

English

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

WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

CAUTION

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the manufacturer. When you dispose of the battery, you must obey the law in the relative area or country.

Important Safety 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.

WARNING: THIS WARNING IS APPLICABLE FOR USA ONLY.

If used in USA, use the UL LISTED power cord specified below.

DO NOT USE ANY OTHER POWER CORD.

Plug Cap	Parallel blade (NEMA 1-15P Configuration)
Cord	Type NISPT-2 or SPT-2, two 16 or 18 AWG wires
Length	Minimum 1.5 m (4 ft 11 in), Less than 2.5 m (8 ft 3 in)
Rating	Minimum 7 A, 125 V

Using this unit at a voltage other than 120 V may require the use of a different line cord or attachment plug, or both. To reduce the risk of fire or electric shock, refer servicing to qualified service personnel.

WARNING: THIS WARNING IS APPLICABLE FOR OTHER COUNTRIES.

1. Use the approved Power Cord (2-core mains lead) / Appliance Connector / Plug that conforms to the safety regulations of each country if applicable.
2. Use the Power Cord (2-core mains lead) / Appliance Connector / Plug conforming to the proper ratings (Voltage, Ampere).

If you have questions on the use of the above Power Cord / Appliance Connector / Plug, please consult a qualified service personnel.

CAUTION

The apparatus shall not be exposed to dripping or splashing. No objects filled with liquids, such as vases, shall be placed on the apparatus.

Do not install the appliance in a confined space, such as book case or built-in cabinet.

IMPORTANT

The nameplate is located on the bottom.

WARNING

Excessive sound pressure from earphones and headphones can cause hearing loss. In order to use this product safely, avoid prolonged listening at excessive sound pressure levels.

WARNING

Batteries shall not be exposed to excessive heat such as sunshine, fire or the like.

For the customers in the U.S.A.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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

All interface cables used to connect peripherals must be shielded in order to comply with the limits for a digital device pursuant to Subpart B of part 15 of FCC Rules.

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.

For the customers in Canada

CAN ICES-3 (A)/NMB-3(A)

For the customers in Europe

This product is intended for use in the following Electromagnetic Environments: E1 (residential), E2 (commercial and light industrial), E3 (urban outdoors), E4 (controlled EMC environment, ex. TV studio).

For the State of California, USA only

Perchlorate Material - special handling may apply, See

www.dtsc.ca.gov/hazardouswaste/perchlorate

GB

For the customers in Taiwan only



廢電池請回收

For the customers in the U.S.A.

SONY LIMITED WARRANTY - Please visit <http://www.sony.com/psa/warranty> for important information and complete terms and conditions of Sony's limited warranty applicable to this product.

For the customers in Canada

SONY LIMITED WARRANTY - Please visit <http://www.sonybiz.ca/pro/lang/en/ca/article/resources-warranty-product-registration> for important information and complete terms and conditions of Sony's limited warranty applicable to this product.

For the customers in Europe

Sony Professional Solutions Europe - Standard Warranty and Exceptions on Standard Warranty.
Please visit <http://www.pro.sony.eu/warranty> for important information and complete terms and conditions.

For the customers in Korea

SONY LIMITED WARRANTY - Please visit <http://bpeng.sony.co.kr/handler/BPAS-Start> for important information and complete terms and conditions of Sony's limited warranty applicable to this product.

Overview

The PMW-RX50 is a portable-type memory recorder, with battery-drive support, that records images to SxS memory cards. Either the UDF, exFAT or FAT file system can be used with recording media.

Using the CD-ROM manual

The manual can be read on a computer with Adobe Reader installed.
You can download Adobe Reader free from the Adobe website.

- 1 Open the index.html file in the CD-ROM.**
- 2 Select and click on the manual that you want to read.**

Note

If you have lost or damaged the CD-ROM, you can purchase a new one from your Sony dealer or Sony service counter.

Specifications

General

Power Requirements

DC 12 V

Power Consumption

Approx. 13 W (while recording, LCD monitor On)

Approx. 22.5 W (while recording, LCD monitor On, with CBK-WA100)

Inrush current

(1) Maximum possible inrush current at initial switch-on (Voltage changes caused by manual switching):

50 A peak, 9.5 A r.m.s. (240 V AC)

(2) Inrush current after a mains interruption of five seconds (Voltage changes caused at zero-crossing):

3 A peak, 0.7 A r.m.s. (240 V AC)

Operating Temperature

0 °C to 40 °C (32 °F to 104 °F)

Storage Temperature

-20 °C to +60 °C (-4 °F to +140 °F)

Mass

Approx. 1 kg (2 lb. 3.3 oz.) (without Audio Input Box)

Approx. 1.2 kg (2 lb. 10 oz.) (with Audio Input Box)

Dimensions (W x H x D)

Approx. 124 × 86 × 237 mm (5 × 3 1/2 × 9 3/8 in.) (without protrusions & Audio Input Box)

Approx. 124 × 115 × 237 mm (5 × 4 5/8 × 9 3/8 in.) (with Audio Input Box & without protrusions)

Recording/Playback Format (Video)

[exFAT]

- XAVC-I mode: CBG, 223 Mbps max, MPEG-4 AVC/H.264
- XAVC-L50 mode: VBR, 50 Mbps max, MPEG-4 AVC/H.264
- XAVC-L35 mode: VBR, 35 Mbps max, MPEG-4 AVC/H.264
- XAVC-L25 mode: VBR, 25 Mbps max, MPEG-4 AVC/H.264

- HD422 mode: CBR, 50 Mbps, MPEG-2 422P@HL
- HD420 mode: VBR, 35 Mbps, MPEG-2 MP@HL
- DVCAM mode: DVCAM
- IMX 50 mode: CBR, 50 Mbps, MPEG-2 422P@ML Intra

[UDF]

- HD422 mode: CBR, 50 Mbps, MPEG-2 422P@HL
- HD420 mode: VBR, 35 Mbps, MPEG-2 MP@HL
- DVCAM mode: DVCAM
- IMX 50 mode: CBR, 50 Mbps, MPEG-2 422P@ML Intra

[FAT]

- HQ mode: VBR, 35 Mbps, MPEG-2 MP@HL
- SP mode: CBR, 25 Mbps, MPEG-2 MP@H14
- DVCAM mode: DVCAM

Recording/Playback Format (Audio)

[exFAT]

- XAVC-I mode: LPCM 24 bits, 48 kHz, 4 channel
- XAVC-L50 mode: LPCM 24 bits, 48 kHz, 4 channel
- XAVC-L35 mode: LPCM 24 bits, 48 kHz, 4 channel
- XAVC-L25 mode: LPCM 24 bits, 48 kHz, 4 channel
- HD422 mode: LPCM 24 bits, 48 kHz, 4 channels
- IMX 50 mode: LPCM 24/16 bits, 48 kHz, 4 channels
- Other mode: LPCM 16 bits, 48 kHz, 4 channels

[UDF]

- HD422 mode: LPCM 24 bits, 48 kHz, 4 channels
- IMX 50 mode: LPCM 24/16 bits, 48 kHz, 4 channels
- Other mode: LPCM 16 bits, 48 kHz, 4 channels

[FAT]

- HD mode: LPCM 16 bits, 48 kHz, 4 channels
- SD mode: LPCM 16 bits, 48 kHz, 2 channels

Maximum recording time (XAVC)

Note

The maximum recording time is equivalent to the duration of a single clip recording that fills the media. The recording time may become shorter, depending on the number of recorded clips.

[XAVC-I]

Approx. 60 min with SBP-128B (128 GB) memory card

Approx. 30 min with SBP-64AB (64 GB)/SBS-64G1A (64 GB) memory card

[XAVC-L50]

Approx. 240 min with SBP-128B (128 GB) memory card

Approx. 120 min with SBP-64AB (64 GB)/SBS-64G1A (64 GB) memory card

[XAVC-L35]

Approx. 340 min with SBP-128B (128 GB) memory card

Approx. 170 min with SBP-64AB (64 GB)/SBS-64G1A (64 GB) memory card

[XAVC-L25]

Approx. 440 min with SBP-128B (128 GB) memory card

Approx. 220 min with SBP-64AB (64 GB)/SBS-64G1A (64 GB) memory card

Maximum recording time (MPEG HD422)

[UDF]

HD422 mode:

Approx. 120 min with SBP-64A/SBS-64G1A (64 GB) memory card

Approx. 60 min with SBP-32/SBS-32G1A (32 GB) memory card

Maximum recording time (MPEG HD)

[UDF]

HD420 mode:

Approx. 180 min with SBP-64A/SBS-64G1A (64 GB) memory card

Approx. 90 min with SBP-32/SBS-32G1A (32 GB) memory card

[FAT]

HQ mode:

Approx. 200 min with SBP-64A/SBS-64G1A (64 GB) memory card

Approx. 100 min with SBP-32/SBS-32G1A (32 GB) memory card

SP Mode:

Approx. 280 min with SBP-64A/SBS-64G1A (64 GB) memory card

Approx. 140 min with SBP-32/SBS-32G1A (32 GB) memory card

Maximum recording time (MPEG IMX)

[UDF]

IMX 50 mode:

Approx. 120 min with SBP-64A/SBS-64G1A (64 GB) memory card

Approx. 60 min with SBP-32/SBS-32G1A (32 GB) memory card

Maximum recording time (DVCAM)

[UDF]

DVCAM mode:

Approx. 220 min with SBP-64A/SBS-64G1A (64 GB) memory card

Approx. 110 min with SBP-32/SBS-32G1A (32 GB) memory card

[FAT]

DVCAM mode:

Approx. 260 min with SBP-64A/SBS-64G1A (64 GB) memory card

Approx. 130 min with SBP-32/SBS-32G1A (32 GB) memory card

Battery Operating Time

Approx. 110 min with BP-U30 battery (while recording, LCD monitor On)

Approx. 220 min with BP-U60 battery (while recording, LCD monitor On)

Approx. 330 min with BP-U90 battery (while recording, LCD monitor On)

Media Drive

Media Type

ExpressCard/34 slot (2)

Input/Output

SD Output

BNC (2), 3G/HD/SD selectable, SMPTE 292M/259M/424M/425M standards

SD Input

BNC (1), 3G/HD/SD automatically switched, SMPTE 292M/259M/424M/425M standards

Analog Audio Input

XLR-3 pin (CH-1, CH-2), LINE: +4 dBu (Reference Level)

Analog Composite Output

BNC (1), NTSC, PAL or HD-Y

HDMI Output

Type A 19-pin (1), output

Analog Audio Output

Phono jack (CH-1, CH-2) -10 dBu (Reference Level), 47 kΩ

Headphone Output

Stereo mini jack (1)

i.LINK

IEEE 1394, 4-pin (1), HDV stream input/output, DVCAM stream output, S400

USB

USB Type-A (1), USB Type-miniB (1)

DC Input (12 V)

DC jack (12 V)

DC Output (12 V)

UnReg (4-pin) for CBK-WA100

Other Equipment

Built-in Display

3.5-inch type color LCD monitor: 960 (H) × 3 (RGB) × 540 (V), 16:9

Supplied Accessories

USB cable (1)

Infrared Remote Commander (1)

BC-U1 battery charger (1)

Lithium battery (CR2032 for backup) (1), Pre-installed in the recorder

Lithium battery (CR2025 for the IR Remote Commander) (1), Pre-installed to the IR Remote Commander

Leaflet: Before Using this Unit (1)

Shoulder strap (1)

Side spacer (1)

CD-ROM: Operating Instructions in PDF (1)

Optional Accessories

Battery pack

BP-U30, BP-U60, BP-U90

Battery charger/AC adapter

BC-U1, BC-U2

SxS memory cards

SxS PRO+ series

SxS PRO series

SxS-I series

SxS memory card USB reader/writer

SBAC-US20

Media adapter

QDA-EX1 (for XQD memory cards)

MEAD-SD02 (for SD cards)

USB wireless LAN module

IFU-WLM3


Wireless adapter

CBK-WA100

Design and specifications are subject to change without notice.

Notes

- Always make a test recording, and verify that it was recorded successfully.
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