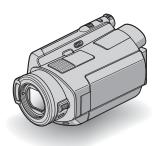


Digital HD Video Camera Recorder

HVDDYCA

Operating Guide HDR-SR5E/SR7E/SR8E













For details on the advanced operations, please refer to "Handycam Handbook" (PDF).



Read this first

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

WARNING

To reduce fire or shock hazard, do not expose the unit to rain or moisture.

CAUTION

Replace the battery with the specified type only. Otherwise, fire or injury may result.

Notice for customers in the United Kingdom

A moulded plug complying with BS 1363 is fitted to this equipment for your safety and convenience.

Should the fuse in the plug supplied need to be replaced, a fuse of the same rating as the supplied one and approved by ASTA or BSI to BS 1362 (i.e., marked with an ratio or mark) must be used.

If the plug supplied with this equipment has a detachable fuse cover, be sure to attach the fuse cover after you change the fuse. Never use the plug without the fuse cover. If you should lose the fuse cover, please contact your nearest Sony service station.

FOR CUSTOMERS IN EUROPE

ATTENTION

The electromagnetic fields at the specific frequencies may influence the picture and sound of this unit.

This product has been tested and found compliant with the limits set out in the EMC Directive for using connection cables shorter than 3 meters (9.8 feet).

Notice

If static electricity or electromagnetism causes data transfer to discontinue midway (fail), restart the application or disconnect and connect the communication cable (USB, etc.) again.



Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

Applicable Accessory: Remote Commander

Notes on use

- The camcorder is not dustproofed, dripproofed or waterproofed. See "Precautions" (p. 32).
- To prevent the hard disk from being broken or recorded images from being lost, do not do the following when either of the (Movie)/(Still) mode lamps (p. 8) or the access lamp* is on:
 - to remove the battery pack or AC Adaptor from the camcorder.
 - to apply mechanical shock or vibration to the camcorder.

 When connecting your camcorder to another device with communication cables, be sure to insert the connector plug in the correct way.
 Pushing the plug forcibly into the terminal will damage the terminal and may result in a malfunction of your camcorder.

On recording

- Before starting to record, test the recording function to make sure the image and sound are recorded without any problems.
- Compensation for the contents of recordings cannot be provided, even if recording or playback is not possible due to a malfunction of the camcorder, recording media, etc.
- TV color systems differ depending on the country/region. To view your recordings on a TV, you need a PAL system-based TV.
- Television programs, films, video tapes, and other materials may be copyrighted.
 Unauthorized recording of such materials may be contrary to the copyright laws.

Save all your recorded image data

- To prevent your image data from being lost, save all your recorded images on external media. It is recommended that you save the image data on a disc such as DVD-R using your computer*. Also, you can save your image data using a VCR, or a DVD/HDD recorder*.
- It is recommended that you save your image data periodically, after recording.

Do not apply shock or vibration to your camcorder

 The hard disk of the camcorder may not be recognized, or recording or playback may not be possible.

On the drop sensor

 To protect the internal hard disk from the shock by dropping, the camcorder has the drop sensor function*. When a drop occurs, or under a nongravity condition, the block noise made when this function is activated by the camcorder may also be recorded. If the drop sensor catches a drop repeatedly, recording/playback may be stopped.

Note on operational temperatures

 When the temperature of the camcorder becomes extremely high or extremely low, you may not be able to record or play back on the camcorder, due to the protection features of the camcorder being activated in such situations. In this case, an indicator appears in the viewfinder (HDR-SR7E/SR8E) or on the LCD screen (p. 30).

When the camcorder is connected to a computer

 Do not try to format the hard disk of the camcorder using a computer. If you do so, your camcorder may not operate correctly.

Note on using the camcorder at high altitudes

 Do not turn on the camcorder in a low-pressure area, where the altitude is more than 3,000 meters (9,800 feet). Doing so may damage the hard disk drive of your camcorder.

Note on disposal/transfer

Even if you perform [FORMAT]* or formatting the hard disk of the camcorder, you may not delete data from the hard disk completely. When you transfer the camcorder, it is recommended that you perform [EMPTY]* to prevent the recovery of your data. In addition to the above, when you dispose of the camcorder, it is recommended that you destroy the actual body of the camcorder.

About language setting

 The on-screen displays in each local language are used for illustrating the operating procedures.
 Change the screen language before using your camcorder if necessary (p. 8).

About this manual

- The images of the viewfinder (HDR-SR7E/ SR8E) and the LCD screen used in this manual for illustration purposes are captured using a digital still camera, and therefore may appear different from the actual images of the viewfinder (HDR-SR7E/SR8E) and the LCD screen.
- Unless otherwise specially indicated, illustrations in this manual are based on HDR-SR7F.
- Design and specifications of recording media and other accessories are subject to change without notice.
- The screenshots are from Windows XP. The scenes may vary depending on the operating system of the computer.
- * Refer also to "Handycam Handbook" (PDF) and "Picture Motion Browser Guide."

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Step 1: Checking supplied items

Make sure that you have the following items supplied with your camcorder. The number in the parentheses indicates the number of that item supplied.

AC Adaptor (1) (p. 6)



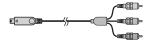
Mains lead (1) (p. 6)



Handycam Station (1) (p. 6)



Component video cable (1) (p. 13)



A/V connecting cable (1) (p. 13)



USB cable (1) (p. 27)



Wireless Remote Commander (1)



A button-type lithium battery is already installed.

Remove the insulation sheet before using the Remote Commander.



Rechargeable battery pack NP-FH60 (1) (p. 6)



21-pin adaptor (1)

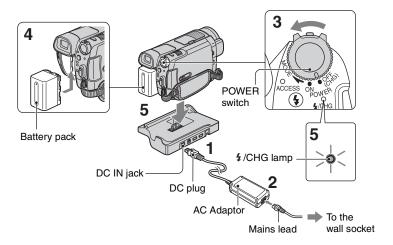
For the models with the $\zeta \in$ mark printed on their bottom surfaces only.

CD-ROM "Handycam Application Software" (1) (p. 23)

- Picture Motion Browser (Software)
- Picture Motion Browser Guide
- Handycam Handbook (PDF)

"Operating Guide" (This manual) (1)

Step 2: Charging the battery pack



You can charge the "InfoLITHIUM" battery pack (H series) after attaching it to your camcorder.

Notes

- Your camcorder operates only with an "InfoLITHIUM" battery pack (H series).
- 1 Connect the AC Adaptor to the DC IN jack on the Handycam Station.

Be sure that the \triangle mark on the DC plug is facing up.

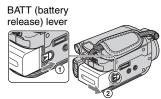
- 2 Connect the mains lead to the AC Adaptor and the wall socket.
- 3 Slide the POWER switch in the direction of the arrow to OFF (CHG) (the default setting).
- 4 Attach the battery pack by sliding it in the direction of the arrow until it clicks.

5 Set the camcorder onto the Handycam Station securely.

The 4/CHG (charge) lamp lights up and charging starts. The 4/CHG (charge) lamp turns off when the battery pack is fully charged. Remove the camcorder from the Handycam Station.

To remove the battery pack

Slide the POWER switch to OFF (CHG). Slide the BATT (battery release) lever and remove the battery pack.

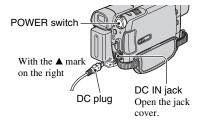


4 Notes

 When you remove the battery pack or the AC Adaptor, make sure that the (Movie) lamp/ (Still) lamp (p. 8) is turned off.

To charge the battery pack using only the AC Adaptor

Slide the POWER switch to OFF (CHG), then connect the AC Adaptor directly to the DC IN jack on the camcorder.



Available running time for the supplied battery pack

Charging time:

Approximate time (min.) required when you fully charge a completely exhausted battery pack.

Recording/Playback time:

Approximate time (min.) available when you use a fully charged battery pack.

"HD" stands for high definition image quality, and "SD" stands for standard image quality.

NP-FH60: (U			(Un	it:min.)	
	HDR-SR5E		HDR-SR7E/ SR8E		
	HD	SD	HD	SD	
Charging time	135		135		
Recording time	Recording time*1				
Continuous recording time	105*2 110*3	120*2 130*3	90*2 95*3 95*4	100*2 105*3 105*4	
Typical recording time*5	50*2 55*3	60*2 65*3	45*2 45*3 45*4	50*2 50*3 50*4	
Playback time*2	150	165	140	160	

- *1 All times of image quality measured with SP recording mode when [INDEX SET] is set to [OFF].
- *2 When the LCD backlight turns on.
- *3 When the LCD backlight turns off.
- *4 When recording with the viewfinder while the LCD panel is closed.
- *5 Typical recording time shows the time when you repeat recording start/stop, turning the power on/off and zooming.

On the battery pack

- Before changing the battery pack, slide the POWER switch to OFF (CHG) and turn off the (Movie) lamp/ (Still) lamp (p. 8).
- The power will not be supplied from the battery as long as the AC Adaptor is connected to the DC IN jack of your camcorder or the Handycam Station, even when the mains lead is disconnected from the wall socket.

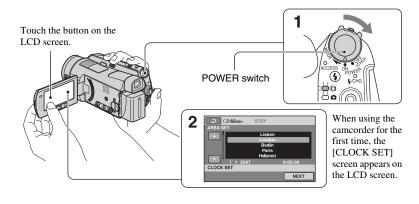
On the charging/recording/playback time

- Times measured when using the camcorder at 25°C (77°F) (10°C to 30°C (50°F to 86°F) is recommended).
- The available recording and playback time will be shorter when you use your camcorder in low temperatures.
- The available recording and playback time will be shorter depending on the conditions under which you use your camcorder.

On the AC Adaptor

- Use the nearby wall socket when using the AC Adaptor. Disconnect the AC Adaptor from the wall socket immediately if any malfunction occurs while using your camcorder.
- Do not use the AC Adaptor placed in a narrow space, such as between a wall and furniture.
- Do not short-circuit the DC plug of the AC Adaptor or battery terminal with any metallic objects. This may cause a malfunction.
- Even if your camcorder is turned off, AC power (mains) is still supplied to it while connected to the wall socket via the AC Adaptor.

Step 3: Turning the power on, and setting the date and time



- 1 While pressing the green button, slide the POWER switch repeatedly in the direction of the arrow until the respective lamp lights up.
 - **(Movie):** To record movies
 - (Still): To record still images
 - When you turn on (Still) lamp, the screen aspect ratio is changed to 4:3 automatically.
- 2 Select the desired geographical area with ▲/▼, then touch [NEXT].
- 3 Set [SUMMERTIME], [Y] (year), [M] (month), [D] (day), hour and minute, then touch OK.



The clock starts.

ϔ Tips

 The date and time do not appear during recording, but they are automatically recorded on the hard disk, and can be displayed during playback.

To reset the date and time

Touch \spadesuit (HOME) $\rightarrow \blacksquare$ (SETTINGS) \rightarrow [CLOCK/ \blacksquare LANG] \rightarrow [CLOCK SET], and set the date and time.

Changing the language setting

You can change the on-screen displays to show messages in a specified language.

Touch ↑ (HOME) → ♣ (SETTINGS)

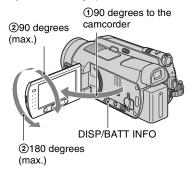
→ [CLOCK/♠ LANG] →

[♠ LANGUAGE SET], then select the desired language.

Step 4: Preparing for recording

Adjusting the LCD panel

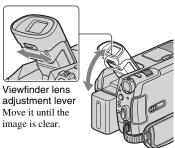
Open the LCD panel 90 degrees to the camcorder (①), then rotate it to the best angle to record or play (②).



Adjusting the Viewfinder (HDR-SR7E/SR8E)

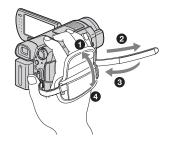
You can view images using the viewfinder to avoid wearing down the battery, or when the image seen on the LCD screen is poor.

Viewfinder

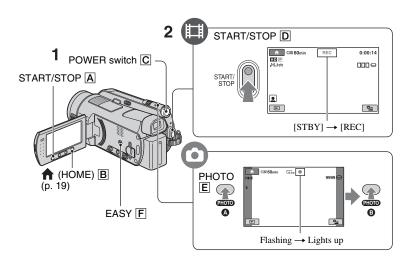


Fastening the grip belt

Fasten the grip belt and hold your camcorder correctly.



Recording



1 Slide the POWER switch © until the respective lamp lights up.

Press the green button only when the POWER switch **C** is in the OFF (CHG) position.

- III (Movie): To record movies
- (Still): To record still images

2 Start recording.

Movies 🖽

Press START/STOP A (or D).

To stop recording, press START/STOP $\boxed{\bf A}$ (or $\boxed{\bf D}$) again.

- You cannot record movies on a "Memory Stick Duo."
- See "Handycam Handbook" (PDF) for changing the image quality to SD (standard definition) image quality.

Still Images

Press PHOTO E lightly to adjust the focus (a beep sounds), then press it fully (a shutter click sounds).

Ó

disappears, the image has been recorded.

• Still images are recorded on the hard disk in the default setting.

6 Notes

 If the ACCESS lamp is lit or flashing after recording is finished, it means data is still being written onto the hard disk or "Memory Stick Duo." Do not apply shock or vibration to your camcorder, and do not remove the battery or AC Adaptor.

Ϋ́Tips

- You can check the free hard disk space by pressing ♠ (HOME) → ♠ (MANAGE HDD/MEMORY) → [INFO].
- You can capture up to 3 still images by pressing PHOTO **E** during movie recording.
- The maximum continuous recordable time is approximately 13 hours.
- When a movie file exceeds 2 GB, the next movie file is created automatically.
- The maximum recordable time is as follows (with recording mode [HD SP]);
 HDR-SR5E: approx. 11 hours and 50 minutes HDR-SR7E: approx. 17 hours and 50 minutes HDR-SR8E: approx. 30 hours
- Use the supplied application software to store recorded movies as still images. For details, see "Picture Motion Browser Guide" on the supplied CD-ROM.

To record still images on a "Memory Stick Duo"

You can change the recording media of still images to a "Memory Stick Duo."
You can use only a "Memory Stick Duo" marked with MEMORY STICK DUO or MEMORY STICK PRO DUO.

■ Inserting/ejecting a "Memory Stick Duo"

Open the LCD panel, then insert the "Memory Stick Duo" into the Memory Stick Duo slot in the right direction until it clicks.



To eject a "Memory Stick Duo," open the LCD panel, then lightly push the "Memory Stick Duo" in once.

4 Notes

 When the ACCESS lamp is lit or flashing, your camcorder is reading/writing data. Do not shake

- or knock your camcorder, turn the power off, eject the "Memory Stick Duo," or remove the battery pack. Otherwise, image data may be damaged.
- If you insert the "Memory Stick Duo" into the slot in the wrong direction, the "Memory Stick Duo," the Memory Stick Duo slot, or image data may be damaged.

Ϋ́ Tips

• The number of recordable still images on the "Memory Stick Duo" (1 GB) is as follows (with the default setting of the image size as shown in ()):

HDR-SR5E: 480 ([4.0M])

HDR-SR7E/SR8E: 315 ([6.1M])

All numbers measured when using a "Memory Stick Duo" made by Sony Corporation. The number of recordable images varies depending on the recording environment and the recording media.

 The number of recordable images varies depending on the image quality or the image size. For details, see "Handycam Handbook" (PDF).

To change the recording media of still images

- ① Touch **9**<u>=</u> (OPTION) → **1** tab → [STILL MEDIA].
- ② Select the media in which you want to save still images, then touch OK. Your camcorder returns to recording standby mode.

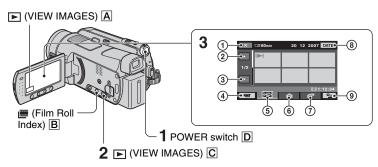
To record/play back easily

By pressing the EASY F, nearly all settings on the camcorder will be automatically operated so that you can perform recording or playing back operation without detailed settings. During Easy Handycam operation, ASY appears on the LCD screen. To cancel Easy Handycam operation, press EASY F again.

4 Notes

• You cannot use some buttons/functions during Easy Handycam operation.

Playback



- 1 Returns to the recording screen
- 2 Previous 6 images
- Next 6 images
- 4 Returns to the recording screen
- (5) Displays movies with HD (high definition) image quality*
- 6 Displays still images on the hard disk
- 7 Displays still images on a "Memory Stick Duo"
- 8 Searches for images by date
- ⑨ Φ= (OPTION)
- * SDE appears for movies with SD (standard definition) image quality.

1 Slide the POWER switch D to turn on your camcorder.

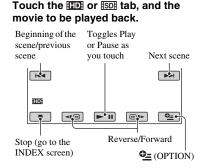
2 Press (VIEW IMAGES) (c (or A).

The VISUAL INDEX screen appears on the LCD screen (It may take some time to display the thumbnails).

Press (Film Roll Index) (B) to display the (Film Roll Index) screen. See "Handycam Handbook" (PDF) for details.

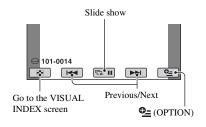
3 Start playback.

Movies



Still Images

Touch the or tab, and the still image to be played back.



To adjust the sound volume of movies

When playing back a movie, touch \P (OPTION) $\rightarrow \P$ tab $\rightarrow \P$ [VOLUME], then adjust the volume with \P | \P | \P |...

ొ Tips

- When playback from the selected movie reaches the last movie, the screen returns to the INDEX screen.
- I▶I appears with the image on the tab that was
 most recently played back/recorded (▶ for the
 still image in the "Memory Stick Duo"). When
 you touch a movie marked with I▶I, you can
 play it back from the point it was previously
 stopped.

Playing the image on a TV

Connection methods and quality of the image viewed on the TV screen differ depending on what type of TV is connected, and the connectors used.

Use the supplied AC Adaptor as the power source (p. 6).

Refer also to the instruction manuals supplied with the device to be connected. For details on connecting and dubbing recorded images to VCR or DVD/HDD recorders, see "Handycam Handbook" (PDF).

4 Notes

 When recording, set [X.V.COLOR] to [ON] to play back on an x.v.Color-compliant TV. Some settings may need to be adjusted on the TV when playing back. Refer to the instruction manual of your TV.

Operation flow

You can make sure that you are connecting the TV correctly using [TV CONNECT Guide] displayed on the LCD screen.

Switch the input on the TV to the connected jack.

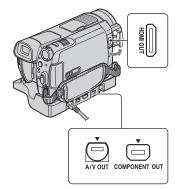
Refer to the instruction manuals of the TV.

Connect your camcorder and TV referring to [TV CONNECT Guide].

You can use [TV CONNECT Guide] by touching ♠ (HOME) → ➡ (OTHERS) → [TV CONNECT Guide].

Make the required output settings on your camcorder.

Open the jack cover to connect to jacks on your camcorder.

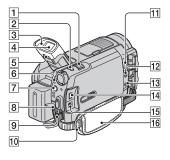


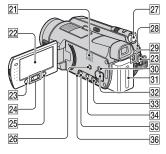
6) Notes

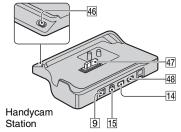
- When the A/V connecting cable is used to output images, images are output with SD (standard definition) image quality.
- The Handycam Station and your camcorder are both equipped with A/V OUT jacks and COMPONENT OUT jacks (p. 14). Connect the A/V connecting cable or component video cable either to the Handycam Station or to your camcorder. If you connect A/V connecting cables or component video cables to both the Handycam Station and your camcorder at the same time, image disturbance may occur.

Parts and functions used for the camcorder

The numbers in () are reference pages.



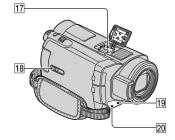


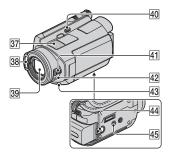




To use the zoom, move the power zoom lever. Move the power zoom lever slightly for a slower zoom. Move it further for a faster zoom.

You can magnify still images from about 1.1 to 5 times the original size (Playback zoom).





- When you touch the screen during playback zoom, the point you touched will be displayed in the center of the displayed frame.
- 2 PHOTO button (10)
- 3 Eyecup (HDR-SR7E/SR8E)
- 4 Viewfinder (9) (HDR-SR7E/SR8E)

- 5 Viewfinder lens adjustment lever (9) (HDR-SR7E/SR8E)
- 6 ACCESS lamp (Hard disk) When the ACCESS lamp is lit or flashing, your camcorder is writing/reading data.
- 7 4 (flash) button
 You can select the settings for the flash.
- 8 REMOTE jack Connect other optional accessories.
- **9** DC IN jack (6)
- 10 Hook for a shoulder belt Attach the shoulder belt (optional).
- [1] HDMI OUT (mini) jack Connect with the HDMI cable (optional).
- 12 MIC (PLUG IN POWER) jack (HDR-SR7E/SR8E)

When an external microphone (optional) is connected, it takes precedence over the internal microphone (p. 16).

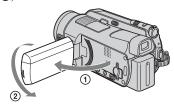
- 13 \(\hat{\omega}\) (headphones) jack (HDR-SR7E/SR8E)
- [4] COMPONENT OUT jack
 Connect with the component video cable.
- 15 A/V OUT jack Connect with the A/V connecting cable.
- **16** Grip belt (9)
- The Active Interface Shoe Active Interface Shoe Interface Shoe supplies power to optional accessories such as a video light, a flash, or a microphone. The accessory can be turned on or off as you operate the POWER switch on your camcorder.
- 18 JACK COVER OPEN/CLOSE knob
- 19 Remote sensor/Infrared port Receive the signal from the Remote Commander.
- 20 Camera recording lamp Lights up in red during recording. Flashes when remaining hard disk space or battery power is low.

21 Speaker

Sound comes out from the speaker while playing back.

22 LCD screen/touch panel

To record in mirror mode, open the LCD screen 90 degrees to the camcorder (①), then rotate it 180 degrees to the lens side (②).



- 23 START/STOP button (10)
- 24 Zoom buttons

Press for zooming in/out.

You can magnify still images from about 1.1 to 5 times the original size (Playback zoom).

- When you touch the screen during playback zoom, the point you touched will be displayed in the center of the displayed frame.
- **25 (HOME)** button (19)
- **26** EASY button (11)
- 27 POWER switch (8)

28 4/CHG (charge) lamp Lights up while charging your camcorder, or flickers while charging the flash, and remains lit when the flash charging is complete.

- 29 (Movie) (Still) mode lamps (8)
- 30 Access lamp ("Memory Stick Duo") When the ACCESS lamp is lit or flashing, your camcorder is writing/reading data.
- 31 Battery pack (6)
- 32 Memory Stick Duo slot (11)
- 33 (VIEW IMAGES) button (12)
- 34 **(Film Roll Index)** button (12)

35 DISP/BATT INFO button You can switch the screen display when you press while the power is set to on. When you press while the power is set to OFF (CHG), you can check the remaining battery.

36 RESET button To initialize the settings (Reset), press RESET to initialize all the settings, including settings for date and time.

37 Internal microphone Records sound. Sound picked up by the internal microphone is converted to 5.1ch surround sound and recorded.

38 Flash Flashes when using the flash.

39 Lens (Carl Zeiss Lens)

40 NIGHTSHOT switch
To record in dark places, set the
NIGHTSHOT switch to ON (appears).

41 CAM CTRL dial (HDR-SR7E/SR8E) You can assign one menu item you often use to the CAM CTRL dial.

42 MANUAL button (HDR-SR7E/SR8E) You can display the [DIAL SETTING] screen with pressing and holding the manual button.

43 BACK LIGHT button
To adjust the exposure for backlit subjects, press BACK LIGHT to display
■. To cancel the backlight function, press BACK LIGHT again.

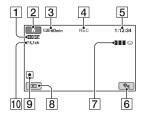
44 BATT (battery release) lever (6)

45 Tripod receptacle (Bottom surface)
Attach the tripod (optional: the length of the screw must be less than 5.5 mm (7/32 in.)) to the tripod receptacle using a tripod screw.

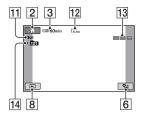
46 DISC BURN button Create a disc by connecting the camcorder to a computer. For details, see "Picture Motion Browser Guide." 47 Interface connector

Indicators displayed during recording/playback

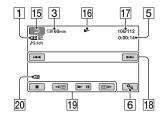
Recording movies



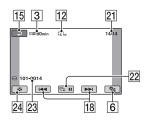
Recording still images



Viewing movies



Viewing still images



- 1 Recording quality (HD/SD) and Recording mode (XP/HQ/SP/LP)
- 2 HOME button
- 3 Remaining battery (approx.)
- 4 Recording status ([STBY] (standby) or [REC] (recording))
- **5** Counter (hour/minute/second)
- 6 OPTION button
- 7 Dual Rec
- 8 VIEW IMAGES button
- 9 Face Index set
- 10 5.1ch surround recording
- 11 Quality ([FINE]/[STD])
- 12 Image size
- 13 Appears while a still image is being saved.
- 14 Recording folder
 Displays only when the recording media
 of still images is a "Memory Stick
 Duo."

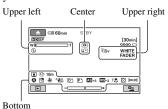
🍟 Tips

- As the number of still images recorded on a "Memory Stick Duo" increases, new folders are automatically created to store them.
- During Dual Rec, indicators for both the movie recording and still image recording appear at the same time. The place indicators appear slightly differs from during usual operations.
- 15 Return button
- 16 Playback mode
- 17 Current playing movie number/Number of total recorded movies
- 18 Previous/Next button
- 19 Video operation buttons
- 20 Playing back image quality
- 21 Current playing still image number/ Number of total recorded still images
- 22 Slide show button
- 23 Data file name

24 VISUAL INDEX button

Indicators when you made changes

Following indicators appear during recording/playback to indicate the settings of your camcorder.



Upper left

Indicator	Meaning
♪ 5.1ch	5.1ch surround recording/playback
0	Self-timer recording
4 ③ 4+ 4-	Flash, REDEYE REDUC
i↑	MICREF LEVEL low
4:3	WIDE SELECT

Center

Indicator	Meaning
¢Þ	Slide show set
0	NightShot
SO	Super NightShot
2	Color Slow Shutter
~	PictBridge connecting
	Warning

Upper right

Indicator	Meaning
WHITE BLACK FADER FADER	FADER
}□ _f	LCD backlight off
COFF	Drop sensor off
ë	Drop sensor activated

Bottom

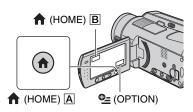
Indicator	Meaning
₽+	Picture effect
□+	Digital effect
€ ∆ ∴	Manual focus
	SCENE SELECTION
25	Backlight
* ☆ ⊾	White balance
(CFF	SteadyShot off
+	EXPOSURE/
	SPOT METER
AS	AE SHIFT*
WS	WB SHIFT*
т₩	TELE MACRO
	ZEBRA
(ĆOLOŖ)	X.V.COLOR
•	Face Index set
* ****************************	

^{*} HDR-SR7E/SR8E

4 Notes

 The recording date and time is recorded automatically on the hard disk and "Memory Stick Duo." They are not displayed while recording. However, you can check them as [DATA CODE] during playback.

Performing various functions - "A HOME" and "S OPTION"



Using the HOME MENU

You can change the recording functions and the operating settings for your convenience. For details, see "Handycam Handbook" (PDF).

1 Turn on your camcorder, then press ♠ (HOME) Ā (or ₺).



- 2 Touch the desired category.
- 3 Touch the desired setup item.
- 4 Follow the guide on the screen for further operation.

Ϋ́ Tips

- If the item is not on the screen, touch ▲/▼ to change the page.
- To hide the HOME MENU screen, touch X.

 You cannot simultaneously select or activate the grayed items in the current recording/playback situation.

To see the explanation of the function of each item on the HOME MENU (HELP)

- 1 Press (HOME) A (or B).
- ② Touch ? (HELP).

The bottom of [?] (HELP) turns orange.



③ Touch the item you want to learn about. When you touch an item, its explanation appears on the screen.

To apply the option, touch [YES].

Using the OPTION MENU

The (OPTION) MENU appears just like the pop-up window that appears when you right-click the mouse on a computer. Various functions are displayed in the context of the operation. For details, see "Handycam Handbook" (PDF).

- 1 While using your camcorder, touch [©]= (OPTION) on the screen.
- 2 Touch the desired item.
- 3 Change the setting, then touch [OK].

4 Notes

- When the item you want is not on the screen, touch another tab. If you cannot find the item anywhere, the function is not available under the current situation.
- The tabs and items that appear on the screen depend on the recording/playback status of your camcorder at the time.
- · Some items appear without a tab.
- The <u>Q=</u> (OPTION) MENU cannot be used during Easy Handycam operation (p. 11).

Items of the HOME MENU

(CAMERA) category

MOVIE*1

PHOTO*1

SMTH SLW REC

► (VIEW IMAGES) category

VISUAL INDEX*1

■ INDEX*1

■ INDEX*¹

PLAYLIST

(OTHERS) category

DELETE*1

[DELETE], [□ DELETE]

EDIT

[⊜ DELETE], [☐ DELETE], [DIVIDE], [COPY]

PLAYLIST EDIT

[HD ADD], [SD ADD], [HD ADD by date], [SD ADD by date], [SD ERASE], [SD ERASE], [SD ERASE ALL], [SD ERASE ALL], [SD MOVE]

PRINT

[⊖ PRINT], [☐ PRINT]

COMPUTER

[○ COMPUTER], [□ COMPUTER], [DISC BURN]

TV CONNECT Guide*1

(MANAGE HDD/MEMORY) category

○ FORMAT*1

₹ FORMAT*1

O INFO

REPAIR IMG.DB F.

(SETTINGS) category

MOVIE SETTINGS

[HDD/HSDB REC SET]*1, [HDD REC MODE], [HSDB REC MODE], [AE SHIFT]*3, [WB SHIFT]*3, [NIGHTSHOT LIGHT], [WIDE SELECT], [DIGITAL ZOOM], [STEADYSHOT], [AUTO SLW SHUTTR], [X.V.COLOR], [GUIDEFRAME], [ZEBRA], [HDD REMAINING], [FLASH LEVEL], [REDEYE REDUC], [DIAL SETTING]*3, [A INDEX SET]*1

PHOTO SETTINGS

[IMAGE SIZE]*1, [QUALITY], [FILE NO.], [AE SHIFT]*3, [WB SHIFT]*3, [NIGHTSHOT LIGHT], [STEADYSHOT]*3, [GUIDEFRAME], [ZEBRA], [FLASH LEVEL], [REDEYE REDUC], [DIAL SETTING]*3, [STILL MEDIA]*1

VIEW IMAGES SET

[ⅢD / ISD INDEX SET]*1, [DATA CODE], [☐ DISPLAY], [☐ INTERVAL SET]*1

SOUND/DISP SET*2

[VOLUME]*1, [BEEP]*1, [LCD BRIGHT], [LCD BL LEVEL], [LCD COLOR], [VF B.LIGHT]*3

OUTPUT SETTINGS

[TV TYPE], [DISP OUTPUT], [COMPONENT]

CLOCK/A LANG

[CLOCK SET]*1, [AREA SET], [SUMMERTIME], [A] LANGUAGE SET]*1

GENERAL SET

[DEMO MODE], [REC LAMP], [CALIBRATION], [A.SHUT OFF], [REMOTE CTRL], [DROP SENSOR]

Items of the OPTION MENU

Items you can set only on the OPTION MENU will be described below.

tab

[FOCUS], [SPOT FOCUS], [TELE MACRO], [EXPOSURE], [SPOT METER], [SCENE SELECTION], [WHITE BAL.], [COLOR SLOW SHTR], [SUPER NIGHTSHOT]

┌+ tab

[FADER], [D.EFFECT], [PICT.EFFECT]

🛳 tab

[MICREF LEVEL], [SELF-TIMER], [TIMING], [RECORD SOUND]

- (The tab depends on the situation/No tab)

[SLIDE SHOW], [SLIDE SHOW SET], [COPIES], [DATE/TIME], [SIZE]

^{*1} You can set these items also during Easy Handycam operation (p. 11).

^{*2} The menu name is changed to [SOUND SETTINGS] during Easy Handycam operation.

^{*3} HDR-SR7E/SR8E

Saving images

Due to the limited capacity of the internal hard disk, make sure that you save the image data to some type of external media such as a DVD-R or a computer.

You can save the images recorded on the camcorder as described below.

Saving images using a computer

By using "Picture Motion Browser" on the supplied CD-ROM, you can save images on a DVD or the hard disk of a computer. For details, see "Picture Motion Browser Guide."

Creating a disc with One Touch (One Touch Disc Burn)

You can save images recorded on the camcorder directly to a disc with ease.

Saving images on a computer

You can save images recorded on the camcorder on the hard disk of a computer.

Creating a disc with selected images

You can save images imported to your computer on a disc. You can also edit those images.

Saving images by connecting your camcorder to other devices

You can dub images to VCR or DVD/HDD devices. For details, see "Handycam Handbook" (PDF).

Deleting images

Deleting the images on the hard disk

- 1 On the \spadesuit (HOME MENU), touch \rightleftharpoons (OTHERS) \rightarrow [DELETE].
- 2 Touch [⊖ DELETE].
- Touch [ID] DELETE], [ID]
 DELETE] (movies) or [ID]
 DELETE] (still images), according to the type of image you want to delete, then touch the image to be deleted.

The selected image is marked with .

4 Touch $\bigcirc K \rightarrow [YES] \rightarrow \bigcirc K$.

To delete all movies or still images at one time

In step 3, touch [HD: DELETE ALL]/[SD: DELETE ALL]/[DELETE ALL] \rightarrow [YES] \rightarrow [YES] \rightarrow [OK].

To delete the still images in the "Memory Stick Duo"

- ① In step 2, touch [DELETE].
- ② Touch [DELETE], then touch the still image to be deleted.

 The selected still image is marked with
- ③ Touch \overline{OK} → $\overline{[YES]}$ → $\overline{OK]}$.
- Ϋ́ Tips
- To delete all still images on the "Memory Stick Duo," in step ②, touch [DELETE ALL] → [YES] → [YES] → [OK].

Viewing "Handycam Handbook" (PDF)

For details on using your camcorder, see "Handycam Handbook" (PDF).
To view "Handycam Handbook" (PDF), you need to install Adobe Reader on your computer.

For Windows users

- 1 Turn on the computer.
- Place the CD-ROM (supplied) in the disc drive of your computer.

The select screen for installation appears.



3 Click [Handycam Handbook].

The installation screen for "Handycam Handbook" (PDF) appears.



4 Select the desired language and the model name of your Handycam, then click [Handycam Handbook (PDF)].

Installation starts. When the installation is completed, the short-cut icon of "Handycam Handbook" (PDF) appears on the desktop of your computer.

- The model name of your Handycam is printed on its bottom surface.
- 5 Click [Exit] → [Exit], then remove the CD-ROM from the disc drive of your computer.

For Macintosh users

- 1 Turn on the computer.
- 2 Place the CD-ROM (supplied) in the disc drive of your computer.
- 3 Open the [Handbook] folder in the CD-ROM, double-click the [GB] folder and then drag-and-drop the "Handbook.pdf" on the computer.

Double-click "Handbook.pdf" to view the handbook.

What you can do with a Windows computer

When you install the "Picture Motion Browser" on a Windows computer from the supplied CD-ROM, you can enjoy the following operations.

Creating a disc with images taken with your camcorder by one simple operation

By pressing DISC BURN on the Handycam Station (p. 16), you can save images recorded on your camcorder to a disc on your computer.

- Importing images taken with your camcorder to a computer
- Viewing imported images on a computer
- Creating a disc with edited images

For details on "Picture Motion Browser," see "Picture Motion Browser Guide."

Attention

This camcorder captures high definition footage in the AVCHD format. Using the enclosed PC software, high definition footage can be copied onto DVD media. However, DVD media containing AVCHD footage should not be used with DVD based players or recorders, as the DVD player/recorder may fail to eject the media and may erase its contents without warning. DVD media containing AVCHD footage may be played on a compatible Blu-ray DiscTM player/recorder or other compatible device.

Using a Macintosh computer

The supplied software "Picture Motion Browser" is not supported by Macintosh computers. To use a Macintosh computer connected to your camcorder, see the following website for details. http://guide.d-imaging.sony.co.jp/mac/ ms/us/

System requirements

When using "Picture Motion Browser"

- OS: Microsoft Windows 2000 Professional SP4/Windows XP SP2*/Windows Vista*
 - * 64-bit editions and Starter (Edition) are not supported.

Standard installation is required.

Operation is not assured if the above OS has been upgraded or in a multi-boot environment.

CPU: Intel Pentium 4 2.8 GHz or faster (Intel Pentium 4 3.6 GHz or faster, Intel Pentium D 2.8 GHz or faster, Intel Core Duo 1.66 GHz or faster, or Intel Core 2 Duo 1.66 GHz or faster is recommended.)

Intel Pentium III 1 GHz or faster enables the following operations:

- Importing the contents to the computer
- One Touch Disc Burn
- Creating an AVCHD format disc/DVDvideo
- Copying a disc
- Processing only the contents in SD (standard definition) image quality

Memory: For Windows 2000/Windows XP: 512 MB or more (1 GB or more is recommended.)

For processing SD (standard definition) image quality content only, 256 MB of memory or more is necessary.

For Windows Vista: 1 GB or more

Hard disk: Disk volume required for installation: Approximately 800 MB (10 GB or more may be necessary when creating AVCHD format discs.)

Display: DirectX 7 or later-compatible video card, Minimum 1,024 × 768 dots, High Color (16 bit color)

Others: \$\psi\$ USB port (this must be provided as standard), Hi-Speed USB (USB 2.0 compatible is recommended),

DVD burner (CD-ROM drive is necessary for installation)

Notes

- Even in a computer environment where the operations are guaranteed, frames may be dropped from movies with HD (high definition) image quality, resulting in uneven playback. However, imported images and images on discs created subsequently will not be affected.
- Operations are not guaranteed, even on computers fulfilling the above system requirements. For example, other open or background applications currently running may limit product performance.
- "Picture Motion Browser" does not support 5.1ch surround sound reproduction. The sound is reproduced in 2ch sound.
- If you use a Notebook PC, connect it to the AC Adaptor as the power source when you view or edit movies recorded in HD (high definition) format. Otherwise, the software will not work properly due to the power saving function of the PC.

Installing software

You need to install the software to your Windows computer **before connecting your camcorder to the computer**. The installation is required only for the first time.

Contents to be installed and procedures may differ depending on your OS.

- 1 Confirm that your camcorder is not connected to the computer.
- 2 Turn on the computer.

6 Notes

- · Log on as an Administrator for installation.
- Close all applications running on the computer before installing the software.

3 Place the supplied CD-ROM in the disc drive of your computer.

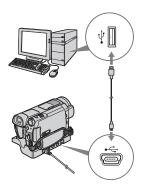
The installation screen appears.



If the screen does not appear

- Click [Start], then click [My Computer]. (For Windows 2000, double-click [My Computer].)
- 2 Double-click [SONYPICTUTIL (E:)] (CD-ROM) (disc drive).*
 - * Drive names (such as (E:)) may vary depending on the computer.
- 4 Click [Install].
- 5 Select the language for the application to be installed, then click [Next].
- 6 Check your area and country/ region, then click [Next].
- Read [License Agreement], select [I accept the terms of the license agreement] if you agree, then click [Next].
- 8 Connect your camcorder to the computer following the steps below.
 - 1 Connect the AC Adaptor to the Handycam Station and a wall socket.

- 2 Set the camcorder onto the Handycam Station, then slide the POWER switch to turn on.
- **3** Connect the ψ (USB) jack of the Handycam Station to the ψ (USB) jack of the computer using the supplied USB cable.
- 4 Touch [COMPUTER] on the LCD screen of your camcorder.



9 Click [Next] on the connection confirmation screen of the computer.



Notes

- Even if a screen prompting you to restart your computer appears, you do not need to restart it at this time. Click [NO], and continue installing the software.
- · The authentication may take time.

10Follow the on-screen instructions to install the software.

One of the following installation screens appears, depending on the computer environment. Check the screen and follow the instructions displayed to install the required software.

- Sonic UDF Reader*
 Software required to recognize an AVCHD format disc
- Windows Media Format 9 Series Runtime (Windows 2000 only)
 Software required to create a DVD
- Microsoft .NET Framework 1.1*
 Software required to create an AVCHD disc
- Microsoft DirectX 9.0c*
 Software required to handle movies
- * For Windows 2000 and Windows XP only

11 Follow the on-screen instructions and, if prompted, restart the computer.



The installation is complete.

12Remove the CD-ROM from the disc drive of your computer.

Operating "Picture Motion Browser"

After you install the software, shortcut icons for "Picture Motion Browser" and "Picture Motion Browser Guide" are created on the desktop.

For the basic operation of "Picture Motion Browser," see "Picture Motion Browser Guide."



Double-click to start "Picture Motion Browser."



Double-click to start "Picture Motion Browser Guide."

Connecting your camcorder to a computer

To import the images to the computer, etc., connect your camcorder to the computer by the following steps.

- Connect the AC Adaptor to the Handycam Station and a wall socket.
- 2 Set the camcorder onto the Handycam Station, then slide the POWER switch to turn on.

3 Connect the [⊈] (USB) jack of the Handycam Station to a computer using the supplied USB cable (p. 25).

The [USB SELECT] screen appears on the LCD screen of your camcorder.

Touch the desired button on the screen.

🍟 Tips

If the [USB SELECT] screen does not appear, touch (HOME) → (OTHERS) → [COMPUTER] to display the screen.

Recommended USB cable connection

To assure the proper functioning of your camcorder, connect your camcorder to a computer as below.

- Connect the USB ports of the Handycam Station and a computer using the USB cable. Do not connect anything to other USB ports of a computer.
- When connecting to a computer with a USB keyboard and USB mouse connected as standard equipment, connect the Handycam Station to another USB port using the USB cable.

Wotes

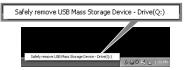
- Operations are not guaranteed when multiple USB devices are connected to a computer.
- Be sure to connect the USB cable to a USB port. If it is connected to a computer via a USB keyboard or USB hub, operations are not guaranteed.

To disconnect the USB cable

① Click the [Unplug or eject hardware] icon on the task tray on the bottom right of the desk top.



② Click [Safely remove USB Mass Storage Device].



- 3 Click [OK] (Windows 2000 only).
- 4 Touch [END] on the screen of your camcorder.
- (5) Touch [YES] on the screen of your camcorder.
- **(6)** Disconnect the USB cable from the Handycam Station and the computer.

4 Notes

- Do not disconnect the USB cable while the ACCESS lamp is lit.
- Before turning off your camcorder, disconnect the USB cable following the proper procedures described above.
- Disconnect the USB cable using the proper procedures described above. Otherwise, files stored on the hard disk of your camcorder or in a "Memory Stick Duo" may not be updated correctly. Also, disconnecting the USB cable improperly may cause a malfunction of the hard disk of your camcorder or of the "Memory Stick Duo."

Troubleshooting

If you run into any problems using your camcorder, use the following table to troubleshoot the problem. If the problem persists, disconnect the power source and contact your Sony dealer.

Notes before sending your camcorder for repair

- Your camcorder may be required to initialize or change the current hard disk of the camcorder, depending on the problem. In the event of this, the data stored on the hard disk will be deleted.
 Be sure to save the data on the internal hard disk (see "Handycam Handbook" (PDF)) onto other media (backup) before sending your camcorder for repair. We will not compensate you for any loss of hard disk data.
- During repair, we may check a minimum amount of data stored on the hard disk in order to investigate the problem. However, your Sony dealer will neither copy nor retain your data.
- For the symptoms of your camcorder, see "Handycam Handbook" (PDF) and for connecting to the computer, see "Picture Motion Browser Guide."

Menu items are grayed out.

 There are some functions you cannot activate simultaneously. For details, see "Handycam Handbook" (PDF).

The power does not turn on.

- Attach a charged battery pack to the camcorder (p. 6).
- Connect the plug of the AC Adaptor to the wall socket (p. 6).
- Set the camcorder onto the Handycam Station securely (p. 6).

The camcorder does not operate even when the power is set to on.

- It takes a few seconds for your camcorder to be ready to shoot after the power is turned on. This is not a malfunction.
- Disconnect the AC Adaptor from the wall socket or remove the battery pack,

- then reconnect it after about 1 minute. If the functions still do not work, press the RESET button (p. 16) using a pointed object. (If you press the RESET button, all settings, including the clock setting, are reset.)
- The temperature of your camcorder is extremely high. Turn off your camcorder and leave it for a while in a cool place.
- The temperature of your camcorder is extremely low. Leave your camcorder with the power of your camcorder on. Turn off the camcorder and take it to a warm place. Leave the camcorder there for a while, then turn on the camcorder.

Buttons do not work.

 During Easy Handycam operation, available buttons/functions are limited.
 Cancel Easy Handycam operation. For details on Easy Handycam operation, refer to "Handycam Handbook" (PDF).

Your camcorder gets warm.

 This is because the power has been turned on for a long time. This is not a malfunction.

The power abruptly turns off.

- When approximately 5 minutes have elapsed while you do not operate your camcorder, the camcorder is automatically turned off (A.SHUT OFF). Change the setting of [A.SHUT OFF], or turn on the power again, or use the AC Adaptor.
- Charge the battery pack (p. 6).

Pressing START/STOP or PHOTO does not record images.

- The playback screen is displayed. Set the POWER switch to (Movie) or (Still) (p. 10).
- Your camcorder is recording the image you have just shot on the hard disk.

You cannot make new recording during this period.

- The hard disk of the camcorder is full. Delete unnecessary images (p. 22).
- Total number of movie scenes or still images exceeds the recordable capacity of your camcorder. Delete unnecessary images (p. 22).

The recording stops.

 The temperature of your camcorder is extremely high/low. Turn off your camcorder and leave it for a while in a cool/warm place.

You cannot install "Picture Motion Browser."

- Check the computer environment required to install it.
- Install it in the proper order (p. 25).

"Picture Motion Browser" does not work correctly.

• Quit "Picture Motion Browser" and restart your computer.

Your camcorder is not recognized by the computer.

- Install "Picture Motion Browser" (p. 25).
- Disconnect devices from the USB jack of the computer other than the keyboard, mouse, and your camcorder.
- Disconnect the USB cable from the computer and the Handycam Station, and restart the computer, then connect the computer and your camcorder again in the proper order.
- Make sure the [Media Check Tool] is running on the computer. For details on the media check tool, see "Picture Motion Browser Guide"

Self-diagnosis display/Warning indicators

If indicators appear in the viewfinder (HDR-SR7E/SR8E) or on the LCD screen, check the following.

You can fix some symptoms by yourself. If the problem persists even after you have tried a couple of times, contact your Sony dealer or local authorized Sony service facility.



C:(or E:) □□:□□ (Self-diagnosis display)

C:04:□□

- The battery pack is not an "InfoLITHIUM" battery pack (H series). Use an "InfoLITHIUM" battery pack (H series) (p. 6).
- Connect the DC plug of the AC Adaptor to the DC IN jack of the Handycam Station or your camcorder securely (p. 6).

C:13:□□ / C:32:□□

• Remove the power source. Reconnect it and operate your camcorder again.

 A malfunction that you cannot service has occurred. Contact your Sony dealer or local authorized Sony service facility. Inform them of the 5-digit code, which starts from "E."

101-0001 (Warning indicator pertaining to files)

Slow flashing

- · The file is damaged.
- · The file is unreadable.

(Warning on the hard disk of the camcorder)*

Fast flashing

 An error may have occurred with the hard disk drive in your camcorder.

⊘(Warning on the hard disk of the camcorder)*

Fast flashing

- The hard disk of the camcorder is fully recorded.
- An error may have occurred with the hard disk drive in your camcorder.

(Battery level warning)

Slow flashing

- · The battery pack is nearly used up.
- Depending on the operating environment or battery conditions, [™] may flash, even if there are approximately 20 minutes remaining.

[l ☐ (High temperature warning)

Slow flashing

 The temperature of your camcorder is getting higher. Turn off your camcorder and leave it for a while in a cool place.

Fast flashing*

 The temperature of your camcorder is extremely high. Turn off your camcorder and leave it for a while in a cool place.

(Low temperature warning)*

Fast flashing

 The temperature of your camcorder is extremely low. Make the camcorder warm

☼ (Warning indicator pertaining to "Memory Stick Duo")

• No "Memory Stick Duo" is inserted (p. 11).

- The "Memory Stick Duo" is damaged.
- The "Memory Stick Duo" is not formatted correctly.

(Warning indicator pertaining to incompatible "Memory Stick Duo")*

 An incompatible "Memory Stick Duo" is inserted.

☐ ○── (Warning indicator pertaining to the write-protect of the "Memory Stick Duo")*

- The write-protect tab on the "Memory Stick Duo" is set to lock.
- Access to the "Memory Stick Duo" was restricted on another device.

(Warning indicator pertaining to the flash)

Fast flashing*

 There is something wrong with the flash.

(Warning indicator pertaining to camera-shake warning)

- The amount of light is not sufficient, so camera-shake easily occurs. Use the flash
- The camcorder is unsteady, so camerashake easily occurs. Hold the camcorder steady with both hands and record the image. However, note that the camera-shake warning indicator does not disappear.

^{*} You hear a melody when the warning indicators appear on the screen.

Precautions

On use and care

- Do not use or store the camcorder and accessories in the following locations:
 - Anywhere extremely hot, cold or humid.
 Never leave them exposed to temperatures above 60°C (140°F), such as under direct sunlight, near heaters or in a car parked in the sun. They may malfunction or become deformed.
 - Near strong magnetic fields or mechanical vibration. The camcorder may malfunction.
 - Near strong radio waves or radiation. The camcorder may not be able to record properly.
 - Near AM receivers and video equipment.
 Noise may occur.
 - On a sandy beach or anywhere dusty. If sand or dust gets in your camcorder, it may malfunction. Sometimes this malfunction cannot be repaired.
 - Near windows or outdoors, where the LCD screen, the viewfinder (HDR-SR7E/SR8E), or the lens may be exposed to direct sunlight.
 This damages the inside of the viewfinder (HDR-SR7E/SR8E) or the LCD screen.
- Operate your camcorder on DC 6.8 V/7.2 V (battery pack) or DC 8.4 V (AC Adaptor).
- For DC or AC operation, use the accessories recommended in these operating instructions.
- Do not let your camcorder get wet, for example, from rain or sea water. If your camcorder gets wet, it may malfunction. Sometimes this malfunction cannot be repaired.
- If any solid object or liquid gets inside the casing, unplug your camcorder and have it checked by a Sony dealer before operating it any further.
- Avoid rough handling, disassembling, modifying, physical shock, or impact such as hammering, dropping or stepping on the product. Be particularly careful of the lens.
- Keep the POWER switch setting to OFF (CHG) when you are not using your camcorder.
- Do not wrap your camcorder with a towel, for example, and operate it. Doing so might cause heat to build up inside.
- When disconnecting the mains lead, pull it by the plug and not the lead.
- Do not damage the mains lead such as by placing anything heavy on it.
- · Keep metal contacts clean.

- Keep the Remote Commander and button-type battery out of children's reach. If the battery is accidentally swallowed, consult a doctor immediately.
- If the battery electrolytic liquid has leaked:
 - consult your local authorized Sony service facility.
 - wash off any liquid that may have contacted your skin.
 - if any liquid gets in your eyes, wash with plenty of water and consult a doctor.

When not using your camcorder for a long time

- Periodically turn it on and let it run such as by playing back or recording images for about 3 minutes.
- Use up the battery pack completely before storing it.

LCD screen

- Do not exert excessive pressure on the LCD screen, as it may cause damage.
- If your camcorder is used in a cold place, a residual image may appear on the LCD screen. This is not a malfunction.
- While using your camcorder, the back of the LCD screen may heat up. This is not a malfunction.

■ To clean the LCD screen

If fingerprints or dust make the LCD screen dirty, it is recommended you use a soft cloth to clean it. When you use the LCD Cleaning Kit (optional), do not apply the cleaning liquid directly to the LCD screen. Use cleaning paper moistened with the liquid.

On handling the casing

- If the casing is soiled, clean the camcorder body with a soft cloth lightly moistened with water, and then wipe the casing with a dry soft cloth.
- Avoid the following to avoid damage to the finish:
 - Using chemicals such as thinner, benzine, alcohol, chemical cloths, repellent, insecticide and sunscreen.
 - Handling the camcorder with above substances on your hands.

 Leaving the casing in contact with rubber or vinyl objects for a long period of time.

About care and storage of the lens

- Wipe the surface of the lens clean with a soft cloth in the following instances:
 - When there are fingerprints on the lens surface.
 - In hot or humid locations
 - When the lens is exposed to salty air such as at the seaside.
- Store in a well-ventilated location subject to little dirt or dust.
- To prevent mold, periodically clean the lens as described above. It is recommended that you operate your camcorder about once a month to keep it in optimum state for a long time.

On charging the pre-installed rechargeable battery

Your camcorder has a pre-installed rechargeable battery to retain the date, time, and other settings even when the POWER switch is set to OFF (CHG). The pre-installed rechargeable battery is always charged while your camcorder is connected to the wall socket via the AC Adaptor or while the battery pack is attached. The rechargeable battery will be fully discharged in **about 3 months** if you do not use your camcorder at all. Use your camcorder after charging the pre-installed rechargeable battery.

However, even if the pre-installed rechargeable battery is not charged, the camcorder operation will not be affected as long as you are not recording the date.

Procedures

Connect your camcorder to a wall socket using the supplied AC Adaptor, and leave it with the POWER switch set to OFF (CHG) for more than 24 hours

To change the battery of the Remote Commander

- While pressing on the tab, inset your fingernail into the slit to pull out the battery case.
- ② Place a new battery with the + side facing up.
- ③ Insert the battery case back into the Remote Commander until it clicks.



WARNING

Battery may explode if mistreated. Do not recharge, disassemble or dispose of in fire.

 When the lithium battery becomes weak, the operating distance of the Remote Commander may shorten, or the Remote Commander may not function properly. In this case, replace the battery with a Sony CR2025 lithium battery. Use of another battery may present a risk of fire or explosion.

Specifications

System

Video compression format

AVCHD (HD)/MPEG2 (SD)/JPEG (Still images)

Audio compression format

Dolby Digital 2/5.1ch Dolby Digital 5.1 Creator

Video signal

PAL color, CCIR standards 1080/50i specification

Hard disk

HDR-SR5E: 40 GB

HDR-SR7E:

60 GB

HDR-SR8E:

100 GB

When measuring media capacity, 1 GB equals 1 billion bytes, a portion of which is used for data management.

Recording format

Movie (HD): AVCHD 1080/50i Movie (SD): MPEG2-PS Still image: Exif Ver.2.2*1

Viewfinder (HDR-SR7E/SR8E)

Electric viewfinder (color)

Image device

HDR-SR5E:

5.9 mm (1/3 type) CMOS sensor Recording pixels (still image, 4:3): Max. 4.0 mega (2 304 × 1 728) pixels*2 Gross: Approx. 2 100 000 pixels Effective (movie, 16:9): 1 430 000 pixels Effective (movie, 4:3): 1 080 000 pixels Effective (still image, 16:9): 1 490 000 pixels Effective (still image, 4:3): 1 990 000 pixels

HDR-SR7E/SR8E:

6.3 mm (1/2.9 type) CMOS sensor Recording pixels (still image, 4:3): Max. 6.1 mega (2 848 \times 2 136) pixels*2 Gross: Approx. 3 200 000 pixels Effective (movie, 16:9): 2 280 000 pixels Effective (movie, 4:3): 1 710 000 pixels

Effective (still image, 16:9): 2 280 000 pixels

Effective (still image, 4:3):

3 040 000 pixels

Lens

Carl Zeiss Vario-Sonnar T* HDR-SR5E: $10 \times (Optical), 20 \times, 80 \times (Digital)$ HDR-SR7E/SR8E: $10 \times (Optical), 20 \times (Digital)$

Focal length

F1.8 ~ 2.9 Filter diameter: 37 mm (1 1/2 in.)

HDR-SR5E: f=5.1 ~ 51 mm (7/32 ~ 2 1/8 in.)

When converted to a 35 mm still camera For movies*3: 41.3 ~ 485 mm (1 11/16 ~ 19 1/ 8 in.) (16:9), 50.5 ~ 594 mm (2 ~ 23 1/2 in.) (4:3)

For still images: 40.4 ~ 404 mm (1 5/8 ~ 16 in.) (16:9), 37 ~ 370 mm (1 1/2 ~ 14 5/8 in.) (4:3)

HDR-SR7E/SR8E:

 $f=5.4 \sim 54 \text{ mm} (7/32 \sim 2.1/4 \text{ in.}) \text{ When}$ converted to a 35 mm still camera For movies: $40 \sim 400 \text{ mm} (1.5/8 \sim 15.3/4 \text{ in.})$ (16:9), $49 \sim 490 \text{ mm} (1.15/16 \sim 19.3/8 \text{ in.})$

For still images: 40 ~ 400 mm (1 5/8 ~ 15 3/4 in.) (16:9), $37 \sim 370$ mm (1 1/2 $\sim 145/8$ in.) (4:3)

Color temperature

[AUTO], [ONE PUSH], [INDOOR] (3 200 K). [OUTDOOR] (5 800 K)

Minimum illumination

2 lx (lux) ([AUTO SLW SHUTTR] [ON], Shutter speed 1/25 sec) 0 lx (lux) (during NightShot function)

- *1 "Exif" is a file format for still images, established by the JEITA (Japan Electronics and Information Technology Industries Association) Files in this format can have additional information such as your camcorder's setting information at the time of recording.
- *2 The unique pixel array of Sony's ClearVid CMOS sensor and image processing system (new Enhanced Imaging Processor) allows for still image resolution equivalent to the sizes described.
- *3 The focal length figures are actual figures resulting from wide angle pixel read-out.

Input/Output connectors

Audio/Video output

10-pin connector

Video signal: 1 Vp-p, 75 Ω (ohms) Luminance signal: 1 Vp-p, 75 Ω (ohms) Chrominance signal: 0.3 Vp-p, 75 Ω (ohms) Audio signal: 327 mV (at load impedance 47 Ω (kilohms)), Output impedance with less than 2.2 Ω (kilohms)

COMPONENT OUT jack

Y: 1 Vp-p, 75Ω (ohms)

PB/PR, CB/CR: \pm 350 mV, 75 Ω (ohms)

HDMI OUT jack

HDMI Type C mini connector

Headphone jack (HDR-SR7E/SR8E)

Stereo minijack (Ø 3.5 mm)

MIC input jack (HDR-SR7E/SR8E)

Stereo minijack (Ø 3.5 mm)

REMOTE jack

Stereo mini-minijack (Ø 2.5 mm)

LCD screen

Image

6.7 cm (2.7 type, aspect ratio 16:9)

Total dot number

 $211\ 200\ (960 \times 220)$

General

Power requirements

DC 6.8 V/7.2 V (battery pack) DC 8.4 V (AC Adaptor)

Average power consumption

HDR-SR5E:

During camera recording using the LCD with normal brightness:

HD: 4.0 W SD: 3.5 W

HDR-SR7E/SR8E:

During camera recording using the viewfinder with normal brightness:

HD: 4.4 W SD: 3.9 W

During camera recording using the LCD with normal brightness:

HD: 4.6 W SD: 4.1 W

Operating temperature

0 °C to + 40 °C (32 °F to 104 °F)

Storage temperature

-20 °C to + 60 °C (-4 °F to + 140 °F)

Dimensions (approx.)

HDR-SR5E:

 $75 \times 81 \times 135 \text{ mm}$

 $(3 \times 3 \ 1/4 \times 5 \ 3/8 \ in.) \ (w/h/d)$

including the projecting parts $75 \times 81 \times 140 \text{ mm}$

 $(3 \times 3 \ 1/4 \times 5 \ 5/8 \ in.) \ (w/h/d)$

including the projecting parts, and the NP-FH60 rechargeable battery pack attached

HDR-SR7E/SR8E:

 $75 \times 81 \times 144 \text{ mm}$

 $(3 \times 3 \ 1/4 \times 5 \ 3/4 \ in.) \ (w/h/d)$

including the projecting parts

 $75 \times 81 \times 149 \text{ mm}$

 $(3 \times 3 \ 1/4 \times 5 \ 7/8 \ in.) \ (w/h/d)$

including the projecting parts, and the NP-FH60 rechargeable battery pack attached

Mass (approx.)

HDR-SR5E:

460 g (1 lb) main unit only

540 g (1 lb 3 oz) including the NP-FH60

rechargeable battery pack

HDR-SR7E/SR8E:

530 g (1 lb 2 oz) main unit only

610 g (1 lb 5 oz) including the NP-FH60

rechargeable battery pack

Supplied accessories

See page 5.

Handycam Station DCRA-C181

Input/Output connectors

Audio/Video output

10-pin connector

Video signal: 1 Vp-p, 75 Ω (ohms)

Luminance signal: 1 Vp-p, 75 Ω (ohms) Chrominance signal: 0.3 Vp-p, 75 Ω (ohms) Audio signal: 327 mV (at load impedance 47

 $k\Omega$ (kilohms)), Output impedance less than

2.2 kΩ (kilohms)

COMPONENT OUT jack

Y: 1 Vp-p, 75 Ω (ohms)

PB/PR, CB/CR: \pm 350 mV, 75 Ω (ohms)

USB jack

mini-B

AC Adaptor AC-L200/L200B

Power requirements

AC 100 V - 240 V, 50/60 Hz

Current consumption

0.35 - 0.18 A

Power consumption

18 W

Output voltage

DC 8.4 V*

Operating temperature

0 °C to + 40 °C (32 °F to 104 °F)

Storage temperature

-20 °C to + 60 °C (-4 °F to + 140 °F)

Dimensions (approx.)

48 × 29 × 81 mm

 $(1.15/16 \times 1.3/16 \times 3.1/4 \text{ in.}) \text{ (w/h/d)}$ excluding the projecting parts

Mass (approx.)

170 g (6.0 oz) excluding the mains lead

* See the label on the AC Adaptor for other specifications.

Rechargeable battery pack NP-FH60

Maximum output voltage

DC 8.4 V

Output voltage

DC 7.2 V

Capacity

7.2 Wh (1 000 mAh)

Dimensions (approx.)

 $31.8 \times 33.3 \times 45.0 \text{ mm}$

 $(1.5/16 \times 1.5/16 \times 1.13/16 \text{ in.}) \text{ (w/h/d)}$

Mass (approx.)

80 g (2.9 oz)

Operating temperature

0 °C to + 40 °C (32 °F to 104 °F)

Type

Lithium ion

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