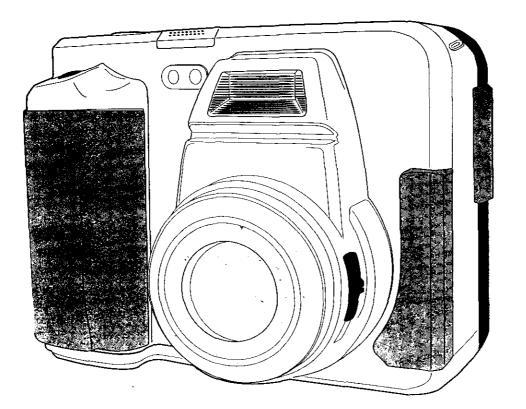


Digital Camera Operating Instructions Model No. PV-SD4090





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

Before attempting to connect, operate or adjust this product, please read these instructions thoroughly, and keep them for future reference.

LSQT0179A

Things You Should Know

Attach your purchase receipt here

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-SD4090)



1 pc. AC Adaptor (LSSQ0219) with AC Cable (VJAW0044)

1pc. DC POWER Cable (LSJA0277)







1pc. SuperDisk

1 pc. USB Cable (LSJA0265)

1pc. A/V Cable (LSJA0278)

1pc. Lithium Ion Battery Pack (PV-DBP5)





Diskette (LSFT0188)

1pc. Camera Strap (LSFC0013)



1pc. CD-ROM of USB Driver Software for Windows 98 and Macintosh / File Converter for Windows 95/98 / QuickTime[™] Software / Adobe PhotoDeluxe Software for Windows 95/98 and Macintosh (LSFT0189)

 \bigcirc

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

Macintosh and iMac are registered trademark of Apple Computer Inc.

QuickTime and the QuickTime logo are trademarks used under license. QuickTime is registered in the US and other countries.

Adobe, the Adobe logo & PhotoDeluxe are trademarks of Adobe Systems Inc. All product/brand names are trademarks or registered trademarks of the respective holders.

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

Safety Precautions

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

Note: This equipment has been tested and found to comply with Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when operated in a residential environment.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, use the equipment in another location and/or utilize an electrical outlet different from that used by the receiver.

If necessary, consult the dealer or an experienced radio/TV technician for help. You may find the booklet, 'Something About Interference' available from FCC local regional offices helpful.

FCC Warning:

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

Model Number: Trade Name : **Responsibility Party:** Address : Telephone Number:

Declaration of Conformity

PV-SD4090 Panasonic Matsushita Electric Corporation of America One Panasonic Way Secaucus New Jersey 07094

1-800-211-PANA (7262)

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.

CAUTION:

UNIT IS A CLASS I LASER PRODUCT. HOWEVER THIS UNIT USES A VISIBLE LASER BEAM WHICH COULD CAUSE HAZARDOUS RADIATION EXPOSURE IF DIRECTED. BE SURE TO OPERATE THE UNIT CORRECTLY AS INSTRUCTED. WHEN THIS UNIT IS PLUGGED TO THE WALL OUTLET. DO NOT PLACE YOUR EYES CLOSE TO THE OPENING OF THE DISC TRAY AND OTHER OPENINGS TO LOOK INTO THE INSIDE OF THIS UNIT.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED. HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

CAUTION:

ASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM.

ATTENTION: RAYONNEMENT LASER EN CAS D'OUVERTURE. NE PAS REGARDER DANS LE FAISCEAU.

(inside of product)

This symbol warns the user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this unit.

This symbol alerts the user that important literature concerning the operation and maintenance of this unit has been included. Therefore, it should be read carefully in order to avoid any problems.

The above markings are located on the appliance bottom cover.

Important Safeguards

- 1. Read Instructions All the safety and operating instructions should be read before the unit is operated.
- Retain Instructions The safety and operating instructions should be retained for future reference.
- 3. Heed Warnings All warnings on the unit and in the operating instructions should be adhered to.
- 4. Follow Instructions All operating and maintenance instructions should be followed.
- 5. Cleaning Unplug this video unit from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a dry cloth for cleaning.
- 6. Attachments Do not use attachments not recommended by the video product manufacturer as they may be hazardous.
- Water and Moisture Do not use this video unit near water — for example near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.
- 8. Accessories Do not place this video unit on an unstable cart, stand, tripod, bracket, or table. The video unit may fall, causing serious injury to a child or adult, and serious damage to the unit. Use only with a cart, stand, tripod, bracket, or table

recommended by the manufacturer, or sold with the video unit. Any mounting of the unit should follow the manufacturer's instructions and should use a mounting accessory recommended by



the manufacturer. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

- 9. Ventilation Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the video unit and to protect it from overheating. These openings must not be blocked or covered. Never place the video unit on a bed, sofa, rug, or other similar surface, or near or over a radiator or heat register. This video unit should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- 10. Power Sources This video unit should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. For video units intended to be operated from battery power, or other sources, refer to the operating instructions.

11. Grounding or Polarization — This video unit may be equipped with either a polarized 2wire AC (Alternating Current) line plug (a plug having one blade wider than the other) or 3-wire grounding type plug, a plug having a third (grounding) pin.

The 2-wire polarized plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still fails to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

The 3-wire grounding type plug will fit 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 safety purpose of the grounding type plug.

- 12. Power-Cord Protection Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords of plugs, convenience receptacles, and the point where they exit from the unit.
- 13. Lightning For added protection of this video unit receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video unit due to lightning and power-line surges.
- 14. Overloading Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
- 15. Objects and Liquids Never push objects of any kind into this video unit through openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind onto the video unit.
- 16. Servicing Do not attempt to service this video unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Important Safeguards

- 17. Damage Requiring Service Unplug this video unit from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a. When the power-supply cord or plug is damaged.
 - b. If any liquid has been spilled onto, or objects have fallen into the video unit.
 - c. If the video unit has been exposed to rain or water.
 - d. If the video unit does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions, as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video unit to its normal operation.
 - e. If the video unit has been dropped or the cabinet has been damaged.
 - f. When the video unit exhibits a distinct change in performance this indicates a need for service.

- 18. Replacement Parts When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
- 19. Safety Check— Upon completion of any service or repairs to this video unit, ask the service technician to perform safety checks to determine that the video unit is in safe operating order.

Precautions

Getting Started

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.

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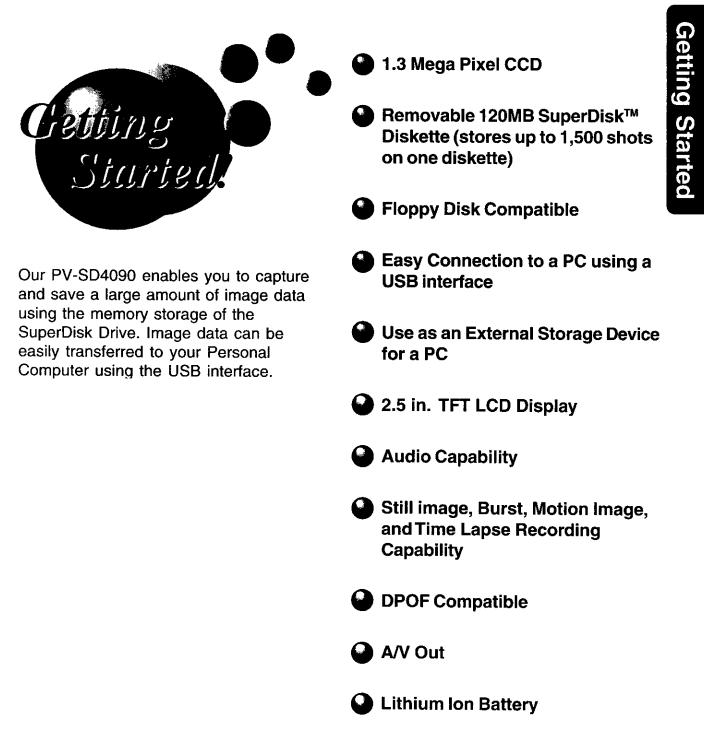
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Special Digital Camera Features



Note

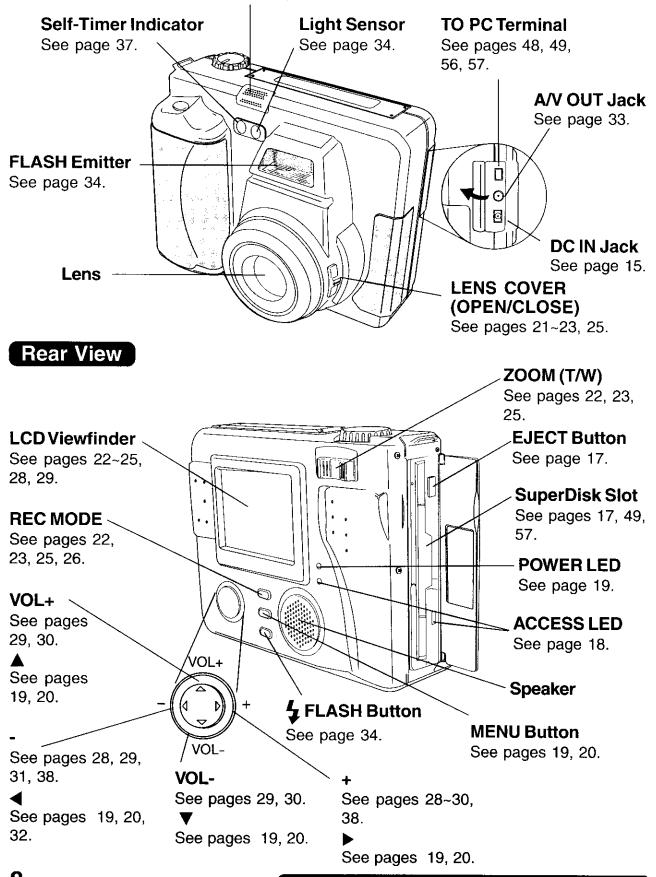
- Do not subject unit to a strong impact during record or playback. Unit may not function normally.
- Do not use in extreme heat (104 °F and above). This may damage the disk. Also, in extremely hot places (104 °F and above), remove the disk from the camera and store to avoid damaging disk.
- Be sure to make a backup copy of important data.

Index of Controls



MIC



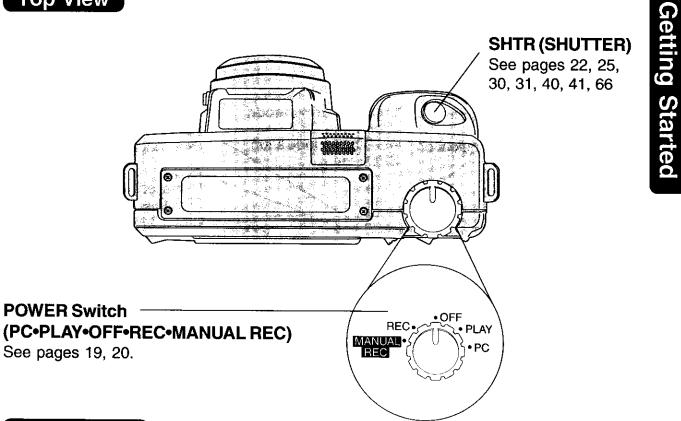


For assistance, call 1-800-272-7033.

8

Index of Controls

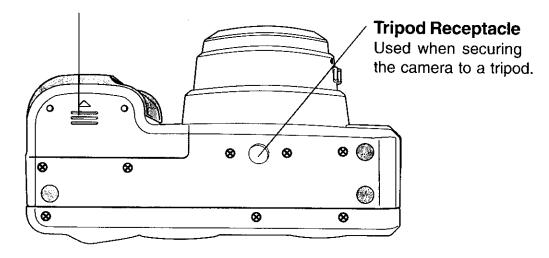
Top View



Bottom View

Battery Compartment

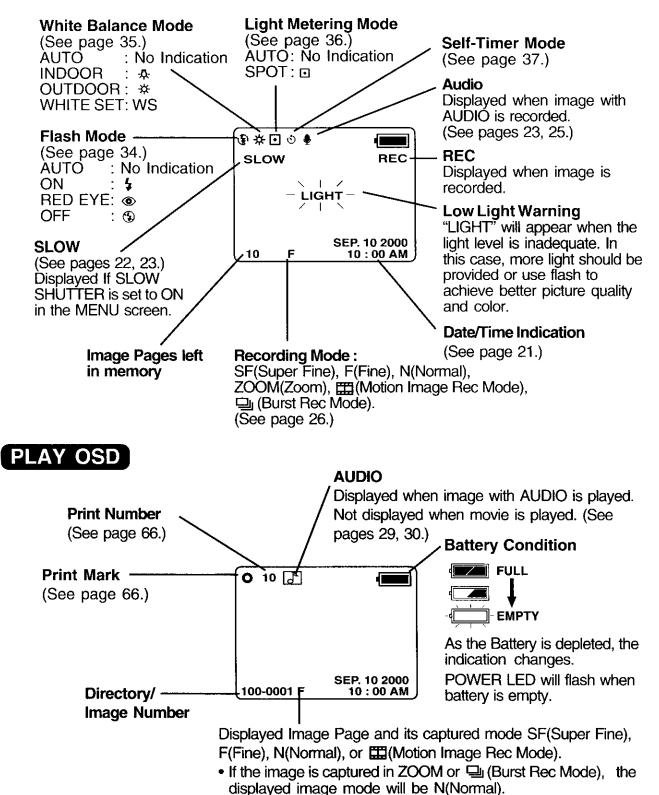
See page 14.



On Screen Display (OSD)

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

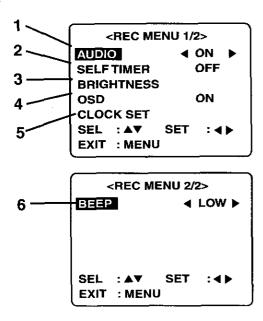




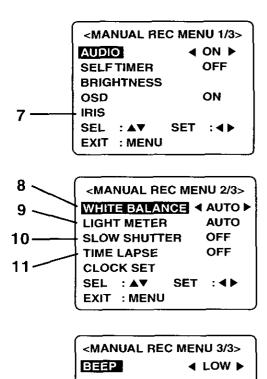
LCD Monitor Indication

Recording Menu

< REC Mode>



< MANUAL REC Mode>

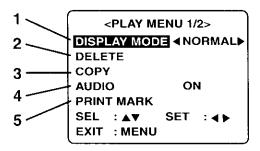


SEL :▲▼ EXIT : MENU

SET :∢►

- 1. AUDIO (See Pages 23, 25, 29, 30.) To select audio recording on/off.
- 2. SELF TIMER (See Page 37.) To set Self Timer.
- **3. BRIGHTNESS** (See Page 28.) To adjust LCD Viewfinder brightness.
- 4. OSD (See Pages 10, 12.) To select OSD display on/off.
- 5. CLOCK SET (See Page 21.) To set clock.
- 6. BEEP (See Page 27.) To select beep mode when capturing images.
- 7. IRIS (See Page 38.) To adjust Iris manually.
- 8. WHITE BALANCE (See Page 35.) To change to one of the 4 White Balance modes.
- **9. LIGHT METER** (See Page 36.) To change to AUTO or SPOT.
- **10. SLOW SHUTTER** (See Pages 22, 23.) To select slow shutter. By changing the shutter speed, you can capturing a more beautiful image also in a comparatively dark place.
- **11. TIME LAPSE** (See Page 39.) To set time lapse recording.

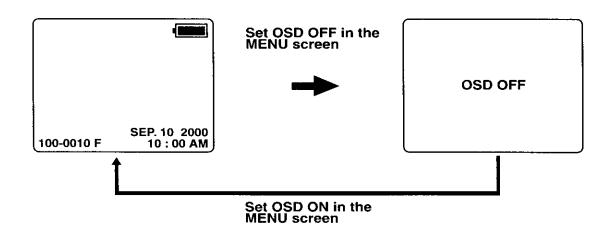
Playback Menu



| | <play 2="" menu=""></play> | | |
|-------|----------------------------|--------|--|
| 6 ——— | SLIDE SHOW | ► | |
| | OSD | ON | |
| | BRIGHTNESS | | |
| | CLOCK SET | | |
| | BEEP | LOW | |
| | SEL :⊾▼ SE | ET ∶∢▶ | |
| | EXIT : MENU | | |

- 1. DISPLAY MODE (See Pages 29, 30, 32.) Select playback mode.
- 2. DELETE (See Pages 40, 41.) Delete image from SuperDisk Diskette or Floppy Disk.
- **3. COPY** (See Pages 42, 43.) To set copy.
- **4. AUDIO** (See Pages 29, 30.) To select audio on/off when playing back.
- 5. PRINT MARK (See Page 66.) To set print mark.
- 6. SLIDE SHOW (See Page 44.) Playback images as slide show.

On Screen Display Order

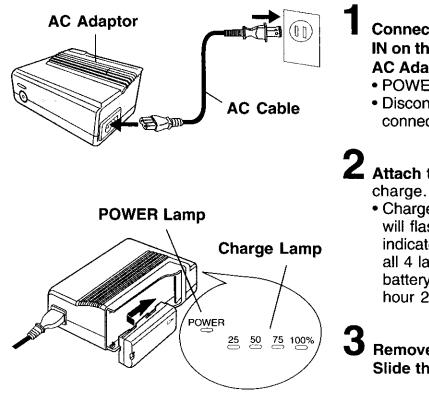


Note

• Press MENU to display MENU screen, and then select OSD: ON. If you select OFF, OSDs will not be displayed.

Power Supply

Charge the Battery Pack on the AC Adaptor



Connect AC Cable (supplied) to AC IN on the AC Adaptor and plug the AC Adaptor into an AC outlet.

POWER LED lamp will light.
Disconnect DC Cable if it is connected to AC Adaptor.

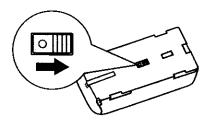
Attach the battery as shown to charge.

• Charge Lamps on the AC Adaptor will flash and then turn solid green to indicate current charge level. When all 4 lamps are constantly on, the battery is fully charged. (approx. 1 hour 20 minutes.)

Remove the Battery. Slide the Battery out and then lift up.

About the Charge Lamps

- The four Charge Lamps "25%", "50%", "75%" and "100%" flash and then remain lit one after another to indicate how much the Battery has been charged. When all four lamps are lit, charging is finished.
- The Charge Lamps give a good approximate indication of the charging condition under normal ambient temperature. However, when charging at high or low temperature, the charge lamps may differ considerably from the actual charging condition.



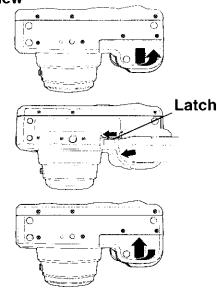
Battery Charging Confirmation Marker Use this marker as a reminder to yourself when the battery is fully charged or in need of a charge. This marker performs no function and is for your reference only.

• The Battery is no longer serviceable if the operation time is very short, even after a sufficient charge.

Power Supply

Loading the Lithium Battery

Bottom View



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

While sliding Latch, insert the Lithium Ion Battery until it locks into place.

• Be sure to use a Lithium Ion Battery. Be sure that the direction of the arrow on the battery is facing down when inserting it into the camera.

Swing the Battery Compartment lid down and slide it shut.

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

Battery 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 may be warm after charging or just after use. This is normal.
- Do not use an insufficiently charged or worn out Battery.
- In extreme cold surroundings, Battery charging time will increase.

Safety precautions:

- Do not get the Battery 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.

To avoid damage to the Battery:

- Do not drop or jar the Battery.
- Use the Battery with specified models only.
- If the Battery is used in extremely high temperatures, a safety device will automatically prevent operation.

To insure longer battery life:

- While not in use, remove Battery from the Digital Camera and AC Adaptor and store in a cool, dark, dry place. If you leave the Battery in the Digital Camera or on the AC Adaptor for a long time, the Battery will no longer be rechargeable.
- Keep the Battery terminals clean.

Operation Time

When using the supplied Panasonic Lithium Ion Batteries, you will have a maximum of about 200 images (at an ambient temperature of 25 ° C).

- · Capturing an image every 30 seconds.
- Using Flash once for every other capture.
- Recording mode is Fine.

CAUTION

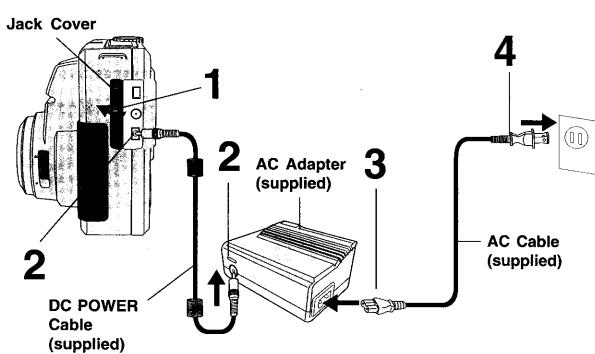
Replace with Panasonic PV-DBP5 or CGR-B/ 202A1B only. Use of another battery may present a risk of fire or explosion. **Caution**-battery may explode if mistreated.

Do not recharge, disassemble or dispose of in fire. Keep battery out of reach of children. Danger of explosion if battery is incorrectly inserted. Dispose of used battery promptly.

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

Power Supply

Using AC Adaptor



Pull up the Jack Cover.

 ${f 2}$ Connect DC POWER Cable (supplied) to DC OUT on the AC Adaptor and DC IN on the Digital Camera.

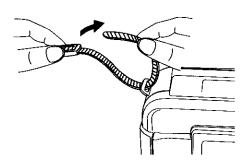
3 Connect AC Cable (supplied) to AC IN on the AC Adaptor.

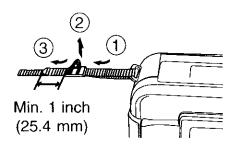
4 Plug the AC Adaptor into an AC outlet.

Note

- While not in use, unplug the AC Adaptor from the AC outlet.
- Use the supplied Panasonic AC Adaptor.
- Do not connect AC Adaptor after turning POWER on.
- When the DC Cable is connected during charging, the power supply is given priority and charging will not be possible.

Attaching the Camera Strap



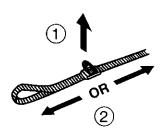


Thread the strap ends through the Strap Attachment Rings.

2 Reinsert the strap ends through their buckles.

• Make sure the straps are not twisted.





Loosen the strap from the Buckle and create a loop.

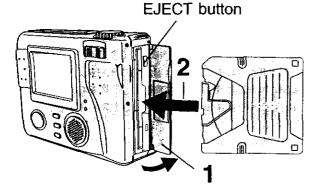
2 Pull the strap firmly through the Buckle to shorten or lengthen the strap.

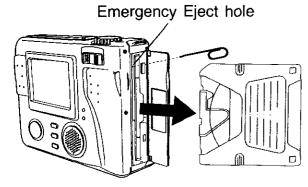
For assistance, call 1-800-272-7033.

Inserting the SuperDisk[™] Diskette or Floppy Disk

Inserting the Disk Media:

- The captured images will be stored on the Disk Media.
- Be sure to insert the Disk Media before using the camera.





Open the cover. Insert the Disk Media.

2 Push the Disk Media fully into the SuperDisk Drive.

Removing the Disk Media:

Set the POWER Switch to REC, PLAY or PC. Push the EJECT button so the Disk Media pops out. (Be careful not to drop the Disk Media.)

Emergency Ejection of the Disk Media:

If, for some reason, the Disk Media does not eject automatically, you can eject manually. (Turn POWER OFF before proceeding.) Insert a straightened paper clip, etc., (diameter = $1 \sim 1.5$ mm, min. length = 30 mm) into the Emergency Eject hole.



Paper Clip

Using a Floppy Disk

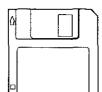
A Floppy Disk (not supplied) which has been formatted to Windows on your Floppy Disk Drive can be used in the SuperDisk Drive. (See pages 61, 64.)

When using a new Floppy Disk, it is recommended that the Disk be inserted into the Digital Camera and formatted (Quick Format).

If a read error occurs in the PC Floppy Disk Drive, use the Digital Camera to read the data.

| SuperDisk Diskette | 120MB Format |
|--------------------|---------------|
| Floppy Disk (2HD) | 1.44MB Format |





*SuperDisk Diskette

*Floppy Disk (2HD)

*The SuperDisk Diskette is only supported by Windows[®] 98 or Mac OS 8.1 or later. For other operating systems, you should use Floppy Disk.

Note

- Only DOS formatted floppy disks can be used with this Camera. Macintosh OS formatted floppy disks must be re-formatted to DOS with this camera.
- You can use this unit as a SuperDisk Drive. (See pages 48, 56.)
- The SuperDisk Diskette is only used for SuperDisk Drive.
- To format the Disk Media, see pages 62, 64.

Inserting the SuperDisk[™] Diskette or Floppy Disk

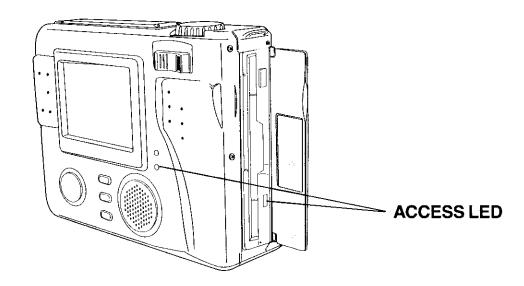
Note

- Do not bend, drop, apply high pressure or subject the Disk Media to strong shocks.
- Do not store it in places with high temperature, high humidity, a lot of dust, or static electricity and strong electromagnetic waves.
- Keep the Disk Media's contacts free from dust, water or other foreign substances. Do not touch them with your fingers, etc.
- Do not disassemble or deform the Disk Media.
- Be sure to make a backup copy of important data.
- Make sure that you do not insert the Disk Media in the wrong direction.

- Do not, under any circumstances, eject the Disk Media immediately after pressing the SHUTTER Button (during recording of an image) or while deleting (when "PLEASE WAIT" is displayed). This could damage the format of the Disk Media and make them unusable.
- When the Disk Media does not eject after pressing the EJECT Button, push the Disk Media fully into the slot again and then press the EJECT Button firmly.
- "NO DISK" will appear on the LCD Viewfinder when the Disk Media is not inserted.
- "DISK ERROR" will appear on the LCD Viewfinder if the Disk Media is defective.

Caution

• The ACCESS LED lamp will flash when the Digital Camera is accessing the Disk Media. Please never expose this unit to large vibrations or impacts while ACCESS LED lamp is flashing. And, do not turn off the Power, take out a Disk Media, or remove the battery when ACCESS LED lamp is flashing.

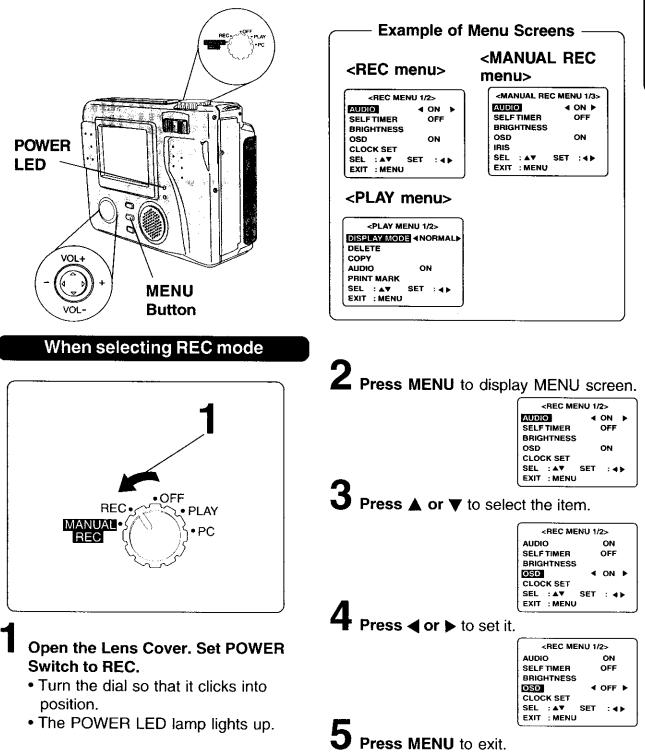


For additional information regarding Imation SuperDisk products, please call 1-888-466-3456.

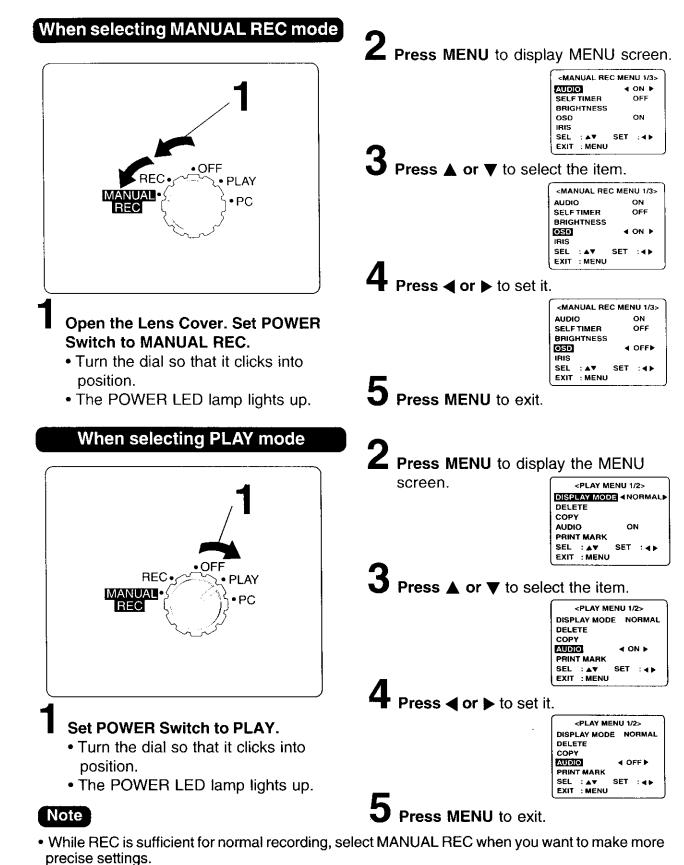
Operating the MENU Screen

How to operate the MENU screen

Please refer to pages 11~12 for explanation of each menu item.



Operating the MENU Screen

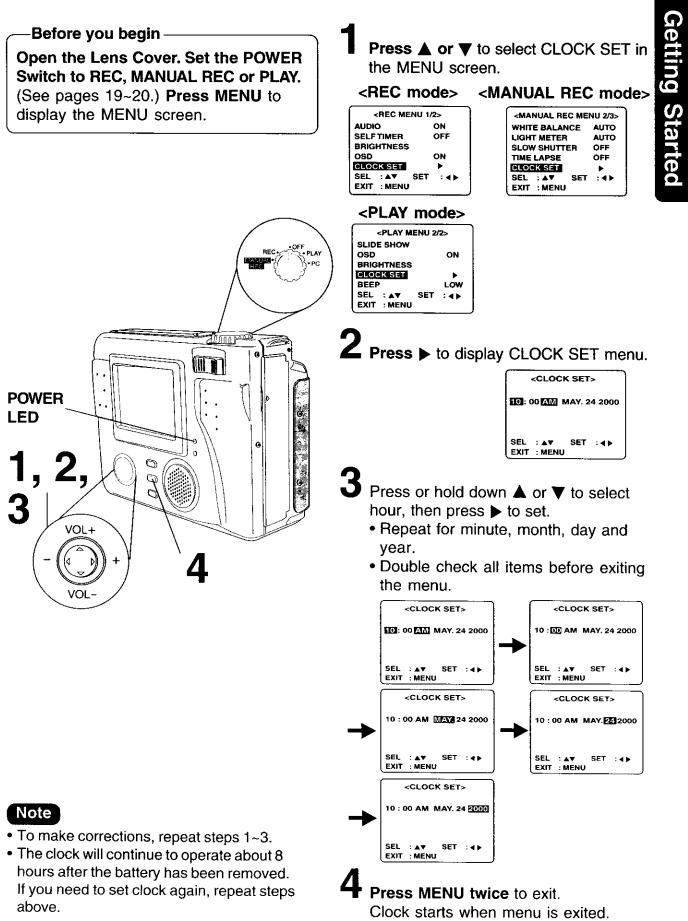


- REC and PLAY functions cannot be operated while MENU screen is displayed.



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

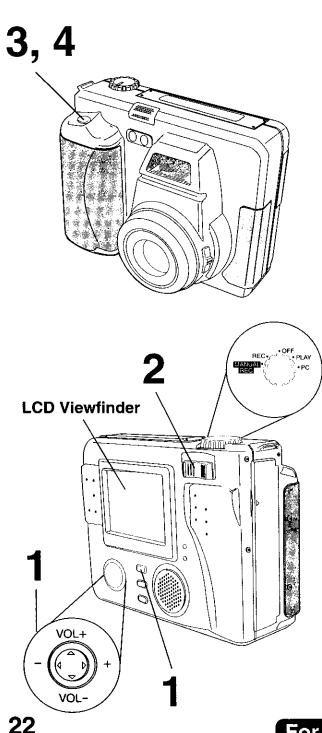
Setting the Clock



Super Fine Mode, Fine Mode, Normal Mode, Zoom Mode

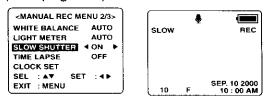
-Before you begin -

Open the Lens Cover. Set the POWER Switch to REC or MANUAL REC. (See pages 19~20.)



Press REC MODE repeatedly to select recording mode (SF, F, N, ZOOM). (See page 26.)

 If you want to use SLOW SHUTTER: In Manual mode, press MENU to display the MENU screen, and then press ▲ or ▼ to select SLOW SHUT-TER. Press◀ or ▶ to select ON. (See page 11.)



2 Press ZOOM T or W to zoom In and Out.

- Zoom magnification level is up to x3.
- There is no zoom indication on the LCD Viewfinder.

Press SHTR down halfway to lock Auto Focus.

• Beep sounds twice. (See page 27.)

- **Press SHTR** down the rest of the way to actually capture the image.
 - Shutter sounds once. (See page 27.)
 - While the Digital Camera processes the image, REC will blink on the LCD Viewfinder and the captured image will be displayed on the LCD Viewfinder for a few seconds.

Note

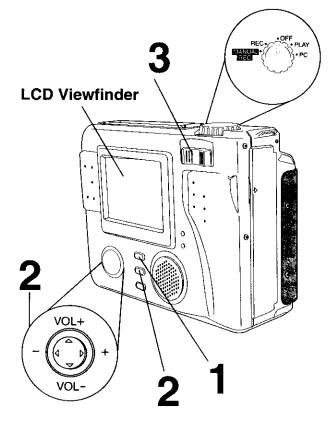
- While the captured image is displayed on the LCD Viewfinder you cannot capture another image. Until that image is no longer displayed on the screen.
- The power automatically shuts off to conserve power if there is no activity for over one minute while the battery is used as a power source. Press SHTR to return POWER on.
- Do not subject unit to a strong impact during record or playback. Unit may not function normally.
- Do not use in extreme heat (104 °F and above). This may damage the disk. Also, in extremely hot places (104 °F and above), remove the disk from the camera and store to avoid damaging disk.

Capturing images (AUDIO ON)

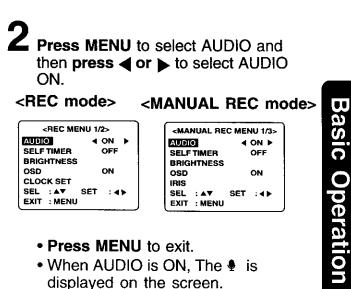
You can record audio with a still image. The still image and audio can then be played back in the PLAY mode. (See page 20.) Please follow the instructions below.

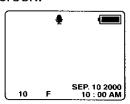
-Before you begin -

Open the Lens Cover. Set the POWER Switch to REC or MANUAL REC. (See pages 19~20.)



Press REC MODE repeatedly to select recording mode (SF, F, N, ZOOM). (See page 26.)

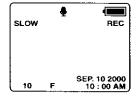




 If you want to use SLOW SHUTTER: Press MENU to display the MENU screen, and then press
 or ▼ to select SLOW SHUTTER. Press ◀ or

 to select ON (MANUAL REC only).

(See page 11.)



3 P

Press ZOOM T or W to zoom In and Out.

- Zoom magnification level is up to x3.
- There is no zoom indication on the LCD Viewfinder.

(Continued on next page)

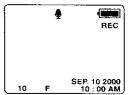
4, 5

4 Press SHTR down halfway to lock Auto Focus.

• Beep sounds twice. (see page 27.)

Press SHTR down the rest of the way to actually capture the image.

- Shutter sounds once. (See page 27.)
- You can record the audio for 5 seconds by pressing the SHTR button.



• While the Digital Camera processes the image, REC OSD will appear on the LCD. The captured image will be displayed on the LCD Viewfinder for a few seconds.

Note

- When a captured image is displayed on the LCD Viewfinder, you will not be able to capture another image until that image is no longer displayed on the screen.
- The power automatically shuts off to conserve power if there is no activity for over one minute while the battery is used as a power source. Press SHTR to return POWER on.
- Do not subject unit to a strong impact during record or playback. Unit may not function normally.
- Do not use in extreme heat (104 °F and above). This may damage the disk. Also, in extremely hot places (104 °F and above), remove the disk from the camera and store to avoid damaging disk.

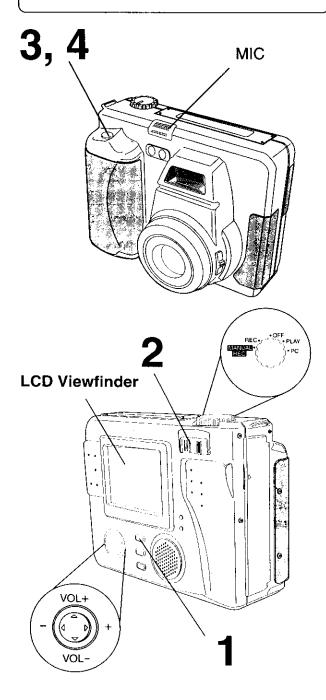
For assistance, call 1-800-272-7033.

Motion Image Rec Mode Burst Rec Mode

You can capture a motion image by selecting III in REC MODE. And you can capture a burst image by selecting III in REC MODE.

-Before you begin -

Open the Lens Cover. Set the POWER to REC or MANUAL REC. (See pages 19~20.)



Press REC MODE repeatedly to select Motion (∰) or Burst (□) recording mode.

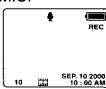
Press ZOOM T or W to zoom In and Out.

- Zoom magnification level is up to x3.
- There is no zoom indication on the LCD Viewfinder.

5 Press SHTR down halfway to lock Auto Focus.

• Beep sounds twice. (See page 27.)

Hold down the SHTR button the rest of the way to actually capture the image. If you select AUDIO ON, audio will be recorded through the MIC.



Basic Operation

```
( REC MODE )
```

 A Motion Image I can be captured up to 10 seconds while SHTR is pressed with audio.

- A Burst Image 🖳 can be captured every 0.5 seconds/frame up to 16 frames while SHTR pressed.
- While the Digital Camera processes the image, REC will blink on the LCD Viewfinder and the captured image will be displayed on the LCD Viewfinder for a few seconds.
- Cannot record audio.

Note

- If you select □, you can not record audio.
- When a captured image is displayed on the LCD Viewfinder, you will not be able to capture another image until that image is no longer displayed on the screen.
- The power automatically shuts off to conserve power if there is no activity for over one minute while the battery is used as a power source. Press SHTR to return POWER on.

Recording Mode

Recording Mode

- SF : Super Fine Mode (with audio) Select this mode when you want the highest quality resolution with the lowest compression (i.e. for printing).
- F : Fine Mode (with audio) Select this mode when you want a high resolution (i.e. for printing or for archiving an image).

N : Normal Mode (with audio) Select this mode when you want a lower resolution image (i.e. for e-mailing or posting on the Internet).

ZOOM : Zoom Mode (with audio)

Using ZOOM mode magnifies the image to twice its normal size.

: Motion Image Rec Mode (with audio)

Capture an image every 0.1 seconds/frame for up to 10 seconds while the SHTR button is pressed. This creates a mini movie.

• REC will blink on the LCD Viewfinder while processing a motion image.

🖳 : Burst Rec Mode

Capture image every 0.5 seconds/ frame up to 16 frames while shutter button is pressed.

 If the number of remaining pages is less than 16, only the number of images equal to the remaining memory will be captured.

Image Resolution and Capacity (SuperDisk Diskette)

| <u> </u> | | |
|----------|---------------------|-------------------------------------|
| REC Mode | Image Resolution | Capacity (w/supplied Super Disk) |
| SF | $1,280 \times 960$ | Approx. 450 images |
| F | 1,280 × 960 | Approx. 900 images |
| N | 640×480 | Approx. 1500 images |
| ZOOM | 640×480 | Approx. 1500 images |
| | 320 × 240 | 10 sec. × Approx. 90 sets |
| Ð | 640 × 480 | Approx. 1500 images |

Image Resolution and Capacity (Floppy Disk)

| REC Mode | Image Resolution | Capacity (w/Floppy Disk) |
|----------|---------------------|-----------------------------|
| SF | 1,280 x 960 | Approx. 5 images |
| F | 1,280 x 960 | Approx. 10 images |
| N | 640 x 480 | Approx. 17 images |
| ZOOM | 640 x 480 | Approx. 17 images |
| | 320 x 240 | 10 sec. × Approx. 1 set |
| | 640 x 480 | Approx. 17 images |

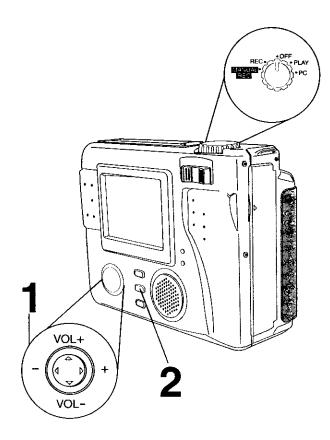
- The number of images given for each mode applies when all images are taken in same mode.
- You can change recording modes at any time before capturing an image.
- The number of images that can be captured may differ depending on the subject. After capturing an image, the number may not decrease, or it may decrease by two. This is normal.

Веер

Set Digital Camera to beep (low or high volume), when an image is captured, or set to OFF.

-Before you begin -

Set the POWER Switch to REC, MANUAL REC or PLAY. (See pages 19~20.) Press MENU to display the MENU screen.

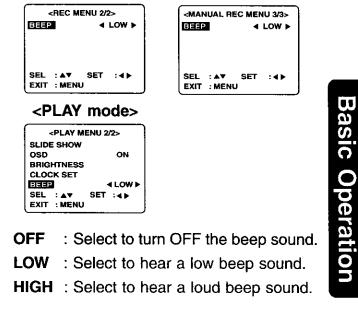


Note

- You can select BEEP mode in the REC, MANUAL REC and PLAY mode.
- If you change the setting, repeat step 2.

Press \blacktriangle or \bigtriangledown to select BEEP and **Press** \triangleleft or \triangleright to select one of the three settings shown below.

<REC mode> <MANUAL REC mode>



2 Press MENU to exit.

Digital Camera will beep:

 Once when the BEEP is set to LOW or HIGH in the MENU mode as follows.
 When you press the REC MODE, MENU or FLASH buttons.

When you press the \blacktriangle , \blacktriangledown , \triangleleft , or \blacktriangleright buttons while adjusting Brightness, Iris and Volume.

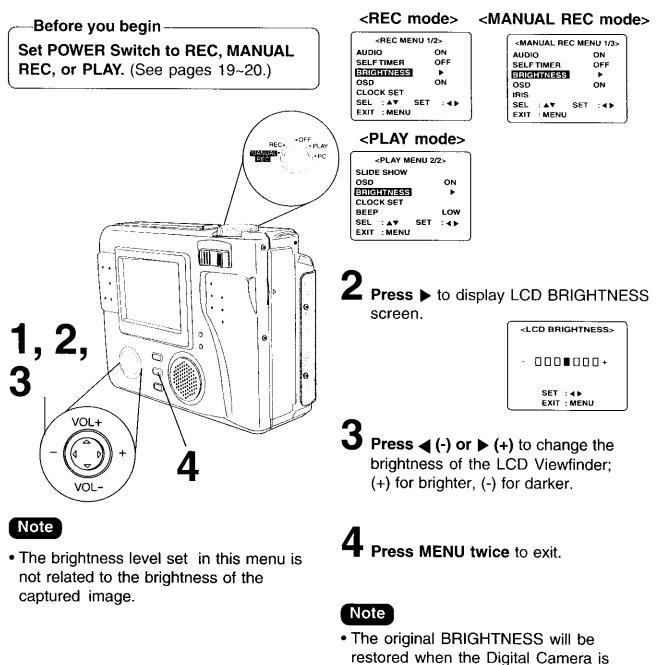
When you press the ◀ or ► button while adjusting Brightness, Iris and volume.

• Twice when you press the shutter button half way to adjust the focus.

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.

Press ▲ or ▼ to select BRIGHTNESS in the MENU screen.



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

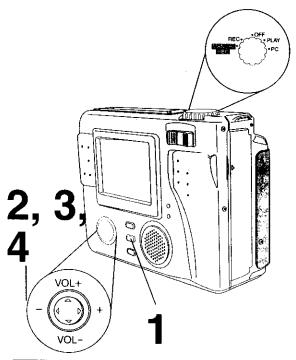
turned off.

Manual Playback

You can playback recorded images on the LCD Viewfinder.

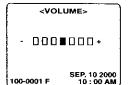
-Before you begin -

Set the POWER Switch to PLAY. (See pages 19~20.)



Note

 When selecting AUDIO ON, a still image with audio will be played. The volume of audio can be adjusted by pressing VOL +/-.

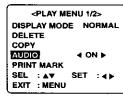


- Do not subject unit to a strong impact during record or playback. Unit may not function normally.
- Do not use in extreme heat (104 °F and above). This may damage the disk. Also, in extremely hot places (104 °F and above), remove the disk from the camera and store to avoid damaging disk.
- The power automatically shuts off to conserve power if there is no activity for over two minutes while the battery is used as a power source. Press SHTR to return POWER on.

Press MENU to display PLAY MENU and **press** ► to set DISPLAY MODE to NORMAL.

| <play m<="" th=""><th>ENU 1/</th><th>2></th></play> | ENU 1/ | 2> |
|--|--------|--------|
| DISPLAY MOD | II ∢NC | ORMAL) |
| DELETE | | |
| COPY | | |
| AUDIO | 0 | N |
| PRINT MARK | | |
| SEL :▲▼ | SET | :46 |
| EXIT : MENU | | |

2 Press ▲ or ▼ to select AUDIO, and press ◀ or ► to select AUDIO ON or OFF. Press MENU to exit.

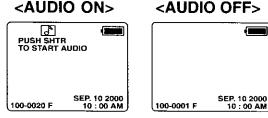


Basic Operation

Press ► (+) or ◀ (-) repeatedly,

[► (+) for ascending order, and ◀ (-) for descending order] to change the displayed image on the LCD Viewfinder.

• The image page number and recording mode are displayed at the bottom of the screen.



• If there are no images in memory, a blue back screen will be displayed.

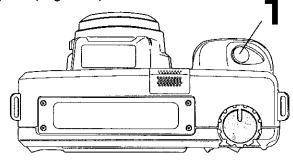
Hold down \triangleright (+) or \triangleleft (-), [\triangleright (+) for ascending order, and \triangleleft (-) for

descending order] to quickly advance the images on the LCD Viewfinder.

- Page number is changed continuously while ▶ (+) or ◄ (-) is held down.
- Selected page is displayed when button is released.



When a captured image in (Motion Image Rec) mode is displayed. (See page 25.)

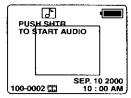


Multi Playback

If you select **E** in the PLAY MENU, you will be able to see Thumbnail images on the LCD Viewfinder (each Thumbnail page will contain 9 images).

---Before you begin Set the POWER Switch to PLAY. (See pages 19~20.) The following message will appear.

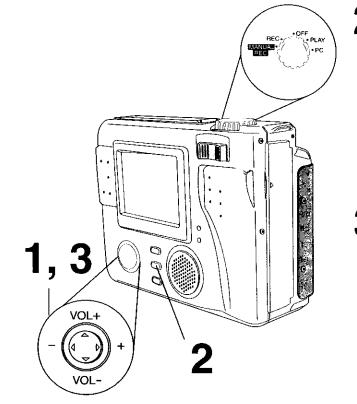
• Adjust the volume by pressing VOL +/-.



Press SHTR to start playback of Motion image.

Press ▲ or ▼ to select DISPLAY MODE in the MENU screen. And, press ◀ or ► to select 🖼.

| <play 1="" 2="" menu=""></play> |
|---------------------------------|
| DISPLAY MODE |
| DELETE |
| COPY |
| AUDIO |
| PRINT MARK ON |
| SEL :▲▼ SET :∢► |
| EXIT : MENU |



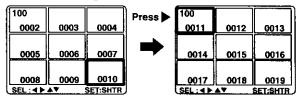
Z Press MENU. A Multi Image Playback screen will appear.

| 100 | | |
|--------|------|----------|
| 0002 | 0003 | 0004 |
| 0005 | 0006 | 0007 |
| 0008 | 0009 | 0010 |
| SEL :4 | | SET:SHTR |

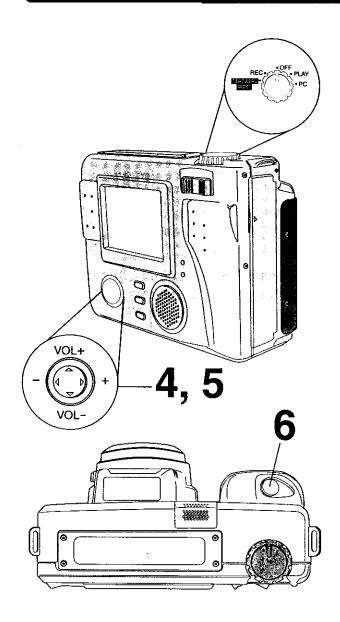
• When many images are stored in the Disk Media, it may take a while for the Multi Image screen to playback.

Press ► (+) repeatedly to scroll forward through Multi Image pages (each page contains 9 images).

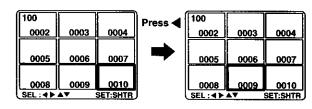
• All images will be displayed as still images.



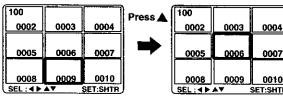
For assistance, call 1-800-272-7033.



Press ◀ (-) to move back through the images on the page until the number of the image you want to select is highlighted.



5 Press \land or \checkmark to go directly to the next or previous page of images.



Press 🖤

100

0002

0005

8000

EL : 🛾 🕨

0003

0006

0009

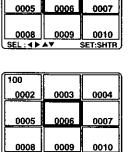
0004

0007

0010

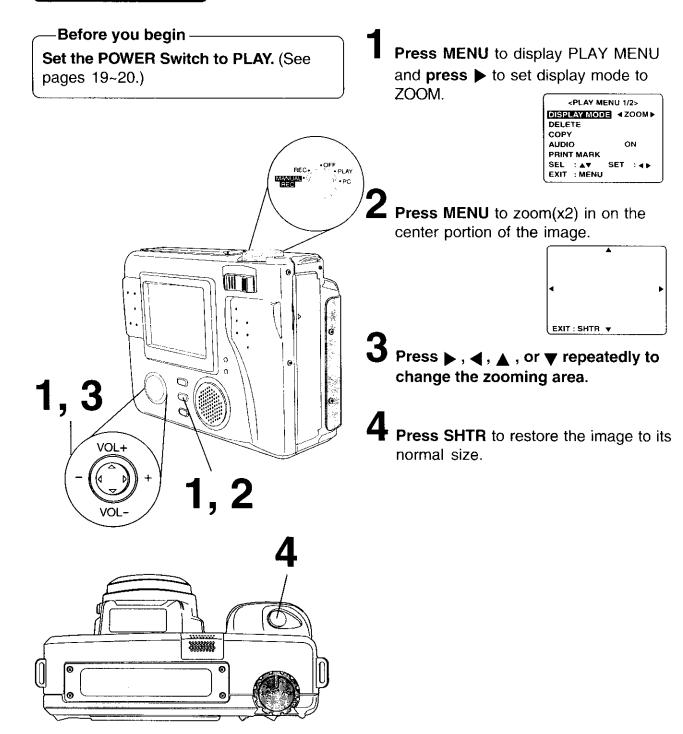
SET:SHTR

Basic Operation



6 Press SHTR to playback the selected image, and to return to Manual Playback.

Zoom Playback



Viewing Images on a TV Screen and Transferring Images to a VCR

Connect the Digital Camera to your TV or VCR using the A/V Cable (supplied) as shown.

Z Turn on your TV and select its video input mode. Then, select its line input mode. (Refer to your TV manual.)

Set the Digital Camera POWER to PLAY. You may select playback as described on page 29 to page 32.

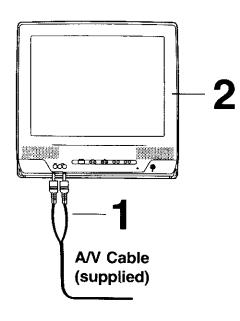
• The POWER LED lamp lights up.

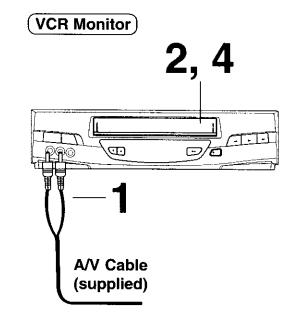
Start a recording of the desired images. (Refer to your VCR manual.)

Note

• For extended periods of use, it is recommended to use the AC Adaptor (supplied) as a power source.





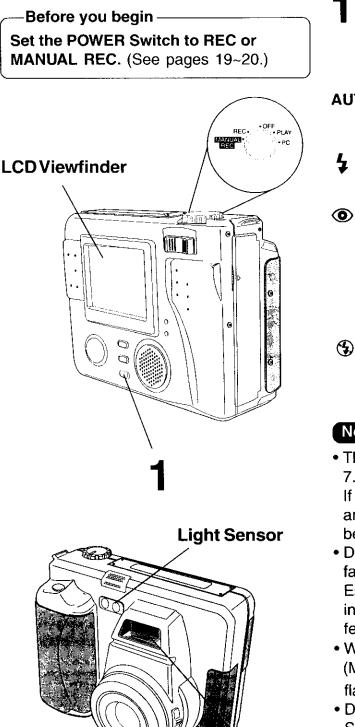


Connect the A/V OUT Terminal on the Camera and the AUDIO IN/VIDEO IN on the VCR or TV using the A/V Cable (supplied).

Basic Operation

Using the Built-in Flash

This camera features a Built-in Flash which can be used to capture images in dimly lit conditions.



Press 4 repeatedly to select flash mode.

The mode that is selected will be displayed on the LCD Viewfinder.

AUTO (No indication) :

The flash automatically lights depending on lighting conditions.

- : The flash will light whenever you capture an image.
- : This setting reduces the red reflections in the eye when the flash lights. The flash will light twice, once before capturing and then once during capturing. (The flash will light whenever you capture an image.)

: The flash will not light even when • you capture an image. (MANUAL REC mode only.)

Note

4

- The effective range of the flash is roughly 7.8 inches (20 cm) to 9.8 feet (3 m). If you are using the flash in very bright areas, the image background may become dark.
- Do not use the flash close to a person's face as it may be harmful to the eyes. Especially when capturing images of infants or small children, keep at least 3.3 feet (1 m) away.
- When the recording mode is set to (Motion Image Rec) or □ (Burst Rec), the flash mode will go to 🚯 (OFF).
- Do not cover the FLASH Emitter and Light Sensor with your finger or other object.

FLASH Emitter

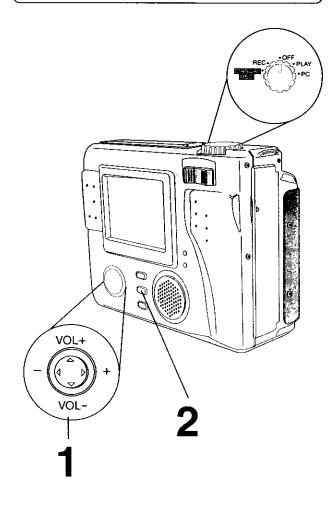
White Balance

Auto White Balance automatically maintains optimum color balance in most lighting conditions.

-Before you begin -

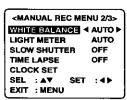
Set the POWER Switch to MANUAL

REC. (See pages 19~20.)



Press ▲ or ▼ to select WHITE

BALANCE and press ◀ or ▶ to select one of the four settings shown below.
Default setting is AUTO.



AUTO (No indication):

-&-

-₩

Automatically maintains optimum color balance in most lighting conditions.

- : When the source illumination is a halogen lamp.
- : When shooting outdoors on a sunny day.
- WS (SET) : Manually set the color Balance. To set the color balance to a fixed position based on the current lighting level, press the SHTR button while shooting a white object.

This setting will be maintained until the MENU button is pressed to exit. The color balance will then return to the AUTO setting.



2 Press MENU to exit.

• Selected mode will appear on the LCD Viewfinder. (See page 10.)

Note

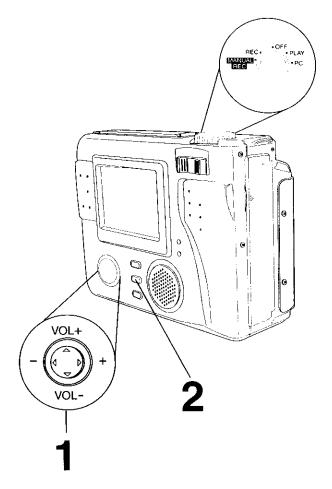
 When the Camera is set to POWER OFF, the white balance setting will be stored in Camera memory. When the Camera is set to POWER ON, the white balance setting will default to the previous setting.

Special Features

Light Metering

According to the recording condition and purpose, set light metering to measure exposure time.

-Before you begin Set the POWER Switch to MANUAL REC. (See pages 19~20.)



Press ▲ or ▼ to select LIGHT METER and press ◀ or ▶ to select one of the two settings shown below.
Default setting is AUTO.

| <manual m<="" rec="" td=""><td>ENU 2/3></td></manual> | ENU 2/3> |
|--|----------|
| WHITE BALANCE | AUTO |
| LIGHT METER | AUTO 🕨 |
| SLOW SHUTTER | OFF |
| TIME LAPSE | OFF |
| CLOCK SET | |
| SEL :▲▼ SE | ⊺ :∢► |
| EXIT : MENU | |

AUTO (No indication):

•

Ideal for normal capturing, the focus is set to the center portion of the finder and the entire image is metered.

: A small sphere in the center portion of the finder is metered. This mode is useful for capturing back lit conditions, such as when the subject is brightly lit.

2 Press MENU to exit.

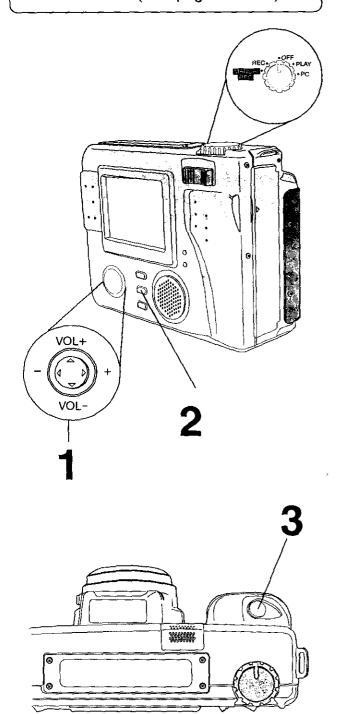
• Selected mode will appear on the LCD Viewfinder. (See page 11.)

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

Self Timer Recording

The Self-Timer allows you to capture an image about 10 seconds after pressing the shutter.

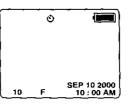
-Before you begin – Set the POWER Switch to REC or MANUAL REC. (See pages 19~20.)



Press ▲ or ▼ to select SELF TIMER and press \triangleleft or \blacktriangleright to select ON. This puts the camera in self-timer mode. <REC Mode> <MANUAL REC Mode> MANUAL REC MENU 1/3> <REC MENU 1/2>

| | (<manual 1="" 3="" menu="" rec=""> (</manual> |
|------------------|--|
| AUDIO ON | AUDIO ON |
| SELFTIMER I ON I | SELFTIMER & ON > |
| BRIGHTNESS | BRIGHTNESS |
| OSD ON | OSD ON |
| CLOCK SET | IRIS |
| SEL :A▼ SET :4► | SEL :▲▼ SET :∢► |
| EXIT : MENU | EXIT : MENU |
| | |

 After ON is selected and MENU is pressed, is mark will appear on the LCD Viewfinder (see page 10).



2 Press MENU to exit.

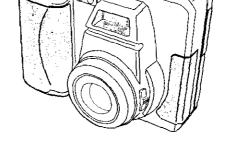
Press SHTR.

Self-Timer Indicator

٢

- The Self-Timer Indicator lights up. The indicator starts flashing rapidly after about 8 seconds and the image is captured about 2 seconds later.
- The Self-Timer setting returns to OFF mode each time an image is captured. Repeat these steps each time Self-Timer is used.

Special Features

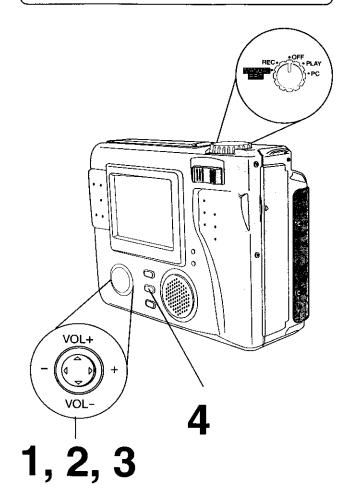


Adjusting the Iris Manually

Normally, the camera adjusts the exposure automatically. However, when the background is extremely bright, or when the subject is backlit, you can compensate by adjusting the Iris manually.

-Before you begin -

Set the POWER to MANUAL REC. (See pages 19~20.)



Press \blacktriangle or \blacktriangledown to select IRIS.

| <manual 1="" 3="" menu="" rec=""></manual> | | | | |
|--|---------|--|--|--|
| AUDIO | ON | | | |
| SELF TIMER | OFF | | | |
| BRIGHTNESS | | | | |
| OSD | ON | | | |
| IRIS | • | | | |
| SEL :▲▼ | SET :∢► | | | |
| EXIT : MENU | | | | |
| | | | | |

Z Press ► to display IRIS screen.

| | <iris></iris> |
|---|------------------------|
| - | 000∎000+ |
| | SET :∢► EXIT : MENU |

Press \triangleleft (-) or \triangleright (+) to change the IRIS; Press (+) to increase the brightness, Press (-) to decrease the brightness.

Press MENU twice to exit.

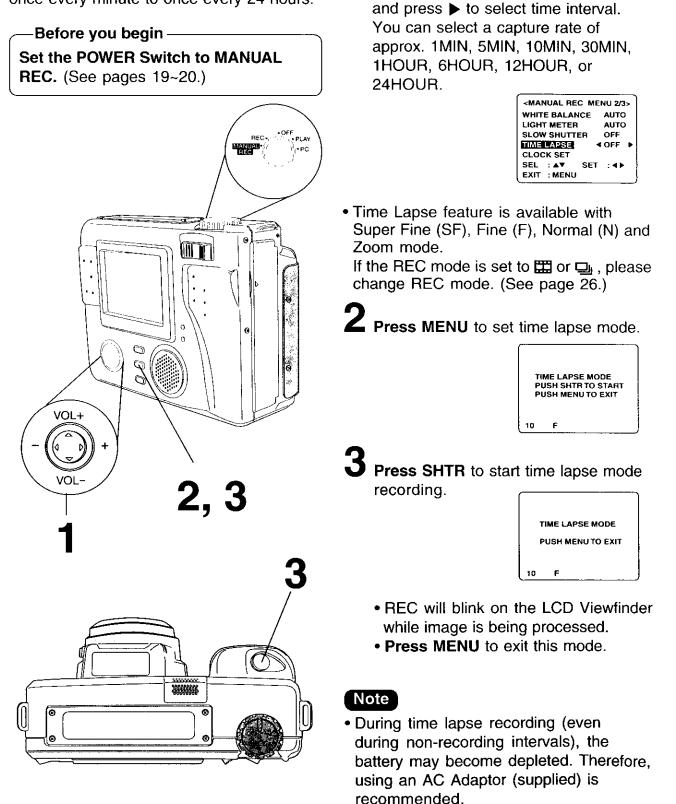
Note

- There are 7 brightness compensation levels ranging from -3 to +3.
- A blue sky may appear somewhat whiter when the brightness is increased.
- The brightness cannot be adequately compensated for in extreme backlight conditions.
- The original exposure is automatically restored when the power is turned off.

Time Lapse Recording

Press ▲ or ▼ to select TIME LAPSE

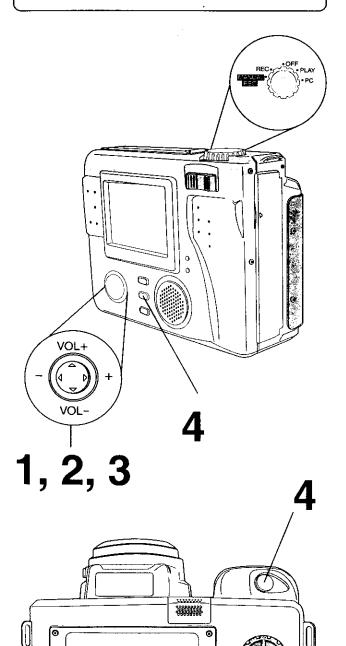
Time Lapse enables you to set the camera to automatically capture an image from once every minute to once every 24 hours.



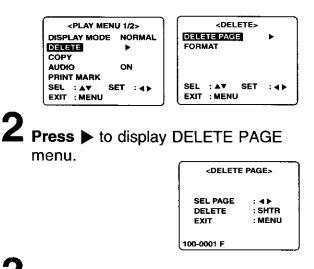
To Delete Specific Images

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

Warning: Once deleted, images cannot be restored.



Press \blacktriangle or \blacktriangledown to select DELETE and press \blacktriangleright to display DELETE menu.



- Press SHTR to delete a image.
 - To delete other specific image pages, please repeat steps 3~4.
 - Press MENU twice to exit.

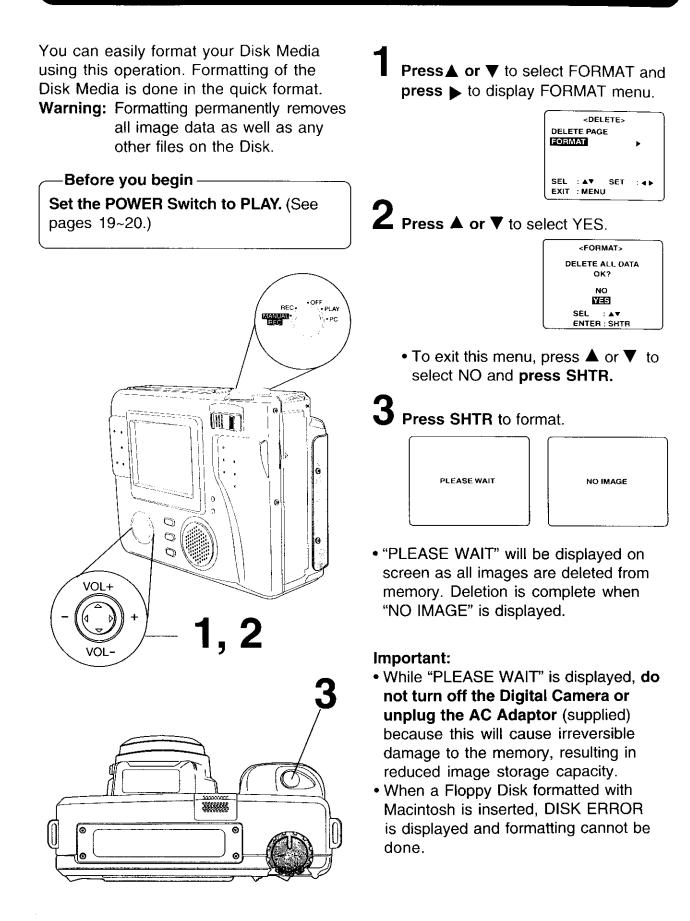
Note

• To delete all image data, refer to "Formatting the Disk Media" on page 41.

Important:

• While deleting image, do not turn off the Digital Camera or unplug the AC Adaptor (supplied) because this will cause irreversible damage to the memory, resulting in reduced image storage capacity.

Formatting the Disk Media

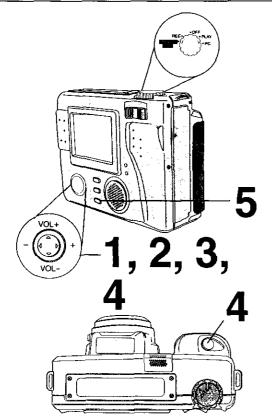


To Copy Image Pages

You can copy specific images from one Disk Media to another Disk Media using this operation.

-Before you begin

Set the POWER Switch to PLAY. (See pages 19~20.)



Important:

• While "PLEASE WAIT" is displayed, do not turn off the Digital Camera or unplug the AC Adaptor (supplied) because this will cause irreversible damage to the memory, resulting in reduced image storage capacity.

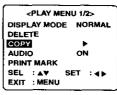
Note

• If the memory capacity of the Disk Media that you want to copy to is not sufficient, the following message will appear.

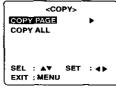


• You can copy images from a SuperDisk Diskette to another SuperDisk Diskette providing the TARGET disk has enough space. You can copy images from a Floppy Disk to another Floppy Disk or a SuperDisk Diskette providing the TARGET disk has enough space.

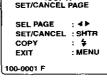
Press \blacktriangle or \forall to select COPY.



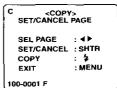




Press to display COPY PAGE menu.



Press destarrow or beta to select image you want to copy and press SHTR to stamp copy mark. A "C" mark will appear on the image.



- Repeat step 4 to stamp other images.
- Press SHTR again to cancel copy mark.

5 Press 4 to copy.

 "PLEASE WAIT", then "PLEASE CHANGE DISK" is displayed. After Disk is changed, "PLEASE WAIT" is displayed as images are copied. When copying is complete, the screen below will be displayed.



• Press MENU twice to exit.

To Copy All Images

You can copy all of the images stored on a Disk Media to another Disk Media using **Press** \blacktriangle or \triangledown to select COPY. this operation. <PLAY MENU 1/2> DISPLAY MODE NORMAL Before you begin DELETE COPY ON Set the POWER Switch to PLAY. (See PRINT MARK SEL : AT SET : ... pages 19~20.) Z Press ► to display COPY menu and select COPY ALL. • OFF • PL A REC. <COPY> COPY PAGE COPY ALL SEL SEL : AV EXIT : MENU SET 100 **Press** ▶ to display COPY ALL menu and press \blacktriangle or ∇ to select YES. <COPY ALL> COPY ALL PAGES OK? Û C NO YES SEL : 41 ENTER : SHTR VOL Select NO to return to the COPY 2, 3 MENU. VOI Press SHTR to copy. PLEASE WAIT Note "PLEASE WAIT", then "PLEASE CHANGE DISK" is displayed. After When copying images from one disk to another, the images are temporarily stored in Disk is changed, "PLEASE WAIT" is camera memory before being copied to the displayed as all of the images are target disk. As the camera memory is only copied. When copying is complete, equal to about one Floppy Disk, all the the screen below will be displayed. SuperDisk Diskette images cannot be stored and COPY ALL cannot be used. If COPY ALL is selected when SuperDisk is the source. "CANNOT COPY ALL THE SUPERDISK" will COPYING IS COMPLETE be displayed. If the memory capacity of the SuperDisk Diskette or Floppy Disk that you want to copy Press MENU twice to exit. to is not sufficient, the following message will appear. Important: NOT ENOUGH DISK SPACE NOT AVAILABLE DISK While "PLEASE WAIT" is displayed, do not turn off the Digital Camera or CONTINUE: SHTR CONTINUE: SHTR

• You can copy images from a Floppy Disk to another Floppy Disk or a SuperDisk Diskette providing the TARGET disk has enough space. unplug the AC Adaptor (supplied)

because this will cause irreversible

damage to the memory, resulting in

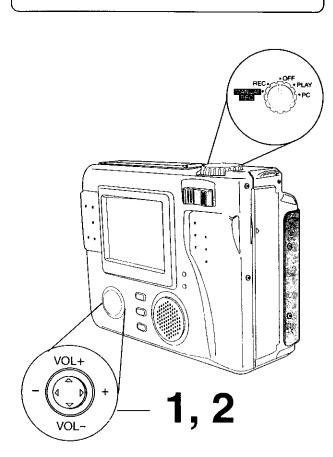
reduced image storage capacity.

Slide Show

You can playback captured images as a slide show.

-Before you begin -

Set the POWER Switch to PLAY. (See pages 19~20.)



Press \blacktriangle or \blacktriangledown to select SLIDE SHOW.



2 Press \blacktriangleright to start slide show.



• Press MENU to exit this mode.



Note

• SLIDE SHOW automatically stops after approx. 20minutes.

Important:

• SLIDE SHOW during execution, do not turn off the Digital Camera or unplug the AC Adaptor (supplied) because this will cause irreversible damage to the memory, resulting in reduced image storage capacity.

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

System Requirements:

- IBM PC/AT or compatible
- Windows 98 (Pre-installed PC with USB port)
- 486 CPU or higher (Pentium) recommended)
- 32MB on-board memory

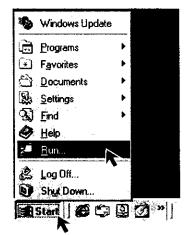
- 10MB available hard disk space
- 256 Color Monitor or Full Color Monitor recommended (24bits per pixel or 16.7 million colors)
- CD-ROM drive (for installation)
- USB Port
- Mouse or other pointing device

USB Driver Installation

Turn on the PC (Personal Computer) and start up Windows 98.

2 Insert supplied Software CD-ROM into the CD-ROM Drive.

3 Click the "Start" button and then click "Run".



Type in "D:\Panasonic\Driver\Setup.exe" and then click "OK". Note "D" Denotes the CD-ROM drive designation.

| Run | 2 × |
|---------------------|--|
| $i \in \{i,j\}$ | |
| | he name of a program, folder, document, or Internet |
| | ce, and Windows will open it for you: |
| 동생 환수의 가 옷 먹으는 것 | 그는 것 수 있는 다니 그는 다양이 것 않아봐 가지만 것이라. 그 것은 것 같고 있다며 상가에 싫어했네. |
| Open: D:\Pa | anasonic\Driver\Setup.exe |
| Open: D:\P | anasonic\Driver\Setup.exe |
| Bpen , D.\P, | anasonic\Driver\Setup.exe |

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

PalmCam File Converter Installation

• When transferring non-Design rule for Camera File system format images from your PC to the Digital Camera, you will need to convert the images data to Design rule for Camera File system format so that the Camera can read it.

Note

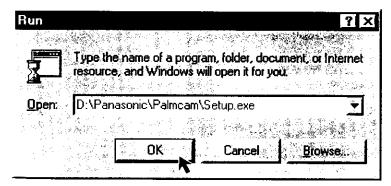
• The Design rule for Camera File system was standardized by the Japan Electronic Industry Development Association (JEIDA) with the main purpose of developing an environment in which image files such as those from Digital Still Cameras can easily be exchanged with other related devices.

1 Turn on the PC (Personal Computer) and start up Windows 98.
2 Insert supplied Software CD-ROM into the CD-ROM Drive.

Olick the "Start" button and then click "Run".



4 Type in "D:\Panasonic\Palmcam\Setup.exe" and then click "OK". Note "D" Denotes the CD-ROM drive designation.



Follow the instructions as they appear on your PC screen.

QuickTime[™] Driver Installation

• The QuickTime[™] Driver, when installed, allows your Digital Camera to transfer Motion Image Recording files to your PC.

Note

• For information on Apple QuickTime,

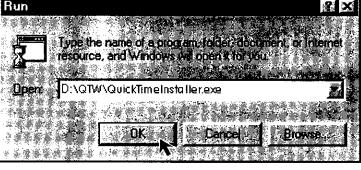
visit their website at :http://www.info.apple.com/info.apple.com/support/

Turn on the PC (Personal Computer) and start up Windows 98.

Z Insert supplied Software CD-ROM into the CD-ROM drive.



| • | Windows Update | | | | | |
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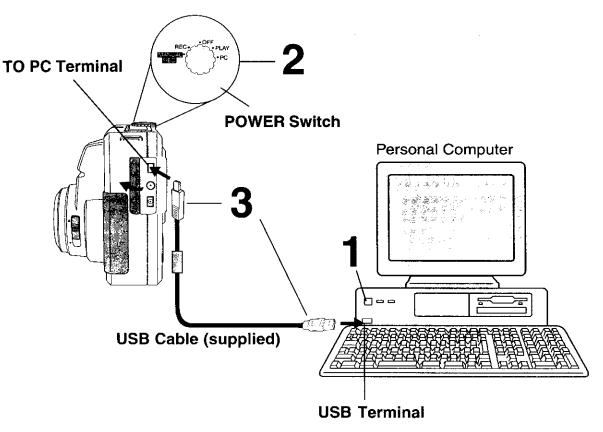
Follow the instructions as they appear on your PC screen.

QuickTime and the QuickTime logo are trademarks used under license. QuickTime is registered in the U.S, and other countries.



By using the included USB cable to connect to a PC, you can use your SuperDisk camera as an external storage device.

The SuperDisk Diskette is only supported by Windows[®] 98 or Mac OS 8.1 or later. For other operating systems, you should use Floppy Disk.



Connection

Turn on your PC.

2 Set the POWER Switch to PC on the Digital Camera.

- The POWER LED lamp lights up.
- LCD Viewfinder is off in PC mode.

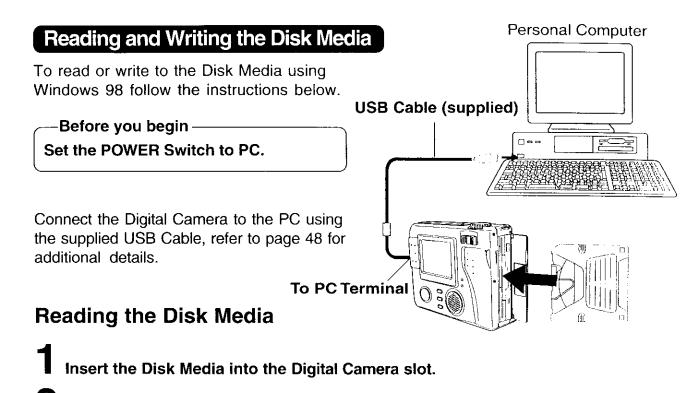
3 Connect the Digital Camera to your PC (Windows) using the USB Cable (supplied).

• You can use this Digital Camera as a SuperDisk Drive. (See pages 61, 62, 63, 65.)

Note

- For extended periods of use, it is recommended to use the AC Adaptor (supplied) as a power source.
- Once the USB driver is installed, the Digital Camera can be connected even after the PC has been started. The USB Cable (supplied) must be connected as described in the above steps.

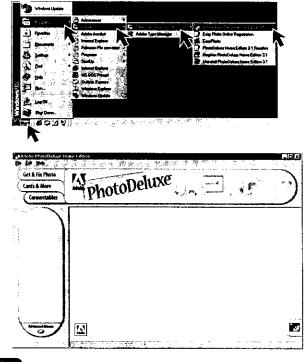
For assistance, call 1-800-272-7033.



Click "Start", "Programs" and "Image Viewing Software (for Example : PHOTODELUXE)".

Click "Adobe", "PhotoDeluxe Home Edition 3.1" and "Adobe PhotoDeluxe Home Edition 3.1".

The initial screen of the Image Viewing Software is displayed.

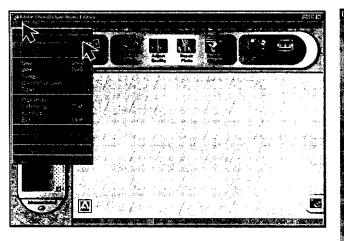


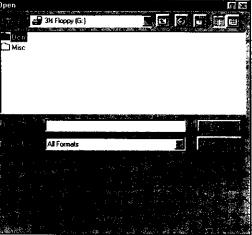
Note

• When playing back Motion images, start QuickTime.



Click on the "File" Menu and "Open File". The File Open MENU is displayed.





Select the 3.5" FD Drive for the Digital Camera and find the image data file in the Digital Camera.

- When the Digital Camera POWER Switch is set to PC, the Digital Camera Drive is recognized as the 3.5" FD Drive with the latest drive letter, for example (G:).
- The Camera Disk consists of Dcim and Misc Folders.
- The Dcim Folder is used to store image data, and the Misc Folder is used to store Print Mark data.
- Image data is stored in the "100 Pana" folder with the file number starting from "P1000001". When the 1000th image data is written, the "101 Pana" folder is created and the file number starts from "P1010001".
- The file numbers once deleted cannot be used.
- If the file number is changed, the Digital Camera cannot read the file.

Open the image to View the image.

Note

• End all the applications, if, after playing back a Motion image, etc. with "QuickTime", you want to change from PC mode to another mode. Only change from PC mode while a message, such as the one shown at the right is displayed.

PLEASE CLOSE IMAGE VIEWER ON PC

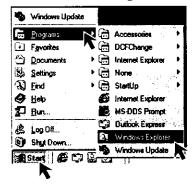
OK : SHTR

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

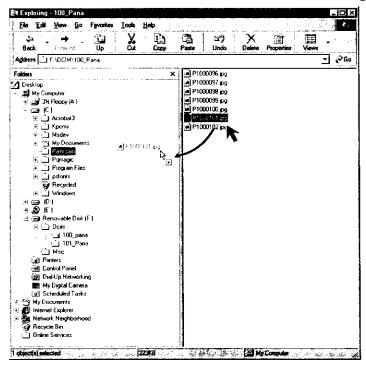
Writing to the Disk Media

Insert the Disk Media into the Digital Camera slot.

2 Click "Start", "Programs", and "Windows Explorer".



3 You can write to the Disk Media by simply dragging and dropping a file or folder from the Digital Camera Drive to another Drive. You can also drag and drop a file or folder from another Drive to the Drive of the Digital Camera.



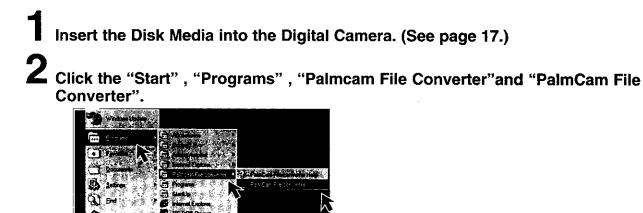
PalmCam File Conversion

When the Digital Camera can not playback the image data which is transferred from another Drive to the Drive of the Digital Camera, even if the data is JPEG, PalmCam File Conversion is necessary.

Before you begin Set the POWER Switch to PC.

SOY !

Connect the Digital Camera to the PC using the supplied USB Cable, refer to page 48 for additional details.



1 de 18 - 2

3 Click "File Selection" then select all images to be converted, select camera drive, click on "Convert".

You can convert the format of the image data from your PC to the Digital Camera.

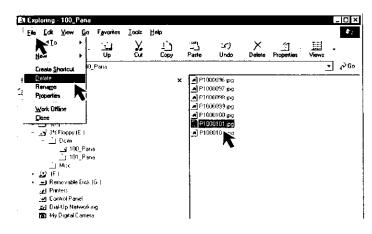
| File converter sa | ftware for Panasonic Pa | lmCam | | X |
|----------------------|---------------------------|-----------------------|------------------|----------------|
| Registered File List | | Converted File List | | |
| Name | Path | Name | Path | File Selection |
| P1000001.pg | G \DCIM\103_pana | OP1000001.JPG | e:\DCIM\100_PANA | |
| 1 P1000002.pg | G \DCIM\103_pana | Q P1000002,JPG | e.\DCIM\100_PANA | ······ |
| P1000003.jpg | G:\DCIM\103_pana | O P1000003.JPG | e \DCIM\100_PANA | Conveit |
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• Use the "Help" of "PalmCam File Converter" for the instructions in detail.

Deleting a File (Folder) from the SuperDisk Drive

To delete a file (folder) from the Digital Camera.

 Click on the file or folder you want to delete. Then from the "File" menu click on "Delete" to delete the file.



Disconnection

End all applications and close all windows. (i.e. QuickTime, PhotoDeluxe, etc.)

- **2** Eject the Disk Media from the Digital Camera. (See page 17.) You can also remove the Disk Media by right clicking on the
 - SuperDisk Drive icon in "Windows Explorer" and "My Computer" and then clicking on "Eject".



- **J** Disconnect the USB Cable (supplied) from your PC and change the POWER Switch on the Digital Camera setting from PC mode to another selection. Make sure that all of the applications and all of the windows are closed. Then press the SHTR button.

Note

- If the USB Cable (supplied) is connected before the AC Adaptor is connected, or, if the AC Adaptor is disconnected before the USB Cable is disconnected, it is possible that Windows 98 will abort the operation.
- The USB Cable (supplied) must be disconnected as described in the above steps.

System Requirements:

- Mac OS 8.1, 8.5, 8.5.1, 8.6
- iMac or Power Macintosh G3 with USB Port
- 32MB of RAM
- 10MB available hard disk space
- **USB Driver Installation**

Turn on the Macintosh.

- 2 Insert the supplied Software CD-ROM into the CD-ROM Drive.
- **3** Double click the "PHOTODELUXE".
- 4 Double click on "Panasonic", "PalmCam" and "DSC&SuperDisk Driver".
- 5 Follow the instructions as they appear on your PC screen.

When the USB Driver is installed, the following changes will occur.

- The Mac OS ROM in the Mac OS 8.1 system folder is changed from 1.1 to 1.1.2.
- The USB Driver of the SuperDisk Drive is installed in the function expansion folder of the System folder.
- Inquire about Mac OS and FIrmware updates at the Apple Computer Inc. web site (<u>http://www.apple.com./</u>).

- 256 Color Monitor or Full Color Monitor recommended (24bits per pixel or 16.7 million colors)
- CD-ROM drive (for installation)
- USB Port
- Mouse or other pointing device



QuickTime™ Driver Installation

• The QuickTime[™] Driver, when installed, allows your Digital Camera to transfer Motion Image Recording files to your PC.

Note

• For information on Apple QuickTime,

visit their website at :http://www.info.apple.com/info.apple.com/support/



Installer".

2 Insert the supplied Software CD-ROM into the CD-ROM Drive.

Double click on "QT 4.02" and "QuickTime

3 Double click the "PHOTODELUXE".



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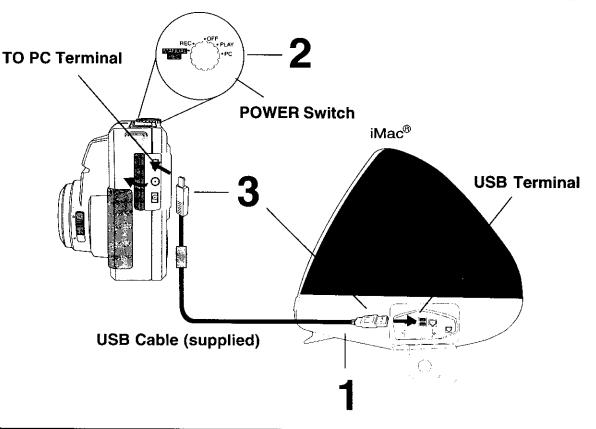
5 Follow the instructions as they appear on your PC screen.

PalmCam File Converter Installation

• The Mac software is currently not available, but will be available in the future on our website at www.panasonic.com/ palmcam or by calling 1-800-272-7033.

By using the included USB cable to connect to a PC, you can use your SuperDisk camera as an external storage device.

The SuperDisk Diskette is only supported by Windows® 98 or Mac OS 8.1 or later. For other operating systems, you should use Floppy Disk.



Connection

Turn on your PC.

2 Set POWER Switch to PC on the Digital Camera.

- The POWER LED lamp lights up.
- LCD Viewfinder is off in PC mode.

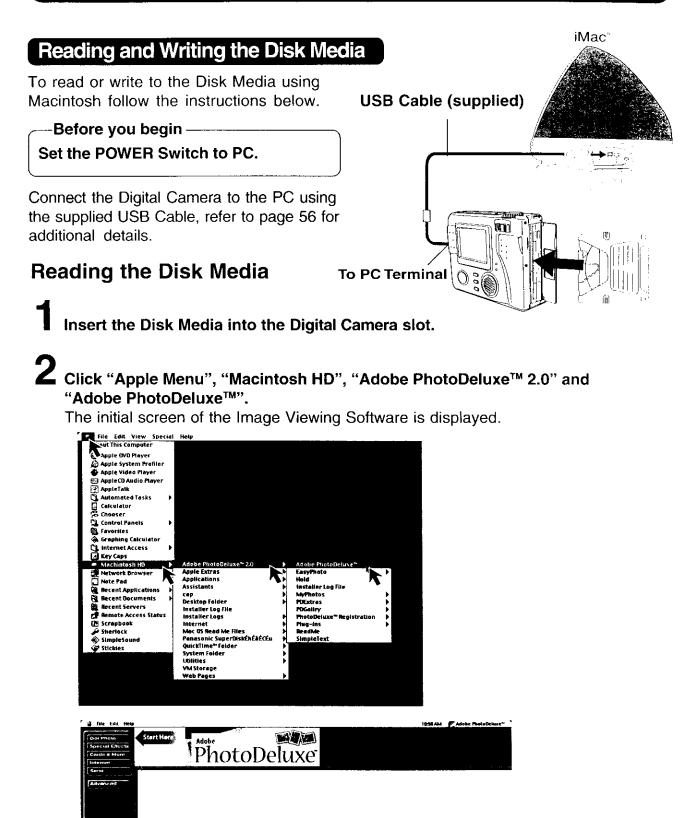
3 Connect the Digital Camera to your PC using the USB Cable (supplied).

• You can use this Digital Camera as a SuperDisk Drive. (See pages 61, 64, 65.)

Note

- For extended periods of use, it is recommended to use the AC Adaptor (supplied) as a power source.
- Once the USB driver is installed, the Digital Camera can be connected even after the PC has been started. The USB Cable (supplied) must be connected as described in the above steps.

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

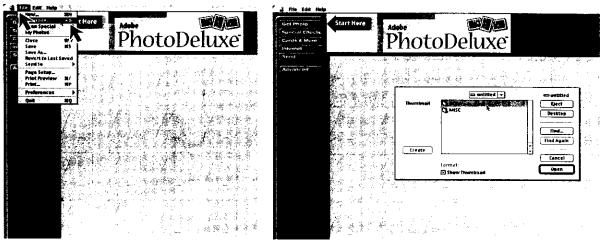


NoteWhen playing back Motion images, start QuickTime.

3

Click on the "File" Menu and "Open File".

The File Open MENU is displayed.



Select the 3.5" FD Drive for the Digital Camera and find the image data file in the Digital Camera.

- When the Digital Camera POWER Switch is set to PC, the Digital Camera Drive is recognized as the 3.5" FD Drive.
- The Camera Disk consists of DCIM and MISC Folders.
- The DCIM Folder is used to store image data, and the MISC Folder is used to store Print Mark data.
- Image data is stored in the "100 PANA" folder with the file number starting from "P1000001". When the 1000th image data is written, the "101 Pana" folder is created and the file number starts from "P1010001".
- The file numbers once deleted cannot be used.
- If the file number is changed, the Digital Camera cannot read the file.

4 Open the image to View the image.

Note

 End all the applications, if, after playing back a Motion image, etc. with "QuickTime", you want to change from PC mode to another mode. Only change from PC mode while a message, such as the one shown at the right is displayed.

| PLEASE CLOSE IMAGE VIEWER ON PC |
|------------------------------------|
| OK : SHTR |

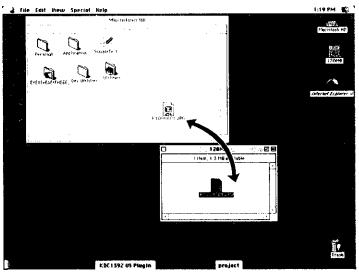
Writing to the Disk Media

Insert the Disk Media into the Digital Camera slot.

2 Click the icon displayed on the desktop.



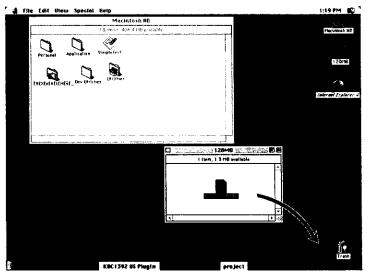
You can write to the Disk Media by simply dragging and dropping a file or folder from Digital Camera Drive to another Drive.



Deleting a File (Folder) from the SuperDisk Drive

To delete a file (folder) from the Digital Camera.

• Drag and Drop the selected file or folder into the "Trash" icon.



Disconnection

End all applications and close all windows. (i.e. QuickTime, PhotoDeluxe, etc.)

 ${f 2}$ Eject the Disk Media from the Digital Camera. (See page 17.)

3 Disconnect the USB Cable (supplied) from your PC and change the POWER Switch on the Digital Camera setting from PC mode to another selection. Make sure that all of the applications and all of the windows are closed. Then press the SHTR button.

Note

- If the USB Cable (Supplied) is connected before the AC Adaptor is connected, or, if the AC Adaptor is disconnected before the USB Cable is disconnected, it is possible that Macintosh will abort the operation.
- The USB Cable (supplied) must be disconnected as described in the above steps.

Removing the Disk Media

- When the PC recognizes the Disk Media, an icon, like the one shown right, is displayed on the desktop.
- · You can remove Disk Media from the Digital Camera by dragging and dropping the Disk Media icon on the desktop into the "Trash" icon.
- While the PC is starting up, the Disk Media cannot be removed, even if the EJECT button on the Digital Camera is pressed.
- When a damaged Disk Media is inserted in the Digital Camera. the Disk Media icon will not appear on the PC desktop. In this case, the Disk Media can be removed by pressing the EJECT button on the Digital Camera.





SuperDisk Drive

You can use this Digital Camera as an external SuperDisk storage drive. You can only use SuperDisk Diskette media or 2HD Floppy Disks in this camera.

Note

• When a DOS formatted Floppy Disk is read by a Macintosh, the PC/File Exchange function will be necessary.

Media Format Type & Explanation

| Туре | Format Style | Explanation | Note |
|-----------------------|------------------------|---|--|
| SuperDisk Diskette | DOS Format (120MB) | This format is usable with DOS and Windows. | This format is usable with Windows and Macintosh. |
| Floppy Disk (2HD) | DOS Format (1.44MB) | This format is usable with DOS and Windows. | This format is usable with Windows and Macintosh. |

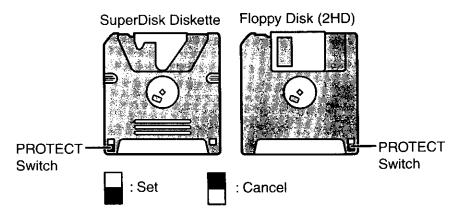
Note

Adverse conditions, such as those described below, are confirmed in PC Exchange Ver. 2.2.1 and also File Exchange Ver. 3.0.

• Do not format a SuperDisk Diskette that is in the DOS format on a Macintosh. If you use the DOS format with a Macintosh, the SuperDisk Diskette will not be able to be read or written to.

WRITE Protecting the Disk Media

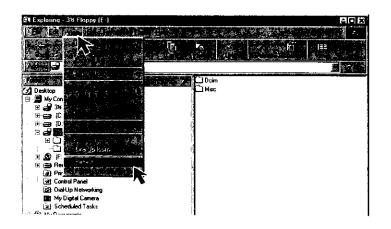
You can prohibit the writing to or deletion of data from the Disk Media by using the PROTECT switch as shown below.



Using the SuperDisk Drive (Windows 98)

Before Formatting

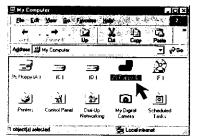
Before formatting the Disk Media, close all applications and all windows. If you format the Disk Media while any of the disk's files are open, an error may occur on the display.



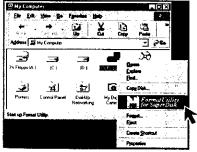
Formatting the Disk Media

Insert the Disk Media into the Digital Camera slot.

 $\mathbf{2}$ Click "My Computer". Click right mouse button on the Digital Camera icon.



3 Click "FormatUtility for SuperDisk".

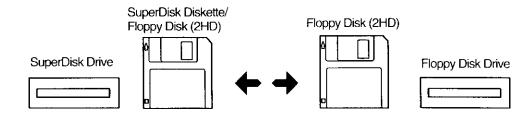


Δ Follow the instructions as they appear on your PC screen.

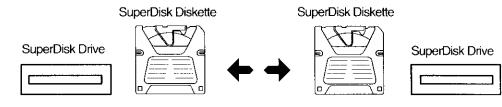
Using the SuperDisk Drive (Windows 98)

Copying the Disk Media

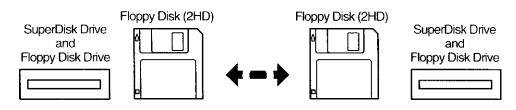
• The DISKCOPY command at the DOS prompt cannot be used.



• Disk copy cannot be performed with SuperDisk Diskette.



• Explorer CopyDisk is only possible with 2HD Floppy Disk.



When using Windows Explorer, etc. and you attempt to copy a previously used 2HD Floppy Disk from the Floppy Disk Drive to the Digital Camera with the CopyDisk utility, please note the following.

After PC start up, when CopyDisk is attempted the first time, a Windows error message box may be displayed and CopyDisk may fail.

| Copy Di | The source and destination disks are not the same type. |
|---------|---|
| U | Make sure the disks you choose are the same type, and then ity again. |
| | |

In this case, switch the source Floppy Disk and the target Floppy Disk so that CopyDisk is performed from the Digital Camera to the Floppy Disk Drive. By doing this, CopyDisk will function properly.

Using the SuperDisk Drive (Macintosh)

Formatting the Disk Media



• Do not format the Disk Media under DOS format with Macintosh.

Insert the SuperDisk Diskette or Floppy Disk into the Digital Camera slot.

2 Click the SuperDisk Diskette or Floppy Disk icon displayed on the desktop.



3 Select "Erase Disk" in the "Special" MENU.



4 Select format style. Then, click "Erase".

| Ŭ ĝ | Completely erase disk named "untitled" (USB (v1.4))? | | | |
|--------|---|---|--|--|
| | Name: untitled a Magnetic state |] | | |
| | Format: Anac OS Standard 120.3 MB Mac OS Extended 120.3 MB DOS 120.3 MB | | | |

Note

- When using the Disk Media that was formatted to Mac OS standard format or Mac OS expanded format in the Digital Camera, format again in the Digital Camera.
- When "File Sharing" is used, formatting may be impossible. In this case, either quit "File Sharing" or turn AppleTalk off in the control panel.
- In Camera mode (REC, MANUAL REC, PLAY), only PC Exchange Ver. 2.2.1 in DOS format can be used.

Using the SuperDisk Drive

Important Operating Notes

• FORMAT command cannot be used.

The FORMAT command at the DOS prompt cannot be used for the Digital Camera.

• DISKCOPY command cannot be used.

The DISKCOPY command at the DOS prompt cannot be used for the Digital Camera.

- You cannot boot your PC from this Digital Camera.
- When using the Digital Camera, never remove the Disk Media while data is being written to it.

If the Disk Media is removed while it is being written, it may become completely unusable.

• When a Defective Disk is inserted into the Digital Camera, it will take a longer than usual time for the drive to recognize the disk.

This is normal, so please wait for a while.

• If the Disk Media is not inserted into the SuperDisk Drive, "FormatUtility for Super Disk" will not be displayed.

Insert the Disk Media. After the busy light goes out, right click on the SuperDisk icon.

- According to the use limitations of "QuickTime for Windows", files stored in the SuperDisk Driver may not play back normally.
- Unable to place in Suspend/ Resume mode.

While the SuperDisk Driver is reading/writing to the Disk Media, please do not place in Suspend/ Resume mode.

- This Digital Camera is not compatible with Flash Pass.
- Using a head cleaner caution.

When using a head cleaner, please use the product described below and limit cleaning to about 7 seconds.

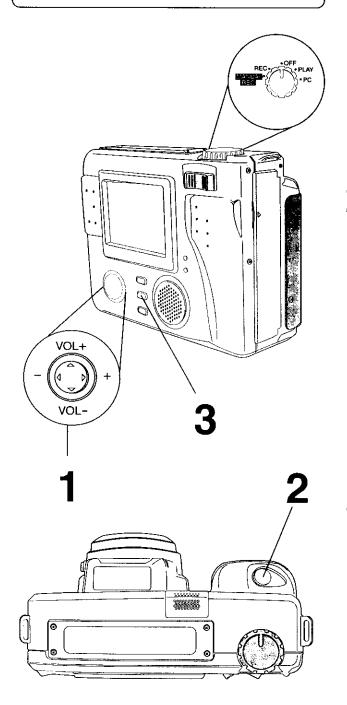
Name of article : Imation 3.5" Dry Head Cleaning Disk Article No. : 74040183035

Print Mark

Use this feature when a laboratory service that supports DPOF (Digital Print Order Format) is used.

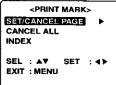
-Before you begin -

Set the POWER Switch to PLAY. (See pages 19~20.)



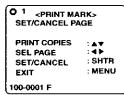
Stamp Print Marker

Press ▲ or ▼ to select PRINT MARK and press ► to display PRINT MARK menu.



• Select "SET/CANCEL PAGE" to select image, "CANCEL ALL" to cancel all image print marks, and "INDEX" to set or clear index print on all pages.

2 Press ∢ or ▶ to select the image page you want to mark for printing and press SHTR to stamp print mark. A "O" mark will appear on the image. Press ▲ or ♥ to select number of copies to print. (up to 99)



- Repeat step 2 to stamp other images.
- Press SHTR again to cancel print mark.

Press MENU to exit this menu.

This print mark is based on DPOF (Digital Print Order Format).

Digital Camera Accessory

For ordering instructions, see the Accessory Order Form page.

| Accessory # | Figure | Description | Price |
|------------------|--|--------------------|----------|
| CGR-B/ 202A1B | and a state of the | Lithum Ion Battery | \$100.00 |

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 |
|--------------------|------------------------------|------------------------------|---------------------|-------------------|
| | | | | |
| | | | | |
| | | I | Subtota | |
| | | Your State | & Local Sales Tax | (|
| | | Sh | ipping & Handling | 5.00 |
| | | | Total Enclosed | 1 |
| 3. Method of payr | . , | | | L <u></u> |
| Check of N | Money Order enc | losed (NO C.O.D. | SHIPMENTS) | |
| | Credit Ca | rd # | | |
| MasterCar | rd Expiration | n Date | | |
| Discover | Customer | Signature | | |
| | Make Che | eck or Money Ord | ler to: MATSUSHI | TA ACCESSORIE |
| (Please do not se | nd cash) | | | |
| 4. Shipping inforn | nation (UPS deliv | ery requires com | plete street addres | ss) |
| Ship To: Mr. | | | | |
| Mrs. | | | | |
| Ms First | Las | | Phone #: | |
| | | | Day (|) |
| Street Addr | ess | | NU-La Z | λ. |
| City | | State Zip | Night (|) |
| TO OBTAIN AN | Y OF OUR DIGITA | L CAMERA ACCES | SORIES YOU CAN | DO ANY OF THE |
| | | FOLLOWING: | | |
| | VISIT YOU | | NIC DEALER | |
| CALL PANASONI | C'S ACCESSORY (| OR DRDER LINE AT 1- OR | 800-272-7033 [8:30 | AM-8 PM M-F, EST] |
| MAIL THIS ORD | ER TO: PANASON 20421 84th | IC SERVICES CON | IPANY ACCESSOR | Y ORDER OFFICE |

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

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 | Solution |
|---|--|
| Cannot charge the Battery Pack. | Make sure the rechargeable Lithium Ion Battery Pack is attached. (p 13) Make sure all necessary connections are correct and tight. (p 13) |
| No power. | Lithium Ion Battery is depleted. (p 14) Make sure polarities are aligned properly. (p 14) When the unit is moved from a cold place to a warm place, it may not function. In this case, please wait one hour before using the unit. |
| Power shuts off automatically. | Auto shut off feature is on. Press SHTR, or set POWER Switch to OFF, and then set to REC or MANUAL REC. (pp 19, 20, 22.) |
| Cannot capture the image. | SuperDisk Diskette (FD) is not inserted. (p 17) Make sure the POWER switch is set to REC or MANUAL REC. (pp 19, 20.) No memory. Delete some images before capturing images. (p 40) |
| No Picture on the LCD Viewfinder. | Auto shut off feature is on. Set the POWER to OFF and then set to REC or MANUAL REC. (pp 19, 20, 22.) |
| LCD Viewfinder image is too bright or dark. | Make sure the LCD Viewfinder brightness setting is adjusted properly. (p 28) |
| Flash will not light. | The flash mode is set to (1) (OFF) mode. Change flash mode. (p 34) |
| Cannot playback. | SuperDisk Diskette (FD) is not inserted. (p 17) There are no images on the SuperDisk Diskette (FD). (pp 22~25.) Make sure the POWER switch is set to PLAY. (p 20) PalmCam File Conversion. (p 52) |
| No picture on the TV (if connected). | Make sure all necessary connections are correct and tight. (p 33) Make sure the TV is set to video input mode. (p 33) |
| Can not transfer images on the PC Connection. | Make sure all necessary connections are correct and tight. (pp 48, 56.) Make sure the SuperDisk Driver is installed. Set Camera to PC mode. (pp 48, 56.) |

These displays will alert you of a missed operation or provide further instructions.

| Indication | Phenomenon | Solution |
|-------------------------------------|---------------------------------|---|
| SYSTEM ERROR | Failed USB handshake. | If, after Power Switch is set to OFF, then REC or PLAY again, SYSTEM ERROR is still displayed, the camera may be broken and needs repair. |
| DRIVE ERROR | Failed to initialize the drive. | If, after Power Switch is set to OFF, then REC or PLAY again, DRIVE ERROR is still displayed, the camera may be broken and needs repair. |
| WRITE ERROR | Failed to write. | If the problem occurred while capturing, please capture again. If WRITE ERROR is still displayed, the disk may be defective, or could not be read. Please reinsert the disk or change disks. If the problem occurred while setting a COPY or PRINT MARK, please try again. If WRITE ERROR, repeat this procedure. |
| READ ERROR | Failed to read. | The camera cannot read this image. Press + or - button to play the next image. A READ ERROR file cannot be delete in DELETE menu. Please format the disk, or delete with the PC. |
| DISK ERROR (PUSH SHTR TO FORMAT) | Unsuitable disk. | If PUSH SHTR TO FORMAT is displayed, you may format the disk. If PUSH SHTR TO FORMAT is not displayed, the disk cannot be formatted. (Disks that can be formatted were once formatted under DOS or Mac.) |
| DELETE ERROR | Failed to delete the file. | If, after attempting to delete again, DELETE ERROR is displayed, the disk may be defective. Change disks. |
| FORMAT ERROR | Failed to format the disk. | If, after attempting to format again, FORMAT ERROR is displayed, the disk may be defective. Change disks. |

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

Warning Indications

| Indication | Phenomenon | Solution |
|--|---|--|
| THIS DISK IS PROTECTED | The disk is protected. | If THIS DISK IS PROTECTED is displayed, change disks or disengage protect. |
| NOT ENOUGH MEMORY PUSH MENU TO EXIT | Insufficient disk memory. (1.44MB) Copy capacity was exceeded. | If NOT ENOUGH MEMORY is displayed, delete unnecessary images. Or, decrease or change the images to be copied. |
| NOT ENOUGH DISK SPACE CONTINUE : SHTR EXIT : MENU | Insufficient space on target disk compared to source disk. | After pressing SHTR to CONTINUE, switch to a disk with enough space, or press MENU to EXIT. |
| NOT AVAILABLE DISK SPACE CONTINUE : SHTR EXIT : MENU | The disk cannot be copied. | The disk is unusable or protected. After pressing SHTR to CONTINUE, switch to a disk with enough space, or press MENU to EXIT. |
| CANNOT COPY ALL THE SUPERDISK | Cannot copy all the images. | It is impossible to select ALL COPY when SuperDisk is the source. Please select COPY PAGE to copy. |
| PLEASE OPEN LENS COVER | Lens Cover is closed. | Please open the Lens Cover. |

Specifications

| CCD | 1/2.7 inch (9.34 mm) 1,3 | 20 k Pixels |
|--|---|--|
| Lens | f=5.2-15.6 mm (equivalent to a 34-102 mm lens on a 35 mm | |
| | still camera.)/F2.8-4.7 | |
| Focus | Auto / Preset (Zone) | |
| Focusing Area | 7.9 inch (20 cm) -∞ (ap | prox.) |
| Iris (Shutter Speed) | F2.8/F8 (wide) | |
| Shutter Speed | 1/30-1/750 seconds (Au mode) | to), 1/4-1/750 seconds (Slow Shutter |
| White Balance | Auto/Indoor/Outdoor/White Set | |
| LCD Viewfinder | 2.5 inch (63.4 mm) TFT Color LCD with 112 k pixels | |
| Flash | Built-in | |
| Microphone | Built-in (Mono) | |
| Speaker | Built-in (Mono) | |
| Memory | Floppy Disk (1.44 MB)/SuperDisk Diskette(120MB) | |
| Image Size | 1,280 × 960 pixels (Sup 640 × 480 pixels (Norma 320 × 240 pixels (5 mo | al, Zoom, 🖵 mode) |
| Image Storage (Floppy Disk) | Approx. 5 images (Super Fine mode) Approx. 10 images (Fine mode) Approx. 17 images (Normal, Zoom, gmmode) 10 sec. × Approx. 1 set (mmmode) | |
| (SuperDisk Diskette) | Approx. 450 images (Su Approx. 900 images (Fir Approx. 1,500 images (N 10 sec. × Approx. 90 set | ne mode) Normal, Zoom, 🖵 mode) |
| Image Format (Still Image With Audio) | JPEG (Design Rule for Camera File System) JPEG, QuickTime | |
| (Motion Image) | QuickTime (320 x 240 p | ixel Still image with Audio) |
| Digital Interface | USB | |
| Video Signal | NTSC Composite | |
| Power Supply | Lithium Ion Battery (1250 mAh, 7.2 V)/AC Adaptor (input 110- 240 V AC) | |
| Power Consumption | Digital Camera AC Adaptor (supplied) | 7.2 V, DC 1 8 A input 110/120/220/240 V AC, 50/60 Hz 20 W |
| Operating Temperature | 32 – 104 °F/0 – 40 °C | |
| Operating Humidity | 10 % – 75 % | |
| Weight | Digital Camera AC Adaptor (supplied) | 1.53 lbs approx./695 g approx. 0.39 lbs approx./180 g approx |
| Dimensions | Digital Camera | 5-5/8 (W) × 4-3/8 (H) × 3-1/4 (D) inch |
| | AC Adaptor (supplied) | 143 (W) × 112 (H) × 84 (D) mm 3-7/8 (W) × 1-5/8 (H) × 2-7/8 (D) inch 97 (W) × 43 (H) × 73 (D) mm |
| | | |

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

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

Warranty

| Panasonic Consumer Electronics | Panasonic Sales Company, Division of |
|--|---|
| Company, Division of Matsushita | Matsushita Electric of Puerto Rico, Inc. |
| Electric Corporation of America One Panasonic Way Secaucus, | Ave. 65 de Infantería. Km. 9.5 San Gabriel Industrial Park, Carolina, Puerto |
| New Jersey 07094 | Rico 00985 |
| * | AR Video Products |
| | Warranty |
| Panasonic Consumer Electronics Company or Pai | nasonic Sales Company (collectively referred to as |
| "the Warrantor") will repair this product with new o Puerto Rico, in the event of a defect in materials o | r refurbished parts, free of charge, in the USA or |
| commence from the date of the original purchase) | : |
| PRODUCT PARTS | LABOR |
| | CD IMAGE SENSOR NINETY (90) DAYS |
| DIGITAL CAMERA CCD IMAGE SENSOR - SI VCR ONE (1) YEAR | X (6) MONTHS NINETY (90) DAYS NINETY (90) DAYS |
| A/V MIXER ONE (1) YEAR | NINETY (90) DAYS |
| MONITOR-VCR ONE (1) YEAR, EXCEPT C CRT - TWO (2) YEARS | RT NINETY (90) DAYS |
| CRT - TWO (2) TEARS | CRT- NIŇEŤY (90) DAYS CUSTOMER PAYS ALL |
| | LABOR CHARGES |
| Monitor VCD In home or count in Court | AFTER 90 DAYS |
| Monitor-VCR Carry-in Service: 21 | ce: 22" (diagonal) CRT / LCD and Larger " (diagonal) CRT / LCD and smaller |
| Batteries (if included) - New rechargeable batteries for ten (10) days. Non-rechargeable batteries are | es in exchange for defective rechargeable batteries |
| <u>Tape</u> (if included) - New video cassette tape in exe (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 Compa | any (PASC) Factory Servicenter listed in the |
| in or mail-in service in Puerto Rico can be obtaine | , to locate an authorized PASC Servicenter. Carry- d during the warranty period by calling the |
| Panasonic Sales Company telephone number liste | ed in the Servicenter Directory. |
| This warranty is extended only to the original purc of the original purchase is requires before warrant | haser. A purchase receipt or other proof of the date y service is rendered. |
| This warranty only covers failures due to defects in | n materials and workmanship which occur during |
| normal use and does not cover normal maintenan head cleaning. The warranty does not cover dama | ce, including, but not limited to, video and audio age which occurs in shipment, or failures which are |
| caused products not supplied by the warrantor, or | failures which result from accident, misuse, abuse, |
| neglect, mishandling, misapplication, alteration, m improper antenna, inadequate signal pickup, mala | odification, faulty installation, set-up adjustments, |
| operation, power line surge, improper voltage sup | ply, lightning damage, commercial use such as |
| hotel, office, restaurant, or other business or renta | I use of the product, or service by anyone other orized Servicenter, or damage that is attributable to |
| acts of God. | onzed Servicenter, or damage that is attributable to |
| LIMITS AND EXCLUSIONS | |
| There are no express warranties except as listed a LIABLE FOR INCIDENTAL OR CONSEQUENTIA | L DAMAGES (INCLUDING, WITHOUT |
| LIMITATION, DAMAGE TO TAPES) RESULTING | FROM THE USE OF THIS PRODUCTS. OR |
| ARISING OUT OF ANY BREACH OF THE WARF WARRANTIES, INCLUDING THE WARRANTIES | ANTY. ALL EXPRESS AND IMPLIED |
| PARTICULAR PURPOSE, ARE LIMITED TO THE | E APPLICABLE WARRANTY PERIOD SET FORTH |
| ABOVE. Some states do not allow the exclusion of or limitations on how long an implied warranty last | or limitation of incidental or consequential damages, |
| apply to you. | s, so the above exclusions of inflitations may not |
| This warranty gives you specific legal rights and y to state. | ou may also have other rights which vary from state |
| If a problem with this product develops during or a | ifter the warranty period, you may contact your |
| dealer or Servicenter. If the problem is not handle Satisfaction Center at the Panasonic Consumer E | u to your satisfaction, then write to the Customer lectronics Company address above. |
| SERVICE CALLS WHICH DO NOT INVOLVE DE | FECTIVE MATERIALS OR WORKMANSHIP AS |
| DETERMINED BY THE WARRANTOR, IN ITS SO OF SUCH SERVICE CALLS ARE THE RESPONS | DLE DISCRETION, ARE NOT COVERED. COSTS |
| warvid 10/20/97 | |

Service Center Directory

For Product Information, operating Assistance, Literature Request, Dealer Locations, and all Customer Service inquires please contact:

1-800-272-7033, Monday-Friday 8:30am-8pm EST.

Web Site: http://WWW.Panasonic.com

You can purchase parts, accessories or locate your nearest servicenter by visiting our Web Site.

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 Servicenter Locations

CALIFORNIA 6550 Katella Avenue Cypress, CA 90630

800 Dubuque Avenue S. San Francisco, CA 94080

20201 Sherman Way Suite 102 Canoga Park, CA 91306

3878 Ruffin Road Suite A San Diego, CA 92123

COLORADO 1640 South Abilene Street Suite D Aurora, CO 80012

FLORIDA 3700 North 29th Avenue Suite 102 Hollywood, FL 33020 GEORGIA 8655 Roswell Road Suite 100 Atlanta, GA 30350

ILLINOIS 1703 North Randall Road Elgin, IL 60123 (Pick-up / Drop-off only)

9060 Golf Road Niles, IL 60714

MARYLAND 62 Mountain Road Glen Burnie MD 21061

MASSACHUSETTS 60 Glacier Drive, Suite G Westwood, MA 02090

MICHIGAN

37048 Van Dyke Avenue Sterling Heights, Ml 48312

MINNESOTA 7850-12th Avenue South Airport Business Center Bloomington, MN 55425

OHIO 2236 Waycross Road Civic Center Plaza Forest Park, OH 45240

PENNSYLVANIA 2221 Cabot Blvd. West Suite B Langhorne, PA 19047

Chartiers Valley Shopping Center 1025 Washington Pike Bridgeville, PA 15017

TENNESSEE

919-8th Avenue South Nashville, TN 37203

TEXAS 7482 Harwin Drive Houston, TX 77036

13615 Welch Road Suite 101 Farmers Branch, TX 75244

WASHINGTON 20425-84th Avenue South Kent, WA 98032

HAWAII

99-859 Iwaiwa Street Aiea, Hawaii 96701 Phone (808) 488-1996 Fax (808) 486-4369

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

Accessory Purchases:

Customer Orders Only 1-800-272-7033

As of October '97

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Printed in Japan LSQT0179A S1199-0