

Network Camera

Installation Manual

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

IPELA

SNC-RZ50N/RZ50P

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http://www.sony.net/



Printed on 70% or more recycled paper.

Printed in Japan

Owner's Record

The model and serial numbers are located on the bottom. Record these numbers in the spaces provided below.
Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. _____ Serial No. _____

WARNING

To reduce a risk of fire or electric shock, do not expose this product to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

AC power adaptor

Model No.: MPA-AC1 (Sony)

CAUTION: This unit is for use only with the supplied AC power adaptor. Use with other AC power adaptors may cause hazards such as a fire.

WARNING

This installation should be made by a qualified service person and should conform to all local codes.

WARNING

A readily accessible disconnect device shall be incorporated in the building installation wiring.

WARNING (for Installers only)

Instructions for installing the equipment on the ceiling:
After the installation, ensure the connection is capable of supporting five times the weight of the equipment downwards.

CAUTION

The rating label is located on the bottom.

CAUTION for LAN port

For safety reason, do not connect the LAN port to any network devices that might have excessive voltage.

For customers in the U.S.A. (SNC-RZ50N only)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: 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 reasonable protection 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 harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

All interface cables used to connect peripherals must be shielded in order to comply with the limits for a digital device pursuant to Subpart B or Part 15 of FCC Rules.

For customers in Canada (SNC-RZ50N only)

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

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

For customers in other countries

WARNING

This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

In the case that interference should occur, consult your nearest authorized Sony service facility.

ATTENTION

The electromagnetic fields at specific frequencies may influence the picture of the unit.

Voor de Klanten in Nederland

- Gooi de batterij niet weg maar lever deze in als klein chemisch afval (KCA).
- Dit apparaat bevat een vast ingebouwde batterij die niet vervangen hoeft te worden tijdens de levensduur van het apparaat.
- Raadpleeg uw leverancier indien de batterij toch vervangen moet worden. De batterij mag alleen vervangen worden door vakbekwaam servicepersoneel.
- Lever het apparaat aan het einde van de levensduur in voor recycling, de batterij zal dan op correcte wijze verwerkt worden.



For the customers in Taiwan only



廢電池請回收

Features

- You can monitor a high-quality live image from the camera using the Web browser on a computer connected to a 10BASE-T or 100BASE-TX network.
- The maximum frame rate is 30 fps for SNC-RZ50N and 25 fps for SNC-RZ50P.
- Up to 20 users can view an image from one camera at the same time.
- Single codec mode and Dual codec mode swichable.
- Remote-controllable high-speed pan/tilt mechanism and high magnification autofocus zoom lens are provided.
- Inserting the optional wireless card SNCA-CFW1* (802.11b) or SNCA-CFW5* (802.11b or 802.11g) in the CF card slot or PC card slot enables you to transmit images from the camera via wireless LAN.
- Image transmission using e-mail or FTP is possible.
- Up to 16 preset positions (pan, tilt and zoom positions) of the camera and 5 tour programs composed from the preset positions can be saved.
- The camera is provided with an intelligent object detection function.
- Two sets of alarm outputs are equipped, which enables you to control peripheral devices by synchronizing with any functions.
- Direct panning/tilting function is equipped.
- Built-in superimposed function (date/time).

* SNCA-CFW1 and SNCA-CFW5 are not available in some countries and areas. For details, contact your authorized Sony dealer.

Notes on Use

Data and security

- You should keep in mind that the images or audio you are monitoring may be protected by privacy and other legal rights, and the responsibility for making sure you are complying with applicable laws is yours alone.
- Access to the images and audio is protected only by a user name and the password you set up. No further authentication is provided nor should you presume that any other protective filtering is done by the service. Since the service is Internet-based, there is a risk that the image or audio you are monitoring can be viewed or used by a third-party via the network.
- SONY IS NOT RESPONSIBLE, AND ASSUMES ABSOLUTELY NO LIABILITY TO YOU OR ANYONE ELSE, FOR SERVICE INTERRUPTIONS OR DISCONTINUATIONS OR EVEN SERVICE CANCELLATION. THE SERVICE IS PROVIDED AS-IS, AND SONY DISCLAIMS AND EXCLUDES ALL WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE SERVICE INCLUDING, BUT NOT LIMITED TO, ANY OR ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR THAT IT WILL OPERATE ERROR-FREE OR CONTINUOUSLY.
- Security configuration is essential for wireless LAN. Should a problem occur without setting security, or due to the limitation of the wireless LAN specifications, SONY shall not be liable for any damage.
- Always make a test recording, and verify that it was recorded successfully. SONY WILL NOT BE LIABLE FOR DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION OR REIMBURSEMENT ON ACCOUNT OF FAILURE OF THIS UNIT OR ITS RECORDING MEDIA, EXTERNAL STORAGE SYSTEMS OR ANY OTHER MEDIA OR STORAGE SYSTEMS TO RECORD CONTENT OF ANY TYPE.
- Always verify that the unit is operating properly before use. SONY WILL NOT BE LIABLE FOR DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION OR REIMBURSEMENT ON ACCOUNT OF THE LOSS OF PRESENT OR PROSPECTIVE PROFITS DUE TO FAILURE OF THIS UNIT, EITHER DURING THE WARRANTY PERIOD OR AFTER EXPIRATION OF THE WARRANTY, OR FOR ANY OTHER REASON WHATSOEVER.
- If you lose data by using this unit, SONY accepts no responsibility for restoration of the data.

Operating or storage location

Do not shoot an extremely bright object (an illumination, the sun, etc.). Also, avoid operating or storing the camera in the following locations, as these can be a cause of a malfunction.

- Extremely hot or cold places (Operating temperature: 0 °C to +40 °C [32 °F to 104 °F])
- Exposed to direct sunlight for a long time, or close to heating equipment (e.g., near heaters)
- Close to sources of strong magnetism
- Close to sources of powerful electromagnetic radiation, such as radios or TV transmitters
- Locations subject to strong vibration or shock

Ventilation

To prevent heat buildup, do not block air circulation around the camera.

Transportation

When transporting the camera, repack it as originally packed at the factory or in materials of equal quality.

Cleaning

- Use a blower to remove dust from the lens.
- Use a soft, dry cloth to clean the external surfaces of the camera. Stubborn stains can be removed using a soft cloth dampened with a small quantity of detergent solution, then wipe dry.
- Do not use volatile solvents such as alcohol, benzene or thinners as they may damage the surface finishes.

Note on laser beams

Laser beams may damage a CCD. You are cautioned that the surface of a CCD should not be exposed to laser beam radiation in an environment where a laser beam device is used.

Phenomena Specific to CCD Image Sensors

The following phenomena that may appear in images are specific to CCD (Charge Coupled Device) image sensors. They do not indicate malfunctions.

White flecks

Although the CCD image sensors are produced with high-precision technologies, fine white flecks may be generated on the screen in rare cases, caused by cosmic rays, etc.

This is related to the principle of CCD image sensors and is not a malfunction.

The white flecks especially tend to be seen in the following cases:
- when operating at a high environmental temperature
- when you have raised the gain (sensitivity)
- when using the slow shutter

Vertical smear

When an extremely bright object, such as a strong spotlight or flashlight, is being shot, vertical tails may be produced on the screen, or the image may be distorted.

Aliasing

When fine patterns, stripes, or lines are shot, they may appear jagged or flicker.

About the Supplied 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.

User's Guide (stored in the CD-ROM)

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 CD-ROM Manuals

The supplied CD-ROM disc includes the User's Guides for this unit (Japanese, English, French, German, Spanish, Italian and Chinese versions) in PDF format.

Preparations

The Adobe Reader Version 6.0 or higher must be installed on your computer in order to use the User's Guide stored in the CD-ROM disc.

Note

If Adobe Reader is not installed, it may be downloaded from the following URL: <http://www.adobe.com/>

Reading the manual in the CD-ROM

- Insert the CD-ROM in your CD-ROM drive.**
A cover page appears automatically in your Web browser. If it does not appear automatically in the Web browser, double-click on the index.htm file on the CD-ROM.
- Select and click on the manual that you want to read.**
This opens the PDF file of the manual. Clicking an item in the Table of Contents allows you jump to the relevant page.

Notes

- The files may not be displayed properly, depending on the version of Adobe Reader. In this case, install the latest version, which you can download from the URL mentioned in "Preparations" above.
- If you have lost or damaged the CD-ROM, you can purchase replacement. Contact your Sony service representative.

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

Location and Function of Part

Front

A

- CF card slot**
A longer wireless LAN distance can be obtained by attaching the optional SNCA-AN1 wireless LAN antenna to the SNCA-CFW1* or SNCA-CFW5*.

This slot is used for the optional SNCA-CFW1* (802.11b)/SNCA-CFW5* (802.11b or 802.11g) wireless card or recommended CF memory card. A longer wireless LAN distance can be obtained by attaching the optional SNCA-AN1 wireless LAN antenna to the SNCA-CFW1* or SNCA-CFW5*.

Notes

- Insert the CF memory card with its front side towards the NETWORK indicator.
- For the verified CF memory cards, contact your authorized Sony dealer.

- PC card slot**

This slot is used for the optional SNCA-CFW1*/SNCA-CFW5* wireless card or recommended ATA memory card.

In case of the wireless card: Insert the SNCA-CFW1* into a commercially available type II-PCMCIA adaptor and insert the adaptor into the PC card slot.

A longer wireless LAN distance can be obtained by attaching the optional SNCA-AN1 wireless LAN antenna to the SNCA-CFW1* or SNCA-CFW5*.

Notes

- Insert the PC card with its front side towards the bottom of the camera.
- For the verified ATA memory cards, contact your authorized Sony dealer.

- PC card lever**

Press the lever to remove the PC card from the PC card slot.

- CF card lever**

Press the lever to remove the CF memory card from the CF card slot.

- NETWORK indicator (green)**

The indicator lights up or flashes in green when the camera is connected to the network.
The indicator goes off when the camera is not connected to the network.

- Lens**

A x 26 optical zoom, auto-focus lens is mounted as standard equipment.

- POWER indicator (green)**

When the power is supplied to the camera, the camera starts checking the system.

If the system works normally, this indicator lights up.
If a system error occurs, this indicator flashes every second. In this case, consult your authorized Sony dealer.

* SNCA-CFW1 and SNCA-CFW5 are not available in some countries and areas. For details, contact your authorized Sony dealer.

Rear

B

- DC IN 12 V (power input) connector**

Connect the supplied AC power adaptor.

- (video output) connector (BNC type)**

Outputs a composite video signal. Connect to a composite video input connector of a video monitor, etc.

- LAN (network) port (RJ45)**

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

- (microphone input) jack (minijack, monaural)**

Connect a commercially available microphone. This jack supports plug-in-power microphones (rated voltage: 2.5 V DC).

You can connect the microphones of the following specifications to this camera.

Type: Electret condenser microphone Plug-in power system
Directivity: Omni-directional
Sensitivity: -40 ± 3.5 dB
Frequency range: 50 – 15,000 Hz
Plug: ø3.5 Mini-plug

- (line output) jack (minijack, monaural)**

Connect a commercially available speaker system with the built-in amplifier.

You can connect the speakers of the following specifications to this camera.

Type: Active speaker
Impedance: Input impedance 4.7 kohms or more
Plug: ø3.5 Mini-plug

- I/O (Input/Output) port**

This port is provided with an RS-232C port, two sensor inputs and two alarm outputs.

The RS-232C port is used when you connect peripheral devices to the camera using the RS-232C interface, and control the camera or transmit/receive data from the devices.

The sensor input is used as the alarm input. The camera operation can be synchronized with e-mail (SMTP) or other applications.

The alarm output is used to control connected peripheral devices by synchronizing with an external sensor input, the built-in detection function, a manual trigger button, Day/Night function or the timer function.

Pin No.	Pin name
1	Sensor In 1 +
2	Sensor In 1 – (GND)
3	Sensor In 2 +
4	Sensor In 2 – (GND)
5	Alarm Out 1 +
6	Alarm Out 1 –
7	Alarm Out 2 +
8	Alarm Out 2 –
9	RS232C · RX
10	RS232C · TX

Note

The I/O port of this unit corresponds to the VISCA command. However, there are some commands which are not supported.

- Reset switch**

To reset the camera to the factory default settings, supply the power to the camera, while holding down this switch with a pointed object.

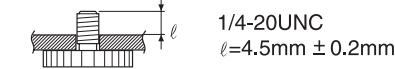
For details on each function and required settings, see the User's Guide stored in the supplied CD-ROM.

Bottom

C

- Tripod hole**

Use this hole when attaching the camera to a tripod (screw: 1/4", 20 UNC)



Caution

Use the mounting screw whose length is 4.5 mm ± 0.2 mm only. Use of other screws may cause improper mounting and damage parts inside the camera.

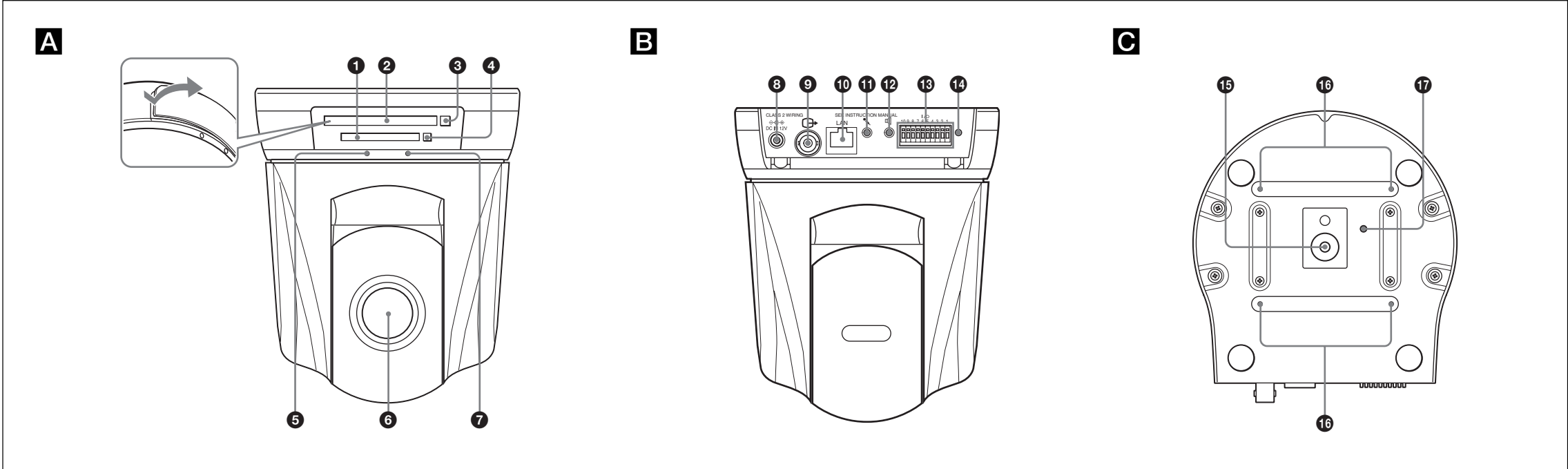
- Ceiling bracket mounting screw holes**

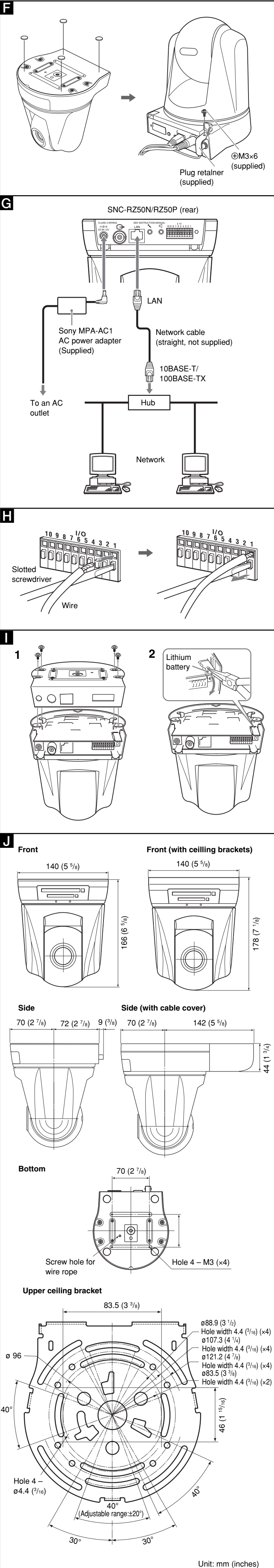
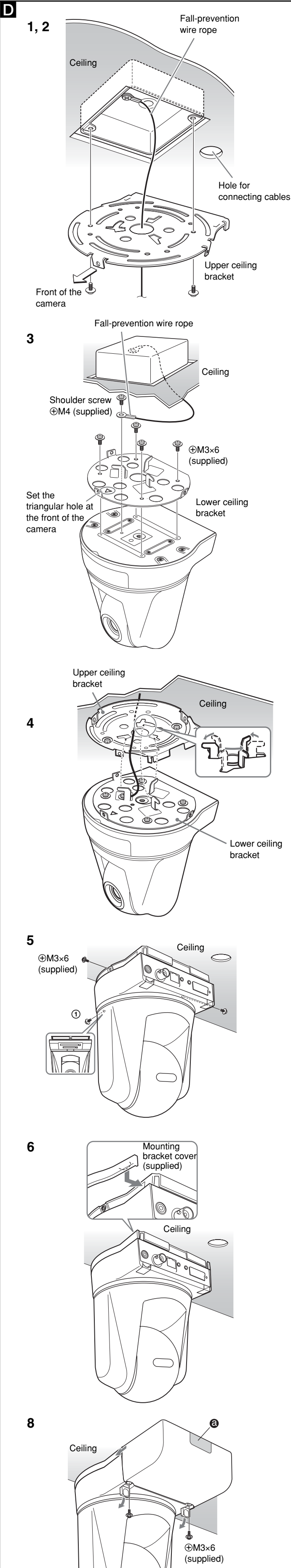
When installing the camera on the ceiling, fix the supplied ceiling brackets to these holes using the supplied screws (øM3 x 6).

- Screw hole for fall-prevention wire rope**

When installing the camera on the ceiling, fix the supplied fall-prevention wire rope to this hole using the supplied shoulder screw (øM4).

(continued on the reverse side)





Installation

Notes

- Do not grasp the camera head when carrying the camera.
- Do not turn the camera head manually. Doing so will result in the camera malfunctioning.

Installing the Camera on the Ceiling

Using the supplied ceiling brackets, wire rope and screws, you can utilize existing junction boxes, etc., to attach the camera to the ceiling. When you install the camera, always install it on a level ceiling. If you have to install it on a sloping or uneven ceiling, make sure that the place where you install it is within $\pm$ 5 degrees of the horizontal in order to ensure the pan/tilt mechanism functions properly.

Warning

- If you attach the camera in the height such as the wall or the ceiling, etc., entrust the installation to an experienced contractor or installer.
- If you install the camera on the ceiling, 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 supplied wire rope.
- 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 connecting cables.

Note

The connecting cables cannot be passed through the upper ceiling bracket. A hole for the wiring is required in the ceiling at the back of the camera where it is attached to the ceiling.

Installation

- Attach the fall-prevention wire rope to the junction box in the ceiling. Use a screw hole and a screw (not supplied) in the junction box to attach the wire rope.
- Attach the upper ceiling bracket to the junction box on the ceiling. Align the holes in the bracket with those in the junction box, and use appropriate screws (not supplied). There are elongated holes for the screws along the rounded edges of the upper ceiling bracket. Later, the front of the camera will be positioned along this edge. Face the camera toward the front, adjust the aim, and attach it securely.
- Attach the lower ceiling bracket to the bottom of the camera using the supplied four screws ($\varnothing$ M3 $\times$ 6). Attach also the wire rope to the bottom of the camera using the supplied shoulder screw ($\varnothing$ M4). When attaching, align the screw holes on the bottom of the camera with those in the ceiling bracket, and set the triangular hole in the ceiling bracket at the front of the camera. Tighten the screws a little bit at a time in the numbered order shown in the illustration. After all of the screws are temporarily tightened in the proper manner, securely tighten each one in turn.

Caution

To attach the ceiling bracket, use only the screws supplied with the camera. Using other screws may damage the camera.

- Insert the raised protrusions on the lower ceiling bracket into the spaces provided in the upper ceiling bracket, and temporarily fix them by turning the camera with lower ceiling bracket clockwise.
- Attach it using the supplied three screws ($\varnothing$ M3 $\times$ 6), starting with the screw at position ①.
- Attach the mounting bracket cover around the ceiling bracket.
- Connect the cables to the connectors on the rear of the camera.
- Temporarily attach the cable cover by inserting the raised protrusions on the cable cover into the gaps at the rear of the upper ceiling cover. Then fix the cable cover using the supplied two screws ($\varnothing$ M3 $\times$ 6). To extend the cables through the rear of the cable cover, cut out the thinner portion ② of the cover using a cutter knife.

Note

Take proper steps to ensure that the load of the connected cables does not cause problems.

Removing the camera

- Remove two screws used to attach the cable cover in step 8 of "Installation" and remove the cable cover.
- Disconnect the cables from the connectors at the rear of the camera.
- Remove the mounting bracket cover that is attached in step 6 of "Installation". First take off the tab on the edge as in the illustration.
- Remove three screws used to attach the camera in step 5 of "Installation."
- Pushing the entire camera up towards the ceiling, turn the camera counterclockwise as far as it goes, then pull it out.

Installing the Camera on the Desk Top

When you install the camera, always install it on a level surface. If you have to install it on a sloping or uneven surface, make sure that the place where you install it is within $\pm$ 5 degrees of the horizontal in order to ensure the pan/tilt mechanism functions properly. In this case, be sure to take the fall-prevention measures.

- Paste the supplied four rubber feet on the bottom of the camera.
- Turn the Sony badge on the front to fit top and bottom.
- Connect the AC power adaptor and attach the plug retainer using the supplied screw ($\varnothing$ M3 $\times$ 6) to prevent it coming out.
- Place the camera on the desktop.

Note

By default, the images from the camera are displayed normally when the camera is installed on the ceiling. To display the images from the camera in correct way when you place the camera on the desk top, use the E.flip function. For the setting of the E.flip function, see the User's Guide stored in the supplied CD-ROM.

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 (straight, not supplied). Arrange wiring of the network cable and secure it with the cable clamps, as shown in the figure.

To connect to a computer

Connect the LAN port of the camera unit to the network connector of a computer using the network cable (cross, not supplied).

Connecting the power source

Connect the supplied Sony MPA-AC1 AC power adaptor as shown in figure.

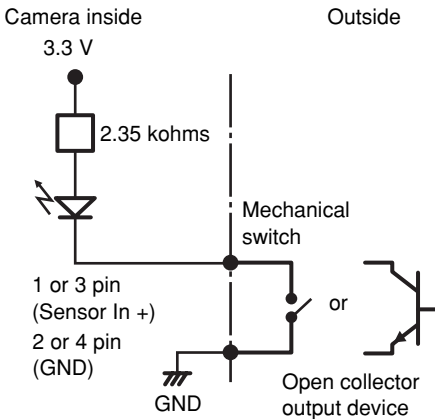
Connecting the I/O cable

Using the I/O receptacle

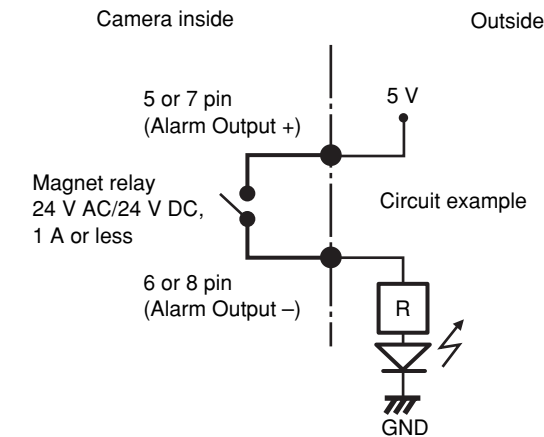
While holding down the button under the slot to which you want to connect the wire (AWG No. 28 to 22) with a small slotted screwdriver, insert the wire into the slot. Then release the screwdriver from the button. Repeat this procedure to connect all required wires.

Wiring diagram for sensor input

Mechanical switch/open collector output device



Wiring diagram for alarm output



When You Discard the Camera

For environmental reasons, take out the lithium battery from the camera and discard it appropriately.

- Remove the four screws illustrated below and detach the bottom panel.
- Hold the board on which the lithium battery is attached using long-nose pliers. Then, bend it in the direction of the arrow illustrated below to detach the battery.

WARNING (for service personnel only)

There is danger of explosion if batteries are mishandled. Dispose of batteries properly in accordance with the manufacturer's instructions and all applicable local regulations.

Specifications

Network

Protocol

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

* The model on sale in China does not support the HTTPS (SSL) function.

Compression

Video compression format JPEG/MPEG4/H.264
Audio compression format G.711/G.726 (40,32,24,16 kbps)
Image size 640 $\times$ 480 (VGA), 320 $\times$ 240 (QVGA), 160 $\times$ 120 (QQVGA)

Maximum frame rate SNC-RZ50N: 30 fps

SNC-RZ50P: 25 fps

Web browser Internet Explorer Ver. 6.0 or later
Available OS Microsoft Windows 2000, Windows XP, Windows Vista

Computer environments CPU: Pentium 4, 1.5 GHz or higher (Pentium 4, 2.4 GHz or higher recommended)

RAM: 256 MB or more
Display size: 1024 $\times$ 768 or more

Maximum user access 20 users

Network security Password (basic authentication), IP filtering

Homepage customization Starting from a homepage in the built-in flash memory, an ATA memory card or a CF memory card possible

Other functions Detection, image trimming, built-in clock, etc.

Camera

Signal system SNC-RZ50N: NTSC color system
SNC-RZ50P: PAL color system

Image device 1/4 type color CCD

Total picture elements: SNC-RZ50N: Approx. 630,000
SNC-RZ50P: Approx. 740,000

Effective picture elements: SNC-RZ50N: Approx. 340,000
SNC-RZ50P: Approx. 400,000

Lens 26 $\times$ (Optical), 12 $\times$ (Digital)
f=3.5 to 91 mm, F1.6 to F3.8

Horizontal angle: 1.7° to 42.0°
TELE end: 1,500 mm (59 1/8 inches)

WIDE end: 320 mm (12 5/8 inches)
2.2 lx (F1.6/50 IRE)

Minimum illumination 1 to 1/10,000 s

Shutter speed SNC-RZ50N : 450 TV (WIDE end)
SNC-RZ50P : 450 TV (WIDE end)

Horizontal resolution 50 dB or more

Video S/N

Mechanism

Pan -170° to $+170^\circ$

Tilt -90° to $+25^\circ$
Maximum speed: 300° / s

Interface

Network port 10BASE-T/100BASE-TX Auto-negotiation (RJ-45)

I/O port Sensor input : $\times$ 2, make contact, break contact

Alarm output : $\times$ 2, 24 V AC/DC, 1 A (mechanical relay outputs electrically isolated from the camera)

Serial interface: $\times$ 1 (RS-232C)
VIDEO OUT: BNC, 1.0 Vp-p,

75 ohms, unbalanced, sync negative
PCMCIA Type II

CF Type I/II
Minijack (monaural)

Plug-in-power supported (rated voltage: 2.5 V DC)

Recommended load impedance 2.2 khoms

Line output Minijack (monaural), Maximum output level: 1 Vrms

Others

Power supply 12 V DC $\pm$ 10%

Power consumption 20 W max.

Operating temperature 0 °C to +40 °C (32 °F to 104 °F)

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

Operating humidity 20 to 80 %

Storage humidity 20 to 95 %

Dimensions 166 $\times$ 140 $\times$ 142 mm (6 5/8 $\times$ 5 5/8 $\times$ 5 5/8 inches) (h/w/d)

not including the projecting parts

Approx. 1.2 kg (2 lb 10 oz)

Supplied accessories CD-ROM (User's Guide and supplied programs) (1)

Sony MPA-AC1 AC power adaptor (1)

AC power cord (1)

Upper ceiling bracket (1)

Lower ceiling bracket (1)

Cable cover (1)

Mounting bracket cover (1)

Screws $\varnothing$ M3 $\times$ 6 (9)

Shoulder screw $\varnothing$ M4 (1)

Plug retainer (1)

Rubber foot (4)

Fall-prevention wire rope (1)

Installation Manual (this document) (1)

B&P Warranty Booklet (1) (SNC-RZ50N only)

Optional accessories

YT-ICB550 (clear type/tinted type)

YT-MA550

Wireless card SNCA-CFW1*, SNCA-CFW5*

Wireless LAN antenna SNCA-AN1

* SNCA-CFW1 and SNCA-CFW5 are not available in some countries and areas. For details, contact your authorized Sony dealer.

Design and specifications are subject to change without notice.

Regular parts replacement

Some of the parts that make up this product (electrolytic condenser, for example) need replacing regularly depending on their life expectancies.

The lives of parts differ according to the environment or condition in which this product is used and the length of time it is used, so we recommend regular checks. Consult the dealer from whom you bought it for details.