and then select “Unit to Unit”.
3. Select **Receive**.
4. Select Unit to Unit Path from Wireless or Cable.
5. When you complete your settings, touch **OK** and wait for the data to be transferred.

 For detailed steps for the OZ-5000/OZ-6000/OZ-9000 series, see the respective manual.

Corresponding applications

When transferring data from your unit to OZ-5000/OZ-6000/OZ-9000 series, the following applications correspond:

Schedule - Appointment

To Do - To Do

ANN 1 - Holiday (Yearly by date)

ANN 2 - Holiday (Yearly by day)

Tel 1 - Contact 1

Tel 2 - Contact 2

Tel 3 - Contact 3

User File 1 - Data File 1

User File 2 - Data File 2

User File 3 - Data File 3

Notebook, Memo - Documents

Outline - Outlines

Scrapbook - Scrapbook

- For Appointments, Contacts and Data Files entries, if the Filter function is turned on, only filtered entries are sent. For Filer, transferred entries are stored in the proper source applications and are also automatically assigned to the IN folder on the receiving unit. After the transfer, move IN folder data to another folder, see p. 77.
- When transferring data from the OZ-5000/OZ-6000/OZ-9000 series to the ZR-5700/ZR-5800 from an application in different format, a warning message may be displayed.
You should check whether all the data was transferred successfully after selecting **OK**.

Transfer conditions

- Press **ON** at any time to cancel a transfer.
- Received data is stored and appended to existing data in the selected application.
- After a transfer using **GET** and **SEND** on the keyboard, the data is also automatically assigned to **Filer's** IN folder so that you can check it. Always try to keep the IN folder empty.
- If a RAM card is installed and selected as the data source, data in the card can also be selected for data transfer, see p.90.
- For **Contacts** or **Data Files**, the receiving file must be set up with the same fields. If a field type (text or picture) is different, the field cannot be transferred.

Be sure that the sending unit does not have a blank (no characters) Telephone/Contact or User File/Data File *field name* or else the ZR-5700/ZR-5800 will not be able to receive information (an error message will appear).

- **GET** and **SEND** on the keyboard do not work for cable transfers. These keys initiate an infrared transfer regardless of the selection for Unit to Unit path or if a cable is connected.
- Transfer of data via the infrared port requires no other devices. However, infrared transfer is easily affected by interference from ambient conditions. Use the optional data transfer cable CE-315L to ensure a more reliable connection, see p. 220.

Data Transfer with Other Computers

Your unit can exchange data with personal computers (PCs) and other computers.

PC Link

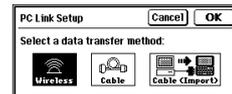
Using Sharp's optional PC Link software and hardware package (or third party software packages), you can exchange data with a personal computer.

Some PC Link software allows data transfer via the infrared port using the optional CE-IR4 wireless interface. You can also use your unit in a remote location, then transfer the data to your desktop computer when you return to your office. To check the availability of PC-Link products that perform these functions, call 800-BE-SHARP.

To set up your unit for use with PC Link software for ZR-5700/ZR-5800:

1. Make sure your unit is turned off.
2. For infrared transfer, connect the CE-IR4 wireless interface to your PC. For details, see the CE-IR4 manual.
For cable transfer, connect the PC Link cable to the 15-pin cable jack on your unit, and to an available communications port on your PC.
3. Press **ON**.

4. Touch **TOOLS** and select **PC Link**.



5. Select the PC Link Path from Wireless or Cable, then touch **OK**.
Your unit is now ready for transfer. For further transfer procedures, check your PC Link software manual.
Press **ON** at any time to exit the PC Link mode.

To set up your unit to use PC Link software for OZ-7000/OZ-8000/YO-600/ZQ-5000 series:

1. Make sure the unit is turned off.
 2. Connect the PC Link cable to the 15-pin cable jack on your unit, and to an available communications port on your PC.
 3. Press **ON**.
 4. Touch **TOOLS** and select **PC Link**.
 5. Touch **Cable (Import)**.
Your unit is now ready for data transfer.
-  For detailed steps for the PC Link software for OZ-7000/OZ-8000/YO-600/ZQ-5000 series, see the respective manual.

Corresponding applications

When transferring data between OZ-7000/OZ-8000/YO-600/ZQ-5000 series and ZR-5700/ZR-5800, the following applications correspond:

- Schedule - Appointment
- To Do - To Do
- ANN 1 - Holiday (Yearly by date)
- ANN 2 - Holiday (Yearly by day)
- Tel 1 - Contact 1
- Tel 2 - Contact 2
- Tel 3 - Contact 3
- User File 1/Business Card - Data File 1
- User File 2 - Data File 2
- User File 3 - Data File 3
- Memo - Documents
- Outline - Outlines

 To exchange data with a OZ-5000/OZ-6000/OZ-9000 series unit, use the wireless transfer method (see p. 219) or Unit to Unit transfer method (see p. 220).

Organizer Link software for Other Sharp Products

To use Organizer Link software (designed for OZ-7000/OZ-8000/YO-600/ZQ-5000 series), the following conditions apply.

When sending data:

- Application data not supported by Organizer Link cannot be sent. (Data File 1 corresponds to Business Card in the OZ-8000/YO-600 series.)
- If you try to exceed link character transfer limits, excess data is not sent.
- Documents entry tab codes are converted to carriage return [↵] characters on a computer. If you restore the Documents entry to your unit, converted carriage returns do not change back to tab codes, so the original layout (and text styles) are lost.
- The first 20 characters (or first line of text) of a Memo entry received as a Documents entry are entered as a title and also appear in the text. If you restore this data to the computer, the title (or first 20 characters) are redundant.
- For Contacts, free field names and contents cannot be sent over a OZ-7000 series Organizer Link.

When using OZ-8000 series Organizer Link:

- You cannot transfer the following data: DAILY ALARM, TEL FILE NAME, TEL/BUSINESS CARD (corresponds to Data File 1) FREE FIELD NAME and USER'S DICTIONARY (corresponds to Word key). If you attempt these transfers, no error messages are displayed, but the data is not transferred.
- You cannot transfer a Data File 1 (Business) entry if it has no data in its Name field, and you cannot transfer any complete file containing such an entry.

When receiving data:

- If an Outlines entry exceeds 32 Kb, only the first 32 Kb of data are received by your unit. Any subsequent text and entries are not transferred.
- For Memo entries received in Documents, the first 20 characters, or the first line of text, are entered as a title and also appear in the text field.
- For Memo entries received in Documents, the number of pages displayed in Index View are shown as **. Once data has been transferred, open the entry in Detail View and store it again after pressing **BS** or making some changes.
- Only suitable application data can be transferred. (Period mode data from the OZ-8000/YO-600 series cannot be received by your unit.)

- If you used free fields in TEL (corresponds to Contacts) or Business Card or User File (corresponds to Data Files) on the other unit, you must set the number of fields in Contacts or Data Files on your unit to be the same (e.g. 8 for the 8000 series) before transferring information, or the data in the free fields is not transferred to your unit. Also, if a field type (text or picture) is different in the two units, it cannot be transferred.
- When transferring Business Card entries from a YO-600 or OZ-8000 series unit to Data File 1 or vice versa, data is entered into the corresponding fields. Even if Data File 1 fields are renamed, data is transferred to or from the fields with corresponding default names.
- When receiving a Business Card entry, if field contents would exceed 2048 characters (the limit for a Data File 1 entry), neither that field nor any subsequent fields of the Business Card entry are transferred.

Special Communications Applications

Certain built-in or optional applications allow your unit to serve as a powerful hand-held data communications tool. Connecting to a variety of information services or networks via telephone or cellular phone lets you stay in touch with the world, wherever you are.

Remote Link

Remote Link allows you to exchange information between your unit and a PC, more flexibly than ever. This gives you greater control and security for your data, and is especially valuable for people who spend a lot of time on the road and away from their office PC.

Optional Remote Link software for your personal computer is required to use the Remote Link function.

- Remote File Access lets your unit directly access your PC's data via a remote connection, eg. a cellular phone.
- Enhanced Import/Export utilities now allow you to exchange data with a PC via the Infrared link in a wide variety of standard file formats.
- Direct Import/Export utilities let you read or write data for popular PC applications, including Microsoft WORD and EXCEL, for full compatibility with your PC.
- For details, see the Remote Link software manual.

Terminal Mode

Terminal mode is a special utility which allows your unit to work as a powerful data communications tool. Together with an optional fax modem or PC card modem, you can use Terminal mode to exchange data with a remote computer or system, or link to a BBS (bulletin board service) for on-line information access.

Terminal mode provides a wide range of data communication settings and methods, allowing you to connect to almost any computer or system. For full details of Terminal mode, see the separate manual provided with your unit.

Message

Optional Zaurus Mail software for your personal computer is required to use the Message function. Message lets you send and receive messages and data to/from other unit's users.

- You can use your personal computer as a host for sending and receiving messages.
- You can also attach messages when sending and receiving Filer folders and PC Files.
- For details, see the Zaurus Mail software manual.
- Call 800-BE-SHARP regarding availability of Zaurus Mail software for your PC.

CompuServe Access

CompuServe Access allows you on-line access to CompuServe using your unit. Simply select CompuServe from Tools, connect to a telephone or cellular phone using a modem or PC card, and you're ready to get on-line! Now you no longer need to carry around a bulky PC just to stay in touch on the road. The CompuServe Access lets you use your unit to:

- Send and receive mail via CompuServe, Internet and other electronic mail networks and services.
- Obtain up-to-the-minute news, stock market prices, financial information and weather reports.
- Join one of CompuServe's many exciting special-interest forums.
- Access CompuServe's extensive information databases.
- Use the touch-pen for all convenience of a true graphical user interface (GUI).
- For details, see the separate manual provided with your unit.

AT&T Mail Access

AT&T Mail Access allows you to use your unit to send and receive mail messages from almost anywhere, via AT&T Mail. After selecting AT&T Mail Access from TOOLS, you can use a fax modem or PC card to let your unit connect to the AT&T Mail service via telephone or mobile phone. Now you never need to be out of touch whenever you're travelling on the road.

- AT&T Mail Access lets you use your unit to create messages to be sent via AT&T Mail.
- Managing your messages is easy, with facilities to file, delete and search for messages.
- Convert your messages into documents for editing using your unit.
- Built-in address book makes it easy for you to manage your mailing lists.
- For details, see the separate manual provided with your unit.

ZR-Pager

ZR-Pager allows you to send pager messages from your unit, wherever you are. Using ZR-Pager you can create pager messages and send them via telephone or cellular phone using the optional fax modem or PC card modem. And with the optional Pager Card, you can even receive, view and store incoming pager messages using your unit. ZR-Pager and a Pager Card transform your unit into a sophisticated personal communications tool.

- Use ZR-Pager to create pager messages for any pager service you register, then send via telephone or cellular phone.
- Use a Pager Card to receive messages from pager services, as well as CompuServe, America Online and other on-line services.
- Register the details of any pager services you want to send messages to.
- Receive news updates, stock quotes, financial information and even sports results sent by pager services.
- File incoming pager messages for viewing and editing using the Document application.

- Send pager messages to another unit user with ZR-Pager and a Pager Card.
- For details, see the separate manual provided with your unit.

Appendices

- A. Key Notations
- B. Reset
- C. Troubleshooting
- D. Battery Replacement
- E. Specifications

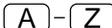
A. Key Notations

Key	Representation in text	Function
 ACTIVITIES	ACTIVITIES	Opens the Activities application.
 CONTACTS	CONTACTS	Opens the Contacts application. Press again to switch between Contact 1, 2 and 3.
 DATA FILES	DATA FILES	Opens the Data Files application. Press again to switch between Data File 1, 2 and 3.
 NOTES	NOTES	Opens the Notes application.
 DOCUMENTS	DOCUMENTS	Opens the Documents application.
 OUTLINES	OUTLINES	Opens the Outlines application.
 SPREADSHEET	SPREADSHEET	Opens the Spreadsheets application.
 CALC	CALC	Opens the Calculator.
 SCRAP BOOK	SCRAPBOOK	Opens the Scrapbook.

Key	Representation in text	Function
	FILER	Opens the Filer.
	SEARCH	Initiates the Search function.
	HELP	Calls the on-line help feature.
	TOOLS	Opens utilities and user preferences.
	MORE	Accesses installed PC cards or Add-on software.
	ON	Turns the unit on.
	QUIT	Interrupts printing and data transfer.
	OFF	Turns the unit off.
	GET	Receives data from another unit via the infrared port.
	SEND	Sends data to another unit via the infrared port.
	2nd SEND	Prints selected entry or folder when a printer is connected.

Key	Representation in text	Function
	CANCEL	Clears entries that have not been stored. Cancels a menu, selection or operation; returns to a previous display.
	MENU	Opens the tool bar menu.
	NEW ENTRY	Opens a new entry in an application.
	 NEW ENTRY	Clears field contents when entering or editing data.
	◀	Moves the cursor one character to the left. In Outlines, promotes a topic one level (to the left).
	2nd ◀	Moves the cursor to the beginning of a line.
	▲	Moves the cursor up one line. Scrolls the display up.
	2nd ▲	Moves the cursor to the beginning of a field, or moves the cursor to first line of a field.

Key	Representation in text	Function
	▼	Moves the cursor down one line. Scrolls the display down.
	2nd ▼	Moves the cursor to the end of a field, or moves the cursor to last line of a field.
	▶	Moves the cursor one character to the right. In Outlines, demotes a topic one level (to the right).
	2nd ▶	Moves the cursor to the end of a line.
	PREV	Moves the cursor between fields. Steps up through entries or screens. Continues a keyword search backward.
	NEXT	Moves the cursor between fields. Steps down through entries or screens. Continues a keyword search forward.
	1 - 0	Enters numerals 1 to 0.
	⇧ 1 - ⇧ 0	Enters symbols.

Key	Representation in text	Function
	-	Enters a hyphen.
	⇧ -	Enters the symbol +.
	= BS	Backspace key; deletes the character to the left of the cursor.
	⇧ BS	Enters the symbol =.
	A - Z	Enters the letters A to Z.
	2nd Q	Inserts a new topic in Outlines.
	2nd W	Moves family in Outlines. Shows/Hides Linked Entries in Contacts/Data Files.
	2nd E	Expand/Collapse topics in outlines.
	2nd T	Stamps the current local time at the cursor position in an entry.
	2nd Y	Sets the text style to plain in Documents and Spreadsheets.
	2nd U	Underlines any text style in Documents and Spreadsheets.

Key	Representation in text	Function
	2nd I	Sets the text style to italics in Documents and Spreadsheet.
	2nd O	Sets the text style to bold in Documents and Spreadsheet.
	P	Enters PM in a time field.
	2nd P	Prints the current display (with printer connected).
	A	Enters AM in a time field.
	2nd A	Redo an undone operation in Spreadsheets.
	2nd D	Stamps the current local date at the cursor position in an entry.
	2nd F	Searches for specific text in any application(s).
	2nd H	Enters an accent mark " (then enter a letter).
	2nd J	Enters an accent mark ` (then enter a letter).

Key	Representation in text	Function
	2nd K	Enters an accent mark ´ (then enter a letter).
	2nd L	Enters an accent mark ~ (then enter a letter).
	2nd Z	Undo [DEL] in Notes and last operation in Spreadsheets.
	2nd X	Cuts the specified text, picture or entry to the clipboard (for pasting).
	2nd C	Copies the selected text, picture or entry to the clipboard (for pasting).
	2nd V	Pastes text, a picture or an entry from the clipboard to the cursor location.
	2nd B	Enters an accent mark ^ (then enter a letter).
	2nd N	Enters the French character Ç.
	2nd M	Enters the German character ß.
	TAB	↵ Enters a carriage return.
		⇧ ↵ Enters a tab in Documents.

Key	Representation in text	Function
	⇧	Switches letters between uppercase and lowercase when held. Enters symbol above a key when held while the key is pressed.
	,	Enters a comma.
	2nd ,	Enters a double quotation mark.
	⇧ ,	Enters a quotation mark.
	.	Enters a period. For Calculator, a keyboard period acts as a decimal point.
	2nd .	Enters a semicolon.
	⇧ .	Enters a colon.
	CAPS	Caps lock key; switches letter keys between uppercase and lowercase.
	2nd CAPS	Turns the Backlight on and off (applies only to the ZR-5800).
	2nd	Press with another key to access keyboard shortcuts.

Key	Representation in text	Function
	WORD	Accesses the user word list.
	⇧ WORD	Enters a slash.
	SMBL	Accesses the symbol selection display.
	⇧ SMBL	Enters a question mark.
	SPACE	Space key.
	DEL	Deletes the character to the right of the cursor when entering or editing data. Deletes entries in Index mode.
	⇧ DEL	Deletes the line at the cursor location.
	ENTER	Executes operations, stores entries in memory.
	2nd ENTER	Stores a copied entry as a new entry, leaves the original entry unchanged.

B. Reset

Strong impacts, exposure to electrical fields, and other unusual conditions may render the unit inoperative (pressing keys and touching the display has no effect). If this occurs, you must press the RESET switch on the back using the touch pen or a similar object. Conditions that make the unit inoperative may also erase part or all of the data stored in memory.

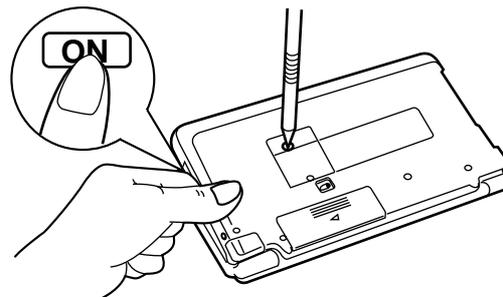
- Do not use sharp objects or objects with breakable tips to press the RESET switch.

All Reset operation

If the unit still fails to function after being reset with the procedure above, or if you forget the password to be entered at start up, you must reset the unit using a more complicated procedure.

To perform an All Reset operation:

1. Hold down **ON** while pressing and releasing the RESET switch.



A message appears.

2. Release **ON**.
3. Touch **No**.
The built-in clock and any set daily alarms will be reset.

- Do not touch **Yes** in step 3 (as this will delete all unit data). However, if you forget the password for the start-up display, to use the unit you must touch **Yes** and lose all your data.

C. Troubleshooting

When the unit is not functioning properly, refer to the list below for solutions before contacting your Sharp dealer.

Problem	Solution
The display remains blank after pressing ON .	<ul style="list-style-type: none"> • Make sure the battery replacement switch is in the NORMAL OPERATION position. • Adjust the LCD contrast, see p. 12. • Install new batteries, see p. 236.
Poor display contrast.	Adjust the LCD contrast, see p. 12.
The unit is turned on, but pressing keys and touch buttons has no effect.	Reset the unit, see p. 234.
The entire keyboard including OFF does not function.	In Note, unlock the keyboard by touching KEYS at the top of the display.
"Not enough memory" displayed.	The memory is full or nearly full. Delete unnecessary data or install a RAM card. Check the amount of free memory using TOOLS/Memory, see p. 81.

Problem	Solution
Alarms don't sound at set times.	Enable alarms using TOOLS/Sound, see p. 82.
Pressing a touch button or touching the display has no effect (or an operation which is not selected occurs).	Calibrate the touch panel using TOOLS/Display, see p. 13.
A PC card is inserted but it doesn't function.	Remove the card, and then insert it again. (Check from the back of the unit that the card is fully inserted.) Press ON to access the card functions. For removing and inserting cards, see p. 203.
Transferring a Telephone or User File entry (from an Electronic Organizer) results in the following error message: "The sending unit is attempting to send information in an incompatible format. This unit can't receive this data."	Be sure that the sending unit does not have a blank (no characters) Telephone/Contact or User File/Data File <i>field name</i> .

D. Battery Replacement

General guidelines

Your unit uses the following battery types:

Use	Type	Size/Model	Qty.
Operations	Alkaline batteries	LR6(AA)	2
Memory backup	Lithium battery	CR2032	1

 Important points to remember when installing new batteries:

- Be certain to use alkaline batteries with your unit under normal conditions. We also recommend that you use High Energy Lithium batteries L91 (size AA) or an external power supply (such as the EA-23E AC adaptor or the CE-BK1 rechargeable battery pack) while using high-power cards such as Fax/Modem cards. Constant usage of many high-power Fax/Modem cards will deplete a fresh set of alkaline batteries in about 20 minutes, for example. Lithium batteries will perform significantly better under these conditions. Under normal operating conditions, however, Lithium batteries do not perform significantly better than alkaline batteries and may not be cost effective. Be sure to best match your battery selection to your particular usage.
- Be sure not to use manganese batteries or nickel cadmium rechargeable batteries. These are easily mistaken for alkaline or lithium batteries.

- Do not remove operating batteries and the memory backup battery at the same time (this will result in the loss of all stored data).
- Backup important data before replacing batteries.
- Remove an installed PC card before replacing batteries. If the PC card has its own batteries, check that they are not depleted before removing the card from the unit.
- Replace both operating batteries at the same time with new batteries of the same type.
- The memory backup battery is installed at the factory. It drains slightly during shipment and distribution, so it may not achieve the lifetime indicated in the specifications.

Caution:

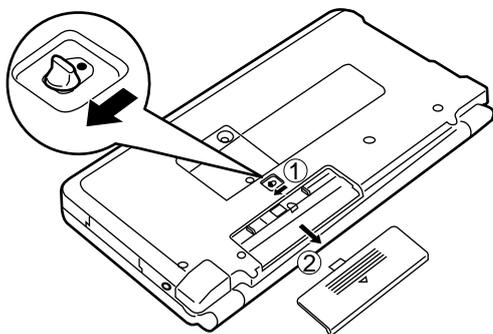
- Keep batteries out of the reach of children.
- If the unit will not be used for a long period of time, turn the unit on once a month and confirm that BATT doesn't appear at the top of the display (or replace the batteries beforehand). Leaving spent batteries in the unit may cause battery leakage and damage from corrosion.
- Do not dispose of batteries in a fire, this may cause explosions.

Replacing operating batteries

When using the unit, if BATT appears at the top of the display, the operating batteries may need to be replaced. To confirm this, turn the unit off and then on again. The unit will display a message if the operating batteries need to be replaced.

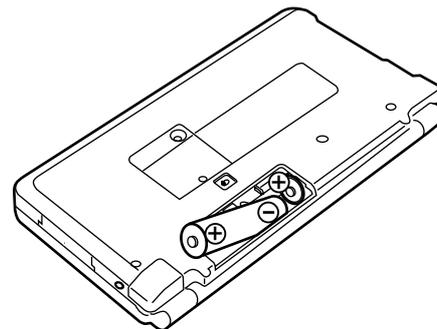
To replace the operating batteries:

1. Turn the unit off.
2. Set the battery replacement switch on the back to "REPLACE BATTERIES" (the red dot is visible).
3. Slide the operating battery cover off.



4. Remove the old operating batteries.

5. Insert two new LR6(AA) operating batteries. Align them correctly for positive (+) and negative (-) polarity, as shown in the battery well.



6. Replace the operating battery cover.
7. Set the battery replacement switch to the "NORMAL OPERATION" position.

If nothing happens when you press ON:

- Setting the battery replacement switch to "REPLACE BATTERIES" shuts off operating power. Check that this switch is set to "NORMAL OPERATION".
- Repeat the battery replacement procedure step by step.

Replacing the memory backup battery

The memory backup battery has an expected lifetime of about five years under normal conditions (temperature extremes can shorten this lifetime). Replace the memory backup battery every five years.

WARNING:

When the operating batteries are depleted, replace them promptly with new batteries. If depleted operating batteries are not replaced, the memory backup battery is drained more quickly than normal.

Memory backup battery lifetime (approx.):

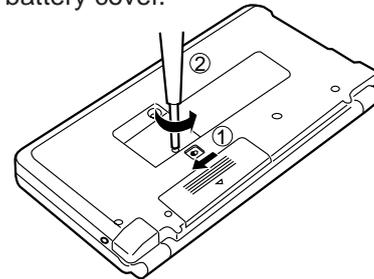
- 1 month (if operating batteries are depleted)
- 5 years (when operating batteries are replaced promptly)



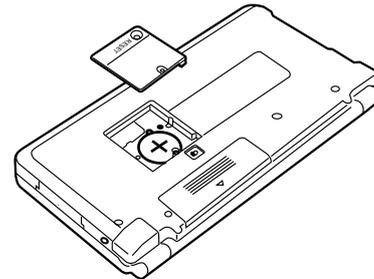
Do not replace the memory backup battery if the operating batteries are weak, as this may result in the loss of all data. If necessary, replace the operating batteries before replacing the memory backup battery.

To replace the memory backup battery:

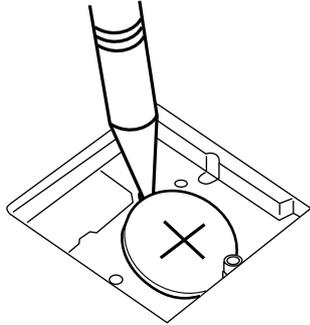
1. Turn off the unit.
2. Set the battery replacement switch on the back to "REPLACE BATTERIES" (the red dot is visible).
3. Undo the screw from the memory backup battery cover.



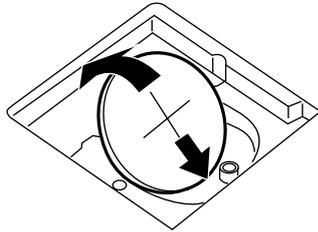
4. Remove the memory backup cover.



5. Use a ballpoint pen or a similar object to remove the old memory backup battery.



6. Insert a new CR2032 battery, positive (+) side up.



7. Replace the backup battery cover and secure it with the screw.
8. Set the battery replacement switch to the "NORMAL OPERATION" position.

If nothing happens when you press ON:

- Setting the battery replacement switch to "REPLACE BATTERIES" shuts off operating power. Check that this switch is set to "NORMAL OPERATION".
- Repeat the battery replacement procedure step by step.

E. Specifications

Model: ZR-5700
Display: 320 x 240 dot matrix liquid crystal display

Model: ZR-5800
Display: 320 x 240 dot matrix liquid crystal display with Backlight function

Electronic unit

Applications: Activities, Contacts, Data Files, Notes, Documents, Outlines, Spreadsheets

Desk accessories: Calculator, Scrapbook, Filer, Search, Help, Tools and More

Memory capacity:

ZR-5700
1 MB (User area: Approx. 600 KB)
Appointments capacity: Approx. 8,850 entries
Contacts capacity: Approx. 8,600 entries

ZR-5800
2 MB (User area: Approx. 1,624 KB)
Appointments capacity: Approx. 25,450 entries
Contacts capacity: Approx. 24,700 entries

These capacities assume the following average entry sizes and only apply when all the available memory is committed to a single function.

Appointments: 32 characters/entry

Contacts: 16 characters/entry in the name field 12 characters/entry in the number field

Maximum data per entry:

Documents:	16 Kbytes
Outlines:	32 Kbytes for an entire outline, 2 Kbytes for each topic
Contacts/Data Files:	2 Kbytes for text data, 61.7 Kbytes for graphics data
Others:	2 Kbytes
User interfaces:	Touch panel, keyboard
Other features:	Secret function, data transfer, keyword search, messages, etc.

Calculator

Digits:	10
Functions:	Addition, subtraction, multipli- cation, division; constant, square root, percent, memory calculation, date calculation, paperless printer.

Clock

Crystal frequency:	32,768 Hz
Accuracy:	Average variance per day, 1.5 seconds (at 25°C/77°F).
Display :	Year, month, day, day of week, hours, minutes, AM/PM, city names.
Time system:	12 hour or 24 hour
Other functions:	Date and time for world cities. Daylight saving time (DST) function.

Peripherals and transfer interface

IR send distance	<ul style="list-style-type: none">• 50 cm (20 inches) maximum at speeds of 9600 bps to 115 Kbps using IrDA- compatible protocol.• 50 cm (20 inches) maximum at speeds of 9600 bps to 19.2 Kbps using Sharp IR (ASK) protocol.• IR distance may change depending on the system used.
Cable jack:	15 pin
PC card slot:	1 (Type II)

General

Power:	Battery (The EA-23E AC Adaptor and CE-BK1 battery pack are optional.)
Operating:	3 V DC alkaline batteries (LR6 x 2) * Be certain not to use manganese or nickel cadmium batteries. These may be easily mistaken for alkaline or lithium batteries.
Memory backup:	3 V DC, lithium battery (CR2032 x 1)
Power consumption:	ZR-5700 0.5W ZR-5800 0.9W (when the Backlight is on)
Battery lifetime:	Varies depending on usage.
Operating	ZR-5700 <ul style="list-style-type: none">• 70 hours approx. 2 months of 1 hour per day continuous display at ambient temperature of 23°C (73°F). <ul style="list-style-type: none">• 45 hours approx. 1.5 months of 1 hour per day use, searching data for 5 minutes and display for 55 minutes, at ambient temperature of 23°C (73°F).

ZR-5800

- 70 hours approx.
- 2 months of 1 hour per day continuous display at ambient temperature of 23°C (73°F).
- 45 hours approx.
- 1.5 months of 1 hour per day use, searching data for 5 minutes and display for 55 minutes, at ambient temperature of 23°C (73°F).
- 35 hours approx.
- 1 month of 1 hour per day use, searching data for 5 minutes and display for 55 minutes, with using the Backlight for 2 minutes per hourly use at ambient temperature of 23°C (73°F).

Memory backup:	<ul style="list-style-type: none"> • 1 month approx. (with depleted operating batteries) • 5 years approx. (with replacement of depleted operating batteries).
Operating temperature:	32° to 104°F (0° to 40°C)
Dimensions:	
Open:	170(W) x 191(D) x 18(H) mm (6-11/16(W) x 7-17/32(D) x 23/32(H) inch)
Closed:	170(W) x 100(D) x 25.4(H) mm (6-11/16(W) x 3-15/16(D) x 1(H) inch)
Weight:	<p>ZR-5700 Approx. 380 g (0.84 lb) including batteries</p> <p>ZR-5800 Approx. 390 g (0.86 lb) including batteries</p>
Accessories:	Alkaline batteries LR6(AA) x 2, lithium battery CR2032 x 1 (installed), operation manuals, protection card (installed), touch pen

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Disclaimer and warnings

NOTICE

SHARP strongly recommends that you keep separate permanent written records of all important data. Data may be lost or altered in virtually any electronic memory product under certain circumstances. Therefore, SHARP assumes no responsibility for data lost or otherwise rendered unusable as a result of improper use, repairs, defects, software error, or any other causes.

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About this manual

This manual introduces you to the spreadsheet and communication functions of the unit. It consists of the following five chapters:

Spreadsheet

Describes how to create a worksheet, build formulas, enter data, and create charts.

Communication – CompuServe® Access Software

Explains how to connect to CompuServe, get or send mail/forum messages, and read news.

Communication – Pager Access

Discusses how to connect to paging services to get or send messages so that you can communicate with other pager users.

Communication – AT&T Mail® Access

Covers the steps required to use the AT&T Mail service to get or send messages to other users.

Communication – Terminal

Walks you through setting up the terminal mode so that you can use it as a general tool to connect to bulletin board services, on-line information services, or another computer, via a telephone line.

The indexes for these chapters are listed, separately, at the back of this manual.

Important things to do

1. Read through the Quick Start section of each chapter. It will quickly get you up and running. Refer to the rest of the chapter for more details about particular operations.
2. If you have any particular questions about the software, read through the list of commonly asked questions and answers. There is a good chance that any questions you have will be answered there.
3. When you need help with any operation, touch  at the left of the display. On-screen help is a topic-specific quick reference guide that explains features and their functions.

Manual conventions

In this manual, screen menus, menu items and keys on the keyboard are in **bold** lettering.

Throughout this manual, ZAURUS is referred as “the unit” or “your unit.”

Spreadsheet

Caution

- Spreadsheet data in the ZR-5700/ZR-5800 cannot be backed up using Zaurus Data Exchange Utility for ZR-5000 (Data Exchange Utility version 1.02 or prior).
- If you attempt to backup a ZR-5700/ZR-5800 with Data Exchange Utility version 1.02 or prior and then restore your data, all spreadsheet data will be lost.
- Please be sure to use only version 1.1 or higher of the Data Exchange Utility with your ZR-5700/ZR-5800. If you already own an older version of the Data Exchange Utility, check on CompuServe (GO ZAURUS) or America Online (Keyword: PDA) for a free patch to version 1.1.

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Quick Start

This section is a quick start to setting up and running PenCell®, a spreadsheet application. On your unit, PenCell is referred to as SPREADSHEETS and indicated by the  icon.

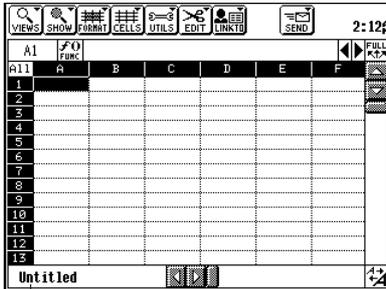
Starting PenCell

1. Turn on the unit.
2. Touch  .

Creating a worksheet

Press **NEW ENTRY**.

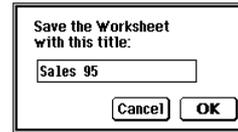
A new, blank worksheet appears in the display. The worksheet has the name [Untitled] until you save it and give it a name of your choice (20 characters or less).



The worksheet name

Saving a worksheet

1. Touch **EDIT**, then select “**Save as...**”



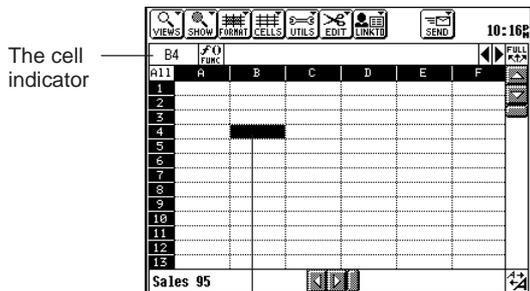
2. Type a file name that is 20 characters or less.
3. Touch **OK**.

Entering data in worksheet cells

A cell is referred to by its column letter and row number (for example, cell B4). When you select a cell by touching it, its reference appears in the cell indicator.

To enter data in a worksheet cell:

1. Touch cell B4 to select it.



The selected cell is highlighted.

2. Press **5**.
The data you enter appears in the edit bar as you type.

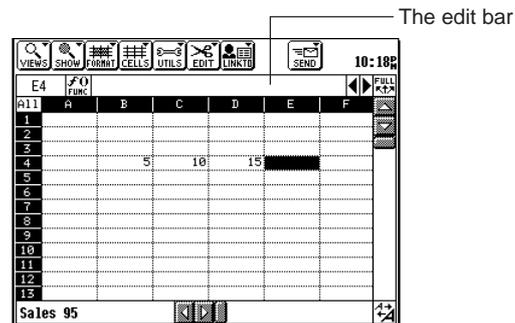
3. Touch cell C4 or press **ENTER**.
Now you see 5 in cell B4. Selecting another cell signals that you are finished entering data into the current cell.

4. Press **1 0**.

5. Press **↔**.

The arrow keys move the selection to the adjacent cell in the direction of the arrow.

6. Press **1 5**. Then touch E4.



NOTE

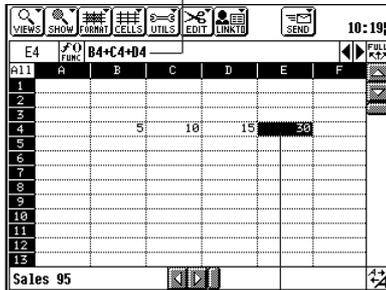
If you need to correct mistakes while you enter data, press **BS** (backspace). If you want to quit entering data without changing the cell, press **CANCEL**.

Entering formulas

To enter a formula in a worksheet cell:

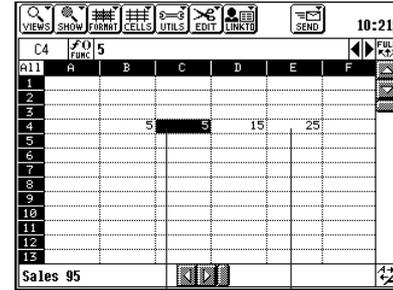
1. Touch cell E4.
2. Enter **B 4 + C 4 + D 4**.
3. Touch another cell (or press **ENTER**).
By default, formulas are automatically calculated and the results are displayed in the cell. When you select a cell that contains a formula, the formula appears in the edit bar.

The formula appears in the edit bar.



The result of the formula appears in the cell.

4. Touch cell C4.
5. Press **5**, replacing the previous cell content.
6. Touch another cell (or press **ENTER**).



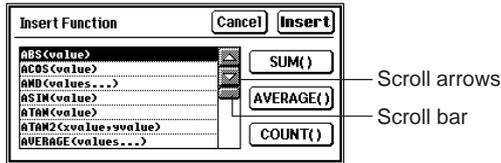
Changing data in C4 also changes the formula result in E4.

Formula results are updated automatically when you edit data.

Using built-in functions

Built-in functions make it easier to enter complex formulas. The following example use the **MAX** function to determine the maximum value from data in a specified range of cells.

1. Touch cell F4.
2. Touch  to use a built-in function.



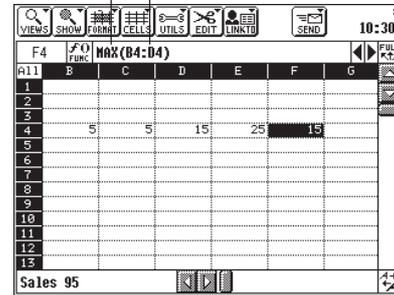
3. Touch the up and down scroll arrows or the scroll bar beneath the arrows until the function you want to use is visible.
4. Touch **MAX (values...)** to select it.
5. Touch **Insert** to enter the selected function.

The edit bar displays the function and its argument place holder. Now you can replace (values) by typing (for example, B4:D4) or by selecting a range of worksheet cells.

6. Drag the pen across the range B4:D4.
7. Press **ENTER** or select another cell to see the result of the formula in F4.

The function appears in the edit bar.

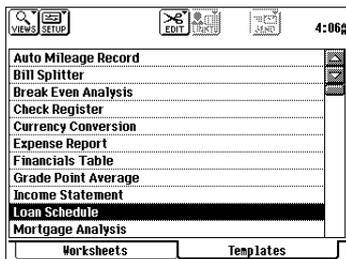
"values..." is highlighted



Creating a worksheet from a template

To create a new worksheet using a template:

1. While in the Index mode, touch the **Templates** tab to see the list of available templates.

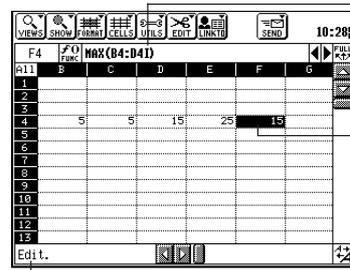


2. Touch the template you want to use to highlight it.
3. Touch the highlighted template.

A new worksheet opens in Edit mode. The worksheet comes with formulas and tables already created. All you need to do is provide your own data. The worksheet has the same name as the template until you save it and give it a name of your choice.

Editing data in a cell

You can quickly replace a cell's contents by touching the cell to select it, then typing new data and pressing **ENTER**. Anything that was in the cell is replaced. But if you want to edit parts of the data or formula in a cell, first select the cell, then touch in the edit bar. This activates the blinking edit cursor that lets you delete and replace individual characters in the edit bar. The full editing functions are available when you see the blinking edit cursor.



The blinking cursor indicates that you can edit individual characters in the edit bar.

To edit the contents, touch cell F4, then touch the edit bar.

This indicates you can edit the cell content now.

When the blinking edit cursor is present in the edit bar, you can:

- Move to the beginning or end of the edit bar by pressing **←** and **→**.
- Select characters in the edit bar by touching or dragging with the pen.
- Erase selected characters by pressing **DEL** or **BS**.
- Cut or copy and paste selected characters in the edit bar.
- Replace selected characters by typing.

Selecting cells and ranges

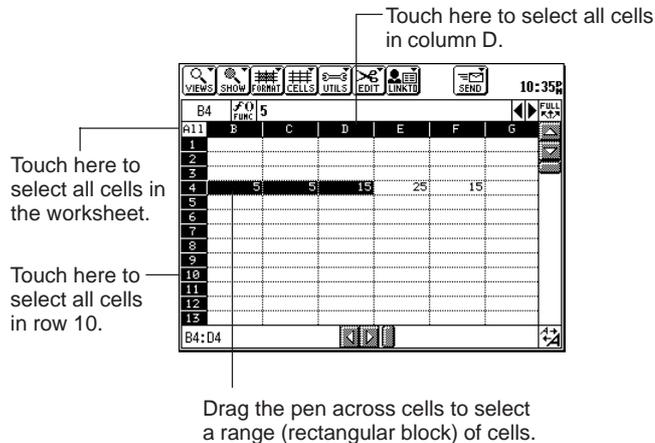
To select cells:

- Touch a cell to select it.
- Touch a column heading to select all cells in the column.
- Touch a row heading to select all cells in the row.
- Touch **All** to select all cells in the worksheet.
- Drag the pen across several cells to select the range of cells.
- Press **2nd** and touch a cell to extend or reduce a selection.

- Drag the pen to the edge of the worksheet to select a range that extends past the edge of the display.
- Press \leftarrow , \rightarrow , \uparrow , or \downarrow to move the selection one cell at a time.
- Press \leftarrow , \rightarrow , \uparrow , or \downarrow to add or remove the adjacent cell to the selection.

NOTE

Drag the pen within the edit bar to select characters that you want to edit. This works even if the edit cursor is not displayed or blinking.



Moving and copying data

To move the contents of a cell or range:

1. Select a cell or range.
2. Touch and hold the pen within the selection and drag the selected cell or range to a new location.

To copy the contents of a cell or range:

1. Select a cell or range.
2. Press **2nd**.
3. Touch and hold the pen within the selection and drag the selected cell or range to a new location.

Whether it is moving or copying cells, the selected cell contents replace anything in the new location.

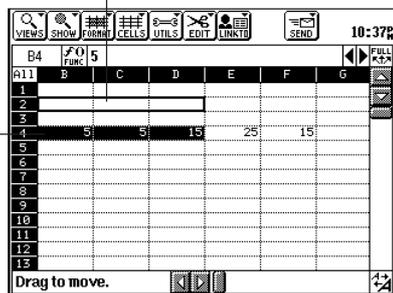
You can touch **EDIT** and select “**Undo**” if you want to reverse an operation you just performed.

NOTE

- If you touch a cell in a selected range, the cell you touched becomes selected. If you press **2nd** and then touch a cell, the selection is extended (or reduced) to the cell you touched.
- You can use the keyboard for many operations. For details see Appendix D.

This is the new location where the highlighted data will be moved to.

Select a cell or range to move.

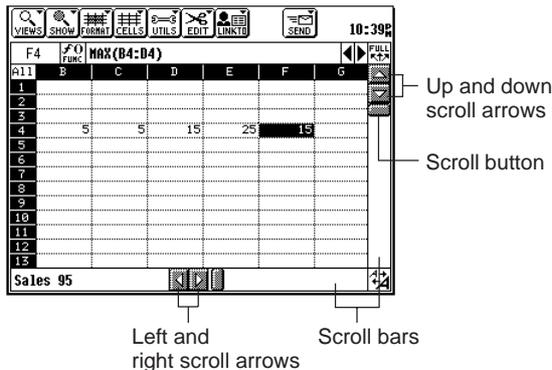


A white outline around the selection indicates that it is ready to be moved.

Navigating the worksheet

Below are some guidelines for moving around the worksheet:

- Touch the up or down arrow in the scroll bar to display cells in rows above or below those in the display.
- Touch the left or right arrows in the scroll bar to display cells in columns left or right of those in the display.
- Touch within the scroll bar to page to the next position in the worksheet.
- Drag the scroll button in the scroll bars to jump to the corresponding position in the worksheet.
- Press **PREV** and **NEXT** to page up and down in the worksheet.
- Press **2nd PREV** and **2nd NEXT** to page left and right in the worksheet.

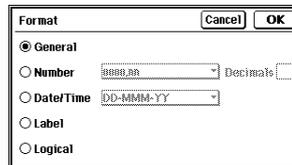


Formatting cells

You can control the displayed content of cells by assigning specific formats. For example, you can format a cell to display U.S. dollar values, or labels, or numbers with 4 decimal places.

To change cell formats:

1. Select the cell or range you want to format.
2. Touch **FORMAT**, then select “**Format...**”



3. Select one of the format choices.
4. Touch **OK**.

If you change your mind, you can revert the cell back to its original format by immediately pressing **2nd Z** or touch **EDIT** and select “**Undo**.”

In a similar way, you can change font style and alignment of the cells, or add borders to the cells.

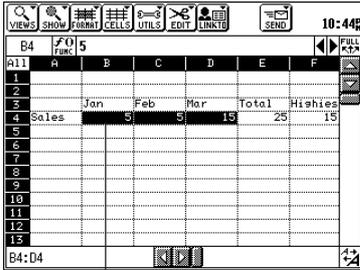
NOTE

Only the dollar (\$) currency symbol can be displayed. All other currency values (e.g. pound sterling, marks, francs, etc.) should be treated like \$.

Creating a chart

To create a chart:

1. In the Worksheet mode, select the cells containing the data you want to chart.



Select a range of cells to create a chart.

2. Touch **EDIT**, then select “**New Chart.**”

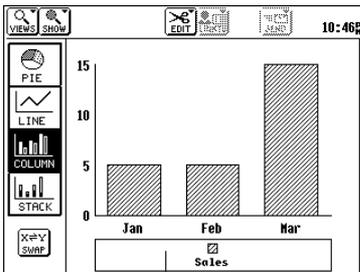


Chart legend

To change the chart format

Touch **PIE**, **LINE**, **COLUMN**, or **STACK**.

To save the chart

Touch **VIEWS**, then select “**Worksheet.**” When prompted, enter a chart title.

Commonly Asked Questions & Answers

Q: I want to print or Fax a worksheet. Is there any way to accomplish this?

A: Yes. You have three options although PenCell does not support Print or Fax directly as other applications do.

- 1) You may use the **2nd P** (PRINT SCREEN) key. This sends the screen image to a printer that is connected to your unit using the optional cable or infrared adapter.
- 2) Select the range of cells or display a Chart (in Chart mode) you wish to print. There are some size restrictions, if some technical image limits are exceeded, a message wants you of possible truncation of your selection. You then use the **Copy Image** command in the **EDIT** menu. Paste your selection into either Documents or Scrapbook Application and use **Print** or **FAX** commands in the **SEND** menu of the receiving application. There are advantages and disadvantages to using either Scrapbook or Documents. Documents will receive larger images than Scrapbook. You can place the worksheet selection or chart in your Document as a single graphic image with text characters wrapped around. Scrapbook receives a single image into a single New Entry, but you can use the graphic tools to annotate the image before you send by Print or Fax.
- 3) Transfer a worksheet to a Macintosh® or PC and print the worksheet. For more details on operating the Link Software, see the manual (readme) of the Link Software.

Q: I want a printout of a chart of a worksheet. How can I print my chart?

A: In Chart mode, you can use the **Copy Image** option in the **EDIT** menu. Then paste the image into the unit's Scrapbook or Documents applications where it can be printed using the **PRINT** command in the **SEND** menu. You can also paste the image into a Documents. In Documents, you can add titles, text, or combine with other images.

Q: How do I save a worksheet?

A: There are two ways to save the current worksheet. The first is to exit from the Worksheet mode worksheet by returning to the Index mode. When you do so, you are prompted to save the worksheet. The second way is to select **Save as** from the **EDIT** menu.

Q: How can I correct mistakes?

A: Use the Undo function. You can reverse up to four of your previous operations by using the undo keystroke **2nd Z**, or by choosing **Undo** in the **EDIT** menu. If you undo too many levels, you can redo operations by selecting **Redo** from the **EDIT** menu or by pressing **2nd A**.

Q: Can I change the width of several columns at once?

A: Yes, it's easy. First select the column headings you want to adjust by dragging through them. Then choose "**Set Column/Row Size**" from **CELLS** menu. Now adjust the size of any one of the selected column by touching and holding the pen in the center of any one the heading and slowly dragging it to the desired width. Adjust rows using the same steps. Touch **Done** when complete.

Q: Is there a shortcut for moving and copying cells?

A: Yes. You can “drag and drop” selected cells to move them anywhere in the worksheet. To copy the selected cells, press **2nd** before you drag and drop. PenCell automatically maintains the cell references and dependencies that the moved or copied cells contain.

Q: Can I import very large spreadsheets from a desktop computer to PenCell?

A: It depends on the size and complexity of the spreadsheet. The spreadsheet is limited by the maximum column and row limits of PenCell. (See Appendix C, “*Spreadsheet Limits.*”) The spreadsheet complexity is constrained by the available file space and workspace memories of your unit.

Q: How do I enter " (double quotes)?

A: Press **2nd** and then press ,.

Q: How do I enter < and > symbols in formulas?

A: Press **SMBL** and select <, > etc.

Q: Do I have to be concerned about file format conventions when I import MS Excel files into Spreadsheet?

A: No, Spreadsheet will read and write MS Excel 4.0 worksheet, and can read MS Excel 3.0.

Q: I have been using Excel 5.0 on my PC. Can I import my spreadsheet files to PenCell?

A: Save your spreadsheets in Excel 4.0 format, if you want to import to PenCell.

Q: I have comported a large spreadsheet in my unit. But when I try to open it, it runs out of memory workspace.

A: Try to increase the spreadsheet workspace. In the Index view, touch **SETUP** and select “**Workspace Size...**” Increase the Extra Workspace for Spreadsheet, close and try to open your spreadsheet again.

Q: I would like to freeze the titles of my data and scroll around the rest of the spreadsheet.

A: See the Set Titles feature of Spreadsheet.

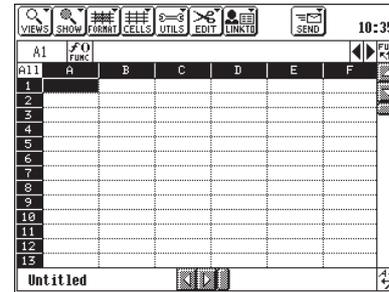
Introduction

This section gives you general information about the unit's Spreadsheets operations.

Starting PenCell

1. Turn on your unit.
2. Touch .

When you start the application, you enter the Worksheet mode and see a display like this:



The display you see when you enter the application is the same display that had been present when you last used the application.

Selecting display modes

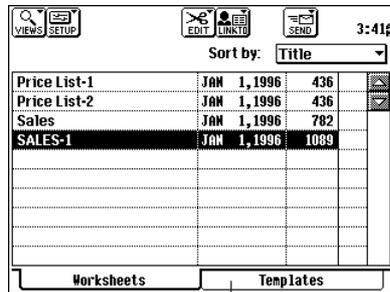
Once in PenCell, you can move between three display modes: Index, Worksheet, and Charts. Each mode has its own appearance and purpose. To change to another mode, touch **VIEWS** and select the appropriate mode.

Index mode

The Index mode shows you a list of templates and a list of the worksheets you have named and saved.

The primary functions of Index mode are to:

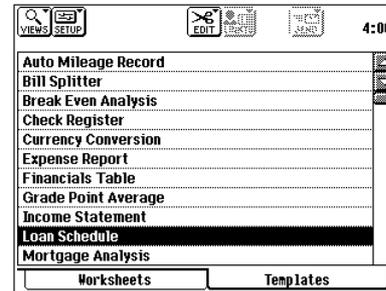
- Open an existing worksheet.
- Create a new, blank worksheet.
- Create a new worksheet using a template.
- Transfer worksheets between PenCell and PC Files.
- Transfer worksheets to another unit.



To view the list of available templates, touch the Templates tab. Then scroll through the index.

Sorting the index list

You can sort the worksheets either by title (ascending order) or by date (descending order) by using the **Sort by** pop-up menu. Each entry shows the spreadsheet title, last date modified, storage size in bytes, and link status. Secret spreadsheets, however, are not displayed if your unit is locked. Also, to see the templates, touch the **Templates** tab. Templates are built-in read-only worksheets that can be used to build custom worksheets. They must be “saved as” a custom worksheet before they can be linked or filed.



Worksheet mode

The Worksheet mode lets you create and edit one worksheet at a time. By default:

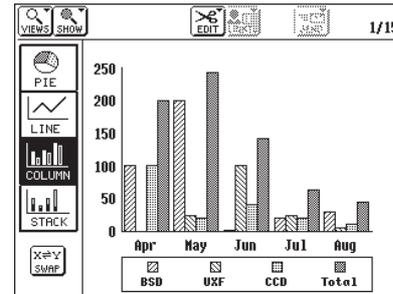
- Calculated results of formulas are automatically displayed in the worksheet cells.
- New results are automatically calculated and displayed if you change data or formulas in the worksheet.

CAPS 1/15					
"Model Name"					
A1	A	B	C	D	E
1	Model Name	Apr	May	Jun	Jul
2	BSD	100	200		1
3	UXF		0	23	100
4	CCD	100	20	40	
5	Total	200	243	141	
6					
7					
8					
9					
10					

SALES-1

Chart mode

The Chart mode gives you the power to graphically display meaningful interpretations of your worksheet data.



Getting to know PenCell

PenCell operates like other applications on your unit, except that it does not directly support printing or faxing. You must use the **Copy Image** command to paste into Scrapbook or Documents. You may then print or fax from Scrapbook or Documents.

Using PenCell with other applications

You can move between PenCell and other applications. By touching an application on the display, you change the display. PenCell disappears, but your work is preserved in its current status and you can return to it again.

Only one worksheet can be active at a time. If you try to open a different worksheet before you save changes to one that is already open, PenCell displays a message that gives you the opportunity to save the changes or quit the worksheet without saving it. If you quit without saving, the worksheet reverts to the content that was last saved.

Tool bar

There is a special tool bar for each application. The tool bar is located across the top of the display and has the following features:

- A small pointer (“”) in the upper right of a tool bar item indicates a menu will be displayed if it is touched.
- For some tool bar menus, current settings are indicated by a check mark “”.
- Menus may be separated into categories by dashed lines.
- Menu items that lead to dialogue are followed by “...”.
- If a particular tool bar item cannot be used for a specific screen, it is “faded” out.
- Tool bar menus can be accessed from the keyboard by pressing **MENU** then using the **PREV**, **NEXT**, , , **ENTER** and **CANCEL** keys.

The pop-up menu

In the worksheet mode, the popup menu is available for quick access to frequently used operations. Press **2nd MENU** to display the pop-up menu.

Keyboard shortcuts

Many operations in PenCell have keyboard equivalents. Refer to Appendix D, “*Keyboard Reference*” for a summary of keyboard operations.

If a menu option has a keyboard equivalent, it appears beside the command in the menu. For example, to copy a selected item, touch **EDIT** and then select “**Copy**,” or press **2nd C**.

Creating a Worksheet

This section describes ways to create and work with worksheets

Three ways to start a worksheet

You can start a worksheet in any of the following three ways:

- Create a new, blank worksheet.
- Create a new worksheet using a template.
- Open an existing worksheet.

Starting with a new worksheet

You can create a new worksheet in either the Worksheet or Index mode.

To create a new, blank worksheet:

Touch **EDIT**, then select “**New Worksheet**,” or press **NEW ENTRY**.

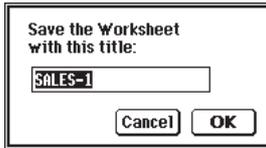
By default, the new worksheet has the name [Untitled] until you name and save it.

In the worksheet mode, only one worksheet is open at a time. When you create a new worksheet from the worksheet mode, a message appears in the display asking if you want to save any changes you made to the currently open worksheet. Respond to the message then the currently open worksheet is closed.

Saving a worksheet

Name and save a worksheet in the worksheet mode, as follows:

1. Touch **EDIT** and select “**Save as....**”



2. Type a worksheet name. The name must be 20 characters or less and can include letters or numbers.
3. Touch **OK**.

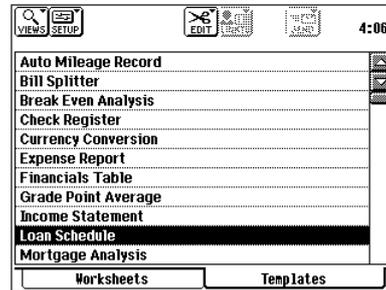
In the worksheet mode, the worksheet name appears at the bottom of the worksheet. In the Index mode, the name appears in the index along with its memory size and date.

Starting with a template

PenCell includes worksheet templates that can save you time when you create a new worksheet. When you choose a template, a new worksheet opens in the worksheet mode with useful data and formula and sample data already entered.

To create a new worksheet:

1. Touch the **Templates** tab while in the Index mode. A list of available templates are displayed.



2. Touch the template you want to use to highlight it.

3. Touch the highlighted template or press **ENTER**.
A new worksheet based on the template opens so that you can modify it, if necessary, or add data.
4. Touch **EDIT** and select “**Save as...**” to name and save the worksheet.

Starting with an existing worksheet

Another way to create a new worksheet is to open an existing one, save it with a different name, and use the copy as a starting point for a new worksheet.

To create from an existing worksheet:

1. Select the worksheet you want to open from the Index mode index.

VIEWS SETUP				EDIT LINK		SEND		3:41	
				Sort by:		Title			
Price List-1	JAN 1, 1996	436							
Price List-2	JAN 1, 1996	436							
Sales	JAN 1, 1996	782							
SALES-1	JAN 1, 1996	1089							
Worksheets					Templates				

If the Index mode of worksheets extends past the bottom of the display, touch the scroll arrows to page through the list.

Entering data

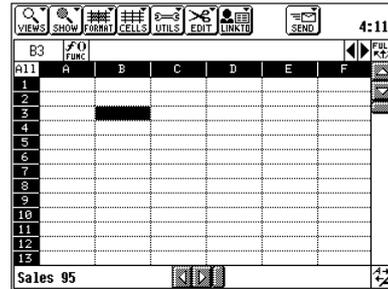
2. Press **ENTER**, or touch the selected worksheet, or touch **VIEWS** and select **“Worksheet.”**

The selected worksheet opens in the worksheet mode.

3. Touch **EDIT** and select **“Save as...”**
4. Type a new worksheet name.
5. Touch **OK**.

To enter data in a worksheet:

1. Touch a cell to select it.



The cell becomes highlighted and the cell reference appears in the cell indicator. See “Entering formulas,” later in this section for more information about cell references. For more information about selecting, see “Selecting cells,” later in this section.

2. Type the data you want the cell to contain. The maximum number of characters in a cell is 255, excluding the “quotes” that PenCell adds around text labels.

By default, all the cells in the worksheet have the General cell type so they can contain numbers, labels, or formulas.

As you type, the edit bar above the worksheet displays cell contents.

The screenshot shows a PenCell spreadsheet window. The title bar indicates '4:14'. The menu bar includes VIEWS, SHOW, Format, CELLS, UTILS, EDIT, LINK, and SEND. The worksheet has columns A through F and rows 1 through 13. The data is as follows:

	A	B	C	D	E	F
1						
2						
3		Sales	Apr	May	Jun	
4		Hardware	10000	3000	4000	
5		Software	2888	299	3333	
6		IC-Card	2999	500	5000	
7		Total				
8						
9						
10						
11						
12						
13						

The edit bar at the bottom shows 'Sales 95'.

Press **BS** (backspace) to move back and to make corrections while you type or press **CANCEL** to clear the edit bar.

3. When you are finished entering, select a different cell (or press **ENTER**). The data now appears in the worksheet cell.

Press \leftarrow , \rightarrow , \uparrow , or \downarrow to complete data entry and move cell highlighting in the direction of the arrow.

Entering numbers

PenCell recognizes a variety of number formats, such as percentages, scientific notation, and logical values. For example, if you enter 7%, PenCell interprets this as 0.07.

If you enter a number that has too many digits to fit in a General cell, PenCell rounds up decimal places or changes to scientific notation (n.nnEnn) so the value can be displayed. The true cell contents appear in the edit bar when you select the cell, and the true cell contents (to at least 15 decimals of precision) are used when formulas are calculated.

You can adjust the width of cells. See “Adjusting column and row size,” later in this chapter for more information.

Entering data with the 10-Key Pad

PenCell includes a 10-key Pad that allows you to enter numeric data with the pen in a cell.

To use the 10-Key Pad:

1. Touch **SHOW** and select “**Show 10-Key Pad.**”
The 10-key pad appears in the display. You can move it around the display by dragging the top left corner of it.



2. Touch the numbers (or arithmetic operators) you want to enter in the selected cell. You can also insert a function by touching **f()**.
3. When you are finished entering in the selected cell, select another cell by touching it or by touching the arrow keys in the pad.
4. To close the 10 Key Pad, touch **CLOSE** on the pad.

Entering labels

If you add text to a cell, PenCell assumes that the text is a label and automatically adds quotes around it. The quotes only appear in the edit bar after you enter the label. They are not displayed in the worksheet cell.

You can also enter text by enclosing it in quotes. For example, if you want to enter a numeric label (or a label that begins with a number, such as 2001 Projections), you have two choices: add quotes when you enter the label (such as “2001 Projections”) or change the cell type to Label and then enter your text.

If you enter too many characters to fit in the selected cell, and if the adjacent cells are empty, the text extends across column boundaries. Worksheet cells can contain up to 255 characters including spaces and carriage returns.

Touch **EDIT** then select “**Undo**” if you enter something by mistake. Undo returns the worksheet to its content prior to the last operation.

Entering labels from the Word list

The **WORD** key provides a quick alternative to typing words that you use frequently, such as your company name or logo. Refer to the other **Operation Manual** for information about storing words or phrases using the **WORD** key.

To enter text from the word list into a cell:

1. Select a cell.
2. Press **WORD**.
3. Select the word or phrase you want to insert.
4. Press **ENTER**.

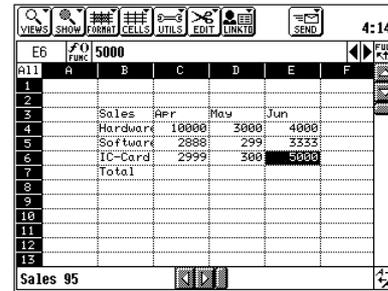
The word or phrase from the list appears in the edit bar, and it can be edited as text.

Selecting cells

Many worksheet functions operate on selected cells only. Selecting a cell distinguishes it from others in the worksheet. When a cell is selected, it is highlighted.

To select a single cell:

Touch the cell once. The selected cell is highlighted and the edit bar displays its contents.



The screenshot shows a PenCell worksheet interface. At the top, there is a toolbar with icons for VIEWS, SHOW, FORMAT, CELLS, UTILS, EDIT, LINKED, and SEND. The status bar at the top right shows the time 4:14. The worksheet grid has columns labeled A through F and rows numbered 1 through 15. The data in the grid is as follows:

1	A	B	C	D	E	F
2						
3		Sales	Apr	May	Jun	
4		Hardware	10000	3000	4000	
5		Software	2888	299	3333	
6		IC-Card	2999	300	5000	
7		Total				
8						
9						
10						
11						
12						
13						
14						
15						

The cell containing '5000' in row 6, column E is highlighted. The edit bar at the top shows 'E6' and '5000'. At the bottom left, the status bar shows 'Sales 95'.

To select a range of cells:

Drag the pen from the cell that will be one corner of the range to the cell in the opposite corner of the range without lifting the pen. You can drag in any direction.

NOTE

If some cells in the range are outside the display, drag the pen in the appropriate direction past the edge of the PenCell worksheet. The display will scroll in the direction you are dragging.

To select a column or row:

Touch the column or row heading.

To select multiple adjacent columns or rows:

Drag through column or row headings.

To select an entire worksheet:

Touch the top left corner cell labeled All.

NOTE

- **All** refers to all cells that are above and to the left of the last cell actually used in the worksheet.
-  +  ,  ,  ,  arrow key extends a selection on row/col when active.
- **2nd** + touching a cell extends a selection.

Entering formulas

Formulas make your worksheet an interactive calculating machine that not only lists raw data, but also calculates useful results based on that data.

To enter formulas in the worksheet:

1. Touch a cell to select it. The cell becomes highlighted.
2. Enter the formula. See “Guidelines for entering formulas,” later in this section for information about the many easy ways to create formulas.
Press **BS** to make corrections while you type. Press **CANCEL** if you change your mind and want to leave the cell unchanged.
3. When you are finished entering, select a different cell (or press **ENTER**).

By default, the result of calculating the formula, not the formula itself, is displayed in the cell. See “Formatting a worksheet,” later in the section for information about displaying formulas in cells.

When the cursor blinks in the edit bar, you can edit your formula using copy, cut and paste operations, and you can move the cursor using the arrow keys.

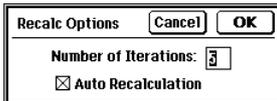
Touch **EDIT** and select “**Undo**” if you enter something by mistake. Undo returns the worksheet to its status prior to the last operation.

Automatic or manual recalculation

When you edit worksheet data or formulas, results of formulas need to be recalculated. Recalculating is automatic by default, but you can also choose manual recalculation.

To choose between automatic and manual recalculation:

1. Touch **UTILS** and select “**Recalc Options....**”



2. In the dialog box, touch the box beside Auto Recalculation to toggle Auto Recalculation (on and off). An X in the box indicates Auto is “on.”
3. Touch **OK**.

To manually recalculate the worksheet:

1. While in the manual calculation mode, you can force recalculation. Turn off Auto Recalculation in the Recalc Options dialog.
2. Touch **UTILS** and select “**Calculate Now!**”

Manual recalculation is useful while you enter data and formulas to prevent recalculation after each entry.

Computation iterations

When PenCell computes the value of the formula in a cell, it sorts out the circular dependencies among formulas in different cells and starts an iterative process to converge on a result for the calculation. This iterative process allows PenCell to achieve greater accuracy in its calculations, but with a tradeoff in terms of performance. The greater the number of iterations, the slower the computational performance when circular dependencies are present.

For example, a circular dependency exists in a worksheet when:

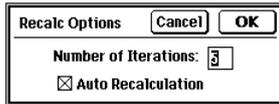
A1 contains 1000

A2 contains $A3 \times 0.5$

A3 contains $A1 - A2$

To control performance, you can specify the number of iterations:

1. Choose **Recalc Options...** in the **UTILS** menu.



The greater the number you enter for iterations, the more accurate the result of circular computations will be, but the longer it will take to arrive at that result.

2. Touch **OK** to close the dialog box and to cause the new iteration count to take effect.

The iteration count for a worksheet is saved with its name and other characteristics. The number of iterations has no effect on the accuracy of non-circular formulas.

Guidelines for entering formulas

Observe the following guidelines when entering a formula:

- A formula can begin with a number, an opening parenthesis, a cell reference, a function name, or the +, =, -, \$, •, *, /, ", × or ÷ symbols.
- A formula can contain up to 255 characters.
- A formula can have either upper- or lower-case letters. All of the following are valid and have the same meaning: SUM(A4:A8), sum(a4:a8), SuM(A4:a8).
- A formula can have spaces between a function name and its arguments. All of the following are valid and have the same meaning: SUM(A4:A8), SUM (A4:A8), sum (a4: a8).

Formulas can contain the following:

- Numbers (for example, 250, -90, 21%, 8.1E+10), date numbers, and time numbers. You can enter numbers using either the unit's keypad or the 10-key pad. Date and time numbers cannot be mixed with other data in the formulas.
- Cell and range references (for example, \$B\$4 and C22:C29).
- Functions (for example, SUM(B4:B10)).

Formulas cannot include Date and Time numbers mixed with other data.

Two ways to enter cell and range references in formulas

As you enter a formula, you have two ways to insert a cell or range reference:

- Type the reference, such as B2:E5, using the keyboard.
- If the blinking edit cursor is at a position to the right of an arithmetic operator (like “+” or “-”) or a parenthesis, then touching a cell or range causes that cell or range reference to be inserted in the formula.

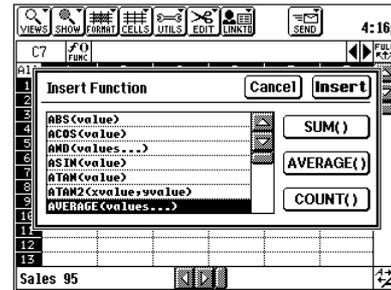
PenCell automatically assumes you want to insert a cell or range reference if you touch or drag through worksheet cells when inserting a cell reference would be appropriate.

Using the built-in functions

PenCell supports certain mathematic business, statistical and miscellaneous functions. You can include built-in functions in your worksheet by typing them or, more simply, by inserting them using $\text{f} \text{O}$. See Appendix B, “*Function Reference*,” for the syntax and examples of built-in functions.

To use a built-in function:

1. Select a cell.
2. Touch $\text{f} \text{O}$ (or touch **UTILS** and select “**Insert Function...**”)



3. Scroll through the list by touching the up and down arrow. Touch the white area above or below the scrolling button to move one page up or down.
4. Touch a function to select it or touch SUM(), AVERAGE(), or COUNT() for the respective function.

5. Touch **Insert** to add the selected function and its argument place holder to the formula in the edit bar.

Functions that require a specific type of argument include a place holder to remind you what argument to add. (See “Syntax of functions,” for details about arguments.) The place holder is highlighted so all you need to do is type the argument or touch a cell to enter the cell reference.

6. Enter the function argument, if necessary.

For example, if you want to compute the statistical average of a set of data in your worksheet, use the **AVERAGE** function.

AVERAGE requires a set of numbers as its argument. When you select **AVERAGE**, **AVERAGE (values...)** appears in the edit bar and values... is highlighted. Highlighted characters in edit bar are replaced when you type or when you touch a cell or range in the worksheet.

Press **PREV** or **NEXT** to move the highlighting to the next argument place holder in the formula. In effect, **NEXT** serves as a tab key, permitting you to move through a formula entering arguments.

7. To signal that you are finished entering the formula, select a new cell (or press **ENTER**).

How formulas work with the data in your worksheet

A worksheet formula can be a simple arithmetic operation, such as $5 + 2$, or a complicated operation, such as determining the net present value of a series of future cash flows based on data present in worksheet cells.

Use cell and range references to identify the data used in formulas. A cell reference identifies one cell by its column letter and its row number, such as C3.

PenCell supports both absolute cell references and relative cell references, as well as combinations of the two.

Absolute cell references

Absolute cell references always point to precisely the same cell, no matter where the reference is made. Absolute cell references have dollar signs (\$) before the column letter and row number.

For example, the absolute cell reference $\$C\5 always points to the cell at the intersection of column C and row 5. When you copy or move an absolute cell reference from one location to another, the cell that the reference points to does not change. If you copy the formula $\$C\$5 - 2$ in cell A1 to cell K9, the formula in K9 remains the same as $\$C\$5 - 2$.

Relative cell references

Relative cell references point to a cell by referring to its location relative to the cell which contains the reference. Relative cell references do not use the dollar sign syntax.

For instance, if a formula in cell B3 includes the relative cell reference C5, PenCell interprets this pointer as “one cell to the right and two cells down.” If you copy the formula containing this reference to another location on the worksheet, it still means “one cell to the right and two cells down,” but now it refers to a different cell. Thus if you copy the formula $C5 - 2$ in cell B3 to cell D6, the formula in D6 contains the appropriate new relative cell reference ($E8 - 2$).

Mixed cell references

Mixed cell references express an absolute reference to the column and a relative reference to the row (for example, $\$C5$) or an absolute reference to the row and a relative reference to the column (for example, $C\$5$). Put a dollar sign in front of the part of the reference that is absolute.

Once again, if you copy such a reference, the absolute part of the reference always remains the same, while the relative part changes depending on the new location.

Ranges

A range is a rectangular block of adjacent cells in the worksheet. A range can be one or more rows, one or more columns, or a group of cells in adjacent rows and columns. Use ranges in commands and formulas to perform operations on more than one cell at the same time.

	A	B	C	D	E	F
1						
2		Sales	Apr	May	Jun	
3		Hardware	10,000	3,000	4,000	
4		Software	2,000	299	3,333	
5		IC-Card	2,999	300	5,000	
6		Total	15,887	3,599	12,333	
7						
8						
9						
10						
11						
12						
13						

Refer to a range by its upper left cell, followed by a colon, followed by its lower right cell, such as C4:C6. You can use the absolute, relative, and mixed range references described above.

Order of precedence in calculations

The following table shows the arithmetic, relational, and logical operators you can use in formulas and their order of precedence. The lower the precedence number, the earlier the worksheet performs the operation. Operations with the same precedence number are performed sequentially from left to right.

Precedence	Operator	Operation
1	- +	Identifying value as positive or negative (binary operators)
2	^	Exponentiation
3	* /	Multiplication and division
4	+ -	Addition and subtraction (binary operators)
5	=, <, >, <=, >=	Tests: Equal-to, Not-equal-to, Less-than, Greater-than, Less-than-or-equal-to, Greater-than-or-equal-to
6	NOT	Logical-NOT test
7	AND, OR	Logical-AND and logical-OR tests

You can override the order of precedence by enclosing an operation in parentheses. The worksheet performs operations inside parentheses first. Within each set of parentheses, the normal order of precedence applies.

Types of formulas

There are three types of formulas: numeric, logical, and date.

Numeric formulas

Numeric formulas perform calculations with numbers, using one or more of the arithmetic operators +, -, *, /, ^, or related built-in functions.

Two examples of numeric formulas are 3*B20 and SUM(B20:B25)/4. The formula 3*B20 returns a numeric value by multiplying 3 by the value in cell B20. The formula SUM(B20:B25)/4 returns a numeric value by dividing the sum of the values in the range B20:B25 by 4.

Logical formulas

Logical formulas are statements that return true (value 1) or false (value 0). For example, the logical formula B5>=40 returns true (1) if cell B5 contains a value greater than or equal to 40. Otherwise, the formula returns false (0). Logical formulas use the logical and relational functions described in the following pages.

Date formulas

Date formulas return results expressed as dates or time.

About built-in functions

A formula can include one or more built-in functions. You can include built-in functions in your worksheet by typing them or, more simply, by inserting them using the  icon. See Appendix B, “Function Reference” for details. This section gives you some general information about using the functions.

Types of functions and operators

PenCell supports six major types of functions and operators:

Arithmetic

Perform arithmetic operations. These include: *, +, -, /, ^, **ABS**, **INT**, **ROUND**, **SQRT**, **EXP**, **LN**, **LOG**, **LOG10**, **MOD**, **RAND**, **PI**, **SUM**.

Date/Time

Compute values based on dates and times. These functions use the unit's clock, so the clock must be set properly for date and time values to be accurate. These include: **DATE**, **DATEVALUE**, **DAY**, **HOUR**, **MINUTE**, **MONTH**, **NOW**, **SECOND**, **TIME**, **TIMEVALUE**, **TODAY**, **YEAR**.

Financial

Calculate annuities, loan payments, cash flows, and so on. These include: **DDB, FV, IRR, NPER, NPV, PMT, PV, RATE, SLN, SYD.**

Logical

Compute the results of conditional formulas. These include: **AND, FALSE, IF, NOT, OR, TRUE.**

Relational Operators

Perform mathematical comparisons. These include: **<, <=, <>, =, >, >=.**

Statistical

Perform calculations on lists of values. These include: **AVERAGE, COUNT, COUNTA, MAX, MIN, STDEV, VARP.**

Syntax of functions

Each function has a specific structure, or syntax, that you must follow when you type it. When you enter a built-in  or touch **UTILS** and select **"Insert Function..."**, the appropriate syntax is included. For the arithmetic and relational operators, the syntax is:

argument1 OPERATOR argument2

For the remainder of the functions, the syntax is:

FUNCTION (argument1, argument2,...,argumentN)

Where:

FUNCTION

Represents the name of the function.

Parenthesis

You must enclose a function's arguments in parentheses. For example, in `INT(SUM(A4:A8))`, the argument for `INT` is `(SUM(A4:A8))`, while the argument for `SUM` is `(A4:A8)`.

Argument separator

You must separate arguments from one another with commas, for example, `SUM(A1,A5,A6,B8)`.

The ellipses, or three dots (...), used between *argument2* and *argumentN* are not part of the syntax; they represent hypothetical arguments only.

Functions and their arguments

Supply the information PenCell needs to carry out a function. For example, when PenCell comes across the function SUM(A4:A20), the argument A4:A20 tells PenCell to add the values in the range extending from A4 to A20. The number and type of arguments required varies by function. The functions in the function list of the PenCell formula editor display a template of the arguments that each function requires.

Arguments can be values, cell references, and conditions:

- For values, use a number (such as 2), a numeric formula (such as 2+3 or A1+B1), or a cell or range reference that contains a number or numeric formula (such as A4 or A4:A20).
- For cell or range references, type the reference or touch the cell or range when the cursor is to the right of a parenthesis or an arithmetic operator (+, -, >, etc.).
- For conditions, use a logical formula or the reference of a cell that contains a logical formula. You can also use any numeric formula, literal string, or cell reference.
- PenCell assigns the value 0 to blank cells used as arguments in financial, logical, and mathematical functions.
- A blank cell is ignored in the computation of statistical functions: MIN, MAX, AVERAGE, STDEVP and VARP.

NOTE

Your unit provides a way of entering symbols like > and < or { and }. Press **SMBL** to see the list of symbols. Touch one to enter it to the selected cell.

Errors when formulas are calculated

Two kinds of error messages are available to help you evaluate errors when they occur.

- #REF appears in a cell when a cell reference in a formula is invalid.
- #ERR appears in a cell when a numeric error occurs.

There are some conditions that cause an error when formulas are calculated.

- A zero as denominator in the formula.
- An incorrect parameter range in a function.
- Error in a function used in a formula. For instance, ASIN(2) evaluates to #ERR.
- A #REF error occurs when a cell reference in a formula becomes invalid after the formula is copied, or a cell referenced in a formula is deleted.

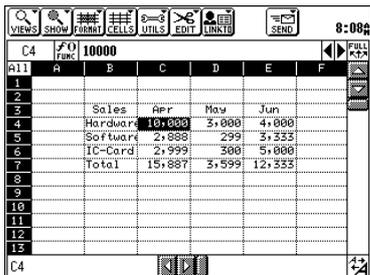
NOTE

If you enter an invalid formula that begins with an alphabetical character, PenCell interprets the formula as a label.

Editing a worksheet

To edit the contents of a cell:

1. Select the cell that you want to change. The cell contents appears in the edit bar.



	A	B	C	D	E	F
1						
2						
3		Sales	Apr	May	Jun	
4		Hardware	10,000	3,000	4,000	
5		Software	2,888	299	3,333	
6		Hardware	2,999	380	5,000	
7		Total	15,887	3,599	12,333	
8						
9						
10						
11						
12						
13						

2. Touch within the edit bar (or press **ENTER**) to obtain the blinking edit cursor that indicates you are ready to edit.

Now you can use any of the editing techniques described below in “Guidelines for editing.”

If you start to type immediately, before you obtain the blinking cursor, the original cell contents disappear from the edit bar and are replaced by what you type.

3. When you are finished, touch another cell.

Guidelines for editing data or formulas

Observe the following guidelines when editing the contents of a cell:

- Touch the edit bar to obtain a blinking edit cursor before editing the contents of the selected cell. If the blinking cursor is absent when you use the keyboard, 10-Key Pad, or function list, the original cell contents are replaced.
- Move the blinking cursor to the right of an operator (like “+” or “÷”) or within parentheses, then touch a cell or select a range to add its reference to the edit bar.
- Drag the pen across a formula, label, or number in the edit bar to select characters you want to change or delete. The selected characters are replaced when you type or deleted when you press **DEL**.
- Press **DEL** to delete the character to the right of the blinking cursor.
- Press **BS** to delete the character to the left of the blinking cursor.
- Touch \leftarrow and \rightarrow to move the blinking cursor to the beginning or end of the edit bar.
- Press **CANCEL** if you change your mind and want the cell contents to remain the same.
- Use **Revert to Saved** to abort all the changes made to the worksheet.
- Use **Undo** (or press **2nd Z**) to revert back to the cell contents prior to the last operation.
- Press **WORD** to add words from the custom word list you create using the unit’s Word function.
- Press **SMBL** to insert one of the unit’s list of special characters like < and {.
- You can also cut, copy and paste.

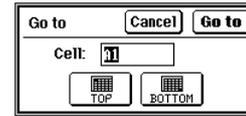
Moving around a worksheet

Your unit displays a portion of the cells in a worksheet at one time. There are several methods to display other parts of the worksheet. You can move around the worksheet in the following ways:

- Touch the scroll arrows to move the worksheet one row or column at a time in the direction the arrow points.
- Touch in the scroll bar or drag the scroll button to move a proportional distance in the worksheet. The display changes after you lift the pen.
- Select a cell or range and drag the pen to the edge of the display where you want to view more columns (or rows).
- Use the “Go To” Command.
- Use the “Find” Command.

Going to a specific cell

1. Touch **UTILS**, then select “**Go to...**”



Type the cell reference or choose **TOP** or **BOTTOM** to go to the first or last cell in the worksheet.

PenCell assumes that the bottom cell is the last cell actually used in the worksheet, not the maximum row or column in PenCell.

2. Touch **Go to....**

The display moves to that portion of the worksheet and the specified cell is highlighted.

When you touch **Go to...**, PenCell remembers the anchor cell of the current selection. Next time you select **Go to...** that cell will appear in the Go to dialog. This makes it easy to switch between two areas of the worksheet.

NOTE

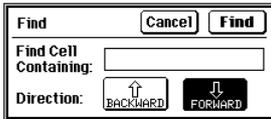
PenCell remembers the Current selection and the next time you use “Go to” it appears as the destination in the “Go to ” dialog. This is an easy way to alternate between two areas of a worksheet.

Finding cell contents

Another way to move the worksheet display is to find specific cell contents. You can find a value, label, or formula. Note, however, that the search is not case-sensitive.

To find cell contents:

1. Touch **UTILS**, then select “**Find...**,” or press **2nd F**.



2. Type all or part of the value, label, or formula and choose either forward or backward search.

Include blank spaces as they appear in the formulas and labels you are searching for.

3. Touch **Find**.
The cell is selected and displayed.
4. Repeat steps 1, and 3 to find the same information in other locations in the worksheet.

NOTE

By default, formulas do not appear in cells, the value calculated by the formula is displayed instead. Before you can search for a formula, you need to show formulas by touching **SHOW** and selecting “**Show Formulas**.” See “Formatting a worksheet” for more information.

Copying and moving data

You can use the pen, menu commands, or the keyboard to copy or move data.

Copying and moving with the pen

1. Select the cell or range you want to move.
2. **To move:**
Touch and hold the pen on the selected (highlighted) cell or range.

To copy:

Press **2nd**, then touch and hold the pen on the selected (highlighted) cell or range.

A white outline appears around the selected cell or range.



3. Drag the outline to the new location. If you want to move the cell contents to a location that is not in the current display, just drag it in the direction you want to go, hold the pen past the edge of the worksheet, and the worksheet will scroll in the direction you drag.
4. Lift the pen when the outlined cell or range is at the desired location.

NOTE

- The copied or moved data overwrites anything that previously occupied that location.
- To copy or move a column (or row), select the column (or row) and **2nd** drag & drop it to the destination column (or row).

Copying and cutting using menu commands

1. Select the cell or range whose contents you want to copy or cut.
2. To copy, touch **EDIT** and then select "**Copy.**"

To cut, touch **EDIT** and then select "**Cut.**" The contents of the cell or range disappear.

3. Select a new location for the data: either one cell, or a range of the same dimensions as the original, or a range that is a multiple of the range originally selected.
4. Touch **EDIT**, then select "**Paste.**" The cell or range's contents now appear in the new location, replacing anything that had been there.

NOTE

Use **2nd C** to copy and **2nd X** to cut. Use **2nd V** to paste.

NOTE

If you copied or cut a single cell, but selected a range of cells prior to pasting, the cell's contents are repeated throughout the range. If you cut or copy a range and select a range of a different size prior to pasting, an error message is displayed unless the new range size is a multiple of the range you cut or copied. If you select one cell to paste a range of cells, the full range is pasted in, with the selected cell as the top left cell of the pasted range.

The effect of moving cells on formulas

When a cell or range of data is moved to a new location, any formulas that refer to the moved data are modified to refer to the new positions, except as noted below. For example, if you enter `SUM(A1:B2)` in cell A5, then move A1:B2 to C3:D4, PenCell automatically updates the formula in A5 to become `SUM(C3:D4)`. However, if you move only part of the data, such as A1:B1, to a new location, the formula in A5 remains unchanged because only a part of the range A1:B2 was moved.

If you move a formula to a new location, PenCell automatically updates the formula to continue referring to the same data, even if the data is moved along with the formula. For example, enter `SUM(A1:B2,D1)` in C1. Then move the range A1:C2, which includes the formula in C1 and the data in A1:B2, to A4:C5. The formula, which is now in C4, automatically changes to `SUM(A4:B5,D1)` to refer to the data moved to range A4:B5, and the data in D1 which was not moved.

Copying and annotating a worksheet

To copy the current worksheet as an image that you can paste in the Scrapbook or Documents application:

1. Select the cells you want to copy.
2. Touch **EDIT**, then select “**Copy Image.**”
3. Touch your unit’s SCRAPBOOK or DOCUMENTS application.
4. Open a new entry.
For Documents you may open an existing entry and place the cursor at desired location.
For Scrapbook you may annotate the worksheet image with the graphic tools.
5. Press **2nd V**.

Copying formulas

To speed up building formulas in a worksheet, you can copy a formula to a number of continuous cells, and the contents of the formulas automatically adjust themselves to the new locations.

To replicate a formula:

1. Select a cell or range containing formula(s).
2. Press **2nd**.
3. Touch and hold the pen within the selection and drag the selected cell or range to a new location.

Whether it is moving or copying cells, the selected cell contents replace anything in the new location.

You can touch **EDIT** and select “**Undo**” if you want to reverse an operation you just performed.

NOTE

- If you touch a cell in a selected range, the cell you touched becomes selected. If you press **2nd** and then touch a cell, the selection is extended (or reduced) to the cell you touched.
- You can use the keyboard for many operations. For details see Appendix D.

Clearing data

You can clear the contents of a cell or range without by:

- Using the Clear command or **DEL**.
- Using the Cut command or **2nd X**.

To remove data from your worksheet:

1. Select the cell or range that contains data you want to remove.
2. Select “Cut” from **EDIT** or “Clear” from **CELLS**.

The cut and clear commands are slightly different. The Cut command places the selected cell contents in a short term memory allocation, enabling you to use the Paste command as if you were moving the data. The Cut command also deletes the cell format, returning the cell to the General format. The Clear command immediately erases the data but has no effect on the cell format.

Sorting

You can sort a range in ascending or descending order based on the key cell you enter. If you sort by rows, the order of the rows is changed. If you sort by columns the order of the columns is changed.

To sort a range of cells:

1. Select the range. (For example, C4:E7.)

	A	B	C	D	E	F
1						
2						
3		sales	Apr	sales	Apr	
4		Hardware	10,000	3,000	4,000	
5		Software	2,888	299	3,333	
6		IC-Card	2,999	300	5,000	
7		Total	15,887	3,999	12,333	
8						
9						
10						
11						
12						
13						

2. Touch **CELLS**, then select “Sort...”

Sort Cancel Sort

By: Columns Rows Order: Ascending Descending

Column/Row Key:

3. Select your sorting criteria by touching your choices in the Sort window. For example, if you choose rows, ascending, and D5, the data in the selected range, C4:E7, are rearranged with the data in cells D4 through D7 in increasing order.

4. Touch **Sort**.

NOTE

If you sort a column or row that contains both numeric values and labels, the numeric values come before the labels in the ascending sort.

If you want to restore the range to its original order, touch **EDIT** and select “**Undo**.”

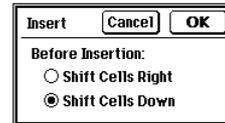
Inserting and deleting cells

Occasionally you need to reorganize a worksheet so you can incorporate new cells or remove obsolete ones. Updating your worksheet might involve adding new blank cells or deleting cells. PenCell lets you add and delete cells while automatically maintaining cell references in the remainder of the worksheet.

When you insert new blank cells, all the cell and range references automatically continue to refer to the same cells, even if those cells have changed location.

To add new, empty cells to your worksheet:

1. Select the cell or range that is currently at the location where you want to place the new cells.
For example, to add a new, blank column or row to the worksheet, select the column or row that currently occupies that location.
2. Touch **CELLS**, then select “**Insert...**” If the range is not a row or column, then the following dialog box appears.



3. Decide whether to shift the selected cells down or to the right before insertion. Then touch **OK**.

When you want to delete cells (and cell contents), the remaining cell references automatically adjust so they continue to refer to the same cells.

Formatting a worksheet

Formatting not only enhances the appearance of your worksheet, it also can aid in analysis.

You can format worksheets on two levels:

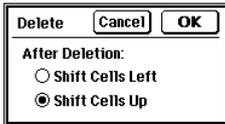
- Worksheet characteristics affect the entire worksheet.
- Cell characteristics affect individual cells.

Worksheet characteristics

Worksheet characteristics affect the entire worksheet. These “globally” formatted characteristics control the appearance of the worksheet, overall functions like recalculating, or the worksheet status in relationship to other functions on the unit. The table on the following page identifies worksheet characteristics and shows the default settings.

To delete cells from your worksheet:

1. Select the cell or range that you want to delete.
2. Touch **CELLS**, then select “**Delete...**”
If the range is not a row or column, then the following dialog box appears.



3. Decide whether to shift the selected cells up or to the left after deletion. Then touch **OK**.

NOTE

#REF appears in a cell containing a formula if you delete a cell that is referred to in the formula or if you delete an entire range that is referred to in the formula. If you delete part of a range that appears in a formula, the formula is updated appropriately.

Worksheet Characteristic	Default Setting
Hide or display gridlines	Gridlines displayed
Display values or formulas	Values displayed
Display or hide Column/Row Labels	Displayed
Show full screen	Off
Set Worksheet Protection On or Off	Off
Set Title On or Off	Off
Number of calculation iterations	5
Automatic or manual recalculation	Automatic
Zoom	100%

When you choose these items, you toggle the functions on and off.

The following sections explain in detail each worksheet characteristic and the alternatives to the default settings.

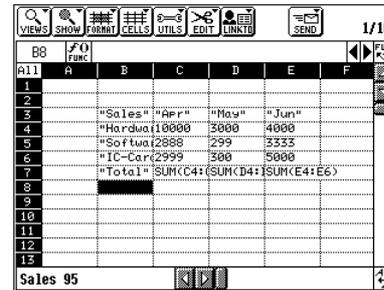
Hiding or displaying gridlines

Touch **SHOW**, then select “**Hide Gridlines.**” To redisplay them, touch **SHOW** and select “**Show Gridlines.**” Any changes in this setting will affect only this worksheet.

Gridlines are always displayed between row and column headings.

Showing formulas or values

Touch **SHOW** and select “**Show Formulas.**” To display their calculated values again, touch **SHOW** and select “**Hide Formulas.**”



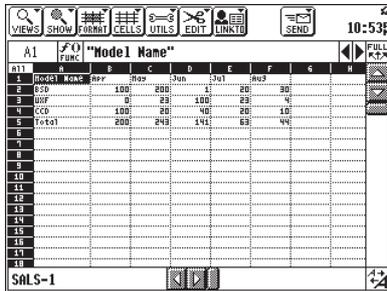
If the formula is too long to fit in a cell, you only see the part that fits in the cell (unless the adjacent cell is empty).

Any change in this setting will affect only this worksheet.

If you want to see the formula in one cell without reformatting the entire worksheet, touch the cell to select it. The formula appears in the edit bar.

Zooming

Touch  in the lower right corner to select a different zooming mode.



NOTE

When in 70% viewing (zoom out mode), all texts are shown in plain text and accent characters are not available.

Showing full screen

To view more cells, you can set the display to full screen. Touch **SHOW**, then select **Show Full Screen.**

Model Name	Apr	May	Jun	Jul	Aug
BSD	100	200	1	20	30
UXF	0	25	100	25	4
CCD	100	20	40	20	10
Total	200	245	141	65	44

You can revert back to the normal viewing by touching



NOTE

- You can show the full screen while in any zoom mode.
- You can also touch  to display another type of full screen mode where only the toolbar is hidden but the scrollbars and column/row labels remain visible.

Displaying or hiding column/row labels

Touch **SHOW**, then select “**Hide Column/Row Labels.**”

To redisplay them, touch **SHOW** and select “**Show Column/Row Labels.**”

Model Name	Apr	May	Jun	Jul	Aug
BSD	100	200	1	20	50
UXF	0	23	100	23	4
CCD	100	20	40	20	19
Total	200	243	141	63	44

Setting title

Use Set Title to create stationary table headings. This enables you to scroll through multiple pages of data while the appropriate row or column labels remain stationary and visible.

For example, if your table has long columns of data that extend beyond the bottom of the screen, you can scroll while column labels remain visible using **Set Titles.**

To turn on Set Titles:

1. Create appropriate row and column labels above and to the left of the scrolling data.
2. Select the cell that occupies the top left position of the data that will scroll normally.
3. Touch **UTILS**, then select “**Set Titles.**”

Model Name	Apr	May	Jun	Jul	Aug
BSD	100	200	1	20	50
UXF	0	23	100	23	4
CCD	100	20	40	20	19
Total	200	243	141	63	44

Rows above and columns to the left of the selected cell are indicated by dark lines that divide the display into panes. When you scroll up and down, column labels appear on each page and when you scroll left and right, row labels appear on each page.

If you select a cell in column A or row 1 before you choose Set Titles, the display is divided into only two panes and scrolling is impacted in only one dimension.

To unset titles:

Touch **UTILS**, then select “**Unset Titles.**”

NOTE

If you set title near the bottom right corner at a zoom out mode, and then zoom in, you may not be able to scroll or select cells. In this case, unset titles by choosing **UTILS** and selecting **Unset Titles.**

Protecting worksheet

You can lock up part or all of a worksheet so that protected area cannot be modified. Protection takes two steps: cell protection, then worksheet protection. By default, all cells are protected.

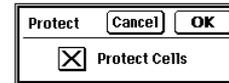
To protect the whole worksheet so that it cannot be

modified:

1. Touch **UTILS.**
2. Select “**Turn Protection On.**”

To protect only part of the worksheet:

1. Select the cell or range you do not want to protect.
2. Touch **CELLS**, then select “**Protect....**”



3. Clear the Protect Cells checkbox, then touch **OK.**
4. Touch **UTILS**, then select “**Turn Protection On.**”

If you try to modify a protected area, a message appears to inform you that the protected cells cannot be changed.

NOTE

When you activate the protection status of the worksheet, the undo and redo operations are cleared from the memory. That means you will not be able to undo or redo operations you performed prior to activating worksheet protection. In addition, when the worksheet protection status is active, you cannot move cells.

Cell characteristics

You can control cell characteristics for a selected cell or range. The following table shows cell characteristics and the default settings.

Cell Characteristic	Default Setting
Cell Type	General
Column width	7 characters
Row height	1 character
Alignment	Left for text, right for numbers, dates & time
Font style	Plain
Cell protection	On

Cell formatting operations can be reversed using the undo operation.

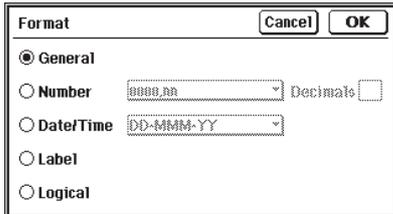
Cell type

By default, all cells in a worksheet are defined as General cells, meaning they can contain data, labels, or formulas. Other cell types are available that enable you to specify the way to display cell contents.

If you change the type of a cell after you have entered data in it, the content of the cell does not change. Only the way it is displayed may change.

To change the cell type:

1. Select the cell or range you want to format.
(To change the default setting of worksheet, select **All** instead.)
2. Touch **FORMAT**, then select “**Format...**”



3. Choose a cell type, then touch **OK**.

If you select the Number or Date/Time cell type, you also need to choose a format option from the pop-up menu.

The following table describes the available cell types.

Cell Type	Description		
Number	If the cell contains a value, it is displayed in one of the following formats:		
	Format	Name	Example
	nnnn.nn	general (default)	1976.10
	nnnEnn	scientific notation	1.98e3
	\$n,nnn.nn	Currency (U.S.)	\$1,976.10
	nn.nn%	percentage	197610.00%
	n,nnn.nn	punctuated	1,976.10

The number of displayed decimal points is controlled by entering a value in the Decimals box in the Format Cells dialog.

If the numeric value is too large to fit in the cell, asterisks (*) appear across the entire cell. To see the value, either select the cell and view the value in the edit bar, or adjust the column width.

Cell Type Description

Date/Time Displays cell content in one of the selected date/time format. Date/time formats are:

Format	Example
DD-MMM-YY	28-Dec-96
DD-MMM	28-Dec
MMM-YY	Dec-96
HH:MM:SS (AM/PM)	02:34:51 AM
HH:MM (AM/PM)	02:34 AM
MM/DD/YY	12/28/96
MM/DD	12/28
HH:MM:SS	02:34:51 (24 hour)
HH:MM	02:34 (24 hour)

General By default, all cells have the General format until you change them.

- General cells can contain a value, formula, or label.
- If you enter a number in a General cell, it is right justified.
- If you enter text in a General cell, it is interpreted as a label and is left justified.
- If you enter a formula (including a cell reference) in a General cell, the computed result of the formula is displayed. If the result is a number, it is right justified and if it is text, it is left justified.

- If you enter data that looks like a date into a General cell, PenCell interprets the data as a formula first. If it fails, it tries to interpret the data as a date. For instance, 12/28/96 in a General cell is interpreted as 12 divided by 28 divided by '96. However, 28-Dec-96 is interpreted as a date. Once you enter a date in a General cell, its type changes to a Date/Time format.
- If you enter True or False in a General cell, PenCell interprets these as logical values 1 and 0 and can use them in logical and relational functions.

Label Limits cell contents to labels. If you enter any data in a Label cell, PenCell uses the data as a label.

Logical Displays cell contents as logical true (non-zero) or false (0). Logical results are computed from logical and relational operations in formulas or can be entered directly. See Appendix B, “*Function Reference*.”

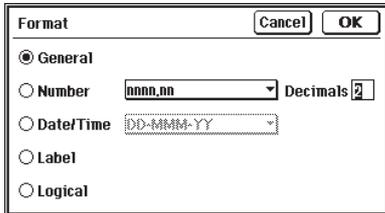
To reverse a format change, touch **EDIT**, then select “Undo.”

Decimals

When a cell has the number cell type, you control the decimal points displayed in the cell from the Format dialog.

To specify decimal points for the NUMBER cell type:

1. Select a cell or range.
2. Touch **FORMAT**, then select “Format....”



3. Touch **Number**.
4. Enter a value between 0 and 15 in the box beside Decimals.
5. Touch **OK**.

If you see asterisks (****) displayed across a cell, this means that the cell is not wide enough to display its value. To solve this problem, adjust the column width. (See “Adjusting column and row size” later in this section.)

NOTE

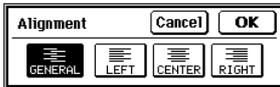
PenCell uses true values when formulas are calculated (to at least 15 decimals of precision). The rounded value appears in the worksheet display, but the true value for a cell appears in the edit bar when you select the cell.

Alignment

Alignment determines where cell contents appear relative to the edges of the cell. General alignment is the default. With General alignment, numbers, dates and times are right justified, and labels are left justified.

To change the alignment for a cell or range:

1. Select the cell or range you want to change. You can also select **All** to change the worksheet's default setting.
2. Touch **FORMAT**, then select “**Alignment...**”



3. Touch the general, left, center, or right alignment button to highlight your choice.
4. Touch **OK**.

Changing font style

Cells can include bold, italic, or plain characters that you can combine with underlining. The default font style is plain.

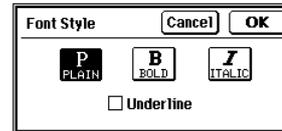
To change the font style for a cell or range:

1. Select a cell or range.

NOTE

To change the default font style touch **All** in the upper left corner of the worksheet. This will have no effect on cells previously changed from the default.

2. Touch **FORMAT**, then select “**Font Style...**”



3. Touch the font style of your choice to highlight it. You can also use **2nd + Y**, **2nd + O**, **2nd + I**, **2nd + U** to choose plain, bold, italic, or underline font style.
4. Touch the Underline for underlined characters.
5. Touch **OK**.

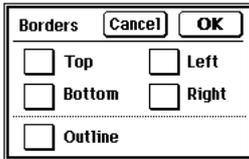
NOTE

In the zoom out mode, all fonts are displayed as plain.

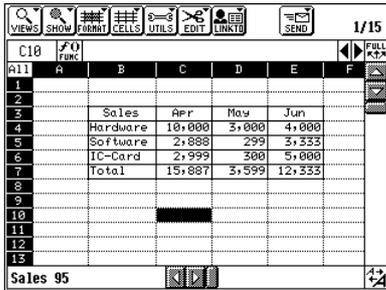
Drawing borders

You can add borders to one or more cells in a worksheet.

1. Select the cell or range you want to change.
2. Touch **FORMAT**, then select “**Borders....**”



3. Touch one or more of the checkboxes, as required.
4. Touch **OK**.



	A	B	C	D	E	F
1						
2						
3		Sales	Apr	May	Jun	
4		Hardware	10,000	3,000	4,000	
5		Software	2,888	299	3,333	
6		IC-Card	2,999	300	5,000	
7		Total	15,887	3,599	12,333	
8						
9						
10						
11						
12						
13						
Sales 95						

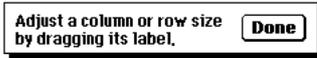
NOTE

- When the dialog is opened Outline is unchecked.
- For multi-cell selection the other buttons are initially grayed.
- When Outline is not checked, the other buttons control all the borders of the selected cells.
- When Outline is checked, the outermost edge of the selection is given a border and the interior edges are set according to the other buttons.
- When the dialog is closed with OK, the grayed buttons leave the relevant edges unchanged.

Adjusting column and row size

You can easily change the column width or row height in a worksheet.

1. Select a column or row heading.
2. Touch **CELLS** then select “**Set Column/Row Size.**” If necessary, you can drag the dialog box to a different location.



3. Touch and hold the pen tip in the center of any selected column or row heading.
4. Holding the pen tip in the display, drag left or right to change the size of columns or up or down to change the size of rows.
5. When you lift the pen, the cells are displayed with the new column or row size.
6. You may change the size of other columns or rows not in the selection.
7. Touch **Done** to finish.

NOTE

- To change the widths of a group of columns (or rows), select the columns (or rows). Then perform the above operation by changing the width of any of the selected columns (or rows). All of the selected columns (or rows) will be changed to the same width.
- Initially, all columns and rows are set to the default width and height. You can change the default values of this worksheet by making the All selection, then change a column width or row height.
- Individual groups of columns or rows that were previously changed are not affected by changes in the default column width/row height.

Working With Charts

Charts are a visually compelling way of presenting many kinds of worksheet information.

Creating a chart

You can create and save one or more charts for your worksheet.

To create a new chart, you need to start in the Worksheet mode:

1. Select the range of cells containing data you want to chart. The cells you select in the Worksheet mode form the basis of the chart.

The row above the selected range determines the horizontal axis labels.

	A	B	C	D	E	F
1						
2						
3		Sales	Apr	May	Jun	
4		Hardware	10,000	3,000	4,000	
5		Software	2,888	299	3,333	
6		IC-Card	2,999	300	5,000	
7		Total	15,887	3,599	12,333	
8						
9						
10						
11						
12						
13						

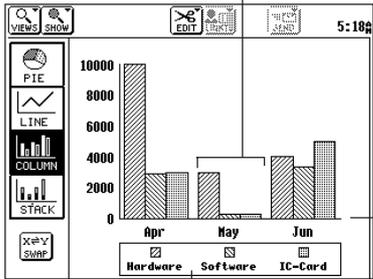
The selected range determines the chart content.

The column to the left of the selected range determines the chart legend.

Formatting a chart

2. Touch **EDIT**, then select “**New Chart.**”

The number of bars comes from the number of rows in the selected range.

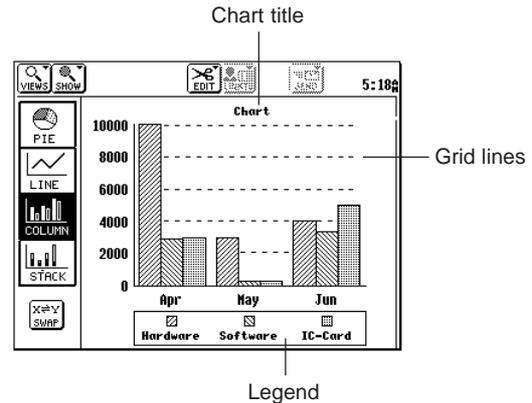


The horizontal (X) axis labels come from the row above the selected range.

The chart legend comes from the column to the left of the selected range.

When you create a chart, the cells immediately above or left of the selection (if any) contain labels for one of the axes in your chart. (See “Exchanging the X and Y axes” later in this chapter.)

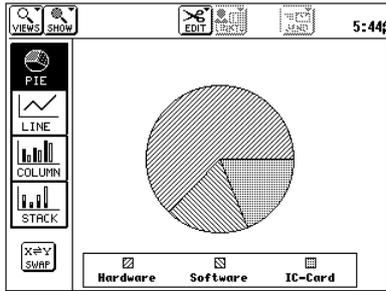
The default chart display is a column chart. You can display the same data in a pie chart, line chart, or stack chart. In addition you can add a chart title, add gridlines, remove the chart legend and reverse the chart axes.



To change the chart format, touch **PIE**, **LINE**, **COLUMN**, or **STACK**.

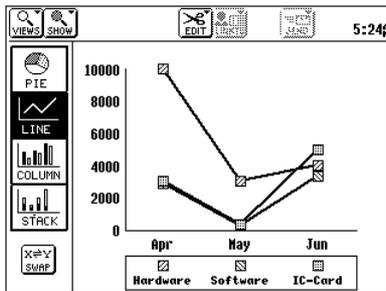
Pie charts

A pie chart shows the data from one column in the selected range as percentages of a whole.



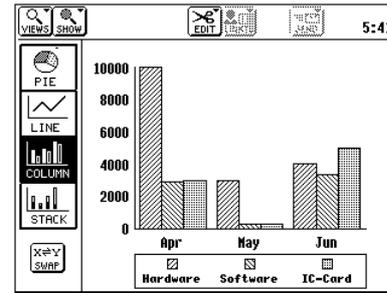
Line charts

A line chart shows the individual values of selected data connected by a line.



Column charts

A column chart displays all the data for each row or column in the worksheet as a single column, with each category of data distinguished by its pattern.



Stacked column charts

A stacked column chart displays all the data for each row or column in the selected range as a single column, with each category of data distinguished by its pattern.

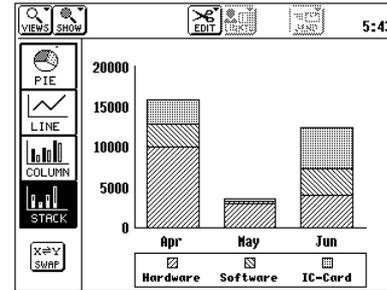
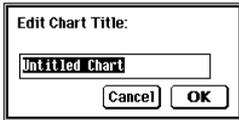


Chart titles

You can add a chart title to enhance your chart, as follows:

1. Touch **EDIT**, then select “**Chart Title....**”



2. Type a chart title, up to 25 characters.
3. Touch **OK**.

To show the title, touch **SHOW**, then select “**Show Title.**”

Displaying gridlines

Gridlines can aid in the visual comparison of data. You can add gridlines to column, stacked column, and line charts.

To show the gridlines, touch **SHOW** and select “**Show Gridlines.**” To hide, repeat the same and select “**Hide Gridlines.**”

Displaying the legend

The chart legend is based on the data in the worksheet columns to the left of the selected range. The legend provides a key to differentiate the patterns in the chart.

To show the legend, touch **SHOW** and select “**Show Legend.**” To hide, repeat the same and select “**Hide Legend.**”

Exchanging the X and Y axes

When you originally create your chart, the horizontal or x axis is determined by the data in the selected rows. The vertical or y axis comes from the data in the selected columns. You can switch the axes so the x axis comes from column data and y axis comes from row data.

To swap, touch the **X ⇌ Y SWAP** in the lower left corner in the Chart mode.

Exiting and saving a chart

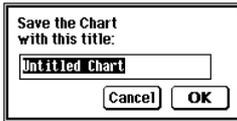
To exit without saving the current chart, touch **CANCEL**. The worksheet display will appear.

Saving a chart

You can save up to 20 charts with any worksheet. To save, change the display mode from Chart to Worksheet, Index or Chart (may be faded out if there is no previously saved chart for the current worksheet).

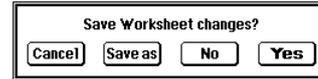
1. Touch **VIEWS**, then select “**Worksheet**”, “**Index**” or “**Charts....**”

- If the chart does not have a title yet, the following window appears. Type a chart title and then touch **OK**. A prompt will indicate the chart has been saved to the current worksheet.

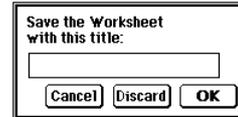


The name of the worksheet in which the chart is saved does not appear in the Chart mode. To see the name of the worksheet, go to the Worksheet mode or touch **VIEWS** then select “**Charts....**”

- The next display depends on the mode change you selected.
 - “Worksheet” returns you to the worksheet display.
 - “Chart” displays the list of saved charts including the current one. You will return to the Chart mode after selecting a chart from the list (See the next section “Viewing saved charts”) .
 - “Index” (from a previously saved worksheet) displays the following window. Touch **Yes** to save the changes. You can also use **Save as** to save the worksheet under a new name.



- “Index” (from a new worksheet) displays the following window. Type a worksheet name to save the worksheet and associated charts. Then press **OK**.

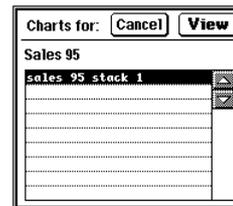


Viewing saved charts

After you have saved one or more charts for a worksheet, you can switch to the Charts mode to view the charts.

To view saved charts starting from the worksheet mode:

- Touch **VIEWS**, then select “**Charts....**”

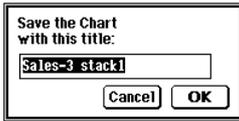


- Select a chart, then touch **View** (or touch an entry twice).

Duplicating a chart

You can make a new chart by duplicating an existing one, then change its content, for example.

1. While viewing a chart, touch **EDIT**, then select “**Duplicate Chart....**”



2. Change the suggested chart title, if necessary. Then touch **OK**.

Deleting a chart

To delete a chart:

1. Touch **EDIT**, then select “**Delete Chart.**”
2. Touch **Yes**.

To delete group of charts:

1. Touch **EDIT**, then select “**Delete Group....**”
2. Select the Delete option, then touch **OK**.

Printing and adding mark-ups to a chart

The unit's Documents or Scrapbook applications include operations that enable you to print graphics like your PenCell. Scrapbook has graphic options to edit the image directly. The charts cannot return to PenCell, however (Refer to the other Operation Manual for details on using the Documents or Scrapbook applications and printing from the Documents or Scrapbook applications).

To put a chart into the Documents or Scrapbook applications:

1. Touch **EDIT**, then select “**Copy Image.**”
2. Touch the Documents or Scrapbook applications.
3. Open a blank page.
4. Press **2nd V** to paste the chart into the Documents or Scrapbook applications. In Scrapbook the chart appears in the screen and you can use the graphic options to edit it.

NOTE

- In Scrapbook or Documents, you can save or print the chart.
- Documents will receive larger worksheet image than Scrapbook, however the image cannot be marked.

Managing Worksheets

Index mode includes file management operations, as well as operations for importing and exporting worksheet files, creating a new file from a template, and opening saved worksheets.

Index mode operations

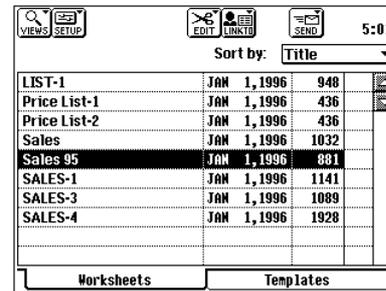
Index mode provides you with tools for managing worksheet files. You can:

- delete, rename, and copy a worksheet
- create a new worksheet
- create a new worksheet from a template
- assign secret status to a worksheet

In addition, use the Index mode when you transfer worksheet files between other unit's as well as personal computers.

Entering the Index mode

The index mode is active when you enter PenCell for the first time, so you can create your first new worksheet.



The screenshot shows a software interface with a menu bar at the top containing 'VIEWS SETUP', 'EDIT LINKED', and 'SEND'. The time '5:01' is displayed in the top right corner. Below the menu bar is a 'Sort by:' dropdown menu set to 'Title'. The main area contains a table with the following data:

LIST-1	JAN 1, 1996	948	
Price List-1	JAN 1, 1996	436	
Price List-2	JAN 1, 1996	436	
Sales	JAN 1, 1996	1032	
Sales 95	JAN 1, 1996	881	
SALES-1	JAN 1, 1996	1141	
SALES-3	JAN 1, 1996	1089	
SALES-4	JAN 1, 1996	1928	

At the bottom of the interface, there are two tabs: 'Worksheets' and 'Templates'.

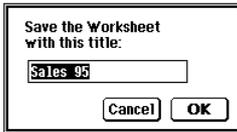
Thereafter, you can switch to the Index mode by touching **VIEWS** and then selecting "Index." The index mode contains two tabs: Worksheets and Templates. Touch the Worksheets tab to select it.

Managing worksheets

The Index tab mode provides you with worksheet management operations. Some operations require that a worksheet be selected. Touch a worksheet to select it.

Duplicating a worksheet

1. Select the worksheet you want to duplicate.
2. Touch **EDIT** and select “**Duplicate Worksheet....**”



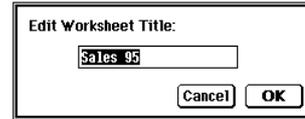
3. Type a name for the duplicate Worksheet.
4. Touch **OK**.

NOTE

Links are not duplicated.

Changing a worksheet name

1. Select the worksheet you want to rename.
2. Touch **EDIT**, then select “**Worksheet Title....**”



3. Type a name for the Worksheet up to 20 characters.
4. Touch **OK**.

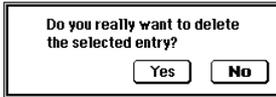
NOTE

You can also change the worksheet name in the worksheet mode by touching the worksheet title at the bottom left of the display.

Deleting worksheets

To delete a worksheet:

1. Select the worksheet you want to delete.
2. Touch **EDIT**, then select “**Delete Worksheet.**”



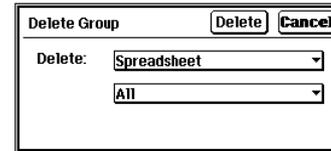
3. Touch **Yes** to confirm that you want to permanently delete the worksheet.

NOTE

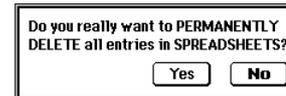
Secret worksheets are hidden from the Worksheets tab index if your unit is locked. Therefore, you must unlock it before deleting the worksheets.

To delete all worksheets:

1. Touch **EDIT**, then select “**Delete Group....**”
2. If your unit is locked, a message appears to prompt you to unlock it before performing the delete operation. Touch **OK**.
If your unit is not locked, the following window appears:



3. Touch **Delete** to delete.



4. Touch **Yes** to confirm.
All worksheets as well as charts are deleted.

Making a secret worksheet

You can turn a normal worksheet into a secret worksheet, or vice versa. When your unit is locked, secret worksheets are not shown in the Index mode and cannot be opened, viewed, deleted, copied, renamed, or set to Normal.

To turn a worksheet secret:

1. While viewing the Worksheets tab in the Index mode, select the desired worksheet.
2. Touch **EDIT**, then select “**Secret Entry.**”

You can also perform this operation from the Worksheet mode.

To turn a secret worksheet normal:

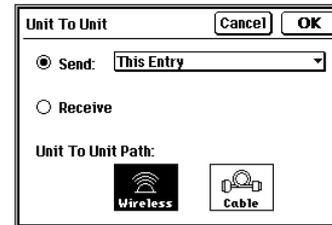
1. Unlock your unit.
2. Touch **EDIT**, then select “**Normal Entry.**”

Transferring worksheets

You can transfer worksheets to another unit using the built-in infrared ports or direct cable connection. You can also exchange files between PenCell and PC Files.

Unit to unit transfer

1. While in the Index or Worksheet mode, touch **SEND** and select “**Unit to Unit....**”
If the worksheet has not been saved, you will be prompted to do so; otherwise the following dialog box appears.



2. On the sending unit, use the Send pop-up menu to select whether to send only the selected worksheet or all worksheets. On the receiving unit, select **Receive**.

3. Set the Unit to Unit Path on both units to the correct option.
4. Touch **OK** on both units. To quit during the transfer, press [**ON**].
The data is transferred as PenCell data (but not assigned to Filer's IN folder).

To transfer a worksheet via the infrared port, you can also use the following simpler method:

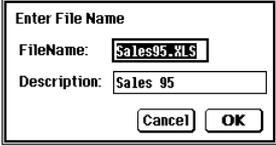
1. Make sure you are either in the Worksheet mode, or if you are in the Index mode you have selected a worksheet from the Worksheets tab.
2. Place the two units at a close distance, then press **GET** on the receiving unit and **SEND** on the sending unit.

Copying a worksheet to a PC File

1. Make sure you are either in the Worksheet mode, or if you are in the Index mode and you have selected a worksheet from the Worksheets tab.

2. Touch **SEND**, then select "**Copy to PC Files...**"

If the worksheet has not been saved, you will be prompted to do so; otherwise the following dialog box appears.



Enter File Name

FileName: Sales95.XLS

Description: Sales 95

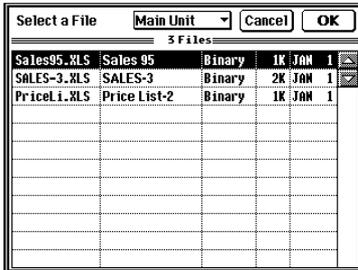
Cancel OK

3. If necessary, change the file name and description.
4. Touch **OK**.
The worksheet is copied to a new PC File in MORE.

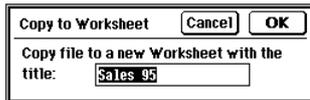
Getting a worksheet from a PC File

1. While in the Worksheet mode or the Index mode, touch **SEND**, then select “**Get from PC Files....**”

If the worksheet has not been saved, you will be prompted to do so; otherwise the following dialog box appears.



2. From the Select a File pop-up menu, select the data source, then select a file from the list.



3. If necessary, change the suggested worksheet title.
4. Touch **OK**.

Replacing with a PC File

1. Make sure you are either in the Worksheet mode, or if you are in the Index mode you have selected a worksheet from the Worksheets tab.
2. Touch **SEND**, then select “**Replace with PC File...**”
3. Select data source, Main Unit or PC Card. Select the PC file. Touch **OK**.



4. Touch **OK**.
Data in the worksheet is replaced with the new one.

NOTE

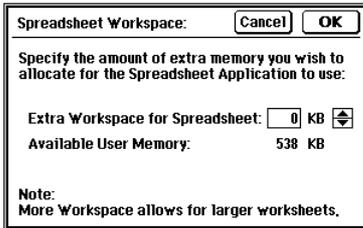
- PenCell can read Excel 3.0 and 4.0 files. It writes Excel 4.0 files. See Appendix E on file compatibility.
- For more details about PC Files, see the other Operation Manual.
- Use an optional Link Software to transfer PC files from/to a PC. For more details on operating the Link Software, see the manual of the Link Software.

Setting the workspace size

By default, PenCell has 128KB of workspace size. You can add more to the workspace size so that you can work with larger worksheets.

To set the workspace size:

1. While in the Index mode, touch **SETUP** and select “**Workspace Size...**”



2. Use \leftarrow or \rightarrow to increase or decrease the extra workspace, in multiple of 32KB. The maximum extra workspace is 384KB. The extra workspace increases at the expense of the user memory.
3. Touch **OK**.

NOTE

If you set a value for the extra workspace, then when you look at the user memory (by touching Memory in TOOLS), this is indicated by the gray, shaded portion in the memory graph.

Troubleshooting

This section answers questions you may have when using PenCell.

Troubleshooting checklist

- A formula entered into a cell remains as text and no calculation is performed.**
 - Make sure the cell has not been formatted to label.
 - Touch **SHOW**, then select “**Hide Formulas**” if it appears on the list.

- Cannot find a menu command to remove the 10-Key Pad from the screen.**
 - When the 10-Key Pad is no longer needed, touch **CLOSE** on the key pad to close it.

- When the formula in a cell is copied into another cell, the formula contents are changed. Can the contents be fixed?**
 - To fix the contents of a formula so that it will not be changed during copying, use the absolute cell reference when specifying the contents.

- A built-in function does not calculate as expected.**
 - Make sure the function is spelled correctly.
 - Make sure the function contains the desired arguments.

❑ **A formula does not calculate as expected.**

- Make sure the order of precedence is correct. If necessary, use parentheses to overwrite the normal order of precedence.
- Touch **UTILS**, then select “**Recalc Options....**” Then see if Auto Recalculation is checked. If Auto Recalculation is not checked, you can perform calculation manually by touching **UTILS** and then selecting “**Calculate Now!**.”

❑ **#REF appears in a cell.**

- Reference is made to a cell that no longer exists.

❑ **#ERR appears in a cell**

- Zero is used as denominator in the formula.
- Parameter range in a function is incorrect.
- There is errors in the formula.
- If the formula depends on other cells, check to see if any one of the cells displays #ERR.

❑ **The gridlines no longer appear.**

- Touch **SHOW**, then select “**Show Gridlines**” to bring it back.

❑ **A message always pops up saying that the cells are protected and cannot be changed.**

- To be able to change the cell contents again, turn off the protection.

❑ **Cannot select a cell or scroll the worksheet.**

- Touch **UTILS** and select “**Unset Titles**”. Or, touch  to zoom out in case Set Titles is selected.

Appendixes

- Appendix A: Menu Functions
- Appendix B: Function Reference
- Appendix C: Spreadsheet Limits
- Appendix D: Keyboard Reference
- Appendix E: File Compatibility

Appendix A: Menu Functions

Menus and functions are available depending on which mode you are in: Index, Worksheet, or Charts.

In Index mode

VIEWS menu

- Index** Use the Index mode to manage worksheets and templates. See page 18.
- Worksheet** Use the Worksheet mode to work on the contents of a worksheet. See page 19.
- Charts...** Use the Charts mode to create and manage charts. See page 19.

A checkmark (✓) appears in front of the current mode.

SETUP menu

Workspace Size...

Changes the workspace size to allow for larger worksheets. See page 75.

EDIT menu

New Worksheet Creates new worksheet. See page 23.

Worksheet Title...

Changes the worksheet title. See page 68.

Duplicate Worksheet...

Makes a copy of the current worksheet. See page 68.

Delete Worksheet

Deletes the current worksheet. See page 69.

Delete Group... Deletes group of worksheets. See page 69.

Secret Entry Turn the worksheet secret. See page 70.

Normal Entry Turn the worksheet normal. See page 70.

LINK TO menu

Contacts... Links the current worksheet to a Contacts entry. See page 74.

Data Files... Links the current worksheet to a Data Files entry. See page 74.

SEND menu

Unit to Unit... Transfers worksheets among units using the Unit to Unit method. See page 70.

Copy to PC Files...

Copies a worksheet to a PC Files entry. See page 71.

Get from PC Files...

Copies a PC Files entry into PenCell as a new worksheet. See page 72.

Replace with PC File...

Copies a PC Files entry into PenCell to replace the current worksheet. See page 73.

Note that when in the Templates tab, only the following functions are available:

- In the VIEWS menu: Index
- In the SETUP menu: Workspace Size
- In the EDIT menu: New Worksheet

In Worksheet mode

VIEWS menu

- Index** Use the Index mode to manage worksheets and templates. See page 18.
- Worksheet** Use the Worksheet mode to work on the contents of a worksheet. See page 19.
- Charts...** Use the Charts mode to create and manage charts. See page 19.

SHOW menu

Show/Hide Gridlines

Shows or hides the gridlines in a worksheet. See page 49.

Show/Hide Formulas

Shows or hides formulas stored in cells of the worksheet. See page 49.

Hide/Show Column/Row Labels

Shows or hides the column or row labels of the worksheet. See page 51.

Show Full Screen

Displays the worksheet in full screen mode. See page 50.

Show/Hide 10-Key Pad

Shows or hides the 10-key numeric pad. See page 28.

FORMAT menu

- Format...** Changes the way contents of the selected cells should be displayed. See page 56.
- Font Style...** Changes the font style of the selected cells. See page 57.
- Alignment...** Aligns the contents of the selected cells. See page 57.
- Borders...** Changes the borders of the selected cells. See page 58.

CELLS menu

- Insert...** Inserts blank cells to the selected cells, but leaves format, font, alignment and border unchanged. See page 47.
- Delete...** Deletes the selected cells. See page 48.
- Clear** Clears contents of the selected cells, but leaves format, font, alignment and border unchanged. See page 46.
- Protect...** Protects or unprotects the selected cells. See page 52.

Set Column/Row Size

Changes column or row size.
See page 59.

Sort... Sorts the selected cells. See page 46.

UTILS menu

Find... Finds desired data in the worksheet.
See page 42.

Go to... Jumps to the desired location in a worksheet. See page 41.

Turn Protection On/Off

Protects or unprotects the worksheet.
See page 52.

Set/Unset Titles Sets or unsets the worksheet title.
See page 51, 52.

Recalc Options...

Sets the recalculation options.
See page 31.

Calculate Now! Performs calculation on the worksheet immediately. See page 31.

Insert Function...

Inserts a built-in function at the selected location in the worksheet.
See page 33.

EDIT menu

New Worksheet Opens a new worksheet. See page 23.

New Chart Creates a new chart based on the selected cells in the worksheet. See page 62.

Worksheet Title...

Changes the worksheet title. See page 68.

Revert to Saved Aborts all the changes made to the worksheet. See page 40.

Save as... Saves the worksheet under a new title. See page 24.

Cut Cuts contents of the selected cells into the clipboard. See page 43.

Copy Copies contents of the selected cells into the clipboard. See page 43.

Paste Pastes contents from the clipboard. See page 43.

Copy Image Copies display image of selected cells to clipboard. See page 45.

Undo Reverses the most recent action. See page 45.

Redo Opposite of **Undo**. Use it if you decide to keep the change after all. See page 15.

Secret Entry Turns the worksheet secret. See page 70.

Normal Entry Turns the worksheet normal. See page 70.

LINK TO menu

Contacts... Links the current worksheet to a Contacts entry. See page 74.

Data Files... Links the current worksheet to a Data Files entry. See page 74.

SEND menu

Unit to Unit... Transfers worksheets among the units using the Unit to Unit method. See page 70.

Copy to PC Files...

Copies a worksheet to a PC Files entry. See page 71.

Get from PC Files...

Copies a PC Files entry into PenCell as a new worksheet. See page 72.

Replace with PC File...

Copies a PC Files entry into PenCell to replace the current worksheet. See page 73.

In Charts mode

VIEWS menu

Index Uses the Index mode to manage worksheets and templates. See page 18.

Worksheet Uses the Worksheet mode to work on the contents of a worksheet. See page 19.

Charts... Uses the Charts mode to create and manage charts. See page 19.

SHOW menu

Show/Hide Title Shows or hides the chart title. See page 64.

Show/Hide Gridlines

Shows or hides gridlines of the chart. See page 64.

Show/Hide Legend

Shows or hides the chart legend. See page 64.

Appendix B: Function Reference

The following built-in functions are available for inclusion in spreadsheet formulas. Each function is described in detail below.

Arithmetic functions

Arithmetic functions (or operators) operate on numeric values or references to numeric values.

$value1 * value2$ Returns the result of multiplying $value1$ by $value2$.

Example: $6*5$ returns 30.

$value1 + value2$ Returns the result of adding $value1$ to $value2$.

Example: $6+5$ returns 11.

$value1 - value2$ Returns the result of subtracting $value2$ from $value1$.

Example: $6-5$ returns 1.

$value1 / value2$ Returns the result of dividing $value1$ by $value2$.

Example: $6/5$ returns 1.2.

$value1 ^ value2$ Returns the result of multiplying $value1$ by itself $value2$ times.

Example: 2^4 returns 16.
 2^{-3} returns 0.125

EDIT menu

New Worksheet Opens a new worksheet. See page 23.

Chart Title... Changes the chart title. See page 64.

Duplicate Chart... Makes a copy of the current chart. See page 66.

Delete Chart Deletes the current chart. See page 66.

Delete Group... Deletes group of charts. See page 66.

Copy Image Copies display image of the current chart to clipboard. See page 66.

ABS(*value*) Returns the absolute value of *value*.

Example: ABS(54) returns 54.
ABS(-54) returns 54.

EXP(*value*) Returns e raised to the power of *value*. e is a constant equal to approximately 2.718281828459045.

Example: EXP(4) returns the approximate value of 54.5982.

INT(*value*) Returns the largest integer less than *value*.

Example: INT(128.35) returns 128 while INT(-128.35) returns -129.

LN(*value*) Returns the natural logarithm of *value*. Natural logs use base e. e is a constant value equal to approximately 2.718281828459045.

Example: LN(A4) returns the natural log of the value in cell A4.

LOG(*value, base*) Returns the common logarithm of a *value* to the *base* you specify or base 10 if *base* is omitted.

Example: LOG(100) returns 2.
Log(A10, 3) returns the log base 3 of the value in cell A10.

LOG10(*value*) Returns the base 10 logarithm of a *value*.

Example: LOG10(86) returns 1.934498451.

MOD(*value, base*)

Returns the remainder (modulus) after *value* is divided by *base*.

Example: MOD (24, 9) returns 6.

PI()

Returns the value of π .

Example: PI() returns 3.14159265...

RAND()

Returns a pseudo random value between 0 and 1.

Example: RAND() * 10 returns a randomly generated value between 0 and 10.

ROUND(*value, digits*)

Rounds *value* to a specified number of digits.

Example: ROUND(23.25,1) returns 23.3. ROUND(23.247,2) returns 23.25. ROUND(234.24,-2) returns 200.

SQRT(*value*)

Returns the square root of *value*.

Example: SQRT(30) returns 5.47723.

SUM (*values...*) Returns the sum of all the *values* in list of arguments.

Example: SUM (23,293,-97,63) returns 282. SUM (A1:A4) returns the sum of *values* in cells A1 to A4.

Date/time functions

All time functions use a 24-hour clock.

The spreadsheets represent date and time information in cells as “serial numbers.”

Creating date and time representations

There are six functions for creating date and time representations:

NOW() Returns current date or time. If the cell is formatted with the date/time format HH:MM:SS, this serial number is displayed as the current time (from the system clock).

Example: NOW() appears as 09:27:45 when the time is 09:27:45 a.m. and the cell is formatted to display the time.

TODAY() Returns the current date (from the system clock) as a serial number. If the cell is formatted with the date/time format DD-MMM-YY, this serial number is displayed as the current date.

Example: TODAY() appears as 03-Sep-96 when the date is September 3, 1996 and the cell is formatted to display the date.

DATE(*year, month, day*)

Returns a serial number corresponding to the date, where *year* is a 2- or 4-digit integer (e.g. 1996 or 96), *month* is an integer from 1 to 12, and *day* is an integer from 1 to 31.

Example: DATE(1996, 3, 22) displays 22-Mar-96.
DATE(1996, 3, 22)+1 displays 23-Mar-96.

NOTE

When you enter a year after 2000, be sure to enter it in four digits.

TIME (*hour, minute, second*)

Returns the fractional value of a particular time, where hour is a value from 0 to 24, minute is a value from 0 to 60, second is a value from 0 to 60.

Example: TIME (15,32,39) returns 0.647674 which is the fractional number representing 15 hours, 32 minutes and 39 seconds. In this encoding, 0 hours is represented by the value 0 and 24 hour is represented by 1.

DATEVALUE(*date_text*)

Converts its argument to a numeric serial value counting the days since the first day of 1900.

Example: DATEVALUE("10/7/96") returns 35345. This number is displayed as 07-Oct-96 if the cell is formatted as DD-MMM-YY.

TIMEVALUE(*time_text*)

Converts its *time_text* argument to a fractional number since the beginning of the day (i.e. midnight).

Example: TIMEVALUE("10:30 PM") is equal to 0.9375. This number is displayed as 22:30:00 if the cell is formatted as HH:MM:SS.

NOTE

Valid date-text and time-text are:

Representations	Example	
DD-MMM-YY	28-Dec-96	<date_text>
DD-MMM	28-Dec	<date_text>
MMM-YY	Dec-96	<date_text>
HH:MM:SS (AM/PM)	02:34:51 AM	<time_text>
HH:MM (AM/PM)	02:34 AM	<time_text>
MM/DD/YY	12/28/96	<date_text>
MM/DD	12/28	<date_text>
HH:MM:SS	02:34:51 (24 hour)	<time_text>
HH:MM	02:34 (24 hour)	<time_text>

Extracting information from date and time representations

There are six functions for extracting information from date and time representations:

- DAY(*date*)** Returns the value of the day in *date*, which is an integer in the range 1 to 31.
Example: DAY(“9/11/96”) returns 11.
- MONTH(*date*)** Returns the value of the month in *date*, which is an integer in the range 1 to 12.
Example: MONTH(“9/11/96”) returns 9.
- YEAR(*date*)** Returns the value of the year in *date*, which is a 4-digit integer representing the year.
Example: YEAR(“9/11/96”) returns 1996.

- HOUR(*time*)** Returns the value of the hour in *time*, which is an integer in the range 0 to 23.
Example: HOUR(“15:08:0”) returns 15.
- MINUTE(*time*)** Returns the value of the minute in *time*, which is an integer in the range 0 to 59.
Example: MINUTE(“15:08:0”) returns 8.
- SECOND(*time*)** Returns the value of the second in *time*, which is an integer in the range 0 to 59.
Example: SECOND(“15:08:0”) returns 0.

Computing with date and time representations

You can use date and time representations in arithmetic expressions. For example:

date_representation + *days*

Returns a new date plus a given number of days (*days*).

date_representation - *days*

Returns a new date minus a given number of days (*days*).

date_representation_date - *representation*

Returns the number of days difference between the two dates.

Financial functions

In the following table, the optional parameters are shown in italic.

DDB(*cost*, *salvage*, *life*, *period*, *factor*)

Calculates double-declining (or specified) balance depreciation for an asset, acquired at cost, with the specified life and estimated final salvage, for the specified period. It assumes the rate at which the balance declines to be 2 (double-declining) if factor is omitted. Accelerates the depreciation rate, to give larger depreciation in earlier periods.

Example: DDB(5500,900,4,1) returns 2750.
DDB(2400,300,10,2,1.5) returns 306.

FV(*rate*, *nper*, *pmt*, *pv*, *type*)

Calculates the future value for fixed payments *pmt* made for the number of periods *nper*, at a constant interest rate. *pv* is the lump-sum amount that a series of future payments is worth right now. It is assumed to be 0 if *pv* is omitted. The function assumes that payments are made at the end of each period if *type* is 0 or omitted, at the beginning of the month, if *type* is equal to 1.

Example: FV(0.083,25,-1500) returns 114583.
FV(0.5%,10,-200,-500,1) returns 2581.40.

IRR(range, *guess*)

Calculates the internal rate of return for a range of values that occur at equal and regular intervals. *guess* is a starting approximation to the expected result, or assumed to be 0.1 (10%) if omitted.

Example: IRR(C9:G9) returns -2.12% where C9:G9 contains (-70000, 12000, 15000, 18000, 21000).
IRR(C9:E9, -10%) returns -44.35% (same interval as above.)

NPER(rate, pmt, pv, *fv*, *type*)

Calculates the number of periods for an investment pv based on periodic, constant payments pmt and a constant interest rate. *fv* is the cash balance after the last payment is made. If *fv* is omitted, it assumes to be 0. If *type* is 0 or omitted, it is assumed that payments are made at the end of each period, if *type* is 1, at the beginning of month.

Example: NPER(1%,-100,1000) returns approximately 11.
NPER(12%/12,-100,-1000,10000,1) returns approximately 60.

NPV(rate, values...)

Computes the net present value for a range or a series of values that occur at equal and regular intervals, when discounted at a fixed, periodic interest rate. It assumes that cash flow occurs at the end of each period.

Example: NPV(8%,C15:G15) returns 41922.1 where C15:G15 contains (8000, 9200, 10000, 12000, 14500).
NPV(10%,-10000,3000,4200,6800) returns 1188.44.

PMT(rate, nper, pv, *fv*, *type*)

Computes the periodic payment needed to pay off the starting principal pv over the number of periods nper, at a fixed interest rate. It assumes the future value, or a cash balance after the last payment is made, to be 0 if *fv* is omitted; it also assumes the payments are made at the end of each period if *type* is 0 or omitted, and at the beginning of the month if *type* is 1.

Example: PMT(1%,5,-5000) returns 1030.20.
PMT(8%/12,10,10000,0,1) returns -1030.16.

PV(rate, nper, pmt, fv, type)

Computes the present value for a fixed payment pmt made for the number of periods nper, at a fixed interest rate. It assumes the future value to be 0 if fv is omitted, assumes the payments are made at the end of the periods if type is 0 or omitted, and at the beginning of the month if type is 1.

Example: PV(7.5%,20,-10000) returns 101944.91.

PV(0.08/12,12*20, -500, 10000,1) returns 58145.95.

RATE(nper, pmt, pv, fv, type, guess)

Computes the periodic interest rate required for a fixed payment pmt made for the number of periods nper to have the present value pv. It assumes that the future value to be 0 if fv is omitted. It assumes payments to be made at the end of the periods if type is 0 or omitted, and at the beginning of the periods if type is 1. guess is as a starting approximation to the expected result; it is assumed to be 10% if omitted.

Example: RATE(48, -200, 8000) returns 0.77%. The annual rate would be 0.77%*12 which is 9.2%. RATE (60, -700, 100000, -140000, 1, 1%) returns 0.0117 (or 1.17%).

SLN(cost, salvage, life)

Computes the straight-line depreciation of an asset, acquired at cost, with the specified life and estimated final salvage value. It spreads the rate of depreciation evenly among all periods.

Example: SLN(30000, 7500, 10) returns 2250.

SYD(cost, salvage, life, per)

Calculates the sum-of-the-years depreciation for an asset, acquired at cost, with specified life and estimated final salvage, for the specified period per.

Example: SYD(30000, 7500, 10, 1) returns 4090.91.

Logical functions

Logical functions let you use conditions in building formulas. Use them when you want the outcome of a computation or a returned value to determine some other value assignment or to control the sequence of operations. You can also use logical functions to determine values and control operations when error conditions occur and when special input types are used. Using logical functions to test for such conditions helps you avoid errors which might otherwise ripple throughout the spreadsheet.

AND(values...)

Evaluates each of the arguments. Returns TRUE if all the arguments are TRUE; returns FALSE if one or more is FALSE.

Example: AND(TRUE(), TRUE(), FALSE()) returns FALSE.

FALSE()

Returns the logical value FALSE.

IF(cond, true, false)

Evaluates the cond expression. If cond is true, it evaluates and returns the value of true part. Otherwise, it evaluates and returns the value of false part or FALSE if false part is omitted.

Example: IF(B5>5, "Bigger", "Smaller") returns "Bigger" if B5 is greater than 5, and "Smaller", otherwise.

IF(A1, "OK") returns "OK" if A1 is TRUE and FALSE, otherwise.

IF(B1>A1, 24*(B1-A1), 24-24*(A1-B1)) is an example of a more complicated **IF** function.

NOT(value)

Reverses the logical value of its argument.

Example: NOT(FALSE()) returns TRUE.

OR(values...)

Returns TRUE if one or more of the arguments is TRUE; returns FALSE if all arguments are FALSE.

Example: OR(FALSE(), TRUE()) returns TRUE.

TRUE()

Returns the logical value TRUE.

Miscellaneous functions

CHOOSE(index, values ...)

Chooses a value from a list. If index evaluates to 1, the first value is returned; if it evaluates to 2, the second value is returned and so on.

Example: CHOOSE(4, "mon", "tue", "wed", "thur", "fri") returns "thur".

COLUMNS(range)

Returns the number of columns in the range.

Example: COLUMNS(\$A\$8:\$K\$9) returns 11.

HLOOKUP(key, range, row)

Looks in the first row of the range for the largest value that is less than or equal to key. Then it moves down the column and returns the value in the specified row. The row index starts from one. The values in the first row (key row) should be sorted in ascending column order. For alphabetic comparison, the search is case-sensitive. That is, the key "Orange" will match "Orange" and not "orange".

Example: HLOOKUP(5, A1:D3, 2) returns "c" where the content of range A1:D3 in row order is
{2, 3, 5, 8}
{8, b, c, d}
{10, f, g, h}

INDEX(range, row, col)

Uses a row and col index to choose a value from a range.

Example: Assume C10:E11 in row order contains the values:

{5, 2, 7},

{8, 4, 9}.

Then INDEX (C10:E11, 1, 3) returns 7 which is the content of the cell in row 1 column 3 of the range.

ISBLANK(value)

Returns TRUE if value is blank, and FALSE, otherwise.

Example: ISBLANK(C13) returns TRUE when C13 is empty.

ISERR(value)

Returns TRUE if value is any error value except NA (Not Available), and FALSE, otherwise.

Example: ISERR(NA()) returns FALSE.

ISERROR(value)

Returns TRUE if value is any error value, and FALSE, otherwise.

Example: ISERROR(NA()) and ISERROR(1/0) both return TRUE.

ISNA(value)

Returns TRUE if value is the error value NA (Not Available), and FALSE, otherwise.

Example: ISNA(NA()) returns TRUE.

ISNUMBER(value)

Returns TRUE if the value is a number, and FALSE, otherwise.

Example: ISNUMBER(D21) returns TRUE where D21 has the value 298.

NA()

Returns the error value NA (Not Available). If a formula refers to a cell having value NA, the formula also returns NA. The NA() function is useful when you want to guard against using an empty cell with unavailable information in your computation.

ROWS(range)

Returns the number of rows in a reference.

Example: ROWS(A3:G6) returns 4.

VLOOKUP(key, range, col)

Looks in the first column of the range for the largest value that is less than or equal to key. Then it moves in the right direction in the row and returns the value in the specified col. The column index starts from one. The values in the first column (key column) must be sorted in ascending row order. For alphabetic comparisons, the search is case-sensitive. That is, the key “Orange” will match “Orange” and not “orange”. You can use sort tool to sort the range the right order.

Example: VLOOKUP(8, A1:D3, 3) returns “c” where the content of range A1:D3 in row order is
{2, 3, 5, 8}
{8, b, c, d}
{10, f, g, h}

Relational functions

Relational functions operate on numeric values, references to numeric values, and labels.

value1 < value2 Returns TRUE if value1 is less than value2, FALSE otherwise.

Example: 5<7 returns TRUE.

value1 <= value2 Returns TRUE if value1 is less than or equal to value2, FALSE otherwise.

Example: 8<=10 returns TRUE.

value1 <> value2 Returns TRUE if value1 is not equal to value2, FALSE if value1 equals value2.

Example: 3<>6 returns TRUE.

value1 = value2 Returns TRUE if value1 equals value2, FALSE otherwise.

Example: 5=2 returns FALSE.

value1 > value2 Returns TRUE if value1 is greater than value2, FALSE otherwise.

Example: 8>8 returns FALSE.

value1 >= value2 Returns TRUE if value1 is greater than or equal to value2, FALSE otherwise.

Example: 9>=3 returns TRUE.

Statistical functions

For statistical functions that accept a list of values as arguments, the values can be any combination of numbers, numeric formulas, cell references, and cell ranges.

AVERAGE(values...)

Returns the average of the values.

Example: AVERAGE(79, 83, 92, 82, 90) returns 85.2.

COUNT(values...)

Counts how many numbers (including date and time values) are in the argument list.

Example: COUNT(C2:E2) returns 1 where C2 contains “a label”, D2 is empty and E2 contains 15.6.

COUNTA(values...)

Counts how many non-empty cells are in the argument list.

Example: COUNT(C2:E2) returns 2 where C2 contains “a label”, D2 is empty and E2 contains 15.6.

MAX(values...) Returns the largest value in the argument list.

Example: MAX(12, 29, 8, -39) returns 29.

MIN (values...) Returns the smallest value in the argument list.

Example: MIN(-5, 29, 32, 7) returns -5.

STDEVP(values...)

Calculates standard deviation of the population as given.

Example: STDEVP(45, 68, 22, 70, 50, 39) returns 16.5731.

VARP(values...) Calculates the variance of the population as given.

Example: VARP(45, 68, 22, 70, 50, 39) returns 274.67.

NOTE

Blank cells in the argument range of these functions are ignored: MIN, MAX, STDEVP, VARP and AVERAGE.

Trigonometric functions

Trigonometric functions operate on numeric values or references to numeric values. The angle values are generally expressed in radians.

ACOS(value) Returns the arccosine of a value. The value cannot be less than -1 or greater than 1.

Example: ACOS(-0.5) returns 2.094.

ASIN(value) Returns the arcsine of a value. The value cannot be less than -1 or greater than 1.

Example: ASIN(-0.5) returns -0.524.

ATAN(value) Returns the arctangent of a value. The returned value is in the range $-\pi/2$ to $\pi/2$.

Example: ATAN(1) returns 0.785.

ATAN2(xvalue, yvalue)

Returns the arctangent of yvalue divided by xvalue. The returned value is in the range $-\pi$ to π .

Example: ATAN2(3,1) returns 0.322.

COS (value) Returns the cosine of a value which is an angle.

Example: COS(1.047) returns 0.500171.

SIN (value) Returns the sine of a value which is an angle.

Example: SIN(PI()/2) returns 1.

TAN (value) Returns the tangent of a value which is an angle.

Example: TAN(2.328) returns -1.058041.

Appendix C: Spreadsheet Limits

The following table summarizes the spreadsheet limits:

Description	Minimum	Maximum
Number of columns		64
Number of rows		128
Charts saved in worksheet	0	20
Rows in a chart	1	40
Columns in a chart	1	40
Nesting level of parentheses in a formula	0	12
Number of arguments in a function var-arg function like SUM(), OR(), etc.		30
Number of terms in a formula		60
Depth of chained circular formulas	N/A	40
Numeric value	2.225073e-308	1.797693e308
Number of iterations	1	99

Description	Minimum	Maximum
Iteration epsilon	1e-6	99
Number of characters in a cell	N/A	255
Number of decimal places in numerics	0	15
File size		Depends on available memory resources.

Appendix D: Keyboard Reference

The following table summarizes the keys for use in the three modes:

- Index mode (Worksheets tab, Templates tab)
- Worksheet mode
- Charts mode

Key	Index Mode (Worksheets tab)	Index Mode (Template tab)	Worksheet Mode (When Editbar inactive)	Chart Mode
ENTER	View worksheet	Open template	Enter editbar mode	
DEL	Delete worksheet		Clear	Delete chart
CANCEL/ON/QUIT			Cancel edit bar mode	View worksheet
RETURN ↵			Go to first column of next row	
NEW ENTRY	New worksheet	New worksheet	New worksheet	
PREV	Page up	Page up	Page up	Previous chart
NEXT	Page down	Page down	Page down	Next chart
2nd + PREV			Page left	
2nd + NEXT			Page right	
UP ↑	Move to worksheet entry above	Move to template entry above	Move to cell above	
DOWN ↓	Move to worksheet entry down	Move to template entry down	Move to cell below	
RIGHT →			Move to cell on the right	
LEFT ←			Move to cell on the left	

Key	Index Mode (Worksheets tab)	Index Mode (Template tab)	Worksheet Mode (When Editbar inactive)	Chart Mode
SHIFT+UP _↑			Extend selection upward	
SHIFT+DOWN _↓			Extend selection downward	
SHIFT+RIGHT _→			Extend selection to the right	
SHIFT+LEFT _←			Extend selection to the left	
GET	Unit to Unit Get operation	Unit to Unit Get operation	Unit to Unit Get operation	
SEND	Unit to Unit Send operation		Unit to Unit Send operation	
MENU	Open VIEWS menu	Open VIEWS menu	Worksheet: open VIEWS menu Full screen: collapse and open VIEWS menu	Open VIEWS menu
2nd MENU	Open VIEWS menu	Open VIEWS menu	Open pop-up menu	Open VIEWS menu
Touch	Select entry	Select entry	Select a single cell	Select
Drag			In selection: drag move Outside selection: select range	
2nd + Touch			In selection: reduce selection Outside selection: extend selection	
2nd + Drag			In selection: drag copy Outside selection: extend selection	

Key	Index Mode (Worksheets tab)	Index Mode (Template tab)	Worksheet Mode (When Editbar inactive)	Chart Mode
2nd + X			Cut	
2nd + C			Copy	Copy image
2nd + V			Paste	
2nd + Z			Undo	
2nd + A			Redo	
2nd + P	Print screen	Print screen	Print screen	Print screen
2nd + Y			Use plain font style	
2nd + U			Use underline font style	
2nd + I			Use italic font style	
2nd + O			Use bold font style	
2nd + F			Open find dialog	

Appendix E: File Compatibility

PenCell can read Excel 3.0 and Excel 4.0 files. It writes to Excel 4.0 files.

Only a subset of Excel's features and functions are supported in PenCell. Unsupported functions, after being imported into PenCell, evaluate to error value and are displayed in edit bar with the prefix XL_ (such as XL_DMAX(...)).



Communication Applications

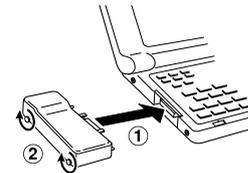
Before you start

The unit must be connected to a modem in order to use a communication software. You can use either the SHARP CE-FM4 Fax/Modem or a PC Card modem.

Connecting to a modem

Connecting to the SHARP CE-FM4 Fax/Modem

1. Make sure the unit is turned off.
2. Slide up and remove the protective cover of the unit's Computer Link Port to expose the 15-pin connector. Remove the two rubber plugs on either side of the connector and install them and the port cover in their storage positions on the modem.
3. Connect the modem's 15-pin interface connector to the Computer Link Port on the unit, and secure the unit with the thumb-screws.



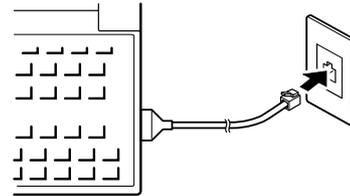
4. With a modular telephone cable, connect the modem to a telephone outlet.
5. Turn on the unit.

Connecting to a PC Card modem

Be sure to use only a recommended PC Card modem. Using card modems that are not recommended may result in damage to the main unit and/or loss of data. If you are not sure whether a particular modem is compatible, consult your SHARP dealer.

You also need the modular telephone cable supplied with the modem to complete the steps below.

1. Make sure the unit is turned off.
2. Insert the PC Card into the PC Card slot on the side of the unit.
3. With the supplied modular cable, connect the modem to a telephone outlet or a cellular phone.
4. Turn on the unit.



The connection varies with the PC card.

CompuServe

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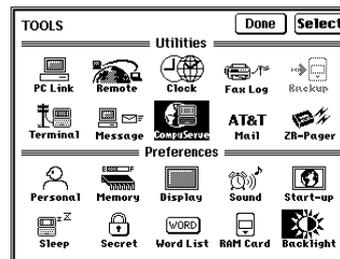
Quick Start

This section is a quick start to setting up and running CompuServe Access Software.

This section assumes you have already joined CompuServe.

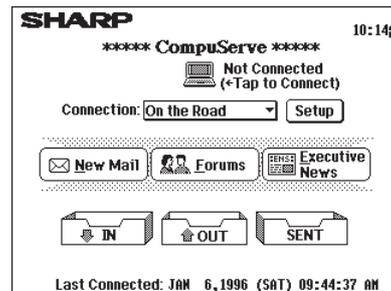
Starting CompuServe Access Software

1. Touch TOOLS.



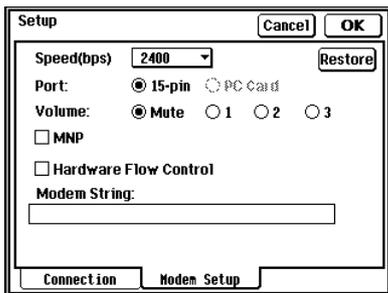
* The contents of the TOOLS screen may differ depending on the version for your country.

2. Touch the CompuServe icon twice. If the unit is locked, you need to enter the password. The main screen will appear.



Setting up your modem

1. From the main screen, touch **Setup**, then touch the Modem Setup tab.



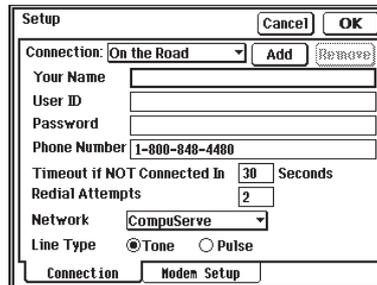
The screenshot shows a 'Setup' dialog box with a 'Cancel' button and an 'OK' button. The 'Modem Setup' tab is selected. The 'Speed(bps)' is set to 2400 with a 'Restore' button. The 'Port' is set to 15-pin (selected) and PC Card. The 'Volume' is set to Mute (selected), with options for 1, 2, and 3. There are checkboxes for 'MNP' and 'Hardware Flow Control'. A 'Modem String' text field is empty. At the bottom, there are tabs for 'Connection' and 'Modem Setup'.

2. Make any necessary changes to these settings.
3. Touch **OK** to save the changes.

Setting up connections

You can connect to CompuServe from different places or via different networks, as follows:

1. From the main screen, touch the **Setup** button.
2. Touch **Add** and enter a new connection name. Then touch **OK**.

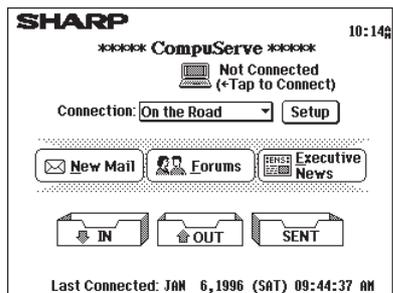


The screenshot shows a 'Setup' dialog box with a 'Cancel' button and an 'OK' button. The 'Connection' tab is selected. The 'Connection' dropdown is set to 'On the Road', with 'Add' and 'Remove' buttons. The 'Your Name', 'User ID', and 'Password' fields are empty. The 'Phone Number' is set to 1-800-848-4480. The 'Timeout if NOT Connected In' is set to 30 Seconds. The 'Redial Attempts' is set to 2. The 'Network' dropdown is set to 'CompuServe'. The 'Line Type' is set to Tone (selected), with an option for Pulse. At the bottom, there are tabs for 'Connection' and 'Modem Setup'.

3. Enter your name, ID, password, and access number. Use NEXT/PREV keys to move between fields.
4. Touch **OK** to save the changes.

Connecting to CompuServe

After you have set your modem and connection preferences, you are ready to connect to CompuServe.



1. From the main screen, use the Connection pop-up menu to select a connection.
2. Touch the  icon then **OK** to connect to CompuServe.

To disconnect

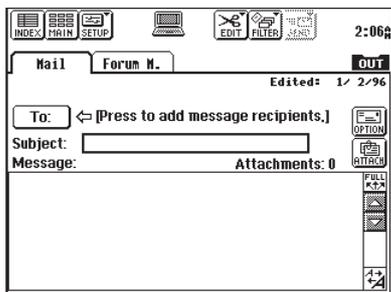
To disconnect, touch .

NOTE

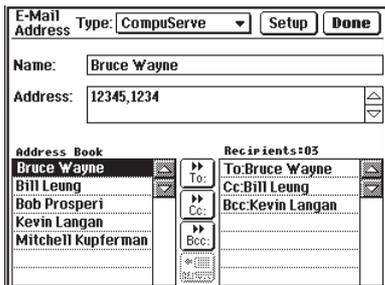
Many operations in CompuServe can be done both on-line and off-line.

Creating Mail

1. If necessary, touch **MAIN** to go back to the main screen, then touch the **OUT** tray.
2. From the Mail index view, touch **EDIT**, then select "**Create Mail**"



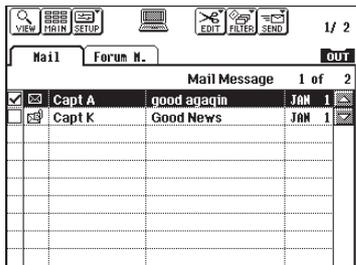
3. Touch **To:** to display the following screen.



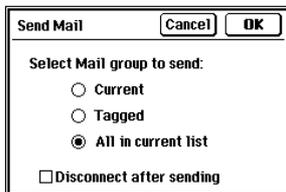
4. Use the **Type:** pop-up menu if the recipient is on a network other than CompuServe. Select a name from the Address Book list, then touch **To:**, **Cc:** or **Bcc:** to put the name into the Recipients list. Alternatively, you can type the name and user ID of the recipient, then touch **To:**, **Cc:**, or **Bcc:**. Repeat this step until you have specified all the desired recipients, then touch **Done**.
5. If desired, touch **OPTION** to specify Importance and Sensitivity. To attach a file (one file maximum), touch **ATTACH**.
6. Type a subject title and a message in the **Subject** and **Message** fields respectively.
7. Press **ENTER** to save the message (to the OUT tray).

Sending Mail

1. While in the Mail index view of the **OUT** tray, tag entries you want to send by touching their checkbox.



2. Touch **SEND**, then select “Send Mail....”



3. Select the current message only, all tagged messages, or all messages.
4. Touch **OK** to send (connect to CompuServe).

Getting Mail

1. From the main screen, touch the **New Mail** icon.
2. A list of new mail messages will appear. The Receipt Notification and Sensitivity information of the selected message, if available, will also appear above the list.

To read a message on-line

Touch a message entry twice.

To save messages to the unit

Tag any messages you want to save. Then touch **SEND** and select “**Save to IN...**” to save mail messages to the **IN** tray.

When the **Save to IN** dialog appears, specify the type of messages to save. You can also select to disconnect after the messages are saved.

Reading Mail off-line

1. If necessary, touch **MAIN** to go back to the main, then touch the **IN** tray.
2. From the index view, touch a mail message entry twice to read it.

To reply

1. While reading a message (or from the Mail index view of the **IN** tray), touch **EDIT**, then select "**Reply**."
2. Select **Reply to Author Only** or **Reply to All Recipients**.
Check the **Include Original Message** box to include a copy of the original message in the reply message.
3. Touch **OK**.
4. Type in a message and press **ENTER** to save the reply.

Commonly Asked Questions & Answers

Q: What do I need to use CompuServe Access Software?

A: First, you must join CompuServe and get an account number and password. If you don't already have one, call CompuServe and they will send you PC or Macintosh disks that will allow you to sign up using your personal computer (and your personal computer's modem). See the CompuServe brochure included in this box for more details. Second, you also need a modem (either the CE-FM4 or a PC card modem) for the ZR-5700/ZR-5800.

Q: What do "on-line" and "off-line" mean?

A: When the unit is connected to CompuServe, it is said to be on-line. When it is disconnected, it is said to be off-line.

Q: Do I need to join a forum before I can use it?

A: No. If you add a forum to your forum list, the unit will automatically join the forum for you the first time you access it.

Q: Where on CompuServe is Zaurus discussed?

A: Put "Zaurus" into your forum list and go to that forum. There you will find a lot of ideas to help you use your Zaurus more effectively.

Q: Can I reply to mail or forum messages while on-line?

A: No. You cannot create messages on-line. You must first download messages ("Save to IN") and then reply off-line. You can then send these messages next time you connect to CompuServe. You cannot create new messages on-line either. This software was designed as a mobile CompuServe companion. It minimizes your time on-line and lets you work extensively off-line (such as on a train, plane, etc.).

Q: Can I send the same mail or forum message to several recipients at the same time?

A: Yes. When creating a message, use the **Recipients** list to name one or more recipients.

Q: I have some data that I would like to send to others. Can I do that?

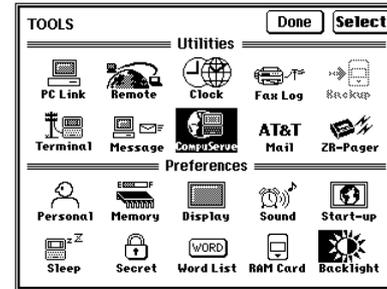
A: Of course you can! Filer and PC File data can be sent as an attachment. When you compose a new mail message, use the **ATTACH** button to attach a file to the message. You can attach only one file to each message.

Introduction

This section gives you general information about CompuServe Access Software application in your unit.

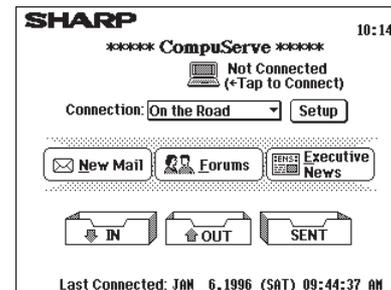
Starting CompuServe Access Software

1. Touch **TOOLS**.



* The contents of the TOOLS screen may differ depending on the version for your country.

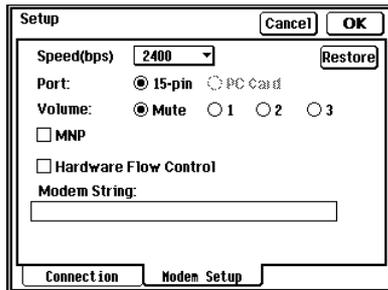
2. Touch the CompuServe icon twice. If the unit is locked, you need to further enter the password.
The main screen will appear.



Setting up your modem

You need to set up your modem, as follows:

1. Make sure the unit is not connected to CompuServe. From the main screen, touch **Setup**, then touch the Modem Setup tab.



2. Make any necessary changes to these settings. See the “Modem settings” section for details.
You can restore the modem settings to the default values by touching **Restore**. When prompted, touch **Yes**.
3. Touch **OK** to save the changes.

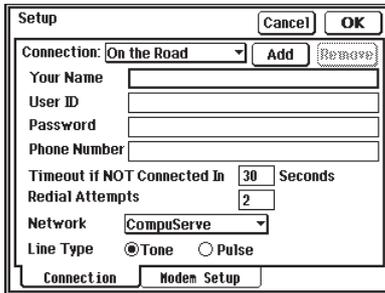
Modem settings

Speed	Specify a modem speed to use.
Port	Specify if communication with the modem is via the 15-pin connector or the PC card.
Volume	If your modem has a built-in speaker, you can adjust the sound you hear when the modem is dialing or connecting. A value of 3 gives you the highest volume. Selecting Mute turns off the speaker. (This function is not valid for the CE-FM4 Fax/Modem.)
MNP	Check to use MNP (Microcom Network Protocol) if this is supported by your modem. MNP corrects data errors caused by line noise, etc. (The CE-FM4 Fax/Modem, however, does not support this function.)
Hardware Flow Control	Provide data flow control for high speed communication.
Modem string	Some modems requires you to initialize it with a modem initialization string. Refer to the modem’s manual to see if any string is required.

Setting up connections

You can connect to CompuServe from different places or via different networks, as follows:

1. Make sure the unit is not connected to CompuServe. From the **Setup** screen, touch the Connection tab.
2. Touch **Add** and enter a new connection name. Then touch **OK**.



The screenshot shows a 'Setup' dialog box with the following fields and controls:

- Connection:** A dropdown menu currently showing 'On the Road', with 'Add' and 'Remove' buttons next to it.
- Your Name:** A text input field.
- User ID:** A text input field.
- Password:** A text input field.
- Phone Number:** A text input field.
- Timeout if NOT Connected In:** A numeric input field set to '30', followed by the text 'Seconds'.
- Redial Attempts:** A numeric input field set to '2'.
- Network:** A dropdown menu currently showing 'CompuServe'.
- Line Type:** Two radio buttons, 'Tone' (which is selected) and 'Pulse'.
- At the bottom, there are two tabs: 'Connection' and 'Modem Setup'.
- At the top right, there are 'Cancel' and 'OK' buttons.

3. Make any necessary changes to these settings. See the “Connection settings” section for details.
4. Touch **OK** to save the changes.

Connection settings

Your name	The name to identify yourself on CompuServe
User ID	The ID required to access CompuServe
Password	The password required to access CompuServe
Phone Number	The number of the access point to CompuServe
Timeout	The time to wait before hanging up the phone
Redial Attempts	The number of times the unit should redial if it cannot connect successfully. The acceptable redial range is from 0 to 2. A value of 0 means there will be no redial.
Network	Use this pop-up menu to select a network to access CompuServe.
Line Type	Choose between tone or pulse dialing.

About the “On the road” connection

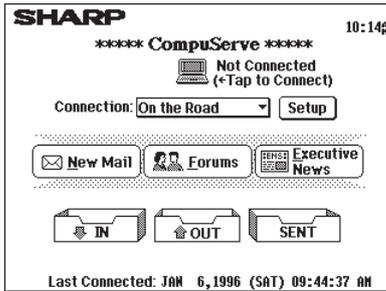
This is the default with the CIS 800#.

To remove a connection

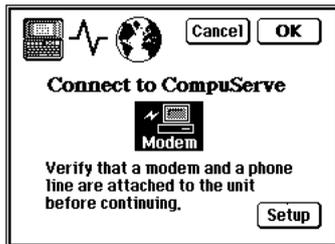
While in the **Connection** tab, select a connection from the Connection pop-up menu and touch **Remove**. When prompted, touch **Yes**.

Connecting to CompuServe

After you have set your modem, connection, and preferences you are ready to connect to CompuServe.



1. From the main screen, use the Connection pop-up menu to select a connection point.
2. Touch the  icon to connect to CompuServe.



To disconnect

To disconnect, touch .

NOTE

Many operations in CompuServe can be done both on-line and off-line.

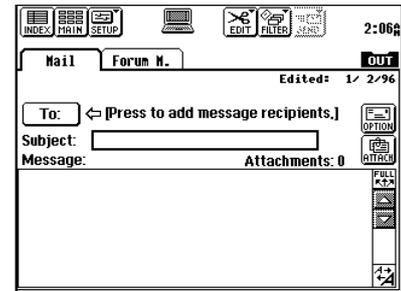
Mail

You can create, send, get, and read mail.

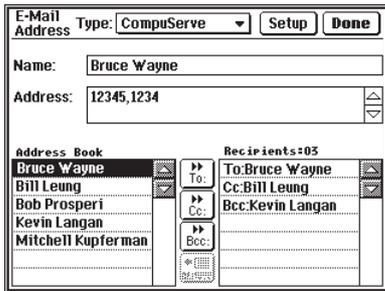
Creating mail

Create a mail message as follow:

1. If necessary, touch **MAIN** to go back to the main screen, then touch the **OUT** tray.
2. From the Mail index view, touch **EDIT**, then select “**Create Mail.**”



3. Touch **To:** to display the following screen.



4. Use the **Type:** pop-up menu if the recipient is on a network other than CompuServe. Select a name from the Address Book list, then touch **To:**, **Cc:**, or **Bcc:** to put the name onto the Recipient list. Alternatively you can type the name and user ID of the recipient, then touch **To:**, **Cc:**, or **Bcc:**. Repeat this step until you have specified all the desired recipients, then touch **Done**.

5. If desired, touch **OPTION** to specify Importance and Sensitivity. The Importance pop-up menu contains: Low, Normal and High. The Sensitivity pop-up menu has: Normal, Personal, Private and Confidential. To attach a file (only one file allowed), touch **ATTACH**.
6. Type a subject title and a message in the **Subject** and **Message** fields respectively.
7. Press **ENTER** to save the message (to the OUT tray).

NOTE

- Touch **FULL** or **2nd W** to display the message in full screen mode. Then touch **SMALL** or **2nd W** to return to the normal mode.
- Touch **↕** repeatedly to display the message content in small, normal or large font.
- You can also check the spelling. To use this function, press **2nd S**.

Sending mail messages

To attach data

1. While composing a message, you can touch **ATTACH** to attach Filer or PC File data to the message. (only one file allowed)

The dialog box is titled "Message Attachments" and has buttons for "Attach", "Detach", "Delete", and "Done". It contains the following fields:

File Name:
Description:
Type:
Size:

2. Touch **Attach**.

The dialog box is titled "Select Attachment Type" and has buttons for "Cancel" and "OK". It contains two radio button options:

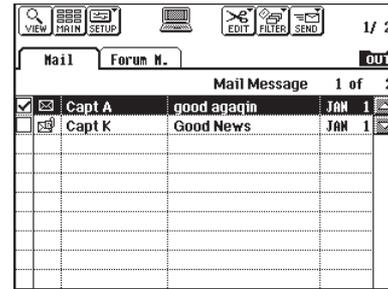
FILER Folders
 PC FILES Directory

3. Select the attachment type, then touch **OK** to select the data.
4. Select a Folder or a PC File, then touch **Attach**.
5. Touch **Done** to attach the data.

NOTE

You can also use the **Send** menu in FILER to send a Filer folder as an attachment.

1. While in the Mail index view of the **OUT** tray, Tag entries you want to send by touching their checkbox.



2. While in the Mail index view of the **OUT** tray, touch **SEND**, then select "**Send Mail...**"

The dialog box is titled "Send Mail" and has buttons for "Cancel" and "OK". It contains the following options:

Select Mail group to send:

Current
 Tagged
 All in current list

Disconnect after sending

3. Specify to send the current message only, all tagged messages, or all messages. Also decide if you want to disconnect after sending by touching the checkbox. Depending on the settings in the Preferences, the sent mails may be deleted automatically or moved to the **SENT** tray.
4. Touch **OK** to send (connect to CompuServe).

Getting mail messages

1. From the main screen, touch the **New Mail** icon.
2. A list of new mail messages appears. The Receipt Notification and Sensitivity information of the selected message, if available, will also appear above the list. The Importance status can be Low, Normal or High. The Sensitivity status can be Normal, Personal, Private, or Confidential.

To read a message on-line

Touch a message entry twice.

To filter out unwanted messages

Touch **FILTER** and check the desired options. Only messages meeting the filter conditions appear on the list.

To save messages

If desired, tag messages you want to save. Then touch **SEND** and select "**Save to IN...**" to save mail messages to the **IN** tray.

When the **Save to IN** dialog appears, specify the type of messages to save. You can also select to disconnect the CompuServe connection after the messages are saved.

Reading mail messages off-line

1. If necessary, touch **MAIN** to go back to the main, then touch the **IN** tray.
2. While in the Mail index view, touch a mail message twice to read it.

To reply

1. While reading a message (or from the Mail index view of the IN tray), touch **EDIT**, then select "**Reply**."
2. Select **Reply to Author Only** or **Reply to All Recipients**.
Check the **Include Original Message** box to include a copy of the original message in the reply message.
3. Complete the rest of the message in the same way you create a new message in the OUT tray. Be sure to press **ENTER** to save the message when finished.

To forward a message

1. While reading a message (or from the Mail index view of the IN tray), touch **EDIT**, then select "**Forward**."
A copy of the original message is included in the message body.
 2. Complete the rest of the message in the same way you create a new message in the OUT tray. Be sure to press **ENTER** to save the message when finished.
- Status Icon: The icon shows the status of a message at a glance. Possible icons include:
 -  Unopened messages.
 -  Messages that you have read.
 -  High-priority messages.
 -  Low-priority messages.
 -  Messages with an attachment.

Forums

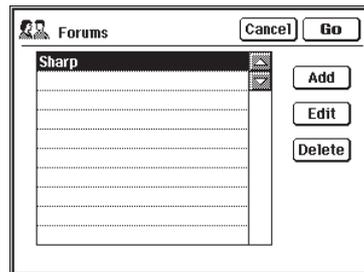
On CompuServe, each forum consists of two major areas; messages and libraries: the software provides two tabs to correspond to the two groups.

The message group is divided into sections. The number of sections vary from forum to forum, and are pre-set by the forum system operator (Sysop). Within each section, you can post messages. When someone posts a forum message and others respond, these messages are linked together as one topic for easy tracking and retrieval; the number of messages in a topic may grow as more and more people respond. If no one replies to a message, the topic will consist of only 1 message.

The result is three “levels” consisting of a section index, a topic index, and the individual message details. Note there is no “index” of messages.

Going to a forum

1. If necessary, touch **MAIN** to go back to the main screen, then touch **Forums**.



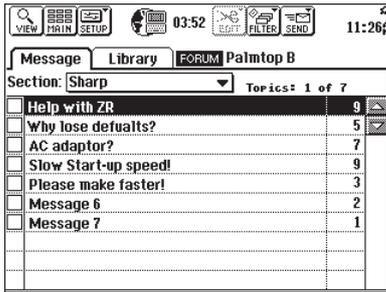
2. Select a forum, then touch **GO**.
If necessary, touch **Add** and type the forum description and service name (or the forum's “Go” word) to add a new one. Then touch **OK**.
3. You will now enter the selected forum.
It will automatically join the forum if this is the first time you visit it.

To go to another forum

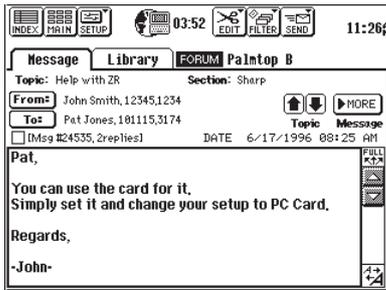
Touch **MAIN** and repeat the above steps again.

Reading a forum message on-line

1. While in the section view of a forum, touch a section of interest twice (or touch **INDEX**, or press **ENTER**).



2. Touch a topic of interest twice (or touch **VIEW**, or press **ENTER**).
If you want to go to a different section, use the Section pop-up menu.



3. Read the message using the scroll bar, if necessary, to see the rest of the message.

Touch **FULL** to get a full screen view, or touch **SMALL** to return to the normal view.

Use **MORE** to see the next message. To go to another topic, touch **↑** or **↓**. **MORE** will continue to display the next message even across topics.

Use **PREV** key to see the top message of the topic.

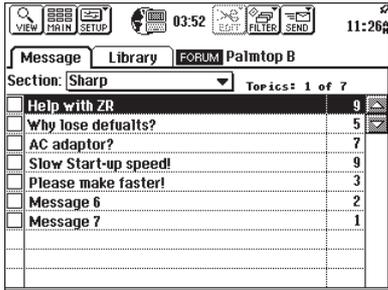
Filtering messages

While in the section view, touch **FILTER** and select "**Forum Message....**" Then set the filter condition and touch **Filter**.

To turn off the filter, touch **FILTER**, then select "**Turn Off View Filter.**" Also, when you leave the forum, the filter will be reset to the default one.

Downloading forum messages

1. While in the section view of a forum, touch a section of interest twice.



2. To download all messages related to a topic, tag the topic.

If you only want to download selected messages, touch the topic twice to go into each message and check each one individually. When you return to the section view, the checkbox of each entry may either be , , or to indicate that all, some or no messages of this topic are tagged.

3. Touch **SEND**, then select “**Save to IN...**”
4. Select the download option, then touch **OK** to start the download.

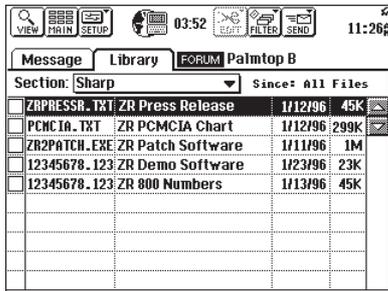
NOTE

- You can only download topics and/or messages from one section at a time. Downloading messages from different sections in a forum at once is not possible.
- In the **Save to IN** dialog, if you have selected the Disconnect after receiving checkbox, then unit will disconnect automatically after downloading the messages.
- Once downloaded, you can respond to messages (or create new messages) by going off-line and then going to the IN tray. After responding you can then send these messages.

Downloading library files

You can download files from CompuServe (but not upload files), as follows:

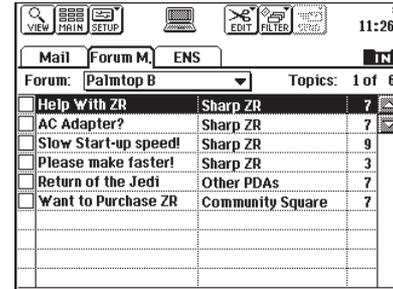
1. Select the Library tab, then touch a section name twice.
If required, touch **FILTER** and select “**Forum Library...**” to set a filter.



2. Touch a file twice to see its description. To download, tag the files of interest, then touch **SEND** and select “**Save to IN...**”
Files will actually be downloaded to the PC Files area.
3. Select the download options, then touch **OK**.

Reading forum messages off-line

1. Touch the **IN** tray and touch **Forum M**.



2. Use the Forum pop-up menu to select a forum. Each entry consists of the topic (“thread”) title, the section it belongs, and the number of messages in the thread.
3. Touch (or press **ENTER**, or touch **VIEW**) a message entry twice to see its contents.

Responding to a message

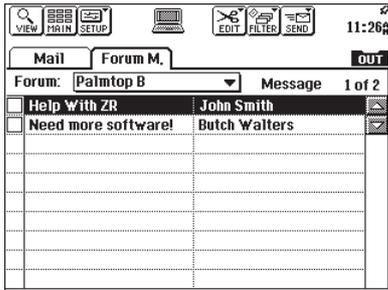
While in the index view, touch **EDIT** and select “**Reply**.”

Filtering messages

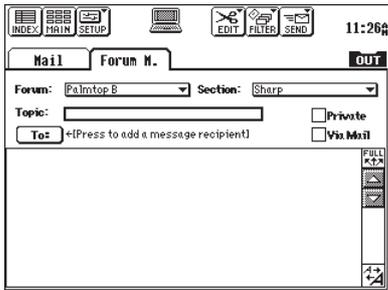
While in the section view, touch **FILTER** and select “**Filter (Off-Line)...**”

Creating a new forum message off-line

1. From the main screen, touch the **OUT** tray icon and touch the Forum M tab.



2. Touch **EDIT**, then select “Create Forum Message.”



3. Use the Forum pop-up menu to specify a forum, and the Section pop-up menu to specify a section. Then type a title in the Topic box. Check the Private checkbox if you want the message to be visible to only the recipients; use the Via Mail checkbox to send the message to the mail box of the recipients instead.
4. Touch **To:** and enter the names of recipients in the same the way you create a mail message.

Posting messages to a forum on-line

1. When you are in the desired section of a forum, go to the **OUT** tray.
2. If necessary, tag the messages you want to send. Then touch **SEND** and select “**Send Forum Messages....**”
3. In the Send Messages dialog, set the Send option, then touch **OK**.

NOTE

- You must post the messages while you are in the **OUT** tray.
- To post messages to a forum, you must be in the same forum.

Getting responses to your forum messages

1. When you are connected, the following prompt appears if there are waiting messages.



2. Touch **Yes** to see these messages. If you touch **No**, you can still see the waiting messages later when you are on-line; while in the section view of a forum, touch **FILTER**, then select “**Waiting Messages....**”

Troubleshooting

If you are having difficulty using CompuServe Access Software, check the following list for possible solutions before contacting your SHARP dealer.

Troubleshooting checklist

- ❑ The modem cannot dial.
 - Make sure the modem is correctly and securely connected to the unit.
 - Make sure the modem settings on the unit are correct. See “Setting up your modem” on page 110.
 - If you know the proper initialization string for the modem you are using, make sure it is entered correctly. Refer to your modem user manual for information on modem commands. See “Setting up your modem” on page 110.
If you are not sure of the proper string, leave the entry blank.

- ❑ The unit always dials the wrong number.
 - Make sure the access phone number of the CompuServe service is correct.
 - Make sure the line type setting on the unit is same as that of the telephone line.

- ❑ The unit fails to connect to CompuServe.
 - Make sure the Connection information is correct. See “Setting up connections” on page 110 for details.

- ❑ Attachment cannot be sent out.
 - Make sure the attachment is Filer or PC File data. All other type of data cannot be attached to a message.

- ❑ Some of the messages no longer appear on the unit.
 - Make sure there is no filter active.

Appendix

The appendix lists all menu functions you can use in the application.

Menu functions

VIEW/ INDEX

(There are no menu items.) This button toggles between the details of a selected message (View) and a list of the current messages in the selected tab (Index).

MAIN

Go to the main screen.

SETUP

Connection / Modem...	Set up connections and your modem. See page 118.
Preferences...	Customize the unit to the way you prefer. See page 135.
Address Book...	Enter recipients of your messages. See page 136.
ENS Personal Folders...	Set up personal folders for news clipping. See page 133.



Tap to Connect or Disconnect from CompuServe.

EDIT

Create Mail	Create a new mail message. See page 121.
Create Forum Message	Create a new forum message. See page 130.
Reply	Replay to a message. See page 125.
Forward	Forward a message to someone else. See page 125.
Delete Entry	Delete the current message. See page 138.
Delete Group...	Delete a group of messages. See page 138.
Convert to Document...	Convert a message to a document. See page 134.

FILTER

Filter (Off-Line)...	Turn on the filter. See page 129.
Mail...	Specify filter keyword so that only filtered mail messages can be viewed and deleted. See page 124.
Waiting Messages...	If there are any messages waiting for you in the forum, they will be selected and displayed. See page 131.
Forum Message...	Specify filter keyword so that only filtered forum messages can be viewed. See page 127.
Forum Library...	Specify filter keyword so that only filtered files can be listed and downloaded. See page 129.
Turn Off View Filter	Turn off the filter if it has been set. See page 127.

SEND

Send Mail...	Send mail messages. See page 123.
Send Forum Messages...	Send forum messages. See page 131.
Save to IN...	Save data to the IN tray. See page 124.

Pager Access

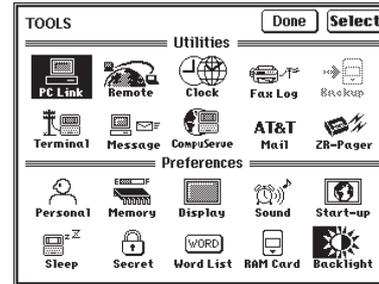
Quick Start	147
Commonly Asked Questions & Answers	154
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Using Pager Access	164
Troubleshooting	183
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Quick Start

This section is a quick start to setting up and running Pager Access.

Starting Pager Access

1. Touch **TOOLS**.



* The contents of the TOOLS screen may differ depending on the version for your country.

2. Touch **ZR-Pager** twice.

System diagram

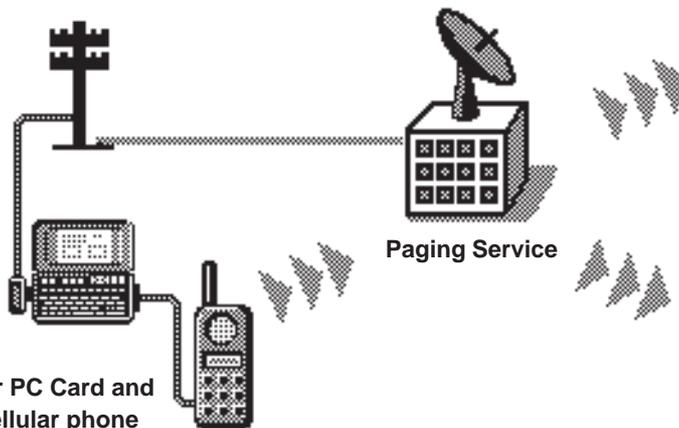
ZAURUS

Pager Access

Send Pager Messages from your unit AnyTime, Anywhere.

Use Pager Access software with CE-FM4 Fax/Modem

Or PC Card and cellular phone



Send to user with a Pager Card

Send to a text-based alphanumeric Pager

Setting up a paging service

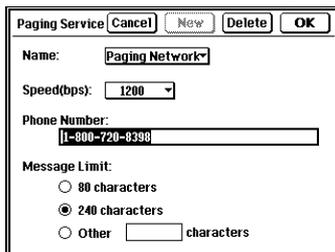
In order to send a message to a full text/alphanumeric pager, you must obtain the following information:

- Name of the paging services for the users to whom you will be sending messages.
- Maximum message size (Message Limit) supported by each paging service.
- TAP access phone number and modem speed (bps) supported. TAP is the protocol used to send a message to a pager user via modem.

As a default setting, some common TAP access numbers for nationwide Paging Services are listed in the Paging Service screen and can be modified or deleted by the user.

Please contact each Paging Service provider for the appropriate TAP access phone number, modem baud rate and maximum message limit for your service area.

1. From the Message screen in Index view, touch **SETUP**, then select "**Paging Service...**".



Paging Service (Cancel) New Delete OK

Name:

Speed(bps):

Phone Number:

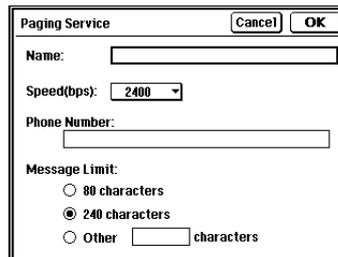
Message Limit:

80 characters

240 characters

Other characters

2. Select the paging service from the Name list. If it is not on the list, you must touch **Delete** to delete one or more paging services you're not going to use from the Name list, then touch **New** to enter a new paging service.



Paging Service (Cancel) OK

Name:

Speed(bps):

Phone Number:

Message Limit:

80 characters

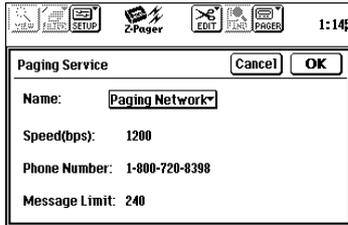
240 characters

Other characters

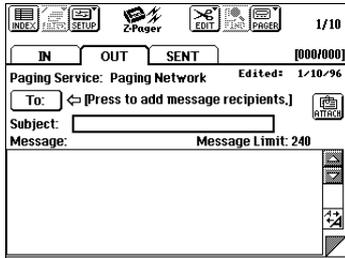
3. Type the name of the paging service and its TAP access phone number. Specify the communication speed as well as the maximum message length the service accepts.
4. Touch **OK** and the Save changes? dialog box appears. Touch **Yes** to save the new entry and return to the Paging Service screen. Finally, touch **OK** to return to the Message screen.

Composing a message

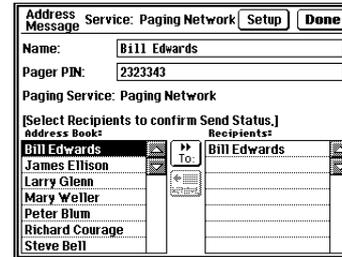
1. Press **NEW ENTRY**. Or, touch **EDIT**, then select “**New Message**”.



2. Select a paging service (Paging Network in this example) from the Name: pop-up menu for this message, then touch **OK**.



3. Touch **To:**. In the Address Message screen, select a name from the Address Book and the name will appear in the **Name:** field. Or, you can type directly in the **Name:** and **Pager PIN:** fields. When you touch the **To:** button, the name will be put into the Recipients list. Repeat this step until all recipients have been set. Touch **Done**.



4. In the **Subject:** field, type the subject of this message, up to 30 characters.
5. In the **Message:** field, type in your message. When you are done, press **ENTER** to save the message in the OUT folder.

Sending messages

1. Touch **PAGER**, then select “**Send Messages...**”.

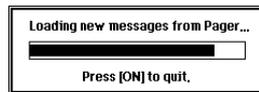


2. Select Current Message, Tagged Messages, or All Messages to send, then touch **OK**. Touch **OK**.
3. After making the connection, the Now Sending status box appears and the messages are sent.
4. When there are no more messages to send, Pager Access disconnects and the SENT folder appears.

Getting messages from your Pager Card

Make sure your Pager Card is inserted in the unit.

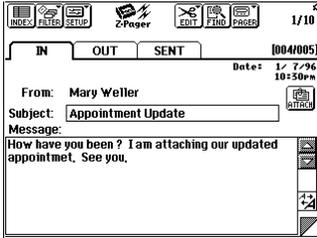
1. Touch **PAGER**, then select “**Get New Pager Messages**”.



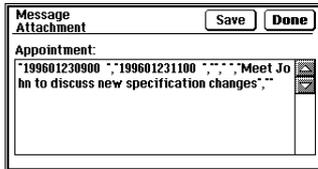
2. When the loading process is complete, new messages appear in the IN folder.

Reading incoming messages

1. From the IN folder, touch the message you want to read twice.



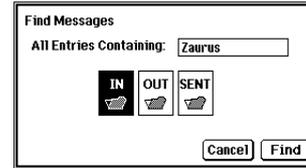
2. Read the message using the scroll bar, if necessary, to see the rest of the message. If the **ATTACH** button is visible, you can touch the button to view and save the attachment.



3. Press **ENTER** or touch **INDEX** to return to index view.
An opened envelope icon is used to indicate the message has been read.

Searching messages

1. Touch **FIND**.
The Find Messages dialog appears.



2. Enter a search string into the All Entries Containing box, in upper or lower case. (The search is case-insensitive.)
3. Touch one or more folders you wish to search.
4. Touch **Find**.
If the string is found, the Find String dialog appears.
5. Touch **Next** or **Prev** to continue the search.
Touch **Done** when you are finished.

Commonly Asked Questions & Answers

Q: How does Pager Access work?

A: It uses the CE-FM4 Fax/Modem or PC Card modem to send out messages through paging services, and reads messages from your Pager Card.

Q: Do I need to subscribe to the paging service which I want to send messages to?

A: No. But you do need to know its TAP access phone number, etc. in order to set it up in Pager Access and send a message to a pager user. See "Setting up a paging service" on page 159 for details.

Q: Can I send the same message to several recipients at the same time?

A: Yes, but they must use the same paging service. See "Selecting recipients of a message" on page 167 for detailed steps.

If you need to send messages to groups on different paging services, create a new message (use copy & paste in the subject or message field) for each group of recipients on the same paging service.

Q: I have some data on my unit that I would like to send to others. Can I do that?

A: Of course you can! Appointment or To Do data is accepted. When you compose a new message, use the **ATTACH** button to attach data to the message. You can attach only one entry to each message and the size of the entry plus the message text must not exceed the message limit set by the paging service.

Q: What is the maximum length of the message I can send?

A: This varies from one paging service provider to another. Check with the service provider for such details.

Q: Can I get my new pager messages whenever I start Pager Access?

A: Yes. Touch **SETUP** and select "**Preferences.**" Then make sure the **Get new messages at start up** box is checked.

Q: What happens if during a message transmission some messages could not be sent due to some problems?

A: Those that were sent appear in the SENT folder while those not sent remain in the OUT folder. Simply try sending the failed messages again.

Q: Is there an automatic way to put my name into every new message I compose?

A: Touch **SETUP** and select "**Preferences.**" Then type your name into the box below the **Contents of From:** Field, or touch the **Use Owner's Name:** button to copy the Owner's Name registered in Personal within the TOOLS area.

Q: What are some good habits I can develop when using Pager Access?

A: Here are some:

- Always back up important messages.
- When you no longer need to keep the old messages, delete them to make room for new messages.

Q: At times I receive messages which contain garbled data and/or strange characters. What is the cause?

A: You may have been inside a building or in a location where your Paging Service provider does not have complete coverage. Check with your Paging Service provider if this happens frequently.

Introduction

This section gives you general information about Pager Access.

What is Pager Access?

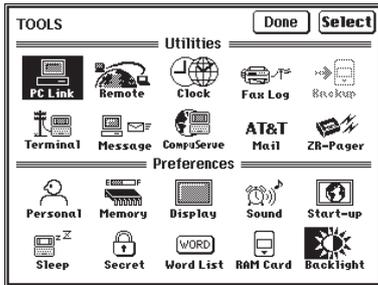
You can compose a message, name one or more recipients, then dial the paging service of the recipients. Your message is sent via a modem to the pagers of the recipients. What's more, you can use either a conventional telephone line or a cellular phone for modem connection.

To read incoming messages from your Pager Card, insert the Pager Card into the unit and use Pager Access to load the messages.

Although you can send messages to any paging service with this software, you must subscribe to a paging service to receive messages via that paging service, and that paging service must support alphanumeric or text message transmission. You must also set up the hardware and the software as described in the following sections.

Starting ZAURUS Pager Access

1. Touch **TOOLS**.



* The contents of the TOOLS screen may differ depending on the version for your country.

2. Touch **ZR-Pager** twice.

About the password screen

If you have entered a secret password into the unit, then regardless of whether the unit is locked or unlocked, the following screen appears when you select ZR-Pager.



Enter the correct password and the Message screen will appear.

About the ZR-Pager icon

When you see the ZR-Pager icon, you can touch it and the following screen appears to give you a graphic description of the working of this software.



Obtaining a Pager Card and paging service

Pager Access works with a Motorola® NewsCard® (Pager Card). For more information about where to obtain one, please check with your SHARP dealer or call:

800-BE-Sharp

In addition, you can call our automated Fax-on-Demand service at:

612-397-8601

NOTE

All alphanumeric Pager Cards record a date and time stamp for each received message. When the Pager Card is inserted in the unit, the Pager Card date and time are automatically modified to match the unit's date and time whenever the Pager Access application is initiated. Therefore, you should always check that your unit's date and time are set correctly before the Pager Card is installed.

Setting up a paging service

In order to send a message to a full text/alphanumeric pager, you must obtain the following information:

- Name of the paging services for the users to whom you will be sending messages
- Maximum message size (Message Limit) supported by each paging service
- TAP access phone number and modem speed (bps) supported. TAP is the protocol used to send a message to a pager via modem.

Please contact each Paging Service provider for the appropriate TAP access phone number, modem rate and maximum message limit.

1. From the Message screen in Index view, touch **SETUP**, then select "**Paging Service...**".

The following screen appears.

Paging Service [Cancel] [New] [Delete] [OK]

Name: [Paging Network]

Speed(bps): [1200]

Phone Number: [1-800-720-8398]

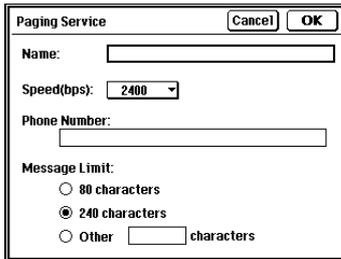
Message Limit:

80 characters

240 characters

Other [] characters

2. Select the paging service from the Name list. If it is not on the list, you must touch **Delete** to delete one or more paging services you're not going to use from the Name list. Touch **New** to enter a new paging service. The following screen appears.



The screenshot shows a dialog box titled "Paging Service" with "Cancel" and "OK" buttons. It contains the following fields and options:

- Name:** A text input field.
- Speed(bps):** A dropdown menu currently showing "2400".
- Phone Number:** A text input field.
- Message Limit:** A section with three radio button options:
 - 80 characters
 - 240 characters
 - Other characters

3. Type the name of the paging service and its TAP access phone number. Specify the communication speed as well as the maximum message length the service accepts. This information can be obtained from the paging service provider.
4. Then touch **OK** and the Save changes? dialog box appears. Touch **Yes** to save the new entry and return to the Paging Service screen. Finally touch **OK** to return to the Message screen.

About the Message Limit field

Message Limit refers to the total of number of characters in the From, Subject, Message and Attachment fields. In actual use, however, the message limit is slightly less than this total. If Other is selected, the maximum number of characters allowed is 2048.

Also, if this field is set to a number less than that allowed by the paging service and there is already a message to be sent out, an alert box appears informing you that other messages in the OUT folder exceed the message limit. If you touch **YES**, then these messages will be truncated. The open envelope icon in the index view in the OUT folder indicates that the message was truncated.

Modifying an existing paging service

1. From the Paging Service screen, select a paging service.
2. Make changes to this entry, such as speed (bps), Phone Number, and Message Limit. You cannot change the name of the service.
3. Touch **OK** to save the changes.

Configuring your modem

After you have connected to a modem, you need to configure Pager Access for your modem, as follows:

1. Touch **SETUP**, then select “**Modem Setup**”.

The screenshot shows a 'Modem Setup' dialog box with the following settings:

- Port: 15-pin PC-Cards
- Line Type: Tone Pulse
- Redial:
- Volume: Mute 1 2 3
- MNP Hardware Flow Control
- Use Dialing Prefix
- Modem String:

2. Touch and select any required setting, or type in the desired value. See the “Modem settings” section (below) for a detailed description of each setting.

You can restore the settings to the factory preset values by touching **Restore**.

3. Touch **OK** to save the changes.

Deleting an existing paging service

1. From the Paging Service screen, select the paging service you want to delete.
2. Touch **Delete**. When prompted, touch **Yes** to confirm. If this paging service is referenced in any messages in the OUT or SENT folders, an alert box appears. If you do not delete the messages you will not be allowed to delete the paging service from the list.

Modem settings

Port	Specify if communication with the modem is via the 15-pin connector or the PC Card slot.
Line type	Specify whether your telephone system uses tone or pulse dialing. If you are not sure, check with your local telephone company.
Redial	Specify the number of times the unit should redial if it cannot connect successfully (due to a busy line, etc.). The acceptable redial range is from 0 to 9. A value of 0 means there will be no redial.
Volume	If your modem has a built-in speaker, you can adjust the sound you hear when the modem is dialing and connecting. A value of 3 gives you the highest volume. Selecting Mute turns off the speaker. (This function is not valid for the CE-FM4 Fax/Modem)
MNP	Check to use MNP (Microcom Network Protocol) if this is supported by your modem. MNP corrects data errors caused by line noise, etc. (The CE-FM4 Fax/Modem, however, does not support this function.) MNP should be disabled when connecting to most Paging Service TAP access phone numbers.
Hardware	Provide data flow control for high Flow Control speed communication.

Use Dialing Prefix	This is required if you call out from a private branch exchange (PBX). This allows you to get an outside line before you can make any call.
Modem String	Some modems require you to initialize them with a modem initialization string. Refer to the modem's manual to see if any string is required. (The CE-FM4 Fax/Modem does not require a modem string.) Refer to the table below for the recommended modem strings.

Fax/Modem initialization strings for paging service

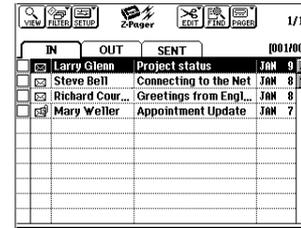
Manufacturer	Model No.	Landline (RJ11) Connection	Cellular Phone Connection
Sharp	CE-FM4	None	Not supported
AT&T Paradyne	Keep In Touch 3762	&F0B1C1\C2\N1%C0S7=100S10=100%B1200 (1200 baud)	&F0B1C1\C2\N1%C0S7=100S10=100%B1200 (1200baud and Nokia 121/128 phone only)
		&F0B1C1\C2\N1%C0S7=100S10=100%B2400 (2400 baud)	&F0B1C1\C2\N1%C0S7=100S10=100%B2400 (2400baud and Nokia 121/128 phone only)
Megahertz	XJ1144	None	Not Applicable
	XJ2144	None	Not Applicable
	CC4144	None	F4N0%C0S7=100S10=100S37=5 (NEC P100 and MIT 3500/4000 phones)
Motorola	Lifestyle Power	None None	Not Applicable &J2%B1200S7=100S10=100 (Motorola Microtac phone)
	CELLect 14.4	None	&J2%B1200S7=100S10=100 (Motorola Microtac phone)
Epson	EFM144FP EFM144C	None None	Not Applicable &J2%B1200S7=100S10=100 (Motorola Microtac phone)

Using Pager Access

This section explains in details how to use Pager Access to communicate with a paging service in order to send or get messages.

Looking at the Message screen

The Message screen is where you handle all of your messages. It consists of a Tool bar on the top and the IN, OUT, and SENT folders.



Status Column

Indicates the status of the message using icons:

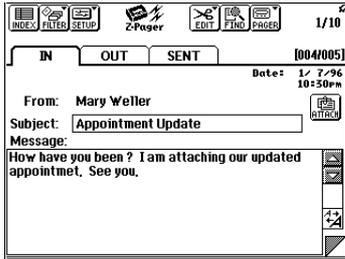
-  Unread
-  Unread with attachment
-  Read
-  Read with attachment

VIEW/INDEX	Toggles between the details of a selected message (VIEW) and a list of the current messages in the selected folder (INDEX).
FILTER	Accesses the View Filter. The View Filter controls the display of messages in each of the IN, OUT, and SENT folders according to criteria you set.
SETUP	Sets up the modem, a paging service, your preferences, as well as address book.
EDIT	Accesses various message commands: message creation, deleting, cutting, copying and pasting, and converting message to document.
FIND	Searches for a string in any combination of the IN, OUT and SENT folders.
PAGER	Sends or gets new messages or displays an index list of all messages in the Pager Card.

Message folders

IN folder

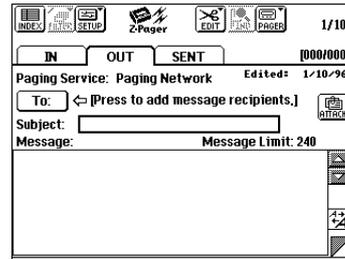
The IN folder stores messages read from your Pager Card.



OUT folder

The OUT folder stores all messages waiting to be sent, including messages which have not been successfully transmitted.

New messages are composed in the OUT folder.



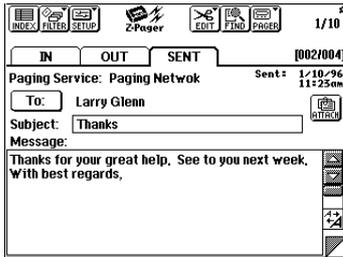
From:	Sender of this message
Subject:	Subject for this message
Message:	Details of the message
ATTACH	If ATTACH is visible, additional data is attached to this message. Touch ATTACH to see and save the attachment.

To:	Touch to specify one or more recipients of this message. (All of the recipients of this message must reside on the same paging service.)
Subject:	Type a subject for this message, up to 30 characters.
Message:	Type in your message.
ATTACH	Touch to attach Appointment or To Do data to this message.

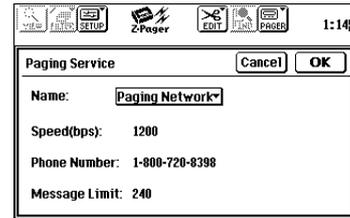
Composing a message

SENT folder

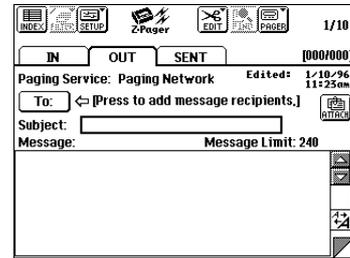
The SENT folder stores all messages which have been successfully sent out.



1. Press **NEW ENTRY**. Or, touch **EDIT**, and then select “**New Message**”.



2. Select a paging service (Paging Network in this example) from the Name: pop-up menu for this message, then touch **OK**.



3. Touch the **To:** button to select one or more recipients of this message. For details, see “Selecting recipients of a message” on page 167.

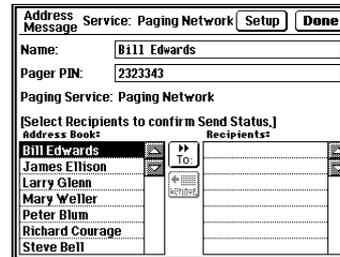
4. In the **Subject:** field, type the subject of this message, up to 30 characters.
5. In the **Message:** field, type in your message. Note that you cannot create a new line. The Message field will stop accepting text if you reach the limit allowed by the paging service you are going to send the message to. This information is stored in SETUP. See “Setting up a paging service” on page 159 for details.
6. If desired, touch the **ATTACH** button to attach Appointment or To Do data. (See “Attaching data to a message” on page 168 for detailed steps.)

Selecting recipients of a message

Each outgoing message can be sent to only one paging service, but you can send the same message to multiple recipients on the same paging service.

If you need to send to groups on different paging services, create a new message (use copy & paste in the subject or message field) for each group of recipients on the same paging service.

When composing a new message, touch the **To:** button to bring up the Address Message screen as shown below:



1. Select a name from the Address Book and the name will appear in the **Name:** field. Or, you can type directly in the **Name:** and **Pager PIN:** fields. When you touch the **To:** button, the name will be put into the Recipients list. Repeat this step until all recipients have been set.

2. If you want to remove a name from the Recipient list, select the name and touch **REMOVE**.
3. Touch **Done**.

Touching a selected name on the Recipients list displays the Send Status information as well as a date (current date if the send status is Queued or the transmission or failed transmission date otherwise) in the area above the Address Book.

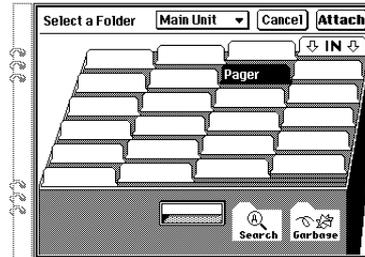
Messages stored in the SENT folder usually have the “Sent” status. Messages stored in the OUT folder have the “Queued” status. The following is a list of errors for Send Status information for messages stored in the OUT folder:

No Dial Tone	The telephone line is not correctly connected.
Line Busy	TAP Access number is busy.
Line Error	The line was cut off due to communication error.
No Pager PIN Number	There is a problem in the PIN number.
TAP Error	There was a problem in the communications protocol.
User aborted operation	You pressed the ON key.

Attaching data to a message

You can attach Appointment or To Do data to an outgoing message. The data, however, must have been filed into a FILER folder. Each message can accept only one attachment. Follow the steps below to attach data to a message.

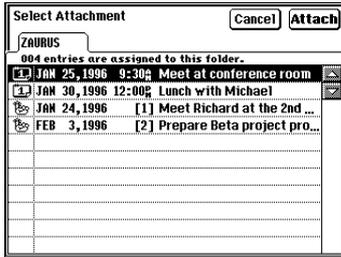
1. When you are composing a message, touch **ATTACH**.
The following screen appears.



2. Select the memory location, Main Unit or PC Card, that contains the desired data.

Modifying a message

3. Touch the desired folder, then touch **Attach**.



4. From the Select Attachment screen, select the desired data to attach, then touch **Attach**.

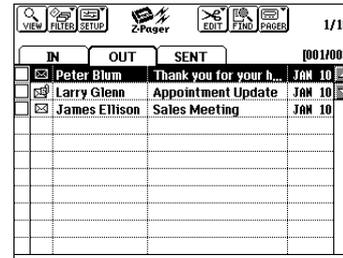
You can only attach Appointment or To Do data filed in a Filer folder.

If an attachment already exists

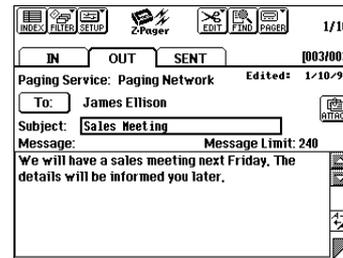
A prompt appears and you can replace it with the new attachment.

Sometimes you may want to modify a message or its attachment before it is sent. You cannot modify messages in the IN and SENT folders, though you can copy them to another location.

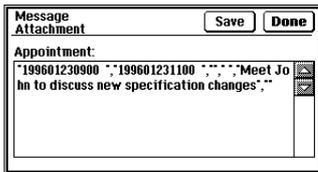
1. Select the OUT folder.



2. Touch the desired entry twice. The details of the message appears.



3. Edit the message contents as required. You can touch **ATTACH** to view or change the attachment. You cannot edit the attachment, but you can change to another one. See “Attaching data to a message” on page 168 for more information.

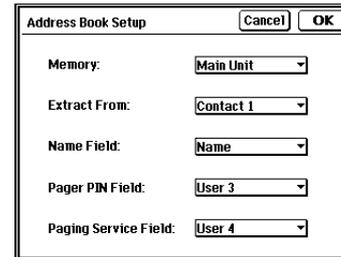


4. Press **ENTER** to save the modifications and return to the Message screen.

Setting up an address book

An address book makes addressing outgoing messages simpler and quicker. Use an address book to select names you want to send a message to.

1. Touch **SETUP**, then select “**Address Book**”. The following screen appears.



2. Touch each list and select the appropriate information:

Memory:

Selects the memory location that contains the source information, either the main unit memory or PC Card memory.

Extract From:

Selects which Contact or Data File is to be used as the information source.

Name Field:

Select which field in the source information is assigned as the recipient name in the address book.

Pager PIN Field:

Select which field in the source information is assigned as the recipient's pager PIN in the address book.

Pager Service Field:

Select which field in the source information is assigned as the recipient's pager service in the address book. This information is provided for reference when the user is addressing a message and is not included in the actual message that is sent.

3. Touch **OK** to save the changes.

Sending messages

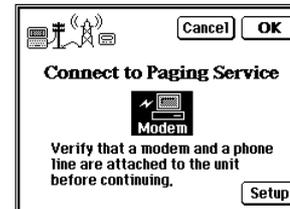
Before sending messages, make sure is connected to a telephone line via a modem. Also make sure the modem as well as the paging service is correctly configured.

1. Touch **PAGER**, then select "**Send Messages...**".



2. Select the current message, tagged messages, or all of the messages to send. Then touch **OK**.

The following screen appears.



Touch **OK**.

3. When Pager Access configures the modem, the following screen appears.



4. Then Pager Access dials the access number of the paging service (Paging Network in this example).



5. After making the connection, the Now Sending status box appears and the messages are sent out.



6. When there are no more messages to send, Pager Access disconnects and the SENT folder appears.

About message transmission

When a message is successfully sent, that means it has reached the paging service only. Pager Access cannot determine if the recipients have actually received the message.

If message transmission succeeds, the message is copied to the SENT folder.

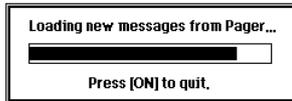
If message transmission fails, the message remains in the OUT folder. If a failure occurs on any recipient, for messages containing multiple recipients, for those recipients where transmission has succeeded, their names appear in the SENT folder.

Getting messages from your Pager Card

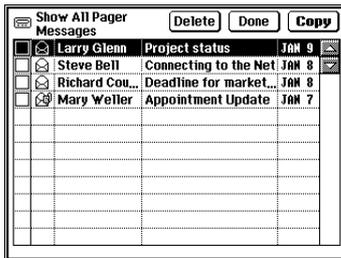
Make sure your Pager Card is inserted in the unit.

If you have checked the **Get new messages at start up** box in the Preferences screen, Pager Access automatically gets messages from your Pager Card when it starts up. Otherwise, use the following steps to get the messages.

1. Touch **PAGER**, then select **“Get New Pager Messages”**.
The following status box appears.

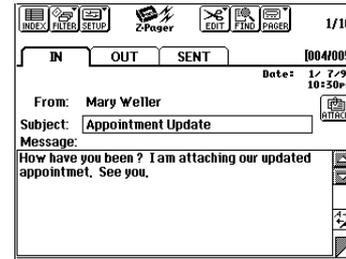


2. When the loading process is complete, new messages appear in the IN folder.
3. An alternative is to use the **“Show All Pager Messages”** selection to get old messages from the Pager Card.



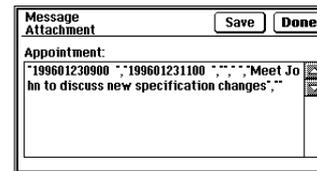
Reading incoming messages

1. From the IN folder, touch the message you want to read twice.



If the message originator was not included in the message, the **From:** field will show “[Not Specified]”.

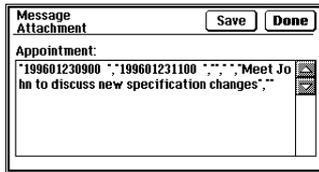
2. Read the message using the scroll bar, if necessary, to see the rest of the message. If the **ATTACH** button is visible, you can touch the button to view and save the attachment. (See "Viewing and saving attachments" on page 175 for detailed steps)



Viewing and saving attachments

Some received messages may contain a Appointment or To Do attachment. You may view and save the attachment as follows:

1. While you are reading the message, if the ATTACH button is visible, touch the **ATTACH** button.



2. To save the attachment, touch **Save**. The attachment is detached and saved as an Appointment or a To Do, accordingly.
3. If you do not want to detach the attachment, touch **Done**.

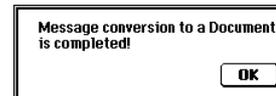
Converting messages to documents

You can convert one or more messages to Documents, as follows.

1. Touch **EDIT**, then select "**Convert Message...**".



2. Enter a title for the Document. You can convert the current message, tagged messages, or all messages.
3. If you have chosen **Delete messages after conversion**, the selected messages will be deleted after the conversion process is complete.
4. Touch **OK** to start the conversion.
5. When the following prompt appears, touch **OK**.



Deleting messages in the unit

Deleting a single message

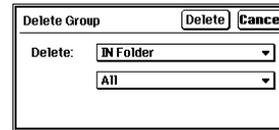
1. Select the message you want to delete.
2. Press the **DEL** key (possible only in index view), or touch **EDIT** and select “**Delete Message**”.
3. When the following message appears, touch **Yes**.



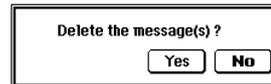
Deleting a group of messages

You can delete a group of messages from the IN, OUT or SENT folder, as follows:

1. Touch **EDIT**, then select “**Delete Group**”.



2. Select the folder where messages will be deleted (IN, OUT, SENT or ALL).
3. Further specify to delete Tagged Messages or All Messages in the selected folder.
4. Touch **Delete** and the following prompt appears.



5. Touch **Yes** to delete.

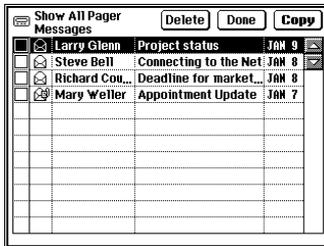
Deleting messages in your Pager Card

From time to time, you may want to delete old messages from your Pager Card memory.

If you have checked the Delete messages from pager after reading box in the Preferences screen, messages automatically deleted after copied into the IN folder.

1. Touch **PAGER**, then select “**Show All Pager Messages**”.

A list of all the messages stored in Pager Card memory appears.



2. Touch **Delete**.

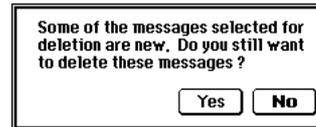
The following screen appears. You can delete the current message only, messages tagged with a check mark on the Index screen, or all messages.



3. Select the type of messages to delete, then touch **OK**.

If some of the messages have not been read

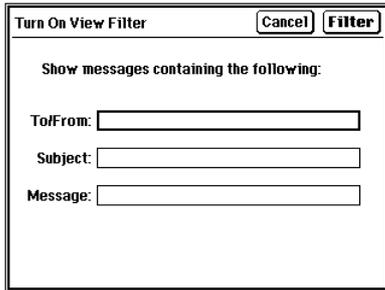
The following prompt will also appear before the deletion:



Applying a filter to view selected messages

This function lets you focus on messages that contain specific information. For example, you can view only entries related to a particular company name. The function does this by hiding all entries that do not match the filter criteria. Then, only filtered messages can be viewed, edited, or deleted.

1. Touch **FILTER** and select “**Filter**”.



Turn On View Filter

Show messages containing the following:

To/From:

Subject:

Message:

2. Type a keyword into the To/From, Subject, or Message fields.

Examples:

- To show messages sent to or received from “Steve Bell”, enter “Steve Bell” in the To/From: field.
- To show messages with the subject containing the keyword “sales”, enter “sales” in the subject: field.
- To show messages containing the word “Wall Street”, enter “Wall Street” in the Message: field.

3. Touch **FILTER** to start filtering all messages.

Deactivating the filter

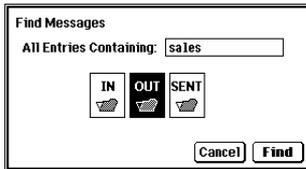
Touch the **FILTER** button and select “**Turn Off View Filter**” or touch the **Turn Off Filter** box to display all messages again.

Searching messages

You can search for messages containing a text string in any or all of the IN, OUT, and SENT folders. Only the Subject and Message fields of each message are searched for the entered text string.

1. Touch **FIND**.

The Find Messages dialog appears.



2. Enter the search string into the All Entries Containing box, in upper or lower case. (The search is case-insensitive.)
3. Touch one or more folders you wish to search.

4. Touch **Find**.

If the string is found, the Find String dialog appears. The folder containing the message appears, with a Detail view of the message that contains the string, and the string is highlighted.



5. Touch **Next** to search forward through the current folder and the other folders. The folders are searched in the following sequence:

IN—>OUT—>SENT

Touch **Prev** to search in reverse order.

The search stops at each occurrence of the search string. To enter a new string, touch the **Find String** button in the Search dialog.

When you have completed the search, touch **Done**.

Copying and moving text

You can copy or move text using the clipboard.

1. Display the message you want to copy or move, in View mode.
2. Drag over a word or sentence to highlight it.
3. For copying, press **2nd** and **C**. Or, touch **EDIT** and select **“Copy”**.
For moving, press **2nd** and **X**. Or, touch **EDIT** and select **“Cut”**.
4. Move to the entry where you want to paste the text, then touch the required place of insertion.
5. Press **2nd** and **V**. Or, touch **EDIT** and select **“Paste”**.

Customizing Pager Access

1. From the Message screen in Index view touch **SETUP**, then select **“Preferences”**.

Preferences [Cancel] [OK]

Delete messages from pager after reading

Save sent messages in SENT folder

Get new messages at start up

Contents of From: Field [Use Owner's Name:]

2. Check the box if you want to use the option.

Delete messages from Pager Card after reading:

Messages are automatically deleted from Pager Card memory after copied into the IN folder.

Save sent messages in SENT folder:

By default sent messages are automatically saved in the SENT folder.

Get new messages at start up:

When starting up, ZR Pager Access will automatically read in new messages from your Pager Card.

Contents of From: Field

If you enter a name here, this name will appear in the message area when you create a new message, thus saving time in typing your name. You may also touch **Use Owner's Name:** to copy the Owner's Name registered in Personal under the TOOLS area.

3. Touch **OK** to save the changes.

Troubleshooting

If you have difficulty using Pager Access, check the following list for possible solutions before contacting your SHARP dealer.

Troubleshooting checklist

- ❑ **The modem cannot dial.**
 - Make sure the modem is correctly and securely connected to your unit.
 - Make sure the modem settings in Pager Access are correct. See “Configuring your modem” on page 161.
 - If you know the proper initialization string for the modem you are using, make sure it is entered correctly. Refer to your modem user manual for information on modem commands.
 - If you are not sure of the proper string, leave the entry blank.

- ❑ **Pager Access always dials the wrong number.**
 - Make sure the access phone number of the paging service is correct.
 - Make sure the line type setting in Pager Access is the same as that of the telephone line.

- ❑ **Pager Access fails to connect to a paging service.**
 - Make sure the paging service is registered in Pager Access. See “Setting up a paging service” on page 159 for details.

❑ **Cannot send messages over a cellular phone.**

- Make sure the cellular phone works with Pager Access.
- Check to ensure you are using the appropriate modem initialization string.
- There may be strong interference. Move the cellular phone to another location and try again.

❑ **Cannot receive any incoming messages.**

- Make sure the Pager Card is correctly inserted in your unit.
- Messages do not come in to Pager Access automatically. See “Getting messages from your Pager Card” on page 173 and try to load any incoming message from your Pager Card.
- There are no messages in your Pager Card.

❑ **Cannot attach data to a message.**

- Check the Maximum Message Limit setting for the selected paging service. Attaching data may cause the message size to exceed the limit.
- Make sure the attachment is either an Appointment or To Do entry. All other types of data cannot be attached to a message.

❑ **Cannot detach data from a message**

The attachment is not in your unit's format or there was a transmission error which corrupted the message. You can call the paging service provider and they may be able to re-transmit the message.

❑ **Cannot send the same message to recipients on different paging services.**

Pager Access does not allow you to send the same message to recipients on different paging services. If you need to send to groups on different paging services, create a new message (use copy & paste in the subject or message field) for each group of recipients on the same paging service.

❑ **Some messages no longer appear on in Pager Access.**

Make sure no filter is active. See “Applying a filter to view selected messages” on page 178 for details.

Appendix

The appendix contains a list of menu function.

Menu functions

VIEW/ INDEX

(There are no menu items.) This button toggles between the details of a selected message (View) and a list of the current messages in the selected folder (Index).

FILTER

Filter	Specify a filter keyword so that only filtered entries can be viewed, edited, and deleted. See page 178.
Turn Off View Filter	Turn off the filter if it has been set. See page 178.

SETUP

Modem Setup	Configure your modem. See page 161.
Paging Service	Add, modify or remove a paging service. See page 159.
Preferences	Customize Pager Access to the way you prefer. See page 180.
Address Book	Enter recipients of your pager messages. See page 170.

EDIT

New Message	Compose a new message to send. See page 166.
Delete Message	Delete a single message. See page 176.
Delete Group	Delete a group of messages. See page 176.
Cut	Cut the highlighted text into the clipboard. See page 180.
Copy	Copy the highlighted text into the clipboard. See page 180.
Paste	Paste contents from the clipboard. See page 180.
Convert Message	Convert messages to a document. See page 175.

FIND

(There are no menu items.) Use FIND to search for desired messages.

PAGER

Send Messages	Connect to a paging service to send messages. See page 171.
Get New Pager Messages	Copy new messages from the Pager Card into memory. See page 173.
Show All Pager Messages	Build an index list of all messages in the Pager Card. See page 177.

AT&T Mail

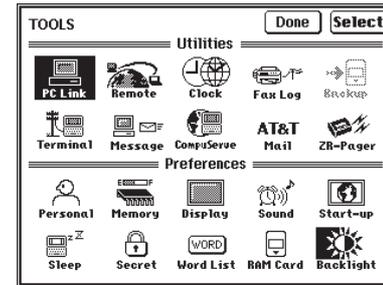
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Quick Start

This section is a quick start to setting up and running AT&T Mail Access.

Starting AT&T Mail Access

1. Touch **TOOLS**.



* The contents of the TOOLS screen may differ depending on the version for your country.

2. Touch **AT&T Mail** twice.

Setting up AT&T Mail Access

AT&T Mail Access requires you to enter your AT&T Mail account and modem information to connect to the AT&T Mail service. Use E-Mail Setup to specify setup information for AT&T Mail, the modem, and the login script. You may need to change these settings if there is a change to your account, modem, or when you connect to AT&T Mail from different locations.

To change E-Mail Setup:

1. Touch **SETUP** at the top of the mail-folder display, and select **E-Mail** to access the E-Mail Setup screen.
2. Enter your AT&T account information the AT&T Mail Setup display. Refer to your AT&T Mail Welcome Kit for this information.

E-Mail Setup

Mail ID:

Password 1: 2:

Phone Number:

Use Dialing Prefix:

User Phone Number:

Private Logo:

File Transfer:

AT&T Mail Setup Modem Setup Login Script

3. Touch the **Modem Setup** tab to configure your modem settings. If using a Sharp CE-FM4 Fax/Modem, touch **RESTORE** to use the default settings. You may need to change this information when using a PC card modem. Refer to the Zaurus, PC card compatibility chart for a list of supported modems and the required modem string.

E-Mail Setup

Speed(bps): Restore

Port: 15-pin PC Card

Parity: None Odd Even

Line Type: Tone Pulse

Data Bits: 8 7

Stop Bits: 1 2

Redial:

Volume: Mute 1 2 3

MNP Hardware Flow Control

Modem String:

AT&T Mail Setup Modem Setup Login Script

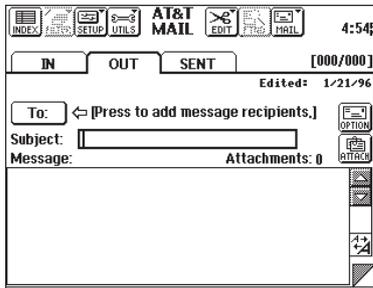
4. Touch **OK** to save the new settings, and return to the mail folders. Touch **Cancel** to return to the old settings.

Creating a new message

The first step in sending a message is to create the message.

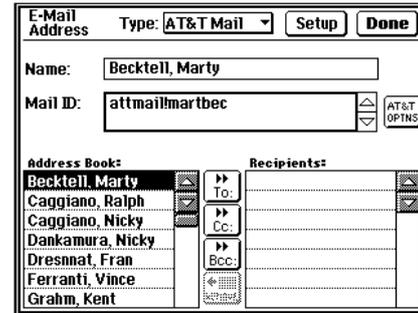
To create a message:

1. Touch **EDIT**, then select **New Message** to get a blank message display.



2. Type a brief subject that describes the nature of the message.

3. Touch **To:** to address the message.



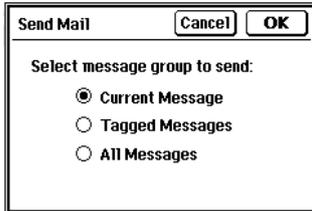
Select a name from Address Books. Touch **To:** (or **Cc:**, or **Bcc:**). The name will be put into the Recipients list. Repeat this step until all recipients have been set. Touch **Done**.

4. Touch the message box and type a message.
5. Touch **OPTION** to include any message options.
6. Touch **ATTACH** to include any attachments with the message.
7. Press **ENTER** to save the message to the OUT folder.

Sending messages

To send messages:

1. If you have more than one message in your OUT folder you can tag selected messages that you want to send.
2. Touch **MAIL**, then select **Send Only** or **Send/Receive**. Note that these selections are available only if the currently displayed folder is the OUT folder.
3. Select the messages that you want to send and touch **OK**.

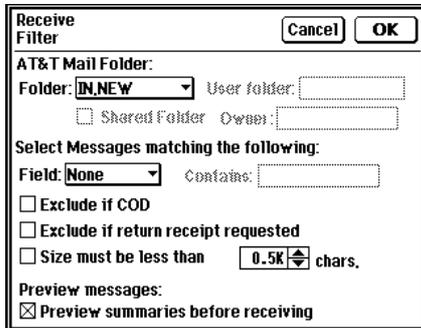


4. After verifying your modem and phone line connection, touch **OK** to send the messages.

Receiving messages

To receive messages:

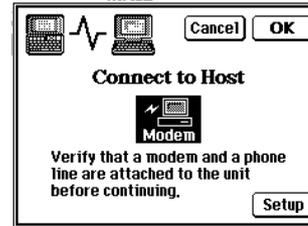
1. Touch **MAIL**, then select **Turn on Receive Filter** to use the receive filter.
If the receive filter is turned off, then all new messages are received.
2. Touch **MAIL**, then touch **Receive Only** or **Send/Receive**.
You see the Receive Filter display if the receive filter is turned on.



The screenshot shows a dialog box titled "Receive Filter" with "Cancel" and "OK" buttons. It contains the following options:

- AT&T Mail Folder:**
 - Folder: **IN,NEW** (dropdown menu) User folder: [text field]
 - Shared Folder Owner: [text field]
- Select Messages matching the following:**
 - Field: **None** (dropdown menu) Contains: [text field]
 - Exclude if COD
 - Exclude if return receipt requested
 - Size must be less than **0.5K** (spin box) chars.
- Preview messages:**
 - Preview summaries before receiving

3. After verifying your modem and phone line connection, touch **OK** to connect to AT&T Mail.



4. Status messages are displayed when the message transfer is completed and when the unit is disconnecting from the AT&T Mail host.

Commonly Asked Questions & Answers

Q: What do I need to use AT&T Mail Access?

A: You need an AT&T Mail account which you must first obtain from AT&T.

Q: Is there any limit to the size of a message that I can create?

A: Yes, the maximum length of the message body is approximately 14.5K bytes. However, the size of additional attachments is limited only by the amount of memory available in your unit.

Q: Can I send multiple messages all at the same time?

A: Yes. Before sending, be sure to tag the messages for sending by touching the checkbox in front of each message entry. Then in the Send Mail dialog, specify to send the tagged messages. Alternatively, you may choose to Send all messages.

Q: I would like to put my company logo on all paper and fax messages sent via AT&T Mail. How can I do that?

A: You need to register the logo with AT&T for an additional cost. Refer to your AT&T Mail Welcome Kit for details.

Q: Can I attach some data in my unit to a mail message?

A: Yes. From the New Message screen, touch ATTACH to attach FILER folders or PC Files.

Q: How can I convert a message to Document?

A: When viewing a message, touch EDIT. Select "Convert to Document" and give the new document a name.

Q: Can I send the same mail message to several recipients at the same time?

A: Yes. When creating a message, use the recipient list to add one or more recipients of the message.

Q: Can I customize the login procedure?

A: Yes. See Appendix C and learn how to write a custom login script.

Introduction

This section gives you general information about AT&T Mail Access.

Obtaining an AT&T Mail account

Before using AT&T Mail, you need to get a user name and password. To register with AT&T EasyLink® Services, call 1-800-242-6005 (within the U.S.) and say *Department Zaurus*. They will then mail you an AT&T Mail Welcome Kit with your account information and documentation. To register with AT&T from outside of the U.S., see the international support list in Appendix A.

Setting up AT&T Mail Access

AT&T Mail Access needs your AT&T Mail account and modem information to connect to the AT&T Mail service. Use E-Mail Setup to specify setup information for AT&T Mail, the modem, and the login script. You may need to change these settings if there is a change to your account, modem, or when connecting to AT&T Mail from different locations.

To change E-Mail Setup:

1. Touch **SETUP** at the top of the mail-folder display, and select **E-Mail** to access the E-Mail Setup displays.
2. Enter the following information on the AT&T Mail Setup display. Refer to your AT&T Mail Welcome Kit for this information.

E-Mail Setup

Mail ID:

Password 1: 2:

Phone Number:

Use Dialing Prefix:

User Phone Number:

Private Logo:

File Transfer: FMODEM

AT&T Mail Setup Modem Setup Login Script

- **Mail ID**
Your AT&T Mail user name. Do not precede the user name with an exclamation point (!) or any other characters that may be necessary when specifying user addresses.
- **Password**
The AT&T Mail passwords. Everyone receives one password, but you may configure a second password for added security. If you have one password, leave **Password 2:** blank.
Lock your unit using the secret password to prevent any unauthorized use of your AT&T Mail account by others. When the unit is locked, the Mail function can not be used unless the password is entered.
- **Phone Number**
The phone number needed to access the AT&T Mail service. The following access numbers are available in the U.S. based on the speed of the connection:
2400 bps access: 1-800-624-5123
14.4K bps access: 1-800-624-5016
If you are traveling outside of your home country, you may have to change this information. Refer to Appendix B for a list of international access numbers.

- **Use Dialing Prefix**

An optional prefix that may be needed to dial the above phone number. For instance, you may need to enter a 9 to get an outside line or a string of numbers for a long-distance access code. You may need to change this prefix when using the unit at different locations (such as your office, home, or hotel).

- **User Phone Number**

Your phone number, if you want it to appear with the messages you send.

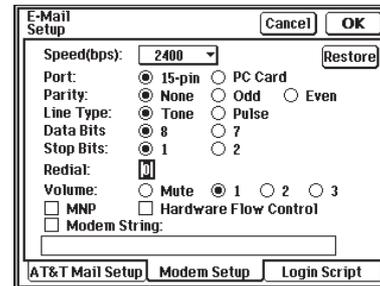
- **Private Logo**

A personalized logo, if you want it to appear with the paper and fax messages you send. To use a private logo, you must register it with AT&T® for an additional cost. (Refer to your AT&T Mail Welcome Kit for more information about logos.)

- **File Transfer**

The type of file transfer protocol that you need to use with your modem. The default is FMODEM. If you are having trouble sending and receiving messages (such as when connecting via a cellular phone), try using XMODEM or YMODEM.

3. Touch the **Modem Setup** tab, and enter the following information. If using a Sharp CE-FM4 Fax/Modem, touch **Restore** to use the default settings. You may need to change this information when using a PC card modem, particularly the modem string. For other modems, refer to the manual that came with your modem for this information.



- **Speed(bps), Port, Parity, Line Type, Data Bits, Stop Bits, MNP, Hardware Flow Control, Modem String**

Modem settings are based on the type of modem and connection. The default settings are as follows:

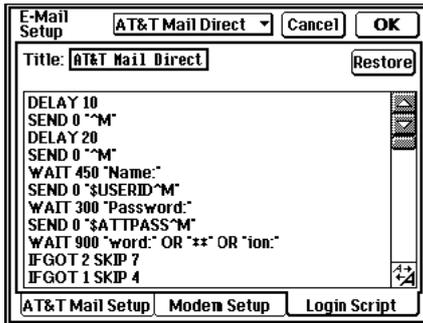
Speed(bps)	: 2400
Port	: 15-pin
Parity	: None
Line Type	: Tone
Data Bits	: 8
Stop Bits	: 1
MNP	: not selected
Hardware Flow Control	: not selected
Modem String	: blank

If using a PC card modem, change the Port setting to **PC Card**, and enter a Modem String, if recommended by your modem manual. If you select a speed (bps) greater than 2400, we recommend that you select the Hardware Flow Control box.

Refer to your modem user manual for more information on these settings.

- **Redial**
The number of times that AT&T Mail Access tries to connect to the service, if it gets an error or busy signal.
- **Volume**
The volume of the modem when connecting to AT&T Mail.

4. Touch the **Login Script** tab, and select one of the following login scripts from the menu at the top of the display. You may need to change the login script when connecting to AT&T Mail from outside of the U.S.



- **AT&T Mail Direct**
The login script used in the United States and other countries where you can access the AT&T network directly.
- **Packet (X.25)**
The login script used in some countries where it is required for X.25 packet service, and you must connect to AT&T Mail using the local public data network.

- **User Script**

The Local Access Script (see Appendix C) is preinstalled in the unit and allows you to access the AT&T Mail service from many locations throughout the world using the local packet data network. In order to use this network, you must set up an account directory with the local provider in the respective country where Local Access Service is available. Before accessing the LAS (Local Access Service), you need to substitute \$A and \$C in the Local Access Script with the LAS ID and Password respectively. For more information about availability and procedures for specific countries, contact the AT&T Mail Customer Assistance Center or the local provider.

To customize a login script, select the script and enter a title. For more information on X.25 packet access, refer to your *AT&T Mail User's Guide*. To restore a login script to its default configuration, touch **Restore**.

5. Touch **OK** to save the new settings, and return to the mail folders. Touch **Cancel** to return to the old settings.

Setting up the address book

AT&T Mail Access uses the address information you have entered into other applications in your unit. This way you only have to maintain one address book for all applications. You can also enter a new address when you are creating a message, but it saves time to store frequently used addresses in the address book.

Contacts and Data Files

You can use the Contacts or Data Files features for your address book. There are 3 Contacts files that are already setup for address information. There are also 3 Data Files that are generic database files where you must define the fields.

To enter addresses into a Contacts file:

Example: Enter the following into Contacts 1.
Allison Wicks of ABC Consulting Co.
P.O. Box 85, Lee, New Jersey 07000
phone: 908-555-4321
fax: 908-555-4567
AT&T Mail User ID: !auser

1. Touch **CONTACTS**.
2. Touch **EDIT** and select **New Business (1)**.

3. Select the following fields and enter the desired information into them. You do not need to enter information into all of the fields.
Name field: *Wicks, Allison*.
Company field : *ABC Consulting Co.*
Office # field: *908-555-4321*.
Fax # field: *908-555-4567*.
Address field: *P.O. Box 85 Lee, NJ 07000*.
E-Mail ID 1 field: *!auser*

INDEX FILTER LINKS SETUP		EDIT LINKED FILE IT SEND		5:27 PM
Name	Wicks Allison			
Company	ABC Consulting Co.			
Office #	908-555-4321			
Ext/Direct				
Fax #	908-555-4567			
Home #				
Other #				
Position				
Department				
Address	P.O. Box 85 Lee, NJ 07000			
AT&T Mail ID	!auser			

NOTE

- The Name field must always contain information.
- For Name fields, enter the last name first so entries can be sorted by last name.
- There are 2 E-Mail ID fields and 4 User fields that can be used for addressing information.

4. Press **ENTER** to save the address.
The Business (1) Index for that entry is displayed with the new entry listed.



E-Mail Addresses

The E-Mail ID in the address book can take many forms, depending on the type of system to which you are sending mail. The following prefixes are used with the recipients ID or number to identify the complete mailing address. When you select the type of address, the appropriate prefix is included in the address.

- AT&T Mail (AT&T Mail subscriber user ID): attmail!
 - CompuServe (CompuServe subscriber user ID): mhs!csmail/dd.id=
 - Telex (Telex number): telex!
 - X.400 (X.400 address): mhs!
 - Internet (Internet address): internet!
 - SkyMail (SkyTel pager PIN): mhs!skymail/s=
- Refer to the *AT&T Mail User's Guide* for additional E-mail address types.

Mail Basic

This section explains the basic operations about AT&T Mail Access that you can perform.

Setting the date and time

Messages that you create include the date and time. Therefore, you should adjust this information if it is not set correctly in your unit.

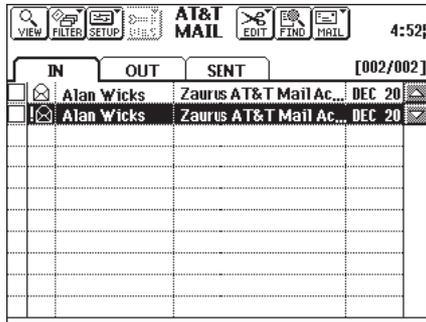
Mail folders

AT&T Mail Access has three mail folders for storing messages:

- IN Folder: Lists the messages that you have received.
- OUT Folder: Lists the messages that you will be sending.
- SENT Folder: Lists messages that you have mailed.

Touch the tab with the mail folder name to display that mail folder.

All of these folders show the following information about messages.



The screenshot shows the AT&T Mail Access interface. At the top, there are icons for VIEW, FILTER, SETUP, and a list of folders (IN, OUT, SENT). The current folder is IN, and the message counter is [002/002]. The list of messages is as follows:

	IN	OUT	SENT	
<input type="checkbox"/>	Alan Wicks	Zaurus AT&T Mail Ac...	DEC 20	
<input type="checkbox"/>	Alan Wicks	Zaurus AT&T Mail Ac...	DEC 20	

- Status Icon: The icon shows the status of a message at a glance. Possible icons include:

-  Unopened messages.
-  Messages that you have read.
-  High-priority messages.
-  Messages with an attachment.

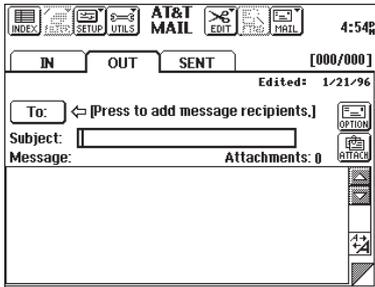
- Name: In the OUT and SENT folders, it is the name of the recipient. In the IN folder, it is the name of the sender.
- Subject
- Date
- [001/002] Message counter: The first number is the number of the selected message (messages are numbered sequentially). The second number is the total number of messages in the folder.

Creating a new message

The first step in sending a message is to create the message. The size of a message is limited only by the amount of memory available in the unit.

To create a message:

1. Touch **EDIT**, then select **New Message** to get a blank message display.



2. Type a brief subject that describes the nature of the message.
3. Touch **To:** to address the message. (See the “Addressing Messages” section that follows.)

4. Touch the message box and type a message. Touch the font button in the scroll bar to change the font size displayed in the message.
5. Touch **OPTION** to include any message options. (See the “selecting message options” section that follows.)
6. Touch **ATTACH** to include any attachments with the message. (See the “Attachments” section that follows.)
7. Press **ENTER** to save the message to the OUT folder.

NOTE

- The message is saved in the unit's main memory, even if you have switched the data source to PC Card (in PC Card of TOOLS).
- You can also check the spelling. To use this function, touch **UTILS** and select “**Check spelling**”. The operation is same as that in Documents. For more detail, refer to unit's operation manual.

Addressing messages

1. Touch **To:** on the message display to add recipients to the message. An E-Mail Address display is shown.

E-Mail Address Type: AT&T Mail Setup Done

Name: Becktell, Marty

Mail ID: attmailmartbec AT&T OPTNS

Address Book: Becktell, Marty; Caggiano, Ralph; Caggiano, Nicky; Dankamura, Nicky; Dresnmat, Fran; Ferranti, Vince; Grahm, Kent

Recipients: To:; Cc:; Bcc:

2. Select the type of address from the pop-up menu at the top of the display. This choice affects the address information and options that are available for the message. See *the "Address types"* section that follows for the types of available messages.

3. Select the name of a recipient from the Address Book listing to display their full Name and Mail ID at the top of the page. If the incorrect address book is listed or the address book is using the incorrect field, you can change the address book setup by touching **Setup** at the top of the display.

Address Book Setup Cancel OK

Memory: Main Unit

Extract From: Contact 1

Name Field: Name

Mail ID Field: E-Mail ID 1

Phone Number Field: Office #

Fax Number Field: Fax #

Company Name Field: Company

Postal Address Field: Address

Internet ID Field: E-Mail ID 2

4. Touch one of the following buttons to add that person to the Recipients list:

- To: Sends the message to a primary recipient.
- Cc: Sends a courtesy copy to a recipient.
- Bcc: Sends a blind courtesy copy to a recipient. Other recipients do not see the list of Bcc: recipients.

You can also manually address a message by entering new information in the address fields, then selecting **To:**, **Cc:**, or **Bcc:**.

NOTE

There must be at least one recipient for a message.

To view a recipient's detailed address information, touch the recipient's name. You can then modify that recipient's address information.

5. Touch **Done** to return to the New Message display.

Address types

The address type affects the address information and available options. The following address types are available:

- AT&T Mail
- Internet
- Paper
- Fax
- CompuServe
- SkyMail
- Telex
- X.400

Touch the **TYPE:** pop-up menu to select the type of message. This selection adjusts the prefix used in the Mail ID. Alternatively, you can directly type in the Mail ID prefix for any type of message. (See "Setting up the address Book" on page 200 for a complete list of message types and address prefixes.)

AT&T Mail

An AT&T Mail address needs the Name and Mail ID.

The screenshot shows the 'E-Mail Address' dialog box with the following fields and options:

- Type:** AT&T Mail (dropdown menu)
- Name:** Beckett, Marty (text field)
- Mail ID:** attmailmartbec (text field)
- Buttons:** Setup, Done, and AT&T OPTNS (checkbox)
- Address Book:** A list of names: Beckett, Marty; Caggiano, Ralph; Caggiano, Nicky; Dankamura, Nicky; Dresnmat, Fran; Ferranti, Vince; and Grahm, Kent.
- Recipients:** Fields for To:, Cc:, and Bcc: with arrows for adding recipients from the address book.

- /overnight: Sends the message by overnight courier service on business days (if the recipient is in the courier's overnight delivery zone). This only applies if you also select /usmail.
- /receipt: Sends a receipt of delivery to the sender when the message is opened by the recipient. There is also a /noreceipt option.
- /usmail: Sends the message via U.S. mail (with U.S. delivery only).

Refer to the *AT&T Mail User's Guide* for a complete list of recipient options.

Fax

A fax address requires the Name and Fax number.

AT&T Mail recipient options

Touch **AT&T OPTNS** to select any of the following recipient options:

- /cod: Sends the message cod (recipients pay the charge if the message is read). There is also a /nocod option.
- /nologo: Sends the message without a user logo. This only applies if you also select /usmail.
- /nocoversheet: Sends the message without a cover sheet. (The cover sheet lists the date, time, sender's name and address, recipient's name and address, message subject, total number of pages, and logo.) This only applies if you also select /usmail.

The screenshot shows the 'E-Mail Address' dialog box with the following fields and options:

- Type:** Fax (dropdown menu)
- Name:** Beckett, Marty (text field)
- Fax No:** (716) 555-1212 (text field)
- Buttons:** Setup, Done, and Nocoversheet (checkbox)
- Logo:** None (dropdown menu)
- Buttons:** Landscape (checkbox)
- Address Book:** A list of names: Beckett, Marty; Caggiano, Ralph; Ferranti, Kent; Dankamura, Nicky; Dresnmat, Fran; Ferranti, Vince; and Grahm, Kent.
- Recipients:** Fields for To:, Cc:, and Bcc: with arrows for adding recipients from the address book.

Fax recipient options

The following recipient options are available with a fax:

- Logo: Specifies the public or private logo for the fax.
- Nocoversheet: Sends the message without a cover sheet.
- Landscape: Sends the message using an 8.5 x 11-inch horizontal format (132-character width). This option is available to AT&T MailFAX only. Logos and signatures are not available with this format.

Paper

Paper messages are sent to an AT&T Mail printing facility, then mailed to the recipient based on the priority. Recipients must be within the United States to receive a paper message. A paper message requires the Address and Phone number.

The screenshot shows an "E-Mail Address" dialog box. At the top, it says "Type: Paper" with a dropdown arrow, and buttons for "Setup" and "Done". Below this, there are fields for "Address:" and "Phone:". The address field contains "Beckett, Marty", "Datacook Inc.", and "729-9992 East Wing". The phone field contains "(716) 555-1212". To the right of the phone field is a "PAPER OPTION" button. Below the address and phone fields, there are two sections: "Address Books" and "Recipients:". The "Address Books" section has a list of names: "Beckett, Marty", "Caggiano, Ralph", "Ferranti, Kent", "Dankamura, Nicky", "Dresnat, Fran", "Ferranti, Vince", and "Grahm, Kent". The "Recipients:" section has three rows for "To:", "Cc:", and "Bcc:", each with a dropdown arrow and a list of names.

Paper recipient options

The following paper recipient options are available by touching **PAPER OPTION**:

- Format: Business format is the standard letter format with the date and recipient information at the top of the page and the sender information and copy list at the bottom of the page. Memo format has the recipient and sender information, date, and subject at the top of the page.
- Delivery: Standard delivery sends the message via 1st class U.S. mail. Priority delivery sends the message using an overnight courier service on business days. Urgent delivery sends the message the same day using a courier service.
- Logo: Specifies if the message is printed with a user or public logo.

Refer to the *AT&T Mail User's Guide* for a complete list of recipient options.

Internet, CompuServe, SkyMail, Telex, & X.400

Each of these address types requires the Name and Mail ID. There are no recipient options.

E-Mail Address Type: **Internet** Setup Done

Name: Beckett, Marty

Mail ID: internet!attmail.com!martybeck

Address Book:

Address Book	Recipients
Beckett, Marty	To:
Caggiano, Ralph	
Ferranti, Kent	Cc:
Dankamura, Nicky	
Dresnatt, Fran	BCC:
Ferranti, Vince	
Graham, Kent	

Selecting message options

1. From the New Message display, touch **OPTION** to change the following message options:

Message Options Done

Priority: Normal

Send COD

Return receipt

Save sent messages

Project Code: _____

- Priority: Sets a normal or high priority for a message.
- Send COD: Sends the message COD (cash on delivery) to all recipients of the message, so the recipients are billed when they read it. This does not apply to some address types, such as fax.
- Return receipt: Notifies the sender when the recipient reads the message. This feature is useful if the recipient is traveling, and you are having difficulty reaching them.
- Save sent messages: Saves sent messages in the SENT mail folder, otherwise they are deleted.
- Project Code: Assigns a project code to the message for billing purposes.

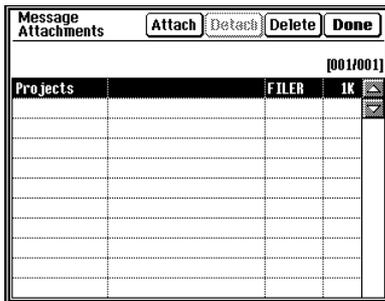
2. Touch **Done** to return to the New Message display.

Attachments

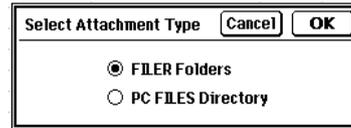
You have the option of including the unit FILER folders or PC files directories with messages. These attachments are not included in the body of the message, but they are merely attached. The attachments retain their original format.

To add attachments to a message:

1. From the New Message display, touch **ATTACH** to include attachments with the message.



2. Touch **Attach** and select the type of attachment (the unit FILER Folders or PC FILES Directory), then touch **OK**.



3. For FILER folders, select a folder and touch **Attach**. Only folders can be attached, not individual entries. For PC Files, select a file and touch **Attach**.
4. Touch **Done** to include the attachments with the message and return to the New Message display.

Editing a message

If you need to correct or add to a message in the OUT folder, you can edit it. Simply select the message and touch **VIEW** to display the message. You can then make any changes to the message in the same way as when creating new messages.

AT&T Mail Access has the added benefit of editing a message, and saving the original and newly edited versions of the message in the OUT folder.

To edit a message (and save the original version):

1. While in Index view, select a message from the OUT folder that you want to edit.
2. Touch **EDIT**, and select **Copy** to copy the message while keeping the original message untouched.
3. Touch **EDIT**, and select **Paste** to place a copy of the message in the OUT folder.
4. Touch **VIEW** to display the message, then change or add new information to it.
5. Press **ENTER** to save the message.

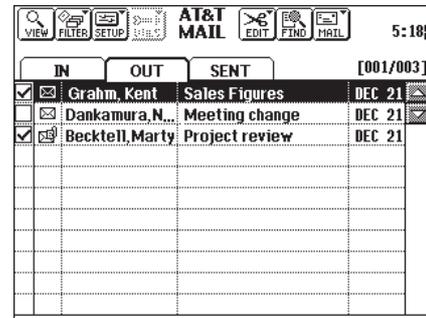
Connecting to the host

After creating messages, you can send them using AT&T Mail Access.

You have the option of selecting the messages that you want to send. The currently selected folder must be the OUT folder to send messages. You can send one of the following groups:

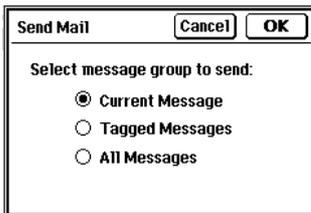
- The currently selected message.
- A group of tagged messages.
- All messages in the OUT folder.

To select a group of messages, you must tag them. To tag a message, touch the tag box on the left side of the index in the OUT folder. A checkmark appears in the tag box to show that the message is selected.

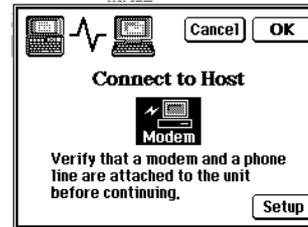


To connect to the host:

1. Touch **MAIL**, then select **Send Only** to send messages in the OUT folder or **Send/Receive** to send and receive messages during the same session. Note that these selections are available only if the currently displayed folder is the OUT folder.
2. Select the messages that you want to send and touch **OK**. You can send one of the following groups:
 - Current Message: The one message that is selected.
 - Tagged Messages: The messages that are tagged with the checkmark in the tag box.
 - All Messages: Every message in the OUT folder.

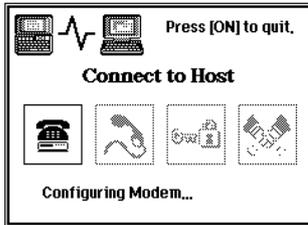


3. If you need to change the AT&T Mail or Modem setup before connecting, touch **Setup**.
4. After verifying your modem and phone line connection, touch **OK** to connect to AT&T Mail.

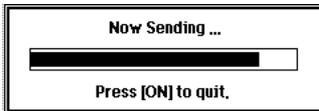


The following display shows you the status of the connection during this process. For a successful connection, you see the following messages:

- Configuring Modem
- Dialing the AT&T Mail Access phone number
- Logging into Host
- Completing communication link



After connecting to AT&T Mail, you see the following status display while it is sending messages. This status display shows a status bar to graphically show how much of the transfer is completed.



You also see status messages when the message transfer is completed and when AT&T Mail Access is disconnecting from the host.

Press **ON** to stop sending messages at any point during the transmission.

Receiving messages

To receive messages, the unit connects to the AT&T Mail system and looks for messages addressed to your user ID. This procedure is similar to the procedure for sending messages, but incoming messages are stored in the IN mail folder.

You can selectively receive messages based on the following criteria:

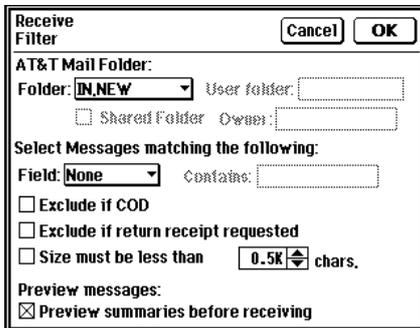
- Subject
- Sender's user name
- Sender's user ID
- COD messages
- Return receipt requested
- Size of the message

You can also preview your messages to select exactly which messages you want to receive. These options can save time if you receive a lot of mail, and you need to search for selected items.

You can then view these messages in your IN folder. AT&T Mail Access also has features for quickly answering or forwarding messages that you receive.

To receive messages:

1. Touch **MAIL**, then select **Turn on Receive Filter** to use the receive filter.
If the receive filter is turned off, then all new messages are received.
2. Touch **MAIL**, then touch **Receive Only** to receive messages into the IN folder or **Send/Receive** to send and receive messages during the same session.
You see the Receive Filter display.



The screenshot shows a dialog box titled "Receive Filter" with "Cancel" and "OK" buttons. It contains the following fields and options:

- AT&T Mail Folder:**
 - Folder: **IN,NEW** (dropdown menu)
 - User folder: [text field]
 - Shared Folder
 - Own: [text field]
- Select Messages matching the following:**
 - Field: **None** (dropdown menu)
 - Contains: [text field]
- Exclude if COD
- Exclude if return receipt requested
- Size must be less than **0.5K** (spin box) chars.

Preview messages:

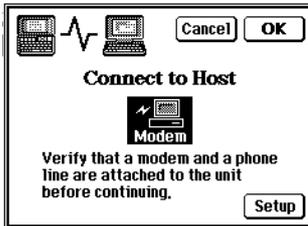
- Preview summaries before receiving

3. Select the folder that contains the messages that you want to receive. Options include:
 - IN.NEW: New messages.
 - IN.OLD: Old messages that were previously received. You can configure your AT&T Mail account to specify the number of days (1-6 days) that the IN.OLD folder retains these messages.
 - SENT: Sent messages.
 - User Folder: Messages stored in a folder that you create. When registering your AT&T Mail account, you must request that your account has the capability to create user folders.
 - Shared Folder: Messages stored in another AT&T Mail user's folder that is shared with a group of users.
4. Select the criteria that the messages need to match. The following message fields are available in the Field pop-up menu:
 - Subject: a text string in the subject field.
 - User Name: a text string in the user name.
 - User ID: a specific user ID.

Other options include:

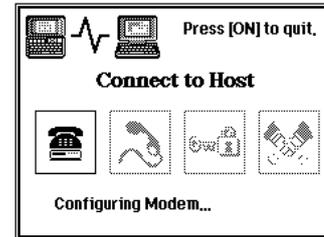
- Exclude COD messages.
- Exclude messages that generate a return receipt.
- Exclude messages greater than a specified size.

5. Select the **Preview summaries** option, if you want to see a list of messages that matches the filter criteria before they are downloaded.
6. Touch **OK** to get the Connect to Host display.
7. If you need to change the AT&T Mail or Modem setup before connecting, touch **Setup**.
8. After verifying your modem and phone line connection, touch **OK** to connect to AT&T Mail.

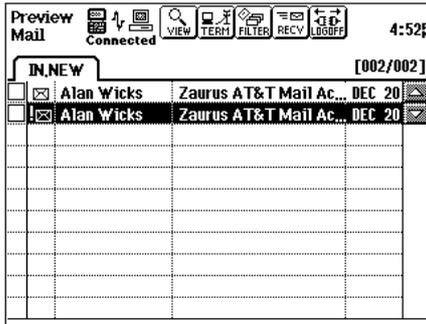


The following display shows you the status of the connection during this process. For a successful connection, you see the following messages:

- Configuring Modem
- Dialing the AT&T Mail Access phone number
- Logging into Host
- Completing communication link

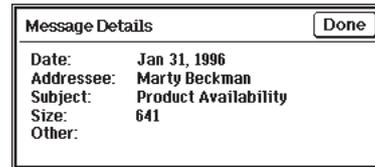


Next, AT&T Mail Access builds the message summary display, listing the messages waiting to be received in the selected folder.



This listing is similar to the other mail folder listings, with the sender, subject, and date displayed for each message. In addition, the listing shows the approximate size of the message.

9. Select a message in the summary and touch **VIEW** to get more information about the message on the Message Details display. The Details display is useful if the message information could not all fit in the summary listing (for example, when you see . . . on the summary).



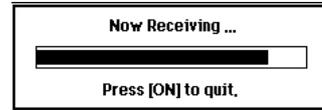
Touch **Done** to return to the Preview Mail display.

10. Touch **FILTER** to change the receive-filter criteria, if necessary.

11. Touch **RCV** to receive messages listed in the summary. You can receive the following groups of messages:
- Current Message: The message that is currently highlighted.
 - Tagged Messages: The messages that are tagged with the check mark in the tag box at the left of the listing.
 - All Messages: Every message in the folder.
- You also have the option of automatically disconnecting after you receive the messages. If you do not choose this option, you are asked if you want to disconnect after receiving messages. If you do not disconnect, you return to the message summary display.



You see the following status display when receiving messages. This status display has a status bar that graphically shows how much of the transfer is completed.



Status messages are displayed when the message transfer is completed and when the unit is disconnecting from the AT&T Mail host.

Press **ON** to stop receiving messages at any point during the transmission.

Using AT&T Mail as a terminal

You can use AT&T Mail as a simple TTY (teletypewriter) computer terminal and connect directly to the AT&T Mail network.

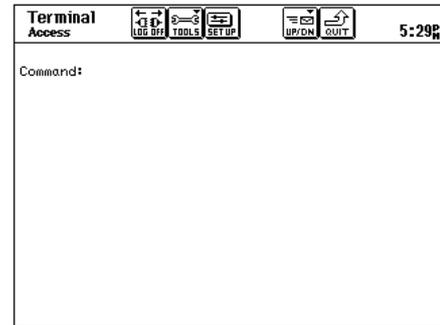
There are two ways to use AT&T Mail in terminal mode. The first method directly connects to AT&T Mail in terminal mode, while the second method connects via AT&T Mail Access and lets you preview mail summaries before entering terminal mode.

To connect to AT&T Mail using terminal mode:

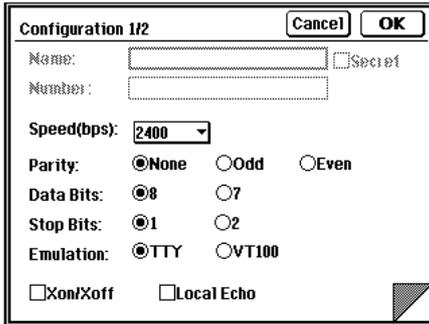
1. Touch **MAIL**, then select **Terminal** to select terminal mode.
2. Touch **OK** from the Connect to Host display to connect to the AT&T Mail network. Once connected, you can then use the terminal mode displays to create, send, and receive messages directly on the AT&T Mail network. These messages are not downloaded to AT&T Mail Access on the unit, so they do not appear in your IN and OUT folders. Refer to the *AT&T Mail User's Guide* for a list of commands that you can use in terminal mode and the "*Terminal*" chapter for a detailed explanation of terminal mode operation.

To switch between preview mail and terminal mode:

1. Connect to the AT&T Mail network, using the receive filter and preview summaries option.
2. From the Preview Mail display, touch **TERM**.



3. Touch **SETUP**, then select **Configuration** to setup the terminal configuration.



Configuration 1/2

Name: Secret

Number:

Speed(bps): 2400

Parity: None Odd Even

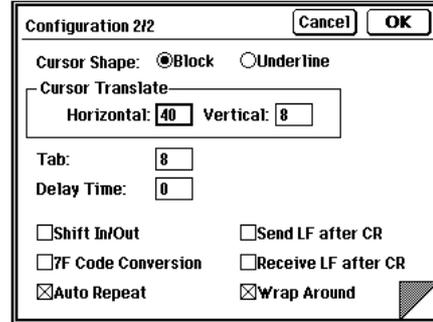
Data Bits: 8 7

Stop Bits: 1 2

Emulation: TTY VT100

Xon/Xoff Local Echo

The configuration settings are on two pages. Touch the bottom right-hand corner of the display to switch between pages.



Configuration 2/2

Cursor Shape: Block Underline

Cursor Translate

Horizontal: 40 Vertical: 8

Tab: 8

Delay Time: 0

Shift In/Out Send LF after CR

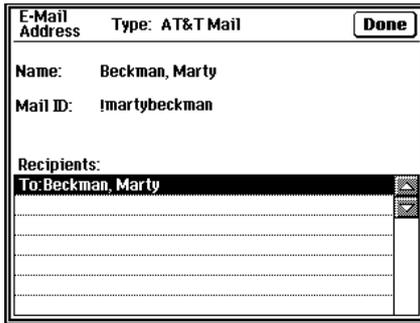
7F Code Conversion Receive LF after CR

Auto Repeat Wrap Around

Refer to the *AT&T Mail User's Guide* for a list of commands that you can use in terminal mode.

4. Touch **QUIT** to return to the Receive Filter display or **LOG OFF** to disconnect from AT&T Mail.

6. Touch **To**: to see all of the recipients of the message. Select a recipient to see their address at the top of the display.



Touch **Done** to return to the message display.

7. Press the **NEXT** or **PREV** keys, or touch the curled-up corner (below the scroll bar) to view the succeeding or preceding messages in the folder.
8. Touch **INDEX** to return to the index view of the IN folder.
Note that the status icon has changed from a closed envelope to an opened envelope. You can then use this same procedure to view another message.

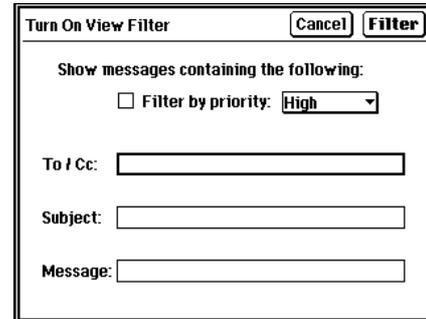
To use the view filter:

The view filter lets you select the type of messages that are listed in a mail folder. It can use the following criteria for displaying messages:

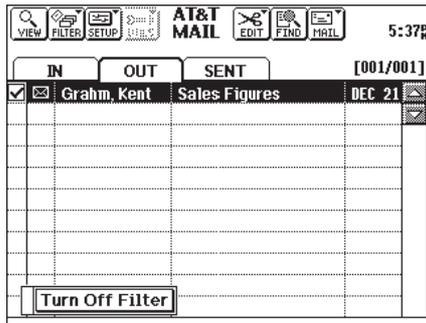
- Priority
- Sender using the From: field (messages in IN folder only)
- Recipients using the To/Cc: field
- Subject
- Message body

You can use the view filter on any of the mail folders, but you must select it separately in each folder.

1. Touch **FILTER**, and select **Filter** to set the filtering criteria.



2. Select the criteria for filtering. You can use key words for filtering; it is not necessary to enter the entire name or subject.
3. Touch **Filter** to activate the filter.

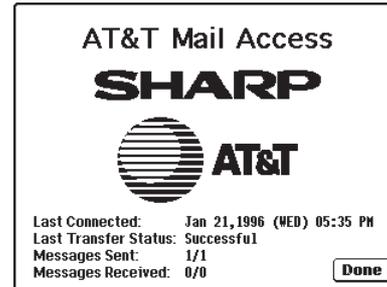


The folder shows only the messages that match the set criteria. A box is displayed at the bottom of the folder to remind you that the view filter is activated and the folder is not displaying the full list of messages.

4. Touch the **Turn Off Filter** reminder (or touch **FILTER** and select **Turn Off View Filter**) to return to the full list of messages.

To view the status of the last connection and transfer:

1. Touch the **AT&T MAIL** icon at the top of the display.



Answering a message

This display shows the following information:

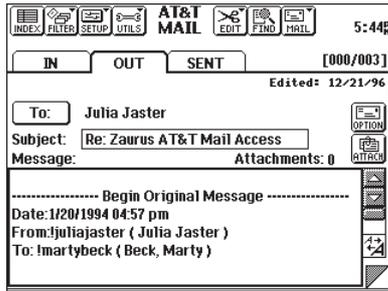
- Last Connected: Date and time of the last connection.
 - Last Transfer Status: Transfer status (such as **Successful** or **Error**) of the last connection. Refer to *Troubleshooting* for a list of possible problems and solutions.
 - Messages Sent: Number of messages sent successfully and the total number of messages that AT&T Mail Access tried to send.
 - Messages Received: Number of messages received successfully and the total number of messages that AT&T Mail Access tried to receive.
2. Touch **Done** to return to the mail folders.

If you need to respond to a message that you received, you can use the Answer Message feature. This is easier than creating a new message, since AT&T Mail Access automatically addresses the message and enters a subject (such as *Re: original subject*). You simply type in the reply.

To answer a message in the IN folder:

1. While viewing the received message, or with it selected in Index view, touch **EDIT**, then select **Answer Message**.
2. Select the recipients of the answer (either the author or all of the recipients of the original message).
3. Check the box if you want to include the original message as part of the new message. The original message is displayed in the message box after the title *Begin Original Message*. It includes the date, sender, recipients, and message.

4. Touch **OK** to edit the new message. AT&T Mail Access automatically fills in the recipients and subject.



5. Type in an additional message or add attachments, as when creating a new message.
6. Press **ENTER** to save the message to the OUT folder.

Forwarding a message

If you receive a message and want to send it to someone else, then you can use the Forward Message feature. This is easier than creating a new message, since AT&T Mail Access uses the same subject (in the form *Re:original subject*), message, and attachments as the original message, and you only need to enter the new address and add to the message, if necessary.

To forward a message in the IN folder:

1. While viewing the received message, or with it selected in Index view, touch **EDIT**, then select **Forward Message**. You see the new message display with the subject and message automatically filled in for you.
2. Select the recipients of the message, the same way you do when creating a new message.
3. Add any additional text to the message, as needed.
4. Press **ENTER** to save the message to the OUT folder.

Managing Your Messages

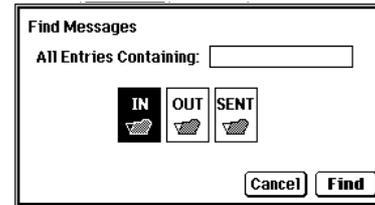
A T&T Mail Access has a variety of functions that help you organize your messages.

Finding messages

If the mail folders contain many messages, you can use this feature to automatically search for a specific message.

To find a message:

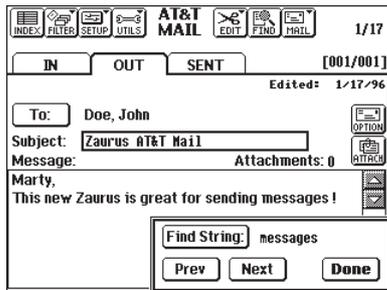
1. Touch **FIND** to search for messages.



2. Enter the search criteria.
3. Select the mail folders that you want to search.

Deleting messages

4. Touch **Find** to search for the message.



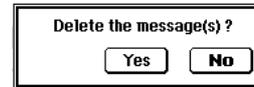
The first message containing the string is opened, and the string is displayed in the Find String dialog box.

5. Touch **Next** to search for the string in other messages. Touch **Prev** to return to previous messages with the string.
6. Touch **Done** when the search is completed or the string cannot be found in any other messages.

The editing functions let you delete messages to reduce the clutter in your mail folders. You can delete messages from the index or detail view.

To delete a message:

1. Touch **EDIT** to use the delete commands.
2. Select the delete function based on the number of messages that you need to delete:
 - Select **Delete Message** to remove the selected message from the folder.



- Select **Delete Group** to remove more than one message from a folder. Select the appropriate option to delete tagged messages or all messages, and touch **OK**.



3. Touch **Yes** to confirm the deletion.

Converting messages to Documents

AT&T Mail Access lets you convert a message to a Document, so you can format and edit it or file a copy of it in Filer.

To convert a message:

1. In Index view, select a message or tag several messages that you want to convert to documents.
2. Touch **EDIT**, and select **Convert to Document**.

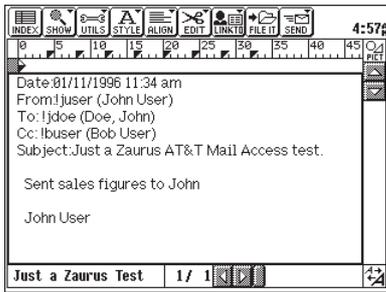


3. Enter the name of the new document. The message subject will be used as the default name.

4. Select the messages that you want to convert. You have the following options:
 - Current Message: The message that is currently selected.
 - Tagged Messages: The messages that are tagged with the checkmark in the tag box at the left of the listing.
 - All Messages: Every message in the folder.
5. Check the **Delete messages after conversion** box if you want to delete the messages from the mail folder after converting them to documents.

6. Touch **OK** to convert the message into a document.

You can now use the Documents application to view or change the document. The document contains the date and time, sender's address, recipient's address, subject, and message.



If you convert a message with attachments and delete the original message, then AT&T Mail Access does not retain the attachments anywhere on the unit. Therefore, AT&T Mail Access displays a warning that reminds you to detach any attachments before it converts the message.

Troubleshooting

This section answers questions you may have when using AT&T Mail Access.

Troubleshooting checklist

- Cannot find AT&T Mail Access on the unit.**
 - Touch **TOOLS**.

- Incorrect date and time on the unit.**
 - Touch **TOOLS** and then touch **Clock** twice. Touch **ADJUST**, and enter the correct date and time.

- Cannot connect to the AT&T Mail service network.**

Check the following:

 - Modem settings.
 - Modem connection to the unit.
 - Modem connection to a phone line.
 - AT&T Mail settings.
 - AT&T Mail phone number.
 - Phone number prefix (if you are dialing from a location that needs additional numbers to access an outside line).
 - Login script.

- Memory is full.**
 - Delete data from the main memory (such as Documents, Notes, Contacts, Data Files, or old messages) to free up memory.

- Unable to send messages.**
 - The AT&T Mail message was rejected. Check the recipient list to ensure that the addresses are valid.

Appendixes

This section contains AT&T EasyLink Services Global Alliance program member directory, AT&T Mail traveller's access number, and AT&T Mail login scripts.

Appendix A: AT&T EasyLink Services Global Alliance program member directory

Use the following international customerservice numbers to get information about registration, access numbers, or other questions about using AT&T Mail.

EUROPE, AFRICA, MIDDLE EAST REGION

European Regional Support Center (ERSC) Tel: 32-2-676-3737
 15B Herman de Broux Fax: 32-2-676-3810
 1160 Brussels Belgium !europehelp

Egypt Comm Net Group 6 Elbatal Medhat Abdel Hamid St. Cairo	Tel: 20-2-344-2085/39/64 Fax: 20-2-344-2027 !commnet
France AT&T EasyLink France 52 Quai de Dion-Bouton 92086 Puteaux Cedex	Tel: 33-47-67-4776 Fax: 33-47-67-4775 !francehelp
Germany AT&T EasyLink Germany Eschersheimer Landstrasse 14 6000 Frankfurt/Main 1	Tel: 49-69-153-06242 Fax: 49-69-153-06119 !atthilfe
Hungary Ediport Telecommunications Ltd. Konkoly Theze M. ut 29 - 33 Budapest XIII	Tel: 361-160-2497 Fax: 361-175-8056 !zsolt

Iran Pars Supala 31, 7th Street Motaheri Avenue Daryaeihnoor St. Tehran 15876	Tel: 982-1-623-208/304/ 806 Fax: 982-1-629-258 !parshelp
Israel Goldnet 40 Namal Street 63506 Tel Aviv	Tel: 972-3-543-3777 Fax: 972-3-544-4199 !goldhelp
Italy SEVA S.p.A. Via Pantano 20 20122 Milano	Tel: 39-2-850-7300 Fax: 39-2-850-7290 !sevahelp
Lebanon Libatel s.a.r.l. 12, Camille Edde Street Beirut	Tel: 961-1-496-430 Fax: 961-1-500-706 !libatel
Russia Institute for Automated Services 2A Nezhdamova Street Moscow 103009	Tel: 70-95-229-7846 Fax: 70-95-229-3237 !iasnet
UK AT&T EasyLink Services 4 Selsdon Way City Harbour London E14 9GL	Tel: 44-71-537-4115 Fax: 44-71-537-3765 !attukhelp

ASIA, PACIFIC REGION

Customer Service Center (CSC) Tel: 852-511-5828
 4/F China Underwriters Center Fax: 852-598-0810
 88 Gloucester Road !elsaphelp
 Wanchai, Hong Kong

Australia, New Zealand AT&T ELS Australia Ltd. Level 8 15 Orion Rd Lane Cove, NSW Sydney	Tel: 61-2-911-1530 Fax: 61-2-911-1555 !elauhelp
Hong Kong, People's Rep. of China, Macao, Thailand AT&T ELS Asia-Pacific 4/F, China Underwriters Ctr 88 Gloucester Road Wanchai, Hong Kong	Tel: 8522-511-5828 Fax: 8522-598-0810 !elsaphelp
Japan AT&T Jens No. 25 Mori Building 1-4-30 Roppongi Minato-ku, Tokyo 106	Tel: 813-5561-3411 Fax: 813-3584-1125 !jenshelp
Rep. of Korea S.T. Lee International Co. Room 1805, Jung-Dong Bldg 15-5 Jung-Dong, Choong-ku Seoul	Tel: 82-2-752-4597 Fax: 82-2-773-2948 !stlee

Philippines TIN Asia, Inc. 22 Filmore St., Greenhills San Juan, Metro Manila	Tel: 63-2-722-2059 Fax: 63-2-722-6650 !tinasia
Taiwan, R.O.C. New Southern Engineering Enterprises Co., Ltd.. 8F, No.279, Sec.4 Hsin-I Road	TaipeiTel: 886-2-708-7679 Fax: 886-2-703-1025 !insehelp

AMERICAS REGION

Americas Regional Support Center (ARSC)

Tel: (201) 331-4400

400 Interpace Parkway
Parsippany, NJ 07054

Fax: (201) 331-4513
!arschelp

<p>Argentina EasyMail, S.A. Viamonte 611 9th Floor 1053 Buenos Aires</p>	<p>Tel: 541-322-1024 Fax: 541-322-0160 !agraizer</p>
<p>Bermuda Cable and Wireless 20 Church Street P.O. Box HM 151 Hamilton HMAX</p>	<p>Tel: 1-809-295-4777 Fax: 1-809-295-7909 !rtbassett</p>
<p>Brazil MSS do Brazil SCLN 309, Bloco A, No.70 Sala 101/105 CEP : 70755 Brasilia DF In Brasilia:</p>	<p>Tel: 5561-349-2100 Fax: 5561-349-1744 In Sao Paulo: Tel: 5511-210-3211 Fax: 5511-210-3838 !msshelp</p>

<p>Canada Unitel Communications, Inc. 2005 Sheppard Ave East Suite 215 Willowdale, Ontario M2J 5B4</p>	<p>Tel: 1-416-502-1740 Fax: 1-416-490-3633 !cndahelp</p>
<p>Chile EasyMail Chile S.A. Marchant Pereira 605 Providencia, Santiago</p>	<p>Tel: 562-274-0072 Fax: 562-235-7529 !helpchile</p>
<p>Colombia ComWare Calle 99 Numero 11, A-32 Santa Fe de Bogota D.C.</p>	<p>Tel: 571-616-6066 Fax: 571-616-0695 !xofthelp</p>
<p>Dominican Rep. Codetel Redes de Datos 1101 Abraham Lincoln Blvd. Santo Domingo</p>	<p>Tel: 1-809-220-5115 Fax: 1-809-220-5206 !codemail</p>
<p>Mexico EKONOM, S.A. de C.V. Leibnitz 270 C.P. 11590 Mexico D.F.</p>	<p>Tel: 52-5-227-7444 Fax: 52-5-227-7432 !vatrev</p>

<p>Panama Fidanque hermanos e hijos,s.a. Calle 50 y Calle 59 Urbanizacion Obarrio Apartado Postal 721 Panama 1</p>	<p>Tel: 507-64-2444</p>
<p>Paraguay Netsystems Avenida Espana 1615 Asuncion</p>	<p>Tel: 595-21-20-8290 Fax: same as phone !paraguayhelp</p>
<p>Peru Limatel Conquistadores 396 OF. 305 Lima 27</p>	<p>Tel: 5114-411319 Fax: 5114-410830 !limatel</p>
<p>Uruguay EasyMail, S.A. Yaguaron 1225 11100 Montevideo</p>	<p>Tel: 598-2-92 01 27 Fax: 598-2-92 01 14 !elsuruguay or !mvdsales</p>
<p>Venezuela ComWare La Urbina Edificio Mulimar Piso 3 Calle 5 con Calle 8 Caracas</p>	<p>Tel: 582-242-5144/5122 Fax: 582-242-4216 !comwarehelp</p>

Appendix B: AT&T Mail

traveler's access numbers

You will access AT&T Mail in the US and internationally from over 160 countries. To receive the detail international access numbers, call AT&T international customer service mentioned in Appendix A.

Australia

Country Wide

Access Number: +61-13-1136
Charges: Local call
Speed/Standard: 2400/V.22
9600/V.32 MNP5
Script: AT&T Mail Direct (installed in Zaurus)

Canada

200+ cities via DATAPAC service

Access Number: 416-868-4100 or 416-979-1619
Charges: No DATAPAC charges, only local call
Speed/Standard: 1200 or 2400
(depending on location)
Script: DATAPAC (see Appendix C)

Toronto

Access Number: 416-502-3000
Speed/Standard: 9.6 V.32
Script: AT&T Mail Direct (installed in Zaurus)

Hong Kong

Hong Kong

Access Number: +852-3003-4900
Speed/Standard: V.32/22/MNP
Script: AT&T Mail Direct (installed in Zaurus)

Singapore

Singapore

Access Number: +65-535-1444
Speed/Standard: 2400/V.22/MNP5
Access Number: +65-535-1940
Speed/Standard: 9600/V.32/MNP5
Script: LAS (see Appendix C)

NOTE

The use of LAS requires an additional subscription. Contact your local AT&T EasyLink Service support center (see *Appendix A*) for additional information.

Appendix C: AT&T Mail login scripts

AT&T Mail Direct

```
DELAY 10
SEND 0 "^M"
DELAY 20
SEND 0 "^M"
WAIT 450 "Name:"
SEND 0 "$USERID^M"
WAIT 300 "Password:"
SEND 0 "$ATTPASS^M"
WAIT 900 "word:" OR "**" OR "ion:"
IFGOT 2 SKIP 7
IFGOT 1 SKIP 4
IFTERMINAL SKIP 5 OR 0
SEND 0 "1^M"
WAIT 900 "word:" OR "**"
IFGOT 2 SKIP 2
SEND 0 "$SECPASS^M"
WAIT 900 "**"
```

REDI-ACCESS Packet (X.25)

For a listing of REDI-ACCESS telephone numbers for each state in the U.S., check your *AT&T Mail User's Guide*.

```
DELAY 50
SEND 1 "...^M"
WAIT 300 ">>" OR " __"
SEND 1 "set 21:0^M"
DELAY 10
SEND 1 "attmail^M"
WAIT 300 "Welcome" OR "COM"
DELAY 10
SEND 0 "^M"
DELAY 20
SEND 0 "^M"
WAIT 450 "Name:"
SEND 0 "$USERID^M"
WAIT 300 "Password:"
SEND 0 "$ATTPASS^M"
WAIT 900 "word:" OR "**" OR "ion:"
IFGOT 2 SKIP 7
IFGOT 1 SKIP 4
IFTERMINAL SKIP 5 OR 0
SEND 0 "1^M"
WAIT 900 "word:" OR "**"
IFGOT 2 SKIP 2
SEND 0 "$SECPASS^M"
WAIT 900 "**"
```

LAS – Local Access Service

In the following script, substitute \$A with the LAS ID and \$C with the LAS password.

```
DELAY 50
SEND 5 "^M^M^M"
DELAY 50
SEND 0 "c^M"
DELAY 50
SEND 0 "$A, $C ^M"
WAIT 400 "Welcome"
DELAY 10
SEND 0 "^M"
DELAY 20
SEND 0 "^M"
WAIT 450 "Name:"
SEND 0 "$USERID^M"
WAIT 300 "Password:"
SEND 0 "$ATTPASS^M"
WAIT 900 "word:" OR "**" OR "ion:"
IFGOT 2 SKIP 7
IFGOT 1 SKIP 4
IFTERMINAL SKIP 5 OR 0
SEND 0 "1^M"
WAIT 900 "word:" OR "**"
IFGOT 2 SKIP 2
SEND 0 "$SECPASS^M"
WAIT 900 "**"
```

DATAPAC – DataPac in Canada

```
DELAY 30
SEND 0 "..^M"
WAIT 300 "DATAPAC:"
DELAY 20
SEND 0 "SET 123:0^M"
DELAY 20
SEND 0 "R 95800942^M"
DELAY 50
DELAY 10
SEND 0 "^M"
DELAY 20
SEND 0 "^M"
WAIT 450 "Name:"
SEND 0 "$USERID^M"
WAIT 300 "Password:"
SEND 0 "$ATTPASS^M"
WAIT 900 "word:" OR "**" OR "ion:"
IFGOT 2 SKIP 7
IFGOT 1 SKIP 4
IFTERMINAL SKIP 5 OR 0
SEND 0 "1^M"
WAIT 900 "word:" OR "**"
IFGOT 2 SKIP 2
SEND 0 "$SECPASS^M"
WAIT 900 "**"
```

Login Script Commands

This section documents the scripting language supported by AT&T Mail Access.

Each line in a script file represents a command to be executed by AT&T Mail Access. The syntax and meaning of each command is as follows:

BREAK [<h-seconds>]

Sends a BREAK signal for <h-seconds> hundredths of a second duration. The default without the optional argument is 12/100 or 0.12 of a second (or BREAK 12)

DELAY <t-seconds>

Delays script execution for <t-seconds> tenths of a second duration.

IFGOT { 1 | 2 | 3 } SKIP <#-lines>

Transfer control <#-lines> down if WAIT parameter <string-1>, <string-2>, or <string-3> was received. Used after a WAIT command.

IFTERMINAL SKIP <#-lines1> OR <#-lines2>

Used for conditional control for a user who goes on-line in terminal mode and uses the Information Services menu. Pressing 1 <CR> (for AT&T Mail) skips <#-lines2> lines down. Pressing anything else skips <#-lines1> lines down.

SEND <t-seconds> "<string>"

Sends <string> with <t-seconds> tenths of a second delay before every character is sent. Use 0 for <t-seconds> for no delay. Quotes are required, but not sent.

SKIP <#-lines>

Transfer control <#-lines> down unconditionally.

WAIT <t-seconds> "<string-1>"

Wait for <string-1>, <string2>, or [OR "<string-2>" <string-3> no longer than <t-seconds> tenths of a second [OR "<string-3>"]]. Use IFGOT to test which string was received. Quotes are required, but not part of the strings.

Several character sequences have special meanings in a SEND or WAIT command string parameter, and they are replaced with the following values:

\$USERID

Login name from configuration.

\$SECPASS

Mail service password from configuration.

\$ATTPASS

Password from configuration.

^X

ASCII Control X character (where X can be from A to Z). For example, ^M = ASCII 13 = Carriage Return.

Terminal

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Introduction

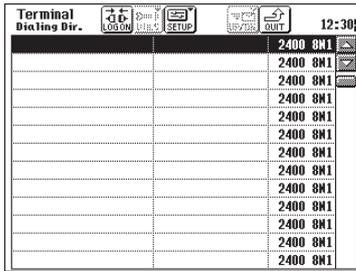
This section describes how to use the unit's Terminal to communicate with other computers.

About Terminal

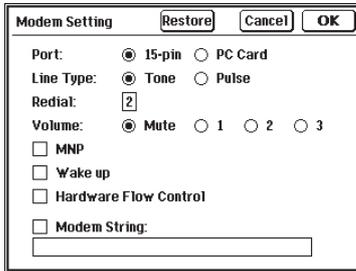
Terminal is an application which lets you use communications functions to link your unit to a remote computer or system (including a bulletin board service (BBS) or an on-line information service), and to transfer data via phone lines between your unit and a personal computer. For example, Terminal makes it possible to link your unit with a computer at home or the office using ordinary telephone lines, or to download (receive) information from public or private subscription databases.

Setting up your modem

1. Turn your unit on.
2. Touch **TOOLS** and touch **Terminal** twice.

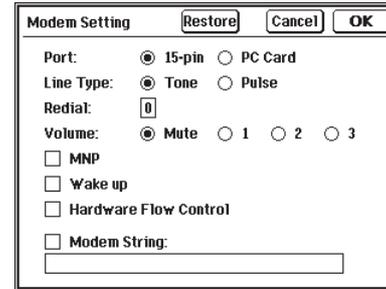


3. Touch **SETUP** and select “**Modem Setting**”.



4. Touch and select any required settings.
5. Use the numeric keys to enter the Redial value.
6. When you complete your settings, touch **OK**.

Modem settings



The modem settings are as follows:

Port:

Select 15-pin (CE-FM4) or PC Card.

Line type:

Telephones use either tone or pulse dialing. Normally, push-button phones use tone dialing and rotary phones use pulse dialing (but not always). Select Tone or Pulse. Contact your telephone company if unsure.

Redial:

Sets the number of redial tries if a connection is not made on the first attempt (number is busy or did not answer). Redial can be set in the range 0-2.

Making Terminal dial setting entry

Volume:

If your modem has a built-in speaker, selecting 1, 2 or 3 adjusts the speaker volume so you can hear dial and connection tones. The Speaker turns off automatically after connection. Mute turns the speaker off. (Speaker volume does not function with the CE-FM4 Fax/Modem.)

MNP:

Check to use MNP (Microcom Network Protocol) if supported by your modem. MNP corrects data errors caused by line noise, etc. CE-FM4 does not support MNP, and will ignore this setting.

Wake Up:

Turns your unit on in Terminal mode when called by a remote system (unless start-up display has Ask Password set to On). There are other hardware and software requirements. For more information, contact your local Sharp dealer.

Hardware Flow Control:

Provides enhanced data flow control for high-speed (greater than 2400 bps) communications.

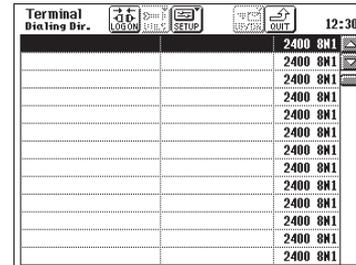
Modem String:

Used to input commands for initializing the modem. To use it, touch the Modem String checkbox first. When using the CE-FM4, you do not have to set this field.

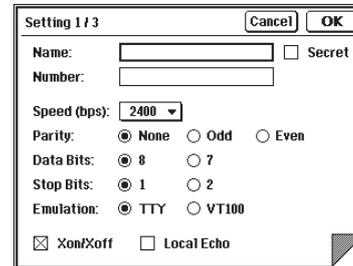
NOTE

You can restore the settings to the factory preset values by touching **Restore**.

1. Touch **TOOLS** and select **Terminal**.



2. Touch **SETUP** and select “**Dial Setting**”.



- Enter the name and phone number for each entry.
- Default settings (except transmission speed), should work well for most modem communications.
- When changing settings, try to match the settings of the remote (called) system.

3. Touch **Name** field and enter the entry's name.
4. Touch the Number field and enter the phone number for the remote system.
 - Include the area code if required.
 - If calling from a private PBX telephone system, you may need to dial 9 or some other number to get an outside line before dialing a required number.
 - PBX outside line connection usually has a delay. If the modem dials continuously, part of the number may be lost. Insert a comma in the number to instruct the modem to pause when dialing. For example, 9,555-1212.
5. Touch the **Speed (bps)** button and select a speed setting.
Data transmission can only be as fast as the slowest of the two modems used. If your modem is capable of 2400 bps and the remote modem of 1200 bps, select 1200 bps.
6. Check the Secret box if you require password access for this entry.

7. Make any other required setting changes. Use the page icon (📄) to turn to other pages.

8. When you complete your settings, touch **OK**.

NOTE

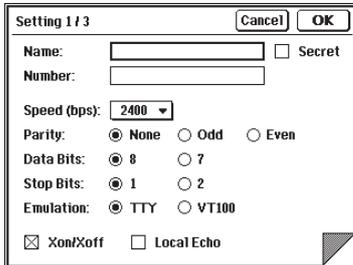
It is beyond the scope of this manual to explain all aspects of communications, such as protocols, terminal emulation, etc. For further information, consult your modem manual or a reference book.

About directory settings

Terminal connection parameters are set from the Dialing Directory Setting display. Each entry has its own settings, so that you can dial a number just by selecting the desired entry.

- When off line, **Dial Setting** can be selected and **Configuration** is faded.
- When on line, **Configuration** can be selected and **Dial Setting** is faded. Configuration is a subset of Dial Setting, for use while on-line.

Dial Setting has three setting displays and Configuration has two.



Setting 1 / 3

Cancel OK

Name: Secret

Number:

Speed (bps): 2400

Parity: None Odd Even

Data Bits: 8 7

Stop Bits: 1 2

Emulation: TTY VT100

Xon/Xoff Local Echo

Parameters that can be set:

Name: Name of the dialing entry.

Number: Phone number to dial.

Speed (bps): Transmission speed in bits per second.

Parity: Simple form of transmission error checking.

Data Bits: Size of each data character transmitted (8 or 7 bits).

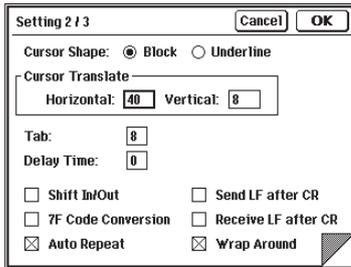
Stop Bits: Signals sent to indicate the end of each transmitted character.

Emulation: Type of computer terminal emulated as the basic remote system input/output device. Select from TTY or VT100.

Xon/Xoff: Form of handshaking (or flow control) between modems.

Local Echo: Selects whether or not to display entered characters when connected to a remote terminal.

To shift to the Setting 2/3 display, touch the bottom right of the  icon:



Setting 2 / 3

Cursor Shape: Block Underline

Cursor Translate

Horizontal: Vertical:

Tab:

Delay Time:

Shift In/Out Send LF after CR

7F Code Conversion Receive LF after CR

Auto Repeat Wrap Around

Cursor Shape:

Select cursor shape from Block/Underline.

Cursor Translate:

Number of vertical lines (range 1 - 24, default 8) or horizontal characters (range 1 - 80, default 40) that key operations move the cursor.

Tab: Sets the tab size in characters.

Delay Time: Time the sending unit waits for the receiving unit to read a line of text. Set any value from 0-99, in tenths of a second.

Shift In/Out: Switch to distinguish between accented and unaccented alphanumeric characters.

7F Code Conversion:

Switch to interpret transmission code as a delete or backspace in 7-bit data.

Auto Repeat: Repeat key function for press and hold.

Send LF after CR:

Adds a line feed to a sent carriage return.

Receive LF after CR:

Adds a line feed to a received carriage return.

Wrap Around: Moves characters to a new display line when the end of a line is reached.

Changing dial settings

1. Select the entry from the Dialing Directory display.
2. Touch **SETUP** and select "**Dial Setting**".
3. Make any changes you require.
4. Touch **OK**. The new settings are stored.

Using Terminal

You can make and receive a call, or perform other communications operation in Terminal.

Making a call

After setting up your unit with the modem, and making a dialing directory entry for the BBS, computer information service, or other remote computer, you are ready to communicate.

To make a call:

1. Touch **TOOLS** and select **Terminal**.
2. Select the entry you want to call.
3. Touch **LOG ON** to dial the number.
A message indicates when a connection is made with the other modem.
 - If the other modem answers, but no connection is made due to a setting mismatch or other problem, or if a connection is made but garbled characters are displayed, press **ON** to disconnect, and try again.
 - If you (after checking) still have trouble connecting, refer to the “Troubleshooting” section.

Calling conditions

- If you connect with a remote unit but the displayed characters are garbled, try connecting again at a slower speed.
- If your telephone line has a call waiting feature, you may receive data errors or garbled characters when someone tries to call while you are connected to a remote computer. You may be able to temporarily disable this feature before connecting to the remote computer. Contact your telephone company for details.
- If you make a connection, but do not see any characters on the display when you enter text, or you see double characters, change the local echo setting for the entry (turn it on or off).
- You must unlock your unit before selecting a secret entry.

Hang up

When you want to disconnect, you must log off from the remote computer. BBS and information services have specific log off procedures that you should follow. Do not just unplug the modem or break the telephone line connection.

After logging off, press **ON** to hang up. If for any reason the auto log off procedure fails, or you are connected to another user, press **ON** at any time to end the call and return to the Dialing Directory display.

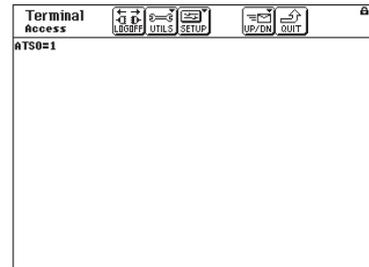
Receiving a call

In addition to making outgoing calls, your unit can also receive calls from other modems when set to “auto answer”.

To receive a call:

1. Touch **TOOLS** and touch **Terminal** twice.
2. Select a blank entry field, touch **SETUP** and then select “**Dial Setting**”.
3. Enter a name for the expected caller, or a general name such as “Answer”. Leave the Number field blank. Make settings changes as required for the incoming call (speed may be the only setting you need to change).
4. When you complete your settings, touch **OK**.
5. From the Dialing Directory display, select the entry you just made, and then touch **LOG ON**.

6. In the terminal display, enter *ATSO=1* and press **ENTER**.



This sets your unit’s modem to automatically answer a call after one ring. For an explanation of AT commands (such as *ATSO=1*), consult your modem manual.

- Any call is automatically answered.
- Press **ON** to turn off auto answer or to disconnect when the call is completed.

NOTE

The Sleep function is disabled in Terminal mode. Auto answer draws battery power continuously so you should set it up just prior to the call.

On-line operations

When connected to another computer via modem, anything you enter on your keyboard is sent to the remote computer, and anything received appears on your display. Terminal mode commands add power and flexibility to the process.

- To use ASCII control codes while your unit is on-line, touch **UTILS**, select "**Use Control Code**" (or press **NEW ENTRY**) then press the appropriate key.
- To interrupt a process, touch **UTILS** and select "**Send Break Code**".
This is also required for some log-off procedures.
- To open a movable numeric keypad on the display, Touch **UTILS** and select "**Pop-up Numeric Keypad**".
This keypad function is only for VT-100 terminal emulation.
- Use **SMBL** to enter accented characters (Ä, Ü, etc.) in on-line mode.

To make Terminal mode commands:

1. Once connected to the desired remote system, touch **UP/DN**.
2. Select the required command or function from the menu.
3. If necessary, press **ON** to cancel an upload or download which is currently in progress.

NOTE

With SHIFT IN/OUT set to ON and DATA BIT to 7, trying to cancel a file transfer might break the connection. If this occurs, press **ON** to disconnect and change SHIFT IN/OUT to OFF or DATA BIT to 8 for that entry, then try again.

Data transfer

Your unit can upload (send) Documents entries in either ASCII (text) format or using XMODEM file transfer protocol. It can also upload Filer folders and PC Files using XMODEM, and upload and download text and files using either ASCII or XMODEM.

- For a Documents entry, the number of downloaded pages is displayed as ** in Index View. Once downloaded, open the entry in Detail View and store it again to display the number correctly.
- ASCII (American Standard Code for Information Interchange) is a character set for transferring text between different kinds of computers, so that text entered on one computer appears in the same form on a remote computer. ASCII has no error correction.
- XMODEM is a file transfer protocol with error correction.

When MNP is on, XMODEM cannot be used. (To check, touch **SETUP** and select “**Modem Setting**”.)

To upload or download data in Terminal mode:

1. Touch **TOOLS**, select **Terminal** and LOG ON to the desired system.
2. Once connected, select **UP/DN**.

3. Select the desired data transfer function from the menu.
 - For Upload Text (XMODEM or ASCII), a display similar to Index View appears, showing all your Documents entries. Select the entry to be uploaded, and then touch **Upload**.
 - For Upload Folder, a display similar to Filer Drawer opens, select the folder to be uploaded, and then touch **Upload**.
 - Select between Main Unit or PC Card to set download destination, then for Download, edit a name (of up to 20 characters), enter a description (only in PC Files) and touch **OK**.
 - Select Stop Download when download text (ASCII) is completed.
4. The selected entry or folder is transferred. Press ON at any time to cancel the upload or download.

NOTE

Some computer information services require specific log-on procedures before data upload or download. Consult the service provider for details.

Auto log-on

When you call a BBS or information service, the log-on procedure (in which you enter your name, user number, and password), is often the same each time you connect. Your unit can automate your log-on, making it faster, cheaper and easier.

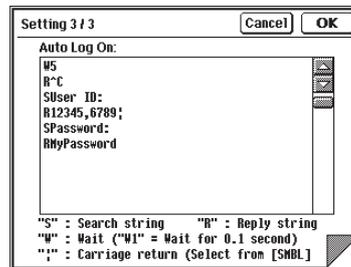
Auto Log on Commands

Auto log-on uses the character strings you normally enter manually (when logging onto the BBS or information service), in conjunction with the following commands:

- “S”: Search for a character string sent from the BBS before going to the next step of the log-on procedure. For example, SUSER ID: means wait for the text “USER ID:” to be received before continuing.
- “R”: Reply with a character string. For example, RJOHN JOHNSON means send the text “JOHN JOHNSON”.
- “W”: Wait in tenths of a second. For example, W2 would introduce a 0.2 second pause before the next step.
- “|”: Insert a carriage return after a character string. Must be included at the end of lines where you would normally press **ENTER**. Use **SMBL** to enter “|”.

To use auto log on:

1. Touch **TOOLS** and touch **Terminal** twice.
2. Select the entry that requires auto log-on.
3. Touch **SETUP**, select “**Dial Setting**” and then touch to turn to the Setting 3/3 display.



4. Enter your Auto Log on text. Press [**↵**] after each command.
 - Enter search strings (S command) exactly as the system you are calling displays them.
 - Use uppercase and lowercase letters exactly as used when logging on manually.
 - You may need to log onto a system manually to copy the system’s log-on text strings.
5. When you complete your entry, touch **OK** to store the auto log-on text.

Terminal emulation

There are two terminal emulation modes, TTY (teletype-writer) and the more advanced VT100 (VT stands for video terminal). In the dialing entry, select the terminal emulation mode the remote computer system supports. You can configure terminal parameters (Cursor Shape, Cursor Translate (Horizontal and Vertical), Tab, Auto Repeat and Wrap Around) to suit your requirements. Default settings work well for most communications, but you may sometimes need to change emulation settings, see page 151. Use the VT100 numeric keypad on the display like function keys on a standard computer.

To use the VT100 keypad in on-line mode:

1. Once connected, touch **UTILS** and select **“Pop up Numeric Keypad”**.
2. Touch the keys on the keypad as required.
 - The keypad is a movable window, so you can move it to any place on the display. Touch the top left corner and drag the keypad to the new location.
 - The keyboard is inactive when the keypad is displayed.
3. Touch **Cancel** when you have finished with the keypad.

Terminal display setup

Your unit's display is smaller than most standard personal computers. Terminal SETUP lets you select a Fixed or Virtual screen display, and choose between Small and Large fonts.

Fixed Screen (Wrap Text):

Text that does not fit on a line wraps to a new line.

Virtual Screen (80 Chr):

The display forms a window and text is displayed in the same format as a conventional remote terminal. Use the cursor keys to view text off the display. Default cursor key settings move the display window 40 characters horizontally or 8 lines vertically.

Use Small Font:

Selects display using a small font.

Use Large Font:

Selects display using a large font.

Troubleshooting

This section answers questions you may have when using Terminal.

Troubleshooting checklist

Common communications problems and their solutions are listed below.

Problem: Remote system answers, but no connection is made.

User message: None, or NO CARRIER.

Cause: Setting mismatch with remote system.
Excessive line noise.

Solution: Touch **SETUP**, select "**Dial setting**", and check the configuration (data speed, parity, data bits, stop bits). Wait a short period of time and try again.

Problem: Remote system answers but received characters are garbled.

User message: None.

Cause: Incorrect setting for parity, data bits or stop bits.
Excessive line noise.

Solution: Change the settings for parity, data bits or stop bits. Wait a short period of time and try again.

Problem: Connection with remote system terminates unexpectedly.
User message: None.
Cause: Surge of line noise, user error, etc.
Solution: Try again.

Problem: Dialing terminated unexpectedly.
User message: Problem during dialing, auto dialing was terminated.
Cause: Incorrect phone number entered.
Incorrect line type selected (tone or pulse).
Modem not connected to a phone line.
Solution: Check phone number in Dialing Directory.
Check Line Type setting in Modem Setup.
Check modem is correctly connected to your unit and a telephone line.

Problem: Auto log-on fails.
User message: There was a problem during auto log on. Check the auto log on commands.
Cause: Incorrect auto log-on settings.
Excessive line noise.
Solution: Check auto log-on settings. Make sure "S" and "R" character strings are correct and that "!" is included at the end of each line that requires it.
Wait a short period of time and try again.

ASCII Control Codes

To generate ASCII control code in Terminal mode, touch **UTILS**, select “**Use Control Code**” (or press **NEW ENTRY**), then press the key as shown in the table below.

Hex Value	Key	ASCII Code
00	@	NUL
01	A	SOH
02	B	STX
03	C	ETX
04	D	EOT
05	E	ENQ
06	F	ACK
07	G	BEL
08	H or BS	BS
09	I or ␣ + ↵	HT
0A	J	LF
0B	K	VT
0C	L	FF
0D	M or ↵	CR
0E	N	SO
0F	O	SI
10	P	DLE
12	R	DC2
14	T	DC4
15	U	NAK
16	V	SYN
17	W	ETB
18	X	CAN

Hex Value	Key	ASCII Code
19	Y	EM
1A	Z	SUB
1B	[or CANCEL	ESC
1C	\	FS
1D]	GS
1E	^	RS
1F	-	US

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