

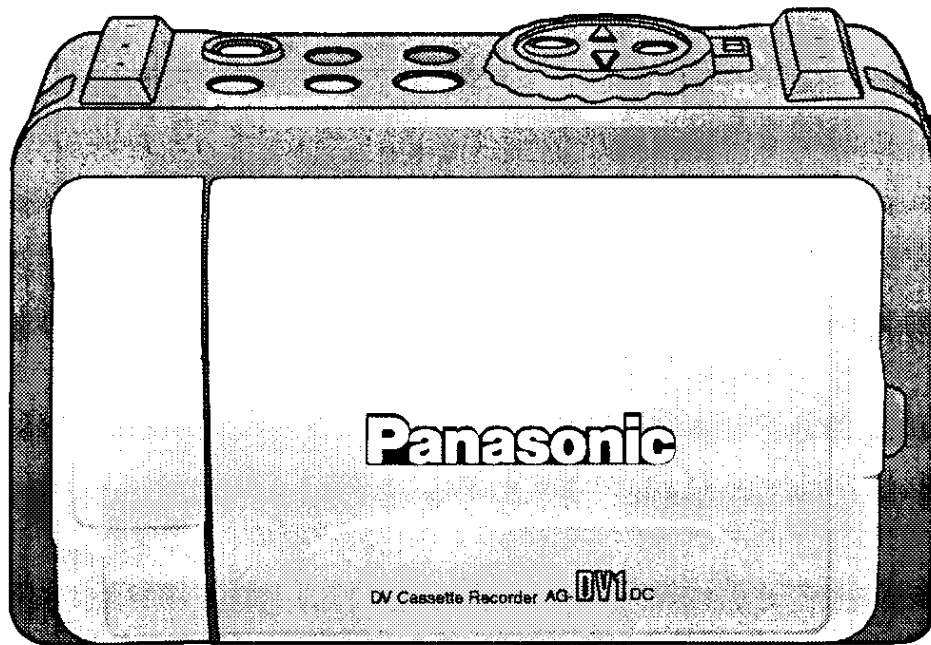
EXHIBIT # : 6
FCC ID : ACJ927144L
OUR REF. : MKES02-F010
MODEL NO. : AG-DV1DCP

Operating Instructions

(Tentative)

Panasonic[®]

miniDV Cassette Recorder
Operating Instructions
Model No. **AG-DV1DCP**



Mini **DV**

Before attempting to connect, operate or adjust this product, please read these instructions thoroughly.

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 below. The serial number is on the tag located on the underside of your unit. Be sure to **retain this manual** as your convenient unit information source.

Date of Purchase

Dealer Purchased From

Dealer Address

Dealer Phone No.

Model No.

Serial No.

Safety Precautions

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

Your **Mini DV** unit is designed to record and play back in Standard Play (SP) mode and Long (LP) mode. It is recommended that only cassette tapes that have been tested and inspected for use in VCR machines with the **Mini DV** mark be used.

 CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN		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.
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 alerts the user that important literature concerning the operation and maintenance of this unit has been included. Therefore, it should be read carefully in order to avoid any problems.

The above markings are located on the appliance bottom cover.

FCC Warning: 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.

This product may cause interference to radio equipment and should not be installed near maritime safety communications equipment or other critical navigation or communication equipment operating between 0.45-30 MHz.

CAUTION : TO PREVENT FIRE OR SHOCK HAZARD AND ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

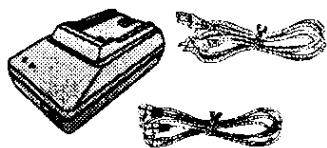
CAUTION : TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

WARNING : DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE.

Before Using

Accessories

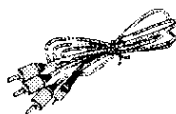
1 pc. AC Adaptor
(DE-852D) with AC
Cable and DC Cable



1 pc. Battery Pack
(CGR-D08/CGR-
D08R)



1 pc. A/V Cable
(LSJA0280)



1 pc. SCREW u
(LSYC0240)

i.LINK is a trademark.

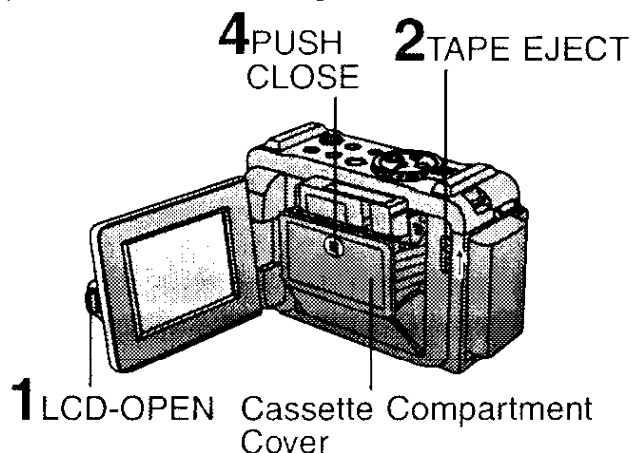
Record Speed/Playback Time

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

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

Easy Cassette Eject/Insertion

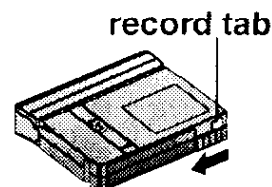
- If this unit is connected to a power source, the cassette can be inserted and ejected without turning this unit on.



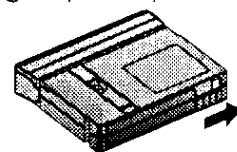
Erase Protection

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

- To prevent accidental erasure:**
Slide the tab to the left (open).



- To record again:**
Slide the tab to the right (close).



Before you begin

- Connect this unit to a power source.
(pp. 9, 10)

- Press LCD-OPEN** to unlock the LCD monitor, and **swing it fully open**.
 - Slide TAPE EJECT** to open the Cassette Compartment Cover.
 - Insert a cassette** record tab up, window side facing out.
 - Press PUSH CLOSE** to close the Cassette Compartment Cover.
- To remove the cassette...**
Slide TAPE EJECT to open the Cassette Compartment Cover and pull the cassette tape straight out.

Note

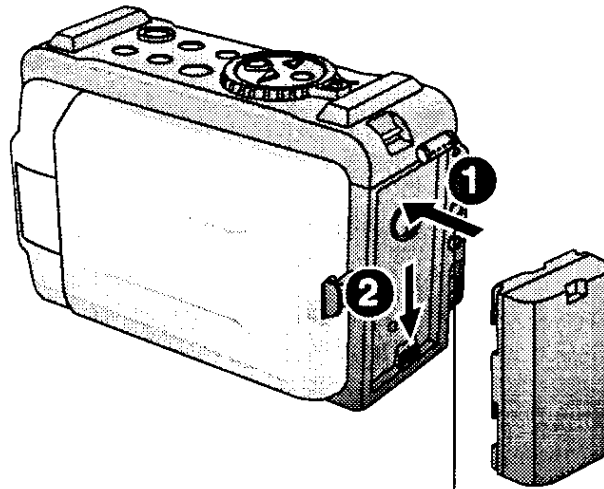
- When inserting the cassette, make sure it is facing in the right direction and then push it in completely.

Insert the Battery Pack

Before you begin

- Charge the Battery. (p. 9)

Before Use



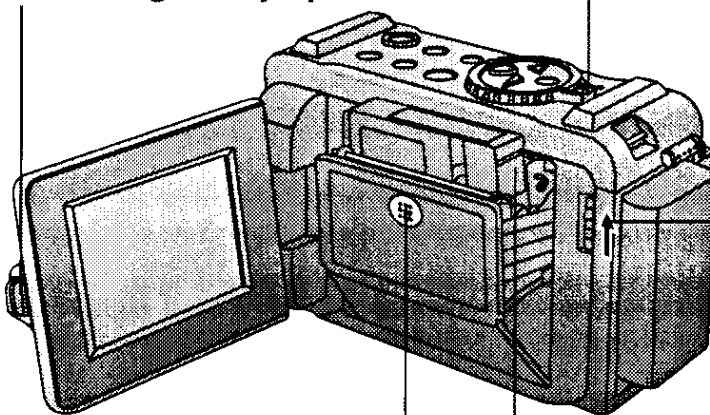
- 1** Insert the **Battery Pack** and slide it down until it locks with a click.

Insert Cassette

This unit is equipped with the Easy Cassette Eject System so it is easy to insert or remove tapes, even when on a tripod. (p. 6)

- 1** Press **LCD-OPEN** to unlock the LCD monitor, and swing it fully open.

- 2** Set **POWER** to **ON**.



- 3** Slide **TAPE EJECT** to open the Cassette Compartment Cover.

- 4** Insert a cassette record tab up, window side facing out.
 - Make sure the record tab is closed. (p. 6)

- 5** Press **PUSH CLOSE** mark to close the Cassette Compartment Cover.

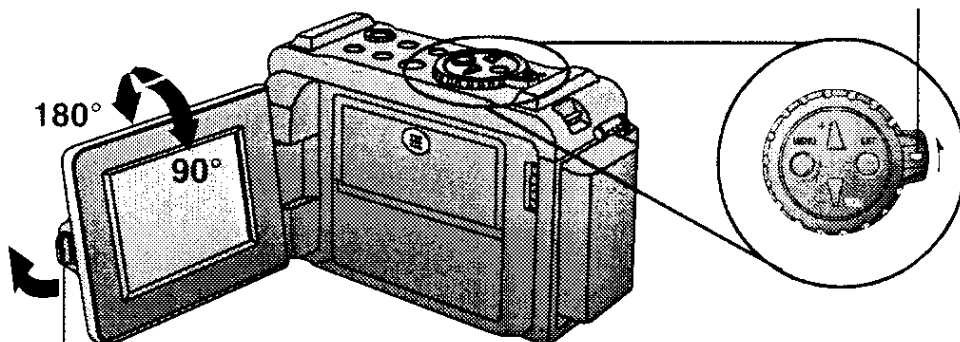
Quick Guide

Playback a Tape

Before you begin

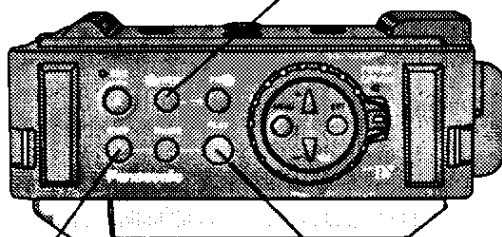
- Charge the Battery. (p. 9)

1 Set POWER to ON.



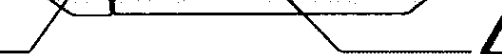
2 Press LCD-OPEN to unlock the LCD monitor. Swing it fully open and adjust the angle.

3 Press ◀ (REW) to rewind the tape.



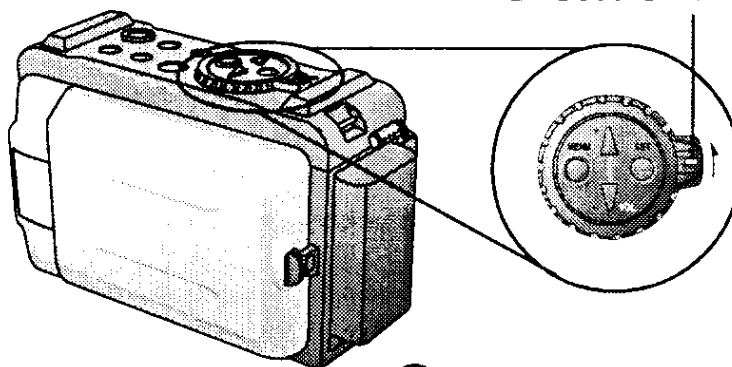
5 Press ■ (STOP) to stop playback.

4 Press ▶ (PLAY) to start playback.

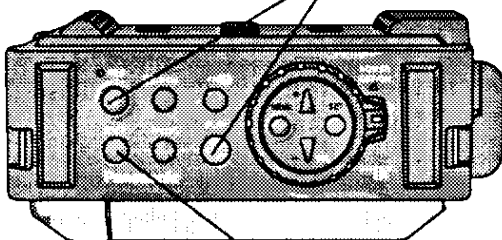


Make a Recording

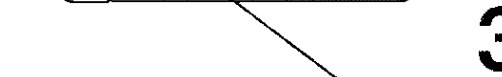
1 Set POWER to ON.



2 Press ● (REC) and ▶ (PLAY) at the same time to start recording.



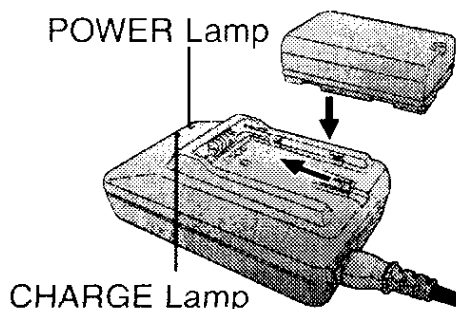
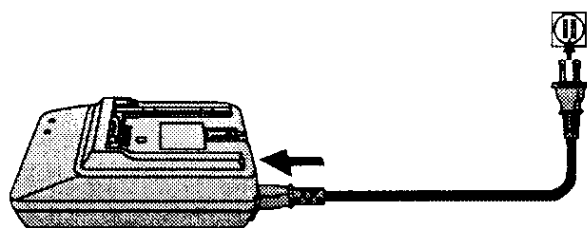
3 Press ■ (STOP) to stop recording.



Supplying Power

Before Use

Charge the Battery Pack on the AC Adaptor



1 Connect and plug in the Power Cord as shown.

- POWER Lamp will light.
- Remove the DC Cable, if attached, from the adaptor.

2 Attach the Battery as shown to charge.

- CHARGE Lamp lights up. It goes out when charging is complete (approx. 1 hour). Expect approx. 1 hour 30 minutes of operation (EVF usage) when fully charged.

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

Note

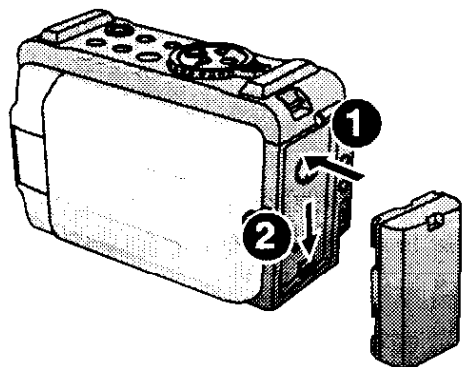
About the Flashing of the CHARGE Lamp

- Charge the Battery within an ambient temperature range of 10 °C (50 °F) and 30 °C (86 °F).
- If charging is done in extreme low or high temperatures, Battery charge time increases.

CHARGE Lamp flashes when...

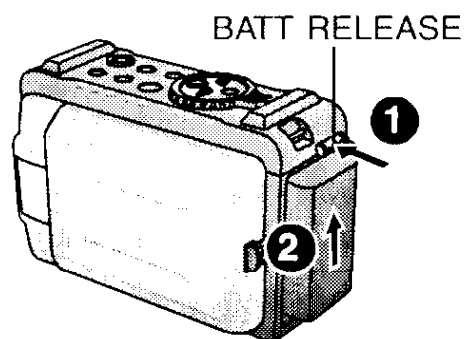
- The Battery is being charged, but charging is taking longer than normal.
- Charging is not possible. Remove the Battery once, wait a short time, then re-attach it for charging.

Insert the Battery Pack



1 Insert the Battery Pack and slide it down until it locks with a click.

Remove the Battery Pack



1 Remove the Battery Pack and slide the Battery upward while pushing the BATT RELEASE.

Supplying Power

Battery Care

Caution:

- Charge only with specified charger.
- Charge the Battery within an ambient temperature range of 10 °C (50 °F) and 30 °C (86 °F).
- The Battery may be warm after charging or just after use. This is normal.
- Do not use an insufficiently charged or worn out Battery.
- If charging is done in extreme low or high temperatures, Battery charge time increases.

Safety precautions:

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

To avoid damage to the Battery:

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

To ensure longer battery life:

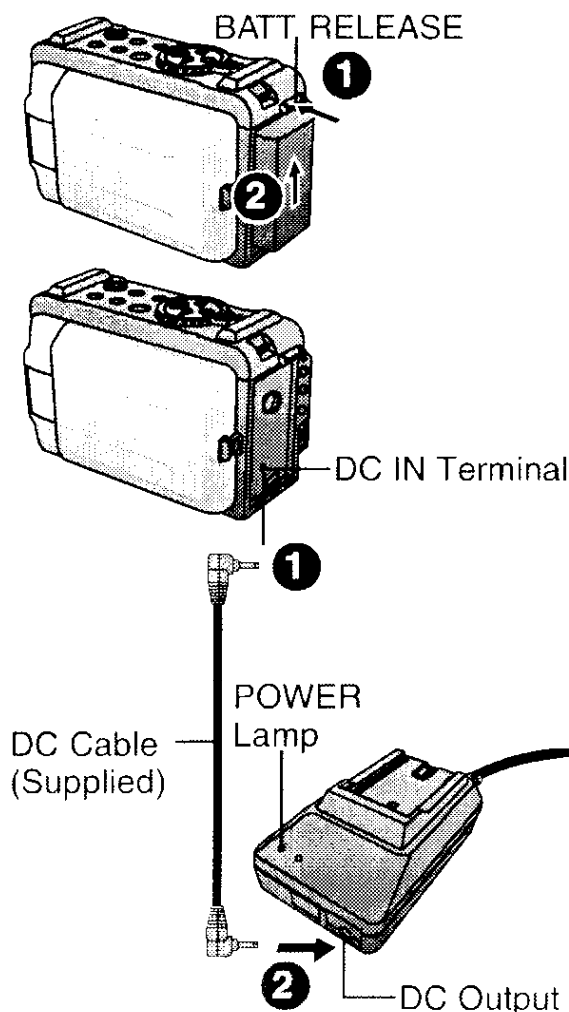
- **While not in use, remove Battery from the Palmcorder and AC Adaptor and store in a cool, dark, dry place.** If you leave the Battery in the Palmcorder or on the AC Adaptor, the Battery will no longer be rechargeable.
- Keep the Battery terminals clean.

ATTENTION:



A lithium ion/polymer battery that is recyclable powers the product you have purchased. Please call 1-800-8-BATTERY for information on how to recycle this battery.

Use AC Adaptor



- 1 Slide the Battery upward while pushing BATT RELEASE to **remove the Battery Pack.** (p. 9)
- 2 Insert the DC Cable into the DC IN Terminal.
- 3 Connect the other end of the DC Cable to the AC Adaptor as shown.
- 4 Plug in the AC Adaptor.
 - The POWER Lamp on the AC Adaptor lights up.

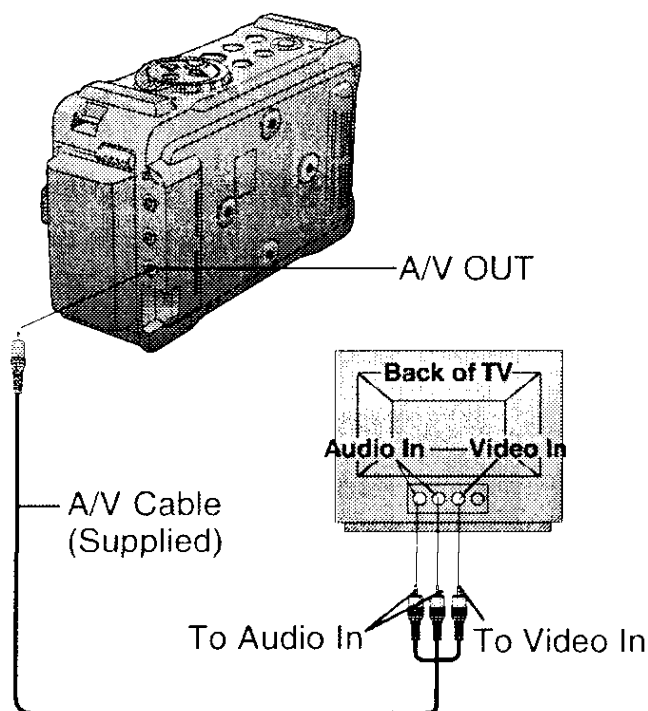
Note

- When not in use, unplug the AC Adaptor from the AC outlet. (AC Adaptor consumes 1 W of electric power when plugged into an AC outlet even when not in use.)

Special Effect Features

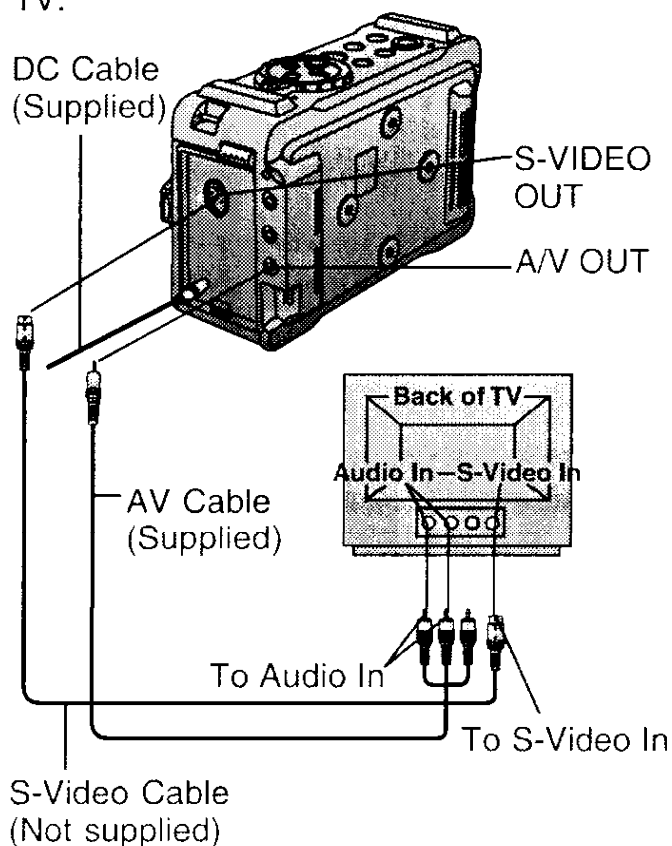
View Recording/Playback on your TV

[TV with AUDIO/VIDEO IN Jacks]



[TV with S-VIDEO IN Jacks]

For best Chrominance and Luminance, use the S-Video connection if available on your TV.



Before you begin

- When using S-VIDEO Connector, insert the DC Cable into the DC IN Terminal. (p. 10)

- 1 Set POWER to ON.**
To view what this unit is recording or to playback a tape on your TV.
- 2 Press MENU** to display the MAIN MENU screen.
To view what this unit is recording or to playback a tape on your TV.
- 3 Press +/-** to select **REC MODE**, then press **SET** to display the REC MODE menu screen.
- 4 Press +/-** to select **AV JACK** in the REC MODE menu. (Menu OSD: p. 28)
- 5 Press SET** to select OUT/PHONES.
 - Press MENU twice to exit.
 - "DV IN" will appear on the screen.
- 6 Turn your TV ON and set it to LINE INPUT or S-VIDEO.**
Check your TV operating instructions for further information.
- 7 Start playback or begin a recording.**
 - Make sure this unit and TV are turned off while connecting.
 - Please connect the A/V Cable securely.

Note

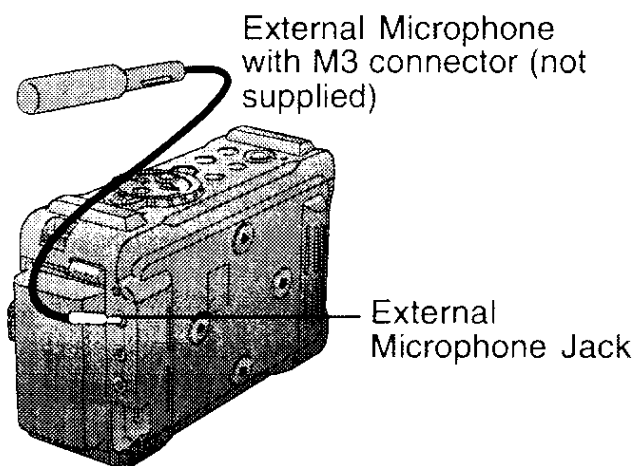
- Set LINE OUT: ON in the DISPLAY menu to display the OSD screen on your TV monitor.

Recording Features

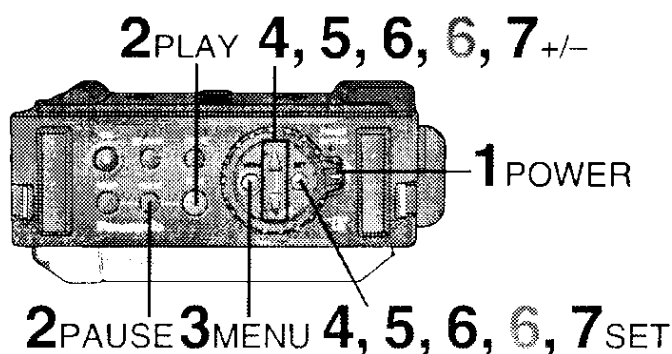
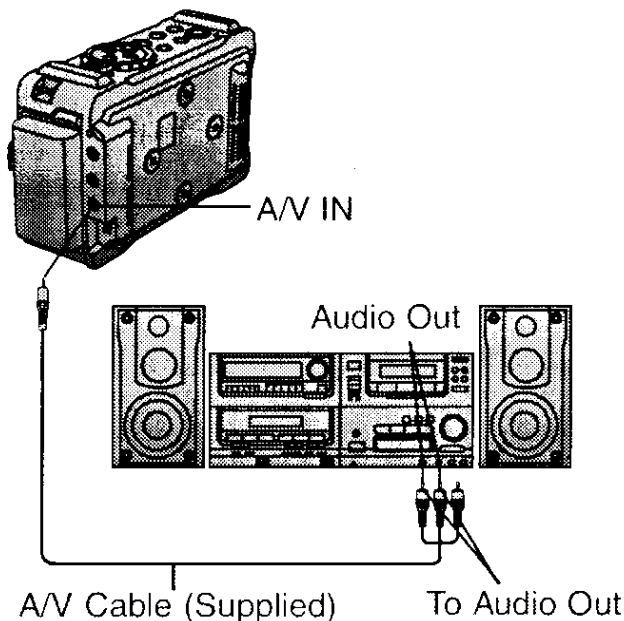
Audio Dubbing using the External Microphone or External Recording Source

The original sound can be replaced with new sound using an external microphone or external recording source.

When using an External Microphone



When using an External Recording Source



Before you begin

- Connect the external Microphone (if used).
- Connect this unit and the external recording source using the A/V Cable (if used).
- Turn on this unit.
- Insert a pre-recorded tape to be dubbed.

The AUDIO REC setting in REC MODE menu should be as follows:

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

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

- 1 Set **POWER** to **ON**.
- 2 Press **▶ (PLAY)**. Then press **⏸ (PAUSE)** where you want dubbing to begin.
- 3 Press **MENU** to display the **MAIN MENU** screen.
- 4 Press **+/-** to select **REC MODE**, then press **SET** to display the **REC MODE** menu screen.
- 5 Press **+/-** to select **AV JACK**, then press **SET** to select **IN**.

When using an External Microphone

- 6 Press **+/-** to select **AUDIO SEL**, and then press **SET** to select **MIC**.
 - Go to step 7 on page 20.

When using an External Recording Source

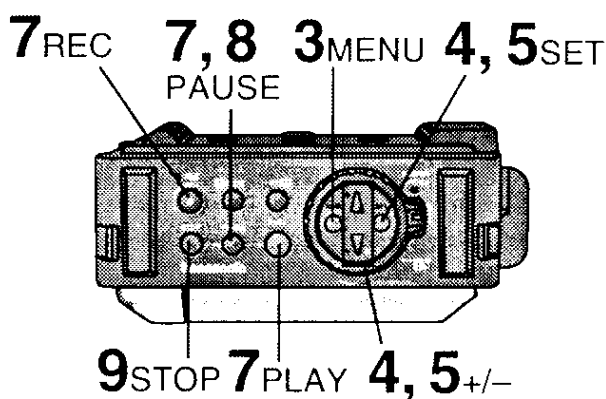
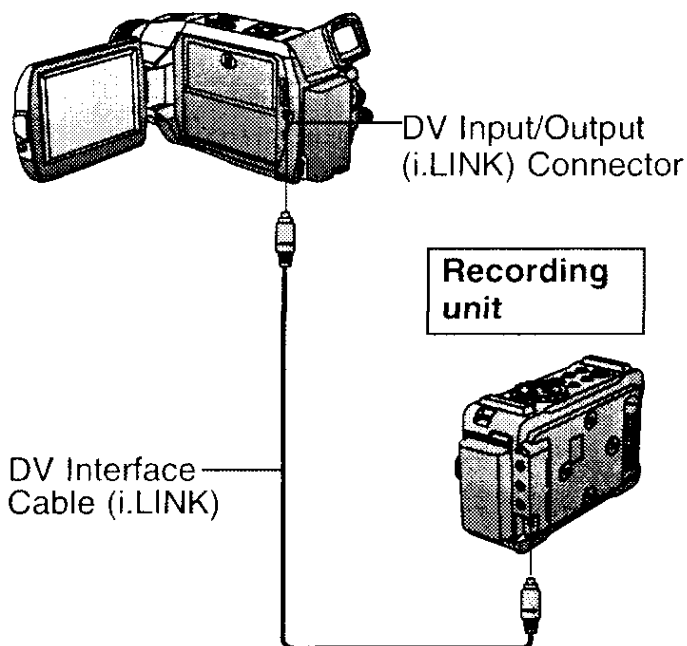
- 6 Press **+/-** to select **AUDIO SEL**, and then press **SET** to select **LINE**.
 - Go to step 7 on page 20.

Recording Features

Copying from Digital Equipment (dubbing)

High quality digital-to-digital copying can be accomplished if this unit and a Palmcorder incorporate the DV Input/Output (i.LINK) Connector (DV Interface cable (i.LINK) is not supplied).

Source (Playing) unit



Before you begin

- Connect this unit and a source (Playing) unit to their power sources.
- Connect this unit and a source (Playing) unit using the DV Interface cable (i.LINK) (4-pin to 4-pin).
- Turn ON both units.

- 1 Insert a **pre-recorded tape** into the source (playing) unit, and set **POWER** to **VCR**.
- 2 Insert a **blank tape with the record tab** closed into the target (recording) unit and set **POWER** to **ON**.
- 3 Press **MENU** to display **MAIN MENU** screen.
- 4 Press **+/-** to select **REC MODE**, then press **SET** to display the **REC MODE** menu screen.
- 5 Press **+/-** to select **AV JACK**, then press **SET** to set to **OUT/PHONES**.
 - "DV IN" is displayed on the LCD monitor. (p. 31)
- 6 Press **▶ (PLAY)** on the source (Playing) unit. When the tape reaches the point from which you want to start dubbing, press **II (PAUSE)**.
- 7 Hold down **REC** and press **▶ (PLAY)** on the target (recording) unit. Press **II (PAUSE)** to pause the tape at the starting point of the dub.
- 8 Simultaneously, press **II (PAUSE)** on both units to begin dubbing.
- 9 Press **■ (STOP)** on the recording unit, and then press **■ (STOP)** on the playing unit to end dubbing.

CAUTION:

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

Specifications

Power Source:	miniDV Recorder Cassette: 7.2 V DC (Battery) 7.9 V DC (AC Adaptor) AC Adaptor: 110/120/220/240 V AC, 50/60 Hz Battery: Lithium-Ion Type DC 7.2 V
Power Consumption:	miniDV Recorder Cassette : 7.2 V/7.9 V DC 4.5 W AC Adaptor : 18 W 1 W (when not in use.)
Digital Interface	i.LINK (IEEE1394)
Video Signal:	EIA Standard (525 lines, 60 fields) NTSC color signal
Video Recording System:	2 rotary heads, helical scanning system
Audio:	12 bit (32 kHz) 4 tracks 16 bit (48 kHz) 2 tracks
LCD Monitor:	88.9 mm (3.5 inch) Liquid Crystal Display
Operating Temperature:	32 °F~104 °F (0 °C~40 °C)
Operating Humidity:	10 %~75 %
Weight:	miniDV Recording Cassette: 0.55 kg 1.21 lbs. AC Adaptor : 0.16 kg 0.35 lbs.
Dimensions:	miniDV Recording Cassette : 142 (W) x 94.5 (H) x 69.5 (D) mm 5-9/16 (W) x 3-12/16 (H) x 2-12/16 (D) inch AC Adaptor: 70 (W) x 45 (H) x 115 (D) mm 2-3/4 (W) x 1-3/4 (H) x 4-1/2 (D) inch

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

Notice

This product has a fluorescent lamp that contains a small amount of mercury. It also contains lead in some components. Disposal of these materials may be regulated in your community due to environmental considerations. For disposal or recycling information please contact your local authorities, or the Electronics Industries Alliance: <<http://www.eiae.org>.>