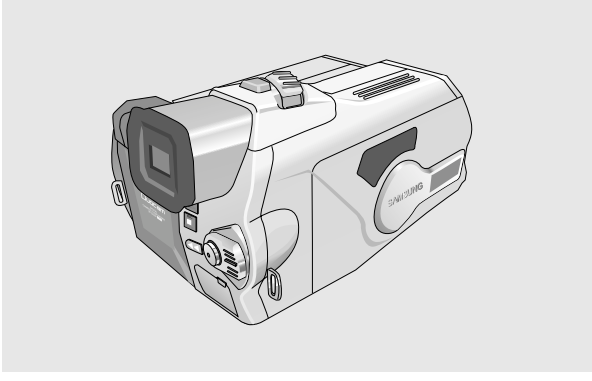
ENGLISH

Digital Video Camcorder

Mini DV Digital Video Cassette **SCD5000**



AF Auto Focus
CCD Charge Coupled Device
LCD Liquid Crystal Display

Owner's Instruction Manual

Before operating the unit, please read this instruction manual thoroughly, and retain it for future reference.

SAMSUNG ELECTRONICS

US PATENT 4415844

FCC Warning

Class B Computing Device

Information to the User

This Equipment has been tested and found to comply with the limits for a class B digital device pursuant to part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help and for additional suggestions.

The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems." This Booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

FCC Warning

The user is cautioned that changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

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Precautions on Camcorder Care

- ✤ Please note the following precautions for use:
- ✤ Please keep your device in a safe place. This device contains a lens that can be damaged by shock. Keep away from the reach of the children.

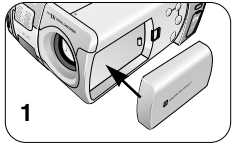
- ■ Do not place your device in a wet place. Moisture and water may cause the device to malfunction.
- ■ Do not aim the device at the sun while looking through the viewfinder; this may cause permanent damage to your eyes.
- ■ To avoid electric shock, do not touch your device or power cable with wet hands .
- ■ Do not use the flash close to another's eyes. The flash emits a strong light that may cause damage similar to direct sunlight on one's eyesight.
- ■ If the device is out of order, please consult your nearest dealer or authorized Samsung service facility. Disassembling the device yourself may cause irrecoverable damagewhich will be difficult to repair.
- ■ Clean the body with a dry, soft cloth. Use a soft cloth moistened with a mild detergent solution for removing stains. Do not use any type of solvent, especially benzenes, as they may seriously damage the finish.
- ■ Keep your device away from rain and saltwater. After using, clean the device. Saltwater may cause the parts to corrode.

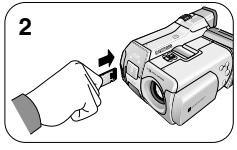
Start

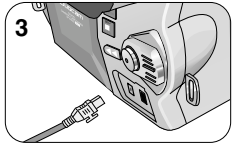
Quick Start

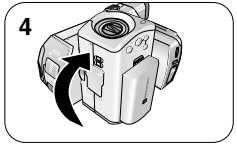
- ✤ This device provides a variety of functions because it is a Camcorder and Digital Still Camera in one system. Please read this manual thoroughly.
- ✤ Before using the device, install the accessories in the following order:

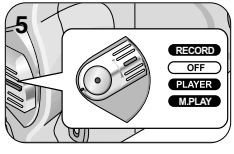
1. Install the battery pack.
2. Insert the Memory Stick into the slot.
3. Charge the battery pack by connecting the power cable to the camcorder.
4. Set your device to CAMCORDER mode or CAMERA mode by flipping the lens body block.
5. While in CAMCORDER mode, remove the Lens CAP.
6. Set the Power Switch to proposed position.
7. When finished, set the Power Switch to OFF.

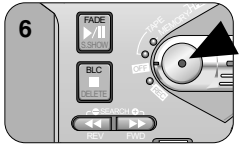


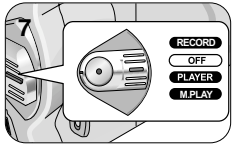










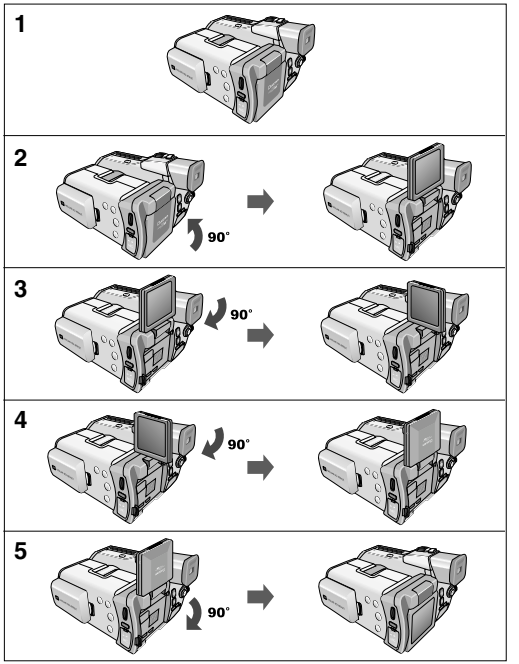


Notes and Safety Instructions

Notes Regarding the Rotation of the LCD Screen

Please rotate the LCD screen carefully as illustrated.
Over rotation may cause damage to the inside of the hinge that connects the LCD screen to the Camcorder.

1. LCD screen closed.
2. Standard recording using the LCD screen.
3. Recording when looking at the LCD screen from the left.
4. Recording when looking at the LCD screen from the front.
5. Recording with the LCD screen closed.



Notes and Safety Instructions

Notices Regarding COPYRIGHT

Television programs, video tapes, DVD titles, films, and other program materials may be copyrighted.
Unauthorized copying of copyrighted material may be against the law.

Notes Regarding Moisture Condensation

1. A sudden rise in atmospheric temperature may cause moisture condensation to form inside the camcorder.

For Example:

- When you take the camcorder from a cold place to a warm place (e.g. from outside to inside during winter.)
- When you take the camcorder from a cool place to a hot place (e.g. from inside to outside during the summer.)

2. When the (DEW) protection feature is activated, leave the camcorder in a dry, warm room with the cassette compartment opened and the battery removed, for at least two hours.

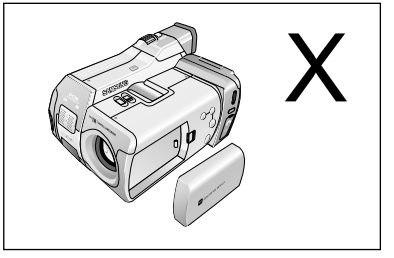
Notes Regarding the CAMCORDER

1. Do not leave the camcorder exposed to high temperatures (above 60°C or 140°F).
   For example, in a parked car in the sun or exposed to direct sunlight.

2. Do not let the camcorder get wet.
   Keep the camcorder away from rain, saltwater, and any other form of moisture. If the camcorder gets wet, it may be damaged.
   A malfunction due to exposure to liquids cannot always be repaired.

Notes and Safety Instructions

Notes Regarding the Battery Pack



- Make sure that the battery pack is fully charged before starting to record.
- To preserve battery power, keep your camcorder turned off when you are not operating it.
- If your device is in CAMCORDER mode with a tape installed, and it is left in STBY mode without being operated for more than 5 minutes it will automatically turn itself off to protect against unnecessary battery discharge.
- Make sure that the battery pack fits firmly into place.
  Dropping the battery pack may damage it.
- A brand new battery pack will not be charged.
  Before using the battery pack, you need to charge it completely.
- It is a good idea to use the viewfinder rather than the LCD when recording for long periods, because the LCD uses up more battery power.

* When the battery reaches the end of its life, please contact your local dealer.
The batteries need to be dealt with as chemical waste.

Notes Regarding Video Head Cleaning

- To ensure normal recording and a clear picture, clean the video heads regularly. If a square block-shape distorts playback, or only a blue screen is displayed, the video heads may be dirty. If this happens, clean the video heads with a dry type cleaning cassette.
- Do not use a wet-type cleaning cassette. It may damage the video heads.

Notes and Safety Instructions

Note Regarding the LENS

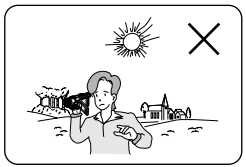
- Do not film with the camera lens pointing directly at the sun.
  Direct sunlight can damage the CCD(Charge Coupled Device).

Notes Regarding Electronic Viewfinder

1. Do not position the camcorder such that the viewfinder is pointing towards the sun.
   Direct sunlight can damage the inside of the viewfinder. Be careful when placing the camcorder under sunlight or near a window exposed to sunlight.
2. Do not pick up the camcorder by the viewfinder.
3. Over-rotating of the viewfinder may damage it.

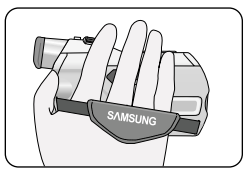
Notes Regarding 'Record' or 'Playback' Using the LCD

1. The LCD display has been manufactured using high-precision technology. However, there may be tiny dots (red, blue or green in color) that appear on the LCD display.
   These dots are normal and do not affect the recorded picture in any way.
2. When you use the LCD display under direct sunlight or outdoors, it maybe difficult to see the picture clearly.
   If this occurs, we recommend using the viewfinder.
3. Direct sunlight can damage the LCD monitor.



Notes Regarding the Hand Strap

- To ensure a steady picture during filming, check that the hand strap is properly adjusted.
- Do not force your hand into the hand strap as you could damage it.



Notes and Safety Instructions

Precautions Regarding the Lithium battery

1. The lithium battery maintains the clock function and user settings; even if the battery pack or AC adapter is removed.

2. The lithium battery for the camcorder lasts about 6 months under normal operation from the time of installation.

3. When the lithium battery becomes weak or dead, the date/time indicator will flash for about five seconds when you set the power switch to RECORD.

   When this occurs, replace the lithium battery with a new one(type CR2025).

Getting to Know Your Device

Features

- **Digital data transfer function with IEEE1394**
  By incorporating the IEEE 1394 (i.LINK™ : i.LINK is a serial data transfer protocol and interconnectivity system, used to transmit DV data) high speed data transport port, both moving and still images can be transferred to a PC, making it possible to produce or edit various images.
- **Unique Style & Free Style Shooting**
  An integrated digital imaging device that easily converts between a CAMCORDER and a CAMERA by using a revolving Lens Body Block which ensures comfortable recording.
- **High Resolution Image Quality (Digital Still Camera)**
  Employing a 4.13 Mega Pixels CCD, a maximum resolution of 2272 X 1704 is realized.
- **Digital Zoom**
  Allows you to magnify an image up to 800X (CAMCORDER mode) or 6X (CAMERA mode) its original size.
- **Color TFT LCD**
  A high-resolution color TFT LCD gives you clean, sharp images as well as the ability to review your recordings immediately.
- **Electronic Image Stabilizer (EIS)**
  The EIS compensates for any shaking that occurs when the camera is handheld, reducing unstable images particularly at high magnification.
- **Various Digital Effects**
  The DSE (Digital Special Effects) function allows you to give your films a special look by adding various special effects.
- **Back Light Compensation (BLC)**
  The BLC function compensates for a bright background behind the subject you're recording.
- **Program AE**
  The Program AE enables you to alter the shutter speed and aperture to suit the type of scene/action to be filmed.
- **NITE PIX / NITE SCENE**
  The NITE PIX function enables you to record a subject in a dark place.
- **USB Interface for Digital Image Data Transfer**
  You can transfer still images to a PC using the USB interface without an add-on card.

Getting to Know Your Device

Accessories Supplied with the Camcorder

Make sure that the following basic accessories are supplied with your digital video camera.

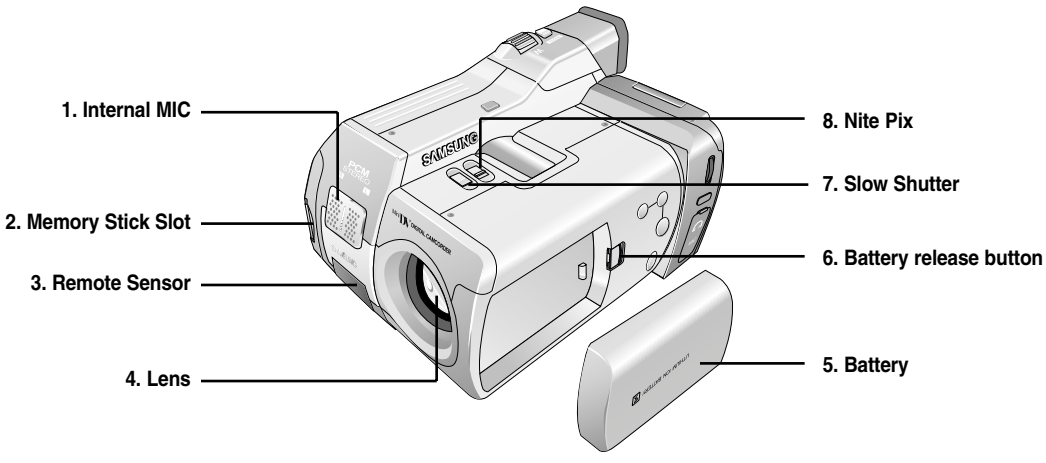
Basic Accessories

1. Lithium Ion Battery Pack
2. AC Power Adapter
3. AC Cord
4. AUDIO/VIDEO Cable
5. Instruction Manual
6. Lithium Battery for Remote Control or Clock. (TYPE: CR2025)
7. Shoulder Strap
8. USB Cable
9. Software CD
10. Remote Control(SCD5000 only)
11. Memory Stick(SCD5000 only)

1. Lithium Ion Battery pack (AD43-00070A)	2. AC Power Adapter (AD44-00065A)	3. AC cord (AD39-00076A)
4. AUDIO/VIDEO cable (AD39-00001A)	5. Instruction Book (AD68-00616B)	6. Lithium battery (AD43-10130H)
7. Shoulder strap (AD63-00202B)	8. USB cable (AD39-00073A)	9. Software CD
10. Remote Control (AD59-00085A)	11. Memory Stick (1109-001221)	

Getting to Know Your Device

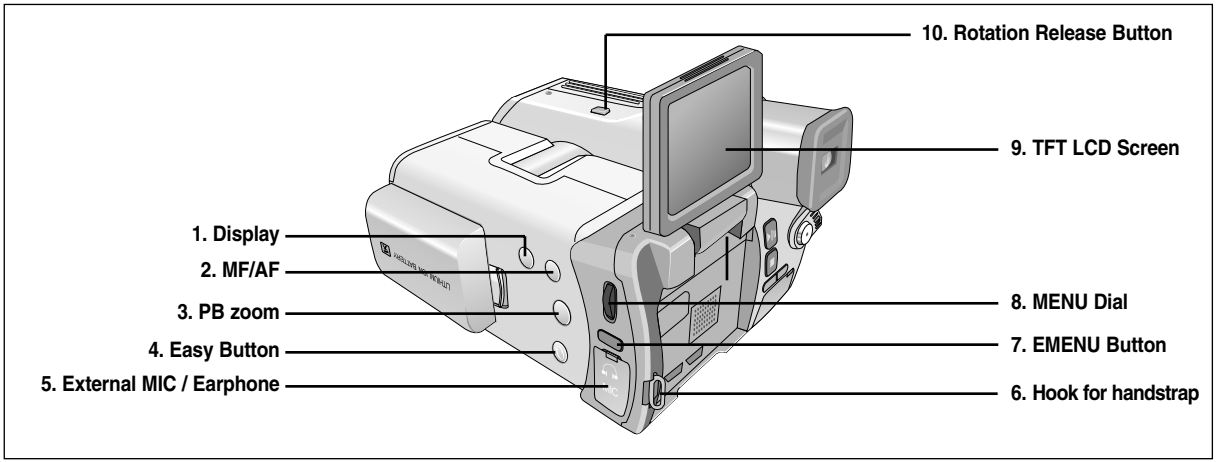
Front & Left View



1. Internal MIC
2. Memory Stick Slot
3. Remote Control Sensor
4. Lens
5. Battery
6. Battery release button
7. Slow Shutter
8. Nite Pix

Getting to Know Your Device

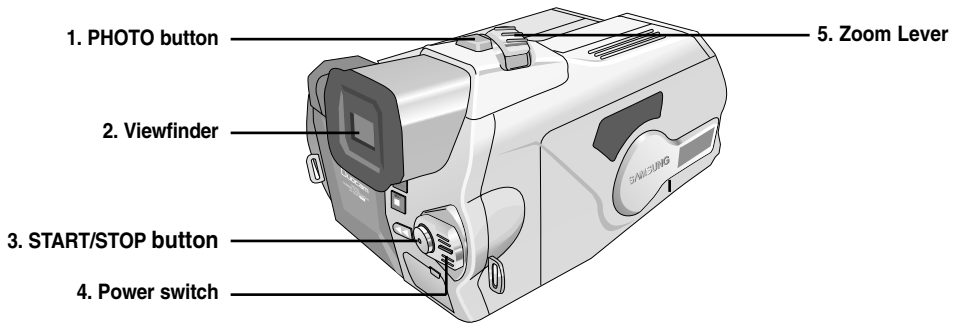
Left Side View



1. Display
2. MF/AF
3. PB Zoom
4. Easy Button
5. External MIC / Earphone
6. Hook for handstrap
7. MENU Button
8. MENU Dial
9. TFT LCD Screen
10. Rotation Release Button

Getting to Know Your Device

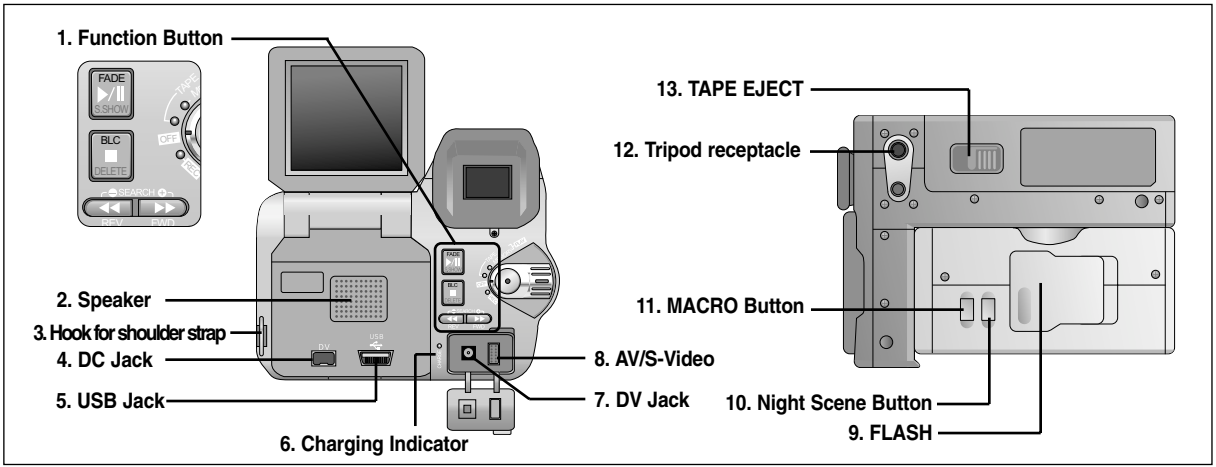
Right & Top View



1. Photo Button
2. Viewfinder
3. Start/Stop Button
4. Power switch
5. Zoom Lever

Getting to Know Your Device

Rear & Bottom View



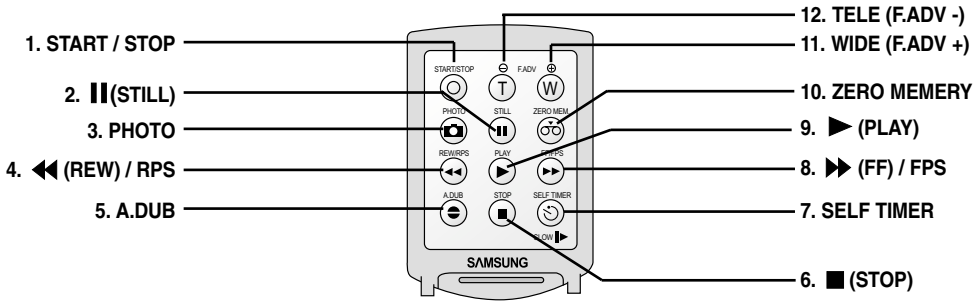
1. **Function Button**

PLAYER	RECORD	M.PLAY
-	EASY	-
◀◀ : (REW)	REC SEARCH –	REV
▶▶ : (FF)	REC SEARCH +	FWD
▶/❚❚ : (PLAY/STILL)	FADE	SLIDE SHOW
■ : (STOP)	BLC, SPOT AE	DELETE

2. **Speaker**
3. **Hook for the shoulder strap**
4. **DC Jack**
5. **USB Jack**
6. **Charging Indicator**
7. **DV Jack**
8. **AV/S-Video**
9. **FLASH**
10. **Night Scene Button**
11. **MACRO Button**
12. **Tripod Socket**
13. **TAPE EJECT**
14. **Focus Adjustment Knob**

Getting to Know Your Device

Remote Control (SCD5000 only)



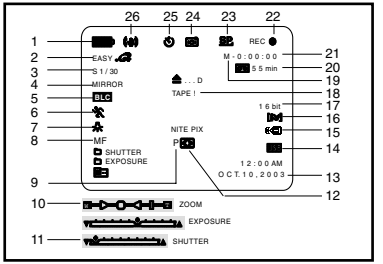
1. START / STOP
2. ❚❚(STILL)
3. PHOTO
4. ◀◀ (REW) / RPS
5. A.DUB
6. ■ (STOP)
7. SELF TIMER
8. ▶▶ (FF) / FPS
9. ▶ (PLAY)
10. ZERO MEMERY
11. WIDE (F.ADV +)
12. TELE (F.ADV -)

Getting to Know Your Device

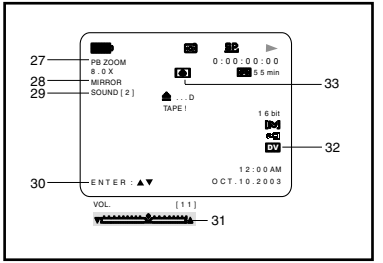
OSD (On Screen Display in CAMERA and PLAYER Modes)

1. Battery Level (See page 28)
2. Easy Mode (See pages 47)
3. Slow Shutter (See pages 69)
4. DSE (Digital Special Effects) Mode (See page 61)
5. BLC (Back Light Compensation) (See page 70)
6. Program AE (See page 56)
7. White Balance Mode (See page 58)
8. Manual Focus (See page 48)
9. POWER NITE PIX (See page 76)
10. Zoom Position (See page 49)
11. Shutter Speed and EXPOSURE (See page 68)
12. NITE PIX (See page 75)
13. DATE / TIME (See page 45)
14. USB (See page 120)
15. WL. REMOTE(SCD5000 only) (See page 43)
16. WIND CUT (See page 65)
17. Audio recording mode (See page 64)
18. Message Line
19. Zero Memory Indicator (See page 82) (SCD5000 only)
20. Remaining Tape (measured in minutes)
21. Tape Counter
22. Operating Mode
23. Record Speed Mode (See page 63)
24. PHOTO Mode (See page 74)
25. Self Recording and Waiting Timer (See page 25) (SCD5000 only)
26. EIS (See page 60)
27. PB ZOOM(See page 84)
28. PB DSE (See page 83)
29. Audio Playback Channel (See page 73)
30. PB ZOOM / ENTER (See page 84)
31. Volume Control (See page 35)
32. DV IN (DV data transfer mode) (See page 86)
33. DEW (See page 11)

OSD in CAMCORDER mode



OSD in TAPE PLAY mode

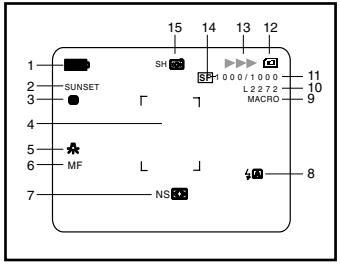


Getting to Know Your Device

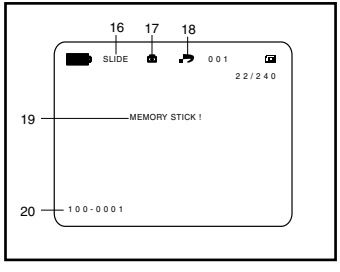
OSD (On Screen Display in CAMERA/M.PLAY Modes)

1. Battery Level (See page 28)
2. DSE (Digital Special Effects) Mode (See page 103)
3. SPOT AE Mode (See page 105)
4. Focus Area
5. White Balance Mode (See page 102)
6. Manual Focus (See page 58)
7. NITE SCENE (See page 106)
8. FLASH Mode (See page 101)
9. MACRO Mode (See page 98)
10. Image Size (See page 108)
11. Image Counter
    - Current still image/Total number of recordable still images.
12. CARD (MEMORY STICK) Indicator
13. Image Recording and Loading Indicator
14. Image Quality (See page 107)
15. Focus (See page 95)
16. SLIDE SHOW (See page 93)
17. ERASE PROTECTION indicator (See page 115)
18. Print Mark (See page 114)
19. Message Line
20. Folder number-file number (See page 89)

OSD in CAMERA mode



OSD in M.PLAY mode



Getting to Know Your Device

Turning the OSD ON/OFF (On Screen Display)

• Turning OSD ON/OFF

Press the DISPLAY button.
- Each press of the button toggles the OSD function ON and OFF.
- When you turn the OSD OFF,
  In CAMCORDER / CAMERA mode: The STBY, REC, EASY.Q modes are always displayed on the OSD, even when the OSD is turned OFF. The key input is displayed for 3 seconds then turned off.
  In PLAYER mode: When you press any Function button, the function is displayed on the OSD for 3 seconds before it disappears.

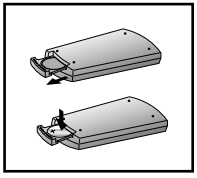
• Turning the DATE/TIME ON/OFF

- The DATE/TIME is not affected when the OSD function is switched ON or OFF.
- To turn the DATE/TIME ON or OFF, access the menu and change the DATE/TIME mode. (See page 51)
- You may also use the Quick Menu to turn the DATE/TIME ON or OFF. (See page 53) (only in CAMCORDER / CAMERA mode)

Preparation

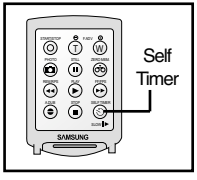
How to use the Remote Control(SCD5000 only)

Battery Installation for the Remote Control



- You need to insert or replace the lithium battery when :
  - You purchase the camcorder.
  - The remote control doesn't work.
- Make sure that you insert the lithium cell correctly, following the + and - markings.
- Be careful not to reverse the polarity of the battery.

Self Timer Recording and Photography Using the Remote Control



When you use the Self Timer function on the remote control, recording begins automatically in 10 seconds.

1. Set the device to CAMCORDER or CAMERA mode.

2. Press the SELF-TIMER button until the appropriate indicator is displayed in the LCD or viewfinder.

3. Press the START/STOP button or the PHOTO Button to start the timer.
   - After 10 seconds, recording or photography begins.
   - Press START/STOP again when you want to stop recording.

Preparation

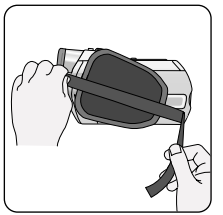
Adjusting the Hand Strap

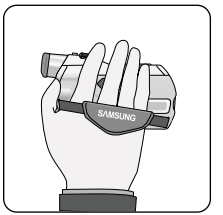
It is very important to ensure that the Hand Strap has been correctly adjusted before you begin recording.
The hand strap enables you to :

- Hold the camcorder in a stable, comfortable position.
- Press the Zoom START/STOP, and PHOTO button without having to change the position of your hand.

Hand Strap

a. Pull the Hand Strap cover open and release the Hand Strap.
b. Adjust its length and stick it back into the Hand Strap cover.
c. Close the Hand Strap cover.

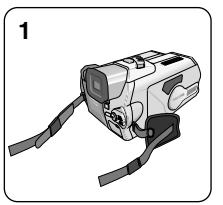


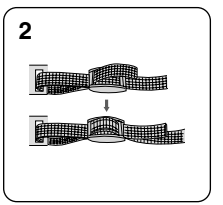


Shoulder Strap

The Shoulder Strap enables you to carry your camcorder around in complete safety.

1. Insert the end of strap into the Shoulder Strap hook on the camcorder. Insert the other end of strap into the ring inside the hand strap.
2. Thread each end into the buckle, adjust the length of the strap and then pull it tight in the buckle.



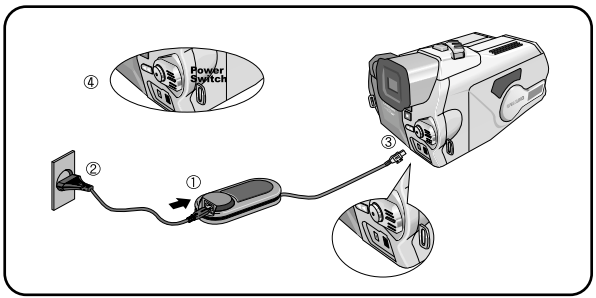


Preparation

Connecting a Power Source

There are two types of power sources that can be connected to your camcorder.
- The AC Power Adapter with the AC cord : used for indoor recording.
- The Battery Pack : used for outdoor recording.

To Use the AC Power Adapter and DC Cable



1. Connect the AC Power adapter to the AC cord.

2. Connect the AC cord to a wall socket.

Reference

The plug and wall socket type may differ according to your country of residence.

3. Connect the DC cable to the DC jack socket on the camcorder.

4. Set the camcorder to different modes by holding down the tab on the power switch and turning it to CAMCORDER/CAMERA mode or PLAYER mode.

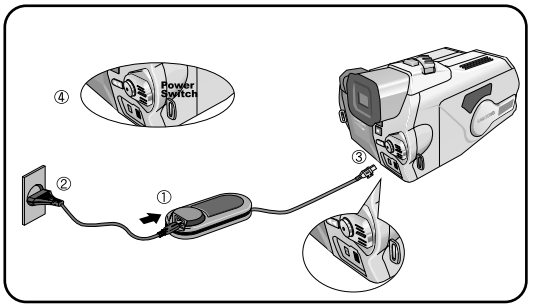
Preparation

Using the Lithium Ion Battery Pack

✤ The amount of continuous recording time available depends on :
- The type and capacity of the battery pack you are using.
- How often the Zoom function is used.
  It is recommended that you have several batteries available.

Charging the Lithium Ion Battery Pack

1. Attach the battery pack to the device.
2. Connect the AC Power adapter to the AC cord and connect the AC cord to a wall socket.
3. Connect the DC cable to the DC jack socket on the camcorder.
4. Turn the Camera power switch to OFF, and the charging indicator will start to flash, showing that the battery is charging.



Blinking time	Charging rate
Once per second	Less than 50%
Twice per second	50% ~ 75%
Three times per second	75% ~ 90%
Blinking stops and stays on	90 ~ 100%
On for a second and off for a second	Error - Reset the battery pack and the DC cable

5. When the battery is fully charged, disconnect the battery pack and the AC Power adapter from the camcorder.
   ■ Even with the power switched off, the battery pack will still discharge if it is left connected to the camcorder.

Notes

■ The battery pack may be charged a little at the time of purchase.
■ To prevent reduction in the life and capacity of the battery pack, always remove it from the camcorder after it is fully charged.

Preparation

Using the Lithium Ion Battery Pack

Table of Continuous Recording Time Based on Model and Battery Type.

✤ If you close the LCD screen, it switches off and the viewfinder switches on automatically.
✤ The continuous recording times given in the table above are approximations.
Actual recording time depends on usage.

Time / Battery	Charging time	Continuous recording time	
		LCD ON	EVF ON
SB-L110	Approx. 2hr	Approx. 1hr 30min	Approx. 2hr
SB-L220	Approx. 3hr 30min	Approx. 3hr 10min	Approx. 4hr 10min

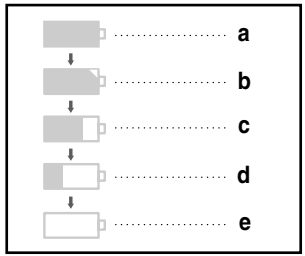
Notes

- The battery pack should be recharged in an environment between 32°F (0°C) and 104°F (40°C).
- The battery pack should never be charged in a room temperature that is below 32°F (0°C).
- The life and capacity of the battery pack will be reduced if it is used in temperatures below 32°F (0°C) or left in temperatures above 104°F (40°C) for a long period, even when it is fully recharged.
- Do not put the battery pack near any heat source (fire or flames, for example).
- Do not disassemble, apply pressure to, or heat the Battery Pack.
- Do not allow the + and - terminals of the battery pack to be short-circuited.
It may cause leakage, heat generation, induce fire or overheating.

Preparation

Battery Level Display

- **The battery level display indicates the amount of power remaining in the battery pack.**



a. Fully Charged
b. 20~40% Used
c. 40~80% Used
d. 80~95% Used
e. Completely Used (flickers)
(The device will turn off soon, change the battery as soon as possible)

✤ Please refer to the table on page 25 for approximate continuous recording times.
✤ The recording time is affected by temperature and environmental conditions.
The recording time becomes very short in a cold environment. The continuous recording times in the operating instructions are measured using a fully charged battery pack at 77°F(25°C). As the temperature and environmental conditions may differ from this when you actually use the camcorder, the remaining battery time may not be the same as the approximate continuous recording times given in these instructions.

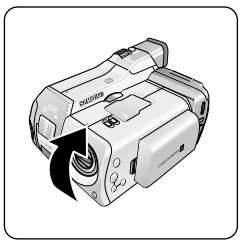
Preparation

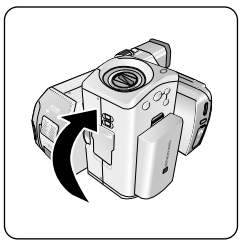
Setting to CAMCORDER / CAMERA modes

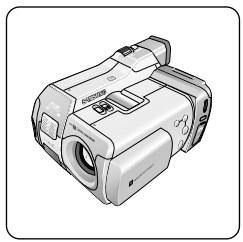
✤ This device is switched between the DVC (Digital Video Camcorder) mode and the DSC (Digital Still Camera) mode by revolving the Lens Body Block.
✤ Switching between CAMCORDER/CAMERA Modes

- To set your device to CAMERA Mode from CAMCORDER Mode: Rotate the Lens Body Block 180° counterclockwise while pressing the Rotation Release Button (Left View).

- To set your device to CAMCORDER Mode from CAMERA Mode: Rotate the Lens Body Block 180° clockwise while pressing the Rotation Release Button (Left View).







Warning

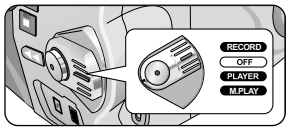
- Do not rotate the lens body block by force, or without pressing the Release button. It may break the device.
- Rotating the Lens Body Block while power is being supplied may stop recording and cause problems with the device.

Preparation

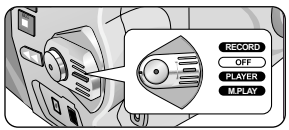
Setting the Power Switch

✤ Use the Power Switch to select the working modes of the device.

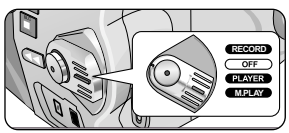
- RECORD mode: Record onto a tape or store images on the Memory Stick.



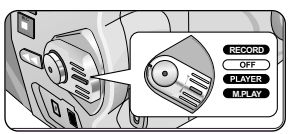
- OFF: Turn the device off. To recharge the battery, connect the power cable while the Power Switch is set to OFF.



- TAPE PLAY (PLAYER) mode: Play and edit the recorded tape.



- MEMORY PLAY (M.PLAY) mode: View and edit images and motion clips stored on the Memory Stick.



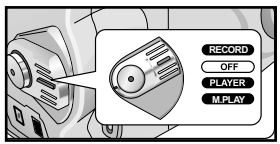
Preparation

Adjusting the LCD

✤ Your camcorder is equipped with a 2.5 inch color Liquid Crystal Display(LCD) screen, which enables you to view what you are recording and play back directly.

✤ Depending on the conditions under which you are using the camcorder (indoors or outdoors), you can adjust ;
- BRIGHT ADJUST
- COLOR ADJUST

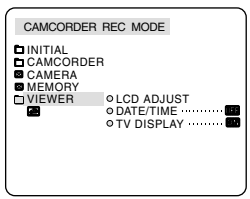
1. Set the POWER switch to the CAMCORDER or CAMERA position.
   - In PLAYER mode, you can only setup the LCD while the tape is playing.



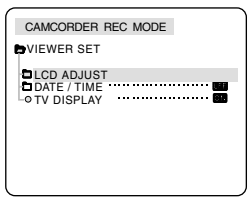
2. Open the LCD screen. The LCD switches on.

3. Press the MENU button.

4. Turn the MENU DIAL so that VIEWER is highlighted and then press the MENU DIAL.

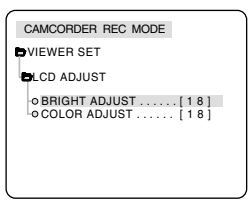


5. Turn the MENU DIAL so that LCD ADJUST is highlighted.



6. Press the ENTER button to enter the sub-menu.

7. Turn the MENU DIAL so that it highlights the menu item you want to adjust (BRIGHT ADJUST, COLOR ADJUST).



Preparation

8. Press the MENU DIAL.
   - Use the MENU DIAL to adjust the value of BRIGHT ADJUST and COLOR ADJUST.
   - You can set the values for BRIGHT ADJUST between 0 ~ 35 and COLOR ADJUST between 0 ~ 35.

9. Press the MENU button to complete the setting.

Using the VIEWFINDER

✤ The VIEWFINDER will not work when the LCD is open.

Adjusting the Focus

Use the focus adjustment knob on the VIEWFINDER to focus the picture.
(refer to diagram)

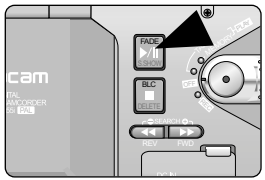
Preparation

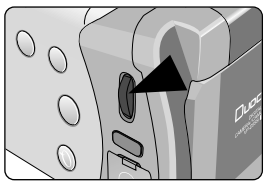
Adjusting the LCD during PLAY

✤ You can adjust the LCD during playback.
✤ The adjustment method is the same as is used while in CAMERA mode. (See page 31)

Controlling Sound from the Speaker

The Speaker only works in PLAYER mode.





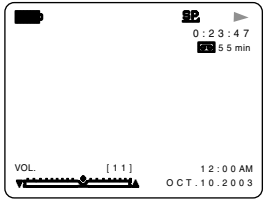
■ When you use the LCD screen for playback, you can hear the recorded sound from the built-in Speaker.
- Follow the instructions below to decrease or mute speaker volume in PLAYER mode.
- Take the following steps to lower the volume or mute the sound while playing a tape on the camcorder.

1. Set the device to CAMCORDER and set the Power Switch to PLAYER mode.

2. Press ▶/II (PLAY/STILL) to play the tape.

3. Once the tape is in play and you hear sound, use the MENU DIAL to adjust the volume.
   ■ A Volume Level display will appear on the LCD.
   Levels may be adjusted from anywhere between 0 to 19. You will not hear any sound when the volume is set on 0.
   ■ If you close the LCD while playing, you will not hear sound from the speaker.

<3-2>



Notes

■ When the cable is connected to the A/V jack, you cannot hear sound from the speaker and cannot adjust the volume.
■ You can hear sound from the speaker by removing the connected cable from the A/V jack

Functions

Using MENU

✤ Use the MENU button to change or select recording settings and Hardware functions.
✤ MENU instructions are displayed both on the LCD and the viewfinder. It is easier to manipulate your device using the LCD.

MENU	SUB MENU		Functions	Page
INITIAL	CLOCK SET		Setting the Time	42
	WL.REMOTE		Using the Remote Control	43
	REC.LAMP		Record Indicator	-
	BEEP SOUND		Play Various Sound Effects	-
	SHUT. SOUND		Sound Effect for the Photo button	-
	DEMO		Demonstration	44
CAMCORDER	RECORD SET	REC SELECT	Selecting the Storage Media for Camcorder mode	51
		REC MODE	Selecting the Recording Speed	63
		EIS	Selecting the Image Stabilizing Function	60
		D. ZOOM	Selecting Digital Zoom in CAMCORDER Mode	59
		PROGRAM AE	Selecting the PROGRAM AE Function	56
		WHT. BALANCE	Setting White Balance of CAMCORDER Mode	58
		DSE SELECT	Setting special effects in CAMCORDER Mode	61
		AUDIO MODE	Selecting Sound Quality for Recording	64
		WIND CUT	Removing Screen Noise	65
		AV IN/OUT	Selecting AV in/out	78

Functions

MENU	SUB MENU		Functions	Page
CAMCORDER	PLAY SET	PB DSE SELECT	Selecting PB DSE(Digital Special Effects)	83
		PHOTO SEARCH	Searching Pictures recorded in TAPE	74
		PHOTO COPY	Copying Pictures from TAPE onto the Memory Stick	113
		AUDIO SELECT	Selecting the Sound Quality of Playback	73
CAMERA	CONT. SHOT		Continuous Shot	99
	FLASH SELECT		Selecting Flash Modes	101
	WHT. BALANCE		Selecting White Balance in CAMERA Mode	102
	D. ZOOM		Selecting Digital Zoom in CAMERA Mode	97
	DSE SELECT		Setting special effects in CAMERA mode	103
MEMORY	M.PLAY SELECT		Selecting Storage Media to MPEG playback	110
	PHOTO SET	QUALITY	Selecting Image Quality	107
		SIZE	Selecting Image Resolution	108
	MPEG4 SIZE		Selecting MPEG Resolution	112
	PRINT MARK		Printing Images	114
	PROTECT		Preventing Accidental Erasure	115
	FILE NO		File Naming Options	89
	DELETE		Deleting Files	116
	FORMAT		Formatting the Memory Stick	118
VIEWER	LCD ADJUST		Setting the brightness and Color Tones of the LCD	33
	DATE/TIME		Setting the Date and Time	45
	TV DISPLAY		Selecting TV out	-

Functions

Setting menu items

MENU	SUB MENU		Available mode			
			CAMCORDER	PLAYER	MEM.REC	MEM.PLAY
INITIAL	CLOCK SET		✔	✔	✔	✔
	WL.REMOTE		✔	✔	✔	✔
	REC.LAMP		✔		✔	
	BEEP SOUND		✔	✔	✔	✔
	SHUT. SOUND		✔	✔	✔	
	DEMO		✔			
CAMCORDER	RECORD SET	REC SELECT	✔	✔		
		REC MODE	✔			
		EIS	✔			
		D. ZOOM	✔			
		PROGRAM AE	✔			
		WHT. BALANCE	✔			
		DSE SELECT	✔			
		AUDIO MODE	✔	✔		
		WIND CUT	✔	✔		
		AV IN/OUT		✔		

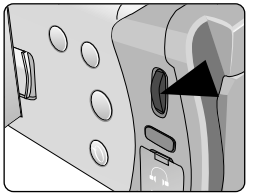
Functions

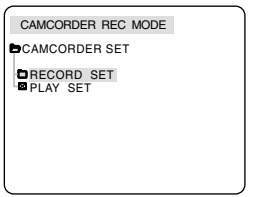
MENU	SUB MENU		Functions			
			CAMCORDER	PLAYER	MEM.REC	MEM.PLAY
CAMCORDER	PLAY SET	PB DSE SELECT		✔		
		PHOTO SEARCH		✔		
		PHOTO COPY		✔		
		AUDIO SELECT		✔		
CAMERA	CONT. SHOT				✔	
	FLASH SELECT				✔	
	WHT. BALANCE				✔	
	D. ZOOM				✔	
	DSE SELECT				✔	
MEMORY	M.PLAY SELECT			✔	✔	✔
	PHOTO SET	QUALITY		✔	✔	
		SIZE			✔	
	MPEG4 SIZE				✔	
	PRINT MARK					✔
	PROTECT					✔
	FILE NO			✔	✔	
	DELETE					✔
	FORMAT					✔
VIEWER	LCD ADJUST		✔	✔	✔	✔
	DATE/TIME		✔	✔	✔	✔
	TV DISPLAY		✔	✔	✔	✔

Functions

● Setting the Camcorder to CAMERA or PLAYER Mode and M.REC or M.PLAY Mode

1. Press the MENU button.
2. The MENU OSD is displayed. The cursor (HIGHLIGHT) indicates the feature you are currently adjusting.
3. Use the MENU DIAL to move between items and press the MENU DIAL to select and activate an item.
4. You can exit Menu mode by pressing the MENU button.





Functions

● Availability of Functions in CAMCORDER Mode.

Operating Mode \ Requested Mode	Digital functions				Digital special effects	NITE PIX
	EIS	D.ZOOM	PHOTO (TAPE)	SLOW SHUTTER		
EIS		O	O	△	O	O
D.ZOOM	O		O	* △	O	O
PHOTO	×	×		×	×	O
SLOW SHUTTER	△	×	O		O	O
Digital Special Effects	O	O	O	O		△
NITE PIX	O	O	O	O	×	

O : The requested mode will work in this operating mode.
× : You can not change the requested mode.
△ : The operating mode will be released and the requested mode will work.
* : The operating mode will be released and the requested mode will work.
(The data input while operating will be backed up)

Notes

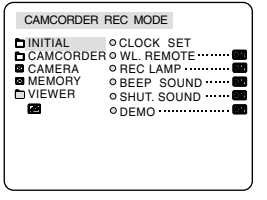
- When a menu item on the LCD is marked with an ☒, that item cannot be activated.
- When you select an item that cannot be changed, an error message will be displayed.

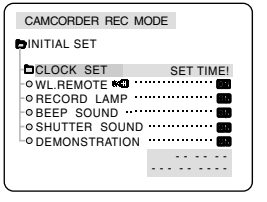
Functions

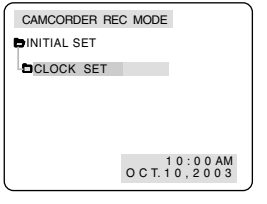
● CLOCK SET

✤ CLOCK setup works in CAMCORDER or CAMERA mode and PLAYER, M.PLAY modes.
✤ The DATE/TIME is automatically recorded onto the tape and Memory Stick.
Before recording or taking photos, please set the DATE/TIME.

1. Press the MENU button.
   ■ The menu list will appear.
2. Turn the MENU DIAL to highlight INITIAL and press the MENU DIAL.
3. Use the MENU DIAL to select CLOCK SET from the sub-menu.
4. Press the MENU DIAL to enter SETTING mode.
   ■ A blinking item indicates the item can be changed. The year will blink first.
5. Using the MENU DIAL, change the year setting.
6. Press the MENU DIAL.
   ■ The month will blink.
7. Using the MENU DIAL, change the month setting.
8. Press the MENU DIAL.
   ■ The day will blink.
9. You can set the day, hour and minute following the same procedure for setting the year and month.
10. Press the MENU DIAL after setting the minutes.
    ■ The word COMPLETE! will appear, and a few seconds later, the menu screen will automatically return to the sub menu.
11. To exit, press the MENU button.



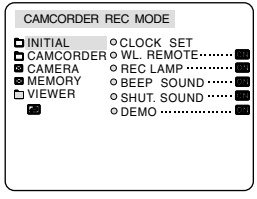




Functions

● WL.REMOTE(SCD5000 only)

✤ The WL.REMOTE function works in CAMCORDER or CAMERA mode and PLAYER, M.PLAY modes.
✤ The WL.REMOTE option allows you to enable or disable the remote control for use in CAMCORDER and CAMERA modes.



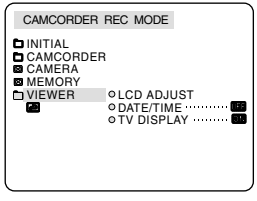
1. Press the MENU button.
   ■ The menu list will appear.

2. Turn the MENU DIAL to highlight INITIAL and press the MENU DIAL.

3. Use the MENU DIAL to select WL.REMOTE from the sub-menu.

4. Press the MENU DIAL to enable or disable the remote control.
   The setting switches between ON/OFF each time you press the MENU DIAL.

5. To exit, press the MENU button.
   ■ If you set the remote to OFF in the menu and try to use it, the remote control icon will blink for 3 seconds and disappear on the LCD.



Functions

● DEMONSTRATION

- ✤ Demonstration automatically shows you the major functions that are included with your camcorder so that you may use them more easily.
- ✤ The DEMONSTRATION function may only be used in the CAMCORDER mode without a tape inserted in the camcorder.
- ✤ The demonstration operates repeatedly until the DEMONSTRATION mode is switched OFF.

1. Set the device to CAMCORDER and set the power switch to RECORD mode mode.

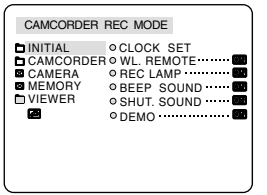
2. Press the MENU button.
   - ■ The menu list will appear.

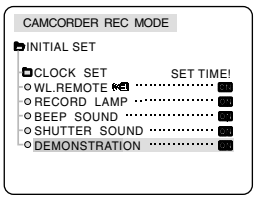
3. Turn the MENU DIAL to highlight INITIAL.

4. Select DEMONSTRATION from the submenu and press the MENU DIAL.

5. To activate the DEMONSTRATION, set DEMONSTRATION to ON.
   - ■ Press the menu button to quit the menu.
   - ■ The demonstration will begin.

6. To end the DEMONSTRATION, set the DEMONSTRATION to OFF.





Notes

- ■ The DEMONSTRATION function only works when there is no TAPE installed.
- ■ The DEMONSTRATION mode is automatically activated when the camcorder is left idle for more than 10 minutes after switching to CAMCORDER mode (when no tape is inserted in the camcorder).
- ■ If you press other buttons (FADE, BLC, PHOTO, EASY) during the DEMONSTRATION mode, the DEMONSTRATION stops temporarily and resumes 10 minutes later if you do not operate any other functions.

Functions

● DATE/TIME

✤ The DATE/TIME function works in CAMCORDER or CAMERA mode and PLAYER, M.PLAY modes.
✤ The date and time are automatically recorded on a special data area of the tape.

1. Press the MENU button.
   ■ The menu list will appear.

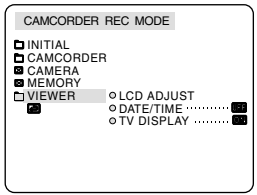
2. Turn the MENU DIAL to highlight VIEWER and press the MENU DIAL.

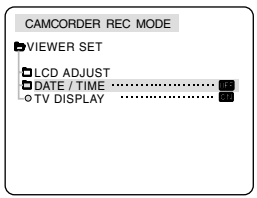
3. Turn the MENU DIAL to highlight DATE/TIME.

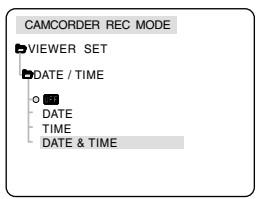
4. Press the MENU DIAL to select the sub-menu.

5. Using the MENU DIAL, select DATE/TIME mode.
   ■ You can choose to display - OFF, DATE, TIME, DATE/TIME
   - OFF
   - DATE only
   - TIME only
   - DATE & TIME
   ■ To return to the previous menu, highlight the DATE/TIME in the middle and press the MENU DIAL.

6. To exit, press the MENU button.







Notes

■ The DATE/TIME is not affected by the OSD ON/OFF (DISPLAY) button.
■ The DATE/TIME will read “- - -” in the following conditions.
- During playback of a blank section of a tape.
- If the tape was recorded before setting the DATE/TIME in the Camera’s memory.
- When the lithium battery becomes weak or dead.

■ Before you can use the DATE/TIME function, you must set the Clock.
See CLOCK SET on page 37.

Functions

● TV DISPLAY

- ✤ The TV DISPLAY function works in CAMCORDER or CAMERA mode and PLAYER, M.PLAY modes.
- ✤ You can select the output path of the OSD (On Screen Display).
  - ■ OFF: The OSD appears on the LCD screen only.
  - ■ ON: The OSD appears on the LCD screen, EVF and TV.
  - ■ Use the DISPLAY button located on the left side of the camcorder to turn ON/OFF all of the OSD displayed on the LCD/EVF/TV.

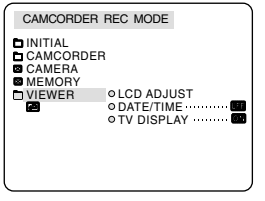
1. Set the Power switch to RECORD, PLAYER, or M.PLAY mode.

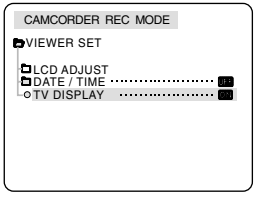
2. Press the MENU button.
   - ■ The menu list will appear.

3. Turn the MENU DIAL to highlight VIEWER and press the MENU DIAL.

4. Select TV DISPLAY mode from the list, press the ENTER button.
   - ■ The DISPLAY mode switches between ON/OFF with each push.

5. To exit, press the MENU button.



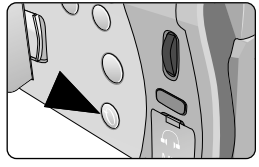


Functions

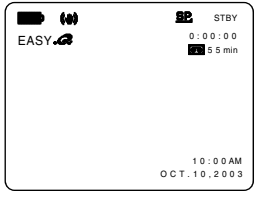
EASY Mode (for Beginners)

✤ The EASY mode allows a beginner to easily make good recordings.
- The EASY mode only operates in CAMCORDER and CAMERA modes.

1. Set the Power Switch to RECORD mode.



2. By pressing the EASY button, all functions on the camera will be set to OFF and the recording settings will be set to the following basic modes:
   - Battery level, recording mode, counter, DATE/TIME, and EIS ( ) will be displayed.
   - The word “EASY.Q” will appear on the LCD at the same time.
     However, the DATE/TIME will only be seen if it has been previously set. (See page 51)



3. Press the START/STOP or PHOTO button to start recording.
   - Recording will begin using the basic automatic settings.

4. Pressing the EASY button again EASY mode off.
   - The EASY function will not turn off when you are recording.
   - The camera will return to the settings that were set prior to activating EASY mode.

Notes

- In EASY mode, certain functions are not available, such as MENU, FADE, BLC, MF/AF.
  - If you want to use these functions, you must first turn EASY mode off.
- The EASY mode settings are deleted when the battery pack is uninstalled from the camcorder and therefore, they must be reset when a battery pack has been replaced.

Functions

MF/AF (Manual Focus/Auto Focus)

- ✤ The MF/AF function works in CAMCORDER and CAMERA modes.
- ✤ In most situations, it is better to use the automatic focus feature, as it enables you to concentrate on the creative side of your recording.
- ✤ Manual focusing may be necessary under certain conditions that make automatic focusing difficult and/or unreliable.

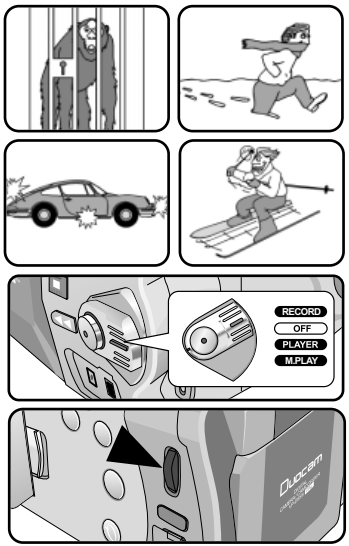
Auto Focusing

✤ In CAMCORDER Mode, turning on the device will set it to automatic focus . In CAMERA Mode, pressing the Photo Button halfway down will set the focus.

Manual Focusing

✤ In the following cases you may obtain better results by adjusting the focus manually.

a. A picture containing several objects, some close to the camcorder, others further away.
b. A person enveloped in fog or surrounded by snow.
c. Very shiny or glossy surfaces like a car.
d. People or objects moving constantly or quickly like an athlete or a crowd.



1. Set the Power Switch to RECORD mode.
2. Press the MF Button.
   - ■ MF Icon is displayed on the LCD screen.
3. Turn the MENU DIAL up or down until the object is in focus.
   - ■ Zoom out a little if focusing is difficult.
4. To return to AF(Auto Focus: [A]), press the MF Button again.

Functions

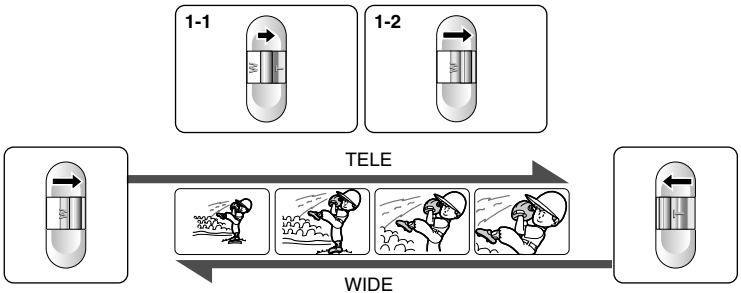
Zooming In and Out with DIGITAL ZOOM

✤ The Zoom works in CAMCORDER and CAMERA modes.

Zooming In and Out

✤ Zooming is a recording technique that lets you change the size of the subject in a scene.
For more professional looking recordings, do not use the zoom function too often.
✤ You can zoom using variable zoom speeds.
✤ Use these features for different shots. Please note that over-use
of the zoom feature can lead to unprofessional looking results and a reduction of battery usage time.

1. Move the zoom lever slowly for a gradual zoom, move it faster for a high-speed zoom.
   Your zooming can be monitored on the OSD.
2. T(Telephoto) side: Subject appears closer.
3. W(Wide angle) side: Subject appears farther away.



Note

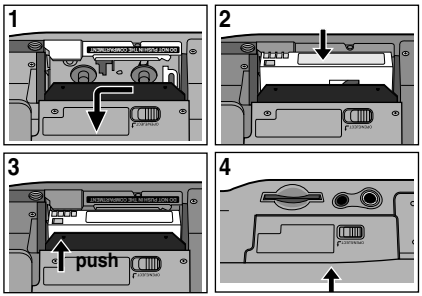
You can record a subject that is a minimum of 1 m (about 2.65 feet) away from the lens surface in the TELE position, or about 10 mm (about 0.5 inch) away in the WIDE position.

Using the CAMCORDER - Basic Recording

Inserting and Ejecting a Cassette

✤ When inserting a tape or closing the cassette holder, do not apply excessive force. This may cause a malfunction.
✤ Do not use any tapes other than Mini DV cassettes.

1. Connect a power source. Slide the TAPE OPEN/EJECT switch and open the cassette door.
   - The cassette holding mechanism rises automatically.
2. Insert a tape into the cassette holder with the tape window facing outward and the protection tab toward the top.
3. Press the area labelled PUSH on the cassette holding mechanism until it clicks into place.
   - The cassette is loaded automatically.
4. Close the cassette door.
   - Close the door completely until you can hear a “click”.

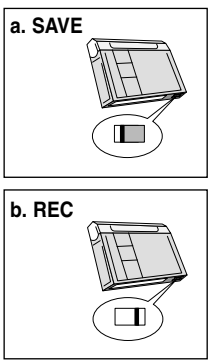


Notes

When you have recorded something that you wish to keep, you can protect it so that it will not be accidentally erased.

a. Protecting a Tape :
Push the safety tab on the cassette so that the hole is uncovered.

b. Removing the protection from a tape :
If you no longer wish to keep the recording on the cassette, push the write-protect tab back so that it covers the hole.



- **How to Stire a Tape**

a. Avoid places with magnets or magnetic interference.
b. Avoid humidity and dust prone places.
c. Keep the tape in an upright position and avoid storing it in direct sunlight.
d. Avoid dropping or knocking your tapes.

Using the CAMCORDER - Basic Recording

To select the CAMCORDER mode

✤ You can select either a tape or the Memory Stick as the storage media for motion clips.
✤ Use M.Play mode to view the motion clips stored on the Memory Stick.

1. Set the device to CAMCORDER and set the power switch to RECORD mode.

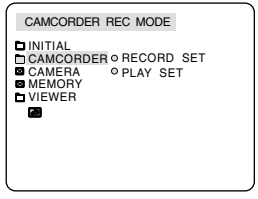
2. Press the MENU button.
   ■ The menu list will appear.

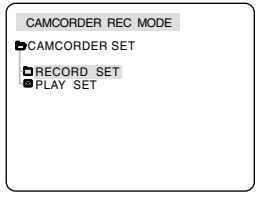
3. Turn the MENU DIAL highlight to CAMCORDER and press the MENU DIAL.
   ■ The sub-menu list will appear.

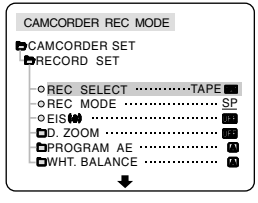
4. Select RECORD SET from the sub-menu and press the MENU DIAL.

5. Turn the MENU DIAL to activate REC SELECT, press the MENU DIAL.
   ■ CAMCORDER mode toggles between TAPE and MEMORY with each press.

6. The menu list will disappear







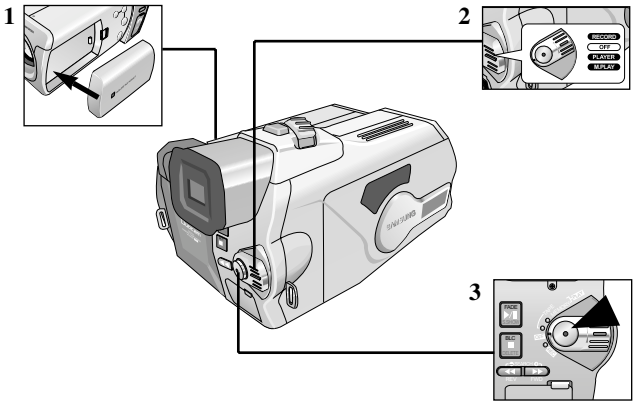
Using the CAMCORDER - Basic Recording

Making Your First Recording

1. Connect a Power source to the camcorder.
   (See page 27)
   (A battery pack or the AC power adapter)
   - Insert a cassette. (See page 50)

2. Set the device to CAMCORDER and set the power switch to CAMCORDER mode.
   - Open the LCD monitor.
   - If the protection tab of the cassette is open, the words STOP and PROTECTION! will be displayed.
   - Make sure the image you want to record appears on the LCD monitor or viewfinder.
   - Make sure the battery level indicates that there is enough remaining power for your expected recording time.

3. To start recording, press the START/STOP button.
   - REC is displayed on the LCD.
     To stop recording, press the START/STOP button again.
   - STBY is displayed on the LCD.



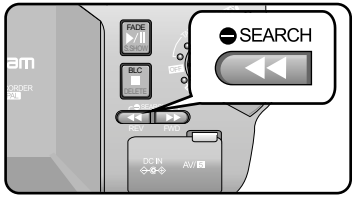
Using the CAMCORDER - Basic Recording

When a cassette is loaded and the camcorder is left in the STBY mode for more than 5 minutes without being used, it will automatically turn off.
To use it again, push the START/STOP button or set the Power switch to OFF and then back to CAMERA.
This Auto Power Off feature is designed to save battery power.

Record Search (REC SEARCH)

✤ You can view a recording using the REC SEARCH +, – function in STBY mode.
REC SEARCH – enables you to play the recording backwards and
REC SEARCH + enables you to play it forwards, for as long as you keep each button pressed down.

✤ If you press the REC SEARCH – button in STBY mode, your camcorder will play in reverse for 3 seconds and return to the original position automatically.



Note

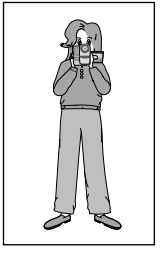
Mosaic shaped distortion may appear on the screen while in Record Search mode.

Using the CAMCORDER - Basic Recording

Hints for Stable Image Recording

✤ When recording, it is very important to hold the camcorder correctly.
✤ Fix the LENS cap firmly by clipping it to the hand strap. (refer to the diagram)

Recording with the LCD Monitor



1. Hold the camcorder firmly using the hand strap.
2. Place your right elbow against your side.
3. Place your left hand under or beside the LCD to support and adjust it.
   Do not touch the built-in microphone.
4. Choose a comfortable, stable position for the shots that you are taking.
   You can lean against a wall or on a table for greater stability.
   Do not forget to breathe gently.
5. Use the LCD frame as a guide to determine the horizontal plane.
6. Whenever possible, use a tripod.

Recording with the Viewfinder

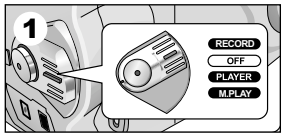
1. Hold the camcorder firmly using the hand strap.
2. Place your right elbow against your side.
3. Place your left hand under the camcorder to support it.
   Be sure not to touch the built-in microphone.
4. Choose a comfortable, stable position for the shots that you are taking.
   You can lean against a wall or on a table for greater stability.
   Do not forget to breathe gently.
5. To view an object through the viewfinder, pull it out until you hear a ‘click’ sound.
   Pulling with excessive force may cause damage to the viewfinder.
6. Place your eye firmly against the viewfinder eyecup.
7. Use the viewfinder frame as a guide to determine the horizontal plane.
8. Whenever possible, use a tripod.

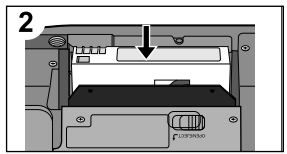
Using the CAMCORDER - Basic Recording

Playing Back a Tape You Have Recorded on the LCD

✤ You can monitor the playback picture on the LCD monitor.
✤ Make sure that the battery pack is in place.

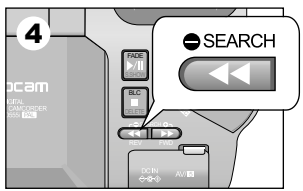
1. Set the device to CAMCORDER and Set the Power Switch to PLAYER mode.





2. Insert the tape you wish to view. (See page 27)

3. Open the LCD screen.
   Adjust the angle of the LCD screen and set the brightness or color if necessary.



4. Press the ◀◀ (REW) button to rewind the tape to the starting point.
   - To stop rewinding, press the ■ (STOP) button.
   - The camcorder stops automatically after rewinding is complete.

5. Press the ▶/II (PLAY/STILL) button to start the playback.
   - You can view the pictures you recorded on the LCD.
   - To stop the PLAY operation, press the ■ (STOP) button.

Notes

- You can also view the picture on a TV screen, after connecting the camcorder to a TV or VCR. (See page 68)
- Various functions are available in Playback mode. (See page 70)

Using the CAMCORDER - Advance Recording

● PROGRAM AE

- ✤ The PROGRAM AE function works in CAMCORDER mode only.
- ✤ PROGRAM AE mode allows you to adjust shutter speeds and apertures to suit different recording conditions.
- ✤ It gives you creative control over the depth of field.

■ AUTO Mode

- Auto balance between the subject and the background.
- To be used in normal conditions.
- The shutter speed automatically varies from 1/60 to 1/250 per second, depending on the scene.

■ SPORTS Mode ( )

- For recording people or objects which are moving quickly.

■ PORTRAIT Mode ( )

- For focusing on the background of a subject, when the background is out of focus.
- PORTRAIT mode is most effective when used outdoors.
- The shutter speed automatically varies from 1/60 to 1/1000 per second.

■ SPOTLIGHT Mode ( )

- For proper recording when there is only light on the subject and not the rest of the picture.

■ SAND/SNOW Mode ( )

- For recording when people or objects are darker than the background because of reflected light from sand or snow.

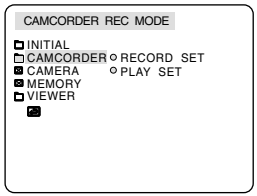
■ High S. SPEED(High Shutter Speed) Mode ( )

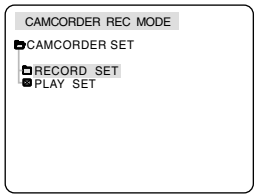
- For recording fast-moving subjects such as players in golf or tennis games.

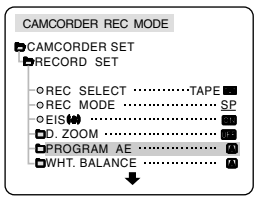
Using the CAMCORDER - Advance Recording

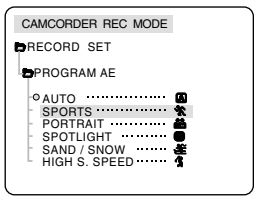
Setting PROGRAM AE

1. Press the MENU button.
   - The menu list will appear.
2. Turn the MENU DIAL to highlight CAMCORDER and press the MENU DIAL.
3. Select PROGRAM AE from the sub-menu.
4. Press the MENU DIAL to enter the sub-menu.
5. Using the MENU DIAL, select one of the PROGRAM AE modes.
   - Press the MENU DIAL to confirm the Program AE mode you have selected.
6. To exit, press the MENU button.









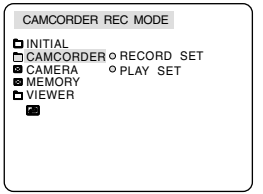
Using the CAMCORDER - Advance Recording

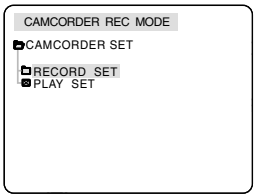
● WHT. BALANCE (WHITE BALANCE) - CAMCORDER Mode

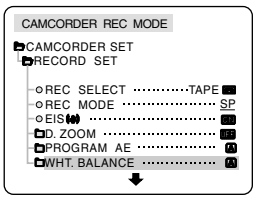
✤ The WHITE BALANCE function in CAMCORDER mode is a recording function that preserves the unique color of the object under any recording conditions.

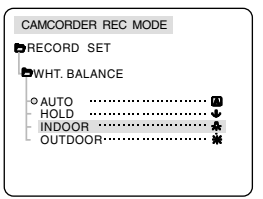
✤ You may select the appropriate WHITE BALANCE mode to obtain high quality color in the image.

- AUTO (Ⓐ) : This mode is generally used to control the WHITE BALANCE automatically.
- HOLD (⏷) : This fixes the current WHITE BALANCE value.
- INDOOR (☘) : This controls the WHITE BALANCE according to indoor ambience.
- OUTDOOR (✱) : This controls the WHITE BALANCE according to outdoor ambience.









1. Set the camcorder to CAMERA mode.
2. Press the MENU button.
   - The menu list will appear.
3. Turn the MENU DIAL to highlight CAMCORDER and press the MENU DIAL.
4. Select WHT.BALANCE from the submenu.
5. Press the ENTER button to enter the sub-menu.
6. Using the MENU DIAL, select the WHITE BALANCE function you wish to use.
   - Press the ENTER button to confirm the WHITE BALANCE function you have selected.
7. To exit, press the MENU button.

Notes

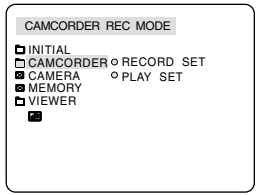
- While setting NITE PIX to ON, the WHT.BALANCE function does not work.
- The WHT.BALANCE function will not operate in EASY mode.
- Turn the Digital Zoom off (if necessary) to set a more accurate White Balance.
- If you have set the White Balance and the lighting conditions change, reset the White Balance.
- For normal outdoor recording, setting the White Balance to AUTO may provide the best results.

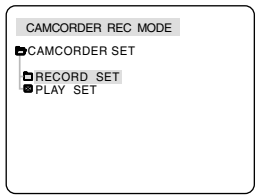
Using the CAMCORDER - Advance Recording

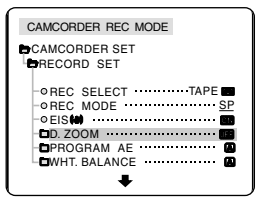
Digital Zoom in CAMCORDER Mode

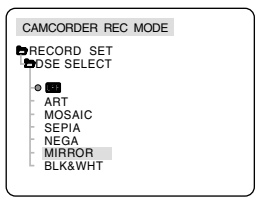
- ✤ Zooming more than 10x is achieved digitally.
- ✤ The picture quality may deteriorate depending on how much you zoom in on the subject.
- ✤ We recommend that you use the EIS feature with DIGITAL ZOOM for picture stability. (See page 45)

1. Set the power switch to CAMCODER or CAMERA mode.
2. Press the MENU button.
   - ■ The menu list will appear.
3. Turn the MENU DIAL to CAMCORDER and press the MENU DIAL.
4. Select RECORD SET from the sub-menu and press the MENU DIAL.
5. Select D.ZOOM from the sub-menu.
6. Press the MENU DIAL to setup the 100x, 200x, 400x, 800x digital zoom function or to turn the feature OFF.
7. To exit, press the MENU button.





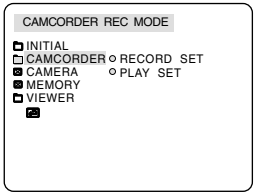




Using the CAMCORDER - Advance Recording

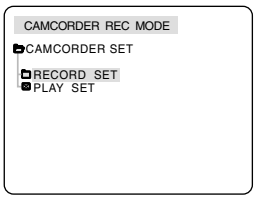
● EIS (Electronic Image Stabilizer)

- ✤ The EIS function works in CAMCORDER mode only.
- ✤ EIS (Electronic Image Stabilizer) is a function that compensates for any shaking or hand movement while holding the camcorder (within reasonable limits).
- ✤ It provides more stable pictures when:
  - ■ Recording with the zoom
  - ■ Recording a small object close-up
  - ■ Recording and walking at the same time
  - ■ Recording through the window of a vehicle



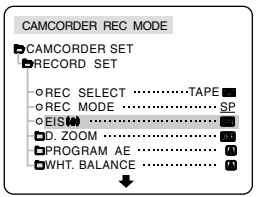
1. Set the device to CAMCORDER and set the power switch to RECORD mode.

2. Press the MENU button.
   - ■ The menu list will appear.



3. Turn the MENU DIAL highlight to CAMCORDER and press the MENU DIAL.
   - ■ The sub-menu list will appear.

4. Select RECORD SET from the sub-menu and press the MENU DIAL.



5. Turn the MENU DIAL to activate the EIS function, then press the MENU DIAL.
   - ■ The EIS menu is changed to ON.
   - ■ If you do not want to use the EIS function, set the EIS menu to OFF.

6. To exit, press the MENU button.

Notes

- ■ It is recommended that you deactivate the shake compensation function when using a tripod.
- ■ If you use the EIS function, the picture quality may deteriorate

Using the CAMCORDER - Advance Recording

● DSE(Digital Special Effects) SELECT in CAMCORDER Mode

- ✤ The DSE function works in CAMCORDER mode only.
- ✤ The digital effects enable you to give a creative look to your recording by adding various special effects.
- ✤ Select the appropriate digital effect for the type of picture that you wish to record and the effect you wish to create.
- ✤ There are 9 DSE modes.

a. ART Mode
This mode gives the images a coarse effect.

b. MOSAIC Mode
This mode gives the images a mosaic effect.

c. SEPIA Mode
This mode gives the images a reddish-brown pigment.

d. NEGA Mode
This mode reverses the colors of the images, creating a negative image.

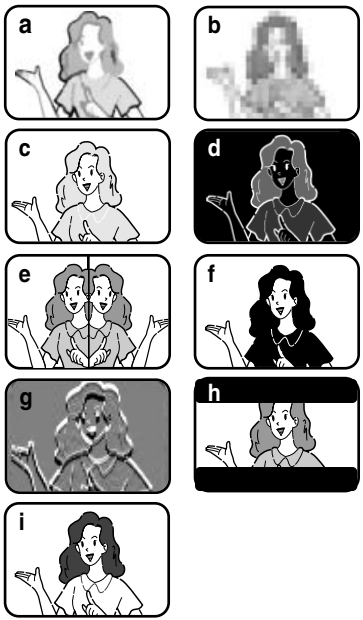
e. MIRROR Mode
This mode cuts the picture in half, using a mirror effect.

f. BLK & WHT Mode
This mode changes the images to black and white.

g. EMBOSS Mode
This mode creates a 3D effect (embossing).

h. CINEMA Mode
This mode covers the upper/lower portions of the screen to create a cinematic effect.

i. MAKE - UP Mode
This mode allows the images to be colored red, green, blue or yellow.



Using the CAMCORDER - Advance Recording

Selecting a Digital Effect in CAMCORDER Mode

1. Set the device to CAMCORDER and set the power switch to RECORD mode.

2. Press the MENU button.
   - The menu list will appear.

3. Turn the MENU DIAL to highlight CAMCORDER and press the MENU DIAL.

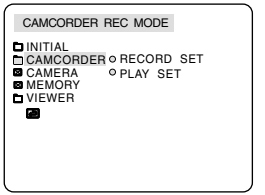
4. Select RECORD SET from the sub-menu and press the MENU DIAL.

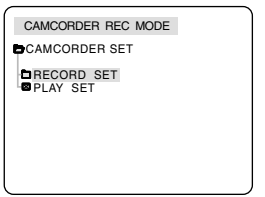
5. Select DSE SELECT from the sub-menu.

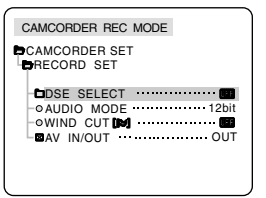
6. Press the MENU DIAL to enter the sub-menu.

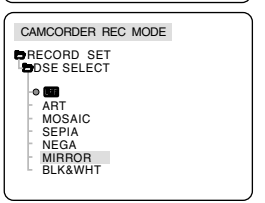
7. Using MENU DIAL, select the DSE mode you wish to use.
   - Press the MENU DIAL to confirm the DSE mode you have selected.

8. To exit, press the MENU button.









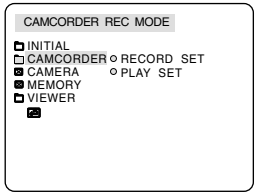
Notes

- While setting NITE PIX to ON, the DSE function does not work.
- The DSE function will not operate in EASY mode.

Using the CAMCORDER - Advance Recording

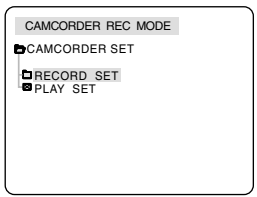
● REC MODE

✤ The REC MODE function works in both CAMCORDER and PLAYER(DV IN) modes.
✤ This camcorder records and plays back in SP (standard play) mode and in LP (long play) mode.
- ■ SP (standard play): This mode permits 60 minutes of recording time with a DVM60 tape.
- ■ LP (long play): This mode permits 90 minutes of recording time with a DVM60 tape.



1. Set the device to CAMCORDER and set the power switch to RECORD mode.

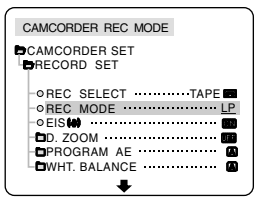
2. Press the MENU button.
   - ■ The menu list will appear.



3. Turn the MENU DIAL to highlight CAMCORDER and press the MENU DIAL.

4. Select RECORD SET from the sub-menu and press the MENU DIAL.

5. Turn the MENU DIAL to highlight RECORD MODE and press the MENU DIAL.



6. Select REC MODE from the sub-menu and press the MENU DIAL.
   - ■ The REC MODE toggles between SP and LP with each press.

7. To exit, press the MENU button.

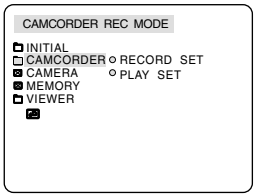
Notes

- ■ We recommend that you use this camcorder to play back any tapes recorded on this camcorder. Playing back a tape recorded in other equipment may produce mosaic shaped distortion.
- ■ When you record a tape in SP and LP modes, or LP mode only, the playback picture may be distorted or the time code may not be written properly between scenes.
- ■ Record using SP mode for the best picture and sound quality.

Using the CAMCORDER - Advance Recording

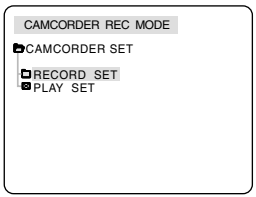
● AUDIO MODE

- ✤ The AUDIO MODE function works in CAMCORDER mode.
- ✤ This camcorder records sound in two ways. (12bit, 16bit)
  - ■ 12bit : You can record two 12bit stereo sound tracks.
    The original stereo sound can be recorded onto the MAIN (SOUND1) track.
    Additional stereo sound can be dubbed onto the SUB (SOUND2) track.
  - ■ 16bit : You can record one high quality stereo sound using the 16bit recording mode.
    Audio dubbing is not possible when using this mode.



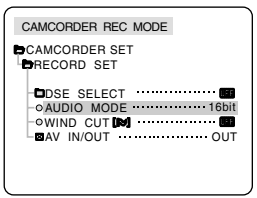
1. Set the device to CAMCORDER and set the power switch to RECORD mode.

2. Press the MENU button.
   - ■ The menu list will appear.



3. Turn the MENU DIAL to highlight CAMCORDER and press the MENU DIAL.

4. Select RECORD SET from the sub-menu and press the MENU DIAL.



5. Turn the MENU DIAL to highlight AUDIO MODE and press the MENU DIAL.

6. Select the AUDIO MODE you wish to use from the menu then press the MENU DIAL.
   - ■ The AUDIO MODE toggles between 12bit-16bit with each press of the dial.

7. To exit, press the MENU button.

Using the CAMCORDER - Advance Recording

● WIND CUT

✤ The WIND CUT function works in CAMCORDER, and PLAYER(SCD5000 only) modes.
✤ The WIND CUT function minimizes wind noise or other noise while recording.
- When the wind cut is on, some low sounds are eliminated along with the sound of the wind.

1. Set the device to CMACORDER and set the power switch to RECORD mode.

2. Press the MENU button.
   ■ The menu list will appear.

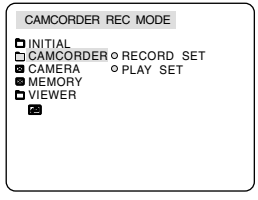
3. Turn the MENU DIAL to highlight CAMCORDER and press the MENU DIAL.

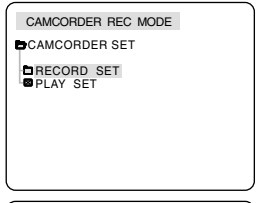
4. Select RECORD SET from the sub-menu and press the MENU DIAL.

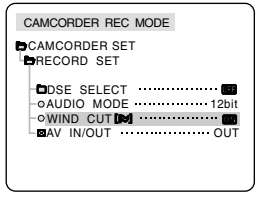
5. Turn the MENU DIAL to highlight WIND CUT( ) and press the MENU DIAL.

6. This feature toggles ON/OFF each time you press the MENU DIAL.

7. To exit, press the MENU button.







Notes

■ Make sure WIND CUT is set to OFF when you want the microphone to be as sensitive as possible.
■ Use the WIND CUT when recording in windy places such as the beach or near buildings.

Using the CAMCORDER - Advance Recording

Using Quick Menu(Navigation Menu)

✤ Quick Menu is available only in CAMCORDER mode.
✤ Quick Menu is used to adjust camera functions by simply using the MENU SELECTOR button.
This feature is useful for when you want to make simple adjustments without having to access the menus and sub-menus.

■ **DATE/TIME**
- Each time you select DATE/TIME and press the MENU DIAL, it will be displayed in the order of DATE - TIME - DATE/TIME - OFF(See page 51).

■ **WL.REMOTE( )(SCD5000 only)**
- Each time you select WL.REMOTE and press the MENU DIAL, the WL.REMOTE is switched to either enabled ( ) or disabled (OFF) .

■ **EIS( )**
- Each time you select EIS and press the MENU DIAL, the EIS icon is displayed or set to OFF.

■ **DSE(Digital Special Effect) (See page 61)**
- Each time you select DSE and press the MENU DIAL, the DSE preset values are applied or set to OFF. DSE values will not switch between ON and OFF if they have not been preset in the menu.

■ **PROGRAM AE (See page 56)**
- Each time you select PROGRAM AE and press the MENU DIAL, you can choose between the preset PROGRAM AE value and AUTO. You can't choose between AUTO and the PROGRAM AE value if the value has not been preset in the regular menu.

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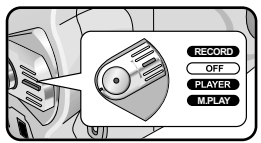
■ **WHT. BALANCE (See page 58)**
- Each time you select WHT. BALANCE and press the MENU DIAL, you can choose between the preset WHT.BALANCE value and AUTO. As in PROGRAM AE, you can't choose between AUTO and- WHT.BALANCE value if it has not been preset..

■ **FOCUS (Manual Focus/Auto Focus) (See page 58)**
- Each time you select FOCUS and press the MENU DIAL, the FOCUS is switched to either Manual Focus (MF) or Auto Focus (A).

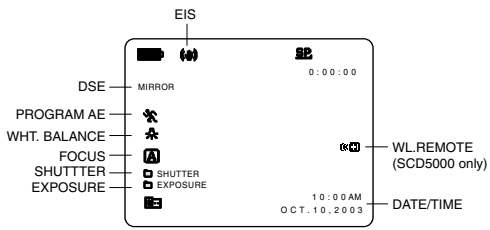
■ **SHUTTER SPEED & EXPOSURE**
- You can set values for SHUTTER SPEED and EXPOSURE by selecting the ( ) icon and pressing the MENU DIAL. For more information, see the next chapter.

Setting the Quick Menu

1. Set the device to CMACORDER and set the power switch to RECORD mode.



2. Turn the MENU DIAL to select a function you want and then press the MENU DIAL to change the values.



Notes

■ The Quick Menu function will not operate in EASY mode.
■ If you are using the Manual FOCUS(MF) function, you cannot use the Quick Menu.
If you want to use the Quick Menu function, exit the Manual FOCUS(MF) mode.

Using the CAMCORDER - Advance Recording

SHUTTER SPEED & EXPOSURE

- ✤ You can set SHUTTER SPEED and EXPOSURE only in CAMCORDER mode.
- ✤ SHUTTER SPEED and EXPOSURE values can only be set in the Quick Menu.
- ✤ SHUTTER SPEED and EXPOSURE are automatically switched and/or deactivated.

1. Set the device to CAMCORDER and set the power switch to RECORD mode.

2. Turn the MENU DIAL until you see icon( ) on, and then press the MENU DIAL.
   - ■ You see a screen on which you can select SHUTTER SPEED and EXPOSURE.
   - ■ Turn the MENU DIAL to select the item you want and then press the MENU DIAL.
   - ■ SHUTTER SPEED can be set to 1/60, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000 or 1/10000.
   - ■ EXPOSURE can be set between 00 and 29.

3. To exit from the setting screen, select the icon( ) and press the MENU DIAL.

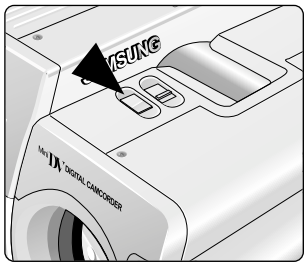
Notes

- ■ If you want to use the selected shutter speed and exposure value, you should begin the recording with the shutter speed and the exposure adjustment screens displayed on the LCD.
- ■ If you manually change the shutter speed and the exposure value when Auto-exposure option is selected, manual changes are applied first.

Using the CAMCORDER - Advance Recording

SLOW SHUTTER (Low Shutter Speed)

✤ The SLOW SHUTTER function works in CAMCORDER mode only.
✤ The shutter speed can be controlled, allowing you to record slow moving objects.



1. Set the device to CAMCORDER and set the power switch to RECORD mode.
2. Press the SLOW SHUTTER button.
3. Each time you press the SLOW SHUTTER button, SHUTTER SPEED is changed between 1/30, 1/15, 1/8, and OFF.
4. To exit, press the SLOW SHUTTER button.

Notes

■ When using "SLOW SHUTTER" the image takes on a slow motion like effect.
■ The SLOW SHUTTER function will not operate with DIS.