

Using a “Memory Stick” – Introduction

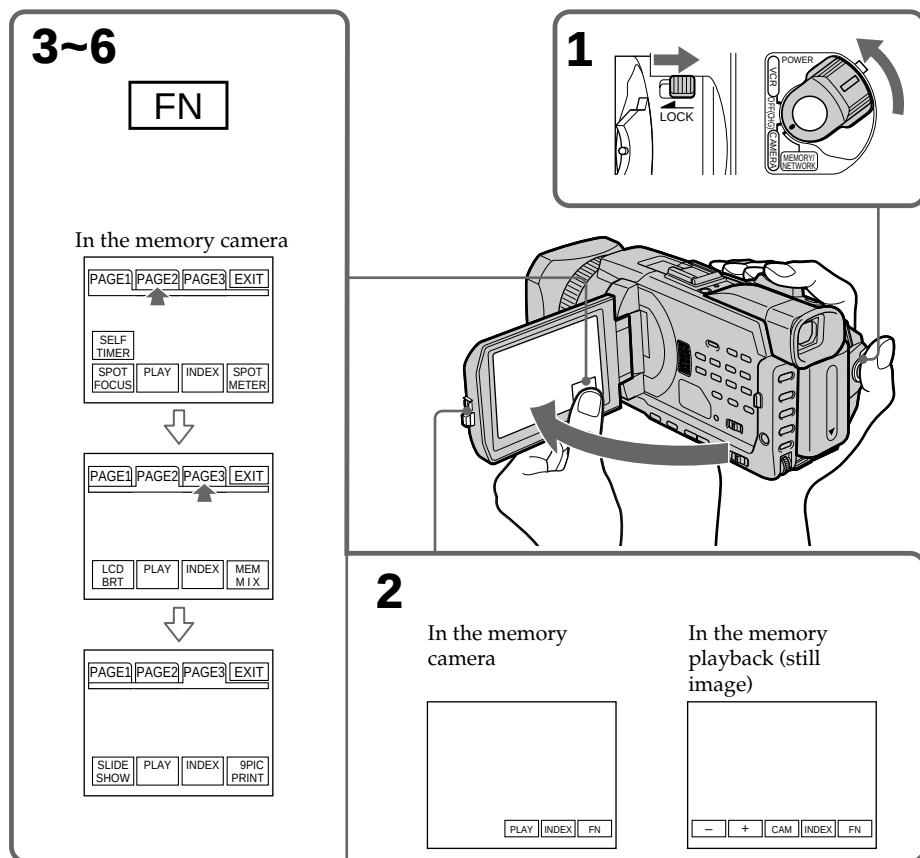
Using a touch panel

Most operation buttons for use of a “Memory Stick” are displayed on the LCD screen. Touch the LCD screen directly with your finger or the supplied stylus (DCR-TRV950 only) to operate each function.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only). Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press OPEN to open the LCD panel. Operation buttons appear on the LCD screen. You can switch the memory playback/memory camera by pressing PLAY/CAM.
- (3) Press FN. Operation buttons appear on the LCD screen.
- (4) Press PAGE2 to go to PAGE2. Operation buttons appear on the LCD screen.
- (5) Press PAGE3 to go to PAGE3. Operation buttons appear on the LCD screen.
- (6) Press a desired operation item.

Refer to relevant pages for each function.

“Memory Stick” Operations



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To return to FN

Press EXIT.

To execute settings

Press  OK.

To cancel settings

Press  OFF to return to PAGE1/PAGE2/PAGE3.

Notes

- When using the touch panel, press operation buttons with your thumb supporting the LCD screen from the back side of it or press those buttons lightly with your index finger.
- Do not press the LCD screen with sharp-pointed objects other than the supplied stylus. (DCR-TRV950 only)
- Do not press the LCD screen too hard.
- Do not touch the LCD screen with wet hands.
- If FN is not on the LCD screen, touch the LCD screen lightly to make it appear. You can control the display with DISPLAY/TOUCH PANEL on your camcorder.
- When operation buttons do not work even if you press them, an adjustment is required (CALIBRATION) (p. 238).
- When the LCD screen gets dirty, clean it with the supplied cleaning cloth.

When executing each item

The green bar appears above the item.

If the items are not available

The color of the items changes to gray.

Press FN to display the following buttons:

In the memory camera

PAGE1	SELFTIMER, SPOT FOCUS, PLAY, INDEX, SPOT METER
PAGE2	LCD BRT, PLAY, INDEX, MEM MIX
PAGE3	SLIDE SHOW, PLAY, INDEX, 9PIC PRINT

In the memory playback

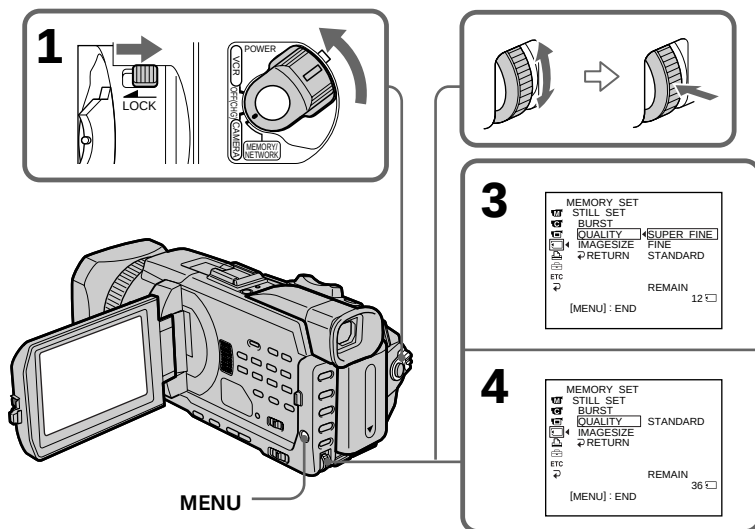
PAGE1	PB ZOOM, CAM, INDEX, DELETE,  , 
PAGE2	LCD BRT, CAM, INDEX,  , 
PAGE3	SLIDE SHOW, CAM, INDEX, 9PIC PRINT,  , 

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Selecting the still image quality

You can select the image quality in still image recording. The default setting is SUPER FINE.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only) or VCR. Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press MENU, then select STILL SET in  with the SEL/PUSH EXEC dial (p. 211).
- (3) Turn the SEL/PUSH EXEC dial to select QUALITY, then press the dial.
- (4) Turn the SEL/PUSH EXEC dial to select the desired image quality, then press the dial.



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Image quality settings

Setting	Meaning
SUPER FINE (SFN)	This is the highest image quality in your camcorder. The number of still images you can record is less than in FINE mode. Super fine images are compressed to about 1/3.
FINE (FINE)	Use this mode when you want to record high quality images. Fine images are compressed to about 1/6.
STANDARD (STD)	This is the standard image quality in your camcorder. Standard images are compressed to about 1/10.

Note

In some cases, changing the image quality may not affect the image quality, depending on the type of images you are shooting.

Differences in image quality

Recorded images are compressed in JPEG format before being stored in memory. The memory capacity allotted to each image varies depending on the selected image quality and image size. Details are shown in the table below. (You can select 1152 × 864 or 640 × 480 image size in the menu settings.)

1152 × 864 image size

Image quality	Memory capacity
SUPER FINE	About 600 KB
FINE	About 300 KB
STANDARD	About 200 KB

640 × 480 image size

Image quality	Memory capacity
SUPER FINE	About 190 KB
FINE	About 100 KB
STANDARD	About 60 KB

Image quality indicator

The image quality indicator is not displayed during playback.

When you select image quality

The number of images you can shoot in the currently selected image quality appears on the screen.

Using a “Memory Stick” – Introduction

Selecting the image size

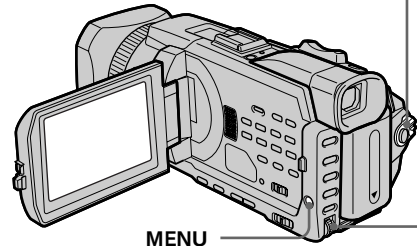
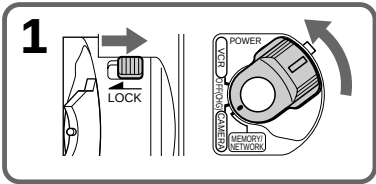
You can select either of two image sizes

Still images: 1152 × 864 or 640 × 480. (When the POWER switch is set to CAMERA or VCR, the image size is automatically set to 640 × 480.)
The default setting is 1152 × 864.

Moving pictures: 320 × 240 or 160 × 112
The default setting is 320 × 240.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only). Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press MENU, then turn the SEL/PUSH EXEC dial to select STILL SET (still image) or MOVIE SET (moving picture) in , then press the dial (p. 211).
- (3) Turn the SEL/PUSH EXEC dial to select IMAGESIZE, then press the dial.
- (4) Turn the SEL/PUSH EXEC dial to select the desired image size, then press the dial.

The indicator changes as follows:



3 STILL SET

MEMORY SET	STILL SET
BURST	
QUALITY	
IMAGESIZE	1152 × 864
RETURN	640 × 480
ETC	
REMAIN	12
[MENU]: END	

MOVIE SET

MEMORY SET	MOVIE SET
IMAGESIZE	320 × 240
RETURN	160 × 112
ETC	
REMAIN	1min
[MENU]: END	

4 STILL SET

MEMORY SET	STILL SET
BURST	
QUALITY	
IMAGESIZE	640 × 480
RETURN	
ETC	
REMAIN	40
[MENU]: END	

MOVIE SET

MEMORY SET	MOVIE SET
IMAGESIZE	160 × 112
RETURN	
ETC	
REMAIN	5min
[MENU]: END	

Using a “Memory Stick” – Introduction

Image size settings

Setting	Meaning	Indicator
1152 × 864	Records 1152 × 864 still images.	 1152
640 × 480	Records 640 × 480 still images.	 640
320 × 240	Records 320 × 240 moving pictures.	 320
160 × 112	Records 160 × 112 moving pictures.	 160

Approximate number of still images you can record on a “Memory Stick”

The number of images you can record varies depending on which image quality and image size you select and the complexity of the subject.

Image quality	Image size	Type of the “Memory Stick”				
		8MB (supplied)	16MB (optional)	32MB (optional)	64MB (optional)	128MB (optional)
SUPER FINE	1152 × 864	12 images	25 images	51 images	100 images	205 images
	640 × 480	40 images	80 images	160 images	325 images	650 images
FINE	1152 × 864	25 images	50 images	100 images	205 images	415 images
	640 × 480	80 images	160 images	325 images	650 images	1310 images
STANDARD	1152 × 864	37 images	74 images	150 images	300 images	600 images
	640 × 480	120 images	240 images	485 images	980 images	1970 images

Approximate time of moving pictures you can record on a “Memory Stick”

The time of moving pictures you can record varies depending on which image size you select and the complexity of the subject.

Image size	Type of the “Memory Stick”				
	8MB (supplied)	16MB (optional)	32MB (optional)	64MB (optional)	128MB (optional)
320 × 240	1 min. 20 sec.	2 min. 40 sec.	5 min. 20 sec.	10 min. 40 sec.	21 min. 20 sec.
160 × 112	5 min. 20 sec.	10 min. 40 sec.	21 min. 20 sec.	42 min. 40 sec.	85 min. 20 sec.

The table above shows approximate number and times of still images and moving pictures you can record on a “Memory Stick” formatted by your camcorder.

Note

When still images recorded on your camcorder in 1152 × 864 size are played back on other equipment that does not support 1152 × 864 size, the full image may not appear, or images in the reduced size may appear in the center of the screen.

Recording still images on a “Memory Stick”– Memory Photo recording

You can record still images on a “Memory Stick.”

Before operation

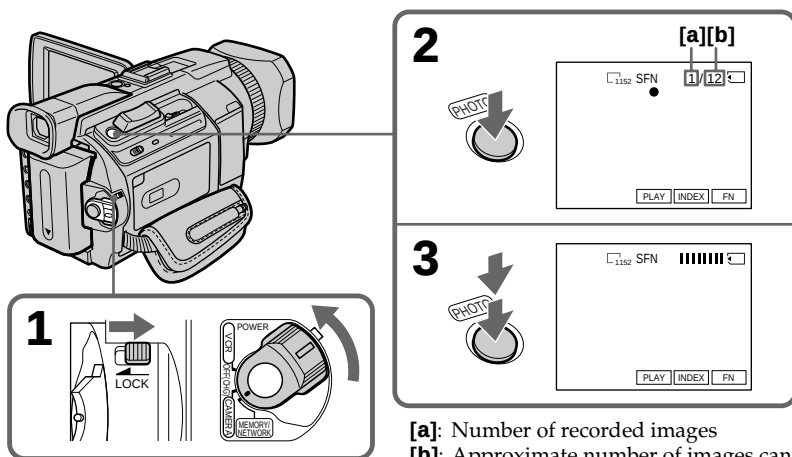
Insert a “Memory Stick” into your camcorder.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only). Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press PHOTO lightly. The green ● mark stops flashing, then lights up. The brightness of the image and focus are adjusted, being targeted for the middle of the image and are fixed. Recording does not start yet.
- (3) Press PHOTO deeper.

The still image will be displayed after the shutter sounds.

Recording is complete when the bar scroll indicator disappears.

The image when you pressed PHOTO deeper will be recorded on the “Memory Stick.”



You can record still images on a “Memory Stick” in the tape recording or recording standby

For the details, see p. 46.

Recording still images on a “Memory Stick”

– Memory Photo recording

When the POWER switch is set to MEMORY/NETWORK (DCR-TRV950 only)

The following functions do not work:

- Digital zoom
- Wide mode
- Fader
- Picture effect
- Digital effect
- Sports lesson of PROGRAM AE (The indicator flashes.)
- Title

While you are recording a still image

You can neither turn off the power nor press PHOTO.

When you press PHOTO on the Remote Commander

Your camcorder immediately records the image that is on the screen when you press the button.

When you press PHOTO lightly in step 2

The image momentarily flickers. This is not a malfunction.

Recording data

The recording data (date/time or various settings when recorded) are not displayed while recording. However, they are recorded automatically onto the “Memory Stick.” To display the recording data, press the DATA CODE button during playback. You can also use the Remote Commander for this operation (p. 41).

When the POWER switch is set to MEMORY/NETWORK (DCR-TRV950 only)

The angle of view is slightly larger compared with the angle of view when the POWER switch is set to CAMERA.

Recording still images on a “Memory Stick” – Memory Photo recording

Recording images continuously

You can record still images continuously. Before recording, select one of the four modes described below in the menu settings.

NORMAL [a]

Your camcorder shoots up to four still images in 1152 × 864 size or 13 still images in 640 × 480 size at about 0.5 sec intervals. ()

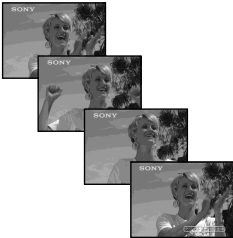
EXP BRKTG (Exposure Bracketing)

Your camcorder automatically shoots three images at about 0.5 sec intervals at different exposures. ()

MULTI SCRN (Multi Screen) [b]

Your camcorder shoots nine still images at about 0.4 sec intervals and displays the images on a single page divided into nine boxes. Still images are recorded in 640 × 480 size. ()

[a]

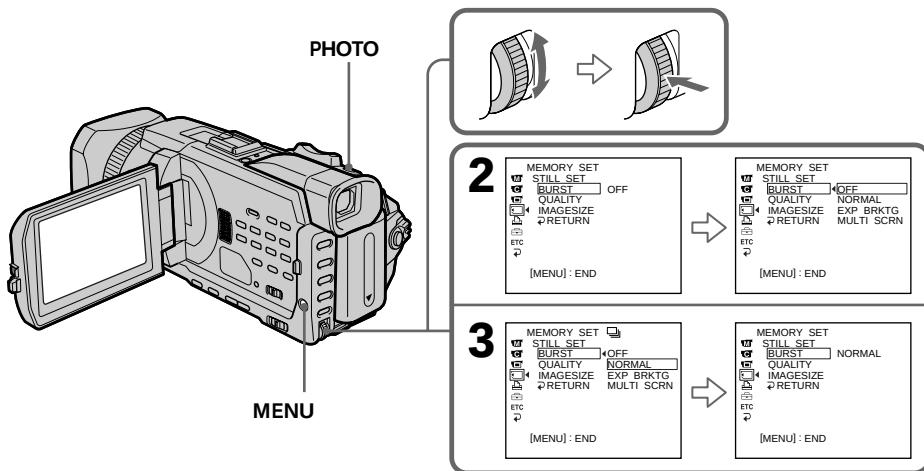


[b]



Recording still images on a “Memory Stick” – Memory Photo recording

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only). Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press MENU, then select BURST while STILL SET is selected in , then press the dial (p. 211).
- (3) Turn the SEL/PUSH EXEC dial to select the desired setting, then press the dial.
- (4) Press MENU to make the menu setting disappear.
- (5) Press PHOTO deeper.



If the capacity of the “Memory Stick” becomes full

“ FULL” appears on the screen, and you cannot record a still image on this “Memory Stick.”

The number of still images in continuous shooting

The number of still images you can shoot continuously varies depending on the image size and the capacity of the “Memory Stick.”

During recording still images continuously

The flash does not work.

The effect of exposure bracketing (EXP BRKTG)

The effect may not appear clearly on the LCD screen.

Checking images on a TV monitor or computer display for the expected effect is recommended.

When selecting NORMAL

Recording continues up to the maximum number of still images during pressing PHOTO deeper. Release PHOTO to stop recording.

When shooting with the self-timer or the Remote Commander

Your camcorder automatically records up to the maximum recordable number of still images.

Recording still images on a “Memory Stick”

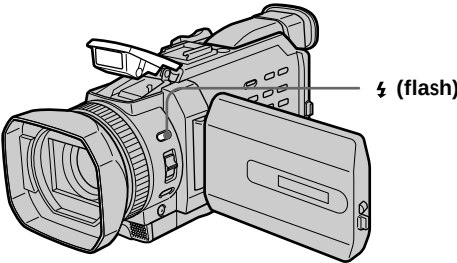
– Memory Photo recording

If there is space remaining on the “Memory Stick” for less than three photos

You cannot carry out the exposure bracketing (EXP BRKTG). “ FULL” is displayed when you press PHOTO.

Recording images with the flash

The flash automatically pops up to strobe. The default setting is auto (no indicator). To change the flash mode, press  (flash) repeatedly until the flash mode indicator appears on the screen.



Each press of  (flash) changes the indicator as follows:

-  →  →  → (no indicator)
-  Auto red-eye reduction: The flash fires before recording to reduce the red-eye phenomenon.
-  Forced flash: The flash fires regardless of the surrounding brightness.
-  No flash: The flash does not fire.

The flash is automatically adjusted to the appropriate brightness. You can also change FLASH LVL to the desired brightness in the menu settings (p. 208). Try recording various images to find the most appropriate setting for FLASH LVL.

Recording still images on a “Memory Stick”

– Memory Photo recording

Notes

- The recommended shooting distance using the built-in flash is 0.8 m to 2.5 m (2 3/5 feet to 8 1/3 feet).
- Attaching the lens hood or a conversion lens (optional) may block the light from the flash or cause lens shadow to appear.
- You cannot use an external flash (optional) and the built-in flash at the same time.
-  (auto red-eye reduction) may not produce the desired effect depending on individual differences, the distance to the subject, the subject not looking at the pre-recording flash or other conditions.
- The flash effect cannot be obtained easily when you use forced flash in a bright location.
- If it is not easy to focus on a subject automatically, for example, when recording in the dark, use HOLOGRAM AF (p. 141) or the focal distance information (p. 77) for focusing manually.

When the flashlight does not reach to the subjects

The color of the image may change.

If you leave your camcorder for five or more minutes after removing the power supply

Your camcorder returns to the default setting (auto).

The flash does not fire even if you select auto and (auto red-eye reduction) during the following operations:

- Spot light
- Shutter speed adjustment
- Sunset & moon of PROGRAM AE
- Landscape of PROGRAM AE
- Exposure
- Flexible Spot meter

When you use an external flash (optional) which does not have the auto red-eye reduction

You cannot select the auto red-eye reduction.

During recording images continuously

The flash does not work.

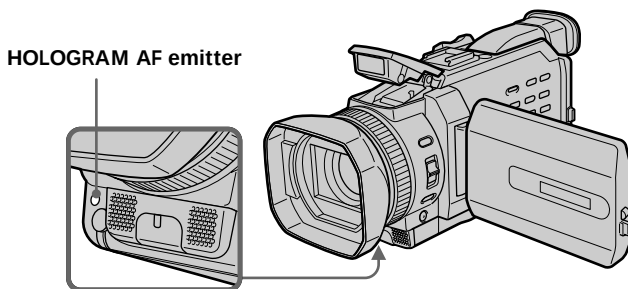
Recording still images on a “Memory Stick” – Memory Photo recording

Shooting with an auxiliary light – HOLOGRAM AF

The HOLOGRAM AF is an auxiliary light source used for focusing on subjects in dark places.

Set HOLOGRAM F in  to AUTO in the menu settings. (The default setting is AUTO.)

When  appears on the screen in a dark place, press PHOTO lightly. Then the auxiliary light will automatically emit until the subject is focused.



About HOLOGRAM AF

“HOLOGRAM AF (Auto-Focus),” an application of laser holograms, is a new AF optical system that enables still image shooting in dark places. Having gentler radiation than conventional high-brightness LEDs or lamps, the system satisfies Laser Class 1 (*) specification and thus maintains higher safety for human eyes.

No safety problems will be caused by directly looking into the HOLOGRAM AF emitter at a close range. However, it is not recommended to do so, because you may experience such effects like several minutes of image residual and dazzling, that you encounter after looking into a flashlight.

* HOLOGRAM AF satisfies Class 1(time base 30 000 seconds), specified in all of JIS (Japan), IEC(EU), and FDA(US) industry standards.

Complying with these standards identifies the laser product to be safe, under a condition that a human looks at the laser light either directly or even through a lens for 30 000 seconds.

Recording still images on a “Memory Stick”

– Memory Photo recording

Notes

- Attaching the lens hood or a conversion lens (optional) may obstruct the HOLOGRAM AF light and make focusing difficult. We recommend removing the lens hood or a conversion lens while shooting with the HOLOGRAM AF.
- If enough light does not reach the subject even if the HOLOGRAM AF emitter is emitted (recommended shooting distance is 2.5 m (8 1/3 feet)), the subject will not be focused.
- Focusing may be hampered if the light emitted from the HOLOGRAM AF is blocked by an obstruction.
- Focus is achieved as long as HOLOGRAM AF light reaches to the subject even if its light is slightly out of the middle position of the subject.
- If HOLOGRAM AF light is dim, it sometimes becomes difficult to focus. If this happens, wipe the HOLOGRAM AF emitter with a soft, dry cloth.

The HOLOGRAM AF does not emit when:

- Flash is set to  No flash
- Focus manually
- Spot Focus
- Sunset & moon of PROGRAM AE
- Landscape of PROGRAM AE
- Continuous photo recording

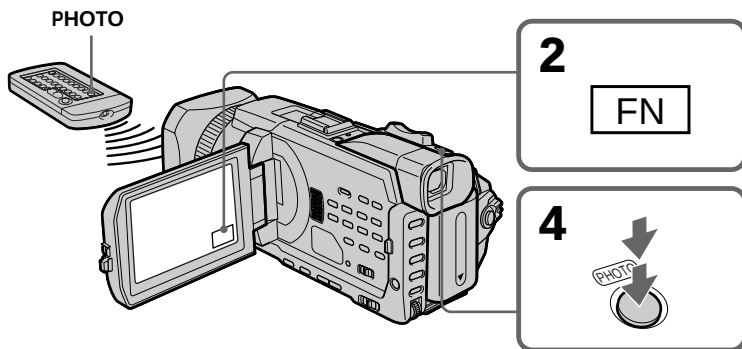
When you use the external flash (optional) as well
HOLOGRAM AF emits.

Recording still images on a “Memory Stick” – Memory Photo recording

Self-timer memory photo recording

You can record images on a “Memory Stick” with the self-timer. You can also use the Remote Commander for this operation.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only). Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press FN to display PAGE1.
- (3) Press SELFTIMER.
The  (self-timer) indicator appears on the screen.
- (4) Press PHOTO deeper.
Self-timer starts counting down from 10 with a beep. In the last two seconds of the countdown, the beep gets faster, then recording starts automatically.



To cancel the self-timer

Press SELFTIMER so that the  (self-timer) indicator disappears on the screen. You cannot stop the countdown.

Note

The self-timer is automatically canceled when:

- Self-timer recording is finished.
- The POWER switch is set to OFF (CHG) or VCR.

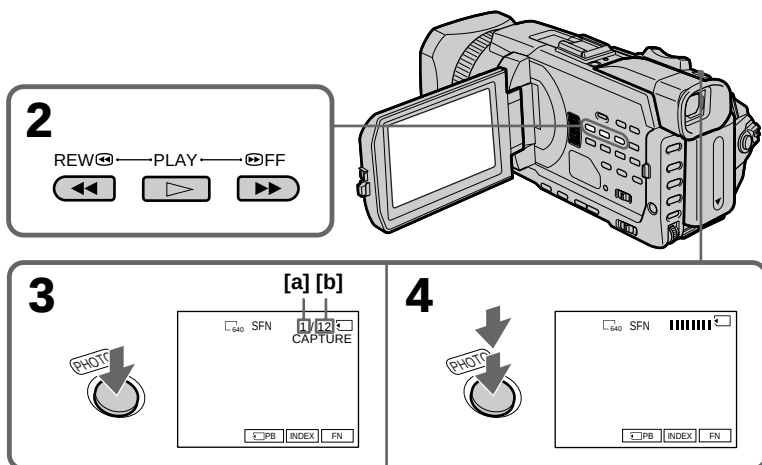
Recording images from a tape as still images

Your camcorder can read moving picture data recorded on a tape and record it as a still image on a "Memory Stick." Your camcorder can also capture moving picture data through the input connector and record it as a still image on a "Memory Stick."

Before operation

Insert a "Memory Stick" and the recorded tape into your camcorder.

- (1) Set the POWER switch to VCR.
- (2) Press **▶**. Moving pictures recorded on the tape are played back.
- (3) Press PHOTO lightly until the picture you want to capture from the tape freezes and CAPTURE appears on the screen. Recording does not start yet. To change from the selected image to another image, release PHOTO once and press it lightly again.
- (4) Press PHOTO deeper. The image displayed on the screen will be recorded on the "Memory Stick." Recording is complete when the bar scroll indicator disappears.



[a] : Number of the recorded images

[b] : Approximate number of the images that can be recorded on the "Memory Stick"

Recording images from a tape as still images

Image size of still images

Image size is automatically set to 640 × 480.

When the access lamp is lit or flashing

Do not shake or strike the unit. Also, do not turn the power off, eject the “Memory Stick.” Otherwise, image data may become damaged.

If “ FORMAT ERROR” appears on the screen

The inserted “Memory Stick” is incompatible with your camcorder because its format does not conform with your camcorder. Check the format of the “Memory Stick.”

If you press PHOTO lightly in the playback

Your camcorder stops momentarily.

Sound recorded on a tape

You cannot record audio from a tape.

Titles already recorded on cassettes

You cannot record titles on a “Memory Stick.” Titles do not appear while you are recording a still image with PHOTO.

Recording date/time

The recording data (date/time) when it is recorded on a “Memory Stick” is recorded. Various settings are not recorded.

Data codes recorded on a tape cannot be recorded on a “Memory Stick.”

When you press PHOTO on the Remote Commander

Your camcorder immediately records the image that is on the screen when you press the button.

Recording images from a tape as still images

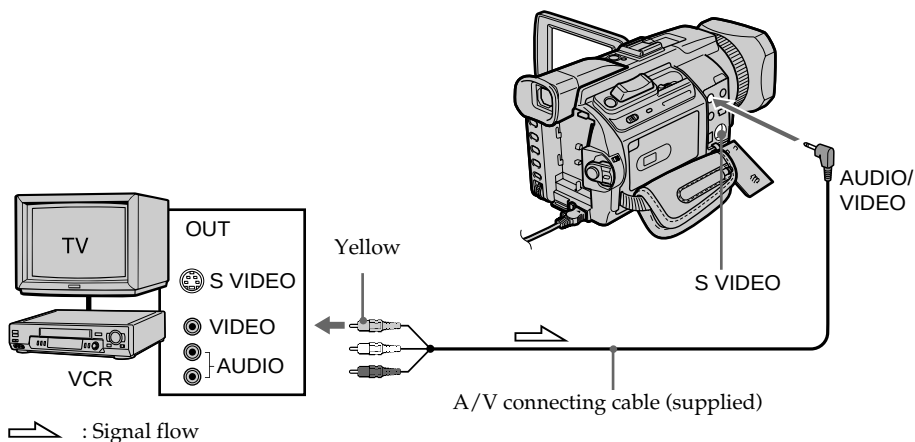
Recording a still image from external equipment

Before operation

Set DISPLAY in **ETC** to LCD in the menu settings. (The default setting is LCD.)

- (1) Set the POWER switch to VCR.
- (2) Play back the recorded tape, or turn the TV on to see the desired program.
The image of the external equipment is displayed on the screen.
- (3) Follow steps 3 and 4 on page 144.

Using the A/V connecting cable



Connect the yellow plug of the A/V connecting cable to the video jack on the VCR or the TV.

If your TV or VCR has an S video jack

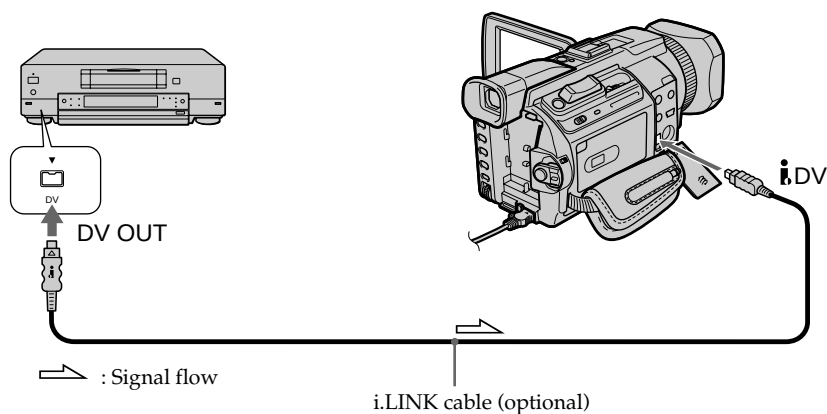
Pictures can be reproduced more faithfully by using an S video cable (optional).

With this connection, you do not need to connect the yellow (video) plug of the A/V connecting cable.

Connect an S video cable (optional) to the S video jacks of both your camcorder and the TV or VCR.

Recording images from a tape as still images

Using the i.LINK cable



Note

In the following instances, recording is interrupted or “ REC ERROR” is displayed, and recording is not possible. Reinsert the “Memory Stick” to record distortion-free images.

- When recording on a tape in a poor recording state, for example, on a tape that has been repeatedly used for dubbing.
- When attempting to input images that are distorted due to poor radio wave reception when a TV tuner unit is in use.

Superimposing a still image in the “Memory Stick” on an image

– MEMORY MIX

You can superimpose a still image you have recorded on the “Memory Stick” on the moving picture you are recording. You can record the superimposed images on a tape or a “Memory Stick.” (However, you can record only superimposed still images on the “Memory Stick.”)

M. CHROM (memory chroma key)

You can swap a blue area of a still image such as an illustration or a frame with a moving picture.

M. LUMI (memory luminance key)

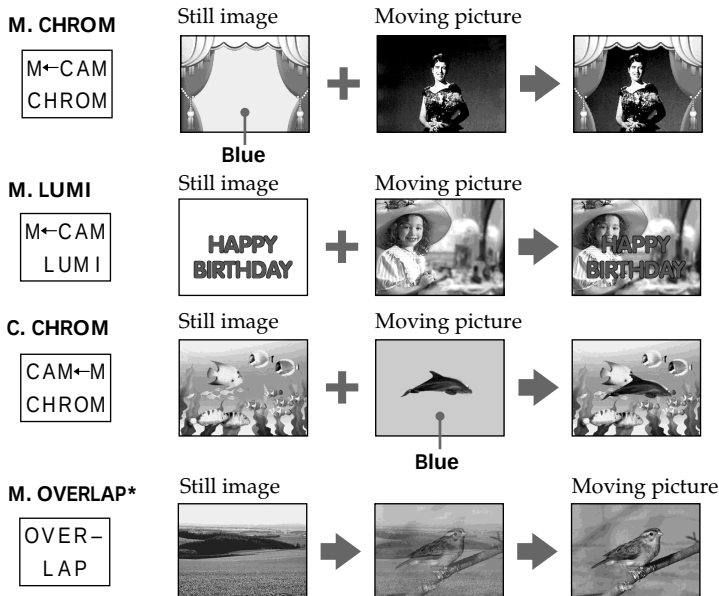
You can swap a brighter area of a still image such as a handwritten illustration or title with a moving picture. Record a title on the “Memory Stick” before a trip or event for convenience.

C. CHROM (camera chroma key)

You can superimpose a moving picture on a still image such as an image can be used as background. Shoot the subject against a blue background. The blue area of the moving picture will be swapped with a still image.

M. OVERLAP* (memory overlap)

You can make a moving picture fade in on top of a still image recorded on the “Memory Stick.”



* The superimposed image using Memory overlap can be recorded on tapes only.

Superimposing a still image in the “Memory Stick” on an image – MEMORY MIX

Recording superimposed images on a tape

Before operation

- Insert a tape for recording into your camcorder.
- Insert a “Memory Stick” recorded still images into your camcorder.

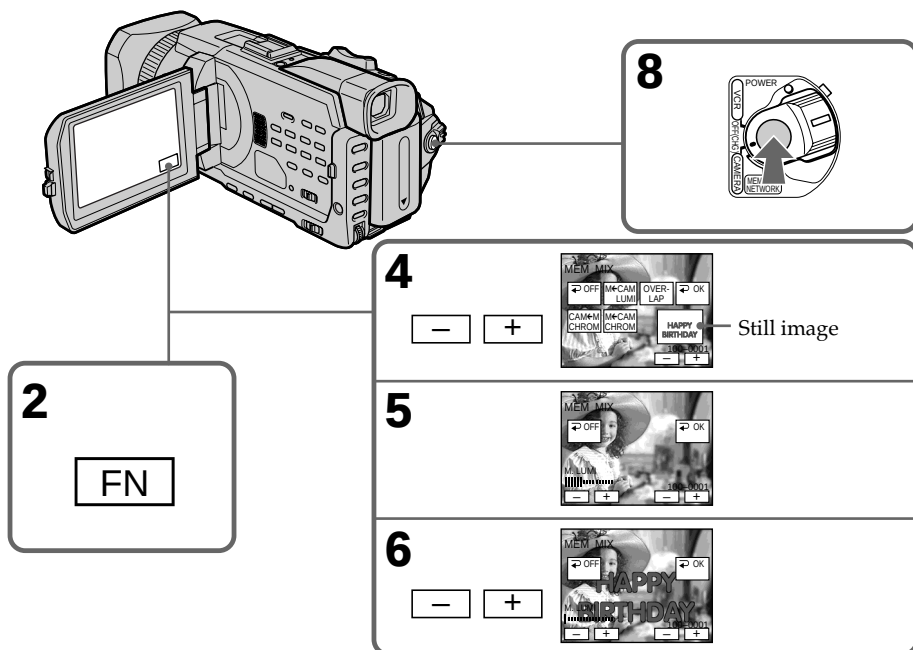
- (1) Set the POWER switch to CAMERA.
- (2) Press FN to display PAGE1.
- (3) Press MEM MIX. The last recorded or last composed image appears on the lower part of the screen as a thumbnail image.
- (4) Press –/+ on the right lower corner of the screen to select the still image which you want to superimpose.
 - : To see the previous image
 - +: To see the next image
- (5) Press a desired mode. The still image is superimposed on the moving picture.
- (6) Press –/+ on the left lower corner of the screen to adjust the effect, then press  OK to return to PAGE1.

M. CHROM:	Blue chroma key (only blue background portion) to extract a still image and superimpose it on a moving image
M. LUMI:	Brightness level used when extracting a still image and superimposing it on a moving image
C. CHROM:	Blue chroma key (only blue background portion) to extract a moving picture and superimpose it on a still image
M. OVERLAP:	No adjustment necessary

The fewer bars there are on the screen, the stronger the effect.

- (7) Press EXIT to return to FN.
- (8) Press START/STOP to start recording.

Superimposing a still image in the “Memory Stick” on an image – MEMORY MIX



To change the still image to be superimposed

Press -/+ on the right lower corner before step 6.

To cancel MEMORY MIX

Press $\rightarrow$ OFF to return to PAGE1.

Notes

- You cannot use the MEMORY MIX for moving pictures recorded on a “Memory Stick.”
- When the overlapping still image has a large amount of white, the thumbnail image of the picture may not be clear.
- You cannot change the mode setting. Press $\rightarrow$ OFF to return to PAGE1.

Image data modified on your computer or shot with other equipment

You may not be able to play back modified images with your camcorder.

When you record the still image without superimposing

Select M. LUMI. mode. Press <-/+ mark> until all bars are displayed. Only the still image will be displayed on the screen.

When you select M. OVERLAP

You cannot change the still image or the mode setting.

To record the superimposed image as a still image

Press PHOTO deeper in step 8 (You should set PHOTO REC in $\square$ to TAPE in the menu settings beforehand).

Superimposing a still image in the “Memory Stick” on an image – MEMORY MIX

Recording superimposed images on a “Memory Stick” as a still image

Before operation

Insert a “Memory Stick” recorded still images into your camcorder.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only). Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press FN and select PAGE2.
- (3) Press MEM MIX. The last recorded or last composed image appears on the lower part of the screen as a thumbnail image.
- (4) Press –/+ on the right lower corner of the screen to select the still image which you want to superimpose.
 - : To see the previous image
 - +: To see the next image
- (5) Press a desired mode. The still image is superimposed on the moving picture.
- (6) Press –/+ on the left lower corner of the screen to adjust the effect, then press $\Rightarrow$ OK to return to PAGE2.

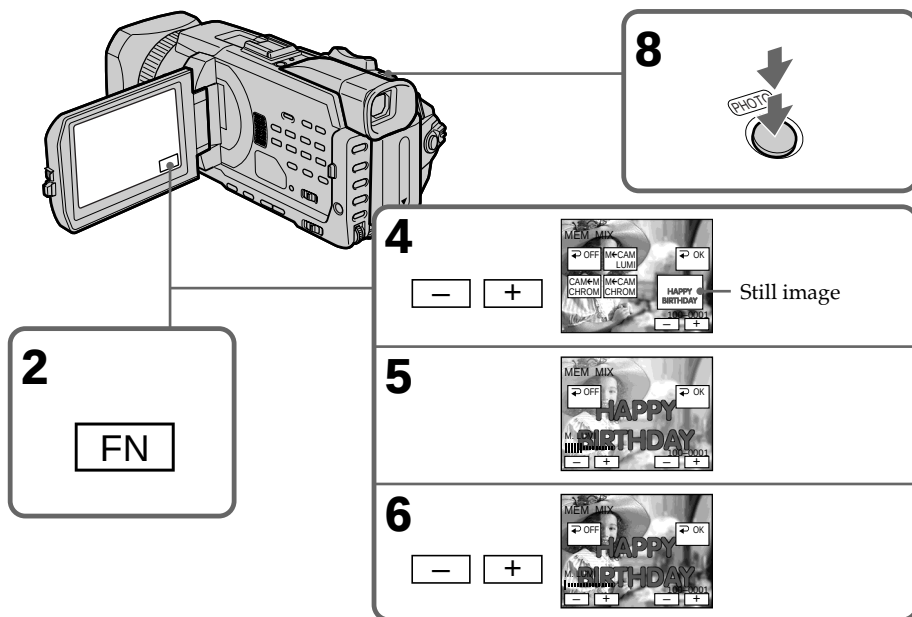
M. CHROM:	Blue chroma key (only blue background portion) to extract a still image and superimpose it on a moving image
M. LUMI:	Brightness level used when extracting a still image and superimposing it on a moving image
C. CHROM:	Blue chroma key (only blue background portion) to extract a moving picture and superimpose it on a still image

The fewer bars there are on the screen, the stronger the effect.

- (7) Press EXIT to return to FN.
- (8) Press PHOTO deeper to start recording.

The image displayed on the screen will be recorded on the “Memory Stick.”
Recording is complete when the bar scroll indicator disappears.

Superimposing a still image in the “Memory Stick” on an image – MEMORY MIX



To change the still image to be superimposed

Press $-/+$ on the right lower corner before step 6.

To cancel MEMORY MIX

Press $\rightarrow$ OFF to return to PAGE2.

Notes

- You cannot use MEMORY MIX for moving pictures recorded on a “Memory Stick.”
- When the overlapping still image has a large amount of white, the thumbnail image of the picture may not be clear.
- You cannot change the mode setting. Press $\rightarrow$ OFF to return to PAGE2.

Image size of still pictures

Image size is automatically set to 640 × 480.

Image data modified with your computers or shot with other equipment

You may not be able to play back modified images with your camcorder.

When recording images on a “Memory Stick” using the MEMORY MIX

The PROGRAM AE does not work. (The indicator flashes.)

The “Memory Stick” supplied with your camcorder stores 20 images

- For M. CHROM: 18 images (such as a frame) 100-0001~100-0018
- For C. CHROM: two images (such as a background) 100-0019~100-0020

Sample images

Sample images stored in the “Memory Stick” supplied with your camcorder are protected (p. 176).

Recording moving pictures on a “Memory Stick” – MPEG movie recording

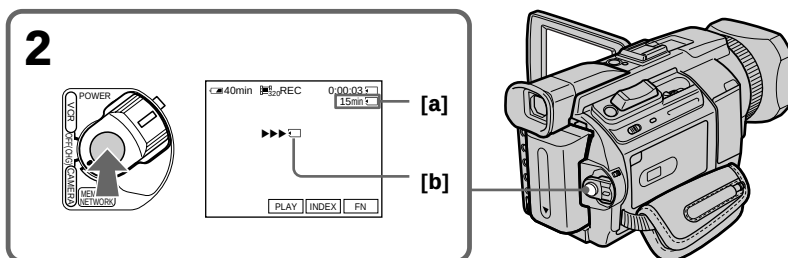
You can record moving pictures with sound on a “Memory Stick.”

You can record picture and sound continuously up to the capacity of a “Memory Stick” (MPEG MOVIE EX).

Before operation

Insert a “Memory Stick” into your camcorder.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only). Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press START/STOP. Your camcorder starts recording. The camera recording lamp located on the front of your camcorder lights up. The picture and sound are recorded up to the remaining capacity of the “Memory Stick.” For more information about recording time, see page 134.



[a]: Recording time can be recorded on the “Memory Stick”.

[b]: This indicator is displayed for five seconds after pressing START/STOP. This indicator is not recorded.

To stop recording

Press START/STOP.

Recording moving pictures on a “Memory Stick” – MPEG movie recording

Note

Sound is recorded in monaural.

When the POWER switch is set to MEMORY/NETWORK (DCR-TRV950 only)

The following functions do not work:

- Digital zoom
- Wide mode
- Fader
- Picture effect
- Digital effect
- Sports lesson of PROGRAM AE (The indicator flashes.)
- Title

When using an external flash (optional)

Turn the power of the external flash off when recording moving pictures on a “Memory Stick.” Otherwise, the charging sound for the flash may be recorded.

Recording date/time

The date/time are not displayed while recording. However, they are automatically recorded onto the “Memory Stick.”

To display the recording date/time, press the DATA CODE button during playback. You can also use the Remote Commander for this operation (p. 41). Various settings cannot be recorded.

During recording on a “Memory Stick”

Do not eject the cassette tape from your camcorder. During ejecting the tape, sound is recorded on the “Memory Stick.”

When the POWER switch is set to MEMORY/NETWORK (DCR-TRV950 only)

The angle of view is slightly larger compared with the angle of view when the POWER switch is set to CAMERA.

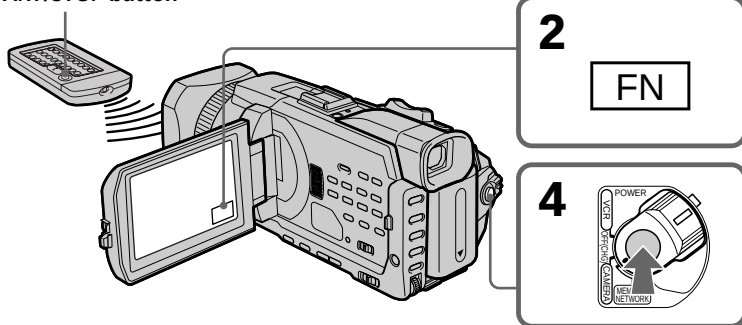
Recording moving pictures on a “Memory Stick” – MPEG movie recording

Self-timer MPEG movie recording

You can record images on a “Memory Stick” with the self-timer. You can also use the Remote Commander for this operation.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only). Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press FN to display PAGE1.
- (3) Press SELFTIMER.
The  (self-timer) indicator appears on the screen.
- (4) Press START/STOP.
Self-timer starts counting down from 10 with a beep. In the last two seconds of the countdown, the beep gets faster, then recording starts automatically.

START/STOP button



To stop the self-timer

Press START/STOP. To restart the self-timer, press START/STOP again.

To cancel the self-timer

Press SELFTIMER so that the  (self-timer) indicator disappears on the screen.

Note

The self-timer is automatically canceled when:

- Self-timer recording is finished.
- The POWER switch is set to OFF (CHG) or VCR.

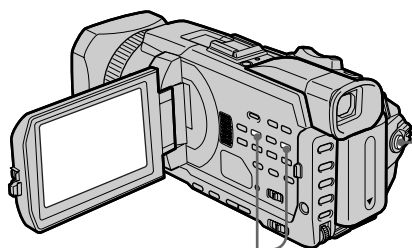
Recording pictures from a tape as a moving picture

Your camcorder can read moving picture data recorded on a tape and record it as a moving picture on a "Memory Stick." Your camcorder can also capture moving picture data through the input connector and record it as a moving picture on a "Memory Stick."

Before operation

Insert a "Memory Stick" and the recorded tape into your camcorder.

- (1) Set the POWER switch to VCR.
- (2) Press ►. The picture recorded on the tape is played back.
And press || at the scene where you want to start recording from.
- (3) Press START/STOP on your camcorder. The picture and sound are recorded up to the remaining capacity of the "Memory Stick." For more information about recording time, see page 134.



2

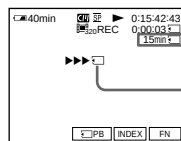
PLAY



PAUSE



3



[a]

[b]

[a]: The recording time can be recorded on the "Memory Stick."

[b]: This indicator is displayed for five seconds after pressing START/STOP. This indicator is not recorded.

To stop recording

Press START/STOP.

Recording pictures from a tape as a moving picture

Notes

- Sound recorded in 48 kHz is converted to 32 kHz sound when recording images from a tape to a “Memory Stick.”
- Sound recorded in stereo is converted to monaural sound when recording from a tape.

When the access lamp is lit or flashing

Do not shake or knock the unit. Also, do not turn the power off, eject the “Memory Stick.” Otherwise, image data may become damaged.

Titles already recorded on cassettes

You cannot record titles on a “Memory Stick.” Titles do not appear while you are recording moving picture with START/STOP.

If “ AUDIO ERROR” is displayed

Sound that cannot be recorded by your camcorder has been recorded. Connect the A/V connecting cable to input images from external equipment used to play back the image (p. 158).

Recording date/time

The recording data (date/time) when it is recorded on a “Memory Stick” is recorded. Various settings are not recorded.

Data codes recorded on a tape cannot be recorded on a “Memory Stick.”

Recording pictures from a tape as a moving picture

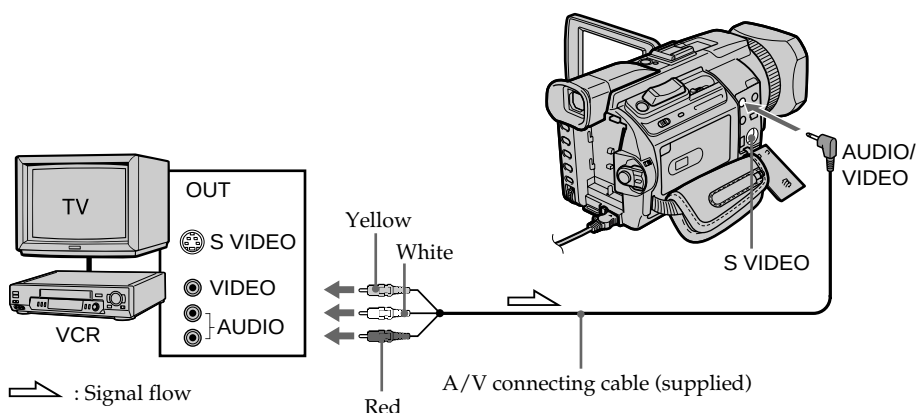
Recording a moving picture from external equipment

Before operation

Set DISPLAY in **ETC** to LCD in the menu settings. (The default setting is LCD.)

- (1) Set the POWER switch to VCR.
- (2) Play back the recorded tape, or turn the TV on to see the desired program.
The image of the other equipment is displayed on the screen.
- (3) Follow the procedure on page 156 from the step 3 onwards at the point where you want to start recording from.

Using the A/V connecting cable



If your TV or VCR has an S video jack

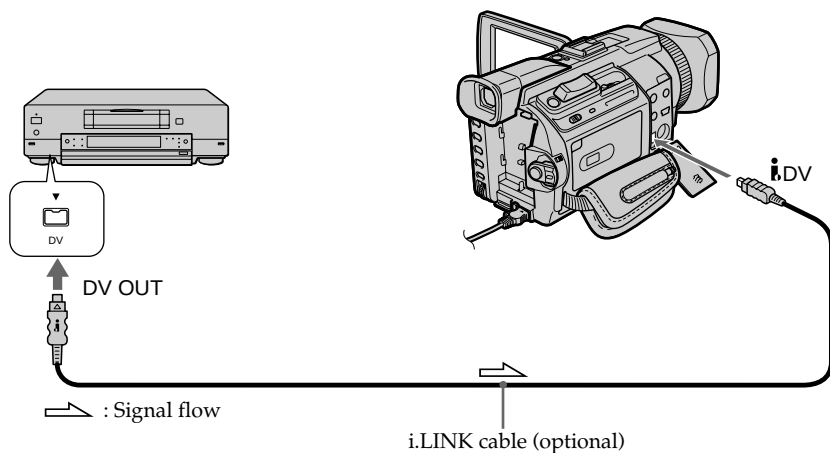
Pictures can be reproduced more faithfully by using an S video cable (optional).

With this connection, you do not need to connect the yellow (video) plug of the A/V connecting cable.

Connect an S video cable (optional) to the S video jacks of both your camcorder and the TV or VCR.

Recording pictures from a tape as a moving picture

Using the i.LINK cable



Note

In the following instances, "❏ REC ERROR" is displayed and you cannot record pictures.

- When recording on a tape in a poor recording state, for example, on a tape that has been repeatedly used for dubbing.
- When attempting to input images that are distorted due to poor radio wave reception when a TV tuner unit is in use.
- When the input signal is cut off.

Recording edited pictures from a tape as a moving picture – Digital program editing (on a “Memory Stick”)

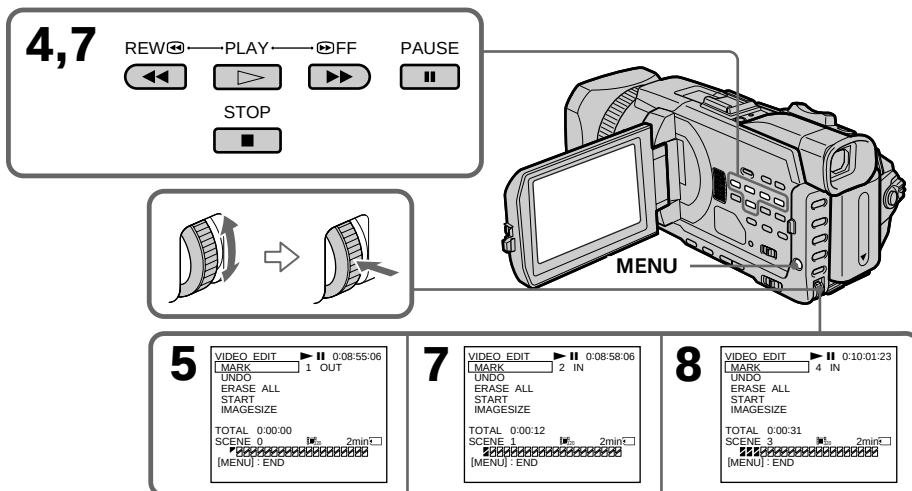
You can duplicate selected scenes (programs) for editing onto a “Memory Stick.”

Making the program

Before operation

Insert a “Memory Stick” and a recorded tape into your camcorder.

- (1) Set the POWER switch to VCR.
- (2) Press MENU, then turn the SEL/PUSH EXEC dial to set VIDEO EDIT in ETC to MEMORY, then press the dial (p.217).
- (3) Turn the SEL/PUSH EXEC dial to select IMAGESIZE and select the desired image size, then press the dial.
- (4) Search for the beginning of the first scene you want to insert using the video operation buttons, then pause playback.
You can fine-adjust one frame at a time with EDITSEARCH.
- (5) Press MARK on the Remote Commander, or turn the SEL/PUSH EXEC dial to select MARK, then press the dial.
The IN point of the first program is set, and the top part of the program mark changes to light blue.
- (6) Search for the end of the first scene you want to insert using the video operation buttons, then pause playback.
You can fine-adjust one frame at a time with EDITSEARCH.
- (7) Press MARK on the Remote Commander, or the SEL/PUSH EXEC dial.
The OUT point of the first program is set, then the bottom part of the program mark changes to light blue.
- (8) Repeat steps 4 to 7, then set the program.
When one program is set, the program mark changes to light blue.
You can set 20 programs in maximum.



Recording edited pictures from a tape as a moving picture – Digital program editing (on a “Memory Stick”)

Erasing the program you have set

Erase OUT first and then IN of the last program.

- (1) Turn the SEL/PUSH EXEC dial to select UNDO, then press the dial.
- (2) Turn the SEL/PUSH EXEC dial to select EXECUTE, then press the dial.
The last set program mark flashes, then the setting is canceled.

To cancel erasing

Select RETURN with the SEL/PUSH EXEC dial in step 2.

Erasing all programs

- (1) Turn the SEL/PUSH EXEC dial to select ERASE ALL, then press the dial.
- (2) Turn the SEL/PUSH EXEC dial to select EXECUTE, then press the dial.
All the program marks flash, then the settings are canceled.

To cancel erasing all programs

Select RETURN with the SEL/PUSH EXEC dial in step 2.

To cancel a program you have set

Press MENU.

The program is stored in memory until the tape is ejected.

Notes

- You cannot dub the titles, display indicators, or the contents of cassette memory.
- You cannot operate recording during the digital program editing on a “Memory Stick.”

If the tape has a blank portion

You cannot set IN or OUT on the portion

If there is a blank portion between IN and OUT on the tape

The total time code may not be displayed correctly.

During making a program

If you eject the cassette, the program will be erased.

Recording edited pictures from a tape as a moving picture – Digital program editing (on a “Memory Stick”)

Performing the program (Dubbing on a “Memory Stick”)

- (1) Turn the SEL/PUSH EXEC dial to select START, then press the dial.
- (2) Turn the SEL/PUSH EXEC dial to select EXECUTE, then press the dial.
Search for the beginning of the first program, then start dubbing.
The program mark flashes.
The SEARCH indicator appears during search and the EDITING indicator appears during writing of data on your camcorder, and REC appears during dubbing on the screen.
The program mark changes to light blue after dubbing is complete.
When the dubbing ends, your camcorder automatically stops.

To stop dubbing during editing

Press ■ using the video operation buttons.

The program you made is recorded on a “Memory Stick” up to the place where you pressed ■.

To end the Digital program editing

Your camcorder stops when the dubbing ends. Then the display returns to VIDEO EDIT in the menu settings.

Press MENU to erase the menu display.

When the program to operate the Digital program editing has not been made.

You cannot press START.

When the “Memory Stick” does not have enough space to record

“LOW MEMORY ” appears on the screen. However, you can record pictures up to the time indicated.

When the “Memory Stick” has no space to record

“MEMORY FULL” appears on the screen.

When a “Memory Stick” is not set

“NO MEMORY STICK” appears on the screen.

When the write-protect switch on the “Memory Stick” is set to LOCK

“MEMORY STICK LOCKED” appears on the screen.

Copying still images from a tape

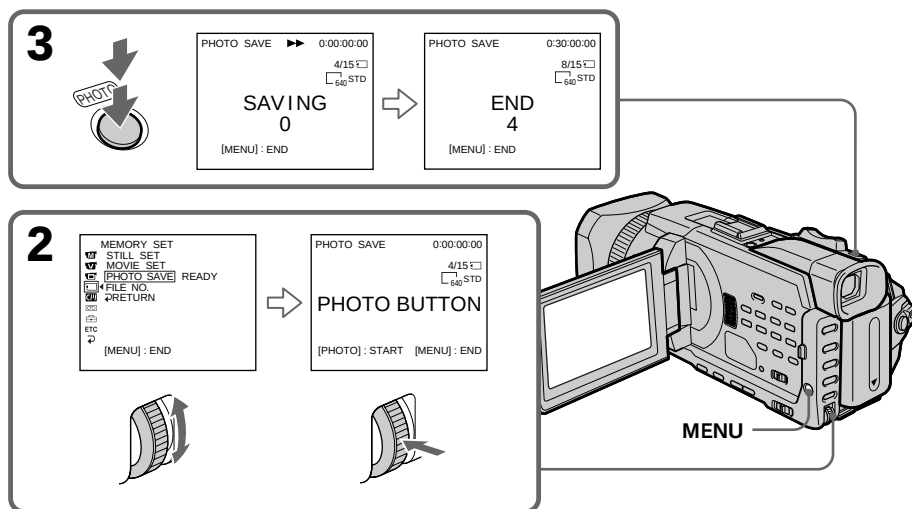
– PHOTO SAVE

Using the search function, you can automatically capture only still images from tapes and record them on a “Memory Stick” in sequence.

Before operation

- Insert a recorded tape into your camcorder and rewind the tape.
- Insert a “Memory Stick” into your camcorder.

- (1) Set the POWER switch to VCR.
- (2) Press MENU, then turn the SEL/PUSH EXEC dial to select PHOTO SAVE in , then press the dial (p. 212).
PHOTO BUTTON appears on the screen.
- (3) Press PHOTO deeper. The still image from the tape is recorded on the “Memory Stick.” The number of still images copied is displayed. END is displayed when copying ends.



To stop copying

Press  using the video operation buttons or press MENU.

When the “Memory Stick” becomes full

“MEMORY FULL” appears on the screen, and copying stops. Insert another “Memory Stick” and repeat the procedure from step 2.

Copying still images from a tape – PHOTO SAVE

Image size of still images

Image size is automatically set to 640 × 480.

When the access lamp is lit or flashing

Do not shake or knock your camcorder. As well do not turn the power off, eject the “Memory Stick.” Otherwise, image data may become damaged.

If the write-protect switch on the “Memory Stick” is set to LOCK

“NOT READY” appears when you select the item in the menu settings.

When you change the “Memory Stick” during copying

Your camcorder resumes copying from the last image recorded on the previous “Memory Stick.”

Viewing still images

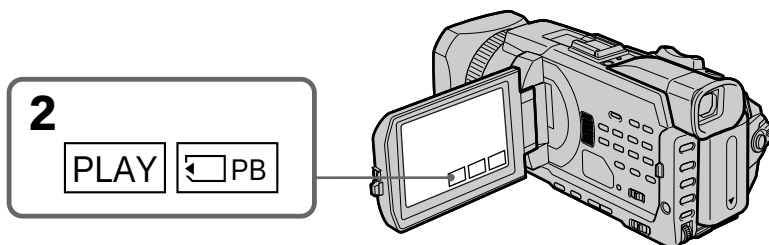
- Memory photo playback

You can play back still images recorded on a "Memory Stick." You can also play back six images including moving pictures in order at a time by selecting the index screen. You can also use the Remote Commander for this operation.

Before operation

Insert a "Memory Stick" into your camcorder.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only) or VCR.
Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press PLAY or  PB. The last recorded image is displayed.
- (3) Press -/+ on your camcorder to select the desired still image.
-: To see the previous image
+: To see the next image



To stop memory photo playback

Press CAM, VCR on your camcorder or MEMORY PLAY button on the Remote Commander.

Viewing still images – Memory photo playback

You may not be able to play back images with your camcorder:

- when playing back image data modified on your computer.
- when playing back image data shot with other equipment.

Notes on the file name

- The directory number may not be displayed and only the file name may be displayed if the structure of the directory does not conform to the DCF standard.
- “ DIRECTORY ERROR” may appear on screen if the structure of the directory does not conform to the DCF standard. While this message appears, you can play back images but cannot record them on the “Memory Stick.”
- The file name flashes on the screen if the file is corrupted or the file is unreadable.

To play back recorded images on a TV screen

- Before operation, connect your camcorder to the TV with the A/V connecting cable supplied with your camcorder.
- When operating memory photo playback on a TV or on the LCD screen, image quality may appear to have deteriorated. This is not a malfunction. The image data is as good as ever.
- Turn the audio volume of the TV down before operation, or noise (howling) may be output from the TV speakers.

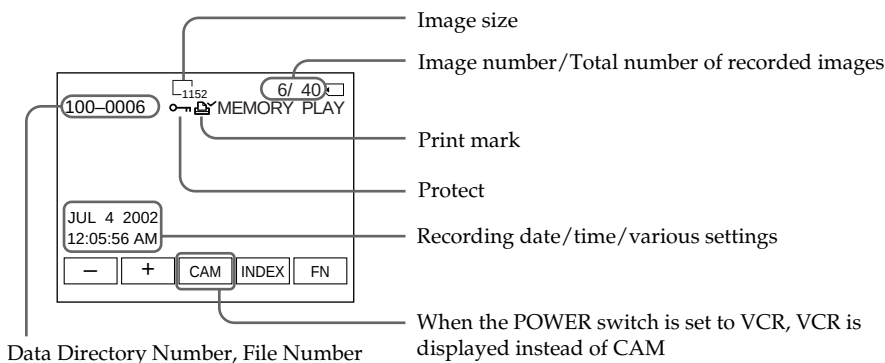
Still images

You can select still images also with –/+ on PAGE1/PAGE2/PAGE3.

When no still image is recorded on the “Memory Stick”

When you press MEMORY PLAY on the Remote Commander, “ NO FILE” appears.

Screen indicators during still image playback



Recording data

You can view recording data (date/time or various settings when recorded) when you press DATA CODE. You can also use the Remote Commander for this operation (p. 41).

To make screen indicators disappear

Press DISPLAY/TOUCH PANEL.

Viewing still images – Memory photo playback

Playing back six recorded images at a time (index screen)

You can play back six recorded images at a time. This function is especially useful when searching for a particular image.

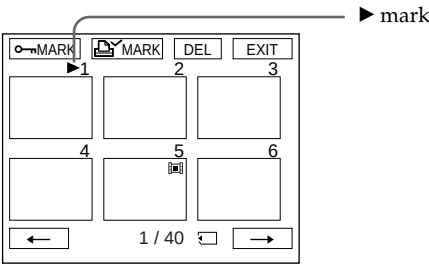
Before operation

Insert a “Memory Stick” into your camcorder.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only) or VCR.
Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press INDEX to display the index screen.

A red ► mark appears above the image that is displayed before changing to the index screen mode.

- ◀ : To display the previous 6 images
- ▶ : To display the following 6 images



“Memory Stick” Operations

To return to FN

Press EXIT.

To return to the normal playback screen (single screen)

Press the image you want to display.

Note

When displaying the index screen, the number appears above each image. This indicates the order in which images are recorded on the “Memory Stick.” These numbers are different from the data file names.

Image data modified on your computer or shot with other equipment

These files are sometimes not displayed on the index screen.

Viewing moving pictures

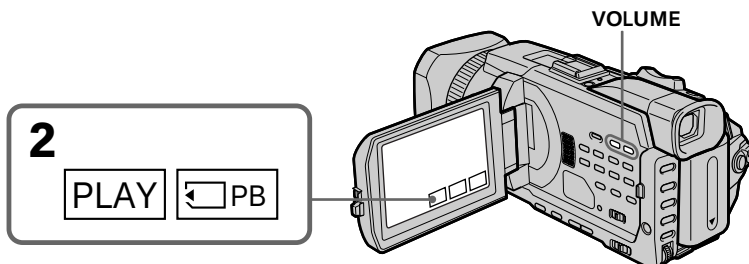
– MPEG movie playback

You can play back moving pictures recorded on a “Memory Stick.” You can also play back six images including still images in order at a time by selecting the index screen.

Before operation

Insert a “Memory Stick” into your camcorder.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only) or VCR.
Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press PLAY or  PB. The last recorded image is displayed.
- (3) Press +/– to select the desired moving pictures.
– : To see the previous picture
+ : To see the next picture
- (4) Press MPEG   to start playback.
- (5) To adjust the volume, press either of the two buttons on VOLUME.
– : To turn down
+ : To turn up
When you close the LCD panel, sound is muted.



To stop MPEG movie playback

Press MPEG  .

Note

You may not be able to play back images with your camcorder:

- When playing back image data modified on your computer.
- When playing back image data shot with other equipment.

To play back recorded images on a TV screen

- Before operation connect your camcorder to the TV with the A/V connecting cable supplied with your camcorder.
- Turn the audio volume of the TV down before operation, or noise (howling) may be output from the TV speakers.

Moving pictures

You can select moving pictures also with –/+ on PAGE1/PAGE2/PAGE3.

When no image is recorded on the “Memory Stick”

When you press MEMORY PLAY on the Remote Commander, the message “ NO FILE” appears.

Viewing moving pictures – MPEG movie playback

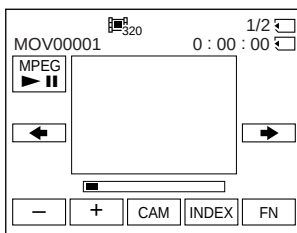
Playing back a moving picture from the desired part

The moving picture recorded on a “Memory Stick” is divided into 23 parts. You can select every each one point and play back pictures.

Before operation

Insert a “Memory Stick” into your camcorder.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only) or VCR.
Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press PLAY or  PB. The last recorded image is displayed.
- (3) Press -/+ to select the desired moving pictures.
- : To see the previous picture
+ : To see the next picture
- (4) Press  /  to select the point where you want to play back.
 : To see previous part
 : To see next part



- (5) Press MPEG   to start playback.

To stop MPEG movie playback

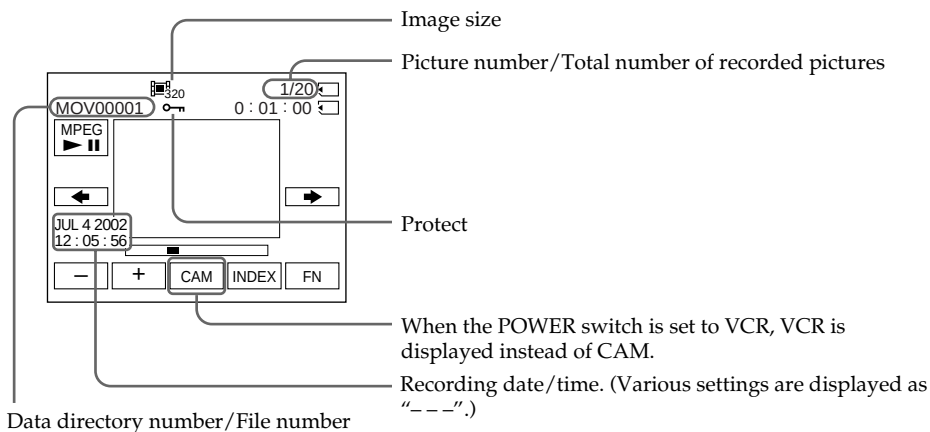
Press MPEG  

When recording time is too short

The moving picture may not be divided into 23 parts.

Viewing moving pictures – MPEG movie playback

Screen indicators during moving picture playback



Recording date/time

To display the recording date/time, press DATA CODE. You can also use the Remote Commander for this operation. (p. 41)

To make screen indicator disappear

Press DISPLAY/TOUCH PANEL.

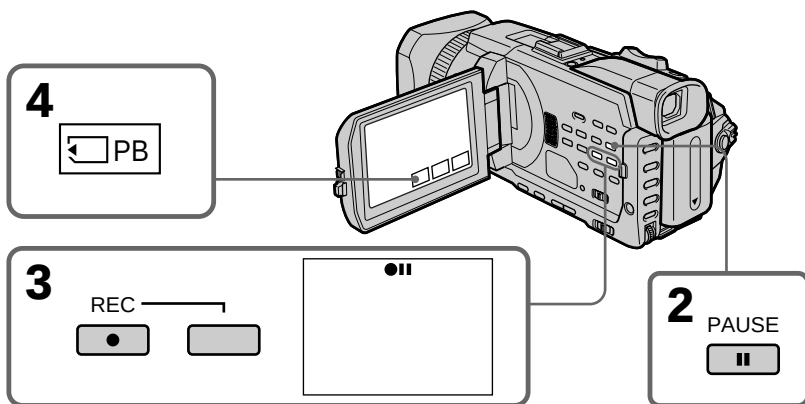
Copying images recorded on a “Memory Stick” to a tape

You can copy images recorded on a “Memory Stick” and record them to a tape.

Before operation

Insert a “Memory Stick” and a tape for recording into your camcorder.

- (1) Set the POWER switch to VCR.
- (2) Using the video control buttons, search a point where you want to record the desired images. Set the tape to playback pause.
- (3) Press ● REC and the button on its right simultaneously on your camcorder. The tape is set to the recording pause.
- (4) Press □ PB. The last recorded image is displayed.
- (5) Press -/+ to select the desired image.
 - : To see the previous image
 - + : To see the next image
- (6) Press II to start recording and press II again to stop.
 - appears on the screen during recording.
- (7) If you have more to copy, repeat steps 5 and 6.



To stop copying in the middle

Press ■.

Copying images recorded on a “Memory Stick” to a tape

During copying

You cannot operate the following functions:

- MEMORY PLAY
- MEMORY INDEX
- MEMORY DELETE
- MEMORY +/-

Note on the index screen

You cannot record the index screen.

If you press EDITSEARCH during pause

Memory playback stops.

Image data modified on your computers or shot with other equipment

You may not be able to copy modified images with your camcorder.

When copying movies

After step 6, press MPEG ►|| and play back the image.

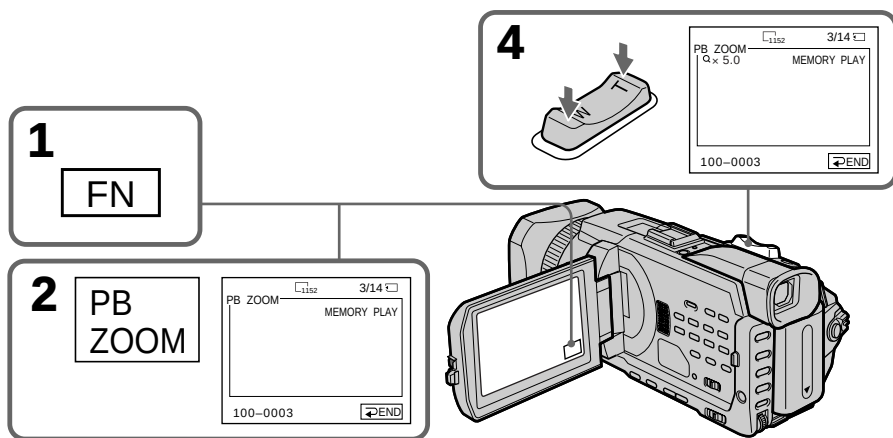
Enlarging still images recorded on a “Memory Stick” – Memory PB ZOOM

You can enlarge still images recorded on a “Memory Stick.” You can select and view a desired part from the enlarged still image. Also, you can copy the desired part of the enlarged still image to tapes or a “Memory Stick”.

Before operation

Insert a “Memory Stick” into your camcorder.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only). Press FN to display PAGE1 during the memory playback. When you set the POWER switch to VCR, press FN and select PAGE2 during the memory playback.
- (2) Press PB ZOOM. PB ZOOM screen appears.
- (3) Press the area that you want to enlarge in the frame on the PB ZOOM screen. The area you pressed moves to the center of the screen, and the playback image is enlarged approximately at twice the size. If you press the other area, the area moves to the center of the screen.
- (4) Adjust the zoom ratio by the power zoom lever.
You can enlarge the image from approximately 1.1 times up to five times its size.
W : Decreases the zoom ratio.
T : Increases the zoom ratio.



To cancel PB ZOOM

Press END.

Enlarging still images recorded on a “Memory Stick” – Memory PB ZOOM

The PB ZOOM is canceled when executing the following operations:

- MENU
- MEMORY PLAY*
- MEMORY INDEX*
- MEMORY +/-*

* When these functions are selected by the Remote Commander.

Moving pictures recorded on a “Memory Stick”

The PB ZOOM does not work.

To record the still image processed by Memory PB ZOOM on a “Memory Stick”

Press PHOTO to record the still image processed by PB ZOOM. (Images are recorded at 640 × 480 size.)

In the PB ZOOM mode

If you press DISPLAY/TOUCH PANEL button, the frame on the PB ZOOM screen disappears. You cannot move the part you pressed to the center of the screen.

Edge of the enlarged image

The edge of the enlarged image cannot be displayed at the center of the screen.

To record an image processed on PB ZOOM on tapes

Follow the procedure on page 171 and execute the PB ZOOM after step 5.

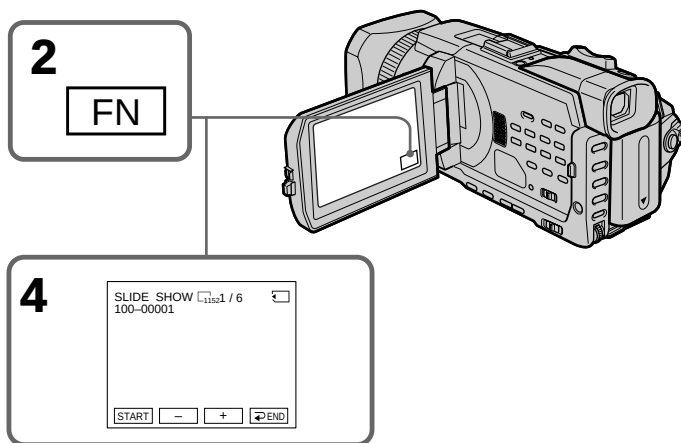
Playing back images in a continuous loop – SLIDE SHOW

You can automatically play back images in sequence. This function is useful especially when checking recorded images or during a presentation.

Before operation

Insert a “Memory Stick” into your camcorder.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only). Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press FN and select PAGE3.
- (3) Press SLIDE SHOW.
- (4) Press START. Your camcorder plays back the images recorded on the “Memory Stick” in sequence.



To stop the slide show

Press END.

To pause during a slide show

Press PAUSE.

To return to FN

Press END to return to PAGE3, then press EXIT.

To start the slide show from a particular image

Select the desired image using -/+ buttons before step 4.

To view recorded images on TV

Before operation connect your camcorder to a TV with the A/V connecting cable supplied with your camcorder.

If you change the “Memory Stick” during operation

The slide show does not operate. If you change the “Memory Stick,” be sure to follow the steps again from the beginning.

Preventing accidental erasure

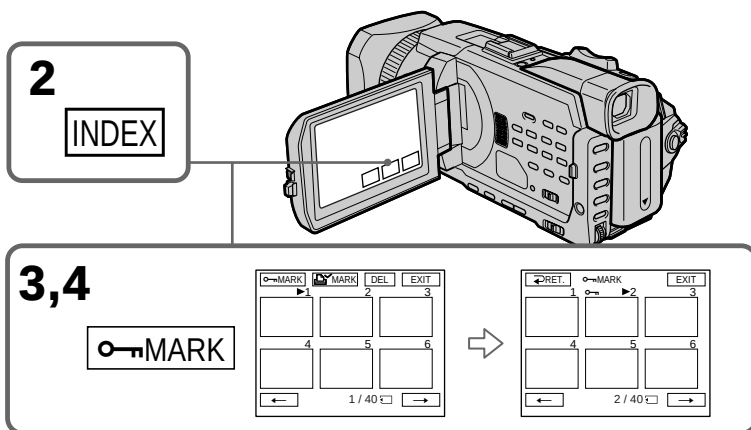
- Image protection

You can protect selected images to prevent accidental erasure of important images.

Before operation

Insert a "Memory Stick" into your camcorder.

- (1) Set the POWER switch to MEMORY / NETWORK (DCR-TRV950 only) or VCR.
Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press INDEX on your camcorder to display the index.
- (3) Press  MARK. The screen to protect the image appears.
- (4) Press the image you want to protect. A "" appears on the protected image.



To return to FN

Press EXIT.

To cancel image protection

Press the image you want to cancel image protection in step 4 again. The "" disappears.

Note

Formatting erases all information on the "Memory Stick," including the protected image data. Before formatting a "Memory Stick," check its contents.

If the write-protect switch on the "Memory Stick" is set to LOCK

You cannot protect images.

Deleting images – DELETE

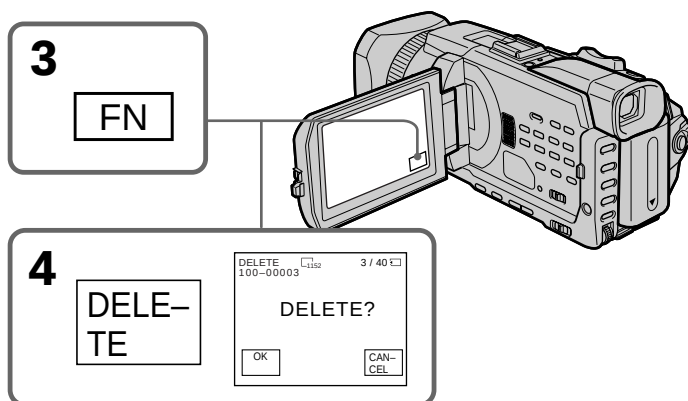
You can delete images stored in a “Memory Stick.” You can delete all images or only selected images.

Deleting selected images

Before operation

Insert a “Memory Stick” into your camcorder.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only) or VCR.
Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Play back the image you want to delete.
- (3) Press FN to display PAGE1.
- (4) Press DELETE. “DELETE?” appears on the LCD screen.
- (5) Press OK. The selected image is deleted.



To return to FN

Press EXIT.

To cancel deleting an image

Press CANCEL in step 5.

Notes

- To delete a protected image, first cancel image protection.
- Once you delete an image, you cannot restore it. Before deleting an image, carefully check the image.

If the write-protect switch on the “Memory Stick” is set to LOCK

You cannot delete images.

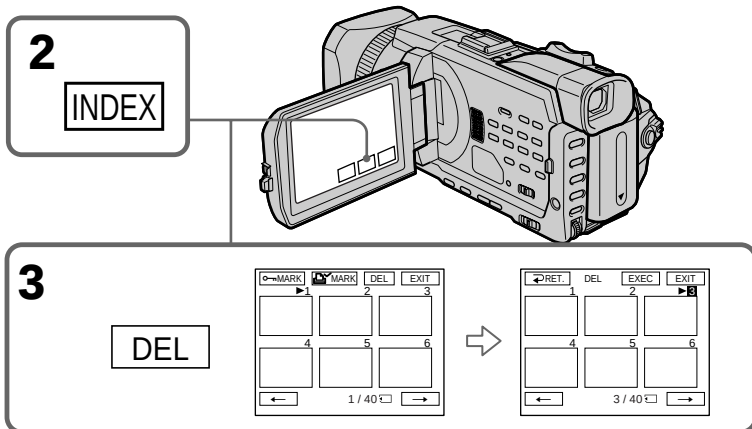
Deleting images – DELETE

Deleting selected images on the index screen

Before operation

Insert a “Memory Stick” into your camcorder.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only). Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press INDEX to display the index screen.
- (3) Press DEL. Then press the images you want to delete. The number of the selected image is highlighted.
- (4) Press EXEC. “DELETE?” appears on the LCD screen.
- (5) Press OK. The selected images are deleted.



To return to FN

Press EXIT.

To cancel deleting an image

Press CANCEL in step 5.

Deleting images – DELETE

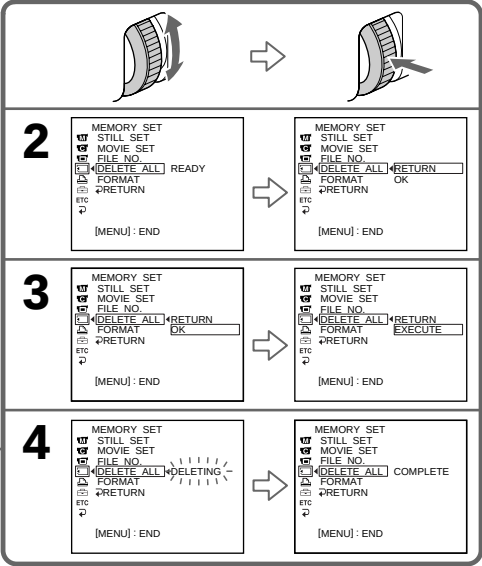
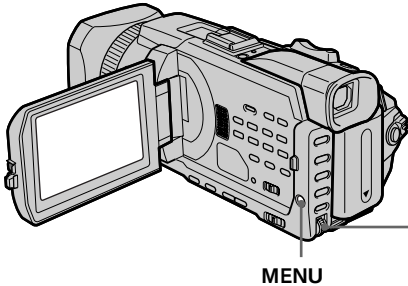
Deleting all images

You can delete all unprotected images in the “Memory Stick.”

Before operation

Insert a “Memory Stick” into your camcorder.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only). Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press MENU, then turn the SEL/PUSH EXEC dial to select DELETE ALL in , then press the dial (p. 212).
- (3) Turn the SEL/PUSH EXEC dial to select OK, then press the dial. OK changes to EXECUTE.
- (4) Turn the SEL/PUSH EXEC dial to select EXECUTE, then press the dial. DELETING flashes on the screen. When all unprotected images are deleted, COMPLETE is displayed.



“Memory Stick” Operations

To cancel deleting all the images in the “Memory Stick”

Select RETURN in step 3 or 4.

While DELETING appears

Do not turn the POWER switch or press any buttons.

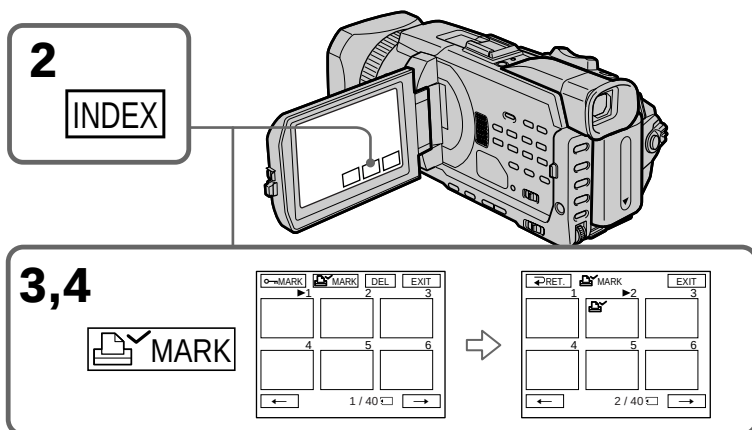
Writing a print mark – PRINT MARK

You can specify a recorded still image to print out by writing a print mark. This function is useful for printing out still images later.
Your camcorder conforms to the DPOF (Digital Print Order Format) standard for specifying still images to print out.

Before operation

Insert a “Memory Stick” into your camcorder.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only) or VCR.
Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press INDEX to display the index screen.
- (3) Press  MARK. The screen used to write a print mark appears.
- (4) Press the image for which you want to write a print mark. A “ ” appears on the selected image.



To return to FN

Press EXIT.

To cancel writing print marks

Press the image for which you want to cancel the print mark set in step 4 again. The  disappears.

If the write-protect switch on the “Memory Stick” is set to LOCK

You cannot write print marks on still images.

Moving pictures

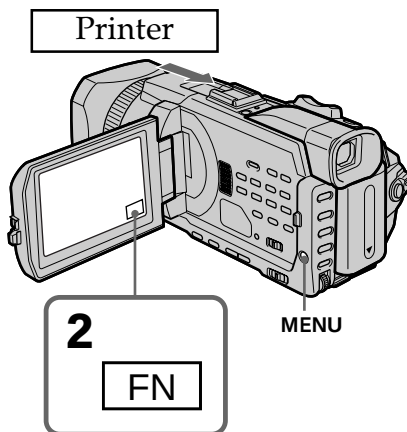
You cannot write print marks on moving pictures.

Using the optional printer

You can use the optional printer on your camcorder to print images on print paper. For details, refer to the operating instructions of the printer. There are various ways of printing still images. The following describes the setup for printing with the DATE/DAY & TIME information superimposed and the print setup required to select 9PIC PRINT.

Before operation

- Insert a recorded "Memory Stick" into your camcorder.
- Attach the optional printer to your camcorder as illustrated.

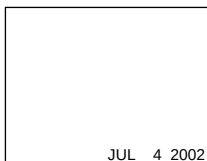


Inserting DATE/DAY & TIME

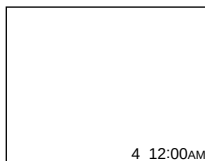
You can print the recorded DATE/DAY & TIME data on the print paper.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only). Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press MENU, then turn the SEL/PUSH EXEC dial to select DATE/TIME in , then press the dial (p. 213).
- (3) Turn the SEL/PUSH EXEC dial to select the desired mode.

DATE



DAY & TIME



Using the optional printer

Selecting 9PIC PRINT

You can make 9 stickers on a single sheet when you print images recorded on a "Memory Stick" in 9PIC PRINT.

- (1) Set the POWER switch to MEMORY/NETWORK (DCR-TRV950 only). Make sure that the LOCK switch is set to the further side (unlock position).
- (2) Press FN and select PAGE3.
- (3) Press 9PIC PRINT.
- (4) Press the desired mode.

SAME PICS



MULTI PICS or MARKED PICS*



* Nine still images with print marks are printed together.

Moving pictures recorded on a "Memory Stick"

You cannot print moving pictures. When there are no files other than moving pictures, "NO STILL IMAGE FILE" appears on the screen.

When the "Memory Stick" has no files

"NO FILE" appears on the screen.

When there are no files with a PRINT MARK

"NO PRINT MARK" appears on the screen.

Images processed by 9PIC PRINT

You cannot insert a DATE/TIME indicator.

Images recorded in the MULTI SCRIN

You can print images recorded in the multi screen mode on sticker type print paper. However, each frame cannot be properly adjusted to the frames on the print paper.

Viewing images on your computer

– Introduction

There are the following ways of connecting the camcorder to a computer in order to view images saved on the “Memory Stick” or recorded on the tape on your computer.

To view images on a computer which has a “Memory Stick” slot, first remove the “Memory Stick” from the camcorder and then insert it into the computer’s “Memory Stick” slot.

	Camcorder Connection jack	Connection cable	Computer environment requirements
Tape stills and movies	USB jack	USB cable (supplied)	USB connector, editing software
	i.LINK (DV Interface)	i.LINK cable (optional)	DV connector, editing software
“Memory Stick” stills and movies	USB jack	USB cable (supplied)	USB connector, editing software

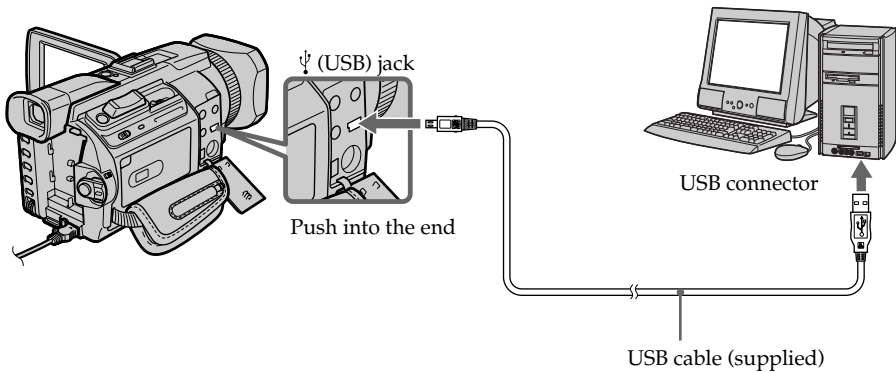
When connecting to a computer via the USB jack, complete installation of the USB driver before connecting the camcorder to the computer. If you connect the camcorder to the computer first, you will not be able to install the USB driver correctly.

For details about your computer’s connectors and editing software, contact the computer manufacturer.

Viewing images recorded on a tape

When connecting to a computer using the USB jack

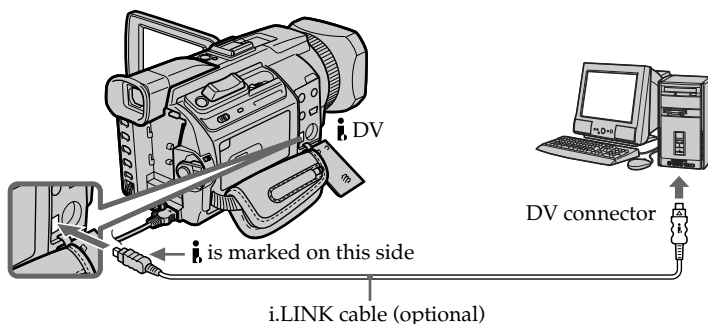
For more information, see page 186.



Viewing images on your computer – Introduction

When connecting to a computer using the i.LINK (DV interface)

Your computer must have a DV connector and editing software installed that can read video signals.

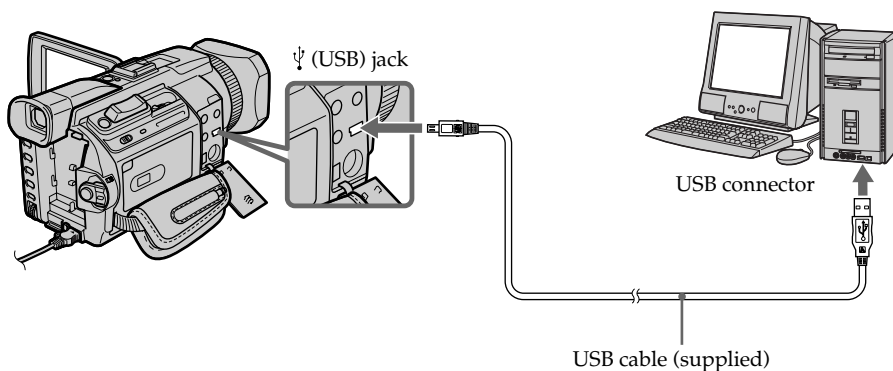


Viewing images recorded on a “Memory Stick”

When connecting to a computer using the USB jack

There are two methods of USB connection, NORMAL and PTP. The default setting is NORMAL. Here we explain how to use the camcorder with a standard USB connection (NORMAL).

See page 186 when using Windows and page 201 when using Macintosh.



You can also use a Memory Stick Reader/Writer (optional).

When connecting to a computer without a USB jack

Use an optional floppy disk adaptor for a Memory Stick or a PC card adaptor for a Memory Stick.

When purchasing an accessory, check its catalog beforehand for the recommended operating environment.

Notes on using your computer

“Memory Stick”

- “Memory Stick” operations on your camcorder cannot be assured if a “Memory Stick” formatted on your computer is used on your camcorder, or if the “Memory Stick” in your camcorder was formatted from your computer when the USB cable was connected.
- Do not compress the data on the “Memory Stick.” Compressed files cannot be played back on your camcorder.

Software

- Depending on your application software, the file size may increase when you open a still image file.
- When you load an image modified using retouching software from your computer to your camcorder or when you directly modify the image on your camcorder, the image format will differ so a file error indicator may appear and you may be unable to open the file.

Communications with your computer

Communications between your camcorder and your computer may not recover after recovering from Suspend, Resume, or Sleep.

Connecting your camcorder to your computer using the USB cable – For Windows users

Complete installation of the USB driver before connecting the camcorder to the computer. If you connect the camcorder to the computer first, you will not be able to install the USB driver correctly.

When connecting to a computer using the USB cable

You must **install a USB driver** onto your computer in order to connect the camcorder to the computer's USB connector. The USB driver can be found on the CD-ROM supplied, along with the application software required for viewing images.

If you connect your camcorder and your computer using the USB cable, you can view pictures live from your camcorder and pictures recorded on a tape on your computer (USB streaming function).

Furthermore, if you download pictures from your camcorder to your computer, you can process or edit them in image processing software and append them to e-mail. You can view images recorded on the "Memory Stick" on your computer.

Recommended computer usage environment when connecting via USB cable and viewing tape images on the computer

OS:

Microsoft Windows 98SE, Windows Me, Windows 2000 Professional, Windows XP Home Edition or Windows XP Professional
Standard installation is required.

However, operation is not assured if the above environment is an upgraded OS.

You cannot hear sound if your computer is running Windows 98, but you can read still images.

CPU:

Minimum 500 MHz Intel Pentium III or faster (800 MHz or faster recommended)

Application:

DirectX 8.0a or later

Sound system:

16 bit stereo sound card and speakers

Memory:

64 MB or more

Hard disk:

Available memory required for installation:

at least 200MB

Available hard disc memory recommended:

at least 1GB (depending on the size of the image files edited)

Display:

4 MB VRAM video card, Minimum 800 × 600 dot Hi color (16 bit color, 65,000 colors), Direct Draw display driver capability (At 800 × 600 dot or less, 256 colors and less, this product will not operate correctly.)

Others:

This product is compatible with DirectX technology, so it is necessary to install DirectX.

The USB connector must be provided as standard.

You cannot use this function in the Macintosh environment.

Recommended computer usage environment when connecting via USB cable and viewing “Memory Stick” images on the computer

OS:

Microsoft Windows 98, Windows 98SE, Windows Me, Windows 2000 Professional, Windows XP Home Edition or Windows XP Professional
Standard installation is required.

However, operation is not assured if the above environment is an upgraded OS.

CPU:

MMX Pentium 200 MHz or faster

The USB connector must be provided as standard.

Windows Media Player must be installed (to play back moving pictures).

Notes

- Operations are not guaranteed for the Windows environment if you connect two or more USB equipment to a single computer at the same time, or when using a hub.
- Some equipment may not operate depending on the type of USB equipment that is used simultaneously.
- Operations are not guaranteed for all the recommended computer environments mentioned above.
- Windows and Windows Media are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.
- Pentium is trademark or registered trademark of Intel Corporation.
- All other product names mentioned herein may be the trademarks or registered trademarks of their respective companies. Furthermore, “TM” and “®” are not mentioned in each case in this manual.

Connecting your camcorder to your computer using the USB cable – For Windows users

Installing the USB driver

Start the following operation without connecting the USB cable to your computer.
Connect the USB cable according to “Making the computer recognize the camcorder.”

If you are using Windows 2000 Professional or Windows XP Home Edition/Professional, log in with permission of Administrators.

- (1) Turn on your computer and allow Windows to load.
- (2) Insert the supplied CD-ROM into the CD-ROM drive of your computer. The application software starts up and the title screen appears.
- (3) Move the cursor to “USB Driver” and click. This starts USB driver installation.



- (4) Follow the on-screen messages to install the USB driver.
- (5) Remove the CD-ROM and then restart the computer, in accordance with the instructions on the screen.

Note

If you connect the USB cable before USB driver installation is complete, the USB driver will not be properly registered. Carry out installation again in accordance with the steps on page 191.

Windows XP Home Edition/Professional users

If you go to “USB CONNECT” in the menu settings and select “PTP,” you can copy “Memory Stick” images from the camcorder onto your computer without installing the USB driver. This is ideal for simply copying images from a camcorder onto a computer. Refer to page 215 for details.

Making the computer recognize the camcorder

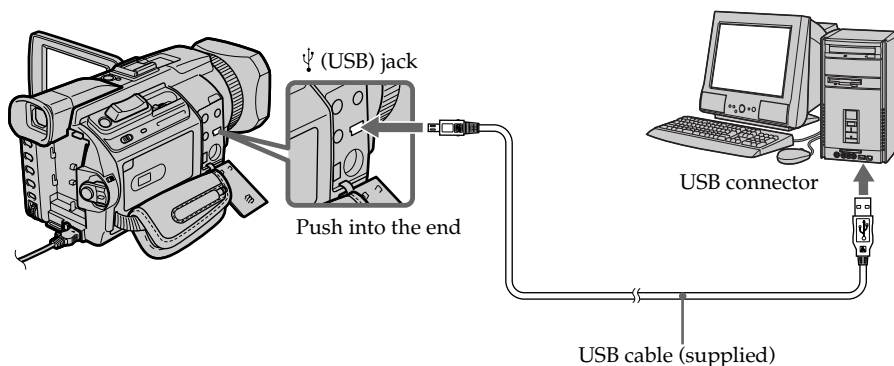
Viewing images recorded on a tape

Refer to page 190 for details on viewing “Memory Stick” images on your computer.

You need to install “PIXELA ImageMixer” to view images recorded on a tape on your computer. Install it from the CD-ROM supplied with your camcorder.

To install and use this software in Windows 2000 Professional. You must be authorized as Power Users or Administrators. For Windows XP Home Edition/Professional, you must be authorized as Administrators.

- (1) Turn on your computer and allow Windows to load.
If you are using your computer, close all running applications.
- (2) Insert the supplied CD-ROM into the CD-ROM drive of your computer.
The application software starts up and the title screen appears. If the title screen does not appear, double-click “My Computer” and then “ImageMixer” (CD-ROM Drive). The application software screen appears after a while.
- (3) Move the cursor to “PIXELA ImageMixer” and click.
The Install Wizard program starts up and the “Select Settings Language” screen appears.
- (4) Select the language for installation.
- (5) Follow the on-screen messages.
The installation screen disappears when installation is complete.
- (6) Click DirectX
Follow the on-screen messages to install DirectX.
Restart your computer when the installation is completed.
- (7) Connect the AC power adaptor to your camcorder.
- (8) Set the POWER switch to VCR.
- (9) Select USB STREAM in  to ON in the menu settings (p. 215).
- (10) With the CD-ROM inserted, connect the USB jacks of the camcorder and computer using the USB cable supplied with your camcorder.
Your computer recognizes the camcorder, and the Add Hardware Wizard starts.



Connecting your camcorder to your computer using the USB cable – For Windows users

- (11) Follow the on-screen messages so that the Add Hardware Wizard recognizes that the USB drivers have been installed. The Add Hardware Wizard starts three times because three different USB drivers are installed. Be sure to allow the installation to complete without interrupting it.

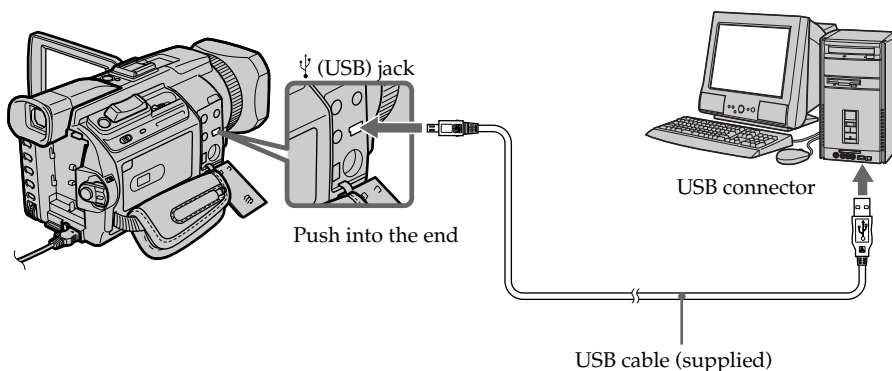
For Windows 2000 Professional, Windows XP Home Edition/Professional users

- (12) After the “File Needed” screen appears.
Open “Browse...” → “My Computer” → “ImageMixer” → “Sonyhcb.sys”,
and click “OK.”

Viewing images recorded on a “Memory Stick”

Set USBCONNECT in  to NORMAL in the menu settings. (The default setting is set to NORMAL.)

- (1) Insert a “Memory Stick” into your camcorder.
(2) Connect the AC power adaptor and set the POWER switch to MEMORY/
NETWORK (DCR-TRV950 only).
(3) Connect the  (USB) jack on your camcorder to the USB connector on your
computer using the supplied USB cable.
USB MODE appears on the LCD screen of your camcorder. Your computer
recognizes the camcorder, and the Add Hardware Wizard starts.



- (4) Follow the on-screen messages to make the Add Hardware Wizard recognize that the USB drivers have been installed. The Add Hardware Wizard starts two times because two different USB drivers are installed. Be sure to allow each installation to complete without interrupting it.

You cannot install the USB driver if a “Memory Stick” is not in your camcorder.
Be sure to insert a “Memory Stick” into your camcorder before installing the USB driver.

If you cannot install the USB driver

The USB driver has been registered incorrectly as your computer was connected to your camcorder before installation of the USB driver was completed. Perform the following procedure to correctly install the USB driver.

Viewing images recorded on a tape

Step 1: Uninstall the incorrect USB driver

- ① Turn on your computer and allow Windows to load.
- ② Connect the AC power adaptor, and set the POWER switch to VCR.
- ③ Connect the USB connector on your computer to the Ψ (USB) jack on your camcorder using the USB cable supplied with your camcorder.
- ④ Open your computer's "Device Manager."

Windows XP Home Edition/Professional:

Select "Start" → "Control Panel" → "System" → "Hardware," and click the "Device manager" button.

If there is no "System" inside "Pick a category" after clicking "Control Panel," click "Switch to classic view" instead.

Windows 2000 Professional:

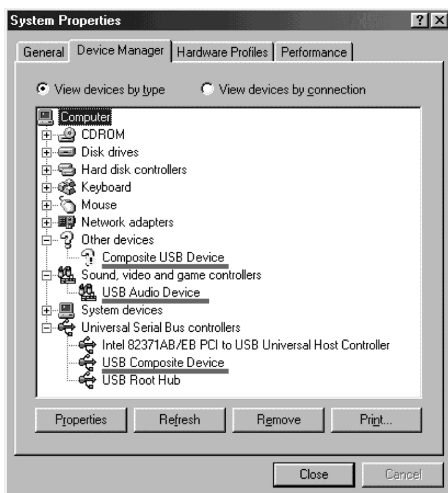
Select "My Computer" → "Control Panel" → "System" → "Hardware" tab, and click the "Device Manager" button.

Windows 98 SE/Windows Me:

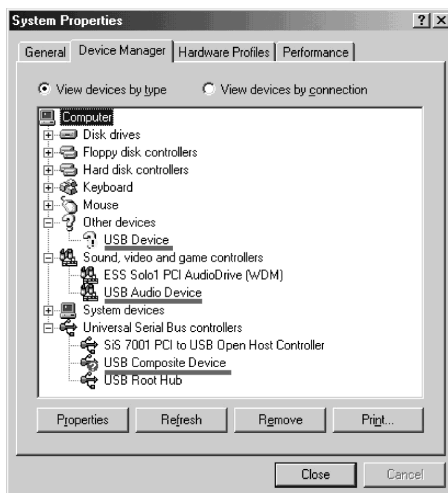
Select "My Computer" → "Control Panel" → "System," and click "Device Manager."

Connecting your camcorder to your computer using the USB cable – For Windows users

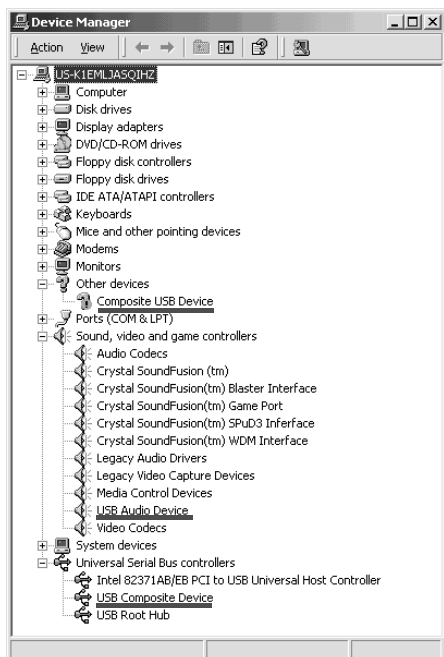
⑤ Select and delete the underlined devices below.



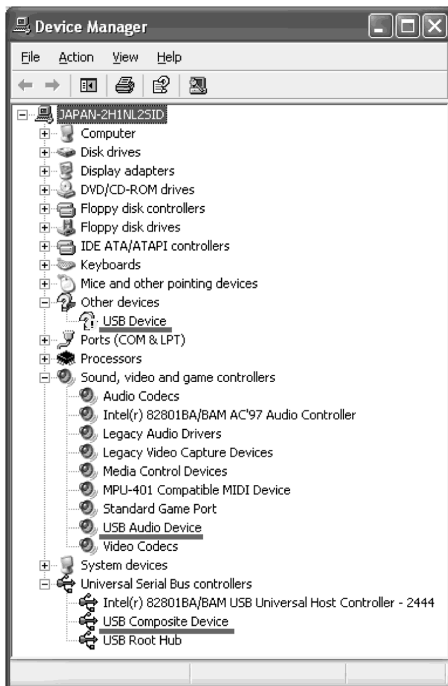
Windows 98SE



Windows Me



Windows 2000 Professional



Windows XP Home Edition/Professional