

## Changing the menu settings

Icon/item	Mode	Meaning	POWER switch
 <b>CAMERA SET</b>			
<b>D ZOOM</b>	● OFF	To deactivate the digital zoom. Up to 10× zoom is carried out.	CAMERA
	20×	To activate the digital zoom. More than 10× to 20× zoom is performed digitally (p. 34).	
	120×	To activate the digital zoom. More than 10× to 120× zoom is performed digitally (p. 34).	
<b>16:9WIDE</b>	● OFF	Not to record a 16:9 wide picture (p. 56).	CAMERA
	ON	To record a 16:9 wide picture.	
<b>STEADYSHOT</b>	● ON	To compensate for camera-shake.	CAMERA
	OFF	To cancel the SteadyShot function. Natural pictures are produced when shooting a stationary subject with a tripod.	
<b>HOLOGRAM F</b>	● AUTO	The HOLOGRAM AF emits when focusing on subjects is difficult in dark places (p. 119)	MEMORY/ NETWORK*
	OFF	The HOLOGRAM AF does not emit.	
 <b>VCR SET</b>			
<b>VIDEOINPUT</b>	● VIDEO	To use the video plug of the A/V connecting cable when recording from a player.	VCR
	S VIDEO	To use the S video plug of the A/V connecting cable when recording from a player.	

\* DCR-IP55 only.

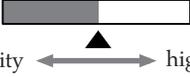
### SteadyShot function

- The SteadyShot function may not correct excessive camera-shake. Even if STEADYSHOT is set to ON.
- Attachment of a conversion lens (optional) may influence the SteadyShot function.

### If you cancel the SteadyShot function

The SteadyShot off indicator  appears. Your camcorder prevents excessive compensation for camera-shake.

## Changing the menu settings

Icon/item	Mode	Meaning	POWER switch
<b>LCD/VF SET</b>			
<b>LCD B.L.</b>	● BRT NORMAL	To set the brightness on the LCD screen normal.	CAMERA MEMORY / NETWORK* VCR
	BRIGHT	To brighten the LCD screen.	
<b>LCD COLOR</b>	—	To adjust the color on the LCD screen with ↓/↑.	CAMERA MEMORY / NETWORK* VCR
			
<b>VF B.L.</b>	● BRT NORMAL	To set the brightness on the viewfinder screen to normal.	CAMERA MEMORY / NETWORK* VCR
	BRIGHT	To brighten the viewfinder screen.	

\* DCR-IP55 only

### LCD B.L. and VF B.L.

- When you select BRIGHT, battery life is reduced by about 10 percent during recording.
- When you use power supplies other than the battery pack, BRIGHT is automatically selected.

### Even if you adjust LCD B.L., LCD COLOR and/or VF B.L.

The recorded picture will not be affected.

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Icon/item	Mode	Meaning	POWER switch
 <b>MEMORY SET</b>			
<b>STILL SET</b>			
<b>BURST</b>	<input checked="" type="radio"/> OFF	Not to record continuously.	MEMORY / NETWORK*
	<input type="radio"/> NORMAL	To record from four to 13 images continuously (p. 116).	
	<input type="radio"/> EXP BRKTG	To record three images continuously with different exposure.	
	<input type="radio"/> MULTI SCRN	To record nine images continuously (p. 116).	
<b>QUALITY</b>	<input checked="" type="radio"/> SUPER FINE	To record still images in the finest image quality mode (p. 108).	MEMORY / NETWORK* VCR
	<input type="radio"/> FINE	To record still images in the fine image quality mode.	
	<input type="radio"/> STANDARD	To record still images in the standard image quality mode.	
<b>IMAGESIZE</b>	<input checked="" type="radio"/> 1152 × 864	To record still images at 1152 × 864 size (p. 112).	MEMORY / NETWORK*
	<input type="radio"/> 640 × 480	To record still images at 640 × 480 size.	
<b>MOVIE SET</b>			
<b>MOVIEMODE</b>	<input checked="" type="radio"/> SUPER FINE	To record moving pictures with super fine image quality (p. 110).	MEMORY / NETWORK* VCR
	<input type="radio"/> FINE	To record moving pictures with fine image quality.	
	<input type="radio"/> STANDARD	To record moving pictures with standard image quality.	
	<input type="radio"/> LIGHTMODE	To record moving pictures to be used as an e-mail attachment.	
 <b>REMAIN</b>	<input checked="" type="radio"/> AUTO	To display the remaining capacity of the "Memory Stick" in the following cases: <ul style="list-style-type: none"> <li>• for five seconds after inserting a "Memory Stick" into your camcorder.</li> <li>• when the capacity of the "Memory Stick" is less than one minute after the POWER switch is set to MEMORY / NETWORK.</li> <li>• for five seconds after completing recording.</li> </ul>	MEMORY / NETWORK* VCR
	<input type="radio"/> ON	To always display the remaining capacity of the "Memory Stick".	

\* DCR-IP55 only.

### If you select QUALITY

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

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Icon/item	Mode	Meaning	POWER switch
 MEMORY SET			
SLIDE SHOW	—	To play back images in a continuous loop (p. 144).	MEMORY/ NETWORK*
FILE NO.	● SERIES	To assign numbers to file in sequence even if the “Memory Stick” is changed.	MEMORY/ NETWORK* VCR
	RESET	To reset the file numbering each time the “Memory Stick” is changed.	
DELETE ALL	—	To delete all the unprotected images (p. 149).	MEMORY/ NETWORK*
FORMAT	● RETURN	To cancel formatting.	MEMORY/ NETWORK*
	OK	To format an inserted “Memory Stick.” Formatting erases all information on the “Memory Stick”. 1. Press ↓/↑ to select FORMAT then press EXEC. 2. Press ↓/↑ to select OK, then press EXEC. 3. After “EXECUTE” appears, press EXEC. “FORMATTING” flashes during formatting. “COMPLETE” appears when formatting is finished.	

\* DCR-IP55 only

### Notes on formatting

- The “Memory Stick” supplied with your camcorder has been formatted at factory. Formatting with your camcorder is not required.
- Do not turn the POWER switch or press any button while FORMATTING is displayed.
- You cannot format the “Memory Stick” if the write-protect tab on the “Memory Stick” is set to LOCK.
- Format the “Memory Stick” if  FORMAT ERROR appears.
- Formatting erases protected image data on the “Memory Stick”.

## Changing the menu settings

Icon/item	Mode	Meaning	POWER switch
 <b>CM SET</b>			
<b>TITLEERASE</b>	—	To erase the title you have superimposed (p. 96).	CAMERA VCR
<b>TITLE DSPL</b>	● ON	To display the title you have superimposed.	VCR
	OFF	Not to display the title.	
<b>TAPE TITLE</b>	—	To label a cassette (p. 101).	CAMERA VCR
<b>ERASE ALL</b>	—	To erase all the data in cassette memory (p. 102).	CAMERA VCR
 <b>INFOSPL</b>	● ON	To display the cassette information of the tape. This is displayed for five seconds in the following cases: (p. 100). <ul style="list-style-type: none"> <li>• When turning on the power and inserting a cassette.</li> <li>• When setting the POWER switch to VCR.</li> </ul>	CAMERA VCR
	OFF	To not display the cassette information of the tape.	
 <b>TAPE SET</b>			
 <b>REMAIN</b>	● AUTO	To display the remaining tape bar: <ul style="list-style-type: none"> <li>• for about eight seconds after a cassette is inserted and your camcorder calculates the remaining amount of tape.</li> <li>• for about eight seconds after the playback button  is pressed in VCR mode.</li> <li>• for about eight seconds after DSPL/TOUCH PANEL is pressed to display the screen indicators.</li> </ul>	CAMERA VCR
	ON	To always display the remaining tape indicator.	

## Changing the menu settings

Icon/item	Mode	Meaning	POWER switch
 <b>SETUP MENU</b>			
<b>CLOCK SET</b>	—	To set the date or time (p. 22).	CAMERA MEMORY/ NETWORK*
<b>USB STREAM</b>	● OFF	To deactivate the USB Streaming function.	CAMERA VCR
	ON	To activate the USB Streaming function.	
<b>LANGUAGE</b>	● ENGLISH	To display the following information indicators in English: min, STBY, REC, CAPTURE, VOL, END SEARCH and START.	CAMERA MEMORY/ NETWORK* VCR
	FRANÇAIS	To display the information indicators in French.	
	ESPAÑOL	To display the information indicators in Spanish.	
	PORTUGUÊS	To display the information indicators in Portuguese.	
	中文	To display the information indicators in Chinese.	
	한국어	To display the information indicators in Korean.	
<b>DEMO MODE</b>	● ON	To make the demonstration appear.	CAMERA
	OFF	To cancel the demonstration mode.	

\* DCR-IP55 only.

### Notes on DEMO MODE

- You cannot select DEMO MODE when a cassette or the “Memory Stick” is inserted in your camcorder.
- When NIGHTSHOT is set to ON, the “NIGHTSHOT” indicator appears on the LCD screen and you cannot select DEMO MODE in the menu settings.
- If you press the touch panel during the demonstration, the demonstration stops for a while, then it starts again after about 10 minutes.
- DEMO MODE is set to STBY (Standby) at the default setting and the demonstration starts about 10 minutes after you have set the POWER switch to CAMERA without a cassette inserted.

To cancel the demonstration, insert a cassette, set the POWER switch to other than CAMERA, or set DEMO MODE to OFF. To set to STBY (Standby) again, leave the DEMO MODE at ON in the menu settings, turn the POWER switch to OFF (CHG), and return the POWER switch to CAMERA.

## Changing the menu settings

Icon/item	Mode	Meaning	POWER switch
<b>ETC OTHERS</b>			
<b>DATA CODE</b> (On the Remote Commander)	● DATE/CAM	When you press the DATA CODE button on the Remote Commander, the date, time and various settings during playback (p. 43).	MEMORY / NETWORK* VCR
	DATE	The date and time are displayed during playback.	
<b>AREA SET</b>	—	To set your area temporarily, when using the camcorder, in a new location (p. 22).	CAMERA MEMORY / NETWORK*
<b>DST SET**</b>	● OFF	To be used when your area is not in daylight saving time.	CAMERA MEMORY / NETWORK*
	ON	To be used when your area is in daylight saving time.	
<b>BEEP</b>	● MELODY	To output the melody when you start/stop recording or when an unusual condition occurs on your camcorder.	CAMERA MEMORY / NETWORK* VCR
	NORMAL	To output the beep instead of the melody.	
	OFF	To cancel melody and the beep sound.	
<b>COMMANDER</b>	● ON	To activate the Remote Commander supplied with your camcorder.	CAMERA MEMORY / NETWORK* VCR
	OFF	To deactivate the Remote Commander to avoid remote control misoperation caused by other VCR's remote control.	
<b>DISPLAY</b>	● LCD	To show the display on the LCD screen and viewfinder.	CAMERA MEMORY / NETWORK* VCR
	V-OUT/LCD	To show the display on the TV screen, LCD screen and viewfinder.	
<b>REC LAMP</b>	● ON	To light up the camera recording lamp at the front of your camcorder.	CAMERA MEMORY / NETWORK*
	OFF	To turn the camera recording lamp off so that the subject is not aware of recording.	

\* DCR-IP55 only.

\*\*Instead of DST, SUMMERTIME is displayed on the screen for some models.

### Note

If you press DSPL/TOUCH PANEL with DISPLAY set to V-OUT/LCD in the menu settings, the picture from a TV or VCR will not appear on the LCD screen even when your camcorder is connected to the output jacks on the TV or VCR.

### When recording a close subject

When REC LAMP is set to ON, the red camera recording lamp on the front of the camcorder may reflect on the subject if it is close. In this case, we recommend you set REC LAMP to OFF.

### In more than five minutes after removing the power source

The PROGRAM AE, FLASH LVL, WHT BAL and COMMANDER items return to their default settings.

Other menu items are held in memory even when the battery is removed.

# Types of trouble and how to correct trouble

If you run into any problem using your camcorder, use the following table to troubleshoot the problem. If the problem persists, disconnect the power source and contact your Sony dealer. If “C:□□:□□” appears on the LCD screen, the self-diagnosis display function has activated. See page 190.

## In the recording mode

Symptom	Cause and/or Corrective Actions
START/STOP does not operate.	<ul style="list-style-type: none"> <li>• The POWER switch is not set to CAMERA. → Set it to CAMERA (p. 29).</li> <li>• The tape has run out. → Rewind the tape or insert a new one (p. 25, 45).</li> <li>• The write-protect tab is set to expose the red mark. → Use a new cassette or slide the tab (p. 26).</li> <li>• The tape is stuck to the drum (moisture condensation). → Remove the cassette and leave your camcorder for at least one hour to acclimatize (p. 201).</li> </ul>
The power goes off.	<ul style="list-style-type: none"> <li>• When your camcorder is in the recording standby mode for more than five minutes, the camcorder automatically turns off to save battery power and to prevent battery and tape wear. → Set the POWER switch to OFF (CHG) and then to ON.</li> <li>• The battery pack is dead or nearly dead. → Install a fully charged battery pack.</li> </ul>
The image on the viewfinder screen is not clear.	<ul style="list-style-type: none"> <li>• The viewfinder lens is not adjusted correctly. → Adjust the viewfinder lens (p. 33).</li> </ul>
The SteadyShot function does not work.	<ul style="list-style-type: none"> <li>• STEADYSHOT is set to OFF in the menu settings. → Set it to ON in the menu settings (p. 176).</li> </ul>
The autofocus function does not work.	<ul style="list-style-type: none"> <li>• The setting is the manual focus mode. → Press FOCUS to set to the auto focus mode (p. 70).</li> <li>• Shooting conditions are not suitable for autofocus. → Adjust to focus manually (p. 70).</li> </ul>
The picture does not appear in the viewfinder.	<ul style="list-style-type: none"> <li>• The LCD panel is open. → Close the LCD panel when you record using the viewfinder. (p. 31).</li> </ul>
A vertical band appears when you shoot a subject such as lights or a candle flame against a dark background.	<ul style="list-style-type: none"> <li>• The contrast between the subject and background is too high. This is not a malfunction.</li> </ul>
A vertical band appears when you shoot a very bright subject.	<ul style="list-style-type: none"> <li>• This is not a malfunction.</li> </ul>
Some tiny white, red, blue or green spots appear on the LCD screen.	<ul style="list-style-type: none"> <li>• SLOW SHUTTER, Super NightShot or Color Slow Shutter mode is activated. This is not a malfunction.</li> </ul>

(continued on the following page)

## Types of trouble and how to correct trouble

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Symptom	Cause and/or Corrective Actions
An unknown picture is displayed on the LCD screen or in the viewfinder.	<ul style="list-style-type: none"><li>• If 10 minutes elapse after you set the POWER switch to CAMERA without a cassette inserted, your camcorder automatically starts the demonstration. → Insert a cassette or press the LCD screen. The demonstration stops. You can also cancel DEMO MODE (p. 181) in the menu settings.</li></ul>
The picture is recorded in incorrect or unnatural colors.	<ul style="list-style-type: none"><li>• NIGHTSHOT is set to ON. → Set it to OFF (p. 38).</li></ul>
Picture appears too bright, and the subject does not appear on the LCD screen.	<ul style="list-style-type: none"><li>• NIGHTSHOT is set to ON in a bright place. → Set it to OFF (p. 38).</li><li>• The BACKLIGHT function is active. → Set it off (p. 38).</li></ul>
The click of the shutter does not sound.	<ul style="list-style-type: none"><li>• BEEP is set to OFF in the menu settings. → Set it to MELODY or NORMAL (p. 182).</li></ul>
A black band appears when recording a TV screen or computer screen.	<ul style="list-style-type: none"><li>• Set STEADYSHOT to OFF in the menu settings (p. 176).</li></ul>

## Types of trouble and how to correct trouble

### In the playback mode

Symptom	Cause and/or Corrective Actions
Playback is not possible.	<ul style="list-style-type: none"><li>• The tape has run out. → Rewind the tape (p. 45).</li></ul>
There are horizontal lines on the picture or the playback picture is not clear or does not appear.	<ul style="list-style-type: none"><li>• The video head may be dirty. → Clean the head using the cleaning cassette (optional) (p. 202).</li></ul>
No sound or only a low sound is heard when playing back a tape.	<ul style="list-style-type: none"><li>• Volume is turned to minimum. → Turn up the volume (p. 42).</li></ul>
The multi-picture search, title search or date search function does not work.	<ul style="list-style-type: none"><li>• There is no title in the tape. → Superimpose the titles (p. 92).</li><li>• The tape has a blank portion in the beginning of the tape or between record portion (p. 83, 84).</li></ul>
The title is not displayed.	<ul style="list-style-type: none"><li>• TITLE DSPL is set to OFF in the menu settings. → Set it to ON in the menu settings (p. 180).</li></ul>
Dubbing cannot be made when using the A/V connecting cable.	<ul style="list-style-type: none"><li>• VIDEOINPUT is not set correctly in the menu settings. → Set it to the appropriate position (p. 176).</li></ul>
The playback picture freezes for about one second.	<ul style="list-style-type: none"><li>• When playing back a transition of recordings, the playback picture freezes for about one second. This is not a malfunction.</li></ul>

## Types of trouble and how to correct trouble

### In the recording and playback modes

Symptom	Cause and/or Corrective Actions
The POWER switch does not turn on.	<ul style="list-style-type: none"><li>• The battery pack is not installed, or is dead or nearly dead. → Install a charged battery pack (p. 17).</li><li>• The AC power adaptor is not connected to a wall outlet. → Connect the AC power adaptor to a wall outlet (p. 20).</li></ul>
The battery pack is quickly discharged.	<ul style="list-style-type: none"><li>• The temperature of the environment is too low.</li><li>• The battery pack is not fully charged. → Charge the battery pack fully again (p. 18).</li><li>• The battery pack is completely dead, and cannot be recharged. → Replace with a new battery pack (p. 17).</li></ul>
The battery remaining indicator does not indicate the correct time.	<ul style="list-style-type: none"><li>• You have used the battery pack in an extremely hot or cold environment for a long time.</li><li>• The battery pack is completely dead, and cannot be recharged. → Replace with a new battery pack (p. 17).</li><li>• The battery is exhausted. → Use a charged battery pack (p. 17, 18).</li><li>• A deviation has occurred in the remaining time. → Charge the battery pack fully again so that the indication on the battery remaining indicator is correct (p. 20).</li></ul>
The power goes off although the battery remaining indicator indicates that the battery pack has enough power to operate.	<ul style="list-style-type: none"><li>• A deviation has occurred in the remaining battery time. → Charge the battery pack fully again so that the indication on the battery remaining indicator is correct (p. 20).</li></ul>
The cassette cannot be removed from the holder.	<ul style="list-style-type: none"><li>• The power source is disconnected. → Connect it firmly (p. 17, 20).</li><li>• The battery is exhausted. → Use a charged battery pack (p. 17, 18).</li></ul>
The  and  indicators flash and no functions except for cassette ejection work.	<ul style="list-style-type: none"><li>• Moisture condensation has occurred. → Remove the cassette and leave your camcorder for at least one hour to acclimatize (p. 201).</li></ul>
Remaining tape indicator is not displayed.	<ul style="list-style-type: none"><li>• The  REMAIN is set to AUTO in the menu settings. → Set it to ON to always display the remaining tape indicator (p. 180).</li></ul>

## Types of trouble and how to correct trouble

### When operating using the "Memory Stick"

Symptom	Cause and/or Corrective Actions
The "Memory Stick" does not function.	<ul style="list-style-type: none"><li>• The POWER switch is not set to MEMORY / NETWORK (DCR-IP55 only). → Set it to MEMORY / NETWORK (p. 13, 114).</li><li>• The "Memory Stick" is not inserted. → Insert a "Memory Stick" (p. 104).</li></ul>
Recording does not function.	<ul style="list-style-type: none"><li>• The "Memory Stick" has already been recorded to its full capacity. → Delete unnecessary images and record again (p. 147).</li><li>• The "Memory Stick" formatted incorrectly is inserted. → Format the "Memory Stick" using your camcorder or use another "Memory Stick" (p. 179).</li><li>• The write-protect tab on the "Memory Stick" is set to LOCK. → Release the lock (p. 103).</li></ul>
The image cannot be deleted.	<ul style="list-style-type: none"><li>• The image is protected. → Cancel image protection (p. 146).</li><li>• The write-protect tab on the "Memory Stick" is set to LOCK. → Release the lock (p. 103).</li></ul>
You cannot format the "Memory Stick."	<ul style="list-style-type: none"><li>• The write-protect tab on the "Memory Stick" is set to LOCK. → Release the lock (p. 103).</li></ul>
Deleting all the images cannot be carried out.	<ul style="list-style-type: none"><li>• The write-protect tab on the "Memory Stick" is set to LOCK. → Release the lock (p. 103).</li></ul>
You cannot protect the image.	<ul style="list-style-type: none"><li>• The write-protect tab on the "Memory Stick" is set to LOCK. → Release the lock (p. 103).</li><li>• The INDEX screen is not displayed. → Press INDEX to display the index screen, then protect the image (p. 146).</li></ul>
You cannot write a print mark on the still image.	<ul style="list-style-type: none"><li>• The write-protect tab on the "Memory Stick" is set to LOCK. → Release the lock (p. 103).</li><li>• The INDEX screen is not displayed. → Press INDEX to display the index screen, then write a print mark (p. 150).</li><li>• You are trying to write a print mark on a moving picture. → Print marks cannot be written to moving picture.</li></ul>
You cannot play back images in actual size.	<ul style="list-style-type: none"><li>• You may not be able to play back images in actual size when you try to play back images recorded by other equipment. This is not a malfunction.</li></ul>
You cannot play back image data.	<ul style="list-style-type: none"><li>• Your camcorder cannot play back some images processed with a computer (The file name flashes on the LCD screen).</li><li>• Your camcorder may not be able to play back the image recorded using other camcorder.</li></ul>

## Types of trouble and how to correct trouble

### Others

Symptom	Cause and/or Corrective Actions
A title is not recorded.	<ul style="list-style-type: none"><li>• 20 titles have been recorded.<ul style="list-style-type: none"><li>→ Erase unnecessary title (p. 96).</li></ul></li><li>• The cassette is set to prevent accidental erasure.<ul style="list-style-type: none"><li>→ Slide the write-protect tab so that red portion is not visible (p. 26).</li></ul></li><li>• The tape has a blank portion in the recorded portion.<ul style="list-style-type: none"><li>→ Superimpose the title to the recorded position (p. 94).</li></ul></li></ul>
A cassette label is not recorded.	<ul style="list-style-type: none"><li>• The tape is set to prevent accidental erasure.<ul style="list-style-type: none"><li>→ Slide the write-protect tab so that red portion is not visible (p. 26).</li></ul></li></ul>
The Remote Commander supplied with your camcorder does not work.	<ul style="list-style-type: none"><li>• COMMANDER is set to OFF in the menu settings.<ul style="list-style-type: none"><li>→ Set it to ON (p. 182).</li></ul></li><li>• Something is blocking the infrared rays.<ul style="list-style-type: none"><li>→ Remove the obstacle.</li></ul></li><li>• The batteries are inserted in the battery holder with the + - polarities incorrectly matching the + - marks.<ul style="list-style-type: none"><li>→ Insert the batteries with the correct polarity (p. 213).</li></ul></li><li>• The batteries are dead.<ul style="list-style-type: none"><li>→ Insert new ones (p. 213).</li></ul></li></ul>
The picture from a TV or VCR does not appear even when your camcorder is connected to the outputs on the TV or VCR.	<ul style="list-style-type: none"><li>• DISPLAY is set to V-OUT /LCD in the menu settings.<ul style="list-style-type: none"><li>→ Set it to LCD (p. 182).</li></ul></li><li>• VIDEOINPUT is not set correctly in the menu settings.<ul style="list-style-type: none"><li>→ Set it to the appropriate position (p. 176).</li></ul></li></ul>
The melody or beep sounds for five seconds.	<ul style="list-style-type: none"><li>• Moisture condensation has occurred.<ul style="list-style-type: none"><li>→ Remove the cassette and leave your camcorder for at least one hour to acclimatize (p. 201).</li></ul></li><li>• Some troubles have occurred in your camcorder.<ul style="list-style-type: none"><li>→ Remove the cassette and insert it again, then operate your camcorder.</li></ul></li></ul>
No function works though the power is on.	<ul style="list-style-type: none"><li>• Disconnect the AC power adaptor from a wall outlet or remove the battery, then reconnect it in about one minute. Turn the power on. If the functions still do not work, press the RESET button using a sharp-pointed object. (If you press the RESET button, all the settings (DCR-IP55: except the NETWORK mode settings) including the date and time return to the default) (p. 208).</li></ul>

## Types of trouble and how to correct trouble

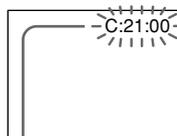
Symptom	Cause and/or Corrective Actions
While charging the battery pack installed on the camcorder, the battery CHG lamp does not light up.	<ul style="list-style-type: none"> <li>• Charging is completed.</li> <li>• The battery pack is not properly installed. → Install it properly (p. 17).</li> </ul>
You cannot charge the battery pack installed on the camcorder.	<ul style="list-style-type: none"> <li>• The POWER switch is not set to OFF (CHG). → Set it to OFF (CHG).</li> <li>• The AC power adaptor is not connected to a wall outlet. → Connect it to a wall outlet.</li> </ul>
While charging the battery pack, the battery CHG lamp flashes.	<ul style="list-style-type: none"> <li>• The battery pack is not properly installed. → Install it properly (P. 17).</li> <li>• Something is wrong with the battery pack. → Please contact your Sony dealer or local authorized Sony service facility.</li> </ul>
When you set the POWER switch to VCR or OFF (CHG), if you move your camcorder, you may hear a clattering sound from inside your camcorder.	<ul style="list-style-type: none"> <li>• This is because some functions use a linear mechanism. This is not a malfunction.</li> </ul>
The buttons do not appear on the touch panel.	<ul style="list-style-type: none"> <li>• The DSPL/TOUCH PANEL button is pressed. → Press the LCD screen lightly. → Press DSPL/TOUCH PANEL on your camcorder or DISPLAY on the Remote Commander (p. 43).</li> </ul>
The buttons on the LCD screen do not work.	<ul style="list-style-type: none"> <li>→ Adjust the LCD screen (CALIBRATION) (p. 203).</li> </ul>
The indicators appear mirror-reversed in the viewfinder.	<ul style="list-style-type: none"> <li>• The mirror mode is activated. This is not a malfunction (p. 35).</li> </ul>
Image data cannot be transferred by the USB connection.	<ul style="list-style-type: none"> <li>• The USB cable was connected before installation of the USB driver was completed. → Uninstall the incorrect USB driver and reinstall the USB driver (p. 155).</li> </ul>
A cassette cannot be removed even if the cassette lid is open.	<ul style="list-style-type: none"> <li>• Moisture condensation has started to condense in your camcorder (p. 201).</li> </ul>

# Self-diagnosis display

Your camcorder has a self-diagnosis display function.

This function displays the current condition of your camcorder as a five-digit code (a combination of a letter and figures) on the screen. If a five-digit code is displayed, check the following code chart. The last two digits (indicated by □□) will differ depending on the state of your camcorder.

## LCD screen or Viewfinder



### Self-diagnosis display

- C:□□:□□  
You can service your camcorder yourself.
- E:□□:□□  
Contact your Sony dealer or local authorized Sony facility.

Five-digit display	Cause and/or Corrective Actions
C:04:□□	<ul style="list-style-type: none"> <li>• You are using a battery pack that is not an "InfoLITHIUM" battery pack. → Use an "InfoLITHIUM" battery pack (p. 20, 196).</li> </ul>
C:21:□□	<ul style="list-style-type: none"> <li>• Moisture condensation has occurred. → Remove the cassette and leave your camcorder for at least one hour to acclimatize (p. 201).</li> </ul>
C:22:□□	<ul style="list-style-type: none"> <li>• The video heads are dirty. → Clean the heads using the cleaning cassette (optional) (p. 202).</li> </ul>
C:31:□□ C:32:□□	<ul style="list-style-type: none"> <li>• A malfunction other than the above that you can service has occurred.* → Remove the cassette and insert it again, then operate your camcorder. → Disconnect the power cord of the AC adaptor or remove the battery pack. After reconnecting the power source, operate your camcorder.</li> </ul>
E:20:□□ E:61:□□ E:62:□□	<ul style="list-style-type: none"> <li>• A malfunction that you cannot service has occurred. → Contact your Sony dealer or local authorized Sony service facility and inform them of the 5-digit code. (example: E:61:10)</li> </ul>

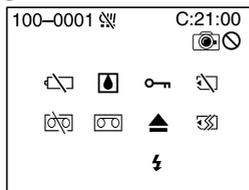
If you are unable to rectify the problem even if you try corrective actions a few times, contact your Sony dealer or local authorized Sony service facility.

\* Do not perform this operation if moisture starts to condense (p. 201).

# Warning indicators and messages

If indicators and messages appear on the LCD screen, check the following:  
See the page in parentheses “( )” for more information.

## Warning indicators



### 100-0001 Warning indicator as to file

Slow flashing:

- The file is corrupted.
- The file is unreadable.
- You are trying to carry out MEMORY MIX function on moving picture (p. 125).

C:21:00 Self-diagnosis display (p. 190).

### ⚡ The battery is dead or nearly dead

Slow flashing:

- The battery is nearly dead.  
Depending on operational, environmental or battery conditions the ⚡ indicator may flash, even if there are approximately five to 10 minutes remaining.

### 💧 Moisture condensation has occurred\*

Fast flashing:

- Eject the cassette, turn off your camcorder, and leave it for about one hour with the cassette compartment open (p. 201).

### 📄 Warning indicator as to Micro Cassette Memory\*

Slow flashing:

- Eject the cassette, and insert it again. If even then the indicator flashes, the Micro Cassette Memory of the cassette may be faulty.

Fast flashing:

- The Micro Cassette Memory of the camcorder may be faulty.

### 📄 Warning indicator as to “Memory Stick”

Slow flashing:

- No “Memory Stick” is inserted.

Fast flashing\*:

- The “Memory Stick” is not readable with your camcorder (p. 103).
- The image cannot be recorded on “Memory Stick”.

### 📄 Warning indicator as to “Memory Stick” formatting\*

Fast flashing:

- The “Memory Stick” data is corrupted.
- “Memory Stick” is not formatted correctly (p. 179).

### 📄 Warning indicator as to tape

Slow flashing:

- The remaining tape is less than five minutes.
- No cassette is inserted.\*
- The write-protect tab on the cassette is out (red) (p. 26).\*

Fast flashing:

- The tape has run out.\*

### 📄▲ Warning indicator as to a cleaning cassette

Slow flashing:

- The cleaning cassette is inserted in the camcorder in NETWORK (DCR-IP55E only) mode (p. 202).

### ▲ You need to eject the cassette\*

Slow flashing:

- The write-protect tab on the cassette is out (red) (p. 26).

Fast flashing:

- Moisture condensation has occurred (p. 201).
- The tape has run out.
- The self-diagnosis display function is activated (p. 190).

### 🔒 The image is protected\*

Slow flashing:

- The image is protected (p. 146).

### ⚡ Warning indicator as to the flash

Slow flashing:

- During charging.

Fast flashing:

- The self-diagnosis display function is activated (p. 190).
- There is something wrong with the flash.

### 📄📄 Warning indicator as to recording of still image

Slow flashing:

- The still image cannot be recorded on a tape or a “Memory Stick” (p. 49).

\* You hear the melody or beep sound.

## Warning indicators and messages

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### Warning messages

- CLOCK SET Set the date and time (p. 22).
- FOR "InfoLITHIUM"  
BATTERY ONLY Use an "InfoLITHIUM" battery pack (p. 20, 196).
-  CLEANING CASSETTE<sup>2)</sup> The video heads are dirty (p. 201).
- COPY INHIBIT You tried to record a picture that has a copyright control signal (p. 194).<sup>1)</sup>
-  FULL The "Memory Stick" is full (p. 117).<sup>1)</sup>
-  The write-protect tab on the "Memory Stick" is set to LOCK (p. 146).
-  NO FILE No image is recorded on the "Memory Stick" (p. 136).<sup>1)</sup>
-  NO MEMORY STICK No "Memory Stick" is inserted.<sup>1)</sup>
-  MEMORY STICK ERROR The "Memory Stick" data is corrupted (p. 105).<sup>1)</sup>
-  FORMAT ERROR The "Memory Stick" is not recognized (p. 179).<sup>1)</sup> Check the format.
-  DIRECTORY ERROR There is more than two same directories (p. 135).<sup>1)</sup>
-  PLAY ERROR The image is distorted and cannot be played back.<sup>1)</sup>
-  REC ERROR Check the input signal, then record again (p. 124, 134).<sup>1)</sup>
-  TAPE END The tape has reached the end of the tape.<sup>1)</sup>
-  NO TAPE Insert a cassette.<sup>1)</sup>
- DELETING You press PHOTO while deleting data in a "Memory Stick".<sup>1)</sup>
- FORMATTING You press PHOTO while formatting a "Memory Stick".<sup>1)</sup>
-  NOW CHARGING Charging flash does not work correctly.<sup>1)</sup>
-  CLEANING END The cleaning is complete. Eject the cleaning cassette (p. 202).
-  CLEANING TAPE END The cleaning tape has run out.

## Warning indicators and messages

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-  TITLE FULL 20 titles have been recorded (p. 94).<sup>1)</sup>
- INPUT ERROR A picture in an incompatible format (such as one recorded with the DV format) is input (p. 91).<sup>1)</sup>
- CHANGE TO "CAM" or "VCR" A cleaning cassette cannot be used in MEMORY / NETWORK mode (DCR-IP55 only) (p. 202).

<sup>1)</sup> You hear the melody or beep sound.

<sup>2)</sup> The  indicator and  CLEANING CASSETTE message appear one after another on the LCD screen.

# Usable cassettes

## Selecting cassette types

You can use  MICROMV cassette only. You cannot use any other  8 mm,  Hi8,  Digital8,  VHS,  VHS-C,  S-VHS,  S-VHS-C,  Betamax,  ED Beta,  DV, or <sup>Mini</sup>  mini DV cassettes.

All of the MICROMV cassettes have Micro Cassette Memory.

  and  MICROMV are trademarks of Sony Corporation.

## Copyright signal

### When you play back

If the tape you play back on your camcorder contains copyright signals, you cannot copy it with another video camera connected to your camcorder.

### When you record

You cannot record software on your camcorder that contains copyright control signals for copyright protection of software.

COPY INHIBIT appears on the LCD screen or on the TV screen if you try to record such software. Your camcorder does not record copyright control signals on the tape when it records.

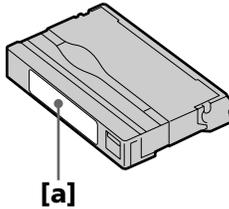
## Usable cassettes

---

### Notes on the MICROMV cassette

#### When affixing a label on the MICROMV cassette

Be sure to affix a label only on the location illustrated below [a] so as not to cause malfunction of your camcorder.



#### After using the MICROMV cassette

Rewind the tape to the beginning, put the cassette in its case, and store it in an upright position.

#### When the Micro Cassette Memory function does not work

Reinsert the cassette.

# About the “InfoLITHIUM” battery pack

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## What is the “InfoLITHIUM” battery pack?

The “InfoLITHIUM” battery pack is a lithium-ion battery pack that has functions for communicating information related to operating conditions between your camcorder and an optional AC adaptor / charger.

The “InfoLITHIUM” battery pack calculates the power consumption according to the operating conditions of your camcorder, and displays the remaining battery time in minutes.

## Charging the battery pack

- Be sure to charge the battery pack before you start using your camcorder.
- We recommend charging the battery pack in an ambient temperature of between 10 °C to 30 °C (50 °F to 86 °F) until the CHG lamp goes off, indicating that the battery pack is fully charged. If you charge the battery outside of this temperature range, you may not be able to efficiently charge the battery pack.
- After charging is completed, either disconnect the cable from the DC IN jack on your camcorder or remove the battery pack.

## Effective use of the battery pack

- Battery pack performance decreases in low-temperature surroundings. So, the time that the battery pack can be used is shorter. We recommend the following to use the battery pack longer:
  - Put the battery pack in a pocket to warm it up, and insert it in your camcorder immediately before you start taking shots.
  - Use the large capacity battery pack (NP-FF70, optional).
- Frequently using the LCD panel or frequently operating playback, fast forward or rewind wears out the battery pack faster. We recommend using the large capacity battery pack (NP-FF70, optional).
- Be certain to turn the POWER switch to OFF (CHG) when not taking shots or playing back on your camcorder. The battery pack is also consumed when your camcorder is in the standby mode or playback is paused.
- Have spare battery packs handy for two or three times the expected recording time, and make trial recordings before taking the actual recording.
- Do not expose the battery pack to water. The battery pack is not water resistant.

## Remaining battery time indicator

- If the power goes off although the remaining battery time indicator indicates that the battery pack has enough power to operate, charge the battery pack fully again so that the indication on the remaining battery time indicator is correct. Note, however, that the correct battery indication sometimes will not be restored if it is used in high temperatures for a long time or left in a fully charged state, or the battery pack is frequently used. Regard the remaining battery time indication as the approximate shooting time.
- The  mark indicating little remaining battery time sometimes flashes depending on the operating conditions or ambient temperature and environment even if the remaining battery time is about five to ten minutes.

## About the “InfolITHIUM” battery pack

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### How to store the battery pack

- If the battery pack is not used for a long time, do the following procedure once per year to maintain proper function.
  1. Fully charge the battery.
  2. Discharge on your electronic equipment.
  3. Remove the battery from the equipment and store it in a dry, cool place.
- To use the battery pack up on your camcorder, leave your camcorder in the recording mode until the power goes off without a cassette inserted.

### Battery life

- The battery life is limited. Battery capacity drops little by little as you use it more and more, and as time passes. When the available battery time is shortened considerably, a probable cause is that the battery pack has reached the end of its life. Please buy a new battery pack.
- The battery life varies depending on how it is stored and operating conditions and environment for each battery pack.

# About i.LINK

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The i.LINK (MICROMV Interface) on this unit is an i.LINK-compliant MICROMV input/output jack. This section describes the i.LINK standard and its features.

## What is i.LINK?

i.LINK is a digital serial interface for handling digital video, digital audio and other data in two directions between equipment having the i.LINK jack, and for controlling other equipment.

i.LINK-compatible equipment can be connected by a single i.LINK cable. Possible applications are operations and data transactions with various digital AV equipment. When two or more i.LINK-compatible equipment are connected to this unit in a daisy chain, operations and data transactions are possible with not only the equipment that this unit is connected to but also with other devices via the directly connected equipment.

Note, however, that the method of operation sometimes varies according to the characteristics and specifications of the equipment to be connected, and that operations and data transactions are sometimes not possible on some connected equipment.

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## Note

Normally, only one piece of equipment can be connected to this unit by the i.LINK cable. When connecting this unit to i.LINK-compatible equipment having two or more i.LINK jacks, refer to the operating instructions of the equipment to be connected.

## About the name "i.LINK"

i.LINK is a more familiar term for IEEE 1394 data transport bus proposed by SONY, and is a trademark approved by many corporations. IEEE 1394 is an international standard standardized by the Institute of Electrical and Electronics Engineers.

## i.LINK baud rate

The maximum baud rate of the camcorder is "S400".

i.LINK's maximum baud rate varies according to the equipment. Three maximum baud rates are defined:

S100 (approx. 100 Mbps\*)

S200 (approx. 200 Mbps)

S400 (approx. 400 Mbps)

The baud rate is listed under "Specifications" in the instruction manual of each equipment. It is also indicated near the i.LINK jack on some equipment.

The maximum baud rate of equipment, except for this unit, on which it is not indicated is "S100".

When units are connected to equipment having a different maximum baud rate, the baud rate sometimes differs from the indicated baud rate.

## \*What is Mbps?

Mbps stands for megabits per second, or the amount of data that can be sent or received in one second. For example, a baud rate of 100Mbps means that 100 megabits of data can be sent in one second.

## About i.LINK

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### i.LINK functions on this unit

For details on how to dub when this unit is connected to other video equipment having i.LINK (MICROMV Interface), see pages 87 and 90.

This unit can also be connected to other i.LINK (MICROMV Interface) compatible equipment made by SONY (e.g. VAIO series personal computer) other than video equipment.

Before connecting this unit to your computer, make sure that application software supported by this unit is already installed on your computer.

For details on precautions when connecting this unit, also refer to the operating instructions for the equipment to be connected.

### Required i.LINK cable

Use the Sony i.LINK 4-pin-to-4-pin cable (during MPEG2 dubbing).

i.LINK and  are trademarks.

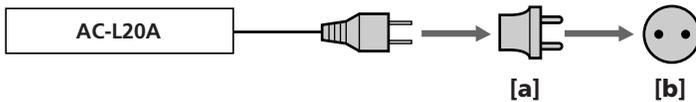
# Using your camcorder abroad

## Using your camcorder abroad

Countries and areas where you can use network functions are restricted. For details, refer to the separate network function operating instructions (DCR-IP55 only).

You can use your camcorder in any country or area with the AC adaptor supplied with your camcorder within 100 V to 240 V AC, 50/60 Hz.

When charging the battery pack, use a commercially available AC plug adaptor **[a]**, if necessary, depending on the design of the wall outlet **[b]**.



Your camcorder is a NTSC system based camcorder. If you want to view the playback picture on a TV, it must be a NTSC system based TV with VIDEO/AUDIO input jack. The following shows TV color systems used overseas.

### NTSC system

Bahama Islands, Bolivia, Canada, Central America, Chile, Colombia, Ecuador, Guyana, Jamaica, Japan, Korea, Mexico, Peru, Surinam, Taiwan, the Philippines, the U.S.A., Venezuela, etc.

### PAL system

Australia, Austria, Belgium, China, Czech Republic, Denmark, Finland, Germany, Holland, Hong Kong, Hungary, Italy, Kuwait, Malaysia, New Zealand, Norway, Poland, Portugal, Singapore, Slovak Republic, Spain, Sweden, Switzerland, Thailand, United Kingdom, etc.

### PAL-M system

Brazil

### PAL-N system

Argentina, Paraguay, Uruguay

### SECAM system

Bulgaria, France, Guiana, Iran, Iraq, Monaco, Russia, Ukraine, etc.

# Maintenance information and precautions

## Moisture condensation

If your camcorder is brought directly from a cold place to a warm place, moisture may condense inside your camcorder, on the surface of the tape, or on the lens. In this condition, the tape may stick to the head drum and be damaged or your camcorder may not operate correctly. If there is moisture inside your camcorder, the beep sounds and the  indicator flashes. When the  indicator flashes at the same time, the cassette is inserted in your camcorder. If moisture condenses on the lens, the indicator will not appear.

### If moisture condensation occurred

None of the functions except cassette ejection will work. Eject the cassette, turn off your camcorder, and leave it for about one hour with the cassette compartment open. Your camcorder can be used again if the  indicator does not appear when the power is turned on again.

If moisture starts to condense, your camcorder sometimes cannot detect condensation. If this happens, the cassette is sometimes not ejected for 10 seconds after the cassette lid is opened. This is not a malfunction. Do not close the cassette lid until the cassette is ejected.

### Note on moisture condensation

Moisture may condense when you bring your camcorder from a cold place into a warm place (or vice versa) or when you use your camcorder in a hot place as follows:

- You bring your camcorder from a ski slope into a place warmed up by a heating device
- You bring your camcorder from an air-conditioned car or room into a hot place outside
- You use your camcorder after a squall or a shower
- You use your camcorder in a high temperature and humidity place

### How to prevent moisture condensation

When you bring your camcorder from a cold place into a warm place, put your camcorder in a plastic bag and tightly seal it. Remove the bag when the air temperature inside the plastic bag has reached the surrounding temperature (after about one hour).

## Maintenance information

### Cleaning the video head

To ensure normal recording and clear pictures, clean the video head. The video head may be dirty when:

- mosaic-pattern noise appears on the playback picture.
- playback pictures do not move.
- playback pictures do not appear.
- the  indicator and  CLEANING CASSETTE message appear one after another or the  indicator flashes on the LCD screen during recording.



## Maintenance information and precautions

### Charging the built-in rechargeable battery

Your camcorder is supplied with a built-in rechargeable battery installed so as to retain the date and time, etc., regardless of the setting of the POWER switch. The built-in rechargeable battery is always charged as long as you are using your camcorder. The battery, however, will get discharged gradually if you do not use your camcorder. It will be completely discharged in **about three months** if you do not use your camcorder at all. Even if the built-in rechargeable battery is not charged, it will not affect the camcorder operation. To retain the date and time, etc., charge the battery if the battery is discharged.

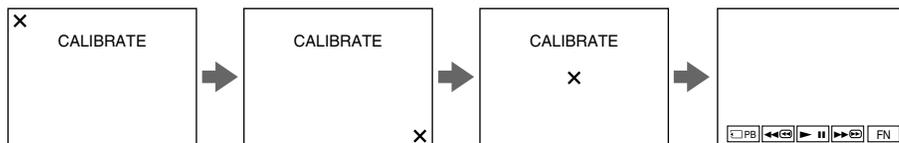
#### Charging the built-in rechargeable battery

- Connect your camcorder to the house current using the AC adaptor supplied with your camcorder, and leave your camcorder with the POWER switch turned off for more than 24 hours.
- Or install the fully charged battery pack in your camcorder, and leave your camcorder with the POWER switch turned off for more than 24 hours.

### Ajusting the LCD screen (CALIBRATION)

The buttons on the touch panel may not work correctly. If this happens, follow the procedure below.

- (1) Set the POWER switch to OFF (CHG).
- (2) Eject the tape from your camcorder, then disconnect any connecting cable from your camcorder.
- (3) Set the POWER switch to VCR while pressing DSPL/TOUCH PANEL on your camcorder, then keep pressing DSPL/TOUCH PANEL for about five seconds.
- (4) Follow the procedure below with your finger or the supplied stylus (DCR-IP55 only).
  - ① Touch ✕ at the upper left corner.
  - ② Touch ✕ at the lower right corner.
  - ③ Touch ✕ in the middle of the LCD screen with your finger or the supplied stylus (DCR-IP55 only).



#### Note

If you do not press the right spot, ✕ always returns to the position at the upper left corner. In this case, start from step 4 again.

### Precautions

#### Camcorder operation

- Operate your camcorder on 7.2 V (battery pack) or 8.4 V (AC adaptor).
- For DC or AC operation, use the accessories recommended in this operating instructions.
- If any solid object or liquid get inside the casing, unplug your camcorder and have it checked by a Sony dealer before operating it any further.
- Avoid rough handling or mechanical shock. Be particularly careful of the lens.
- Keep the POWER switch set 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.
- Keep your camcorder away from strong magnetic fields or mechanical vibration.
- Do not touch the LCD screen with a sharp object other than the stylus supplied. (DCR-IP55 only)
- 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.
- Do not use the network function in a medical institution or in an aircraft (DCR-IP55 only).

#### On handling tapes

- Do not insert anything into the small holes on the rear of the cassette. These holes are used to sense the type and thickness of the tape and if the recording tab is in or out.
- Do not open the tape protect cover or touch the tape.
- Avoid touching or damaging the terminals. To remove dust, clean the terminals with a soft cloth.

#### Camcorder care

- Remove the tape, and periodically turn on the power, operate the CAMERA and VCR sections and play back a tape for about three minutes when your camcorder is not to be used for a long time.
- Clean the lens with a soft brush to remove dust. If there are fingerprints on the lens, remove them with a soft cloth.
- Clean the camcorder body with a dry soft cloth, or a soft cloth lightly moistened with a mild detergent solution. Do not use any type of solvent which may damage the finish.
- Do not let sand get into your camcorder. When you use your camcorder on a sandy beach or in a dusty place, protect it from the sand or dust. Sand or dust may cause your camcorder to malfunction, and sometimes this malfunction cannot be repaired.

#### AC power adaptor

- Unplug the unit from a wall outlet when you are not using the unit for a long time. To disconnect the power cord, pull it out by the plug. Never pull the power cord itself.
- Do not operate the unit with a damaged cord or if the unit has been dropped or damaged.
- Do not bend the power cord forcibly, or place a heavy object on it. This will damage the cord and may cause fire or electrical shock.
- Prevent metallic objects from coming into contact with the metal parts of the connecting section. If this happens, a short may occur and the unit may be damaged.
- Always keep metal contacts clean.
- Do not disassemble the unit.

## Maintenance information and precautions

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- Do not apply mechanical shock or drop the unit.
- While the unit is in use, particularly during charging, keep it away from AM receivers and video equipment. AM receivers and video equipment disturb AM reception and video operation.
- The unit becomes warm during use. This is not a malfunction.
- Do not place the unit in locations that are:
  - Extremely hot or cold
  - Dusty or dirty
  - Very humid
  - Vibrating

### About care and storage of the lens

- Wipe the surface of the lens clean with a soft cloth in the following instance:
  - When there are fingerprints on the lens surface
  - In hot or humid locations
  - When the lens is used in environments such as the seaside
- Store the lens in a well-ventilated location subject to little dirt or dust.

To prevent mold from occurring, periodically perform the above. We recommend turning on and operating the video camera recorder about once per month to keep the video camera recorder in an optimum state for a long time.

### Battery pack

- Use only the specified charger or video equipment with the charging function.
- To prevent an accident from a short circuit, do not allow metal objects to come into contact with the battery terminals.
- Keep the battery pack away from fire.
- Never expose the battery pack to temperatures above 60 °C (140 °F), such as in a car parked in the sun or under direct sunlight.
- Store the battery pack in a cool, dry place.
- Do not expose the battery pack to any mechanical shock.
- Do not disassemble nor modify the battery pack.
- Attach the battery pack to the video equipment securely.
- Charging while some capacity remains does not affect the original battery capacity.

### Notes on dry batteries

To avoid possible damage from battery leakage or corrosion, observe the following:

- Be sure to insert the batteries with the + – polarities matched to the + – marks.
- Dry batteries are not rechargeable.
- Do not use a combination of new and old batteries.
- Do not use different types of batteries.
- Current flows from batteries when you are not using them for a long time.
- Do not use leaking batteries.

### If batteries are leaking

- Wipe off the liquid in the battery compartment carefully before replacing the batteries.
- If you touch the liquid, wash it off with water.
- If the liquid get into your eyes, wash your eyes with a lot of water and then consult a doctor.

If any problem occurs, unplug your camcorder and contact your nearest Sony dealer.

# Specifications

## Video camera recorder

### System

#### Video recording system

2 rotary heads

Helical scanning system

#### Audio recording system

MPEG1 Audio Layer2 (Fs 48 kHz, stereo)

#### Video signal

NTSC color, EIA standards

#### Usable cassette

MICROMV cassette with the **||||/** mark printed

#### Tape speed

Approx. 5.66 mm/s

#### Recording/playback time

(using cassette MGR60)

One hour

#### Fastforward/rewind time

(using cassette MGR60)

Approx. one min. and 30 seconds

#### Viewfinder

Electric viewfinder (color)

#### Image device

3.8 mm (1/4.7 type) CCD

(Charge Coupled Device)

Gross: Approx. 1 070 000 pixels

Effective (still): Approx. 1 000 000 pixels

Effective (moving):

Approx. 690 000 pixels

#### Lens

Carl Zeiss

Combined power zoom lens

Filter diameter 30 mm. (1 3/16 in.)

10× (Optical), 120× (Digital)

#### Focal length

3.7 - 37 mm (5/32 - 1 1/2 in.)

When converted to a 35 mm still camera

CAMERA:

50 - 500 mm (2 - 19 3/4 in.)

MEMORY/NETWORK

(DCR-IP55):

42 - 420 mm (1 11/16 - 16 5/8 in.)

#### Color temperature

Auto, HOLD (Hold),  Indoor

(3 200K),  Outdoor (5 800K)

#### Minimum illumination

7 lx (lux) (F 1.8)

0 lx (lux) (in the NightShot mode)\*

\* Objects unable to be seen due to the dark can be shot with infrared lighting.

### Input/Output connectors

#### Audio/Video input/output

10-pin connector

Input/output auto switch

Video signal: 1 Vp-p, 75  $\Omega$  (ohms), unbalanced, sync negative

Luminance signal: 1 Vp-p, 75  $\Omega$  (ohms), unbalanced

Chrominance signal: 0.286 Vp-p, 75  $\Omega$  (ohms), unbalanced

Audio signal: 327 mV, (at output impedance more than 47 k $\Omega$  (kilohms) )

Input impedance with more than 47 k $\Omega$  (kilohms)

Output impedance with less than 2.2 k $\Omega$  (kilohms)

#### i. LINK (MICROMV Interface)

#### input/output

4-pin connector S400

#### LANC jack

Stereo mini-minijack ( $\varnothing$  2.5 mm)

#### USB jack

mini-B

### LCD screen

#### Picture

6.2 cm (2.5 type)

50 × 37 mm (2 × 1 1/2 in.)

#### Total dot number:

211 200 (960 × 220)

### Wireless communication (DCR-IP55 only)

#### Communication system

Bluetooth specification Ver. 1.1

#### Maximum communication speed <sup>1)2)</sup>

Approx. 723 kbps

#### Maximum output

Bluetooth specification Power Class2

#### Communication distance <sup>2)</sup>

Approx. 10 m (33 feet) (Open space, when using a Sony BTA-NW1/NW1A Modem Adaptor with Bluetooth Function)

#### Compatible Bluetooth profiles <sup>3)</sup>

Generic Access Profile

Dial-up Networking Profile

#### Usable frequency band

2.4 GHz band

(2.400 - 2.4835 GHz)

1) The maximum rate defined by Bluetooth specification Ver. 1.1

2) Depends on obstacles between the Bluetooth devices, radio wave conditions, etc.

3) Defined by Bluetooth specification for intended use between the Bluetooth devices

### General

#### Power requirements

7.2 V (battery pack)

8.4 V (AC power adaptor)

#### Average power consumption (when using the battery pack)

During camera recording using

LCD: 4.4 W

Viewfinder: 3.8 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.)

60 × 73 × 128.5 mm

(2 3/8 × 2 7/8 × 5 1/8 in.) (w/h/d)

#### Mass (approx.)

435 g (15 oz)

excluding the battery pack and cassette

480 g (1 lb 0 oz)

including the battery pack, NP-FF50, cassette MGR60, lens cap and wrist strap

#### Supplied accessories

See page 16.

# Specifications

## AC power adaptor

**Power requirements**

100 - 240 V AC, 50/60 Hz

**Power consumption**

23 W

**Output voltage**

DC OUT: 8.4 V, 1.5 A in the operating mode

**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.)**

125 × 39 × 62 mm (5 × 1 9/16 × 2 1/2 in.) (w/h/d) excluding projecting parts

**Mass (approx.)**

280 g (9.8 oz) excluding power cord

## “Memory Stick”

**Memory**

Flash memory

8MB: MSA-8A

**Operating voltage**

2.7-3.6V

**Power consumption**

Approx. 45mA in the operating mode

Approx. 130µA in the standby mode

**Dimensions (approx.)**

50 × 2.8 × 21.5 mm (2 × 1/8 × 7/8 in.) (w/h/d)

**Mass (approx.)**

4 g (0.14 oz)

Design and specifications are subject to change without notice.

## Battery pack

**Maximum output voltage**

DC 8.4 V

**Output voltage**

DC 7.2 V

**Capacity**

4.8 Wh (675 mAh)

**Operating temperature**

0°C to 40°C (32°F to 104°F)

**Dimensions (approx.)**

40.8 × 12.5 × 49.1 mm (1 5/8 × 1/2 × 1 15/16 in.) (w/h/d)

**Mass (approx.)**

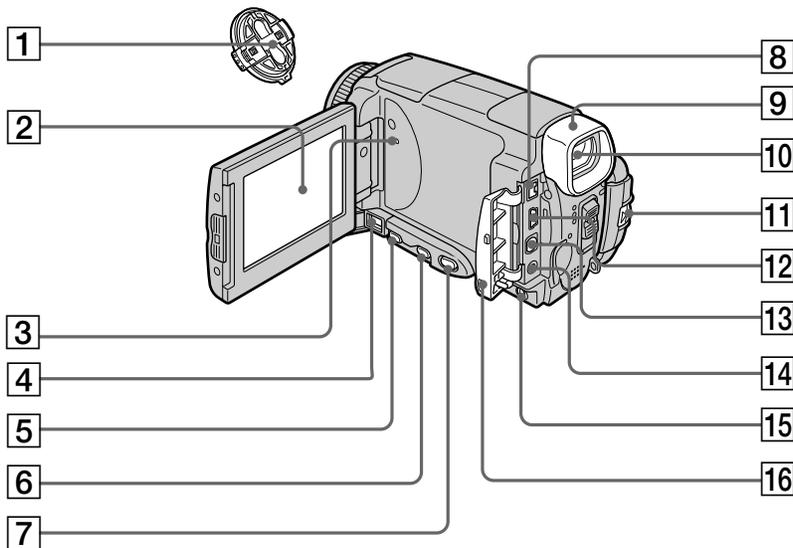
45 g (1.6 oz)

**Type**

Lithium ion

# Identifying the parts and controls

## Camcorder



**1** Lens cap (p. 29)

**2** LCD screen/Touch panel (p. 27, 31, 105)

**3** RESET button (p. 188)

**4** DC IN jack

**5** FOCUS button (p. 70)

**6** BACK LIGHT button (p. 37)

**7** DSPL (DISPLAY)/TOUCH PANEL button (p. 43)

**8** i.LINK (MICROMV Interface) (p. 87, 90, 124, 134, 152)  
The i.LINK (MICROMV Interface) is i.LINK compatible.

**9** Eyecup

**10** Viewfinder (p. 33, 73)

**11** BATT (battery) RELEASE lever (p. 17)

**12**  $\Psi$  (USB) jack (p. 151, 153, 169)

**13** A/V (ID-2) jack (p. 47, 85, 90, 123, 133)

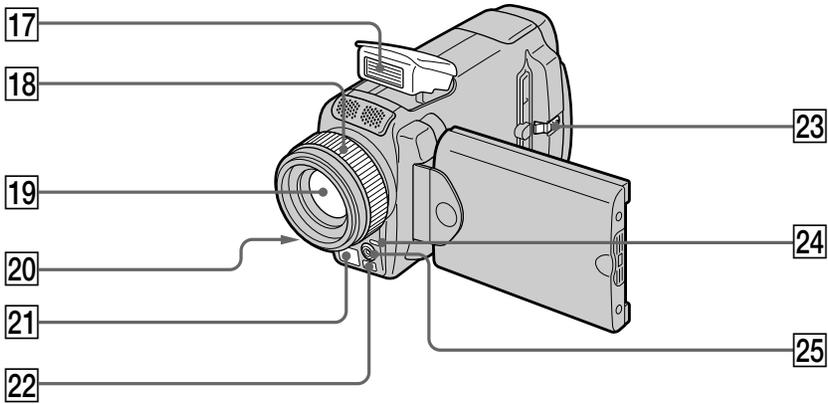
**14**  $\bullet$  (LANC) jack

LANC stands for Local Application Control Bus System. The  $\bullet$  control jack is used for controlling the tape transport of video equipment and other peripherals connected to the video equipment. This jack has the same function as the jack indicated as CONTROL L or REMOTE.

**15** LCD BACKLIGHT switch (p. 32)

**16** Jack cover

## Identifying the parts and controls



**17** Flash

**18** Focus ring (p. 70)

**19** Lens

**20** Camera recording lamp (p. 29)

**21** Infrared rays (Nightshot Light) emitter  
(p. 38)

**22** Remote sensor

**23** OPEN button (p. 11, 13)

**24**  (Bluetooth) lamp (DCR-IP55 only)  
(p. 172)

**25** HOLOGRAM AF emitter (p. 119)

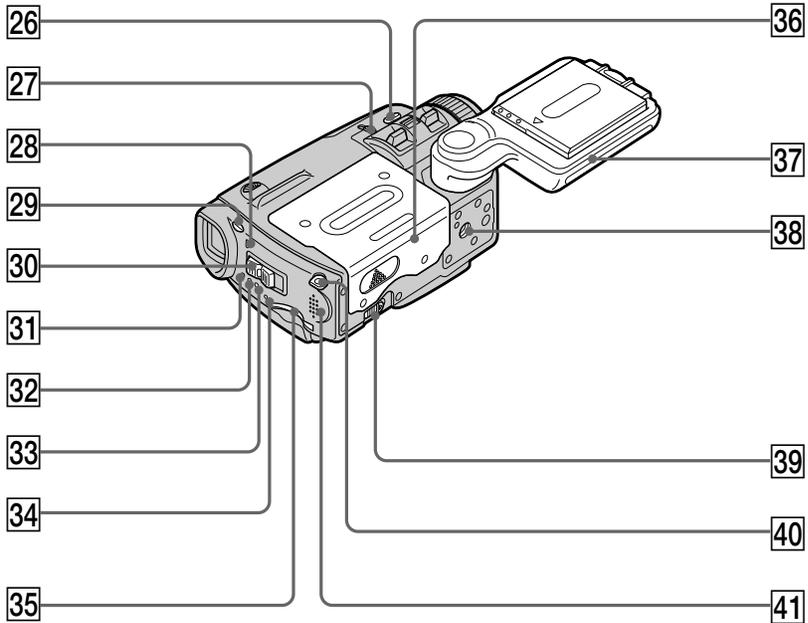
### Note on the Carl Zeiss lens

Your camcorder is equipped with a Carl Zeiss lens which can reproduce a fine image. The lens for your camcorder was developed jointly by Carl Zeiss, in Germany, and Sony Corporation. It adopts the MTF\* measurement system for video camera and offers a quality as the Carl Zeiss lens.

\* MTF is an abbreviation of Modulation Transfer Function.

The value number indicates the amount of light of a subject penetrating into the lens.

## Identifying the parts and controls



**26** COLOR SLOW S/SUPER NIGHTSHOT button (p. 38)

**27** NIGHTSHOT switch (p. 38)

**28** Battery or Flash CHG (Charge) lamp (p. 18, 51, 118)

**29** ⚡ (flash) button (p. 51, 118)

**30** POWER switch (p. 8)

**31** CAMERA lamp (p. 8)

**32** MEMORY/NETWORK lamp (DCR-IP55) or MEMORY lamp (DCR-IP45) (p. 8)

**33** VCR lamp (p. 8)

**34** "Memory Stick" access lamp (p. 104)

**35** "Memory Stick" slot (p. 104)

**36** Cassette lid (p. 25)

**37** Grip (p. 9)

**38** Tripod receptacle

Make sure that the length of the tripod screw is less than 5.5 mm (7/32 inch).

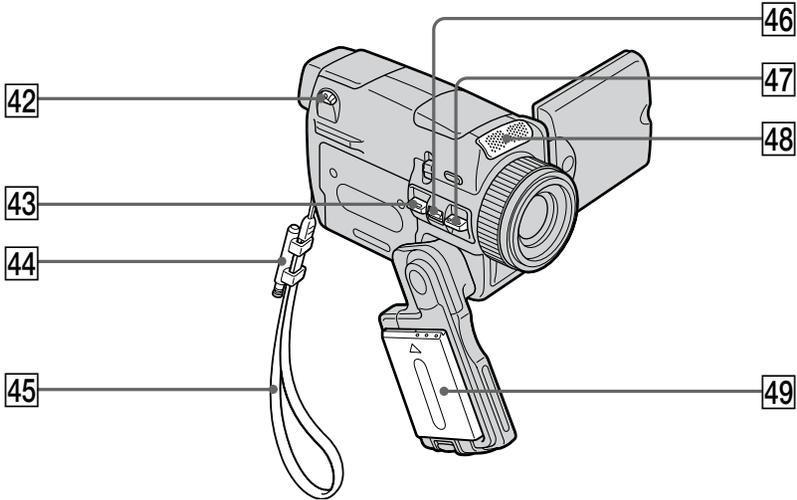
Otherwise, you cannot attach the tripod securely and the screw may damage your camcorder.

**39** OPEN/EJECT lever (p. 25)

**40** Hook for wrist strap (p. 211)

**41** Speaker

## Identifying the parts and controls



**42** Viewfinder lens adjustment lever (p. 33)

**43** PHOTO button (p. 49, 114)

**44** Stylus holder (p. 173)

**45** Wrist strap (p. 10, 12)

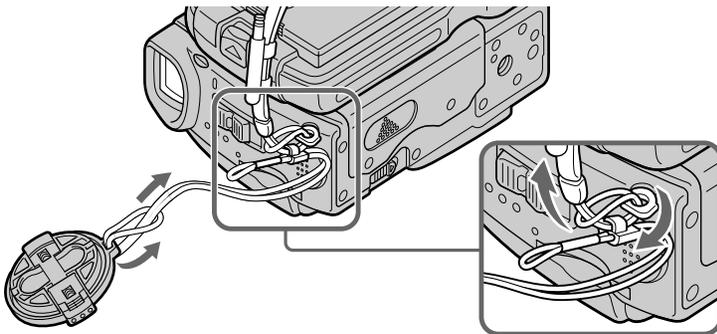
**46** Power zoom lever (p. 34)

**47** START/STOP button (p. 29)

**48** Microphone

**49** Battery pack or battery terminal cover (p. 17)

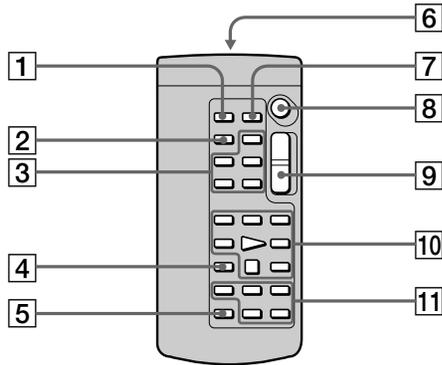
### How to attach the supplied lens cap and wrist strap



## Identifying the parts and controls

### Remote Commander

The buttons that have the same name on the Remote Commander as on your camcorder function identically to the buttons on your camcorder.



**1** PHOTO button (p. 49, 114)

**2** DISPLAY button (p. 43)

**3** MEMORY control buttons

**4** SEARCH MODE button (p. 83, 84)

**5** MULTI SRCH button (p. 79)

**6** Transmitter

Point toward the remote sensor to control your camcorder after turning on your camcorder.

**7** DATA CODE button (p. 43)

**8** START/STOP button (p. 29)

**9** Power zoom button (p. 34)

**10** Video control buttons (p. 42, 45)

**11** ↑/↓/←/→/EXECUTE buttons

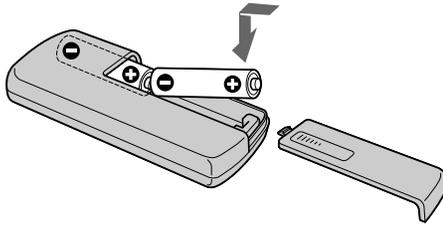
These buttons function the same as the control button on the camcorder.

## Identifying the parts and controls

---

### To prepare the Remote Commander

Insert two size AA (R6) batteries by matching the + and – polarities on the batteries to the + – marks inside the battery compartment.



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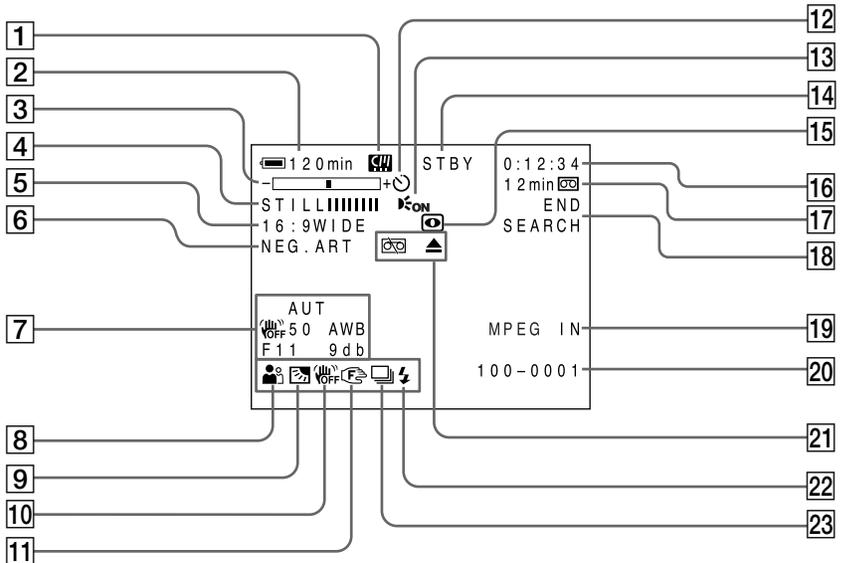
### The Remote Commander

- Point the remote sensor away from strong light sources such as direct sunlight or overhead lighting. Otherwise, the Remote Commander may not function properly.
- Your camcorder works in the commander mode VTR 2. Commander modes 1, 2 and 3 are used to distinguish your camcorder from other Sony VCRs to avoid remote control misoperation. If you use another Sony VCR in the Commander mode VTR 2, we recommend changing the commander mode or covering the sensor of the VCR with black paper.

# Identifying the parts and controls

## Operation indicators

### LCD screen and viewfinder



- 1** Micro Cassette Memory (p. 36)
- 2** Remaining battery time (p. 36)
- 3** Zoom (p. 34)/Data file name (p. 103)
- 4** Digital effect (p. 62, 76)/MEMORY MIX (p. 125)/FADER (p. 58)
- 5** 16:9WIDE (p. 56)
- 6** Picture effect (p. 61, 75)
- 7** Data code (p. 43)/Date
- 8** PROGRAM AE (p. 65)
- 9** BACK LIGHT (p. 37)
- 10** SteadyShot off (p. 176)
- 11** Manual focus (p. 70)
- 12** Self-timer (p. 53, 121)
- 13** HOLOGRAM AF (p. 119)
- 14** STBY/REC (p. 36)/Video control mode (p. 45)/Image size (p. 112)/Image quality mode (p. 108)
- 15** NIGHTSHOT/SUPER NIGHTSHOT (p. 38)/COLOR SLOW SHUTTER (p. 38)
- 16** Tape counter (p. 36)/Self-diagnosis (p. 190)/Memory photo (p. 49)/Image number (p. 136)
- 17** Remaining tape (p. 36)/Memory playback (p. 135)
- 18** END SEARCH (p. 41)
- 19** MPEG IN (p. 87)
- 20** Data file name (p. 125)  
This indicator appears when the MEMORY MIX functions work. /Time (p. 36)
- 21** Warning (p. 191)
- 22** Video flash ready  
This indicator appears when you use the video flash light.
- 23** Continuous photo recording (p. 116)

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