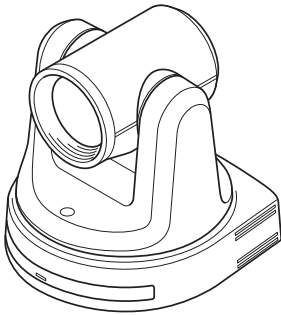# Panasonic®

Operating Instructions Basics

Installation Instructions provided

4K Integrated Camera

Model No. **AW-UE20KP**

Model No. **AW-UE20WP**

Model No. **AW-UE20KE**

Model No. **AW-UE20WE**

Model No. **AW-UE20KED**

Model No. **AW-UE20WED**

HDMI™

ENGLISH Basics	Before using this product, be sure to read "Read this first!" (pages 6, 31 to 36). This "Basics" describes the procedure for basic operation and installation. For more information, please visit the Panasonic website (https://pro-av.panasonic.net/manual/en/index.html), and refer to the Operating Instruction (Operations and Settings).
FRANÇAIS	Avant d'utiliser cet appareil, assurez-vous de lire la section « Lire ces informations en premier ! » (pages 6, 37 à 42). Pour de plus amples informations sur le mode d'emploi, visiter le site Web de Panasonic (https://pro-av.panasonic.net/manual/en/index.html) et consulter le mode d'emploi.
ESPAÑOL	Antes de usar este producto, asegúrese de leer "Lea esto primero" (páginas 7, 43 a 48). Si desea obtener más información acerca de las instrucciones de funcionamiento, visite el sitio web de Panasonic (https://pro-av.panasonic.net/manual/en/index.html) y consulte las instrucciones de funcionamiento.
DEUTSCH	Bitte lesen Sie sorgfältig die „Bitte lesen Sie zuerst diesen Hinweis!" vor der Nutzung dieses Produkts. (Seiten 7, 49 bis 52). Weitere Informationen zu den Bedienungsanleitungen finden Sie auf der Panasonic-Webseite (https://pro-av.panasonic.net/manual/en/index.html) und in den Bedienungsanleitungen.
ITALIANO	Prima di utilizzare il prodotto, assicurarsi di leggere "Leggere prima quanto segue!" (pagine da 8, 53 a 56). Per maggiori informazioni sulle istruzioni per l'uso, per favore visitare il sito web Panasonic (https://pro-av.panasonic.net/manual/en/index.html), e fare riferimento alle istruzioni per l'uso.
РУССКИЙ	Перед использованием данного прибора ознакомьтесь с информацией в разделе «Прочитайте нижеследующее до начала эксплуатации!» (стр. 8, 57 до 59). Для получения дополнительной информации из инструкций по эксплуатации посетите веб-сайт Panasonic (https://pro-av.panasonic.net/manual/en/index.html) и обратитесь к инструкциям по эксплуатации.

ENGLISH

Български	Посетете следния уебсайт относно последната информация за безопасността и важни уведомления за продукта.
Hrvatski	Za najnovije sigurnosne informacije i važne obavijesti o proizvodu posjetite sljedeću internetsku stranicu.
Čeština	Na následujícím webu najdete nejaktuálnější bezpečnostní informace a důležité poznámky k tomuto produktu.
Dansk	Besøg følgende webside for den seneste sikkerhedsinformation og vigtige bemærkninger vedrørende produktet.
Nederlands	Ga naar de volgende website voor de recentste veiligheidsinformatie en belangrijke meldingen over het product.
Eesti	Toodet puudutava värskeima ohutusteabe ja oluliste märkuste saamiseks külastage järgmist veebilehte.
Suomi	Käy seuraavalla verkkosivulla saadaksesi uusimmat turvallisuustiedot ja tärkeät tiedot liittyen laitteeseen.
Ελληνικά	Για τις πιο πρόσφατα επικαιροποιημένες πληροφορίες σχετικά με θέματα ασφάλειας και σημαντικές ειδοποιήσεις που αφορούν το προϊόν σας, επισκεφτείτε τον ιστότοπο που ακολουθεί.
Magyar	A termékkel kapcsolatos legfrissebb biztonsági információkért és fontos értesítésekért látogasson el az alábbi weboldalra.
Latviešu	Lai iegūtu jaunāko informāciju par drošību un skatītu svarīgus paziņojumus par šo produktu, apmeklējiet tālāk norādīto tīmekļa vietni.
Lietuvių	Jei reikia naujausios saugos informacijos ir svarbių pranešimų apie gaminį, apsilankykite toliau nurodytoje svetainėje.
Polski	Najnowsze informacje o bezpieczeństwie i ważne informacje o produkcie znajdują się w poniższej witrynie internetowej.
Português	Consulte o seguinte website para as mais recentes informações de segurança e importantes notificações sobre o produto.
Română	Vizitaţi următoarea pagină web pentru ultimele informaţii de securitate şi notificări importante cu privire la produs.
Slovensky	Pre najnovšie bezpečnostné informácie a dôležité oznámenia súvisiace s produktom navštívte túto webovú stránku.
Slovenščina	Za najnovejše varnostne informacije in pomembna obvestila v zvezi z izdelkom obiščite naslednje spletno mesto.
Svenska	Besök följande webbplats för senaste säkerhetsinformation och viktiga meddelanden om produkten.
العربية	زر موقع الويب التالي لمعرفة أحدث معلومات السلامة والإخطارات الهامة بشأن المنتج.

https://pro-av.panasonic.net/manual/en/index.html

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About Copyright and License

Distributing, copying, disassembling, reverse compiling, reverse engineering, and also exporting in violation of export laws of the software provided with this unit are expressly prohibited.

Abbreviations

For the purposes of this manual, the model numbers of the units are given as listed in the table below.

Model number of unit	Model number given in manual
AW-UE20KP, AW-UE20WP AW-UE20KE, AW-UE20WE AW-UE20KED, AW-UE20WED	AW-UE20
AW-RP60G	AW-RP60
AW-RP150G	AW-RP150

Illustrations and screen displays featured in the manual

What is shown in the manual's illustrations and screen displays may differ from how it is actually appears.

Contents

Read this first!

WARNING:
To prevent injury, this apparatus must be securely attached to the floor/wall 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.

CAUTION:
This camera intended for use only with the Mount Bracket enclosed with the unit and Panasonic Direct Ceiling Mount Bracket, WV-Q105A.
Use with other apparatus is capable of resulting in instability causing possible injury.

CAUTION:
To reduce the risk of fire or electric shock, install making sure that the mounting screws do not come in contact with electrical wiring within the wall.

indicates safety information.

Lire ces informations en premier!

AVERTISSEMENT:
Pour éviter tout risque de blessures, l'appareil doit être solidement fixé au plancher/mur conformément aux instructions d'installation.

AVERTISSEMENT:
L'installation ne doit être effectuée que par du personnel d'installation qualifié.
Une mauvaise installation peut avoir pour conséquence la chute de l'appareil et provoquer des blessures.

ATTENTION:
Cette caméra est conçue pour être utilisée uniquement avec la potence de fixation fournie avec l'appareil ou avec la potence de fixation directe au plafond Panasonic WV-Q105A.
L'utilisation de tout autre dispositif risque de se traduire par une instabilité et être cause de blessures à des personnes.

ATTENTION:
Pour réduire les risques d'incendie ou d'électrocution, faire l'installation en s'assurant que les vis de montage n'entrent pas en contact avec un fil électrique présent dans le mur.

Informations concernant la sécurité.

Lea esto primero!

ADVERTENCIA:
Para evitar heridas, este aparato debe estar firmemente instalado al piso/pared de acuerdo con las instrucciones de instalación.

ADVERTENCIA:
La instalación solamente debe llevarla a cabo personal cualificado.
Una instalación incorrecta podría provocar la caída del dispositivo y causar lesiones.

PRECAUCIÓN:
Esta cámara ha sido diseñada para ser utilizada solamente con la ménsula de montaje suministrada con la unidad y con la ménsula de montaje directo en el techo de Panasonic modelo WV-Q105A.
La utilización con otros aparatos puede causar inestabilidad y posibles lesiones.

PRECAUCIÓN:
Para reducir el riesgo de incendio o descarga eléctrica, instálelo asegurándose de que los tornillos de montaje no entren en contacto con el cableado eléctrico dentro de la pared.

indica información de seguridad.

Bitte lesen Sie zuerst diesen Hinweis!

WARNUNG:
Um Verletzungen zu verhüten, muss dieser Apparat gemäß der Installationsanleitung sicher am Boden bzw. an der Wand befestigt werden.

WARNUNG:
Die Installation darf nur durch qualifiziertes Personal ausgeführt werden.
Fehlerhafte Installation kann zum Herunterfallen des Gerätes und zu Verletzungen führen.

VORSICHT:
Diese Kamera ist nur für den Einsatz mit der mitgelieferten Montagehalterung und der Panasonic Decken-Direktmontagehalterung WV-Q105A vorgesehen.
Wird die Kamera mit anderen Apparaten verwendet, kann es zu Instabilität kommen, die Verletzungen verursachen kann.

VORSICHT:
Zur Reduzierung der Gefahr von Brand und elektrischem Schlag bei der Installation sicherstellen, dass die Befestigungsschrauben nicht mit in der Wand verlegten elektrischen Leitungen in Berührung kommen.

ist die Sicherheitsinformation.

Leggere prima quanto segue!

AVVISO:
Per prevenire ferite, questo apparecchio deve essere montato saldamente al pavimento/muro in conformità alle istruzioni di installazione.

AVVISO:
L'installazione deve essere realizzata unicamente da tecnici qualificati. Un'installazione incorretta può risultare nella caduta dell'apparecchio con conseguenti danni alle persone.

PRECAUZIONE:
La videocamera deve essere utilizzata esclusivamente con la staffa di montaggio in dotazione con l'unità e con la staffa per montaggio diretto a soffitto WV-Q105A. L'uso con altri apparecchi potrebbe causare instabilità ed eventuali infortuni.

PRECAUZIONE:
Per ridurre il rischio di incendio o di folgorazione, installare accertandosi che le viti di montaggio non vengano a contatto con i cablaggi elettrici all'interno del muro.

sono le informazioni sulla sicurezza.

Прочитайте нижеследующее до начала эксплуатации!

ОСТОРОЖНО:
Во избежание повреждения данный прибор должен быть надежно закреплен на полу/стене в соответствии с инструкцией по установке.

ОСТОРОЖНО:
Установка должна выполняться только квалифицированным специалистом по установке.
Ненадлежащая установка может привести к падению всего аппарата и получению травмы.

ПРЕДОСТЕРЕЖЕНИЕ:
Данная камера предназначена для использования только с монтажным кронштейном, поставляемым с устройством, и монтажным кронштейном Panasonic для непосредственного крепления к потолку WV-Q105A. Использование с другим аппаратом может привести к нарушению устойчивости и возможной травме.

ПРЕДОСТЕРЕЖЕНИЕ:
Для снижения риска возникновения пожара или удара электрическим током при выполнении установки следите за тем, чтобы крепежные винты не коснулись электропроводки в стене.

Данный знак обозначает информацию, относящуюся к технике безопасности.

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 "Read this First!" (Page 6) 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.

■ **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.

■ **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 or tilted at an angle.

[Note]

● Be absolutely sure to use the 4 bracket mounting screws (M4 x 10 mm) for mounting the mount bracket. These are supplied with the unit.

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).

Recommended clamping torque M4 x 10 mm: 1.47 N · m {15 kgf · cm}

● The withdrawal strength of the mounting location for each screw must be at least 215.75 N {22 kgf}.

● When mounting the unit on a ceiling made of plasterboard, for instance, if it is not strong enough to support its weight, either reinforce the ceiling adequately or use the WV-Q105A direct ceiling mount bracket, which is sold separately.

● When using a mount bracket which is sold separately, read the handling instructions. Do not hold the camera head while undertaking the installation work. Doing so may cause malfunctioning.

Desktop Installation　　Hanging Installation
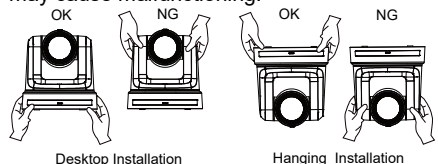
■ **Do not install or use the unit in the following kinds of locations.**
  - On walls (where the unit would be installed sideways)
  - In locations (including places such as under the eaves of a building) where the unit would be directly exposed to rain or water
  - In locations such as kitchens where 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 85%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.

■ **Be absolutely sure to use the supplied brackets and screws to install the camera.**
  - Do not mount the unit by employing any methods other than those specified.
  - Do not remodel the mounting bracket or mounting screws provided with the unit.

■ **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.

■ **Before installation, always disconnect the DC connector**
  When installing, always use the supplied components. Do not disassemble or modify the wall mount adaptor.

■ **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.**

- **When installing, transferring or disposing of the unit, be absolutely sure to hold it by its pedestal area.**
  Problems may result if the camera head is held or rotated.

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

- **Use the dedicated AC adaptor and power cable provided with the unit.**
  Connect the AC adaptor and power cable to the power inlet securely.

- **Installing the AC adaptor**
  - Do not place the 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 adaptor firmly to the bottom or other surface of a reinforcing member made of channel steel where dust and other foreign matter will not accumulate. (Refer to page 20.)
  - Secure the 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 of the AC adaptor.

- **Power switch**
  This unit does not have a power switch. Before proceeding with maintenance, be absolutely sure to disconnect the power plug from the power outlet.
  [Note]
  - Under factory default conditions, the unit will be in Power ON mode when power is supplied for the first time. (Status display lamp: Lit green).
  - When the power supply is cut off while the unit is in Standby mode, the unit will be in Standby mode the next time power is supplied. (Status display lamp: Lit orange)
  - When the power supply is cut off while the unit is in Power ON mode, the unit will be in Power ON mode the next time power is supplied. (Status display lamp: Lit green)

- **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.

- **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.
  In addition, the heat is dissipated to the bottom panel which will warm up over time: This is normal and not indicative of any trouble.

■ **Install the external DC power supply 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 external DC power supply 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.

■ **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 meter (3.3 ft.) apart.

Alternatively run each cable through its own metal conduit. (The metal conduits must be grounded.)

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

Doing so may cause malfunctioning.

■ **PoE+ power supplies**

Use a PoE+ [IEEE802.3at] compatible hub or power supply device.
[Note]
The unit is connected to PoE networks without routing to the outside plant.

■ **Network settings**

The network function of this unit does not work unless an initial account is set up (except when using the Easy IP Setup Software. A personal computer is required to set up an initial account.
[Note]
Network connection with AW-UE20 also requires setup of an initial account. When an initial account is not set up, AW-UE20 can detect but cannot control this unit.

How to Connect and Install the Unit

Be absolutely sure to read through the "Read this first!" and "Installation precautions".

1) Connect and install in the following order:
2) Checking the installation location
3) Preparing the power source
4) Ceiling-suspended Installation/Standing Installation/Mount to a Tripod
5) Connecting the cables

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 with due consideration for the unit and the wiring space on the back.

● Ensure that there is at least 200 mm (7-7/8) of space for wiring behind the rear cover. Unit: mm (inch)
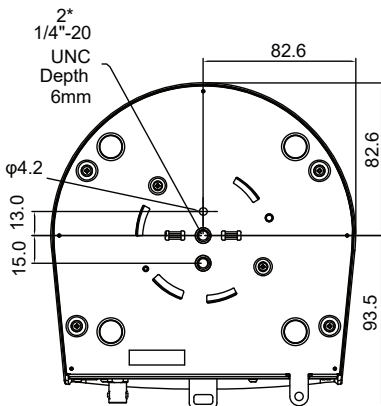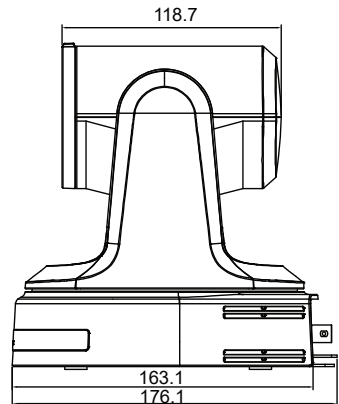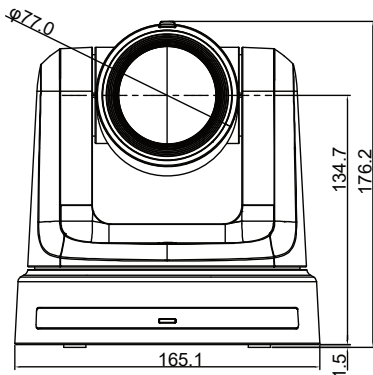
Regarding the Power Source

- DC IN connector [12V $==$ IN $\ominus\!-\!\!\odot\!\!-\!\oplus$]
  Connect the AC adaptor supplied with the unit to this connector to supply the DC 12V to the unit.
- This product is intended to be supplied by a UL Listed Power Adapter or DC power source marked "L.P.S." (or "Limited Power Source"), rated 12V DC, 1.3A minimum (supplied by a power adapter), or 42.5-57V DC, 0.4A minimum (supplied by PoE), Tma =40 degree C minimum. Please contact your local retailer for more information. It is absolutely essential to only use the dedicated AC adaptor and power cable provided with the unit.
- If the AC adaptor and a PoE+ power supply are connected simultaneously, the AC adaptor will have priority.

Ceiling Mount Installation

- Do not use any screws other than those supplied with the unit (do not use wood screws, nails, etc.).
- Make sure the camera is firmly mounted to the ceiling, with no tilting or wobbling.

1. Check the mounting space.

Refer to the illustration below, and determine where the unit is to be installed and in which direction it should be mounted. In a case like this, the 4 holes (ø 4.5 mm) for installing the mount bracket for installation surface on the ceiling must be drilled in the ceiling panel. Unit: mm
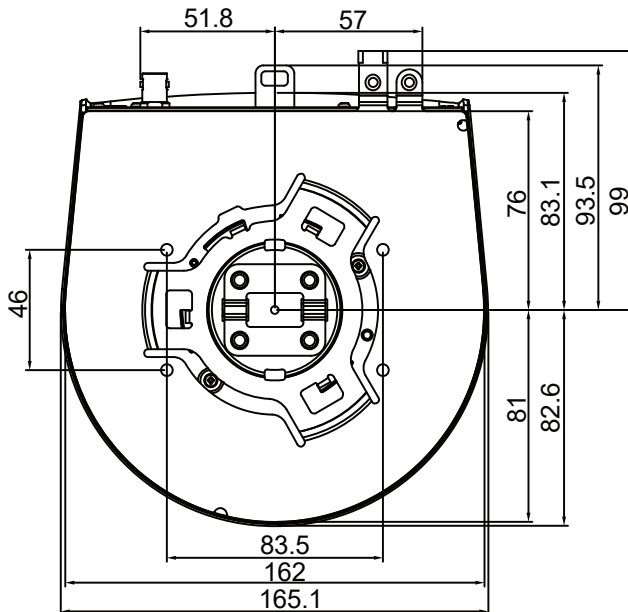

Note

- Make connections for each cable within the ceiling beforehand, and pass the cables through a cable-routing hole in preparation for making connections for and installing the unit.
- For a power outlet which is used on the ceiling, be absolutely sure to take measures to deal with the tracking that may be caused by the accumulation of dust and other foreign matter.

2. **Use the attached mounting screws (M4 length 10 mm) to secure the mounting bracket on the installation surface.**

Screw: M4, 10 mm length, bind-head
Clamping torque: 1.47 N · m (15 kgf · cm)
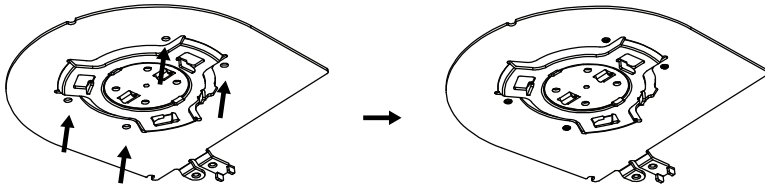
3. **Attach the drop-prevention wire.**

● Screw in the drop-prevention wire onto the ceiling mount bracket with the supplied main unit mounting screw (M4 x 6).
● Clip in the other end of the drop-prevention wire unto the protruding hole near the middle of the camera bottom panel.
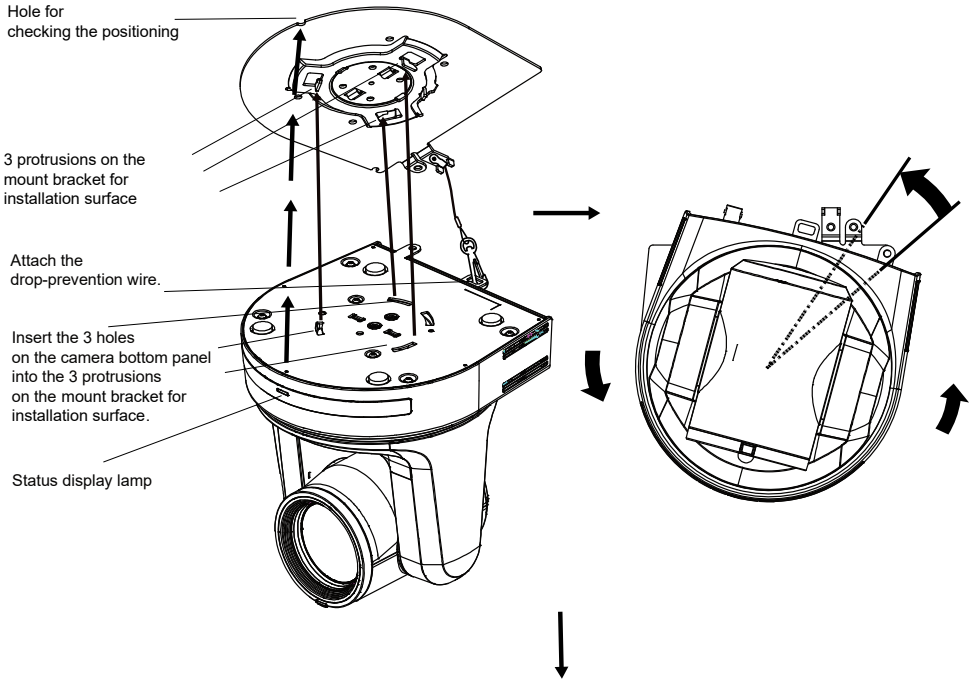

Screw in the drop-prevention wire with the supplied main unit mounting screw.

Clip in the other end of the drop-prevention wire unto the protruding hole near the middle of the camera bottom panel.
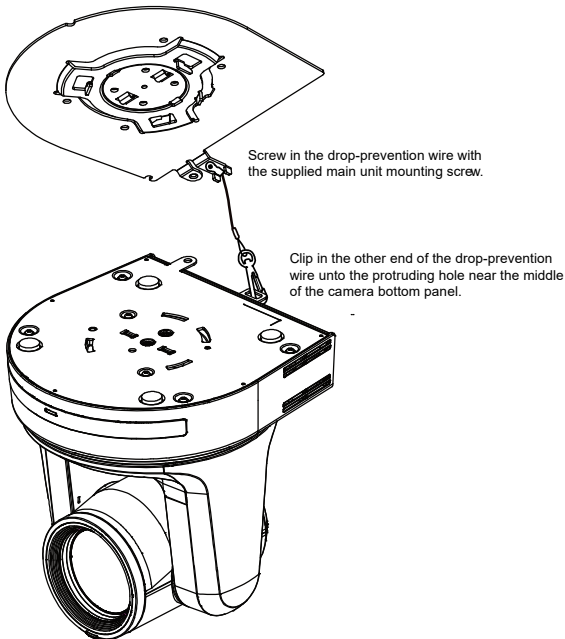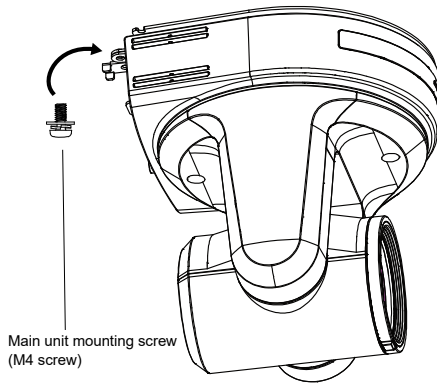
Note

● Do not do this work while holding the camera head since doing so may result in malfunctioning of the unit.
● 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.

4. Mount the unit.

- Align the position of the hole for checking the positioning with the status display lamp.
- Align the holes on the camera main unit used to insert the bottom panel with the protrusions on the mount bracket used for inserting the camera, push the camera to the bracket firmly, and rotate the main unit about 15 degrees counterclockwise.
- Secure the unit to the mount bracket using the main unit mounting screw (M4) as supplied.
- Attach the mount bracket securely with the prescribed tool using the clamping torque below. Be absolutely sure to verify that none of the screws are loose.

Screw diameter	Clamping torque
M4	1.47 N · m {15 kgf · cm}

Hole for checking the positioning

3 protrusions on the mount bracket for installation surface

Attach the drop-prevention wire.

Insert the 3 holes on the camera bottom panel into the 3 protrusions on the mount bracket for installation surface.

Status display lamp

Main unit mounting screw
(M4 screw)

Note
- Do not do this work while holding the camera head since doing so may result in malfunctioning of the unit.
- Check that the unit has been mounted securely with no tilting or wobbling.
- The unit must be secured without fail using the main unit mounting screw before any the cables are connected.

5. Cable fixing bracket

Install the cable fixing bracket included in the ceiling mount package and you can better manage the power cable with a cable tie.
- Screw in the cable fixing bracket with the supplied screw for cable fixing bracket (M2.6) on the back panel of AW-UE20. Clamping torque: 0.39 Nm (4 kgf.cm)]
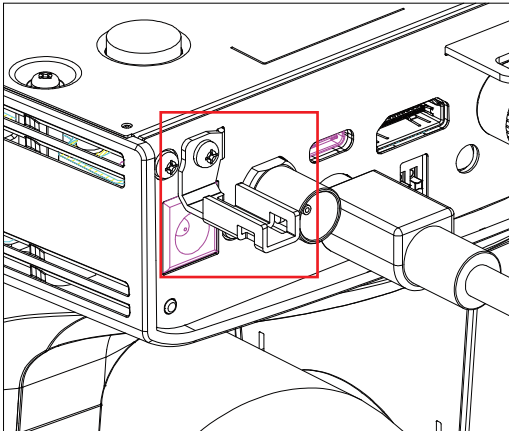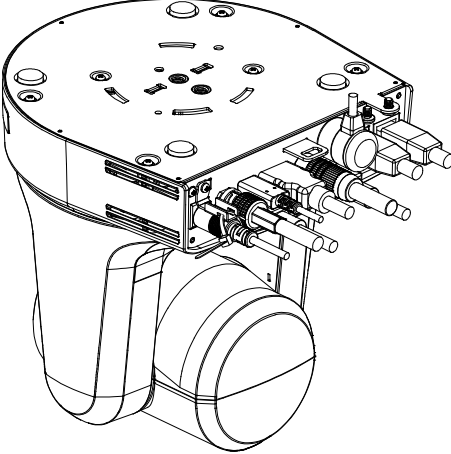

- Slide a cable tie through the openings on the cable fixing bracket.

● Run the power cable through the openings.
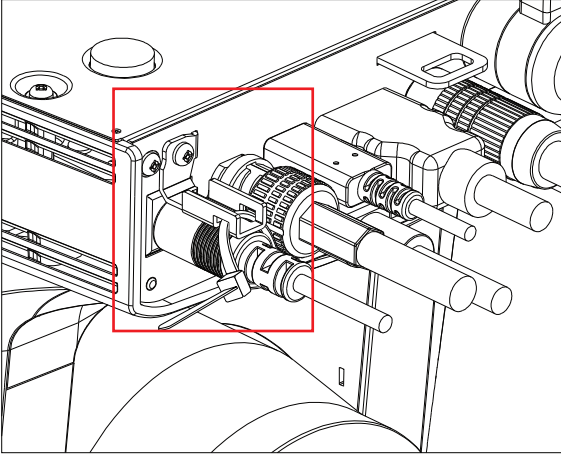
● Insert the cable tie into a self-locking clip. The power cable is secured.

6. Check the mounting.

Check the following points

Note

- The main unit mounting screw must be mounted securerly.
- The unit must not tilt and it must be mounted properly.
- The unit must be securely installed.
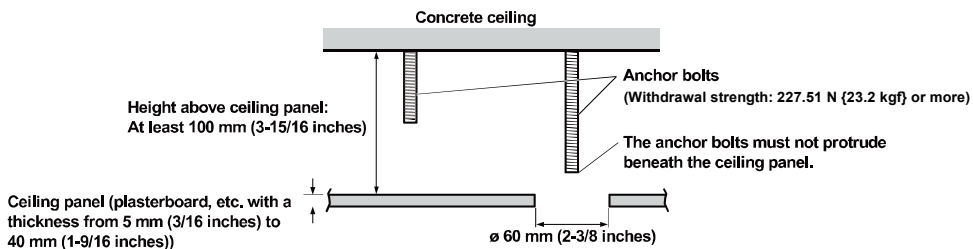- The unit pedestal part must not rotate even when at attempt is made to turn it.

When using the WV-Q105A (optional accessory)

It is recommended that you provide an inspection opening or other such space for access purposes in the area near where the equipment is installed in order to facilitate installation and the wiring connections work.

Before mounting the mount bracket, check that the installation location is strong enough to withstand the total mass (approx. 2.32 kg [5.15 lb]) which will be exerted once the camera is mounted.

When installing the unit on a ceiling, ensure that there is at least 100 mm (3-15/16 inches) of space above the ceiling panel in the place where the unit will be used.

The unit can be installed on a ceiling panel with a thickness ranging from 5 mm (3/16 inches) to 40 mm (1-9/16 inches). The drop-prevention wire (supplied with the WV-Q105A) must be used when mounting the direct ceiling mount bracket.

Concrete ceiling

Height above ceiling panel:
At least 100 mm (3-15/16 inches)

Anchor bolts
(Withdrawal strength: 227.51 N {23.2 kgf} or more)

The anchor bolts must not protrude beneath the ceiling panel.

Ceiling panel (plasterboard, etc. with a thickness from 5 mm (3/16 inches) to 40 mm (1-9/16 inches))

ø 60 mm (2-3/8 inches)

When installing the unit on a ceiling

1. **Refer to the Operating Instructions of the WV-Q105A direct ceiling mount bracket, and attach the WV-Q105A as well as the drop-prevention wire angle and drop-prevention wire supplied with the WV-Q105A to the anchor bolts.**

> **Mounting the anchor bolts and direct ceiling mount bracket (*)**
>
> This job is facilitated if the direct ceiling mount bracket is loosely secured to the ceiling panel in one place, and the direct ceiling mount bracket and anchor bolts are vertically aligned before the nuts are tightened up.

2. **First, remove the screws which were loosely fastened in step 1, and then align the camera mount bracket of the AW-UE20 with the screw holes in the WV-Q105A direct ceiling mount bracket and mount it in place.**
   - Use the mounting screws (the M4-L60 Phillips head screws with adhesive) supplied with the WV-Q105A as the mounting screws.
   - Fasten the AC adaptor securely to the bottom or other surface of the reinforcing member made of channel steel where dust and other foreign matter will not accumulate.
   - Do not place the AC adaptor directly onto the ceiling panel or other such surface.
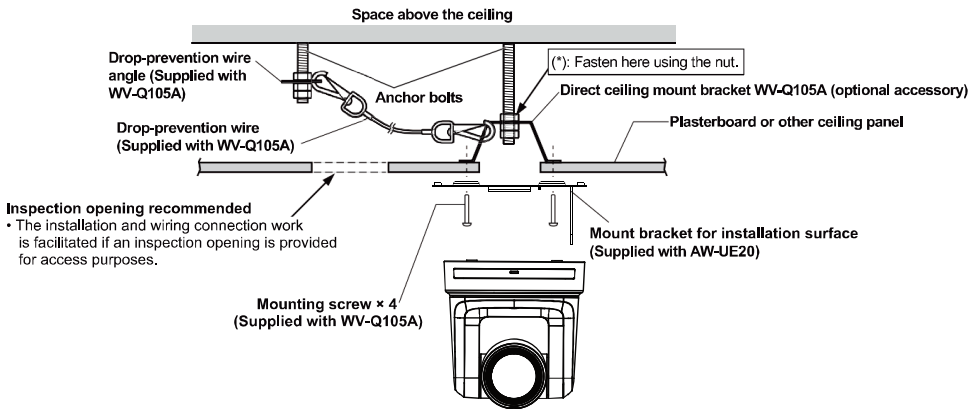
3. **Install the AW-UE20 camera by following the procedure starting with step 3 on page 15.**

Stand-alone installation
## (when the mount bracket is not going to be used)

■ When installing the unit on a desktop

Place the unit flat on the surface.

[Note]
- 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.
- Take care not to allow the unit to fall or otherwise be damaged during installation.
- When carrying the unit, do not hold it by its head.
- Take care not to pull the connected cables. Doing so may cause the unit to fall and/or it may result in injury.

Ensure that the unit will not fall off.   Correct   Incorrect
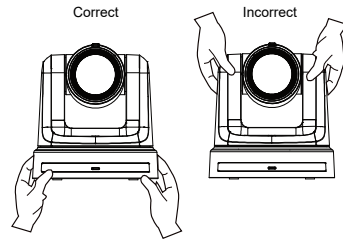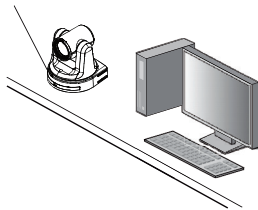
■ When mounting the unit on a tripod

Attach the tripod to the threaded holes for mounting the camera on the camera's bottom panel. Place the tripod on a completely flat and level surface.

Tighten the screws by hand to mount the tripod securely.

Use screw for mounting tripod that satisfy the following standard.

**Screw for mounting tripod 1/4-20UNC**

3.5 mm to 4.5 mm
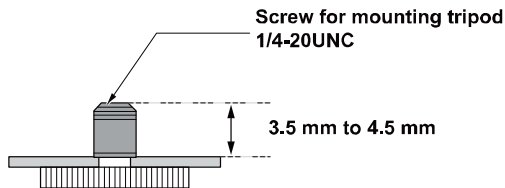
[Note]
- Do not install the unit where people will be passing back and forth.
- When using the unit mounted on a tripod, do not put the tripod high above the floor level.
- Mount the unit securely so there is no looseness. Looseness may cause the unit to fall off and/or result in injuries.
- When the 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.
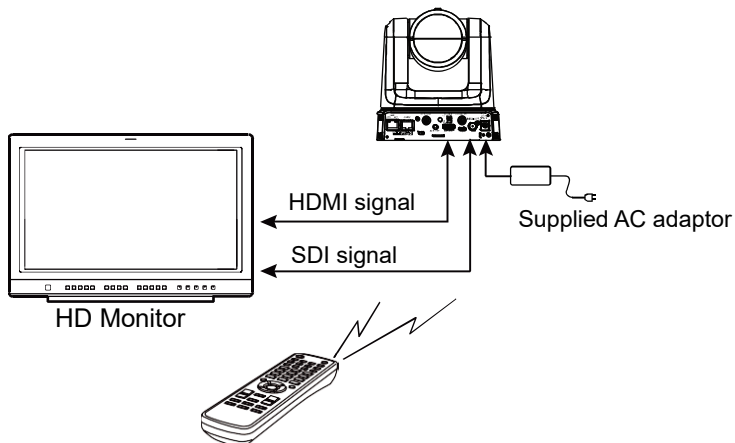
Connecting Cables

[Note]
- Do not connect PoE cable to the RS-422 port.
- For details on recommended products, refer to the catalog or consult your local dealer.
- Always disconnect the power supply before connecting or disconnecting cables.
- Connecting or disconnecting cables while the power is turned on may result in malfunctions.
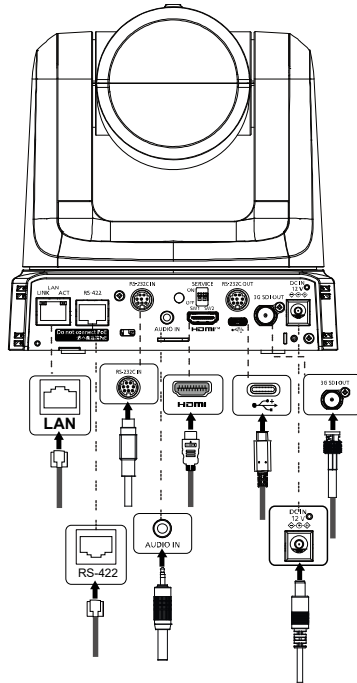
Connecting with an HD Monitor

HDMI signal

Supplied AC adaptor

SDI signal

HD Monitor

Wireless Remote Control (Optional Accessory)
Up to four units can be operated using one remote control

[Note]
● Cables not conforming to the HDMI standard will not work.
● When connecting with an HDMI cable using an HDMI-to-DVI converter, etc., be sure to connect the HDMI cable to the connector of the AW-UE20 last. Connecting the HDMI cable to the connector of the AW-UE20 first may result in malfunction.
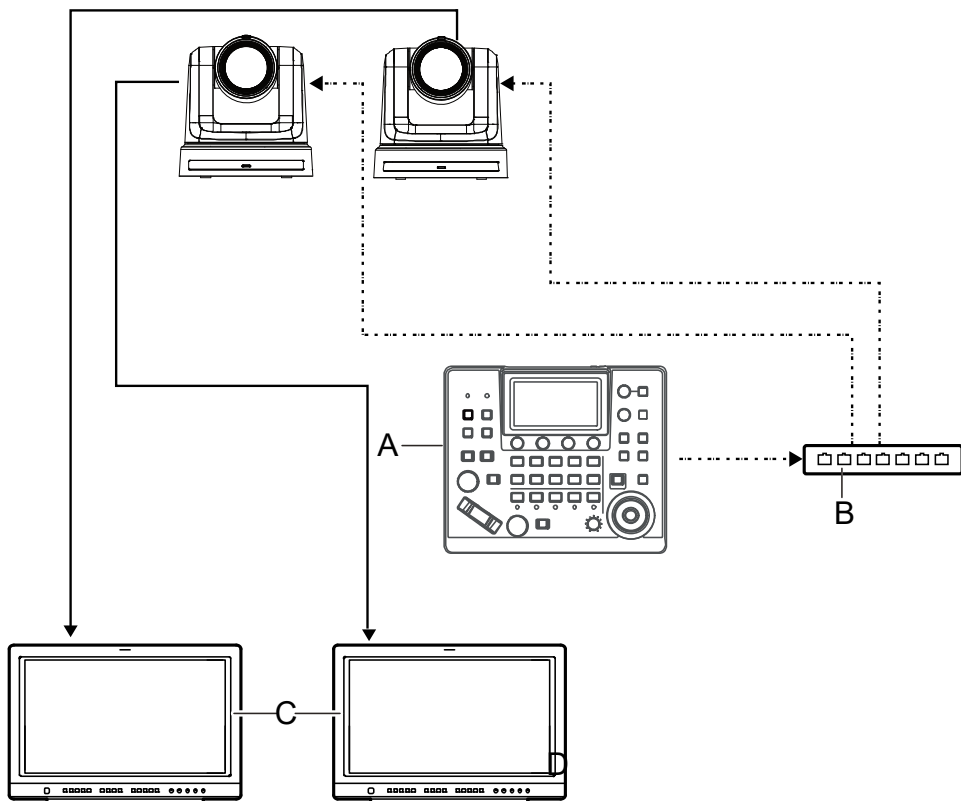
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System example 1 (IP control, PoE+)

──────── : SDI cable

◄·········· : LAN cable
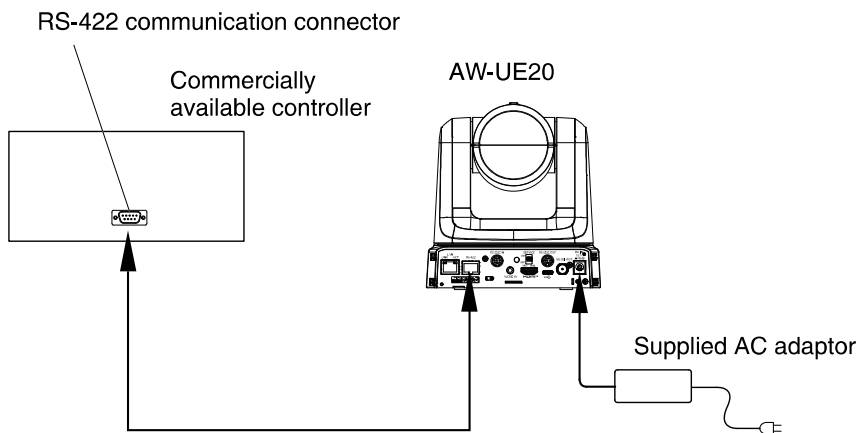
A. Remote Camera Controller AW-RP60
B. PoE+ switching hub
C. Monitor 1/Monitor 2

[Note] Use a category 5e cable for the LAN cable.

System example 2 (connection with commercially available controller, RS-422 connection)

RS-422 communication connector

Commercially available controller

AW-UE20

Supplied AC adaptor

[Note]: Daisy-chain connections are not possible for RS-422 connections.
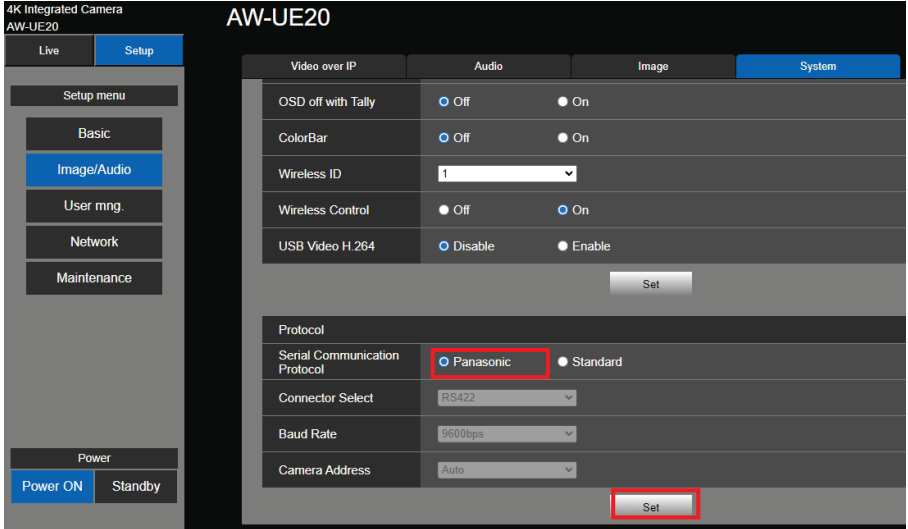
Select **RS422** via either the WEB user interface or OSD menu of UE20. Then, you can connect to a controller via RS422.

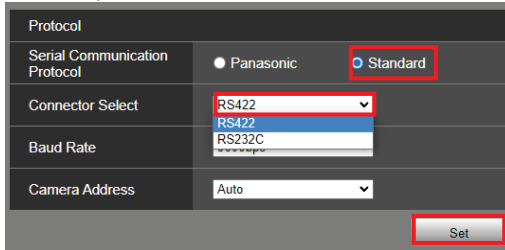1. Select **Setup** > **Image/Audio** > **System**.

2. You can scroll down and do either one of the followings to enable **RS422**.

   ● Select **Panasonic** for **Serial Communication Protocol.**

   ● Select **Standard** for **Serial Communication Protocol.**

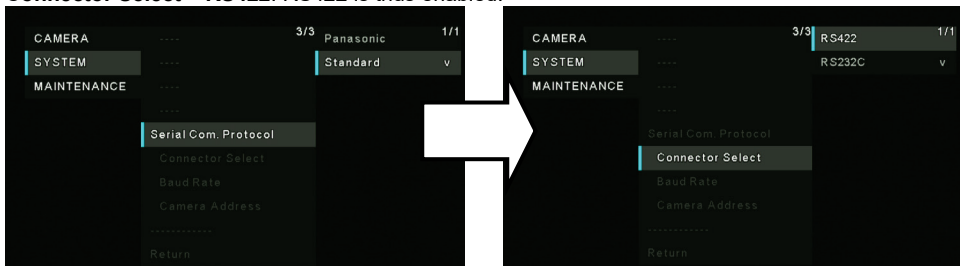   In the drop-down list of **Connector Select**, choose **RS422**.

3. Click **Set** to enable the configuration of RS422.

OSD Menu
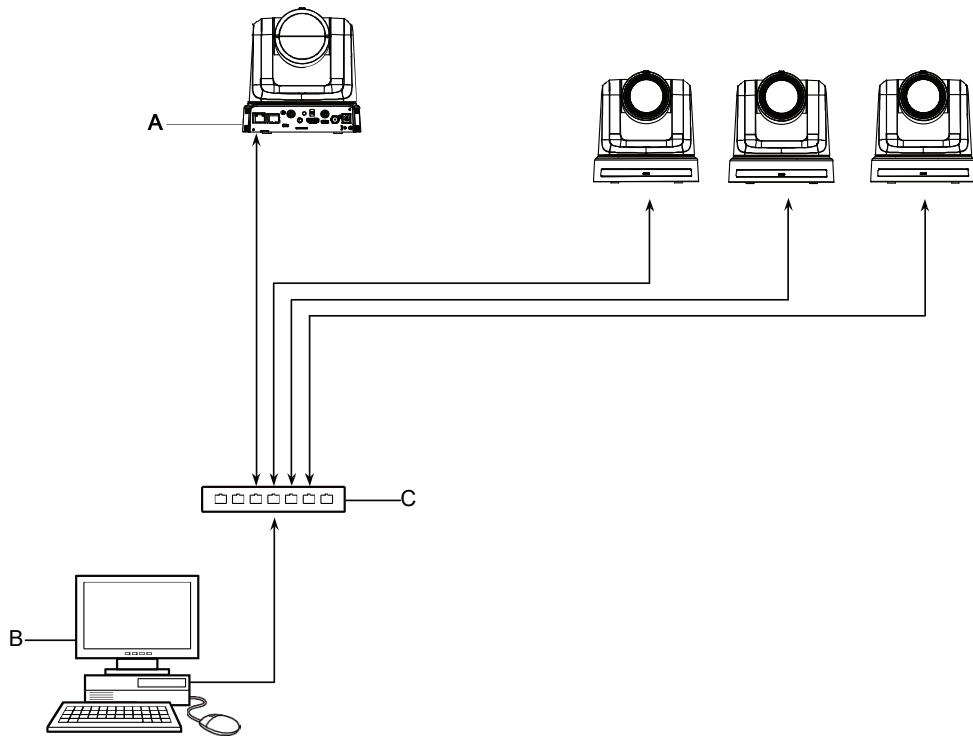Select **System** > **Serial Com. Protocol** > **Panasonic**. RS422 is thus enabled.
Or
Select **System** > **Serial Com. Protocol** > **Standard**. Right below **Serial Com. Protocol**, select
Connector Select > **RS422**. RS422 is thus enabled.
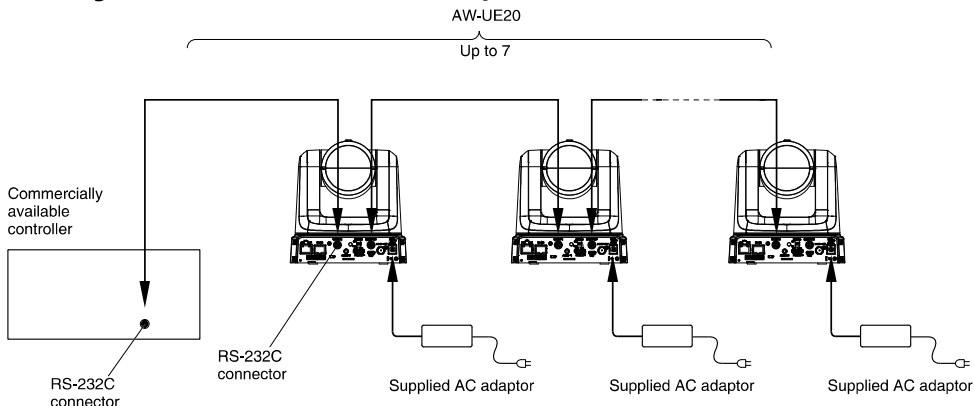

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System example 3 (IP image transmission, PoE+)

◄──────── : LAN cable

A. LAN connector
B. Personal computer
C. PoE+ compatible switching hub or PoE+ injector

System example 4 (connection with commercially available controller, RS-232C daisy-chain connection)

AW-UE20

Up to 7

Commercially
available
controller

RS-232C
connector

RS-232C
connector

Supplied AC adaptor

Supplied AC adaptor

Supplied AC adaptor

*: You can connect up to seven cameras to a single controller.

Select **RS232C** via either the WEB user interface or OSD menu of UE20. Then, you can connect to a controller via RS232C.

WEB User Interface
Select **Setup** > **Image/Audio** > **System** > **Connector Select** > **RS232C.** Click **Set** to enable the configuration.

1. Select **Setup** > **Image/Audio** > **System**.

2. You can scroll down and select **Standard** for **Serial Communication Protocol**.

3. In the drop-down list of **Connector Select**, choose **RS232C**.

4. Click **Set** to enable the configuration.
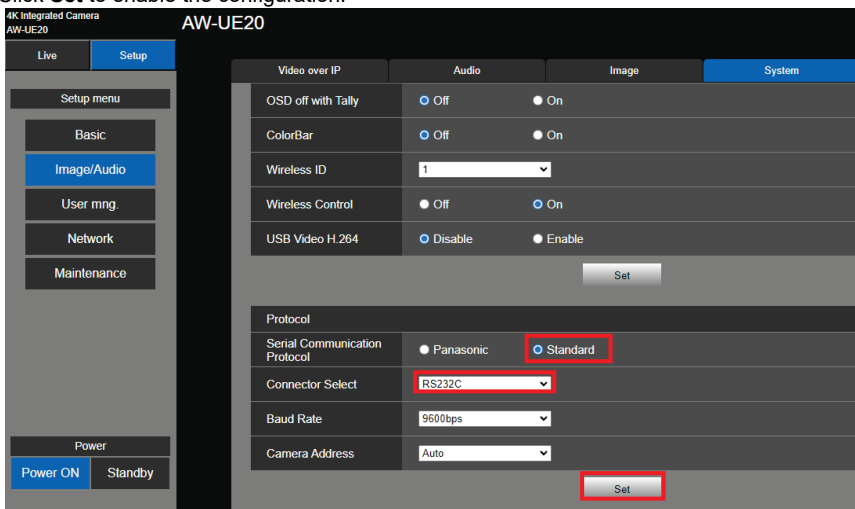
OSD Menu
Select **System** > **Serial Com. Protocol** > **Standard**. Right below **Serial Com. Protocol**, select **Connector Select** > **RS232C**. RS232C is thus enabled.
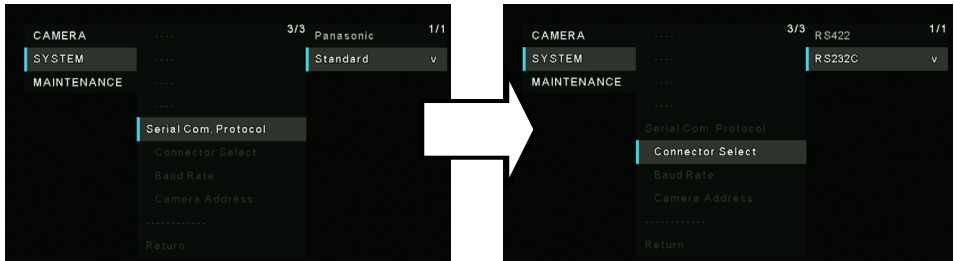
System example 5 (USB connection, Web camera)

AW-UE20

Communication software (optional accessory)
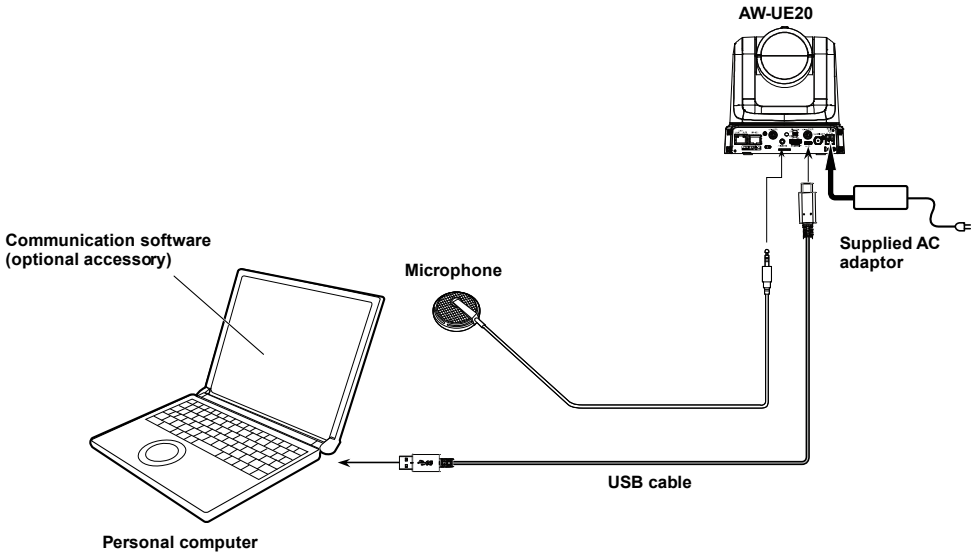
Microphone

Supplied AC adaptor

USB cable

Personal computer

- Use a USB cable that is compatible with the USB 2.0 specification.
  Connect a USB Type-C connector to the unit.
- You can connect the unit to your computer or lap top via a USB cable and use the unit as a USB camera.
  [Note]:
  1. Access **Setup** > **Basic** > **Priority mode** on the Web User Interface. In the drop-down list of **Priority mode**, you can select either **HDMI/USB** or **USB (Video Conference)** and click **Set**.
  2. Since **USB (Video Conference)** mode does not support HDMI output, OSD menu cannot be accessed under **USB (Video Conference)** mode.
  3. Under **USB (Video Conference)** mode, if you connect the unit to the PC using a USB cable, only UVC connection will be supported. USB Audio Class will be off.
- Use communication software (optional accessory) that is compatible with the USB Video Class and USB Audio Class.

Read this first! (For AW-UE20KP, AW-UE20WP)   **ENGLISH**

WARNING:
- To reduce the risk of fire or electric shock, do not expose this equipment to rain or moisture.
- To reduce the risk of fire or electric shock, keep this equipment away from all liquids. Use and store only in locations which are not exposed to the risk of dripping or splashing liquids, and do not place any liquid containers on top of the equipment.

WARNING:
Always keep the main unit mounting screw, bracket mounting screws and drop-prevention wire mounting screw out of the reach of infants and small children.

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

CAUTION:
Do not remove panel covers by unscrewing.
To reduce the risk of electric shock, do not remove the covers.
No user serviceable parts inside.
Refer servicing to qualified service personnel.

CAUTION:
This apparatus can be operated at a voltage in the range of 100 – 240 V AC.
Voltages other than 120 V are not intended for U.S.A. and Canada.
Operation at a voltage other than 120 V AC may require the use of a different AC plug.
Please contact either a local or foreign Panasonic authorized service center for assistance in selecting an alternate AC plug.

CAUTION:
The mains plug of the power supply cord shall remain readily operable.
The AC receptacle (mains socket outlet) shall be installed near the equipment and shall be easily accessible. To completely disconnect this equipment from the AC mains, disconnect the power cord plug from the AC receptacle.

CAUTION:
In order to maintain adequate ventilation, do not install or place this unit in a bookcase, built-in cabinet or any other confined space. To prevent risk of electric shock or fire hazard due to overheating, ensure that curtains and any other materials do not obstruct the ventilation.

CAUTION:
To reduce the risk of fire or electric shock and annoying interference, use the recommended accessories only.

CAUTION:
Check the installation at least once a year.
An improper installation could cause the unit to fall off resulting in personal injury.

CAUTION:
To reduce the risk of fire or electric shock caused by damage to the power supply cord, do not squeeze, bend, or pull the power supply cord when using the apparatus.

☐ indicates safety information.

Read this first! (For AW-UE20KP, AW-UE20WP) (continued)

ENGLISH

FCC NOTICE (USA)

Supplier's Declaration of

Conformity Trade Name: Panasonic
Model Number: AW-UE20KP/AW-UE20WP
Responsible Party: Panasonic Corporation of North America Two Riverfront Plaza, Newark, NJ
07102
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
anyinterference received, including interference that may cause undesired operation.

FCC Warning:
To assure continued FCC emission limit compliance, follow the attached installation
instructions and the user must use only shielded interface cables 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.

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

NOTIFICATION (Canada)

CAN ICES-003 (A)/NMB-003(A)

indicates safety information.

■ **The symbols on this product (including the accessories) represent
thefollowing. (Some symbols are not displayed on this unit.)**

I	ON
⏻	Standby (OFF)
∼	AC
⎓	DC
▣	Class II equipment (The construction of the product is double-insulated.)

(For AW-UE20KE, AW-UE20WE, AW-UE20KED, AW-UE20WED)

WARNING:
- To reduce the risk of fire or electric shock, do not expose this equipment to rain or moisture.
- To reduce the risk of fire or electric shock, keep this equipment away from all liquids. Use and store only in locations which are not exposed to the risk of dripping or splashing liquids, and do not place any liquid containers on top of the equipment.

WARNING:
Always keep the main unit mounting screw, bracket mounting screws and drop-prevention wire mounting screw out of the reach of infants and small children.

WARNING:
This equipment is compliant with Class A of CISPR 32.
In a residential environment this equipment may cause radio interference.

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

CAUTION:
Do not remove panel covers by unscrewing.
To reduce the risk of electric shock, do not remove the covers. No user serviceable parts inside.
Refer servicing to qualified service personnel.

CAUTION:
The mains plug of the power supply cord shall remain readily operable.
The AC receptacle (mains socket outlet) shall be installed near the equipment and shall be easily accessible. To completely disconnect this equipment from the AC mains, disconnect the power cord plug from the AC receptacle.

CAUTION:
In order to maintain adequate ventilation, do not install or place this unit in a bookcase, built-in cabinet or any other confined space. To prevent risk of electric shock or fire hazard due to overheating, ensure that curtains and any other materials do not obstruct the ventilation.

CAUTION:
To reduce the risk of fire or electric shock and annoying interference, use the recommended accessories only.

CAUTION:
Check the installation at least once a year. An improper installation could cause the unit to fall off resulting in personal injury.

☐ indicates safety information.

Turkey Only
AEEE Yönetmeliğine Uygundur.
AEEE Complies with Directive of Turkey.
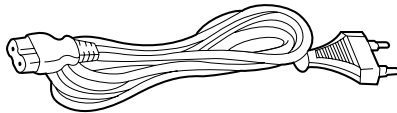
Caution for AC Mains Lead

FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY.
This product is equipped with 2 types of AC mains cable. One is for continental Europe,etc. and the other one is only for U.K.

Appropriate mains cable must be used in each local area, since the other type of mains cable is not suitable.
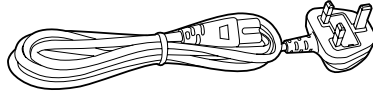
FOR CONTINENTAL EUROPE, ETC.
Not to be used in the U.K.

FOR U.K. ONLY
If the plug supplied is not suitable for your socket outlet, it should be cut off and appropriate one fitted.

FOR U.K. ONLY

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 13 amp fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 13 amps 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 Panasonic Dealer.

How to replace the fuse
1. Open the fuse compartment with a screwdriver.

Or

2. Replace the fuse.

Fuse

Or
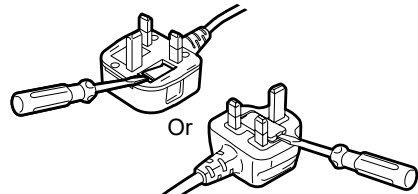
Fuse
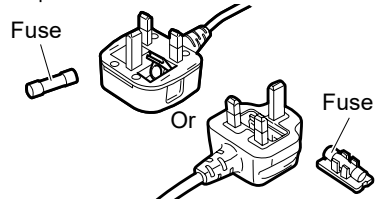
indicates safety information.

Importer for UK:
Panasonic Connect UK,
a branch of Panasonic Connect Europe GmbH,
Maxis 2, Western Road, Bracknell, Berkshire, RG12 1RT

UK CA

EMC NOTICE FOR THE PURCHASER/USER OF THE APPARATUS

1. Pre-requisite conditions to achieving compliance with the above standards

<1> Peripheral equipment to be connected to the apparatus and special connecting cables
- The purchaser/user is urged to use only equipment which has been recommended by us as peripheral equipment to be connected to the apparatus.
- The purchaser/user is urged to use only the connecting cables described below.

**<2> For the connecting cables, use shielded cables which suit the intended purpose of the apparatus.**
- Video signal connecting cables
  Use double shielded coaxial cables, which are designed for 75-ohm type high-frequency applications, for SDI (Serial Digital Interface).
  Coaxial cables, which are designed for 75-ohm type high-frequency applications, are recommended for analog video signals.
- Audio signal connecting cables
  If your apparatus supports AES/EBU serial digital audio signals, use cables designed for AES/EBU.
  Use shielded cables, which provide quality performance for high-frequency transmission applications, for analog audio signals.
- Other connecting cables (IEEE1394, USB)
  Use double shielded cables, which provide quality performance for high-frequency applications, as connecting cables.
- When connecting to the DVI signal terminal, use a cable with a ferrite core.
- If your apparatus is supplied with ferrite core(s), they must be attached on cable(s) following instructions in this manual.

2. Performance level
The performance level of the apparatus is equivalent to or better than the performance level required by these standards.
However, the apparatus may be adversely affected by interference if it is being used in an EMC environment, such as an area where strong electromagnetic fields are generated (by the presence of signal transmission towers, cellular phones, etc.). In order to minimize the adverse effects of the interference on the apparatus in cases like this, it is recommended that the following steps be taken with the apparatus being affected and with its operating environment:
1. Place the apparatus at a distance from the source of the interference.
2. Change the direction of the apparatus.
3. Change the connection method used for the apparatus.
4. Connect the apparatus to another power outlet where the power is not shared by any other appliances.

■ **The symbols on this product (including the accessories) represent the following. (Some symbols are not displayed on this unit.)**

⏽	ON
⏻	Standby (OFF)
∼	AC
⎓	DC
▣	Class II equipment (The construction of the product is double-insulated.)

Disposal of Old Equipment

Only for European Union and countries with recycling systems

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

For proper treatment, recovery and recycling of old products, please take them to applicable collection points in accordance with your national legislation.

By disposing of them correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment. For more information about collection and recycling, please contact your local authority, dealer or supplier.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

Lire ces informations en premier !
(Pour AW-UE20KP, AW-UE20WP)

AVERTISSEMENT:
- Pour réduire les risques d'incendie ou de choc électrique, évitez d'exposer cet appareil à la pluie ou à l'humidité.
- Pour réduire tout risque de feu ou de choc électrique, éloigner l'appareil des liquides — utiliser et ranger uniquement dans un endroit ne risquant pas de recevoir des gouttes ou d'être aspergé de liquides, et ne pas mettre de récipient renfermant des liquides sur le dessus de l'appareil.

AVERTISSEMENT:
Gardez toujours la vis de montage de l'appareil principal, celles de montage de la potence et celle de montage du fil antichute hors de portée des enfants et des nourissons.

AVERTISSEMENT:
L'installation ne doit être effectuée que par du personnel d'installation qualifié.
Une mauvaise installation peut avoir pour conséquence la chute de l'appareil et provoquer des blessures.

ATTENTION:
Ne pas dévisser le couvercle.
Pour réduire tout risque d'électrocution, ne pas retirer le couvercle. Il ne se trouve à l'intérieur aucune pièce qui puisse être réparée par l'utilisateur.
Confier toute réparation à un personnel qualifié.

ATTENTION:
Cet appareil peut être mis en service sur la tension d'une plage de 100 – 240 V C.A.
Le réglage autre que à 120 V C.A. n'est pas prévu pour utilisation au Canada ou aux États-Unis d'Amérique.
L'utilisation d'une tension de secteur autre que à 120 V C.A. peut exiger une fiche différente. Consulter un centre de service Panasonic authrisé local ou à l'etranger pour le choix de l'adaptateur approprié.

ATTENTION:
La fiche du cordon d'alimentation doit être facilement accessible.
La prise de courant (prise secteur) doit être installée à proximité de l'appareil et facilement accessible.
Pour déconnecter complètement cet appareil du secteur, débranchez la fiche du cordon d'alimentation de la prise de courant.

ATTENTION:
Pour maintenir une bonne ventilation, ne pas installer ni placer l'appareil dans une étagère, un meuble encastré ni aucun endroit confiné. Pour éviter tout risque de choc électrique ou de feu dû à une surchauffe, vérifier qu'aucun rideau ni aucun autre matériau ne fait obstacle à la ventilation.

ATTENTION:
Pour éviter tout risque d'incendie, de chocs électriques ou d'interférences, n'utiliser que les accessoires recommandés.

ATTENTION:
Vérifiez l'installation au moins une fois par an. Une mauvaise installation peut provoquer la chute de l'appareil et engendrer des blessures.

ATTENTION:
Pour réduire le risque d'incendie ou d'électrocution résultant de l'endommagement du cordon d'alimentation, ne pas compresser, plier ni tirer sur le cordon d'alimentation lors de l'utilisation de l'appareil.

Informations concernant la sécurité.

NOTIFICATION (Canada)

CAN ICES-003 (A)/NMB-003(A)

Informations concernant la sécurité.

■ **Les symboles présents sur ce produit (y compris sur les accessoires)**
signifient les choses suivantes. (Certains symboles ne sont pas affichés
surcet appareil.)

| MARCHE

⏻ Veille (ARRÊT)

∼ CA

=== CC

▣ Équipement de Classe II (Le produit a été fabriqué avec une double isolation.)

Lire ces informations en premier !
(Pour AW-UE20KE, AW-UE20WE, AW-UE20KED, AW-UE20WED)

AVERTISSEMENT:
- Pour réduire les risques d'incendie ou de choc électrique, évitez d'exposer cet appareil à la pluie ou à l'humidité.
- Pour réduire tout risque de feu ou de choc électrique, éloigner l'appareil des liquides — utiliser et ranger uniquement dans un endroit pas de recevoir des gouttes ou d'être aspergé de liquides, et ne pas mettre de récipient renfermant des liquides sur le dessus de l'appareil.

AVERTISSEMENT:
Gardez toujours la vis de montage de l'appareil principal, celles de montage de la potence et celle de montage du fil antichute hors de portée des enfants et des nourissons.

AVERTISSEMENT:
Cet appareil est conforme à la Classe A de la norme CISPR32.
Dans un environnement résidentiel, cet appareil peut provoquer des interférences radio.

AVERTISSEMENT:
L'installation ne doit être effectuée que par du personnel d'installation qualifié.
Une mauvaise installation peut avoir pour conséquence la chute de l'appareil et provoquer des blessures.

ATTENTION:
Ne pas dévisser le couvercle.
Pour réduire tout risque d'électrocution, ne pas retirer le couvercle. Il ne se trouve à l'intérieur aucune pièce qui puisse être réparée par l'utilisateur.
Confier toute réparation à un personnel qualifié.

ATTENTION:
La fiche du cordon d'alimentation doit être facilement accessible.
La prise de courant (prise secteur) doit être installée à proximité de l'appareil et facilement accessible.
Pour déconnecter complètement cet appareil du secteur, débranchez la fiche du cordon d'alimentation de la prise de courant.

ATTENTION:
Pour maintenir une bonne ventilation, ne pas installer ni placer l'appareil dans une étagère, un meuble encastré ni aucun endroit confiné. Pour éviter tout risque de choc électrique ou de feu dû à une surchauffe, vérifier qu'aucun rideau ni aucun autre matériau ne fait obstacle à la ventilation.

ATTENTION:
Pour éviter tout risque d'incendie, de chocs électriques ou d'interférences, n'utiliser que les accessoires recommandés.

ATTENTION:
Vérifiez l'installation au moins une fois par an. Une mauvaise installation peut provoquer la chute de l'appareil et engendrer des blessures.

Informations concernant la sécurité.

Avertissement concernant le cordon d'alimentation

POUR VOTRE PROPRE SÉCURITÉ, VEUILLEZ LIRE ATTENTIVEMENT LE TEXTE SUIVANT.
Cet appareil est équipé de 2 types de cordon d'alimentation. L'un est pour l'Europe continentale, etc., l'autre pour le Royaume-Uni exclusivement.
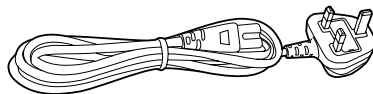
Dans chacune des régions respectives, le cordon d'alimentation adéquat doit être utilisé;
l'utilisation de l'autre cordon n'étant pas possible.

POUR L'EUROPE CONTINENTALE,ETC.
Ne doit pas être utilisé au Royaume-Uni.

POUR LE ROYAUME-UNI EXCLUSIVEMENT

Informations concernant la sécurité.

NOTE D'INFORMATION SUR LA CEM POUR L'ACHETEUR/ UTILISATEUR DE L'APPAREIL

1. Conditions requises pour obtenir la conformité aux normes ci-dessus

<1> Equipements périphériques à connecter à l'appareil et câbles de connexion spéciaux

- L'acheteur/utilisateur est invité à utiliser uniquement des équipements recommandés par notre société comme équipements périphériques à connecter à l'appareil.
- L'acheteur/utilisateur est invité à n'utiliser que les câbles de connexion décrits ci-dessous.

<2> Pour les câbles de connexion, utilisez des câbles blindés appropriés à l'utilisation de l'appareil.

- Câbles de connexion signal vidéo
  Utilisez des câbles coaxiaux blindés, conçus pour des applications à haute fréquence du type 75 ohms, pour la SDI (Serial Digital Interface).
  Les câbles coaxiaux, conçus pour des applications à haute fréquence du type 75 ohms, sont conseillés pour les signaux vidéo analogiques.
- Câbles de connexion signal audio
  Si votre appareil prend en charge les signaux audio numériques série AES/EBU, utilisez des câbles conçus pour AES/EBU.
  Utilisez des câbles blindés, qui assure des performances de qualité pour les applications de transmission haute fréquence, pour les signaux audio analogiques.
- Autres câbles de connexion (IEEE1394, USB)
  Utilisez des câbles blindés, qui assurent des performances de qualité pour les applications haute fréquence, comme des câbles de connexion.
- Lors du raccordement à la borne de signal DVI, utilisez un câble avec un noyau de ferrite.
- Si votre appareil est fourni avec un ou plusieurs tore(s) magnétique(s), ils doivent être fixés sur le(s) câble(s) selon les instructions figurant dans la présent manuel.

2. Niveau de performance

Le niveau de performance de l'appareil est équivalent ou supérieur au niveau de performance requis par les normes en question.

Cependant, l'appareil pourrait être affecté de façon négative par des interférences s'il est utilisé dans un environnement CEM, tel qu'une zone où de forts champs électromagnétiques sont générés (par la présence de pylônes de transmission, téléphones portables etc.). Pour réduire au minimum les effets négatifs des interférences sur l'appareil dans des cas de ce genre, il est conseillé d'adopter les mesures suivantes en ce qui concerne l'appareil concerné et son environnement de fonctionnement:

1. Placez l'appareil à une certaine distance de la sources des interférences.
2. Changez la direction de l'appareil.
3. Changez la méthode de connexion utilisée pour l'appareil.
4. Connectez l'appareil à une autre prise électrique sur laquelle l'alimentation n'est partagée par aucun autre appareil.

■ **Les symboles présents sur ce produit (y compris sur les accessoires)**
signifient les choses suivantes. (Certains symboles ne sont pas
affichés sur cet appareil.)

I	MARCHE
⏻	Veille (ARRÊT)
∼	CA
===	CC
▣	Équipement de Classe II (Le produit a été fabriqué avec une double isolation.)

L'élimination des équipements usagés

Applicable uniquement dans les pays membres de l'Union européenne et les pays disposant de systèmes de recyclage.

Apposé sur le produit lui-même, sur son emballage, ou figurant dans la documentation qui l'accompagne, ce pictogramme indique que les appareils électriques et électroniques usagés, doivent être séparés des ordures ménagères.

Afin de permettre le traitement, la valorisation et le recyclage adéquats des appareils usagés, veuillez les porter à l'un des points de collecte prévus, conformément à la législation nationale en vigueur.

En les éliminant conformément à la réglementation en vigueur, vous contribuez à éviter le gaspillage de ressources précieuses ainsi qu'à protéger la santé humaine et l'environnement.

Pour de plus amples renseignements sur la collecte et le recyclage, veuillez vous renseigner auprès des collectivités locales, votre revendeur ou fournisseur.

Le non-respect de la réglementation relative à l'élimination des déchets est passible d'une peine d'amende.

ADVERTENCIA:

• Para reducir el riesgo de producir un incendio o recibir una descarga eléctrica, no exponga este equipo a la lluvia ni a la humedad.
• Para reducir el riesgo de incendio o sacudida eléctrica, mantenga este equipo alejado de todos los líquidos. Utilícelo y guárdelo solamente en lugares donde no corra el riesgo de que le caigan gotas o le salpiquen líquidos, y no coloque ningún recipiente de líquidos encima del equipo.

ADVERTENCIA:

Mantenga siempre el tornillo de montaje de la unidad, los tornillos de montaje de la ménsula y el tornillo de montaje del cable para evitar caídas fuera del alcance de los niños y bebés.

ADVERTENCIA:

La instalación solamente debe llevarla a cabo personal cualificado.
Una instalación incorrecta podría provocar la caída del dispositivo y causar lesiones.

PRECAUCIÓN:

No quite la cubierta desatornillándola.
No quite la tapa para evitar el riesgo de sacudidas eléctricas. Las piezas del interior no requieren mantenimiento por parte del usuario. Solicite las reparaciones al personal de servicio calificado.

PRECAUCIÓN:

Este aparato puede funcionar con una tensión de entre 100 – 240 V CA.
Las tensiones diferentes de 120 V no son adecuadas para los EE.UU. y Canadá.
El funcionamiento con una tensión diferente de 120 V CA puede requerir la utilización de una clavija de CA diferente. Póngase en contacto con un centro de servicio autorizado por Panasonic, bien sea local o del extranjero, para que le ayude en la selección de una clavija de CA alternativa.

PRECAUCIÓN:

El enchufe del cable de la alimentación deberá poder conectarse y desconectarse fácilmente.La toma de CA (toma de la red) deberá estar cercadel equipo y a ella podrá accederse fácilmente.
Para desconectar completamente el equipo de la red, desconecte el cable de alimentación de la toma de red.

PRECAUCIÓN:

Para mantener unas buenas condiciones de ventilación, no instale ni ponga este aparato en una librería, mueble empotrado u otro espacio reducido. Para evitar el riesgo de que se produzcan sacudidas eléctricas o peligros de incendio debidos al recalentamiento, asegúrese de que las cortinas y otros materiales no obstruyan la ventilación.

PRECAUCIÓN:

Para reducir el riesgo de incendios, sacudidas eléctricas e interferencias molestas, utilice solamente los accesorios recomendados.

PRECAUCIÓN:

Compruebe la instalación al menos una vez al año.
Una instalación incorrecta podría provocar la caída de la unidad, lo cual podría causar lesiones al usuario.

PRECAUCIÓN:

Para reducir el riesgo de incendio o de descarga eléctrica causado por daños en el cable de alimentación, no lo apriete, doble ni tire de él cuando utilice el aparato.

indica información de seguridad.

■ **Los símbolos en este producto (incluidos los accesorios) representan losiguiente. (Algunos símbolos no se muestran en esta unidad).**

I	ENCENDIDO
⏻	En espera (APAGADO)
∼	CA
===	CC
▣	Equipamiento de Clase II (Producto fabricado con aislamiento doble.)

Lea esto primero!
(Para AW-UE20KE, AW-UE20WE, AW-UE20KED, AW-UE20WED)

ADVERTENCIA:
- Para reducir el riesgo de producir un incendio o recibir una descarga eléctrica, no exponga este equipo a la lluvia ni a la humedad.
- Para reducir el riesgo de incendio o sacudida eléctrica, mantenga este equipo alejado de todos los líquidos. Utilícelo y guárdelo solamente en lugares donde no corra el riesgo de que le caigan gotas o le salpiquen líquidos, y no coloque ningún recipiente de líquidos encima del equipo.

ADVERTENCIA:
Mantenga siempre el tornillo de montaje de la unidad, los tornillos de montaje de la ménsula y el tornillo de montaje del cable para evitar caídas fuera del alcance de los niños y bebés.

ADVERTENCIA:
Este equipo es compatible con la Clase A de CISPR32.
En un entorno residencial, este equipo puede causar interferencias de radio.

ADVERTENCIA:
La instalación solamente debe llevarla a cabo personal cualificado.
Una instalación incorrecta podría provocar la caída del dispositivo y causar lesiones.

PRECAUCIÓN:
No quite la cubierta desatornillándola.
No quite la tapa para evitar el riesgo de sacudidas eléctricas. Las piezas del interior no requieren mantenimiento por parte del usuario.Solicite las reparaciones al personal de servicio calificado.

PRECAUCIÓN:
El enchufe del cable de la alimentación deberá poder conectarse y desconectarse fácilmente.La toma de CA (toma de la red) deberá estar cercadel equipo y a ella podrá accederse fácilmente.
Para desconectar completamente el equipo de la red, desconecte el cable de alimentación de la toma de red.

PRECAUCIÓN:
Para mantener unas buenas condiciones de ventilación, no instale ni ponga este aparato en una librería, mueble empotrado u otro espacio reducido. Para evitar el riesgo de que se produzcan sacudidas eléctricas o peligros de incendio debidos al recalentamiento, asegúrese de que las cortinas y otros materiales no obstruyan la ventilación.

PRECAUCIÓN:
Para reducir el riesgo de incendios, sacudidas eléctricas e interferencias molestas, utilice solamente los accesorios recomendados.

PRECAUCIÓN:
Compruebe la instalación al menos una vez al año.
Una instalación incorrecta podría provocar la caída de la unidad, lo cual podría causar lesiones al usuario.

▭ indica información de seguridad.

Aviso para el cable de alimentación de CA

PARA SU SEGURIDAD, LEA CUIDADOSAMENTE LO SIGUIENTE.

Este producto está equipado con 2 tipos de cable de alimentación de CA. Uno es para Europa continental, etc. y el otro es para el Reino Unido solamente.
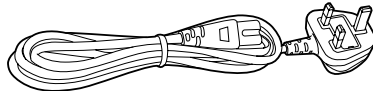
En cada una de las zonas deberá utilizarse el cable de alimentación apropiado, ya que el otro tipo de cable no es adecuado para ello.

PARA EUROPA CONTINENTAL, ETC.	PARA EL REINO UNIDO SOLAMENTE
No debe utilizarse en el Reino Unido.	

indica información de seguridad.

AVISO SOBRE CEM PARA EL COMPRADOR/USUARIO DEL APARATO

1. Condiciones previas para conseguir la conformidad con las normas mencionadas
  <1> Equipo periférico por conectar al aparato y cables de conexión especiales
  - Se recomienda que el comprador/usuario utilice solo equipos recomendados por nosotros como equipos periféricos que se pueden conectar al aparato.
  - Se recomienda que el comprador/usuario utilice solo los cables de conexión descritos más abajo.

  <2> Para los cables de conexión, utilizar cables apantallados que se ajusten al destino del aparato.
  - Cables de conexión de señales de vídeo
    Utilizar cables coaxiales apantallados dobles, diseñados para aplicaciones de alta frecuencia del tipo de 75 ohm, para SDI (Interfaz digital en serie).
    Cables coaxiales, diseñados para aplicaciones de alta frecuencia del tipo de 75 ohm, están recomendados para señales de vídeo analógicas.
  - Cables de conexión de señales de audio
    Si el aparato es compatible con las señales de audio digitales en serie AES/EBU, utilizar cables diseñados para AES/EBU.
    Utilizar cables apantallados, que proporcionan un rendimiento de calidad para aplicaciones de transmisión en alta frecuencia, para señales de audio analógicas.
  - Otros cables de conexión (IEEE1394, USB)
    Utilizar cables apantallados, que proporcionan un rendimiento de calidad para aplicaciones de transmisión en alta
    frecuencia, como cables de conexión.
  - Para conectar el terminal de señales DVI, utilice un cable con un núcleo de ferrita.
  - Si el aparato está equipado con núcleo(s) de ferrita, tiene que conectarse al cable(s) siguiendo las instrucciones contenidas en este manual.

2. Nivel de rendimiento
El nivel de rendimiento del aparato es equivalente a o mejor respecto al nivel de rendimiento requerido por estas normas.
Sin embargo, el aparato puede quedar perjudicado por las interferencias si se está utilizando en un ambiente CEM, como una zona donde haya fuertes campos electromagnéticos (generados por la presencia de torres de transmisión de señales, teléfonos móviles, etc.).
Para minimizar los efectos negativos de la interferencia en el aparato en casos como éste, se recomienda llevar a cabo las siguientes operaciones en el aparato afectado y en su ambiente de funcionamiento.
  1. Colocar el aparato a cierta distancia de la fuente de la interferencia:
  2. Cambiar de dirección el aparato.
  3. Cambiar el método de conexión utilizado para el aparato.
  4. Conectar el aparato a otra toma de corriente que no comparta su energía con otros dispositivos.

■ **Los símbolos en este producto (incluidos los accesorios) representan losiguiente. (Algunos símbolos no se muestran en esta unidad).**

| ENCENDIDO

⏻ En espera (APAGADO)

∿ CA

⎓ CC

▣ Equipamiento de Clase II (Producto fabricado con aislamiento doble.)

Eliminación de Aparatos Viejos

Solamente para la Unión Europea y países con sistemas de reciclado.

Este símbolo en los productos, su embalaje o en los documentos que los acompañen significa que los productos eléctricos y electrónicos usadas no deben mezclarse con los residuos domésticos.

Para el adecuado tratamiento, recuperación y reciclaje de los productos viejos llévelos a los puntos de recogida de acuerdo con su legislación nacional.

Si los elimina correctamente ayudará a preservar valiosos recursos y evitará potenciales efectos negativos sobre la salud de las personas y sobre el medio ambiente.

Para más información sobre la recogida o reciclaje, por favor contacte con su ayuntamiento, su distribuidor o su proveedor.

Puede haber sanciones por una incorrecta eliminación de este residuo, de acuerdo con la legislación nacional.

Bitte lesen Sie zuerst diesen Hinweis!

WARNUNG:
- Zur Reduzierung der Gefahr von Brand und elektrischem Schlag dieses Gerät weder Nässe noch Feuchtigkeit aussetzen.
- Um Brand- oder Stromschlaggefahr zu reduzieren, muss dieses Gerät von allen Flüssigkeiten ferngehalten werden. Vermeiden sie Gebrauch und Lagerung des Gerätes an Orten, an denen die Gefahr besteht, dass es mit Flüssigkeiten betropft oder bespritzt wird, und stellen sie keine Flüssigkeitsbehälter auf das Gerät.

WARNUNG:
Bewahren Sie die Haupteinheit-Befestigungsschrauben, die Halterungs-Befestigungsschrauben und die Befestigungsschraube für Fallschutzdraht stets außer Reichweite von Säuglingen und Kleinkindern auf.

WARNUNG:
Dieses Gerät ist mit der Klasse A von CISPR32 kompatibel.
In einer Wohngegend kann dieses Gerät Funkstörungen verursachen.

WARNUNG:
Die Installation darf nur durch qualifiziertes Personal ausgeführt werden.
Fehlerhafte Installation kann zum Herunterfallen des Gerätes und zu Verletzungen führen.

VORSICHT:
Öffnen Sie nicht das Gerät durch Abschrauben von Gehäuseteilen.
Zur Vermeidung von elektrischem Schlag darf das Gehäuse nicht geöffnet werden. Im Geräteinneren befinden sich keine Teile, die vom Benutzer gewartet werden können. Wartungs- und Reparaturarbeiten grundsätzlich autorisiertem Kundendienstpersonal überlassen.

VORSICHT:
Ein unbehinderter Zugang zum Netzstecker des Netzkabels muss jederzeit gewährleistet sein.
Die Steckdose (Netzsteckdose) sollte in der Nähe des Gerätes installiert werden und leicht zugänglich sein.
Zur vollständigen Trennung dieses Gerätes vom Netz ziehen sie den Netzstecker aus der Steckdose.

VORSICHT:
Um eine ausreichende Belüftung zu gewährleisten, dieses Gerät nicht in einem Bücherregal, Einbauschrank oder an einem anderen engen Platz aufstellen. Sicherstellen, dass die Ventilationsöffnungen im Gehäuse nicht durch Vorhänge oder andere Materialien blockiert werden; anderenfalls besteht die Gefahr von elektrischem Schlag oder Feuer aufgrund von Überhitzung.

VORSICHT:
Nur das empfohlene Zubehör verwenden, um die Gefahr von Feuer und elektrischem Schlag sowie Störungen auszuschalten.

VORSICHT:
Die Installation ist mindestens einmal jährlich zu überprüfen.
Bei fehlerhafter Installation besteht Verletzungsgefahr durch Herunterfallen des Gerätes.

ist die Sicherheitsinformation.

Vorsichtshinweis zum Netzkabel

BITTE LESEN SIE IM INTERESSE IHRER SICHERHEIT DEN FOLGENDEN TEXT AUFMERKSAM DURCH.
Dieses Gerät wird mit Netzkabeln in zwei verschiedenen Ausführungen geliefert. Ein Netzkabel ist für Kontinentaleuropa usw., das andere ausschließlich für Großbritannien bestimmt.
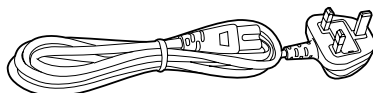
Bitte achten Sie unbedingt darauf, das für das jeweilige Bestimmungsgebiet vorgesehene Netzkabel zu verwenden, da die andere Ausführung nicht für Ihr Land geeignet ist.

FÜR KONTINENTALEUROPA USW.
Nicht für den Gebrauch in Großbritannien bestimmt.

NUR FÜR GROSSBRITANNIEN

◻ ist die Sicherheitsinformation.

EMV-HINWEIS FÜR DEN KÄUFER/ANWENDER DES GERÄTS

1. Erforderliche Bedingungen zur Einhaltung der oben genannten Standards

<1> An das Gerät angeschlossene Geräte und spezielle Verbindungskabel

- Der Käufer/Anwender sollte nur Geräte verwenden, die von uns als Zusatzgeräte für den Anschluss an das Gerät empfohlen wurden.
- Der Käufer/Anwender sollte nur die unten aufgeführten Verbindungskabel verwenden.

<2> Für den Anschluss abgeschirmte Kabel verwenden, die dem Gerätezweck entsprechen

- Videokabel
  Für SDI (Serial Digital Interface) doppelt abgeschirmte 75-Ohm HF-Koaxialkabel verwenden.
  Für analoge Videosignale werden 75-Ohm HF-Koaxialkabel empfohlen.
- Audiokabel
  Verwenden Sie Kabel für AES/EBU, wenn Ihr Gerät serielle digitale AES/EBU-Audiosignale unterstützt.
  Verwenden Sie für analoge Audiosignale abgeschirmte Kabel für hochwertige HF-Übertragungen.
- Weitere Kabel (IEEE1394, USB)
  Verwenden Sie abgeschirmte Kabel für hochwertige HF-Anwendungen.
- Für die Verbindung zum DVI-Signalanschluss muss ein Kabel mit Ferritkern verwendet werden.
- Wird Ihr Gerät mit Ferritkernen geliefert, müssen diese an den Kabeln befestigt werden, siehe Angaben in dieser Anleitung.

2. Leistungsniveau

Das Leistungsniveau des Geräts entspricht oder übersteigt das von diesen Standards verlangte Leistungsniveau.
Das Gerät kann aber durch Nutzung in einer EMV-Umgebung, wie Bereichen mit starken elektromagnetischen Feldern (durch Sendemasten, Mobiltelefone etc.) störend beeinflusst werden.
Um in diesen Situationen die störenden Einflüsse auf das Gerät zu minimieren wird empfohlen, folgende Schritte für betroffene Geräte und Betriebsumgebungen durchzuführen:

1. Positionieren Sie das Gerät von der Störquelle entfernt.
2. Ändern Sie die Gräterichtung.
3. Ändern Sie die Anschlussmethode des Geräts.
4. Schließen Sie das Gerät an eine andere Stromverbindung, die mit keinen weiteren Geräten geteilt wird.

■ **Die Symbole an diesem Produkt (einschließlich Zubehör) haben die folgenden Bedeutungen. (Einige Symbole werden nicht auf diesem Gerätangezeigt.)**

| EIN

⏻ Standby (AUS)

∼ Wechselstrom

=== Gleichstrom

▢ Geräte der Klasse II (das Produkt wurde mit doppelter Isolierung konstruiert.)

Entsorgung von Altgeräten

Nur für die Europäische Union und Länder mit Recyclingsystemen
Dieses Symbol, auf den Produkten, der Verpackung und/oder den Begleitdokumenten,bedeutet, dass gebrauchte elektrische und elektronische Produkte nicht in den allgemeinen Hausmüll gegeben werden dürfen.
Bitte führen Sie alte Produkte zur Behandlung, Aufarbeitung bzw. zum Recycling gemäßden gesetzlichen Bestimmungen den zuständigen Sammelpunkten zu.
Indem Sie diese Produkte ordnungsgemäß entsorgen, helfen Sie dabei, wertvolle Ressourcen zu schützen und eventuelle negative Auswirkungen auf die menschlicheGesundheit und die Umwelt zu vermeiden.
Für mehr Informationen zu Sammlung und Recycling, wenden Sie sich bitte an Ihrenörtlichen Abfallentsorgungsdienstleister, Händler oder Zulieferer.
Gemäß Landesvorschriften können wegen nicht ordnungsgemäßer Entsorgung dieses Abfalls Strafgelder verhängt werden.

Leggere prima quanto segue!

AVVISO:
- Per ridurre il rischio d'incendio o di scosse, non esporre questo prodotto alla pioggia o all'umidità.
- Per ridurre il rischio d'incendio o di scosse elettriche, tenere questo prodotto lontano da tutti i liquidi. Usarlo e conservarlo soltanto in luoghi che non siano esposti a gocciolamenti o spruzzi di liquidi, e non mettervi sopra recipienti di liquidi.

AVVISO:
Mantenere sempre la vite di montaggio dell'unità principale, le viti di montaggio staffa e la vite di montaggio del cavo anticaduta lontano dalla portata dei bambini.

AVVISO:
Questa apparecchiatura è conforme alla Classe A della norma CISPR32.
In ambienti residenziali questa apparecchiatura potrebbe causare interferenze radio.

AVVISO:
L'installazione deve essere realizzata unicamente da tecnici qualificati.
Un'installazione incorretta può risultare nella caduta dell'apparecchio con conseguenti danni alle persone.

PRECAUZIONE:
Non togliere il coperchio svitandolo.
Per ridurre i pericoli di scosse elettriche, non togliere il coperchio. All'interno non ci sono parti riparabili dall'utente.
Per le riparazioni, rivolgersi a personale tecnico qualificato.

PRECAUZIONE:
La spina del cavo di alimentazione deve essere sempre a portata di mano.La presa c.a. (presa di rete) deve essere installata vicino all'apparecchio ed essere facilmente accessibile.
Per scollegare completamente questo apparecchio dalla rete, scollegare la spina del cavo di alimentazione dalla presa c.a..

PRECAUZIONE:
Per assicurare una buona ventilazione, non installare o sistemare questo apparecchio in uno scaffale, mobile incorporato od altro spazio chiuso. Per evitare i pericoli di scosse elettriche o d'incendio a causa di un surriscaldamento, accertarsi che tende od altro materiale non ostacolino la ventilazione.

PRECAUZIONE:
Per ridurre i pericoli d'incendio o di scosse elettriche e di fastidiose interferenze, usare soltanto gli accessori raccomandati.

PRECAUZIONE:
Controllare l'installazione almeno una volta all'anno.
Un'installazione incorretta può risultare nella caduta dell'apparecchio con conseguenti danni alle persone.

sono le informazioni sulla sicurezza.

Precauzione per il cavo di alimentazione

PER LA PROPRIA SICUREZZA, LEGGERE ATTENTAMENTE IL TESTO SEGUENTE.
Questo prodotto è dotato di un cavo di alimentazione c.a. di 2 tipi. Uno è per l'Europa continentale, ecc. e l'altro esclusivamente per il Regno Unito.
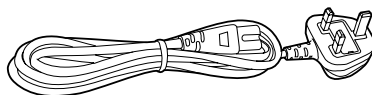
In ciascuna area locale bisogna usare il cavo di alimentazione appropriato, perché ogni altro tipo di cavo non è adatto.

PER L'EUROPA CONTINENTALE, ECC. Da non usare nel Regno Unito.	**PER IL REGNO UNITO SOLTANTO**

sono le informazioni sulla sicurezza.

AVVISO EMC PER L'ACQUIRENTE/UTENTE DELL'APPARATO

1. Prerequisiti essenziali per la conformità agli standard sopra menzionati

<1> Periferiche da collegare all'apparato e cavi di collegamento speciali
- Si raccomanda all'acquirente/utente di collegare l'apparato esclusivamente con periferiche da noi approvate.
- Si raccomanda all'acquirente/utente di utilizzare esclusivamente i cavi di collegamento descritti in basso.

<2> Per i cavi di collegamento, utilizzare cavi schermati idonei per l'utilizzo previsto per l'apparato.
- Cavi di collegamento per segnali video
  Utilizzare cavi coassiali con doppia schermatura, progettati per applicazioni in alta frequenza da 75-ohm, per SDI (interfaccia digitale seriale).
  Per i segnali video analogici sono consigliati cavi coassiali, progettati per applicazioni in alta frequenza da 75-ohm.
- Cavi di collegamento per segnali audio
  Se l'apparato dell'utente supporta i segnali audio digitali seriali AES/EBU, utilizzare i cavi progettati per segnali AES/EBU.
  Per i segnali audio analogici, utilizzare cavi schermati che garantiscono prestazioni di qualità per le applicazioni di trasmissione ad alta frequenza.
- Altri cavi di collegamento (IEEE1394, USB)
  Come cavi di collegamento, utilizzare cavi schermati che garantiscono prestazioni di qualità per le applicazioni ad alta frequenza.
- Per la connessione al terminale del segnale DVI utilizzare un cavo dotato di anello in ferrite.
- Se l'apparato dell'utente dispone di anima/e in ferrite, questa deve essere attaccata al cavo o ai cavi come indicato nelle istruzioni che seguono nel presente manuale.

2. Livello di prestazioni

Il livello di prestazioni dell'apparato è equivalente o superiore al livello di prestazioni richiesto da questi standard.

Tuttavia, l'apparato potrebbe essere disturbato da interferenze esterne qualora venga utilizzato in un ambiente EMC, come nel caso di un'area con forti campi elettromagnetici (generati dalla presenza di torri per la trasmissione di segnali, telefoni cellulari, ecc.). In casi simili, al fine di minimizzare il disturbo di tali interferenze sull'apparato, si consiglia di intervenire sull'apparato e sul suo ambiente operativo adottando le misure indicate di seguito:

1. Posizionare l'apparato lontano dalla fonte dell'interferenza.
2. Cambiare la direzione dell'apparato.
3. Cambiare il metodo di collegamento utilizzato per l'apparato.
4. Collegare l'apparato a un'altra presa sul muro che non sia condivisa con altri apparecchi.

Fabbricato da: Panasonic Connect Co., Ltd.
4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Giappone
Importatore: Panasonic Connect Europe GmbH
Rappresentante autorizzato nell'UE: Panasonic Testing Centre
Winsbergring 15, 22525 Amburgo, Germania

■ **I simboli su questo prodotto (compresi gli accessori) rappresentano quanto segue. (Alcuni simboli non sono visualizzati su questa unità.)**

	ON
	Standby (OFF)
	CA
	DC
	Apparecchiatura di classe II (il prodotto dispone di doppio isolamento.)

Smaltimento di vecchie apparecchiature

Solo per Unione Europea e Nazioni con sistemi di raccolta e smaltimento

Questo simbolo sui prodotti, sull'imballaggio e/o sulle documentazioni o manuali accompagnanti i prodotti indica che i prodotti elettrici, elettronici non devono essere smaltiti come rifiuti urbani ma deve essere effettuata una raccolta separata.

Per un trattamento adeguato, recupero e riciclaggio di vecchi prodotti vi invitiamo a portarli negli appositi punti di raccolta secondo la legislazione vigente nel vostro paese. Con uno smaltimento corretto, contribuirete a salvare importanti risorse e ad evitare i potenziali effetti negativi sulla salute umana e sull'ambiente.

Per ulteriori informazioni su raccolta e riciclaggio, vi invitiamo a contattare il vostro comune, rivenditore o fornitore.

Lo smaltimento non corretto di questi rifiuti potrebbe comportare sanzioni in accordocon la legislazione nazionale.

ОСТОРОЖНО:
• Для снижения риска возникновения пожара или удара электрическим током не подвергайте данное оборудование воздействию дождя или влаги.
• Для снижения риска возникновения пожара или удара электрическим током держите данное оборудование подальше от любых жидкостей. Используйте и храните его только в местах, где оно не будет подвергаться риску попадания капель или брызг жидкости и не помещайте емкостей с жидкостью на оборудование.

ОСТОРОЖНО:
Всегда храните крепежный винт для основного устройства, крепежные винты для кронштейна и крепежный винт троса для защиты от падения вне доступа младенцев и маленьких детей.

ОСТОРОЖНО:
Это оборудование совместимо с классом A стандарта CISPR32.
В жилых районах это оборудование может стать причиной радиопомех.

ОСТОРОЖНО:
Установка должна выполняться только квалифицированным специалистом по установке.
Ненадлежащая установка может привести к падению всего аппарата и получению травмы.

ПРЕДОСТЕРЕЖЕНИЕ:
Не отвинчивайте крышки панелей.
Для снижения риска удара электрическим током не снимайте панели. Внутри устройства нет деталей, подлежащих обслуживанию пользователем. Обратитесь за сервисным обслуживанием к квалифицированному персоналу.

ПРЕДОСТЕРЕЖЕНИЕ:
Сетевой штепсель шнура питания должен всегда быть в рабочем состоянии.
Штепсельная розетка переменного тока (сетевая розетка) должна быть установлена возле оборудования и быть легкодоступной. Для полного отключения данного оборудования от сети переменного тока отсоедините шнур питания от штепсельной розетки переменного тока.

ПРЕДОСТЕРЕЖЕНИЕ:
Для обеспечения надлежащей вентиляции не устанавливайте и не размещайте данное устройство на книжном стеллаже, во встроенном шкафу или в другом закрытом пространстве. Для предотвращения риска поражения электрическим током или опасности возгорания вследствие перегрева убедитесь, что занавески или другие материалы не препятствуют вентиляции.

ПРЕДОСТЕРЕЖЕНИЕ:
Для снижения риска возникновения пожара или удара электрическим током и возникновения помех используйте только рекомендуемые дополнительные принадлежности.

ПРЕДОСТЕРЕЖЕНИЕ:
Проверяйте установку по крайней мере раз в год.
Ненадлежащая установка может привести к падению устройства и получению травмы.

Данный знак обозначает информацию, относящуюся к технике безопасности.

Меры предосторожности для сетевого провода переменного тока

В ЦЕЛЯХ ВАШЕЙ БЕЗОПАСНОСТИ, ПОЖАЛУЙСТА, ВНИМАТЕЛЬНО ПРОЧТИТЕ ПРИВЕДЕННЫЙ НИЖЕ ТЕКСТ.

К данному изделию прилагаются сетевой провод переменного тока 2 типов. Один из них предназначен для европейского континента и т.п., а другой предназначен только для Великобритании.
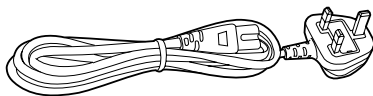
В каждом местном регионе необходимо использовать соответствующий сетевой провод, поскольку другой тип сетевого провода не подходит.

ДЛЯ ЕВРОПЕЙСКОГО КОНТИНЕНТА И Т.П.	ТОЛЬКО ДЛЯ ВЕЛИКОБРИТАНИИ
Не для использования в Великобритании.	

Данный знак обозначает информацию, относящуюся к технике безопасности.

ПРИМЕЧАНИЕ ЕМС ДЛЯ ПОКУПАТЕЛЯ/ПОЛЬЗОВАТЕЛЯ

1. **Условия, которые необходимо соблюдать для достижения соответствия указаннымстандартам**
   <1> Периферийное оборудование, которое подключается к устройству, и специальные соединительные кабели
   - Настоятельно рекомендуется использовать только то оборудование, которое поставляется как периферийные устройства для подключения к данному аппарату.
   - Используйте только соединительные кабели, представленные ниже.
   <2> В качестве соединительных кабелей используйте экранированные кабели, которые соответствуют задачам подключения устройства.
   - Соединительные кабели для передачи видеосигнала
     Для подключения SDI (Serial Digital Interface) следует использовать двойной экранированный коаксиальный кабель, предназначенный для высокочастотных приложений с сопротивлением 75 Ом, для SDI (Serial Digital Interface).
     Для передачи аналоговых видеосигналов рекомендуется использовать коаксиальный кабель, предназначенный для высокочастотных приложений с сопротивлением 75 Ом.
   - Соединительные кабели для передачи аудиосигнала
     Если видеокамера принимает цифровые аудиосигналы AES/EBU, следует использовать кабели, предназначенные специально для AES/EBU.
     Для передачи аналоговых аудиосигналов используйте экранированные кабели, которые обеспечивают высокую производительность при работе при свысокочастотными приложениями.
   - Другие типы соединительных кабелей (IEEE1394, USB)
     Следует использовать экранированные кабели, которые обеспечивают высокую производительность при работе с высокочастотными приложениями.
   - При подключении к DVI signal terminal следует использовать кабель на основе феррита.
   - Если камера поставляется с ферритовыми сердечниками, следует подсоединитьих к кабелям, как показано в инструкции.

2. **Уровень производительности**
   Уровень производительности данного устройства соответствует требованиям указанных стандартов или превосходит их.
   При использовании устройства вблизи оборудования, которое является источником сильного электромагнитного излучения, могут возникать помехи (например, при использовании вблизи устройств передачи сигналов, мобильных телефонов и др.).
   Для минимизации подобного воздействия на устройство рекомендуется выполнить следующие действия с устройством и другими источниками электромагнитного излучения:
   1. Переместите камеру на достаточно большое расстояние от других устройств.
   2. Измените направление расположения камеры.
   3. Измените метод подключения камеры.
   4. Подключите камеру к другому источнику питания, который не используется никакими устройствами.

Інформація для покупця

Виробник:	Panasonic Connect Co., Ltd.	Панасонік Коннект Ко., Лтд.
Адреса виробника:	Fukuoka Japan	Фукуока Японія
Країна походження:	Taiwan	Тайвань

Імпортер:	ТОВ "ПАНАСОНІК УКРАЇНА ЛТД"
Адреса імпортера:	вул. Васильківська, буд. 30, м. Київ 03022, Україна

Примітки:

| Термін служби виробу	7 років

Дата виготовлення може бути визначена за допомогою комбінації літер та цифр серійного номера, розташованого на продукті.

Приклад: X   X   XXXXXXX

Рік: остання цифра року (7 – 2017, 8 – 2018,…0 – 2020)

Місяць: А – Січень, В – Лютий… L – Грудень

■ **Символы на данном изделии (включая дополнительные принадлежности) означают следующее. (Некоторые символы не отображаются на этом устройстве.)**

| | ВКЛ

(ᵠ) режим ожидания

∿ Переменный ток

=== Постоянный ток

▢ Оборудование класса II (Конструкция изделия с двойной изоляцией.)

60

Characteristics

Multiple number of formats supported

You can switch between the following formats via the camera menus or a web browser.

[50Hz]

2160/25p (HDMI Only),
1080/50p, 1080/25p,
1080/50i,
720/50p

[59.94Hz]

2160/29.97p (HDMI Only),
1080/59.94p, 1080/29.97p,
1080/59.94i,
720/59.94p

[60Hz]

2160/30p (HDMI Only),
1080/60p, 1080/30p,
1080/60i,
720/60p

1/2.8-type MOS sensor and 12× zoom lens featured

● 1/2.8-type MOS sensor and DSP (digital signal processor) are incorporated. High-quality pictures are obtained by video processing in many different kinds of ways.

● In addition to its optical 12× zoom lens, the unit comes with a 4× digital zoom to achieve high-quality images that overflow with ambiance.

● The unit is equipped with functions that allow clean and clear reproduction of images in a wide range of applications, such as dynamic range stretch (DRS) functions that compensate for overexposure and loss of dark detail and a digital noise reduction (DNR) function that allows you to shoot scenes clearly by minimizing image lag even in dark locations.

Easy operation of unit enabled by its integration with a high-performance pan-tilt head unit

● High-speed operations with maximum speed of 200°/s during preset, and 100°/s during manual

● Wide rotational angles with a panning range of ±170° and a tilting range from –30° to +90°

● Storage of up to 100 positions in the preset memory (The number of preset memories that can be used varies from one controller to another.)

IP video output function featured

● The unit is equipped with image compression and IP transmission LSI capabilities. In addition, output at up to 30 fps is possible for 4K images and up to 60 fps for Full HD images.

● Employing the functions of this chip together with IP control opens the door to uses in a wide range of applications including the control of the camera from a remote location.

Standard serial communication support

- Connect up to seven cameras to a commercially available controller via RS-232C interface

Integrated pan-tilt head unit, camera and lens to facilitate installation

- By designing the camera, lens and pan-tilt head as a single integrated unit, the time taken for the installation work has been drastically reduced.

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

- A wireless remote control 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

- The unit features excellent connectivity and installability thanks to the IP control; a lightweight main unit, and the turn-lock mechanism, which enables the user to install it on his or her own (only when used indoors).

[Note]

  Bear in mind that the unit is designed to be used indoors only: It cannot be used outdoors.

- The compact camera unit realizes space-saving installation. The unit is suitable for replacing an existing camera or for expanding the current system.

Use in online meetings

The unit supports UVC so the video and audio signals can be output over USB. By using the PTZ virtual USB Driver software and connecting with a LAN cable, it is possible to use the unit as a usb camera.

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

- A maximum of five units can be operated by serial control from one of Panasonic's currently available controllers (AW-RP60, AW-RP150).

The unit can also be used together with the cameras and pan-tilt head unit systems currently available from Panasonic Connect Co., Ltd. so that an existing system can be used to advantage to put together a system that is even more flexible.

[Note]

- It may be necessary to upgrade the version of the controller in order to support the unit.

- The maximum distances between the units and controller is 1000 meters (3280 ft). (when serial control is exercised)

  Use of an external device or some other means must be provided separately in order to extend the video signal connections.

PoE+ *1 eliminates need for camera power configurations

- Configurations for camera's power supply are not necessary when the unit is connected to a network device that supports the PoE+ standard (IEEE802.3at compliant)*2.

[Note]

- If the AC adaptor and a PoE+ power supply are connected simultaneously, the AC adaptor will have priority.
- Use a category 5e cable or higher when using aPoE+ power supply. The maximum length of the cable between the power supply unit and the unit is 100 meters (328 ft). Using a cable that is lower than category 5e may result in reduced power supply capabilities.
- *1: Power over Ethernet Plus. Referred to as "PoE+" in this manual.
- *2: For details on PoE+ power supply devices for which operation has been verified, consult your local dealer.

Required Personal Computer Environment

CPU	Intel® Core™ i5 3.2GHz or higher (Skylake 6500 or later)
Memory	4 GB or more
Network function	100BASE-T/TX or 1000BASE-T, RJ-45 connector
Image display	Resolution: 1920 x 1080 pixels or more Color generation: True Color 24-bit or more

Supported operating systems and web browsers	For Windows:
	    Microsoft® Windows® 10
	    Windows® Internet Explorer® 11
	    64-bit/32-bit
	
	    Microsoft Edge
	    Google Chrome

	For Mac:
	    macOS 10.15
	    macOS 10.14
	    macOS 10.13
	    macOS 10.12
	    OS X 10.11
	
	    Safari
	    Google Chrome

Other	Graphics card support hardware acceleration (for decode H.264/H.265/MJPEG streaming) Adobe® Reader® (for viewing the operating instructions available on the website)

> **IMPORTANT**
>
> Failure to provide the required personal computer environment may slow down the delineation of the images on the screen, make it impossible for the web browser to work and cause other kinds of problems.

[Note]
- Depending on the software version of the unit, an update may be necessary.
- For the latest information on compatible operating systems, and web browsers, visit the support desk at the following website: https://pro-av.panasonic.net/

Disclaimer of Warranty

IN NO EVENT SHALL Panasonic Connect Co., Ltd. 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) ANY DEMANDS FOR COMPENSATION, CLAIMS, ETC. OCCASIONED BY THE INFRINGEMENT OF PRIVACY BY INDIVIDUALS OR ORGANIZATIONS WHOSE IMAGES WERE SHOT BY THE USER BECAUSE THESE IMAGES (INCLUDING THE RECORDINGS MADE) WERE MADE AVAILABLE BY THE USER BECAUSE IN THE PUBLIC DOMAIN FOR SOME REASON OR OTHER OR BECAUSE THE IMAGES ENDED UP BEING USED FOR PURPOSES OTHER THAN THE ONE DESCRIBED ABOVE
7) 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.

● Leakage or theft of information through this unit
● Use of this unit for illegal operations by persons with malicious intent
● 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.

● Enable user authentication from the web screen.
● 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.
● After accessing the unit as an administrator, be sure to close all web browsers.
● Change the administrator password periodically.
● To avoid passwords that can be guessed easily by third parties, set a password of at least 8 characters in length, including at least 3 different types of characters, such as upper case, lower case, numbers, and symbols
● Restrict access to the unit by authenticating the users, for example, to prevent setting information stored on the unit from leaking over the network.
● Do not install the unit in locations where the unit, cables, and other parts can be easily damaged or destroyed by persons with malicious intent.
● Avoid connections that use public lines.

[Note]
Notes on user authentication
User authentication on the unit can performed via digest authentication or basic authentication. If basic authentication is used without the use of a dedicated authentication device, password leaks may occur.
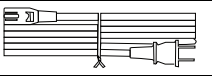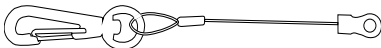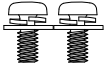We recommend using digest authentication.
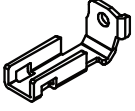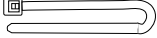
Usage restrictions
Use of the same segment is recommended for the network in which the unit and personal computer are connected.
If the equipment uses connections with different segments, events based on the settings inherent to the network equipment, for instance, may occur so check this thoroughly prior to operation.

Accessories

Check the accessories before using this unit.
After removing the product from its container,
dispose of the packing materials in an
appropriate manner.

AC Adaptor	
Power cable	
Drop-prevention wire	
Mount bracket for installation surface	
Cable fixing bracket	
Cable Ties (x2)	
Bracket mounting screws **M4 x 10 mm** (4 screws)	
Main unit mounting screws **M4 x 6 mm** (2 screws)	
Screw for cable fixing bracket **M2.6 x 5 mm** (1 screw)	
Lens cap	

Optional accessories

- Wireless remote control
  AW-RM50AG (Size "AA" dry battery x2,
  obtained separately)

- Direct ceiling mount bracket WV-Q105A

[Note]
For details on optional accessories, refer to the
catalog or consult your local dealer.

Operating Precautions

■ **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 $^{\circ}$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.

■ **When using the automatic functions**

In the [Scene] such as the camera menu, the initial settings on some items has been set to auto, making it impossible for these items to be operated manually. To operate them manually, switch from the auto settings to the manual settings as required.

When using the ATW (auto tracking white adjustment) function under fluorescent lights, the white balance may vary.

■ **Operating temperature range**

Avoid using the unit in cold locations where the temperature drops below 0 $^{\circ}$C (32 °F) or hot locations where the temperature rises above 40 $^{\circ}$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.

■ Concerning PoE+ power supply

The unit complies with the IEEE802.3at standard. Use a compatible Ethernet hub and PoE+ injector to use a PoE+ power supply.

■ Turn off the power before connecting or disconnecting the cables.

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

■ H.264/H.265 patent pool licensing

This product is licensed based on the AVC Patent Portfolio License, and the license does not extend beyond uses by users, who engage in the acts described below, for their own personal and non-profit applications.

(i) Recoding of image information in compliance with the AVC standard (hereafter, "AVC videos")

(ii) Playing of AVC videos recorded by consumers engaging in personal activities or AVC videos acquired from licensed providers

For details, visit MPEG LA, LLC website (http://www.mpegla.com).

■ 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.

■ Keep the unit away from water

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

■ 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, no matter whether it is turned on or not.

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

■ 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.

■ Disposal of the unit

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

■ 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.

■ Do not use the unit in oily-smoky or dusty places.

Performance may be adversely affected if small particles or other foreign objects get inside the product.

Take extra care in environments where a special effect such as theatrical smoke is used.

■ Do not allow foreign matter to make contact with the rotating parts.

Failure to obey may cause the unit to malfunction.

■ 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.

■ Zooming and focusing

When the focus is set manually, out-of-focusing may occur during zooming. After zooming, if necessary, either adjust the focus or set the focus to auto.

When using the focus at the manual setting, proceed with zooming after setting the focus position at the Tele end where the focusing accuracy is higher. (However, if the distance form the unit to the object is less than 1.5 meters (4.9 ft), the subject may shift out of focus at the Wide end.)

If zooming is performed to the Tele end after having adjusted the focus at the Wide end, out-of-focusing may occur.

■ About the operation sound of pan/tilt

When pan/tilt is being operated, the operation sound is louder at high speed compare with that at low speed.

For environment with operation sound concern, operate the pan/tilt at a low speed.

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■ Information on software used with this product

This product incorporates the following software:

(1)   the software developed independently by or for Panasonic Connect Co., Ltd.,

(2)   the software owned by third party and licensed to Panasonic Connect Co., Ltd.,

(3)   the software licensed under the GNU General Public License, Version 2.0 (GPL V2.0),

(4)   the software licensed under the GNU LESSER General Public License, Version 2.1 (LGPL V2.1), and/or

(5) open source software other than the software licensed under the GPL V2.0 and/or LGPL V2.1.
The software categorized as (3) - (5) are distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY, without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. Please refer to the detailed terms and conditions that can be downloaded from the web screen

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, LGPL V2.1 or the other licenses with the obligation to do so, as well as the respective copyright notice thereof.

https://pro-av.panasonic.net

However, do not contact Panasonic for questions regarding obtained source codes.

Parts and Functions

Camera Unit
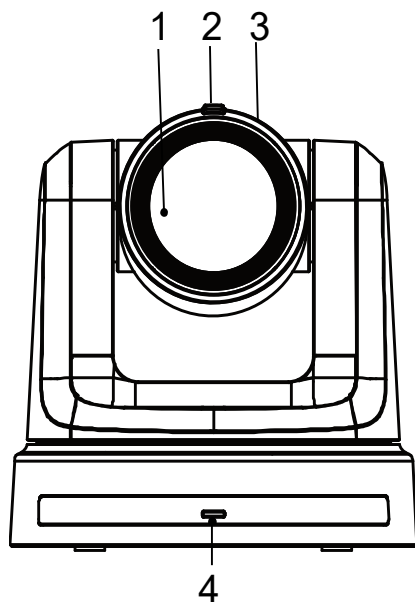
1. **Lens**
2. **Tally status indicator**
   - Red light: The unit is receiving tally command.
   - Red light flashing once (1Hz): The unit's pan/tilt limit is being configured.
   - Red light flashing twice (1Hz): The unit's pan/tilt limit is being cancelled.
   - Blue light: USB Video Class/Audio Class is in operation.
3. **Camera head**
4. **Power status indicator**
   - Orange light: Standby mode
   - Green light: The unit is turned on
   - Flashing green light (1Hz):　The unit is receiving a wireless remote control signal with a matching remote control ID
   - Flashing(1Hz) orange light: The unit is receiving a wireless remote control signal with a different remote control ID
   - Flashing (5Hz) green light: After Initialization 1 and Initialization 2 via DipSW
   - High speed (5Hz) flashing orange light: When a signal from the wireless remote control is received while the wireless control is set to "Disable" from the web screen menu.
   - Flash (1Hz) red light: Firmware updating
   - Red light: Firmware update failure or other abnormality.
5. **LAN indicator(LINK/ACT)**
   Lights up when data is transmitted/received via LAN.
6. **LAN connector**
   Use a category 5e or above LAN cable with a maximum length of 100 m (328 ft.)
   [Note]:
   Use of an STP (shielded twisted pair) cable is recommended.
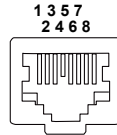
71
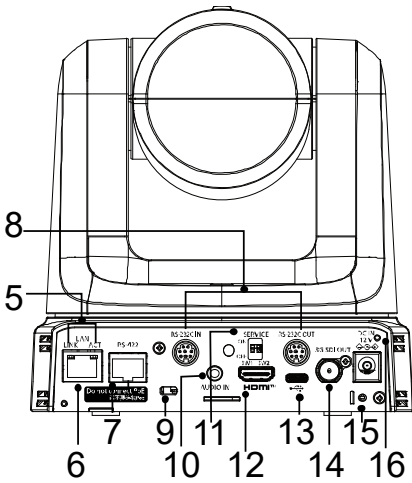
7. RS-422 connector [RS-422]

This RS-422 connector (RJ-45) is connected when exercising serial control over the unit from an external device.

Use a cable with the following specifications for the connection to this connector.

[Note]:

● LAN cable* (category 5 or above, straight cable), max. 1000 meters [3280 ft]

● **Use of an STP (shielded twisted pair) cable is recommended.**

Pin No.	Signal	Pin No.	Signal
1	GND	5	TXD +
2	—	6	RXD +
3	RXD −	7	—
4	TXD −	8	—

8. RS-232C connectors [RS-232C IN/OUT]

Connect to RS-232C cables.

RS-232C IN/OUT connector

Mini DIN 8-pin (JST)

RS-232C IN		RS-232C OUT	
Pin No.	Signal	Pin No.	Signal
1	DTR_IN	1	DTR_OUT
2	DSR_IN	2	DSR_OUT
3	TXD_IN	3	TXD_OUT
4	GND	4	GND
5	RXD_IN	5	RXD_OUT
6	GND	6	GND
7	IR OUT R	7	NC
8	IR OUT L	8	NC

[Note]:

Be aware that the polarities (+/−) of the serial data may be different depending on the specifications of the device to be connected.

9. Anti-theft wire mounting hole

Use this hole to attach the wire bracket (commercially available).

10. Audio input connector [AUDIO IN]

Inputs external audio (microphone, line).
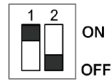
72
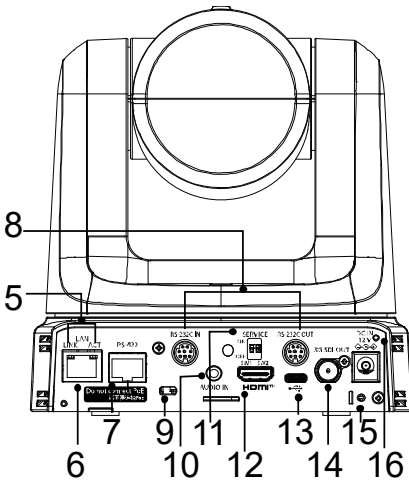
11. Service Switch

- **Default**: a full reset

  The unit is in its default mode.

- **Initialization 1:**

  Reset the user authentication settings for network connection. (This will delete all the registered user information (IDs/passwords). After configuring the SERVICE switch in the manner of the following illustration, power on the unit.
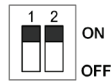

  [Note]:

  1. Once Initialization 1 is configured properly, the unit's status indicator LED blinks green.
  2. Restore the SERVICE switch to its previous setting. (Both SW1 and SW2 are set to OFF.)
  3. Restart the unit to fully accomplish the setting of Initialization 1.

- **Initialization 2**

  Initialization 2 restores the unit to its factory default, including the setting of the menu, and the Network Configuration.

  After configuring the SERVICE switch in the manner of the following illustration, power on the unit.

  [Note]:

  1. Once Initialization 2 is configured properly, the unit's status indicator LED in front of the unit blinks green.
  2. Restore the SERVICE switch to its previous setting. (Both SW1 and SW2 are set to OFF.)
  3. Restart the unit to fully accomplish the setting of Initialization 2.

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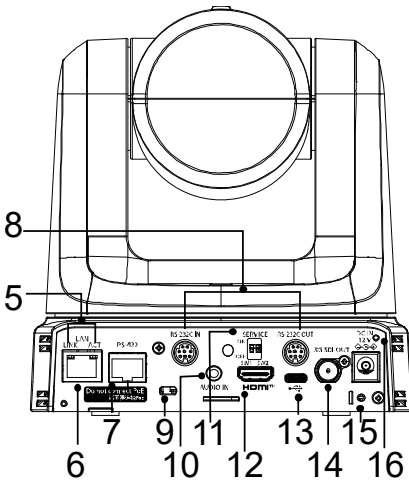
12. HDMI connector

This is the HDMI video signal output connector. For limitations that pertain when simultaneously outputting HDMI and SDI signals, refer to the section on the Priority Mode in <Operations and Settings>.

13. USB Type-C terminal [⌁]

The unit can be used as a Web camera by connecting the unit and a personal computer with USB Video Class.

14. SDI OUT connector [3G-SDI OUT]

This is the SDI video signal output connector. For limitations that pertain when simultaneously outputting HDMI and SDI signals, refer to the section on the Priority Mode in <Operations and Settings>.

15. Screw hole for cable fixing bracket

16. DC IN connector [12V⎓ IN ⊖─⊙─⊕]

Connect the AC adaptor supplied with the unit to this connector to supply the DC 12 V voltage to the unit.
[Note]
System will reboot as you plug in/out the AC adapter in/out even when the power is supplied from a PoE+ switch.
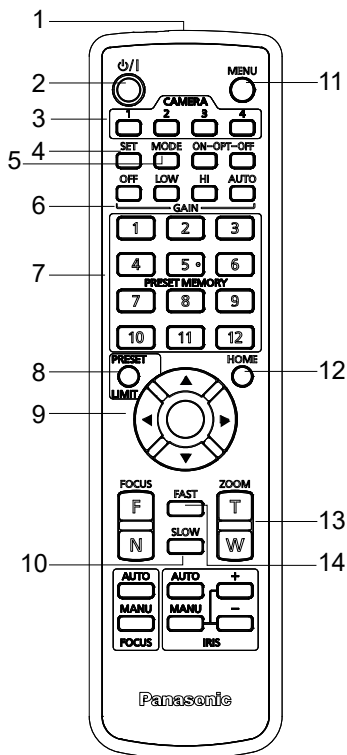
Wireless Remote Control (optional accessory)

You can operate the unit with the optional wireless remote control (AW-RM50AG).

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

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	**CAMERA 1 to 4 buttons** Selects a camera to be operated. Once a button has been selected, the unit corresponding to the selected button can be operated.
4	**SET button** If this button is pressed when the [AWB A] memory or [AWB B] memory has been selected for the white balance adjustment, the white balance is automatically adjusted and registered in the selected memory.
5	**MODE button** Each time you press the button, the signal switches between the color bar signal output and the camera image output.
6	**GAIN buttons [OFF] [LOW] [HI] [AUTO]** These are used to set the gain. The gain increase can be set in three steps using the [OFF], [LOW] and [HI] buttons. [OFF] is set to 0 dB, [LOW] is set to 9 dB, and [HI] is set to 18 dB. When the [AUTO] button is pressed, the AGC function is activated, and the gain is adjusted automatically depending on the light quantity. The maximum gain of the AGC function can be set using the camera menu.
7	**1 to 12 buttons** These are used to call the information on the unit's directions and other settings, which have been registered in the units preset memories No.1 to No.12, and reproduce those settings. Setting in preset memories No.13 and above cannot be called from the wireless remote control.
8	**PRESET button** Press this button and any of the buttons from 1 to 12 simultaneously to register a preset memory.

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9	**Pan-tilt buttons and menu operation buttons**
	(1)These are used to change the unit's direction. The unit is tilted in the up/down direction using the [▲] and [▼] buttons and panned in the left/right direction using the [◄] and [►] buttons.
	The [○] button does not work during tilting and panning.
	When the [▲] or [▼] and [◄] or [►] buttons are pressed at the same time, the unit moves diagonally.
	(2) The buttons are used for menu operations when the unit displays the camera menus.
	Use the [▲] and [▼] buttons to select the menu items. When a selected item has a sub-menu, the sub-menu will be displayed by pressing the [○] or [►] button. When the [○] or [►] button is pressed on the setting menu at the bottom hierarchical level, the new setting is entered.
10	**SLOW button**
	This is used to change the movement speed at which the panning, tilting, zooming and focusing operations are performed to the low speed.
11	**MENU button**
	Press and hold for 2 seconds to display the camera menu of the unit.
12	**HOME button**
	When this is pressed for 2 seconds, the unit's direction (panning or tilting) returns to the front of the unit and the zoom level of the unit is changed back to x1.
13	**ZOOM button**
	These are used to adjust the digital zoom. The zoom is adjusted in the wide-angle using the [W] button and in the telephoto using the [T] button
14	**FAST button**
	This is used to change the movement speed at which the panning, tilting, zooming and focusing operations are performed to the high speed.

This unit can be operated by remote control using a wireless remote control (model number: AW-RM50AG) purchased separately. Check out the following points before using the wireless remote control.

- **Point the wireless remote control at the unit's wireless remote control signal light-sensing area (front side and back side), and operate it within a range of 10 meters (32.8 ft.) from the area.**
- **Refer to <Layout of wireless remote control signal light-sensing areas> on the below.**
- **The signal sensing distance is reduced if the angle at which the wireless remote control signals are sensed is increased.**
  The light-sensing sensitivity is reduced to about one-half when the wireless remote control is pointed at an angle of 40 degrees from each position in front of a wireless remote control signal light-sensing area (front panel or back panel).
- **If the unit is installed near fluorescent lights, plasma monitors or other such products or if the unit is exposed to sunlight, the effects of the light may make it impossible for the unit to be operated using the wireless remote control.**
  Be sure to follow the steps below for installation and use.
  - ✓ Take steps to ensure that the wireless remote control signal light- sensing area will not be exposed to the light from fluorescent lights, plasma monitors or other such products or from the sun.
  - ✓ Install the unit away from fluorescent lights, plasma monitors and other such products.
- **For about 10 minutes even after the batteries have been removed from the wireless remote control, the selection of the operation to be performed (the CAMERA <1>, <2>, <3> or <4> button which was pressed last) will remain stored in the memory.**
  When a longer period of time elapses, however, the selection is reset to the status established when the CAMERA<1> button was pressed.
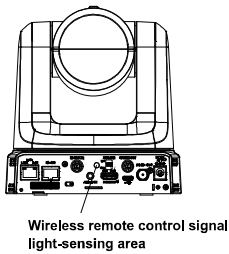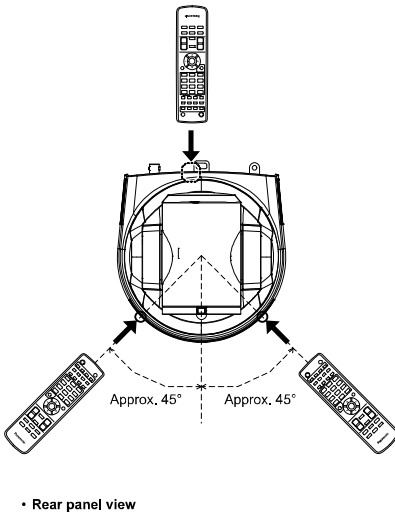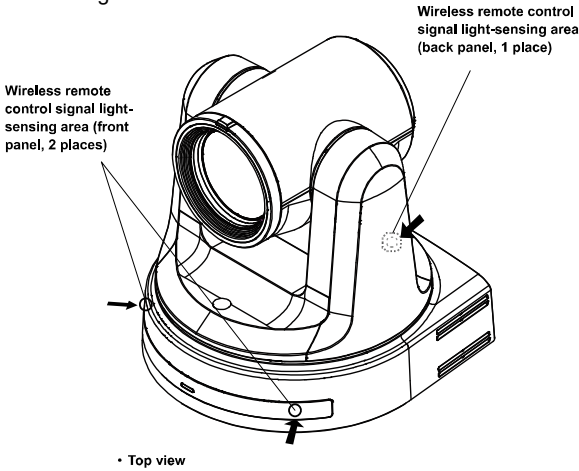- **The unit's status indicator LED blinks green when a signal matched by the wireless remote control ID has been received, and it blinks orange when a signal that is not matched by the wireless remote control ID has been received.**
- **When the wireless control in the web screen menu is set to "Off", you cannot operate with the wireless remote control. The power status indicator flashes orange rapidly (5Hz).**
  When operating with the wireless remote control, set the wireless control in the web screen menu to "On".

\<Layout of wireless remote control signal light-sensing areas\>

[Note]The arrows in the figure below show the light-sensing directions in which the wireless remote control signals travel.

Wireless remote control signal light-sensing area (back panel, 1 place)

Wireless remote control signal light-sensing area (front panel, 2 places)

• Top view

Approx. 45°   Approx. 45°

• Rear panel view

Wireless remote control signal light-sensing area

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Network Settings

Use the Easy IP Setup Software to Establish the Unit's Settings

The settings related to the unit's network can be established using the Easy IP Setup Software. You can obtain Easy IP Setup Software (EasyIPSetup.exe) by downloading it from the following website: https://pro-av.panasonic.net/

- To establish the settings for a multiple number of units, the settings must be selected for each camera involved.
- If the settings cannot be established using the Easy IP Setup Software, select the settings separately for the unit and personal computer on the network page of the setting menu. For further details, refer to the "Operating Instructions — <Operations and Settings>" (PDF file).

[Note]
- 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 remote camera controller AW-RP150 or AW-RP60 at the same time. The IP address settings may no longer be recognized as a result.
- To enhance the security of the Easy IP Setup Software, it will not be possible to make network settings for the target camera once about 20 minutes or more have elapsed after turning the power of the camera on. (When the [Easy IP Setup accommodate period] setting is [20min].
- The Easy IP Setup Software cannot be used from a different subnet via a router.

1 **Double-click EasyIPSetup.exe to start the Easy IP Setup Software.**

2 **Click the [Search] button.**
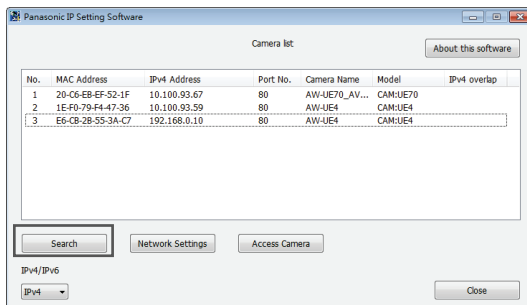
3 **Click the MAC address/IPv4 address of the camera to be set, and click the [Network settings] button.**
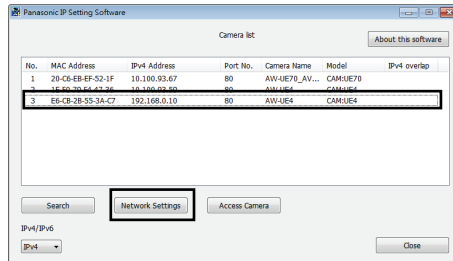
- When a DHCP server is being used, the IP address allocated to the unit can be checked by clicking the [Search] button of the Easy IP Setup Software.
- If the same IP address is used for any additional cameras, the numbers of the additional cameras will be displayed in the "IPv4 overlap" column of the cameras concerned.
- When the [Access Camera] button is clicked, the Live screen of the selected camera is displayed.

4 **Input the network items, and click the [Save] button.**
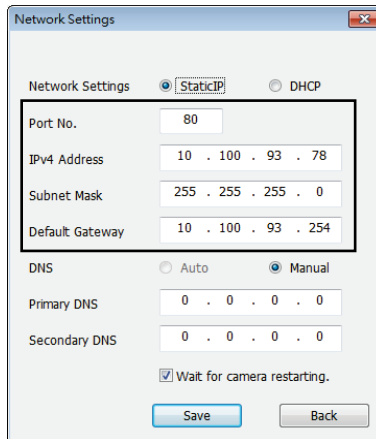
- When a DHCP server is being used, [DNS] of the Easy IP Setup Software can be set to [Auto].
- After the [Save] button is clicked, it takes about 1 minute for the settings in the unit to be completed.
- If the AC adaptor or LAN cable is disconnected before the settings are completed, the settings will 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.

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Use the EasyIP Setup Tool Plus Software to Establish the Unit's Settings

The settings related to the unit's network can be established using the EasyIP Setup Tool Plus Software. You can obtain EasyIP Setup Tool Plus Software (EasyIPSetupToolPlus.exe) by downloading it from the following website:

https://pro-av.panasonic.net/

- To establish the settings for a multiple number of units, the settings must be selected for each camera involved.
- If the settings cannot be established using the EasyIP Setup Tool Plus Software, select the settings separately for the unit and personal computer on the network page of the setting menu. For further details, refer to the "Operating Instructions — <Operations and Settings>" (PDF file).

[Note]
- 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 EasyIP Setup Tool Plus Software programs at the same time for a single camera. Similarly, do not perform the "Auto IP setting" operation of the remote camera controller AW-RP150 or AW-RP60 at the same time. The IP address settings may no longer be recognized as a result.
- To enhance the security of the EasyIP Setup Tool Plus Software, it will not be possible to make network settings for the target camera once about 20 minutes or more have elapsed after turning the power of the camera on. (When the [Easy IP Setup accommodate period] setting is [20min].)
- The EasyIP Setup Tool Plus Software cannot be used from a different subnet via a router.

1 **Double-click EasyIPSetupToolPlus.exe to start the EasyIP Setup Tool Plus Software.**

**2** **Click the [Search] button.**
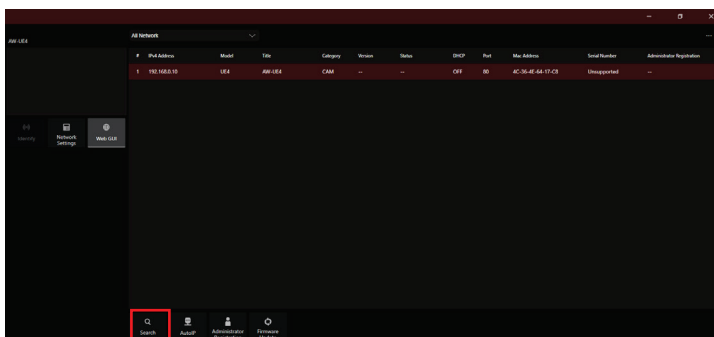
3 **Click the MAC address/IPv4 address of the camera to be set, and click the [Network settings] button.**
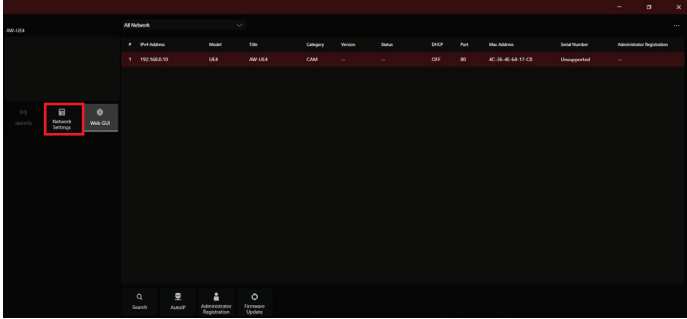
- When a DHCP server is being used, the IP address allocated to the unit can be checked by clicking the [Search] button of the EasyIP Setup Tool Plus Software.
- If the same IP address is used for any additional cameras, the numbers of the additional cameras will be displayed in the "IPv4 overlap" column of the cameras concerned.
- When the [Web GUI] button is clicked, the Live screen of the selected camera is displayed.
- The screen display of EasyIP Setup Tool Plus may vary by its version.

4 **Input the network items, and click the [Setup] button.**
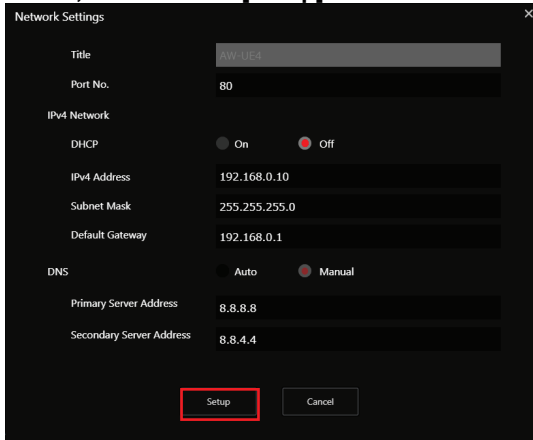
- When a DHCP server is being used, [DNS] of the EasyIP Setup Tool Plus Software can be set to [Auto].
- After the [Setup] button is clicked, it takes about 1 minute for the settings in the unit to be completed.
- If the AC adaptor or LAN cable is disconnected before the settings are completed, the settings 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.

Setting the Initial Account

1 Set the initial account.

In the initial state, the initial account setting screen is displayed when the web screen is displayed.

Set a user name and password.

[Note]

- The usable symbols for user name is following (# % + = , - _ ^ / @ . ~)
- Do not set character strings that can be easily guessed by third parties.
- Change the password at regular intervals.
- The password must use at least 3 of the following 4 character types and be 8 characters or longer.

  Alphabet upper cases

  Alphabet lower cases

  Numerals

  Symbols (# % + = , - _ ^ / @ . ~)

- When a password is set that does not adhere to the above policy, take responsibility for use of the device with due consideration for the security risks in the installation environment, etc.
- A warning is displayed if the set password goes against the recommended setting policy. When changing the password, click the [Back] button and set the password again.
- When continuing with the setting with full understanding of the security risks, click [Continue] to complete the setting.
- If you forget the account information that was set, use the switches for initialization of service switches to reset the user information used for connecting to the network. (→ page 73)

2 Completing registration of the initial account

After completing registration of the initial account, the following registration completed screen is displayed.

Administrator registration completed.

Automatically reconnect to camera after 10 seconds.
If it is not automatically reconnected, please click here.
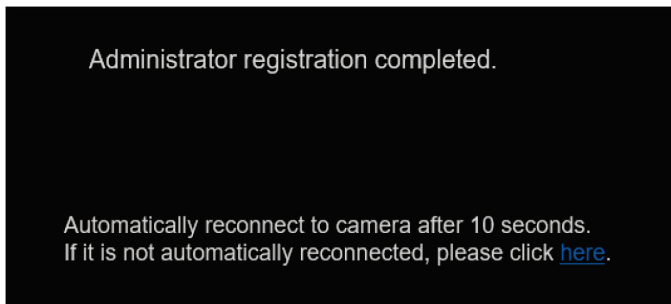
The live screen [Live] is automatically displayed after about 10 seconds elapse after the completed screen is displayed. If the live screen [live] is not displayed after 10 seconds elapse, manually move to the live screen [Live] by clicking the "please click here" link.

This completes the process of registering the initial account.

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 → Page 63

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 (factory defaults)*
  - IP address : 192.168.0.10
  - Subnet mask : 255.255.255.0

* The factory default for the private address range is between 192.168.0.0 and 192.168.0.255.

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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.
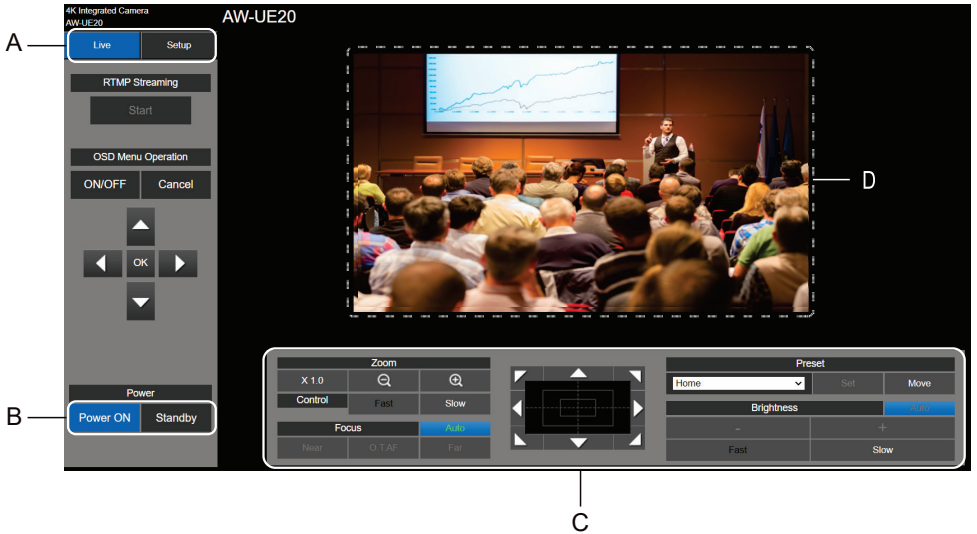
A. Switch between the live screen and the Setup screen.
B. Switch the unit from on to standby mode or vice versa.
C. Operate the camera.
D. The camera image is displayed.
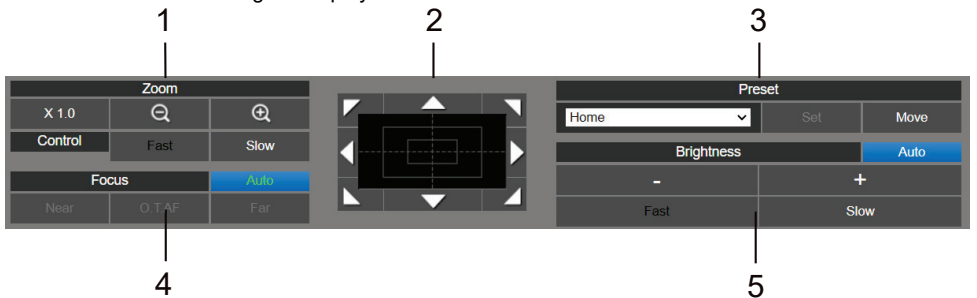
1 Zoom operation
2 Pan/tilt operation
3 Preset memory registration/retrieval
4 Focus operation
5 Brightness

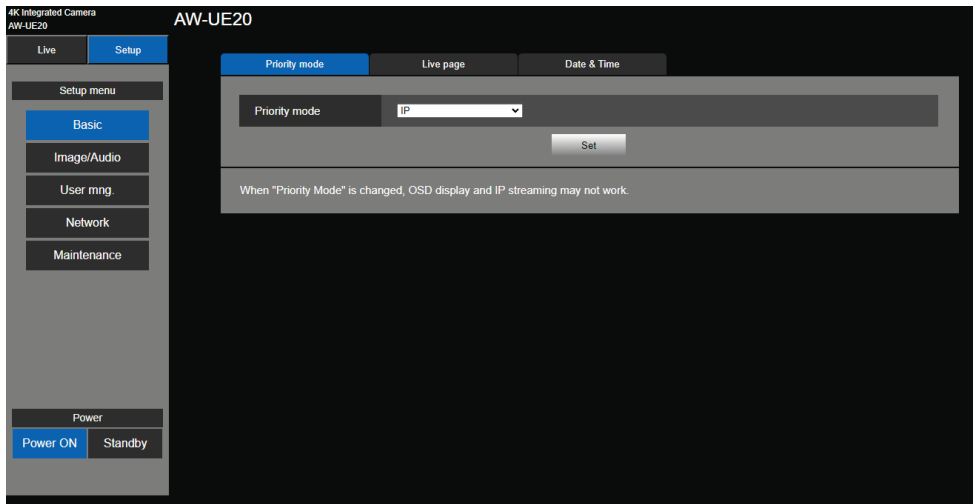For details regarding camera operations, refer to the "Operating Instructions <Operating the Camera unit>".

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2 Click [Setup] on the live screen.

The user identification screen is displayed.

3 Correctly enter the user name and password that has already been registered,and click [OK].

The Setup screen is displayed.

For details regarding the Setup screen, refer to the "Operating Instructions <Camera Menu Operation>".

- The camera cannot be operated in standby mode.
- If the wireless remote control and web browser are being used at the same time, the content selected using the wireless remote control may not be reflected on the web setting screen.
- When using both the wireless remote control and web browser, be absolutely sure to check the settings using the wireless remote control or camera menu.

Power on and Power Off the Camera Unit

Power on the Camera Unit

When performing the operations using the wireless remote control.

Set all the power switches of the units and devices connected in the system to ON.
When the power is supplied, the status display lamp lights orange. After the initial setting is completed, it switches to green and the power turns on.

[Note]
- During the initial settings operation, the unit cannot be operated.
- The unit stores its STANDBY / POWER ON mode status in the memory.
- If the power supply is cut off while the operation is in POWER ON mode, the operation will transfer to the POWER ON mode the next time power is supplied.
- When transferring to the STANDBY mode
  - Status indicator LED: Orange
  - When operation is transferred to the standby mode: The current pan-tilt position is stored in the memory (as a POWER ON preset), and the panning/tilting moves so that the camera points in the backward-facing direction.
- When transferring to the POWER ON mode
  - Status indicator LED: Green (after the initial setting operation is completed))
  - The pan/tilt unit is moved to the position which was stored in the memory when the transition to the STANDBY mode was made.
- POWER ON preset
  - The pan/tilt unit is moved to the setting, which was established immediately prior to the transition to the STANDBY mode, when the power has been turned on.
- If the power is turned off without transferring to the STANDBY mode, the pan/tilt unit position will not be stored in the memory or reflected in the POWER ON preset. The previous POWER ON preset will be applied.

When performing the operations using the controller (AW-RP60, AW-RP150).
For details, refer to the operating instructions for the controller.

Power off the Camera Unit

When performing the operations using the wireless remote control

1. **Press one of the CAMERA<1> to CAMERA<4> buttons on the wireless remote control to select the unit.**

2. **Press the [ON/STANDBY] button on the wireless remote control for 2 seconds.**
   The unit enters STANDBY mode.

3. **The unit's status display lamp now lights up orange.**

4. **If a multiple number of units are used, repeat steps 1 and 2 as required.**

5. **Set all the power switches of the units and devices connected in the system to OFF.**

When performing the operations using the controller (AW-RP60, AW-RP150).
For details, refer to the operating instructions for the controller.

Troubleshooting

| Symptom	Cause and solution
No power	Is the AC adaptor securely connected to the AC outlet?
	If the power plug of the AC adaptor connected properly?
	Is the network cable for the PoE+ (IEEE802.3at) compatible power supply device and the unit connected properly?
	Power may not be supplied if the total power limit is exceeded on power supply devices that allow connections to multiple PoE+ terminals.
	If the unit is connected to the controller, has it been connected properly? → For details, refer to the operating instructions for the controller.
Cannot operate (common to wireless remote control, controller)	Is the power on? → If the unit's status display lamp is off or lights up orange, it means that the unit's power is not on or the unit is starting up.
	Has the unit you want to operate been selected properly?
Cannot operate using the wireless remote control	Have the remote control's batteries run down or have the batteries been installed with their polarities reversed? → If the status display lamp does not blink even when the wireless remote control is operated near the wireless remote control signal light-sensing area, it means that the batteries have run down. Replace the batteries.
	Is the correct Remote Control ID selected in the menu settings?
	Is there a fluorescent light or plasma monitor near the unit and, if so, is the wireless remote control signal light-sensing area exposed to its light?
	Is the wireless control on the web screen menu not set to "Off"? → If the power status indicator flashes orange rapidly (5Hz) when operated with the wireless remote control, the wireless control in the Web screen menu is set to "Off".
Cannot operate using the controller	Is the unit connected to the controller properly? → For details, refer to the operating instructions for the controller.
	It may be necessary to upgrade the version of the controller so that the controller will support the unit. → For details on upgrading, visit the support page on the following website. https://pro-av.panasonic.net/

Symptom	Cause and solution
Cannot operate using the controller	**If the initial account has not been set for the AW-UE20, the unit cannot be controlled from the AW-RP60/AW-RP150.** **Please access this machine from a web browser and set up an account.**
	If the user authentication function of AW-UE20 is enabled, please make sure that the correct user name and password are set on the controller.
The unit turns in the opposite direction to the one operated	**Has the Install Position setting been selected correctly?**
	The reversal setting may have been established at the controller if the unit is connected to the controller. → For details, refer to the operating instructions for the controller.
Cannot access from a web browser	**Has a LAN cable of category 5e or above been connected to the LAN connector for IP control <LAN LINK/ACT>?**
	Is the [LINK] LED of the LAN connector for IP control lit? → If it is not lit, it means that something is wrong with the connection to the LAN or that the network at the connection destination is not working properly. Check the LAN cable for defective contacts, and check the wiring.
	Is the power on? → If the unit's status display lamp is off or lights up orange, it means that the unit's power is not on.
	Has a valid IP address been set in the unit?
	Is the same IP address setting being used by another unit? → Check out the IP addresses of the unit, access devices (personal computer, etc.) and any other cameras.
	Does the subnet mask setting match the network subnet of the connection destination? → Check out the subnet mask settings of the unit and access devices, and then consult with the network administrator.
	Has the "Use a proxy server" setting been selected by the web browser? (When the unit and the personal computer are connected to the same subnet) → If a proxy server has been set using the [proxy setting] of the web browser, it is recommended that a "Don't use proxy" address be selected as the unit's IP address setting.

Symptom	Cause and solution
Cannot access from a web browser	**Has the wrong IP address been accessed?** → Check the connections by following the steps below. **For Windows:** Using the Windows command prompt, execute > ping [IP address which has been set in the camera] A reply returned from the unit signifies that there are no problems in operation. If a reply is not received, try following operation: Reboot the unit, and within 20 minutes change the IP address using the Easy IP Setup Software/EasyIP Setup Tool Plus Software. **For Mac:** Using the OS X terminal, execute > ping -c 10 [IP address which has been set in the camera] A reply returned from the unit signifies that there are no problems in operation. If a reply is not received, try following operation: Reboot the unit, and within 20 minutes change the IP address using the Easy IP Setup Software/EasyIP Setup Tool Plus Software.
	Has the wrong default gateway been set for the unit? (When the unit and personal computer are connected to different subnets**)** → Check out the default gateway that has been set for the unit, and then consult with the network administrator.

Specifications

Power requirements:

DC === 12V (10.8V-13.2V)

DC === 42.5V to 57V

(PoE+ power supply)

Current consumption:

1.3A (Supplied AC adapter)

0.4A (PoE+ power supply)

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

=== DC

Indicates safety information.

■ **GENERAL**

- **Ambient operating temperature:** 0°C to 40°C (32°F to 104°F)
- **Storage temperature:** –20 °C to +50 °C (–4 °F to +122 °F)
- **Allowable humidity ranges:** 20 % to 90 % (no condensation)
- **Dimensions (W x H x D):** 165.1mm x 176.2mm x 176.1mm

(6.5 inches x 6.94 inches x 6.93 inches)

(Excluding protrusions, ceiling mount bracket)

- **Mass (Weight) :** Approx. 1.9 kg (4.19 lb)

(Excluding ceiling mount bracket)

■ **AC adaptor**

Input: 100 V to 240 V AC (∿), 50/60 Hz, 1.2A
Output: 12 V DC (===), 3.0 A, 36 W

Indicates safety information.

Inrush current, measured according to European standard EN55103-1, on initial switch-on: 4.5 A, after a supply interruption of 5 s: 16 A

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MEMO