

ENGLISH

THIS CAMCORDER IS MANUFACTURED BY:



SERVICE DIVISION
400 Valley Road, Suite 201, Mt. Arlington N.J. 07856
Tel: 1-800-SAMSUNG
(1-800-726-7864)

***Samsung Electronics' Internet Home Page**
<http://www.samsungusa.com>

AD68-00616B

ENGLISH

Digital Video Camcorder



SCD23/D24/D29

AF Auto Focus
CCD Charge Coupled Device
LCD Liquid Crystal Display



Owner's Instruction Book

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

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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ENGLISH**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.

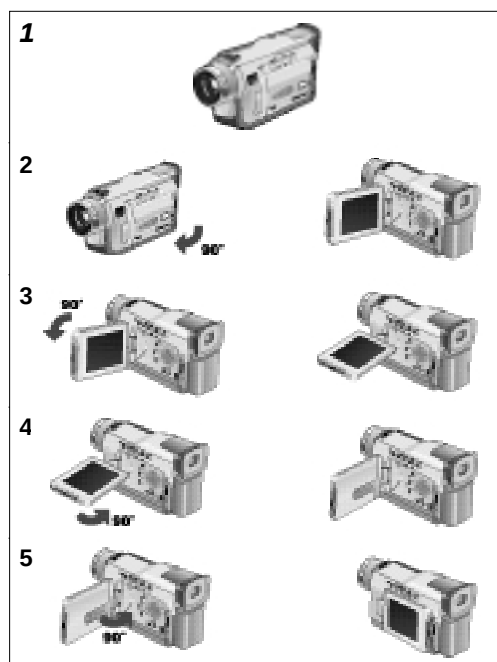
1. LCD screen closed.

2. Standard recording using the LCD screen.

3. Recording when looking at the LCD screen from the top.

4. Recording when looking at the LCD screen from the front.

5. Recording with the LCD screen closed.



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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 condensation to form inside the camcorder.

for example:

- When you move the camcorder from a cold location to a warm location (e.g. from outside to inside during winter.)
 - When you move the camcorder from a cool location to a hot location (e.g. from inside to outside during the summer.)
2. If the  (DEW) protection feature is activated, leave the camcorder for at least two hours in a dry, warm room with the cassette compartment opened and the battery removed.

Notes regarding CAMCORDER

1. Do not leave the camcorder exposed to high temperature (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, sea water, and any other form of moisture. If the camcorder gets wet, it may get damaged.
Sometimes a malfunction due to exposure to liquids cannot be repaired.

ENGLISH**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 camcorder is in CAMERA mode, and it is left in STBY mode without being operated for more than 5 minutes with a tape installed, it will automatically turn itself off to protect against unnecessary battery discharge.
- Make sure that the battery pack is fitted firmly into place.
Dropping the battery pack may damage it.
- A brand new battery pack is not 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 making long recording, because the LCD uses up more battery power.



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

Notes regarding the 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

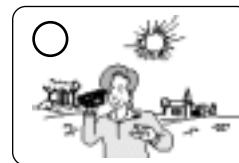
- Do not film with the camera lens pointing directly at the sun.
Direct sunlight can damage the CCD (Charge Coupled Device).

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 from 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 may be 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.



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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 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 CAMERA.
In this case, replace the lithium battery with a new one(type CR2025).
4. Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.

Warning: Keep the LITHIUM BATTERY out of reach of children. Should a battery be swallowed, consult a doctor immediately.

Notice regarding VIDEO LIGHT

Danger:

- The Video Light can become extremely hot. Do not touch it during operation or after turning it off, otherwise serious injury may result. Take 5 minutes (approx.) for the light to cool down.
- Do not place the camcorder into the carrying case immediately after using the video light. The video light will be hot. Please allow time for it to cool down.
- Do not use it near flammable or explosive materials.
- It is recommended that you consult your nearest SAMSUNG dealer for replacement bulbs.
- Not to be handled by children. Emits intense heat and light. Use with caution to reduce the risk of fire or injury to persons.

Danger: Do not direct light at persons or materials locating less than four feet during use. Disconnect when not in use.

Danger: To prevent possible burn hazard, disconnect the supply cord and allow the lamp to cool down before replacing.

Getting to Know Your Camcorder

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.

- **USB interface for digital image data transfer**

You can transfer still images to a PC using the USB interface without an add-on card.

- **PHOTO**

The PHOTO function lets you capture an object as a still along with sound, while in Camera mode.

- **800x Digital zoom**

Allows you to magnify an image up to 800 times 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.

- **Digital Image Stabilizer (DIS)**

The DIS compensates for any handshake, reducing unstable images particularly at high magnification.

- **Various digital effects**

The DSE (Digital Special Effects) allows you to give your films a special look by adding various special effects.

- **Back Light Compensation (BLC)**

The BLC function compensates for the bright background behind a 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**

The NITE PIX function enables you to record a subject in a dark place.

- **Digital Still Camera function**

- Using Memory Stick™(SCD24 only), you can easily record and play back standard still images.
- You can transfer standard still images on the Memory Stick™ to your PC using the USB interface.

ENGLISH**Getting to Know Your Camcorder****Accessories Supplied with camcorder**

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

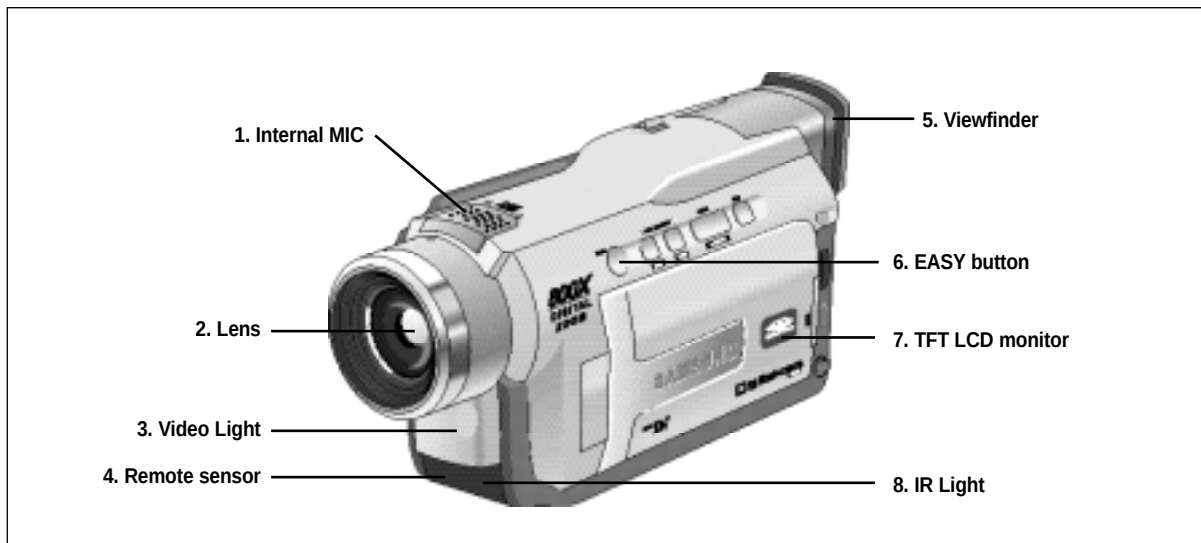
Basic Accessories

1. Lithium Ion Battery pack
2. AC Power Adapter
3. AC Cord
4. AUDIO/VIDEO cable
5. Instruction Book
6. Lithium battery for Remote Control or Clock.
(TYPE: CR2025)
7. Shoulder strap
8. USB cable
9. Software CD
10. Remote Control(SCD24 only)
11. Memory Stick(SCD24 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 (AD63-00202A) 	8. USB cable (AD39-00073A) 	9. Software CD 
10. Remote Control (AD59-00085A) 	11. Memory Stick (1109-001221) 	

Getting to Know Your Camcorder

Front & Left View



1. Internal MIC

2. Lens

3. Video Light

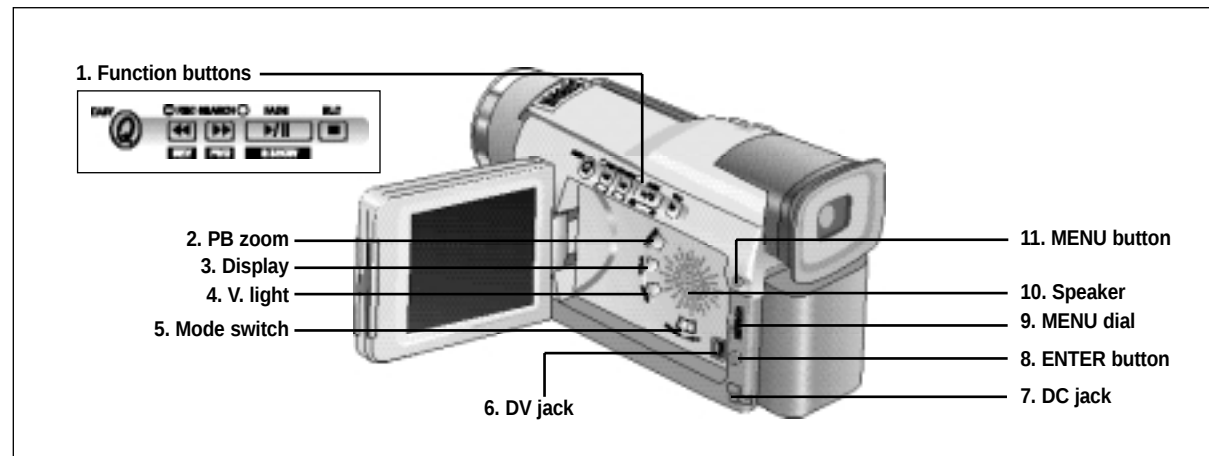
4. Remote sensor

5. Viewfinder (see page 32)

6. EASY button (see page 57)

7. TFT LCD monitor

8. IR(Infrared) Light

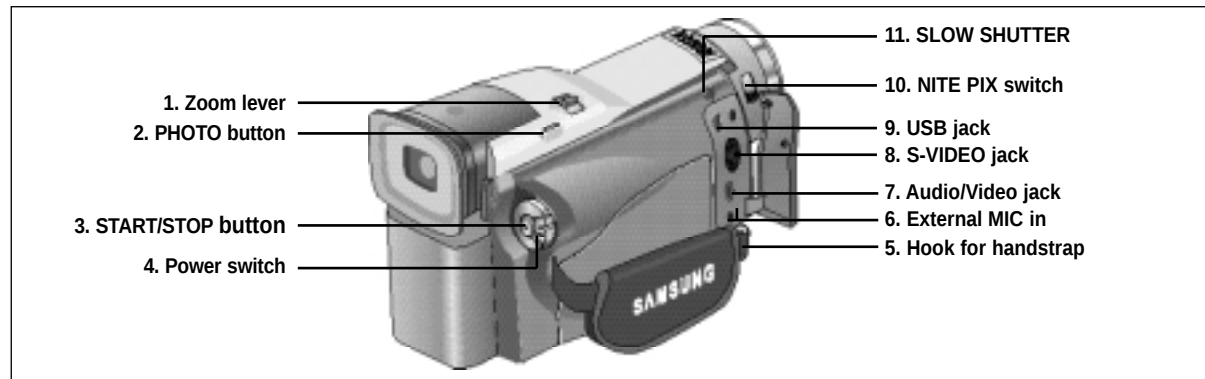
ENGLISH**Getting to Know Your Camcorder****Left Side View****1. Function buttons**

PLAYER	CAMERA	M.PLAY
-	EASY	-
⏮ (REW)	REC SEARCH -	REV
⏭ (FF)	REC SEARCH +	FWD
⏮/⏭ (PLAY/STILL)	FADE	SLIDE SHOW
■ (STOP)	BLC	-

2. PB zoom**3. Display****4. V. light****5. Mode switch (TAPE/MEMORY STICK)****6. DV jack****7. DC jack****8. ENTER button****9. MENU dial****10. Speaker****11. MENU button**

Getting to Know Your Camcorder

Right & Top View



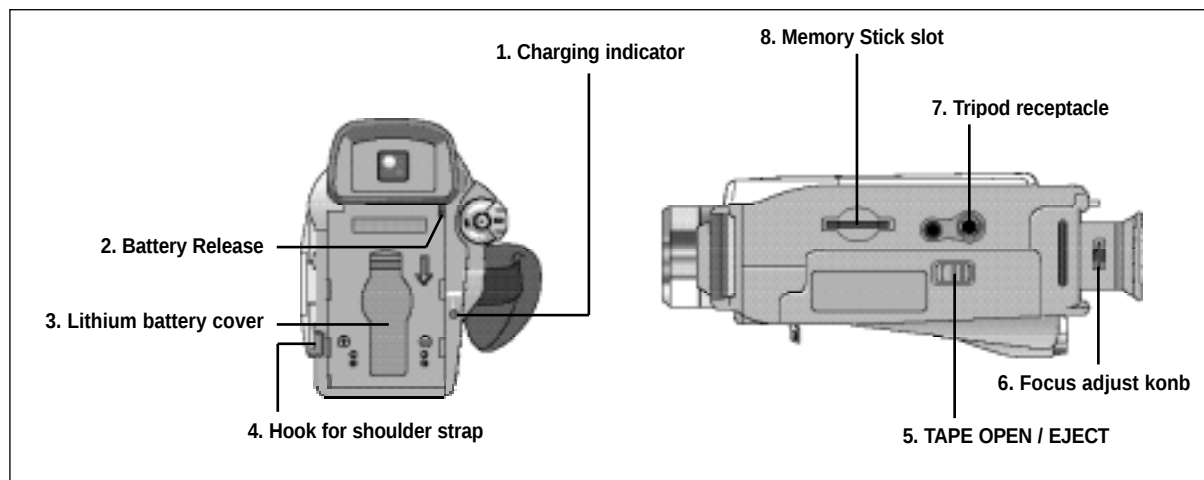
- 1. Zoom lever
- 2. PHOTO button (see page 63)
- 3. START/STOP button
- 4. Power switch (CAMERA or PLAYER)
- 5. Hook for handstrap
- 6. External MIC in
- 7. Audio/Video jack
- 8. S-VIDEO jack

- 9. USB jack
- 10. NITE PIX switch
- 11. SLOW SHUTTER

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Getting to Know Your Camcorder

Rear & Bottom View

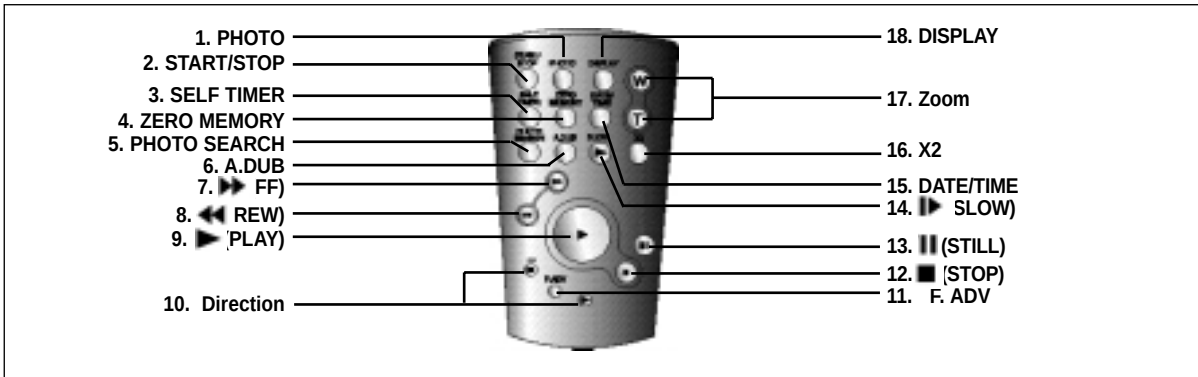


- | | |
|----------------------------|----------------------|
| 1. Charging indicator | 5. TAPE OPEN / EJECT |
| 2. Battery Release | 6. Focus adjust knob |
| 3. Lithium battery cover | 7. Tripod receptacle |
| 4. Hook for shoulder strap | 8. Memory Stick slot |

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Getting to Know Your Camcorder

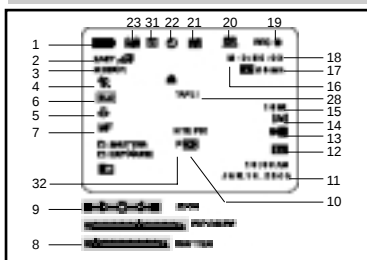
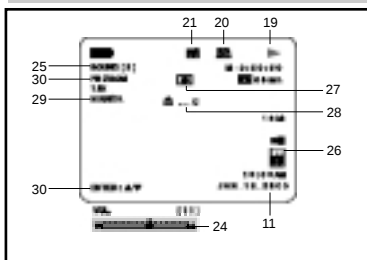
Remote control(SCD24 only)



- | | |
|------------------------------|---------------------------|
| 1. PHOTO | 10. Direction (◀ ▶) |
| 2. START/STOP | 11. F. ADV (see page 71) |
| 3. SELF TIMER (see page 20) | 12. ■ (STOP) |
| 4. ZERO MEMORY (see page 72) | 13. (STILL) |
| 5. PHOTO Search | 14. ► (SLOW) |
| 6. A.DUB (see page 61) | 15. DATE/TIME |
| 7. ►► (FF) | 16. X2 (see page 71) |
| 8. ◀◀ (REW) | 17. Zoom |
| 9. ► (PLAY) | 18. Display |

ENGLISH**Getting to Know Your Camcorder****OSD (On Screen Display in CAMERA and PLAYER modes)**

1. Battery level (see page 26)
2. Easy mode (see pages 57)
3. DSE (Digital Special Effects) mode (see page 46)
4. Program AE (see page 40)
5. White Balance mode (see page 42)
6. BLC (Back Light Compensation) (see page 59)
7. Manual focus (see page 58)
8. Shutter speed and EXPOSURE (see page 55)
9. Zoom position (see page 43)
10. NITE PIX (see page 64)
11. DATE/TIME (see page 51)
12. USB
13. REMOCON(SCD24 only)
14. WIND CUT (see page 50)
15. Audio recording mode (see page 49)
16. Zero memory indicator (see page 72)(SCD24 only)
17. Remaining Tape (measured in minutes)
18. Tape Counter (see page 68)
19. Operating mode
20. Record speed mode
21. PHOTO mode
22. Self recording and waiting timer (see page 20)(SCD24 only)
23. DIS (see page 45)
24. Volume control (see page 34)
25. Audio playback channel
26. DV IN(DV data transfer mode) (see page 75)
27. DEW (See page 7)
28. Message Line
29. PB DSE (See page 73)
30. PB zoom/enter (See page 74)
31. Video light (see page 66)
32. POWER NITE PIX (see page 65)

OSD in CAMERA mode**OSD in PLAYER mode**

Getting to Know Your Camcorder

OSD (On Screen Display in M.REC/M.PLAY modes)

- A. Folder number-file number (see page 84)
- B. Image counter
 - Current still image/Total number of recordable still images.
- C. CARD (MEMORY STICK) indicator
- D. Image recording and loading indicator
- E. Quality
- F. ERASE PROTECTION indicator (see page 92)
- G. Print Mark(see page 91)
- H. SLIDE SHOW

Turning the OSD on/off (On Screen Display)

• Turning OSD on/off

Press the DISPLAY button on the left side panel.

- Each press of the button toggles the OSD function on and off.
- When you turn the OSD off,

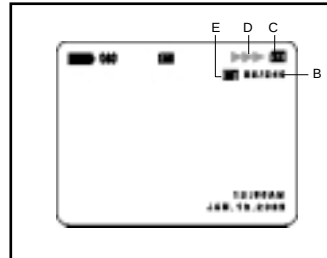
In CAMERA mode: The STBY, REC, EASY.Q modes are always displayed on the OSD, even when the OSD is turned OFF and the key input is displayed for 3 seconds then turned off.

In PLAYER mode: When you press any Function button, the function is displayed on the OSD for 3 seconds before it turns off.

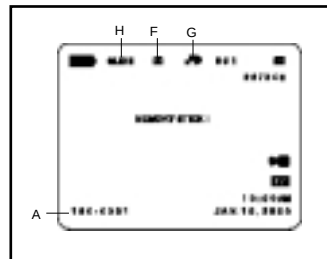
• Turning the DATE/TIME on/off

- 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 CAMERA / M.REC mode)

OSD in M.REC mode



OSD in M.PLAY mode



ENGLISH

Preparation

How to use the Remote Control(SCD24 only)

Battery Installation for the Remote Control

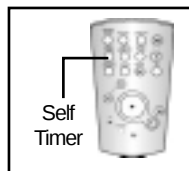
- ※ You need to insert or replace the lithium battery when :
 - You purchase the camcorder.
 - The remote control doesn't work.
- ※ Ensure that you insert the lithium cell correctly, following the + and - markings.
- ※ Be careful not to reverse the polarity of the battery.



Self Record using the Remote Control

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

1. Set the camcorder to CAMERA mode.
2. Press the SELF TIMER button until the appropriate indicator is displayed in the viewfinder.
3. Press the START/STOP button to start the timer.
 - After a 10 second wait, recording starts.
 - Press START/STOP again when you wish to stop recording.



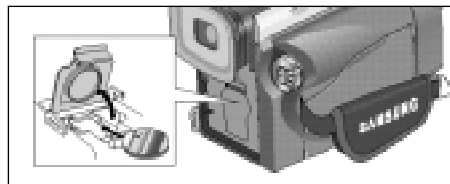
Preparation

Lithium Battery Installation

- ⌘ The lithium battery maintains the clock function and preset contents of the memory; even if the battery pack or AC power adapter is removed.
- ⌘ The lithium battery for the camcorder lasts about 6 months under normal operation from the time of installation.
- ⌘ When the lithium battery becomes weak or dead, the date/time indicator flashes for about 5 seconds when you set the power switch to CAMERA.

In this case, replace the lithium battery with CR2025 type.

1. Open the Lithium battery cover from the camera.
2. Position the Lithium cell in the holder, with the positive (+) terminal face outward.
3. Close the lithium battery cover.



Note The lithium battery must be inserted in the correct direction.

Warning: Keep the LITHIUM BATTERY out of the reach of the children.
Should any battery be swallowed, consult a doctor immediately.

ENGLISH**Preparation*****Adjusting the Hand Strap***

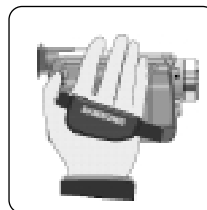
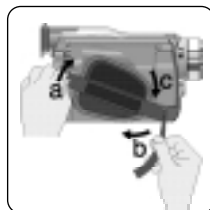
It is very important to ensure that the Hand strap has been correctly adjusted before you begin your recording.

The hand strap enables you to :

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

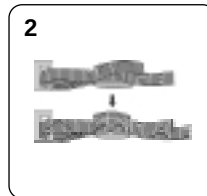
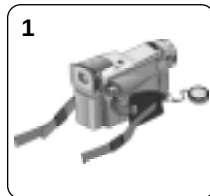
Hand strap

- Pull open the Hand Strap cover and release the Hand Strap.
- Adjust its length and stick it back onto the Hand Strap cover.
- Close the Hand Strap cover again.

**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 ring inside 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 source that can be connected to your camcorder.

- The AC Power Adapter and AC cord : used for indoor recording.
- The Battery Pack : used for outdoor recording.

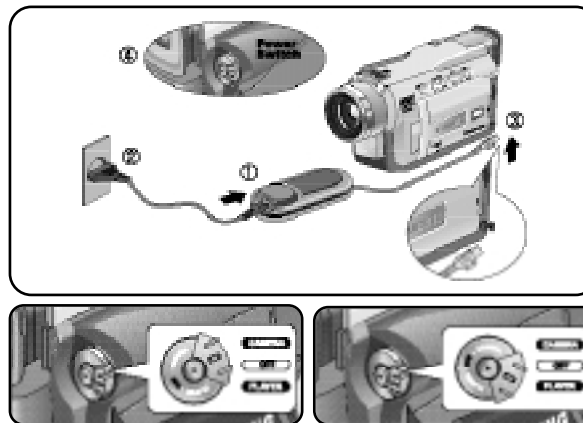
To use the AC Power adapter and DC Cable

1. Connect the AC Power adapter to the AC cord.
2. Connect the AC cord to a wall socket.

Note

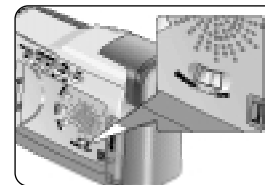
The plug and wall socket type may differ according to your resident country.

3. Connect the DC cable to the DC jack socket of the camcorder.
4. Set the camcorder to each mode by holding down the tab on the power switch and turning it to the CAMERA or PLAYER mode.



To select the CAMCORDER mode

- ⌘ If you want to use this unit as a camcorder, set the mode switch to TAPE position.
- ⌘ If you want to use this unit as a DSC (Digital Still Camera), set the mode switch to MEMORY STICK position.

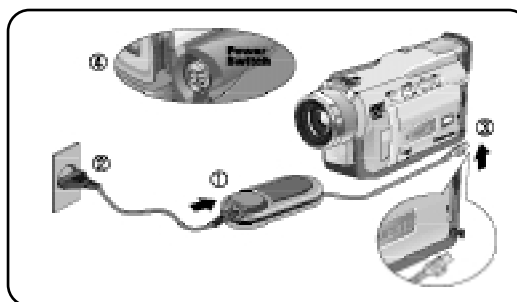


ENGLISH**Preparation****Using the Lithium Ion Battery Pack**

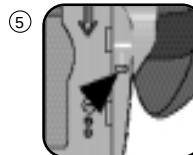
- ※ The amount of continuous recording time available depends on :
- The type and capacity of the battery pack you are using.
 - How often the Zoom function is used.
- It is recommended that you have several batteries available.

Charging the Lithium Ion Battery Pack

1. Attach the battery pack to the camcorder.
2. Connect the AC Power adapter to an 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

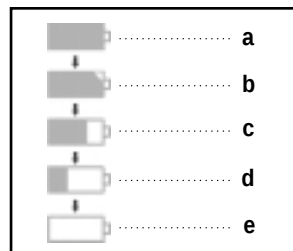
Notes

- The battery pack should be recharged in an environment of 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, process, pressure, 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 and overheating.

ENGLISH**Preparation****Battery level display**

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

- Fully charged
- 20~40% used
- 40~80% used
- 80~95% used
- Completely used (flickers)
(The camcorder will turn off soon, change the battery as soon as possible)

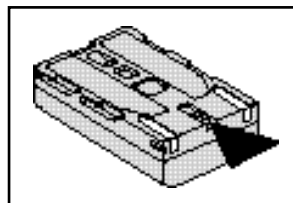


- ⌘ Please refer to the table on page 25 for approximate continuous recording times.
- ⌘ The recording time is affected by environmental temperature and conditions.
The recording time becomes very short in a cold environment. The continuous recording times in the operating instructions are measured using a fully charged battery pack at 77°F(25°C). As the environmental temperature and conditions may differ 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.

Tips for Battery Identification

A charge mark is provided on the battery pack to help you remember whether it has been charged or not.

Two colors are provided (red and black)-you may choose which one indicates charged and which indicates discharged.



ENGLISH

Basic Recording

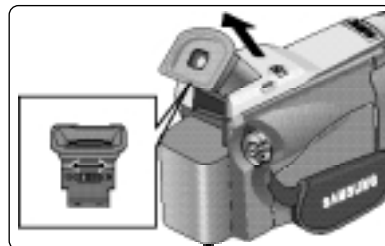
8. Press the ENTER button again.
 - You may select NORMAL or SUPER in the BRIGHT SELECT feature and press the ENTER button to save the setting.
 - Use the MENU DIAL to adjust the value of BRIGHT ADJUST and COLOR ADJUST.
 - You can set values for BRIGHT ADJUST between 00 ~ 35 and COLOR ADJUST between 00 ~ 35.
9. Press the MENU button to finish the setting.

Using the VIEWFINDER

- ⚠ The VIEWFINDER will not work when the LCD is open.

Adjusting the Focus

Use the focus adjustment knob of the VIEWFINDER to focus the picture.
(refer to figure)



Advanced Recording

Use of various Functions

● Setting menu items

MENU	SUB MENU	Available mode			
		CAMERA	PLAYER	Memory REC.	Memory PLAY
INITIAL	CLOCK SET	✓	✓	✓	✓
	WL.REMOTE	✓		✓	✓
	DEMO	✓			
CAMERA	PROGRAM AE	✓		✓	
	WHT. BALANCE	✓		✓	
	D. ZOOM	✓		✓	
	DIS	✓		✓	
	DSE SELECT	✓		✓	
A/V	REC MODE	✓	✓		
	PHOTO SEARCH		✓		
	COPY		✓		
	AUDIO MODE	✓	✓		
	AUDIO SELECT	✓	✓		
	WIND CUT		✓		
	PB DSE		✓		
MEMORY	PHOTO QUALITY		✓	✓	✓
	PRINT MARK				✓
	PROTECT				✓
	FILE NO				✓
	DELETE				✓
	FORMAT				✓
VIEWER	LCD ADJUST	✓	✓	✓	✓
	DATE/TIME	✓	✓	✓	✓
	TV DISPLAY	✓	✓	✓	✓

(SCD24 only)

● Set the camcorder to CAMERA or PLAYER mode and M.REC or M.PLAY mode

1. Press the MENU button.
The MENU OSD is displayed. The cursor (**HIGHLIGHT**) indicates the feature you are currently adjusting.
2. Using the MENU DIAL and press the ENTER button on the left side panel, select and activate the item.
3. You can exit the menu mode by pressing the MENU button.

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Advanced Recording

● Availability of functions in each mode

Requested Operating Mode	Digital functions				Digital special effects	NITE PIX
	DIS	D.ZOOM	PHOTO	SLOW SHUTTER		
DIS		O	O	△	O	O
D.ZOOM	O		O	* △	O	O
PHOTO	X	X		X	X	O
SLOW SHUTTER	△	X	X		O	O
Digital Special Effects	O	O	O	O		△
NITE PIX	O	O	O	O	X	

- O : The requested mode will work in this operating mode.
X : 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 during the operating mode will be backed up)

Notes

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

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Advanced Recording

● REMOCON(SCD24 only)

- ⌘ THE REMOCON function works in CAMERA, PLAYER, M.REC and M.PLAY modes.
- ⌘ The REMOCON option allows you to enable or disable the remote control for use with the camcorder.

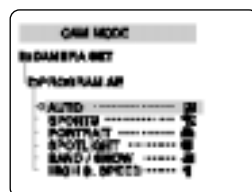
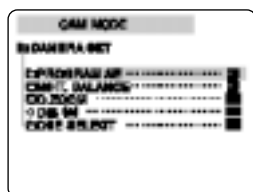
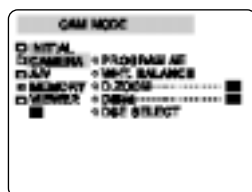
1. Press the MENU button.
 - The menu list will appear.
2. Turn the MENU DIAL to highlight INITIAL and press the ENTER button.
3. Use the MENU DIAL to select WL.REMOTE from the submenu.
4. Press the ENTER button to enable or disable the remote control.
The setting switches between ON/OFF each time you press the ENTER button.
5. To exit, press the MENU button.
 - If you set the remote to OFF in the menu and try to use it, the remote icon will the remote control icon will blink for 3 seconds and disappear on the LCD.



Advanced Recording

Setting the PROGRAM AE

1. Press the MENU button.
 - The menu list will appear.
2. Turn the MENU DIAL to highlight CAMERA and press the ENTER button.
3. Select PROGRAM AE from the submenu.
4. Press the ENTER button to enter the sub-menu.
5. Using the MENU DIAL, select the PROGRAM AE mode.
 - Press the ENTER button to confirm the PROGRAM AE mode.
6. To exit, press the MENU button.



ENGLISH

Advanced Recording

Digital Zoom

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

1. Set the camcorder to CAMERA or M.REC mode.
2. Press the MENU button.
 - The menu list will appear.
3. Turn the MENU DIAL to CAMERA and press the ENTER button.
4. Select D.ZOOM from the submenu.
5. Press the ENTER button to setup the 100x,200x,400x,800x digital zoom function or to turn the feature OFF.
6. To exit, press the MENU button.

