

Network Camera

Installation Manual

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

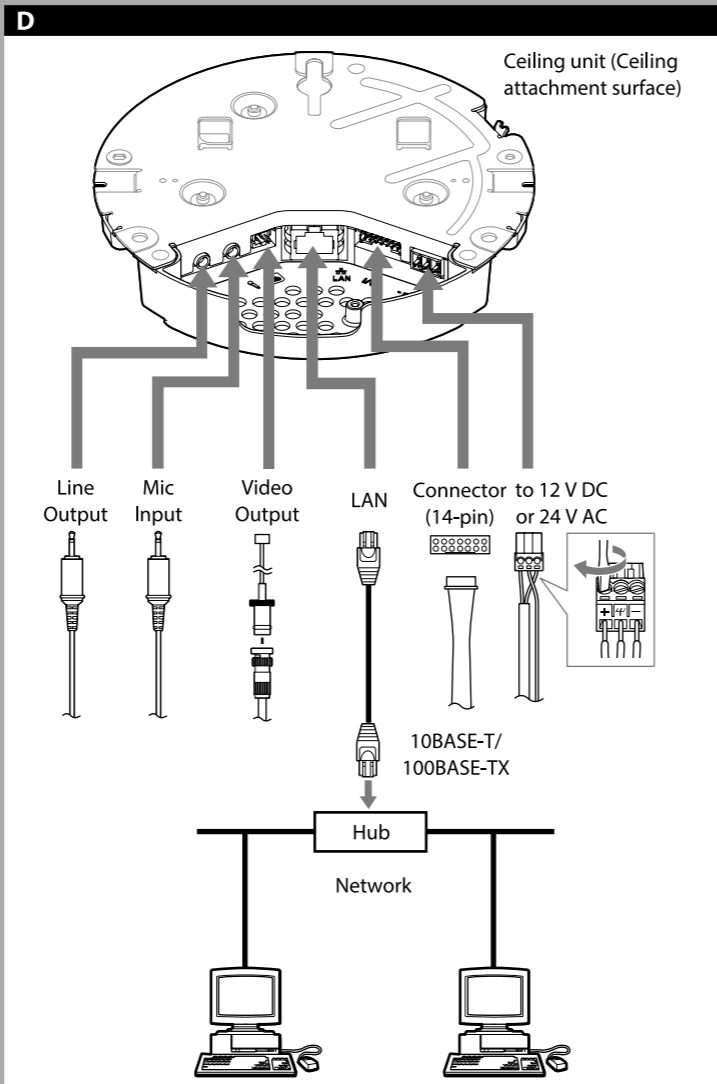
SNC-WR630

IPELA

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www.use-ip.co.uk
01304 827609



8 RELEASE buttons (2)

Use these buttons to remove the camera from the ceiling.

9 Fall-prevention stripe

The stripe is used to prevent the camera from falling.

10 Rating Label

This label shows the name of device and its electric rating.

11 Camera connection terminal

Connect to the camera connection terminal of the ceiling unit.

12 Lens

ATTENTION

The model name and specifications are located on the camera.

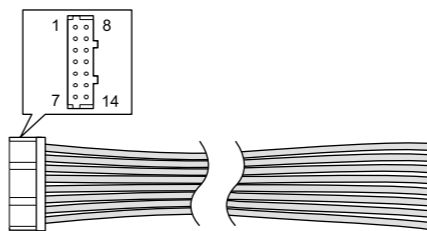
Ceiling attachment surface of the ceiling unit

13 (microphone input) terminal (minijack, monaural)

Connect a commercially available microphone.

14 I/O (Input/Output) port

Provides four sensor inputs and two alarm outputs.



Pin No.	Pin name	Color	Pin No.	Pin name		Color
				RS422/RS485(Full)	RS485(Half)	
1	Alarm Out 1-	Blue	8	Rx-		Yellow
2	Alarm Out 1+	Blue	9	Rx+		Orange
3	Sensor in 4	Yellow	10	Tx-	Tx-/Rx-	Red
4	Sensor in 3	Orange	11	Tx+	Tx+/Rx+	Brown
5	Sensor in 2	Red	12	GND		Black
6	Sensor in 1	Brown	13	Alarm Out 2-		Purple
7	GND	Black	14	Alarm Out 2+		Purple

Note

For details about functions and settings, see the user's guide.

15 (line output) terminal (minijack, monaural)

Connect to a speaker with a built-in amplifier.

16 (video output) terminal

Outputs a composite video signal. Use the supplied monitor cable to connect to the camera.

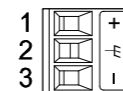
17 LAN (network) port (RJ45)

Connect to a 10BASE-T or 100BASE-TX network using a network cable (UTP, category 5).

18 DC IN 12 V / AC IN 24 V (power input) terminal

Use the provided AC power cable to connect to the 12 V DC/24 V AC power supply system.

Pin No.	Pin name	
	AC24V	DC12V
1	AC24V+	DC12V+
2	Frame Ground	
3	AC 24V-	GND



Note

Be sure to connect the frame ground to the specified terminal.

19 Cable clamp

To prevent the provided monitor cables disconnecting from the ceiling unit, use the cable clamp to secure the cables to the ceiling unit.

Be sure to use the supplied cable clamp fixing screws (M2.6 x 8, tapping screw). The cable clamp and/or ceiling unit may break if the cable clamp is over tightened.

Camera attachment surface of the ceiling unit

20 Stripe attachment hook

Use when hooking the fall-prevention stripe of the camera on the hook for fall-prevention.

21 Camera connection terminal

Connect to the camera connection terminal of the camera.

Connection

Connecting to the Network

Connect the LAN connector of the camera to a HPOE* supported device (such as a hub) using the network cable (straight, not supplied). The electrical power is supplied through the network cable. For details, refer to the instruction manuals of the HPOE supported devices.

(* HPOE: The acronym for High Power over Ethernet. IEEE 802.3at standard compliant devices.) It is also possible to connect the LAN port of the camera to a router or hub in the network using a network cable (not supplied).

Connecting the Power Source

The camera can be powered in the following ways.

- 12 V DC or 24 V AC
 - Power supply equipment pursuant to IEEE802.3at (HPOE* system)
- *HPOE means High Power over Ethernet.

Notes

- Do not turn off the camera immediately after turning it on. Wait for at least five minutes before turning off the camera.
- If power is supplied by an HPOE system, do not install the wiring for 12 V DC or 24 V AC. Perform grounding of the frame ground only.

Connecting to the power supply equipment pursuant to IEEE802.3at

The power supply equipment pursuant to IEEE802.3at supplies the power through the network cable. For details, refer to the Instruction Manual of the equipment.

Connecting to 12 V DC or 24 V AC source

- Connect the power input cable of the camera to a 12 V DC or 24 V AC source.
- Use a 12 V DC or 24 V AC source isolated from 100 to 240 V AC. Each usable voltage ranges are as follows.
 - 12 V DC: 10.8 V to 13.2 V
 - 24 V AC: 21.6 V to 26.4 V
- In the USA, The product shall be powered by a UL Listed Class 2 Power Supply Only.

- In Canada, The product shall be powered by a CSA certified Class 2 Power Supply Only

- Use UL cable (VW-1 style 10368) for these connections.

Recommended cable

DC 12 V:

CABLE(AWG)	#24	#22	#20
Max. length(m)	9	15	23

AC 24 V:

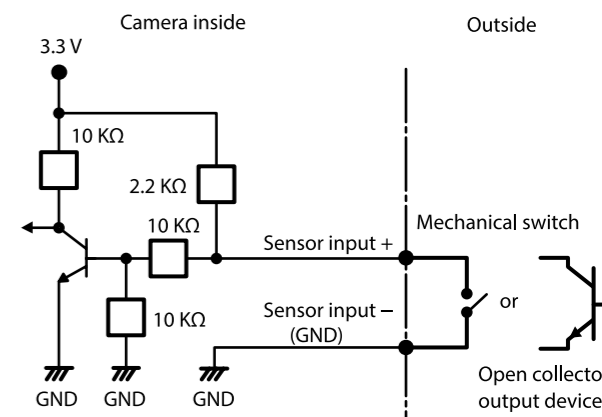
CABLE(AWG)	#24	#22	#20
Max. length(m)	37	63	92

Connecting the I/O Cable

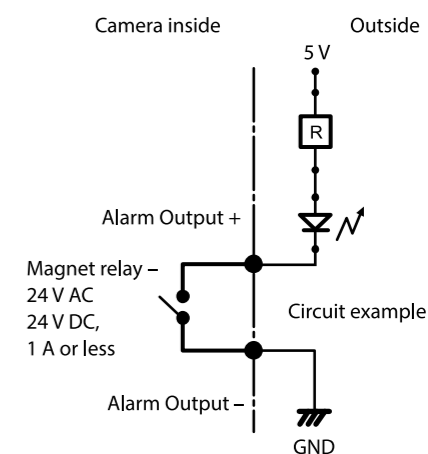
Connect the wires of the I/O cable as follows:

Wiring diagram for sensor input

Mechanical switch/open collector output device



Wiring diagram for alarm output



(continued on the reverse side)

About the Manuals

Installation Manual (this document)

This Installation Manual describes the names and functions of parts and controls of the Network Camera, gives connection examples and explains how to set up the camera. Be sure to read the Installation Manual before operating.

SNC easy IP setup Guide (stored in the CD-ROM)

User's Guide/Application Guide (Web)

The User's Guide describes how to set up the camera and how to control the camera via a Web browser.

After installing and connecting the camera correctly, operate referring to this User's Guide.

Using the software

The supplied CD-ROM includes the setup program for assigning an IP address. The information for how to set up an IP address is also included in the disc in PDF format.

User's Guide and Application Guide can be downloaded from the disc, or the following URL:

<http://www.sony.net/ipela/snc>

Using the CD-ROM manual

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

1 Open the index.html file in the CD-ROM.

2 Select and click on the manual that you want to read.

Note

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

Adobe and Acrobat Reader are trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Assigning the IP address

Assign the IP address using the setup program in the supplied CD-ROM. For details on how to set up the IP address, see SNC easy IP Setup Guide.

Location and Function of Part

Camera

1 Slot cover

Remove the front cover, when using the SD card slot.

2 RELEASE button lock (2)

Turn the locks 45° until the RELEASE buttons (6) cannot be pressed and the camera cannot be removed from the ceiling unit.

3 NETWORK indicator (green/orange)

The indicator lights up or flashes when the camera is connected to the network. The indicator is off when the camera is not connected to the network. When 100BASE-T is connected, the indicator turns green. When 10BASE-T is connected, the indicator turns orange.

4 Reset switch

The camera can also be reset to the factory setting by turning on the power while pressing the reset switch with a needle/paper clip.

5 Cable cover

Remove the cover when bundling the cables from the side of the camera.

6 SD card slot

This slot is used for optional SD memory cards.

Image data in the camera can be recorded to a memory card by inserting it into the slot.

When inserting, point the contact area at the rating label side and be sure to insert it completely.

This unit is only compatible with SD and SDHC memory cards.

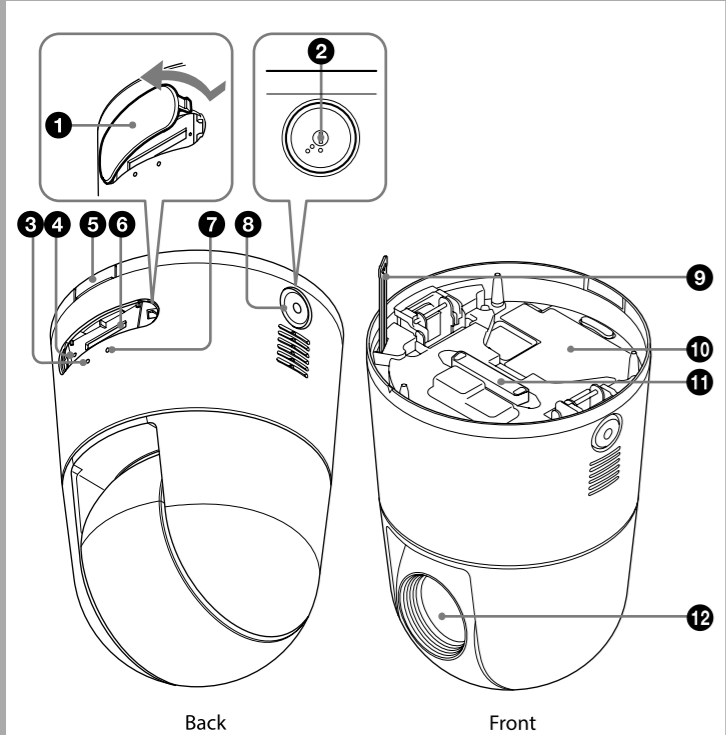
Note

For inquiries regarding verified SD memory cards, contact your authorized Sony dealer.

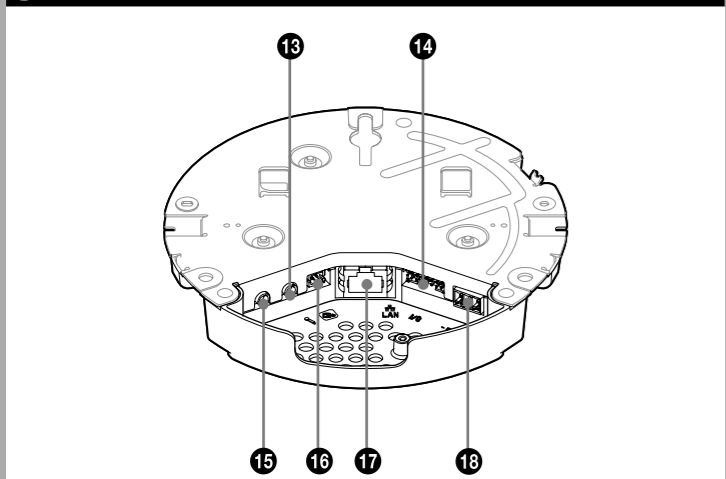
7 POWER indicator (green)

When the camera receives power, a system check is run internally in the camera. The indicator lights up when the camera is operating normally.

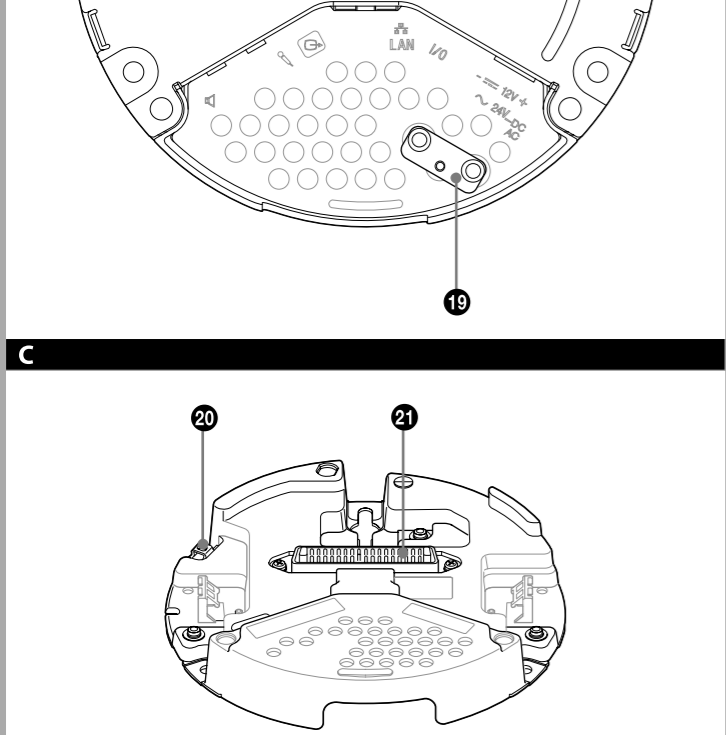
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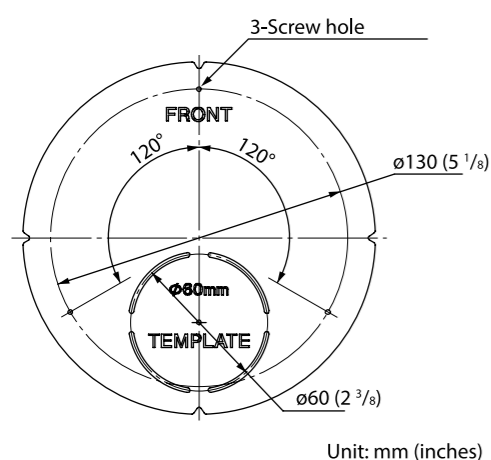
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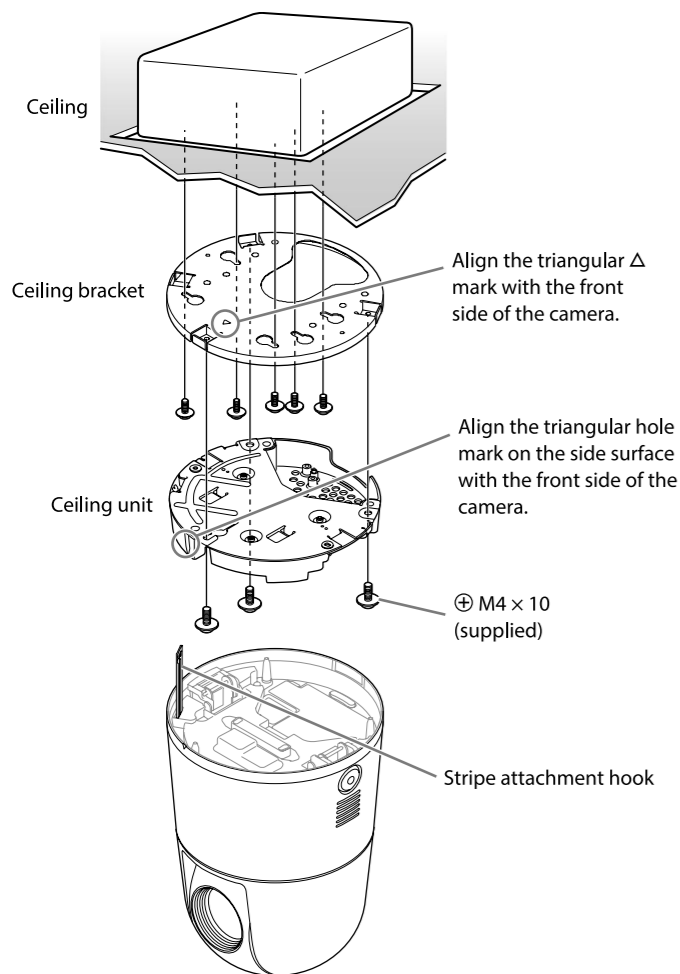


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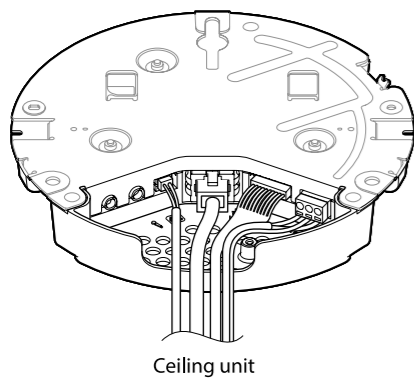


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How to install the ceiling unit

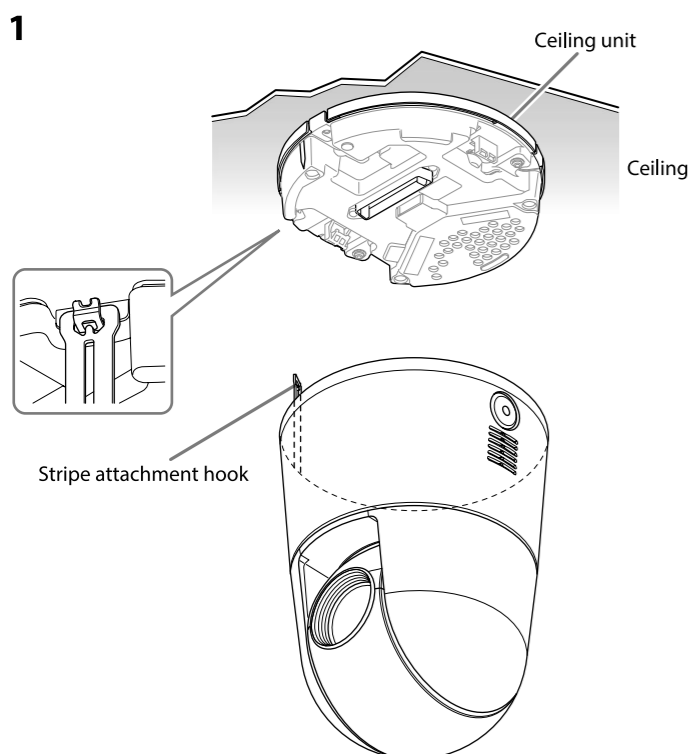


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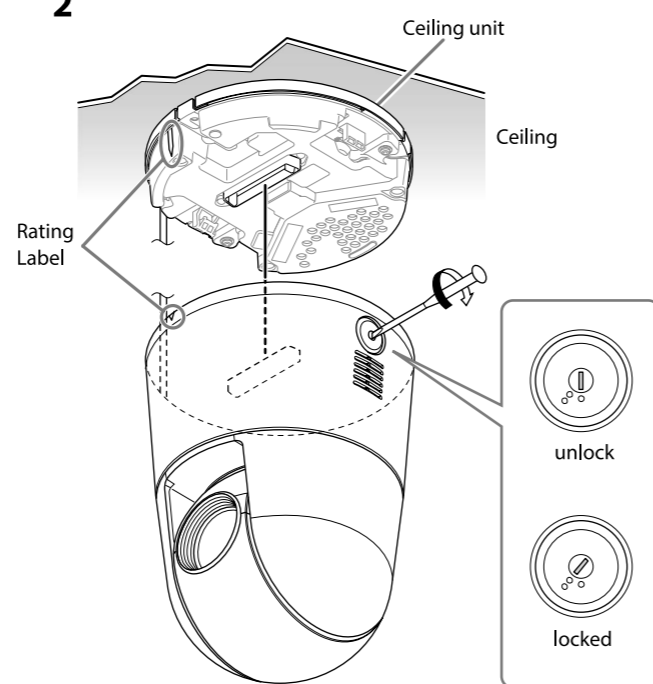


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How to install the camera

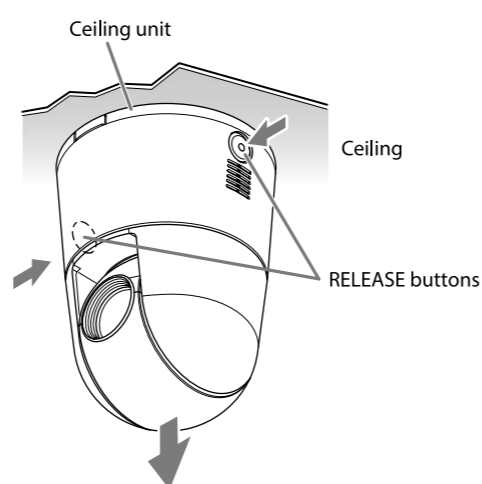


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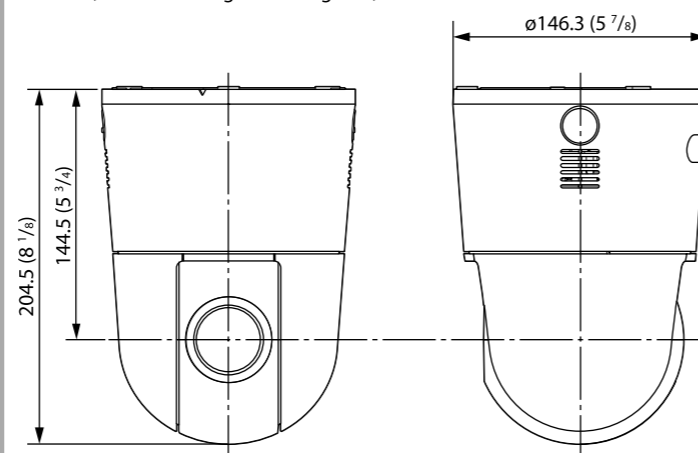
I

Removing the camera

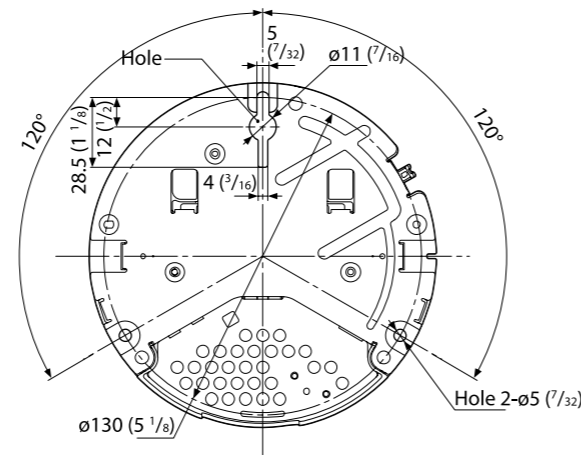


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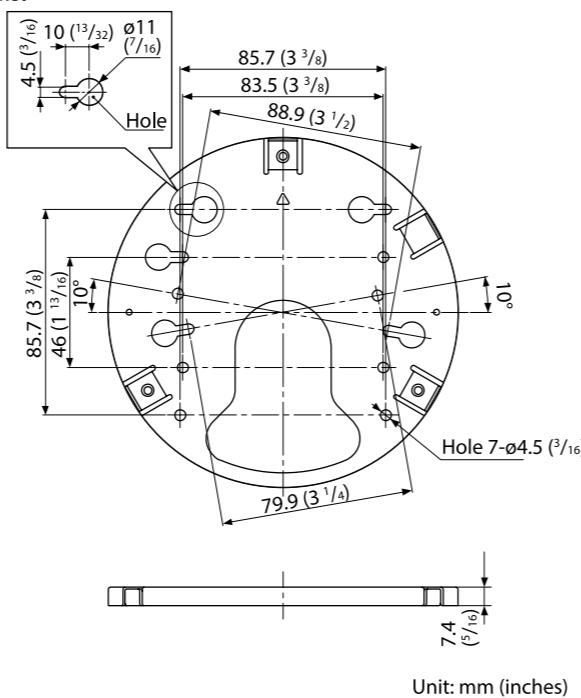
Camera (When installing the ceiling unit)



Ceiling unit



Ceiling bracket



Installation

Notes

- Do not grasp the camera head when carrying the camera.
- Do not turn the camera head manually. Doing so will likely result in the camera malfunctioning.
- Turn off the power of ceiling unit before installing or removing the camera to the ceiling unit.

Installing the Camera on a Ceiling

You can view the image of this camera in the normal direction when the camera is installed on the ceiling.

There are three ways to install the camera:

- Install directly on a ceiling.
- Use the existing junction box.
- In places you cannot use screws on the ceiling or in case you do not want the camera to stand out, use the optional in-ceiling bracket YT-ICB630.
 - For details, see the installation instructions of YT-ICB630.

Install the camera to a horizontal ceiling. If you have to install the camera to an incline, make sure the incline is within $\pm 15^\circ$ to the horizontal level to ensure the turning performance of the camera.

WARNING

- If you attach the camera in a high location such as wall or ceiling, etc., entrust the installation to an experienced contractor or installer.
- If you install the camera in a high location, ensure that the ceiling is strong enough to withstand the weight of the camera plus the ceiling brackets and then install the camera securely. If the ceiling is not strong enough, the camera may fall and cause serious injury.
- To prevent the camera from falling, make sure to attach the fall-prevention stripe.
- If you attach the camera to the ceiling, check periodically, at least once a year, to ensure that the connection has not loosened. If conditions warrant, make this periodic check more frequently.

Before installation

- After deciding the direction in which the camera will shoot, make the required holes for the junction box, and connect the cables.
- Remove the cable cover to wire the cables from the side of the camera.

Installing directly on a ceiling

Using the supplied template, make a hole for the wiring ($\phi 60$ mm (2 3/8 inches)). Determine the location of the three screw holes for attaching the ceiling unit. **(E)**

Using the existing junction box

Attach the ceiling bracket to the junction box in the ceiling.

Screws for this operation are not supplied.

Attach the ceiling bracket in a manner that the triangular mark faces the front side of the camera.

Fixing screws

The ceiling unit has three holes ($\phi 5$ mm (7/32 inches)). Use these holes to screw the ceiling unit on the ceiling.

Required screws (not supplied) vary in accordance with the location or material of the installation.

For steel: Fix with M4 screws and nuts.

For wood: Fix with tapping screws (nominal diameter 4). A material thickness of 15 mm (19/32 inches) or more is necessary.

For a concrete wall: Fix with dry bit or plug bolts.

For a junction box: Fix with screws that accommodate the screw holes in the junction box.

WARNING

Use the appropriate screws in accordance with the condition and material of the location site. Otherwise, the ceiling unit may fall and cause serious injury.

How to install the ceiling unit **(F)**

1 Connect the cables.

Note

When drawing out cables from the side of the camera, draw them through the groove in the ceiling attachment surface of the ceiling unit. **(G)**

2 Attach the ceiling unit on the ceiling or ceiling bracket.

Attach the cable screws to the unit temporarily. Then securely tighten all screws.

Notes

- Use the supplied screws (\oplus M4 × 10) to attach the ceiling bracket. Using other screws does not ensure proper attachment and may cause the ceiling unit to fall.
- Ensure that the cables are not caught between the ceiling unit and camera when drawing out the cables from the side of the camera.

How to install the camera **(H)**

1 Draw out the fall-prevention stripe from the camera and hook it on the stripe attachment hook of the ceiling unit.

2 Align the marks and insert the camera into the ceiling unit until you hear a click.

Note

Before removing your hand from the camera, push it again to make sure that the camera is properly installed to the ceiling unit.

To lock the RELEASE buttons, turn the RELEASE button locks 45° .

Removing the camera **(I)**

1 Remove the camera while pressing the two RELEASE buttons on both sides at the same time.

If the RELEASE button locks are locked, turn them to the initial position, then press the RELEASE buttons.

Note

Always hold the camera when you press the RELEASE buttons. This will prevent any risk of the camera falling.

Specifications

Network

Protocol TCP/IP, ARP, ICMP, HTTP, FTP (server/client), SMTP (client), DHCP (client), DNS (client), NTP (client), SNMP (MIB-2), RTP/RTCP

Compression

Video compression format JPEG/H.264
Audio compression format G.711/G.726 (40, 32, 24, 16 kbps)
Maximum frame rate JPEG/H.264: 60 fps (1920 × 1080)

Camera

Camera system Camera FHD (1080 60P)

Signal system NTSC/PAL switching system

Image device 1/2.8 type CMOS

Effective picture elements Approx. 2,140,000

Synchronising Minimum illumination

Internal (DC 12 V / AC 24 V)
1.4 lx (F1.6/AGC ON/50 IRE (IP))

Horizontal resolution Video S/N

480 TV (analog video output)
50 dB or more (AGC 0 dB)

Lens

Focus length f30.2 mm to 904.9 mm (35 mm equivalent)
Maximum relative aperture F1.6 (wide), F4.7 (tele)

Minimum object distance

300 mm

Mechanism

Pan 360°, endless rotation
Maximum speed: 700°/s
220° (with auto invert function)
Maximum speed: 700°/s

Tilt

Interface

Network port 10BASE-T/100BASE-TX, auto negotiation (RJ-45)
Sensor input: × 4, make contact
Alarm output: × 2, 24 V AC/DC, 1 A (mechanical relay outputs electrically isolated from the camera)
VIDEO OUT: BNC, 1.0 Vp-p, 75 ohms, unbalanced, sync negative

Video output

SD card slot
Microphone input

Minijack (monaural)
Plug-in-power supported (rated voltage: 2.5 V DC)
Recommended load impedance 2.2 kohms
* A selector menu allows switching between microphone input and line input

Line input

Line output

Minijack (monaural)
Recommended load impedance 10 kohms
Minijack (monaural), Maximum output level: 1 Vrms

Serial communication

RS485/RS422

Others

Power supply 12 V DC \pm 10%
24 V AC \pm 10%, 50/60 Hz
IEEE802.3at compliant (HPoE system)

Power consumption Max. 25 W (DC 12 V Input)

Operating temperature 0°C to 50°C (32°F to 122°F)

Storage temperature -20°C to +60°C (-4°F to +140°F)

Operating humidity 20% to 80%

Storage humidity 20% to 95%

Dimensions (Diameter/Height) **(J)**

Ø146.3 mm × 204.5 mm (Ø5 7/8 inches × 8 1/8 inches) (When installing the ceiling unit, not including the projecting parts)

Approx. 1.7 kg (3 lb 12 oz) (including ceiling unit)

Supplied accessories Ceiling unit (1)

Ceiling bracket (1)

Fixing screws (\oplus M4 × 10) (3)

3-pin power connector (1)

BNC cable (1)

I/O cable (1)

Installation manual (1 set)

CD-ROM (supplied programs) (1)

Template (1)

Cable clamp (1)

Cable clamp fixing screws (\oplus M2.6 × 8, tapping screw) (2)

Optional accessories

In-ceiling Bracket YT-ICB630

Dome cover (clear) YT-LD124C*

Dome cover (smoked) YT-LD124S*

* In-ceiling bracket (YT-ICB630) is required for using the dome cover.

Design and specifications are subject to change without notice.

Recommendation of Periodic Inspections

In case using this device over an extended period of time, please have it inspected periodically for safe use.

It may appear flawless, but the components may have deteriorated over time, which may cause a malfunction or accident.

For details, please consult the store of purchase or an authorized Sony dealer.