

Network Camera

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

SNC-WR632/WR602

IPELA HD

© 2013 Sony Corporation Printed in China



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 (Front)

- 1 Top sunshade
- 2 Dome cover
- 3 Sunshade

Top Unit (Bottom)

4 Reset switch

This switch returns the setting of the device to the factory default setting.
1. Move the INIT switch in the direction indicated by ← and connect with camera.
2. Turn on power and wait 1 minute. After the initialization is completed, the camera starts.
3. Check that the camera has started and turn off the power to remove camera.
4. Move the INIT switch back to its original position.

Notes

- Resetting the device removes all customized settings. It is recommended that users save the settings as necessary. Instructions on how to save settings are available in the User's Guide.
- The reset switch should always be returned to its original position. Otherwise your device is reset to its factory default setting whenever it is turned on.

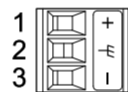
5 Camera connection terminal

Connect to the camera connection terminal of the camera.

6 AC 24 V (power input) terminal

Use the supplied AC connector to connect to the 24 V AC power supply system.

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

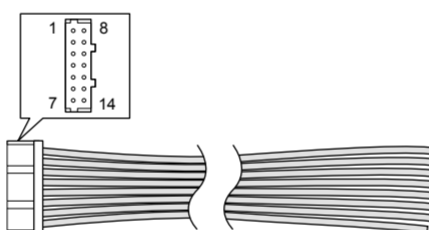


Note

Be sure to connect the Frame Ground to the specified terminal.

7 I/O (Input/Output) port

Provides four sensor inputs and two alarm outputs.



Pin No.	Pin name	Color	Pin No.	Pin name		Color
				R5422/ R5485 (Full)	R5485 (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.

8 LAN (network) port (RJ-45)

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

9 Harness holder

Attach the supplied band mount.

10 Video output terminal

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

11 Microphone input terminal (minijack, monaural)

Connect a commercially available microphone.

12 Line output terminal (minijack, monaural)

Connect to a commercially available speaker with a built-in amplifier.

Camera (Top)

13 Camera connection terminal

Connect to the camera connection terminal of the top unit.

14 Rating Label

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

15 Built-in wire rope

The wire rope is used for fall-prevention.

16 SD memory card slot

This slot is used for an optional SD memory card. Images captured by the camera can be stored into an inserted memory card. Be sure that the printed side of a memory card and the product specifications label face in the same direction, and then insert the card firmly into the slot. (a) This unit only supports memory card formats compatible with the SD/SDHC standards.

Note

For information about Sony-approved SD memory cards, contact your Sony dealer.

Connection

Connecting to the Network

Connect the LAN port of the camera unit to a router or hub in the network using the network cable (not supplied).

Connecting the Power Source

The following power sources can be used.

- HPOE+ 4 line power-supply
- 24 V AC

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 24 V AC. Perform grounding of the frame ground only.

HPOE+ 4 line power-supply

The power is supplied by using PD9501G of PowerDsine or a similar power supply device via a network cable.

For details, refer the manual of the power supply device.

Note

If the power is supplied by HPOE+, the integrated heater is not available. Use the camera in the activation temperature range of 0 °C to 50 °C (32 °F to 122 °F).

Connecting to a 24 V AC power source supply

Connect the 24 V AC power supply system to the power input terminal of the camera. The AC power cable is not supplied.

- Use a 24 V AC power source isolated commercial power supply.
- The usable voltage range is as follows:
24 V AC: 21.6 to 26.4 V
- Use a UL cable (VW-1 style 10368) for 24 V AC connection.

Recommended power cable

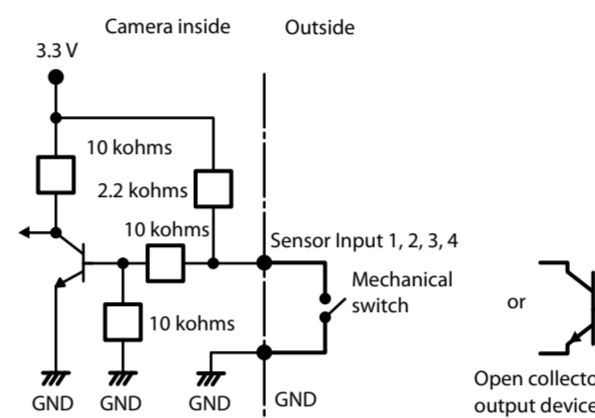
24 V AC

Cable(AWG)	#22	#20	#18	#16
Maximum cable length (m (feet))	5 (16.4)	8 (26.2)	15 (49.2)	21 (68.9)

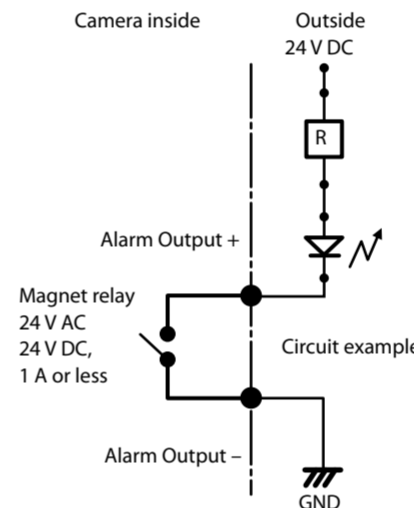
Connecting the I/O Cable

Wiring diagram for sensor input

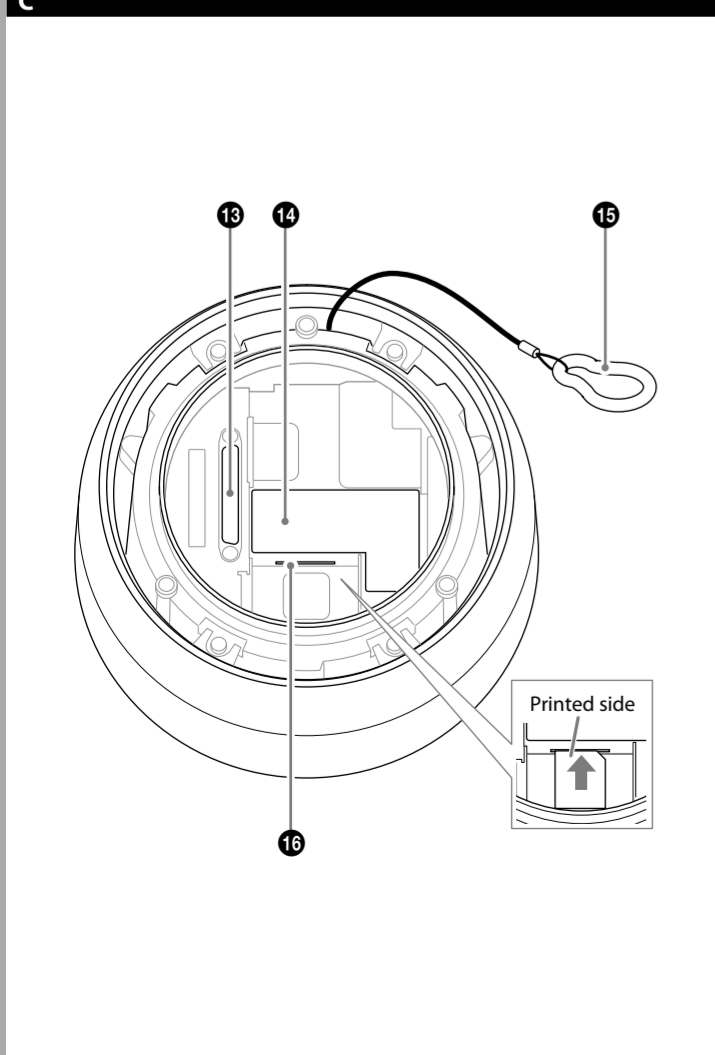
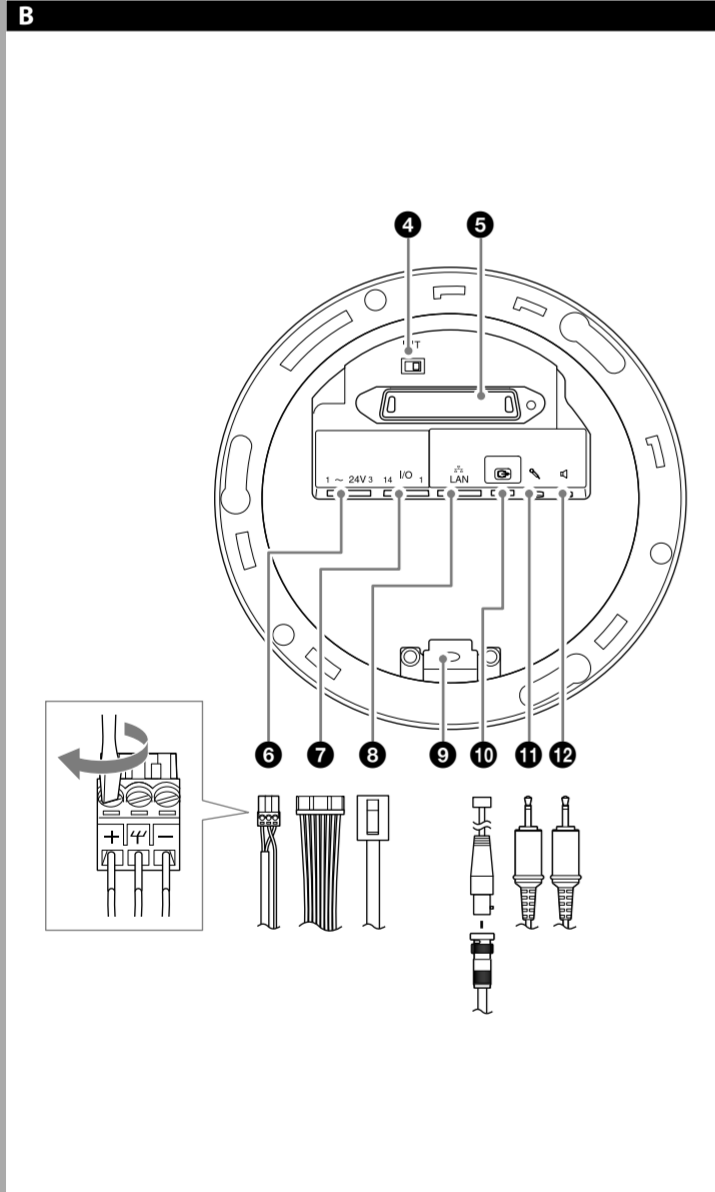
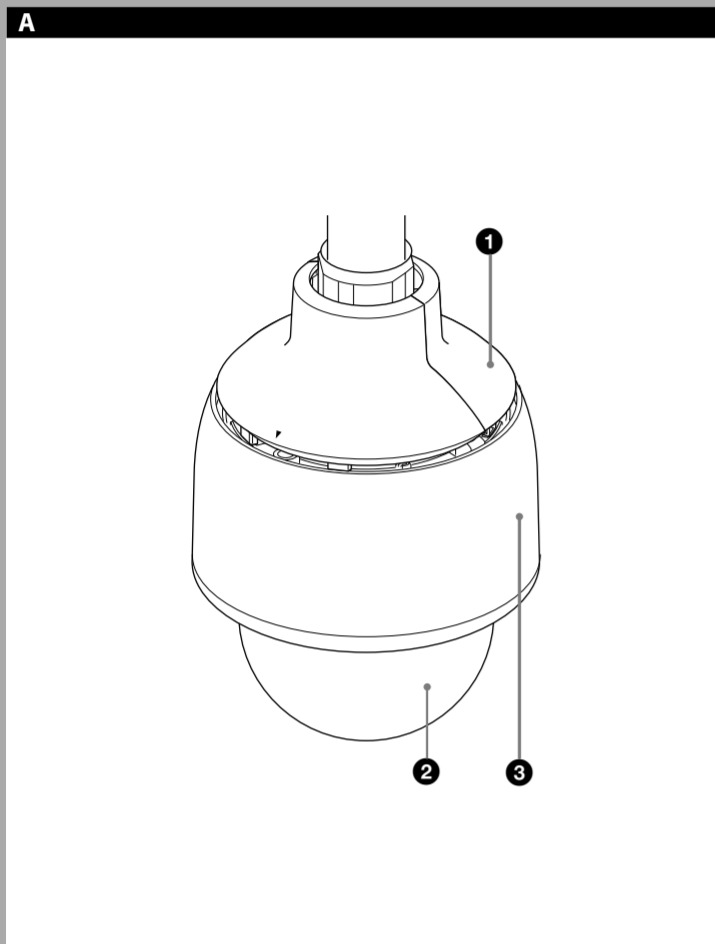
Mechanical switch/open collector output device



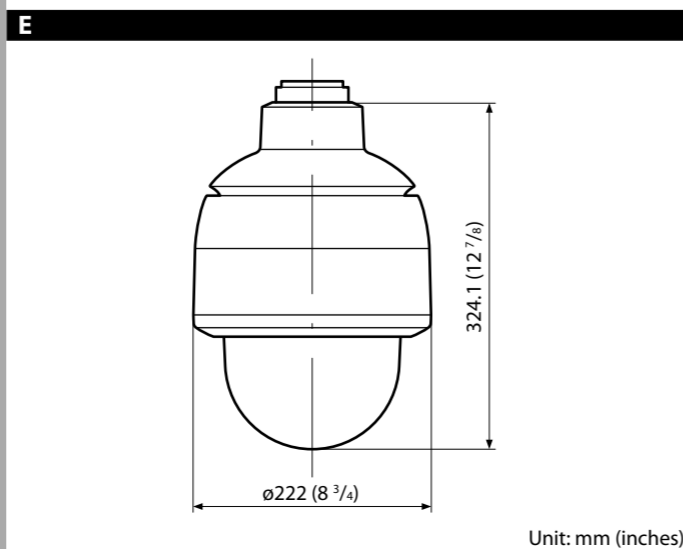
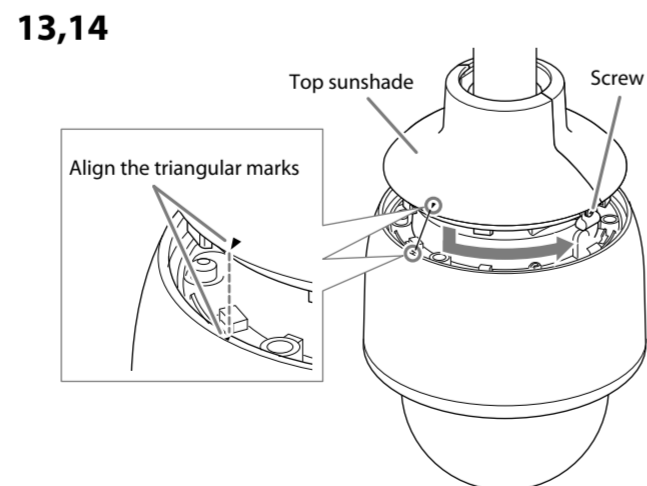
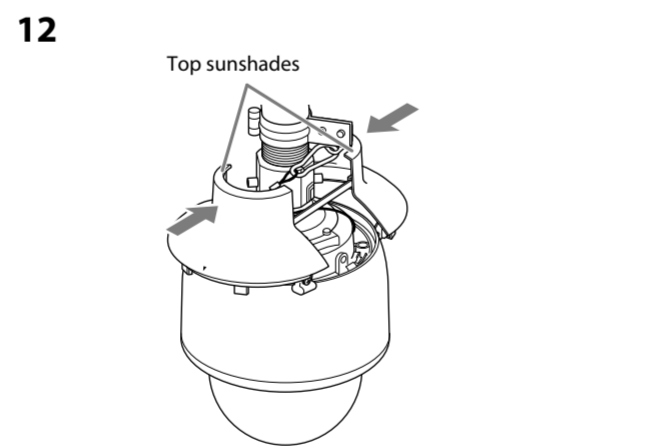
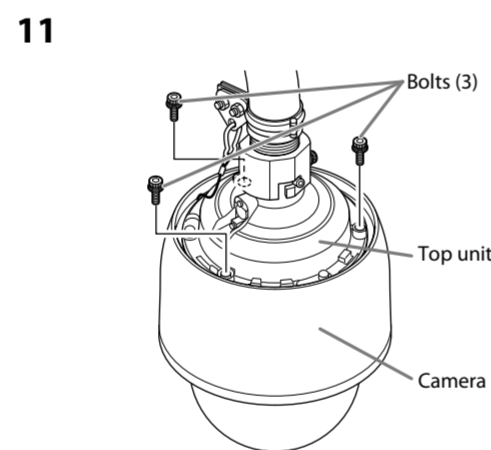
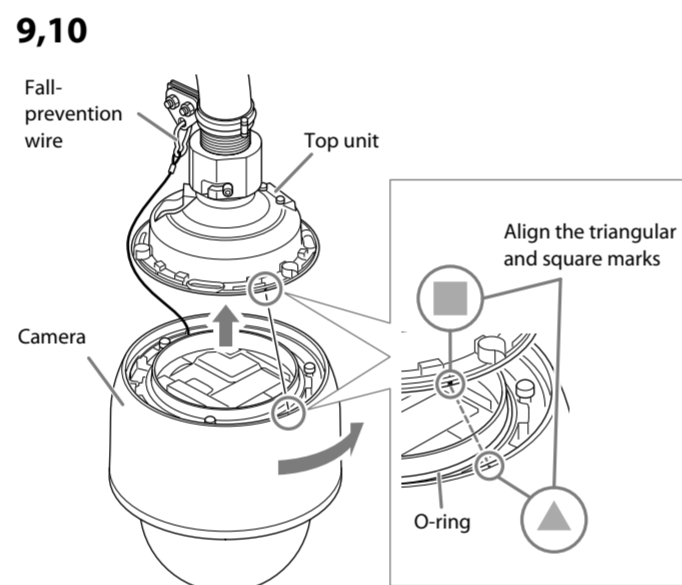
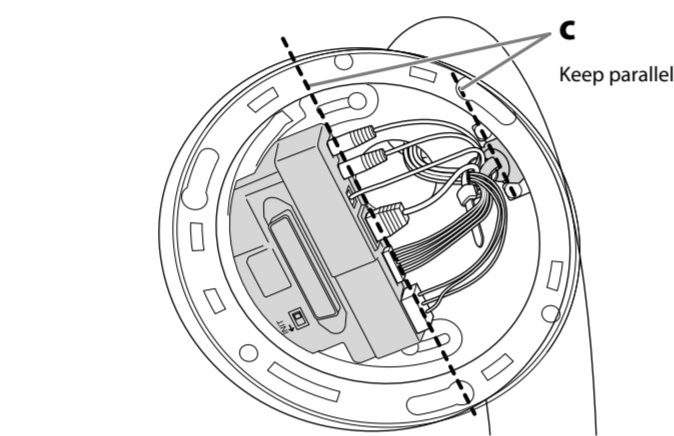
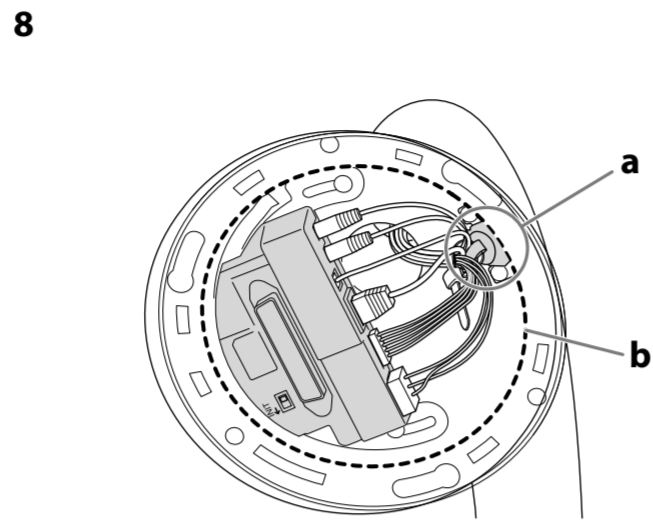
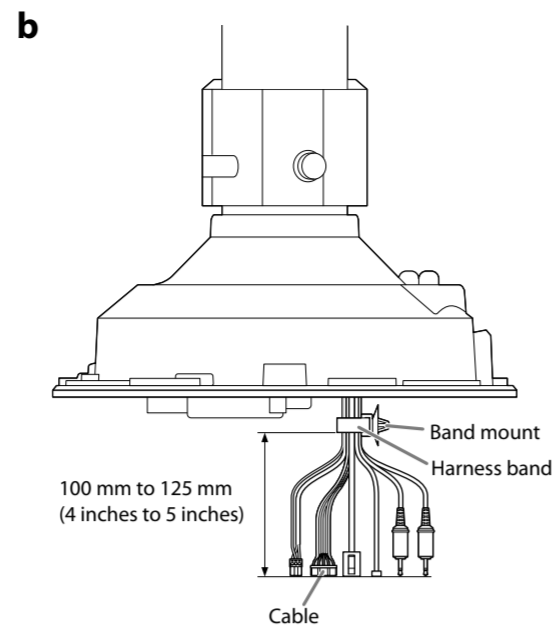
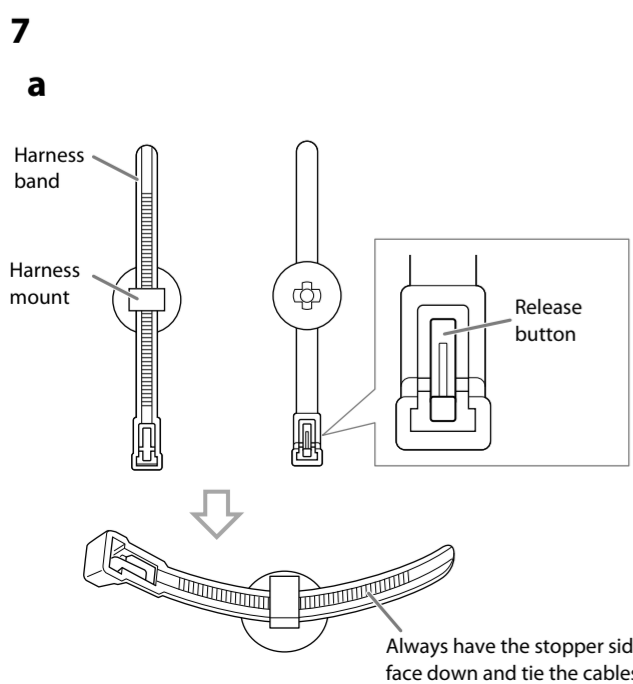
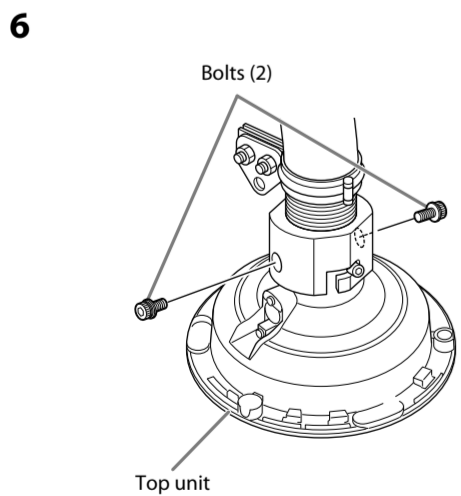
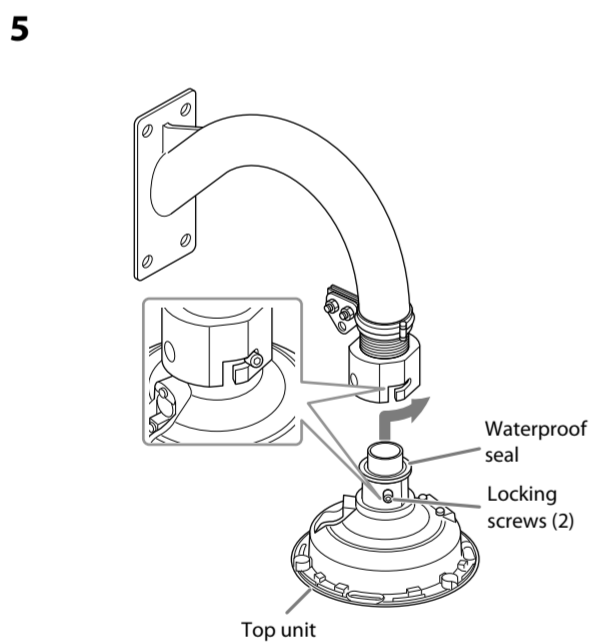
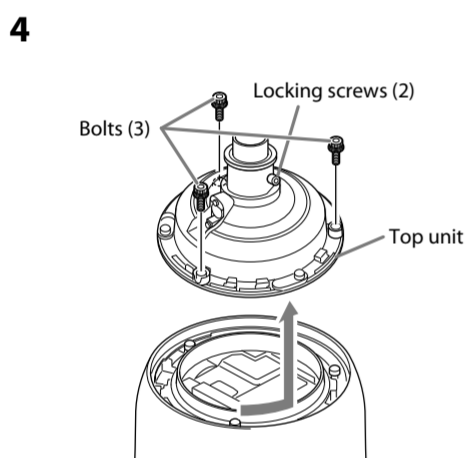
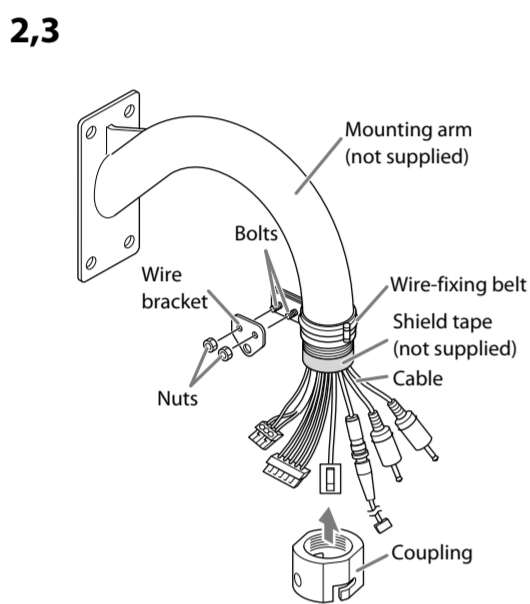
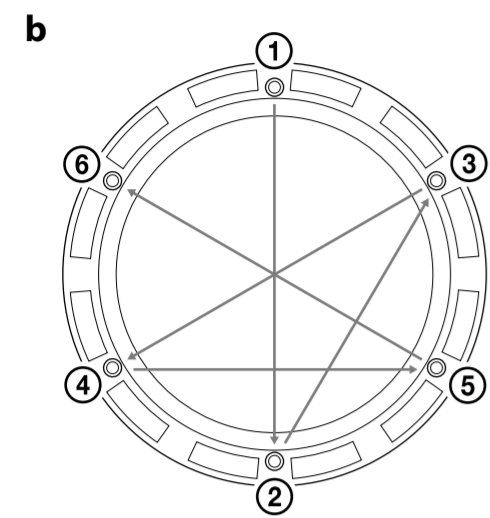
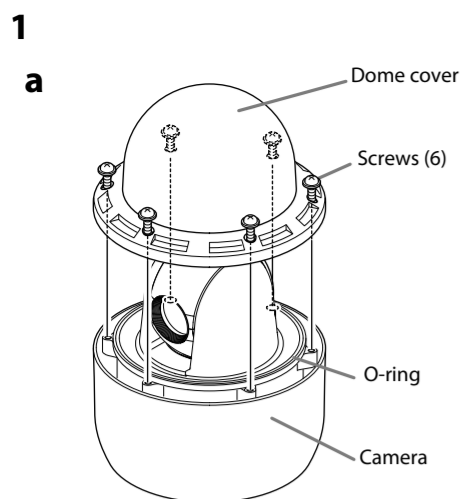
Wiring diagram for alarm output



(continued on the reverse side)



How to install the camera



Installation

Notes

- Do not allow water to come in contact with the power cable, connection cables or connectors, as it may cause water leakage into this device, and subsequent damage.
- The mounting arm (not supplied) to which the device is attached should have fixing screws of NPT 1 1/2" specified by a Sony dealer. Using an unspecified mounting arm may cause water leakage into this device, and subsequent damage. Be sure to use the specified mounting arm.
- The lens zoom and angle may result in a blurred or inclined image within the range above the horizon of the lens position.
- To prevent the dome cover from damage and stain, do not remove the protecting sheet from the dome cover until the setting is completed.

WARNING

- If installing the camera in high location, such as high wall, entrust the installation to a professional contractor or service personnel.
- The camera should be securely installed on a location strong enough to support the weight of the camera and the mounting arm. Otherwise, the camera and mounting arm may fall and cause serious injury.
- For the fall-prevention of the camera, make sure to use the wire rope.
- If the bolts are attached loosely or loosen, the camera and parts may fall. There may also be a risk of water leakage. Make sure to tighten the bolts and screws so that they will not loosen.
- Check the camera is attached securely, the screws, etc. are not loosened periodically, at the least once a year. Depending on the usage conditions, periodic inspections should be conducted more frequently.

Note

Use the supplied screws to install the unit. Using other screws may cause damage inside the unit.

How to Install



Before installation

Referring to the installation manual of the mounting arm (not supplied), drill the required holes for the mounting screws and the connection cable. Then install the mount arm in advance. After that, wrap the screw part of the mounting arm in a shield tape (not supplied).

How to install the camera

- Attach the dome cover to the camera. (a)
- Tighten the six screws in the specified order (1 to 6). (b)

Notes

- Remove the drafting tape from the O-ring before attaching the dome cover.
- Be sure to properly place the O-ring in the groove firmly before attaching the dome cover. If the O-ring is not properly and firmly placed, waterproof performance may be compromised.
- The six screws should be tightened to 1.2 N·m.

- Attach the supplied wire-fixing belt and wire bracket to the mounting arm (not supplied). Then secure the wire-fixing belt and wire bracket to the mounting arm by tightening two nuts.

Note

The two bolts should be tightened to 5.2 N·m.

- Screw the supplied coupling on the mounting arm.

Note

If the coupling is attached loosely or loosens, the camera may fall. Securely put the coupling around the mounting arm so that it will not loosen.

- Remove the three bolts from the top part of the camera, and turn the top unit until it stops, then pull it upward to remove it from the camera. Have a 5 mm (1/8 inch) hex wrench ready to loosen the bolts.

- Attach the top unit to the mounting arm. Place the locking screws fixed to the top unit in the groove of the coupling and turn the top unit until it stops, in the direction of the arrow.

Notes

- Remove the drafting tape from the waterproof seal before attaching the mounting arm.
- Be sure to verify that the locking screws are not loose. If the locking screws are loose, the camera may fall. The locking screws should be tightened to 5.2 N·m.
- Be sure to tighten the waterproof seal properly to the top unit before attaching; otherwise, waterproof performance may be compromised.

- Attach the two supplied bolts to the screw holes of the coupling and tighten them.

Note

The two bolts should be tightened to 5.2 N·m.

- Run the supplied harness band through the band-mounting hole (a), tie the cables at 100 mm to 125 mm (4 inches to 5 inches) from the cable head (b). If the tied position is not appropriate, push the release button of the harness band to loosen, and tie the cables again.

- Secure the band mount to the harness holder (a), and connect the cables. Push the cables into the top unit (b). Be sure that all cable connection sides of the top unit are in parallel with the harness holder. (c)

- Hook the fall-prevention wire of the camera on the hole of the wire bracket.

- Align the triangular mark of the camera and square mark of the top unit and push the camera into the top unit. Then turn the camera until it stops, in the direction of the arrow.

Notes

- Be sure to properly place the O-ring in the groove firmly before attaching the camera. If the O-ring is not properly and firmly placed, waterproof performance may be compromised.
- Be sure that the camera connection terminal of the top unit is in parallel with the harness holder before pushing the camera into the top unit.
- To prevent the cables from getting caught, push the slack part of the cables into the top unit before attaching the camera.

- Attach the camera to the top unit using the three bolts which were removed in step 4.

Note

The three bolts should be tightened to 5.2 N·m.

- Separate the provided top sunshade and reattach the separated parts above the camera to return the top sunshade to its original form.

Notes

- Run the fall-prevention wire through the top sunshade.
- Securely attach the top sunshade so that the snap hook will not get caught in it.

- Align the respective triangular marks of the camera and top sunshade and push the top sunshade into the camera. Then turn the sunshade until it stops, in the direction of the arrow.

- Secure the camera and top sunshade using the screw on the top sunshade.

Notes

- Please make sure to attach the top sunshade. The top sunshade prevents the device from overheating in direct sunlight.
- The screw should be tightened to 1.2 N·m.

Removing the camera

- Remove the one screw that secures the top sunshade to the camera in Step 14 of "How to install the camera" to remove the top sunshade.
- Remove the three bolts used in Step 11 of "How to install the camera."
- Turn the top unit to the position where the triangular mark of the camera and the square mark of the top unit align, and pull the camera out downwards.
- Remove the fall-prevention wire of the camera from the hole of the wire bracket.

Specifications

Network	TCP/IP, ARP, ICMP, HTTP, FTP (server/client), SMTP (client), DHCP (client), DNS (client), NTP (client), SNMP (MIB-2), RTP/RTCP
Compression	JPEG/H.264
Video compression format	G.711/G.726 (40, 32, 24, 16 kbps)
Audio compression format	SNC-WR632: JPEG/H.264: 60 fps (1920 × 1080)
Maximum frame rate	SNC-WR602: JPEG/H.264: 60 fps (1280 × 720)

Camera	SNC-WR632: Camera FHD (1080 60P) SNC-WR602: Camera HD (720 60P)
Camera system	NTSC/PAL switching system
Signal system	1/2.8 type CMOS
Image device	Effective picture elements SNC-WR632: Approx. 1,370,000 SNC-WR602: Approx. 1,370,000
Synchronizing	Internal synchronization
Minimum illumination	SNC-WR632: 1.4 lx (F1.6/AGC ON/50 IRE (IP)) SNC-WR602: 1.0 lx (F1.6/AGC ON/50 IRE (IP))
Horizontal resolution	480 TV (analog video output)
Video 5/N	50 dB or more (AGC 0 dB)
Lens	
Focal length	SNC-WR632: f = 30.2 mm to 904.9 mm (35 mm equivalent) SNC-WR602: f = 33.0 mm to 990.0 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
Tilt	220° (with auto invert function) Maximum speed: 700°/s
Interface	
Network port	10BASE-T/100BASE-TX, auto negotiation (RJ-45)
I/O port	Sensor input: × 4, make contact Alarm output: × 2, 24 V AC/DC, 1 A (mechanical relay outputs electrically isolated from the camera)
Video output	VIDEO OUT: BNC, 1.0 Vp-p, 75 ohms, unbalanced, sync negative
SD card slot	Minijack (monaural)
Microphone input	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	Minijack (monaural) Recommended load impedance 10 kohms
Line output	Minijack (monaural), Maximum output level: 1 Vrms
Serial communication	RS485/RS422
Others	
Power supply	HPoE+ 4 line power-supply 24 V AC ± 10%, 50 Hz/60 Hz Max. 80 W
Power consumption	24 V AC: -40 °C to +50 °C (-40 °F to +122 °F) Max. 80 W
Operation temperature	HPoE+: -5 °C to +50 °C (23 °F to +122 °F)
Activation temperature	24 V AC: -40 °C to +50 °C (-40 °F to +122 °F) HPoE+: 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)	ø222 mm × 324.1 mm (ø8 3/4 inches × 12 7/8 inches) (Not including the projecting parts) Approx. 4.1 kg (9 lb 0.6 oz)
Mass	
Supplied accessories	Dome cover (1) Top sunshade (1) Coupling (1) Wire-fixing belt (1) Wire bracket (1) Bolts (2) Power supply connector 3-pin (1) I/O harness 14-pin (1) Monitor cable (1) Harness band (1) Band mount (1) Installation manual (1 set) CD-ROM (supplied programs) (1)
Optional accessories	
Dome Cover Smoked	YT-LDR632S

Design and specifications are subject to change without notice.