

# Panasonic

## Installation Guide

### Network Camera

#### Model No. BL-VP100 Series



(This illustration represents BL-VP104W.)

#### For U.S. and Canada:

**Panasonic System Communications Company of North America,**  
**Unit of Panasonic Corporation of North America**  
 www.panasonic.com/business/  
 For customer support, call 1.800.528.6747  
 Three Panasonic Way, Secaucus, New Jersey 07094 U.S.A.  
 800.528-6747  
**Panasonic Canada Inc.**  
 5770 Ambler Drive, Mississauga, Ontario, L4W 2T3 Canada  
 800.528-6747  
 www.panasonic.ca

#### For Europe and other countries:

**Panasonic Corporation**  
 http://panasonic.net  
 Importer's name and address to follow EU rules:  
 Panasonic Testing Centre  
 Panasonic Marketing Europe GmbH  
 Winsbergring 15, 22525 Hamburg FR.Germany

© Panasonic System Networks Co., Ltd. 2012

CsQ312-0 PG0X1158ZA  
 Printed in China

This manual covers the models: BL-VP100 Series (BL-VP104W, BL-VP104WE, BL-VP104WU, BL-VP104, BL-VP104E, BL-VP104U, BL-VP101, BL-VP101E, BL-VP101U).

Before attempting to connect or operate this product, please read these instructions carefully and save this manual for future use. The model number is abbreviated in some descriptions in this manual.

#### WARNING:

- To prevent fire or electric shock hazard, do not expose this apparatus to rain or moisture.
- To prevent injury, this apparatus must be securely attached to the floor/wall/ceiling in accordance with the installation instructions.
- The mains plug or an appliance coupler shall remain readily operable.
- The apparatus should not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, should be placed on the apparatus.

This product contains a CR Coin Cell Lithium Battery which contains Perchlorate Material - special handling may apply. See www.dtscc.ca.gov/hazardouswaste/perchlorate/

For U.S.: BL-VP104W  
 For U.S. and Canada: BL-VP104, BL-VP101  
 For Europe and other countries: BL-VP104WE, BL-VP104WU, BL-VP104E, BL-VP104U, BL-VP101E, BL-VP101U

UL listed model No. BL-VP104W, BL-VP104, BL-VP101

For Canada  
 This Class B digital apparatus complies with Canadian ICES-003.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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.

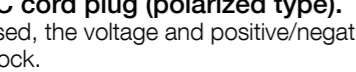
#### CAUTION:

- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## Precautions



- **Refer installation work to the dealer.**  
 Installation work requires technique and experiences. Failure to observe this may cause fire, electric shock, injury, or damage to the product.
  - Be sure to consult the dealer.
- **Stop the operation immediately when something is wrong with this product.**  
 When smoke goes up from the product, the smell of smoke comes from the product, or the exterior of the product has deteriorated, continued use will cause a fire or fall of the product resulting in injury, or damage to the product.
  - Turn the power off immediately and contact qualified service personnel for service.
- **Select an installation area that can support the total weight.**  
 Selecting an inappropriate installation surface may cause this product to fall down or topple over, resulting in injury.
  - Installation work shall be started after sufficient reinforcement.
- **Periodic inspections shall be conducted.**  
 Rust on the metal parts or screws may cause a fall of the product resulting in injury or accidents.
  - Consult the dealer for the inspections.
- **Do not install this product in locations subject to vibration.**  
 Loosening of mounting screws or bolts may cause a fall of the product resulting in injury. Make sure that the screws and bolts are tightened firmly.
- **Install this product in a location high enough to avoid people and objects from bumping the product.**  
 Failure to observe this may cause a drop resulting in injury or accidents.
- **Fully insert the AC cord plug into the power outlet.**  
 Do not use damaged plugs or unstable power outlets.  
 Failure to observe this may cause electric shock or heat generation resulting in a fire.
- **When disconnecting or connecting the AC adaptor, do not hold the metal parts of the plug.**  
 Failure to observe this may cause electric shock.
- **Periodically remove dust or other materials from the AC adaptor and its plug part.**  
 Disconnect the AC adaptor and wipe the AC adaptor and its plug part with a dry cloth to remove dust. A fire may be caused if dust or other materials accumulate on the plug part of the AC adaptor and become moist from humidity.
- **Perform all electrical wiring in accordance with the relevant electrical installation and wiring precautions and regulations.**  
 Incorrect electrical wiring may cause fire or electrical shock.  
 All AC electrical wiring perform by a licensed electrician.
- **Do not attempt to disassemble or modify this product.**  
 Failure to observe this may cause fire or electrical shock. Consult the dealer for the repair or inspections.
- **Do not insert any foreign objects.**  
 This could permanently damage this product. Turn the power off immediately and contact qualified service personnel for service.
- **Do not use this product in an inflammable atmosphere.**  
 Failure to observe this may cause an explosion resulting in injury.
- **Avoid installing this product in the locations where salt damage occurs or corrosive gas is produced.**  
 Otherwise, the mounting portions will deteriorate and accidents such as a fall of the product may occur.
- **Use only a dedicated AC cord plug (polarized type).**  
 If other AC cord plugs are used, the voltage and positive/negative polarities may differ and this may cause fire or electric shock.
- **Do not overload the power outlet or wiring above the specified levels.**  
 Overloading by having many connections on one power outlet may cause heat generation resulting in a fire.
- **Do not damage the AC cord or AC cord plug.**  
 Do not damage, fabricate, twist, stretch, bundle, or forcibly bend the power cable or AC cord plug. Do not place heavy objects on the power cable or AC cord plug. Keep the power cable and AC cord plug away from heat sources. Using a damaged power cable or AC cord plug may cause electric shock, short circuit, or fire. Consult the dealer for repair.
- **Do not damage internal wiring or plumbing when opening holes in ceiling or walls for installation or wiring, fixing AC cords, extension cords, or LAN cables, etc. or performing any other installations.**  
 Failure to observe this may cause earth leakage, electric shock, or fire.
- **Do not use AC cords from other products.**  
 Failure to observe this may cause fire or electric shock.
- **Do not strike or give a strong shock to this product.**  
 Failure to observe this may cause fire or injury.
- **Do not rub the edges of metal parts with your hand.**  
 Failure to observe this may cause injury.
- **Do not touch this product or the connected cables during thunder (even in the process of work).**  
 Failure to observe this may cause electric shock.
- **Do not insert/remove the AC cord plug with wet hands.**  
 Failure to observe this may cause electric shock.
- **Unplug this unit from power supply if it emits smoke, an abnormal smell or makes unusual noise, has been dropped or is damaged in any way.**  
 These conditions can cause fire or electric shock. Stop using the unit and contact an authorized service center.
- **Do not place containers or other objects that contain water or other liquids on top of the unit.**  
 If electrical shock may be caused if water or other liquids enter inside the unit.  
 If water or other liquids enter inside the unit, immediately disconnect the AC cord and contact an authorized service center.



- **Turn the power off when cleaning this product.**  
 Failure to observe this may cause injury.
- **Disconnect the AC cord when not using the unit for extended periods of time or when performing maintenance.**  
 Failure to observe this may cause an earth leakage or electric shock.

Operating near 2.4 GHz electrical appliances may cause interference. Move away from the electrical appliances.

- This equipment must be installed and operated in accordance with provided instructions and a minimum 20 cm (8 inches) spacing must be provided between antenna and all person's body (excluding extremities of hands, wrist and feet) during wireless modes of operation.
- This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

**MEDICAL:**  
 Consult the manufacturer of any personal medical devices, such as pacemakers, to determine if they are adequately shielded from external RF (radio frequency) energy. (The unit operates in the frequency range of 2.412 GHz - 2.462 GHz (BL-VP104W), 2.412 GHz to 2.472 GHz (BL-VP104WE/BL-VP104WU).) Do not use the unit in health care facilities if any regulations posted in the area instruct you not to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF (radio frequency) energy.

For U.S.A  
 The model number and serial number of this product may be found on the surface of the unit. You should note the model number and serial number of this unit in the space provided and retain this book as a permanent record of your purchase to aid identification in the event of theft.

Model No. \_\_\_\_\_  
 Serial No. \_\_\_\_\_

For European Union (EU) (BL-VP104E/BL-VP104U/BL-VP101E/BL-VP101U)  
 We declare under our sole responsibility that the product to which this declaration relates is in conformity with the standards or other normative documents following the provisions of Directives 2006/95/EC and 2004/108/EC.

Wir erklären in alleiniger Verantwortung, daß das Produkt, auf das sich diese Erklärung bezieht, mit den folgenden Normen oder normativen Dokumenten übereinstimmt. Gemäß den Bestimmungen der Richtlinie 2006/95/EG und 2004/108/EG.

Nous déclarons sous notre propre responsabilité que le produit auquel se réfère la présente déclaration est conforme aux normes spécifiées ou à tout autre document normatif conformément aux dispositions des directives 2006/95/CE et 2004/108/CE.

Nosotros declaramos bajo nuestra única responsabilidad que el producto a que hace referencia esta declaración está conforme con las normas u otros documentos normativos siguiendo las estipulaciones de las directivas 2006/95/CE y 2004/108/CE.

Noi dichiariamo sotto nostra esclusiva responsabilità che il prodotto a cui si riferisce la presente dichiarazione risulta conforme ai seguenti standard o altri documenti normativi conformi alle disposizioni delle direttive 2006/95/CE e 2004/108/EC.

Vi verklaeren als enige aansprakelijke, dat het product waarop deze verklaring betrekking heeft, voldoet aan de volgende normen of andere normatieve documenten, overeenkomstig de bepalingen van Richtlijn 2006/95/EG en 2004/108/EG.

Vi erklærer oss enesvangsforer, at dette produkt, som denne deklaration omhandler, er i overensstemmelse med standarder eller andre normative dokumenter i følge bestemmelserne i direktivene 2006/95/EC og 2004/108/EC.

Vi deklarerar härmed vårt fulla ansvar för att den produkt till vilken denna deklaration hänvisar är i överensstämmelse med de standarder eller andra normativa dokument som framställts i direktiv nr 2006/95/EG och 2004/108/EG.

Ilmoitamme yksinomaissella vastuullamme, että tuote, jota tämä ilmoitus koskee, noudattaa seuraavia standardeja tai muita ohjeellisia asiakirjoja, jotka noudattavat direktiivien 2006/95/EC ja 2004/108/EC säälykksiä.

Vi erklærer oss alene ansvarige for att produktet som denne erklæringen gjelder for, er i overensstemmelse med følgende normer eller andre normgivende dokumenter som følger bestemmelsene i direktivene 2006/95/EC og 2004/108/EC.

For European Union (EU) (BL-VP104WE/BL-VP104WU)  
 Panasonic System Networks Co., Ltd., declares that this equipment is in compliance with the essential requirements and other relevant provisions of Radio & Telecommunications Terminal Equipment (R&TTE) Directive 1999/5/EC.

Declarations of Conformity for the relevant Panasonic products described in this manual are available for download by visiting:  
<http://www.doc.panasonic.de>

**Contact:**  
 Panasonic Services Europe  
 a Division of Panasonic Marketing Europe GmbH  
 Panasonic Testing Centre  
 Winsbergring 15, 22525 Hamburg, FR, Germany

## CE17310

AT	BE	BG	CY	CZ	DK
EE	FI	FR	DE	GR	HU
IE	IT	LV	LT	LU	MT
NL	PL	PT	RO	SK	SI
ES	SE	GB	IS	LI	NO
CH	HR	MK	TR		

## Important safety instructions

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 8) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 9) Only use attachments/accessories specified by the manufacturer.
- 10) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 11) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

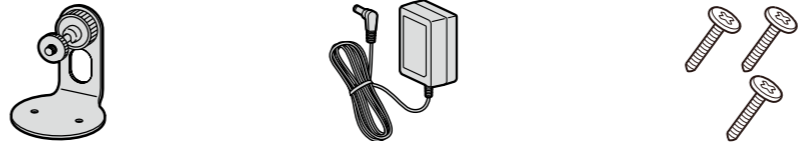
## Main functions

- **H.264 and JPEG triple encoding**  
 A total of 3 outputs, comprising of 2 H.264 outputs and 1 JPEG output, can be provided.
- **Advanced darkness correction mode**  
 Corrects the blacked-out parts of dark areas of objects that have different illumination intensities.
- **Wireless LAN function (IEEE802.11 n/g/b) (BL-VP104W/BL-VP104WE/BL-VP104WU)**  
 It is possible to monitor camera images and configure camera settings over a wireless network.
- **WPS (Wi-Fi Protected Setup) function (BL-VP104W/BL-VP104WE/BL-VP104WU)**  
 WPS enables the camera to automatically obtain the connection configuration information and the security configuration information of the wireless router. WPS can be configured by pressing the WIRELESS button (WPS button) (PBC method) or entering an 8 digit pin code (Pin code method).

## Standard accessories

Confirm the following items are included in the camera's packaging.

- Flexible Stand (1 pc.)
- AC Adaptor (1 pc.)
- Screw (3 pcs.) (incl. 1 spare)



Installation Guide (this document) ..... (1 pc.)  
 Configure the settings of the camera (leaflet)..... (1 pc.)  
 Warranty card (P model) ..... (1 pc.)  
 CD-ROM \* ..... (1 pc.)

\*1 The CD-ROM contains the operating instructions and different kinds of tool software programs.

## Option

You will need the following additional items to install and configure the camera.

- [Locally procured]**
- a PC (used to view settings and images)
  - a router/ a wireless router (when using the wireless function)
  - a LAN cable (CAT-5 straight cable)

## System requirements for a PC

Refer to "Configure the settings of the camera" (leaflet) for information about the system requirements for a PC.

## About the user manuals

There are 3 sets of operating instructions for the BL-VP104W, BL-VP104, BL-VP101 (P model), BL-VP104WE, BL-VP104E, BL-VP101E (E model), BL-VP104WU, BL-VP104U, BL-VP101U (U model) as follows.

- Installation Guide: Explains how to install and connect devices.
- Configure the settings of the camera: Explains how to connect and configure the network.
- Operating Instructions (included in the CD-ROM): Explains how to perform the settings and how to operate this camera.

Adobe® Reader® is required to read these operating instructions on the provided CD-ROM. When the Adobe Reader is not installed on the PC, download the latest Adobe Reader from the Adobe web site and install it.

"BL-VP104W, BL-VP104, BL-VP101" or "VP104W, VP104, VP101" shown in the instructions and illustrations used in these operating instructions indicates the BL-VP104W, BL-VP104WE, BL-VP104WU, BL-VP104, BL-VP104E, BL-VP104U, BL-VP101, BL-VP101E, BL-VP101U.

The screens used in these operating instructions show the cases of P models.

Scanning area:	<b>VP104W/VP104WE/VP104WU/VP104/VP104E/VP104U:</b> 3.89 mm (H) x 2.43 mm (V) (5/32 inches (H) x 3/32 inches (V)) <b>VP101/VP101E/VP101U:</b> 2.69 mm (H) x 2.02 mm (V) (1/8 inches (H) x 1/16 inches (V))
Scanning system:	Progressive
Minimum illumination:	<b>VP104W/VP104WE/VP104WU/VP104/VP104E/VP104U:</b> Color: 0.9 lx (0.09 footcandle) (F2.8, Auto slow shutter: Off (1/30) s, Gain: On (High)) 0.06 lx (0.006 footcandle) (F2.8, Auto slow shutter: max. 16/30 s, Gain: On (High))* BW: 0.6 lx (0.06 footcandle) (F2.8, Auto slow shutter: Off (1/30) s, Gain: On (High)) 0.04 lx (0.004 footcandle) (F2.8, Auto slow shutter: max. 16/30 s, Gain: On (High))*
	<b>VP101/VP101E/VP101U:</b> Color: 0.9 lx (0.09 footcandle) (F2.8, Auto slow shutter: Off (1/30) s, Gain: On (High)) 0.11 lx (0.011 footcandle) (F2.8, Auto slow shutter: max. 8/30 s, Gain: On (High))* BW: 0.6 lx (0.06 footcandle) (F2.8, Auto slow shutter: Off (1/30) s, Gain: On (High)) 0.08 lx (0.008 footcandle) (F2.8, Auto slow shutter: max. 8/30 s, Gain: On (High))* * Converted value
Gain (AGC):	On/Low/ On/Mid/ On/High/ Off
Adaptive black stretch:	On/Off
Light control mode setting:	Indoor scene (50 Hz/ 60 Hz) / ELC
ELC (Maximum exposure time):	<b>VP104W/VP104WE/VP104WU/VP104/VP104E/VP104U:</b> ELC(1/30) s, ELC(1/100) s, ELC(1/120) s, ELC(2/100) s, ELC(2/120) s, ELC(1/100) s, ELC(1/120) s, ELC(1/250) s, ELC(1/500) s, ELC(1/1000) s, ELC(1/2000) s, ELC(1/4000) s, ELC(1/10000) s <b>VP101/VP101E/VP101U:</b> ELC(1/30) s, ELC(3/100) s, ELC(3/120) s, ELC(2/100) s, ELC(2/120) s, ELC(1/100) s, ELC(1/120) s, ELC(1/250) s, ELC(1/500) s, ELC(1/1000) s, ELC(1/2000) s, ELC(1/4000) s, ELC(1/8000) s
Auto slow shutter:	<b>VP104W/VP104WE/VP104WU/VP104/VP104E/VP104U:</b> Off (1/30) s, Max. 2/30 s, Max. 4/30 s, Max. 6/30 s, Max. 10/30 s, Max. 16/30 s <b>VP101/VP101E/VP101U:</b> Off (1/30) s, Max. 2/30 s, Max. 3/30 s, Max. 4/30 s, Max. 8/30 s
Simple black & white mode:	Off/Auto
White balance:	ATW1/ ATW2/ AWC
Digital noise reduction:	High/Low
Privacy zone:	On/Off (up to 2 zones available)
Camera time on screen:	Up to 20 characters (alphanumeric characters, marks), On/Off
Video motion detection (VMD alarm):	On/Off (4 areas available)

Resolution:	<b>VP104W/VP104WE/VP104WU/VP104/VP104E/VP104U:</b> Imaging mode: 4:3 H.264 SVGA (800x600) / VGA (640x480) / QVGA (320x240) max.30 fps JPEG SVGA (800x600) / VGA (640x480) / QVGA (320x240) max.30 fps Imaging mode: 16:9 H.264 1280x720/ 640x360/ 320x180 max.30 fps JPEG 1280x720/ 640x360/ 320x180 max.30 fps <b>VP101/VP101E/VP101U:</b> Aspect ratio: 4:3 H.264 VGA (640x480) / QVGA (320x240) max.30 fps JPEG VGA (640x480) / QVGA (320x240) max.30 fps Aspect ratio: 16:9 H.264 640x360/ 320x180 max.30 fps JPEG 640x360/ 320x180 max.30 fps
Image compression method: *3	H.264 Image quality: Low/ Normal/ Fine Transmission type: Unicast/Multicast Bit rate: Constant bit rate/ Best effort: <b>VP104W/VP104WE/VP104WU/VP104/VP104E/VP104U:</b> 64 kbps/ 128 kbps/ 256 kbps/ 384 kbps/ 512 kbps/ 768 kbps/ 1024 kbps/ 1536 kbps/ 2048 kbps/ 3072 kbps/ 4096 kbps/ 8192 kbps <b>VP101/VP101E/VP101U:</b> 64 kbps/ 128 kbps/ 256 kbps/ 384 kbps/ 512 kbps/ 768 kbps/ 1024 kbps/ 1536 kbps/ 2048 kbps/ 3072 kbps/ 4096 kbps Frame rate: 1 fps/ 3 fps/ 5 fps/ 7.5 fps/ 10 fps/ 12 fps/ 15 fps/ 20 fps/ 30 fps
Transmission interval:	0.1 fps - 30 fps JPEG frame rate will be restricted when displaying both JPEG and H.264/ images.)
Bandwidth control:	Unlimited/ 64 kbps/ 128 kbps/ 256 kbps/ 384 kbps/ 512 kbps/ 768 kbps/ 1024 kbps/ 1536 kbps/ 2048 kbps/ 3072 kbps
Protocol:	IPv6: TCP/IP, UDP/IP, HTTP, HTTPS, RTP, FTP, SMTP, DNS, NTP, SNMP, DHCPv6, ICMP, ICMPv6 IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, RTP, SMTP, DNS, NTP, SNMP, DHCP, ICMP, ARP
OS: *4 *5	Microsoft® Windows® 7 Microsoft® Windows Vista® Microsoft® Windows® XP SP3
Browser:	Windows® Internet Explorer® 9.0 (32-bit) Windows® Internet Explorer® 8.0 (32-bit) Windows® Internet Explorer® 7.0 (32-bit) Microsoft® Internet Explorer® 6.0 SP3
Maximum concurrent access number:	14 (Depends on network conditions)
FTP client:	Alarm image transmission, FTP periodic transmission
Multi-screen:	Up to 16 camera images can be displayed simultaneously on a multi-screen. (Including the camera itself)
Cellular phone compatibility:	JPEG image
Mobile terminal compatibility (As of January, 2012): *6	iPad, iPhone, iPod touch (iOS 4.2.1 or later) Android™ mobile terminals

● <b>Lens</b>	
Zoom ratio:	<b>VP104W/VP104WE/VP104WU/VP104/VP104E/VP104U:</b> Extra zoom: 1.5x (at VGA resolution)
Digital (electronic) zoom:	<b>VP104W/VP104WE/VP104WU/VP104/VP104E/VP104U:</b> 8x (at VGA resolution) <b>VP101/VP101E/VP101U:</b> 4x
Focal length:	<b>VP104W/VP104WE/VP104WU/VP104/VP104E/VP104U:</b> 3.6 mm <b>VP101/VP101E/VP101U:</b> 2.7 mm
Maximum aperture ratio:	1 : 2.8
Focus range:	<b>VP104W/VP104WE/VP104WU/VP104/VP104E/VP104U:</b> ∞ ~ 0.4 m <b>VP101/VP101E/VP101U:</b> ∞ ~ 0.5 m
Angular field of view:	<b>VP104W/VP104WE/VP104WU/VP104/VP104E/VP104U:</b> Horizontal: 57°, Vertical: 34° <b>VP101/VP101E/VP101U:</b> Horizontal: 53°, Vertical: 40.5°

● <b>Wireless (BL-VP104W/BL-VP104WE/BL-VP104WU)</b>	
Antenna:	1x1 (Diversity)
Transmission method:	SISO (Single Input/ Single Output) -OFDM, OFDM, DSSS
Communication standard:	IEEE802.11n/g/b/g
Frequency range (center frequency)/Channel:	<b>VP104W/VP104WE/VP104WU/VP104/VP104E/VP104U:</b> 2.412 GHz - 2.462 GHz (1 - 11ch) <b>VP101/VP101E/VP101U:</b> 2.412 GHz - 2.472 GHz (1 - 13ch)
Data transfer rate: *1	IEEE802.11n: 6.5 - 72.2 Mbps IEEE802.11g: 6 - 54 Mbps IEEE802.11b: 1 - 11 Mbps
Access method:	Infrastructure mode
Authentication method:	Open System
Security: *2	WPA/WPA2-PSK (TKIP/AES) WEP (64 bit/128 bit)
WPS:	PBC method (push button method), PIN method (PIN code method)

● <b>Network</b>	
Network:	10BASE-T/10BASE-TX, RJ45 connector

## Limitation of liability

THIS PUBLICATION IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT OF THE THIRD PARTY'S RIGHT.  
 THIS PUBLICATION COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE ADDED TO THE INFORMATION HEREIN, AT ANY TIME, FOR THE IMPROVEMENTS OF THIS PUBLICATION AND/OR THE CORRESPONDING PRODUCT (S).

## Disclaimer of warranty

IN NO EVENT SHALL Panasonic System Networks Co., Ltd. BE LIABLE TO ANY PARTY OR ANY PERSON, EXCEPT FOR REPAIR, REPLACEMENT OR REASONABLE MAINTENANCE OF THE PRODUCT, FOR THE DAMAGES, INCLUDING BUT NOT LIMITED TO BELOW:  
 (1) ANY DAMAGE AND LOSS, INCLUDING WITHOUT LIMITATION, DIRECT OR INDIRECT, CONSEQUENTIAL OR EXEMPLARY, ARISING OUT OF OR RELATING TO THE PRODUCT;  
 (2) PERSONAL INJURY OR ANY DAMAGE CAUSED BY INAPPROPRIATE USE OR NEGLIGENT OPERATION OF THE USER;  
 (3) ALL MALFUNCTIONS OR TROUBLES FROM UNAUTHORIZED DISASSEMBLE, REPAIR OR MODIFICATION OF THE PRODUCT BY THE USER, REGARDLESS OF THE CAUSE OF THE MALFUNCTION OR TROUBLE;  
 (4) INCONVENIENCE OR ANY LOSS ARISING WHEN IMAGES ARE NOT DISPLAYED, DUE TO ANY REASON OR CAUSE INCLUDING ANY FAILURE OR PROBLEM OF THE PRODUCT;  
 (5) ANY PROBLEM, CONSEQUENTIAL INCONVENIENCE, OR LOSS OR DAMAGE, ARISING OUT OF THE SYSTEM COMBINED BY THE DEVICES OF THIRD PARTY;  
 (6) ANY CLAIM OR ACTION FOR DAMAGES, BROUGHT BY ANY PERSON OR ORGANIZATION BEING A PHOTOGENIC SUBJECT, DUE TO VIOLATION OF PRIVACY WITH THE RESULT OF THAT SURVEILLANCE-CAMERA'S PICTURE, INCLUDING SAVED DATA, FOR SOME REASON, BECOMES PUBLIC OR IS USED FOR ANY PURPOSE;  
 (7) LOSS OF REGISTERED DATA CAUSED BY ANY FAILURE.

## Trademarks and registered trademarks

- Adobe, Acrobat Reader, and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.
- Microsoft, Windows, Windows Vista, Internet Explorer, ActiveX, and DirectX are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- iPad, iPhone, and iPod touch are registered trademarks of Apple Inc., registered in the U.S. and other countries.
- Android is a trademark of Google Inc. Use of this trademark is subject to Google Permissions.
- All other trademarks identified herein are the property of their respective owners.

## Copyright

Distributing, copying, disassembling, reverse compiling and reverse engineering of the software provided with this product are all expressly prohibited. In addition, exporting any software provided with this product violating export laws is prohibited.

## Network security

As you will use this unit connected to a network, your attention is called to

# 1 Check the installing place

## Precautions for Installation

Panasonic assumes no responsibility for injuries or property damage resulting from failures arising out of improper installation or operation inconsistent with this documentation.

**This camera is designed to be used indoors.**

This camera is not operable outdoors. Do not expose this camera to direct sunlight for hours and do not install the product near a heater or an air conditioner. Otherwise, it may cause deformation, discoloration and malfunction. Keep this camera away from water and moisture.

**Do not place this product in the following places:**

- Locations where it may get wet from rain or water splash
- Locations where a chemical agent is used such as a swimming pool
- Locations subject to humidity, dust, steam and oil smoke
- Locations that have a specific environment that is subject to an inflammable atmosphere or solvents
- Locations where a radiation, an X-ray, a strong radio wave or a strong magnetic field is generated
- Locations where corrosive gas is produced. Locations where it may be damaged by briny air such as seashores
- Locations where the temperature is not within the specified range (0 °C to +40 °C (32 °F to +104 °F)).
- Locations subject to vibrations (This product is not designed for on-vehicle use.)
- Locations subject to condensation as the result of severe changes in temperature

**Be sure to remove this product if it is not in use.**

**Before installation**

- When this camera is mounted on a wooden wall, use the wood screws (accessory). Screws to be used for other materials are not provided. Prepare the screws according to the material, structure, strength and other factors of the mounting area and the total weight of objects to be mounted.
- Ensure that the mounting surface, anchor and screws are sufficiently strong.
- Do not mount this product on a plaster board or a wooden section because they are too weak. If this product is unavoidably mounted on such a section, the section shall be sufficiently reinforced.

**Design and engineer the power supply system to turn on/off the power of this product.**

The product has no power switch. When installing the product, use a power supply device equipped with the ON-OFF switch. Alternatively you can simply disconnect the AC adaptor from the power supply when performing installations.

**About the network connection**

When connecting to a network using the network cable of this product, observe the following. When wiring for the network, design and engineer not to be affected by thunder.

**Screw tightening**

- The screws must be tightened with an appropriate tightening torque according to the material and strength of the installation area.
- Do not use an impact driver. Use of an impact driver may damage the screws or cause tightening excessively.
- When a screw is tightened, make the screw at a right angle to the surface. After tightening the screws, perform checks to ensure that the tightening is sufficient enough so that there is no movement or looseness.

**Procure fixing screws separately.**

The screws that secure this product are not supplied. Prepare them according to the material and strength of the area where the product is to be installed. Required pull-out capacity of a single screw is 196 N (44.06 lbf) or more.

**Do not remove or loosen the internal camera screws.**

Do not loosen the internal camera screws. Otherwise, water exposure may cause damage or malfunction of camera, or camera dropping may result in injury.

**Radio disturbance**

When this product is used near TV/radio antenna, strong electric field or magnetic field (near a motor, a transformer or a power line), images may be distorted and noise sound may be produced.

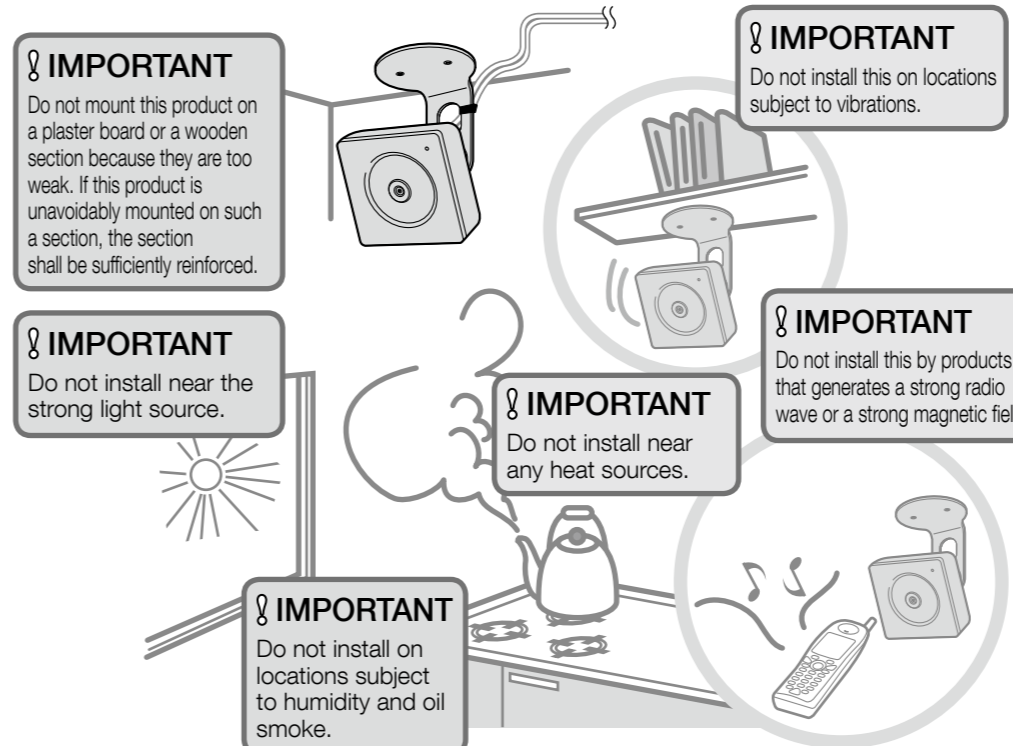
**Router**

When connecting this product to the Internet, use a broadband router with the port forwarding function (NAT, IP masquerade). Refer to the Operating Instructions (included in the CD-ROM) for further information about the port forwarding function. Configure the wireless settings of the camera to match the wireless settings of the router. For information on the wireless settings of the router, refer to the operating instructions included with your wireless router.

**Time & date setting**

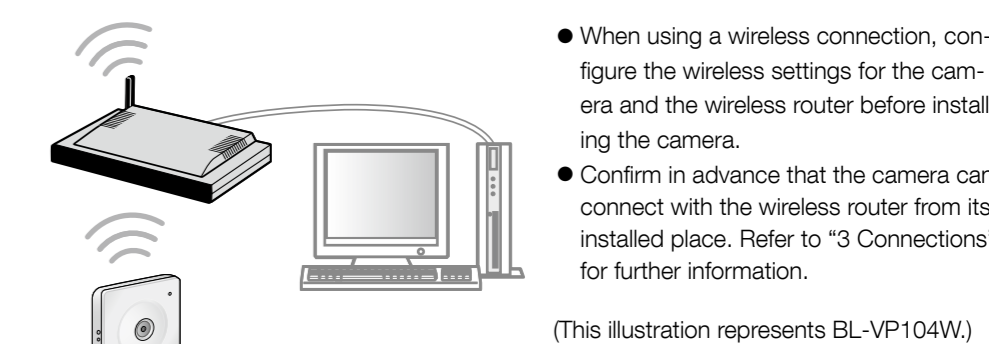
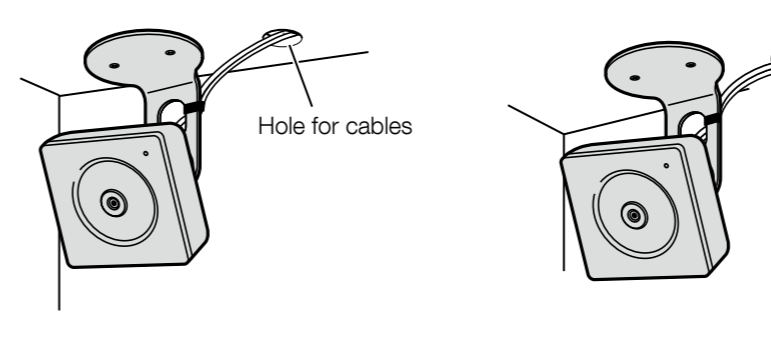
It is necessary to set the time & date before putting this product into operation. Refer to the Operating Instructions on the provided CD-ROM for descriptions of how to perform the settings.

## Determining the mounting position



## Determining how to wire the cable

It is necessary to make a hole in the ceiling or wall to pass the cables through. Make a hole in diameter.

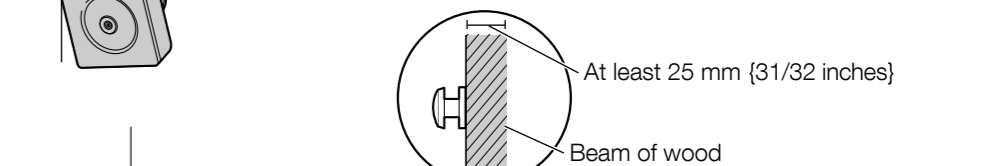


## Determining how to mount the camera

(This illustration represents BL-VP101.)

**■ Installing the camera on the wall**

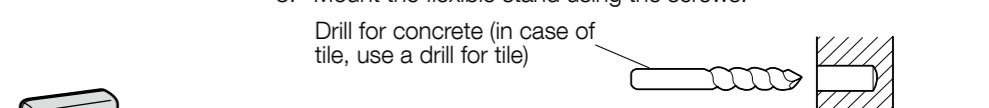
Make sure the flexible stand is firmly mounted on a beam of wood (25 mm (31/32 inches) and greater) etc. When there is no beam, apply a board on the other side of the wall to make sure the camera does not drop.



**When mounting on a mortar or concrete surface**

Prepare anchors for 4 mm (5/32 inches) diameter screws for mounting. Mortar walls break easily when drilling. Be careful of pieces of mortar which may become loose and fall.

1. Place the flexible stand on the wall where you plan to mount the flexible stand and mark the points where you are going to make holes.
2. Make holes with an electric drill. Insert anchors (locally procured) into the holes and push them inside the holes with a hammer.
3. Mount the flexible stand using the screws.



**■ Tripod Mount**

It is also possible to mount the camera on a standard tripod stand (locally procured).

## About the range of use for wireless communication (BL-VP104W/BL-VP104WE/BL-VP104WU)

**Do not use this product in the following areas or locations.**

(It may cause interference to radio communications or malfunction.)

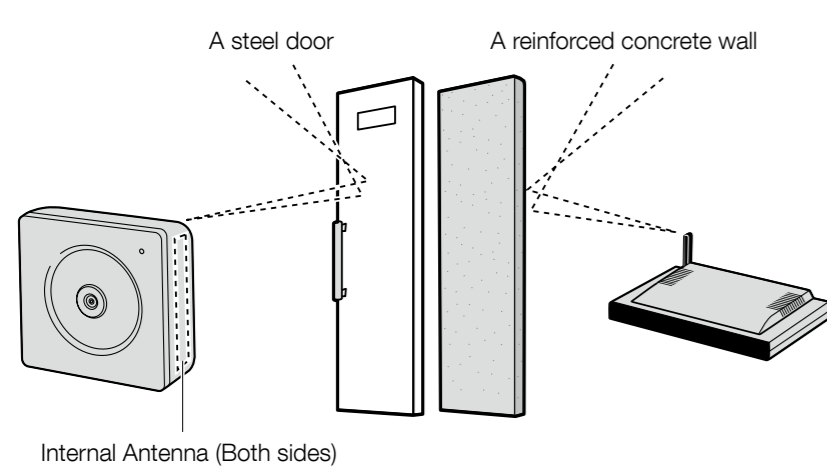
- Indoor areas that have specified radio stations or mobile communications equipment.
- Locations near microwave ovens or Bluetooth devices
- Indoor areas that use antitheft devices or 2.4 GHz frequency devices such as POS systems

**Change the installation location of the camera when there are materials or objects such as the following between the camera and a wireless router.**

(When there are materials or objects that are difficult for radio waves to pass through in the installation area, wireless transmission may fail or the transmission speed may become slower.)

(When there are materials or objects that reflect radio waves in the installation area, wireless transmission may fail or the transmission speed may become slower due to interference from reflected radio waves.)

- A metallic door or shutter
- A wall with an insulation material that contains aluminum foil
- A wall made of concrete, stone or brick
- Several walls separated by open space
- A wall made of tin
- A steel shelf
- Fireproof glass

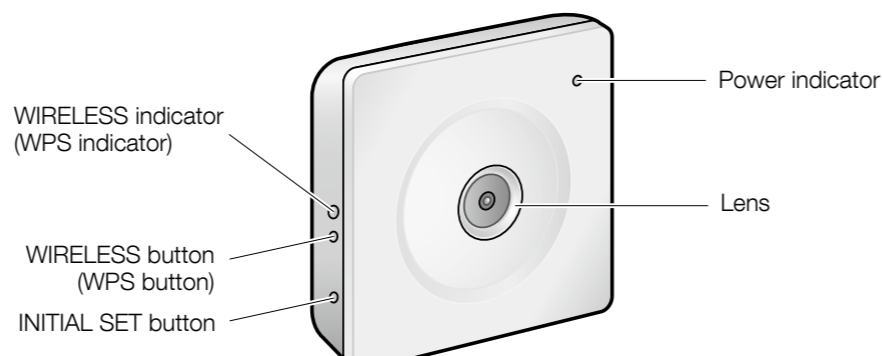


**Note**  
When two or more radio routers and radio interference exist, radio may become being hard to be connected or transmission speed may become remarkably slow. In that case, it may be necessary to change the channel of a radio router or to rearrange wireless applications.

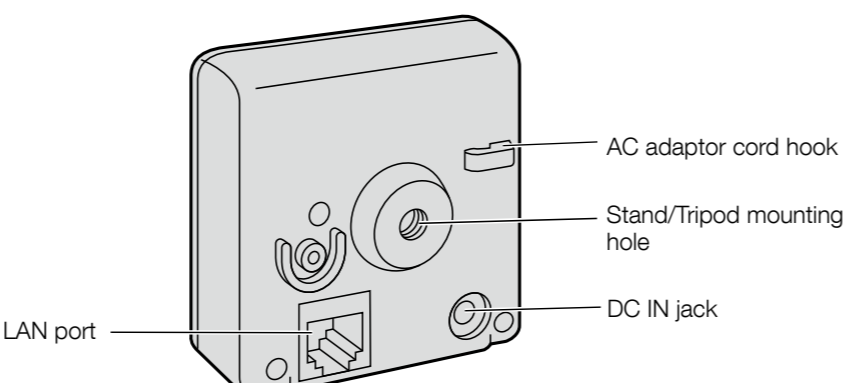
## 2 Major operating controls

<BL-VP104W>

<Front view>

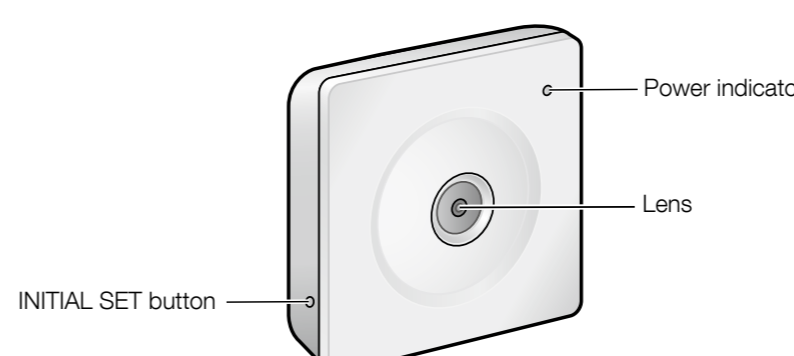


<Rear View>

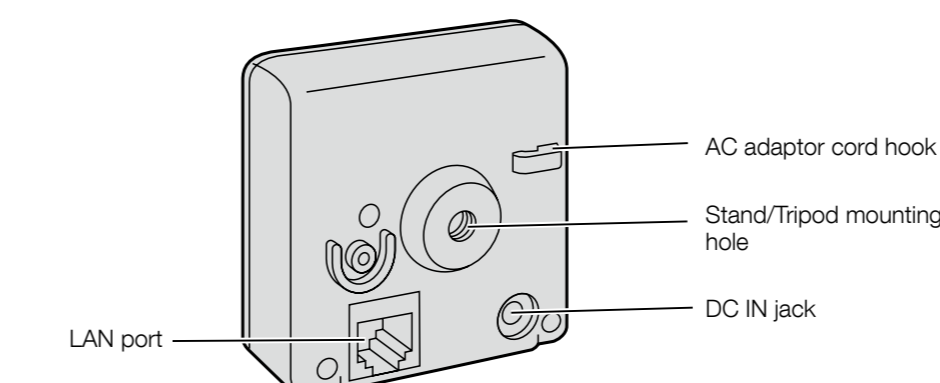


<BL-VP101/BL-VP104>

<Front view>



<Rear View>



**About the [INITIAL SET] button**

After turning off the power of the camera, turn on the power of the camera while holding down this button, and wait for around 5 seconds or more without releasing this button. Wait around 3 minutes after releasing the button. The camera will start up and the settings including the network settings will be initialized. Before initializing the settings, it is recommended to write down the settings in advance. The initialization will be complete when the power indicator stops blinking orange and lights off. Note that the CRT key (SSL encryption key) used for the HTTPS protocol will not be initialized.

**IMPORTANT**

Do not turn off the power of the camera during the process of initialization. Otherwise, it may fail to initialize and may cause malfunction.

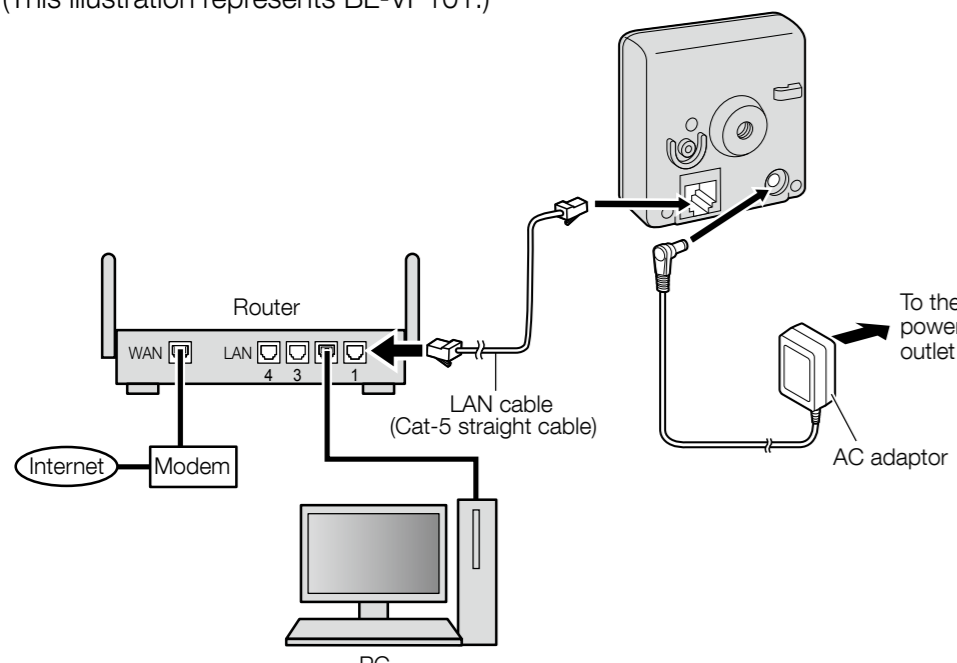
**About the POWER indicator and the WIRELESS indicator (WPS indicator)**

For more information, see Configure the basic settings [Basic] in the Operating Instructions (included in the CD-ROM).

# 3 Connections

**When connecting the camera to your router**

(This illustration represents BL-VP101.)



## WARNING

- Use only a dedicated AC cord plug (polarized type). If other AC cord plugs are used, the voltage and positive/negative polarities may differ and this may cause fire or electric shock.

**IMPORTANT**

- Use a 4-pair UTP/STP cable.

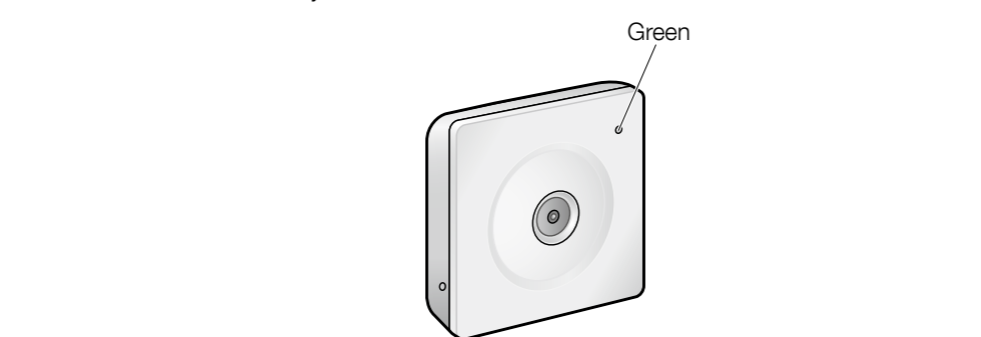
**1 Connect the LAN cable to the camera and the router.**

When connecting the camera to a wireless LAN, refer to "When connecting the camera using a wireless LAN".

**2 Connect the AC adaptor cord to the DC IN jack.**

**3 Connect the AC adaptor to the camera and plug the AC adaptor into the power outlet.**

- Confirm that the power indicator turns green after about 1 minute. If it does not turn green, see the Troubleshooting Guide on the CD-ROM.
- When you operate the camera, the power outlet should be near the camera and easily accessible.
- Use only specified Panasonic AC adaptor.
- The camera may become warm. This is normal.



**Note**

- The camera operates in wireless mode when the camera is turned on without the LAN cable connected and with the power of the router turned off. Recheck the LAN cable connection and the power to the router, and then turn the camera on or off.

After connecting the camera, refer to "Configure the settings of the camera" (leaflet) and perform the camera settings.

**When connecting the camera using a wireless LAN (BL-VP104W/BL-VP104WE/BL-VP104WU)**

Use the camera's WIRELESS button (WPS button) to automatically perform wireless settings.

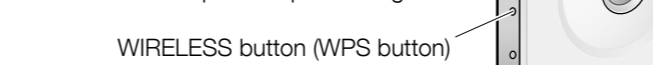
**1 Turn on the camera without connecting the LAN cable to enable the wireless settings.**

After the internal initial operations are performed, the power indicator stops blinking orange and lights orange. The power indicator lights orange and the camera starts up in wireless LAN mode about 90 seconds after the camera was turned on.

**2 Select ON for the WPS function (Push-button method (PBC)) on the wireless router. (For more information, refer to the operating instructions included with your wireless router.)**

WIRELESS indicator (WPS indicator)

- When WPS starting up: blinks orange (for about 2 minutes)
- When WPS setup is completed: lit green



**3 Press and hold down the WIRELESS button for a second or more until the WIRELESS indicator blinks orange.**

- The camera and the wireless router automatically start performing wireless settings. Settings may take up to 2 minutes to be performed.
- The WIRELESS indicator stops blinking orange and lights green. When the power indicator lights green, the wireless settings have been successfully completed.
- About 5 seconds after the power indicator lights green, the camera restarts in order to obtain the network settings and apply the wireless settings.

**Note**

- If about 2 minutes pass after the WIRELESS indicator starts blinking and the wireless connection is not completed, the WIRELESS indicator will blink red for about 10 seconds and then go off. If this happens the wireless settings have failed. Check the wireless router's settings and connection procedures, and then try performing the settings again.
- If the WPS settings fail to automatically configure, check the settings of the wireless router and the camera.
- If you want to turn off the WIRELESS button and power indicator's green light, select "Off" for the "Indicator" on the [Basic] tab of the "Basic" page.

**IMPORTANT**

- WPS function is unavailable when the wireless router is set to shared key authentication.
- When the wireless router or other devices are set to use the ESS-ID stealth function (hidden SSID), the WPS function is unavailable.
- During the configuration of WPS setting, another wireless device may be temporarily caused interference by the wireless router.
- If the wireless router is configured to use the MAC address filtering feature, the WPS function is unavailable. Check the settings of the wireless router.
- If the settings for the WPS function are performed when no wireless devices to be connected to the wireless network, etc. the configuration will be automatically cancelled after 2 minutes. (Check the wireless router in use before configuration.)
- The auto setup of the WPS function may be unavailable if there are multiple Registrars (wireless router which have the WPS function on) on the same network.
- If you do not use the WPS function of the wireless router, we recommend that you turn OFF your wireless router WPS feature.

After connecting the camera, refer to "Configure the settings of the camera" (leaflet) and perform the camera settings.

- Confirm the status of the wireless connection on the [Status] tab of the "Wireless" page.

# 4 Mounting the Camera

Before installing the camera, check that the camera settings have been completed. Refer to "Configure the settings of the camera" (leaflet).

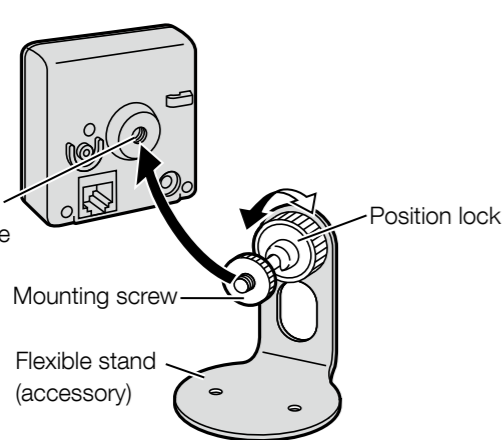
## WARNING

- Do not mount cameras to ceilings or walls with weak surfaces. (Such as plaster board, ALC (autoclaved lightweight concrete), concrete blocks, or plywood with a thickness of under 25 mm (31/32 inches).) This may cause the camera to fall, resulting in injury.
- When mounting the camera, make sure to securely mount it on a stable and strong installation area that is strong enough to hold the camera's weight.

**Attach the camera to the flexible stand**

**1 Loosen the position lock of the flexible stand, attach the camera to the flexible stand (accessory) with the mounting screw of the flexible stand.**

**2 Adjust the angle and direction of the camera, and then fasten the position lock.**



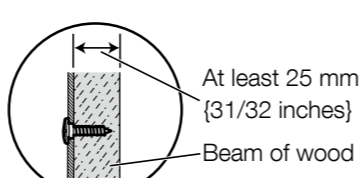
**Installing the camera on the ceiling or wall**

Adjust the camera to a suitable position/direction while confirming the images actually is played on the computer screen.

**Wire without making a hole in the ceiling or wall**

**1 Place the base of the flexible stand (accessory) to the ceiling or wall and determine its mounting position.**

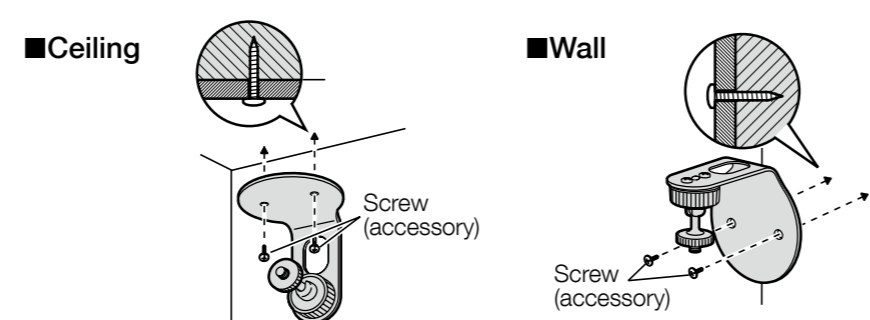
Make sure the flexible stand is firmly mounted on a beam of wood (25 mm (31/32 inches) and greater) etc. When there is no beam, apply a board on the other side of the wall to make sure the camera does not drop.



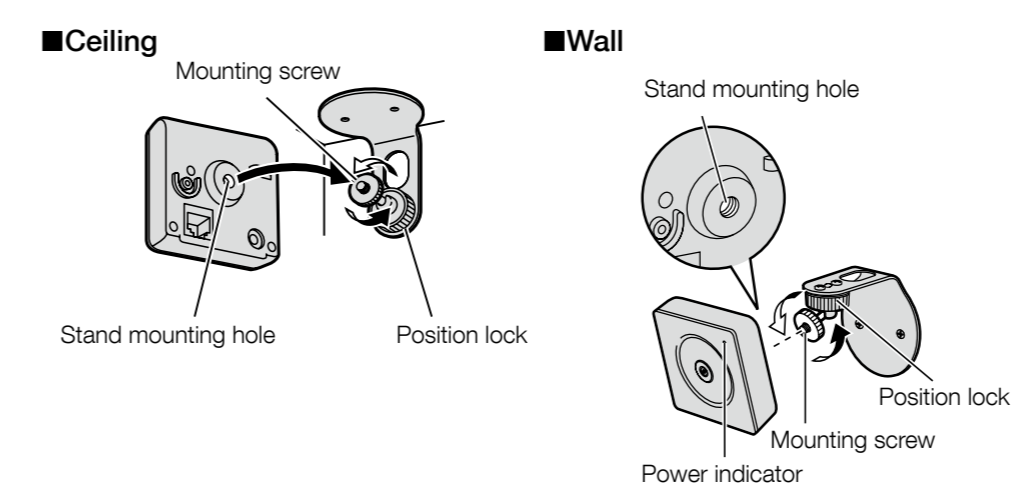
**Note**

- Minimum pull-out strength: 196 N (44.06 lbf)

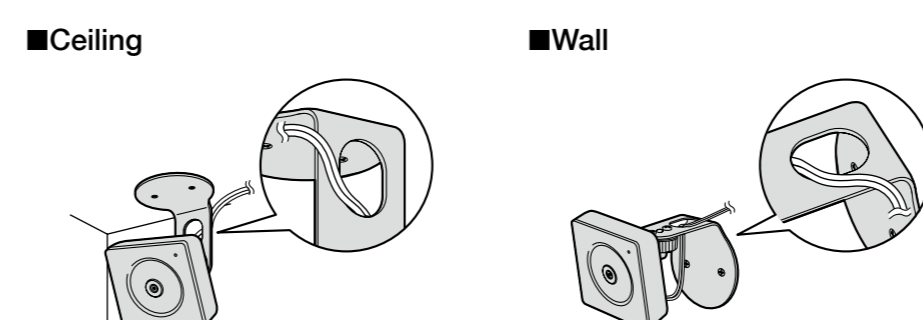
**2 Mount the flexible stand (accessory) firmly to the ceiling or wall with screw (accessory).**



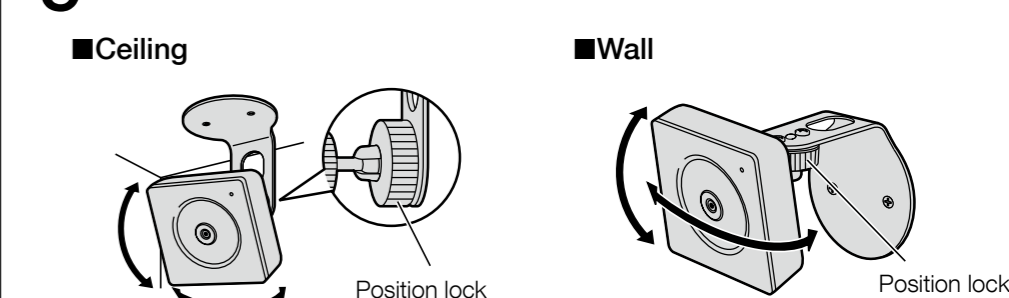
**3 Loosen the position lock of the flexible stand, and turn the mounting screw to attach the camera.**



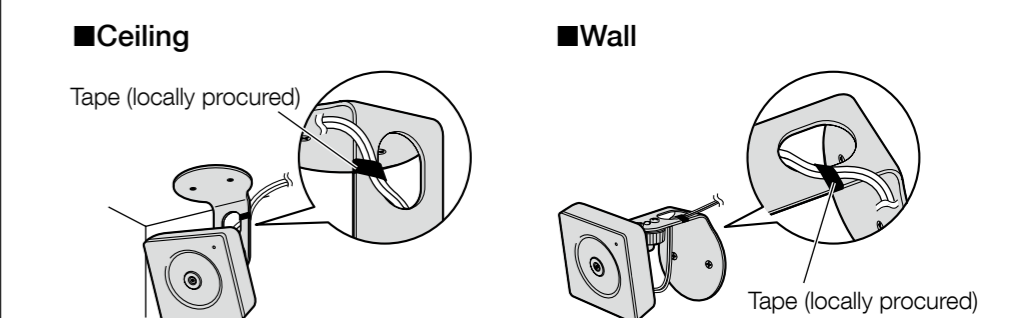
**4 Pass the cord of the AC adaptor (accessory) and LAN cable (locally procured) through the hole of the flexible stand, and then connect them to the camera while referring to "Connections".**



**5 Adjust the camera position and tighten the position lock.**



**6 Dress the cord of the AC adaptor and LAN cable neatly, and then secure them with tape (locally procured).**



**Wire through a hole in the ceiling or wall**

After performing step 1 of "Wire without making a hole in the ceiling or wall", make a hole for cables in the ceiling or wall, and then follow steps 2 to 6 to mount the camera.

