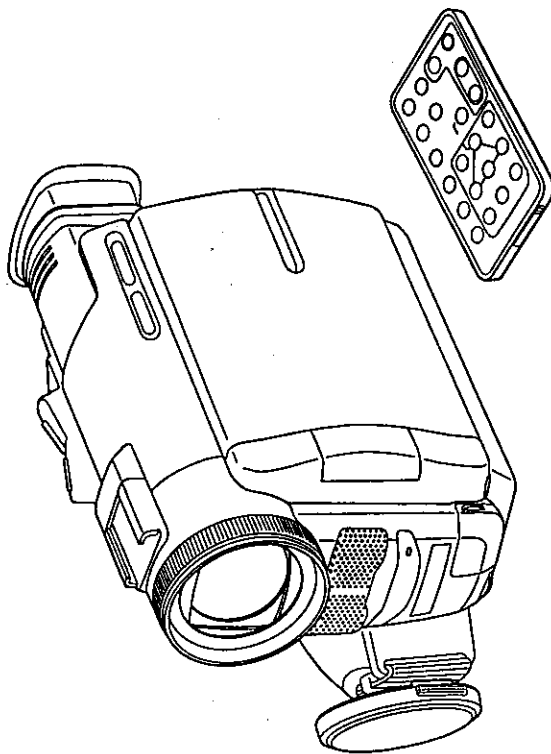


Panasonic®

—TENTATIVE— Digital Palmcorder®

Camcorder
PalmSight™

Operating Instructions



Mini **DV**
DIGITAL 6
PV-DV910

EXHIBIT # 5
FCC ID: AGT5240033
MODEL NO. PV-DV910B
OUR REF: MKS98-F40

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

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

Before attempting to connect, operate or adjust this product, please read these instructions thoroughly.
Spanish Quick Use Guide is included.

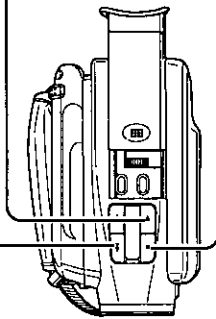
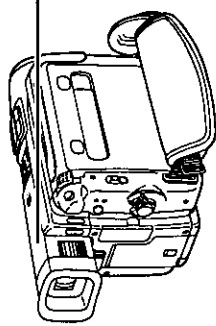
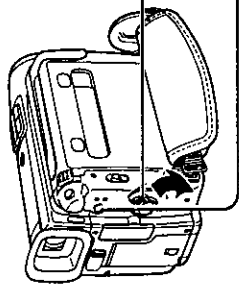
Guía para rápida consulta en español está incluida.

VQTW0734 (A)

Conectar la videocámara a una fuente de alimentación (batería, adaptador de CA o para batería de coche).
Introducir una cinta de video en el compartimiento de cinta.

PRODUCCION USANDO EL VISOR

- 1 Fije el botón POWER hacia ON.
- 2 Oprima CAMERA/CR. Se enciende la luz indicador de VCR.
- 3 Deslice todo el visor.
- 4 Oprima REW para rebobinar la cinta.
- 5 Oprima PLAY para iniciar la reproducción.
- 6 Oprima STOP para parar la reproducción.



PRODUCCION CON EFECTOS ESPECIALES

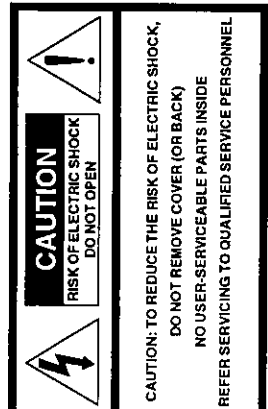
- LOCALIZAR RAPIDAMENTE UNA ESCENA ESPECIFICA
Oprimir el botón de localización (SEARCH).
- CONGELAR UNA IMAGEN
Oprimir el botón de pausa/imagen fija (PAUSE/STILL).
Oprimir nuevamente el botón cuando se desea continuar reproduciendo.

Things You should Know

Safety Precautions

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

Your Mini DV Palmcorder is designed to record and play back in Standard Play (SP) mode only. This Palmcorder is equipped with the HQ System to provide excellent video pictures. It is recommended that only cassette tapes that have been tested and inspected for use in VCR machines with the Mini DV mark be used.



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.

FCC Warning: To assure continued FCC compliance, use only the shielded interface cable with ferrite cores provided with Adaptec model AHA-8940 when connecting digital video camera and computer. Also, any unauthorized changes or modifications to this equipment would void the user's authority to operate.

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

Note: This equipment has been tested and found to comply with Part 15 and part 18 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.

Important Safeguards

Site: <http://www.Panasonic.com>

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

Centralized Factory Servicenter

Panasonic Services Company
1705 N. Randall Road,
Elgin, IL 60123-7847

MAIL TO :

Attention: Digital Camera Repair

Please carefully pack and ship, prepaid and insured, to the Elgin centralized repair Factory vicenter. 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.

Primary Servicer Locations

GEORGIA 8655 Roswell Road Suito 100 Atlanta, GA 30350	ILLINOIS 1703 North Randall Road Elgin, IL 60123 (Pick-up / Drop-off only)	MARYLAND 62 Mountain Road Glen Burnie MD 21061	MASSACHUSETTS 80 Glacier Drive, Suite G Westwood, MA 02090	MICHIGAN 37048 Van Dyke Avenue Sterling Heights, MI 48312	MINNESOTA 7950-12th Avenue South Airport Business Center Bloomington, MN 55425	MICHIGAN 37048 Van Dyke Avenue Sterling Heights, MI 48312	MINNESOTA 7950-12th 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	CHARTERS VALLEY Shopping Center 1025 Washington Pike Bridgeville, PA 15017	TENNESSEE 919-8th Avenue South Nashville, TN 37203	TEXAS 7482 Harwin Drive Houston, TX 77036	WASHINGTON 20425-84th Avenue South Kent, WA 98032	HAWAII 99-859 Iwaikua Street Alea, Hawaii 96701 Phone (808) 488-1996 Fax (808) 486-4369
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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:

former Orders Only 800-211-PANA(7262)

As of October '97

Getting Started

15. **Power Lines** — An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
 16. **Overloading** — Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
 17. **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.
 18. **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.
 19. **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.
20. **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.
21. **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.

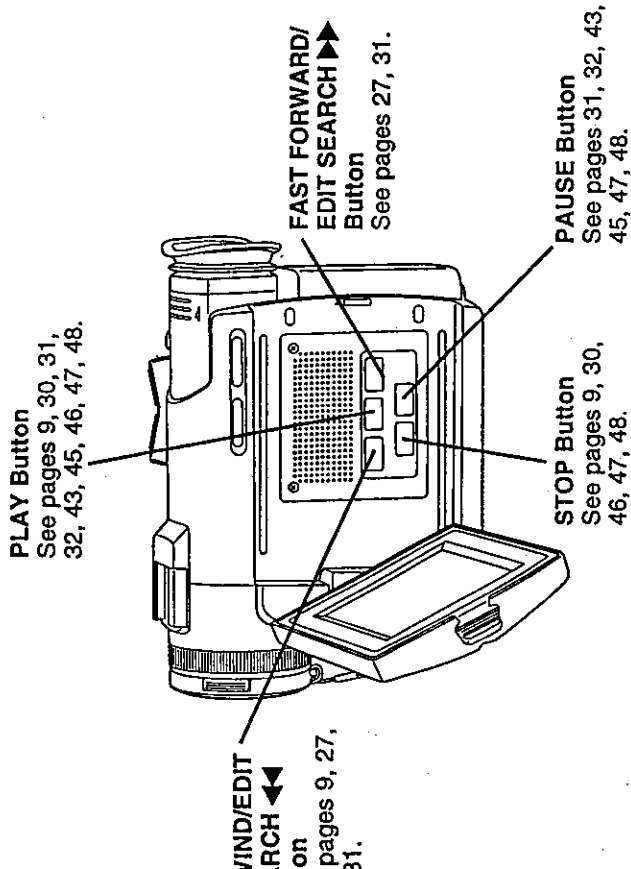
Precautions

USE & LOCATION

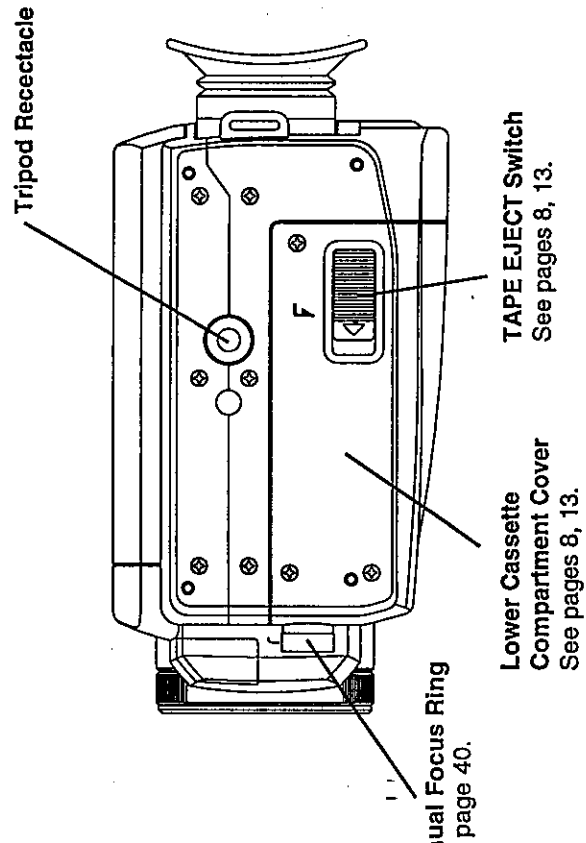
- **TO AVOID SHOCK HAZARD ...** Your Camcorder and power supply should not be exposed to rain or moisture. Do not connect the power supply or operate your Camcorder if it gets wet. Your Camcorder has been designed for outdoor use, however it is not designed to sustain direct exposure to water, rain, 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 Camcorder. Do not attempt to disassemble this unit. There are no user serviceable parts inside. Unplug your Camcorder from the power supply before cleaning.
 - **DO NOT AIM YOUR CAMCORDER AT THE SUN OR OTHER BRIGHT OBJECTS**
 - **DO NOT LEAVE THE PALMCORDER WITH THE EVF AIMED DIRECTLY AT THE SUN AS THIS MAY CAUSE DAMAGE TO THE INTERNAL PARTS OF THE EVF**
 - **DO NOT EXPOSE YOUR CAMCORDER 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 Camcorder.
 - **AVOID SUDDEN CHANGES IN TEMPERATURE ...** If the unit is suddenly moved from a cold place to a warm place, moisture may form on the tape and inside the unit.
 - **DO NOT LEAVE YOUR CAMCORDER OR THE POWER SUPPLY TURNED ON WHEN NOT IN USE.**
 - **STORAGE OF YOUR CAMCORDER ...** Store and handle your Camcorder in a manner that will not subject it to unnecessary movement (avoid shaking and striking). Your Camcorder contains a sensitive pick-up device which could be damaged by improper handling or storage.
- CARE**
- **TO CLEAN YOUR CAMCORDER ...** Do not use strong or abrasive detergents when cleaning your Camcorder body.
 - **TO PROTECT THE LENS ...** Do not touch the surface of the lens with your hand. Use a commercial camcorder lens solution and lens paper when cleaning the lens. Improper cleaning can scratch the lens coating.
 - **TO PROTECT THE FINISH OF YOUR CAMCORDER ...** Before handling your Camcorder, make sure your hands and face are free from any chemical products, such as suntan lotion, as it may damage the finish.



View

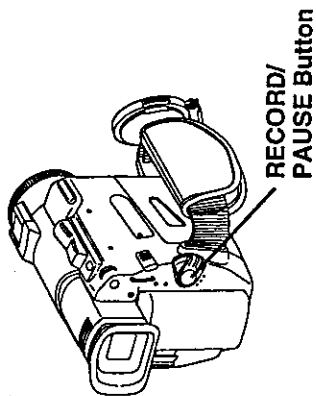


erside View



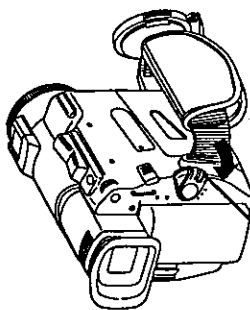
Getting Started

- 10 Press **RECORD/PAUSE** Button to start recording.
Press **RECORD/PAUSE** Button again to pause recording.

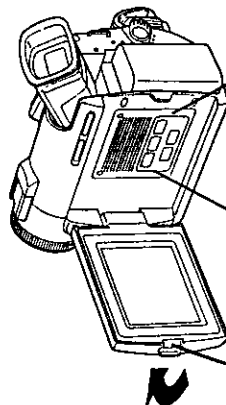


To Watch Playback in the LCD (Liquid Crystal Display)

- 1 Set the **POWER** switch to **VCR**.



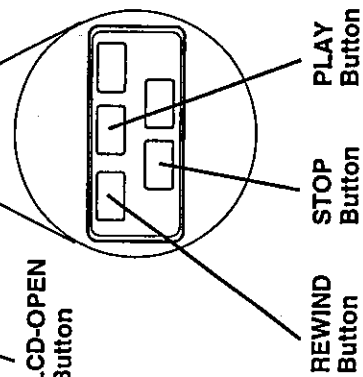
- 2 Press the **LCD-OPEN** Button to unlock the LCD monitor and swing open.

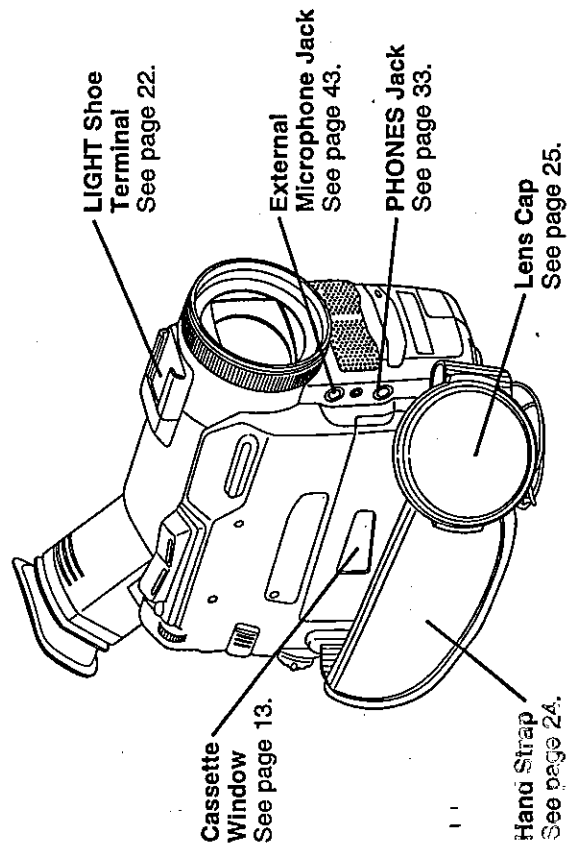
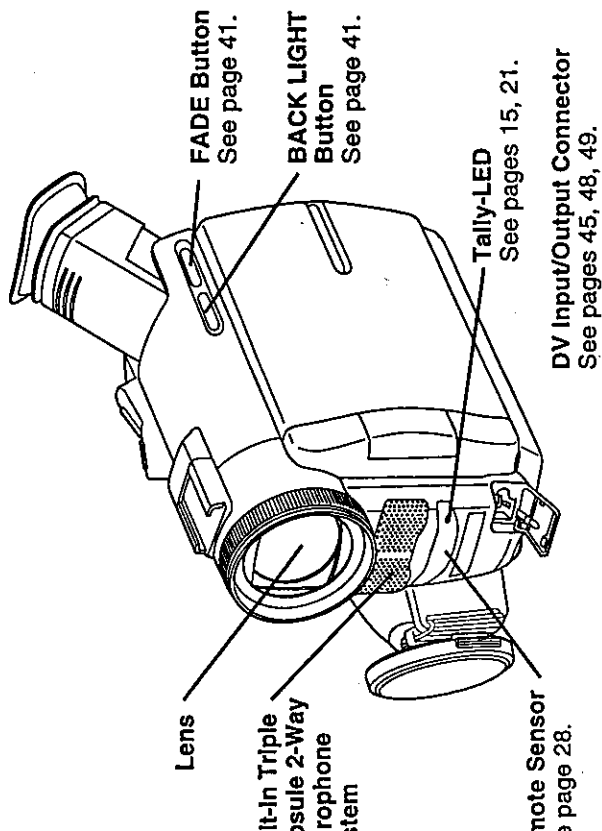


- 3 Press **REW** to rewind the tape.

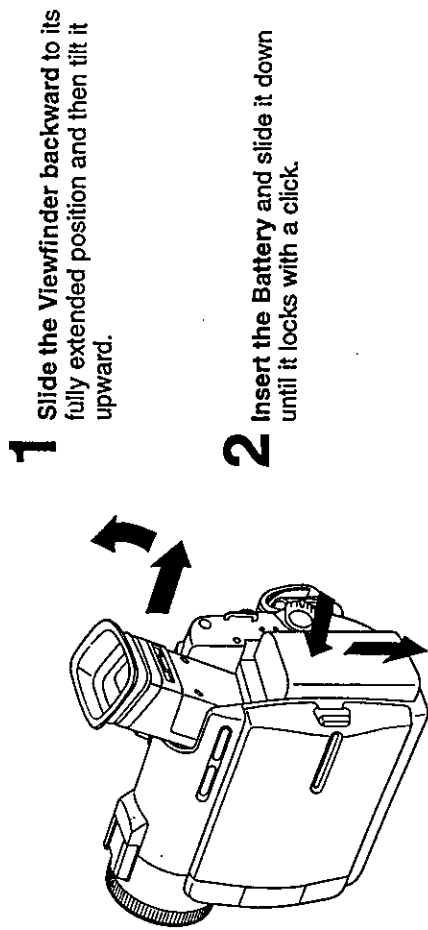
- 4 Press **PLAY** to start playback.

- 5 Press **STOP** to stop playback.

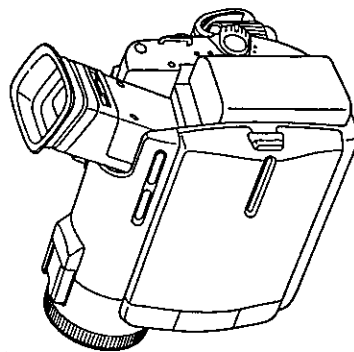




Insert/Remove the Battery Pack



To remove the Battery:
Slide the Battery upward while pressing the PUSH button.



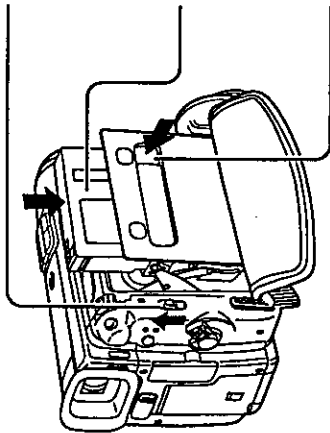
If you have a problem with your Palmcorder, it may be something you can correct yourself. A list below for symptoms and corrections.

Symptom	Correction
Image is in the EVF or LCD Monitor ...	- Make sure the Power Source is connected. (pp. 8, 12) - Make sure the POWER switch is set to ON. (pp. 25, 30) - Check the Dew Indicator. (p. 21) - Make sure the battery is fully charged. (p. 10) - Make sure all necessary cables are connected correctly and firmly. (p. 12) - Make sure the Lens Cap is removed. (p. 25)
Cassette can't be inserted ...	- Make sure the Power Source is connected. (pp. 8, 12) - Insert the cassette with the window side facing out. (p. 13)
Cassette can't be removed ...	Make sure the Power Source is connected. (pp. 8, 12)
Operation starts when operation buttons pressed ...	Check the Dew Indicator. (p. 21)
Image cannot be done ...	- Make sure the record tab is closed. (p. 13) - Check the Battery Indicator. (p. 18) - Check the Dew Indicator. (p. 21)
Focus does not operate ...	- Make sure the FOCUS is set to AUTO. (p. 40) - Make sure the unit is ON with CAMERA mode. (p. 25)
Sound from microphone can't be monitored	Make sure the unit is set to REC or Record/Pause mode.
Sound can't be heard ...	Make sure the Audio on the VCR MENU is set to ST1. (p. 17)

Cassette Insertion

Connect the Palmcorder to a power source.

- Slide the TAPE EJECT switch to open the Cassette Compartment.
 - The Cassette Holder slides out.
- Insert a cassette (supplied) with its window side facing up.
- Press on the PUSH CLOSE mark to close the upper Cassette Compartment Cover.
 - The Cassette Holder with the cassette slides back inside.
- Close the lower Cassette Compartment Cover.



Record Speed/Playback Time

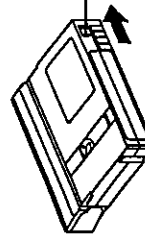
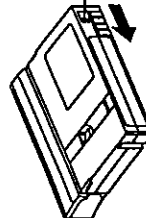
Use only those tapes having the **IX** logo indicating the 6.35mm digital standard.

Cassette type	Record Speed/Playback time	
	SP	LP
AY-DVM30EA	30 minutes	45 minutes
AY-DVM60EA	60 minutes	90 minutes
AY-DVM80EA	80 minutes	120 minutes

Erase Protection

Cassettes have a sliding record tab to ensure recordings are not accidentally erased.

- To prevent accidental erasure
Slide the tab to the left (open).
- To record again
Slide the tab to the right (close).



- Source:**
Digital Video Camera: 7.2V DC (Battery)
8.4V DC (AC Adaptor)
AC Adaptor: 110/120/220/240V AC, 50/60 Hz
Battery: Lithium-Ion Type DC 7.2V
- Consumption:**
Digital Video Camera: 7.2V DC (Battery) 7.5W
8.4V DC (AC Adaptor) 7.5W
AC Adaptor: 19W
2W (when not in use.)
- Signal:**
EIA Standard (525 lines, 60 fields) NTSC color signal
2 rotary heads, helical scanning system
12bit (32kHz) 4 tracks
16bit (48kHz) 2 tracks
- System and Device:**
One integral color filter Charge Coupled Device (CCD) (RGB color filter)
18:1 zoom lens, F1:1.6 with auto iris control
Focal length: 3.9mm - 70.2mm
Power zoom function
Lens filter diameter: 43mm
0.45 inch (11.4mm) Liquid Crystal Color Electronic Viewfinder
3 inch (76.2mm) Liquid Crystal Display
7 lx (F1:1.4) 0.7 footcandles
32°F-104°F (0°C-40°C)
10%-75%
- Weight:**
Digital Video Camera: 1.46 lbs.
0.66 kg
AC Adaptor: 0.39 lbs.
0.18 kg
- Dimensions:**
Digital Video Camera:
3-1/16 (W) x 3-3/4 (H) x 5-3/16 (D) inch
73.5 (W) x 107.5 (H) x 145 (D) mm
AC Adaptor: 3-7/8 (W) x 1-5/8 (H) x 2-7/8 (D) inch
97 (W) x 43 (H) x 73 (D) mm

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

The Palmcorder features two menu displays: one for camera mode (recording) and the other for VCR mode (Playback).

Displaying the MENU

Before you begin...

- Connect the Palmcorder to a power source.
- Set the POWER switch to CAMERA.

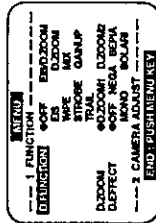
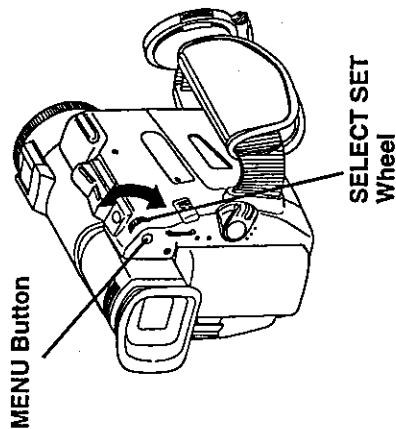
1 Press the MENU button to display the CAMERA menu.

2 Set the POWER switch to VCR to change to the VCR menu if desired.

Setting the MENU Items

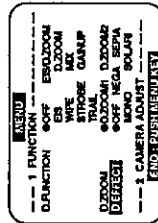
1 Rotate the SELECT SET WHEEL to select a menu item.

- Character color will change from white to green indicating your selection.



2 Press down on the SELECT SET WHEEL to set your selection.

- The "●" mark will indicate your selection.



3 Press MENU to exit from the display.

Note:

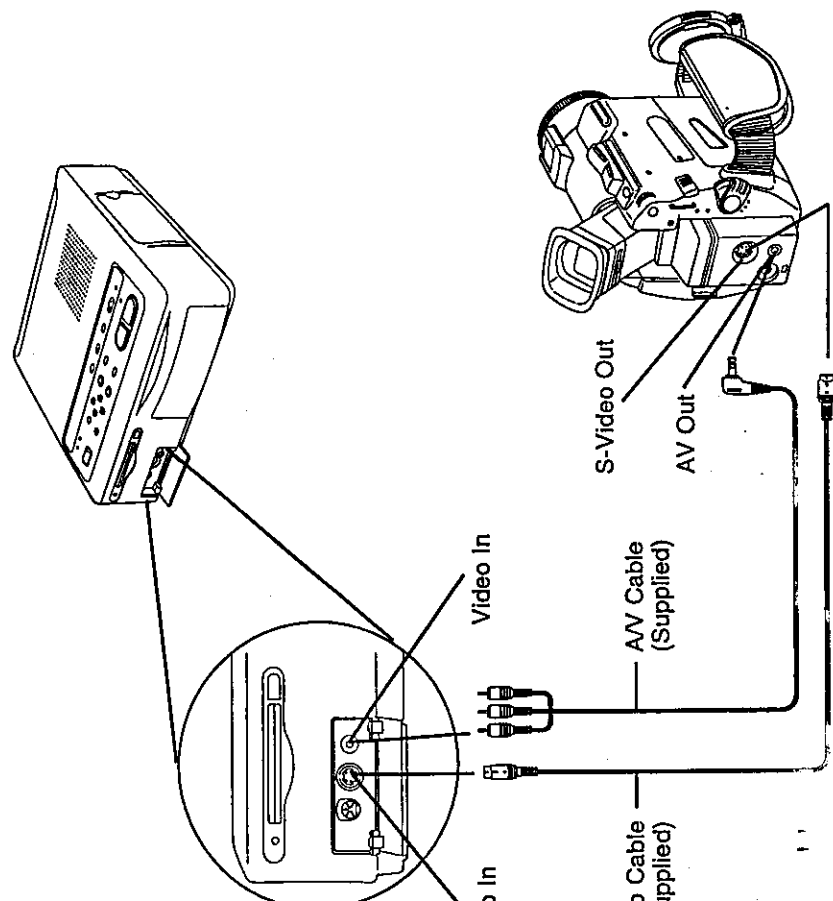
- The EVF or LCD Monitor can only display seven MENU items at a time. Rotate the SELECT SET WHEEL to display additional lines.

Using the Digital Photo Printer

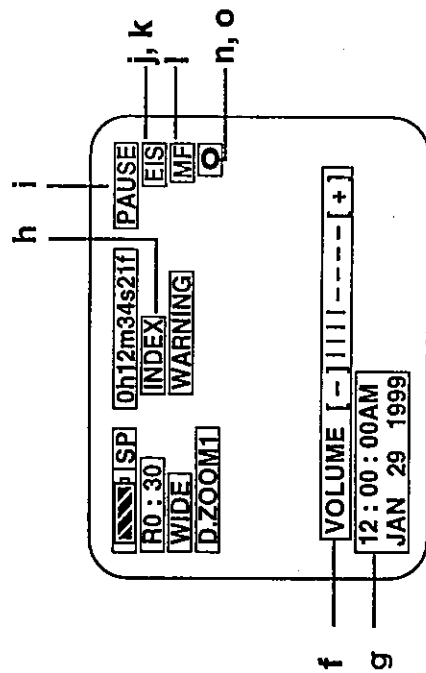
can be selected for print out on a digital photo printer (sold separately).

Getting you begin...

Connect both the Palmcorder and Digital Photo Printer to their power sources. Connect the Palmcorder and Digital Photo Printer using a AV cable (supplied) or S-Video (not supplied). If different video sources are connected simultaneously to the S-VIDEO IN Socket and DEO IN Socket, the video for S-VIDEO IN Socket takes precedence. When to sound from the Palmcorder directly to the television AUDIO IN Socket. Refer to the printer's operating instructions for detail on printing.

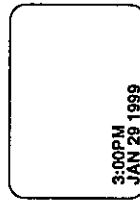


Getting Started



f Volume Display (see page 30)
The volume bar appears when the volume of the built-in speaker is adjusted.

g Date and Time Indication (see page 14)
As shown below, the date and time indication changes each time the DATE/TIME is selected from the Palmcorder's MENU (see page 16) or the DATE/TIME button is pressed on the remote.



h INDEX (see page 32)
This display appears when an index signal is being recorded.

Tape Mode Indications

- REC Recording.
- PAUSE Paused during recording.
- PLAY Playback.
- R PLAY Repeat Playback.
- FF Fast forward.
- REW Rewind.
- SEARCH Book Mark Search.
- Mirror feature recording.
- Paused during Mirror feature recording.

j Digital EIS Indications (see page 35)

k Zoom Magnification Level (see page 36)

l Manual Focus Indication (see page 40)

m PROGRAM-AE Indication (see page 38)

n Backlight indication (see page 41)

Copying from Digital Equipment (dubbing)

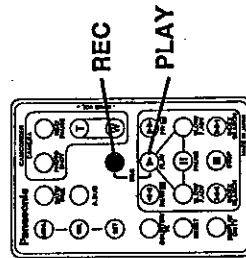
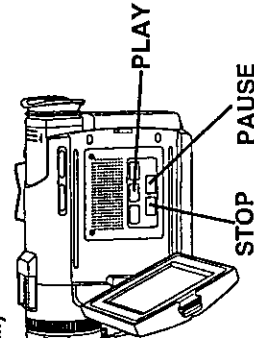
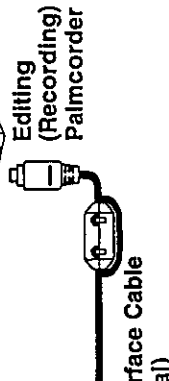
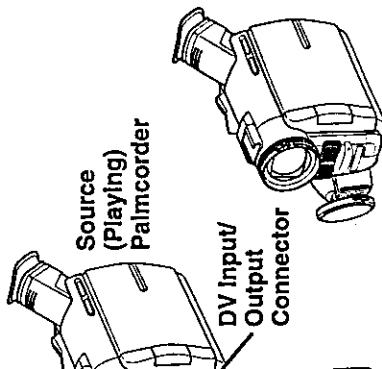
...ity digital-to-digital copying can be accomplished if both Palmcoders incorporate IEEE1394 interface (DV cable is not supplied).

you begin...

...at both Palmcoders to their power

...at the two digital Palmcoders using supplied DV interface cable.

...th Palmcoders ON.



- 1 Insert a pre-recorded tape into the source (playing) Palmcorder, turn on, and set the **POWER Switch** to **VCR**.
- 2 Insert a blank tape with the record tab in place into the target (recorder) Palmcorder turn on, and set the **POWER Switch** to **VCR**.
- 3 Press **PLAY** on the source Palmcorder. When the tape reaches the point you want to start dubbing, press **PAUSE**.
- 4 On the remote control, hold down the **REC** button and press **PLAY**. Press **PAUSE** to pause the tape at the starting point of the dub.
- 5 Simultaneously, press the **PAUSE** buttons on both units to begin the copying.
- 6 Simultaneously, press the **STOP** buttons on both units to end the copying.

Notes:

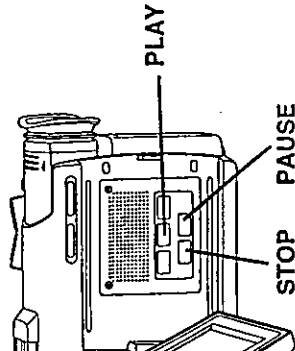
- When two Palmcoders are used for dubbing, it is recommended that the remote control **VCR1** or **VCR2** setting be used to avoid mis-operation.
- When two Palmcoders are connected using the supplied DV interface cable, a Video Editing Controller cannot be used.

CAUTION:

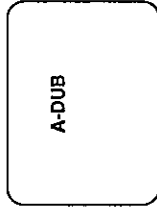
Unauthorized exchanging and/or copying of copyrighted recordings may be copyright infringement.

Getting Started

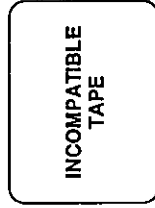
- | | |
|---------------------------------|--|
| CANNOT REC COPY GUARD | — When an AUDIO DUB is attempted on a pre-recorded LP tape. |
| CHECK DV-INPUT | — When the DV connection is not securely connected. Check the connections. |
| --WARNING-- DEW DETECTED | — If excessive moisture condenses in the unit, "WARNING" will flash, "DEW DETECTED" will appear, and the Palmcorder will automatically turn OFF in 15 seconds. In this case, wait until the indicator no longer flashes when your Palmcorder is turned on again. |
| --WARNING-- LOW BATTERY | — When a battery recharge is necessary, "WARNING" will flash, "LOW BATTERY" will appear, and the Palmcorder will automatically turn OFF in 15 seconds. (see page 18). |
| CLOCK BATTERY | — When the built-in lithium clock battery is discharged. To re-charge the lithium clock battery, connect the AC Adaptor to the Palmcorder and turn ON. Recharging takes approx. 4 hours. Reset the clock after charging. |
| CANNOT REC COPY GUARD | — When you attempt to copy a protected copy-guarded tape. |
| | — When the LCD monitor is rotated 180° so that it faces the same direction as the lens, the "!" mark indicates that a warning message exists. To view the warning, return the LCD monitor to the original position. |



- 5** Press **PLAY** on the playing Palm-corder.
- 6** Press **PAUSE** to start Audio Dubbing.



Only NTSC (National Television Standards Committee) recorded tapes can be audio dubbed. The following screen appears if the tape was not recorded in NTSC format.



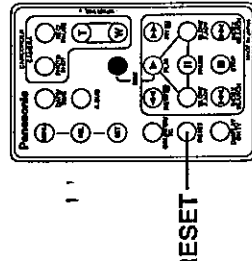
- 7** Press **STOP** to stop Audio Dubbing.

recorded in LP mode, you can not use the A-DUB feature. Palmcorders are used for dubbing, and the speed on both units must be the same.

Palmcorders are used for dubbing, and the speed on both units must be the same. Patent Nos. 4,603,457, 4,577,216, and 4,819,098, issued for limited viewing uses only.

Memory-Stop Editing

When set an automatic Edit stopping

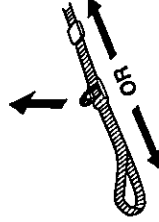


Before step 4, locate the point at which you want the dubbing to stop. Press **MENU** and set **COUNTER** to **MEMORY** (page 17). Then, press **RESET** on the remote control to reset the Counter Memory to **M 0:00:00**. Now, rewind to the editing start point, and continue with steps 3-6. The tape will now stop automatically at "M 0:00:00".

Attaching the Shoulder Strap

- 1** Thread one of the strap ends through the strap attachment slot on the Palmcorder.
• You may need to jiggle the strap a little to get it to go through.
- 2** Fold the strap end over and slide the clasp over and up to the Palmcorder attachment slot.
- 3** Pull a large loop of the strap loose from the Buckle and thread the strap end through the Buckle as shown.
• Make sure the strap is not twisted.
- 4** Attach the other strap end to the strap attachment ring located on the hand strap following steps 1-3.

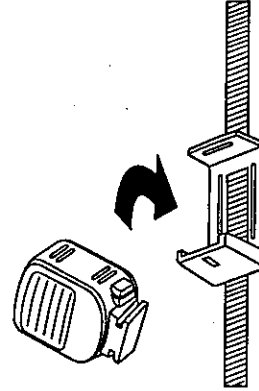
Adjust the Length

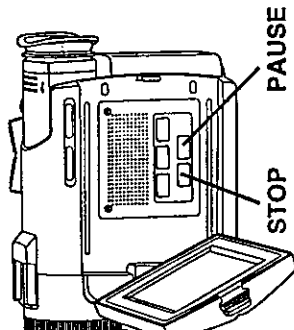


- 1** Loosen the strap from the Buckle and create a loop.
- 2** Pull the strap firmly through the Buckle to shorten or lengthen the strap.

Attach the Remote Control Holder

- 1** Attach the Remote Holder to shoulder strap as shown.
- 2** Attach the Remote Control when not in use.



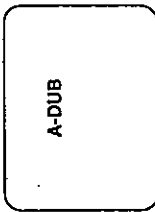


STOP

PAUSE

5 Press PAUSE to start Audio Dubbing.

Connect Palmcorder to TV in order to monitor the sound. (see page 33)



A-DUB

Only NTSC (National Television Standards Committee) recorded tapes can be audio dubbed. The following screen appears if the tape was not recorded in NTSC format.



INCOMPATIBLE
TAPE

6 Press STOP to stop Audio Dubbing.

When to the desired audio sound, set the DIO setting of the VCR mode MENU (page 17) as follows:

(The following selections are available 12bit AUDIO dubbed recording only)

Set this position to listen to the original sound.

Set this position to listen to the audio dubbed sound.

Set this position to listen to both the original sound and the audio dubbed sound.

Audio dubbed sound completely erases original 16bit recorded sound.

Select 12bit AUDIO recording and the sound with the AUDIO-MIX setting will be stereo regardless of AUDIO-OUT setting.

Recorded in LP mode, you can not use the A-DUB feature.

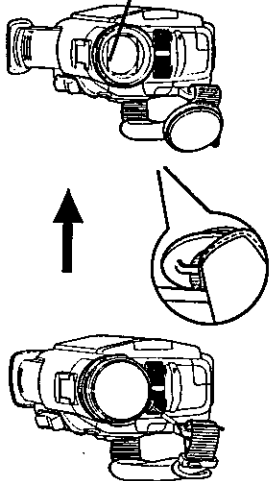
Refer to page 46 for Memory-Stop Editing.

If the microphone used for dubbing gets too near the speaker of your TV, a howling noise (feedback) may occur.

If the tape position lies or starts in a blank section, you can not use the A-DUB feature.

Simple Recording

Remove the lens cap and clip it to the hook.



Tally Lamp

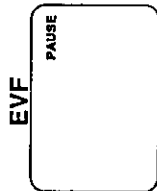
Flashes during Remote Control operation (see page 28).

Before you begin...

- Connect the Palmcorder to a power source.
- Insert a cassette with record tab closed (see page 11).

1 Set POWER switch to CAMERA.

- The CAMERA lamp lights red.



Record/Pause mode.

2 With the Viewfinder Eye Cup up to your eye, adjust the Vision Adjustment Control to your eyesight.

3 Press RECORD/PAUSE Button to start recording.

The Tally Lamp will be on.

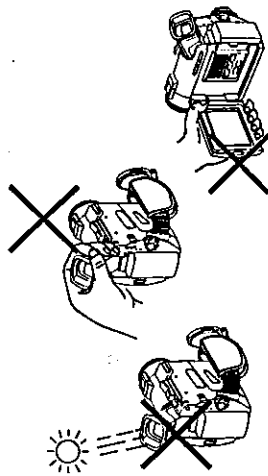
To turn the Tally Lamp off, see TALLY-LED on page 16.

Press RECORD/PAUSE Button again to pause recording.

- To reduce microphone wind noise, set the WIND-CUT to ON (see WIND-CUT on page 16).

WARNING:

- Do not leave the Palmcorder with the EVF aimed directly at the sun as this may cause damage to the internal parts of the EVF.
- Do not lift or carry the Palmcorder by the EVF or by the LCD Monitor.



- When Palmcorder is aimed at excessively bright objects, or bright lights, a vertical bar may appear in the picture. This is a normal characteristic of the CCD pick-up device. Try to avoid this whenever possible.

To conserve power

After 5 minutes, the Record/Pause mode will automatically change to Standby mode. To resume recording, set POWER to OFF and then ON again.

High Speed Shutter

Record high speed motion (e.g. a tennis stroke) for improved STILL or SLOW MOTION playback, when watching the tape on this Camcorder or a VHS 3 or 4 head VCR.

Before you begin...

- Connect the Camcorder to a power source.
- Set the POWER switch to CAMERA.
- Insert a cassette with record tab (see page 12).

Auto Shutter

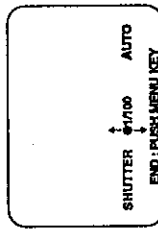
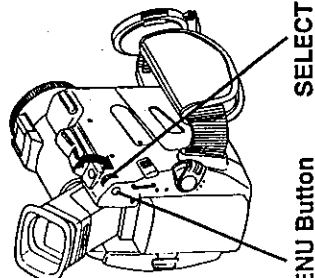
AUTO mode (no indication in the EVF), the Camcorder will automatically adjust the shutter speed (1/60).

AUTO mode is automatically selected whenever the POWER switch is set to CAMERA.

Manual Selection

High Speed Shutter indicator flashes when the light level is inadequate. High Speed Shutter light should be provided to achieve better picture quality and color.

- 1 Press MENU to display the camera mode menu in the EVF or the LCD monitor.
- 2 Rotate the SELECT SET WHEEL to select SHUTTER, and then press down on the SELECT SET WHEEL to SET.
- 3 Rotate the SELECT SET WHEEL to obtain one of the following shutter speed.

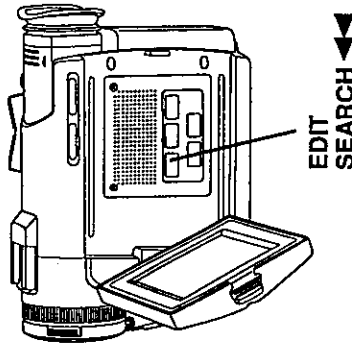


1/60	←	1/8000
↓		↑
1/100		1/4000
↓		↑
1/120		1/3000
↓		↑
1/180		1/2000
↓		↑
1/250		1/1500
↓		↑
1/350		1/1000
↓		↑
1/500	→	1/750

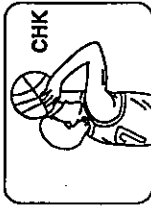
For proper color reproduction, it is recommended that you use this feature outdoors. For High Speed Shutter recording, additional tungsten light should be provided. Fluorescent light will degrade the picture quality. This feature requires ample light. More light is required for the fastest shutter speeds. Auto Focus system may not operate properly in insufficient light when using the High Speed Shutter.

Recording Check

To play back the final few seconds of the last recorded scene in the Recording Pause Mode.

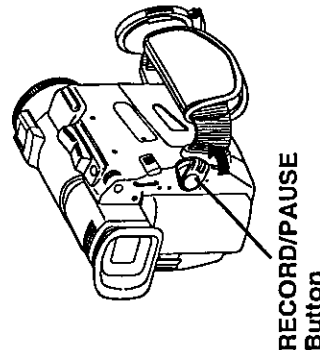


- Press the EDIT SEARCH Button ◀◀ briefly in the recording Pause Mode. The [CHK] indication appears. After checking, the Movie Camera returns to the Recording Pause Mode.
- For Recording Check, the Movie Camera must be in the same mode (SP or LP) as used for recording, otherwise the playback picture is distorted.



Edit Search

You can visually search for scenes during CAMERA mode to maintain proper continuity when taping.



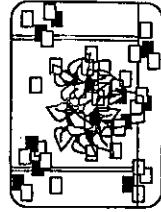
- 1 Set POWER switch to CAMERA.
- 2 In RECORD/PAUSE mode, hold down EDIT SEARCH ▶▶ to perform a forward visual search and EDIT SEARCH ◀◀ to perform a reverse visual search. Releasing the button stops the search.
- 3 Press RECORD/PAUSE to continue recording.

Record Review:

Press EDIT SEARCH ◀◀ once while in Record/Pause mode to review the last few seconds of your recording.

Note:

- During Edit Search, the picture will become mosaic and the sound will be muted.
- Make sure the SP/LP tape speed setting is the same as the recording to eliminate distortion during edit search.



Auto Focus

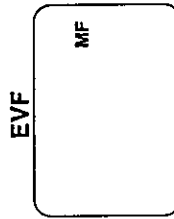
The Palmcorder automatically adjusts the focus over the entire zoom range.

Manual Focus

Manual Focus (MF) when recording ...

- a bright, flat subject such as a white wall.
- in low light situations.
- a scene with fast motions, like a golf swing.
- Re-focusing may be required when your Palmcorder is aimed at a new scene.

- 1 Press **MANUAL FOCUS** so that "MF" (Manual Focus) appears in the EVF.

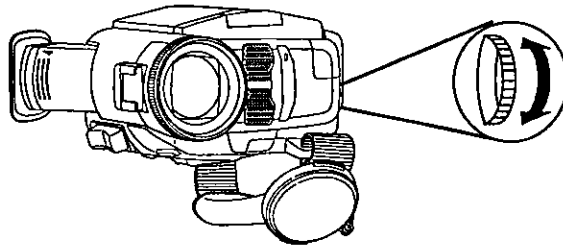


- 2 Press and hold the **POWER ZOOM** switch to the "T" side (Full Telephoto) until the lens is zoomed in all the way (subject at maximum size).

- 3 Turn the **MANUAL FOCUS** control until the picture is in focus.
 - It may be necessary to back away from the subject to focus the image properly.

- 4 Press the **POWER ZOOM** switch to "W" or "T" as desired.

- The subject will remain in focus over the entire zooming range.
- It may be necessary to back away from the subject to focus the image properly.



Macro Focus (for close-ups)

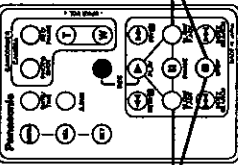
Press the "W" side of the **POWER ZOOM** switch to the wide angle position.

Focus will function with the subject as close as 1 inch (25mm) in front of the lens.

Remote Controlling Two Palmcorders

You can control any two PV-DV910's with one Remote control. In order for the remote to distinguish between the two units, it is necessary to set one of the Palmcorders to VCR 2. On the remote, press VCR 1 or VCR 2 to control the desired Palmcorder.

- 1 Display the menu and select **REMOTE VCR 2** on one Palmcorder (see pages 16 and 17). Leave the other Palmcorder set to VCR 1.
- 2 Set the **Remote Control** to **VCR 1** or **VCR 2** to correspond with the Palmcorder you wish to control. (See illustration at left.)



For VCR 2:
Press these buttons at same time.

For VCR 1:
Press these buttons at same time.

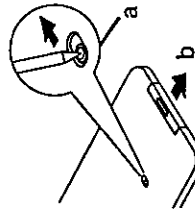


Note:

- When the Palmcorder and remote are not set to the same mode (VCR1 or VCR2).
- "CHECK REMOTE MODE" will also appear for 5 seconds when the Palmcorder is first turned on.

- After replacing the Remote Control Battery, the remote will default to VCR 1.

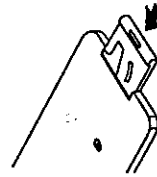
Replace the Battery



- 1 Insert a slender, pointed object, such as the tip of a ball-point pen into the slot so that it fits into the hole (as shown a). Then, while sliding to the right, pull the battery holder out with your fingernail.



- 2 Insert the battery into the Battery Tray with the ⊖ mark facing up.
Do not reverse the polarity.

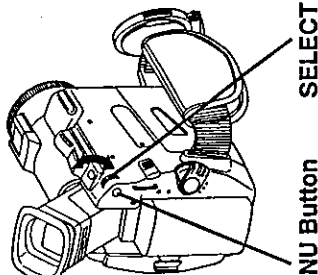


- 3 Replace the Battery Tray.

Replace battery with Panasonic PART NO. VSBW0004 (CR2025) only. Use of another battery may present a risk of fire or explosion.
Caution-battery may explode if mistreated.
Dispose of used battery promptly. Keep away from children. Do not recharge, disassemble or dispose of in fire.

Program AE

Program AE (Aperture Priority) Exposure feature can be used to make quality recordings in a variety of scene conditions.



- 1 Press **MENU** to display the menu screen and rotate the **SELECT SET** Wheel to select one of the five modes shown below.
- 2 Press **MENU** to display the menu screen and rotate the **SELECT SET** Wheel to select no display to cancel this feature.

Sports mode
For recording fast actions scenes.

Portrait mode
For recording only subjects in the foreground, while ignoring subjects in the background.

Low-light mode
For recording in extreme low light conditions.

Spot-light mode
Recording in situations where subjects are under a spotlight(s).

Surf & Snow mode
For recording in locations with a high degree of "Dazzle", such as snow slopes and the seashore.

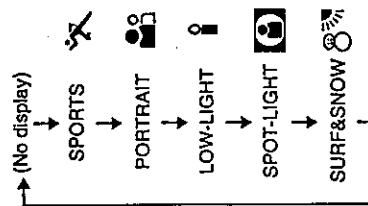
SPORTS mode
• The image may flicker if this mode is used indoors.

LOW-LIGHT mode
• Scenes recorded in extremely low light levels may not come out properly.

SPOT-LIGHT mode
• If the recorded subject is extremely bright, the picture may appear whitish.

SURF&SNOW mode
• If the recorded subject is extremely bright, the picture may appear whitish.

• If you selected **GAIN UP** in the Digital function camera menu, **SPORTS** mode and **PORTRAIT** mode can not be selected.



recorded images will not be so blurred when they are viewed later using slow or picture playback.

When playing back a sports mode recording, the movement may appear slightly

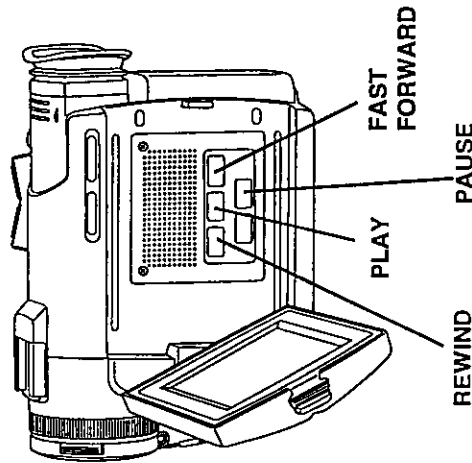
Do not use this mode when recording fluorescent, mercury or sodium lighting. These types of lights will affect color and brightness of the images. A critical band of light might appear when recording objects that are brightly illuminated or which are highly reflective. A amount of light is insufficient, the **SPORTS** "A" indicator will flash in the or the LCD monitor.

image may flicker if this mode is used outdoors.

Playback Your Recordings

Special Effect Features During Playback

(Sound is muted during all special effects)



Rapid Visual Search

During playback, hold down **FAST FORWARD/SEARCH** or **REWIND/SEARCH** buttons.

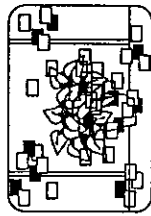
The search will continue for as long as the button is held down.

OR

Press **FAST FORWARD/SEARCH** or **REWIND/SEARCH** buttons once for a continuous rapid visual search. Press **PLAY** to release.

Note:

- When executing a rapid visual search, the picture may become bluish for an instant or mosaic. This is normal during this mode.



STILL Picture

Press **PAUSE** during playback. Press **PLAY** or **PAUSE** to release.

Note:

- To protect the tape and video heads, your Palmcorder's operating modes will revert as follows:
STILL → **STANDBY** after 5 minutes.
STANDBY → **POWER OFF** after 5 minutes when using a Battery Pack.

Slow Motion Playback

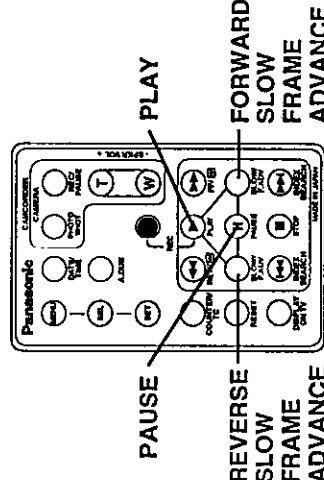
Forward Slow = Press **▶ SLOW/F.ADV** during play.

Reverse Slow = Press **◀ SLOW/F.ADV** during play.

Press **PLAY** to release. (During reverse slow motion playback, time code indication may not change regularly.)

Note:

- Palmcorder will automatically **STOP** when in slow motion for more than 10 minutes.
- During slow motion playback, picture may move up and down. This is normal.
- When you start or stop slow motion playback, the picture may become bluish for an instant.



Fast Forward/Rewind Check

Monitor normal picture playback during fast forward or rewind.

• Hold down the **FAST FORWARD/SEARCH** during fast forward.

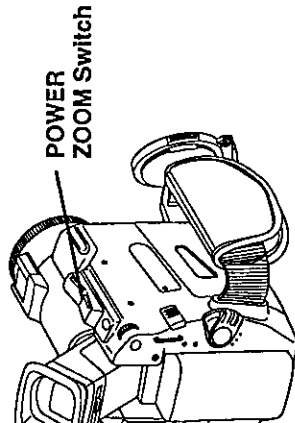
• Hold down the **REWIND/SEARCH** during rewind.

• The picture will appear for as long as the button is held down.

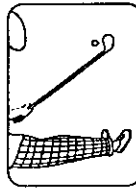
Zoom

can gradually zoom in for close ups or zoom out for wide angle shots.

zooming speed ranges from a slow 14 seconds to a fast 2 seconds according to amount of pressure applied to the zoom



Zoom In ("T")



Zoom Out ("W")

Zoom slowly by lightly moving the power zoom switch toward the "T" (Telephoto) or the "W" (Wide Angle).
Zoom quickly by applying more pressure.

Digital Zoom

To enable this feature:

Display the CAMERA mode menu (see page 14). Rotate the SELECT SET WHEEL to select D. ZOOM. Press down on the SELECT SET WHEEL to select 36x (D.ZOOM1) or 300x (D.ZOOM2).

D.ZOOM1

- The normal optical zoom functions from 1x to 18x.
- D.ZOOM1 functions from 18x to 36x.
- D.ZOOM2 functions from 18x to 300x.
- The magnification level is displayed in the EVF or the LCD monitor.
- Because the image is enlarged digitally, the picture may become distorted when higher magnification levels are used.
- When the level falls below 18x, the normal zooming function will resume.
- Focus length becomes 4 feet (1.2m) if the lens is in full telephoto.

Attach the Jack Box for TV Viewing

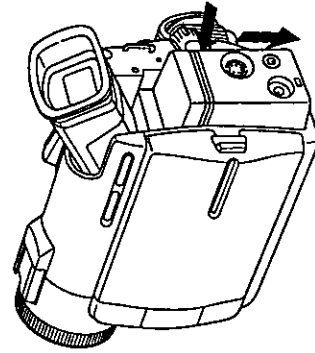
Your Palmcorder may be connected to a TV to play back tapes or to view what you are recording by connecting to the Jack Box.

Before you begin...

- Connect the Palmcorder to your TV as illustrated at next page.

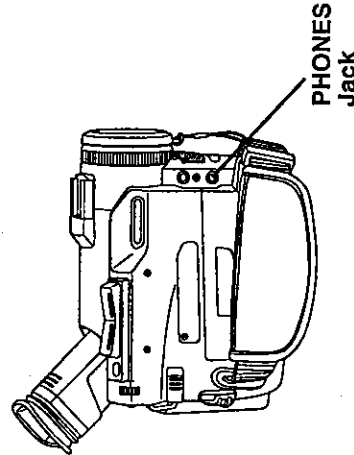
IMPORTANT:

Turn off the Palmcorder before power connecting.



1 Slide the Viewfinder backward to its fully extended position and then tilt it upward.

2 Insert the Jack box and slide it down until it locks with a click.



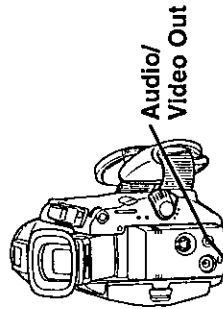
Note:

- Use an AC Adaptor PV-DAC9 (included) so that you do not have to worry about depleting the battery.
- Connect earphones (not supplied) to the PHONES jack.

Playback Your Recordings

Connections

V with AUDIO/VIDEO IN Jacks.

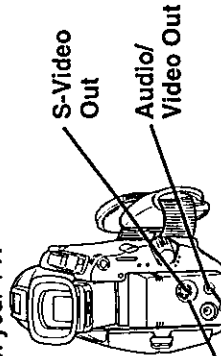


AV Cable
(Supplied)

To Audio In
To Video In

V with S-VIDEO IN Jacks.

Best Chrominance and Luminance it is
suggested to use the S-Video connection if
able on your TV.



AV Cable
(Supplied)

To Audio In

S-Video Cable
(Not supplied)

To S-Video In

1 Set the **POWER** switch to **CAMERA**.
You can now view what the Palmcorder
is recording on your TV.
Or, to playback a tape, set the
POWER switch to **VCR**.
You can now playback a recorded tape
on your TV.

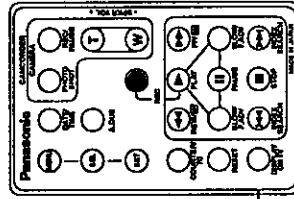
2 Turn your TV **ON** and set it to **LINE**
INPUT or **S-VIDEO**.
Check your TV operating instructions for
further information.

3 Start playback or begin a recording.

Note:

- Make sure the Palmcorder and TV are turned off while connecting.

You can display the various EVF indications
on your TV by pressing **DISPLAY** on remote
control. Press again to remove the
indications.



DISPLAY

CATV System Installer

This reminder is provided to call the
CATV system installer's attention to
Article 820-40 of the NEC in USA (and to
the Canadian Electrical code in Canada)
that provides guidelines for proper
grounding and, in particular, specifies
that the cable ground shall be connected
to the grounding system of the building,
as close to the point of cable entry as
practical.

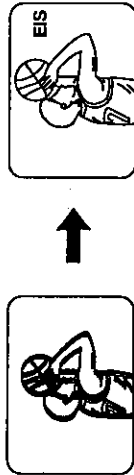
Special Features

Before you begin...

- Set the **POWER** switch to **CAMERA**.

Digital Electronic Image Stabilization System (D.E.I.S.)

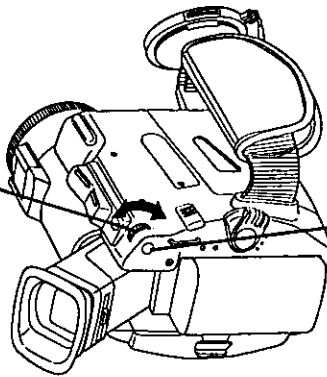
This feature helps stabilize the picture in situations
such as walking or shooting from a moving vehicle.



NORMAL

EIS ON

SELECT SET
WHEEL



MENU Button

- 1** Press **MENU** button to display the menu screen.
- 2** Rotate and press the **SELECT SET WHEEL** to select **EIS** and set **ON** (see page 14).
 - Picture flicker may be observed when taping under fluorescent lighting conditions.
 - Turn **D.E.I.S.** **OFF** during recording when using a tripod.
- 3** Set **EIS** **OFF** to cancel.
 - Be sure that the **D.E.I.S.** is turned off when not needed.

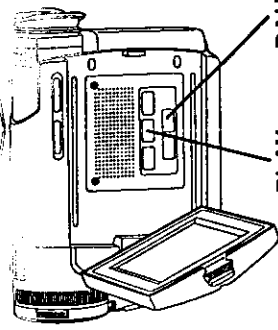
D.E.I.S. may not function when...

- Palmcorder movement is too extreme.
- Recording a subject with distinct horizontal or vertical stripes.
- Recording in low light situations.
- Recording a subject under a great amount of fluorescent light.
- Recording a scene with very fast motions.

Special Features

Playback Your Recordings

Special Features



PLAY
PAUSE

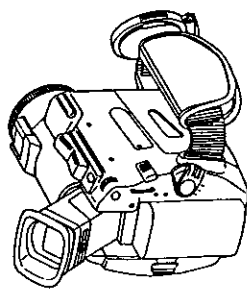
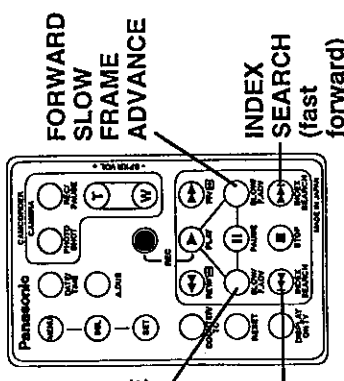


PHOTO SHOT
Button

MENU Button
SELECT SET Wheel



FORWARD
SLOW
FRAME
ADVANCE

INDEX
SEARCH
(fast
forward)

PHOTO
SHOT

Note:
• If you hold down SLOW/F.ADV., you can see a continuous series of still images at a slower speed than normal slow mode.
• During frame by frame advance, a few frames may move automatically, and the picture may become bluish for an instant.

Jog Frame by Frame Search
(Palmcorder only)
During Still mode, rotate the SELECT SET WHEEL to advance or reverse the picture one frame at a time.

Index Forward/Reverse Search
(Remote Control only)
Search for a particular scene by using the electronic index marks placed at the beginning of each recording. (See page 15 for details on the two different kinds of index marks.)

1 Place Palmcorder in the VCR STOP mode.
2 Press the INDEX SEARCH fast forward or rewind buttons the number of recordings (indexes) forward or back to want to view. The Palmcorder will advance or rewind to the desired recording and automatically PLAY.

• The number of times you press the button is displayed in the EVF and the LCD monitor if you set INDEX on the VCR menu to SCENE (see page 15).
(Ex., if you press the button three times, "S3" will appear.)
• If the interval between scenes is less than 1 minute, index search may not operate properly.

Top Scan
If you hold down the INDEX SEARCH button more than 2 seconds, the Palmcorder will scan for scenes (or photo shots) and playback the first few seconds of each.
To cancel this function, press PLAY or STOP.

Special Features

Note:
• The picture quality will deteriorate slightly.
• The tape remaining indicator will not appear while PHOTO SHOT feature is used.
• When the AUDIO-REC mode is changed, the shutter sound effect may not be able to be heard even when SHUTTER is set to on.

1 Press PHOTO SHOT Button in Record/ Pause mode.
"PHOTO" will appear in the EVF or the LCD monitor.
• If SHUTTER on the menu screen is set to ON, a sound effect similar to the shutter of a film camera will be heard when the PHOTO SHOT button is pressed.

2 Set the POWER switch to VCR.
• Lamp should be green.

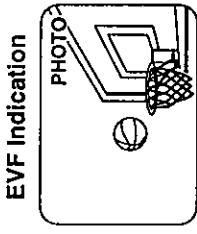
3 Press MENU to display the VCR mode menu screen in the EVF or the LCD monitor.

4 Rotate the SELECT SET WHEEL to select INDEX and press down to select PHOTO.

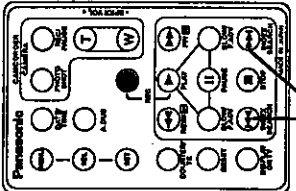
5 Press one of the INDEX SEARCH buttons on the remote control to advance or rewind the tape to playback a photo shot scene.
• To view the next photo shot, the INDEX SEARCH button must be pressed again.

Notes:

- The picture quality will deteriorate slightly.
- The tape remaining indicator will not appear while PHOTO SHOT feature is used.
- When the AUDIO-REC mode is changed, the shutter sound effect may not be able to be heard even when SHUTTER is set to on.



EVF Indication
PHOTO

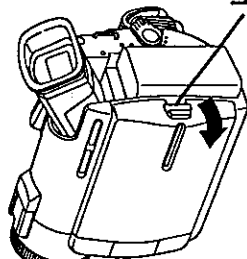


INDEX SEARCH
Button

Playback your Recordings

Back using the LCD Monitor

also use the LCD monitor to
your recording.



LCD-OPEN
Button

Before you begin...

- Connect the Palmcorder to a power source.
- Insert a recorded cassette.
- Set the Power switch to VCR.

1 Press the LCD-OPEN button to unlock the LCD monitor and swing open.

2 Press REWIND/SEARCH to rewind the tape.

3 Press PLAY to start playback.

To adjust the volume:

Hold down the VOLUME wheel until the volume setting screen appears. Then rotate the wheel to adjust the volume of the built-in speaker.

- Adjust the picture on the LCD monitor if needed. (see page 22)

4 Press STOP to stop playback.

- When the tape reaches its beginning during rewind or rewind search, it will stop automatically.
- If you press PLAY for more than 5 seconds, the Palmcorder will start the Repeat Playback mode when the tape reaches its end. The letter "R" will appear in the EVF.

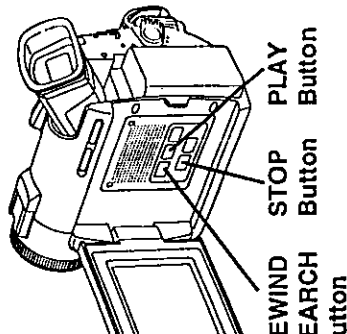
To exit the Repeat mode, turn the Palmcorder OFF.



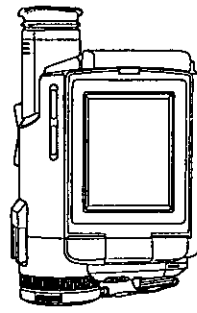
You can place the Palmcorder on a table, etc. for viewing. Rotate the LCD Monitor 180° and swing it up against the Palmcorder body as shown.

Note:

- When a tape recorded in LP mode on another digital video camera is played back on this unit, the picture may appear mosaic.
- Using the LCD monitor reduces battery operating time.



REWIND
SEARCH
Button
STOP
Button
PLAY
Button

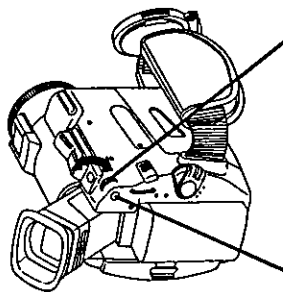


Special Features

Digital Functions

Use the following features to add interest and professionalism to your recordings. Select from nine special effects.

- 1** In Camera mode, press MENU to display the menu screen.
- 2** Rotate the SELECT SET WHEEL to select D.FUNCTION. Then, press down on the SELECT SET WHEEL repeatedly to select one of the Digital Functions listed below.
- 3** To cancel the Digital Function, press down on the SELECT SET WHEEL to select OFF.



MENU Button SELECT SET Wheel

Note:

- The EIS and Digital Zoom features must be turned off in order to use Digital Functions.

Types of Digital Effects

WIPE

Successive scenes are separated in a way which simulates the drawing of a curtain.

MIX

The current scene is mixed in with the following scene during scene changes.

STROBE

The recording appears as a sequence of still frames.

GAIN UP

Picture sensitivity is increased.

- Only Manual Focus is available.

N/P (Neg/Pos)

The recorded picture is inverted to appear as a film negative.

SEPIA

The picture is recorded in sepia, brownish color, giving it an antique look.

MONO (Monotone)

The picture is recorded in black-and-white.

TRAIL

The subject being recorded creates a trail when in motion.

SOLARI (Solarization)

The scene takes on a appearance similar to an oil painting.

To use the WIPE:

- In Camera mode, set the "D.FUNCTION" item in the menu screen to "WIPE" (page 14).
- Press the RECORD/PAUSE to start recording.
- Press the RECORD/PAUSE to pause the recording. The last scene will be memorized.
- Press the RECORD/PAUSE to start recording again. The new scene will take the place of the memorized scene.

To use the MIX:

Perform steps a-d above. The memorized scene and the new scene will appear mixed as the scene changes from one to the other.

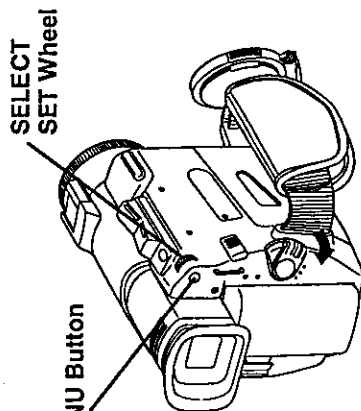
Special Features

Camera Recording / Remote Control

Book Mark Search

You can go directly to a blank portion of tape and start recording exactly where you left off.

- 1 Set the **POWER** switch to **VCR**.
- 2 Press **MENU** to display the menu screen. Then rotate the **SELECT SET WHEEL** to select **B.SEARCH** (see page 17).
- 3 Press the **SELECT SET WHEEL** to select **ON**. The Palmcorder will start a forward Book Mark Search.



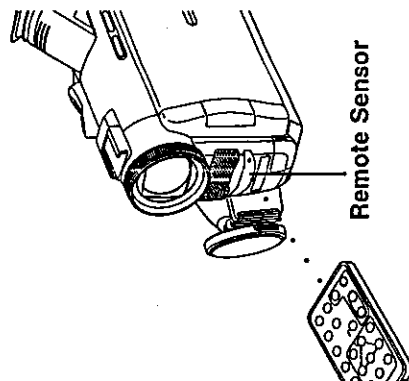
You can operate the major functions of your Palmcorder from up to approximately 16 feet (5 m) away (indoors). Aim the Remote Control toward the front of the Palmcorder and press the desired buttons (sensor is located under the lens).

Control Camera functions:

Press the **POWER** switch to **CAMERA**.

Control VCR functions:

Press the **POWER** switch to **VCR**.



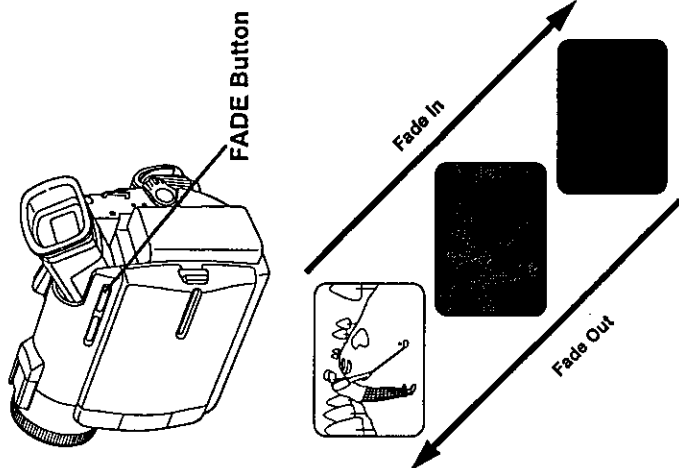
Controlled Functions

- Rec/Pause (see page 25)
- Tele (Zoom) (see page 36)
- Wide (Zoom) (see page 36)
- Date/Time (see page 19)
- Reset (see page 46)
- Photo Shot (see page 37)
- Display On TV (see page 34)
- Counter/Time Code (see pages 18, 46)
- Audio Dubbing (see page 43)
- Record (see page 47)
- Menu (see page 15)
- Select (see page 15)
- Set (see page 15)
- Play (see page 30)
- FF/Search (see page 30)
- REW/Search (see page 30)
- Pause (see page 31)
- Stop (see page 30)
- Slow/Frame Advance (Forward) (see page 31)
- Slow/Frame Advance (Backward) (see page 31)
- Index Search (Forward) (see page 32)
- Index Search (Backward) (see page 32)
- Speaker Volume (see page 30)

Special Features

Audio/Video Fade In/Out

This feature allows you to make smoother scene transitions for a more professional look.



Fade In:

Starting the first scene with "fade in" is very effective.

In Record/Pause mode, hold down **FADE** until the picture and sound fade out. Then, press **RECORD/PAUSE** to start recording.

Release **FADE** and the picture and sound will gradually fade in.

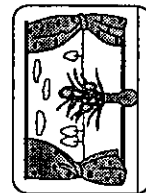
Fade Out:

Use to create a soft ending or (together with fade in) for a soft transition from one scene to the next.

During recording, hold down **FADE** until the picture and sound fade out. Then, press **RECORD/PAUSE** to pause the recording.

Backlight

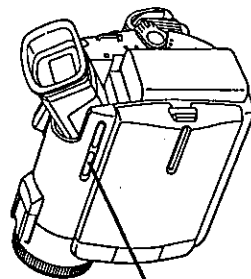
Use when recording a subject that is darker than the surrounding scene, in a shadowed area, or when the light source is in the back of your subject.



Hold down the **BACKLIGHT** button to activate the Backlight feature.

The Indicator "O" will appear in the EVF or LCD monitor.

When the **BACKLIGHT** button is released, this feature will be cancelled.

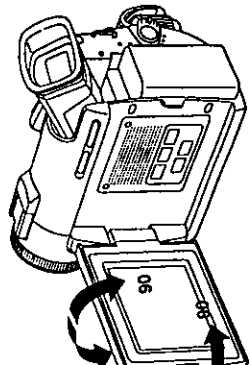
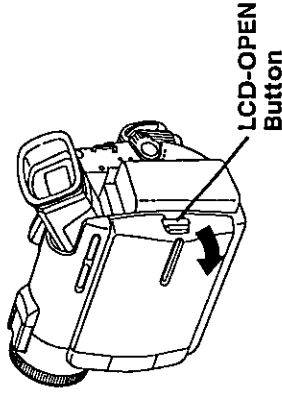


Note:

- The Indicator "O" will not appear in the EVF or LCD monitor when OFF is selected in the **COUNTER** menu.

Using the LCD Monitor

The LCD (Liquid Crystal Display) monitor is used while recording.



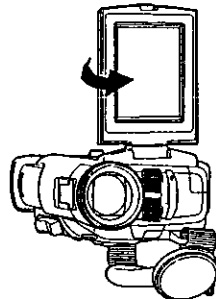
Press the MENU button, located on the side of the Palmcorder, to display the menu screen.

Rotate the SELECT SET WHEEL to the LCD-PANEL from the menu screen (see pages 16, 17).

Press the SELECT SET WHEEL to adjust the LCD monitor adjustment.

Press the SELECT SET WHEEL to adjust BRIGHT or COLOR, then rotate the SELECT SET WHEEL to adjust them. Press the MENU button twice to exit the menu.

Recording



Before you begin...

- Connect the Palmcorder to a power source.
- Insert a cassette with record tab closed (see page 13).

1 Press the LCD-OPEN button to unlock the LCD monitor.

2 Swing the LCD monitor fully open and adjust the angle.

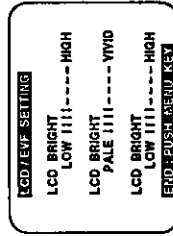
- The LCD monitor will automatically turn on.
- When the LCD monitor is completely closed, it will shut off automatically to save power.
- Adjust the LCD monitor if necessary according to at left.

3 Start recording (see page 25).

- Using the LCD monitor reduce battery operating time.

Note:

- Using the LCD monitor reduce battery operating time.
- Close the LCD monitor completely when not in use.



Rotate the LCD monitor 180 degrees so that it faces in the same direction as the lens, while in the CAMERA mode, to record yourself.

The picture in the LCD Viewfinder will appear reversed. Select SELF-REC MIRROR in the Camera mode screen to see the picture as it is actually being recorded.

Audio Dubbing using the External or Built-in Microphone

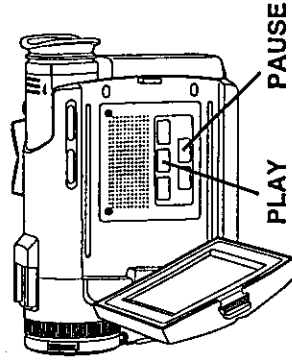
The original sound can be replaced with new sound using the built-in Palmcorder microphone or an external microphone.

The AUDIO setting in CAMERA MENU mode should be as follows:

12bit The original sound is recorded on ST (Stereo) 1, and the new sound will be recorded on ST (Stereo) 2.

16bit The original sound is replaced with the new sound.

- Select 12bit if you do not want the original sound to be completely replaced during an audio dub.
- If you dub over a tape which has both 12bit and 16bit audio recordings on it, keep in mind that the original 16bit audio portion will be completely replaced.



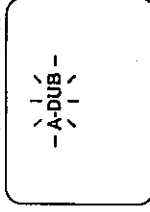
1 Set the POWER switch to VCR.

2 Press MENU and set the A-DUB item in the VCR mode menu (see page 17) to MIC.

3 Press PLAY. Then press PAUSE where you want dubbing to begin.

4 Press A.DUB on the remote control to put the Palmcorder in the Audio Dub mode.

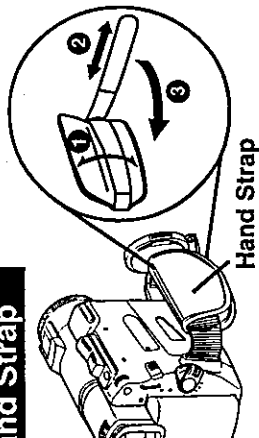
EVF Indication



(Continued on next page.)

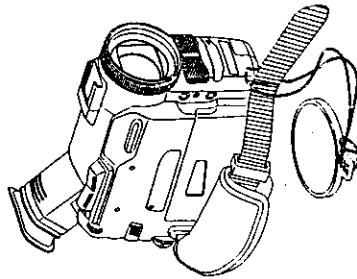
Attaching the Shoulder Strap

and Strap



Adjust the length of the Hand Strap to the size of your hand as illustrated.

ns Cap



Attaching the Lens Cap Cord to the Hand Strap

Remove the Hand Strap from the front clasp and run the Strap through the Lens Cable Loop. Reattach the Hand Strap.

Special Features

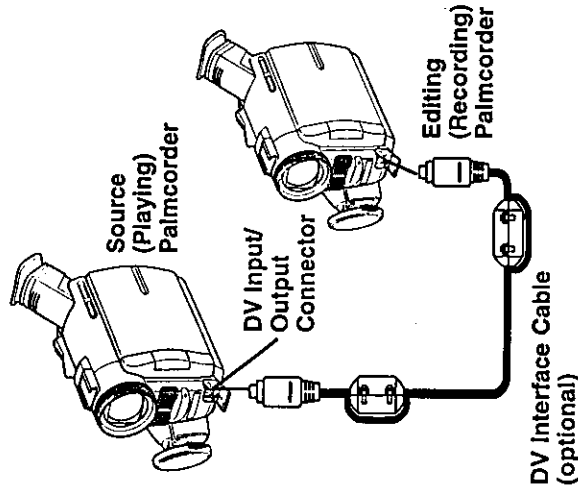
Audio Dubbing using the DV Terminal

Your own sound track may be substituted onto a tape using a DV terminal. Connect the Palmcorder to Digital Equipment with the DV Output Terminal using DV cable (Not supplied).

The original sound can be replaced with new sound using the DV In/Out Terminal Jack.

Before you begin...

- Turn on both Palmcorders.
- Insert the pre-recorded tape in the recording Palmcorder.
- Uncover the DV Input/Output connectors on both Palmcorders and connect with the supplied DV cable.

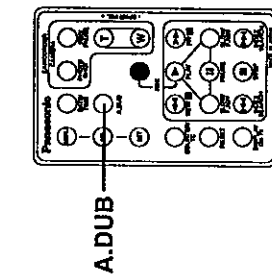


1 Set the POWER switch on both Palmcorders to VCR.

2 Press MENU and set the A-DUB item in the VCR mode menu (see page 17) to DV.

3 Press PLAY on the recording Palmcorder. Then press PAUSE where you want dubbing to begin.

4 Press A.DUB on the remote control to put the recording Palmcorder in the Audio Dub mode.

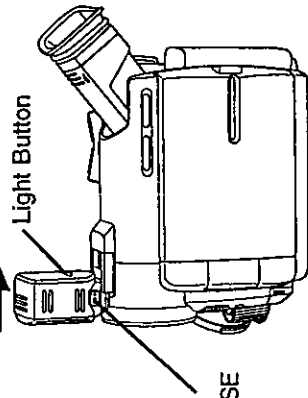


Color Enhancement Light

Adding the Light

When the natural colors in a scene.

Slide the Light into Built-In Light Mount. Be sure to lock it into place.



Replacing the Bulb

- 1 Turn screw counterclockwise on the underside of the Reflector Casing and remove.
- 2 Turn Reflector Casing counterclockwise only as far as shown in the diagram and pull it off the Bulb Housing.
- 3 Using a clean cloth or tissue, replace the bulb.
- 4 Replace the Reflector Casing turning it clockwise. Replace the screw.

Danger:

Use only replacement bulbs (PART NO. VLLW0023) supplied by Panasonic to reduce the risk of fire.
Handle new bulb with cloth or tissue as skin oils will decrease bulb life.
Remove lens cover and allow bulb to cool before replacing to avoid possible burn hazard.

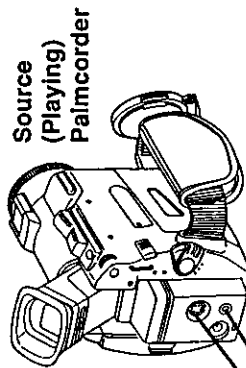
Using the enhancement light for an extended period of time, be sure to provide ventilation using an a/c fan or open window.
The Enhancement Light when the camcorder is powered by a car battery may drain the car battery.
Do not attempt to lift or carry the camcorder by the Enhancement Light.

Special Features

Copying your Tapes to S-VHS or VHS Cassette

Before you begin...

- Connect the camcorder and the Jack Box (see page 33).
- Connect the camcorder to a VCR as illustrated below.
- Turn ON both units.
- Set the recording VCR's Input Signal Selector to LINE.
- Set the camcorder POWER switch to VCR.



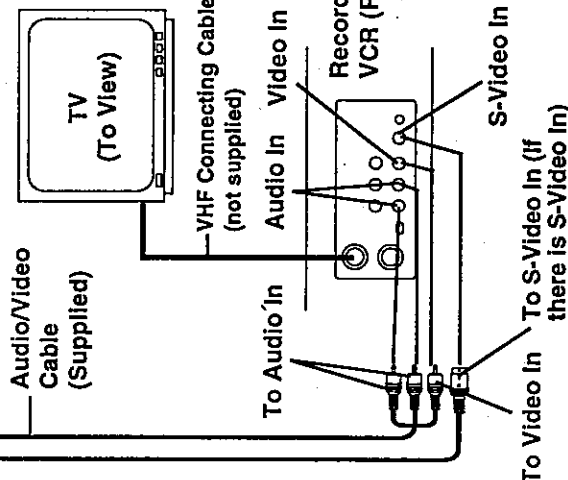
- 1 Insert a pre-recorded tape into the source (playing) camcorder and a blank tape with record tab in place into the target VCR (Recorder).
- 2 Press PLAY on the camcorder. When the tape reaches the point you want to start dubbing, press PAUSE.
- 3 Press REC or simultaneously REC and PLAY (depends on VCR) and then pause the recorder.



VCR Buttons

- 4 Simultaneously, press PAUSE on the both units to begin the copying.

- 5 Press STOP on both units when dubbing is complete.



Notes:

- For technical reasons, dubbing a tape may reduce its quality.
- Press DISPLAY on the camcorder remote control to eliminate EVF/LCD Monitor indications to be recorded on the tape. Eliminate all OSD functions on the VCR as well.
- If the Time Code is displayed in the EVF or LCD monitor, this display cannot be reset.

CAUTION:

Unauthorized exchanging and/or copying of copyrighted recordings may be copyright infringement.

Monitor with your TV

- Turn the TV ON and select its VCR channel (either CH3 or CH4).
- Set the VCR/TV Selector on the recording VCR to VCR.

Special Features

Following warning displays appear in the EVF and the LCD monitor.

Warning Indications



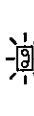
TAPE NOT
INSERTED

— If the Palmcorder is in CAMERA mode without a cassette inserted, "TAPE NOT INSERTED" will appear for 5 seconds. Recording will not start.



CHECK
REC TAB

— If the Palmcorder is in CAMERA mode with the cassette sliding record tab opened, "CHECK REC TAB" will appear for 5 seconds. Recording will not start.



CANNOT REC

— When Audio dub is performed and the sliding record tab is open, or a blank portion of tape is detected.



TAPE
END

— When the tape is about to end in REC mode, "TAPE END" will flash and "TAPE END" will appear for 5 seconds.

INCOMPATIBLE
TAPE

— When a pre-recorded tape other than NTSC format is inserted for play.

NEED HEAD
CLEANING

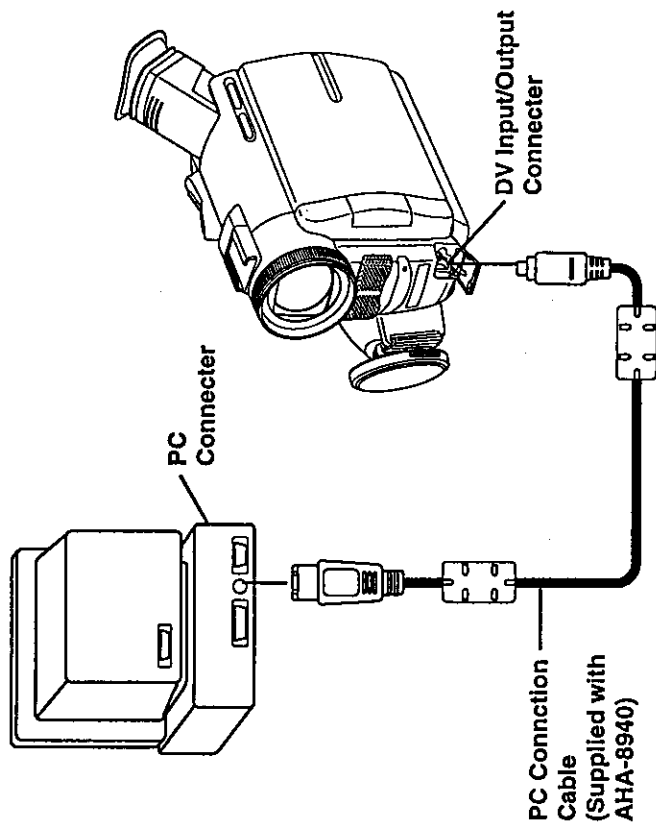
— If the video heads require cleaning.

REMOTE

— When the Palmcorder and remote are not set to the same mode (VCR1 or VCR2). "CHECK REMOTE MODE" will also appear for 5 seconds when the Palmcorder is first turned on.

PC CONNECTION

A live image can be transferred directly to your PC (Personal Computer) via an PC Connection Cable using Adaptec model AHA-8940.



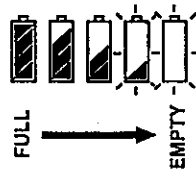
Note:

- For more detail information, please contact Adaptec, Inc.

For ordering instructions, see the Accessory Order Form.

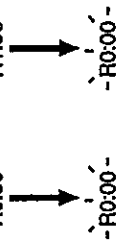
VOLUME [-] [|||||] [---] [+]
12:00:00AM
JAN 29 1999

Battery Remaining



Tape Remaining

AY-DVM30EA (AY-DVM60EA)
R0:30 R1:00



It takes several seconds for the tape remaining indicator to operate after the tape starts moving.

Digital Zoom (see page 36)

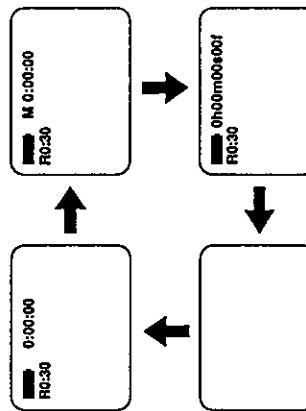
This display appears when the digital zoom function has been activated.

Tape Speed Indication (see page 16)
indicates the tape speed (SP or LP).

Counter/Time Code

The indication switches as shown below when the desired "COUNTER" mode is selected from the menu (see page 16) or the COUNTER/TC button on the remote is pressed.

• Even if display off is selected the Tape Mode and Date and Time indication can be displayed.



Memory Counter M 0:00.00

The Palmcorder will stop whenever it reaches the point where the counter was previously set to M 0:00.00 during audio or video dub, fast forward or rewind.

Time Code 0h00m00s00f

The Palmcorder calculates and displays exactly where you are on any tape in terms of hours, minutes, seconds, and frames (30 frames = 1 second).

• This display can not be reset.

CGR-D120A/1B (Same as PV-DBP9)		0.8Ah Battery Pack	\$
CGR-D220A/1B		1.6Ah Battery Pack	\$
CGR-D815A/1B		5.3Ah Battery Pack	\$
PV-DDC9		DV Interface Cable	\$

FUNCTION
 ZOOM: OFF ● 25x 100x
 FUNCTION: OFF WIFE MIX STROBE GAINUP N/P SEPIA MONO TRAIL SOLARI
 SHUTTER: OFF ● ON
 REC-SPEED: ● SP LP 16bit
 AUDIO-REC: ● 12bit ● OFF
 WIND-CUT: ● NORMAL MIRROR
 SELF-REC: ● NORMAL BRIGHT
 LIGHT: ● OFF ON
 CD-PANEL: OFF ● LINEAR
 COUNTER: OFF MEMORY T.CODE
 .RESET: OFF ● ON
 DATE/TIME: OFF ● D/T DATE
 REMOTE: OFF ● VCR1 VCR2
 INDEX: ● DAY 2HOUR
 ALLY-LED: OFF ● ON
 LOCK-SET: OFF ● ON

- a. EIS (page 35)
Set to ON to stabilize the picture when the camera cannot be held stable.
- b. D. ZOOM (page 36)
OFF: Optical zoom from 1x to 18x.
D.ZOOM1: Digital zoom from 18x to 36x.
D.ZOOM2: Digital zoom from 18x to 300x.
- c. D. FUNCTION (page 39)
Select from nine different digital effects while recording.
- d. SHUTTER (page 37)
To hear a shutter sound effect when the digital photo shot is button is pressed.
- e. REC-SPEED (page 13)
SP: Standard Play
LP: Long Play
- f. AUDIO-REC (page 43)
12 bit: 12 bit (32kHz) Audio Recording.
16 bit: 16 bit (48kHz) Audio Recording.
- g. WIND-CUT (page 25)
Set to ON to reduce the wind noise of the microphone during recording.
- h. SELF-REC (page 26)
MIRROR: During Self-Recording, the picture on the LCD monitor will be horizontally reversed.
- i. B.LIGHT (Back Light)
NORMAL: To set the Brightness of the LCD monitor to standard.
BRIGHT: To set the Brightness of the LCD monitor to bright.
- j. LCD-PANEL (page 26)
Adjusts the Brightness and Color of the LCD monitor.
- k. COUNTER (page 18)
Select the desired counter type indication.
C.RESET (Counter Reset) (page 46)
To set or reset the counter to 0:00:00.
- m. DATE/TIME (page 19)
OFF: No date or time display.
D/T: Display date and time.
DATE: Display date only.

Rough

Your Palms

(100 ix).

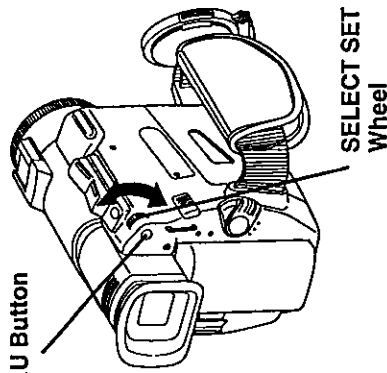
due to calibration.

The table below shows the color temperature of various

PALM-CORDER SETTINGS	NATURAL LIGHT CONDITIONS	KELVIN COLOR TEMPERATURE	ARTIFICIAL LIGHT SOURCE	COLOR TINT MATURE
(Amber Filter Range)	• Fair weather, blue sky	10,000	• Color television	Bluish
	• Slightly cloudy sky	8,000		
	• Cloudy or rainy sky	7,000		
	• Sunlight in clear weather at midday	6,500	• Fluorescent lamp (Daylight)	
	• Average sunlight in clear weather	6,000	• Camera flash bulb	
"OUTDOOR"		5,500		
		5,000	• Blue lamp for photography	
"AUTO"	• Sunlight 2 hours after sunrise and before sunset	4,500	• Fluorescent lamp (White)	Whitish
		4,000	• Normal flash bulb	
		3,500	• Fluorescent lamp (Off-white)	
			• Tungsten lamp for photography	
	• Sunlight 40 min. after sunrise and before sunset	3,200	• Halogen lamp	
			• Iodine lamp	
			• Tungsten lamp	Yellowish
	• Sunlight 30 min. after sunrise and before sunset	2,800	• Acetylene lamp	
	• Sunlight 20 min. after sunrise and before sunset		• Kerosene lamp	
(Blue Filter Range)		2,000	• Candlelight	Reddish

At the Date and Time

date and time is calculated, including year, up to DEC 31 2089.



EXAMPLE:

YEAR	: 1998		
↓	•(PUSH)•	Rotate	
YEAR	: 1999		
↓	•(PUSH)•	Push	
MONTH	: JAN		

As you should pass the current year, continue pressing down on the SELECT SET WHEEL until year appears again.

Before you begin...

- Connect the Palmcorder to a power source.
- Set the POWER switch to CAMERA.

- 1** Press MENU to display the Camera Mode menu screen (see page 16).
- 2** Rotate the SELECT SET WHEEL to select CLOCK-SET.
- 3** Press SELECT SET WHEEL down to select CLOCK-SET ON. The DATE/TIME SETTING menu appears.
- 4** Rotate the SELECT SET WHEEL to select the desired numbers, then, press SELECT SET WHEEL down to fix that portion and move to the next. Adjust the shaded items for the Year, month, day, hour, and minute.

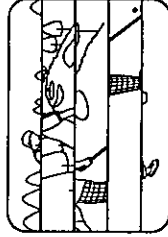
DATE/TIME SETTING
 YEAR : 1999
 MONTH : JAN
 DAY : 29
 HOUR : 12AM
 MINUTE : 34

END : PUSH MENU KEY

When time setting is completed, press the MENU button to start the clock.

Before Requesting Service

Cleaning Care for Video Head



Clogged Video Head

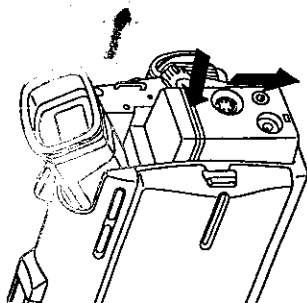
- (a) Video Head Cleaning:** Normally, your Palmcorder will not normally require head cleaning. However, it is possible that the heads may become clogged due to dust in the air, damaged tape, long term use, etc. If "CLOGGED HEAD" flashes and "NEED HEAD CLEANING" appears for 5 seconds in the EVF, the heads may require cleaning.
- (b) Cleaning the Heads:** It is recommended that head cleaning be performed by a qualified service technician. Please contact your nearest Panasonic Service Center. An alternate solution is to obtain a head cleaning cassette. Please use Panasonic cleaning cassette (AY-DVMCL). Be sure to follow the cleaning instructions carefully. Excessive use of the cleaning cassette could shorten head life. Use this cassette only when a head clogging symptom occurs. Refer servicing to qualified service personnel.

Caution for Tape Operations

- When you go from function to function (PLAY, FF, REW etc.), please note that the unit will not accept a new function operation until the previous operation is complete.
- The CAMERAVCR Button, and all function buttons, (PLAY, FF, REW, etc.) are only operational after the tape has been completely loaded.

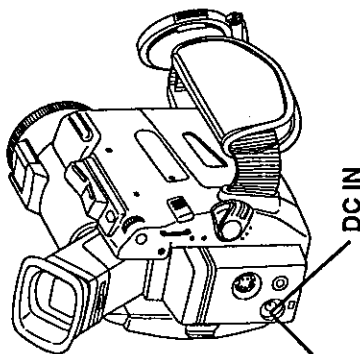
Lens Hood Area Operation Caution

- With a Wide or Telephoto Conversion Lens (optional) attached, the four corners of the screen may darken when zoom is set to maximum wide angle.
- Attaching the lens hood, a Wide or Telephoto conversion lens (optional), etc. after a filter (optional) has been attached, the four corners of the screen may darken when zoom is set to maximum wide angle.
- With two filters (optional) attached, the four corners of the screen may darken when zoom is set to maximum wide angle.



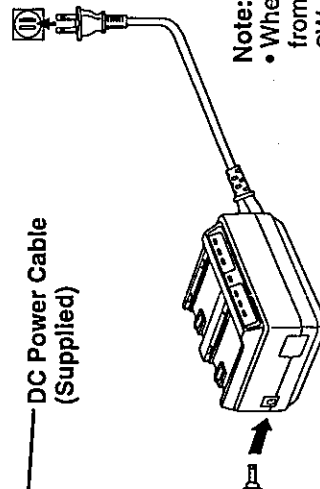
Slide the Jack Box and slide it down until it locks with a click.

3 Insert the DC Power Cable into the Jack Box.



4 Connect the other end of the DC Power Cable to the AC Adaptor as shown.

5 Plug in the AC Adaptor.
• The POWER Lamp lights up.

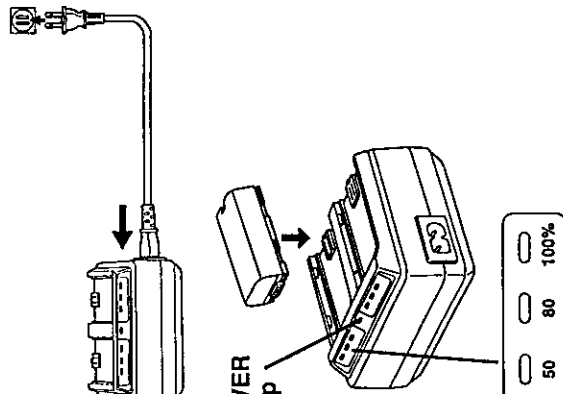


Note:
• When not in use, unplug the AC Adaptor from the AC outlet. (AC Adaptor consumes 2W of electric power when plugged into an AC outlet even when not in use.)

When you request your service, please provide information of what is wrong with the unit and any symptom it is exhibiting.

Mail this completed form and your Proof of Purchase along with your unit to:
Panasonic Services Company
1705 N. Randall Road
Elgin, IL 60123-7847
Attn: Camcorder Repair

Charge the Battery Pack on the AC Adaptor



- 1** Connect and plug in the Cords as shown.
 - POWER Lamp will light.
- 2** 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 3 lamps are constantly on, the battery is fully charged. (approx. 1 hour 20 minutes) Expect approx. 1 hour of operation when fully charged.
- 3** Remove the Battery.
 - Slide the Battery out and then lift up.

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.

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 Palmcorder and AC Adaptor and store in a cool, dark, dry place. If you leave the Battery in the Palmcorder or on AC Adaptor, the Battery will no longer be rechargeable.
- Keep the Battery terminals clean.

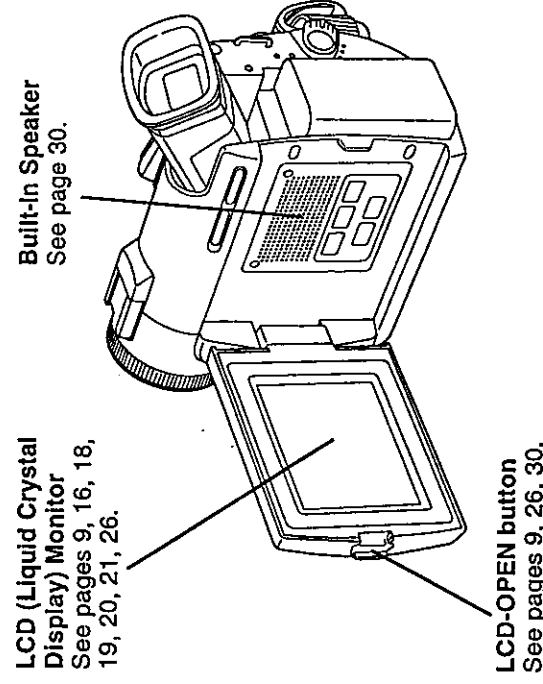
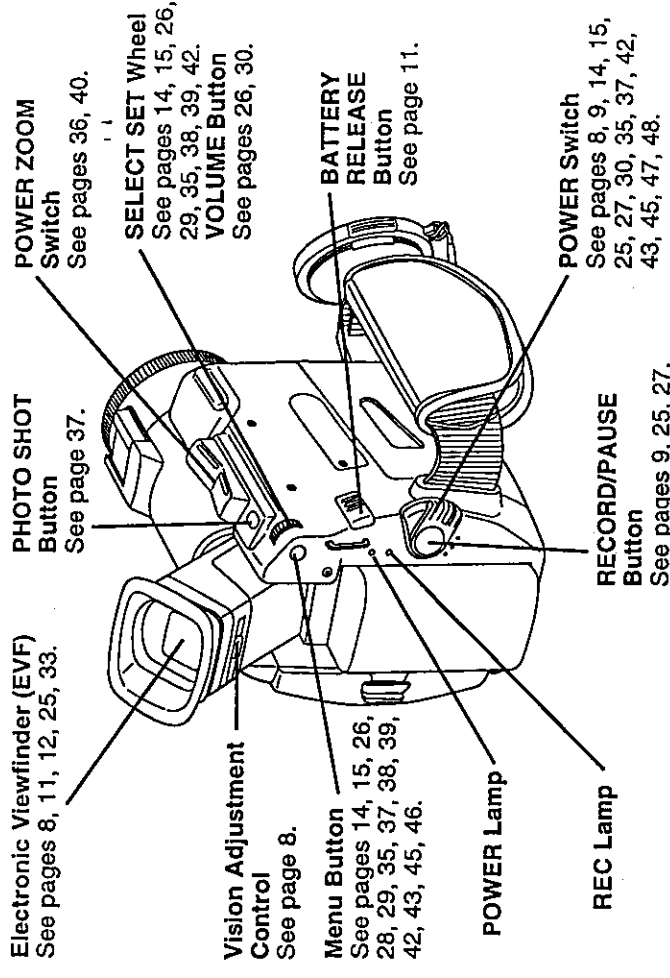
Caution:

Charge only with specified charger.
Battery can be charged within a temperature range of 32° F (0° C) and 104° F (40° C).
Battery may be warm after charging or after use. This is normal.
Do not use an insufficiently charged or worn Battery.
In extreme cold surroundings, Battery charging time will increase.

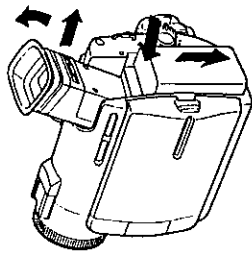
Safety precautions:

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

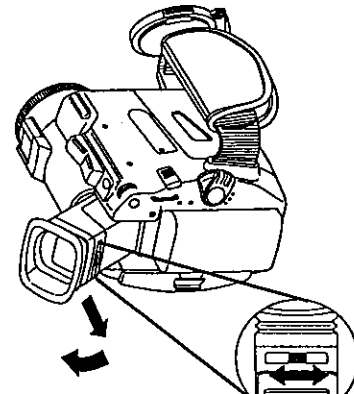
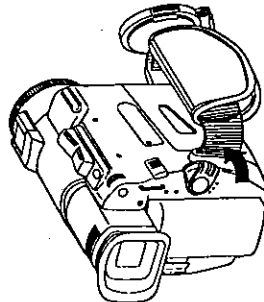
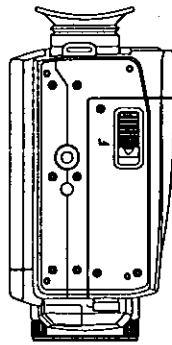
Rear View



Before you begin...
• Charge the Battery (see page 10).



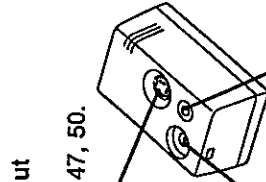
- 1** Slide the Viewfinder backward to its fully expanded position and then tilt it upward.
- 2** Insert the Battery and slide it down until it locks with a click.
- 3** Slide the TAPE EJECT switch to open the Cassette Compartment.
• The cassette holder slides out.
- 4** Insert a cassette with its window side facing up.
• Make sure record tab is closed. (see page 13).
- 5** Press on the PUSH CLOSE mark to close the upper Cassette Compartment Cover.
• The Cassette Holder with the cassette slides back inside.
- 6** Close the lower cassette Compartment Cover.
- 7** Set the POWER switch to CAMERA.
- 8** Slide the Viewfinder to its fully extended position.
- 9** Adjust the Vision Adjustment Control to your eyesight.



(Continued on next page.)

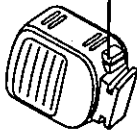
Docking Station

S-VIDEO Output Connector
See pages 34, 47, 50.

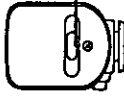


DC Input Connector
See page 12.

Video Output connector
See pages 34, 47, 50.
(This connector for use with supplied Audio/Video cable only.)



LIGHT Release Button
See page 22.



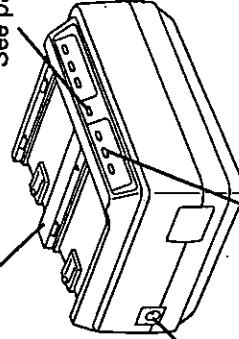
LIGHT Release Button
See page 22.

Color Enhancement Light

AC Adaptor

Battery Charging Compartment
See page 10.

POWER Lamp
See page 10.



AC Power Cord
See page 10.

VCR DC Output Connector
See page 12.

CHARGE Lamps
See page 10.

CAUTION:

This unit will operate on 110/120/220/240V AC. An AC plug adaptor may be required for voltages other than 120V AC. Please contact either a local or foreign electrical parts distributor for assistance in selecting an alternate AC plug.
We recommend using the accessory power plug adaptor (VJSS0070) in an area which has special AC outlets.

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

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

PANASONIC/QUASAR Video Products Limited Warranty

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

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

Monitor-VCR In-home or carry-in Service: 22" (diagonal) CRT / LCD and Larger
Monitor-VCR Carry-in Service: 21" (diagonal) CRT / LCD and smaller

Batteries (if included) - New rechargeable batteries in exchange for defective rechargeable batteries for ten (10) days. Non-rechargeable batteries are not warranted.
Tape (if included) - New video cassette tape in exchange for a defective video cassette tape for five (5) days.

In-home, carry-in or mail-in service, as applicable, in the USA can be obtained during the warranty period by contacting a Panasonic Services Company (PASC) Factory Servicenter listed in the Service Directory. Or call toll free 1-800-211-PANAV (7262), to locate an authorized PASC Servicenter. Carry-in or mail-in service in Puerto Rico can be obtained during the warranty period by calling the Panasonic Sales Company telephone number listed in the Servicenter Directory.

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

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

LIMITS AND EXCLUSIONS

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

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

If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to the Customer Satisfaction Center at the Panasonic Consumer Electronics Company address above. SERVICE CALLS WHICH DO NOT INVOLVE DEFECTIVE MATERIALS OR WORKMANSHIP AS DETERMINED BY THE WARRANTOR, IN ITS SOLE DISCRETION, ARE NOT COVERED. COSTS OF SUCH SERVICE CALLS ARE THE RESPONSIBILITY OF THE PURCHASER.

warvid 10/20/97

Instructions — All the safety and operating instructions should be read before the unit is used.

Instructions — The safety and operating instructions should be retained for future reference. All warnings on the unit and in the operating instructions should be adhered to.

Instructions — All operating and maintenance instructions should be followed.

Warning — Unplug this video unit from the wall outlet after cleaning. Do not use liquid or aerosol cleaners. Use a dry cloth for cleaning.

Warnings — Do not use attachments not recommended by the video product manufacturer as they may be hazardous.

Warnings — 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 swimming pools, and the like.

Warnings — Do not place this video unit on an unstable surface, such as a table, or on a cart, stand, tripod, bracket, or table. The unit may fall, causing serious injury to a child or other persons, and serious damage to the unit. Use only with recommended stands, tripods, brackets, or tables recommended by the manufacturer, or sold with the video unit. Any modification of the unit should follow the manufacturer's instructions and should use a qualified service technician and accessories recommended by the manufacturer. An appliance should be used in combination with care. Quick stops, jerky force, and uneven force may cause the appliance to tip over, resulting in a combination to overturn.

Warnings — 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, or other similar surface, or near or over a radiator or register. This video unit should not be placed in an installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

Warnings — This video unit should be operated only on the type of power source indicated on the rating label. If you are not sure of the type of power source to your home, consult your appliance dealer or local power company. For video units intended to be powered from battery power, or other sources, refer to the operating instructions.



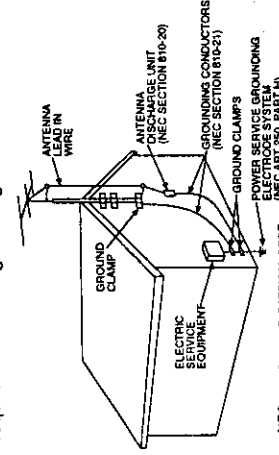
11. Grounding or Polarization — This video unit may be equipped with either a polarized 2-wire AC (Alternating Current) line plug (a plug having one blade wider than the other) or 3-wire grounding type plug, a plug having a third (grounding) pin.

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. Outdoor Antenna Grounding — If an outside antenna or cable system is connected to the video unit, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Part 1 of the National Electrical Code, in USA Section 810 of the Canadian Electrical Code, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.



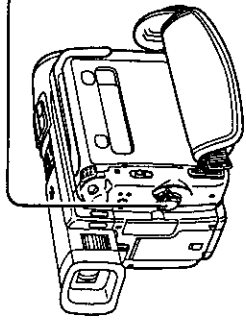
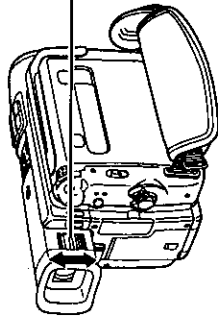
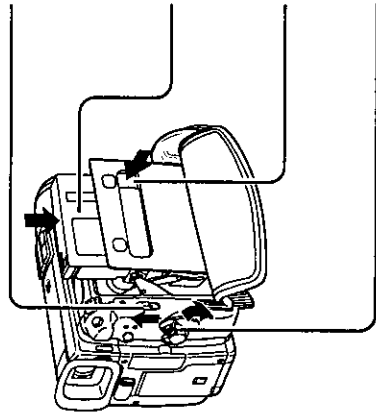
14. Lightning — For added protection of this video unit receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video unit due to lightning and power-line surges.

PREPARATIVOS

- Conectar la videocámara a una fuente de alimentación (batería, adaptador de CA o cable para batería de coche).

GRABACION A CAMARA

- 1 Deslice el botón TAPE EJECT para abrir la tape.
- 2 Introduzca una cinta con el lado de la ventanilla hacia puer.
- 3 Presione aquí para cerrar la tape.
- 4 Fije el conmutador de power a la posición de ON. La luz indicador se enciende a color rojo.
- 5 Deslice todo el visor y ajuste el control de ajustamiento de la vision.
- 6 Oprimir RECORD/PAUSE para inciar la grabación. Volver a oprimir RECORD/PAUSE para hacer una pausa en la grabación.



Ask you for choosing Panasonic!

have purchased one of the most sophisticated and reliable products on the market. Used properly, we're sure it will bring you and your family years of enjoyment. We take time to fill in the information at right. The serial number is on the tag located on the underside of your Palmcorder. Be sure to retain this manual as your convenient recorder information source.

Date of Purchase
Dealer Purchased From
Dealer Address
Dealer Phone No.
Model No.
Serial No.

pack your Camcorder

 AC Adaptor (VJAW0043)	 1 pc. AV Jack Box (VSQW0042)	 1 pc. AV Cable (VJAW0043)
 1 pc. Battery Pack (PV-DBP8)	 1 pc. Color Enhancement Light (VYKW3110) w/Holder	 1 pc. Digital Video Cassette Tape (AY-DVM30EA)
 Remote Control (VW0044) with one Control Battery (025)	 1 pc. Lens Cap (VYFW0008)	 1 pc. Shoulder Strap (VYCW0214)

Remote Control has loaded with battery. page 25.

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