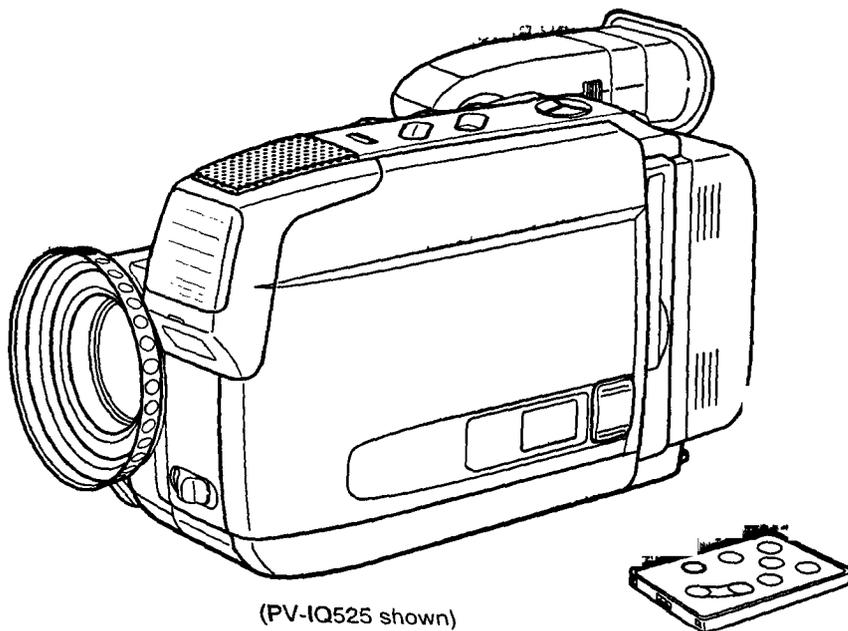


Panasonic®

Palmcorder IQ™

Camcorder

Operating Instructions



(PV-IQ525 shown)

VHS

PV-IQ225/PV-IQ325

PV-IQ425/PV-IQ525

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.

VQTW0553 ©

Things You Should Know

Thank you for choosing Panasonic!

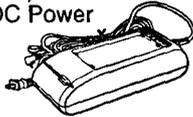
You have purchased one of the most sophisticated and reliable products on the market today. Used properly, we're sure it will bring you and your family years of enjoyment. Please take time to fill in the information at right. The serial number is on the tag located on the underside of your Palmcorder.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

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

Unpack your Palmcorder

These accessories are provided in order to set up or use your Palmcorder.

1 pc. AC Adaptor
(PV-A16)
with DC Power
Cable



1 pc. Battery Pack
(PV-BP18)



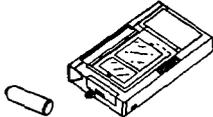
1 pc. Audio/Video
Cable (VJAW0026)



1 pc. Shoulder Strap
(VYCW0071)



1 pc. VHS PlayPak
(PV-P1/VYMW0009)
and one "AA" battery



1 pc. 8-Function Remote (VSQW0009)
with one CR2025 Battery
(with PV-IQ325/PV-IQ425/PV-IQ525)



1 pc. CR2025 Clock
Battery (VSBW0004)
(installed in Palmcorder)



Remote has been loaded with battery and comes stored in Palmcorder. See page 21.

Safety Precautions

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

Your Compact VHS Palmcorder is designed to record and play back in Standard Play (SP) and Super Long Play (SLP) modes. You can also play a Compact VHS Palmcorder recording on your VHS VCR using the VHS PlayPak supplied

This Palmcorder is equipped with the HQ System to provide excellent video pictures, and is compatible with standard VHS equipment.

It is recommended that only cassette tapes that have been tested and inspected for use in VCR machines with the **VHS** and/or **VHS** mark be used.

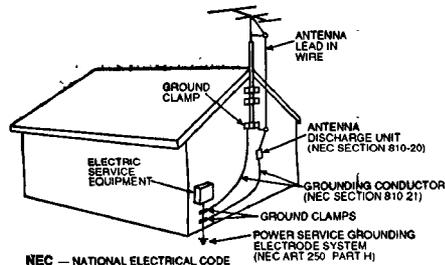
 <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN</p> </div> 	 <p>This symbol warns the user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this unit.</p>
<p>CAUTION TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL</p>	 <p>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.</p>

Important Safeguards

1. **Read Instructions** — All the safety and operating instructions should be read before the unit is operated.
2. **Retain Instructions** — The safety and operating instructions should be retained for future reference.
3. **Heed Warnings** — All warnings on the unit and in the operating instructions should be adhered to.
4. **Follow Instructions** — All operating and maintenance instructions should be followed.
5. **Cleaning** — Unplug this video unit from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a dry cloth for cleaning.
6. **Attachments** — Do not use attachments not recommended by the video product manufacturer as they may be hazardous.
7. **Water and Moisture** — Do not use this video unit near water — for example near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.
8. **Accessories** — Do not place this video unit on an unstable cart, stand, tripod, bracket, or table. The video unit may fall, causing serious injury to a child or adult, and serious damage to the unit. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the video unit. Any mounting of the unit should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
9. **Ventilation** — Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the video unit and to protect it from overheating. These openings must not be blocked or covered. Never place the video unit on a bed, sofa, rug, or other similar surface, or near or over a radiator or heat register. This video unit should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
10. **Power Sources** — This video unit should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. For video units intended to be operated from battery power, or other sources, refer to the operating instructions.



11. **Grounding or Polarization** — This video unit may be equipped with either a polarized 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 Canadian Electrical Code, in USA Section 810 of the National 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.

Important Safeguards

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 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.

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This operating instruction book is designed for use with models PV-IQ225 and PV-IQ325 and PV-IQ425 and PV-IQ525. Illustrations in this manual show the PV-IQ525. Features may vary, so please read carefully.

Differences between models

Model Number	Viewfinder	8-Function Remote Control	Built-in Light
PV-IQ225	Black and White	—	—
PV-IQ325	Color	Supplied	○
PV-IQ425	Black and White	Supplied	○
PV-IQ525	Color	Supplied	○

Model Number	Backlight	D.E.I.S	Digital Zoom	Negative/Positive Transposer
PV-IQ225	1 Step	—	—	—
PV-IQ325	1 Step	—	—	—
PV-IQ425	3 Steps	○	○	○
PV-IQ525	3 Steps	○	○	○

Quick Guide

Camera Recording

- 1** Charge the Battery (see page 7).
- 2** Attach the Battery (see page 7).
- 3** Slide the **TAPE EJECT** switch to open the door.
- 4** Insert a cassette (see page 10).
- 5** Press **PUSH TO CLOSE** the door.
- 6** Set the **POWER** switch to **CAMERA**. Built-In Lens Cover opens and Power Indicator lights.
- 7** Slide the **TAPE SPEED** Selector for (SP or SLP, see page 10).
- 8** With the **Eye Cup** against your eye, adjust the **Vision Adjustment Control**.
- 9** Press **RECORD/PAUSE** to start recording. Press **RECORD/PAUSE** again to pause recording.

To Watch Playback in the EVF (Electronic Viewfinder)

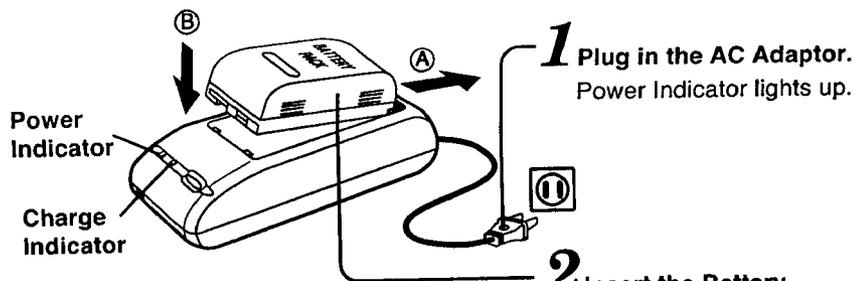
- 1** Set the **POWER** switch to **VCR**.
- 2** Press **REWIND/SEARCH** to rewind the tape.
- 3** Press **PLAY** to start playback.
- 4** Press **STOP** to stop playback.

Supplying Power

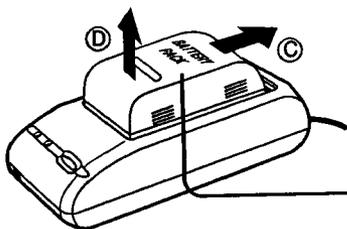
Getting Started

Charge the Battery Pack

Charge the Battery Pack fully before operation.



- 2 Insert the Battery
- A Slide the top of the Battery forward.
 - B Press down until it locks with a click.
- Charge Indicator lights up, and goes out when charging is done (about one and a half hours).



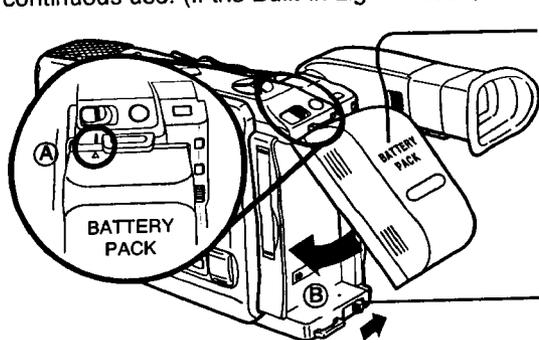
- 3 Remove the Battery
- C Slide Battery forward.
 - D Lift up and out.

Note:

After recharging the Battery Pack about 5 times, use the BATTERY REFRESH feature as explained on page 8.

Use the Battery Pack

With a fully charged Battery Pack, you will have about one and a half hours of continuous use. (If the Built-in Light is used, battery operating time decreases.)

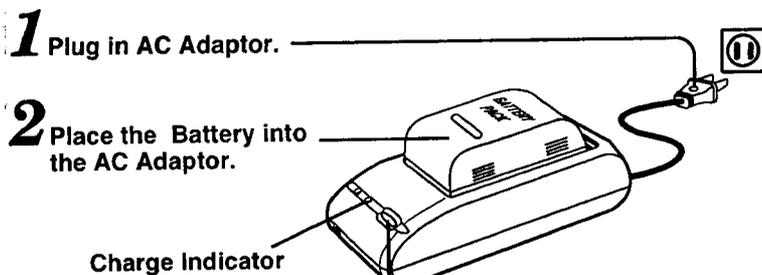


- 1 Attach the Battery
- A Align the Battery with the top of the mounting surface.
 - B Press it into place until it locks with a click.
- 2 Remove the Battery
- While sliding the BATTERY RELEASE button, remove the Battery.

Supplying Power

Battery Refresh Feature

This feature completely discharges the Battery before recharging begins. To keep your Battery in top condition, use Refresh after about every 5 charges.



3 Press the BATTERY REFRESH button.
The Charge indicator will flash when discharging begins and stop flashing when fully discharged. Charge indicator will stay lit when fully charged.

- Should you accidentally press the BATTERY REFRESH button, remove Battery and then re-insert it to begin charging.
- It takes about seven and a half hours when both Battery Refresh and charging are performed.

ATTENTION:



The product that you have purchased is powered by a rechargeable battery. The battery is recyclable. At the end of its useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

Battery Care

Caution:

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

Safety precautions:

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

To avoid damage to the Battery:

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

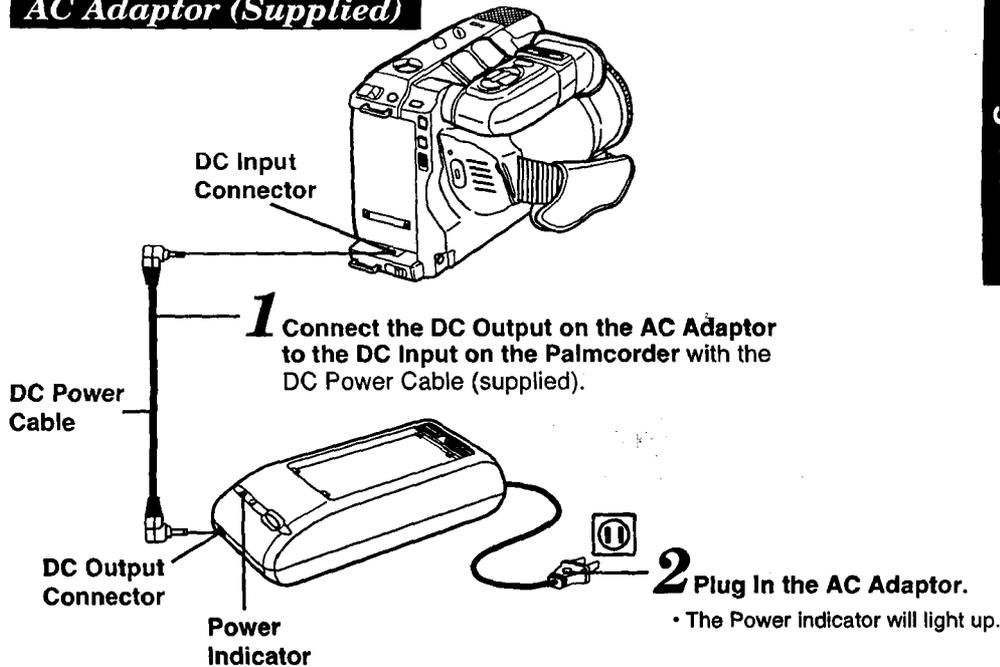
To insure longer battery life:

- While not in use, remove Battery from the Palmcorder and AC Adaptor and store in a cool, dark, dry place.
- Keep the Battery terminals clean.

Supplying Power

Getting Started

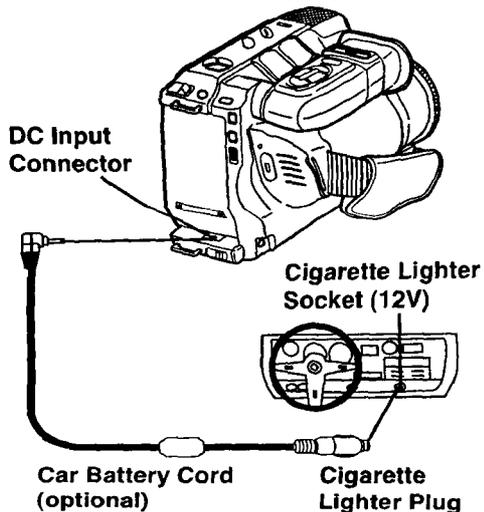
AC Adaptor (Supplied)



Note:

AC Adaptor does not function while charging the Battery.

Car Battery Cord (Optional)



- 1 Connect a PV-C16 Car Battery Cord (optional) to the DC Input of the Palmcorder.

- 2 Start your car engine and then Insert the Car Battery Cord plug into your cigarette lighter socket.

- There is a fuse located in the lighter plug end of the cord. Should fuse replacement be necessary use the exact current rating (in amps).

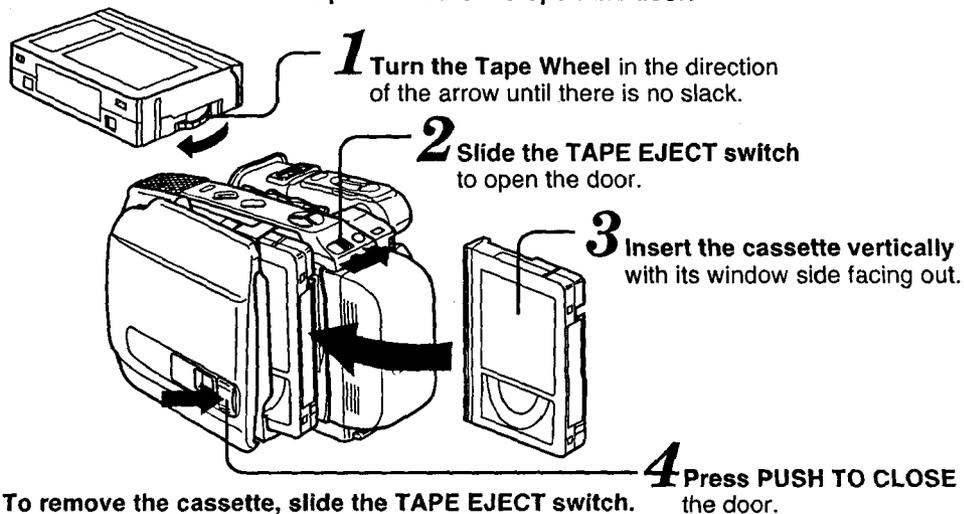
Note:

This cord can only be used in vehicles equipped with DC 12V (negative ground) batteries. Use only the specified car battery cord.

Cassette Information

Cassette Insertion/Removal

Connect the Palmcorder to a power source to open the door.



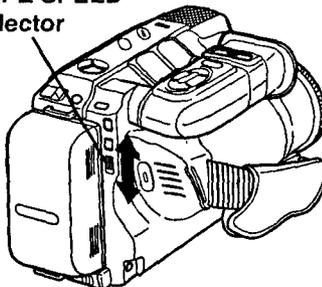
• To remove the cassette, slide the TAPE EJECT switch.

Record/Playback Time

Use tapes with the **VHS** mark in this unit.

Tape Speed Selector Position	Cassette type		
	T-20	T-30	T-40
SP (Standard Play)	20 Minutes	30 Minutes	40 Minutes
SLP (Super Long Play)	1 Hour	1 Hour 30 Minutes	2 Hours

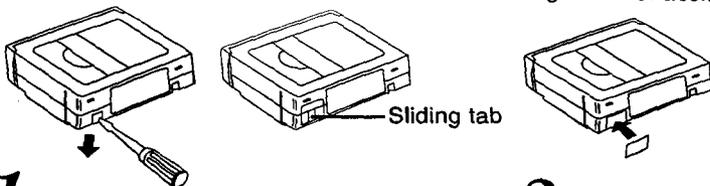
TAPE SPEED Selector



- SP provides the best picture, but the shortest recording time.
- SLP provides three times the recording time as SP. SLP has slightly more picture noise in playback.

Erase Protection Tab

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



- 1** To prevent accidental erasure
Break off the tab with a screwdriver.
(Some tapes have a sliding tab.)

- 2** To record again
Cover the hole with adhesive tape.

Setting the Clock

Set the Time Zone

Date and time are preset as Eastern Standard time beforehand. If you live in other time zones, just select the appropriate time zone from menu screen. Then the date/time are automatically adjusted to the standard time of your time zone.

Before you begin...

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

Note:

The Palmcorder will exit the CLOCK SET menu if, after activation, none of the CLOCK SET ▲, ▼ or DISPLAY buttons are pressed within 30 seconds.

The Palmcorder's clock may lose or gain up to two minutes per month. Please adjust as necessary (refer to page 13).

1 Press **CLOCK SET UP ▲** to display the **CLOCK SET** menu.

--- CLOCK SET ---
1.SELECT TIME ZONE
2.DAYLIGHT SAVING TIME
3.DATE/TIME SETTING
4.END
SELECT: PUSH ▼/▲ KEY
SET : PUSH DISPLAY KEY

2 Press **▲** or **▼** repeatedly to select **1.SELECT TIME ZONE** from the **CLOCK SET** menu.

--- SELECT TIME ZONE ---
ATLANTIC PACIFIC
EASTERN ALASKA
CENTRAL HAWAII
MOUNTAIN SAMOA
SELECT: PUSH ▼/▲ KEY
SET : PUSH DISPLAY KEY

3 Press **DISPLAY** to display the **SELECT TIME ZONE** menu.

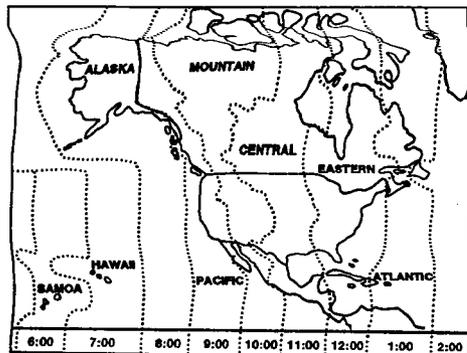
4 Press **▲** or **▼** repeatedly to select one of the eight time zones of the location where you are using the Palmcorder.

5 Press **DISPLAY** to fix the Time Zone. The **CLOCK SET** menu appears.

To exit from the **CLOCK SET** menu, Select **4.END** and press **DISPLAY**.

Note:

When you travel outside the eight time zones right, please set the clock manually (see page 13).



Setting the Clock

Set the Daylight Saving Time

The clock will automatically adjust to daylight saving time so you do not have to do it manually.

Daylight Saving Time is preset to **AUTO**. If you do not want the clock to automatically adjust to daylight saving time, please select **OFF** by following steps 1-5 below.

1 Press **CLOCK SET UP ▲** to display the **CLOCK SET** menu.

Before you begin...

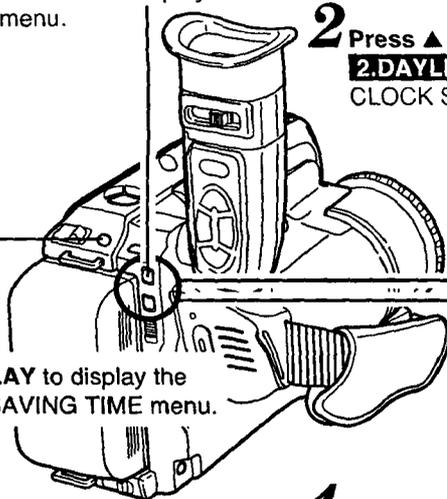
- Connect the Palmcorder to a power source.
- Set the **POWER** switch to **VCR** or **CAMERA**.

Note:

The Palmcorder will exit the **CLOCK SET** menu if, after activation, none of the **CLOCK SET ▲**, **▼** or **DISPLAY** buttons are pressed within 30 seconds.

If Hawaii or Samoa Time Zone is selected, the clock will not automatically adjust to daylight saving time.

2 Press **▲** or **▼** repeatedly to select **2.DAYLIGHT SAVING TIME** from the **CLOCK SET** menu.



--- CLOCK SET ---
1.SELECT TIME ZONE
2.**DAYLIGHT SAVING TIME**
3.DATE/TIME SETTING
4.END
SELECT: PUSH ▼/▲ KEY
SET : PUSH DISPLAY KEY

3 Press **DISPLAY** to display the **DAYLIGHT SAVING TIME** menu.

-- DAYLIGHT SAVING TIME --
AUTO
OFF
SELECT: PUSH ▼/▲ KEY
SET : PUSH DISPLAY KEY

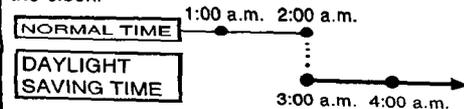
5 Press **DISPLAY** to fix the **DAYLIGHT SAVING TIME** setting. The **CLOCK SET** menu appears.

To exit from the **CLOCK SET** menu, Select **4.END** and press **DISPLAY**.

4 Press **▲** or **▼** to select **AUTO** or **OFF**.

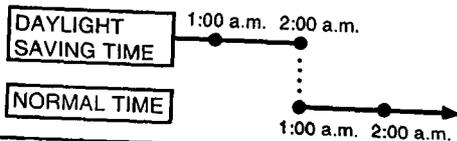
Spring:

First Sunday in April (**DAYLIGHT SAVING TIME: AUTO**) Automatically adds one hour and adjusts the clock.



Autumn:

Last Sunday in October (**DAYLIGHT SAVING TIME: AUTO**) Automatically turns back one hour and adjusts the clock.



Setting the Clock

Set the Date and Time

The date and time is calculated, including leap year, up to DEC 31 2093.

Before you begin...

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

Note:

The Palmcorder will exit the CLOCK SET menu if, after activation, none of the CLOCK SET ▲, ▼ or DISPLAY buttons are pressed within 30 seconds.

Getting Started

- 1** Press **CLOCK SET UP ▲** to display the **CLOCK SET** menu.

- 2** Press **▲** or **▼** repeatedly to select **3.DATE/TIME SETTING** from the **CLOCK SET** menu.

---CLOCK SET---

1.SELECT TIME ZONE
2.DAYLIGHT SAVING TIME
3.DATE/TIME SETTING
4.END

SELECT: PUSH ▼/▲ KEY
SET : PUSH DISPLAY KEY

- 3** Press **DISPLAY** to display the **DATE/TIME SETTING** menu.

- 4** Adjust the flashing digits for the hour, minute, month, day and year.

---DATE/TIME SETTING---

-12:00AM-
JAN 1 1995

SELECT: PUSH ▼/▲ KEY
SET : PUSH DISPLAY KEY

▲ UP
▼ DOWN

5:00PM
JAN 1 1995

→

DISPLAY

5:00PM
JAN 1 1995

▲ UP
▼ DOWN

5:20PM
JAN 1 1995

→

DISPLAY

5:20PM
JAN 1 1995

▲ UP
▼ DOWN

5:20PM
FEB 1 1995

→

DISPLAY

5:20PM
FEB 1 1995

▲ UP
▼ DOWN

5:20PM
FEB 12 1995

→

DISPLAY

5:20PM
FEB 12 1995

▲ UP
▼ DOWN

5:20PM
FEB 12 1996

→

DISPLAY

5:20PM

Press **▲** or **▼** repeatedly (or hold down) to enter the desired numbers, then, press **DISPLAY** to fix that portion and move to the next.

When you finish setting the year, the clock starts operating, and the **CLOCK SET** menu appears.

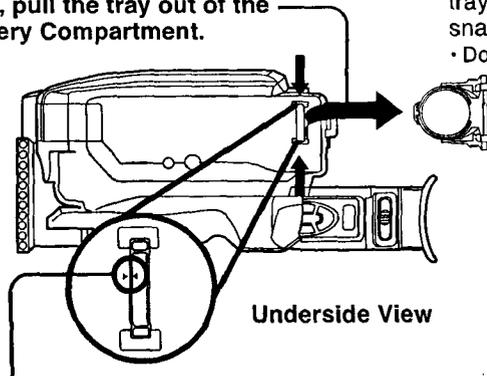
To exit from the **CLOCK SET** menu, Select **4.END** and press **DISPLAY**.

Setting the Clock

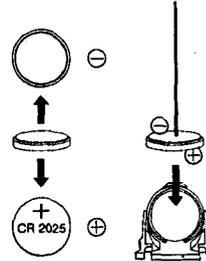
Replace the Battery

The date and time function operates on a preinstalled miniature battery.

- 1** While pinching the stopper tabs, pull the tray out of the Battery Compartment.

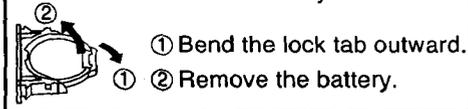


- 2** Replace the battery into the Battery tray with the ⊕ mark facing down until it snaps into place.
- Do not reverse the polarity.



- 3** Replace the Battery tray so that the small triangle marks meet.

How to remove the Battery.



Note:

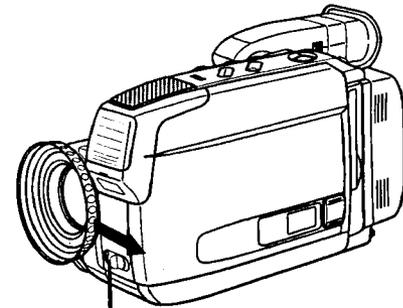
- Make sure your Palmcorder is off when replacing the battery.
- Keep the Battery out of the reach of children since swallowing it may be harmful.
- When the Battery is installed improperly, is discharged, or missing, the words "CLOCK BATTERY" appears on the EVF.
- Battery life is approximately 5 years.

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.

Electronic Viewfinder Indications

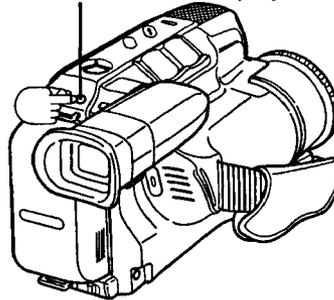
Tape/Battery Remaining

The tape remaining and battery charge level can be displayed during recording.



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

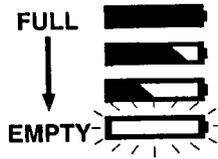
2 Press **DISPLAY** repeatedly to select the desired display.



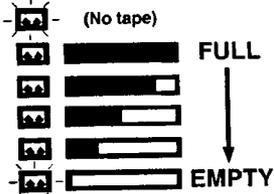
Getting Started

EVF Indications

Battery Charge Remaining:

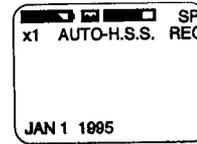
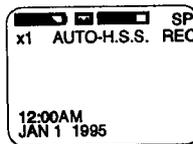


Tape Remaining:

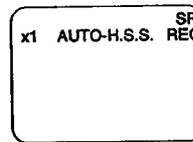


- It will take several seconds for the tape remaining indicator to operate after the tape starts moving.

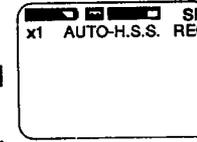
First press



Fourth press



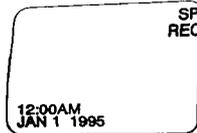
Second press



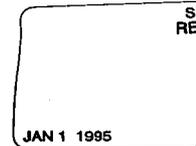
Third press

Record the Date and Time

Set the **POWER** switch to **CAMERA**. When placed in Record mode, the time and date will be recorded on the tape.



Press **DISPLAY** once to change the display to date only. Press once or twice more to remove the date/time display.

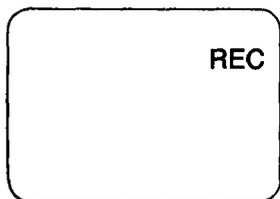


Note:
Only the Date and Time are recorded on the Tape.

Electronic Viewfinder Indications

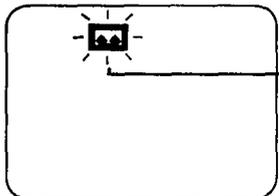
Here are some of the basic indications which appear in the Palmcorder EVF. They will not be recorded on the tape.

Operating Mode Indications

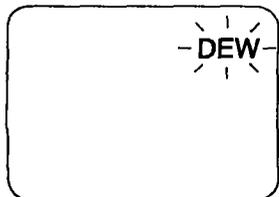


REC (record)
PAUSE
FF (fast forward)
PLAY
REW (rewind)

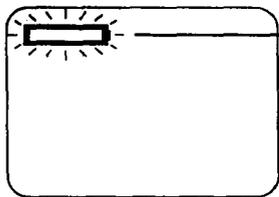
Warning Indications



If the record tab is missing, this indicator will flash and recording will not start.
This indicator flashes when the tape is about to end in REC mode.



If excessive moisture condenses in the unit, it will not operate. This indicator will flash for several seconds and the Palmcorder will automatically turn OFF.
In this case, wait until the indicator no longer flashes when your Palmcorder is turned on again.



 and Power Indicator will flash for a few minutes prior to automatic power shut off. When this happens, a battery recharge is necessary (see page 7).

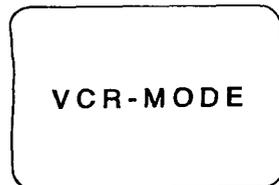
10-Second Reminder

An elapsed time indicator appears for one second every 10 seconds that recording continues. This is a reminder of how long you have been shooting a particular scene and can help keep your recordings fresh and interesting.

0:00 0:10 0:20 59:50
↑
(return to 0:00 and continue)

• 10-Second Reminder will be reset whenever you press Record/Pause.

VCR-MODE Indication



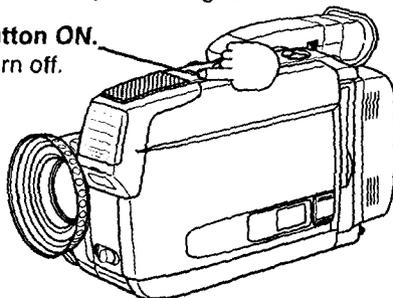
"VCR-MODE" will appear for one minute if the POWER switch is set to VCR or the RECORD/PAUSE button is pushed in VCR Mode.

Built-in Light (PV-IQ325/PV-IQ425/PV-IQ525)

Using the Built-in Light

You can enjoy both indoor and outdoor recording using the ready-to-use light.

Press **LIGHT** button ON.
Press again to turn off.



Before you begin...

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

Caution:

This light becomes hot during operation. Make sure nothing covers the Light during operation.

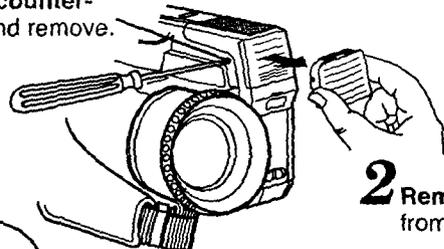
Getting Started

Replacing the Bulb

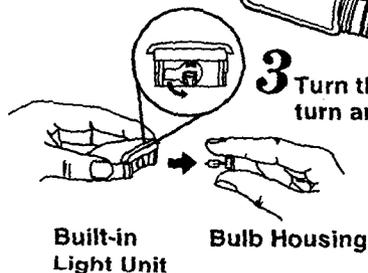
Before you begin...

- Set the POWER switch to OFF.

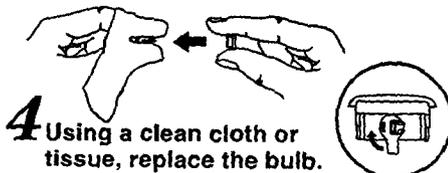
1 Turn screw counter-clockwise and remove.



2 Remove the Built-in Light unit from the Palmcorder.



3 Turn the Bulb Housing counterclockwise 1/4 of a turn and pull free from the Built-in Light unit.



4 Using a clean cloth or tissue, replace the bulb.

5 Replace the Bulb Housing turning it clockwise, then replace the Built-in Light Unit. Finally, replace the screw.

Danger:

When replacing the bulb, use only lamp bulbs (PART NO. VLLW0007) supplied by Panasonic to reduce the risk of fire.

Use a cloth or tissue when handling the bulb as finger oils will decrease the bulb life.

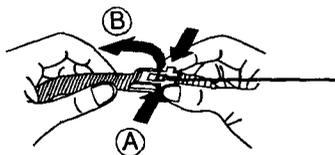
To prevent possible burn hazard, disconnect the Built-in Light and allow the lamp to cool before replacing.

Note:

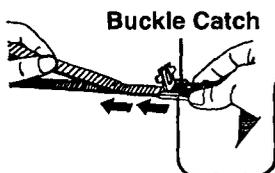
- If using the Built-in Light for an extended period of time, be sure to provide ventilation when in a hot environment.
- Using the Built-in Light when the Palmcorder is powered by a car battery may shorten bulb life.

Attaching the Shoulder Strap

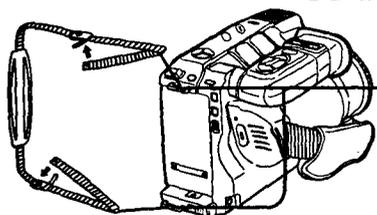
Make sure the Battery Pack is not attached.



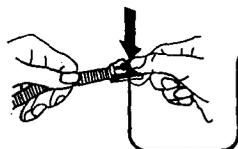
- 1** **A** Pinch the tabs together on either side of the clasps **B** and open the buckles.



- 2** Unhook the strap from the Buckle Catch.



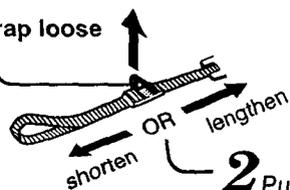
- 3** Thread the strap ends through the Strap Attachment Rings. Then re-hook them onto the Buckle Catch.



- 4** Snap both clasps shut to lock the strap in place.

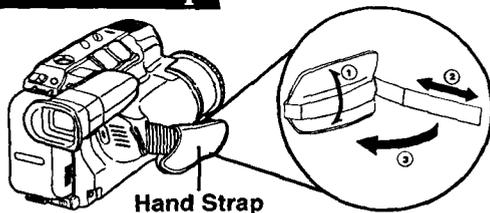
Adjust the Length

- 1** Pull a loop of the strap loose from the buckle.



- 2** Pull the strap firmly through the buckle to adjust the length.

Hand Strap



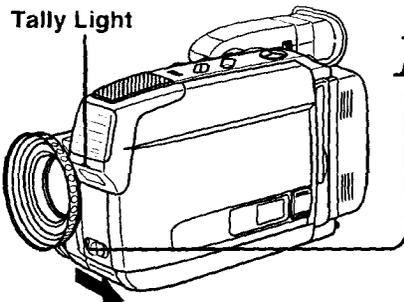
Adjust the length to the size of your hand using the illustration at left as a guide.

Camera Recording

Simple Recording

Before you begin...

- Connect the Palmcorder to a power source.
- Insert a cassette with record tab (see page 10).



- 1** Set the POWER switch to CAMERA.
Built-In Lens Cover opens.

EVF

PAUSE

Record/Pause
mode.

- 2** With the Eye Cup against your eye, adjust the Vision Adjustment Control to your eyesight.

Underside View



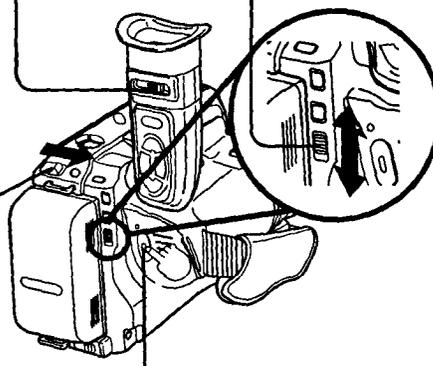
(PV-IQ325)
(PV-IQ525) Vision Adjustment
Control



(PV-IQ225)
(PV-IQ425)

- 3** Slide the TAPE SPEED Selector to SP or SLP (refer to page 10).

TAPE EJECT



- 4** **A** Press RECORD/PAUSE to start recording.
The Tally Light and RECORD/PAUSE are lit during recording.

REC

- B** Press RECORD/PAUSE again to pause recording.

Helpful Notes:

To conserve power
After 5 minutes the Record/Pause mode will automatically change to Standby mode.
To resume recording, set the POWER switch to OFF and then CAMERA.

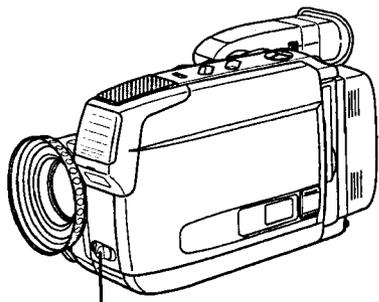
- **To remove the cassette**
In Record/Pause mode, slide the TAPE EJECT switch (refer to page 10).

Basic Operation

Camera Recording

Easy Edit Standby

If you stop recording but plan to resume within 24 hours, use the Edit Standby feature to make a smooth transition between scenes.



POWER Switch

Set the **POWER** switch to **OFF** and leave the cassette in the Palmcorder.

Set the **POWER** switch to **CAMERA** and press **RECORD/PAUSE** (within 24 hours) to continue recording.

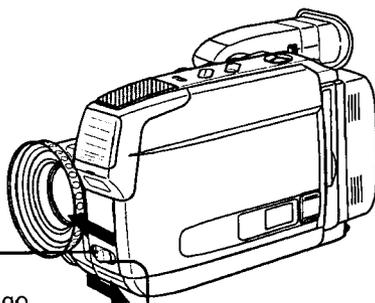
Note:

- If it is longer than 24 hours before you resume recording, use the manual Easy Edit feature described below.

Manual Easy Editing

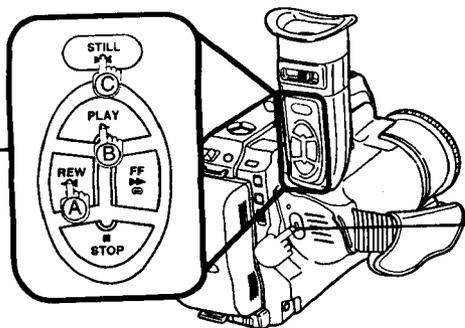
For proper continuity when taping from the Stop mode, or after changing the Battery Pack.

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



- 2**
- Ⓐ Press **REWIND/SEARCH** to go back a few seconds on the tape.
 - Ⓑ Press **PLAY** to review the picture on the Viewfinder.
 - Ⓒ Press **STILL** at the location you wish to continue your recording.

3 To prepare for recording, set the **POWER** switch to **CAMERA**.

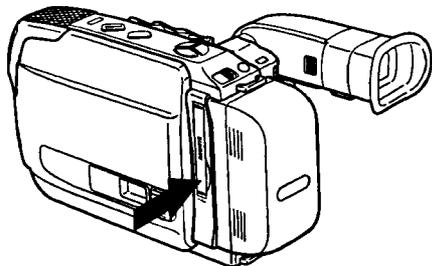


4 Press **RECORD/PAUSE** to continue recording.

8-Function Remote Control (PV-IQ325/PV-IQ425/PV-IQ525)

Removing and Storing the Remote

Operate the major functions of your Palmcorder from up to 16 feet (5 m) (approx.) away.

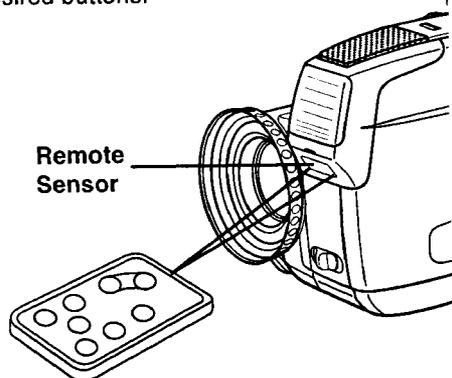


To remove,
press in on the Remote itself and release.
The Remote ejects for removal.

To store,
insert into the slot, as shown by the arrow,
until it locks into place.

Remote Control Operation

Aim the Remote Control at the Remote Sensor of the Palmcorder and press the desired buttons.



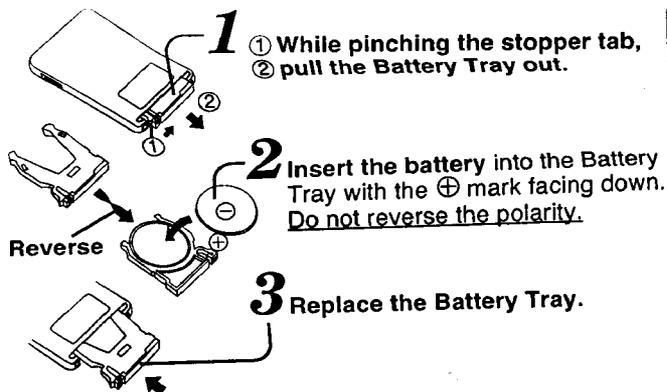
Controlled Functions	VCR MODE	CAMERA MODE
REC/PAUSE	-	0
T(telephoto) Zoom	-	0
W(wide angle) Zoom	-	0
PLAY	0	-
FF/SEARCH	0	-
REW/SEARCH	0	-
STOP	0	-
STILL	0	-

Basic Operation

Important Note:

- After 5 minutes in the Rec/Pause mode, the Palmcorder will shut off to conserve battery life.
If within 30 minutes, press REC/PAUSE down for about one second, the Palmcorder comes back on and goes into the Record mode.
If it is longer than 30 minutes before you resume recording, set the POWER switch to OFF and then CAMERA.

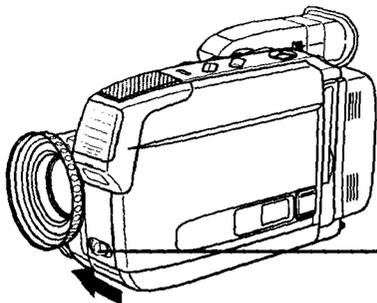
Replace the Battery



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.

Playback your Recordings

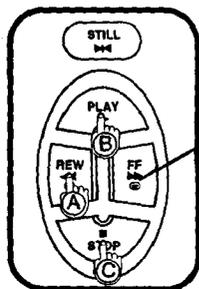
Playback using the EVF



Before you begin...

- Connect the Palmcorder to a power source.
- Insert a recorded cassette.

1 Set the POWER switch to VCR.



2 **A** Press REWIND/SEARCH to rewind the tape.

B Press PLAY to start playback.

C Press STOP to stop playback.

FAST FORWARD

DISPLAY

CLOCK SET UP ▲

DOWN ▼

Helpful Note:

Search Speed

Standard Play (SP) Search is about 3 times the normal speed, and Super Long Play (SLP) Search is about 9 times the normal speed.

Special Effects Playback Features During Playback

(Sound is Muted)

Rapidly Locate a Scene

Press FF or REW for a rapid visual search.

Press again, or press PLAY to resume normal speed.

View a Still Picture

Press STILL to freeze the playback picture.

Press again to resume normal playback.

Tracking Control

Auto Tracking

Continuously analyzes the signal of each recording for optimum picture quality.

Manual Tracking

To minimize the noise in some recordings, manual tracking may be necessary.

For Noise in Playback mode:

Press CLOCK SET UP ▲ or DOWN ▼ until picture clears.

Press DISPLAY to return to Auto Tracking.

For Noise in Still mode:

Press CLOCK SET UP ▲ or DOWN ▼ until picture clears.

V-Lock Control

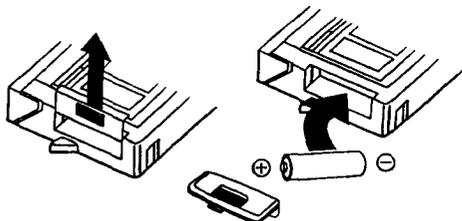
Reduces jitter in Still mode.

Press DISPLAY and CLOCK SET UP ▲ or DOWN ▼ until picture is stable.



Playback your Recordings

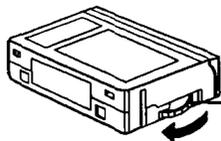
Playback using the PlayPak



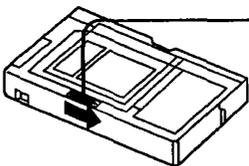
Remove the Battery Compartment lid and insert the AA size battery.

- Make sure polarities are aligned properly.
- When tape loading and unloading time becomes longer than normal, battery replacement is necessary.

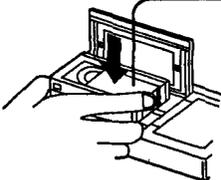
Insert VHS Cassette



1 Turn the Tape Wheel on the **VHS** cassette in the direction of the arrow to take up any slack.



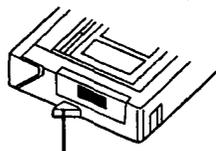
2 Slide the **RELEASE** button in the direction of the arrow to open the PlayPak door.



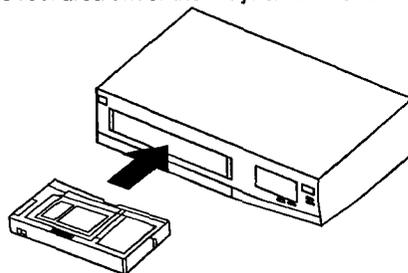
3 Insert the **VHS** cassette with the window facing up and to the left.

Then, snap the lid shut.

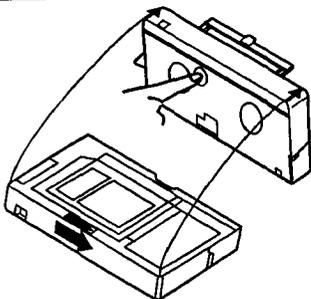
- Let the Load Detector fully retract before using the PlayPak in your standard VHS VCR.
- Be sure the cassette reel area under the PlayPak is free to turn while loading.



Load Detector



Remove VHS Cassette



Slide the **RELEASE** button and wait for the lid to open.

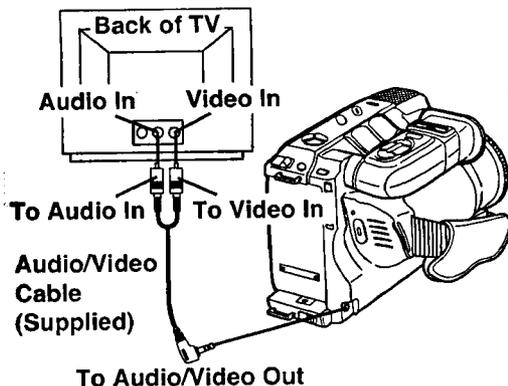
Hold the PlayPak securely in one hand. Using your finger, reach through the hole in the bottom of the PlayPak and **push the tape out the top.**

Playback your Recordings

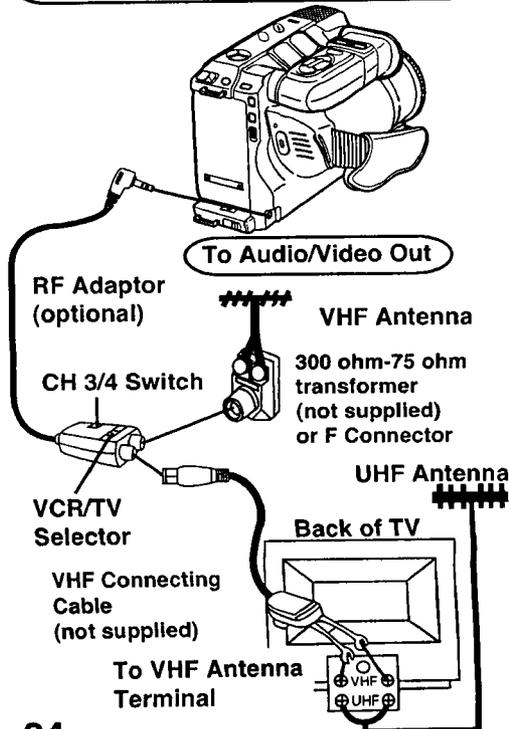
Playback or Viewing using a TV

Your Palmcorder may be connected to a TV to play back tapes or to view what you are recording.

TV with AUDIO/VIDEO IN Jacks.



TV without AUDIO/VIDEO IN Jacks.



Before you begin...

- Connect the Palmcorder to a power source.

1 Set the **POWER** switch to **VCR** to playback a tape.

Or, set to CAMERA to view what your Palmcorder is recording.

2 Turn the **TV ON** and set it to **LINE INPUT**.

Check your TV operating instructions for further information.

Note:

If your TV has no **VIDEO** or **AUDIO IN** Jacks, select **CH 3** or **4** on your TV to match the **RF Adaptor CH 3/4** switch and set the **VCR/TV selector** on the **RF Adaptor** to **VCR**.

3 Start playback or begin a recording.

Display-Off Mode

This feature allows you to remove all Electronic Viewfinder Indications.

Before inserting a tape, press DISPLAY and STOP together for more than one second to remove the indications except time and date*.

To display the Electronic Viewfinder Indications again, **turn the Palmcorder Power off and then again on.**

* To remove the time and date, refer to page 15.

To watch TV only

If you have connected the Palmcorder to your TV using an **RF Adaptor**:

Set the POWER switch to OFF on the Palmcorder.

Then, set the VCR/TV Selector on the **RF Adaptor** to **TV**.

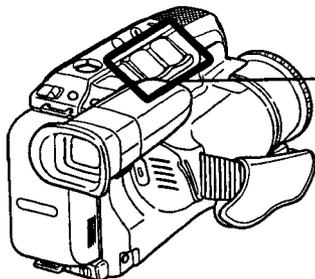
Now, turn the TV ON and select a channel.

Special Features

Four Speed Power Zoom

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

The zooming speed ranges from a slow speed of 15 seconds to a fast 3.5 seconds according to the pressure applied to the zoom buttons.



Zoom In ("T")



Zoom Out ("W")

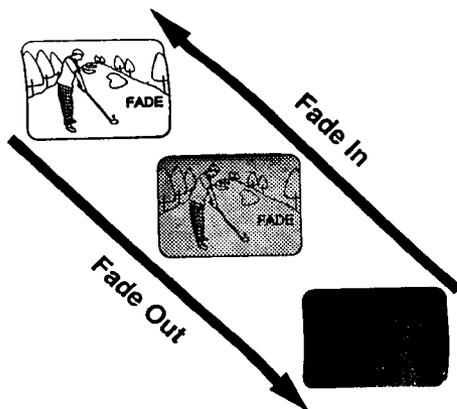
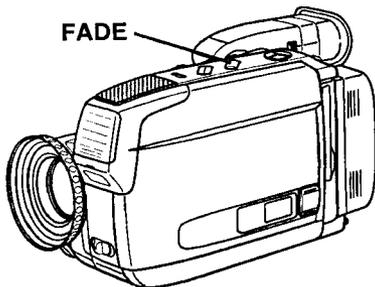
Zoom slowly by lightly pressing the "T" (Telephoto) or the "W" (Wide Angle) side of the POWER ZOOM switch.

Zoom quickly by applying more pressure.

- The magnification level is displayed in the EVF.

One -Touch Auto Fade

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



Fade In:

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

- 1 Press **FADE** so that "FADE" flashes in the EVF.
- 2 Press **RECORD/PAUSE** to start recording. The picture and sound fade out, and then 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.

- 1 Press **FADE** so that "FADE" flashes in the EVF while recording.
- 2 Press **RECORD/PAUSE** to pause recording. The picture and sound gradually fade out.

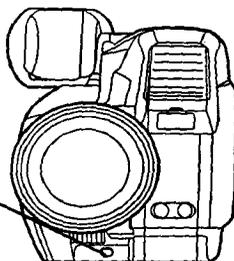
Should you accidentally press the **FADE** button, press **FADE** again so that "FADE" disappears in the EVF.

Special Features

Auto Focus

The Palmcorder will automatically bring the subject into focus even during zooming.

Press **FOCUS A/M** if necessary, so that the letters "MF" do not appear in the EVF.

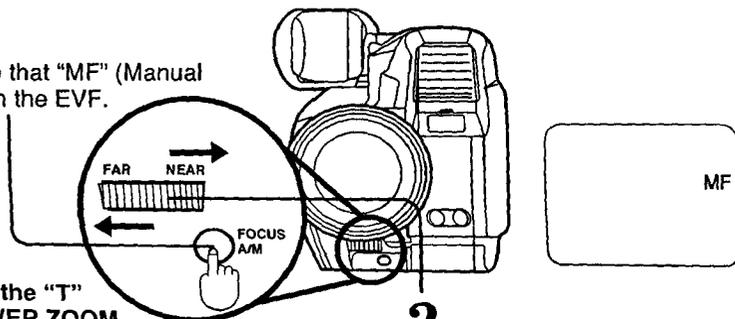


Manual Focus

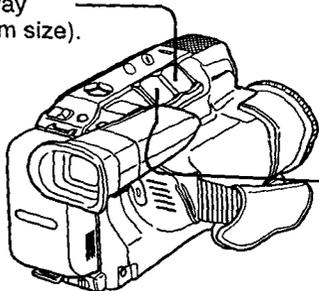
Use Manual Focus (MF) when recording ...

- a subject through glass.
- a scene where the subject is far from the Palmcorder and there are objects in the foreground.
- a subject with distinct horizontal stripes.
- a subject not centered in the Viewfinder.
- subjects with shiny surfaces.
- an obliquely angled subject.
- 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 **FOCUS** so that "MF" (Manual Focus) appears in the EVF.



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



3 Turn the **FAR/NEAR** dial until the picture is in focus.
• It may be necessary to back away from the subject to focus the image properly.

4 Press the "W" side of the **POWER ZOOM** switch to frame the picture as desired.

Macro Focus (for close-ups)

Auto Focus will function down to 1/2 inch (12.7mm) in front of the lens.

Press the "W" side of the **POWER ZOOM** switch to the wide angle position. Then, bring the Palmcorder as close to the subject as necessary.

Special Features

High Speed Shutter

To record high speed motion (i.e. a tennis stroke) for improved replay in STILL or SLOW mode, when watching the tape on a VHS VCR (3 or 4 head VCR).

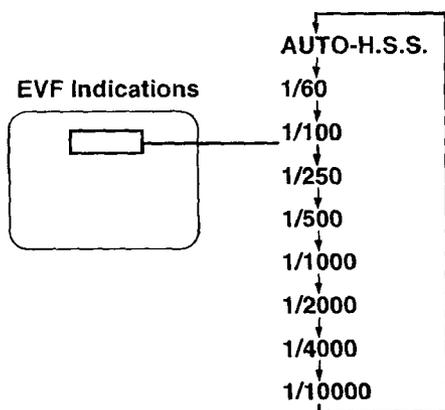
Auto Shutter

In the AUTO mode ("AUTO-H.S.S." is displayed in the EVF), the Palmcorder will automatically adjust the shutter speed from 1/60 to 1/250 according to the brightness of the subject. The speed does not appear in the EVF.

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

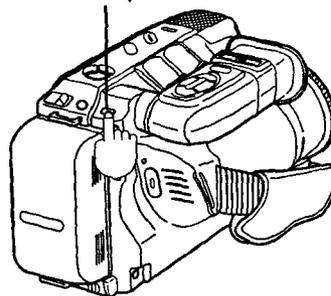
Manual Selection

The High Speed Shutter indicator flashes when the light level is inadequate. More light should be provided to achieve better picture quality and color (see page 33).



Press **HIGH SPEED SHUTTER** while recording.

Press repeatedly to obtain one of the eight higher shutter speeds shown at left.

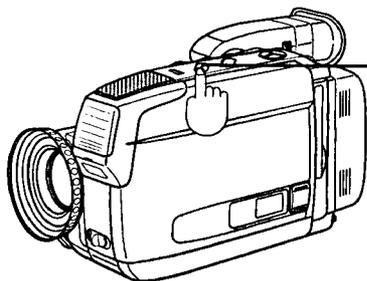


Special Features

Special Features

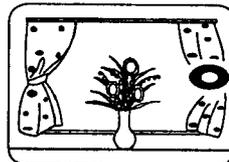
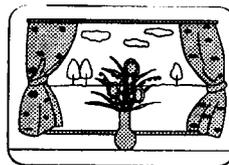
Backlight (PV-IQ225/PV-IQ325)

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



Press **BACKLIGHT** while recording.

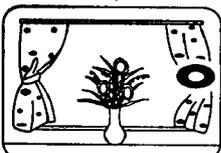
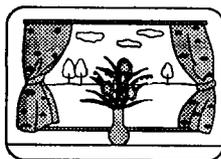
When lighting conditions return to normal, press **BACKLIGHT** again to disengage.



Indication appears in the EVF.

Backlight (PV-IQ425/PV-IQ525)

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



Indication appears in the EVF.

EVF Indications

Normal (no display)



First press (low)



Second press (medium)



Third press (high)

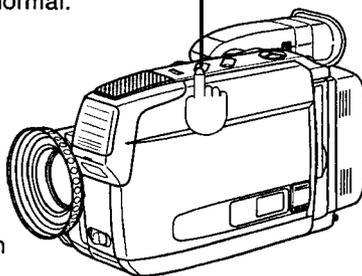


Fourth press

Select one of these positions so that the subject can be seen clearly.

Press **BACKLIGHT** to obtain the desired position while recording.

Press until there is no display in the EVF when lighting conditions return to normal.



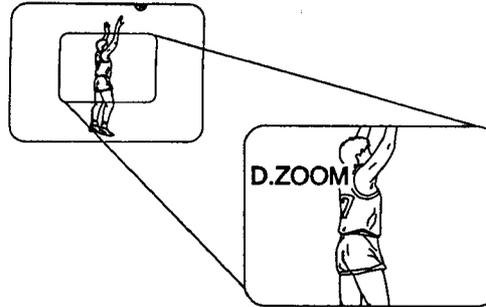
Special Features

Digital Zoom (PV-IQ425/PV-IQ525)

This feature allows you to increase the magnification of the Power Zoom.

Before you begin...

- Set the POWER switch to CAMERA.

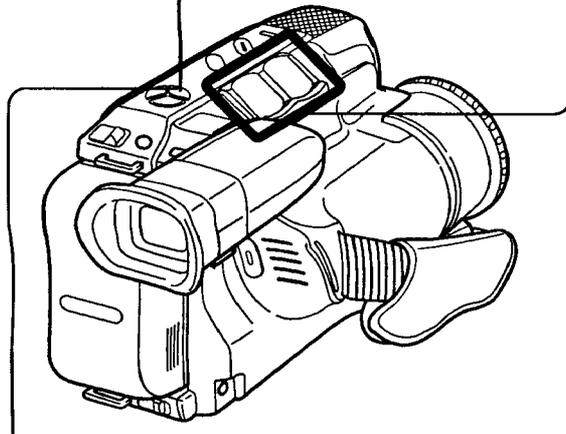


- 1 Press DIGITAL ZOOM** to select D.ZOOM for partial increase (20X max.).

Because the image is enlarged digitally, the picture may become distorted when the higher magnification levels are used.

- 2 Press and hold the "T" side of the POWER ZOOM switch.** Digital Zoom engages when the Power Zoom reaches its maximum position of x14.

- The zoom level is displayed in the EVF.
- Press the "T" or "W" side of the POWER ZOOM switch to control the digital zoom level.
- When the level falls below x14, the normal zooming function will resume.



- 3 Press DIGITAL ZOOM** until no indication appears in the EVF to turn the Digital Zoom feature off (refer to page 25).

Special Features

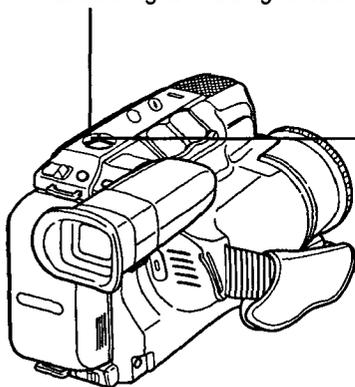
Special Features

Digital Electronic Image Stabilization System (D.E.I.S.) (PV-IQ425/PV-IQ525)

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

1 Press **EIS** to activate the D.E.I.S. function. ("EIS" will appear in the EVF.)

- The image in the EVF will be enlarged slightly and the shutter speed will be automatically adjusted from 1/80 to 1/250 according to the brightness of the subject.



2 Press **EIS** again to cancel.

- You may also use the High Speed Shutter function (from 1/100 to 1/10000). The shutter speed you select remains active even after you cancel the D.E.I.S. function.
- 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.
- EIS indicator flashes when the light level is inadequate.
- recording a subject under a great amount of fluorescent light.
- recording a scene with very fast motions.

Before you begin...

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



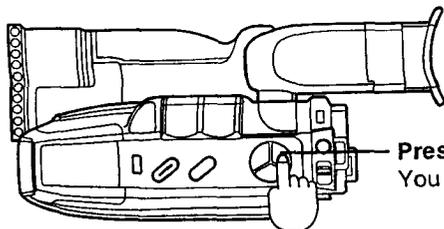
NORMAL



EIS ON

Negative/Positive Transposer (PV-IQ425/PV-IQ525)

This special effect feature allows you to change the picture from a positive to a negative image.



Press **NEG/POS**.

You may now view or record the image.

Before you begin...

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

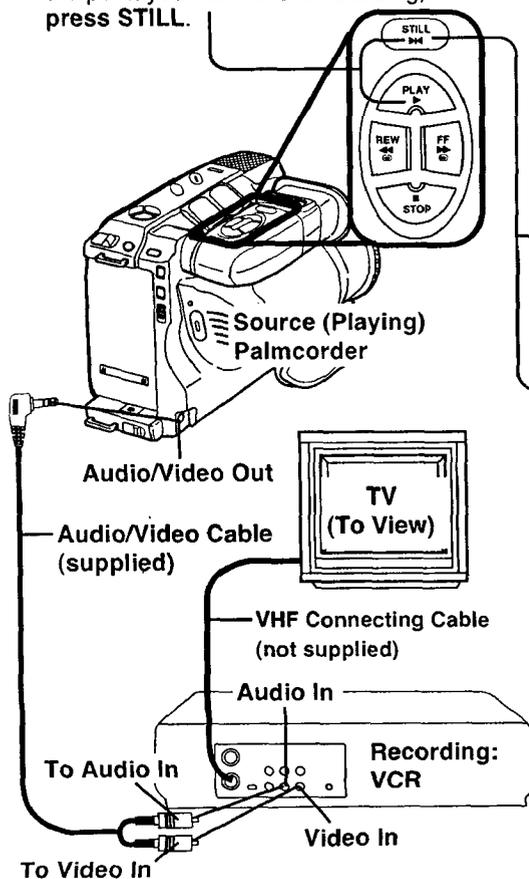
Copying your Tapes (dubbing)

Main Operation

Before you begin...

- Connect the Palmcorder to a power source.
- Turn ON both units.
- Set the recording VCR's Input Signal Selector to LINE.
- Set the Palmcorder POWER switch to VCR.

- 2** Press **PLAY** on the (playing) Palmcorder. When the tape reaches the point you want to start dubbing, press **STILL**.



Monitor with your TV

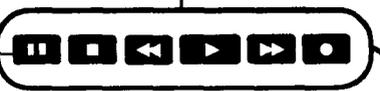
- Turn the TV ON and select its VCR channel (either CH3 or CH4).
- Set the VCR/TV Selector on the recording VCR to VCR.

- 1** Insert a **pre-recorded tape** into the source (playing) Palmcorder and a blank tape with record tab into the recording unit.

- 3** Press **PLAY** and **REC** together then immediately press **STILL** on the recording unit.

- 4** Press **STILL** on the playing Palmcorder and **PAUSE/STILL** on the recording unit to begin copying your tape.

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



VCR Buttons

Special Features

CAUTION:

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

Palmcorder Accessory System

For information and ordering instructions, see the separate Selection Guide and Accessory Order Form.

Power Supplies

Supplied Accessory



**AC Adaptor
(PV-A16)**

Supplied Accessory



**1.8Ah Battery Pack
(PV-BP18)**

Connection

Supplied Accessory



**Audio/Video Cable
(VJAW0026)**

Optional Accessory



**RF Adaptor
(PV-RF16)**

Optional Accessory



**2.4Ah Battery Pack
(PV-BP17)**

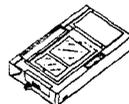
Optional Accessory



**1.2Ah Battery Pack
(PV-BP15)**

To Record and Playback

Supplied Accessory



**VHS PlayPak
(PV-P1)**

Optional Accessory



**Compact Video
Cassette Tape
(NV-TC20P,
NV-TC30P,
NV-TC40P)**

Optional Accessory



**Car Battery Cord
(PV-C16)**

To Transport

Supplied Accessory



**Shoulder Strap
(VYCW0071)**

Optional Accessory



**System Carrying Case
(PV-H18)**

Optional Accessory



**Video Corrector
(PV-CC50)**

To Copy your Tapes (with Video/Audio)

Supplied Accessory



**Audio/Video Cable
(VJAW0026)**



VCR (not supplied)

Notes Regarding Operations

Car Battery Cord (P. 9)

- Be sure to start your car engine before inserting the cigarette lighter plug of the Car Battery Cord into the lighter socket; otherwise, the cigarette lighter plug fuse may burn out.
- Because the car is running while your Palmcorder is in operation, make sure you're in a well ventilated area.
- Disconnect the cigarette lighter plug when your Palmcorder is not being used.

Note:

The Car Battery Cord can only be used in vehicles equipped with DC 12V (negative ground) batteries.

Charge the Battery Pack (P. 7)

- The useful operation time of the Battery will gradually decrease after repeated use and recharging.
- The Battery is no longer serviceable if the operation time is very short, even after a sufficient charge.

Special Effects Playback (P. 22)

- During search playback, horizontal noise bars will appear and there will be no audio.
- 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.

- When the tape reaches its end during playback, or fast forward, it will rewind automatically.

High Speed Shutter (P. 27)

- For proper color reproduction, it is recommended that you use this feature outdoors. For indoor High Speed Shutter recording, additional halogen or 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.
- The Auto Focus system may not operate properly in insufficient light when using the High Speed Shutter.

Copying your Tapes (P. 31)

- Tapes recorded on other VCRs and used for playback in the Palmcorder must be recorded in SP or SLP mode.
- For technical reasons, dubbing a tape may reduce its quality.

CCD Warning

When your Palmcorder is aimed at excessively bright objects, such as the sun or other bright lights, a vertical bar may appear in the picture. This is a normal characteristic of the CCD pick-up device. Try to avoid aiming the camera at extremely bright objects.

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.

Auto-Reset

The Palmcorder, provided no tape is inserted, will reset the Backlight, High Speed Shutter and Focus to their AUTO or OFF modes if, after activation, none of these buttons are pressed within 5 minutes.

For Your Information

Notes Regarding Operations

Attaching Optical Filters and Lenses

Remove the Lens Hood by turning it counterclockwise.

Then attach an optical filter or lens.

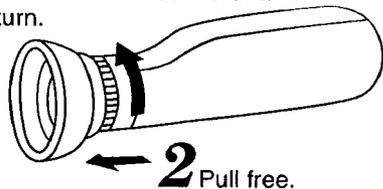
- Be careful not to touch the lens itself.
- Replace the Lens Hood after removing the accessory.

Cleaning the EVF (Electronic View Finder)

PV-IQ225/PV-IQ425

To Remove

- 1 Turn the EVF Eyepiece counterclockwise 1/8 of a turn.



Remove any lint or dust particles with a soft clean cloth being careful not to scratch the glass surfaces.

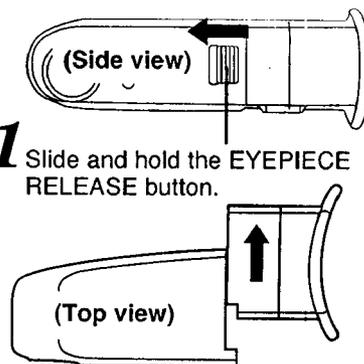
3 To re-install EVF

Line up the marks on the Eyepiece with the grooves inside the EVF shaft and attach. Turn the EVF clockwise 1/8 of a turn to lock in place.

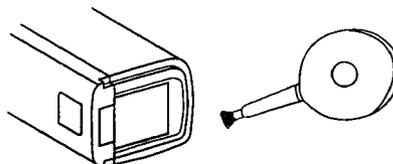
PV-IQ325/PV-IQ525

To Remove

- 1 Slide and hold the EYEPIECE RELEASE button.



- 2 Remove the eyepiece. (Do not twist.)



Remove any lint or dust particles with a blower, available at photography stores. Do not touch lenses with fingers.

Now, replace the eyepiece.

FCC Warning: 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.

Specifications

Power Source:	Compact VHS Palmcorder: DC 6V AC Adaptor: 110/120/220/240V AC, 50/60 Hz Battery: Nickel-Cadmium Type DC 6V
Power Consumption:	Compact VHS Palmcorder: 6V DC 8.1W (Max. 11.1W) (PV-IQ525) 6V DC 7.6W (Max. 10.6W) (PV-IQ425) 6V DC 7.8W (Max. 10.8W) (PV-IQ325) 6V DC 7.3W (PV-IQ225) AC Adaptor: 24W
Video Signal:	EIA Standard (525 lines, 60 fields) NTSC color signal
Video Recording System:	4 rotary heads, helical scanning system
Audio:	1 track
Pick-Up System:	Sequential color difference field reverse system
Pick-Up Device:	One integral color filter Charge Coupled Device (CCD)
Lens:	14:1 zoom lens, F1:1.6 with auto iris control Focal length: 5.3mm - 74.2mm Power zoom function Lens filter diameter: 55mm
Viewfinder:	0.5 inch (12.7mm) Liquid Crystal Color Electronic Viewfinder (PV-IQ325/PV-IQ525) 0.5 inch (12.7mm) Electronic Viewfinder (PV-IQ225/PV-IQ425)
Minimum Illumination Required:	1 lx (F1:1.6) 0.1 footcandles
Operating Temperature:	32°F~104°F (0°C~40°C)
Operating Humidity:	10%~75%
Weight:	Compact VHS Palmcorder: 1.9 lbs. 0.89kg (PV-IQ225) 1.9 lbs. 0.90kg (PV-IQ325/PV-IQ425/ PV-IQ525) AC Adaptor: 0.77 lbs. 0.35kg
Dimensions:	Compact VHS Palmcorder: 4-1/8 (W) × 4-5/8 (H) × 6-7/8 (D) inch 106 (W) × 116 (H) × 176 (D) mm AC Adaptor: 2-3/4 (W) × 1-5/8 (H) × 6-1/4 (D) inch 70 (W) × 41 (H) × 158 (D) mm

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

Before Requesting Service

Cleaning Care for Video Heads



Clogged Video Head

(a) Video Head Cleaning: Your Palmcorder will not normally require head cleaning; however, it is possible that the heads may become clogged when playing an old or damaged tape. If the image on your screen resembles the photograph on the left while playing back a tape, 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. There are many types of cleaning cassettes, so 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.

For Your Information

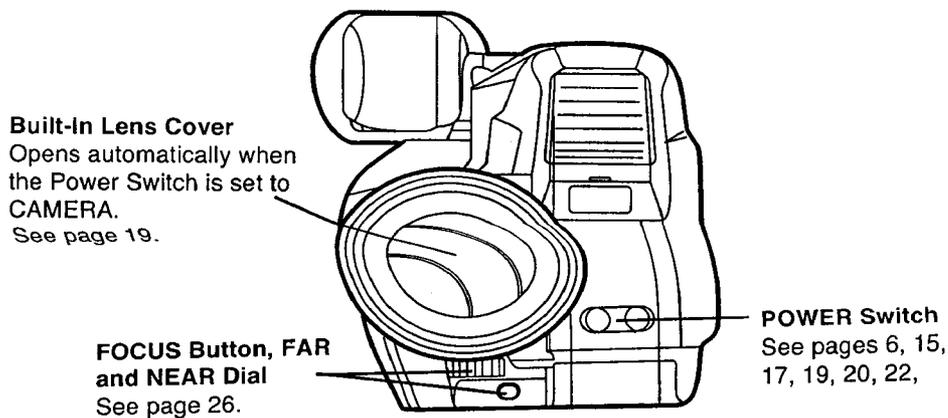
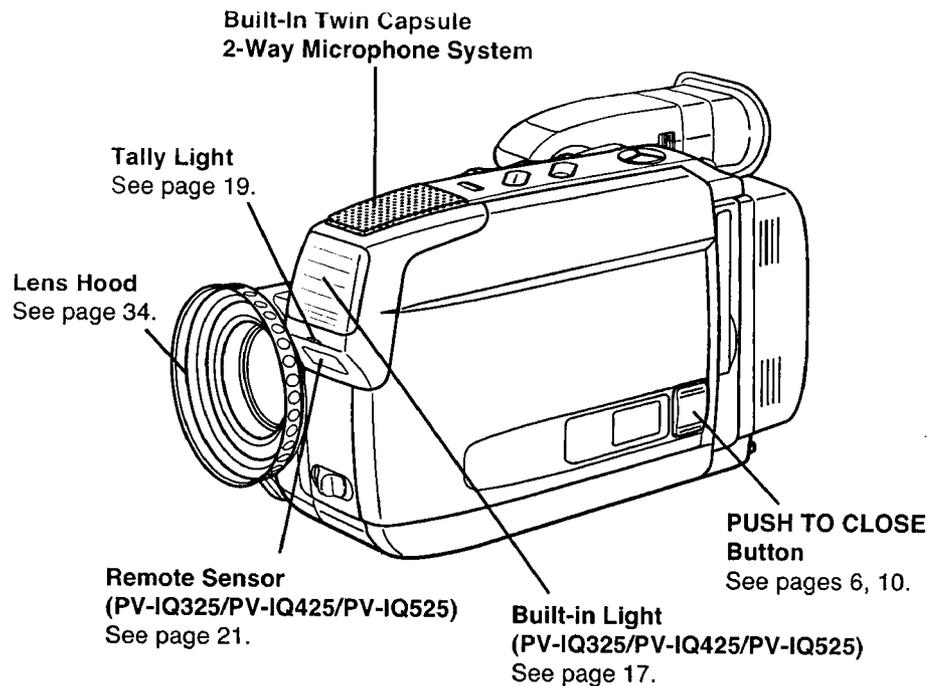
Before Requesting Service

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

Symptom	Correction
No picture in the EVF ...	<ul style="list-style-type: none"> • Make sure the Power Source is connected. (pp. 7, 9) • Make sure the POWER switch is set to VCR or CAMERA. (pp. 19, 22) • Check the Dew Indicator. (p. 16) • Make sure the battery is fully charged. (p. 7) • Make sure all necessary cables are connected correctly and firmly. (p. 24)
Video cassette can't be inserted ...	<ul style="list-style-type: none"> • Make sure the Power Source is connected. (pp. 7, 9) • Insert the cassette with the window side facing out. (p. 10)
Video cassette can't be removed ...	<ul style="list-style-type: none"> • Make sure the Power Source is connected. (pp. 7, 9)
No operation starts when operation buttons are pressed ...	<ul style="list-style-type: none"> • Check the Dew Indicator. (p. 16)
Recording cannot be done ...	<ul style="list-style-type: none"> • Make sure the record tab is still intact. (p. 10) • Check the Battery Indicator. (p. 15) • Check the Dew Indicator. (p. 16)
Auto Focus does not operate ...	<ul style="list-style-type: none"> • Make sure the FOCUS button is set to AUTO. (p. 26) • Make sure the unit is ON, with the POWER switch set to CAMERA (p. 19).
Sound from microphone can't be monitored ...	<ul style="list-style-type: none"> • Make sure the unit is set to REC or Record/Pause mode.
Camera picture is too dark ...	<ul style="list-style-type: none"> • Make sure the HIGH SPEED SHUTTER button is OFF (p. 27).
No playback picture, or the playback picture is noisy or contains streaks ...	<ul style="list-style-type: none"> • Press the Clock Set Up ▲/Down ▼ button during playback (Tracking Control) (p. 22).
During playback, the picture shows motion or blurred action ...	<ul style="list-style-type: none"> • Portions of the still picture where the normal speed motion was particularly rapid may produce this effect. This is normal.
"Panasonic Palmcorder IQ IT'S VHS SO ITS TAPES PLAY IN YOUR VCR" appears in the EVF and Monitor ...	<ul style="list-style-type: none"> • Set the POWER switch to OFF and then CAMERA.
If the top of your playback picture waves back and forth excessively ...	<ul style="list-style-type: none"> • Because the playback signal is not as stable as an off the air TV signal, the top of your TV screen may be bent or unstable when the tape is played back. This symptom is more noticeable when a tape, recorded on another VCR, is played back. To solve this problem, locate the horizontal hold control on your TV. Turn it slowly to correct the wavy picture. If your TV does not have a horizontal hold control or adjusting the control does not help, some modifications may have to be made to the TV set. Technically this is called "Horizontal AFC time constant change." If such a problem exists, please contact your local TV service center. (Some nominal service charges may be required.)

Index of Controls

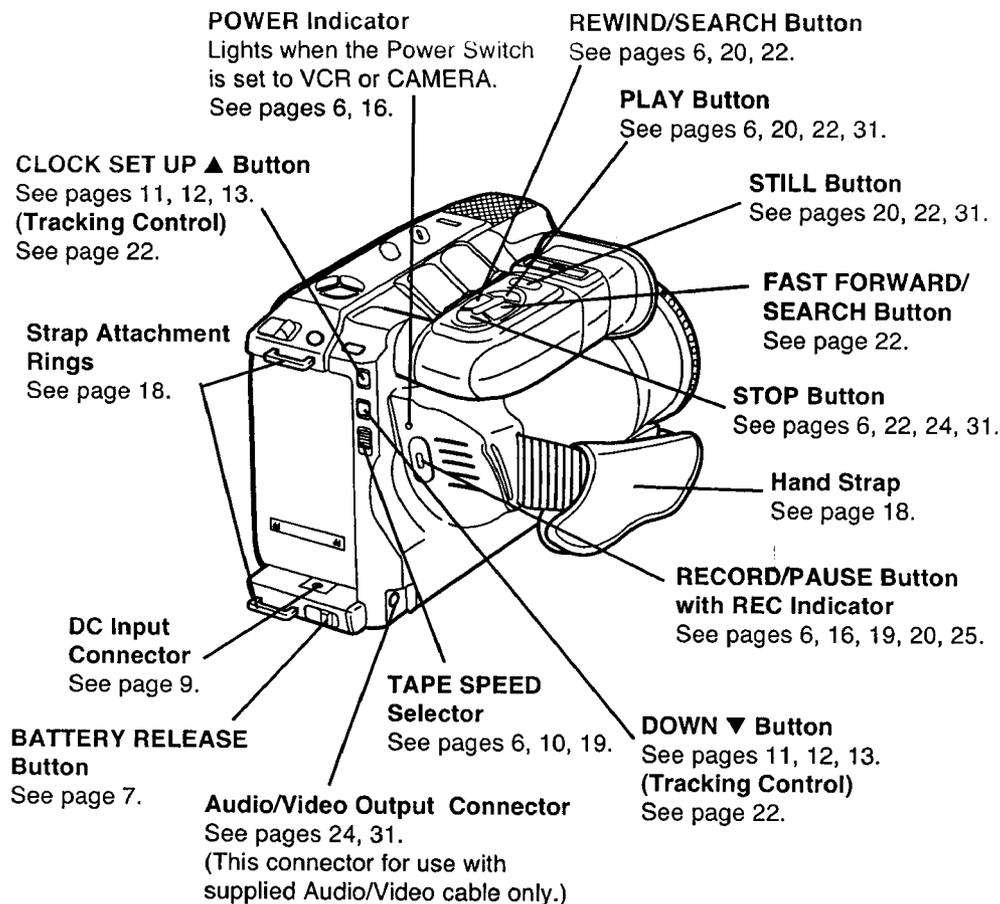
Front View



For Your Information

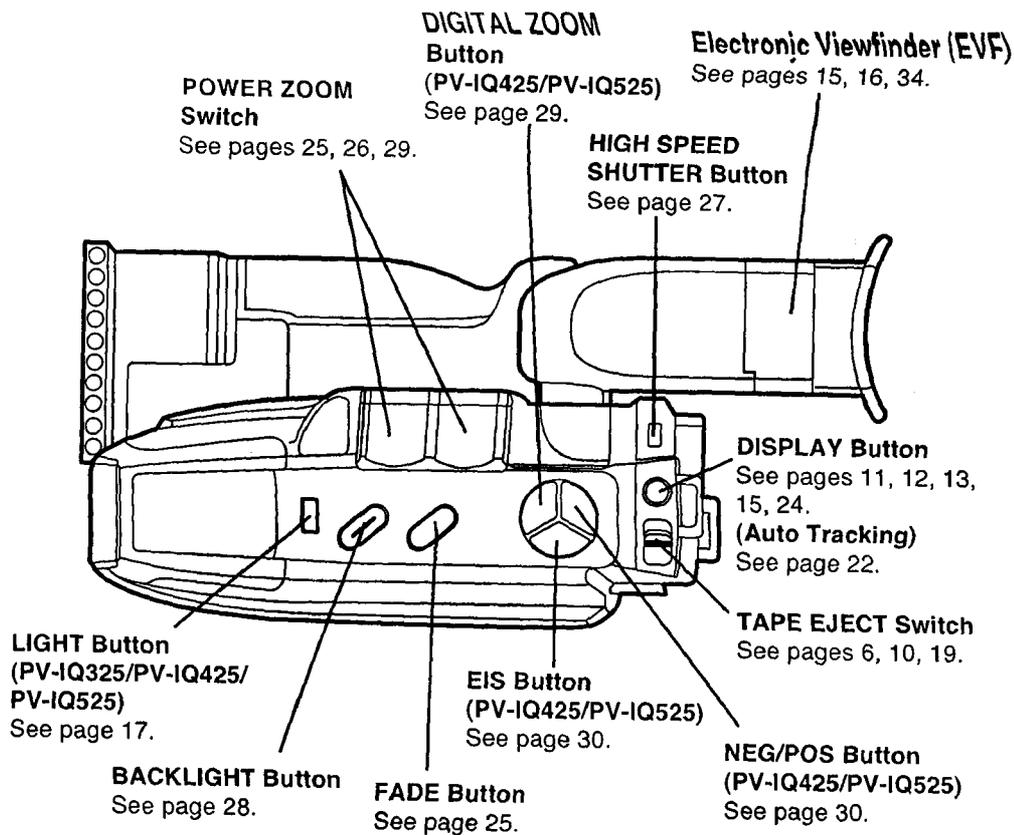
Index of Controls

Rear View



Index of Controls

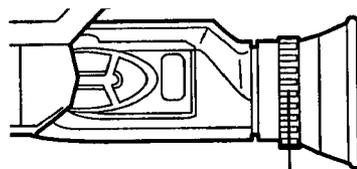
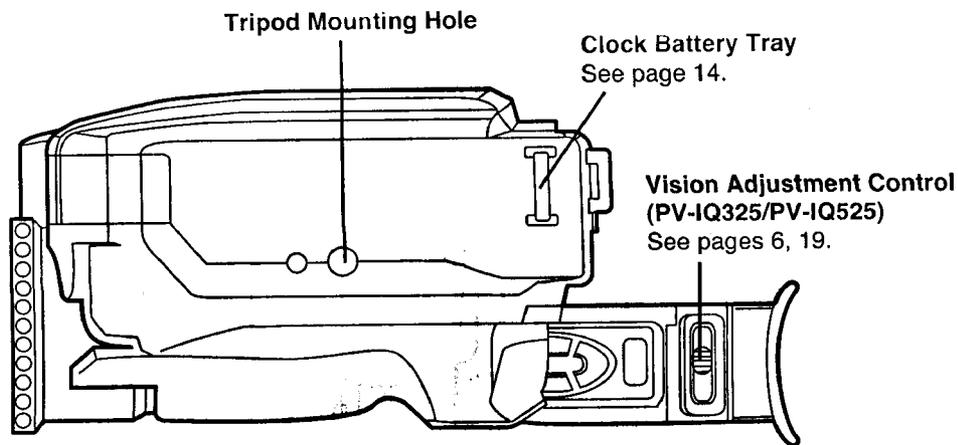
Top View



For Your Information

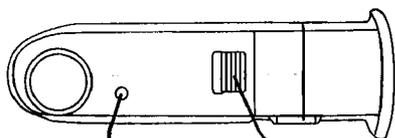
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Underside View



Vision Adjustment Control (PV-IQ225/PV-IQ425)
See pages 6, 19.

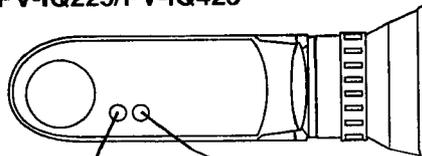
PV-IQ325/PV-IQ525



***Bright Control**
Adjust the brightness of the picture.

EYEPiece RELEASE button
See page 34.

PV-IQ225/PV-IQ425



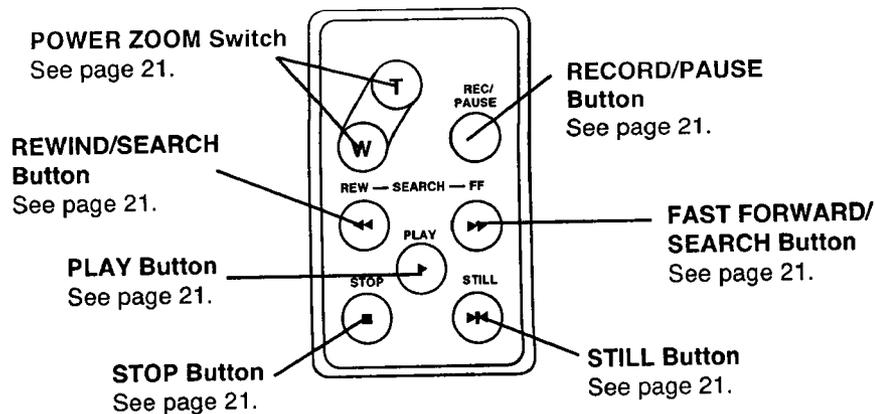
***Focus Control**
Adjust the focus of the picture on the EVF.

***Bright Control**
Adjust the brightness of the picture.

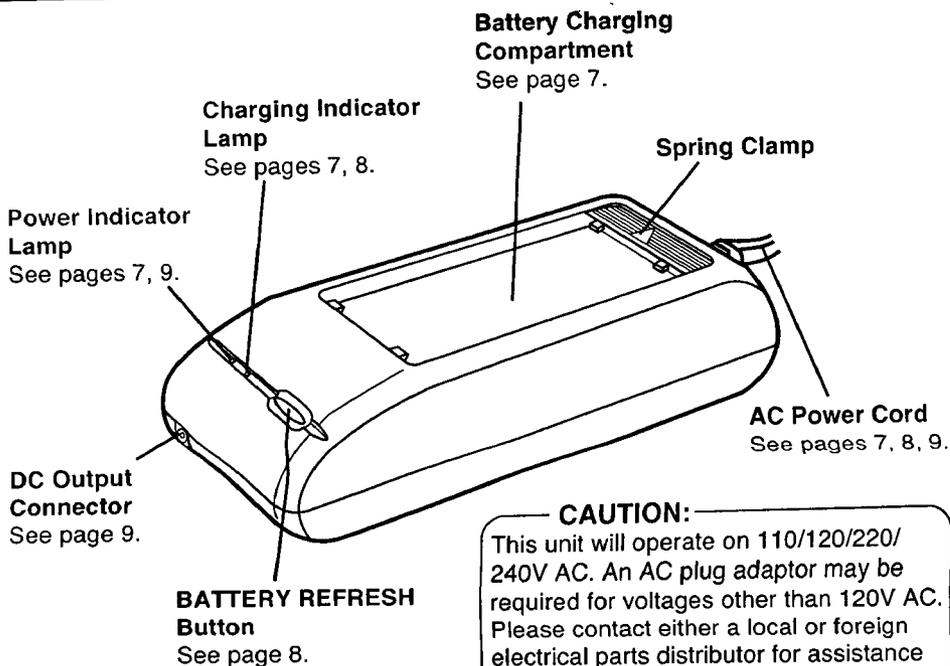
***Note:** These controls have been set at the factory. It is not necessary to adjust these controls under normal circumstances. But, should it become necessary, be careful to make the adjustment with a small, slender screwdriver so as not to damage the miniature control.

Index of Controls

8-Function Remote (PV-IQ325/PV-IQ425/PV-IQ525)



AC Adaptor



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.

For Your Information

Index

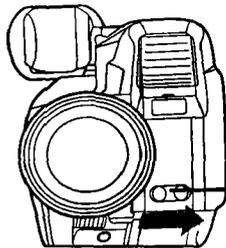
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Spanish Quick Use Guide/Guía Para Uso Rápido

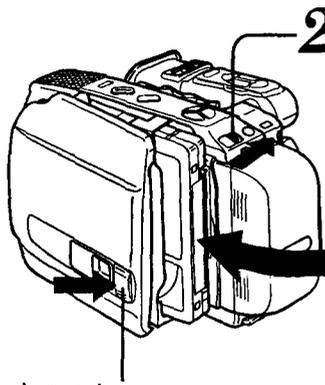
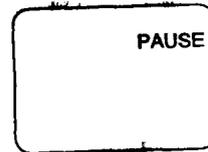
PREPARATIVOS

- Conectar la videocámara a una fuente de alimentación (batería, adaptador de CA o cable para batería de coche).
- Encender el aparato.
- Introducir el casete en el compartimiento de cassetes.

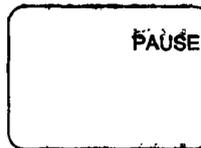
GRABACION



1 Fije el interruptor a la posición de CAMERA.



2 Deslice el botón EJECT para abrir la puerta.



3 Introduzca la cinta.

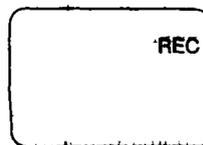


4 Cierre la puerta presionando el botón PUSH TO CLOSE.

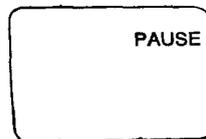
5 Seleccionar la velocidad de grabación.



6 Oprimir el botón de grabación/pausa (RECORD/PAUSE) para comenzar a filmar.



7 Volver a oprimir el botón de grabación/pausa (RECORD/PAUSE) cuando se desea hacer una pausa en la grabación.

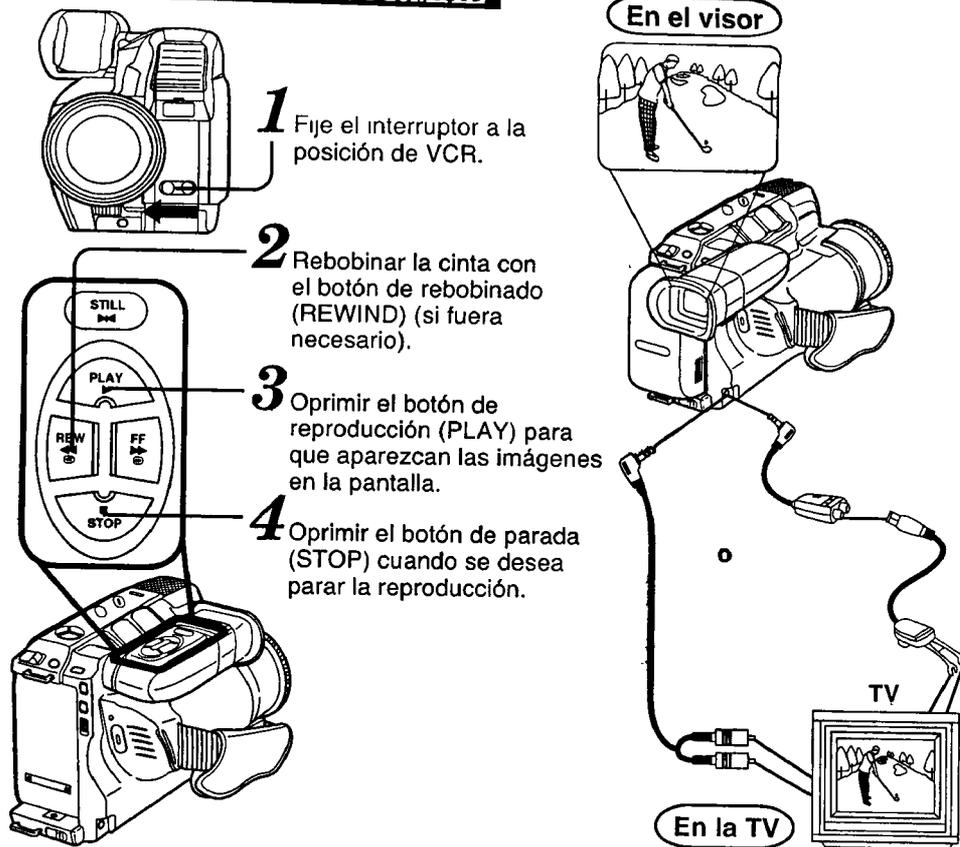


For Your Information

Spanish Quick Use Guide/Guía Para Uso Rápido

- Conectar la videocámara a una fuente de alimentación (batería, adaptador de CA o cable para batería de coche).
- Encender el aparato.
- Introducir el casete en el compartimiento de cassetes.

REPRODUCCION NORMAL



REPRODUCCION CON EFECTOS ESPECIALES

PARA LOCALIZAR RAPIDAMENTE UNA ESCENA ESPECIFICA

- Oprimir el botón de localización (SEARCH).

PARA CONGELAR UNA IMAGEN

- Oprimir el botón de pausa/imagen fija (PAUSE/STILL).
- Oprimir nuevamente el botón cuando se desea continuar reproduciendo.

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