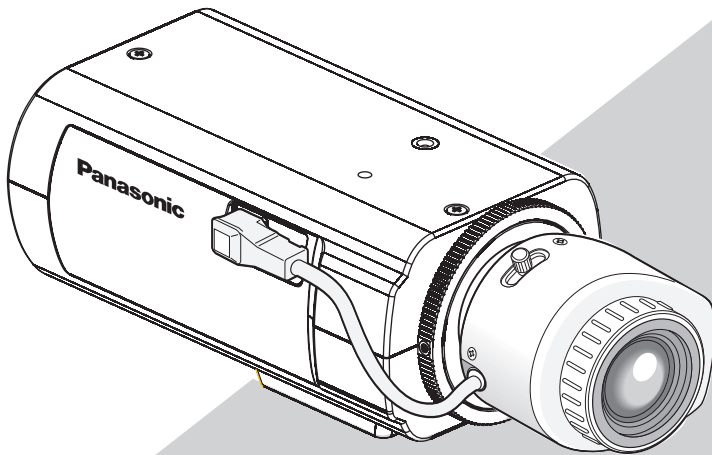


# Panasonic

## Operating Instructions Color CCTV Camera

Model No. WV-CP290/G  
WV-CP294E



Lens: Option

Before attempting to connect or operate this product,  
please read these instructions carefully and save this manual for future use.

No model number suffix is shown in this manual.

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.

Wij verklaren als enige aansprakelijke, dat het product waarop deze verklaring betrekking heeft, voldoet aan de volgende normen of andere normatieve documenten, overeenkomstig de bepalingen van Richtlijnen 2006/95/EC en 2004/108/EC.

Vi erklærer os eneansvarlige for, 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 framställs i direktiv nr 2006/95/EC och 2004/108/EC.

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

Vi erklærer oss alene ansvarlige for at 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.

### CAUTION:

An ALL-POLE MAINS SWITCH with a contact separation of at least 3 mm in each pole shall be incorporated in the electrical installation of the building.

	<b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>		



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Turn the power off at the mains to disconnect the main power for all unit.

### WARNING:

- This apparatus must be earthed.
- Apparatus shall be connected to a mains socket outlet with a protective earthing connection.
- The mains plug or an appliance coupler shall remain readily operable.
- To prevent fire or electric shock hazard, do not expose this apparatus to rain or moisture.
- 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.
- All work related to the installation of this product should be made by qualified service personnel or system installers.
- The connections should comply with local electrical code.

### FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY.

**WARNING: This apparatus must be earthed.**

#### IMPORTANT

The wires in this mains lead are coloured in accordance with the following code.

Green-and-yellow:	Earth
Blue:	Neutral
Brown:	Live

As the colours of the wire in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.

The wire which is coloured **green-and-yellow** must be connected to the terminal in the plug which is marked with the letter **E** or by the earth symbol  $\perp$  or coloured **green** or **green-and-yellow**.

The wire which is coloured **blue** must be connected to the terminal in the plug which is marked with the letter **N** or coloured **black**.

The wire which is coloured **brown** must be connected to the terminal in the plug which is marked with the letter **L** or coloured **red**.

# 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 block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.



- 14) 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.

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THIS PUBLICATION COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRA-

PHICAL 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 REPLACEMENT OR REASONABLE MAINTENANCE OF THE PRODUCT, FOR THE CASES, INCLUDING BUT NOT LIMITED TO BELOW:

- (1) ANY DAMAGE AND LOSS, INCLUDING WITHOUT LIMITATION, DIRECT OR INDIRECT, SPECIAL, 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) UNAUTHORIZED DISASSEMBLE, REPAIR OR MODIFICATION OF THE PRODUCT BY THE USER;
- (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 THE PURPOSE OTHER THAN SURVEILLANCE.

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## Preface

The WV-CP290,WV-CP294 are surveillance color CCTV cameras equipped with a 1/3 inch CCD solid-state image sensor with 752 of horizontal pixels.

## Features

The WV-CP290,WV-CP294 are provided with the adaptive black stretch function, high resolution of 540 TV lines (horizontal), and minimum luminance of 0.8 lx (C/L),0.05 lx (B/W), F1.4(WIDE) thanks to the adoption of the newly developed digital signal processor.

## Precautions

### **This product has no power switch.**

Power is supplied from an external 12 V DC/ 24 V AC (WV-CP294) or 220 to 240 V AC (WV-CP290) power-supply device. Refer to service personnel for how to turn on/off the power.

### **Use this product for indoor use only.**

Do not expose this product 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 product away from water.

### **To keep on using with stable performance**

- Parts of this product may deteriorate and it may shorten the lifetime of this product when using in locations subject to high temperatures and high humidity. Do not expose the product to direct heat such as from a heater.
- Use this product at temperature within  $-10\text{ }^{\circ}\text{C}$  -  $+50\text{ }^{\circ}\text{C}$  { $14\text{ }^{\circ}\text{F}$  -  $122\text{ }^{\circ}\text{F}$ } and humidity below 90 %. (When using this product without turning the power off)

### **Do not attempt to disassemble this product.**

To prevent electric shock, do not remove screws or covers.

There are no user-serviceable parts inside. Ask qualified service personnel for servicing.

### **Handle the product with care.**

Do not abuse the product. Avoid striking, shaking, etc. The product could be damaged by improper handling or storage.

### **Cleaning the product body**

Turn the power off when cleaning the product. Use a dry cloth to clean the product.

Do not use strong abrasive detergent when cleaning the product. When the dirt is hard to remove, use a mild detergent and wipe gently. Then, wipe off the remaining detergent with a dry cloth.

Otherwise it may cause discoloration. When using a chemical cloth for cleaning, read the caution provided with the chemical cloth product.

### **Noise on monitor**

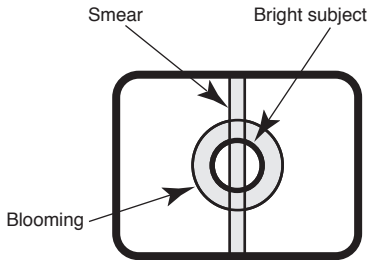
This product is equipped with a super sensitive CCD. Therefore, white dot noise may appear on the monitor. This phenomenon is not trouble.

### **Discoloration on the CCD color filter**

When continuously shooting a bright light source, such as a spotlight, the color filter of the CCD may have deteriorated and it may cause discoloration. Even when changing the fixed shooting direction after continuously shooting a spotlight for a certain period, the discoloration may remain.

**Do not aim the camera at strong light sources.**

A light source such as a spot light causes a blooming (light bleeding) or a smear (vertical lines).



**Turn the circuit breaker off which supplies this product with the power when abnormal conditions are encountered.**

# Precautions for installation

**This camera is designed to be used indoors. This camera is not operable outdoors.**

**Do not operate this product beyond the specified temperature, humidity or power source ratings.**

Use this product at temperatures within  $-10^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ , and humidity below 90 %. The input power source is 12 V DC/24 V AC (WV-CP294) or 220 to 240 V AC (WV-CP290).

## Installing place

Contact your dealer for assistance if you are unsure of an appropriate place in your particular environment.

- Make sure that the installation area is strong enough to hold the camera, such as a concrete ceiling.
- If a ceiling board such as plaster board is too weak to support the total weight, the area shall be sufficiently reinforced.
- Do not install this product in a humid or dust-laden environment. Otherwise, lifetime of the internal parts may be shortened.

## Avoid installing in the following locations.

- 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 steam and oil smoke such as a kitchen, Locations near flammable gas or vapor
- Locations where radiation or X-ray emissions are produced
- Locations subject to strong magnetic field or radio waves
- Locations where it may be damaged by briny air such as seashores
- Locations where the temperature is not within  $-10^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ .
- 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

**Avoid installing the camera in a place with a high level of noise.**

Installation near an air conditioner, an air cleaner, a vending machine, or the like causes noise.

**Avoid connections during a lightning storm.**

Otherwise, an electric shock may be caused.

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

**Keep the camera cable away from the lighting cable.**

Failure to observe this may cause noise.

## Radio interference

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

## Mounting screws

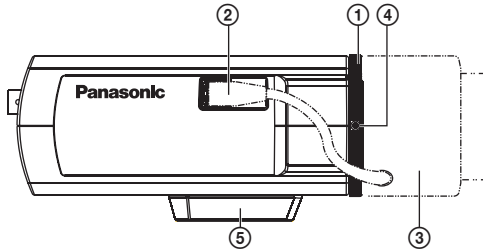
- Screws are not supplied with this product.
- Prepare them according to the material and strength of the area where the product is to be installed.
- Do not use an impact driver. Use of an impact driver may damage the screws.
- The screws and bolts must be tightened with an appropriate tightening torque according to the material and strength of the installation area.

## Power cord (only for WV-CP290)

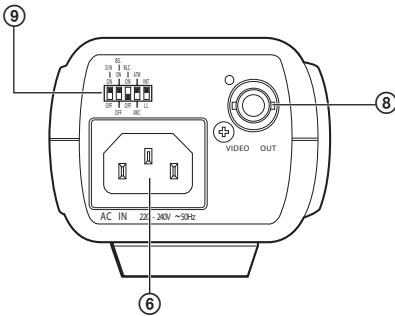
Connect the power cord securely. Run the power cord so that no load is applied to the cord when panning or tilting the camera. (Failure to observe this may disconnect the power cord, and accordingly no image is displayed.)

# Major operating controls and their functions

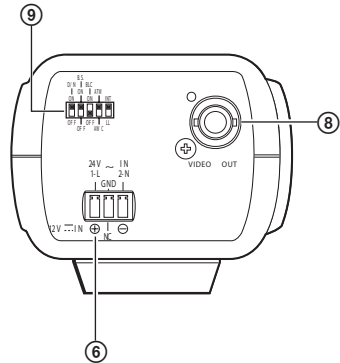
Side view(WV-CP290,WV-CP294)



Rear view(WV-CP290)



Rear view(WV-CP294)



① **Flange-back adjustment ring**

This ring adjusts the back-focal distance or picture focus.

**Important:**

- When an object is out of focus because it is too close to the camera, focus on a darker object with the aperture open.

② **ALC lens connector**

Supplies power and control signals to an auto iris lens (option).

③ **Lens (option)**

**Important:**

- The lens mount should be a CS mount (1"-32UN).

④ **Flange-back lock screw [LOCK]**

Loosen this screw with a screwdriver to adjust the flange-back adjustment ring. When completing the adjustment, tighten this screw.

Recommended tightening torque:  
0.05 N·m {0.5 kgf·cm}

**Important:**

- When the screw is tightened stronger than the recommended tightening torque, it may strip the thread or cause focus misalignment.

⑤ **Tripod mount base**

This socket is used to mount the camera mount bracket (option). The tripod socket can be mounted on either top or bottom of the camera head.(Tripod socket hole: 1/4-20 UNC for tripod)

⑥ **Power connector (only for WV-CP290)**

The included power cord is connected to this power connector.

⑦ **AC/DC power terminal (only for WV-CP294)**

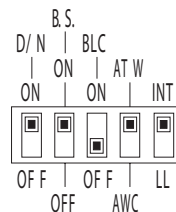
The power supply of 24 V AC or 12 V DC is connected to this terminal.

⑧ **Video output connector [VIDEO OUT]**

Composite video signals are transmitted. If this unit is connected to the multiplex unit, the multiplexed VD2 that is prioritized over INT/LL is automatically selected.

⑨ **Dip switch**

Selects ON/OFF for white balance mode, backlight compensation, Adaptive Black Stretch, day/night mode, and INT/LL for synchronization mode.



• **Day/night mode selector [D/N]**

**ON:** Switches from color to black-and-white images when the ambient brightness (illuminance) of the camera is approx. 0.8 lx or less.

**OFF:** Color picture is displayed normally.

**Default setting: ON**

**Note:**

- To obtain color images, a sufficient level of illuminance (approx. 30 lx or more) is required.
- The switching illuminance level varies with subjects, light sources, and lenses.
- The switching illuminances described above are reference values. The switching illuminance shall be decided based on the actual installation environment.

• **Adaptive Black Stretch Selector [B.S.]**

**ON:** The dark area of the object is automatically corrected to lighten it.

**OFF:** Does not compensate.

**Default setting: ON**

**Important:**

- In the case of "ON" setting, noise may be increased in the dark area of the object.
- In addition, darkness and brightness may be emphasised in the vicinity of the boundary between the dark and bright areas.

- **Backlight compensation selector [BLC]**

**ON:** Compensates the background automatically if it is brighter than the object.

**OFF:** This mode is used when the front of the object is extremely bright.

**Default setting: OFF**

**Note:**

- Under conditions such as extremely strong backlight, the desired compensation effect may not be achieved even with this mode set to ON to detect the backlight level.

- **White balance selector[ATW/AWC]**

**ATW:** Activates the automatic color temperature tracking mode. The camera continuously measures the color temperature of the light source and automatically adjusts the white balance. The adjustment of the color temperature ranges from approx. 2 700 K to 6 000 K.

**AWC:** Activates the automatic white balance control mode. This adjustment is suitable for a location where a light source is stable. The adjustment of the color temperature ranges from approx. 2 000 K to 10 000 K.

**Default setting:ATW**

- **Synchronization mode selector[INT/LL]**

Selects the camera synchronization mode as either internal sync mode (INT) or line-lock mode (LL).

**INT:** Sets to internal 2:1 interlace

**LL:** Sets to line-lock mode

**Default setting: INT**

**Note:**

- Please use the INT setting when DC 12 V is used (WV-CP294).

# Installation and Connection

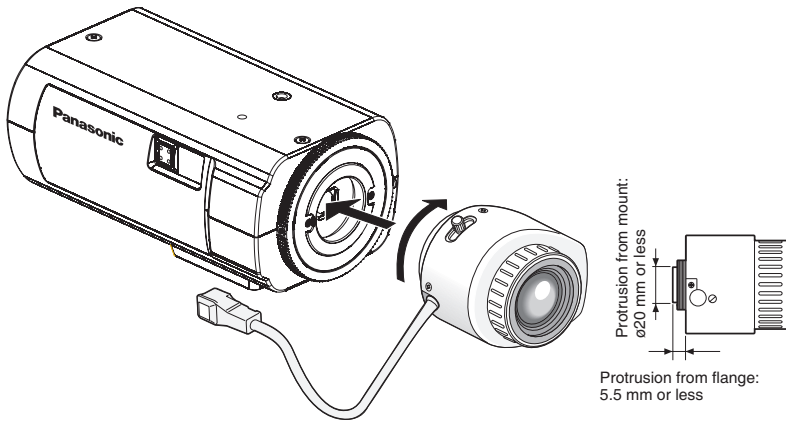
## Caution:

- Be sure to connect the grounding lead to the GND terminal (WV-CP290).

## 1 Rotate the lens (option) clockwise slowly to mount the lens.

### Important:

- For use of C-mount lens, use the C-mount adaptor (option).
- For prevention of damage to the camera body, use a lens with protrusion of 5.5 mm or less from the flange surface.



## Optional dedicated lens

### Lens type

ALC lens for 1/3 inch CCD cameras

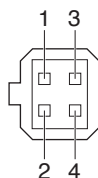
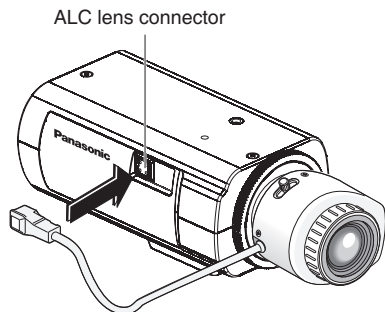
2x vari-focal

### Model No.

WV-LZA61/2S

WV-LZA62/8S

## 2 Connect the lens cable to the ALC lens connector of the camera.



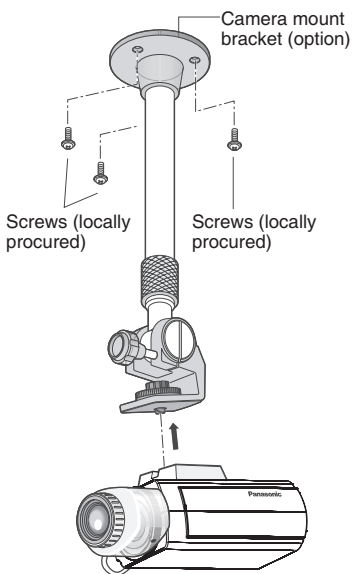
Pin No.	
1	Dump ⊖
2	Dump ⊕
3	Drive ⊕
4	Drive ⊖

## 3 Secure the camera mount bracket (option) to an installation position, and mount the camera on the camera mount bracket.

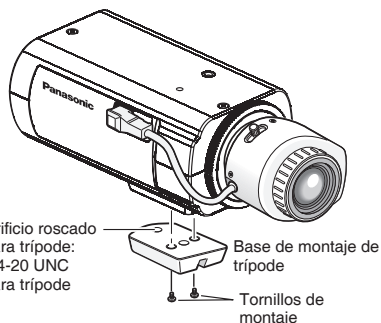
### Important:

- The camera mount bracket shall be mounted on the foundation part of the construction or a part with adequate strength.
- Recommended screw M6, minimum pull-out strength 196 N.
- The other security measures to prevent dropping also must be considered when the total weight of camera and its lens is above 1 kg in addition to the fall protection measure functioned by coaxial cable, in order to strengthen the fall protection countermeasure. (The fall protection measure can be functioned through the coaxial cable when the total weight is below 1 kg.)

### <Installation sample on a ceiling>



- When attaching an optional tripod mount base on the bottom of the camera, use the removed screws to attach the tripod mount base. Use of longer or shorter screws may cause drop or damage. Recommended tightening torque: 0.39 N·m

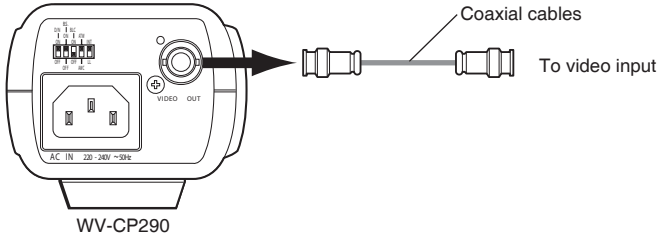


#### 4 The coaxial cable(procured locally) is connected to this video output connector.

##### Important:

- Be sure to turn off the power of each device before connection.
- Be sure to secure the coaxial cable connectors.

Connect a coaxial cable to the video output connector.

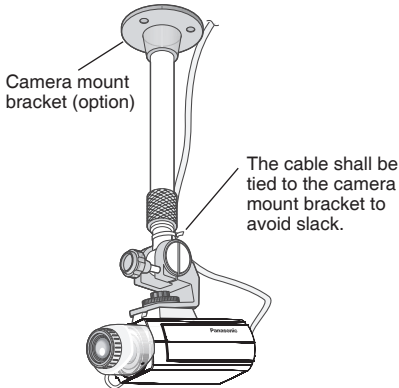


#### 5 Use a cable tie (locally procured) to attach the coaxial cable to the camera mount bracket.

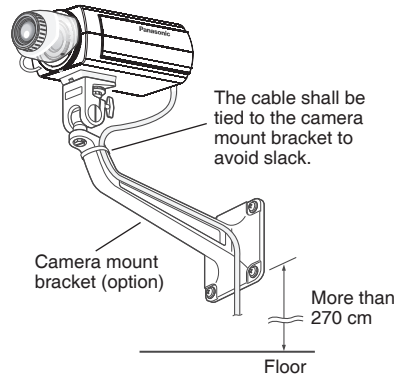
##### Important:

- The cable tie shall be made of metallic or durable material to be strong enough because the tie plays the role of camera drop prevention measures in case.
- When the camera mount bracket is mounted on a wall, be sure to observe the mounting height described on the illustration below.

<Installation sample on a ceiling>



<Installation sample on a wall>

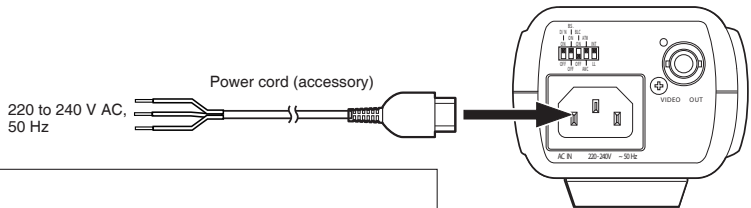


## 6 Turn on the power.

### WV-CP290

The included power cord is connected to this power connector.

Connect between the power connector on the rear side of the camera and a plug socket with the supplied power cord.



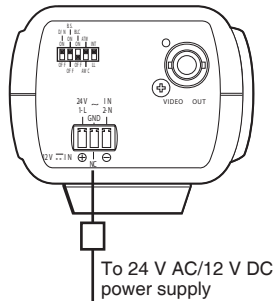
#### Caution:

- The camera shall be connected with cord set with plug. Plug for respective country shall be mounted on the Power cord by a qualified electrical.

### WV-CP294

#### Important:

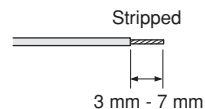
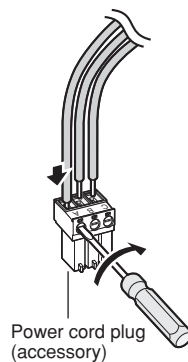
- The power supply of 24 V AC/12 V DC shall be insulated against 220 to 240 V AC.
- The power supply is automatically selected either 24 V AC or 12 V DC. No setting is required with this camera.



- ① Loosen the screw of the power cord plug (accessory).
- ② Connect the power supply (option) of 24 V AC or 12 V DC to the power cord plug. Strip the end of the wire by 3 mm to 7 mm, and twist the stripped part of the wire sufficiently to avoid short circuit.
  - Specification of cable (wire)  
AWG #16 - #28, Single core, twisted
  - \* Check whether the stripped part of the wire is not exposed and is securely connected.

#### <Ratings>

	24 V AC	12 V DC
A	2-N	⊖(GND)
B	GND	NC
C	1-L	⊕



- ③ Tighten the screw of the power cord plug.
- ④ Connect the power cord plug to the AC/DC power terminal on the rear side of the camera.
  - \* Make sure that the power cord plug is inserted fully into the AC/DC power supply terminal.

## 7 Adjust the camera angle by loosening the screw of the camera mount bracket while viewing the video monitor.

Be sure to loosen the screw of the camera mount bracket when the camera angle is adjusted. If the camera angle is changed when the screw is tight, excessive force is applied to the camera mount bracket and camera, and accordingly they may be damaged. Be sure to tighten the screw securely after camera angle adjustment.

## 8 Adjust the focus position.

Loosen the flange-back lock screw and rotate the flange-back adjustment ring to adjust the focus position while monitoring the video monitor. When completing the adjustment, tighten this screw.

Recommended tightening torque: 0.05 N·m {0.5 kgf·cm}

### Important:

- When the screw is tightened stronger than the recommended tightening torque, it may strip the thread or cause focus misalignment.

### Notes:

- When using a fixed-focal lens featuring the focus adjustment, adjust the flange-back length after setting the lens focus to the FAR end.
- When using a vari-focal lens featuring the focus adjustment, refer to the operating instructions of the lens in use.

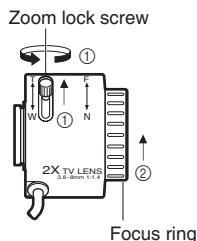
## How to use a vari-focal lens

The following are descriptions of how to use a 2x vari-focal lens. Method of adjustment may be different depending on the lens in use. For further information, refer to the operating instructions of the lens in use.

- ① Loosen the zoom lock screw and slide it to the "T" end.
- ② Rotate the focus ring to one step short of the "F" end.
- ③ Shoot an object which is located 10 m away or more, and adjust the back focal length of the camera.

### Important:

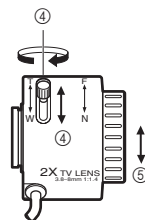
- Make sure that it is possible to focus on an object which is located approx. 1.2 m away by rotating the focus ring when the zoom lock screw is at the "W" end.



- ④ Slide the zoom lock screw to an appropriate position and tighten it.
- ⑤ Rotate the focus ring to bring the camera into focus.

### Important:

- When changing the angular field of view, adjust focus by changing the zoom lock screw position and rotating the focus ring again.



# Troubleshooting

Before asking for repairs, check the symptoms with the following table. Contact your dealer if a problem cannot be solved even after checking and trying the solution in the table or a problem is not described below.

Symptom	Cause/solution	Reference pages
No image displayed	<ul style="list-style-type: none"> <li>• Are the power cord and coaxial cable connected appropriately? → Check whether the connection is appropriately established.</li> </ul>	-
	<ul style="list-style-type: none"> <li>• Is the monitor brightness appropriately adjusted, or is the contrast appropriately adjusted? → Check whether the monitor settings are appropriate.</li> </ul>	-
	<ul style="list-style-type: none"> <li>• Is the lens cap detached? → Check whether the lens cap is removed.</li> </ul>	-
Blurred image	<ul style="list-style-type: none"> <li>• Is the lens of the camera soiled with dirt or dust? → Check whether the lens of the camera is clean.</li> </ul>	-
	<ul style="list-style-type: none"> <li>• Is the focus adjusted correctly? → Check if the focus is adjusted correctly.</li> </ul>	-
Image Distortion	<ul style="list-style-type: none"> <li>• Check if the DIP switch is set to "LL" when the DC 12 V is used. → Set the DIP switch to "INT".</li> </ul>	9-10

Inspect the power cord, power plug and power connectors periodically.

Symptom	Cause/solution	Reference pages
Damaged power cord sheathing	<ul style="list-style-type: none"><li>• The power cord, power connector, or power plug is damaged. Use of the damaged cord, connector, or plug may cause electric shock or fire. Disconnect the power plug immediately and request repair to your dealer.</li></ul>	-
Heated portion of power line consisting of power cord, connector, and power plug during use		
The power cord gets hot when bent or stretched.		

## Specifications

Power source and power consumption:	WV-CP290: 220 V-240 V AC 50 Hz, 3.2 W WV-CP294: 24 V AC 50 Hz, 2.9 W, 12 V DC, 240 mA
Image sensor:	1/3 inch interline transfer CCD
Effective pixels:	752 (H) x 582 (V)
Scanning area:	4.9 mm (H) x 3.7 mm (V)
Scanning system:	2 : 1 interlace
Scanning frequency:	Horizontal: 15.625 kHz Vertical: 50 Hz
Scanning:	625 lines/50 fields/25 frames
Synchronization:	Internal (INT), multiplexed vertical drive (VD2) or line-lock (LL)
Resolution:	Horizontal: 540 TV lines (at centre) Vertical: 400 TV lines (at centre)
Minimum illumination:	0.8 lx(C/L), 0.05 lx(B/W), F1.4(wide)
Signal-to-noise ratio:	50 dB (equivalent to AGC Off, weight On)
Video output:	1.0 V[P-P] PAL composite 75 Ω(BNC)
Lens mount:	CS-mount
White balance:	ATW/AWC
Switch function:	White balance mode selector (ATW/AWC), Backlight compensation selector (ON/OFF), Adaptive Black Stretch selector (ON/OFF), Day/night mode selector (ON/OFF), Synchronization mode selector (INT/LL)
Ambient temperature:	-10°C - +50°C {14°F - 122°F}
Ambient humidity:	Less than 90 %
Dimensions:	75 (W) x 65 (H) x 137 (D) mm (excluding the lens connector)
Weight:	WV-CP290: 365 g WV-CP294: 330 g

Weights and dimensions indicated are approximate.

## Standard Accessories

Operating Instructions (this book).....	1 pc.
CD-ROM*.....	1 pc.

\*The CD-ROM contains the operating instructions (PDF).

The following parts are used during installation procedures.

Power cord (approx. 1.8 m) (only for WV-CP290) .....	1 pc.
Power cord plug (only for WV-CP294).....	1 pc.

## Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)



This symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.

For proper treatment, recovery and recycling, please take these products to designated collection points, where they will be accepted on a free of charge basis. Alternatively, in some countries you may be able to return your products to your local retailer upon the purchase of an equivalent new product.

Disposing of this product correctly will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest designated collection point.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

### For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

### Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union.

If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

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 F.R.Germany

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