SONY

4-441-093-**13**(1)

Network Camera

Installation Manual

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

SNC-VB600/VB600B/VB630 SNC-EB600/EB600B/EB630/EB630B



© 2012 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.

The illustrations in this Installation Manual show the SNC-VB600 as an example.

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

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

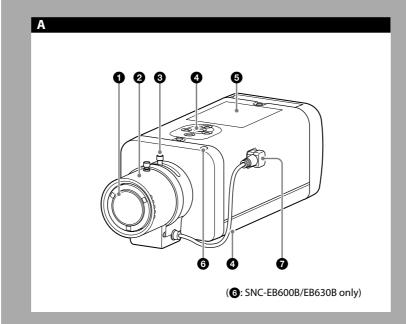
The manual can be read on a computer with Adobe Reader installed. You can download Adobe Reader free from the Adobe website.

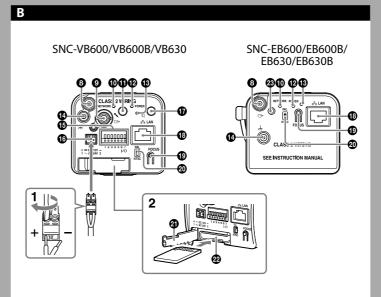
- 1 Open the index.html file in the CD-ROM.
- 2 Select and click on the manual that you want to read.

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 Adobe 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

Front

• Lens

A vari-focal lens is mounted as standard equipment.

2 Focus ring

Turn this ring toward N (near) to focus on a closer object. Turn it toward ∞ (infinite) to focus on a farther object.

Soom ring

Turn this ring toward T for telephoto, or toward W for wide-angle.

Tripod screw hole

Use this screw hole when attaching the camera to a tripod (screw: 1/4", 20 UNC). You can attach a tripod to either the top or bottom of the camera.



Α

В

U1/4", 20 UNC ℓ = 4.5 mm - 7 mm (ISO standard) (with the screws fastened)

Caution

Use the mounting screw whose length is 4.5 mm – 7 mm only. Use of other screws may cause improper mounting and damage parts inside the camera.

6 Rating Label

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

6 Focal length adjustment (SNC-EB600B/EB630B only)

Use this screw to adjust the focal length (the distance between the lens mounting plane and the image plane).

• Lens connector (4-pin socket)

Supplies power and control signals to an auto-iris lens.

Rear

3 Fall-prevention wire rope mounting screw hole

When installing the camera to the ceiling or the wall, secure the supplied wire rope to this hole using the supplied screw.

③ VIDEO OUT (video output) connector

Connect the BNC cable (not supplied) to this connector.

NETWORK indicator

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.

(microphone input) jack (minijack, monaural)

Connect a commercially available microphone.

This jack supports plug-in-power microphones (rated voltage: 2.5 V DC).

POWER indicator (Green)

When the power is supplied to the camera, the camera starts checking the system. If the system is normal, this indicator lights up.

Reset switch

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

♠ (ground) terminal

This is a ground terminal for the chassis.

1/O (Input/Output) port

This port provides two sensor inputs and two alarm outputs. The signal pin assignment is as follows.

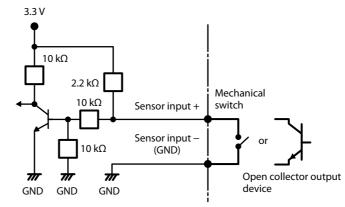
PinNo. Signal			
1	Sensor input 1+		
2 Sensor input 2+			
3 Sensor input– (GND)			
4	4 Alarm output 1+		
5 Alarm output 1–			
6 Alarm output 2+			
7 Alarm output 2–			

For details on each function and required settings, see the User's Guide. Connect the wires of the I/O cable as follows:

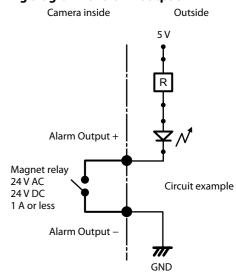
Wiring diagram for sensor input

Mechanical switch/open collector output device

Camera inside Outside



Wiring diagram for alarm output



16 DC 12 V/AC 24 V (power input) terminal

Connect to a 12 V DC or 24 V AC power supply system. (B-1)

(line output) jack (minijack, monaural)

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

(B) LAN network port (RJ-45)

Connect a network cable (UTP, category 5) to this port to communicate with a network or PoE* system.

For details on connection, see the Instruction Manual of the power supply equipment.

(*PoE stands for Power over Ethernet. It is pursuant to IEEE802.3af.)

19 Easy Focus button (except SNC-EB600B/EB630B)

Adjust the focus approximately by the focus ring, then press this button to automatically adjust the focus.

To load the default setting, press and hold this button for more than 4 seconds.

NTSC/PAL switch

Switching the video output.

After setting the switch, reboot the camera unit.

SD card slot cover

To remove the SD card slot cover, pull the cover forward, and insert the memory card.

When closing the cover, be sure to close it completely by pushing on the hook on the end until it locks in place.

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 (referring to the illustration), and be sure to insert it completely. (**B**-2)

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

Note

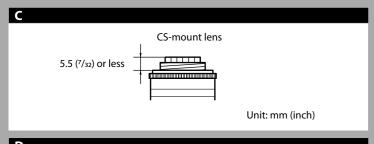
For inquiries regarding verified SD memory cards, contact your authorized Sony dealer

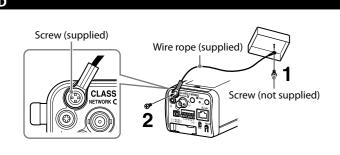
MONITOR out connector (AV minijack)

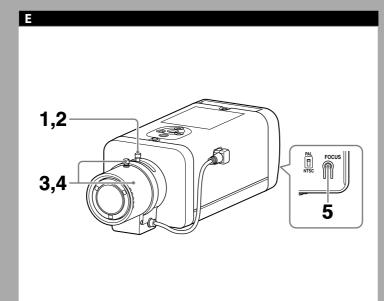
Output the composite video signal from the camera.

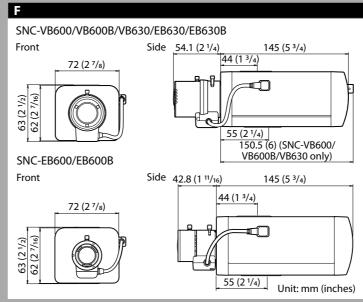
Monitor out is used when you adjust the view angle.

(continued on the reverse side)









Installation

Caution

To prevent the camera from falling, make sure to attach the supplied wire

Suitable lens

The lens must be a CS-mount type and the protrusion behind the mounting surface must be 5.5 mm (7/32 inch) or less.

 When you install it into a wall or a ceiling, check that the wall or the ceiling is strong enough to hold the weight of the camera including the mounting bracket, and install it without fail. If not, the camera falls down and causes a serious injury.

Also, check if the mounting is not loosened at least once a year. Make the checking interval short according to use condition.

• Performance will depend on the installation environment and the lens itself. For details, contact your authorized Sony dealer.

Attaching the wire rope

When you install the camera on a ceiling or a high position, be sure to attach the supplied wire rope to prevent the camera from falling.

Attach the wire rope to the screw hole on the rear of the camera, as in the illustration

Note

Take care not to short-circuit the power terminal or the cable with the wire rope

1 Secure the wire rope to the junction box on the ceiling. Use a screw to match the screw hole of your junction box (not supplied).

2 Secure the wire rope to the wire rope mounting screw hole on the rear of the camera using the supplied screw.

Caution

Use the supplied screws for installation. If not, the wire rope may not function

Adjusting the Camera Coverage and Focus 目

- 1 Loosen the zoom ring locking screw to adjust the camera shooting coverage
- 2 Tighten the locking screw to fix the zoom.
- 3 Loosen the focus ring locking screw to adjust the focus.
- 4 Tighten the locking screw to fix the focus ring.
- 5 Press the Easy Focus button on the rear to automatically adjust the focus (except SNC-EB600B/EB630B).

C

D

You may not achieve satisfactory focus with the Easy Focus button due to the

In this case, press and hold the Easy Focus button for more than 4 seconds to return to the default position. Then, adjust the focus following step 3 and 4.

Connection

Connecting to the Network

Connect the LAN connector of the camera to a PoE* 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 PoE supported devices.

(* PoE: The acronym for Power over Ethernet, IEEE802,3af standard compliant

SNC-VB600/VB600B/VB630

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 (Either voltage supported by SNC-VB600/VB600B/VB630
- Power supply equipment pursuant to IEEE802.3af (PoE* system)
- * PoE stands for 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.
- Do not connect the power input cable if power is supplied by a PoE system.

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

The power supply equipment pursuant to IEEE802.3af 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. The acceptable voltage ranges for each are as follows.

12 V DC: 10.8 V to 13.2 V 24 V AC: 19.2 V to 28.8 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

12 V DC:			
CABLE(AWG)	#24	#22	#20
Max. length(m(feet))	8 (26.2)	14 (45.9)	20 (65.5)

24	٧	AC:
$\overline{}$		

CABLE(AWG)	#24	#22	#20
Max. length(m(feet))	11 (36.1)	19 (62.3)	28 (91.9)

Specifications

Compression

JPEG/H.264 Video compression format Audio compression format G.711/G.726/AAC Maximum frame rate

60 fps

SNC-VB600B/EB600/EB600B/EB630/EB630B

30 fps

Camera

Signal system

Image device

1/3type CMOS (Exmor) Effective picture elements: Approx. 1,370,000

1/2.9type CMOS (Exmor) Effective picture elements:

Synchronization

Horizontal resolution

4:3)

Video S/N More than 50 dB (Auto gain control maximum

rate 0 dB)

SNC-VB600/VB600B

F1.2/Color: 0.05 lx, Black & White: 0.04 lx SNC-VB630/EB630/EB630B F1.2/Color: 0.10 lx, Black & White: 0.07 lx

SNC-EB600/EB600B

F1.0/Color: 0.05 lx, Black & White: 0.04 lx

* VE stands for Visibility Enhancer.

Lens

SNC-VB600/VB600B/VB630/EB630/EB630B: Focal length

Maximum relative aperture SNC-VB600/VB600B/VB630/EB630/EB630B:

2 V DC:				
CABLE(AWG)	#24	#22	#20	
Max. length(m(feet))	8 (26.2)	14 (45.9)	20 (65.5)	

4 V AC:	
---------	--

CABLE(AWG)	#24	#22	#20
Max. length(m(feet))	11 (36.1)	19 (62.3)	28 (91.9)

SNC-VR600/VR630

NTSC color system/PAL color system

(switchable)

SNC-VB600/VB600B/EB600/EB600B

SNC-VB630/EB630/EB630B Approx. 2,140,000

Internal synchronization SNC-VB600/VB600B: 600 TV lines (analog video)

SNC-VB630: 700 TV lines (monitor display ratio

View-DR Off/VE* Off/Auto gain control

maximum rate MAX/50 IRE (IP)/30 fps

Minimum illumination

2.8 mm to 8 mm

SNC-EB600/EB600B: 3 mm to 8 mm

F1.2 to F1.95

SNC-EB600/EB600B: F1.0 to F1.65

SNC-VB600/VB600B: 1280×1024 (aspect ratio

Vertical: 78.1° to 28.6°, Horizontal: 100.0° to

SNC-VB630/EB630/EB630B: 1920 × 1080 (aspect

ratio 16:9)

Vertical: 60.6° to 22.5°, Horizontal: 114.2° to

SNC-EB600/EB600B: 1280 × 1024 (aspect ratio

SNC-EB600/EB600B: 200 mm

Interface (SNC-VB600/VB600B/VB630)

10BASE-T/100BASE-TX, auto negotiation (RJ-45)

Sensor input: × 2, make contact, break contact

SD memory card slot

LAN (PoE)

I/O port

VIDEO OUT: BNC, 1.0 Vp-p, 75 ohms, Video output

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

Line input* * The microphone input and the line input are switchable with operating menu.

Minijack (monaural), Maximum output level:

Interface (SNC-EB600/EB600B/EB630/EB630B)

10BASE-T/100BASE-TX, auto negotiation (RJ-45) I AN (PoF) Video output Monitor output: 1.0 Vp-p, 75 ohms, unbalanced,

sync negative

Others

Mass

Power supply

SNC-VB600/VB600B/VB630: 6.0 W max.

Start temperature: 0°C to 50°C (32°F to 122°F)

Working temperature: -10°C to +50°C

(14°F to 122°F)

Storage temperature

20% to 80%

Storage humidity Dimensions (w/h/d) 72 mm \times 63 mm \times 145 mm (2 $^{7}/_{8}$ inches \times

 $2^{1/2}$ inches $\times 5^{3/4}$ inches) not including the

projecting parts and lens

3.9 oz) with lens

SNC-EB600B: Approx. 460 g (1 lb 0.2 oz) with

SNC-EB630: Approx. 505 g (1 lb 1.8 oz) with lens

CD-ROM (Supplied programs) (1)

Screw M4 (1)

SNC-VB600/VB600B/VB630 DC 12 V/AC 24 V connector (1)

Design and specifications are subject to change without notice.

Vertical: 72.7° to 28.6°, Horizontal: 92.5° to 35.7°

* The view angle will change, depending on the setting of the aspect ratio

resolution Minimum object distance

View angle*

300 mm

(mechanical relay outputs electrically isolated

Microphone input*

Line output

Minijack (monaural)

Minijack (monaural)

1 Vrms

* Use an AV cable with a 4-pole AV mini plug.

Power consumption

Operating temperature

SNC-VB600/VB600B/VB630: $12 \text{ V DC} \pm 10\%$, $24 \text{ V AC} \pm 20\%$, 50 Hz/60 Hz

SNC-EB600/EB600B/EB630/EB630B: 5.0 W max.

Operating humidity

20% to 95%

SNC-EB600: Approx. 480 g (1 lb 0.9 oz) with lens

Wire rope (1)

Installation Manual (this document) (1)

http://www.sony.net/

Supplied accessories

SNC-VB600/VB600B/VB630/EB630/EB630B:

Alarm output: × 2, 24 V AC/DC, 1 A max.

from the camera)

unbalanced, sync negative

Recommended load impedance: $2.2 \text{ k}\Omega$

AV miniiack*

IEEE802.3af compliant (PoE system)

 -20° C to $+60^{\circ}$ C (-4° F to $+140^{\circ}$ F)

SNC-VB600/VB600B/VB630: Approx. 565 g (1 lb

SNC-EB630B: Approx. 485 g (1 lb 1.1 oz) with

Safety Regulations (1)