

Operating Instructions <Basics>

Installation Instructions provided

HD Integrated Camera

Model No. **AW-HE2P**
AW-HE2E



- Die Bedienungsanleitung in Deutsch ist als PDF-Datei in der CD-ROM enthalten. (→ 2)
- Le mode d'emploi en français est fourni sous forme de fichier PDF sur le CD-ROM. (→ 2)
- Le istruzioni per l'uso in italiano sono contenute in un file PDF sul CD-ROM. (→ 2)
- Las instrucciones de funcionamiento en español se encuentran en un archivo PDF del CD-ROM. (→ 2)
- Документ Инструкция по эксплуатации на русском языке находится в виде PDF-файла на диске CD-ROM. (→ 2)

Please read these instructions carefully before using this product, and save this manual for future use.

How the Operating Instructions are configured

This <Basics> describes the procedure for basic operation and installation. Before installing this unit, be sure to take the time to read through <Basics> to ensure that the unit will be installed correctly.

For more detailed operating instructions, please refer to <Operations and Settings> (PDF file) recorded on the attached CD-ROM.

- To open <Operations and Settings>, please refer to page 2.
- This <Basics> is also contained as a PDF file on the CD-ROM supplied with the unit.

ENGLISH

• How to open the operating instruction manual PDF files

Discontinue installation if the installation screen of the software opens as a result of inserting the CD-ROM.

When [INDEX.pdf] on the CD-ROM is opened, a list of the operating instruction manuals will be displayed.

Click on the document name of the manual to be opened.

• Adobe Reader is required to read PDF files.

It can be downloaded from the home page of Adobe Systems.

DEUTSCH

• Öffnen der PDF-Dateien der Bedienungsanleitung

Brechen Sie die Installation ab, falls beim Einlegen der CD-ROM der Installationsbildschirm der Software erscheint.

Wenn [INDEX.pdf] auf der CD-ROM geöffnet wird, erscheint eine Liste der Bedienungsanleitungen.

Klicken Sie auf den Dokumentennamen der zu öffnenden Anleitung.

• Zum Lesen der PDF-Dateien benötigen Sie Adobe Reader.

Dieses Programm kann von der Homepage von Adobe Systems heruntergeladen werden.

FRANÇAIS

• Comment ouvrir les fichiers PDF des manuels du mode d'emploi

Arrêter l'installation si l'écran d'installation du logiciel s'ouvre quand le CD-ROM est inséré.

Quand [INDEX.pdf] sur le CD-ROM s'ouvre, la liste des manuels du mode d'emploi s'affiche.

Cliquer sur le nom du document correspondant au manuel à consulter.

• Adobe Reader est nécessaire pour lire les fichiers PDF.

Ce logiciel peut être téléchargé depuis la page d'accueil d'Adobe Systems.

ITALIANO

• Come aprire i file dei manuali di istruzioni per l'uso

Se inserendo il CD-ROM si apre la schermata di installazione del software, interrompere l'installazione.

Aperto [INDEX.pdf] sul CD-ROM, viene visualizzato un elenco di manuali di istruzioni per l'uso.

Fare clic sul nome del documento corrispondente al manuale da aprire.

• Per leggere i file PDF è necessario Adobe Reader.

Il programma può essere scaricato dal sito Web di Adobe Systems.

ESPAÑOL

• Modo de abrir los archivos PDF que contienen el manual de las instrucciones de funcionamiento

Interrumpa la instalación si la pantalla de instalación del software se abre como resultado de insertar el CD-ROM.

Cuando se abra [INDEX.pdf] en el CD-ROM se visualizará una lista de los manuales de instrucciones de funcionamiento.

Haga clic en el nombre de documento del manual que va a abrir.

• Para leer los archivos PDF se necesita el programa Adobe Reader.

Este programa se puede descargar de la página inicial de Adobe Systems.

РУССКИЙ

• Как открыть PDF-файлы инструкции по эксплуатации

Прекратите установку, если в результате загрузки диска CD-ROM появилось окно установки программного обеспечения.

При открытии файла [INDEX.pdf] на диске CD-ROM будет отображен список инструкций по эксплуатации.

Щелкните название документа руководства, чтобы открыть его.

• Для чтения PDF-файлов потребуется Adobe Reader.

Данное программное обеспечение можно скачать с домашней страницы Adobe Systems.

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Read this first!

■ References made in this manual

References made are as per below:

- Pages for reference are indicated by an arrow, for example: → 00
- AW-HS50N, AW-HS50E → [AW-HS50]
- AW-RP50N, AW-RP50E → [AW-RP50]
- Remote Camera Controller → [Controller]

■ Regarding photos and illustrations in this manual

Please note that the product profile sketches, illustrations, menu screens, etc. in this manual differ slightly from the actual product.

■ Regarding personal computer screenshots

Descriptions are provided using screenshots from Windows 7.

■ To prevent unauthorized use

- Your user name and password on the web setting screen.
 - Do not use the default user name and password. Make sure you change them.
 - Do not set the same character string for the user name and password.
 - Do not allow anyone else to see the user name and password, and do not tell them to anyone else.
 - In the case that a third party sets up/performs settings for the unit, be sure to change the user name and password after the third party has done so.
 - When requesting repairs, restore the default settings with the INIT button (→ 9), and then reset your user name and password.
(When the default settings are restored, the default network settings are also restored. Please make a note of the network settings, user name, and password.)
- Set a screensaver protected with a password for the personal computer.

■ Precautions when requesting repairs

Take note of each setting you have changed in the camera when requesting repairs. Your current settings may be deleted or modified.

■ When disposing of/transferring the unit

The unit records personal information related to your operations. When you part with the unit due to such reasons as disposal or transfer, make sure to restore the default settings with the INIT button (→ 9) and erase recorded information.

■ Privacy and Image Rights

Set up and use the camera at your own responsibility. Take into consideration subjects' privacy (including sounds picked up by the microphone), portrait rights, and the like first.

■ Disclaimer of warranty

IN NO EVENT SHALL Panasonic Corporation BE LIABLE TO ANY PARTY OR ANY PERSON, EXCEPT FOR REPLACEMENT OR REASONABLE MAINTENANCE OF THE PRODUCT, FOR THE CASES, INCLUDING BUT NOT LIMITED TO BELOW:

- 1) ANY DAMAGE AND LOSS, INCLUDING WITHOUT LIMITATION, DIRECT OR INDIRECT, SPECIAL, CONSEQUENTIAL OR EXEMPLARY, ARISING OUT OF OR RELATING TO THE PRODUCT;
- 2) PERSONAL INJURY OR ANY DAMAGE CAUSED BY INAPPROPRIATE USE OR NEGLIGENT OPERATION OF THE USER;
- 3) UNAUTHORIZED DISASSEMBLE, REPAIR OR MODIFICATION OF THE PRODUCT BY THE USER;
- 4) INCONVENIENCE OR ANY LOSS ARISING WHEN IMAGES ARE NOT DISPLAYED, DUE TO ANY REASON OR CAUSE INCLUDING ANY FAILURE OR PROBLEM OF THE PRODUCT;
- 5) ANY PROBLEM, CONSEQUENTIAL INCONVENIENCE, OR LOSS OR DAMAGE, ARISING OUT OF THE SYSTEM COMBINED BY THE DEVICES OF THIRD PARTY;
- 6) LOSS OF REGISTERED DATA CAUSED BY ANY FAILURE.

■ Network security

As you will use this unit connected to a network, your attention is called to the following security risks.

- 1) Leakage or theft of information through this unit
- 2) Use of this unit for illegal operations by persons with malicious intent
- 3) Interference with or stoppage of this unit by persons with malicious intent

It is your responsibility to take precautions such as those described below to protect yourself against the above network security risks.

- Use this unit in a network secured by a firewall, etc.
- If this unit is connected to a network that includes personal computers, make sure that the system is not infected by computer viruses or other malicious entities (using a regularly updated antivirus program, anti-spyware program, etc.).
- Protect your network against unauthorized access by restricting users to those who log in with an authorized user name and password.
- Take measures by authenticating the users of the unit in order to restrict access, for example, so that the setting information contained inside the unit is not leaked over the network.
- Do not install the camera in locations where the camera or the cables can be destroyed or damaged by persons with malicious intent.
- Refrain from connections that use public lines.

Usage restrictions

Use of the same segment is recommended for the network in which the unit and the controller or personal computer are connected.

If the equipment uses connections with different segments, events based on the settings inherent to the network equipment, for instance, may occur so check this thoroughly prior to operation.

Accessories

Check the accessories before using this unit.

CD-ROM

- Operating Instructions (<Basics>, <Operations and Settings>)
- Easy IP Setup Software (EasyIpSetup.exe)



Stand

Remove the stand protrusion, stand fixing screw and spring washer when using a tripod. (→ 23)



Drop-prevention wire



Stand cover



AC adaptor



AC cable for AW-HE2P



AC cable for AW-HE2E



for AW-HE2E

- In Saudi Arabia, always use (B).



M4 screw

20 mm (0.787 ") length
(4 screws)



M3 screw

8 mm (0.315 ") length



Flat washer (for M4 screw)



Flat washer (for M3 screw)



Bundling band (2 bands)



Perpendicular fixing screw (installed on the unit)



Horizontal fixing screw (installed on the unit)



- Refer to page 10 concerning the mounting method for the stand and stand cover.
- Keep the screws, washers, bundling bands, drop-prevention wire and stand protrusion out of reach of children to prevent swallowing.

Optional accessories

The following optional product is compatible with the unit:

Some optional accessories may not be available in some countries.

Product name (product number)

- **Wireless remote controller (AW-RM50G)**
- **Remote Camera Controller (AW-RP50N, AW-RP50E)**
- **USB cable (K2KYYYY00221)**

(contact a sales store for information about purchases)

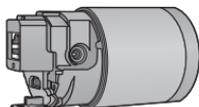
Product numbers correct as of Oct. 2012. These may be subject to change.

Names and Functions of Main Parts

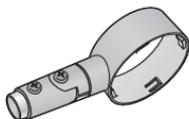
Unit Configuration

This unit consists of the camera body, middle ring portion and rear cover.

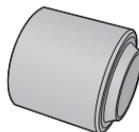
Camera body



Middle ring portion

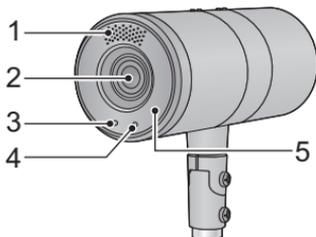


Rear cover

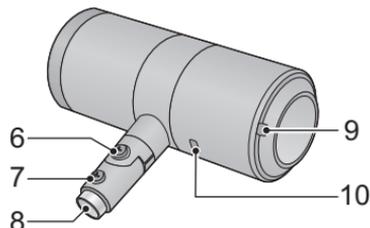


- Detaching and attaching the Rear Cover (→ 11)
- Detaching and attaching the Middle Ring Portion (→ 12)
- The middle ring portion has a front and rear orientation. Take note of the front and rear orientation when attaching the middle ring portion or passing cables through. (→ 12, 20)

Names and Functions of Main Parts

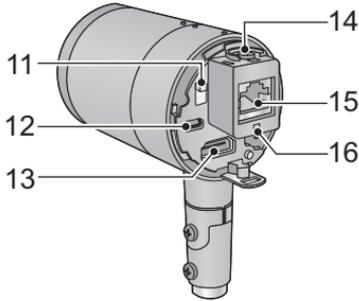


- 1 Internal stereo microphones**
- 2 Lens**
- 3 Status display lamp**
 - Orange light: Standby mode
 - Green light: The unit is turned on
 - Flashing green light:
The unit is receiving a wireless remote control signal with a matching remote control ID
 - Flashing orange light:
The unit is receiving a wireless remote control signal with a different remote control ID
- 4 Tally lamp**
- 5 Wireless remote control signal light-sensing area (→ 45)**
- 6 Perpendicular fixing screw (→ 10)**
- 7 Horizontal fixing screw (→ 10, 23)**



- 8 Stand mounting hole (→ 10, 23)**
- 9 Bundling band eyelet (→ 20)**
- 10 Anti-theft wire mounting hole (→ 20)**
The anti-theft wire (available from a hardware store) is attached here.

■ When the rear cover is detached



11 RELEASE lever (→ 12)

12 USB terminal [↔] (→ 20)

Power can be supplied from any device that complies with USB battery charging standards, including Micro USB AC/DC converters for ordinary cell phones, personal computers, or televisions. When doing so, use the USB cable.

- Always use a genuine Panasonic USB cable (K2KYYYY00221: optional).

13 HDMI terminal (→ 20)

14 Drop-prevention wire mounting portion (→ 20)

15 LAN connector (→ 20)

Use a category 5 or above LAN cable with a maximum length of 100 m (328 ft.).

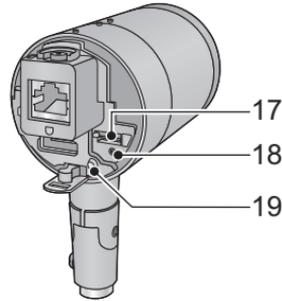
16 LAN lamp [LINK/ACT]

Lights up when data is transmitted/received via LAN.

17 microSD card slot

This portion is used when updating the firmware of the unit. (Not ordinarily used)

- Keep the microSD card out of reach of children to prevent swallowing.



18 INIT button

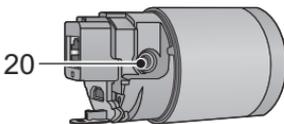
If you press the button while the unit is turned on, the user management settings and the network settings are initialized. Initialize using the following procedure.

- 1) Close the camera menu and the web settings screen.
- 2) Press the INIT button.
- 3) Switch on the power again using the power button.

19 Power button [⏻/⏻]

If you press the button when the unit is in standby mode or turned off, the unit is turned on. If you press and hold the button when the unit is in standby mode or turned on, the unit is turned off.

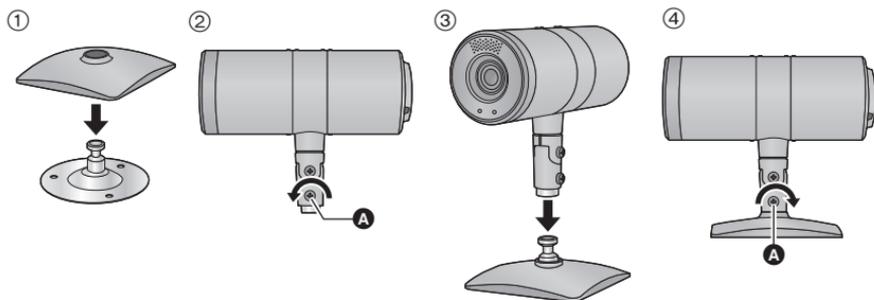
■ When the middle ring portion is detached



20 DC input terminal [DC IN] (→ 20)

- Do not use any other AC adaptors except the supplied one.

Mounting the Stand and the Stand Cover



- 1 (only when using the stand cover)
Put the stand cover on the stand.
- 2 **Loosen the horizontal fixing screw A.**
- 3 **Insert the stand in the stand mounting hole.**
- 4 **Tighten the horizontal fixing screw A.**

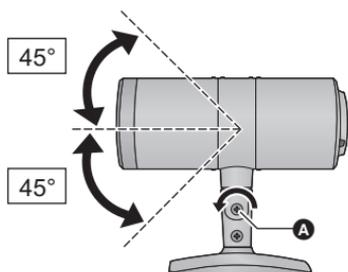
- Tightening torque: 1.176 N·m (12 kgf·cm)
- Tighten it firmly so that there is no wobbling.

When the horizontal fixing screw is loosened, the camera can be rotated 360° in the horizontal direction.

Adjust the position of the camera to suit the installation location.

Tilting the Camera Up and Down

When the perpendicular fixing screw A is loosened, the camera can be tilted approximately 45° up or down.

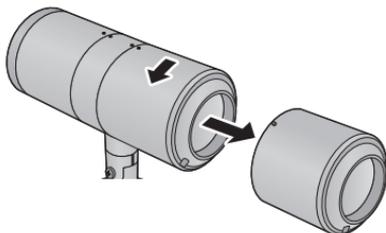


- After adjusting the position of the camera, firmly tighten the screw to fix the camera in position.
(Tightening torque: 1.176 N·m (12 kgf·cm))

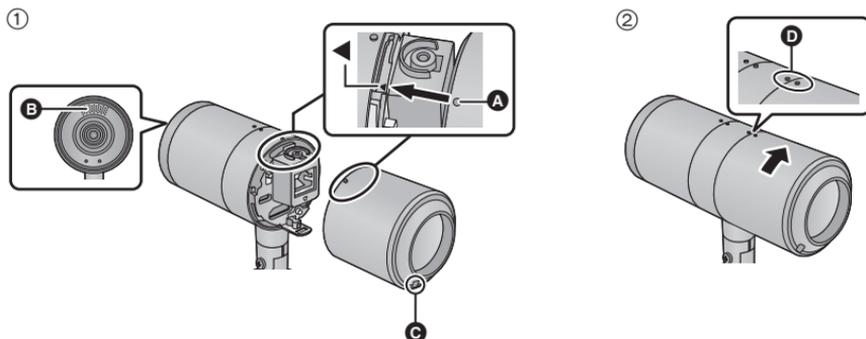
Detaching and Attaching the Rear Cover

Detaching the Rear Cover

Turn the rear cover in the direction of the arrow and detach it.



Attaching the Rear Cover



1 Align the mark ◀ on the camera body with the mark **A** on the rear cover and insert it.

- Attach the rear cover with the internal stereo microphones **B** facing up, and the bundling band eyelet **C** facing down (the cover cannot be attached in the reverse order).

2 Attach the rear cover by turning it in the direction of the arrow.

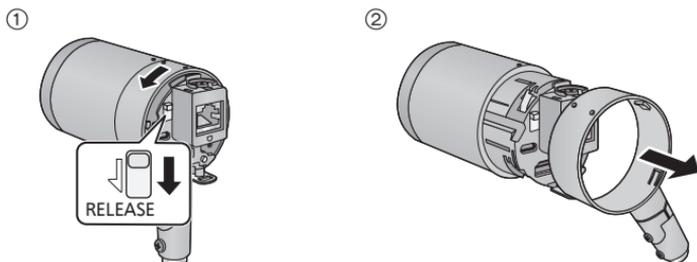
- Align the middle ring portion and the mark **D** on the rear cover.

Detaching and Attaching the Middle Ring Portion

Detach the middle ring portion when connecting the AC adaptor or when installing the middle ring portion upside down by suspending the camera from the ceiling.

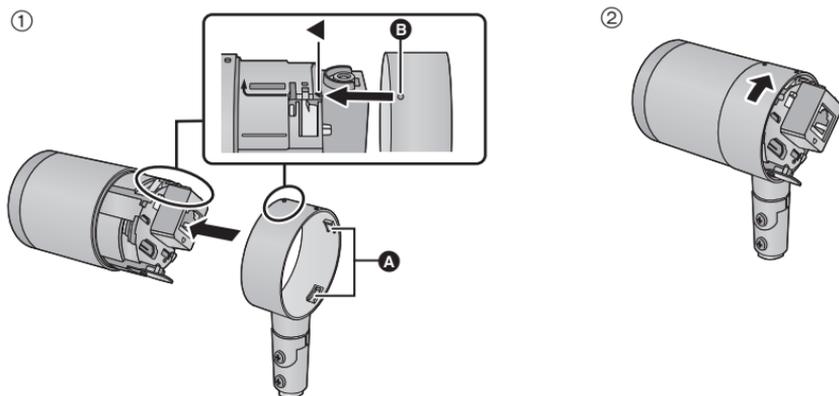
Detaching the middle ring portion

- Detach the rear cover (→ 11)



- 1** While sliding the **RELEASE** lever, turn the middle ring portion in the direction of the arrow.
- 2** Pull the middle ring portion out from the camera body.

Mounting the middle ring portion



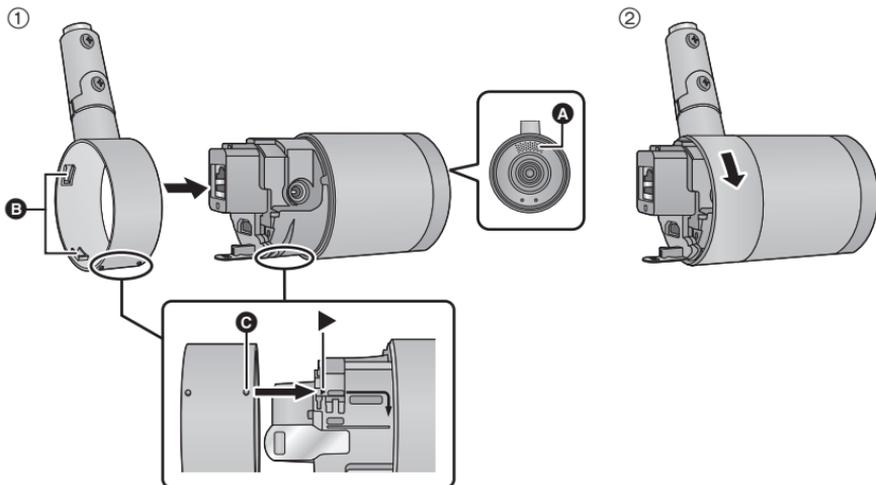
- 1** Insert the middle ring portion in the camera body.
 - Insert the middle ring portion from the opposite side of the groove (A) into the camera body.
 - Align the mark (B) on the middle ring portion with the ◀ mark on the camera body and insert it.

2 Turn the middle ring portion in the direction of the arrow to attach the middle ring portion to the camera body.

- Turn it until there is a clicking noise and it locks into place.

■ For ceiling-suspended installation

Mount the middle ring portion to the camera body while moving it up/down or rotating it.



1 Insert the middle ring portion in the camera body.

- Check which portions of the camera body are the top and bottom by looking at the positions of the internal stereo microphones (A).
- Insert the middle ring portion from the opposite side of the groove (B) into the camera body.
- Align the mark (C) on the middle ring portion with the ▶ mark on the camera body and insert it.

2 Turn the middle ring portion in the direction of the arrow to attach the middle ring portion to the camera body.

- Turn it until there is a clicking noise and it locks into place.

Information for Your Safety

WARNING:

To prevent injury, this apparatus must be securely attached to the floor/wall/ceiling in accordance with the installation instructions.

WARNING:

Installation should only be performed by qualified installation personnel.
Improper installation may result in the entire apparatus falling down and causing injury.

Installation precautions

Panasonic does not accept any responsibility for accident or damage during installation if procedure in this manual is not followed.

To installation personnel

Read the "Installation Instructions" thoroughly and then perform the operation correctly and safely.

Also, always read the "Information for Your Safety" (→ 14) of this manual as they contain important information.

After the installation, give the "Operating Instructions <Basics>" to the customer to save for future use.

Ensure that the installation work complies with the technical standards governing electrical equipment.

This unit is for indoor use only.

It cannot be used outdoors.

Avoid installation in a location where the unit will be exposed to direct sunlight for extended periods or near a cooling or heating appliance.

Otherwise, deformation, discoloration, malfunctioning and/or problems in operation may result. Operate the unit where it will not be splashed or sprayed by water.

Use the unit with an installation where the unit is suspended from an overhead surface or with a stand-alone installation.

Do not use the unit on its side.

- When using screws to fix parts during installation, be sure to use the supplied screws. Do not use wood screws, nails, etc.
In the case of a concrete ceiling, secure the unit using anchor bolts (for M4) or AY plug bolts (for M4).

Tightening torque: 1.176 N·m (12 kgf·cm)

- **Installation conditions (ceiling-suspended installation/standing installation)**
 - **Camera weight: 244 g (including stand, stand cover, middle ring portion and rear cover)**
 - **Minimum pulling strength (per screw): 147 N (15 kgf)**
 - **No. of screws: 3 screws**

Concerning the installation location

Install the unit in a stable location which will not be susceptible to shaking. If the unit is installed in a location which is susceptible to shaking, this will cause the unit's images to shake in turn.

Install the unit after conferring in detail with your dealer.

Install the unit on a ceiling that is strong enough (such as a concrete ceiling).

If the unit is to be installed on a ceiling which is not strong enough, reinforce the ceiling sufficiently first.

Do not install or use the unit in the following kinds of locations.

- On walls (where the unit would be installed sideways)
- In locations (including places such as under the eaves of a building) where the unit would be directly exposed to rain or water
- In locations such as kitchens where there are high concentrations of steam and grease
- In outdoor locations or hot places where the temperature will exceed 40 °C (104 °F)
- In cold locations where the temperature will drop below 0 °C (32 °F)
- In locations where the humidity will exceed 80%RH
- In locations where chemicals are used such as near swimming pools
- At sea, in coastal areas or in locations where corrosive gases are emitted
- In locations where radiation, X-rays, or strong radio waves or magnetic fields are generated
- In locations where the unit would be subject to a great deal of vibration such as on board a vehicle or ship (this unit is not designed to be used in vehicles)
- In locations where the temperature is subject to sudden changes such as near the air outlet of an air conditioner or near a door which allows the outside air to come in

What to avoid to ensure that the unit will perform stably over a prolonged period.

- Using the unit for a prolonged period in a location with high temperature and humidity levels will cause its parts to deteriorate and shorten its service life.
- Ensure that a cooling unit or heating unit will not blow any air directly toward the installation location.

Be absolutely sure to use the supplied stand and screws to install the camera.

- Do not mount the unit by employing any methods other than those specified.
- Do not remodel the stand or screws provided with the unit.

Before installation, always disconnect the power plug.

Tightening up the mounting screws

- Tighten up the screws and bolts securely to the degree that is appropriate for each of the materials used in the mounting location and structures.
- After tightening up the screws and bolts, check that there is no unsteadiness and that the parts have been tightened securely.
- Use the specified tools and tighten the screws firmly.
- Tighten up the screws using the specified torque driver. Do not use electrical drivers or impact drivers.

When the unit is no longer going to be used, do not leave it lying around, but be absolutely sure to dispose of it properly.

Do not attach a filter, hood, extender or other parts to the unit.

Use the dedicated AC adaptor and AC cable provided with the unit.

Connect the AC adaptor and AC cable to the power inlet securely.

Installing the AC adaptor

- Do not place the AC adaptor directly onto a ceiling panel or other such surface.
Extreme danger is posed when water has collected on the surface as a result of leaking rain, for instance.
Secure the AC adaptor firmly to the bottom or other surface of a reinforcing member made of channel steel where dust will not accumulate.

- Secure the AC adaptor firmly so that there will be no chance that it will fall off or fall down. Secure it using a strength which can withstand the mass (approx. 0.1 kg (0.22 lb.)) of the AC adaptor.

Install the accessory AC adaptor near the main power outlet, and position it in such a way that its power plug can be plugged into and unplugged from the outlet easily.

When connecting the AC adaptor to a power outlet on the ceiling or on any other surface where dust may collect, wipe off the dust on the power plug at periodic intervals as an anti-tracking measure.

Connecting the AC cable

Be absolutely sure to connect the AC cable of the AC adaptor through a circuit breaker using one of the following methods.

- 1) Connect the power cable through a power control unit.
- 2) Connect the power cable to a circuit breaker in a power distribution panel with a contact distance of 3.0 mm or more. Use a circuit breaker which is capable of shutting off all the poles of the main power supply with the exception of the protective ground conductor.
- 3) Install the AC adaptor near the power outlet, and connect it through the power plug.

If there is a possibility of noise interference

Either wire the cables so that the power cable (ceiling light cord) of AC 100 V* (AC 220 V**) or more, and the signal cable are placed at least 1 m (3.3 ft.) apart.

Alternatively run each cable through its own metal conduit.

(The metal conduits must be grounded.)

*For AW-HE2P

**For AW-HE2E

Radio signal interference

If the unit is positioned near a TV or radio transmitting antenna or a strong electrical field or magnetic field (such as that generated by a motor, transformer or power lines), its images may be distorted and/or the images may be affected by noise.

When connecting the cables, ensure that the connector areas will not be subject to any load.

Doing so may cause malfunctioning.

Allowing the generated heat to escape

This unit allows the heat generated inside to escape from its surfaces.

Do not install the unit in a location where it will be surrounded by walls or other surfaces and where heat will be trapped.

How to connect and install the unit

Be absolutely sure to read through the "Information for Your Safety" (→ 14) and "Installation precautions" (→ 15 to 17).

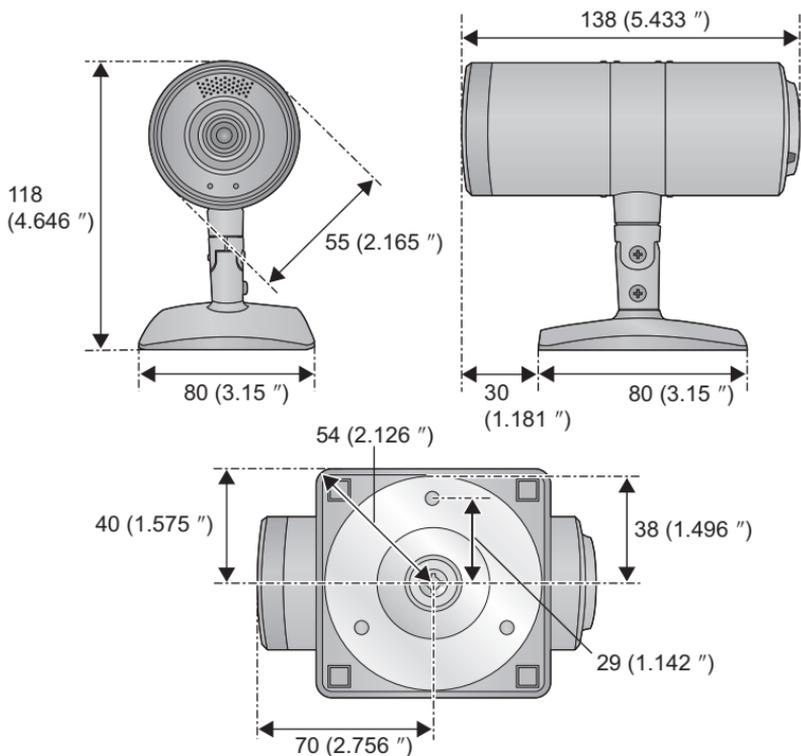
Connect and install in the following order:

- 1) Checking the installation location
- 2) Preparing the power source
- 3) Connecting the cables
- 4) Ceiling-suspended Installation/Standing Installation/Mount to a Tripod

Checking the installation location

Refer to the illustration, and determine where the unit is to be installed and in which direction it should be mounted.

- Ensure that there is at least 200 mm (7.874 ") of space for wiring behind the rear cover.
Unit: mm (inch)



Preparing the power source

Connect the AC cable to the AC adaptor and the socket.

- Use the supplied AC adaptor. Do not use the AC adaptor of another device.
- Do not use the AC cable with any other equipment as it is designed only for this unit. Also, do not use the AC cable from other equipment with this unit.
- Concerning the socket used on the ceiling, be sure to take preventative measures against tracking caused by dust and the like.

- The camera can also be used by connecting a USB cable. (→ 9)

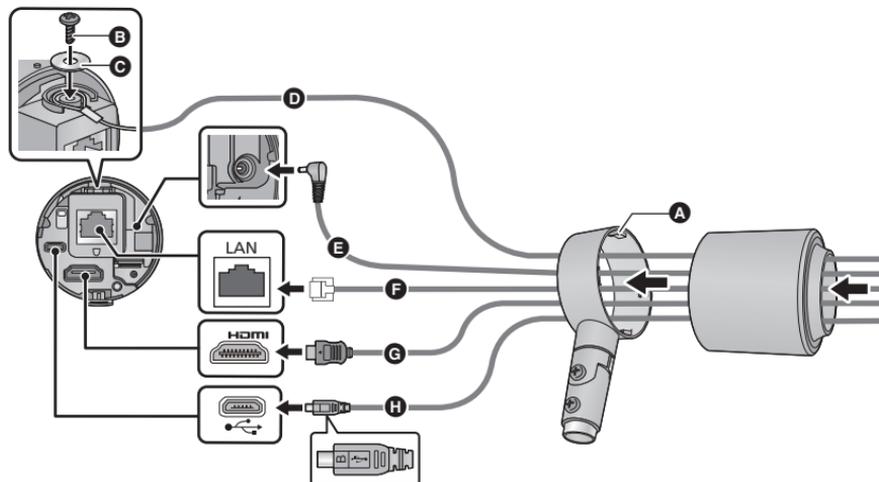
Connecting the cables

- When installing the unit on a ceiling, connect the LAN cable, the HDMI cable, the AC adaptor cable, the USB cable, and the anti-theft wire in the space above the ceiling panel, and draw each cable out from the cable eyelet.
- Please use “High Speed HDMI Cables” that have the HDMI logo (as shown on the cover). Cables not conforming to the HDMI standard will not work. Panasonic HDMI cable is recommended.
Part No.: RP-CDHS15 (1.5 m (4.9 ft.)), RP-CDHS30 (3.0 m (9.8 ft.))
- Always use a genuine Panasonic USB cable (K2KYYYY00221: optional).

1 Detach the rear cover and the middle ring portion. (→ 11, 12)

2 Pass each cable through the rear cover and the middle ring portion and connect them to the rear of the camera body.

- Pass cables from the side with the middle ring portion groove (A).



- B** M3 screw (supplied)
Tightening torque: 0.882 N·m (9 kgf·cm)
 - C** Flat washer (for M3 screw, supplied)
 - D** Drop-prevention wire (supplied)
 - E** AC adaptor (supplied)
 - F** LAN cable (→ 9)
 - G** HDMI cable (optional)
 - H** USB cable (optional)
- Connect this when supplying power from the USB cable.
 - Insert with the mark  on the cable facing upwards.

3 Attach the middle ring portion and the rear cover. (→ 11, 12)

Check that the top and bottom of the middle ring portion are in a position which suits the installation method. (→ 13)

4 Connect the anti-theft wire.

- As necessary for use, pass the bundling band through the bundling band eyelet and bind the cables together.

Ceiling-suspended Installation

When installing the camera by suspending it from the ceiling, be sure to attach the drop-prevention wire.

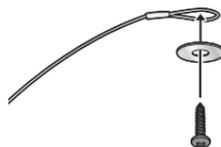
1 Mount the stand to the ceiling using the M4 screws (supplied).

- Tightening torque: 1.176 N·m (12 kgf·cm)
- Screw the stand's three holes.
- Do not use any screws other than those supplied with the unit (do not use wood screws, nails, etc.).
- Make sure the stand is firmly mounted to the ceiling, with no tilting or wobbling.
- Screw the drop-prevention wire separately to the stand.



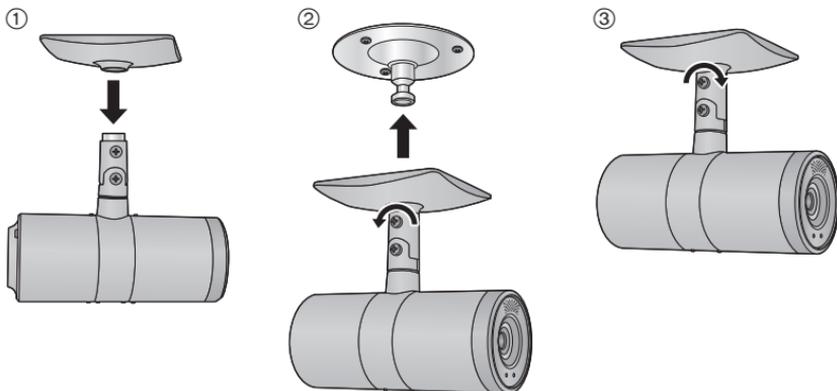
2 Mount the drop-prevention wire to the ceiling by using the M4 screw (supplied) and the flat washer (for M4 screw, supplied).

- Tightening torque: 1.176 N·m (12 kgf·cm)
- Pull the drop-prevention wire, and check that it has been attached securely.
- The drop-prevention wire is designed to be used for installation where the unit is suspended from an overhead surface so do not subject it to the weight of units other than the unit.



3 Fix the camera to the stand.

- 1) Put the stand cover on the middle ring portion.
 - 2) Loosen the horizontal fixing screw and insert the stand into the stand mounting hole.
 - 3) Tighten the horizontal fixing screw and fix the camera to the stand.
- Tightening torque: 1.176 N·m (12 kgf·cm)
 - Attach the camera securely with a prescribed tool.
 - Adjust the horizontal orientation of the camera before fixing.

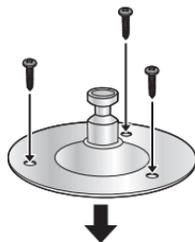


- Tilt the camera horizontally and vertically as necessary for use. (→ 10)

Standing Installation

Mount the stand/stand cover to the camera and install it. (→ 10)

- **If you want to fix the stand, screw the stand to the installation surface with the M4 screws (supplied), and then mount the stand cover and the camera to the stand.**
 - Tightening torque: 1.176 N·m (12 kgf·cm)
- Place the unit such that it is horizontal to the installation surface.
- Install the unit in a stable location where there is no vibration.
Vibration of the installation location causes image vibration.
- When installing the camera, take care that it does not fall, etc.
- Take care that the connected cables do not catch on something.
If they do it may cause a fall or injury.



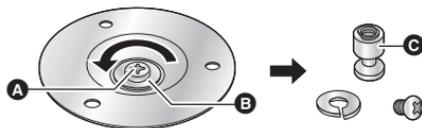
Mount to a Tripod

The tripod mounting hole of the unit supports 1/4-20UNC.

- Loosen the horizontal fixing screw (→ 10)

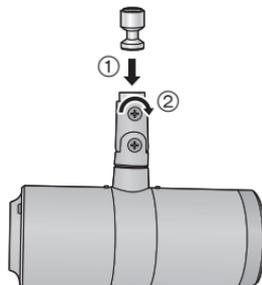
- 1 Remove the stand fixing screw **A** and spring washer **B**, and detach the stand protruding portion **C**.**

– The stand protruding portion can be used as a tripod mounting hole.



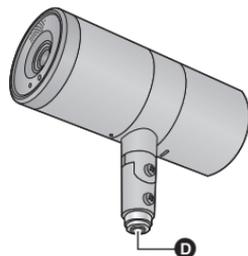
- 2 Insert the stand protruding portion in the stand mounting hole, and tighten the horizontal fixing screw.**

- Tightening torque: 1.176 N·m (12 kgf·cm)



- 3 Mount a tripod to the tripod mounting hole **D**.**

- Place the tripod on a completely flat and level surface.
- Tighten the screws by hand to mount the tripod securely.
- Do not install the unit where people will be passing back and forth.
- When using the unit mounted on a tripod, do not put the tripod high above the floor level.
- Mount the unit securely so there is no looseness. Looseness may cause the unit to fall off and/or result in injuries.
- When the unit is going to be used for a prolonged period of time, take steps to ensure that the unit will not topple or fall over and that it will not fall off or fall down. After using the unit, restore the installation location to its original state without delay.



■ To return the stand to the condition it was in when you purchased it,

Use the stand fixing screw and spring washer to screw the stand protrusion to the stand.

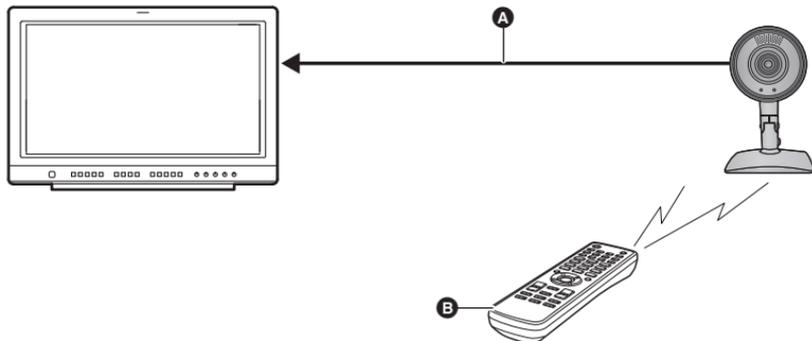
- Align the stand protruding portion and the stand correctly so that the stand protruding portion does not turn.
- Tightening torque: 2.94 N·m (30 kgf·cm)

Connection with Other Devices

- Connect the AC adaptor supplied with the unit, controller (AW-RP50) and compact live switcher (AW-HS50) to each device.
- Please use “High Speed HDMI Cables” that have the HDMI logo (as shown on the cover). Cables not conforming to the HDMI standard will not work. Panasonic HDMI cable is recommended.
Part No.: RP-CDHS15 (1.5 m (4.9 ft.)), RP-CDHS30 (3.0 m (9.8 ft.))
- The unit is capable of transmitting IP images to only one terminal.
- If the unit is simultaneously controlled by more than one controller (AW-RP50), the unit may not function correctly.

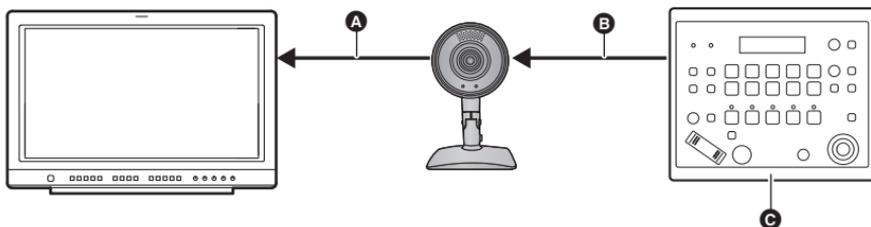
Connections with an HD monitor

- A** HDMI cable:
An HDMI video/audio signal is output.
- B** Wireless remote controller (optional)



Connections with a controller (AW-RP50, optional)

- A** HDMI cable:
An HDMI video/audio signal is output.
- B** LAN cable:
A camera control sign is output.
- C** Controller (AW-RP50)



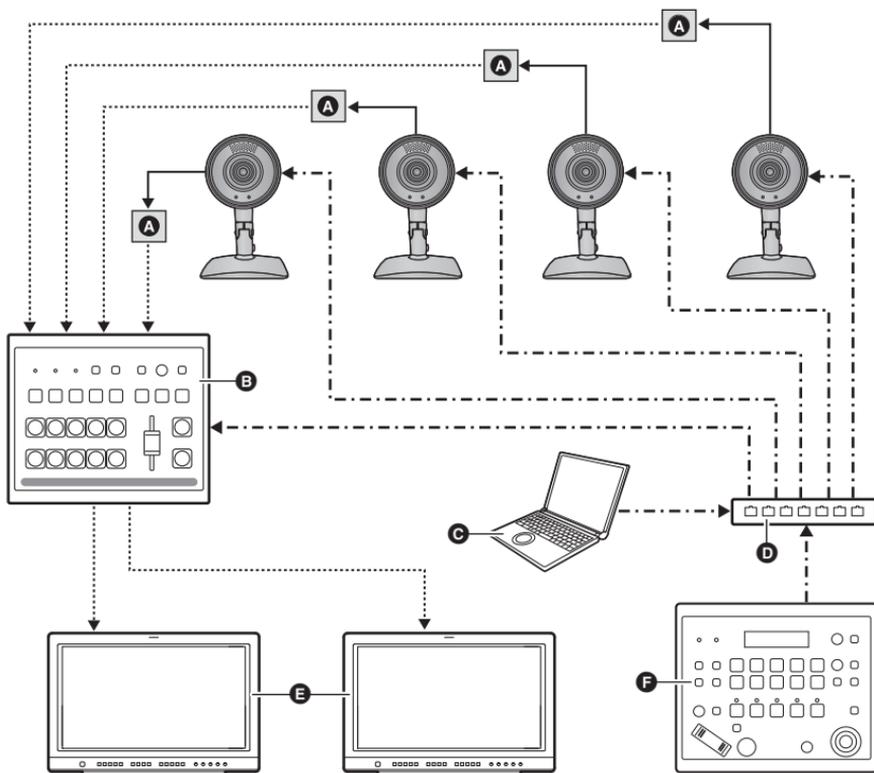
System example 1 (IP control)

←: HDMI cable

←- - -: LAN cable

←.....: Use an appropriate cable to suit the connected devices.

- A** HDMI/SDI converter
- B** Compact Live Switcher (AW-HS50)
- C** Personal computer
- D** Switching hub
- E** Monitor 1/Monitor 2
- F** Controller (AW-RP50)



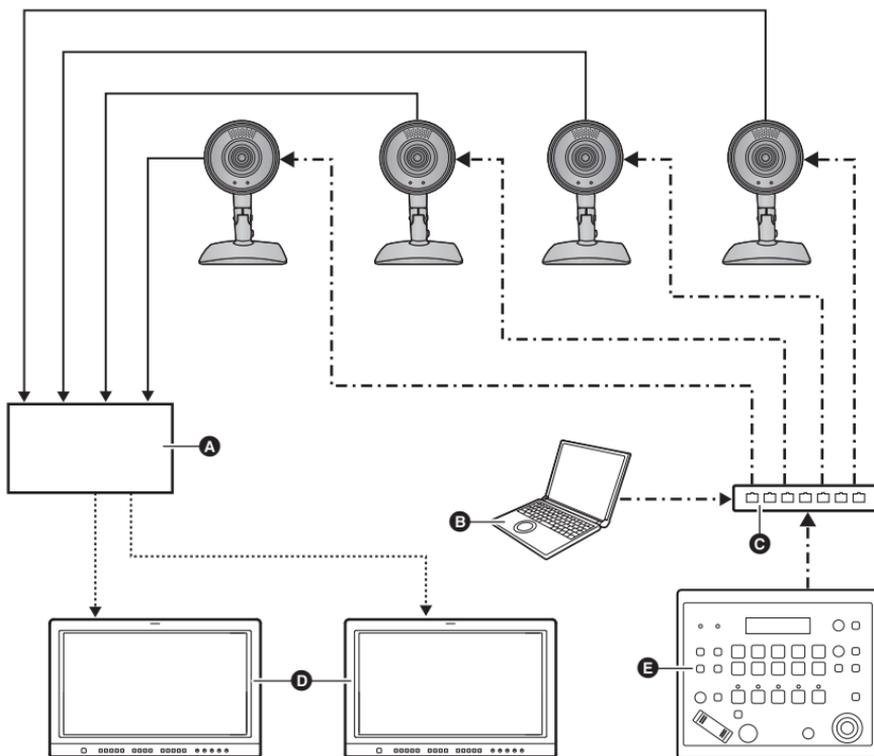
System example 2 (IP control)

←————: HDMI cable

←- - - - -: LAN cable

←.....: Use an appropriate cable to suit the connected devices.

- A** Switcher
- B** Personal computer
- C** Switching hub
- D** Monitor 1/Monitor 2
- E** Controller (AW-RP50)



Information for Your Safety

For AW-HE2P

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 only 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.

CAUTION:

Check the installation at least once a year.

An improper installation could cause the unit to fall off resulting in personal injury.

CAUTION:

Do not pick up and move the unit while the tripod is attached.

The fitting may break under the weight of the tripod, which may result in injury.

■ Product identification marking

Product	Location
HD Integrated Camera	Bottom
AC adaptor	Bottom

Install this unit so that the power cord can be unplugged from the socket outlet immediately if any problem occurs.

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

AC adaptor

This AC adaptor operates on AC between 100 V and 240 V.

But

- In the U.S.A. and Canada, the AC adaptor must be connected to a 120 V AC power supply only.
- When connecting to an AC supply outside of the U.S.A. or Canada, use a plug adaptor to suit the AC outlet configuration.
- When connecting to a supply of greater than AC 125 V, ensure the cord you use is suited to the voltage of the AC supply and the rated current of the AC adaptor.
- Contact an electrical parts distributor for assistance in selecting a suitable AC plug adaptor or AC cord set.

Conforms to UL STD 60065

FCC NOTICE (USA)

Declaration of Conformity

Model Number: AW-HE2P
Trade Name: Panasonic
Responsible Party: Panasonic Corporation of North America
One Panasonic Way, Secaucus, NJ 07094
Support contact: 1-800-524-1448

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.

To assure continued compliance, follow the attached installation instructions and do not make any unauthorized modifications.

CAUTION:

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 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 user may find the booklet "Something About Interference" available from FCC local regional offices helpful.

FCC Warning:

To assure continued FCC emission limit compliance, follow the attached installation instructions and the user must use only shielded interface cables with ferrite core when connecting to host computer or peripheral devices. Also, any unauthorized changes or modifications to this equipment could void the user's authority to operate this device.

NOTIFICATION (Canada)

This Class B digital apparatus complies with Canadian ICES-003.

 indicates safety information.

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

 **Panasonic**
AW-HE2P

IMPORTANT SAFETY INSTRUCTIONS

Read these operating instructions carefully before using the unit. Follow the safety instructions on the unit and the applicable safety instructions listed below. Keep these operating instructions handy for future reference.

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) 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.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) 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.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) 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.



For AW-HE2E

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 only 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.

CAUTION:

Check the installation at least once a year.

An improper installation could cause the unit to fall off resulting in personal injury.

CAUTION:

Do not pick up and move the unit while the tripod is attached.

The fitting may break under the weight of the tripod, which may result in injury.

■ **Product identification marking**

Product	Location
HD Integrated Camera	Bottom
AC adaptor	Bottom

Install this unit so that the AC mains lead can be unplugged from the socket outlet immediately if any problem occurs.

AEEE Yönetmeliğine Uygundur.
AEEE Complies with Directive of Turkey.

For Europe

■ **EMC Electric and magnetic compatibility**

This symbol (CE) is located on the rating plate.

For the United Kingdom customers

■ Caution for AC mains lead

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience. A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

■ Before use

Remove the connector cover.

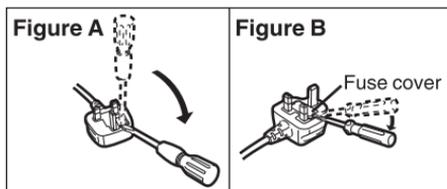
■ How to replace the fuse

The location of the fuse differ according to the type of AC mains plug (figures A and B).

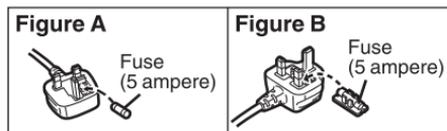
Confirm the AC mains plug fitted and follow the instructions below.

Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



2. Replace the fuse and close or attach the fuse cover.



Characteristics

■ Overview

- This HD camera features single focus, ultra-wide angle 95° lens, and uses a 1/2.33 type (1/2.33")* HD MOS sensor and digital signal processor (DSP).
- * The effective size of the MOS sensor is 1/4.37.
- When preset memory is used, digital pan/tilt/zoom functions mean users can flip through images in an instant to shoot quietly.
- By connecting a controller, the camera operations can be performed smoothly by IP control.
- By connecting the unit to a personal computer through an IP network, it is possible to operate the unit from the Web browser screen.

■ Characteristics

Multiple number of formats supported

- HDMI signals can be output in 1080/59.94p, 1080/50p, 1080/59.94i, 1080/50i, 720/59.94p, 720/50p, 480/59.94p, and 576/50p formats.
- With the SD format, either Squeeze, LetterBox or SideCut can be selected.
- LAN signals will be output at 640x360/30p, 320x180/30p. This signal can be used for monitors.

Uses a 1/2.33 type (1/2.33") MOS sensor and ultra-wide angle 95° single focus lens

- Equipped with Dynamic Range Stretch (DRS) for correcting blown-out highlights and blocked-up shadows, this unit can recreate clear images for a wide range of uses.
- Storage of up to 9 positions in the preset memory (The number of preset memories that can be used varies from one controller to another.)
- Equipped with the PinP function to enable the main screen and sub screen to be controlled and displayed individually.

High degree of compatibility with Panasonic's currently available controllers, enabling a flexible system to be put together

- Can be used with other current cameras from Panasonic to put together a flexible system based on existing systems.
 - It may be necessary to upgrade the version of the controller in order to support the unit.

Use of easy-to-operate wireless remote controller (optional) is possible

- A wireless remote controller capable of operating up to four units can be used. It can easily be used to set the various functions or switch between them while viewing the menu screens.

Flexible camera layout enabled by simple connection and installation

- IP control, lightweight body and simple up/down and inverse mechanism result in outstanding DIY (indoor applications only) connectivity and installation ease.
 - Bear in mind that this unit is designed to be used indoors only: It cannot be used outdoors.

Energy-savings achieved by the compact main unit design

- The main unit is lightweight and compact at less than 244 g, and a low 3.6 W energy consumption means multiple cameras can be connected easily.

Easy connections and settings courtesy of IP control

- Up to a hundred units can be operated by IP connection from a Panasonic controller (AW-RP50). (The maximum length of the LAN cables is 100 m (328 ft.))

Cautions for use

Shoot under the proper lighting conditions.

To produce pictures with eye-pleasing colors, shoot under the proper lighting conditions. The pictures may not appear with their proper colors when shooting under fluorescent lights. Select the proper lighting as required.

To ensure a stable performance in the long term

Using the unit for prolonged periods in locations where the temperature and humidity levels are high will cause its parts to deteriorate, resulting in a reduction of its service life.

(Recommended temperature: Max. 35 °C (95 °F))

Ensure that a cooling unit or heating unit will not blow any air directly toward the installation location.

Do not point the camera at strong lights.

When parts of the MOS sensor are exposed to spotlights or other strong lights, blooming (a phenomenon where the edges of strong lights become blurred) may occur.

What happens with high-brightness subjects

Flare may occur if an extremely bright light source is pointed at the lens. In a case like this, change the angle or take some other remedial action.

Operating temperature range

Avoid using the unit in cold locations where the temperature drops below 0 °C (32 °F) or hot locations where the temperature rises above 40 °C (104 °F) since these temperatures downgrade the picture quality and adversely affect the internal parts.

Also, it may take a few minutes to stabilize the image when used in low temperatures. We recommend that you turn on this unit before use.

Concerning the HDMI interface standard

This unit has been certified as HDMI-compatible, but on rare occasions images may not be displayed depending on the HDMI device which has been connected to the unit.

Color bars

Color bars are used to adjust the color phase, and the widths and positions of these bars may differ from other models.

Turn off the power before connecting or disconnecting the cables.

Always be sure to turn off the power before connecting or disconnecting the cables.

Handle the unit carefully.

Do not drop the unit or subject it to strong impact or vibration. Doing so may cause the unit to malfunction.

When the unit is not in use

Turn off the unit's power when it is not in use.

When the unit is no longer going to be used, do not leave it lying around, but be absolutely sure to dispose of it properly.

Do not touch the optical system.

Under no circumstances must they be touched.

In the unlikely event that they have become dusty, remove the dust by using a camera blower or by wiping them gently with a lens cleaning paper.

Do not point the camera directly at the sun or a laser beam.

Taking images of the sun, laser beams, or other brightly lit subjects for prolonged periods of time may damage the MOS sensor.

Do not use the unit for long periods of time.

Continuous use could cause the unit to overheat and cause a malfunction.

Personal computer used

If the same image is displayed for a prolonged period on a PC monitor, the monitor may be damaged. Use of a screen saver is recommended.

Concerning the IP address setting

Do not run the Easy IP Setup Software on a multiple number of personal computers for a single camera and set the IP address at the same time.

Otherwise, you will be unable to complete the proper procedure and set the IP address correctly.

Keep the unit away from water.

Avoid all direct contact with water. Otherwise, problems may occur.

Maintenance

Turn off the unit's power before proceeding with maintenance. Otherwise, you may injure yourself.

Wipe the surfaces using a soft dry cloth. Avoid all contact with benzene, paint thinners and other volatile substances, and avoid using these substances. Otherwise, the casing may become discolored.

Use the unit in an environment with minimal moisture and dust.

Avoid using the unit in an environment with high concentration of moisture or dust since these conditions will damage the internal parts.

Disposal of the unit

When the unit has reached the end of its service life and is to be disposed of, ask a qualified contractor to dispose of the unit properly in order to protect the environment.

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.
- 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 disconnect AC adaptor. Then 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.

Required personal computer environment

- If the necessary computer environment is not provided, malfunctions may occur. E.g., screen pictures may be slow, or it may not be possible to operate the web browser.
- Even if the system requirements mentioned in this Operating Instructions are fulfilled, some PCs cannot be used.

CPU	Intel Core 2 Duo 2.4 GHz or higher or including compatible CPU (including compatible CPU)
RAM	Windows 7: 1 GB or more (32 bit)/2 GB or more (64 bit) Windows XP: 512 MB or more Mac OS X: 2 GB or more
Network function	10BASE-T or 100BASE-TX port ×1
Display	Resolution: 1024 × 768 pixels or more Color generation: True Color 24 bits or more
Supported OS and Web browser	Windows 7 (32 bit/64 bit) Professional (SP1)* ¹ Internet Explorer 8.0/9.0* ²
	Windows XP (32 bit) (SP3)* ³ Internet Explorer 8.0* ²
	Mac OS X 10.6 Safari 5.1.7
	Mac OS X 10.7 Safari 6.0
	Mac OS X 10.8 Safari 6.0
Other requirements	Mouse or equivalent pointing device

*1 Cannot be used with Windows XP Compatibility mode.

*2 Cannot be used with Internet Explorer 8.0 (64 bit).

*3 Does not support Windows XP Professional x64 Edition.

- For detailed notes on the use of personal computer, refer to the “Operating Instructions <Operations and Settings>”.

Network settings

The settings related to the unit's network can be established using the Easy IP Setup Software supplied. (Only for Windows)

- To establish the settings for a multiple number of units, the settings must be selected for each camera involved.
- If settings cannot be set using the Easy IP Setup Software or you are using a Mac, perform the unit and PC settings separately using the Network screen on the Web settings screen. For further details, refer to the "Operating Instructions <Operations and Settings>".
- For details of the required personal computer environment, refer to page 37.
- If, after the network settings have been established, another device in the same network has the same IP address, the network operations will not be performed properly. Set the IP address in such a way that it does not duplicate an existing IP address.
- Do not establish network settings from a multiple number of Easy IP Setup Software programs at the same time for a single camera. Similarly, do not perform the auto IP setting operation of the controller (AW-RP50) at the same time. The IP address settings may no longer be recognized as a result.

- If the Easy IP Setup Software is run when using Windows 7 Professional (SP1), you may be prompted to enter the password for the Administrator account. If this is the case, disable [User Account Control] from Control Panel.
- If the Easy IP Setup Software is run when using Windows XP Home Edition (SP3), an important warning screen concerning security may appear. If this is the case, click the [Unblock(U)] button.
- The Easy IP Setup Software cannot be used from a different subnet via a router.
- The unit cannot be displayed or its settings established using an older version of the Easy IP Setup Software (Ver.2.xx).

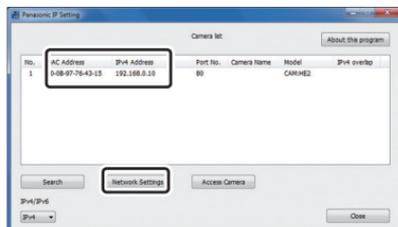
Network settings

Be sure to read the "Readme.txt" on the supplied CD-ROM.

- 1 Double-click EasyIpSetup.exe to start the Easy IP Setup Software.**
- 2 Click the [Search] button.**



3 Click the MAC address/IPv4 address of the camera to be set, and click the [Network settings] button.



- When a DHCP server is being used, the IP address allocated to the unit can be checked by clicking the [Search] button of the Easy IP Setup Software.
- If IP addresses have been duplicated, the duplicated camera No. is displayed in the [IPv4 overlap] column of the relevant camera.
- Clicking [Access Camera] displays a Live screen of the selected camera.
- The IPv4/IPv6 switching function cannot be used with this camera (only compatible with IPv4).

4 Input the network items, and click the [Save] button.



- When a DHCP server is being used, [DNS] of the Easy IP Setup Software can be set to [Auto].
 - This camera is not compatible with the [AutoIP] connection mode.
-
- After the [Save] button is clicked, it takes about 2 minutes for the settings in the unit to be completed.
If the AC adaptor or LAN cable is disconnected before the settings are completed, the settings will be canceled. In this case, repeat the steps to establish the settings.
 - When a firewall (including software) has been introduced, enable access to all the UDP ports.

Starting the Web Setting Screen

If you connect the unit with a PC, you can operate the unit and configure the unit's settings from the web setting screen.

For details of the required personal computer environment, refer to page 37.

Starting the Web Setting Screen (Live Screen/Setup Screen)

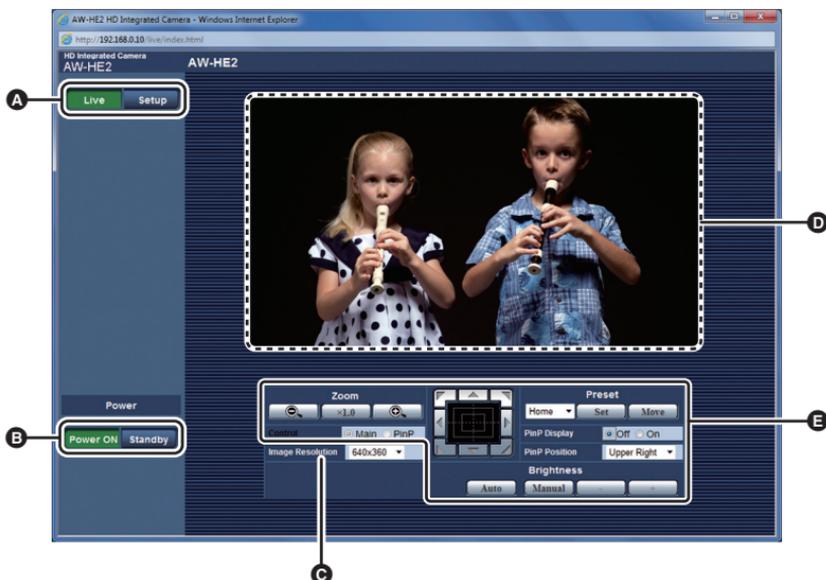
- **Connect the unit with a PC**
- **Perform the settings for the PC:**
 - Select an IP address for the personal computer within the private address range while ensuring that it is different from the address of the unit.
 - Set the subnet mask for the personal computer to the same address as the unit.

- If you need to change the IP address and subnet mask, be sure to ask your dealer to make these changes for you.
- The IP address and subnet mask of the unit at the time of purchase are as shown below.
 - IP address: 192.168.0.10
 - Subnet mask: 255.255.255.0
(the private address range is from 192.168.0.0 to 192.168.0.255)

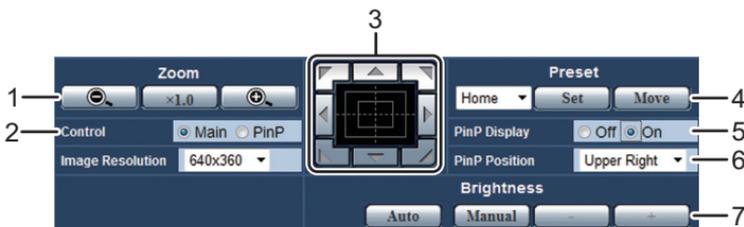
1 Start the web browser and enter [http://the IP address for the unit/] into the address bar.

- If the IP address of the unit has been changed from the [192.168.0.10] set at the time of purchase, enter the new IP address.
- If the HTTP port number has been changed from the [80] set at the time of purchase, enter [http://the IP address for the unit: The port number/].

- The web setting screen (Live screen) starts up.



- Switch between the Live screen and the Setup screen.
- Switch the unit from on to standby mode or vice versa.
- Change the resolution of the camera image. ([640×360]/[320×180])
- The camera image is displayed. (When a tally light up signal is received, a red frame is displayed over the camera image)
- Operate the camera.



- Zoom operations
- Switch the control mode (Main screen / PinP)
- Pan/tilt operations, PinP operations (control pad, buttons)
- Preset memory registration/retrieval
- Display / hide PinP
- Change the display position of PinP
- Brightness adjustment

For details regarding camera operations, refer to the “Operating Instructions <Operations and Settings>”.

2 Click [Setup] on the Live screen.

- The user identification screen is displayed.

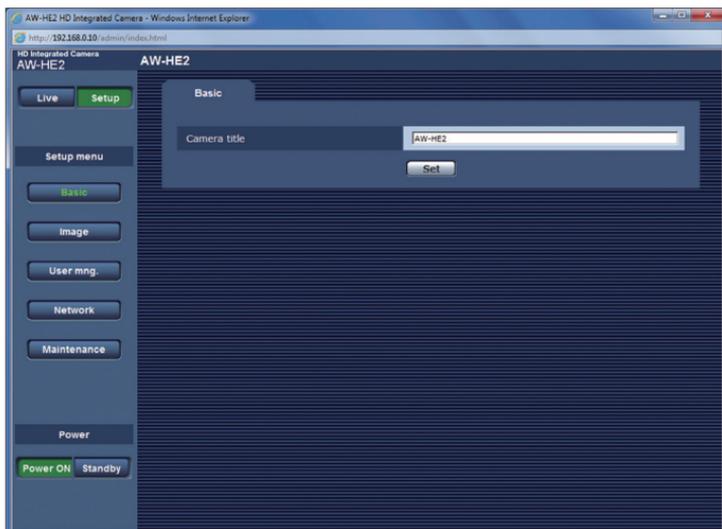


3 Enter the default user name and password, and click [OK].

Default user name: admin

Default password: 12345

- If the message is displayed, click [OK].
- The Setup screen is displayed.



For details regarding the Setup screen, refer to the “Operating Instructions <Operations and Settings>”.

-
- The camera cannot be operated in standby mode.
 - For security protection, change the user name and password on the User mng. screen.
 - If the controller and web browser are being used at the same time, the content selected using the controller may not be reflected on the web setting screen.
- When using both the controller and web browser, be absolutely sure to check the settings using the controller or camera menu.

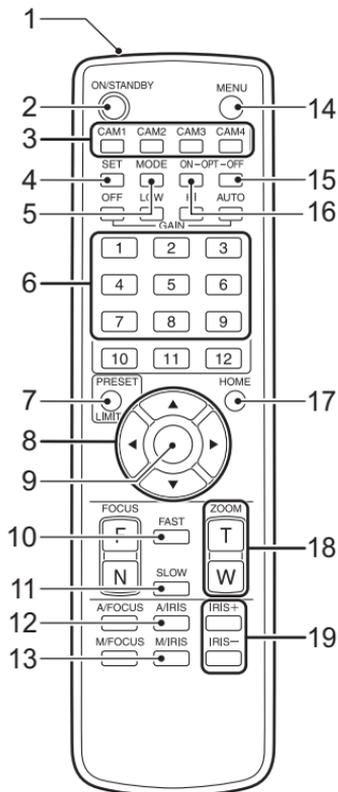
Wireless remote controller

You can operate the unit with the optional wireless remote controller (AW-RM50G).

Consult your dealer concerning the purchase of a wireless remote controller.

Names and Functions of Main Parts

Buttons used for operating this unit are described.



1 Signal transmission window

2 ON/STANDBY button

Each time this is pressed for 2 seconds, operation switches between turning on the unit's power and establishing the standby status.

3 CAM1 to CAM4 buttons (→ 46)

4 SET button

Press and hold for 2 seconds to set the white balance.

5 MODE button

Each time you press the button, the signal switches between the color bar signal output and the camera image output.

6 1 to 9 buttons

Registers and retrieves preset memories.

7 PRESET button

Press this button and any of the buttons from 1 to 9 simultaneously to register a preset memory.

8 Pan-tilt buttons and menu operation buttons

9 Enter button

10 FAST button

Changes the pan/tilt or zoom speed to high speed.

11 SLOW button

Changes the pan/tilt or zoom speed to low speed.

12 A/IRIS button

Set brightness adjustment to auto mode.

13 M/IRIS button

Set brightness adjustment to manual mode.

14 MENU button

Press and hold for 2 seconds to display the camera menu of the unit.

15 OPT-OFF button

Switches the control mode (Main screen / PinP)

16 OPT-ON button

Displays / hides PinP.

17 HOME button

If you press and hold the button for 2 seconds, the zoom level of the unit is changed to x1.

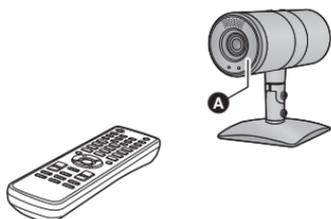
- If you press and hold the button for 2 seconds when the control mode is set to PinP, the retrieval position of PinP moves to the center of the screen and the zoom level is changed to x1.

18 ZOOM button

19 IRIS+ / IRIS- button

Adjust the brightness manually.

Usable Range for the Wireless Remote Controller



- A** Wireless remote control signal light-sensing area

Distance: Within approx. 10 m (32.8 ft.)

- When strong light such as fluorescent light, light from a plasma monitor, or sunlight shines on the signal light-sensing area, operation may not be possible even within this range.
- As the signal light-sensing angle becomes larger, the distance at which light can be sensed decreases.

Setting the Remote Control ID of the Camera

Set the camera's remote control ID by selecting the option from [CAM1] – [CAM4].

- Turn on the power to the unit. (→ 41)

- 1** Open the Setup screen. (→ 40)
- 2** Click [Image], and click the [System] tab.
- 3** Select one of the options [CAM1] – [CAM4] in [IR ID].
- 4** Click [Set] to confirm.

- The default setting is [CAM1].
- When operating a multiple number of these units using a wireless remote controller, set a different remote control ID.
- When using one unit, set the remote control ID to [CAM1] unless the setting needs to be changed.

Before Operating With the Wireless Remote Controller

Select the camera by pressing the button you pressed for setting the remote control ID for the camera (one of the CAM1 to CAM4 buttons).

- You can operate the selected camera until you select another one.
- The selected camera is retained in the memory after the battery has been removed from the wireless remote controller. (When left with the batteries removed for an extended time, a reset with the CAM1 button pressed is performed.)

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This source code can also be obtained for free from the following website.

<http://panasonic.net/avc/oss/index.html>

Specifications

HD Integrated Camera

Information for your safety

Power source:

DC 5.0 V (When using AC adaptor)

Power consumption:

3.6 W

Image sensor:

1/2.33 type (1/2.33") 1MOS image sensor
(effective size of imaging element: 1/4.37)

Total; Approx. 15300 K

Effective pixels;

Motion picture; Approx. 3910 K (16:9)

Lens:

F2.0 (f = 2.15 mm)

35 mm equivalent;

Approx. 18.0 mm (16:9)

Field of view; 95° (horizontal),

56° (vertical) (When zoom is 1×)

Minimum focus distance; Approx. 80 cm
(31.496") (25 °C (77 °F))

Shutter speed

(AW-HE2P)1/60 to 1/12000

(AW-HE2E)1/50 to 1/12000

Zoom:

Approx. 2× i.Zoom,

Approx. 4× Digital Zoom

Pan/tilt angle:

±23° approx. /±14° approx. (when i.Zoom is
approx. 2×)

±35° approx. /±21° approx. (when digital
zoom is approx. 4×)

Microphone:

Stereo microphone

White balance adjustment:

Auto tracking white balance system

Standard illumination:

1,400 lx

Minimum required illumination:

(AW-HE2P)

Approx. 20 lx (1/60 in Auto Mode)

(AW-HE2E)

Approx. 20 lx (1/50 in Auto Mode)

HDMI connector video output level:

HDMI™ 1080p/1080i/720p/480p

(when the system frequency is 59.94 Hz) /

576p (when the system frequency is 50 Hz)

HDMI connector audio output level:

Linear PCM

Network:

10BASE-T/100BASE-TX, RJ45 connector

Automatic recognition of straight/crossover
cable

Network output image;

JPEG, 640×480 (640×360) or 320×240

(320×180), up to 30fps (16:9 video is
transmitted in the LetterBox format).

USB:

Micro-B terminal

Power supply function (power supplied from

the USB terminal when there is no power

provided from the DC input terminal)

Dimensions:

80 mm (W)×118 mm (H)×138 mm (D)

[3.15" (W)×4.646" (H)×5.433" (D)]

Mass (Weight):

Approx. 244 g (Approx. 0.538 lbs.)

Operating temperature:

0 °C to 40 °C (32 °F to 104 °F)

Operating humidity:

10%RH to 80%RH

AC adaptor

Information for your safety

Power source:

(AW-HE2P)

AC 100 V to 240 V, 50/60 Hz

(AW-HE2E)

AC 110 V to 240 V, 50/60 Hz

Power consumption:

12 W

Output:

DC 5.0 V, 1.6 A

-If you see this symbol-

Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)



This symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.

For proper treatment, recovery and recycling, please take these products to designated collection points, where they will be accepted on a free of charge basis. Alternatively, in some countries you may be able to return your products to your local retailer upon the purchase of an equivalent new product.

Disposing of this product correctly will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest designated collection point. Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union.

If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

EU

Pursuant to at the directive 2004/108/EC, article 9(2)

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