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This device complies with Part 15 of the FCC Rules. Operations are subject to the following two conditions: (1) This device must not be allowed to cause harmful interference, (2) This device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT SAFETY INSTRUCTIONS

- 1. Read these instructions carefully. Save these instructions for future reference.
- 2. Follow all warnings and instructions marked on the product.
- 3. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- 4. Do not use this product near water.
- 5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
- 6. Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.
- 7. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- 8. This product is equipped with a 3-wire grounding-type plug, a plug having a third (grounding) pin. This will only plug into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the purpose of the grounding-type plug.
- 9. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
- 10. If an extension cord is used with this product, make sure that the total ampere rating of the equipment plugged into the extension cord does not exceed the extension cord ampere rating. Also, make sure that the total rating of all products plugged into the wall outlet does not exceed 15 amperes.
- 11. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points that could result in a fire or electric shock. Never spill liquid of any kind on the product.
- 12. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to qualified service personnel.
- 13. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a. When the power cord or plug is damaged or frayed.
 - b. If liquid has been spilled into the product.
 - c. If the product has been exposed to rain or water.
 - d. If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal condition.
 - e. If the product has been dropped or the cabinet has been damaged.
 - f. If the product exhibits a distinct change in performance, indicating a need for service.
- 14. CAUTION. When replacing the battery, be sure to install it with the polarities in the correct position. There is a danger of explosion if the battery is replaced with an incorrect type or is mistreated. Do not recharge, disassemble or dispose of in fire. Replace only with the same or equivalent type recommeded by the manufacturer. Dispose of the used battery according to the manufacturer's instructions.
- 15. Use only the proper type of power supply cord set (provided in your accessories box) for this unit. It should be a detachable type: UL listed/CSA certified, BS1363,ASTA,SS145 certified, rated 10A 250V minimum, VDE approved or its equivalent. Maximum length is 15 feet (4.6 meters).

NOTATION IN THIS DOCUMENT

Warnings

This manual uses a variety of icons as visual marks so that you can use this computer safely and correctly and avoid damage and danger to yourself and to others. These icons and their meanings are as follows. Please learn these icons before reading this manual. Learning these icons will be useful for understanding this manual.

lcon	Meaning
	Incorrect handling or ignoring this warning can cause a dangerous situation that could result in death or severe injury.
A CAUTION	Incorrect handling or ignoring this warning can cause a dangerous situation that could result in moderate or minor injury or could result in equipment damage.

The symbols below are used together with the icons above to indicate what type of danger or damage is involved.

Symbol	Meaning
Â	The symbol indicates a w arning or caution. The symbol inside the indicates the concrete nature of the warning. (The example on the left is a caution for electric shock.)
	The circle and slash indicates prohibited behavior. The symbol inside the circle indicates the concrete nature of the prohibition. (The example on the left indicates that disassembly is prohibited.)
	The indicates instructions that must be followed. The symbol inside indicates the concrete nature of those instructions. (The example on the left tells you to unplug the power plug from the socket.)

Key notation and operation methods

Explanations of key operations do not show all the characters on the keyboard. Instead they indicate just the keys necessary to the explanation as follows.

Examples: [Ctrl] key, [Enter] key, [\rightarrow] key

When multiple keys are to be pressed at the same time, this is indicated by connecting them with [+].

Examples: [Ctrl] + [F3] keys; [Shift] + [1 key

Screen examples

The screens shown in this manual are examples. Please understand that the file names and screens you use may be different.

Notation in text

Here is what symbols in text mean.

Symbol	Meaning	
Critical Points	Indicates a point necessary for correctly operating the hardware or software.	
Column	Gives the meaning and brief explaination of a term.	
\rightarrow	Indicates the page to see elsewhere in this manual.	

Command input (key input)

Within the text of this manual, command input (giving commands to the computer by pressing keys) is indicated as follows.

Example: dir c:

In the position indicated in the example above by the \uparrow , the space left between the characters indicates that a space needs to be left in the entry by pressing the space bar (the long key with nothing written on it at the center of the front of the keyboard). Commands are written in this manual as lowercase latin letters, but uppercase letters may be used.

Product names

The following product names are abbreviated as follows in this manual.

"Microsoft® Windows® 98 operating system" is written as "Windows 98".

"Microsoft® MS-DOS® operating system Version 6.2/V" is written as "MS-DOS".

"Microsoft® Windows® operating system Version 3.1" is written as "Windows 3.1".

"Microsoft[®] Windows NT[®] Server network operating system Version 3.5" and "Microsoft[®] Windows NT[®] Workstation operating system Version 3.5" are both written as "Windows NT 3.5". "Microsoft[®] Windows NT[®] Server network operating system Version 3.51" and "Microsoft[®] Windows NT[®] Workstation operating system Version 3.51" are both written as "Windows NT 3.51". "Windows NT[®] Server network operating system Version 3.51" are both written as "Windows NT 3.51". "Windows NT 3.51" and "Windows NT 4.0" are both written as Windows NT. "Fujitsu Lifebook" is written as "this computer" or "the computer main unit".

Configuration of this Manual

SECTION 1

This section explains basic operations and basic items for using this computer, including the names of the parts and their functions, quick point IV operation methods, connector box handling, and battery operation.

SECTION 2

This section explains installation of options for this computer.

SECTION 3

This section explains the BIOS setup program, which is necessary for setting the date and time and power conservation mode. This section also explains how to set the password for protecting data in this computer.

SECTION 4

This section explains what to do when trouble occurs with this computer and when messages are displayed. Read this section as the necessity arises.

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SECTION



This section explains basic operations and basic items for using this computer, including the names of the parts and their functions, quick point IV operation methods, connector box handling, and battery operation.

1. Names of the Parts and their Functions

Front/Top



1 LCD panel

Displays text, graphics, etc. The LCD is covered with a touch-sensitive panel if your computer is a touch-panel model.

Critical Point

0		_
	The TFT color LCD panel used with this computer has been made using high resolution technology, but there might be dots that are always lit up or always not lit up on part of the screen.	
	There may be some slight inconsistencies on the LCD panel with variations in temperature. Please note that this is not a malfunction.	
2	Pen holder	
-	Holds a pen (stylus) if your personal computer is a touch-panel model.	
3	Cover close switch	
	When the LCD panel is closed, this switch turns off the backlight and suspends operation of the personal computer.	Э
4	Condenser Microphone	
_	Allows sound (monaural) recording.	
6	Keyboard	
	Keys are pressed to give commands to the computer main unit.	
6	Quick Point IV	
_	This operates the mouse pointer.	
0	Suspend/Resume switch	_
_	This switch suspends/resumes the computer main unit. From here on, it is written as SUS/RES switch.	3
8	LCD	
_	Displays the status of the computer main unit. See "Status Indicator LCD".	
9	Latch	
_	This is pressed to release the lock when the LCD panel is opened.	
D	One-touch operation button	
	Allows you to launch application software or check the arrival of an e-mail.	

Left Side/Right Side







Be careful not to block the air-cooling fan vent, otherwise heat will accumulate inside the computer, causing damage to it.

PC card slot

Slot for inserting separately sold PC cards.

This PC card slot is identified as the "slot-1", which is connected with the main unit of this personal computer.

PC card eject/lock button

Press this button to eject the PC card.

This button also serves as the PC card lock that prevents the inserted PC card from accidentally getting out of the PC card slot.

Volume control

Adjusts the sound volume. Turning it towards you lowers the volume; turning it away from you raises it.

Critical Point-

If the volume is raised too high when using a microphone, howling may occur between the speaker and the microphone.

Headphone jack

For connecting commercially available headphones.

Critical Point-

- Things that can be fitted to the headphone jack.
 - Headphones, earphones, amplifier-installed external speakers (mini-plug with 3.5mm outer diameter. However you may not be able to fit them because of the shape, so check before inserting.)

Microphone jack

Can be connected with a commercially available microphone.

22 MAIN switch

This is the switch for turning the power to the computer main unit on and off.

USB connector

Connector for connecting a peripheral equipment which meets the USB standard.

CRT connector

Connect an optional CRT display to this connector.

2 Anti-theft lock

Can be connected with a commercially available anti-theft cable.

Critical Point-

The anti-theft lock is for the Kensington Microsaver Security System.



Connector box connector

Connect the connector box to this connector.

Internal battery pack

The internal battery pack is mounted here.

Expansion RAM module slot

Slot for fitting a separately sold expansion RAM module.

29 Speaker

Outputs the sound of the computer main unit.

Connector Box



1 Connector lock

After connecting the connector box to the personal computer, turn these connector locks to secure the connection between them.

2 Mouse connector

Connect an optional PS/2 mouse.

3 Extension keyboard connector

Connect an optional keypad, etc. to this connector.

4 Serial connector

Connect an optional unit conforming to the RS-232C interface standard to this connector.

5 Parallel connector

Connect an optional unit such as a printer, etc. to this connector.

6 VGA out

Floppy disk unit connector

Connect an optional floppy disk unit to this connector.

8 Connector release lever

Raise this lever to detach the following connector from your personal computer.

9 Connector box connector

Connect the connector box to the personal computer by this connector.

Status Indicator LCD





$\mathbf{3}$ Num Lock indicator ($\begin{array}{c} \mathbf{1} \\ \mathbf{1} \end{array}$)

Lights up when [Num Lk] is pressed to put the keyboard into numeric keypad mode.

O Caps Lock indicator (A)

Lights up when [Shift] + [Caps lock] is pressed to put the keyboard into CAPS mode.

Scroll Lock indicator (fractional distance)

Lights up or goes out each time the [Scr Lk] keys is pressed.

Critical Point-

- If you switch off the main switch or operate the SUS/RES switch while the hard disk access indicator is lit, the data being accessed may be destroyed.
- When the main switch is switched off, all the indicators other than charging go off. However, the AC adaptor lamp comes on regardless of the status indicator lamp when power is being supplied.



2. Quick Point IV

What Is the Quick Point IV?

The Quick Point IV is a handy pointing device that allows you to move the mouse pointer with a fingertip. It is composed of a stick at the center of the keyboard and buttons on this side of the keyboard.

The stick acts like a mouse ball and you can move the mouse pointer in any direction on the screen by moving the stick to and fro, and to the right and left with a fingertip.

The upper button has the same function as a mouse left button and the lower button as a mouse right button, though their functions vary depending on the software used.



Quick Point IV Usage

Manner to operate the stick



The small arrow (mouse pointer) on the screen moves as you move the stick with a fingertip. Move the stick to and fro, and to the right and left to see how the pointer moves on the screen.

Manner to press the button

Click



"Click" refers to tapping on the upper button once, pressing it down and then immediately releasing it.

"Right click" refers to tapping on the lower button once.

• Double click



Drag

Press the upper button twice until it clicks, then immediately release it.

To "drag" the selected objective across the screen, move the stick while holding down the upper button and release the button in the desired position.



SECTION 1

3. About the touch panel

What is the touch panel?

The touch panel is a handy pointing device that enables you to directly control the mouse pointer on the screen. The touch-sensitive panel covering the LCD screen can be operated with the pen which comes with your personal computer. The touch panel which allows you to directly control objects on the screen ensures intuitive and speedy computer operations.



The mouse pointer moves as you move the pen on the screen.

Critical Point-

Always use the supplied pen to operate the touch panel. Using a finger or a ballpoint pen can
make the touch panel dirty or damage it.

How to use the touch panel

Single-click



Tap on the screen once with the pen and move it off the screen immediately.

Double-click



Tap on the screen twice in quick succession with the pen and move it off the screen immediately.

Drag



Move the pen while pressing it lightly against the screen.

Critical Point-

- To right-click on an object, press the [] key (application key) while pressing the pen lightly against the desired object. Right clicking is effective only for right-clicking an icon; to right-click on other objects on the screen, use the Quick Point IV.
- Opening a sub-menu and choosing an icon require different ways of pointing (positioning the mouse pointer over an object).
 - To open a sub-menu: Touch the desired menu item with the pen.
 - To choose an icon:
 Place the pen near the desired icon on the screen and drag the pen onto the icon to highlight
 it.
- The mouse pointer's position can disagree with the point you touch with the pen after the screen resolution is changed. In such a case, calibrate the effective area of the panel.

Calibrating the touch panel (Only for models with a touch panel)

If the mouse pointer's position does not correspond to the point you touch with the pen, for example, after the screen resolution is changed or the driver program is reinstalled, you need to calibrate the effective area of the touch panel.

Critical Point -

- With the pen which comes with your computer, point to the red [+] mark on the screen.
- Be careful not to touch the touch panel with a finger, etc. during operation.
- The point you touch with the tip of the pen is recognized when you move the pen off the touch panel.
- 1 Click on Start, Program, then Touch Panel Calibration. The screen turns white, enabling you to calibrate the touch panel.
- 2 With the tip of the supplied pen, point to and touch the red [+] mark on the screen. Point to the red [+] mark accurately because this mark acts as the datum for positioning. You can hide the mouse pointer \sum from view by pressing the Tab key.

+	
	Please touch nine red '+' marks with the attached pen.
	[Home]: Test Screen [Tab]: Cursor on/off [Arrow Keys]: moved '+' marks [Esc]: Cancel [Enter]: Next Screen

The [+] mark moves to the next position when you touch it.

3 Similarly, touch the [+] mark in each position (a total of nine positions).



Critical Point-

If you touch the [+] mark in a position twice in quick succession, move the mark with arrow keys [←], [→], [↓] and [↑], then touch it once again.

4 Press the Enter key.

A window appears on the screen to show the calibration result.

Critical Point-

If the message "Correction Parameter Error" is displayed, click on OK and repeat the above steps 2 though 4 once again. 5 Slide the pen in each of the four corners and at the center of the screen to check if the touch panel is calibrated correctly.



- 6 After calibrating the touch panel correctly, press the Enter key.
- 7 The Touch Panel Calibration program exits. The touch panel is now calibrated correctly.

Critical Point-

- The mode of clicking of your computer is set by default at "Single-click to select and doubleclick to open". If you wish to change it to "Point to select and single-click to open", then follow the procedure below.
 - 1 Double-click on the My Computer icon.
 - 2 Click on Folder Option in the View menu.
 - ③ Check Custom to enable it (), then click on Limited.
 - ④ In the Mode of Clicking dialog, check "Point to select and single-click to open" to enable it (), and then click on OK.
 - **(5)** Close all the dialog boxes and windows.
- The touch panel does not support right-clicking.
- The touch panel calibrating method described in this user's guide is intended for models with the Quick Point IV. For other models, therefore, the method of calibrating their touch panels can be different from that described in this guide.



Keyboard

The keyboard is the device for giving instructions to the computer, inputting data, and executing. The keys can be divided into two types.



Numeric Keypad Mode

The mode in which some of the character keys are used as numeric keys (with a key layout that makes numeric input easier) instead of their normal functions is called numeric keypad mode. The keyboard is switched to numeric keypad mode with **[Num Lk]**. (In numeric keypad mode, 1 is displayed on the status indicator LCD.) The keys surrounded by thick lines in the diagram above become the numeric keypad. The numbers input with these keys are printed in pink on the front of each key.

Critical Point-

• When the separately sold numeric keypad is connected, if you press Num Lk to put the computer into numeric keypad mode, the keys on the external numeric keypad are enabled, but the numeric keypad section on the keyboard is disabled.

Names of the Main Keys and their Functions

[Esc] (escape) key

The usage is determined by the application software. It is often used to return to the previous operation.

[F1-F12] (function) keys

The usage depends on the application software.

[Fn] key

A key unique to this computer; it has the following functions.

- [Fn + F3] This switches ON/OFF of the speaker. When a pip sounds with this operation, the speaker is on. When nothing sounds, the speaker is turned off.
- [Fn + F5] This selects whether or not to use the entire LCD screen for display in test mode.
- [Fn + F10] Rotates among the three display options: LCD only, CRT only, both LCD and CRT.

Space key

Inputs a single space character.

(This is the long key with nothing written on it at the center of the front of the keyboard.)

$[\uparrow] [\downarrow] [\leftarrow] [\rightarrow]$ (cursor) keys

Move the cursor.

[Enter] key

Also called the return key or the line feed key. This key inputs line feeds and executes command.

[Ctrl] key

Used in combination with other keys; its functions depend on the application software.

[Shift] key

Used in combination with other keys.

[Alt] key

Used in combination with other keys; its functions depend on the application software.

[Caps Lock] key

To lock the keyboard into caps mode, press this key together with the Shift key. Pressing this key again ends caps mode.

[Num Lk] (numerical lock) key

Press to put the computer into numeric keypad mode.

[Scr Lk] (scroll lock) key

Its functions depend on the application software.

[Prt Sc] (print screen) key

Press this key to make a hard copy of the screen.

[Pause] key

Press this key to pause the screen display.

[Break] key

Its functions depend on the application software.

[Ins] (insert) key

Press this key to insert a new character between characters. The new characters are entered at the cursor position.

[Del] (delete) key

Press this key to delete a character. Pressing the Delete key and the Ctrl and Alt keys at the same time resets this computer.

[Home] key

Press this key to move the cursor directly to the head of the row or the head of the document.

[End] key

Press this key to move the cursor directly to the end of the row or the end of the document.

[Pg Up] key

Press this key to switch to the previous screen.

[Pg Dn] key

Press this key to switch to the next screen.

[Back Space] key

Press this key to delete the character to the left of the cursor position.

[Sys Rq] (system request) key

When this key is supported by the application software, this key is used for such functions as resetting the keyboard. Press this key together with the **[Alt]** key.

[🖽] (Windows) key (only valid for Windows 98)

Press this key to display the Start menu.

[] (Application) key (only valid for Windows 98)

Press this key to display the shortcut menu for the selected item. This key has the same role as the mouse right click.

SECTION 1

5. Switching on the Power

Switching on the power

This item explains the normal way to switch the computer main unit power on and off.

1 Connect the AC adaptor.



First connect the AC power cord to the AC adaptor (1), next connect the other cord of the AC adaptor to the personal computer's DC-IN connector (2). Lastly, plug the AC power cord into an AC outlet (3).

2 Open the LCD panel.



Push the latch to release the lock, then lift the display panel with your hand.

3 Switch on the main switch of the computer main unit.



Power is supplied from the AC adaptor or the battery, the power comes on, and the POST starts. Also, the etc. on the status indicator L

20

Critical Point-

• Do not carry this computer around or subject it to shock or vibration with the power on. These can result in breakdown.



POST is the abbreviation for POWER ON SELF TEST, which is a self-diagnostic test that checks for abnormalities within the computer. This test is automatically carried out when the power is switched on for this computer. If the power is switched off during the POST, an error message is displayed the next time the computer is started up. Do not cut off the power during the POST.



6. Switching off the Power

This item explains how to switch off the power and gives precautions for switching off the power.

Precautions when Switching Off the Power

The following precautions must be observed when switching off the power.

- When switching off the main switch, end Windows 98 first.
- When the main switch is switched off, if the suspend mode is suspend, the suspend function stops working. If the application software has been suspended during execution, it is necessary to save the data, then end the application software.
- After you switch off the main switch, wait at least about ten seconds before switching it back on again.

Switching Off the Power

1 Click the Start button.

The Start menu is displayed.

	Bernetove Update	
	. Depose	•
	🕒 Fgeoriae	•
	C Leonet	•
	The Section	•
	Dim .	•
	@ 144	
8	gen.	
8	🖄 Log D# Enduation .	
ł	B Pallon.	

2 Click Shut Down.

The following message is displayed.

Dill.	What do you want the computer to da?
3	(F Stand by
	C Shit dave
	C Bester
	C Restart in MS-005 mode

22

3 Check that Shut down the computer is selected, then click Yes. The power is switched off.

Critical Point -

You can reset this computer by selecting Restart the computer with the screen shown in Step 2. Resetting means that the data in memory is all erased and the operating system is loaded again from the hard disk or a floppy disk.

4 Switch off the main switch.

Slide the main switch in the direction of the arrow (\bigcirc side). The status indication LCD \bigoplus indicator goes out and the power for the computer main unit is cut off.



Critical Point-

• If the computer will be unused for a long period, disconnect the AC adaptor.

SECTION 1

7. Suspend/Resume Function

What Is the Suspend/Resume Function?

When this computer is suspended with the SUS/RES switch, the suspend/resume function retains the programs and data in memory as is so that you can resume operations immediately the next time you press the SUS/RES switch.

Suspending

There are three ways to suspend this computer, using the SUS/RES switch, Cover close switch and the Start menu.



Using the SUS/RES switch

1 Suspending

Check that 🖰 is out. When you press the SUS/RES switch, if the BIOS setup suspend mode is suspend, 🗭 flashes and the computer goes into suspend mode.



Critical Point-

Which of the two destinations suspending saves the data in the computer to depends on the BIOS setup Power menu setting as follows.

System RAM:

When "Suspend" is set with the BIOS setup Power menu Suspend Mode item, the data is saved to system RAM. Power for the system RAM is supplied from the AC power supply if the AC adaptor is connected or from the battery if the AC adaptor is not connected.

Save to Disk area:

If "Save to Disk" is set with the BIOS setup Power menu Suspend Mode item, the data is written to the Save to Disk area on the hard disk.

If you hold down the Fn key while pressing the SUS/RES switch, the data is saved to the hard disk regardless of the Power menu setting.

Using the cover close switch

1 Close the LCD panel.

This unit goes into suspend mode using the cover close switch.

Critical Point -

 When the BIOS setup Lid Closure Suspend setting is "Disabled", this unit does not go into suspend mode even if you close the LCD panel.





the [Quit Windows].

The [Quit Windows] dialog appears on the display.

2 Click [Standby]. This computer is suspended.



Critical Point-

- If the BIOS setup Suspend Mode setting is "Suspend", suspend mode is ended in the following cases. Save important data to the hard disk, etc.
 - The main switch is switched off.
 - In battery operation, the battery runs out.
 - (The battery is still used in suspend mode.)
 - If you start with the internal battery fully charged, suspend mode lasts about one day maximum with the AC adaptor not connected.

Precautions for Suspending

Pay attention to the following points when using the suspend function.

- When the computer is connected to a network using a LAN card or modem and when the peripheral equipment is expanded with a PC card, you may not be able to use the suspend/ resume function. When you have expanded functions with a PC card, also check the manual for the cards you are using.
- Do not operate the SUS/RES switch when using Windows NT.
- In the following cases, do not use the suspend function, but switch on/off the computer main unit power supply with the main switch.
 - When this computer is unused for a long period When this computer will be unused longer than the effective period (about one day maximum) for battery power for suspend mode, save all data, close Windows 98, then switch off the main switch. If you suspend with the BIOS setup Suspend Mode set to Save to Disk, the power goes off with the main switch still on. In this case, it does not matter if you switch off the main switch. The next time you switch on the main switch, operation resumes.
 - When installing or removing options There are some options that can be installed without switching off the main switch. See SECTION 2 of this manual and the manual that comes with the option product.

Critical Point-

- The SUS/RES switch does not work in the following cases.
 - When the main switch is off
 - When the battery has run out
 - When the BIOS setup SUS/RES Switch is set to disabled

Resuming

This personal computer can be resumed by the SUS/RES switch or the cover close switch.

Critical Point-

- When resuming this personal computer after it was suspended, resume it 10 or more seconds after the last suspending operation.
 - The screen occasionally flickers during suspending/resuming operation.

Resuming with the SUS/RES switch.

1 Press the SUS/RES switch for resuming the personal computer.

As the SUS/RES switch is pressed, the mark of the status indicator LCD stops blinking and continues lighting. This indicates that the personal computer is in the operating status.



 Resuming with the cover close switch.
 1 Fold out the LCD display. The personal computer is resumed by the cover close switch.

Critical Point-

 When the Lid Open Resume of the BIOS setup is set to "Disabled", the personal computer won't be resumed by folding out the LCD display.





8. Battery

Battery Charging

For portability, this computer can operate either from the AC adaptor or from its battery. This item explains how to charge the battery.

1 Connect the AC adaptor.



First connect the AC power cord to the AC adaptor (1), next connect the other cord of the AC adaptor to the personal computer's DC-IN connector (2). Lastly, plug the AC power cord into an AC outlet (3).

2 is displayed.



During charging, it is displayed on the status indicator LCD and the remaining battery charge is displayed.

Main switch	SUS/RES switch	Computer mode	Charging mode	Charging time
ON	Resume	Operating mode	Standard charging	About 4.5 hours
	Suspend	Suspend mode	Quick charge	About 2.5 hours
OFF	_	Stopped	a diox ondigo	1.5001 2.0 110010

Relationship between computer modes and battery charging time

Critical Point

- When the battery charging indicator (→) goes out and the remaining battery charge indicator at the leftmost end changes its mode from blinking (↓) to continuous lighting (↓), charging the battery is complete.
- The battery capacity falls if the ambient temperature is too low or too high. We recommend charging in the range 10°C-30°C.
- When the expansion battery pack is charged, the built-in battery pack is charged together with it.

Battery Operation

This item explains operation with the battery.

1 Disconnect the AC adaptor and switch on the main switch.



Slide the main switch in the direction of the arrow (| side).

() is displayed.

2 When the MAIN switch is on, press the SUS/RES switch.



tops flashing and stays lit up.

Critical Point-

- When the ambient temperature is lower, the battery operating time is reduced. We recommend that you use the battery within the range from 5°C to 35°C.
- With this computer, the battery operating time depends on the conditions under which the battery is used. However, the operating time of a new, fully-charged battery is as follows.

Only Internal Battery: about 1.5 to 3.0 hours

Conditions: Main unit only, full charge, with power management on. (The battery operating time depends on the conditions of use.)
Checking the Remaining Battery Charge

This computer indicates the amount of battery charge remaining with the remaining battery charge indicator on the status indicator LCD.

Remaining battery charge indicator Indicates battery charge level of about 76% to about 100% Indicates battery charge level of about 51% to about 75% Indicates battery charge level of about 51% to about 75% Indicates battery charge level of about 26% to about 50% Indicates battery charge level of about 16% to about 25% Indicates the low battery state (battery charge level of about 15% or lower). Indicates the low battery state (battery charge level of about 15% or lower). Indicates that the battery has run out (0% charge level).

Critical Point-

- Indication of the remaining battery charge indicator (↓ I may be slightly different from the real remaining charge rate depending on the operating environment (temperature, number of times that the battery was previously charged and discharged, etc.) because of the characteristic of the battery (lithium ionic battery). In charging the battery, keep it in mind that the battery is incompletely charged when the battery charging indicator (→) is still on though the remaining battery charge indicator indicates the full charge level (→ ↓).
- When the battery charge remains at a rate of 90 % or more, the battery cannot be recharged. The battery can be recharged when its remaining charge is at a rate of 89 % or less.

Battery abnormality indicator

The lindicates that the battery can not be charged normally.

Critical Point-

When <u>messive</u> is displayed, take out the battery pack and re-install it. If this display still remains, the battery pack is abnormal, so replace it.

Low Battery State

This item explains the display when this computer's battery is low and what to do.

1 The low battery is announced in the following way. The warning beeps and the battery mark on the status indicator LCD flashes.

Critical Point-

If the audio volume is set too low, you may not be able to hear the warning beep.

2 Press the SUS/RES switch.

When the battery goes low, quickly press the SUS/RES switch to suspend operation. Since the suspend/resume function works even if the computer is suspended during operation, the program and data are not lost.

Critical Point-

 If you want to resume operation immediately, connect the AC adaptor, then press the SUS/ RES switch again.

3 Charge the battery.

Connect the AC battery to charge the battery.

Critical Point-

- Reading from and writing to the hard disk uses large amounts of power. When saving data to the hard disk with the battery low, connect the AC adaptor.
- If you leave this computer running with the battery low, it is suspended automatically. However, if data is being read from or written to the hard disk or other media, the suspending waits until that processing is complete.
- If you continue using the computer with the battery low, in the worst case, the data being created or saved may be lost. Quickly connect the AC adaptor.

Replacing the Internal Battery Pack

Save the program to the hard disk or a floppy disk before replacing the internal battery pack. This item explains how to replace the internal battery pack.

\land WARNING -



ELECTRIC SHOCK

Always turn off the computer main unit main switch and disconnect the AC adaptor before installing/removing the internal battery pack in order to avoid electric shock.

AUTION-



INJURY

Do not remove screws from any places other than those indicated in the manual when installing/removing the internal battery pack.

There is a risk of injury or malfunction if you remove screws from places not indicated.

- 1 Turn the main switch off and disconnect the AC adaptor.
- 2 Take out the internal battery pack.



Slide the main switch in the direction of the arrow (to the O side).

Disconnect the AC adaptor from the computer main unit.



Raise the two latches on the internal battery pack while holding them, and remove the internal battery pack.

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3 Install the new internal battery pack.



Connect the connector of the new internal battery pack to the connector of your personal computer, and then insert and latch the battery pack.

Precautions for Battery Pack



ELECTRIC SHOCK

All battery packs are extremely delicate products. When installing or removing one, do not drop it or subject it to strong shocks. If this should happen, do not use that battery pack in the interest of safely, because there is a risk of electric shock or malfunction.

Discharge

After you charge the battery pack, even if you store it without using it, over about 1 month it will naturally discharge.

Service life

- The battery pack is a consumption item. After you use it for a long time, its charging capacity drops.
- Replace the battery after about 300 to 500 charge/discharge cycles.
- When the battery operating time becomes extremely short, the battery has reached the end of its service life.

To extend the battery operating time

Use the BIOS setup Power menu.

Conditions under which the battery operating time becomes shorter

- Using in cold or hot location The battery operating time is influenced by the environmental temperature and the battery operating time can be shorter at low temperature (5°C) than at high temperature (35°C). Also, high temperatures not only lower the charging efficiency, but are also a cause of battery pack deterioration.
- When the battery charging capacity drops . When the battery pack has been used for a long time, its charging capacity drops. In this case, replace it with a new battery pack.

Use the AC adaptor in the following cases

- When using the hard disk or CD-ROM frequently
- When using a LAN or a Modem

9. Connector Box

Connecting the Connector Box

The following explains how to connect the connector box to the personal computer.

\land WARNING –



ELECTRIC SHOCK

When connecting the connector box to the personal computer, be sure to turn off the MAIN switch of the personal computer and disconnect the AC adaptor from it beforehand. If the connector box is connected as the personal computer is on, it may cause an electric shock or a machine failure. 1 Turn off the MAIN switch of the personal computer and disconnect the AC adaptor from it.



Slide the MAIN switch in the direction of the arrow (toward \bigcirc side).

Disconnect the AC adaptor from the personal computer.

2 Connect the connector box to the personal computer.



Open the cover of the connector box connector located on the rear side of the personal computer, and tightly connect the connector box to the personal computer by their respective connectors. 3 Lock the connector box by turning the knob screws.



Tighten the right and left knob screws evenly to lock the connector box.

Disconnecting the Connector Box

The following explains how to disconnect the connector box from the personal computer.

\Lambda WARNING —

ELECTRIC SHOCK

When disconnecting the connector box from the personal computer, be sure to turn off the MAIN switch of the personal computer and disconnect the AC adapter from it beforehand. If the connector box is disconnected as the personal computer is on, it may cause an electric shock. 1 Turn off the MAIN switch of the personal computer and disconnect the AC adaptor from it.



Slide the MAIN switch in the direction of the arrow (toward O side).

Disconnect the AC adaptor from the personal computer.

2 Loosen the right and left knob screws to unlock the connector box.



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3 Disconnect the connector box from the personal computer.



Raise the connector box release lever and detach the connector box. After this, close connector cover.

SECTION 1

10. Built-in LAN (local-area network) device

This item explains how to connect a LAN cable into the LAN connector.

Connection

\land WARNING —



ELECTRIC SHOCK

Be sure to turn off your personal computer and disconnect the AC adaptor from it before connecting a LAN cable to the computer, otherwise you might get an electric shock.



ELECTRIC SHOCK

When it thunders in the neighbourhood, immediately turn off your personal computer and disconnect the AC adaptor and the LAN cable from it, otherwise your computer might be struck and damage by lightning and thus cause a fire.

\land CAUTION –



ELECTRIC SHOCK

Do not touch the LAN connector with your finger, otherwise you might get an electric shock.

- 1 Turn off the computer and disconnect the AC adaptor from it.
- 2 Plug a LAN cable into the LAN connector on your personal computer to connect it to a network.



Critical Point-

- To unplug the LAN cable from the LAN connector, pull the jack while holding down the latch. Failure to do so might damage the jack, cable or connector.
- Your computer consumes more electric energy when it is connected to a LAN. When using a LAN, therefore, it is advisable to use the AC adaptor to supply power to your computer.





11. Built-in FAX modem

This item explains how to plug a telephone cable into the modular connector.

Connection

\land WARNING —



ELECTRIC SHOCK

Be sure to turn off your personal computer and disconnect the AC adaptor from it before connecting a modular cable to the computer, otherwise you might get an electric shock.

ELECTRIC SHOCK

When it thunders in the neighbourhood, immediately turn off your personal computer and disconnect the AC adaptor and the modular cable from the computer, otherwise your computer might be struck and damage by lightning and thus cause a fire.

AUTION-



ELECTRIC SHOCK

Do not touch the modular connector with your finger, otherwise you might get an electric shock.

- 1 Turn off the computer and disconnect the AC adaptor from it.
- 2 Using a telephone cable, connect the computer to the telephone line.



Critical Point —

- To disconnect the modular cable from the connector, pull the jack while holding down the latch. Failure to do so might damage the jack, cable or connector.
- Your computer consumes more electric energy when using the built-in modem. When using the modem, therefore, it is advisable to use the AC adaptor to supply power to your computer.



A CAUTION-

The internal modem has a maximum speed of 56000bps by ITU-T V.90 standard. Its maximum speed of 53000bps is the highest allowed by FCC, and its actual connection rate depends on the line conditions. The maximum speed is 33600bps at upload.

A CAUTION-

The internal modem is not intended for use with Digital PBX systems. Do not connect the internal modem to a digital PBX as it may cause serious damage to the internal modem or your entire notebook.

Consult your PBX manufacturer's documentation for details. Some hotels have digital PBX systems.

Be sure to find out BEFORE you connect your modem.

SECTION



This section explains installation of options for this computer.





Options

You can expand the functions of this computer by connecting various options.



SECTION 2

MARNING-



ELECTRIC SHOCK

Only connect equipment recommended by Fujitsu.

Connecting any other equipment can cause electric shock, fire, or breakdown.

A CAUTION —



INJURY

When installing/removing options, do not remove any screws other than those specified by this manual.

Removing any other screws can cause injury and breakdown.



BREAKDOWN

Read this manual carefully and connect cables correctly. If you use this computer with cables connected incorrectly, this can cause breakdown of the computer main unit and of the peripheral equipment.



Precautions for PC Cards

Observe the following points when using PC cards to prevent breakdown.



temperature locations and loca- strong shocks. tions subject to direct sunlight.



Do not place PC cards in high- Do not subject PC cards to Avoid rubbing PC cards and



building up static electricity.



top of PC cards.



Do not place heavy objects on Be careful to avoid spilling coffee and other liquids on PC cards.



When storing a PC card, always place it in its special case.

Installing PC Cards

PC card is a generic term for business card sized cards which have a program and data memory function or peripheral equipment functions such as a modem or LAN adaptor. This item explains how to install a PC card.

1 Install the PC card.



Insert the PC card into the PC card slot with the product name facing upwards.

2 Tilt the PC card eject/lock button down to lock the PC card.



Pull out the PC card eject/lock button completely and then tilt it down to lock the PC card with the fastener.

Critical Point-

- For some PC cards, the main power switch should be turned off. Refer to the manual attached to your PC card.
- In order to avoid damage, be careful not to knock or put anything on top of the connection point between the PC card and the cord.

Removing PC Cards

This item explains how to remove a PC card.

1 Click the PC card icon on the task bar.



A message is displayed for stopping the installed PC card.

2 Click the PC card to be removed.

The PC card operations stop and the following screen is displayed.

Standard 56000 bps K56Flex Modem - Socket 2 🛛 🗋	Κ.
You may safely remove this device.	
<u> </u>	

Critical Point-

- For IC memory cards, the "This device cannot be removed" message may appear. If this message does appear, close Windows 98 and switch off the computer main unit power before removing the IC memory card.
- 3 Click OK.

4 Raise the PC card eject/lock button.



5 Remove the PC card.



Press the PC card eject/lock button to eject the PC card.

Critical Point-

Never remove a PC card by pulling on its cord. Twisting on the cord can break the PC card.
 Always use the procedure above for removing PC cards. Removing PC cards in any other way can cause breakdown.

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SECTION 2

3. Expansion RAM Modules

Installing an Expansion RAM Module

This item explains how to install expansion RAM modules.

\land WARNING -

ELECTRIC SHOCK

Always turn off the computer main unit main switch and disconnect the AC adaptor when installing an expansion RAM module in order to avoid electric shock.

Turn off the main switch and 1 disconnect the AC adaptor.



Slide the main switch in the direction of the arrow (to the O side).

Disconnect the AC adaptor from the main unit.

2 Remove the cover of the expansion RAM module slot.



Take out the screws on the bottom of the computer main unit and remove the cover of the expansion RAM module slot.

Install the expansion RAM module. 3



Align the notch of the expansion RAM module with the projection on the connector, insert firmly diagonally from above and push down until the module clicks into place.

46

4 Fit the cover of the expansion RAM module slot.



Fit the cover removed in 2.

A CAUTION-



DAMAGE

The expansion RAM module is made up of parts that are extremely vulnerable to static electricity and can be damaged by the static electricity built up in the body. When installing or removing an expansion RAM module, hold it by the edges. Do not touch any terminals or ICs. Also, do not touch any parts or terminals within the computer main unit.

Checking expansion memory

To check the extended memory capacity after installing an expansion RAM module, look at the DIMM item of the BIOS setup info menu. For example, when a 32 MB expansion RAM module has been installed, "32 MB" is indicated in the DIMM item. If the memory capacity indicated in the DIMM item is not increased after installing an expansion RAM module though it has correctly been installed, it is possible that the RAM module is faulty or defective. In such the case, consult with the store at which you purchased the RAM module about the trouble.

Removing an Expansion RAM Module

This item explains how to remove an expansion RAM module.

\land WARNING -

A

ELECTRIC SHOCK

Always turn off the computer main unit main switch and disconnect the AC adaptor when removing an expansion RAM module in order to avoid electric shock. 1 Turn off the main switch and disconnect the AC adaptor.



Slide the main switch in the direction of the arrow (to the O side).

Disconnect the AC adaptor from the main unit.

2 Remove the cover of the expansion RAM module slot.



Remove the cover of the expansion RAM module slot on the bottom of the computer main unit.

3 Remove the expansion RAM module.



Open the hooks on both sides that retain the expansion RAM module to the left and right, then remove the expansion RAM module from the slot.

48

4 Fit the cover of the expansion RAM module slot.



Fit the cover removed in 2.

SECTION 2

4. Floppy Disk Unit

Installing a Floppy Disk Unit

The following explains the method to connect a floppy disk unit.

\land WARNING -



ELECTRIC SHOCK

Always turn off the computer main unit main switch and disconnect the AC adaptor when installing or removing a floppy disk unit in order to avoid electric shock. 1 Turn off the main switch and disconnect the AC adaptor.



Slide the main switch in the direction of the arrow (to the O side).

Disconnect the AC adaptor from the main unit.

2 Connect the connector box to the rear of the personal computer by their respective connectors.



3 Install the floppy disk unit.



Precautions for Floppy Disk Units

Take the following precautions when using the floppy disk unit in order to prevent damaging it.

- Avoid storing the floppy disk unit in extremely hot and cold locations, or in locations subject to severe temperature changes.
- Keep the floppy disk unit out of direct sunlight and away from heating equipment.
- Avoid storing the floppy disk unit in locations subject to shock or vibration.
- Avoid using the floppy disk unit in damp or dusty locations.
- Never use the floppy disk unit with any liquid, metal or other foreign matter inside it. If any foreign matter gets inside the floppy disk unit, consult your local dealer.
- Wipe the floppy disk unit clean with a dry soft cloth or with a soft cloth moistened with water or a neutral detergent solution. Never use benzine, paint thinner or other volatile material.

Never disassemble or dismantle this product.

Critical Point-

 Use the floppy disk unit away from equipment that creates a magnetic field such as a CRT monitor or an AC adaptor.

Removing a Floppy Disk Unit

This item explains how to remove a floppy disk unit.

\land WARNING —



ELECTRIC SHOCK

Always turn off the computer main unit main switch and disconnect the AC adaptor when installing or removing a floppy disk unit in order to avoid electric shock. 1 Turn off the main switch and disconnect the AC adaptor.



Slide the main switch in the direction of the arrow (to the \ensuremath{O} side).

Disconnect the AC adaptor from the main unit.

2 Remove the floppy disk unit.



Critical Point-



What is a Floppy Disk?

A floppy disk is a medium for storing programs or data. This item explains basic knowledge and precautions regarding floppy disks.

Types of floppy disks

If floppy disks are classified according to the amount of data they can store (the memory capacity), typically there are the following 2 types.

- 2HD floppy disks These have 1.44MB (megabyte: unit of data amount) and 1.2MB memory capacities.
- 2DD floppy disks These have 720KB (kilobyte) memory capacities, half of the 2HDs.

The differences between the 2 kinds of floppy disks are shown in the diagram on the right.



Hole or no hole

3 mode drive

This computer's floppy disk drive is a 3 mode drive that can read 1.44MB, 1.2MB and 720KB memory capacity floppy disks. Therefore it can read nearly all floppy disks. However, when exchanging data with another computer, you have to be careful if the other computer's floppy disk drive is not a 3 mode drive. For example, if the other computer can read 1.2MB floppy disks but not 1.44MB floppy disks, you have to enter the data after putting it into 1.2MB format in advance with this computer.

Critical Point-

Some floppy disks cannot be read by this computer, depending on the floppy disk format.

Precautions on Handling

Take the following precautions when using floppy disks in order to avoid damaging them.



Be careful not to spill liquids such as coffee onto them.



Do not place them in places with Do not bend them or place heavy high temperatures or in direct objects on top of them. sunlight.





Never touch the surface of the Do not bring them near to magdisk.



netic fields.



Do not stick labels on over each other.

Loading/Ejecting a Floppy Disk

This item explains how to load and eject floppy disks.

Loading

Insert into the floppy disk drive.



Insert the floppy disk with the label upwards and the shutter side first until the EJECT button springs out. Ejecting

Press the EJECT button.



Check that the floppy disk unit's access lamp is out, then press the EJECT button.

Critical Points

- If you eject the floppy disk while the floppy disk unit's access lamp is still on, there is a risk of losing the data on the disk.
- When you do not want to erase the data saved on the disk, or when you do not want to write additional data, slide the floppy disk's write protector so that the hole is open (WRITE PROTECT state). When you want to write data again, slide the write protector so that the hole is closed.





Connecting a CCD Camera

This item explains how to connect a CCD camera.

* Depending on the model, a Fujitsu video capture software is preloaded into your computer.

To connect a CCD camera directly to the USB connector

1 Raise the tilt foot on the back of the CCD camera and slide the connector. Keep holding the connector slide button () while sliding the connector ().



2 Connect the CCD camera to your personal computer. Fully engage the CCD camera connector and its hook with the USB connector and the jack just under it on the back of your personal computer to fix them firmly.



To connect a CCD camera, using a connecting cable

1 Connect the larger plug of the connecting cable to the CCD camera and the smaller plug to your personal computer.



2 Fix the CCD camera to your personal computer. Pull out the personal computer fixing tab from the CCD camera and fix the personal computer on the top of the CCD camera.





6. Mouse

Connecting a Mouse

This item explains how to connect a mouse.

1 Turn off the main switch of your personal computer and attach the connector box to it.



Slide the main switch in the direction shown by the arrow (toward O) to attach the connector box.

Critical Point-

2 Connect a mouse to the connector box.



Have the arrow marked on the connector facing up.

• For using the mouse, select "Keyboard/Mouse Features" from the "Advanced Menu" of the BIOS setup first, and then properly set the Pointing Device Configuration.

Using the Mouse



Moving the Mouse.

Place your hand on the mouse so that your fingers are resting on the left and right buttons and move the mouse by sliding it over your desktop or other smooth surface. The arrow (called the mouse pointer) on the screen moves in the same way as the mouse. Try moving the mouse while watching the screen.





Button operations

• Click



Press the left mouse button once until it clicks. The action of pressing the right button once firmly enough that it clicks is called a "right click".

Press the mouse left button two times quickly in a row.

Double click



Pointing



Align the mouse pointer with a menu item. When there is another level for the menu item the cursor is on (when > is displayed at the right of the menu item), that menu level is displayed.

• Dragging



Move the mouse pointer with the mouse left button held down, then release the button at the desired position.



SECTION 2

7. Numeric Keypad

Connecting a Numeric Keypad

This item explains how to connect a numeric keypad.

1 Switch off the main switch.

2 Connect the numeric keypad.



Slide the main switch in the direction of the arrow (O side).

Have the arrow marked on the connector facing up.

Critical Point-

- When a mouse is connected to the numeric keypad mouse connector, the mouse connector on the computer main unit cannot be used.
- You can adjust the tilt of the numeric keypad with the tilt feet on the bottom of the numeric keypad.





8. Printer

Connecting a Printer

This item explains how to connect a printer.

\Lambda WARNING -



ELECTRIC SHOCK

Always switch off the computer main unit main switch and disconnect the AC adaptor before connecting/disconnecting a printer. Connecting/disconnecting a printer with the power on can cause electric shock.



BREAKDOWN

When connecting cables, read this manual carefully and make sure to connect correctly. Using this computer with cables incorrectly connected can cause breakdown of the computer main unit and the printer.

Critical Point-

- Connecting a printer requires a printer cable. Sometimes this cable does not come with the printer. Even if the printer cable does come with the printer, sometimes it has the wrong configuration for this computer. In either of these cases, separately purchase a printer cable that you can connect to this computer.
- How to connect the printer depends on the printer. For details, refer to the printer manual.

1 Switch off the main switch and disconnect the AC adaptor.



Slide the main switch in the direction of the arrow (O side). Disconnect the AC adaptor.

2 Connect the connector box to the rear of the personal computer by their respective connectors.



3 Connect the printer to the computer main unit.

Connect the printer cable between the connector box's parallel connector and the printer's connector, and then fix it securely with screws and fixtures.



- 4 Connect the printer's power cord and switch on its power.
- 5 Connect the AC adaptor to the computer main unit and switch on main switch.
- 6 Make the printer settings.



Connecting an External CRT Monitor

An external CRT monitor can be connected to this computer. This item explains how to connect a CRT monitor to the CRT connector on the right of the computer main unit.

\land WARNING -



ELECTRIC SHOCK

Always switch off the computer main unit main switch and disconnect the AC adaptor before connecting/disconnecting a CRT monitor. Connecting/disconnecting a CRT monitor with the power on can cause electric shock.

A CAUTION-



BREAKDOWN

When connecting cables, read this manual carefully and make sure to connect correctly. Using this computer with cables incorrectly connected can cause breakdown of the computer main unit and the CRT monitor.

 Switch off the main switch and disconnect the AC adaptor. Slide the main switch in the direction of the arrow (O side). Disconnect the AC adaptor.



Main switch

2 Connect the CRT monitor to the computer main unit.

Connect the CRT cable between the personal computer's CRT connector and the CRT monitor's connector, and then fix it securely with screws and fixtures.



- 3 Connect the CRT monitor's power cord and switch on its power.
- 4 Connect the AC adaptor to the computer main unit and switch on main switch.
- 5 Switch the screen display. When you press Fn + F10, the display switches to the next step in the sequence: LCD \rightarrow simultaneous display \rightarrow CRT \rightarrow LCD.

SECTION 2

10. One Touch Operation buttons

The one touch operation buttons function as quick access for pre-configured applications, browser or e-mail. It enables users to start a program quickly with a single press on the buttons.



Lock

When this button is set to lock location, all one-touch operation buttons are locked or disabled to prevent careless operation.

A

Start an application. Press the button to start an application.

Internet

Press this button to start your default browser.

4 E-mail

Press this button to launch your email program.

E-mail arrival indicator lamp.

This lamp indicates e-mail status :

- Turned on : Checking new arrival of e-mail
- Blinking : Newly arriving e-mail is recognized
- Turned off: No new mail

Critical Point-

The one-touch operation buttons cannot be used in the following cases.

• The MAIN switch is set at the OFF position (slid to the " \bigcirc " side).
Checking new arrival of E-mail

Press the E-mail button to check to see if there is new arrival of E-mail. New arrival of E-mail can be checked even when the Windows 98 is shutdown.

Important note -

When the MAIN switch is turned off (set at " \bigcirc " side), new arrival of E-mail cannot be checked with the E-mail button.

For operating the E-mail button, set up the computer so as to access the Internet beforehand.

1 Connect the system to access your email software.

2 Make sure the lock button is at correct position.

3 Press the E-mail button.

When the E-mail button is pressed, the computer accesses the Internet to check to see if there is new arrival of E-mail or not.

A while later, the Outlook Express is activated and newly arriving E-mail, if there is any, is received by the computer.

30 seconds after the computer completes reception of new E-mail(s), it automatically discontinues accessing the Internet.

Arrival of new E-mail can be checked with the E-mail arrival indicator lamp.

This function is convenient for checking arrival of new E-mail as the LCD panel is closed. When the E-mail button is pressed, the E-mail arrival indicator lamp goes on and then blinks or goes out to indicate arrival or non-arrival of E-mail as shown below.

Turned on: Checking new arrival of E-mail

(accessing the Internet)

Blinking: Newly arriving E-mail is recognized.

Turned off: No arrival of E-mail is recognized.

If the LCD panel is opened, the suspended computer is resumed, or the Outlook Express is quitted, the E-mail arrival indication lamp goes out.

SECTION



This section explains the BIOS setup program, which is necessary for setting the date and time and power conservation mode. This section also explains how to set the password for protecting data in this computer.

SECTION 3 1. BIOS setup

Snapshots of the BIOS setup screen and the possible setup options is shown in the following sections.



Underlined setup options show the default settings.

Columns between Selections and Note show the security level of each setup item. 'S' means that the item needs the supervisor password security level and can not be changed with the user password security level.

1.1 Main Menu



Figure 1-1 Main menu

Setup Item	Selections	Note (Item Specific Help)
System Time	00:00:00 to 23:59:59	Adjust calendar clock. <tab>, <shift-tab>, or <enter> selects field.</enter></shift-tab></tab>
System Date	01/01/1981 to 12/31/2099	Adjust calendar clock. <tab>, <shift-tab>, or <enter> selects field.</enter></shift-tab></tab>
Floppy Diskette A	Disabled S 1.44/1.25 MB 3 1/2"	 Select floppy drive type. 1.44/1.25 MB 3 1/2 " is the valid value. Selects floppy type. Note that 1.25 MB, 3 1/2" references a 1024 byte/sector Japanese media format.
Primary Master	Fujitsu MHK2060AT	Configure primary master ATA/ATAPI device. Configures ATA/ATAPI device.
Language	<u>English (US)</u> xxxxxx (JP)	The default setting differs between US/European model and Japanese model. Select the display language for the BIOS.

Table 1-1 Main menu options

1.1.1 Main - Primary Master and Primary Slave Menu

PhoenixBIOS Setup Utility					
Main					
Primary Master [F	'ujitsu MHK2060AT]	Item Specific Help			
Type: Cylinders: Heads: Sectors: Maximum Capacity: Multi-Sector Transfer LBA Mode Control: PIO Transfer Mode: DMA Transfer Mode:	[Auto] [12416] [15] [63] 6007 MB s: [16 Sectors] [Enabled] [Fast PIO 4] [Ultra DMA 2]	Select ATA/ATAPI drive installed here. [Auto] The BIOS auto-type the drive on boot time. Except [Auto] You enter parameters of the drive. [None] The drive is disabled.			
F1 Help $\uparrow \downarrow$ Select Item -/SpaceChange Value F9 Setup Defaults ESCExit $\leftarrow \rightarrow$ Select Menu Enter Select \triangleright Sub-MenuF10Save and Exit					

Figure 1-2 Main - Primary Master and Primary Slave Menu

Setup Item	Selections		Note (Item Specific Help)
Туре	<u>Auto</u> None CD-ROM ATAPI Removable User		Select ATA/ATAPI device type. If 'Auto' is selected, the type is automatically identified at POST by the BIOS. It does not carry out Cylinder/Head/Sector display in the case of over 8.4GB-HDD when Auto mode. If 'None' is selected, all of the following setup items do not appear. When 'User' is selected, you can specify Cylinders, Heads and Sectors. User = you enter parameters of hard-disk drive installed at this connection. Auto = autotypes ATA/ATAPI drive installed here. CD-ROM = a CD-ROM drive is installed here. ATAPI Removable = removable disk drive is installed here.
Cylinders	0 to 65535	S	This item appears when 'Auto' is selected and the type is identified as hard disk, or 'User' is selected. When 'User' is selected, you can change the value. Specify the number of Cylinders.
Heads	1 to 16	S	This item appears when 'Auto' is selected and the type is identified as hard disk, or 'User' is selected. When 'User' is selected, you can change the value. Specify the number of Heads.

Setup Item Sectors	Selections 0 to 63	S	Note (Item Specific Help) This item appears when 'Auto' is selected and the type is identified as hard disk, or 'User' is selected. When 'User' is selected, you can change the value. Specify the number of Sectors.
Maximum Capacity	xxxx MB		Display maximum capacity calculated from parameters of hard disk when 'Auto' is selected and the type is identified as hard disk, or 'User' is selected.
Multi-Sector Transfers	Disabled 2 Sectors 4 Sectors 8 Sectors <u>16 Sectors</u> 32 Sectors 64 Sectors 128 Sectors	S	This option can not be changed when 'Auto' is selected. Specify the number of sectors per block for multiple sector transfer.
LBA Mode Control	Disabled <u>Enabled</u>	S	This option can not be changed when 'Auto' is selected. Enabling LBA causes Logical Block Addressing to be used in place of Cylinders, Heads & Sectors.
PIO Transfer Mode	Standard Fast PIO 1 Fast PIO 2 Fast PIO 3 Fast PIO 4	S	This option can not be changed when 'Auto' is selected. Multi-word DMA is automatically set to mode 1 for 'Fast PIO 1', 'Fast PIO 2', 'Fast PIO 3' and set to mode 2 for 'Fast PIO 4'. Selects the method of moving data to/from the drive. Autotype the drive to select the optimum transfer mode.
DMA Transfer Mode	Disabled Multiword DMA 1 Multiword DMA 2 Ultra DMA 0 Ultra DMA 1 Ultra DMA 2	S	You can not change this option when 'Auto' is selected. Selects the Ultra DMA mode used for moving data to/from the drive. Autotype the drive to select the optimum transfer mode.

Table 1-2 Main - Primary Master and Primary Slave Menu options

1.2 Advanced Menu



Figure 1-3 Advanced menu

Setup Item	Selections		Note (Item Specific Help)
Plug & Play O/S	No <u>Yes</u>	S	Select 'Yes' if you are using a Plug & Play capable operating system. Select 'No' if you need the BIOS to configure non-boot devices.
Protected Device Configurations		S	'Yes' prevents a Plug and Play Operating System from changing system settings.
Serial/Parallel Port Configurations			Peripheral Configuration.
Keyboard/Mouse Features			Setup keyboard/mouse features.
Video Features			Configures display and video features.
Internal Device Configurations			Configures other internal devices.
PCI Configuration			Additional setup menus to configure PCI devices.
ACPI Features			Configure ACPI features.
Event Logging			Configure event logging features.

Table 1-3 Advanced menu options

PhoenixBIOS Setup Utility					
Advanced					
Serial/Parallel P	ort Configuration	Item Specific Help			
Serial port : I/O Address: Interrupt: Mode: I/O Address: Interrupt: I/O Address: DMA Channel: Parallel Port: Mode: I/O Address: Interrupt:	<pre>[Enabled] [3F8-3FF] [IRQ 4] [Enabled] [FIR] [2E8-2EF] [IRQ 3] [118-11F] [DMA 3] [Enabled] [Bi-directional] [378-37F] [IRQ 7]</pre>	<pre>[Disabled] The port is disabled [Enabled] The port is enabled with user configuration [Auto] A Plug & Play OS or an ACPI OS will configure the port.</pre>			
F1 Help $\uparrow \downarrow$ Select Item -/SpaceChange Value F9 Setup Defaults ESCExit \longleftrightarrow Select Menu Enter Select \blacktriangleright Sub-MenuF10Save and Exit					

1.2.1 Advanced - Serial/Parallel Port Configuration Menu

Figure 1-4 Advanced - Serial/Parallel Port Configuration Menu

Setup Item Serial Port	Selections Disabled <u>Enabled</u> Auto	S	Note (Item Specific Help) Configure serial port A using options: [Disabled] No configuration [Enabled] User configuration [Auto] BIOS or OS chooses configuration
I/O Address	<u>3F8-3FF</u> 2F8-2FF 3E8-3EF 2E8-2EF	S	This option is available when Serial port A is 'Enabled'. Set the base I/O address for serial port A.
Interrupt	IRQ 3 <u>IRQ 4</u> IRQ 5	S	This option is available when Serial port A is 'Enabled'. Set the interrupt for serial port A.
Infrared Port	Disabled <u>Enabled</u> Auto	S	Configure Infrared port using options: [Disabled] No configuration [Enabled] User configuration [Auto] BIOS or OS chooses configuration
Mode	IrDA <u>FIR</u>	S	Infrared port is 'Enabled'. Infrared port is 'Disabled'.
I/O Address	3F8-3FF 2F8-2FF 3E8-3EF <u>2E8-2EF</u>	S	Set the base I/O address.

Setup Item Interrupt	Selections IRQ 3 IRQ 4 IRQ 5	S	Note (Item Specific Help) This option is available when Infrared port is 'Enabled'. Set the interrupt for Infrared port.
Base I/O address	100-107 108-10F 110-117 <u>118-11F</u>	S	This option is available when Mode for Infrared port is set to 'FIR'. Set the base I/O address for the FIR of Infrared port.
DMA channel	DMA 1 <u>DMA 3</u>	S	This option is available when Mode for Infrared port is set to 'FIR'. Set the DMA channel for the FIR of Infrared port.
Parallel port	Disabled <u>Enabled</u> Auto	S	Configure parallel port using options: [Disabled] No configuration [Enabled] User configuration [Auto] BIOS or OS chooses configuration
Mode	Output only <u>Bi-directional</u> ECP	S	This option is available when Parallel port is 'Enabled'. When you change this mode to 'ECP', 'DMA 1' is selected by default. Set the mode for the parallel port.
I/O address	<u>378-37F</u> 278-27F 3BC-3BF	S	This option is available when Parallel port is 'Enabled'. Set the base I/O address for the parallel port.
Interrupt	IRQ 5 IRQ 7	S	This option is available when Serial port B is 'Enabled'. Set the interrupt for the parallel port.

Table 1-4 Advanced - Serial/Parallel Port Configuration Menu options

1.2.2 Advanced - Keyboard/Mouse Features Menu

PhoenixBIOS Setup Utility				
Advanced				
Keyboard/Mouse Features	Item Specific Help			
Numlock: [Auto] Hot Plug: [Enabled] Pointing Device: [Configuration 1] Touch Panel: Enabled Quick Point: Enabled External PS/2 Mouse: Disabled	Selects power-on state for Numlock.			
F1 Help ↑↓ Select Item -/Space Change Value ESCExit ←→ Select Menu Enter Select ▶Sub-M	F9 Setup Defaults NenuF10Save and Exit			

Figure 1-5 Advanced - Keyboard/Mouse Features menu

Setup Item Numlock	Selections Auto On Off	S	Note (Item Specific Help) Selects Power-on state for Numlock.
Hot Plug	Disabled <u>Enabled</u>	S	Select Hot Plug.
Pointing Device	Configuration 1 Configuration 2 Configuration 3 Configuration 4	S	Select pointing device configurations. Enabled The pointing device is enabled. Disabled The pointing device is disabled. Exclusive Enabled The pointing device is enabled. However the pointing device is disabled when an external mouse PS/2 mouse is connected.

Table 1-5 Advanced - Keyboard/Mouse Features menu options

Pointing Device	Configuration 1	Configuration 2	Configuration 3	Configuration 4
Touch Panel	Enabled	Enabled	Disabled	Disabled
Quick Point	Enabled	Disabled	Enabled	Exclusive Enabled
External PS/2 mouse	Disabled	Enabled	Enabled	Enabled

1.2.3 Advanced - Video Features Menu



Figure 1-6 Advanced - Video Features menu

Setup Item Display	Selections Internal Flat-Panel External Simultaneous	Note (Item Specific Help) Select display terminal.
Compensation	<u>Disabled</u> Enabled	Select compensation.

Table 1-6 Advanced - Video Features menu

1.2.4 Advanced - Internal Device Configurations.

	PhoenixBIOS Setup Utility				
	Advanced				
	Internal Device Conf	iguration	Item Specific Help		
	Floppy Disk Controller: IDE Controller: LAN Controller	[Enabled] [Enabled] [Auto]	[Disabled] Floppy Disk drive is disabled. [Enabled] Floppy Disk drive is enabled.		
F: E:	1 Help ↑↓ Select Item -/s SCExit ←→ Select Menu En	Space Change Value ter Select ▶Sub-	F9 Setup Defaults MenuF10Save and Exit		

Figure 1-6a Advanced - Internal Device Configurations

Setup Item Floppy Disk Controller	Selections Disabled Enabled	Note (Item Specific Help) Enabled/Disable Floppy Drive.
IDE Controller	Disabled Enabled	Enabled/Disable IDE Controller.
LAN Controller	<u>Auto</u> Disabled Enabled	Enabled/Disable LAN Controller. When set to Auto mode With AC power supply, the LAN device is always enabled. With the battery, the device is enabled only when the link is active.

Table 1-6a Advanced - Internal Device Configurations options

1.2.5 Advanced - PCI Configuration Menu

Selections



Figure 1-7 Advanced - PCI Configuration menu

Setup Item IRQ Reservation Note (Item Specific Help) Reserve specific IRQs for use by legacy ISA devices.

Table 1-7 Advanced - PCI Configuration menu options

1.2.5.1 Advanced - PCI Configuration - IRQ Reservation Menu

	Advanced	PhoenixBIOS	S Setup	Utilit	ty
	IRQ	Reservation			Item Specific Help
IRQ 3: IRQ 4: IRQ 5: IRQ 7: IRQ 9: IRQ 10: IRQ 11: IRQ 15:	[Avail [Avail [Avail [Avail [Avail [Avail [Avail [Avail	able] able] able] able] able] able] able]			Reserve the specified IRQ for use by legacy ISA devices.
F1 Help ESCExit	$ \begin{array}{l} \uparrow \downarrow \text{Select} \\ \leftarrow \rightarrow \text{Select} \end{array} $	Item -/Spac Menu Enter	e Change Select	Value ▶Sub-M	F9 Setup Defaults MenuF10Save and Exit

Figure 1-8 Advanced - PCI Configuration - IRQ Reservation menu

Setup Item IRQ 3	Selections <u>Available</u> Reserved	S	Note (Item Specific Help) If [Reserved] is selected, the BIOS reserves IRQ 3 for use by legacy ISA devices and does not use it for embedded PCI or ISA devices. IRQ 3 is removed from the IRQ bitmap in the PCI IRQ routing table. Reserve the specified IRQ for use by legacy ISA devices.
IRQ 4	<u>Available</u> Reserved	S	Reserves IRQ 4. Reserve the specified IRQ for use by legacy ISA devices.
IRQ 5	<u>Available</u> Reserved	S	Reserves IRQ 5. Reserve the specified IRQ for use by legacy ISA devices.
IRQ 7	<u>Available</u> Reserved	S	Reserves IRQ 7. Reserve the specified IRQ for use by legacy ISA devices.
IRQ 9	<u>Available</u> Reserved	S	Reserves IRQ 9. Reserve the specified IRQ for use by legacy ISA devices.
IRQ 10	<u>Available</u> Reserved		Reserves IRQ 10. Reserve the specified IRQ for use by legacy ISA devices.

Setup Item IRQ 11	Selections Available Reserved	S	Note (Item Specific Help) Reserves IRQ 11. Reserve the specified IRQ for use by legacy ISA devices.
IRQ 15	<u>Available</u> Reserved	S	Reserves IRQ 15. Reserve the specified IRQ for use by legacy ISA devices.

Table 1-8 Advanced - PCI Configuration - IRQ Reservation menu options

1.2.5.2 Advanced - ACPI Features Menu

L	PhoenixBIOS Setup Utility			
	Advanced			
	ACPI Features	Item Specific Help		
	ACPI Management: [Disabled]	Configures ACPI Management feature. [Disabled] ACPI Management is disabled. [Enabled] ACPI Management is enabled.		
	F1 Help ↑↓ Select Item -/SpaceChange Value ESCExit ← Select Menu Enter Select ▶Sub-N	F9 Setup Defaults		

Figure 1-7 Advanced - ACPI Features Menu

Setup Item ACPI Management Selections Enabled Disabled Note (Item Specific Help) Enabled/Disabled ACPI Management.

Table 1-7 Advanced - ACPI Features Menu options

1.2.6 Advanced - Event Logging Menu

Advanced Event Logging Item Specific Help Event Log Capacity: Space Available Event Log Validity: Valid View Event Log: [Enter] Event Logging: [Enabled] System Boot Event: [Disabled] Clear all event logs: [Mo] Mark Events as Read: [Enter]	PhoenixBIOS Setup Utility					
Event LoggingItem Specific HelpEvent Log Capacity:Space Available[No]Event Log Validity:ValidEvent logs will not be cleared at the next boot.View Event Logging:[Enbeld][Yes]System Boot Event:[Disabled]All event logs will be cleared at the next boot.Clear all event logs:[Mo]Mark Events as Read:[Enter]	Advanced					
Event Log Capacity: Space Available [No] Event Log Validity: Valid Event logs will not be cleared at the next boot. View Event Log: [Enter] next boot. Event Logging: [Enabled] [Yes] System Boot Event: [Disabled] All event logs will be cleared at the next boot. The value is reset to [No] Mark Events as Read: [Enter] after clearing logs.	Event Logging	Item Specific Help				
	Event Log Capacity: Space Available Event Log Validity: Valid View Event Log: [Enter] Event Logging: [Enabled] System Boot Event: [Disabled] Clear all event logs: [NC] Mark Events as Read: [Enter]	<pre>[No] Event logs will not be cleared at the next boot. [Yes] All event logs will be cleared at the next boot. The value is reset to [No] after clearing logs.</pre>				

Figure 1-10 Advanced - Event Logging menu

Setup Item Event log capacity	Selections	Note (Item Specific Help) Display event log capacity.
Event log validity		Display event log validity.
View Event Log:	[Enter]	Press Enter key to view the contents of the event log.
Event Logging	Disabled <u>Enabled</u>	Enables Event Logging.
Clear all event logs	<u>No</u> Yes	The value is reset to 'No' after clearing logs.
Mark Events as Read:	[Enter]	Press Enter key to mark all events currently in the event log as read. Marked events will not be displayed from the next "View Event Log".

Table 1-10 Advanced - Event Logging menu options

1.3 Security Menu

PhoenixBIOS Setup Ut	PhoenixBIOS Setup Utility					
Main Advanced Security Power B	Boot Info Exit					
Supervisor Password Is: Clear User Password Is: Clear Set Supervisor Password [Enter] Set User Password [Enter] Minimum User Password Length [0] Password on Boot: [Disabled] Boot from Removable Media:[All] Floppy Disk Access: [All] Hard Disk Security	Item Specific Help Press <enter> key to set Supervisor Password to enable any password features. Then password entry is required to enter BIOS Setup.</enter>					
<pre>>Owner Information Hard Disk Boot Sector: [Normal] F1 Help ↑↓ Select Item -/Space Change Value</pre>	alue F9 Setup Defaults					

Figure 1-11 Security menu

Setup Item Supervisor Password Is	Selections		Note (Item Specific Help) Display the setting of Supervisor password.
User Password Is			Display the setting of User password.
Set Supervisor Password		S	Supervisor Password controls access to the setup utility.
Set User Password			User password can be set after Supervisor password is set. User Password controls access to the system at boot.
Floppy Disk Access	<u>All</u> Supervisor Only	S	This item can be set with Supervisor password security level. When 'Supervisor Only' is selected, floppy diskette drive is not available with User password security level. Controls access to diskette drives.
Password on Boot	<u>Disabled</u> Enabled		When Password on boot is 'Enabled', the BIOS requires a password on OS boot. Enables password entry on boot.
Hardisk boot sector	<u>Normal</u> Write Protect	S	Write protects boot sector on hard disk to protect against viruses.

Setup Item Hardisk security	Selections		Note (Item Specific Help)
Primary Master	<u>Disabled</u> Enabled	S	This item can be set with Supervisor password security level. When 'Enabled' is selected, the data of the hard disk are protected with the password lock feature of the drive. You can not read any data on the drive if it is not installed in the same system as it is locked with the password. Enables fixed disk security.

Table 1-11 Security menu options

1.3.1 Set Supervisor Password

Supervisor Password Is: Clear



Supervisor Password Is: Set

Set Supervisor Password					
Enter Current Password [
Enter New Password [
Confirm New Password []				

1.3.3 Security- Owner Information

1.3.2 Set User Password

User Password Is: Clear



User Password Is: Set

Set User Password	
Enter Current Password [
Enter New Password [
Confirm New Password [

Phoe Secu	nixBIOS Setup Utili urity	ty
Owner Info	rmation	Item Specific Help
Owner Information Is:	Clear	
Set Owner Information:	[Enter]	
Foreground Color: Background Color:	[Gray] [Black]	
F1 Help ↑↓ Select Item	-/Space Change Value	F9 Setup Defaults

Figure 1-7 Security- Owner Information

SECTION 3

1.4 Power Menu

			Phoer	nixBIOS	S Setup	Utili	ty		
	Main	Advanced	Secu	rity	Power	Boot	Info	Exit	
Γ	Power	Savinge:		Custor	mizedl		Item Sp	ecific Help]
	Hard Vide Stan Auto	Disk Timeou o Timeout: dby Timeout: Suspend Tim	nt: neout:	[2 minu [2 minu [4 Minu [5 Minu	utes] utes] utes] utes]		Select Po Managemen Choosing changes s	ower nt Mode. modes system power	
	Suspen Auto	d Mode: Save To Dis	sk:	[Susper [Off]	nd]		managemer Maximum H conserves greatest	nt settings. Power Savings s the amount of	
	Resume Resume Resume	On Modem Ri On Time: Time: ed Features	.ng:	[Off] [Off] [00:00	:00]		system po Maximum I conserves allows gr system pe	erformance.	
							Customize off power choose Di	, choose e. To turn r management, isable.	
1	F1 Help ESCExit	$ \begin{array}{c} \uparrow \downarrow \text{Select} \\ \leftarrow \rightarrow \text{Select} \end{array} $	Item Menu	-/Spac Enter	e Change Select	e Value : ►Sub-!	F9 Set MenuF10Sav	up Defaults e and Exit	

Figure 1-14 Power menu

Setup Item Power Savings	Selections Disabled <u>Customized</u> Maximum Power Savings Maximum Performance	Note (Item Specific Help) Select Power Management Mode. Choosing modes changes system power management settings. Maximum Power Savings conserves the greatest amount of system power while Maximum Performance conserves power but allows greatest system performance. To alter these settings, choose Customized. To turn off power management, choose Disabled.
Hard Disk Timeout	Off 30 Seconds 1 Minute <u>2 Minutes</u> 4 Minutes 6 Minutes 8 Minutes 10 Minutes 15 Minutes 20 Minutes	Amount of time the hard disk needs to be inactive before it is turned off.
Display Timeout	Off <u>2 Minutes</u> 4 Minutes 6 Minutes 8 Minutes 10 Minutes 15 Minutes 20 Minutes	Amount of time the user input devices need to be inactive before the screen is turned off.

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Setup Item Standby Timeout	Selections Off 1 Minute 2 Minutes 4 Minutes 6 Minutes 12 Minutes 16 Minutes	Note (Item Specific Help) Amount of time the system needs to be inactive before entering the Standby Mod Standby Mode turns off various devices in the system, including the screen, until you statusing the computer again.		
Auto Suspend Timeout	Off <u>5 Minutes</u> 10 Minutes 15 Minutes 20 Minutes 30 Minutes 40 Minutes 60 Minutes	Amount of time the system needs to be inactive before entering the Suspend Mode.		
Suspend Mode	<u>Suspend</u> Save To Disk	Select the type of Suspend Mode. If you choose Save To Disk the system will save its state to disk and power off. If you choose Suspend the system will save its state but remain in a low power mode. If you choose Suspend then you also have the option of choosing Auto Save To Disk.		
Auto Save To Disk	<u>Off</u> After 1 Hour	Turn on or off the Auto Save To Disk feature. When Auto Save To Disk is turned on, the system will save its state to disk and then power off after being in Suspend mode for a period of time.		
Resume On Modem Ring	Off On	Turning this feature on will wake the system up when an incoming call is detected on your modem in Suspend Mode.		
Resume On Time	Off On	Turning this feature on will wake the system up at 'Resume Time' from Suspend Mode.		
Resume Time	<u>00:00:00</u> to 23:59:59	Specify the time when the system is to wake up. <tab>, <shift-tab>, or <enter> selects field.</enter></shift-tab></tab>		
Advanced Features		Allows editing of advanced power management features.		
	Table 1-14 Power m	enu options		
Power Saving Mode Disabled Customized	Hard Disk I Off Off	DisplayStandbyAuto SuspendOffOffOffOff4 Minutes15 Minutes		

Disabled	Off	Off	Off	Off
Customized	Off	Off	4 Minutes	15 Minutes
Maximum Power Savings	30 Seconds	2 Minutes	1 Minute	5 Minutes
Maximum Performance	Off	Off	Off	15 Minutes

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SECTION 3

1.4.1 Power - Advanced Features Modes

PhoenixBIOS Setup Utility				
Power				
Advanced Features	Item Specific Help			
Suspend/Resume Switch: [Enabled] Lid Closure Suspend: [On] Lid Open Resume: [On] Resume On LAN: [Off] Serial Mouse Activity: [Disabled]	Configures the Suspend/Resume switch.			
F1 Help ↑↓ Select Item -/SpaceChange Value ESCExit ←→ Select Menu Enter Select ▶Sub-M	F9 Setup Defaults NenuF10Save and Exit			

Figure 1-16 Power - Advance Features menu

Setup Item SUS/RES Switch	Selections Disabled Enabled	Note (Item Specific Help) Set the SUS/RES Switch.
Lid Closure Suspend	Off On	Set the Lid Closure Suspend.
Lid Open Resume	Off On	Set the Lid Open Resume.
Resume on LAN	<u>Off</u> On	Turning this feature on will wake the system up when the internal LAN device receive a Magic Packet in Suspend Mode.
Serial Mouse Activity	<u>Disabled</u> Enabled	Turning this feature on will wake the video up from standby mode when external serial connector activity is detected.

Table 1-16 Power - Advanced Features menu options

1.5 Boot Menu

PhoenixBIOS Setup Utility				
Main Advanced Security Power Boot	Info Exit			
Quick Boot: [Enabled]	Item Specific Help			
Boot-time Diagnostic Screen: [Disabled] Preboot Execution Environment: [Disabled] Boot Device Priority	[Disabled] All diagnostic test will be done.			
	[Enabled] Some diagnostic tests may be skipped while booting to speed up.			
	[Auto] Diagnostic tests will be automatically skipped or done according to the order of the ACPI OS.			
F1 Help ↑↓ Select Item -/Space Change Value	F9 Setup Defaults			

Figure 1-17 Boot menu

Setup Item QuickBoot Mode	Selections Disabled <u>Enabled</u> Auto	S	Note (Item Specific Help) Allows the system to skip certain tests while booting. This will decrease the time needed to boot the system.
Boot-time Diagnostic Screen	<u>Disabled</u> Enabled	S	Display the diagnostic screen during boot.
Preboot Execution Environment	<u>Disabled</u> Enabled		
Boot Device Priority			Select the search order for the types of boot devices.

Table 1-17 Boot menu options

1.5. 1 Boot - Boot Device Priority Menu

PhoenixBIOS Setup Utility				
Boot				
Boot Device Priority	Item Specific Help			
Floppy Disk Drive +Hard Disk Drive	The top device has the highest priority. <enter> expands or collapses devices with a + or <ctrl+enter> expands all. <↑> or <↓> select a device. <+>/<space> or <-> move the device up or down. <shift+1> enables or disables adevice.</shift+1></space></ctrl+enter></enter>			
F1 Help ↑↓ Select Item -/SpaceChange Value ESCExit ←→ Select Menu Enter Select ▶Sub-M	F9 Setup Defaults MenuF10Save and Exit			

Figure 1-18 Boot - Boot Device Priority menu

Setup Item

Bootable devices available are listed. The following devices will appear depending on the hardware configuration. [Floppy Disk Drive]

[Hard Drive]

Note (Item Specific Help)

Use $<\uparrow$ > or $<\downarrow$ > to select a device, then press <+> or <Space> to move it up the list, or <-> to move it down the list. Press <Esc> to exit this menu.

Table 1-18 Boot - Boot menu Device Priority options

1.5. 1.1 Boot Menu at POST

The following pop up menu will appear when you hit the Esc key during POST. The device list in this pop up menu are same as the list in the Boot Device Priority menu.



1.6 Info Menu

	PhoenixBIOS Setup Utilit	су
Main Advanced	Security Power Boot	Info Exit
Main Advanced BIOS Version: BIOS Date: BIOS Area: CPU Type: CPU Speed: L1 Cache: L2 Cache: Total Memory: Onboard: Memory Slot:	Security Power Boot 1.XX XX/XX/1999 ECOOh - FFFFh Celeron(TM) processor XXX MHz XX KB XXX KB XX MB XX XX MB XX XX MB XX MB XX MB XX MB XX MB XX MB XX	Info Exit Item Specific Help
F1 Help $\uparrow \downarrow$ Select ESC Exit $\leftarrow \rightarrow$ Select	Item -/Space Change Value Menu Enter Select >Sub-N	F9 Setup Defaults MenuF10Save and Exit

Figure 1-19 Info menu

Information Item BIOS Version	Values n.nn	Note
BIOS Date	MM/DD/YYYY	
BIOS Area	xxxxh – FFFFh	This area can not be used as UMB.
СРИ Туре	Intel(R) Celeron(TM) processor	
CPU Speed	XXX MHz	
L1 Cache	32 KB	
L2 Cache	128 KB	Intel(R) Celeron(TM) processor
Total Memory	XX MB	
On Board	64 MB SDRAM	
Memory Slot	None XXXMB SDRAM	
	Table 1-19 Into m	enu items

1.7 Exit menu

	PhoenixBIO	S Setup (Utilit	y		
Main Advanced	Security	Power	Boot	Info	Exit	
Exit Saving Change Exit Discarding Ch Load Setup Default Discard Changes Save Changes	s anges s			Item Spe Exit Syst save your CMOS.	ecific H em Setu change	p and s to
F1 Help $\uparrow \downarrow$ Select ESCExit $\leftarrow \rightarrow$ Select	Item -/Spac Menu Enter	e Change ' Select	Value ▶Sub-M	F9 Setu IenuF10Save	up Defau e and Ex	ilts it

Figure 1-20 Exit menu

Setup Item Exit Saving Changes

Exit Discarding Changes

Load Setup Defaults

Discard Changes

Note (Item Specific Help) Exit System Setup and save your changes to CMOS.

Exit utility without saving Setup data to CMOS.

Load default values for all SETUP items.

Load previous values from CMOS for all SETUP items.

Save Changes

Save Setup Data to CMOS.

Table 1-20 Exit menu options

1.7.1 Exit Saving Changes



1.7.2 Exit Discarding Changes



1.7.3 Load Set up Defaults



1.7.4 Discard Changes



1.7.5 Save Changes



1.8 General Help



Figure 1-21 General Help

General Help

Setup changes system behavior by modifying the BIOS configuration. Selecting incorrect values may cause system boot failure; load Setup Default values to recover.

<Up/Down> arrows select fields in current menu. <PgUp/PgDn> moves to previous/next page on scrollable menus. <Home/End> moves to top/bottom item of current menu.

Within a field, <F5> or <-> selects next lower value and <F6>, <+>, or <Space> selects next higher value.

<Left/Right> arrows select menus on menu bar. <Enter> displays more options for items marked with _.

<F9> loads factory installed Setup Default values.<F10> saves current settings and exits Setup.

<Esc> or <Alt-X> exits Setup; in sub-menus, pressing these keys returns to the previous menu.

<F1> or <Alt-H> displays General Help (this screen).

Table 1-21 Entire Text of General Help



SECTION 3 2. POST Diagnostic Screen

PhoneixBIOS 4.0 Release 6.0 Copyright 1985–1999 Phoenix Technologies Ltd. All Rights Reserved Fujitsu Notebook BIOS Version 1.xx

CPU = XXXX processor XXX MHz xxM System Memory Passed XXXK Memory Cache Passed System BIOS Shadowed Video BIOS Shadowed Mouse Initialized Fixed disk 0: xxxx ATAPI CD-ROM: xxxx

Copyright FUJITSU LIMITED 1998-1999.

<F12>:Boot Menu / <F2>:BIOS Setup

Figure 2-1 Typical Diagnostic Screen

Normal Messages

0640K System Memory Passed nnnnM Extended Memory Passed nnnnK Memory Cache Passed System BIOS shadowed Video BIOS shadowed Mouse initialized Press <F2> to enter SETUP Entering SETUP ...

Table 2-1 Normal Messages in Diagnostic Screen

Error Messages
System Memory Failed at offset: xxxx Failing Bits: zzzz
Extended Memory Failed at offset: xxxx Failing Bits: zzzz zzzz
System cache error - Cache disabled
Keyboard controller error
Keyboard error
Diskette drive A error
Failure Fixed Disk n

Error Messages
System timer error
Real time clock error
System CMOS checksum bad - Default configuration used
Previous boot incomplete - Default configuration used
Press <f1> to resume,<f2> to Setup</f2></f1>
Check date and time settings
Password locked: Fixed Disk n
No Save To Disk partition or file exists on Fixed Disk - Save To Disk features is disabled.
Not enough Save To Disk partition or file exists on Fixed Disk. - Save To Disk feature is disabled.
Hard Disk Drive is not installed. - Save To Disk feature is disabled.
Unknown Save To Disk error. - Save To Disk feature is disabled.
Hard disk sector read function failed. - Save To Disk feature is disabled.
Hard disk sector write function failed. - Save To Disk feature is disabled.
Save To Disk partition or file corrupted. - Save To Disk feature is disabled.
Fixed Disk is not installed. Cannot restore from disk. To restore from disk : turn off system, install original fixed disk and reboot. Press <f1> to continue to boot without save to disk data.</f1>
Fixed Disk has been changed. Cannot restore from disk. To restore from disk : turn off system, install original fixed disk and reboot. Press <f1> to continue to boot without save to disk data.</f1>

Table 2-2 Error Messages in Diagnostic Screen

SECTION



This section explains what to do when trouble occurs with this computer and when messages are displayed. Read this section as the necessity arises.

SECTION 4

1. When This Happens

When you are having trouble with this computer, there is something you think is strange, or there is something you want to do, but do not know how. This section is divided into related items.

The power does not come on.

Checkpoint	Cause and Solution
Is the AC adaptor connected?	When using this computer for the first time after purchase, the battery is not yet charged, so you must connect the AC adaptor and switch on the main switch.
Is the main switch switched on?	If the main switch is not switched on, the power will not come on even if the SUS/RES switch is pressed.
Is the battery charged?	If a beep is heard when the main switch is turned on, then the battery is running low (LOW BATTERY). Connect the AC adaptor.
Has the computer been left unused for a long time?	When using the computer for the first time after leaving it unused for a long time, connect the AC adaptor and switch on the main switch to switch on the power.

Nothing displayed on the LCD panel

Checkpoint	Cause and Solution
Is anything displayed on the status indicator LCD?	Connect the AC adaptor and switch on the main switch.
Is () displayed on the LCD panel?	 Displayed Adjust the brightness and darkness with the brightness and contrast controls.
	 Flashing Press the SUS/RES switch to put the computer into operating mode. When the icon is off on the status indicator LCD. When the computer runs by the battery power, check the battery status if it is sufficiently charged for operation or not. If it is not abarged compare the AC admits a parage it.
	If it is not charged, connect the AC adaptor and charge it. If you are already using this computer with the AC adaptor connected, check that it is correctly plugged into the power socket and into the computer.

Checkpoint	Cause and Solution
Have you been pressing any of the keys?	On this computer, if the power management functions are set and no key is pressed for a certain period of time, the CPU stops and the LCD panel backlight goes out. (In this state, pressing any key lights up the backlight again.) If the computer stops too frequently, change the BIOS setup settings.
Is it set to output to the CRT?	Switch over to the LCD display with the [Fn] + [F10] keys.

LCD panel hard to read.

Checkpoint	Cause and Solution
Did you adjust the brightness?	Adjust the luminance of the LCD's backlight with the [Fn] + [F6] keys or [Fn] + [F7] keys on the keyboard.

• Battery is not charged.

Checkpoint	Cause and Solution
Is the AC adaptor connected?	Check that the AC adaptor is correctly plugged into the power socket and into the computer.
Is the battery overheated (The on the LCD display flashes.)?	If the ambient temperature is high and the battery temperature becomes too high during use, the battery protection function may be triggered to stop the charging.
Is the computer too cold (The on the LCD display flashes.)?	If the battery temperature falls too low, the battery protection function may be triggered to stop the charging.
Was the charging stopped midway?	If you use the computer and disconnect the AC adaptor between the start of charging and the time the \rightarrow LCD turns off, the battery will not become fully charged, Once you start charging do not remove the AC adapter until the \rightarrow LCD turns off.

• The remaining battery charge indicator does not stop flashing.

Checkpoint	Cause and Solution
Is the battery connected correctly?	Check that the battery is connected correctly. If it is connected correctly, there is an abnormality in the battery pack, so replace the battery pack.
Is the battery low?	Attach the AC adaptor and charge the battery.

• Floppy disk or LS-120 disk can not be used.

Checkpoint	Cause and Solution
Is the floppy disk loaded into the floppy disk drive correctly?	Insert the floppy disk with its label facing up, into the drive shutter and keep inserting firmly until you hear a clicking sound.
Is the floppy disk formatted?	New floppy disks can not be used until they are formatted (initialized). Format the floppy disk.
Is the floppy disk unit securely installed?	Firmly install the floppy disk drive unit, port replicater or LS-120 disk unit.
Are both items of "Floppy disk A" and "Floppy controller" of the BIOS Setup menu set properly?	In the case a floppy disk is used, select "1.44/1.2MB 3.5" for the item "Floppy disk A" and "Use" for the item "Floppy controller".
Is "Administrator only" selected for the item "Floppy disk access" of the BIOS Setup menu?	In the case a floppy disk is used, select "Accessible at any time" for this item. When a super disk is used, accessibility cannot be controlled by this item.
Is the floppy disk write inhibited?	Set the write protect tab on the floppy disk to the write enable position.
Does it work with a different floppy disk?	If it works with a different floppy disk then the problem floppy disk may be damaged.

No sound or minimal sound from speaker.

Checkpoint	Cause and Solution
Is the volume control correctly adjusted?	Turn the volume control to adjust the volume to a proper level. If volume adjustment with the volume control results in failure, check to see if the sound driver is correctly installed.

• Can not record from Mic or Line In jack.

Checkpoint	Cause and Solution
Is the volume adjusted properly?	Turn the volume control to obtain the correct volume. If the line jack is connected to the sound source, then check that connec- tion. If recording still results in failure after the above-mentioned operation and check, activate the item "Recording" of the "Volume Control" and again adjust the volume with it.

• LCD panel does not close.

Checkpoint	Cause and Solution
Is something caught in the LCD panel?	Forcing the LCD panel closed can damage it. Check for something caught in the LCD panel. Also, a metal object such as a paper clip can cause a breakdown if it gets caught in between the keys.

The power management function is not executed.

Checkpoint	Cause and Solution
Is Power Savings set to off in the BIOS setup?	Reset the BIOS setup.



Message displayed on screen.

See the message list.

Data cannot be read from the CD-ROM drive.

Checkpoint	Cause and Solution
Is the CD-ROM correctly set?	Set the CD-ROM correctly with its label facing upwards.
Is there any dirt, condensation or water on the CD-ROM?	Wipe it from the center outwards with a dry, soft cloth.
Is the CD-ROM scratched or extremely warped?	Replace the CD-ROM.
Are you using a non-standard CD-ROM?	Use a CD-ROM which conforms to the standards.
Is the CD-ROM drive unit securely installed?	Securely install the CD-ROM drive unit.

• The CD cannot be ejected from the CD-ROM.

Checkpoint	Cause and Solution
Is it in operating mode?	The CD can only be ejected when the personal computer main unit is in operating mode because its CD- ROM drive has an electronic lock. Check that the personal computer main unit is in operating mode and press the EJECT button. If for some reason the CD tray does not come out even when you press the EJECT button, insert a clip or something into the hole to the right of the EJECT button and pull the tray out. If the tray doesn't still come out, click the CD-ROM icon in the "My Computer" window with the right button of the mouse and then click "EJECT".

Super disk cannot be ejected.

Checkpoint	Cause and Solution
Is the computer in operation?	Since the super disk drive secures the super disk by the electronic lock, the disk can be ejected only when the computer is in the operation status. If the super disk cannot be ejected for some reason, insert a thin linear wire such as a straightened paper clip or the like into the emergency disk ejecting hole and push it into the depth. The disk will be resultingly ejected from the drive.

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