Panasonic

Owner's Manual <Quick Start Guide>

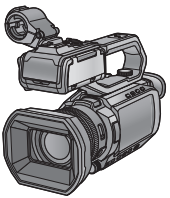
4K Video Camera

Manuel d'utilisation <Guide de prise en main rapide>

Caméra vidéo 4K

Model No. / Modèle N°

HC-X2100/ HC-X1600/ HC-X1200



Please read these instructions carefully before using this product, and save this manual for future use.
Veuillez lire attentivement les présentes instructions avant d'utiliser ce produit, et conserver ce manuel pour utilisation ultérieure.

More detailed operating instructions are available in "Owner's Manual <Complete Guide>" (HTML format/PDF format). This can be viewed with a PC or smartphone.
Un manuel d'utilisation plus détaillé est disponible en "Manuel d'utilisation <Guide complet>" (Format HTML/format PDF). Il peut être visionné à l'aide d'un PC ou d'un smartphone.
https://panasonic.jp/support/video/oi/X2100/index.html

If you have any questions, visit :
U.S.A. : http://shop.panasonic.com/support
Canada : www.panasonic.ca/english/support

Pour toute assistance supplémentaire, visitez :
www.panasonic.ca/french/support

PP

DVQX2727YA
F1224MZ1036

Safety Precautions

Dear Customer,

Thank you for choosing Panasonic!

You have purchased one of the most sophisticated and reliable products on the market today. Used properly, we're sure it will bring you and your family years of enjoyment. Please take time to fill in the information on the right.
The serial number is on the tag located on the back of your camera. Be sure to **retain this manual** as your convenient camera information source.

Date of Purchase	
Dealer Purchased From	
Dealer Address	
Dealer Phone No.	
Model No.	
Serial No.	

U.S.A./CANADA CONSUMERS: ATTENTION:



A lithium ion battery that is recyclable powers the product you have purchased. Please call 1-800-8-BATTERY for information on how to recycle this battery.

[For U.S.A.]

To dispose of your product, please recycle in accordance with local environmental regulations.
For further recycling please visit
https://shop.panasonic.com/recycle

WARNING:

To reduce the risk of fire, electric shock or product damage,

- Do not expose this unit to rain, moisture, dripping or splashing.
- Do not place objects filled with liquids, such as vases, on this unit.
- Use the recommended accessories.
- Do not remove covers.
- Do not repair this unit by yourself. Refer servicing to qualified service personnel.

CAUTION!

To reduce the risk of fire, electric shock or product damage,

- Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure this unit is well ventilated.
- Do not obstruct this unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.
- Do not place sources of naked flames, such as lighted candles, on this unit.

Certification and Compliance

See Camera for the certification and compliance mark specific to that device.

1 Press the <MENU> button.

2 Select the [OTHERS] menu.

3 Select the [APPROVED REGULATION] menu.

THE FOLLOWING APPLIES ONLY IN THE U.S.A.
(For the X2100 / X1600)

Contains FCC ID: VPYLBEE5ZZ1PJ

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines as this equipment has very low levels of RF energy.

Compliance with FCC requirement 15.407(c)
Data transmission is always initiated by software, which is the passed down through the MAC, through the digital and analog baseband, and finally to the RF chip. Several special packets are initiated by the MAC.
These are the only ways the digital baseband portion will turn on the RF transmitter, which it then turns off at the end of the packet. Therefore, the transmitter will be on only while one of the aforementioned packets is being transmitted. In other words, this device automatically discontinue transmission in case of either absence of information to transmit or operational failure.

Frequency Tolerance: ± 20ppm

THE FOLLOWING APPLIES ONLY IN THE U.S.A.

FCC Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC 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.

FCC Caution:

- Any unauthorized changes or modifications to this equipment would void the user's authority to operate this device.
- To assure continued compliance, follow the attached installation instructions and use only shielded interface cables with ferrite core when connecting to computer or peripheral devices.

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.

Supplier's Declaration of Conformity

Trade Name:	Panasonic
Model No.:	HC-X2100/HC-X1600/HC-X1200
Responsible Party:	Panasonic Corporation of North America Two Riverfront Plaza, Newark, NJ 07102-5490
Support Contact:	http://shop.panasonic.com/support

THE FOLLOWING APPLIES ONLY IN CANADA.
(For the X2100 / X1600)

Contains IC: 772C-LBEE5ZZ1PJ

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

5150-5350 MHz band is restricted to indoor operations only.

The available scientific evidence does not show that any health problems are associated with using low power wireless devices. There is no proof, however, that these low power wireless devices are absolutely safe. Low power Wireless devices emit low levels of radio frequency energy (RF) in the microwave range while being used. Whereas high levels of RF can produce health effects (by heating tissue), exposure of low-level RF that does not produce heating effects causes no known adverse health effects. Many studies of low-level RF exposures have not found any biological effects. Some studies have suggested that some biological effects might occur, but such findings have not been confirmed by additional research. HC-X2100 (HMN is 1PJ2598)/HC-X1600 (HMN is 1PJ2597) has been tested and found to comply with ISED radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the ISED radio frequency (RF) Exposure rules.

Product identification marking is located on the bottom of the unit.

■ Concerning the AC adaptor

The power plug is the disconnecting device. Install this unit so that the power plug can be unplugged from the socket outlet immediately.

This unit is intended for use in moderate climates.

■ Concerning the battery

Battery pack (Lithium-ion battery pack)

- Use the specified unit to recharge the battery pack.
- Do not use the battery pack with equipment other than the specified unit.
- Do not get dirt, sand, liquids, or other foreign matter on the terminals.
- Do not touch the plug terminals (+ and −) with metal objects.
- Do not disassemble, remodel, heat or throw into fire.

If any electrolyte should come into contact with your hands or clothes, wash it off thoroughly with water.
If any electrolyte should come into contact with your eyes, never rub the eyes. Rinse eyes thoroughly with water, and then consult a doctor.

Warning

Risk of fire, explosion and burns. Do not disassemble, heat above 60 °C (140 °F) or incinerate.

CAUTION

- Danger of explosion if battery is incorrectly replaced. Replace only with the type recommended by the manufacturer.
- When disposing of the batteries, please contact your local authorities or dealer and ask for the correct method of disposal.

■ Concerning the button cell or coin battery

⚠ WARNING

- **INGESTION HAZARD**: This product contains a button cell or coin battery.
- **DEATH** or serious injury can occur if ingested.
- A swallowed button cell or coin battery can cause **Internal Chemical Burns** in as little as **2 hours.**
- **KEEP** new and used batteries **OUT OF REACH of CHILDREN**
- **Seek immediate medical attention** if a battery is suspected to be swallowed or inserted inside any part of the body.



- This product contains non-replaceable batteries.
- Even used batteries may cause severe injury or death.
- Call a local poison control center for treatment information.
- Battery type: MS614SE
- Nominal voltage: 3 V
- Do not force discharge, recharge, disassemble, heat above (manufacturer's specified temperature rating) or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.

Cautions for use

Keep this unit as far away as possible from electromagnetic equipment (such as microwave ovens, TVs, video games etc.).

- If you use this unit on top of or near a TV, the pictures and/or sound on this unit may be disrupted by electromagnetic wave radiation.
- Do not use this unit near cell phones because doing so may result in noise adversely affecting the pictures and/or sound.
- Recorded data may be damaged, or pictures may be distorted, by strong magnetic fields created by speakers or large motors.
- Electromagnetic wave radiation generated by microprocessors may adversely affect this unit, disturbing the pictures and/or sound.
- If this unit is adversely affected by electromagnetic equipment and stops functioning properly, turn this unit off and remove the battery or disconnect AC adaptor. Then reinsert the battery or reconnect AC adaptor and turn this unit on.

Do not use this unit near radio transmitters or high-voltage lines.

- If you record near radio transmitters or high-voltage lines, the recorded pictures and/or sound may be adversely affected.

When this unit is turned on, do not use it in direct contact with the skin for a long period of time.

- When using this unit for a long period of time, use a support such as a tripod. Low temperature burns may result if any high temperature part of this unit or hot air from the ventilation openings on the front side of the hand strap of this unit is in direct contact with the skin for a long period of time.

Caution regarding the lens and the viewfinder

- Do not aim the lens or the viewfinder* at the sun or strong light. Doing so may cause the unit to malfunction.

* X2100 / X1600 is equipped with a viewfinder. X1200 is not equipped with a viewfinder.

Before using the unit

The date and time have not been set at the time of purchase. Before use, make sure you set the clock and time zone so that date and time information is correctly recorded. (➜ 27)

- When using this product during rain or snow or when at the beach, be careful that water, sand and/or dust do not get inside the camera.

- Clips recorded with devices other than this unit are not supported by this unit.
- Hold the handle or grip when carrying the camera, and handle it carefully.
- If you prepare to record important images, always shoot some advance test footage to verify that both pictures and sound are being recorded normally.
- [BATTERY]/[AC]/[NETWORK]* in [ECO MODE] is set to [ON] at the time of purchase. When there is no button operation or LCD monitor touch operation performed for a certain time, the power turns off automatically.
  The power consumption of this unit may increase if [BATTERY]/[AC]/[NETWORK]* in [ECO MODE] is set to [OFF].

* When using X1200, [NETWORK] is not displayed.

Battery

- Always remove the battery from the unit after use.

Charging lamp during charging

When the charging lamp is flashing, the following should be considered.

Flashing with approx. 4 second period (on for approx. 2 seconds, off for approx. 2 seconds):

- When the battery is over discharged or the temperature of the battery is too high or low.
  It can be charged, but it may take a few hours to complete the charging normally.
- Once normal charging starts, the charging lamp lights up green. However, depending on the conditions of use, even when normal charging is taking place, the charging lamp may keep flashing in approx. 4 second intervals until charging is completed.

Flashing with approx. 0.5 second period (on for approx. 0.25 second, off for approx. 0.25 second):

- The battery is not charged. Remove the battery from the unit, and try charging again.
- Check that the terminals of the unit or battery are not dirty or covered with a foreign object, and connect the battery correctly once again.
  If a foreign object or dirt is present, turn off the unit before removing.
- The battery or environment is at an extremely high or low temperature. Wait until the temperature has returned to an appropriate level and try charging again. If you are still unable to charge, there may be a fault in the main unit, battery or AC adaptor.

Off:

- Charging has finished.
- If the status indicator stays off despite the charging being unfinished, there may be a fault in the unit, battery or AC adaptor.
- If the operating time is very short even after the battery has been recharged, the battery has worn out. Please purchase a new battery.

LCD monitor and viewfinder

- The LCD monitor and viewfinder* are managed with high precision so that at least 99.99 % of the dots are effective pixels and 0.01 % or less are invalid pixels and always lit. This is not a malfunction and it has no effect whatsoever on the recorded images.

* X2100 / X1600 is equipped with a viewfinder. X1200 is not equipped with a viewfinder.

Memory cards

The SD cards can be used with the camera.

- Do not perform the following operations when accessing the memory card (the card 1 access lamp/card 2 access lamp is flashing in orange).
  - – Removing the memory card
  - – Disconnecting battery or the AC adaptor without turning off the main unit
  - – Apply vibration of impact
- Keep the memory card out of reach of children to prevent swallowing.

❖ Speed Class during shooting

The memory card to use differs depending on the file format and the recording format.
Use memory cards compatible with the Speed Class or UHS Speed Class.
The recording may stop suddenly when a memory card not compatible with the required Speed Class is used.

Speed Class and UHS Speed Class are the speed specification regarding continuous writing. Check the display on the label and other information on the memory card.

File format	Supported memory cards	Recording bit rate or recording function	Speed Classes
MOV*/MP4	SDXC memory card	200 Mbps, 150 Mbps, 100 Mbps, Super slow recording	UHS Speed Class 3 
		72 Mbps or less	Speed Class 10, UHS Speed Class 1 or better 
AVCHD	SDHC/SDXC memory card	All	Speed Class 4 or better 

* Available for setting when using X2100 / X1600 .

Using commercially-available products

- Use a Premium High Speed HDMI cable (Type A-Type A plug).
- Use a USB cable conforming to the USB specification that is 1.5 m (approx. 4.9 feet) or less in length.
- (For the X2100)
  It is recommended to use a double shielded BNC cable equivalent to 5C-FB.
- You can remotely control some of the camera's functions by connecting a remote control unit (commercially-available) to the <REMOTE> terminal.

About using a headphone

- Excessive sound pressure from earphones and headphones can cause hearing loss.
- Listening at full volume for long periods may damage the user’s ears.

Exemption of liability

Panasonic is not liable in any way regarding following.

1 Incidental, special, or consequential damages caused directly or indirectly by the unit

2 Damages, breakage of the unit, etc., caused by misuse or carelessness of the customer

3 When disassembly, repair, or modification of the unit is performed by the customer

4 Inconveniences, damnification, or damages by not being able to record and/or display the video due to any reasons including failure or malfunction of the unit and recording media

5 Inconveniences, damnification, or damages resulting from malfunction of the system combining with any third party equipment

6 A liability claim or any claim for a privacy violation by an individual or a group that was the subject of the video that the customer has shot (including recording) that became public by any reason (including using with the network user authentication turned OFF)

7 The registered information is lost due to any reason (including initializing this unit because the authentication information such as user name or password is forgotten)

❖ Be careful with regard to copyrights

Under copyright law, you may not use the images and audio you have recorded for other than personal enjoyment without the permission of the copyright holder.

How to read this document

Models described in this Owner's manual

- The external design and specifications of this product, as described in this document, may differ from the actual product.
- Illustrations used in this document may differ from the actual product and the actual images displayed on the product.
- Images used in this document are sample pictures used to explain the functions and effects.
- Unless specifically stated otherwise, screen depictions and illustrations of the unit are of HC-X2100.
- Not all models may be available depending on the region of purchase.
- Model numbers are abbreviated as follows in this Owner's manual:

Model number	Abbreviation used in this Owner's manual	
HC-X2100	X2100	[X2100]
HC-X1600	X1600	[X1600]
HC-X1200	X1200	[X1200]

Conventions used in this manual

- Words and phrases in [ ] brackets indicate content displayed in the LCD monitor.
- Words and phrases in < > brackets indicate design text used on this unit, such as button names.

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Accessories

Check the accessories before using this unit.
Product numbers correct as of January 2025. These may be subject to change.

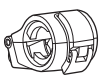
Battery pack
AG-VBR59
(This is referred to as battery pack or battery in this document.)

Lens hood[*1]
DVYE1263Z

■ **For the** X2100 / X1600
The following accessories are also supplied.
Eye cup
DVHG1323Z

■ **For the** X2100
The following accessories are also supplied.
Handle unit
VW-HU1
- To purchase as a supplied accessory, use part number 1KC1VWHU1PP9K when ordering.

1AC1R25SXZ
Microphone holder



Microphone holder mounting screws[*2]
1PP1R25SXZ



- Length 12 mm (0.47 ″) (x2)

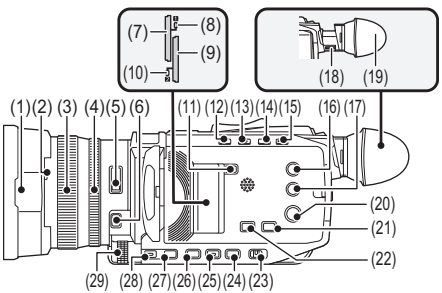
*1 Pre-attached to the main unit.
*2 The microphone holder mounting screws are supplied with the microphone holder.
- Appropriately discard the packing materials after taking the product out.
- Keep the light cover out of reach of children to prevent swallowing.[*3]
- Keep the microphone holder mounting screws out of reach of children to prevent swallowing.[*4]

*3 The light cover is fitted to the handle unit.
*4 The microphone holder mounting screws are supplied with the handle unit.

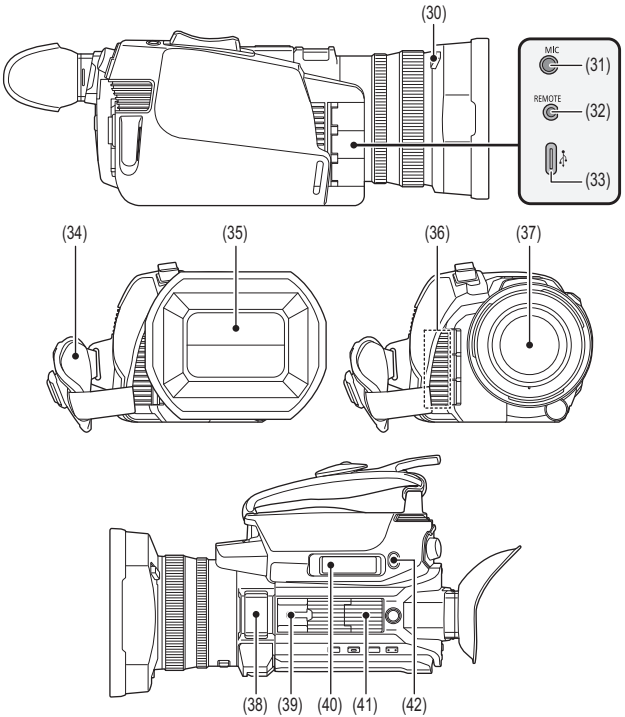
Description of parts

❖ Main unit

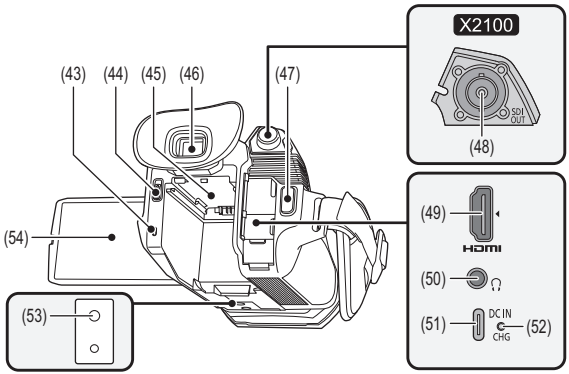
- The illustrations in this document show the handle unit (X2100 supplied, X1600 optional) removed.
- X1200 does not support the handle unit.



(1) Lens hood
(2) Lens cover switching lever
(3) Focus ring
(4) Rear ring
(5) <ND FILTER> switch
(6) <FOCUS A/M/∞> button
(7) Card slot 1
(8) Card 1 access lamp
(9) Card slot 2
(10) Card 2 access lamp
(11) <SLOT SEL> button
(12) <USER1> button
(13) <USER2> button
(14) (For the X2100 / X1600)
<O.I.S.>/<USER3> button
(For the X1200)
<FACE DET.>/<USER3> button
(15) (For the X2100 / X1600)
<VF>/<USER4> button
(For the X1200)
<LCD B. LIGHT>/<USER4> button
(16) <THUMBNAIL> button
(17) <DISP/MODE CHK> button
(18) (For the X2100 / X1600)
Diopter adjustment dial
(19) (For the X2100 / X1600)
Eye cup (➜ 20)
(20) Power button (➜ 26)
(21) <WHITE BAL> button
(22) <AE LEVEL>/<USER6> button
(23) <AUTO/MANU> switch
(24) <SHUTTER> button
(25) <GAIN> button
(26) <IRIS> button
(27) <MENU> button
(28) <EXIT> button
(29) Multidial



(30) Lens hood release button
(31) <MIC> terminal
(32) <REMOTE> terminal
(33) USB terminal
(34) Grip belt (➜19)
(35) Lens cover
(36) Fan outlet
(37) Lens
(38) Built-in microphone
(39) Accessory shoe (on the main unit)
(40) Zoom lever (on the grip)
(41) (For the X2100 / X1600)
Handle unit mounting section (➜20)
(42) <USER5> button



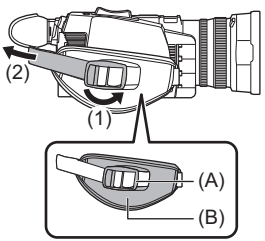
(43) Status indicator (➜ 26)
(44) Battery release lever (➜ 23)
(45) Battery mounting section (➜ 23)
(46) (For the X2100 / X1600)
Viewfinder
(47) REC button (on the grip)
(48) (For the X2100)
<SDI OUT> terminal
(49) <HDMI> terminal
(50) Headphones terminal
(51) DC IN terminal (➜ 24)
(52) Charging lamp (➜ 24)
(53) Tripod mounting holes
(54) LCD monitor

Attaching accessories

Adjusting the grip belt

- Adjust the grip belt so that it fits the size of your hand.
- If the buckle is difficult to tighten, move the pad backward and tighten the buckle again.

(A) Buckle
(B) Pad



1 Open the buckle section.

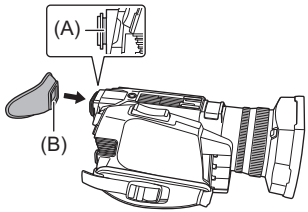
2 Pull the end of the belt.

Attaching the eye cup ([X2100]/[X1600])

1 Attach the eye cup by aligning the groove on the mounting part of the eye cup with the inner ridge of the eye cup.

The illustration at right shows an example of fitting for use with the right eye. If you rotate the eye cup to the left by 180° before attaching it, you can use it with your left eye.

(A) Groove
(B) Ridge

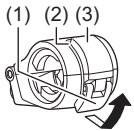


Attaching the handle unit ([X2100] supplied, [X1600] optional)

- X1200 **does not support the handle unit.**
- **Press the power button to turn off the unit. (➜26)**

1 Open the microphone holder.

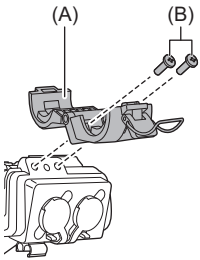
Open buckle (1), and detach fitting (2) from hook (3).



2 Attach the microphone holder to the microphone holder mounting section on the handle unit.

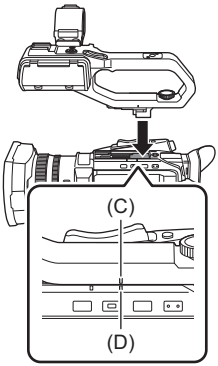
- Attach using a commercially-available screwdriver.
- There will be some rubbing noises with the rubber when screwing in the microphone holder mounting screws, but please ensure they are done up tightly.

(A) Microphone holder
(B) Microphone holder mounting screws



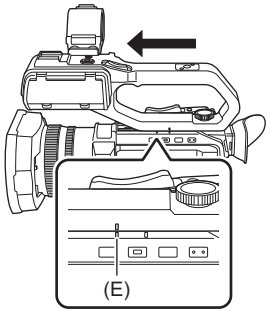
3 Push the handle unit into the handle unit mounting section on the camera.

Match the positions of mounting mark (C) on the handle unit and mounting mark (D) on the camera when pushing in.

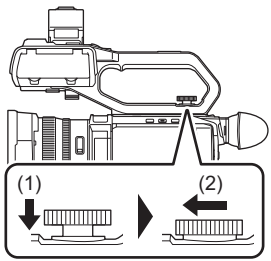


4 Slide the handle unit in the direction indicated by the arrow.

Slide up to mounting mark (E).



5 While pressing the handle unit mounting screw down, turn it in the direction indicated by arrow (2) until it stops.



❖ How to remove

Remove by doing the steps for attaching in reverse.

Power supply

A battery or an AC adaptor (optional/commercially available) can be used as the power supply for the unit.

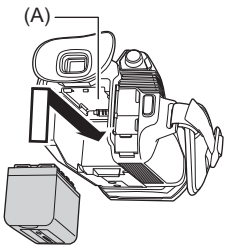
- The unit is compatible to following batteries. (As of January 2025)
  – AG-VBR59 (supplied/optional, supports quick charging)
- AG-VBR59 supports quick charging. Use a battery charger (AG-BRD50: optional) to perform quick charging.

Attaching and removing the battery

- **Press the power button to turn off the unit. (➜26)**

1 Push the battery against the battery mounting section (A) on the main unit and slide forward to attach.

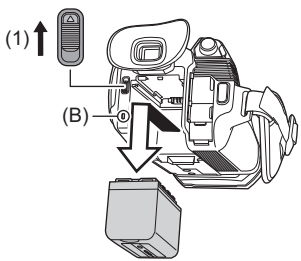
Press in the battery until it clicks and gets locked.



❖ Removing the battery

Be sure to hold down the power button until the status indicator (B) goes off. Then remove the battery while supporting the unit to prevent it from dropping.

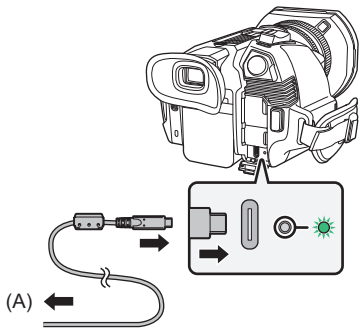
- Move the battery release lever in the direction indicated by the arrow (1) and remove the battery when unlocked.



Charging the battery

Charge using an AC adaptor (optional/commercially available) and a USB cable (commercially available).
The battery is not charged at the time of purchase. Use only after charging sufficiently.
It is recommended that you have one extra battery.

- It is recommended to perform charging of the battery in a location with ambient temperature of 10 °C to 30 °C (50 °F to 86 °F) (same for the battery temperature).
- The battery is not charged when the power is on.



(A) To the AC adaptor

1 Connect the USB cable to the AC adaptor and to the DC IN terminal of this unit.

- Insert the USB cable as far as they will go.

2 Insert the AC adaptor into an AC outlet.

- As the charging lamp lights up green, charging starts. It will turn off when the charging is completed.
- If the charging lamp flashes, refer to page 10.

❖ Connecting to the AC outlet

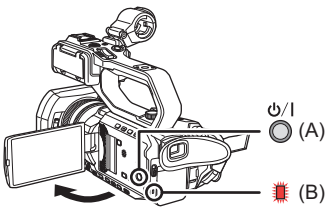
It is possible to use this unit with power supplied from the AC outlet by turning on the unit with the AC adaptor connected.
Even when you use the AC adaptor for recording images, keep the battery connected. This allows you to continue the recording even if a power failure occurs or the AC adaptor is unplugged from the AC outlet by accident.

- We recommend using an optional Panasonic AC adaptor (DMW-AC11) to supply power and charge.
- You can also charge with a battery charger (AG-BRD50: optional).
- A commercially available AC adaptor and USB cable can be used to supply power and charge this unit.
  * Recommended specifications for the commercially available AC adaptor
    - Supports PD (Power Delivery)
    - Supports 9 V/3 A (27 W) DC output
    - USB Type-C terminal
  * For supplying power and charging, use a USB cable with an output rating of 27 W or greater.
- You can also use an AC adaptor with 5 V/500 mA or better for charging. However, charging time may be longer than with the recommended AC adaptor.
- Operation is not guaranteed with all commercially available devices.
- We recommend using Panasonic batteries (➜ 23).
- If you use other batteries, we cannot guarantee the quality of this product.
- Do not heat or expose to flame.
- Do not leave the battery(ies) in a car exposed to direct sunlight for a long period of time with doors and windows closed.
- Do not expose to low air pressure at high altitudes.
- Do not expose to extremely low air pressure, as this may result in explosions or leakage of flammable liquids and gases.

Turning the unit on/off

1 Open the LCD monitor and press the power button (A) to turn on the unit.

- The status indicator (B) lights on.



❖ To turn off the unit

Hold down the power button until the status indicator goes off.

When turning on the power for the first time

The time zone, date, and time are not set when the unit is shipped.
[TIME ZONE] is displayed in the LCD monitor when the power is turned on for the first time.
Follow the guidance and make the settings in the order of [TIME ZONE] and then [CLOCK SETTING].

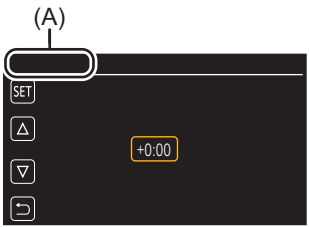
❖ [TIME ZONE]

Set the time difference from the Greenwich Mean Time.
(A) [TIME ZONE]

1 Set the time difference.

2 Select [SET].

Once the setting for [TIME ZONE] is completed, the [CLOCK SETTING] screen is displayed.



- The setting for the date/time of the main unit changes together with the time zone settings.

❖ [CLOCK SETTING]

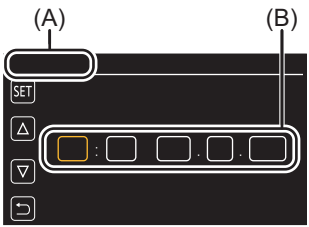
Set the year, month, date, and time.
(A) [CLOCK SETTING]
(B) 0 : 0 JAN. 1. 2025

1 Set the year, month, date, and time.

The year can be set between 2024 and 2037.

2 Select [SET].

Once the setting is complete, the camera image screen is displayed.



Main specifications

Power	7.28 V ⎓ (when battery is used) 9.0 V ⎓ (when the AC adaptor is used)
Power consumption	X2100 Recording; 19.8 W, Charging; 15.5 W X1600 / X1200 Recording; 12.3 W, Charging; 15.5 W

Ambient operating temperature	0 °C to 40 °C (32 °F to 104 °F)
Ambient operating humidity	10 %RH to 80 %RH (no condensation)
Mass (Weight)	X2100 Approx. 0.85 kg[*1]/Approx. 1.5 kg[*2] (Approx. 1.88 lbs[*1]/ Approx. 3.31 lbs[*2]) X1600 Approx. 0.85 kg[*1]/Approx. 1.2 kg[*2] (Approx. 1.88 lbs[*1]/ Approx. 2.65 lbs[*2]) X1200 Approx. 0.80 kg[*1]/Approx. 1.1 kg[*2] (Approx. 1.77 lbs[*1]/ Approx. 2.43 lbs[*2]) *1 Main unit only, excluding handle unit (X2100 only), lens hood, battery, and eye cup (X2100 / X1600 only) *2 Including handle unit (X2100 only), lens hood, battery and eye cup (X2100 / X1600 only)
External dimensions (W×H×D)	X2100 129 mm×159 mm×267 mm (5.1 ″ × 6.3 ″ × 10.5 ″) X1600 129 mm×93 mm×267 mm (5.1 ″ × 3.7 ″ × 10.5 ″) X1200 129 mm×93 mm×209 mm (5.1 ″ × 3.7 ″ × 8.3 ″) (including handle unit (X2100 only), lens hood, and eye cup (X2100 / X1600 only), excluding microphone holder (X2100 only) and protrusions)

Pickup device	1/2.5 ″ MOS solid-state image sensing device for colors Total pixels: approx. 8,570,000 pixels
Number of effective pixels	Approx. 8,290,000 pixels
Lens	Optical image stabilizer lens, motorized 24× zoom F value: F1.8 to F4.0 Focal length: f=4.12 mm to 98.9 mm 35 mm conversion: f=25.0 mm to 600.0 mm
Filter diameter	62 mm (2.44 ″)
USB terminal	USB Type-C®×1, (High-Speed USB) USB2.0 X2100 : Host/device combined (switched with menu) Host: Supports bus power (5 V, 0.5 A), USB tethering functionality, USB ethernet adaptor functionality Device: USB mass storage functionality (read only) X1600 / X1200 : USB mass storage functionality (read only)
DC IN terminal	9 V/3 A, USB Type-C®×1, compatible with USB-PD
LCD monitor	3.5 ″ LCD monitor: approx. 2,760,000 dots Capacitive touch screen
X2100 / X1600 **Viewfinder**	0.39 ″ OLED (organic EL display): approx. 2,360,000 dots Video display area: approx. 1,770,000 dots

Wi-Fi ([X2100]/[X1600])

Compliance standard	IEEE802.11a/b/g/n/ac (standard wireless LAN protocol)
Frequency range used (central frequency)	2412 MHz to 2462 MHz (1 to 11ch) 5180 MHz to 5320 MHz (36/40/44/48/52/56/60/64ch) 5745 MHz to 5825 MHz (149/153/157/161/165ch)
Encryption method	Wi-Fi compliant WPA2™ / WPA3™
Access method	Infrastructure mode

Handle unit ([X2100] supplied)

Input voltage
23.6 V/5 V/3.15 V ⎓
Power consumption
Maximum approx. 3.1 W (when connected to the camera)

Mass (Weight)	Approx. 305 g (Approx. 0.67 lbs.) (main part of the handle unit only, excluding microphone holder and microphone holder mounting screws)
External dimensions (W×H×D)	Approx. 71 mm× 89 mm× 207 mm (2.8 ″ × 3.5 ″ × 8.2 ″) (including protrusions, excluding microphone holder)

Battery pack (AG-VBR59)

Voltage/capacity	7.28 V ⎓ 5900 mAh 43 Wh

The symbols on this product (including the accessories) represent the following:

⎓	DC	|	ON	⏻	Standby

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- USB Type-C® and USB-C® are registered trademarks of USB Implementers Forum.
- X2100 and X1600 correspond to Wi-Fi functions.
  – The Wi-Fi CERTIFIED™ Logo is a registered trademark of Wi-Fi Alliance®.
  – “Wi-Fi®” is a registered trademark of Wi-Fi Alliance®.
  – “WPA2™” and “WPA3™” are trademarks of Wi-Fi Alliance®.
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At least three (3) years from delivery of this product, Panasonic will give to any third party who contacts us at the contact information provided below, for a charge no more than our cost of physically performing source code distribution, a complete machine-readable copy of the corresponding source code covered under GPL V2.0 or LGPL V2.1, as well as the respective copyright notice thereof.
Contact Information: oss-cd-request@gg.jp.panasonic.com

The source code and the copyright notice are also available for free in our website below.
https://ospo.panasonic.com/oss

This product is licensed under the AVC Patent Portfolio License for the personal use of a consumer or other uses in which it does not receive remuneration to (i) encode video in compliance with the AVC Standard (“AVC Video”) and/or (ii) decode AVC Video that was encoded by a consumer engaged in a personal activity and/or was obtained from a video provider licensed to provide AVC Video. No license is granted or shall be implied for any other use. Additional information may be obtained from MPEG LA, L.L.C.
See http://www.mpegla.com

- Separate license contract with MPEG-LA is required to record in a memory card with this product and to distribute that card to end users for a profit. The end user mentioned here indicates a person or organization that handles contents for a personal use.

Limited Warranty (ONLY FOR U.S.A.)

Panasonic Products Limited Warranty

Limited Warranty Coverage (For USA Only)

If your product does not work properly because of a defect in materials or workmanship, Panasonic Corporation of North America (referred to as “the warrantor”) will, for the length of the period indicated on the chart below, which starts with the date of original purchase (“warranty period”), at its option either (a) repair your product with new or refurbished parts, (b) replace it with a new or a refurbished equivalent value product, or (c) refund your purchase price. The decision to repair, replace or refund will be made by the warrantor.

Product or Part Name	Parts	Labor
4K Video Camera	1 Year	90 Days
All included Accessories (Except Non-Rechargeable Batteries)	90 Days	Not Applicable
Only Non-Rechargeable Batteries	10 Days	Not Applicable

During the “Labor” warranty period there will be no charge for labor. During the “Parts” warranty period, there will be no charge for parts. This Limited Warranty excludes both parts and labor for non-rechargeable batteries, antennas, and cosmetic parts (cabinet). This warranty only applies to products purchased and serviced in the United States. This warranty is extended only to the original purchaser of a new product which was not sold “as is”.

Mail-In Service--Online Repair Request

Online Repair Request

To submit a new repair request and for quick repair status visit our Web Site at http://shop.panasonic.com/support.

When shipping the unit, carefully pack, include all supplied accessories listed in the Owner’s Manual, and send it prepaid, adequately insured and packed well in a carton box. When shipping Lithium Ion batteries please visit our Web Site at http://shop.panasonic.com/support as Panasonic is committed to providing the most up to date information. Include a letter detailing the complaint, a return address and provide a daytime phone number where you can be reached. A valid registered receipt is required under the Limited Warranty.

IF REPAIR IS NEEDED DURING THE WARRANTY PERIOD, THE PURCHASER WILL BE REQUIRED TO FURNISH A SALES RECEIPT/PROOF OF PURCHASE INDICATING DATE OF PURCHASE, AMOUNT PAID AND PLACE OF PURCHASE. CUSTOMER WILL BE CHARGED FOR THE REPAIR OF ANY UNIT RECEIVED WITHOUT SUCH PROOF OF PURCHASE.

Limited Warranty Limits And Exclusions

This warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, introduction of sand, humidity or liquids, or rental use of the product, or service by anyone other than a Factory Service Center or other Authorized Servicer, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE".

THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY.

(As examples, this excludes damages for lost time, travel to and from the servicer, loss of or damage to media or images, data or other memory or recorded content. The items listed are not exclusive, but for illustration only.)

ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the exclusions may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your dealer or Service Center. If the problem is not handled to your satisfaction, then write to:

Panasonic Corporation of North America
Consumer Affairs Department
Two Riverfront Plaza
Newark NJ 07102-5490

PARTS AND SERVICE, WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY, ARE YOUR RESPONSIBILITY.

Product registration is not mandatory. Failure to complete the form does not affect the consumer's warranty rights.

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http://shop.panasonic.com/support

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Customer Services Directory

For Product Information, Operating Assistance, Parts, Owner's Manuals, Dealer and Service info go to http://shop.panasonic.com/support

For the hearing or speech impaired TTY: 1- 855-497-2056

As of January 2026

Warranty (For Canadian Customers)

Panasonic Canada Inc.

5770 Ambler Drive, Mississauga, Ontario L4W 2T3

PANASONIC PRODUCT – LIMITED WARRANTY

Panasonic Canada Inc. warrants this product to be free from defects in material and workmanship under normal use and for a period as stated below from the date of original purchase agrees to, at its option either (a) repair your product with new or refurbished parts, (b) replace it with a new or a refurbished equivalent value product, or (c) refund your purchase price. The decision to repair, replace or refund will be made by Panasonic Canada Inc.

Camcorder Products - One (1) year, parts and labour

This warranty is given only to the original purchaser, or the person for whom it was purchased as a gift, of a Panasonic brand product mentioned above sold by an authorized Panasonic dealer in Canada and purchased and used in Canada, which product was not sold “as is”, and which product was delivered to you in new condition in the original packaging.

IN ORDER TO BE ELIGIBLE TO RECEIVE WARRANTY SERVICE HEREUNDER, A PURCHASE RECEIPT OR OTHER PROOF OF DATE OF ORIGINAL PURCHASE, SHOWING AMOUNT PAID AND PLACE OF PURCHASE IS REQUIRED

LIMITATIONS AND EXCLUSIONS

This warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by Panasonic Canada Inc., or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, improper batteries, power line surge, lightning damage, modification, introduction of sand, humidity or liquids, or rental use of the product, or service by anyone other than an Authorized Servicer, or damage that is attributable to acts of God.

Dry cell batteries are also excluded from coverage under this warranty. Rechargeable batteries are warranted for ninety (90) days from date of original purchase.

THIS EXPRESS, LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL PANASONIC CANADA INC. BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT OR ARISING OUT OF ANY BREACH OF ANY EXPRESS OR IMPLIED WARRANTY.
(As examples, this warranty excludes damages for lost time, travel to and from the Authorized Servicer, loss of or damage to media or images, data or other memory or recorded content. This list of items is not exhaustive, but for illustration only.)

In certain instances, some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, or the exclusion of implied warranties, so the above limitations and exclusions may not be applicable. This warranty gives you specific legal rights and you may have other rights which vary depending on your province or territory.

WARRANTY SERVICE

For product operation, repairs and information assistance, please visit our Support page:

www.panasonic.ca/english/support

IF YOU SHIP THE PRODUCT TO A SERVICENTRE

Carefully pack and send prepaid, adequately insured and preferably in the original carton.
Include details of the defect claimed, and proof of date of original purchase.

Useful Information
(Only For Latin American Countries)

Customer Service

Customer Service Directory

Obtain products information and operative assistant; localize the closer distributor or Service Center; buy spare parts and accessories by our Web Site to Latin America or calling our Contact Center:

COUNTRY	WEB SITE	CONTACT CENTER
Panama	www.panasonic.com/pa/soporte/	800-7262
Colombia	www.panasonic.com/co/soporte/	01-8000-947262
Ecuador	www.panasonic.com/pa/soporte/	1-800-726276
Costa Rica	www.panasonic.com/pa/soporte/	800-7262737
El Salvador	www.panasonic.com/pa/soporte/	800-7262
Guatemala	www.panasonic.com/pa/soporte/	1-801-811-7262
Uruguay	www.panasonic.com/pa/soporte/	0-800-7262
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