SONY

Digital HD Video Camera Recorder

Operating Guide



"Help Guide" (Web manual)

Refer to "Help Guide" for in-depth instructions on the many functions of the camera.

http://rd1.sony.net/help/cam/1420/h_zz/

Getting started

Recording/Playback

Saving images

Customizing your camcorder

Others

















Read this first

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

Owner's Record

The model and serial numbers are located on the bottom. Record the serial number in the space provided below. Refer to these numbers whenever you call your Sony dealer regarding this product.

Model No. HDR-	
Serial No.	
Model No. AC-	
Serial No.	

WARNING

To reduce the risk of fire or electric shock,

- 1) do not expose the unit to rain or moisture.
- do not place objects filled with liquids, such as vases, on the apparatus.

Do not expose the batteries to excessive heat such as sunshine, fire or the like.

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS. DANGER - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS.

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician

for replacement of the obsolete outlet.

- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.



- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- If the shape of the plug does not fit the power outlet, use an attachment plug adaptor of the proper configuration for the power outlet.

CAUTION

| Battery pack

If the battery pack is mishandled, the battery pack can burst, cause a fire or

even chemical burns. Observe the following cautions.

- · Do not disassemble.
- Do not crush and do not expose the battery pack to any shock or force such as hammering, dropping or stepping on it.
- Do not short circuit and do not allow metal objects to come into contact with the battery terminals.
- Do not expose to high temperature above 60°C (140°F) such as in direct sunlight or in a car parked in the sun.
- Do not incinerate or dispose of in fire.
- Do not handle damaged or leaking lithium ion batteries.
- Be sure to charge the battery pack using a genuine Sony battery charger or a device that can charge the battery pack.
- Keep the battery pack out of the reach of small children.
- Keep the battery pack dry.
- Replace only with the same or equivalent type recommended by Sony.
- Dispose of used battery packs promptly as described in the instructions.

| AC Adaptor

Do not use the AC Adaptor placed in a narrow space, such as between a wall and furniture.

Use the nearby wall outlet (wall socket) when using the AC Adaptor. Disconnect the AC Adaptor from the wall outlet (wall socket) immediately if any malfunction occurs while using the apparatus.

Even if your camcorder is turned off, AC power source (mains) is still supplied to it while connected to the wall outlet (wall socket) via the AC Adaptor. Excessive sound pressure from earphones and headphones can cause hearing loss.

For Customers in the U.S.A. and Canada

RECYCLING LITHIUM-ION BATTERIES

Lithium-Ion batteries are recyclable.
You can help preserve our environment by returning your used rechargeable batteries to the collection and recycling location nearest you.

For more information regarding recycling of rechargeable batteries, call toll free 1-800-822-8837, or visit http://www.call2recycle.org/

Caution: Do not handle damaged or leaking Lithium-Ion batteries.

| Battery pack/AC Adaptor

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAN ICES-3 B/NMB-3 B

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the IC radio frequency (RF) Exposure rules.

This equipment has very low levels of RF energy that are deemed to comply without testing of specific absorption ratio (SAR).

For Customers in the U.S.A.

If you have any questions about this product, you may call:

Sony Customer Information Center 1-800-222-SONY (7669).

The number below is for the FCC related matters only.

Regulatory Information

Declaration of Conformity

Trade Name: SONY Model No.: HDR-PJ670 Responsible Party: Sony

Electronics Inc.

Address: 16530 Via Esprillo, San Diego, CA 92127

U.S.A.

Telephone No.: 858-942-2230

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment must not be colocated or operated in conjunction with any other antenna or transmitter.

| CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

This equipment has been tested and

| Note:

found to comply with the limits for a Class B digital device, pursuant to Part 15 of the ECC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined. by turning the equipment off and on, the user is encouraged to try to correct the interference by one or

- more of the following measures:Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The supplied interface cable must be used with the equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

For Customers in Canada

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

For Customers in Europe

Notice for the customers in the countries applying EU Directives

Manufacturer: Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan

For EU product compliance: Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany



Hereby, Sony Corporation, declares that this equipment is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. For details, please access the following URL:

http://www.compliance.sony.de/

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.

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

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

Disposal of waste batteries and electrical and electronic equipment (applicable in the European Union and other European countries with separate collection systems)



This symbol on the product, the battery or on the packaging indicates that the product and the battery shall not be

treated as household waste. On certain batteries this symbol might be used in combination with a chemical symbol. The chemical symbols for mercury (Hg) or lead (Pb) are added if the battery contains more than 0.0005% mercury or 0.004% lead. By ensuring these products and batteries are disposed of correctly, vou will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling. The recycling of the materials will help to conserve natural resources In case of products that for safety. performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only. To ensure that the battery and the electrical and electronic equipment will be treated GB properly, hand over these products at **6** end-of-life to the applicable

collection point for the recycling of electrical and electronic equipment. For all other batteries, please view the section on how to remove the battery from the product safely. Hand the battery over to the applicable collection point for the recycling of waste batteries. For more detailed information about recycling of this product or battery, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product or battery.

For Customers in Singapore

Complies with IDA Standards DB00353

For Customers in U.A.E.

TRA REGISTERED No: ER0098751/12

DEALER No: DA0073692/11

This manual describes 1080 60icompatible devices and 1080 50i-compatible devices.

To check whether your camera is a 1080 60i-compatible device or 1080 50i compatible device, check for the following marks on the bottom of the camera.

1080 60i-compatible device: 60i 1080 50i-compatible device: 50i

Learning more about the camcorder (Help Guide)

Help Guide is an on-line manual. Refer to it for in-depth instructions on the many functions of the camcorder.

Access the Sony support page.

http://rd1.sony.net/help/cam/ 1420/h_zz/



You will find further information such as the following functions in Help Guide.

- Highlight Movie Maker
- Live Streaming
- Multi Camera Control

Table of Contents

Read this first	2
Learning more about the camcorder (Help Guide)	7
Getting started	.8
Supplied items Charging the battery pack Turning the power on Inserting a memory card	9 11
Recording/Playback	14
Recording Playback Viewing images at a larger siz	.14 .16 e
Saving images Using PlayMemories Home™	
Connecting an external media device Using the Wi-Fi function	20
	. 21
Customizing your camcorder	26
Using the menus	
Others	27
Precautions	.27
Specifications Parts and controls	

Supplied items

The numbers in () indicate the supplied quantity.

- Camcorder (1)
- AC Adaptor (1)



The shape of the AC Adaptor differs depending on the countries/ regions.

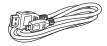
• USB connection support cable (1)



The USB connection support cable is designed for use with this camcorder only. Use this cable when the Built-in USB Cable of the camcorder is too short for connection.



• HDMI cable (1)



 Rechargeable battery pack NP-FV50 (1)



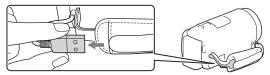
• "Operating Guide" (This manual) (1)

Charging the battery pack

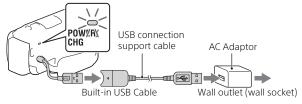
1 Turn off your camcorder by closing the LCD monitor, and attach the battery pack.



2 Pull out the Built-in USB Cable.



3 Connect the AC Adaptor and the camcorder with the USB connection support cable, and connect the AC Adaptor to the wall outlet (wall socket).



- The POWER/CHG (charge) lamp turns orange.
- The POWER/CHG (charge) lamp turns off when the battery pack is fully charged. Disconnect the USB connection support cable from the camcorder.
- The shape of the AC Adaptor differs depending on the countries/ regions.

• Turn off your camcorder before you remove the battery pack.

| Charging the battery using your computer

Turn off your camcorder and connect the camcorder to a running computer using the Built-in USB Cable.

To use your camcorder connected to the wall outlet (wall socket)

Connect the camcorder to the wall outlet (wall socket) in the same way as "Charging the battery pack."

- Attach the battery pack to the camcorder.
- The battery pack may be consumed even if the camcorder is connected to the wall outlet (wall socket).