

Panasonic

Colour CCTV Cameras

Operating Instructions

Model No. **WV-CL270**
WV-CL274E

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

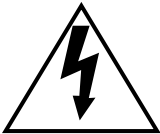
Ns0103-1043 3TR001506BAA Printed in China





CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

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.

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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.
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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.
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Power disconnection. Unit with or without ON-OFF switches have power supplied to the unit whenever the power cord is inserted into the power source; however, the unit is operational only when the ON-OFF switch is in the ON position. The power cord is the main power disconnect for all units.

The serial number of this product may be found on the bottom of the unit. You should note the serial number of this unit in the space provided and retain this instruction as a permanent record of your purchase to aid identification in the event of theft.

Model No. _____
Serial No. _____

WARNING: To prevent fire or electric shock hazard, do not expose this appliance to rain or moisture. The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

PREFACE

Panasonic's WV-CL270/CL274E series digital signal processing colour CCD cameras introduce a new level of high picture quality and high resolution through the use of a 1/2-inch interline transfer

CCD image sensor having 752 horizontal pixels (picture elements), and digital signal processing LSI's. This model offers cutting-edge technology for advanced video surveillance.

FEATURES

1. The following functions are built in.

 - (1) Auto Light Control (ALC)/Electronic Light Control (ELC)
 - (2) Automatic Gain Control (AGC) +18 dB and Automatic Tracing White Balance (ATW)
 - (3) Camera synchronization mode selectable between internal (INT), Line-locked (LL) and Multiplexed Vertical Drive (VD2).
2. Minimum illumination of 0.8 lx (0.08 foot-candle) at F1.4

3. Signal-to-noise ratio of 50 dB (Equivalent to AGC Off)

4. Horizontal resolution of 480 lines

5. Auto iris lens control selectable between video signal and DC power supply.

PRECAUTIONS

1. **The installation should be made by qualified service personnel or system installers.**

2. **Do not attempt to disassemble the camera.**
To prevent electric shock, do not remove screws or covers.
There are no user serviceable parts inside. Ask a qualified service person for servicing.

3. **Handle the camera with care.**
Do not abuse the camera. Avoid striking, shaking, etc. The camera could be damaged by improper handling or storage.

4. **Do not expose the camera to rain or moisture, or try to operate it in wet areas.**
Turn the power off immediately and ask a qualified service person for servicing. Moisture can damage the camera and also create the danger of electric shock.

5. **Do not use strong or abrasive detergents when cleaning the camera body.**
Use a dry cloth to clean the camera when dirty.

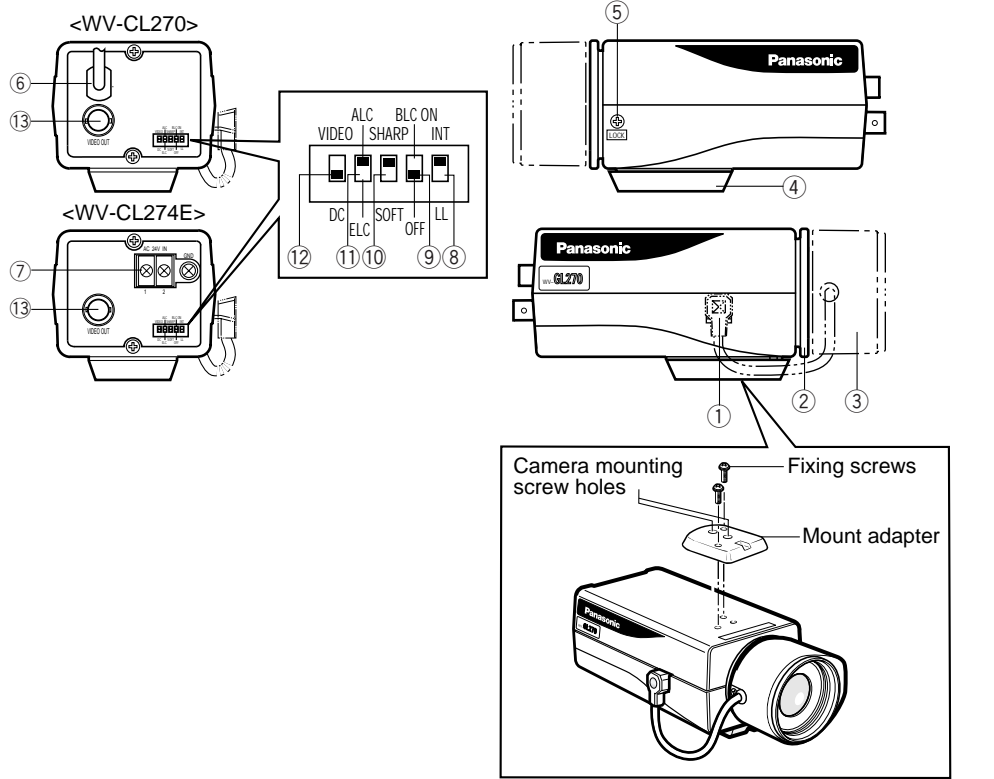
In case the dirt is hard to remove, use a mild detergent and wipe gently. Afterwards, wipe off the remained part of the detergent in it with a dry cloth.

6. **Clean the CCD faceplate with care.**
Do not clean the CCD with strong or abrasive detergents. Use lens tissue or a cotton tipped applicator and ethanol.

7. **Never face the camera towards the sun.**
Do not aim the camera at bright objects. Whether the camera is in use or not, never aim it at the sun or other extremely bright objects. Otherwise, blooming or smear may be caused.

8. **Do not operate the camera beyond the specified temperature, humidity or power source ratings.**
Use the camera under conditions where temperature is between -10°C - +50°C (14°F - 122°F), and humidity is below 90 %. The input power source is 220 V - 240 V AC 50 Hz for WV-CL270, and 24 V AC 50 Hz for WV-CL274E.

MAJOR OPERATING CONTROLS AND THEIR FUNCTIONS



- ① **Auto Iris Lens Connector**
Supplies power and control signals to an auto iris lens (not supplied).

② **Flange-back Adjusting Ring**
This ring adjusts the back-focal distance or picture focus.

③ **Lens (option)**

④ **Mount Adapter**
The camera mounting screw hole is for mounting the camera onto a mounting bracket. The camera is originally designed to be mounted from the bottom, however, a top-mounting type is also available. To mount from the top, remove the mount adapter from the bottom of the camera by removing two fixing screws. Attach the mount adapter to the top as shown in the diagram, then mount the camera on the mounting bracket. Make sure that two original screws are used when mounting the mount adapter; longer type screws may damage inner components, too shorter type screws may cause the camera drop.

⑤ **Focus Fixing Screw**

⑥ **Power Cord (only for WV-CL270)**
Connect this power cord to an electrical outlet of 220 V - 240 V AC 50 Hz.

⑦ **AC 24 V Input Terminal [AC 24V IN] (only for WV-CL274E)**
This terminal is for connecting the 24 V AC 50 Hz power supply cord.
- ⑧ **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.

⑨ **Back Light Compensation Mode Selector [BLC ON, OFF]**
Lets you select the mode according to the position of the object and light conditions on the screen.
ON: Select this mode when a strong light such as a spotlight is in the background.
OFF: Normal picture.

⑩ **Detail/Aperture Level Selector [SHARP, SOFT]**
The detail/aperture level can be selected with this selector. Set it to the desired position while observing the picture on the monitor.
SHARP: Normal position.
SOFT: Select this position when a Quad System is connected to this camera.

⑪ **Automatic Light Control/Electronic Light Control Selector [ALC, ELC]**
Lets you select the mode according to the lens type used.
ALC: Select this mode when an auto iris lens (ALC lens) is used with this camera.
ELC: Select this mode when a fixed iris lens or manual iris lens is used with this camera.

⑫ **Lens Drive Signal Selector [VIDEO, DC]**
Lets you select the mode according to the type of auto iris lens drive signal to be supplied to the lens from the auto iris lens connector.
VIDEO: Select this mode if you are using an auto iris lens that requires a video drive signal.
DC: Select this mode if you are using a auto iris lens that requires a DC drive signal.

- ⑬

Video Output Connector [VIDEO OUT]

This connector is for connecting with the VIDEO IN connector of the video monitor. Whenever the multiplexed vertical drive (VD2) signal is supplied to this connector, the camera synchronization mode is automatically set to Vertical Drive.

Caution: Connect to 24 V AC (19.5 V-28 V) class 2 power supply only. Make sure to connect the grounding lead to the GND terminal when the power is supplied from a 24 V AC power source.

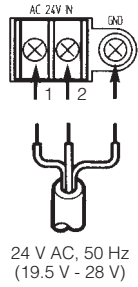
CONNECTIONS

A. WV-CL270 (220 V - 240 V AC 50 Hz)

Connect the power cord to an electrical outlet of 220V - 240V AC 50Hz.

B. WV-CL274E (24 V AC 50 Hz)

Connect the power cable to the AC 24 V IN terminal on the rear panel of the WV-CL274E.



Recommended wire gauge sizes for 24 V AC line

Copper wire size (AWG)		#24 (0.22mm²)	#22 (0.33mm²)	#20 (0.52mm²)	#18 (0.83mm²)
Length of cable (Approx.)	(m)	95	150	255	425
	(ft)	314	495	842	1 403

- Video Cable**
1.

It is recommended to use a monitor whose resolution is at least equal to that of the camera.
2.

The maximum extensible coaxial cable length between the camera and the monitor is shown below.

Type of coaxial cable		RG-59/U (3C-2V)	RG-6U (5C-2V)	RG-11/U (7C-2V)	RG-15/U (10C-2V)
Recommended maximum cable length	(m)	250	500	600	800
	(ft)	825	1 650	1 980	2 640

Installation of Auto Iris Lens Connector

Install the lens connector when using a video drive ALC lens.

Cut the iris control cable at the edge of the lens connector to remove the existing lens connector and then remove the outer cable cover of the supplied connector as shown in the diagram.

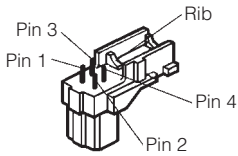
The pin assignment of the lens connector is as follows:

Pin 1: Power source; +9 V DC, 50 mA max.

Pin 2: Not used

Pin 3: Video signal; 0.7 V[p-p]/40 kΩ

Pin 4: Shield, ground



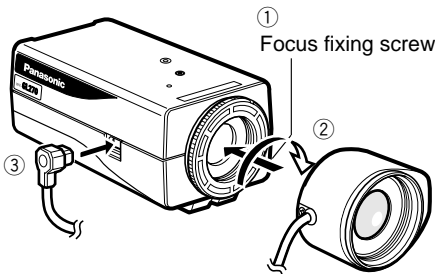
Solder the lens cable to the pins of the supplied connector.

- Mounting the Lens**
- ①

Before you mount the lens, loosen the screw on the side of the camera, and rotate the flange-back adjusting ring clockwise until it stops. If the ring is not at the end, the inner lens or CCD image sensor may be damaged.
- ②

Mount the lens by turning it clockwise on the lens mount of the camera.
- ③

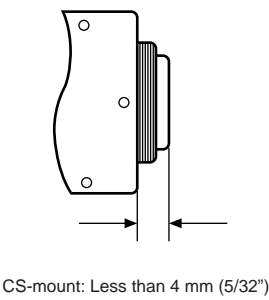
Connect the lens cable to the auto iris lens connector on the side of the camera.



Caution for Mounting the Lens

The lens mount should be a CS-mount (1"-32UN) and the lens weight should be less than 450 g (0.99 lbs). If the lens is heavier, both the lens and camera should be secured by using the supporter.

The protrusion at the rear of the lens should be as shown below.



FOCUS OR FLANGE-BACK ADJUSTMENT

- The following adjustment should be made by qualified service personnel or system installers.

①

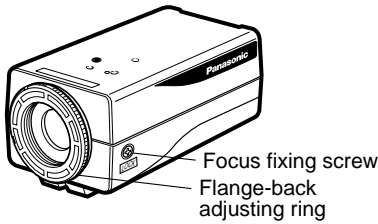
Loosen the screw on the side of the camera.

②

Turn the flange-back adjusting ring to the desired position.

③

Tighten the screw on the side of the camera.



Note: Tightening the screw by force will cause damage to the screw or deviation of focus.

SPECIFICATIONS

Pick-up device:	752 (H) x 582 (V) pixels, interline transfer CCD
Scanning area:	6.45 (H) x 4.84 (V) mm (equivalent to scanning area of 1/2" pick-up tube)
Synchronization:	internal, line-locked or multiplexed vertical drive (VD2), selectable
Scanning system:	2 : 1 interlace
Scanning:	625 lines / 50 fields / 25 frames
Horizontal:	15.625 kHz
Vertical:	50 Hz
Horizontal resolution:	480 lines
Video output:	1.0 V[p-p] PAL composite 75 Ω / BNC connector
Signal-to-noise ratio:	50 dB (equivalent to AGC Off, weight On)
Electronic light control:	equivalent to continuous variable shutter speed between 1/50 s and 1/15 000 s
Minimum illumination:	0.8 lx (0.08 foot-candle) at F1.4
Detail:	SHARP or SOFT, selectable
Lens mount:	CS-mount
Ambient operating temperature:	-10 °C - +50 °C (14 °F - 122 °F)
Ambient operating humidity:	less than 90 %
Power source and power consumption:	WV-CL270: 220 V - 240 V AC 50 Hz, 3.8 W WV-CL274E: 24 V AC 50 Hz, 3.5 W
Dimensions (without lens):	67 mm (W) x 65 mm (H) x 123 mm (D) 2-5/8" (W) x 2-9/16" (H) x 4-13/16" (D)
Weights (without lens):	WV-CL270: 0.495 kg (1.09 lbs) WV-CL274E: 0.35 kg (0.77 lbs)

Weights and dimensions indicated are approximate. Specifications are subject to change without notice.

STANDARD ACCESSORIES

Body cap1 pc.
ALC lens connector1 pc.

OPTIONAL ACCESSORIES

Lenses: WV-LA6AE, WV-LA12AE, WV-LZ81/6E, WV-LZ81/10E, WV-LA4R5AE, WV-LZ80/2E

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