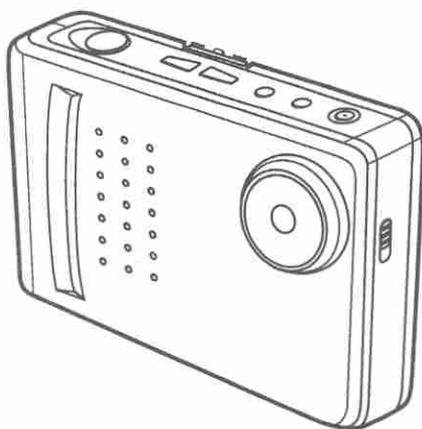


Panasonic®

 PalmCam

Digital Camera

Operating Instructions



PV-DC1000

For assistance, call 1-800-272-7033.

Please read these instructions thoroughly before operating this product.

Things You Should Know

Thank you and congratulations

on your purchase of this state of the art Panasonic Digital Camera. This product has been manufactured and tested to Panasonic's highest standards to give you the best in performance and reliability. **Save this operating instruction manual as an operating and information guide.**

Date of Purchase

Dealer Purchased From

Dealer Address

Dealer Phone No.

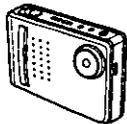
Model No.

Serial No.

Unpack your Digital Camera

Please confirm that the following items are packed in the Digital Camera box. They are provided to help you use or set up your Digital Camera.

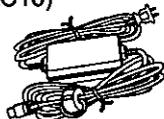
1pc. Digital Camera
(PV-DC1000)



1pc. Digital Camera Station
(PV-JB1000)



1pc. AC Adaptor
(PV-AC10)



1pc. Ni-Cd Battery Pack
(PV-BPN10)



1pc. Hand Strap
(LSFC0002)



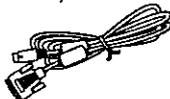
1pc. Soft Carrying Case
(LSFC0001)



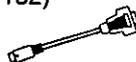
1pc. Video Cable
(LSJA0153)



1pc. PC Connection Cable
for Windows (LSJA0146,
LSJA0149, or LSJA0150)



1pc. PC Connection Cable
Adaptor for Macintosh
(LSJA0147, LSJA0151, or
LSJA0152)



1 pc. 3.5 inch Floppy Disk of
Driver Software for Windows



1 pc. 3.5 inch Floppy Disk of
Driver Software for Macintosh



Microsoft, Windows, and Windows 95 are registered trademarks of Microsoft in the United States and other countries.

Macintosh is a registered trademark of Apple Computer Incorporated.

All product/brand names are trademarks or registered trademarks of the respective holders.

Information

Note This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

FCC Warning To assure continued FCC compliance, use only the provided shielded interface cable with ferrite cores when connecting digital camera station to computer. Also, any unauthorized changes or modifications to this equipment could void the user's authority to operate.

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

Precautions

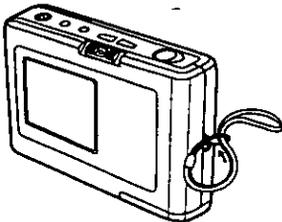
USE & LOCATION

- **TO AVOID SHOCK HAZARD** - Your Digital Camera and power supply should not be exposed to rain or moisture. Do not connect the power supply or operate your Digital Camera if it gets wet. Your Digital Camera has been designed for outdoor use, however it is not designed to sustain direct exposure to water, rain, sleet, snow, sand, dust, or a direct splashing from a pool or even a cup of coffee. This action could permanently damage the internal parts of your Digital Camera. Do not attempt to disassemble this unit. There are no user serviceable parts inside. Unplug your Digital Camera from the power supply and have it serviced.
- **DO NOT AIM YOUR DIGITAL CAMERA AT THE SUN OR OTHER BRIGHT OBJECTS**
- **DO NOT EXPOSE YOUR DIGITAL CAMERA TO EXTENDED HIGH TEMPERATURE** - Such as, in direct sunlight, inside a closed car, next to a heater, etc. This action could permanently damage the internal parts of your Digital Camera.
- **AVOID SUDDEN CHANGES IN TEMPERATURE** - If the unit is suddenly moved from a cold place to a warm place, moisture may form inside the unit.
- **DO NOT LEAVE YOUR DIGITAL CAMERA OR THE POWER SUPPLY TURNED ON WHEN NOT IN USE**
- **STORAGE OF YOUR DIGITAL CAMERA** - Store and handle your Digital Camera in a manner that will not subject it to unnecessary movement (avoid shaking and striking). Your Digital Camera contains a sensitive pick-up device which could be damaged by improper handling or storage.

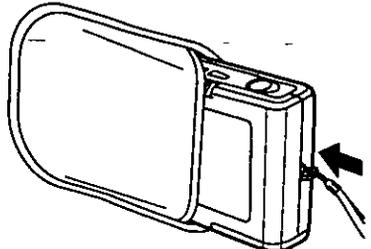
CARE

- **TO CLEAN YOUR DIGITAL CAMERA** - Do not use strong or abrasive detergents when cleaning your Digital Camera body.
- **TO PROTECT THE LENS** - Do not touch the surface of the lens with your hand. Use a commercial Digital Camera lens solution and lens paper when cleaning the lens. Improper cleaning can scratch the lens coating.
- **TO PROTECT THE FINISH OF YOUR DIGITAL CAMERA** - Before handling your Digital Camera, make sure your hands and face are free from any chemical products, such as suntan lotion, as it may damage the finish.

Attaching the Hand Strap/Soft Carrying Case



Thread the Hand Strap through the Strap Attachment ring as shown.



Keep the Digital Camera in the Soft Carrying Case as shown when not in use.

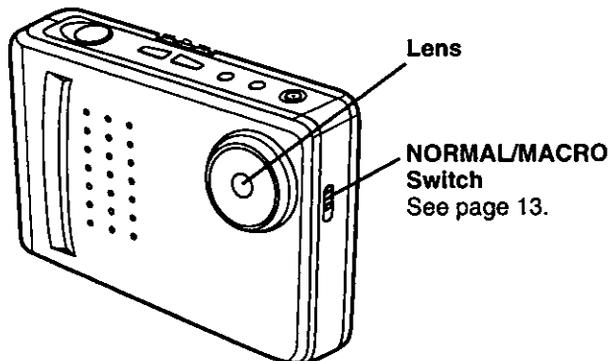
- You may thread the hand strap through the hole in the Soft Carrying Case.

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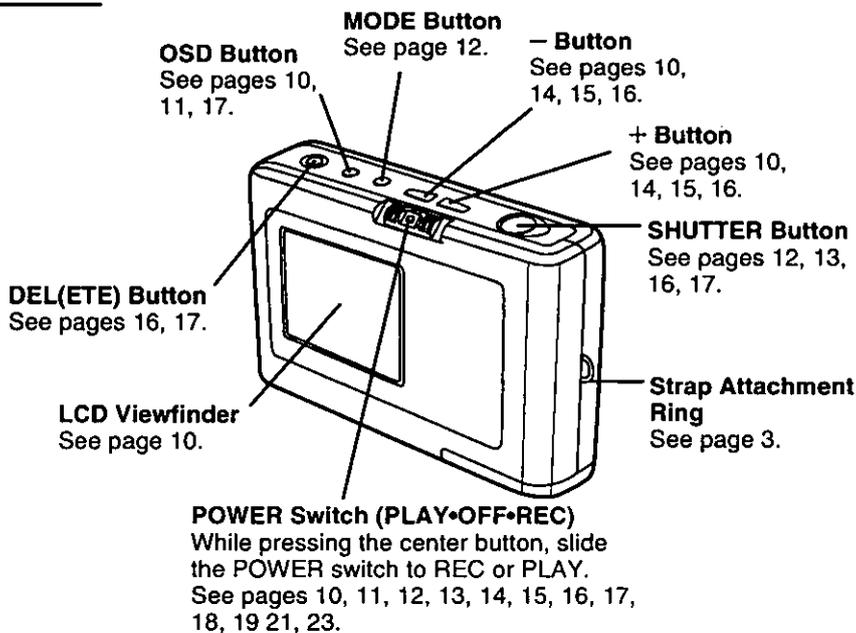
Index of Controls

Front View

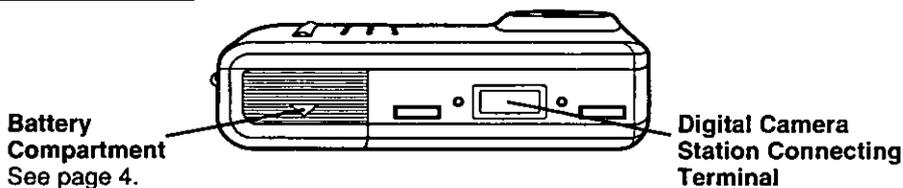


Index of Controls

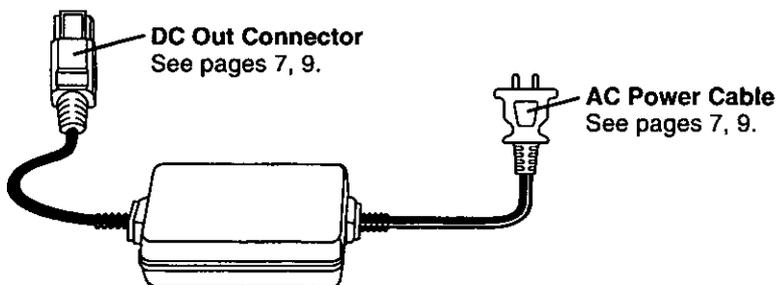
Rear View



Underside View

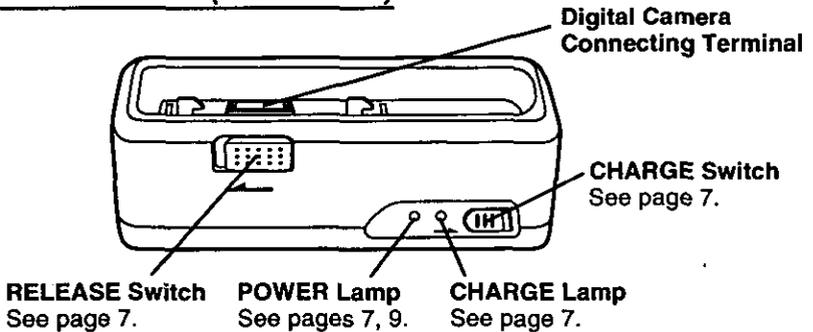


AC Adaptor

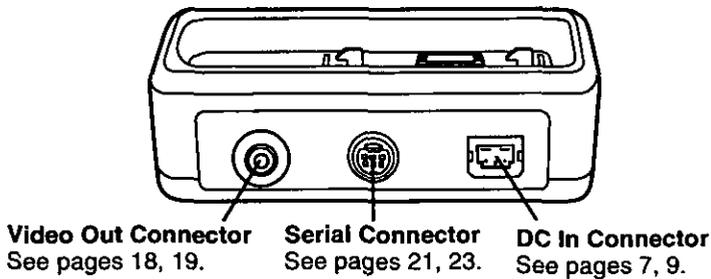


Index of Controls

Digital Camera Station (Front View)

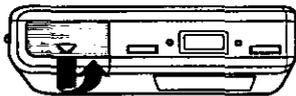


Digital Camera Station (Rear View)

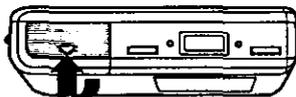
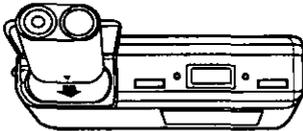


Power Supply

Loading the Battery Pack



Underside



1 Slide the Battery Compartment lid in the direction of the arrow and swing it open.

2 Install the Battery Pack with the arrow mark at the bottom and facing the rear of the Digital Camera.

3 Swing the Battery Compartment lid down and slide it shut.

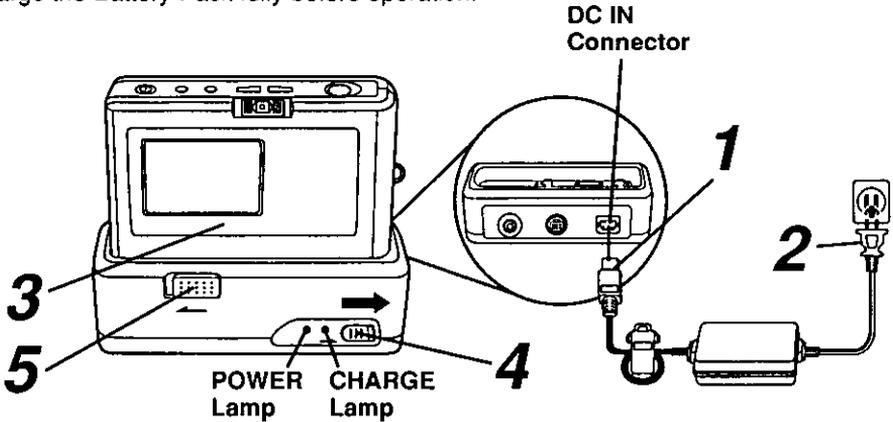
- Charge the Battery Pack fully before operation (see page 7).

Power Supply

Charging the Battery Pack (PV-BPN10 only)

Install the Battery Pack (see page 6.)

Charge the Battery Pack fully before operation.



1 Connect DC OUT on the AC Adaptor to DC IN on the Digital Camera Station until it locks with a click.

2 Plug the AC Adaptor into an AC outlet.
The POWER Lamp lights up.

3 Insert the Digital Camera into the Digital Camera Station until it locks.

4 Slide the CHARGE switch.
The CHARGE Lamp lights orange, and then changes to green when charging is done (about 6 hours).

- A red CHARGE Lamp indicates a charge malfunction. Remove the Digital Camera and repeat steps 3 and 4. If the CHARGE Lamp is still red, send the unit in for service.

5 Slide the RELEASE switch to release the Digital Camera from the Digital Camera Station.

- With a fully charged Battery Pack, you will have a maximum of about 1 hour of continuous use (77°F/25°C).
- The useful operation time of the Battery will gradually decrease after repeated use and recharging. The Battery is no longer serviceable if the operation time is very short, even after a sufficient charge.
- If you are not going to use the Digital Camera for an extended period of time, remove the Battery Pack or AA alkaline batteries from the Digital Camera.
- You can also use 2 Panasonic brand AA alkaline (not manganese) batteries in place of the rechargeable Battery Pack to power the Digital Camera if needed. When installing 2 Panasonic AA alkaline batteries, be sure to follow the +/- marks inside the Battery Compartment. With 2 new Panasonic AA alkaline batteries, you will have a maximum of about 20 minutes of continuous use (77°F/25°C).
- Only Panasonic brand alkaline batteries are guaranteed to perform for the operating time stated above.
- Do not mix old and new batteries.
- Never attempt to recharge AA alkaline type batteries.

WARNING! Do not dispose of in fire, put in backwards, disassemble, or short circuit; otherwise battery may leak or burst, causing possible personal injury.

Power Supply

Battery Pack Notes

Caution:

- Charge only with specified charger.
- The Battery can be charged within a temperature range of 32° F (0° C) and 104° F (40° C).
- The Battery Pack may be warm after charging or just after use. This is normal.
- Do not use an insufficiently charged or worn out Battery Pack.

Safety precautions:

- Do not get the Battery Pack or AA alkaline batteries near, or dispose of in fire.
- Do not directly connect (short circuit) the positive (+) and negative (-) terminals.
- Never attempt to disassemble or reassemble the Battery Pack.

To avoid damage to the Battery Pack:

- Do not drop or jar the Battery Pack.
- Use the Battery Pack with specified units only.

To insure longer Battery Pack life:

- While not in use, remove the Battery Pack from the Digital Camera and store in a dark, cool, dry place.
- Keep the Battery Pack terminals clean.

U.S.A. CONSUMERS:

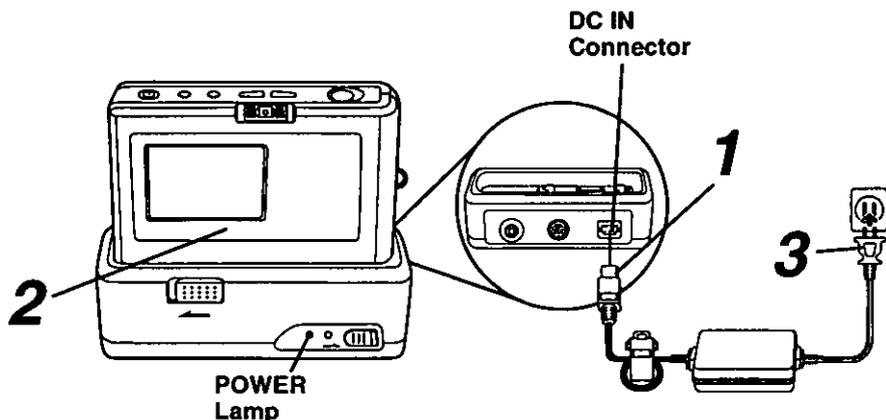
ATTENTION:

The product you have purchased is powered by a nickel cadmium battery which is recyclable. At the end of its useful life, under various state and local laws, it is illegal to dispose of this battery into your municipal waste stream. Please call 1-800-8-BATTERY for information on how to recycle this battery.



Power Supply

AC Adaptor



1 Connect DC OUT on the AC Adaptor to DC IN on the Digital Camera Station until it locks with a click.

2 Insert the Digital Camera into the Digital Camera Station until it locks.

3 Plug the AC Adaptor into an AC outlet.

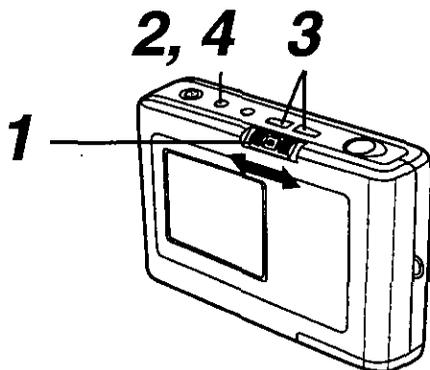
The POWER Lamp lights up.

Note:

- While not in use, unplug the AC Adaptor from the AC outlet. Plugged into an AC outlet, the AC Adaptor consumes 1.5W of electric power.

Adjusting LCD Viewfinder Brightness

You may want to brighten or darken the LCD (Liquid Crystal Display) Viewfinder for easier viewing. This adjustment will not affect the captured image brightness.



1 Set the POWER switch to REC or PLAY.

2 Press OSD repeatedly until the BRIGHT adjustment screen appears.



3 Press (+) or (-) to change the brightness of the LCD Viewfinder; (+) for brighter, (-) for darker.

- The normal screen will reappear if either (+) or (-) is not pressed within five seconds.

4 Press OSD once to exit the BRIGHT adjustment screen.

Note:

- The BRIGHT adjustment will be reset to the original setting when the Digital Camera is turned off.

On Screen Display (OSD)

The indications displayed on the LCD screen will tell you the operation status of the Digital Camera.

REC Mode

Function Status

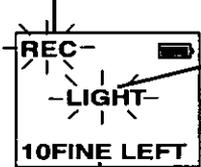
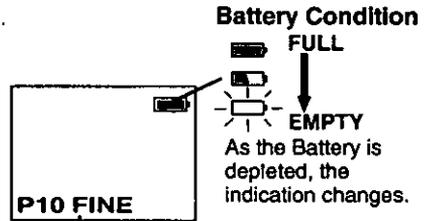


Image Pages left in memory and Image Resolution selected: SF (Super Fine), FINE (Fine), or NOR (Normal).

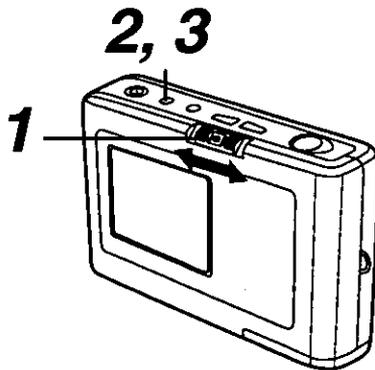
Low Light Warning

"LIGHT" will appear when the light level is inadequate. In this case, more light should be provided to achieve better picture quality and color.

Playback Mode



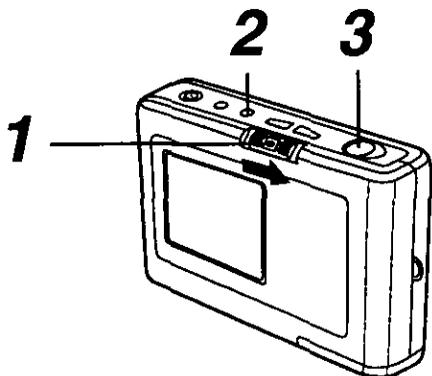
Displayed Image Page and its Image Resolution SF (Super Fine), FINE (Fine), or NOR (Normal).



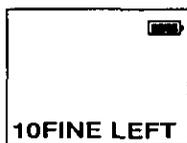
To Cancel the OSD

- 1** Set the POWER switch to REC or PLAY.
 - 2** Press OSD repeatedly until the On Screen Display disappears.
 - 3** To resume the On Screen Display, press OSD until it reappears.
- Only Warning indications and REC indication will be displayed on the LCD Viewfinder if the OSD is cancelled.
 - The OSD feature will be in on mode each time the Digital Camera is powered on.

Capturing Images



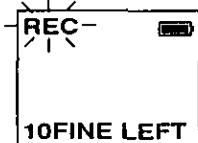
1 Set the POWER switch to REC.



2 Press MODE to select the image resolution mode; SF (Super Fine)/FINE (Fine) (640X480 pixels), or NOR (Normal) (320X240 pixels).

- 16 images can be stored in Super Fine mode, 32 images can be stored in Fine mode, or 94 images in Normal mode.
- Use Super Fine mode for scenes with many details may give you better picture quality.

3 Press SHTR (SHUTTER) to capture the image displayed on the LCD Viewfinder.



- REC will flash on the LCD Viewfinder while the Digital Camera processes the

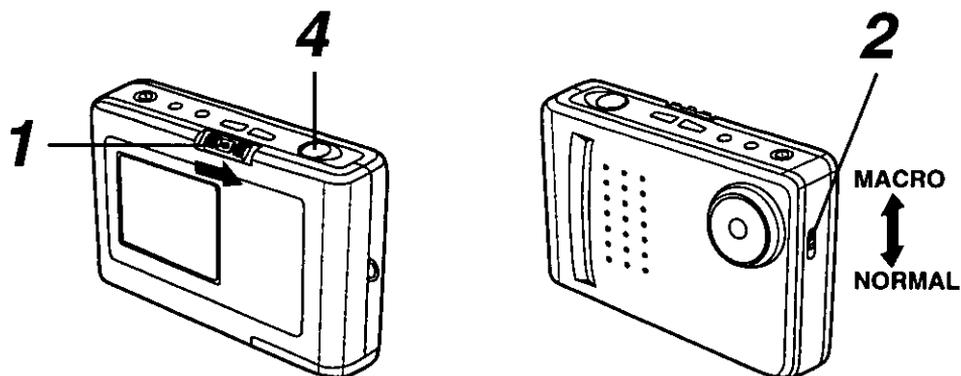
image (approximately 5 seconds for NOR (Normal), 20 seconds for FINE (Fine), and 25 seconds for SF (Super Fine)). (It might take more time for the Digital Camera to process the image.) You may capture another image as soon as REC stops flashing.

Note:

- You may switch SF (Super Fine), FINE (Fine) and NOR (Normal) mode anytime by pressing MODE.
- The number of image pages left in the selected mode is displayed on the LCD Viewfinder. When no memory remains, 00 will flash. To capture other images, you will first need to delete some images from memory (see pages 16, 17).
- The Digital Camera is focused automatically. For close-ups, see page 13.
- If after the POWER switch has been set to REC, no buttons are pressed for one minute, the power will turn off automatically to conserve power. To resume operation, press SHTR (SHUTTER), or set the POWER switch to OFF, and then to REC.
- Avoid covering the lens with your fingers when capturing images.
- Do not subject the LCD Viewfinder to pressure or shock.
- Hold the Digital Camera as steady as possible when capturing an image.
- The active LCD Viewfinder image will have a slightly degraded appearance when compared to a captured or transferred image. This is normal.

Capturing Close-up Images (macro)

You can capture images of plants, insects, photo album pictures, and so on.



1 Set the POWER switch to REC.

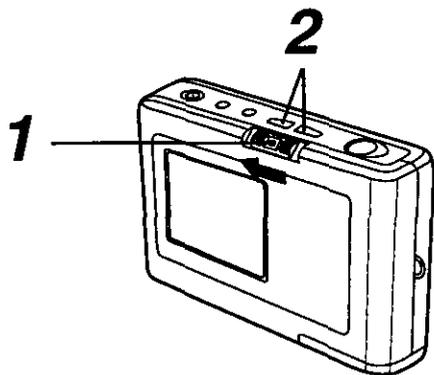
2 Set the NORMAL/MACRO switch to MACRO.

3 Bring the Digital Camera up to the subject [as close as approximately 3.1 inches (8cm) away].

4 Press SHUTTER when the subject is in focus.

- You may have to move the Digital Camera closer or further away from the subject for proper focus
- When finished with this feature, be sure to return the NORMAL/MACRO switch to NORMAL.

Playing Back Captured Images



Manual Playback

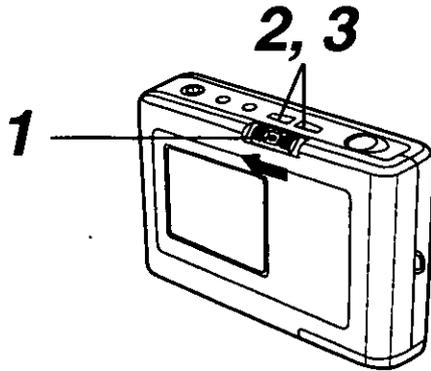
1 Set the POWER switch to PLAY.



2 Press (+) or (-) repeatedly, [(+) for ascending order, and (-) for descending order] to change the displayed image on the LCD Viewfinder.

- The image page number and resolution mode are displayed at the bottom of the screen.
- If there are no images in memory, a blue back screen will be displayed.

Playing Back Captured Images



Auto Playback

1 Set the POWER switch to PLAY.



2 Hold down (+) or (-) more than three seconds [(+) for ascending order, and (-) for descending order.] to place the Digital Camera in Auto Playback mode.



3 Press (+) or (-) again to cancel Auto Playback mode.



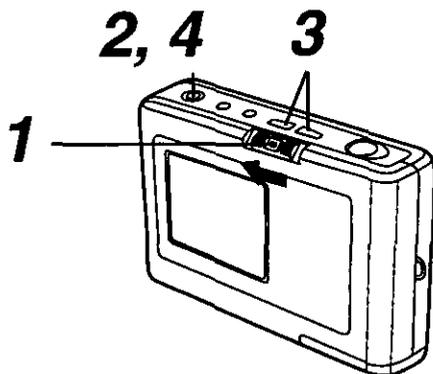
- "AUTO PLAY STOP" will be displayed.

- "AUTO PLAY START" will be displayed.
- Each image will remain on the LCD Viewfinder for three seconds after it is fully displayed.
- Auto Play will continue to loop through the images until you cancel this feature.

To Delete Specific Images

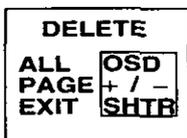
You can delete unwanted images and increase the remaining image memory.

Warning: Once deleted, images cannot be restored.



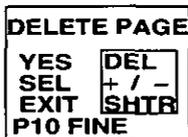
1 Set the POWER switch to PLAY.

2 Press DEL to display the DELETE menu.



• To exit this menu, press SHTR.

3 Press (+) or (-) to select the image page to be deleted.



• To exit this menu, press SHTR.

4 Press DEL to select YES when the image page you want to delete is displayed.



- It takes 3 to 6 seconds to delete the image.
- Image page numbers are adjusted automatically as images are deleted.
- To delete other specific image pages, please repeat steps 2–4.

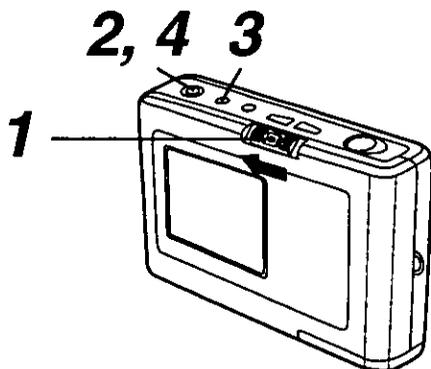
Important:

- While “PLEASE WAIT” is displayed, **do not turn off the Digital Camera nor unplug the AC Adaptor** because this will cause irreversible damage to the memory, resulting in reduced image storage capacity.

To Delete All Image Pages

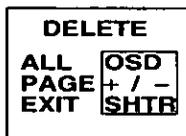
You can delete all images from memory with one easy operation.

Warning: Once deleted, images cannot be restored.



1 Set the POWER switch to PLAY.

2 Press DEL to display the DELETE menu.



- To exit this menu, press SHTR.

3 Press OSD to select ALL in the DELETE menu.



- To exit this menu, press SHTR.

4 Press DEL to select YES in the DELETE ALL menu.

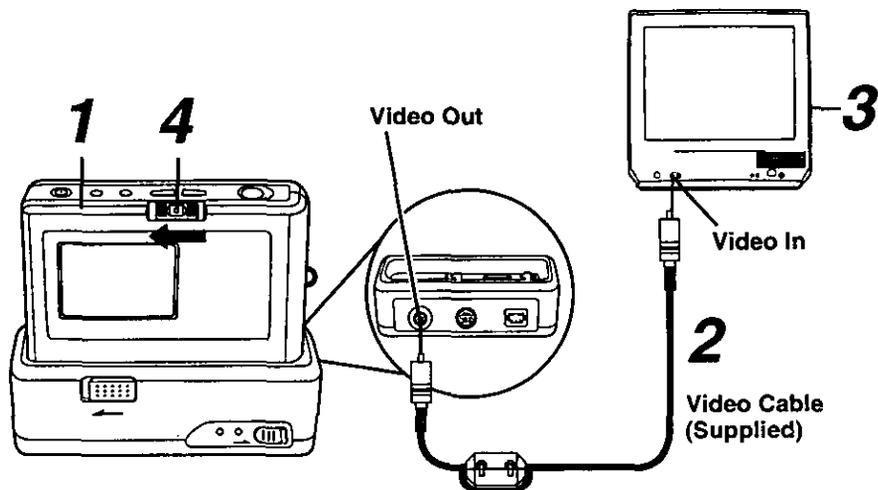


- "PLEASE WAIT" will be displayed on screen (approx. 90 seconds) as all images are deleted from memory. Deletion is complete when the screen turns solid blue.

Important:

- While "PLEASE WAIT" is displayed, do not turn off the Digital Camera nor unplug the AC Adaptor because this will cause irreversible damage to the memory, resulting in reduced image storage capacity.

Viewing Images on Your TV Screen



1 Insert the Digital Camera into the Digital Camera Station until it locks.

2 Connect the Digital Camera Station to your TV using the Video cable (supplied) as shown.

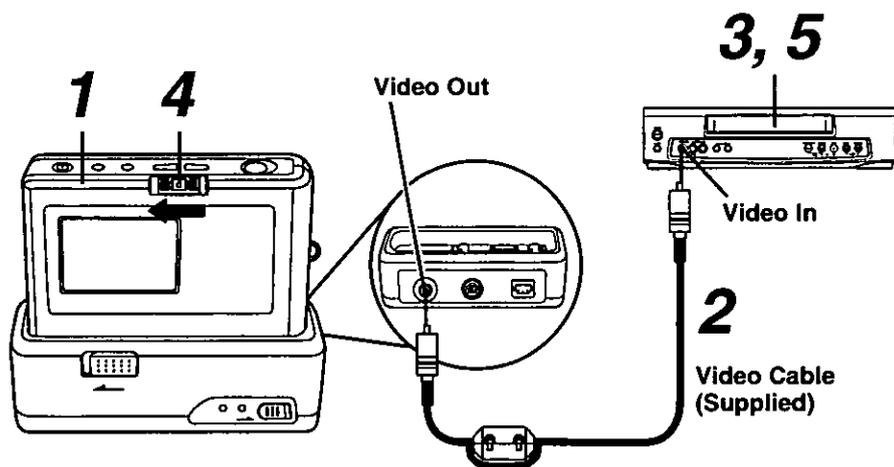
3 Turn on your TV and select its video input mode.

4 Set the Digital Camera **POWER** switch to **PLAY**. You may select manual or auto playback as described on pages 14 and 15.

Note:

- For extended periods of use, it is recommended to use the AC Adaptor for a power source.

Transferring Your Images (VCR)



1 Insert the Digital Camera into the Digital Camera Station until it locks.

2 Connect the Digital Camera Station to your VCR using the Video cable (supplied) as shown.

3 Turn on your VCR and select its line input mode.

4 Set the Digital Camera POWER switch to PLAY. You may select manual or auto playback as described on pages 14 and 15.

5 Start a recording of the desired images. (Refer to your VCR manual.)

Note:

- For extended periods of use, it is recommended to use the AC Adaptor for a power source.

Transferring Your Images (Windows)

System Requirements:

- IBM PC/AT or compatible.
- MS-Windows 3.1 or Windows 95.
- 386SX CPU or higher. (486 recommended.)
- RAM: 8MB on-board memory.

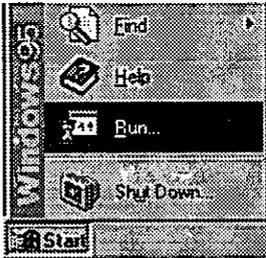
- 10MB available hard disk space.
- 256 Color monitor or full color recommended (24bit per pixel or 16.7M color).
- 3.5 inch 1.44MB floppy disk drive (for installation).
- RS-232C serial port (D-Sub 9-pin). An adaptor is required for a D-Sub 25-pin.
- Mouse or other pointing device.

PV-DC1000 Driver Installation

1 Turn on the PC (Personal Computer) and start up Windows.

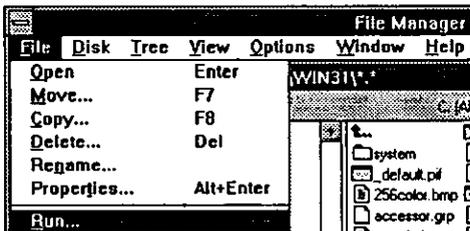
2 Insert the floppy disk into a floppy disk drive.

3 For Windows 95, select "**Run...**" from the Windows 95 Start menu.

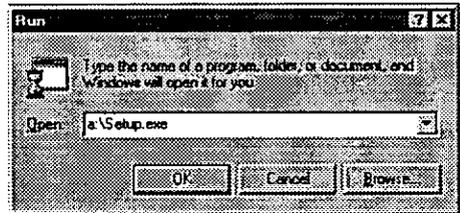


or

For Windows 3.1, select "**Run...**" from the Program Manager File menu.

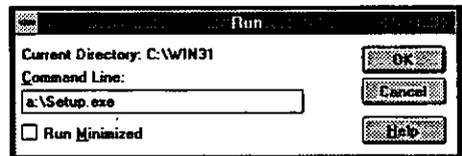


4 For Windows 95, type in a:\Setup.exe and click OK.



or

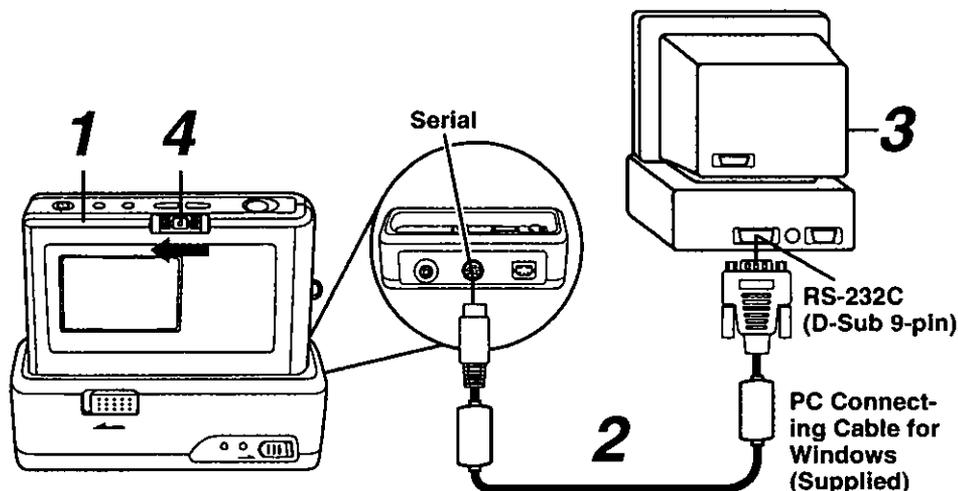
For Windows 3.1, type in a:\Setup.exe and click OK.



- It is assumed that your 3.5 inch 1.44MB floppy disk drive is assigned as "A" drive. If not, replace "A" with the appropriate letter.

5 Follow the instructions as they appear on your PC screen.

Transferring Your Images (Windows)



Connection

1 Insert the Digital Camera into the Digital Camera Station until it locks.

2 Connect the Digital Camera Station to your PC (Windows) using the PC connecting cable (supplied) with the arrow mark facing downward.

3 Turn on your PC.

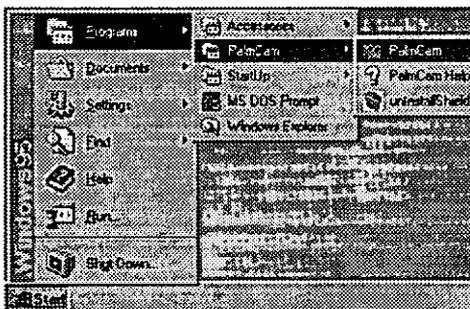
4 Set the Digital Camera POWER switch to PLAY.

Note:

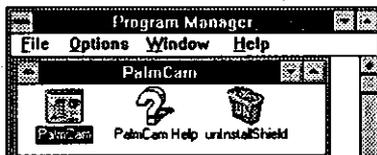
- For extended periods of use, it is recommended to use the AC Adaptor for a power source.
- While the PC communicates to the Digital Camera, the Digital Camera cannot be operated.

Running the Application

5 For Windows 95, select Programs/PalmCam/PalmCam from the Windows 95 Start Menu.



For Windows 3.1, Double click the PalmCam icon in the Program Manager.



6 Please read the Help information to operate the application.

Transferring Your Images (Macintosh)

System Requirements:

- System 7.1 or later.
- 68030 CPU or higher, or Power Macintosh.
- 4MB of RAM. (8MB recommended.)
- 10MB available hard disk space.
- 256 Color monitor or full color recommended (24bit per pixel or 16.7M color)
- 3.5 inch 1.44MB floppy disk drive (for installation).
- Modem port or printer port (RS-422).
- Mouse or other pointing device.

PV-DC1000 Driver Installation

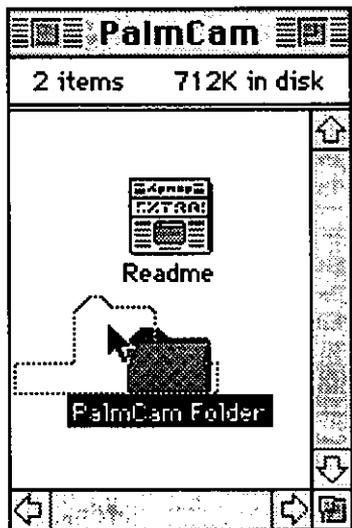
1 Turn on the Macintosh.

2 Insert the floppy disk into a floppy disk drive.

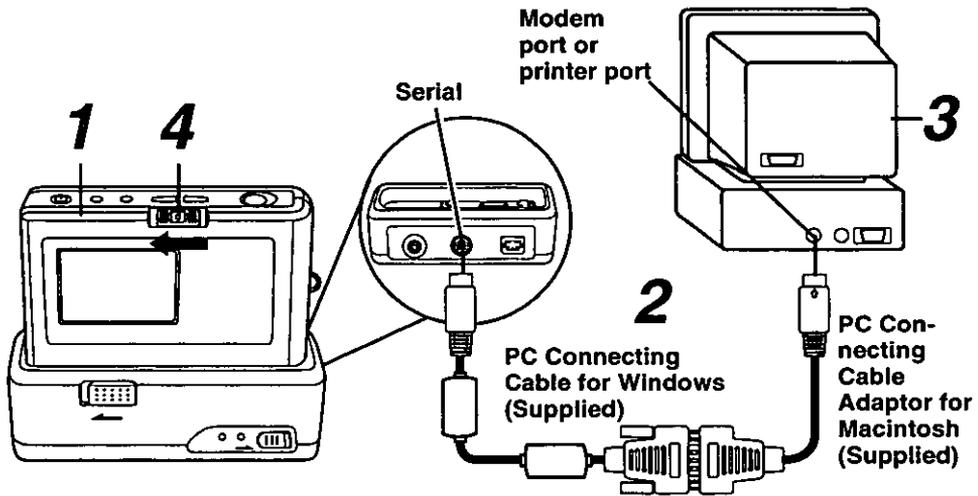
3 Double click the floppy disk icon.



4 Drag the PalmCam Folder where you want to copy.



Transferring Your Images (Macintosh)



Connection

- 1** Insert the Digital Camera into the Digital Camera Station until it locks.
- 2** Connect the Digital Camera Station to your PC (Macintosh) using the PC connecting cable (supplied) and PC Connecting Cable Adaptor for Macintosh (supplied) with the arrow mark facing downward.
- 3** Turn on your PC (Macintosh).
- 4** Set the Digital Camera POWER switch to PLAY.

Running the Application

- 5** Double click the PalmCam icon.



PalmCam

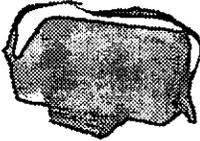
- 6** Please read the Help file to operate the application.

Note:

- For extended periods of use, it is recommended to use the AC Adaptor for a power source.
- While the PC communicates to the Digital Camera, the Digital Camera cannot be operated.

Digital Camera Accessory System

For ordering instructions, see the Accessory Order Form page.

Accessory #	Figure	Description	Price
PV-BPN10/1B		Battery Pack	\$24.95
PV-H100		System Soft Case (It carries the Digital Camera and all its supplied accessories.)	\$24.95

Digital Camera Accessory Order Form

Please photocopy this form when placing an order.

1. Model # _____

2. Items Ordered

Accessory #	Description	Price Each	Quantity	Total Price
Subtotal				
Your State & Local Sales Tax				
Shipping & Handling				5.00
Total Enclosed				

3. Method of payment (check one)

- Check of Money Order enclosed (NO C.O.D.SHIPMENTS)
- VISA Credit Card # _____
- MasterCard Expiration Date _____
- Discover Customer Signature _____

Make Check or Money Order to: MATSUSHITA ACCESSORIES

(Please do not send cash)

4. Shipping information (UPS delivery requires complete street address)

Ship To:

Mr.

Mrs.

Ms. _____

First _____ Last _____

Phone #:

Day () _____

Street Address _____

Night () _____

City _____ State _____ Zip _____

TO OBTAIN ANY OF OUR DIGITAL CAMERA ACCESSORIES YOU CAN DO ANY OF THE FOLLOWING:

VISIT YOUR LOCAL PANASONIC DEALER

OR

LOCATE YOUR AUTHORIZED ACCESSORY STOCKING DISTRIBUTOR AT 1-800-545-2672

OR

CALL PANASONIC'S ACCESSORY ORDER LINE AT 1-800-332-5368 [6 AM-6 PM M-F, 6-10:30 SAT PACIFIC TIME]

OR

MAIL THIS ORDER TO: PANASONIC SERVICES COMPANY ACCESSORY ORDER OFFICE
20421 84th Avenue South Kent, WA. 98032

Before Requesting Service

If you have a problem with your Digital Camera, it may be something you can correct yourself.

Check the list below for symptoms and corrections.

Symptom	Correction
Cannot charge the Battery Pack.	<ul style="list-style-type: none">• Make sure the rechargeable Ni-Cd Battery Pack is inserted. (p. 4)• Make sure all necessary connections are correct and tight. (p. 7)
No power.	<ul style="list-style-type: none">• Battery Pack is worn out. (p. 7)• Make sure polarities are aligned properly. (p. 4)• Make sure the rechargeable Ni-Cd Battery Pack is fully charged. (p. 7)
Power shuts off automatically.	<ul style="list-style-type: none">• Auto shut off feature is on. Press SHTR (SHUTTER), or set the POWER switch to OFF and then set to REC. (p. 12)
Cannot capture the image.	<ul style="list-style-type: none">• Make sure the POWER switch is set to REC. (p. 12)• No memory. Delete some images before capturing images. (pp. 16, 17)
LCD Viewfinder image is too bright or dark.	<ul style="list-style-type: none">• Make sure the LCD Viewfinder brightness setting is adjusted. (p. 10)
Indication or image on the LCD Viewfinder is not focused.	<ul style="list-style-type: none">• Make sure the NORMAL/MACRO switch is properly set. (p. 13)
Cannot playback.	<ul style="list-style-type: none">• There are no images in the memory. (p. 14)• Make sure the POWER switch is set to PLAY. (p. 14)
Auto Playback feature can not be performed.	<ul style="list-style-type: none">• There is only one image in the memory.
No picture on the TV (if connected).	<ul style="list-style-type: none">• Make sure all necessary connections are correct and tight. (p. 18)• Make sure the TV is set to video input mode. (p. 18)

Specifications

CCD	1/4 inch (6.35 mm) 350,000 Progressive Scan CCD
Lens	f=5.7 mm (equivalent to a 55 mm lens on a 35 mm still camera.)/F3.8
Focus	Fixed Focus with Macro Position
Focusing Area	Normal: 0.7m-∞/Macro: 8cm (approx)
Iris	F3.8 Fixed
Shutter Speed	1/8-1/20,000 sec.
White Balance	Auto
LCD Viewfinder	1.8 inch (45.72 mm) TFT Color Liquid Crystal Display
Memory	Built-in 2MB Memory
Image Size	640 × 480 pixels (Super Fine, Fine mode) 320 × 240 pixels (Normal mode)
Image Storage	16 images (Super Fine mode) 32 images (Fine mode) 94 images (Normal mode)
Image Format	JPEG
Digital Signal	Serial (via Digital Camera Station)
Video Signal	NTSC Composite (via Digital Camera Station)
Power Supply	Rechargeable Ni-Cd Battery/2 AA Alkaline Battery/AC Adaptor
Power Consumption	Digital Camera 2.4V DC, 1A (Ni-Cd Battery) 3V DC, 0.8A (Alkaline Battery) AC Adaptor Input: 120V AC 60Hz 8W 1.5W (when not in use) Digital Camera Station 3V DC, 1A
Operating Temperature	32 - 104 °F/0 - 40 °C
Operating Humidity	10 % - 75 %
Weight	Digital Camera 5.53 oz approx./158 g approx. AC Adaptor 12.00 oz approx./340 g approx. Digital Camera Station 3.88 oz approx./110 g approx.
Dimensions	Digital Camera 3.55 (W) × 2.36 (H) × 1.25 (D) inch 90 (W) × 60 (H) × 31.6 (D) mm AC Adaptor 2.28 (W) × 1.34 (H) × 4.39 (D) inch 58 (W) × 34 (H) × 111.4 (D) mm Digital Camera Station 4.06 (W) × 1.44 (H) × 1.77 (D) inch 103 (W) × 36.5 (H) × 45 (D) mm

Weight and dimensions shown are approximate.
Design and specifications are subject to change without notice.

Warranty

Panasonic Consumer Electronics Company, Division of Matsushita Electric Corporation of America
One Panasonic Way Secaucus,
New Jersey 07094

Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico, Inc.
Ave. 65 de Infantería. Km. 9.5
San Gabriel Industrial Park, Carolina, Puerto Rico 00985

PANASONIC/QUASAR Video Products Limited Warranty

Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as "the Warrantor") will repair this product with new or refurbished parts, free of charge, in the USA or Puerto Rico, in the event of a defect in materials or workmanship as follows (all time periods commence from the date of the original purchase):

PRODUCT	PARTS	LABOR
CAMCORDER	ONE (1) YEAR, EXCEPT CCD IMAGE SENSOR	NINETY (90) DAYS
DIGITAL CAMERA	CCD IMAGE SENSOR - SIX (6) MONTHS	NINETY (90) DAYS
VCR	ONE (1) YEAR	NINETY (90) DAYS
AV MIXER	ONE (1) YEAR	NINETY (90) DAYS
MONITOR-VCR	ONE (1) YEAR, EXCEPT CRT CRT - TWO (2) YEARS	NINETY (90) DAYS CRT- NINETY (90) DAYS CUSTOMER PAYS ALL LABOR CHARGES AFTER 90 DAYS

**Monitor-VCR In-home or carry-in Service: 19" (diagonal) CRT / LCD and Larger
Monitor-VCR Carry-in Service: 18" (diagonal) CRT / LCD and smaller**

Batteries (if included) - New rechargeable batteries in exchange for defective rechargeable batteries for ten (10) days. Non-rechargeable batteries are not warranted.

Tape (if included) - New video cassette tape in exchange for a defective video cassette tape for five (5) days.

In-home, carry-in or mail-in service, as applicable, in the USA can be obtained during the warranty period by contacting a Panasonic Services Company (PASC) Factory Servicenter listed in the Service Directory. Or call toll free 1-800-545-2672, to locate an authorized PASC Servicenter. Carry-in or mail-in service in Puerto Rico can be obtained during the warranty period by calling the Panasonic Sales Company telephone number listed in the Servicenter Directory.

This warranty is extended only to the original purchaser. A purchase receipt or other proof of the date of the original purchase is required before warranty service is rendered.

This warranty only covers failures due to defects in materials and workmanship which occur during normal use and does not cover normal maintenance, including, but not limited to, video and audio head cleaning. The warranty does not cover damage which occurs in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, modification, faulty installation, set-up adjustments, improper antenna, inadequate signal pickup, maladjustment of consumer controls, improper operation, power line surge, improper voltage supply, lightning damage, commercial use such as hotel, office, restaurant, or other business or rental use of the product, or service by anyone other than a PASC Factory Servicenter or a PASC authorized Servicenter, or damage that is attributable to acts of God.

LIMITS AND EXCLUSIONS

There are no express warranties except as listed above. THE WARRANTOR SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGE TO TAPES) RESULTING FROM THE USE OF THIS PRODUCTS, OR ARISING OUT OF ANY BREACH OF THE WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE. Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to the Customer Satisfaction Center at the Panasonic Consumer Electronics Company address above.

SERVICE CALLS WHICH DO NOT INVOLVE DEFECTIVE MATERIALS OR WORKMANSHIP AS DETERMINED BY THE WARRANTOR, IN ITS SOLE DISCRETION, ARE NOT COVERED. COSTS OF SUCH SERVICE CALLS ARE THE RESPONSIBILITY OF THE PURCHASER.

warvid 2/11/97

Servicenter Directory

OPERATION ASSISTANCE

Dial toll free 1-800-272-7033 (8:30am-8:00pm Monday-Friday, EST)

PRODUCT INFORMATION • LITERATURE REQUESTS • DEALER LOCATIONS

Customer Service Center 2F-3, One Panasonic Way, Secaucus, NJ 07094 (Headquarters)
201-348-9090 (9:00am-8:00pm Monday-Friday, EST)

ACCESSORY PURCHASES

1-800-332-5368 (Consumer Orders Only)

Panasonic Services Company 20421 84th Avenue South Kent, WA 98032

(6:00am-6:00pm Monday-Friday; 6:00am-10:30am Saturday; PST)

(Visa, Mastercard, Discover card, American Express, Check)

AUTHORIZED SERVICENTERS • PARTS DISTRIBUTOR LOCATIONS

To locate an independent authorized servicenter or parts distributor in your area, within the USA dial toll free 1-800-545-2672, 24 hours a day, 7 days a week.

PRODUCT REPAIRS

Centralized Factory Servicenter

MAIL TO :

Panasonic Services Company

1705 N. Randall Road,

Elgin, IL 60123-7847

Attention: Digital Camera Repair

Please carefully pack and ship, prepaid and insured, to the Elgin centralized repair Factory Servicenter. While there will be added handling delays, you may bring your unit to one of the following locations who will then forward the unit to Elgin for repair.

Customer's in Puerto Rico, please ship or carry in to location below ("Service in Puerto Rico").

Factory Servicenters

CALIFORNIA

6550 Katella Avenue
Cypress, CA 90630
Phone (714) 373-7426
Fax (714) 894-8534

800 Dubuque Avenue
S. San Francisco, CA 94080
Phone (415) 871-6373
Fax (415) 871-6840

20201 Sherman Way
Suite 102
Canoga Park, CA 91306
Phone (818) 709-1775
Fax (818) 709-2165

3878 Ruffin Road
Suite A
San Diego, CA 92123
Phone (619) 580-9200
Fax (619) 580-1831

COLORADO

1640 South Abilene Suite D
Aurora, CO 80012
Phone (303) 752-2024
Fax (303) 752-0810

FLORIDA

3700 North 29th Avenue
Suite 102
Hollywood, FL 33020
Phone (954) 925-2680
Fax (954) 925-5224

GEORGIA

8655 Roswell Road
Suite 100
Atlanta, GA 30350
Phone (770) 518-6301
Fax (770) 518-6306

HAWAII

99-859 Iwaiwa Street
Aiea, Hawaii 96701
Phone (808) 488-1996
Fax (808) 488-4369

ILLINOIS

*1703 North Randall Road
Elgin, IL 60123
*12:30 to 4:30, Mon-Fri
Phone (847) 468-5484
Fax (847) 468-5465

9060 Golf Road
Niles, IL 60714
Phone (847) 608-1010
Fax (847) 299-1710

MARYLAND

Sulphur Springs
Business Park
1638 Sulphur Springs Road
Baltimore, MD 21227
Phone (410) 242-2607
Fax (410) 247-3047
*Pick-up/drop-off only

MASSACHUSETTS

80 Glacier Drive, Suite G
Westwood, MA 02090
Phone (617) 329-4230
Fax (617) 329-0586

MICHIGAN

37049 Van Dyke Avenue
Sterling Heights, MI 48312
Phone (810) 939-2060
Fax (810) 939-2638

MINNESOTA

7850-12th Avenue South
Airport Business Center
Bloomington, MN 55425
Phone (612) 854-8624
Fax (612) 854-2089

OHIO

2238 Wyncross Road
Cincinnati, OH 45240
Phone (513) 851-4180
Fax (513) 851-8448

PENNSYLVANIA

2221 Cabot Boulevard West
Suite B
Langhorne, PA 19047
Phone (215) 741-0661
Fax (215) 741-0521

Charters Valley Shopping
Center

1025 Washington Pike
Bridgeville, PA 15017
Phone (412) 257-4522
Fax (412) 257-4650

TENNESSEE

919-8th Avenue South
Nashville, TN 37203
Phone (615) 244-4434
Fax (615) 244-6713

TEXAS

7482 Harwin Drive
Houston, TX 77038
Phone (713) 781-1528
Fax (713) 781-0643

13615 Welch Road
Suite 101

Farmers Branch, TX 75244
Phone (972) 385-1975
Fax (972) 960-7628

WASHINGTON

20425-84th Avenue South
Kent, WA 98032
Phone (206) 872-7922
Fax (206) 872-0918

Service in Puerto Rico

Matsushita Electric
of Puerto Rico, Inc.
Panasonic Sales Company/
Factory Servicenter
Ave. 65 de Infantería, Km. 9.5
San Gabriel Industrial Park
Carolina, Puerto Rico 00985
Phone (787) 750-4300
Fax (787) 768-2910

REPAIR INQUIRIES

Regional Customer Care Department

EAST (PCE)

2221 Cabot Boulevard West
Suite A
Langhorne, PA 19047
Phone (215) 741-0676
Fax (215) 750-6492
Covers:
CT, DE, ME, MD, MA, NH, NJ,
NY, PA, RI, VT, VA, DC, WV

EAST (PCE)

1225 Northbrook Parkway
Suite 2-390
Suwanee, GA 30174
Phone (770) 338-6880
Fax (770) 338-6548
Covers:
AL, FL, GA, MS, NC, SC, TN

CENTRAL (PCC)

1707 North Randall Road
Elgin, IL 60123
Phone (847) 468-5530
Fax (847) 468-5528
Covers:
AR, IL, IN, IA, KS, KY, LA, MI,
MN, MO, NE, ND, OK, SD, TX,
WI, OH

WEST (PCW)

6550 Katella Avenue
Cypress, CA 90630
Phone (714) 373-7440
Fax (714) 373-7447
Covers:
AK, AZ, CA, CO, ID, MT, NV,
NM, OR, UT, WA, WY, HI

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**Panasonic Consumer Electronics
Company, Division of Matsushita
Electric Corporation of America**
One Panasonic Way Secaucus,
New Jersey 07094

**Panasonic Sales Company,
Division of Matsushita Electric of
Puerto Rico, Inc. ("PSC")**
Ave. 65 de Infanteria, Km. 9.5
San Gabriel Industrial Park
Carolina, Puerto Rico 00985