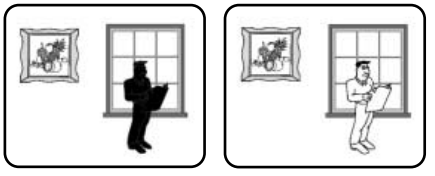
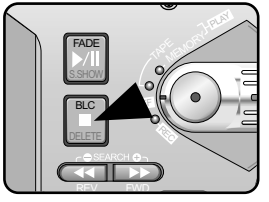
Using the CAMCORDER - Advance Recording

BLC (Back Light Compensation)

✤ BLC works in CAMCORDER mode only.
✤ Back lighting exists when the subject is darker than the background. For Example:
- The subject is in front of a window.
- The person to be recorded is wearing white or shiny clothes and is placed against a bright background; the person's face is too dark to distinguish his/her features.
- The subject is outdoors and the background is overcast.
- The light sources are too bright.
- The subject is against a snowy background.





1. Set the device to CAMCORDER.

2. Set the power switch to RECORD mode.

3. Press the BLC(STOP) button.
   - Normal - BLC - Normal
   - BLC enhances the subject.

Notes

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

Using the CAMCORDER - Advance Recording

Fade In and Out

- ✤ The FADE function works in CAMCORDER and CAMERA modes.
- ✤ You can give your recordings a professional look by using special effects such as fading in at the beginning of a sequence or fading out at the end of a sequence.

To Start Recording

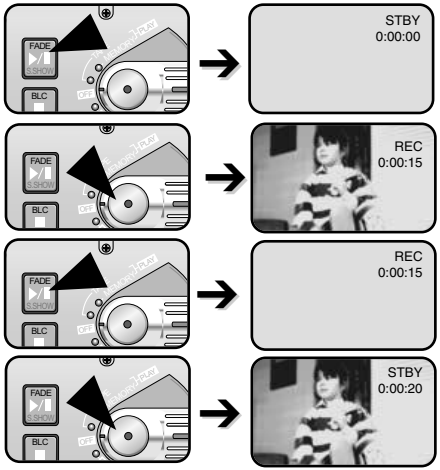
1. Before recording, hold down the FADE button.
   The picture and sound gradually disappear (Fade Out).
2. Press the START/STOP button and at the same time release the FADE button. Recording starts and the picture and sound gradually appear (Fade In).

To Stop Recording (Using FADE IN / FADE OUT)

3. When you wish to stop recording, hold down the FADE button. The picture and sound gradually disappear (fade out).
4. When the picture has disappeared, press the START/STOP button to stop recording.

a. FADE OUT (Approx. 4 seconds)

b. FADE IN (Approx. 4 seconds)



Press the FADE button *a. FADE OUT* *Gradual disappearance*

Gradual appearance *b. FADE IN* *Release the FADE button*

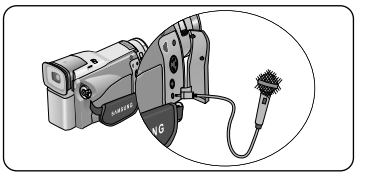
Using the CAMCORDER - Advance Recording

Audio Dubbing (SCD5000 only)

- ✤ The AUDIO DUBBING function only works in PLAYER Mode.
- ✤ You can add sound to the original sound on a pre-recorded tape, recorded in SP mode with 12bit sound.
- ✤ Use the internal and external microphones or other audio equipment.
- ✤ The original sound will not be erased.

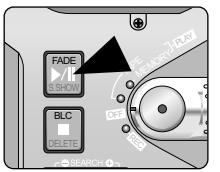
Dubbing Sound

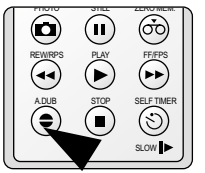
1. Set the device to CAMCORDER.
   - ■ If you want to use an external microphone, connect the microphone to the external MIC input jack on the camcorder.



2. Set the power switch to PLAYER mode.
   - ■ If you want to use an external microphone, connect the microphone to the external MIC input jack on the camcorder.

3. Press the ▶/❚❚ (PLAY/STILL) button and find the timeframe of the scene to be dubbed.





4. Press the ▶/❚❚ (PLAY/STILL) button to pause the scene.

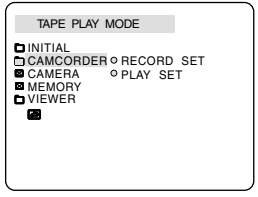
5. Press the A.DUB button on the Remote Control.
   - ■ A.DUB will be displayed on the LCD.
   - ■ The camcorder is in a ready-to-dub state for dubbing.

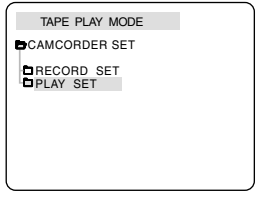
6. Press the ▶/❚❚ (PLAY/STILL) button to start dubbing.
   - ■ Press the ■ (STOP) button to stop the dubbing.

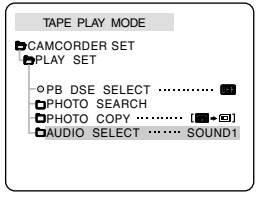
Using the CAMCORDER - Advance Recording

Dubbed Audio Playback

1. Insert the dubbed tape and press the MENU button.
2. Turn the MENU DIAL to highlight CAMCORDER.
3. Press the MENU DIAL to enter the sub-menu.
4. Select PLAY SET and press the MENU DIAL.
5. Use the MENU DIAL to select AUDIO SELECT from the sub-menu.
6. Press the MENU DIAL to enter the sub-menu.
7. Using the MENU DIAL, select the AUDIO playback channel.
   - Press the MENU DIAL to confirm the audio playback channel.
     - SOUND1 : play the original sound.
     - SOUND2 : play the dubbed sound.
     - MIX(1+2) : play back with SOUND1 and 2 equally mixed.
8. To exit, press the MENU button.
9. Press the ▶/II (PLAY/STILL) button to playback the dubbed tape.





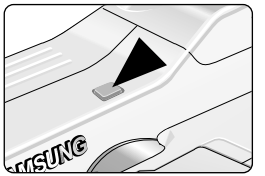


Note

When you playback added sound (SOUND2 or MIX mode), you may experience some loss of sound quality.

Using the CAMCORDER - Advance Recording

PHOTO Image Recording



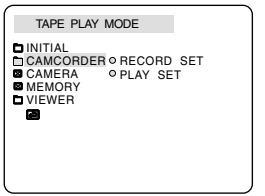
1. Press the PHOTO button and hold it.
   - The still picture appears on the LCD monitor.
   - If you do not wish to record, release the button.

2. Release the PHOTO button and press the PHOTO button again in 2 seconds.
   - The still picture is recorded for about 6~7 seconds.

3. After the PHOTO has been recorded, the camcorder returns to STBY mode.

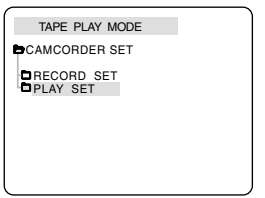
Searching for a PHOTO Picture

✤ The PHOTO SEARCH works in PLAYER and M.PLAY mode only.



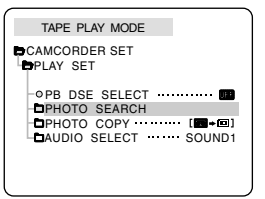
1. ■ Press the MENU button.
   - The MENU list will appear.

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



3. Select PLAY SET and press the MENU DIAL to enter the sub-menu.

4. Select PHOTO SEARCH from the sub-menu and press the MENU DIAL.

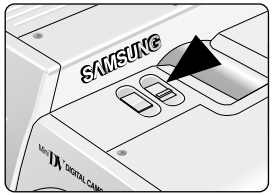


5. Search for the PHOTO using the ▶▶ (FF) and ◀◀ (REW) buttons.
   - The PHOTO search process appears on the LCD while you are searching.
   - After completing the search, the camcorder displays the still image.

6. To exit, press the ■ (STOP) button.

Using the CAMCORDER - Advance Recording

NITE PIX (0 Lux Recording)



✤ The NITE PIX function works in CAMCORDER mode only.
✤ The NITE PIX function enables you to record a subject in darkness.

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

2. Slide the NITE PIX switch to ON.
   - (NITE PIX indicator) appears on the LCD monitor.
   - The infrared(invisible rays) light is turned on automatically.

3. To cancel the NITE PIX function, slide the NITE PIX switch to OFF.

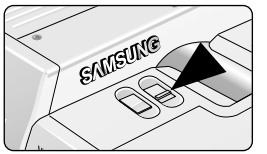
Notes

- The maximum recording distance using the infrared light is about 3 m (about 10 feet).
- If you use the NITE PIX function in normal recording situations (ex. outdoors by day), the recorded picture may be tinted green.
- While in NITE PIX mode, certain functions are not available, such as White Balance, Program AE, DSE, BLC.

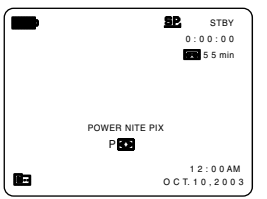
Using the CAMCORDER - Advance Recording

POWER NITE PIX

- ✤ The NITE PIX function works in CAMCORDER mode only.
- ✤ The POWER NITE PIX function can record a subject more brightly in darkness than the NITE PIX function.
- ✤ POWER NITE PIX is displayed for three seconds on the LCD if you press the SLOW SHUTTER button when the NITE PIX switch is turned on.
- ✤ When you work in POWER NITE PIX mode, the POWER NITE PIX icon appears on the LCD continuously.



1. Set the device to CAMCORDER and set the power switch to RECORD mode.
2. Turn on the NITE PIX switch, and then press the SLOW SHUTTER button.
3. Press the SLOW SHUTTER button to set the shutter speed. The SLOW SHUTTER function enables you to record a subject more brightly.
4. When using POWER NITE PIX the image takes on a slow motion like effect.
5. To cancel the POWER NITE PIX function, press the SLOW SHUTTER button until it is set to " OFF " and then turn off the NITE PIX switch.



Notes

- ■ The maximum recording distance using the infrared light is about 3 m (about 10 feet).
- ■ If you use the POWER NITE PIX function in normal recording situations (ex. outdoors by day), the recorded picture may contain unnatural colors.
- ■ In POWER NITE PIX mode, certain functions are not available, such as White Balance, Program AE, DSE, BLC.
- ■ When the subject is too bright, it is better to press the SLOW SHUTTER button (1/8 → 1/30) so that you can record in better quality.

Using the CAMCORDER - Advance Recording

Various Recording Techniques

✤ In some situations different recording techniques may be required for more dramatic results.

Note

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

1. General Recording.

2. Downward recording.

Recording while viewing the LCD screen from above.

3. Upward Recording.

Recording while viewing the LCD screen from below.

4. Self recording.

Recording while viewing the LCD screen from the front.

5. Recording with the Viewfinder.

- In circumstances where it is difficult to use the LCD monitor, the viewfinder can be used as a convenient alternative.

Playback

Tape Playback

✤ The playback function works in PLAYER mode only.

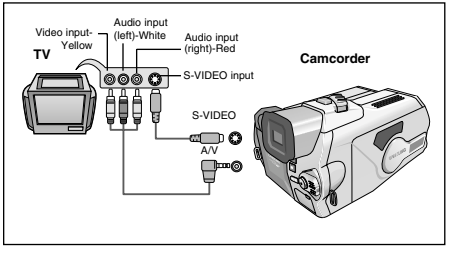
Playback on the LCD

✤ It is practical to view a tape using the LCD when in a car or outdoors.

Playback on a TV Monitor

✤ To play back a tape, the television must have a compatible color system.
✤ We recommend that you use the AC Power Adapter as the power source for the camcorder.

Connecting to a TV which has Audio/Video Input Jacks



1. Connect the camcorder to the TV with the Audio/Video cable.
   - The Yellow plug : Video
   - The White plug : Audio(L)
   - The Red plug : Audio(R) - STEREO only
     - If you connect to a monaural TV or VCR, connect the Yellow plug (Video) to the video input of the TV or VCR and the White plug (Audio L) to the audio input of the TV or VCR.
2. Set the device to CAMCORDER.
3. Set the power switch to PLAYER mode.
4. Turn the TV on and set the TV/VIDEO selector on the TV to VIDEO.
   - Refer to the TV or VCR User's Manual.
5. Play the tape.

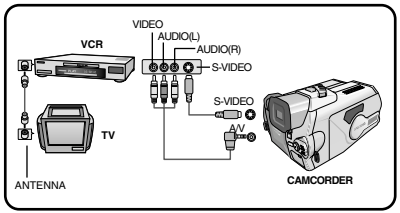
Notes

- You may use a S-VIDEO cable (not supplied) to obtain better quality pictures if you have a S-VIDEO connector on your TV.
- Even if you use a S-VIDEO cable, you need to connect an audio cable.
- If you connect the cable to the A/V Jack, you will not hear sound from the speakers.

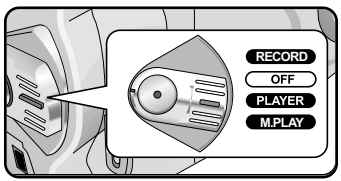
Playback

Connecting to a TV which has No Audio and Video Input Jacks

✤ You can connect your camcorder to a TV through a VCR.



1. Connect the camcorder to the VCR with the Audio/Video cable.
   - The Yellow plug : Video
   - The White plug : Audio(L)
   - The Red plug : Audio(R) - STEREO only
2. Connect the TV to the VCR.
3. Set the device to CAMCORDER.
4. Set the power switch to PLAYER mode.
5. Turn on both the TV and VCR.
   - Set the input selector on the VCR to LINE.
   - Select the channel reserved for your VCR on the TV set.
6. Play the tape.



Playback

✤ You can play the recorded tape in PLAYER mode.

1. Connect a power source and set the device to CAMCORDER.
2. Set the power switch to PLAYER mode.
3. Using the ▶▶ (FF) and ◀◀ (REW) buttons, find the first position you wish to play back.
4. Press the ▶/II (PLAY/STILL) button.
   - The images you recorded will appear on the TV after a few seconds.
   - If a tape reaches its end while being played back, the tape will rewind automatically.

Note

- The playback mode (SP/LP) is selected automatically.

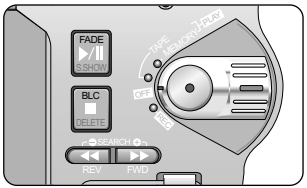
Playback

Various Functions while in PLAYER Mode

- ✤ The PLAY/STILL, STOP, FF, REW buttons are located on the camcorder and the Remote Control.
- ✤ The F.ADV(Frame advance), SLOW buttons are located on the Remote Control only.(SCD5000 only)
- ✤ To prevent tape and head-drum wear, your camcorder will automatically stop if it is left in STILL or SLOW modes for more than 5 minutes.

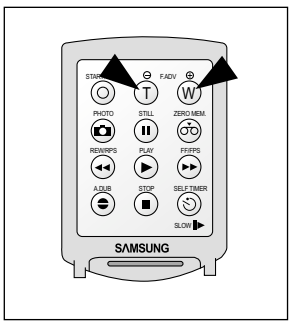
Playback Pause

- ✤ Press the ▶/II (PLAY/STILL) button during Playback.
- ✤ To resume playback, press the ▶/II (PLAY/STILL) button again.



Picture Search - Forward/Reverse

- ✤ Press the ▶▶ (FF) or ◀◀ (REW) buttons once during Playback or while in Still mode. To resume normal playback, press the ▶/II (PLAY/STILL) button.
- ✤ Keep pressing the ▶▶ (FF) or ◀◀ (REW) buttons during Playback or while in Still mode. To resume normal playback, release the button.

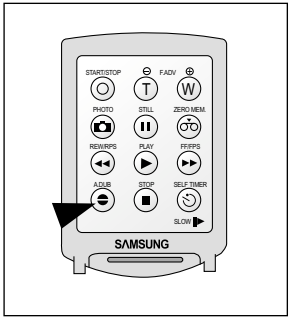


Slow Playback - Forward/Reverse (SCD5000 only)

- ✤ Forward Slow Playback
  - ■ Press the SLOW button on the remote control during Playback.
  - ■ To resume normal playback, press the ▶/II (PLAY/STILL) button.
- ✤ Reverse Slow Playback
  - ■ Press the ◀II (–) button during Forward Slow Play back.
  - ■ To resume forward slow playback, press the II▶ (+) button.
  - ■ To resume normal playback, press the ▶/II (PLAY/STILL) button.

Playback

Frame Advance - To Play back Frame by Frame (SCD5000 only)



- Press the F.ADV button on the Remote Control while in Still mode.
  The F.ADV function works only in Still mode.
- To resume normal playback, press the ▶/II (PLAY/STILL) button.
  - ✤ Forward Frame Advance
    - ■ Press the F.ADV button on the remote control while in Still mode.
  - ✤ Reverse Frame Advance
    - ■ Press ◀II (–) the button on the remote control to change the direction of the F.ADV mode.
    - ■ Press the F.ADV button on the remote control.

Playback

ZERO MEMORY(SCD5000 only)

✤ The MEMORY function works in both CAMERA and PLAYER modes.
✤ You can mark a point on a tape that you want to return to following playback.

1. Press the ZERO MEMORY button on the remote control during playback or while recording at the point you wish to return to.
   - The time code is changed to a tape counter that is set to Zero Memory with the M 0:00:00(Zero Memory Indicator)
   - If you want to cancel the Zero Memory function, press the ZERO MEMORY button again.

2. Finding the Zero Position.
   - When you have finished playback, fast forward or rewind the tape.
     - The tape stops automatically when it reaches the Zero Position.
   - When you have finished recording, press the power switch on the PLAYER and press the ◀◀ (REW) button.
     - The tape stops automatically when it reaches the zero position.

3. The tape counter with the M (Zero Memory Indicator) disappears from the display and the tape counter is changed back to time code.

Notes

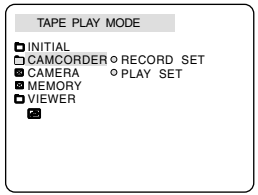
- In the following situations, ZERO MEMORY mode may be canceled automatically:
  - At the end of the section marked with the ZERO MEMORY function.
  - When the tape is ejected.
  - When you remove the battery pack or power supply.
- The Zero Memory may not function correctly when there is a break between recordings on the tape.

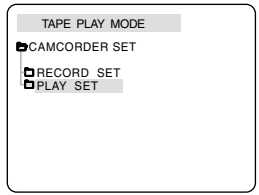
Playback

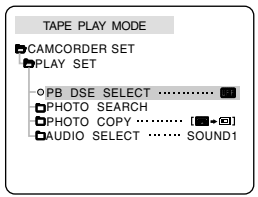
PB DSE (Playback Digital Special Effects)

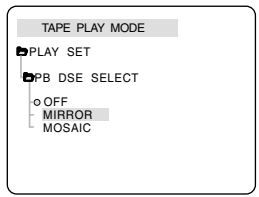
✤ The PB DSE function works in PLAYER mode.
✤ The PB DSE function enables you to apply a Digital Special Effect (DSE) to the tape during playback or to a still image.

1. Set the device to CAMCORDER and set the Power Switch to PLAYER mode
2. Playback a tape.
3. Press the MENU button and turn the MENU DIAL to highlight CAMCORDER.
4. Press the MENU DIAL to enter the sub-menu.
5. Select PLAY SET and press the MENU DIAL.
6. Select PB DSE SELECT from the sub-menu and press the MENU DIAL.
7. Select a PB DSE item (OFF, Mirror, Mosaic) from the sub-menu and press the MENU DIAL.
8. To exit, press the MENU button.
9. To cancel the PB DSE function, set the PB DSE to OFF or press the STOP button.









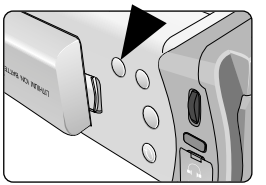
Notes

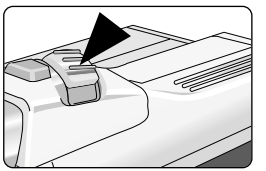
■ You cannot apply the PB DSE function to the pictures which are being input from an external video source.
■ Once you modify an image using the PB DSE function, it cannot be imported to your PC from the camcorder's DV jack.

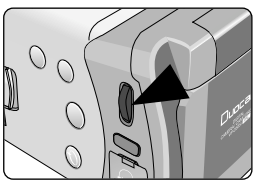
Playback

PB ZOOM

✤ The PB ZOOM function works in PLAYER and M.PLAY mode.
✤ The PB ZOOM function enables you to magnify the playback or still image.
- PLAYER mode : 1.2 - 8.0X
- M.PLAY mode : 1.2 - 5.0X







1. Press the PB ZOOM button while in Playback mode or in Playback Still mode
2. The image is magnified starting from the center of image. Four arrows appear which allow you to move the image in the four directions shown.
3. You can zoom in from 1.2x to 8.0x useing the zoom lever.
4. You can move the image in the arrow directions using the MENU DIAL.
5. You can change the arrow direction(vertical, horizontal) by pressing the MENU DIAL.
6. To cancel the PB ZOOM function, press the PB ZOOM or STOP button.

Notes

- You cannot apply the PB ZOOM function to pictures which are being input from an external video source.
- The PB ZOOM images cannot be imported to your PC from the camcorder's DV jack.

IEEE 1394 Data Transfer

Transferring Using IEEE1394 (i.LINK)-DV Standard Data Connections

Connecting to a DV Device

✤ Connecting with Other DV Standard Products.
- ■ A standard DV connection is quite simple.
  If a product has a DV port, you can transfer data by connecting to the DV port using the correct cable.

!!! Please be careful since there are two types of DV ports, (4pin & 6pin). This camcorder has a 4pin terminal.

✤ With a digital connection, video and audio signals are transmitted in digital format, allowing high quality images to be transferred.

Connecting to a PC

✤ If you want to transmit data to a PC, you must install an IEEE 1394 add-on card onto the PC. (not supplied)

✤ The frame rate recorded for video capturing is dependent on the capacity of the PC.

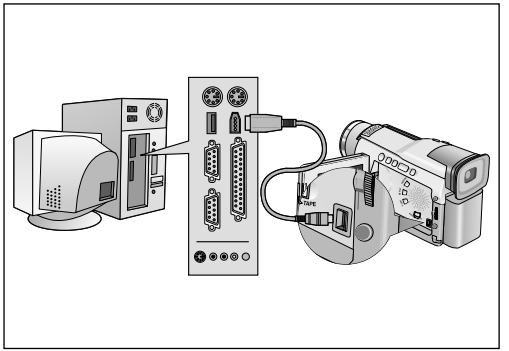
Notes

- ■ When you transmit data from the camcorder to another DV device, some functions may not work.
  If this occurs, please reconnect the DV cable or turn the power OFF and ON again.
- ■ When you transmit data from the camcorder to the PC, the PC function button is not available in M.PLAY mode.

IEEE 1394 Data Transfer

● System Requirements

- CPU : Intel®(or compatible) Pentium III™ 450Mhz or faster.
- Operating System : Windows® 98SE, ME, XP, Mac OS (9.1~OS X)
- Main Memory : More than 64 MB RAM
- IEEE1394 Add-On Card or Built In IEEE1394 Card



Recording with a DV Connection Cable

1. Set the device to CAMCORDER and set the power switch to PLAYER mode.
2. Connect the DV cable (not supplied) from the DV IN/OUT port of the camcorder to the DV IN/OUT port of the other DV device.
   - Make sure that DV IN appears on the screen.
3. Press the START/STOP button to begin REC PAUSE mode.
   - PAUSE is displayed on the OSD.
4. Start playback on the other DV device while you monitor the picture.
5. Press the START/STOP button to start recording.
   - If you want to pause the recording, press the START/STOP button again.
6. To stop recording, press the ■ (STOP) button.

Note

When using this camcorder as a recorder, the pictures that appear on the monitor may seem uneven, however recorded pictures will not be affected.

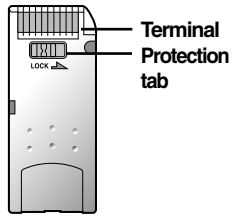
Using the CAMERA

MEMORY STICK (SCD5000 only)

✤ The Memory Stick (SCD5000 only) stores and manages still images recorded by the camera.

Memory Stick Functions

✤ Record Still Images
✤ View Still Images
  - Single(View Frame by Frame)
  - Slide Show
✤ Protect Images Against Accidental Erasure
✤ Delete Images Recorded on the Card
✤ Add text to Still Images
✤ Formatting the Card



(SCD24 only)

Note

- You can use most of the camera's functions when recording to the Memory Stick.
- appears on the screen while recording to the Memory Stick.
- While recording or loading an image, do not eject or insert the Memory Stick.
- Inserting or ejecting a Memory Stick while recording or loading an image can cause data damage.
- If you want to save all images on the Memory Stick, set the write protect tab on the Memory Stick to LOCK.

MEMORY STICK™

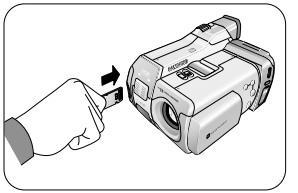
- "Memory Stick" and MEMORY STICK™ are trademarks of Sony Corporation.
- All other product names mentioned herein are the trademarks or registered trademarks of their respective companies. Furthermore, "™" and "®" will not be mentioned in each case in this manual.

Using the CAMERA

Inserting and Ejecting the Memory Stick

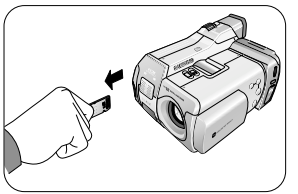
● Inserting the Memory Stick

1. Turn the Power switch to OFF.
2. Insert the Memory Stick into the CARD slot in the direction of the arrow.



● Ejecting the Memory Stick

1. Turn the Power switch to OFF.
2. Push the Memory Stick, and it will automatically come out of the camcorder.
3. Pull out the Memory Stick.



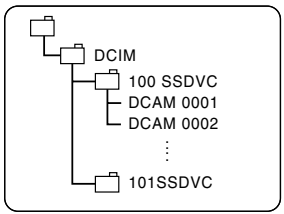
Note

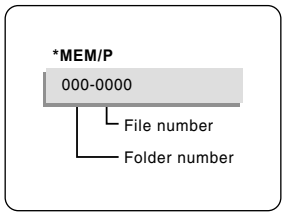
- ■ If you set the camcorder to M.PLAY mode, the last recorded still image appears.
- \- If there are no recorded images on the Memory Stick, "NO STORED IMAGE!" will appear on the screen.
- ■ Do not turn the power off while recording, loading, erasing or formatting.
- ■ Please turn the power off before you insert or eject the Memory Stick, otherwise. you may lose data on the Memory Stick.
- ■ Do not allow metal substances to come in contact with the terminals of the Card.
- ■ Do not bend the Card.
- ■ After pulling the card out from the camcorder, please keep the Memory Stick in a soft case to prevent electrostatic shock.
- ■ The content stored on the Memory Stick may be changed or lost as a result of misuse, static electricity, electric noise or repair. Save important images separately.
- ■ Samsung is not responsible for data loss due to misuse.

Using the CAMERA

Structure of the Folders and Files on the Memory Stick

✤ The still images that you recorded are saved in JPEG file format on the card.
✤ Each file has a file number and all files are assigned to a folder.
- A file number from DCAM0001 to DCAM9999 is sequentially assigned to each recorded image.
- Each folder is numbered from 100SSDVC to 999SSDVC and recorded on the CARD.



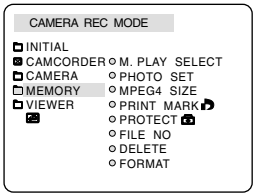


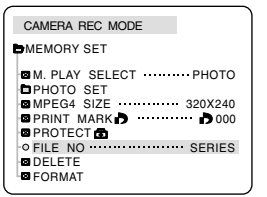
Using the CAMERA

MEMORY FILE NUMBER

✤ File numbers will be given to images in order of recording when still images are stored in the Memory Stick.
✤ MEMORY FILE NUMBERS may be set as follows:
- ■ SERIES: When there are existing files, the new image will be named as the next number in the sequence.
- ■ RESET
  - When there are no files stored in the Memory Stick: The file numbering starts from 0001
  - When there are files stored in the Memory Stick: File numbering will continue after the last file's number

1. Set the device to CAMERA and set the Power Switch to M.PLAY mode.
2. Press the MENU button.
   - ■ The menu list will appear.
3. Turn the MENU DIAL to highlight MEMORY and press the MENU DIAL.
4. Turn the MENU DIAL to activate the FILE NO. and press the MENU DIAL.
5. Using the MENU DIAL, select the FILE NUMBER.
   - ■ Press the MENU DIAL to confirm the FILE NUMBER.
6. To exit, press the MENU button.





Note

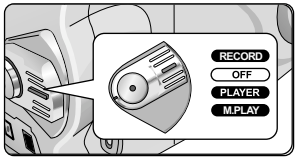
- ■ When using a Memory Stick that contains image files from another device, the file numbering will begin after the largest number that is memorized whether in the camera or the the Memory Stick.
- ■ File numbering starts from 0001 again when 9999 files have been saved.

Basic Picture-Taking

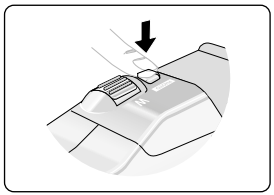
Taking Your First Picture

1. Connect a power source to the CAMERA (See page 23)
   (A battery pack or an AC power adapter)

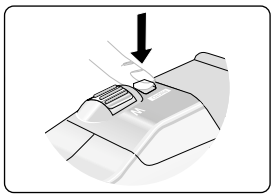
2. Set the device to CAMERA mode and Set the power switch to the RECORD mode.
   - Open the LCD monitor.
   - Ensure that the Memory Stick has been properly inserted into the device.
   - Make sure the image you want to record appears on the LCD monitor or viewfinder.
   - Make sure the battery level indicates that there is enough remaining power for your expected recording time.



3. Press the Photo Button halfway down to set the focus.
   - A Sound Effect will play when the focus is set.
   - Press the Photo Button halfway down to automatically set the focus, White Balance, and exposure for the best results.



4. Press the Photo Button firmly to take a picture.
   - While the camcorder is recording the still image, "▷▷▷" appears on the screen.



Note

- This Auto Power off feature is designed to save battery power.

Basic Picture-Taking

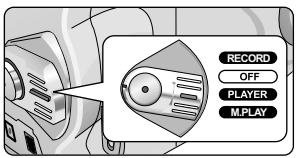
Viewing Still Images

✤ You can playback and view still images recorded on the Memory Stick.
✤ Still Images stored on the Memory Stick are displayed in the same size despite their resolution on the LCD or viewfinder.
✤ There are 2 ways to view recorded images.
- Single : To view an image frame by frame.
- Slide Show : To view all images automatically and in consecutive order.

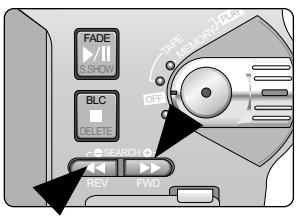
To View a Single image

1. Set the device to CAMERA.

2. Set the power switch to PLAYER mode.
   - The last recorded image appears.
   - If there are no recorded images on the Memory Stick, "NO STORED IMAGE!" will appear on the screen.



3. Using the ▶▶(FWD) and ◀◀ (REV) buttons, search for the desired still image.
   - To View the Next Image : press the ▶▶(FWD) button.
   - To View the Previous Image : press the ◀◀ (REV) button.
   - Pressing ▶▶(FWD) when you are on the last image will take you to the first image and pressing ◀◀ (REV) when you are on the first image will take you to the last image.
   - Keep pressing ▶▶(FWD) or ◀◀ (REV) to search for an image quickly.

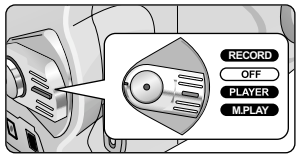


Basic Picture-Taking

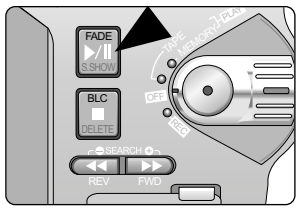
To View a Slide Show

1. Set the device to CAMERA

2. Set the power switch to PLAYER mode.
   - ■ The last recorded image appears.
   - \- If there are no recorded images on the Memory Stick, "NO STORED IMAGE!" will appear on the screen.



3. Press the ▶/II (S.SHOW) button.
   - ■ All images will be played back consecutively for 4~5 seconds each.



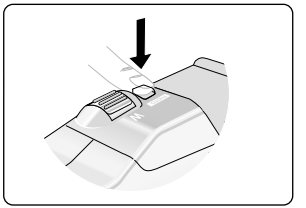
4. To stop the slide show, press the ▶/II (S.SHOW) button again.

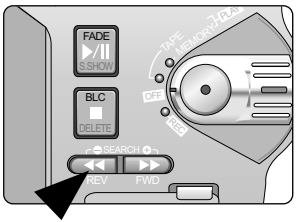
Basic Picture-Taking

Quick Review

✤ Quick Review is used to view the last recorded image.

1. Record a picture using Photo Button.
2. Press the REV(◀◀) Button to view the picture taken.
3. To return to CAMERA mode, press the REV(◀◀) Button again or press the Photo Button halfway down.

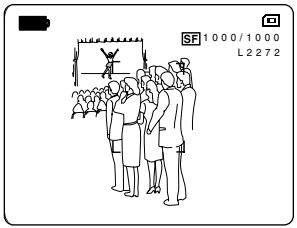




Basic Picture-Taking

Adjusting the Focus

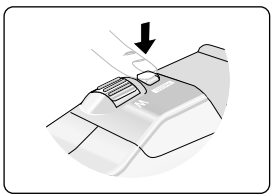
✤ In CAMERA Mode, the automatic focus will not engage unlessthe Photo Button is pressed.
✤ To get a good image, please verify the focus is set properly before pressing the Photo Button firmly.
✤ While the camera is focusing (by pressing the Photo Button halfway down), a flashing icon( ) will appear on the OSD (On Screen Display). A Sound Effect will playonce the focus is set.

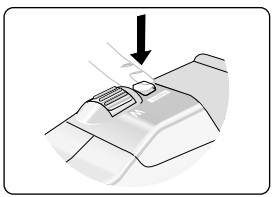


1. Adjust your frame so that the subject is within the AF frame on the LCD screen.

2. Pressing the Photo Button halfway down will set the focus.
   - When the focus is set, a sound effect will play.

3. Press the Photo Button firmly to take the picture.





Note

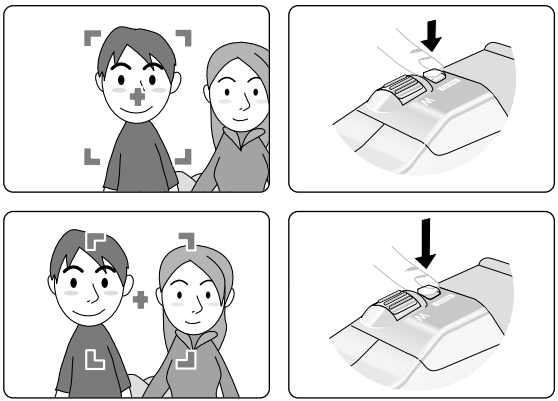
- If the focus is not set properly, release the Photo Button and then press the button halfway down again.
- Use MACRO Mode for recording images at close range (under 30cm), or the proper focus will not occur.
- To obtain a blurry image on purpose, use the MF (Manual Focus) Button to set the focus.

Advanced Technic

FOCUS LOCK

✤ Focus will be set to the AF frame of LCD screen. If the subject leaves the AF frame, the acquired image may blur.
✤ When objects are spread throughout the frame, use FOCUS LOCK to get even focusing.

1. First, adjust your frame so that the subject is within the AF frame on the LCD screen.
2. Press the Photo Button halfway down to set the focus on the subject.
3. Adjust your framing with the Photo Button pressed halfway down to get the desired frame.
4. Press the Photo Button fully down to take a picture.



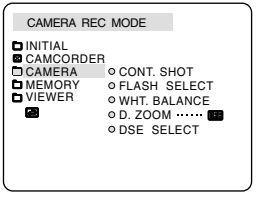
Note

- To get even focusing, for example, while taking a group photo , maintain a distance of 3 - 5 m when recording.
- The FOCUS LOCK function will not work under 1m focal distance.

Advanced Technic

Digital Zoom in CAMERA Mode

✤ A 6X Digital Zoom is provided.
✤ The digital zoom, which differs from the Optical Zoom, may cause deterioration of image quality. Please use with caution.



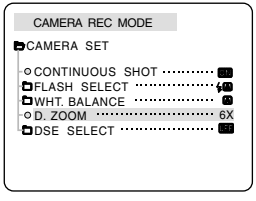
1. Set the device to CAMERA and set the power switch to RECORD mode.

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

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

4. Turn the MENU DIAL to activate the D. ZOOM and press the MENU DIAL.
   - The D. ZOOM menu is changed to 6X.
   - If you do not want to use the Digital Zoom function, set the D. ZOOM menu to OFF.

5. To exit, press the MENU button.



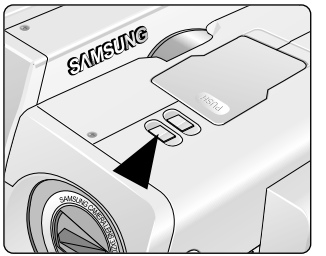
Note

- The digital zoom, magnifies an image. This may cause deterioration of the image when it is recorded using the maximum rate of magnification.

Advanced Technic

MACRO Mode

✤ The MACRO function works in CAMERA mode only.
✤ Use MACRO Mode for recording images at close range (under 80cm).
✤ Effective focal distance in MACRO Mode is 30cm ~ 80cm.



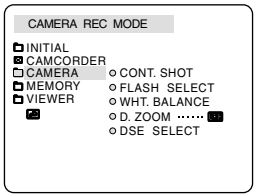
Notes

- Pressing the MACRO Button again or turning it off will exit from MACRO Mode.
- Please be careful not to cause a shadow when recording in MACRO Mode.
- As the distance to the subject decreases, focusing area will be narrowed.
- When you can not get proper focus, use the Zoom Lever to achieve focus.
- The viewfinder may not show the entire recording range. Refer to the LCD Screen for more precise framing.

Advanced Technic

CONT. SHOT (Continuous Shot)

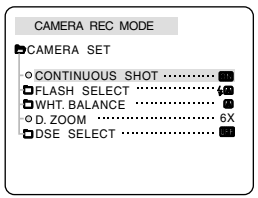
✤ The CONT. SHOT function works in CAMERA mode only.
✤ Continuous recording will occur while the Photo Button is being pressed.
- ■ OFF: Records one picture at a time
- ■ Records pictures continuously up to storage capacity.
- - When the image resolution is set to 1600 x 1200 or higher, only 3 continuous pictures can be recorded when using CONTINUOUS SHOT.



1. Set the device to CAMERA 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 CAMERA and press the MENU DIAL.



4. Turn the MENU DIAL to activate CONTINUOUS SHOT and press the MENU DIAL.
   - ■ The CONTINUOUS SHOT menu is changed to ON.

5. To exit, press the MENU button.

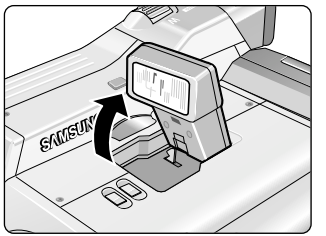
Notes

- ■ When the CONT. SHOT function is set to "ON", an icon is displayed on the LCD screen.
- ■ It is recommended to limit your usage of Continuous Shot to under 10 seconds to prevent troubles that may be caused by excessive usage of Continuous Shot.
- ■ The flash does not function during continuous recording while using the CONT. SHOT function.

Advanced Technic

Using the FLASH

✤ The FLASH works in CAMERA mode only.
✤ When power is supplied, FLASH mode is set to Auto. When you change FLASH modes an icon that shows the current FLASH mode will be displayed on the LCD screen.
✤ Using a flash enables the user to take bright pictures in dark circumstances, such as nighttime shooting and in shaded areas.



Notes

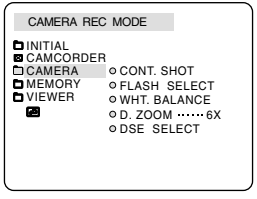
- By setting the Power Switch to CAMERA Mode after placing the CAMERA side of the Lens Body Block to the forward position, the FLASH will automatically open according to the lighting conditions.
- To close the FLASH, push the FLASH cover until it clicks.
- The Flash does not function in CONTINUOUS SHOT mode or CAMCORDER Mode.
- The battery power will be consumed faster with repeated use of the flash.
- To use the flash again, wait until the flash is recharged (5 to 7 seconds).

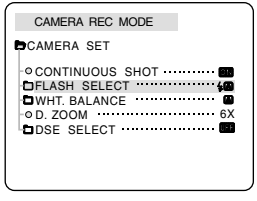
Advanced Technic

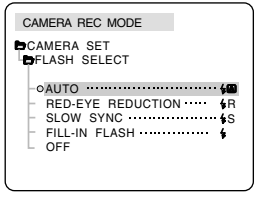
FLASH SELECT

✤ The FLASH SELECT function works in CAMERA mode only.

- **Auto** : The Flash automatically strobes when the surroundings are dark enough.
- **RED-EYE REDUCTION** : Using the flash to take pictures in dark surroundings may cause red-eye to occur. Using the RED-EYE REDUCTION setting, the flash pre-strobes before recording the picture to reduce the occurrence of red-eye .
- **SLOW SYNC** : When the Shutter Speed is set to SLOW, the flash strobes at the adjusted shutter speed. It is recommended to use a tripod when the shutter speed is set to SLOW.
- **FILL-IN FLASH** : Forces the flash to strobe despite the light condition. To get finer results, it is recommended to use the flash to take pictures, for example taking a picture of a dark object in the shade of a tree even under daylight.
- **OFF** : Sets the flash not to strobe. It is recommended to set your flash not to strobe in public places like art galleries, museums, and theaters.







1. Set the device to CAMERA 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 CAMERA and press the MENU DIAL.
4. Turn the MENU DIAL to activate FLASH SELECT and press the MENU DIAL.
5. Using the MENU DIAL, select the FLASH mode you wish to use.
   - Press the MENU DIAL to confirm the FLASH mode you have selected.
6. To exit, press the MENU button.

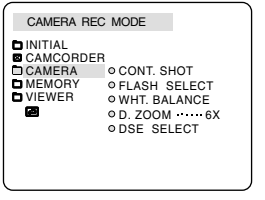
Advanced Technic

WHT. BALANCE (WHITE BALANCE) - CAMERA Mode

✤ When the recorded color of a subject appears differently because of certain weather or lighting conditions, adjusting the White Balance enables you to get the correct color of the subject.

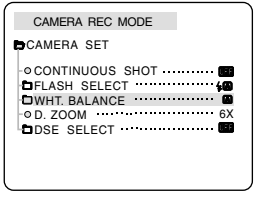
✤ The Adjusted White Balance is stored when the device is turned off. If the battery is fully discharged or detached, the White Balance will return to the AUTO setting, which is the factory default.

- **AUTO** : This mode is generally used to control the WHITE BALANCE automatically.
- **HOLD** :This keeps 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 device to CAMERA and set the power switch to RECORD mode.

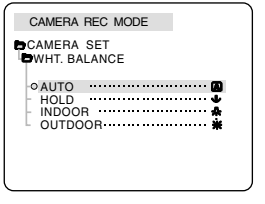
2. Press the MENU button.
   - The menu list will appear.



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

4. Turn the MENU DIAL to activate WHT. BALANCE and press the MENU DIAL.

5. Using the MENU DIAL, select the WHT. BALANCE you wish to use.
   - Press the MENU DIAL to confirm the WHT. BALANCE you have selected.



6. To exit, press the MENU button.

Note

- 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.
- During normal outdoor recording, setting the White Balance to AUTO may provide the best results.

Advanced Technic

DSE(Digital Special Effects) SELECT in CAMERA Mode

- ✤ The DSE function works in CAMERA mode only.
- ✤ The Digital Effects function will apply special effects to the image while recording.
- ✤ There are 3 DSE (Digital Special Effects) in CAMERA Mode. You can check the DSE applied image on the LCD screen or the viewfinder.

a. BLK & WHT Mode

This mode changes the images to black and white.

b. SEPIA Mode

This mode gives the images a reddish-brown pigment.

c. SUNSET Mode

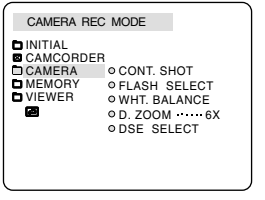
Sunset Mode is used to record sunsets.

Advanced Technic

Selecting a Digital Effect in CAMERA Mode

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

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

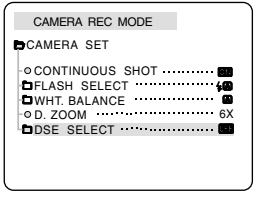


3. Turn the MENU DIAL to highlight CAMERA and press the MENU DIAL.

4. Turn the MENU DIAL to activate DSE SELECT and press the MENU DIAL.

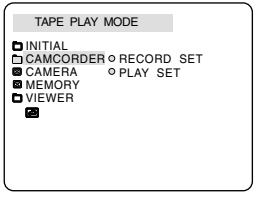
5. Using the MENU DIAL, select the DSE you wish to use.
   - Press the MENU DIAL to confirm the DSE you have selected.

6. To exit, press the MENU button.



Note

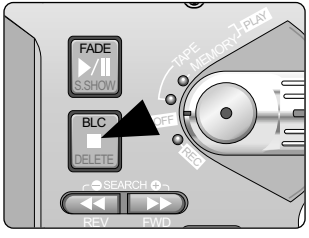
- While setting NITE SCENE to ON, the DSE function does not work.
- The DSE function will not operate in EASY mode.



Advanced Technic

SPOT-AE

✤ SPOT AE mode works in CAMERA mode only.
✤ Use this function to adjust the exposure of the subject to obtain better results when there is strong backlight or high contrast between the subject and background, for example on seashores or ski slopes.



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

2. Press the SPOT AE(STOP) button.
   - The Icon( ) is displayed on the LCD screen.

3. Place the subject in the center of AF frame then press the Photo Button halfway down.
   - After focus is set, sound effect is played and an icon that shows focus is fixed will be displayed on the LCD screen

4. Press the Photo Button down fully to record a picture.

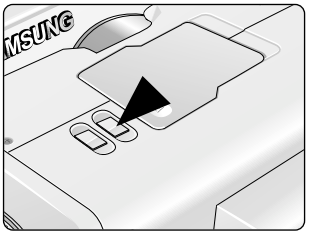
5. To exit SPOT AE Mode, press the SPOT AE Button again or turn it off .

Advanced Technic

NITE SCENE

✤ The NITE SCENE function works in CAMERA mode only.
✤ The NITE SCENE function enables you to record a subject in darkness.

1. Set the device to CAMERA and set the Power Switch to RECORD mode



2. Press the NITE SCENE button.
   - The (NS) appears on the LCD monitor.
   - The infrared(invisible rays) light is automatically turned on.

3. To cancel the NITE SCENE function, press the NITE SCENE button again.

Note

- The maximum recording distance using the infrared light is about 3 m (about 10 feet).
- In NITE PIX mode, certain functions are not available, such as White Balance, and DSE.

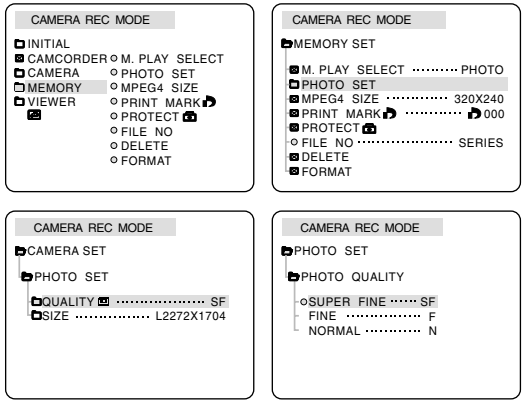
Advanced Technic

Selecting the Image Quality

✤ You can select the quality of a still image to be recorded.

Select the Image Quality

1. Set the device to CAMERA.
2. Set the Power Switch to M.PLAY mode.
3. Press the MENU button.
   - The menu list will appear.
4. Turn the MENU DIAL to highlight MEMORY.
5. Press the MENU DIAL to enter the sub-menu.
6. Turn the MENU DIAL to highlight PHOTO SET in the sub-menu.
7. Press the MENU DIAL.
8. Turn the MENU DIAL to highlight QUALITY and press the MENU DIAL.
9. Using the MENU DIAL, select the image quality you wish to use.
   - Press the MENU DIAL to confirm the image quality you have selected.
   - If you exit the sub-menu without pressing the MENU DIAL, the quality mode will not be changed.
10. To exit, press the MENU button.



Number of images on the Memory Stick

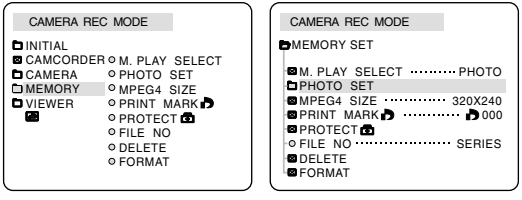
QUALITY	16MB	32MB
SUPER FINE	Approx.120	Approx.240
FINE	Approx.240	Approx.480
NORMAL	Approx.480	Approx.960

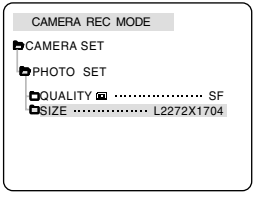
- The actual number that you can record varies depending on the image size.

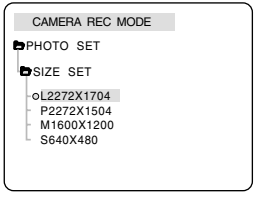
Advanced Technic

Selecting the Image Size

✤ You can select the size of a still image to be recorded.
✤ The number of images that can be stored in the Memory Stick will be decreased as the resolution of images increases.
✤ The resolution may be set before recording an image and between recordings. The following 4 modes of resolution are provided:
- L2272X1704 : Resolution for printing B5 sized images
- P2272X1504 : Resolution for developing a photograph
- M1600X1200 : Resolution for printing postcard sized images
- S640X480 : Resolution for E-mailing Images







Select the Image Size

1. Set the device to CAMERA.

2. Set the Power Switch to M.PLAY mode.

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

4. Turn the MENU DIAL to highlight MEMORY.

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

6. Turn the MENU DIAL to highlight PHOTO SET in the sub-menu.

7. Press the MENU DIAL.

Advanced Technic

8. Turn the MENU DIAL to highlight SIZE and press the MENU DIAL.

9. Using the MENU DIAL, select the image size.
   - Press the MENU DIAL to confirm the image size.

10. To exit, press the MENU button.

Memory Stick and Image Resolutions

	16MB	32MB
L2272 × 1704	8	16
P2272 × 1504	9	18
M1600 × 1200	20	40
S640 × 480	88	178

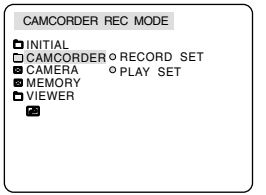
Notes

- Estimation is based when the image quality is set to FINE mode.
- The number of stored images varies depending on the recording conditions.
- Resolutions of images are the same as those that appear on your PC Monitor.
- An Optional Memory Stick is available (up to 128MB).

Advanced Technic

MPEG REC

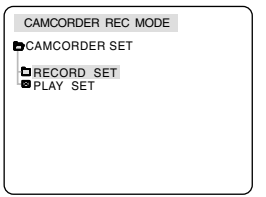
✤ Saving Tape Playback Images as a Moving Picture File onto the MEMORY STICK
✤ Saving the Pictures Captured by a Camera as a Moving Picture File onto the MEMORY STICK



1. Check whether the MEMORY STICK has been inserted into the device. If it is not in the device, insert it into the slot.

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

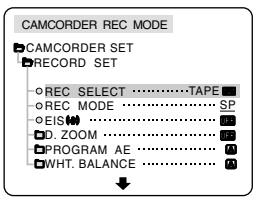
3. Press the MENU button.
   - The menu list will appear.



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

5. Select RECORD SET and press the MENU DIAL to enter the sub-menu.

6. Select REC SELECT from the sub-menu and press the MENU DIAL.
   - The REC SELECT toggles between TAPE and MEMORY with each press of the dial.



7. Press the START/STOP button, The images which are captured are recorded as a moving picture MPEG4 type file onto the MEMORY STICK.(Up to 25 seconds)
   - You can record a camera still image onto the Memory Stick by pressing the Photo key instead the START/STOP button.

8. Press the START/STOP button to stop the recording.

Notes

- Before using the MPEG REC function, check whether the MEMORY STICK has been inserted into the camcorder.
- Moving pictures can be made in two sizes, 160 × 120 or 320 × 240 (Pixels).

Advanced Technic

MPEG PB

✤ The MPEG PB function works only in M.PLAY mode.

1. Check whether the MEMORY STICK has been inserted into the device. If it is not in the device, insert it into the slot.

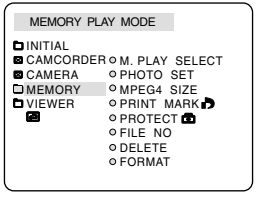
2. Set the device to CAMCORDER and set the Power Switch to RECORD mode.

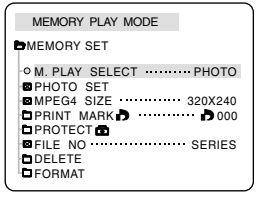
3. Press the MENU button.
   ■ The menu list will appear.

4. Turn the MENU DIAL to highlight MEMORY and press the MENU DIAL.

5. Select M.PLAY SELECT and press the MENU DIAL.
   ■ The camera will be set to MPEG Play standby after the MENU screen disappears.

6. Press the PLAY/STILL button.
   ■ An MPEG motion clip will be played back.





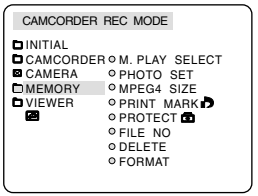
Advanced Technic

MPEG SIZE

✤ The resolution of the MPEG clip may be set to 320 x 240 or 160 x 120.

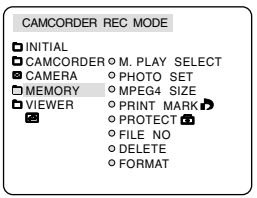
1. Check whether the MEMORY STICK has been inserted into the device. If it is not in the device, insert it into the slot.

2. Set the device to CAMCORDER and set the Power Switch to RECORD mode.



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

4. Turn the MENU DIAL to highlight MEMORY and press the MENU DIAL.



5. Select MPEG SIZE and press the MENU DIAL.
   - The MPEG SIZE toggles between 320X240 and 160X120 with each press of the dial.

6. To exit the menu, press the MENU button.

Notes

- A higher resolution setting for the MPEG file decreases maximum recording time.

Advanced Technic

Copying Still Images From a Cassette to the Memory Stick

✤ You can copy still images recorded with the PHOTO function from a cassette to a Memory Stick.

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

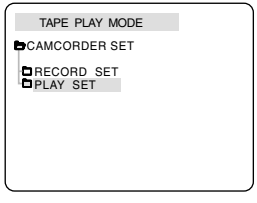
2. Press the MENU button.
   - The menu list will appear.

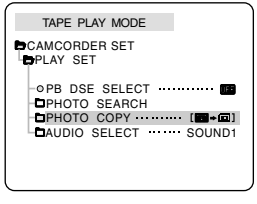
3. Turn the MENU DIAL to highlight MEMORY and press the MENU DIAL.

4. Select PHOTO COPY and press the MENU DIAL.
   - All still images that have been recorded on the cassette will be copied to the Memory Stick.

5. The camcorder automatically performs the photo search to find still images and copying begins.

6. Press the (STOP) button to stop copying.
   - Copying stops when the cassette is finished or when the Memory Stick is full.

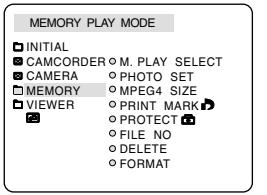




Advanced Technic

Marking Images for Printing

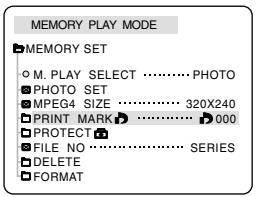
✤ This camcorder supports the DPOF (Digital Print Order Format) print format.
✤ You can automatically print images recorded on a Memory Stick with a printer supporting DPOF.
✤ There are 2 ways to make a PRINT MARK.
- THIS FILE : You can set a print mark on the photo image displayed on the LCD.
- ALL FILES : To print 1 copy each of all of the stored images.



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

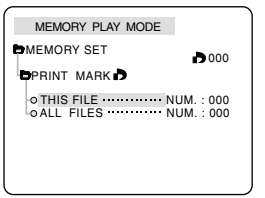
2. Using the (FWD) and (REV) buttons, search for the still image that you want to mark.

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



4. Turn the MENU DIAL to highlight MEMORY and press the MENU DIAL.
   - The MEMORY SET sub-menu will appear.

5. Turn the MENU DIAL to highlight PRINT MARK, and press the MENU DIAL.



6. Use the MENU DIAL to select either THIS FILE or ALL FILES and press the MENU DIAL.

7. Use the MENU DIAL to select the quantity and press the MENU DIAL.

Notes

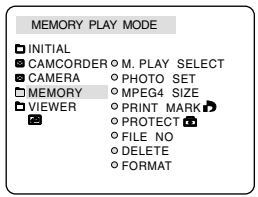
- When you set the PRINT MARK option to ALL FILES, 999 files from the current file are set to 1 or 0.
- The ALL FILES option may require extended operation time depending on the number of stored images.

Advanced Technic

Protection from Accidental Erasure

✤ You can protect important images from accidental erasure.
- If you execute FORMAT, all images including protected images will be erased.

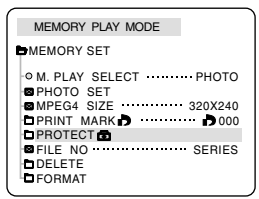
1. Set the device to CAMCORDER and set the Power Switch to M.PLAY mode.



2. Using the ▶▶ (FWD) and ◀◀ (REV) buttons, search for the still image that you want to mark.

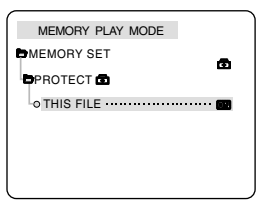
3. Press the MENU button.
   - The menu list will appear.

4. Turn the MENU DIAL to highlight MEMORY and press the MENU DIAL.
   - The MEMORY SET sub-menu will appear.



5. Turn the MENU DIAL to highlight PROTECT and press the MENU DIAL.

6. Press the MENU DIAL to set PROTECT to ON or OFF.
   - THIS FILE : protects the currently selected file from erasure.



7. Using the ▶▶ (FWD) and ◀◀ (REV), search for the still image that you wish to protect.

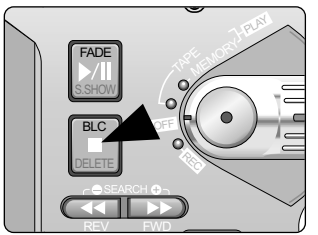
8. To exit the menu, press the MENU button.

Advanced Technic

Deleting Still images

✤ You can erase the still images recorded on the Memory Stick.
✤ If you want to delete protected images, you must first deactivate the image protection.
✤ An image which has been deleted cannot be recovered.

Deleting Pictures One by One



1. Set the device to CAMCORDER.

2. Set the Power Switch to the M.PLAY mode.

3. Using the ▶▶ (FWD) and ◀◀ (REV) buttons, search for the still image that you want to delete.

4. Press the DELETE(STOP) button.
   ■ "DELETE REALLY?" will be displayed.

5. Press the DELETE button again. The currently selected file will be deleted.
   ■ M.Play Mode will be restored after 3 seconds if the DELETE button is not pressed.

Advanced Technic

Deleting All Pictures at Once

1. Set the device to CAMCORDER.

2. Set the Power Switch to the M.PLAY mode.

3. Using the ▶▶ (FWD) and ◀◀ (REV) buttons, search for the still image that you want to delete.

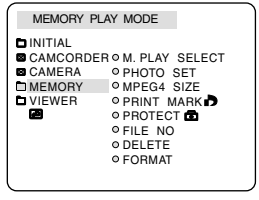
4. Press the MENU button.

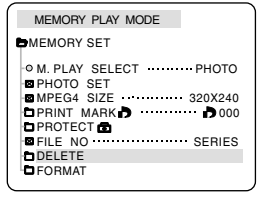
5. Turn the MENU DIAL to highlight MEMORY and press the MENU DIAL.
   - The MEMORY SET sub-menu will appear.

6. Turn the MENU DIAL to highlight DELETE and press the MENU DIAL.

7. Select ALL FILES and press the MENU DIAL
   - Using the MENU DIAL, select either THIS FILE or ALL FILES and press the MENU DIAL.
   - THIS FILE : deletes only the currently selected file.
   - ALL FILES : deletes all files stored in the Memory Stick.

8. A box will appear to verify whether you wish to delete the image(s).
   - Using the MENU DIAL, select the item.
   - EXECUTE : Deletes the selected image(s).
   - CANCEL : Does not delete the selected image(s) and returns to the previous menu.





Note

- If you try to delete a protected image, "PROTECT!" appears on the screen.

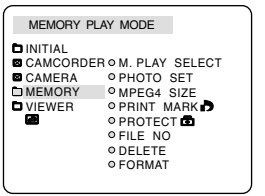
Advanced Technic

Formatting the Memory Stick

- ✤ You can use the MEMORY FORMAT functions to completely delete all images and options on the Memory Stick, including protected images.
- ✤ The format function restores the Memory Stick to its initial state.
- ✤ The Memory Stick supplied with this camcorder has already been formatted.

Attention

- ✤ If you execute the MEMORY FORMAT function, all images will be erased completely and erased images cannot be recovered.

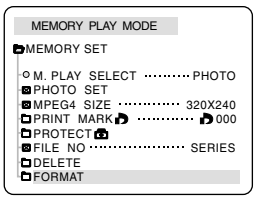


1. Set the device to CAMCORDER and set the Power Switch to the M.PLAY mode.

2. Press the MENU button.

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

4. Select FORMAT from the list and press the MENU DIAL.



5. "ALL FILES ARE DELETED! FORMAT REALLY?" appears on the screen.

6. Using the MENU DIAL, select the item.
   - ■ NO : To return to previous menu
   - ■ YES : To start formatting.

7. Press the MENU DIAL.

8. To exit the menu, press the MENU button.

Notes

- ■ If you want to format the Memory Stick on your PC, use only the "Memory Stick Formatter" supplied with the software CD.

Advanced Technic

Recording an Image from a Cassette as a Still Image.

✤ You can record a still image from a cassette onto a Memory Stick.
✤ If you want to recorded multiple still images from a cassette to a Memory Stick, use the COPY function.

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

2. Press the MENU DIAL.

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

4. Select RECORD SET and press the MENU DIAL.

5. Turn the MENU DIAL to highlight REC SELECT and press the MENU DIAL.
   - Set REC SELECT to MEMORY. By pressing the MENU DIAL you can toggle between TAPE and MEMORY modes.

6. To exit the menu, press the MENU button.

7. Press the Photo button.
   - The still image is recorded onto the Memory Stick.
   - While the camcorder is recording the still image, "▷▷▷" appears on the screen.

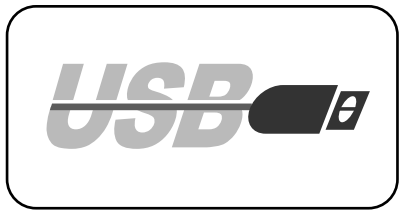
USB Interface

● Transferring a Digital Image through a USB Connection

- ✤ You can easily transfer a still image from a MEMORY STICK to a PC without additional add-on cards via a USB connection.
- ✤ You can transfer an image to a PC via a USB connection.
- ✤ If you transfer data to a PC, you need to install the software (Driver, Editing software) supplied with the camcorder.

System Requirements

- CPU : Intel® Pentium(or compatible) II™ 400 processor faster
- Operating system : Windows® 98SE/ME/2000/XP
- RAM : 64 MB or more
- CD-ROM: 4x CD-ROM drive
- VIDEO : 65,000-Color or better video display card
- Available USB Port
- Hard Disc : 4GB (8GB recommended)



Notes

- Intel® Pentium II™ is a trademark of the Intel Corporation.
- Windows® is a registered trademark of the Microsoft® Corporation.
- All other brands and names are the property of their respective owners.

USB Interface

Installing the DVC Media 5.0 Program

✤ Do not connect the camcorder to a PC before installing the program.
✤ If another camera or scanner is connected, please disconnect it in advance.
✤ This explanation is based on Windows® 98SE OS.

Program Installation

1. Insert the Software CD into CD-ROM drive.
   - The Installation Selection screen appears in the monitor.

2. If the Installation Selection screen does not appear after inserting the CD click “Run” on the Windows “Start” menu and execute SETUP.EXE file to begin installation.
   - When the CD-ROM drive is set to “D:drive”, type “D:\setup.exe” and press Enter.

3. Click one of the icons listed below to install the selected software.
   - DVC Driver (Windows 98SE only)
   - Editing Software

1.

Install the DVC Driver

4. When you see the Start window, click “DVC Driver” to continue installation.

USB Interface

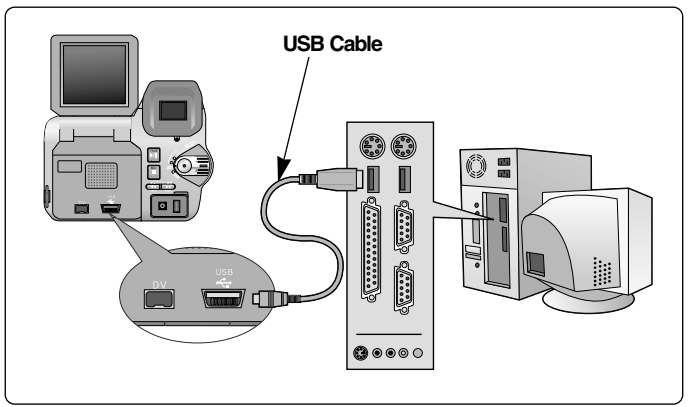
Connecting to a PC

1. Connect a USB cable to the USB port on the PC.

2. Connect the other end of the USB cable into the proper terminal on the camcorder. (USB jack)

Notes

- If you disconnect the USB cable from the PC or the camcorder while transferring, the data transmission will stop and the data may be damaged.
- If you connect the USB cable to a PC via a USB HUB or simultaneously connect the USB cable along with other USB devices, the camcorder may not work properly.
  - If this occurs, remove all USB devices from the PC and reconnect the camcorder.

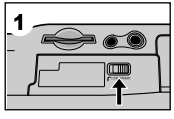


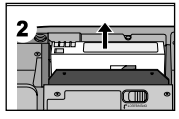
Maintenance

After Finishing a Recording

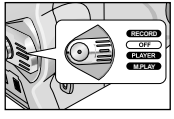
✤ At the end of a recording you should remove the power source.
✤ When recording with a Lithium Ion Battery Pack, leaving the pack on the camcorder can reduce the life span of the battery. Therefore, it should be removed from the camcorder.

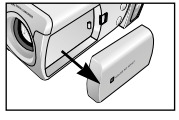
1. Slide the TAPE OPEN/EJECT switch in the direction of the arrow.
   - Opening the cassette door ejects the tape automatically.
   - Please wait for while the tape to be completely ejected.





2. After removing the tape, close the door and store the camcorder in a dust free environment.
   - Dust and other foreign materials can cause square-shaped noise or jerky images.





3. Set the power switch to OFF.

4. Disconnect the power source or remove the Lithium Ion Battery Pack.
   - Hold down the BATTERY RELEASE button and slide the battery pack in the direction of the arrow.

Maintenance

Cleaning and Maintaining the Camcorder

Cleaning the Video Heads

To ensure normal recording and clear pictures, clean the video heads when the playback pictures display square block-shaped noise or distortion or a blue screen appears.

1. Set the device to CAMCORDER.
2. Insert the Cleaning Tape.
3. Press the ▶/II (PLAY/STILL) button.
4. Press the ■ (STOP) button after 10 seconds.

Notes

- Check the quality of the picture using a videocassette.
  If the picture quality has not improved, repeat the operation.
  If the problem continues, contact your local authorized service center.
- Clean the video heads with a dry-type cassette cleaner.

Maintenance

Using Your Camcorder Abroad

✤ Each country or region has its own electric and color systems.
✤ Before using your camcorder abroad, check the following items.

Power Sources

- You can use your camcorder in any country or area with the supplied AC Power Adapter within 100V to 240V, 50/60 Hz.
- Use a commercially available AC plug Adapter, if necessary, depending on the design of the local wall outlet.

Color System

- You can view your recording in the viewfinder.
  However, to view it on a television or copy it to a videocassette recorder, the television or VCR must be NTSC-compatible and have the appropriate audio/video jacks.
  Otherwise, you may need to use a transcoder.

● **PAL-Compatible Countries/Regions**
Australia, Austria, Belgium, Bulgaria, China, CIS, Czech Republic, Denmark, Egypt, Finland, France, Germany, Greece, Great Britain, Holland, Hong Kong, Hungary, India, Iran, Iraq, Kuwait, Libya, Malaysia, Mauritius, Norway, Romania, Saudi Arabia, Singapore, Slovak Republic, Spain, Sweden, Switzerland, Syria, Thailand, Tunisia, etc.

● **NTSC-compatible Countries/Regions**
Bahamas, Canada, Central America, Japan, Mexico, Philippines, Korea, Taiwan, United States of America, etc.

Note

You can make recordings with your camcorder and view pictures on the LCD from anywhere in the world.

Troubleshooting

Troubleshooting

✤ Before contacting a Samsung authorized service center, perform the following simple checks.
They may save you the time and expense of an unnecessary call.

Self Diagnosis Display

Display	Blinking	Informs that...	Action
▭	slow	the battery pack is almost discharged.	Change to a charged one.
TAPE END!	slow	When the remaining time on the tape is about 2 minutes	Prepare a new one.
TAPE END!	no	the tape reached its end.	Change to a new one.
TAPE!	slow	there is no tape in camcorder.	Insert a tape.
PROTECTION!	slow	the tape is record protected.	If you want to record, release the protection.
⏏····D L C R	slow	the camcorder has some mechanical fault.	1. Eject the tape. 2. Set to OFF. 3. Detach the battery. 4. Reattach the battery. * If unresolved contact your local service representative.
💧	slow	moisture condensation has formed in the camcorder.	see below.

Moisture Condensation

✤ If the camcorder is brought directly from a cold place to a warm place, moisture may condense inside the camcorder, on the surface of the tape, or on the lens. In this condition, the tape may stick to the head drum and be damaged or the unit may not operate correctly.
To prevent possible damage under these circumstances, the camcorder is fitted with a moisture sensor.

✤ If there is moisture inside the camcorder, 💧 (DEW) is displayed. If this happens, none of the functions except cassette ejection will work.
Open the cassette compartment and remove the battery.
Leave the camcorder for at least two hours in a dry warm room.

Troubleshooting

Self Diagnosis Display in M.REC/M.PLAY Mode

Display	Blinking	Informs that...	Action
MEMORY STICK!	slow	There no Memory stick in the camcorder.	Insert a Memory Stick.
MEMORY FULL!	slow	There is not enough memory to record.	Change to a new Memory Stick. Erase recorded image.
NO STORED IMAGE!	slow	There are no images recorded on the Memory Stick.	Record new images.
WRITE PROTECT!	slow	The Memory Stick is record protected.	Release the write protect tab on the Memory Stick.
PROTECT!	slow	When you try to delete to protected image.	Cancel the protect of image.
READ ERROR!	slow	The camera can not playback.	Format a Memory Stick or insert Memory Stick recorded on this camcorder.
WRITE ERROR!	slow	The camera can not record.	Format a Memory Stick or change to a new Memory Stick.
NOT FORMATTED!	slow	The card or memory needs to format.	Format a Memory Stick.
NOW DELETE...	slow	When progressing FILE DELETE.	Wait until Delete has finished.
NOW FORMAT...	slow	When progressing MEMORY FORMAT.	Wait formatting has finished.
NOW COPY...	slow	When progressing FILE COPY.	Wait until copying has finished.

Troubleshooting

✤ If these instructions do not solve your problem, contact your nearest Samsung authorized service center.

Symptom	Explanation/Solution
You cannot switch the camcorder on.	Check the battery pack or the AC Power Adapter.
START/STOP button does not operate while recording.	Check the POWER switch is set to CAMERA. You have reached the end of the cassette. Check the record protection tab on the cassette.
The camcorder goes off automatically.	You have left the camcorder set to STBY for more than 5 minutes without using it. The battery pack is fully exhausted.
The battery pack is quickly exhausted.	The atmospheric temperature is too low. The battery pack has not been charged fully. The battery pack is completely dead, and cannot be recharged, Use another battery pack.
When you see a blue screen during playback.	The video heads may be dirty. Clean the head with a cleaning tape.
A vertical strip appears on the screen when recording a dark background.	The contrast between the subject and the background is too great for the camcorder to operate normally. Make the background bright to reduce the contrast or use the BLC function while you are recording brighter.
The image in the viewfinder is blurred.	The Viewfinder lens has not been adjusted. Adjust the viewfinder control lever until the indicators displayed on the viewfinder come into sharp focus.
Auto focus does not work.	Check the M.FOCUS menu. Auto focus does not work in the Manual Focus mode.
Play, FF or REW button does not work.	Check the POWER switch. Set the power switch to PLAYER. You have reached the beginning or end of the cassette.
When you see a broken block image during the RECORD SEARCH.	This is normal operation and it is not a failure or defect.

Specifications

Model name: SCD5000

System	
Video signal	NTSC
Video recording system	2 rotary heads, Helical scanning system
Audio recording system	Rotary heads, PCM system
Usable cassette	Digital video tape (6.35mm width): Mini DV cassette
Tape speed	SP: approx. 18.81mm/s LP: approx. 12.56mm/s
Tape recording time	SP: 60 minutes (when using DVM 60), LP: 90 minutes (when using DVM 60)
FF/REW time	Approx. 180 sec. (using DVM60 tape)
Image device	CCD (Charge Coupled Device)
Lens	F1.4 10x(Optical), 800x(Digital) Electronic zoom lens
Filter diameter	Ø37
LCD monitor/Viewfinder	
Size/dot number	2.5inchs (112,000)
LCD monitor Method	TFT LCD
Viewfinder	0.24" B/W LCD
Connectors	
Video output	1Vp-p (75Ω terminated)
S-video output	Y: 1Vp-p, 75Ω, C: 0. 286Vp-p, 75Ω
Audio output	-7.5dBs (600Ω terminated)
DV input/output	4pin special in/out connector
USB output	Mini-B type connector
External mic	Ø3.5 stereo

General	
Power source	DC 8.4V, Lithium Ion Battery Pack 7.4V
Power source type	Lithium Ion Battery Pack, Power supply (100V~240V) 50/60Hz
Power consumption (Recording)	5.0W(LCD), 3.9W(EVF)
Operating temperature	0˚~40˚C (32˚F~104˚F)
Storage temperature	-20˚C ~ 60˚C (-4˚F ~ 140˚F)
External dimension	Length 7inches(156mm), Height 3.54inches(90mm), Width 2.48inches(58mm)
Weight	1.21lbs(500g) (Except for Lithium Ion Battery Pack and tape)
Built-in MIC	Omni-directional stereo condenser microphone
Remote control	Indoors: greater than 49ft(15m) (straight line), Outdoors: greater than 16.4ft(5m) (straight line)

- These technical specifications and design may be changed without notice.

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Warranty

SAMSUNG
LIMITED WARRANTY

SAMSUNG Electronics America Inc. (SEA), warrants that this product is free from defective material and workmanship. SEA further warrants that if product fails to operate properly within the specified warranty period and the failure is due to improper workmanship or defective material, SEA will repair or replace the product at it's option.
All warranty repairs must be performed by a SEA authorized service center. The name and address of the location nearest you can be obtained by calling toll free: 1-800 SAMSUNG (1-800-726-7864).
Labor
90 days carry-in
Parts
1 year

On carry-in models, transportation to and from the service center is the customer's responsibility.

The original dated sales receipt must be retained by the customer and is the only acceptable proof of purchase. It must be presented to the authorized service center.

EXCLUSIONS (WHAT IS NOT COVERED)

This warranty does not cover damage due to accident, fire, flood and/or other acts of God; misuse, incorrect line voltage, improper installation, improper or unauthorized repairs, commercial use, or damage that occurs in shipping. Exterior and interior finish, lamps, and glass are not covered under this warranty.
Customer adjustments which are explained in the instruction manual are not covered under the terms of this warranty. This warranty will automatically be voided for any unit found with a missing or altered serial number. This warranty is valid only on products purchased in the United States and Puerto Rico.

Some States do not allow the exclusions or limitations of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you.
This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

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

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