Digital Palmcorder® PalmSight®

Panasonic[®]



Operating Instructions
Model No. PV-DV600D

-TENTATIVE-

EXHIBIT# 5

FIG NO. _____ FCC ID: ACJ927129K

MODEL NO. PV-DV600D

OUR REF.: MKES99-F021









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.

For assistance, call 1-800-211-PANA (7262)

LSQTXXXX



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 below. 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 Camcorder

1 pc. AC Adaptor (PV-DAC9) with AC Cable, DC Cable and Jack Box



1 pc. Battery Pack (PV-DBP8)



1 pc. A/V Cable (VJAW0043)



1 pc. Lens Cap (LSYF0358)



1 pc. Shoulder Strap (VYCW0225)



1 pc. PC Connection Cable for Windows (LSJA0236)



For assistance, call 1-800-211-PANA(7262)



Things You Should Know

Safety Precautions

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

Your Mini N 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 The mark be used.



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



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.

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.

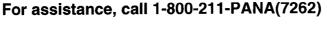
Note: This equipment has been tested and found to comply with Part 15 and part 18 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when operated in a residential environment.

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

FCC Warning: To assure continued FCC compliance, use only the provided shielded interface cable with ferrite cores when connecting digital video camera to computer and elip-on ferrite core mounted over the user provided modular cable in accordance with instruction herein. Also, any unauthorized changes or modifications to this equipment could void the user's authority to operate.



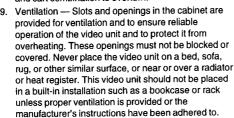


99/09/18, 9:53

Important Safeguards

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

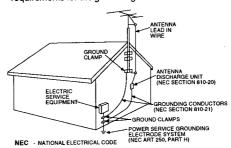
mounting accessory recommended by the manufacturer. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



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.



- 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.
- 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.
- 13. 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.
- 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

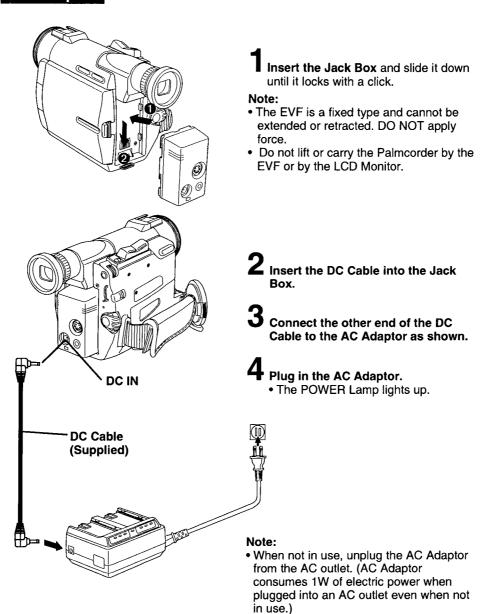
- TO CLEAN YOUR CAMCORDER ... Do not use strong or abrasive detergents when cleaning your Camcorder body.
- TO PROTECT THE LENS ... Do not touch the surface of the lens with your hand. Use a commercial camcorder lens solution and lens paper when cleaning the lens. Improper cleaning can scratch the lens 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.

For assistance, call 1-800-211-PANA(7262)



Supplying Power

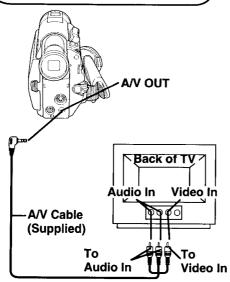
AC Adaptor



Playback Your Recordings

Connections

TV with AUDIO/VIDEO IN Jacks.



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

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.

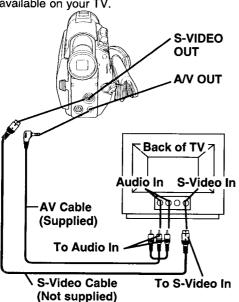
Check your TV operating instructions for further information.

Start playback or begin a recording.

- Please connect the A/V cable until it stops.
- Make sure the Palmcorder and TV are turned off while connecting.

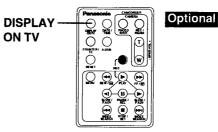
TV with S-VIDEO IN Jacks.

For best Chrominance and Luminance it is suggested to use the S-Video connection if available on your TV.



Optional Remote Control Only (page 53)

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



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.

For assistance, call 1-800-211-PANA(7262)



Special Features

Copying your Tapes to S-VHS or VHS Cassette

Source (Playing)

Palmcorder

- Before you begin...Connect the Palmcorder and the Jack Box (see page 36).
- Connect both Palmcorder and VCR to their power sources.
- Connect the Palmcorder to a VCR as illustrated below.
- Turn ON both units.
- Set the recording VCR's Input Signal Selector to LINE.
- Set the Palmcorder POWER Switch to VCR.

Insert a pre-recorded tape into the source (playing) Palmcorder and a blank tape with record tab in place into the target VCR (Recorder).

Press PLAY on the Palmcorder. When the tape reaches the point you want to start dubbing, press PAUSE.

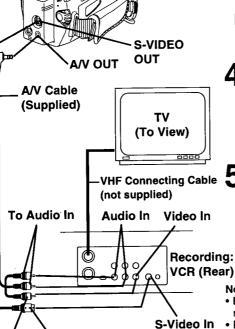
Press REC or simultaneously REC and PLAY (depends on VCR) and then pause the recorder.



VCR Buttons

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

5 Press STOP on both units when copying is complete.



To S-Video In

Monitor with your TV

channel (either CH3 or CH4).

recording VCR to VCR.

• Set the VCR/TV Selector on the

• Turn the TV ON and select its VCR

(If there is S-Video In)

Notes:

- For technical reasons, dubbing a tape may reduce its quality.
- Press DISPLAY on the Palmcorder 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.

For assistance, call 1-800-211-PANA(7262)

49

To Video In

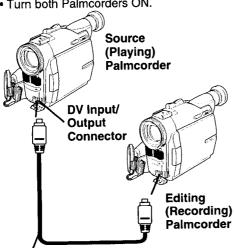


Copying from Digital Equipment (dubbing) (Optional Remote Control Only)

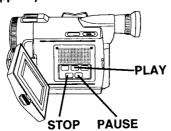
High quality digital-to-digital copying can be accomplished if both Palmcorders incorporate the digital in/out IEEE1394 interface (DV interface cable is not supplied).

Before you begin...

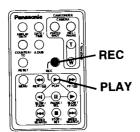
- Connect both Palmcorders to their power
- Connect the two digital Palmcorders using the DV interface cable (not supplied).
- Turn both Palmcorders ON.



DV Interface Cable (not supplied)



Optional



- Insert a pre-recorded tape into the source (playing) Palmcorder, turn on, and set the POWER Switch to VCR.
- Insert a blank tape with the record tab in place into the target (recording) 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.
- 4On the remote control (Optional, page 53), hold down the REC button and press PLAY.

Press PAUSE to pause the tape at the starting point of the dub.

- Simultaneously, press the PAUSE Buttons on both units to begin the dubbing.
- Press the STOP Button on recording unit, and then press STOP Button on playing unit to end dubbing.

Note:

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

CAUTION: •

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

For assistance, call 1-800-211-PANA(7262)

PC Connection

A live image can be transferred directly to your PC (Personal Computer) via a DV Interface Cable (not supplied) using products from Adaptec or Digital Origin (formerly Radius).

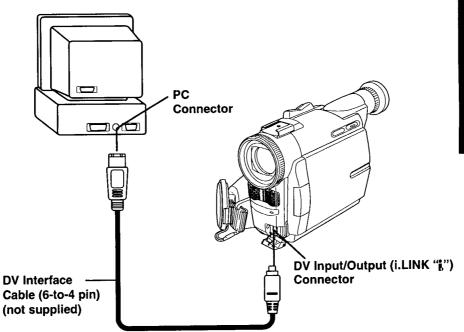
Using these products allows you to capture live images onto your PC, edit the captured image, etc.

Note:

 For more detailed information, please see the Adaptec and Digial Origin (formerly Radius) brochures in this box or visit their web site at:

http://www.adaptec.com/1394 or http://www.digitalorigin.com/DVP

• For assistance on Adaptec products, call **1-800-442-7274**For assistance on Digital Origin (formerly Radius) products, call **1-800-572-3487**



Special Features

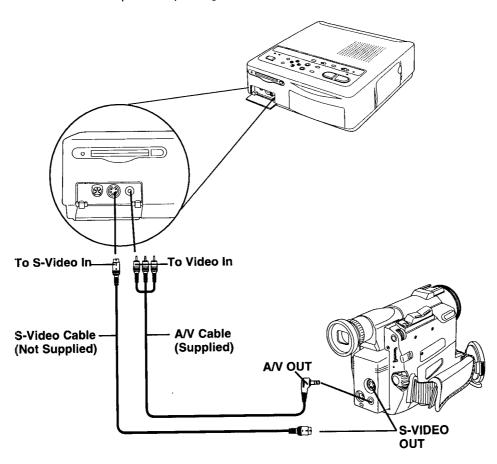
Special Features

Using the Digital Photo Printer

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

Before you begin...

- Connect both Palmcorder and Digital Photo Printer to their power sources.
- Connect the Palmcorder and Digital Photo Printer using a A/V cable (supplied) or S-Video Cable (not supplied).
- Connect the Digital Photo Printer and your TV using a Video cable (not supplied) and turn the TV on.
- If different video sources are connected simultaneously to the S-VIDEO IN Socket and the VIDEO IN Socket, the video for S-VIDEO IN Socket takes precedence.
- To listen to sound from the Palmcorder, connect the audio output from the Palmcorder directly to the television AUDIO IN socket.
- Please refer to the printer's operating instructions for detail on printing.



Connection

- Turn off your PC.
- 2 Connect the Digital Camera to your PC (Windows) using the PC connecting cable (supplied).
- 3 Turn on your PC.
- 4 Set the Digital Video Camera POWER to switch to VCR.

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

Digital Video Camera: 7.2V DC (Battery)

7.8V DC (AC Adaptor)

AC Adaptor: 110/120/220/240V AC, 50/60 Hz

Battery: Lithium-Ion Type DC 7.2V

Power Consumption:

Digital Video Camera: 7.2V DC 7W (Max. 10W)

AC Adaptor: 18W

1W (when not in use.)

Video Signal:

EIA Standard (525 lines, 60 fields) NTSC color signal

Video Recording System:

2 rotary heads. helical scanning system

Audio:

12bit (32kHz) 4 tracks 16bit (48kHz) 2 tracks

Pick-Up System and Device:

One integral color filter Charge Coupled Device (CCD)

Lens:

18:1 zoom lens, F1:1.6 with auto iris control

Focal length: 3.9mm - 70.2mm Power zoom function Lens filter diameter: 43mm

Viewfinder: **LCD Monitor:** 0.5 inch (12.7mm) Electronic Viewfinder 2.5 inch (63.5mm) Liquid Crystal Display

Minimum Illumination Required:

5 lx (F1:1.6) 0.5 footcandles

Operating Temperature:

32°F~104°F (0°C~40°C)

Operating Humidity:

10%~75%

Weight:

Digital Video Camera: 1.5 lbs.

AC Adaptor:

0.53 lbs. 0.24 kg

Dimensions:

Digital Video Camera:

2-15/16 (W) x 4-1/4 (H) x 5-11/16 (D) inch

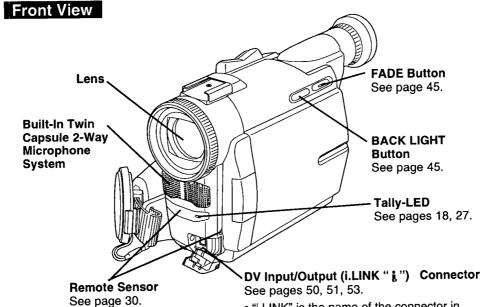
73.5 (W) x 107.5 (H) x 145 (D) mm AC Adaptor: 4-1/16 (W) x 2 (H) x 3-1/8 (D) inch

103 (W) x 50 (H) x 79 (D) mm

Weight and dimensions shown are approximate.

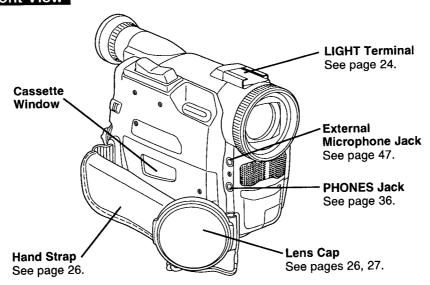
Designs and specifications are subject to change without notice.

For Your Information



- "i.LINK" is the name of the connector in accordance with the International Standard IEEE1394-1995.
- "i" is the logo marked on products conforming with the "i.LINK" specifications.

Front View



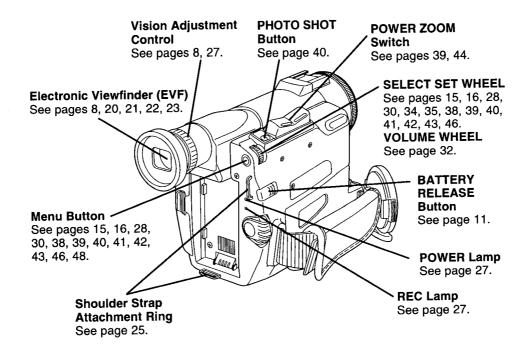
For assistance, call 1-800-211-PANA(7262)

61

For Your Information

Index of Controls

Rear View



For assistance, call 1-800-211-PANA(7262)

-

Index of Controls

Side View

PLAY Button See pages 9, 32, 33, 34, 35, 47, 49, 50. REWIND/EDIT SEARCH ◀◀ **FAST FORWARD/ Button EDIT SEARCH**►► See pages 7, 9, **Button** 29, 32, 33, 34. See pages 7, 29, 33, STÓP Button **PAUSE Button** See pages 7, 9, 32, See pages 33, 35, 47, 49, 50. 48, 49, 50. **STILL Button** See page 39.

Underside View

