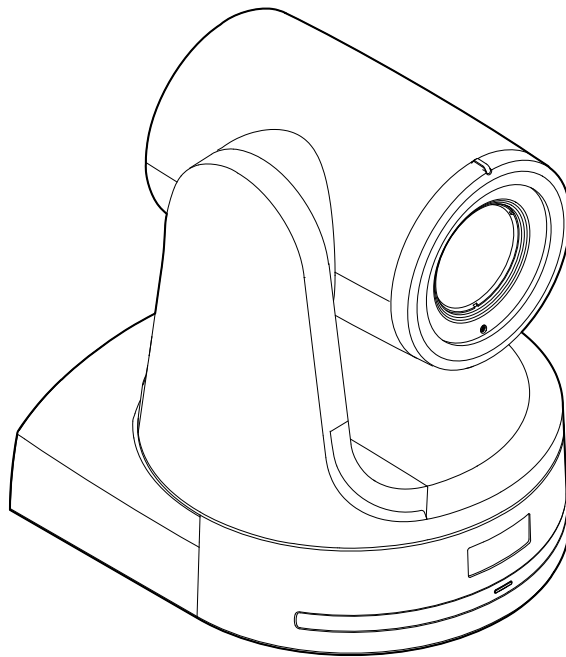# Panasonic

Installation Instructions

HD Integrated Camera

Model No. **AW-HE130WP**

Model No. **AW-HE130KP**

Model No. **AW-HE130WE**

Model No. **AW-HE130KE**

HDMI

Before operating this product, please read the instructions carefully and save this manual for future use.

● **About the instruction manuals**
　・**Operating Instructions:**
　　This manual describes how to operate and configure settings for the unit.
　・**Installation Instructions (this document):**
　　This manual includes information on installation and system configurations for the unit.
　　Be sure to read this before installing the unit to ensure proper installation.


Read this first!

⬚ indicates safety information.

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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

The following abbreviations are used in this manual.
- Microsoft® Windows® 7 Professional SP1 32/64-bit is abbreviated to "Windows 7".
- Microsoft® Windows® 8 Pro 32/64-bit is abbreviated to "Windows 8".
- Microsoft® Windows® 8.1 Pro 32/64-bit is abbreviated to "Windows 8.1".
- Windows® Internet Explorer® 8.0, Windows® Internet Explorer® 9.0, Windows® Internet Explorer® 10.0, and Windows® Internet Explorer® 11.0 are abbreviated to "Internet Explorer".

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-HE130WP	AW-HE130
AW-HE130KP	
AW-HE130WE	
AW-HE130KE	
AW-HS50N	AW-HS50
AW-HS50E	
AW-RP50N	AW-RP50
AW-RP50E	
AW-RP120G	AW-RP120
AK-HRP200G	AK-HRP200

■ 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.
- Screen shots are used according to Microsoft Corporation guidelines.

Contents

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 2) of this manual as they contain important information.

After the installation, give the "Installation Instructions" to the customer to save for future use.

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

■ This unit is for indoor use only.

It cannot be used outdoors.

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

Otherwise, deformation, discoloration, malfunctioning and/or problems in operation may result. Operate the unit where it will not be splashed or sprayed by water.
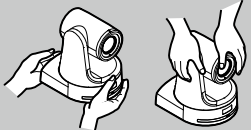
■ Use the unit with an installation where the unit is suspended from an overhead surface or with a stand-alone installation.

Do not use the unit on its side or tilted at an angle.

<NOTE>

Be absolutely sure to use the four bracket mounting screws (M4) 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
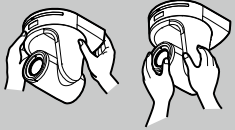
M4 : 1.47 N · m {15 kgf · cm}

• The withdrawal strength of the mounting location for each screw must be at least 294 N {30 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.

OK　NG　　OK　NG

Desktop installation　　Hanging installation

■ Concerning the installation location

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

Install the unit after conferring in detail with your dealer.

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

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

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

• On walls (where the unit would be installed sideways)

• In locations (including places such as under the eaves of a building) where the unit would be directly exposed to rain or water

• In locations such as kitchens where there are high concentrations of steam and grease

• In outdoor locations or hot places where the temperature will exceed 40 °C (104 °F)

• In cold locations where the temperature will drop below 0 °C (32 °F)

• In locations where the humidity will exceed 85 %

• In locations where chemicals are used such as near swimming pools

• At sea, in coastal areas or in locations where corrosive gases are emitted

• In locations where radiation, X-rays, or strong radio waves or magnetic fields are generated

• In locations where the unit would be subject to a great deal of vibration such as on board a vehicle or ship (this unit is not designed to be used in vehicles)

• In locations where the temperature is subject to sudden changes such as near the air outlet of an air conditioner or near a door which allows the outside air to come in

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

• Using the unit for a prolonged period in a location with high temperature and humidity levels will cause its parts to deteriorate and shorten its service life.

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

■ Be absolutely sure to use the supplied 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.

AW-HE130 main unit	Mounting conditions					
	Applicable mount bracket			Mounting onto the ceiling		
Mass	Model No.	Mass	Mounting	Recommended screws	No. of screws	Minimum withdrawal strength (per screw)
Approx. 2.8 kg (6.17 lb) (Including mount bracket)	Direct mount (supplied accessory)	Approx. 0.3 kg (0.66 lb)	Hanging/Desktop	M4 screws (supplied accessory)	4	294 N (30 kgf) • Ensure that the mounting strength can support a weight that is at least five times the total mass of the equipment, including the camera's main unit.
	WV-Q105A (optional accessory)	Approx. 0.15 kg (0.33 lb)	For ceiling	M4 screws (supplied with the WV-Q105A)	4	

■ Before installation, always disconnect the power plug

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.

For details on how to remove the unit, refer to "Removing the camera" (→ page 13).

■ 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.
  (→ page 11)
- 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 (approx. 0.3 kg (0.66 lb)) of the AC adaptor.

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

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

■ Power switch

This unit does not have a power switch. The power turns on when its power plug is connected to a power outlet. When the power is turned on, the pan, tilt, zoom and focusing operations are performed.[1] Before proceeding with maintenance, be absolutely sure to disconnect the power plug from the power outlet.

  [1] The unit is set to Standby mode under factory default settings. When turning the unit for the first time, release the unit from Standby mode.
  For details, refer to the Operating Instructions.

■ Connecting the power cable

Be absolutely sure to connect the power cable of the AC adaptor through a circuit breaker using one of the following methods.
  (1) Connect the power cable through a power control unit.
  (2) Connect the power cable to a circuit breaker in a power distribution panel with a contact distance of 3.0 mm (1/8 inches) or more.
  Use a circuit breaker which is capable of shutting off all the poles of the main power supply with the exception of the protective ground conductor.
  (3) Install the AC adaptor near the power outlet, and connect it through the power plug.

■ Grounding

Before operating the unit, check that SIGNAL GND has been securely grounded.

■ If there is a possibility of noise interference

Either wire the cables so that the power cable (ceiling light cord) of AC 100 V[1] (AC 220 V[2]) 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.)

  [1] For AW-HE130WP, AW-HE130KP
  [2] For AW-HE130WE, AW-HE130KE

■ Radio signal interference

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

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

Doing so may cause malfunctioning.

■ Allowing the generated heat to escape

This unit allows the heat generated inside to escape from its surfaces.
Do not install the unit in a location where it will be surrounded by walls or other surfaces and where heat will be trapped.
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.
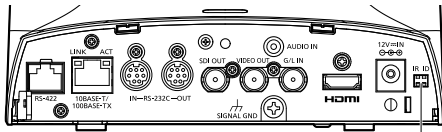
■ PoE+ power supplies

Use a PoE+ (IEEE802.at) compatible hub or power supply device.

Before installation

Be sure to configure the switches on the connector panel and bottom of the unit before installing it.
Configuring the switches after the unit is installed may prove difficult.

IR ID switch settings

The IR ID switches are located on the connector panel of the unit.
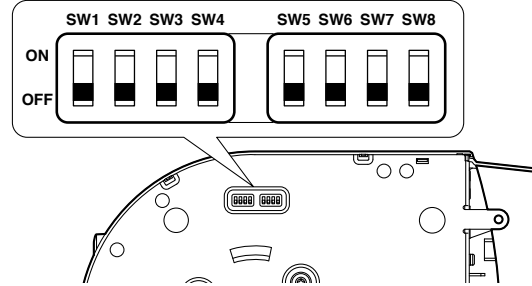

IR ID switch

CAM1	CAM2	CAM3	CAM4
IR ID	IR ID	IR ID	IR ID

These are used to select the ID of the wireless remote control (optional accessory).
The IR ID switch settings "CAM1" to "CAM4" correspond to the <CAM1> to <CAM4> buttons on the wireless remote control.

Service switch settings

The service switches are located on the bottom of the unit.

	Function	OFF	ON	Factory settings
SW1	Camera address setting (standard serial communication)	See descriptions for SW1 to SW3		OFF
SW2				OFF
SW3				OFF
SW4	Communication format	Panasonic proprietary serial communication	Standard serial communication	OFF
SW5	Always leave at OFF (used for factory adjustments)			OFF
SW6	Infrared output OFF	Disable	Enable	OFF
SW7	Communication baud rate	9600 bps	38400 bps	OFF
SW8	Communication connector	RS-422	RS-232C	OFF

<NOTE>
• Perform switch settings before turning the unit on.
• Cameras whose camera address setting switches are set to AUTO cannot coexist with cameras whose switches are set to 1 to 7.
• Manually setting multiple cameras to the same address will not allow you to control multiple cameras from a single controller simultaneously.

SW1 to SW3 (camera address setting switches)
Configure the camera address.
Set this to AUTO under normal circumstances. When cameras are set to AUTO, addresses will be assigned to the cameras automatically in response operation from the controller in the order in which the cameras were connected.
To manually configure the address, set the switches as follows.

Address	AUTO	1	2	3	4	5	6	7
SW1	OFF	ON	OFF	ON	OFF	ON	OFF	ON
SW2	OFF	ON	ON	OFF	OFF	ON	ON	OFF
SW3	OFF	ON	ON	ON	ON	OFF	OFF	OFF

SW4 (communication format selection switch)
Selects the communication format.
When this is set to ON, standard serial communication is enabled.
When this is set to OFF, Panasonic's proprietary serial communication is enabled.

SW5 (maintenance switch)
Fixed at OFF.
Do not change this switch setting.

SW6 (infrared output switch)
When this is set to ON, infrared output is enabled. The signal received via the remote control sensor is output from pins 7 and 8 of the <RS-232C IN> connector.
Signal output is disabled when this is set to OFF.

SW7 (communication baud rate switch)
When this is set to ON, the baud rate is 38400 bps.
When this is set to OFF, the baud rate is 9600 bps.

SW8 (communication connector switch)
When this is set to ON, the RS-232C is enabled.
When this is set to OFF, the RS-422 is enabled.
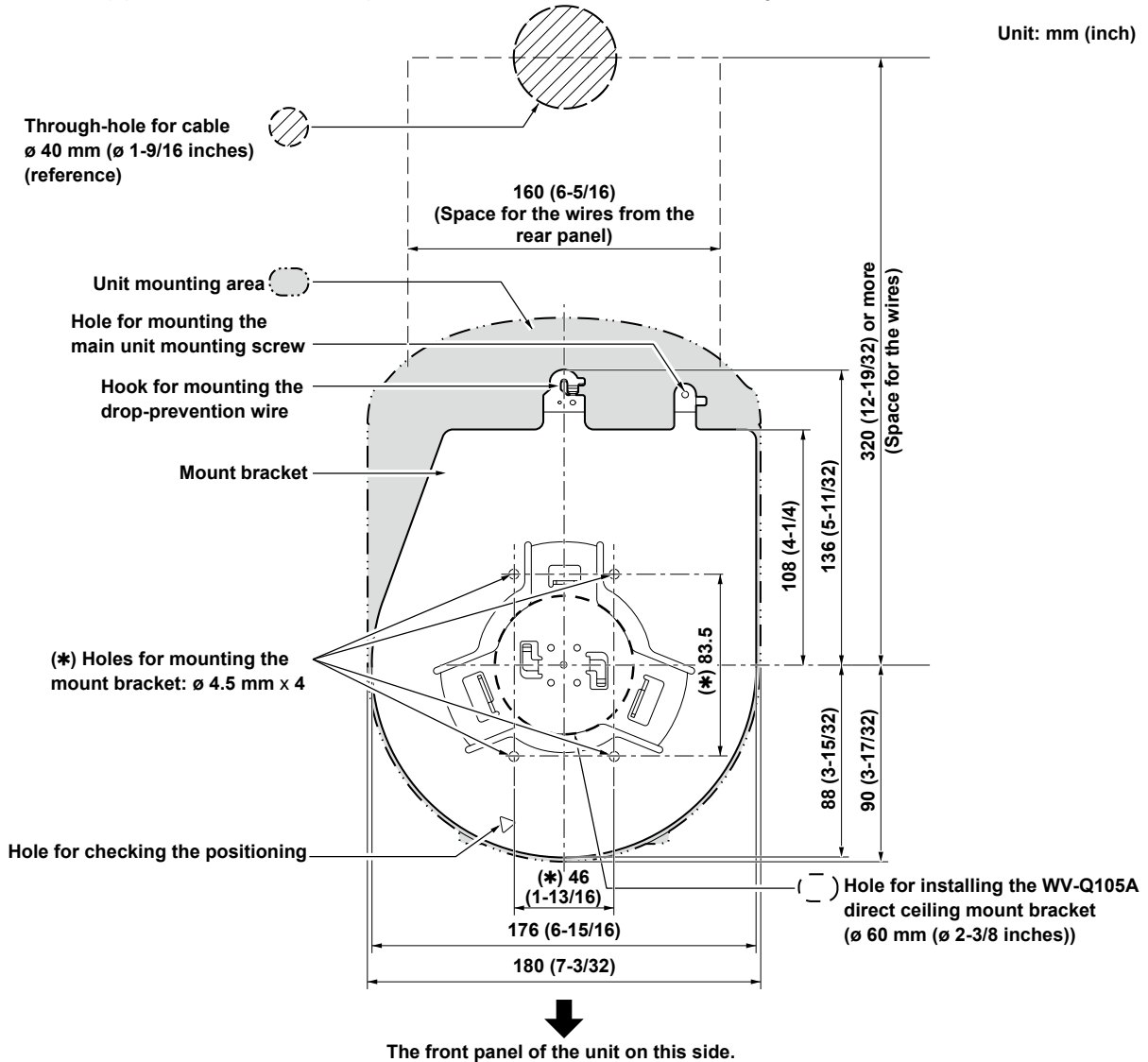
How to install and connect the unit

Be absolutely sure to read through the "Read this first!" (→ page 2) and "Installation precautions" (→pages 4 to 5)

The procedure given here is for the kind of installation where the unit is suspended from an overhead surface, but the same steps are followed for a stand-alone installation.

> **If the ceiling panel is not strong enough to bear the unit's weight, use the kind of mount bracket that is supported by anchor bolts between the concrete ceiling and ceiling panel. The unit supports the WV-Q105A direct ceiling mount bracket which is used solely for combination cameras. Use this bracket to install the unit. (→ page 11)**
> **In a case like this, the holes (ø 60 mm (ø 2-3/8 inches)) for installing the direct ceiling mount bracket on the ceiling must be drilled in the ceiling panel.**
> **It is also recommended that you provide an inspection space or opening for access purposes in the area near where the equipment is installed in order to facilitate installation and the wiring connections work.**
> **For details on supplied accessories, refer to the Operating Instructions.**

1. Check the mounting space.
- Refer to the illustration, and determine where the unit is to be installed and in which direction it should be mounted. Factor in the unit mounting area and include space for the wires extending from its rear panel.
- The asterisk (✱) in the illustration marks the position and dimensions of the hole for mounting the mount bracket.

Unit: mm (inch)

Through-hole for cable ø 40 mm (ø 1-9/16 inches) (reference)

160 (6-5/16) (Space for the wires from the rear panel)

Unit mounting area

Hole for mounting the main unit mounting screw

Hook for mounting the drop-prevention wire

Mount bracket

(✱) Holes for mounting the mount bracket: ø 4.5 mm x 4

Hole for checking the positioning

320 (12-19/32) or more (Space for the wires)

136 (5-11/32)

108 (4-1/4)

(✱) 83.5

88 (3-15/32)

90 (3-17/32)

(✱) 46 (1-13/16)

176 (6-15/16)

180 (7-3/32)

( ) Hole for installing the WV-Q105A direct ceiling mount bracket (ø 60 mm (ø 2-3/8 inches))

The front panel of the unit on this side.

<NOTE>
- Before proceeding to install and connect the main unit, connect the LAN cable, HDMI cable, RS-232C cable, AC adaptor cable and coaxial cables in the space above the ceiling panel, and then pass the cables through the cable holes.
- 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.

How to install and connect the unit (continued)

2. Mount the mount bracket onto the installation surface.
- Use the bracket mounting screws (M4, bind-head: 10 mm long) supplied with the unit.
- For proper clamping torque, securely attach the screws using the specified tools.

Screw diameter	Clamping torque
M4	1.47 N · m (15 kgf · cm)

Bracket mounting screws x 4 (supplied) (M4, bind-head)
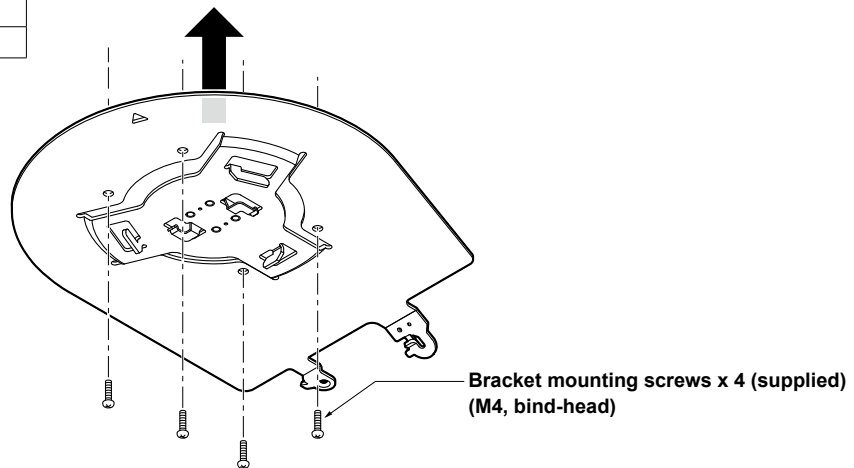
<NOTE>
- Use only the screws supplied with the unit. Do not use any other screws such as wood screws, nails, etc.

3. Attach the drop-prevention wire.
- Loop the circle part of the drop-prevention wire, which has been attached to the bottom panel of the unit, around the end of the hook part of the mount bracket.
- Pull the drop-prevention wire, and check that it has been attached securely to the hook.
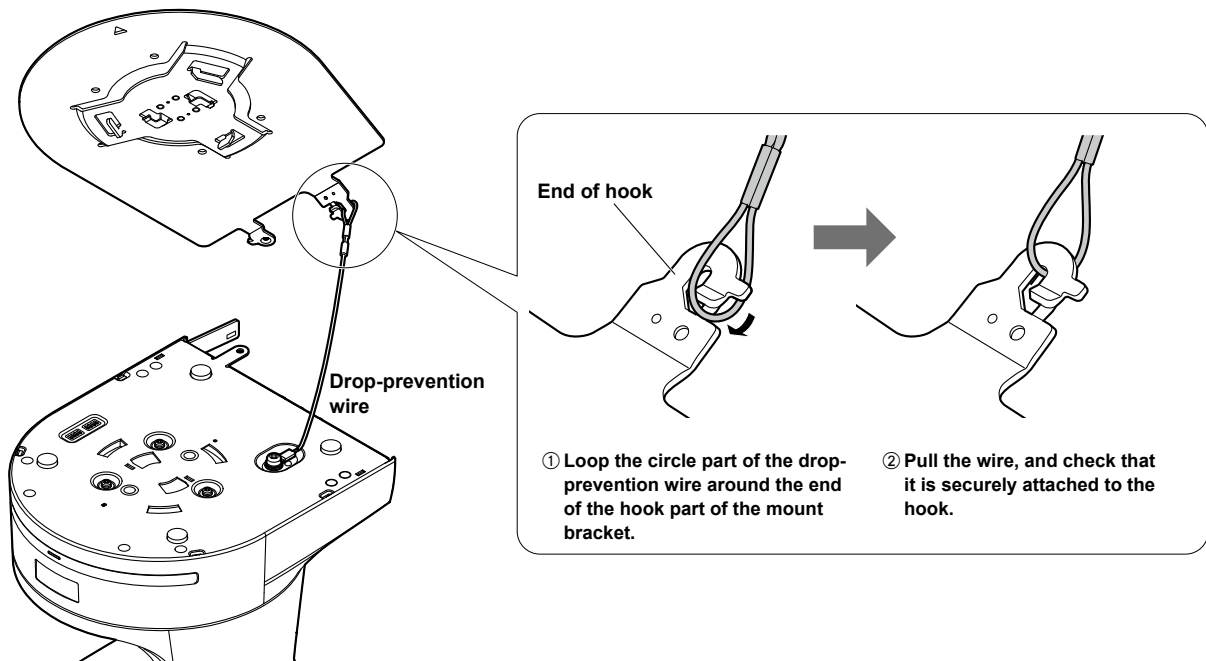
End of hook

Drop-prevention wire

① **Loop the circle part of the drop-prevention wire around the end of the hook part of the mount bracket.**

② **Pull the wire, and check that it is securely attached to the hook.**

<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.

8

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 bracket and camera firmly together, and rotate the main unit by about 20 degrees in the direction of the arrow.
- Secure the mount bracket to the unit using the main unit mounting screw (M3) as supplied.
- Attach the mount bracket securely with the prescribed tool using the clamping torque below.
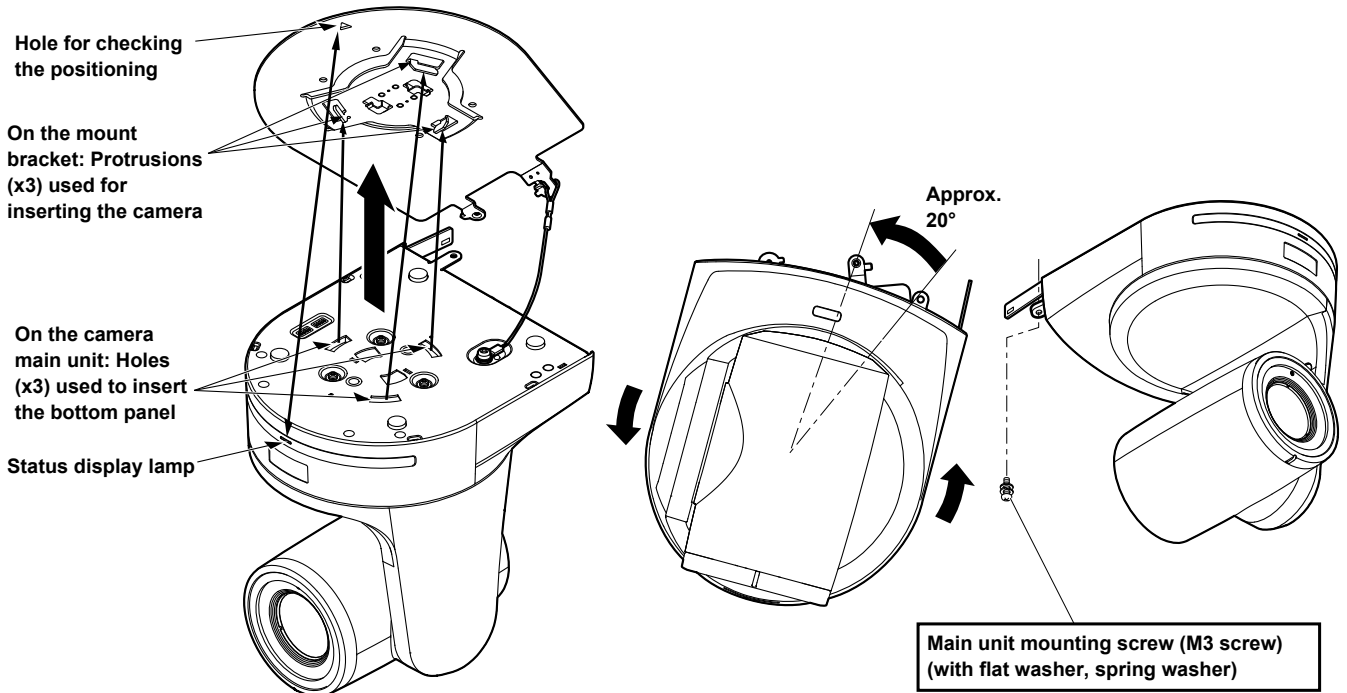- Be absolutely sure to verify that none of the screws are loose.

Screw diameter	Clamping torque
M3	0.78 N · m (8 kgf · cm)

Hole for checking the positioning

On the mount bracket: Protrusions (x3) used for inserting the camera

On the camera main unit: Holes (x3) used to insert the bottom panel

Status display lamp

Approx. 20°

Main unit mounting screw (M3 screw) (with flat washer, spring washer)

<NOTE>
- Do not do this work while holding the camera head since doing so may result in malfunctioning of the unit.
- Use only the screws supplied. Do not use any other screws.
- 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 of the cables are connected.

5. Check the mounting.

Check out the following points.

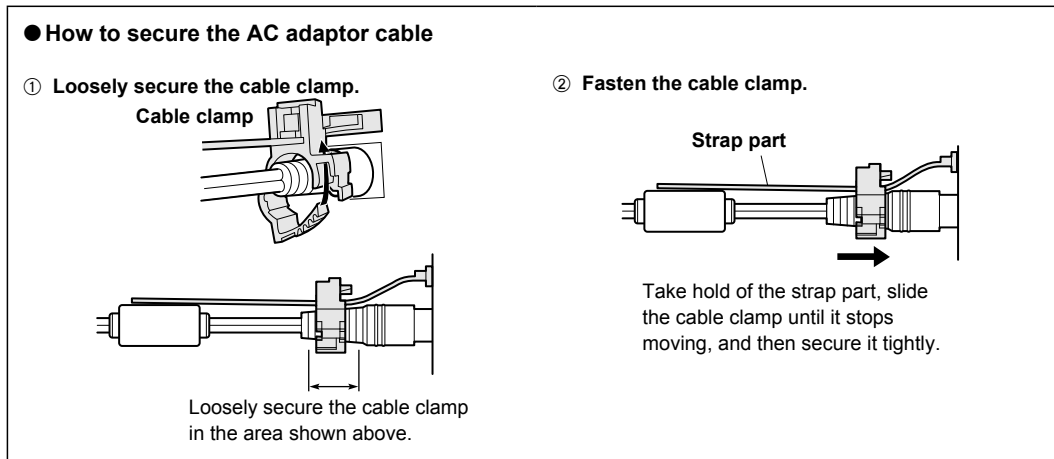- **The main unit mounting screw must be mounted securely.**
- **The unit must not tilt, and it must be mounted exactly.**
- **The unit must be securely installed.**
- **The unit pedestal part must not rotate even when an attempt is made to turn it.**

6. Connect the rear panel connectors.

Anchor the AC adaptor cable in place using the cable clamp.
When three coaxial cables are to be connected, connect coaxial cable [2] first.
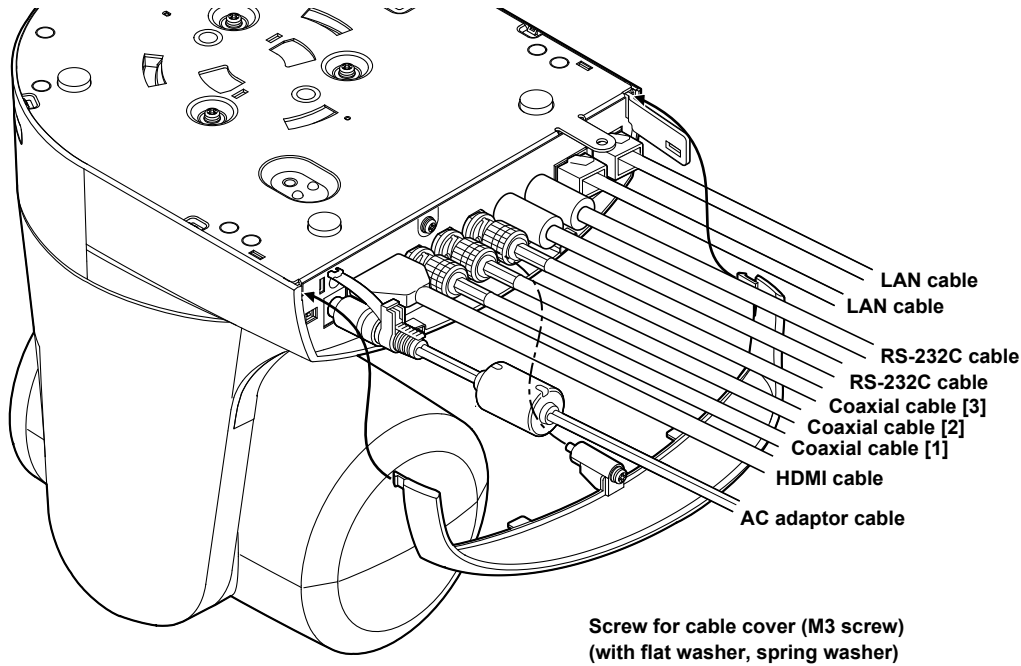
LAN cable
LAN cable
RS-232C cable
RS-232C cable
Coaxial cable [3]
Coaxial cable [2]
Coaxial cable [1]
HDMI cable
AC adaptor cable

Screw for cable cover (M3 screw)
(with flat washer, spring washer)

● **How to secure the AC adaptor cable**

① **Loosely secure the cable clamp.**

Cable clamp

Loosely secure the cable clamp
in the area shown above.

② **Fasten the cable clamp.**

Strap part

Take hold of the strap part, slide
the cable clamp until it stops
moving, and then secure it tightly.

---

7. Attach the cable cover.

• Fit the two tabs on the cable cover into the square mounting hole at either side of the rear panel.
• Secure the cable cover using the screw (M3 x 25 mm) provided.

Screw diameter	Clamping torque
M3	0.78 N · m (8 kgf · cm)

<NOTE>
• Engage the tabs on the cable cover so they fit into place perfectly, and check that the cover is not rickety.
• When attaching an anti-theft wire, do so after attaching the cable cover.

How to install and connect the unit (continued)

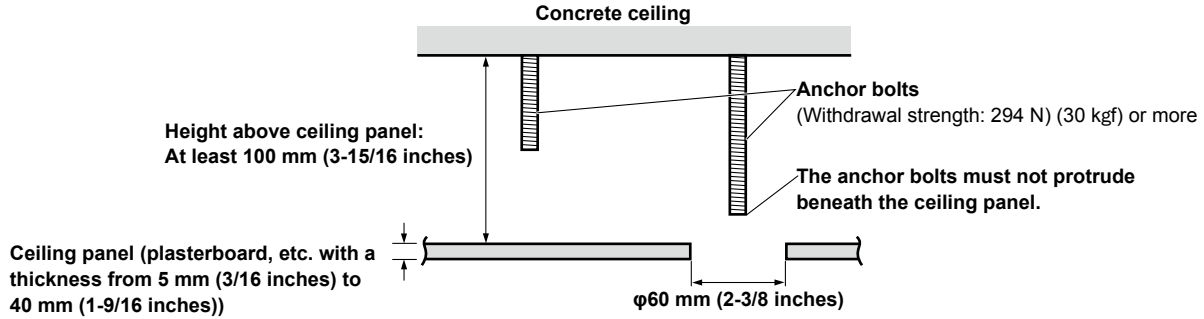## When using the WV-Q105A (optional accessory)

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. 3.1 kg (6.83 lb)) which will be exerted once the camera is mounted.
Use the mount bracket where the space between the ceiling panel and the concrete ceiling is at least 100 mm (3-15/16 inches) high.
The bracket can be mounted where the thickness of the ceiling panel ranges 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.
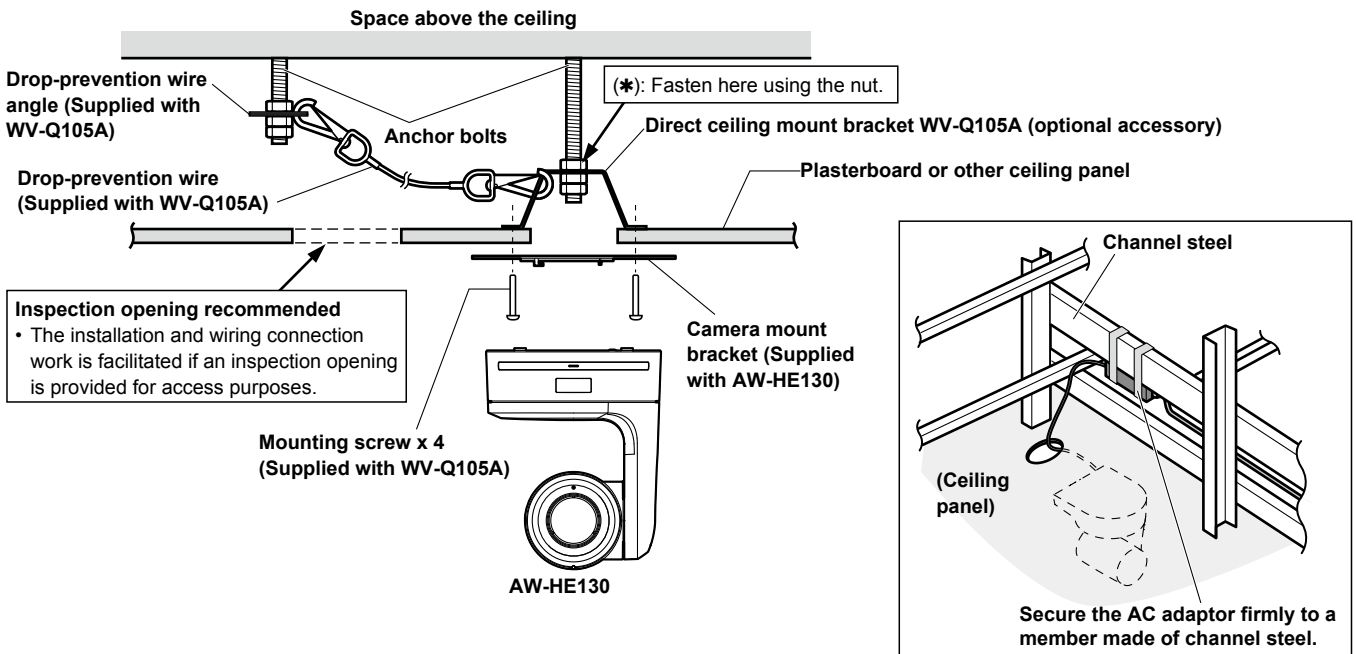
Concrete ceiling

Anchor bolts
(Withdrawal strength: 294 N) (30 kgf) or more

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

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))

φ60 mm (2-3/8 inches)

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-HE130 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.

   Space above the ceiling

   Drop-prevention wire angle (Supplied with WV-Q105A)

   Anchor bolts

   (✻): Fasten here using the nut.

   Direct ceiling mount bracket WV-Q105A (optional accessory)

   Drop-prevention wire (Supplied with WV-Q105A)

   Plasterboard or other ceiling panel

   Inspection opening recommended
   • The installation and wiring connection work is facilitated if an inspection opening is provided for access purposes.

   Mounting screw x 4 (Supplied with WV-Q105A)

   Camera mount bracket (Supplied with AW-HE130)

   Channel steel

   (Ceiling panel)

   **Secure the AC adaptor firmly to a member made of channel steel.**

   AW-HE130

3. **Install the AW-HE130 camera by following the procedure starting with step 3 on page 8.**
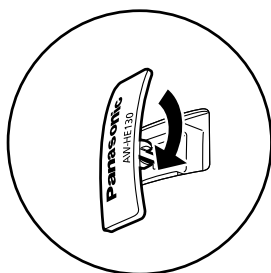
Changing the direction of the nameplate

When the unit is mounted on the ceiling, its nameplate will be upside down.
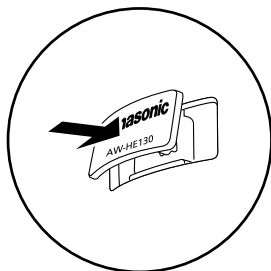The direction of the unit's nameplate can be changed.

1. Push in the part indicated by the arrow, and pull out the nameplate.
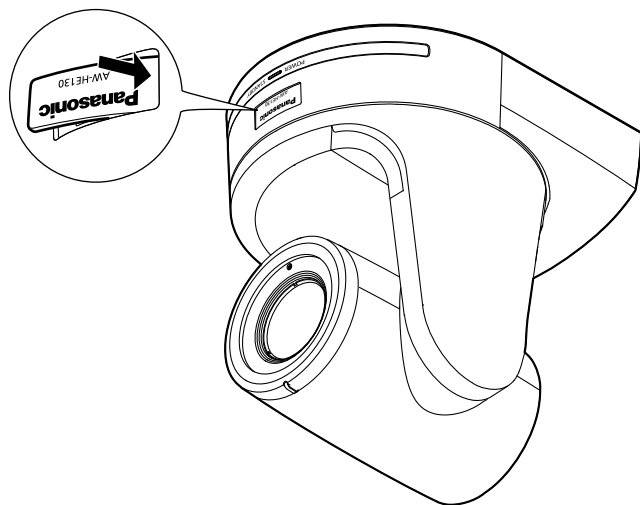
2. Change the direction of the nameplate.

3. Push the nameplate back into place.

Removing the camera

1. Turn off the circuit breaker and power.

2. Remove the cable cover.
  • Remove the screw (M3) for the cable cover used to secure the cover.
  • Push the tab parts of the cover to disengage the cover.

3. Disconnect the cables.
  Disconnect the power cable, video cable, and control cable, etc.

4. Remove the main unit mounting screw used to secure the unit and mount bracket.

5. Push the unit (①). Turn it approximately 20 degrees away from the installed position (②), and remove it (③).
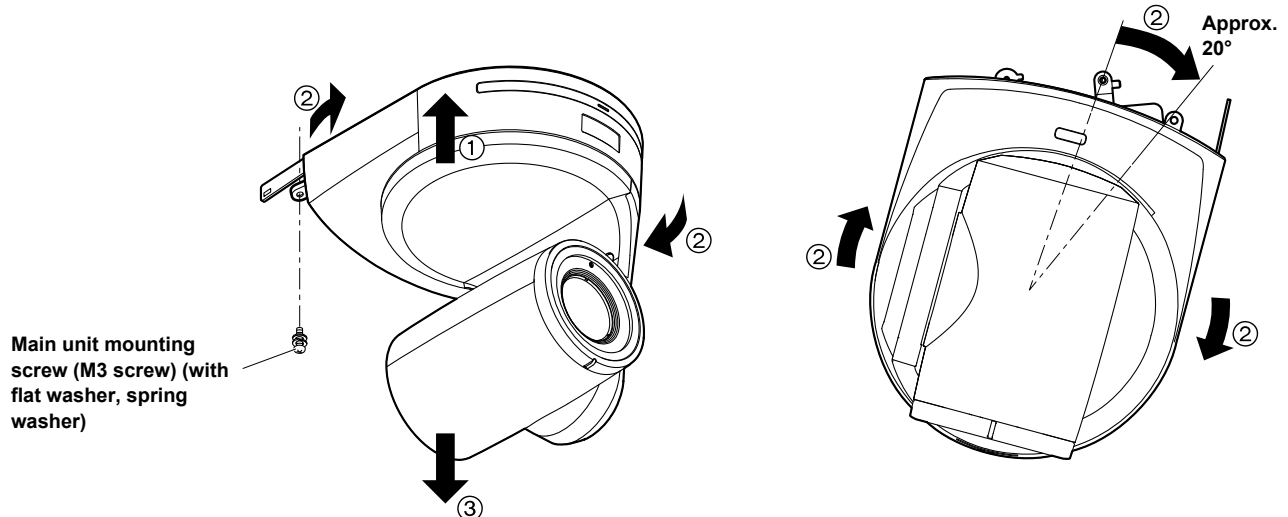
Main unit mounting
screw (M3 screw) (with
flat washer, spring
washer)

Approx.
20°

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

6. Disengage the drop-prevention wire from the mount bracket.
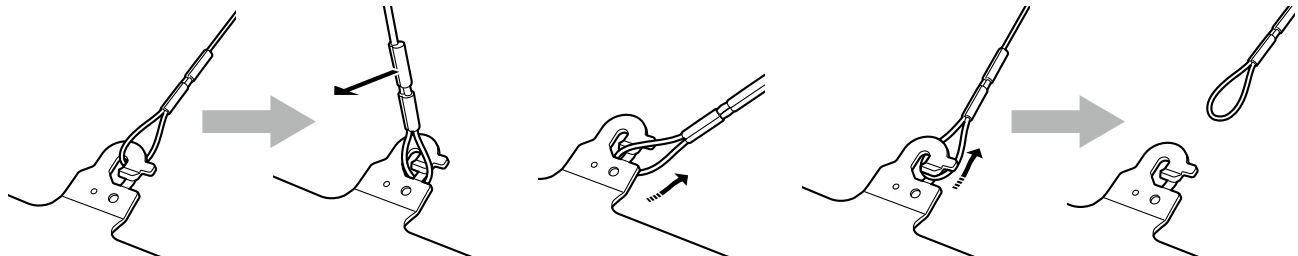
①**Pull the dropprevention
  wire in the direction
  shown by the arrow
  above.**

②**Twist the wire, and
  remove the wire loop
  through the opening in
  the hook.**

③**Pull the wire in the direction
  shown by the arrow above, and
  simply pull it out.**

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Stand-alone installation (when the mount bracket is going to be used)

The same steps are followed as for the kind of installation where the unit is suspended from an overhead surface (→ page 7 to 10).

1. Check the mounting space.
<NOTE>
• As with installing the unit suspended from an overhead surface, carefully check the space where the unit will be mounted, and then decide if it is appropriate to install the unit in that space.
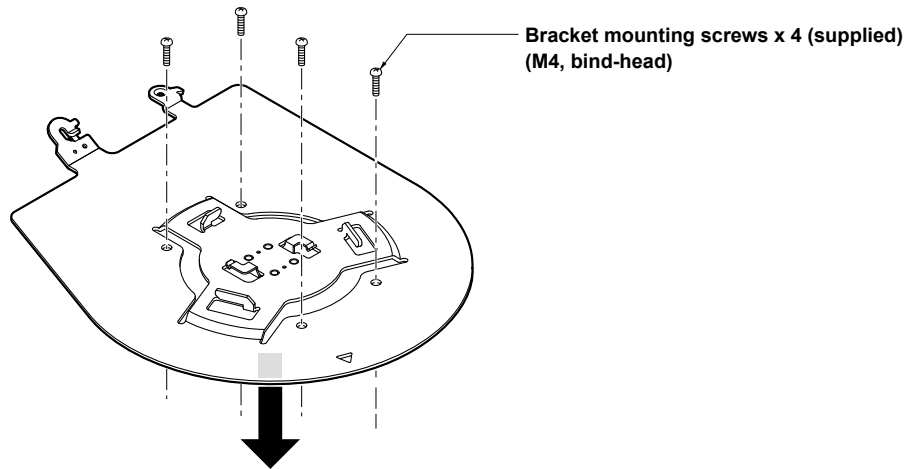
2. Mount the mount bracket onto the installation surface.

**Bracket mounting screws x 4 (supplied)
(M4, bind-head)**

3. Attach the drop-prevention wire.

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 bracket and camera firmly together, and rotate the main unit by about 20 degrees in the direction of the arrow.
• Secure the mount bracket to the unit using the main unit mounting screw (M3) as supplied.

Approx. 20°

Status display lamp

On the camera main unit: Holes (x3) used to insert the bottom panel

On the mount bracket: Protrusions (x3) used for inserting the camera

Hole for checking the positioning

Attach the drop-prevention wire.

Main unit mounting screw (M3 screw) (with flat washer, spring washer)

5. Check the mounting.

6. Connect the rear panel connectors.
When three coaxial cables are to be connected, connect coaxial cable [2] first.
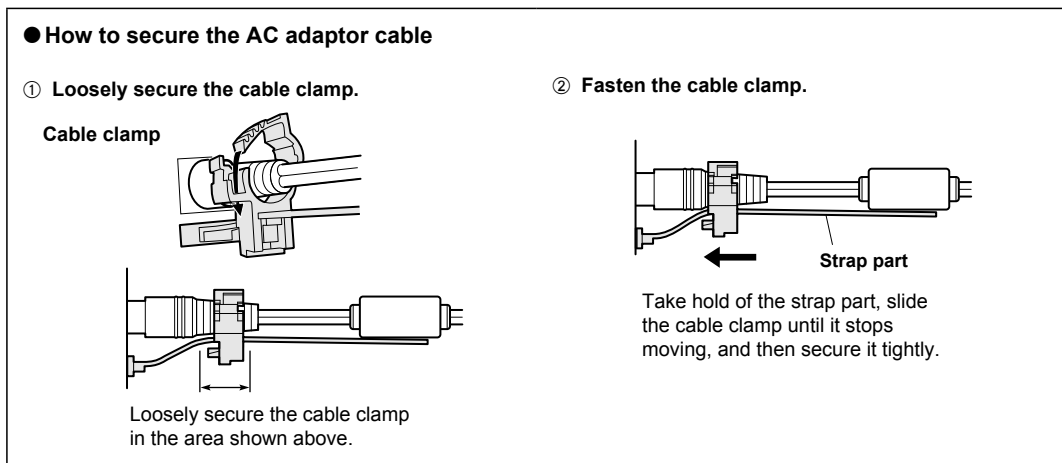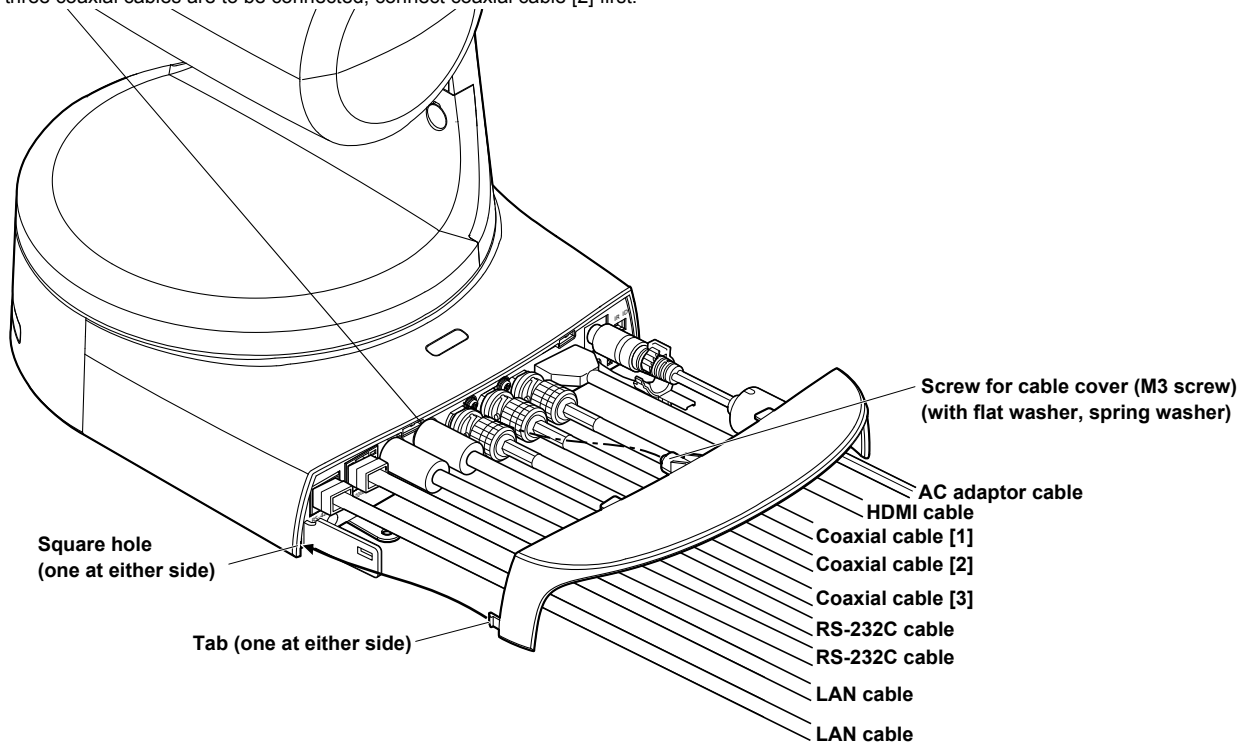
Screw for cable cover (M3 screw)
(with flat washer, spring washer)

AC adaptor cable
HDMI cable
Coaxial cable [1]
Coaxial cable [2]
Coaxial cable [3]
RS-232C cable
RS-232C cable
LAN cable
LAN cable

Square hole
(one at either side)

Tab (one at either side)

● **How to secure the AC adaptor cable**

① **Loosely secure the cable clamp.**

Cable clamp

Loosely secure the cable clamp
in the area shown above.

② **Fasten the cable clamp.**

Strap part

Take hold of the strap part, slide
the cable clamp until it stops
moving, and then secure it tightly.

---

7. Attach the cable cover.
• Fit the two tabs on the cable cover into the square mounting hole at either side of the rear panel.
• Secure the cable cover using the screw (M3 x 25 mm) provided.

Screw diameter	Clamping torque
M3	0.78 N · m (8 kgf · cm)

<NOTE>
• Engage the tabs on the cable cover so they fit into place perfectly, and check that the cover is not rickety.
• When attaching an anti-theft wire, do so after attaching the cable cover.

# 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.
• Do not take hold of the camera head or rotate it. Doing so may cause malfunctioning.
• 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.
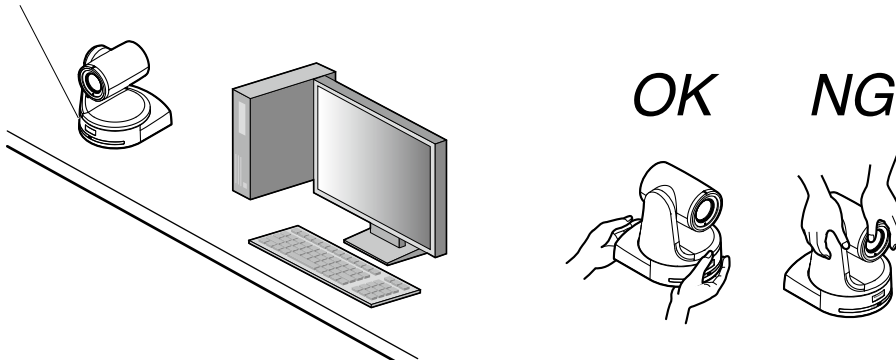
When mounting the unit on a tripod

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 the tripod that satisfy the following standard.

Screw for mounting tripod
1/4-20UNC, ISO1222 (6.35 mm)

4.5 mm to 6 mm
(0.18 inches to 0.24 inches)
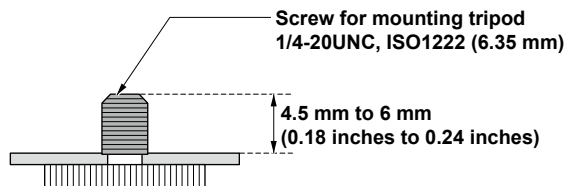
<NOTE>
• Do not install the unit where people will be passing back and forth.
• When using the unit mounted on a tripod, do not put the tripod high above the floor level.
• Mount the unit securely so there is no looseness. Looseness may cause the unit to fall off and/or result in injuries.
• When the 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.

Connections

Connections with an HD monitor

**HD Integrated Camera
AW-HE130**

**Accessory
AC adaptor**

HDMI signal, HD-SDI signal

HD monitor
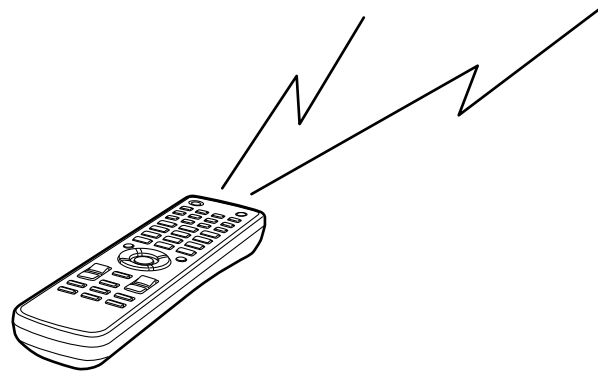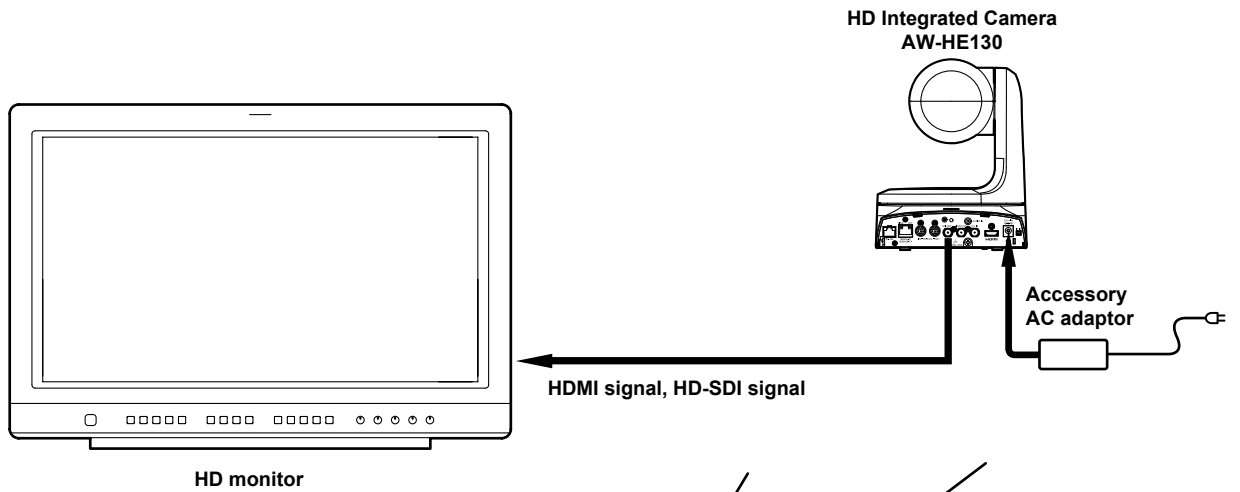
Wireless remote controller (optional accessory)
Up to four units can be operated using one remote control.

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Connections with a controller (AW-RP120/AW-RP50/AK-HRP200)

LAN cable (crossover cable)

**Pan-tilt head/
camera control signals**

**HD Integrated Camera
AW-HE130**

**Remote Camera Controller
AW-RP50**

HDMI/SDI

**Accessory
AC adaptor**

Monitor

**Accessory
AC adaptor**

**Remote Camera Controller
AW-RP120**

**External DC
power supply**

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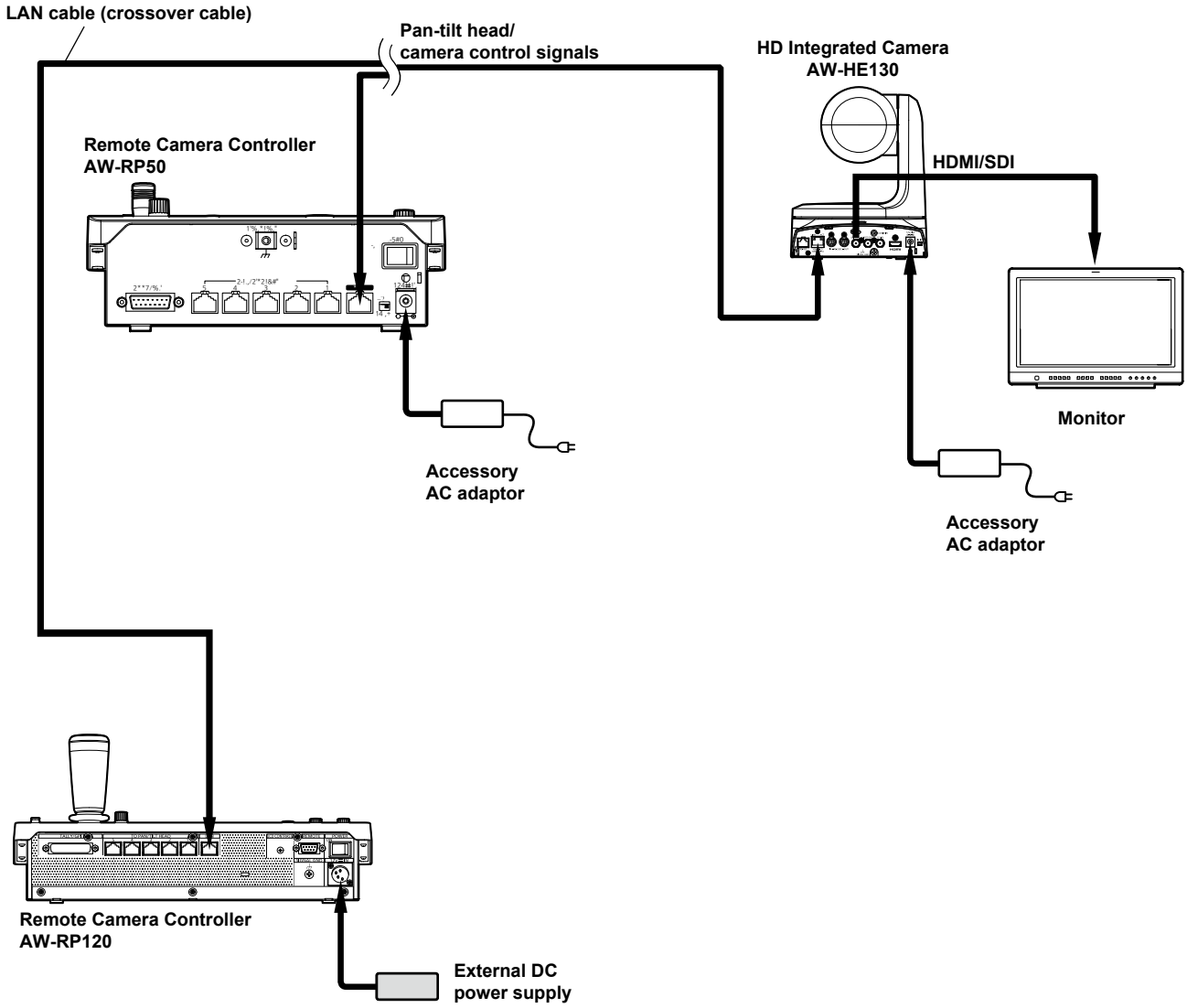
System example 1 (Serial control)

**HD Integrated Camera
AW-HE130**

HD Integrated Camera[1]
AW-HE130

**Accessory
AC adaptor**

**RS-422
connector**

**Genlock signal
generator**

**Pan-tilt head and
camera control signal
(LAN straight cable)**

SDI video signal

Monitor 1

Monitor

Monitor 2

Monitor

System TALLY

**Accessory
AC adaptor**

**Compact Live Switcher
AW-HS50**

**External DC
power supply**

**Remote Camera Controller
AW-RP120**
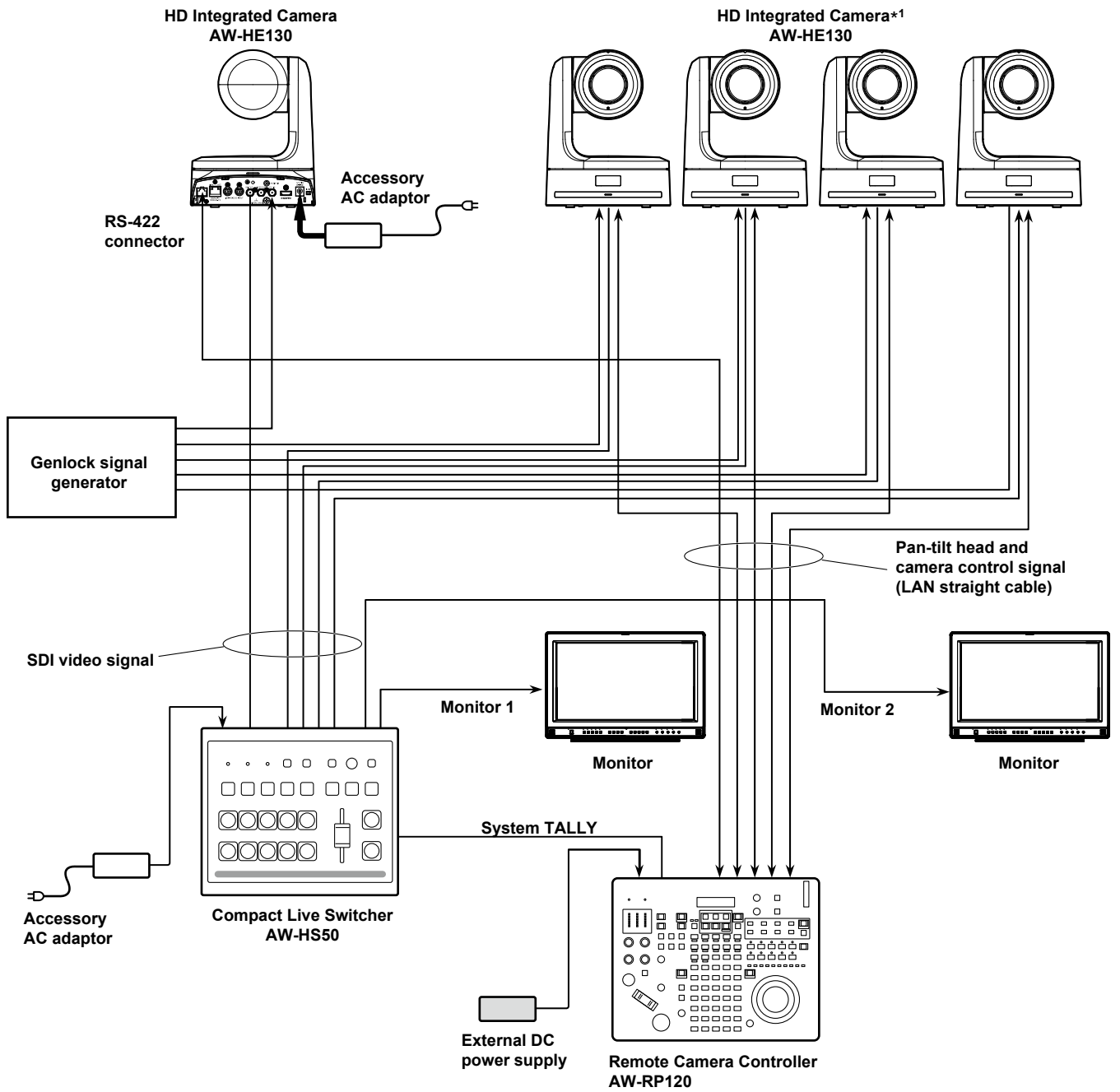
[1] **The AC adaptor provided with the unit is
not shown in the above figure.**

System example 2 (IP control)

HD Integrated Camera
AW-HE130

HD Integrated Camera*[1]
AW-HE130

LAN connector

Accessory AC adaptor

Genlock signal generator

SDI video signal

LAN cable (straight cable)

Monitor 2

Monitor 1

Switching hub

LAN cable (straight cable)

Monitor

Monitor

Accessory AC adaptor

Accessory AC adaptor

Compact Live Switcher AW-HS50

Accessory AC adaptor

Remote Camera Controller AW-RP50

*[1] The AC adaptor provided with the unit is not shown in the above figure.

Connections (continued)

System example 3 (IP image transmission, PoE+)

HD Integrated Camera
AW-HE130

HD Integrated Camera
AW-HE130

LAN
connector

Network Recorder
WJ-NV300/4

LAN cable

PoE+ compatible switching hub

Personal computer

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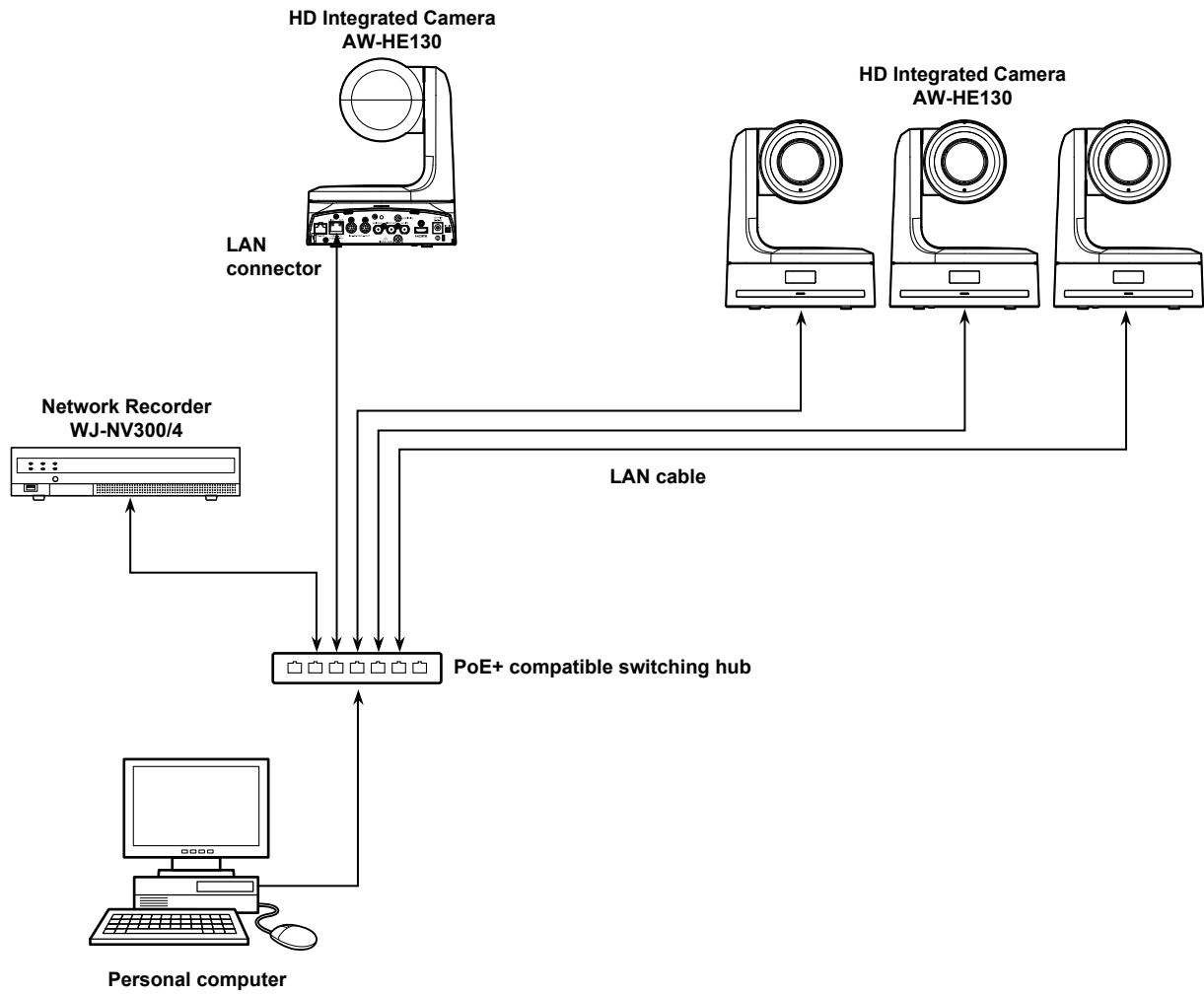
System example 4 (connection with commercially available controller, RS-232C daisy-chain connection)

HD Integrated Camera AW-HE130[*1]

Up to 7

RS-232C
communication
connector

RS-232C
communication
connector

Commercially
available
controller

Accessory AC adaptor

Accessory AC adaptor

**Accessory
AC adaptor**
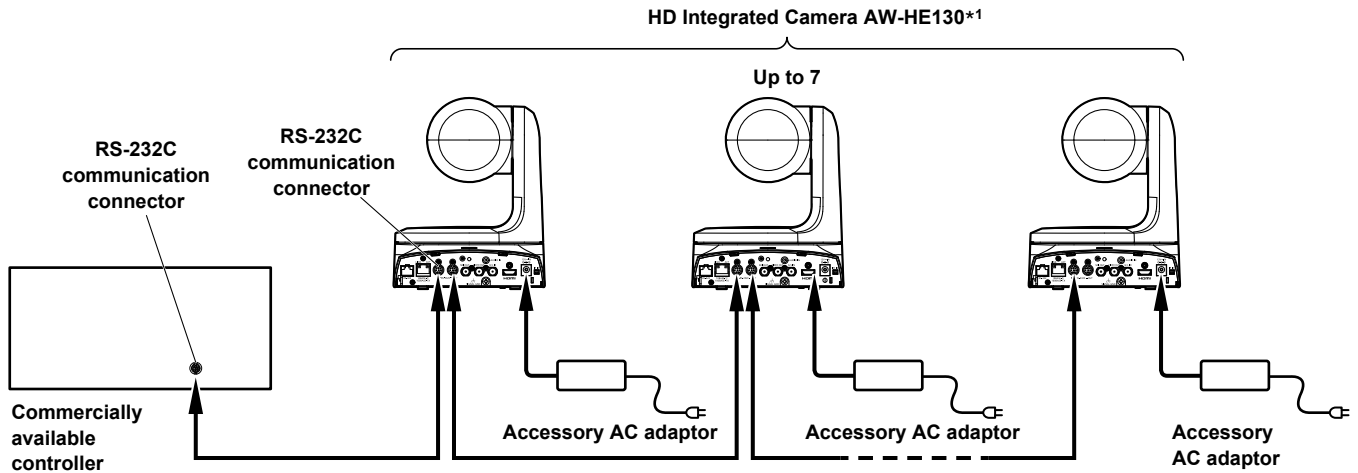
[*1] **You can connect up to seven cameras to the commercially available controller.**

- Configure the service switches at the bottom of the unit.
  For details on the service switches, see "Service switch settings" (→ page 6).
  SW1 to SW3: Set the camera address to AUTO or 1 to 7.
       (Set address numbers so that they do not duplicate each other.)
  SW4:   Enable standard serial communication (ON).
  SW7:   Set the baud rate to 9600 bps (OFF) or 38400 bps (ON) based on your commercially available contoller.
  SW8:   Set the communication connector to RS-232C (ON).
- Configure the following items in the camera menu.
  1. Display [System] menu - [Protocol] - [Model Select].
  2. Select [SEVIHD1], [SBRC300], or [SBRCZ330] for the protocol type.

Appearance

R90
(R3-17/32)

125 (4-29/32)

225 (8-27/32)

175 (6-7/8)

71 (2-25/32)

Panasonic
AW-HE130

POWER ⊂⊃ STANDBY

3 (1/8)

180 (7-3/32)

90 (3-17/32)

234(9-3/16)

Full HD 3MOS

LINK   ACT

RS-422   10BASE-T/
          100BASE-TX

IN—RS-232C—OUT

SDI OUT   VIDEO OUT   G/L IN
         SIGNAL GND

AUDIO IN

HDMI

12V⎓IN
Ⓞ—Ⓔ—Ⓞ

IR   ID