Panasonic
ideas for life

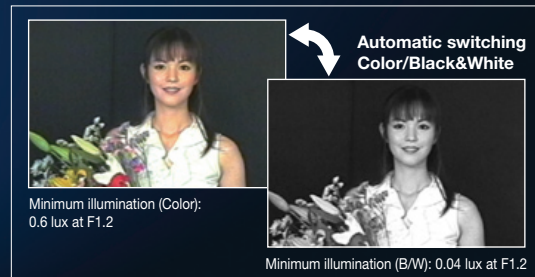**Day/Night Surveillance Camera**
WV-CP290 Series

NTSC **WV-CP290** (120 V AC)
WV-CP294 (24 V AC or 12 V DC)

PAL **WV-CP290** (220 ~ 240 V AC)
WV-CP294 (24 V AC or 12 V DC)

Lens: optional

Automatic switching Color/Black&White

Minimum illumination (Color): 0.6 lux at F1.2

Minimum illumination (B/W): 0.04 lux at F1.2

day/night IR removable

Superb Image Quality and Cost Performance True Day/Night Camera

Key Features

- 6 mm (1/3 inch) CCD pick-up element with 768 (H) x 494 (V) (NTSC) / 752 (H) x 582 (V) (PAL) pixels
- Newly-developed Digital Signal Processor (DSP)
- High resolution: 540 TV lines
- High sensitivity with Day/Night function: 0.6 lux (Color), 0.04 lux (B/W) at F1.2.
  IR cut filter switches on/off to enhance the sensitivity in B/W mode.
- Signal-to-Noise Ratio: 50 dB (equivalent to AGC Off, Weight On)
- ABS (Adaptive Black Stretch) enhances visibility of dark area without degrading image quality in bright area.
- Various adjustment features including BLC (Back Light Compensation), ATW (Auto Tracing White Balance) and ALC (Automatic Light Control)
- 2 White Balance modes are selectable with Dip Switch: ATW (Auto Tracking White Balance) / AWC (Automatic White Balance Control)
- Internal / Line-lock / Multiplexed Vertical Drive (VD2) synchronization
- CS-mount lenses. DC-servo ALC lenses.

Standard Accessories

- Operating Instructions .... 1 pc.
- CD-ROM (only for PAL) .... 1 pc.
  The CD-ROM contains the operating instructions (PDF).
- Power Cord (only for WV-CP290)
  .... 1 pc.
- Power Cord Plug (only for WV-CP294)
  .... 1 pc.

Optional Accessories

6 mm (1/3 inch) 2x Varifocal Lens
WV-LZA61/2S
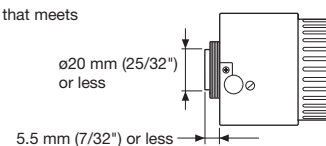(3.8 ~ 8 mm)
F1.4 (Wide)
F1.8 (Tele)

6 mm (1/3 inch) 8x Varifocal Lens
WV-LZ62/8S
(5 ~ 40 mm)
F1.6 (Wide)
F1.9 (Tele)

In case of use of other lenses

Please select lenses that meets the following:

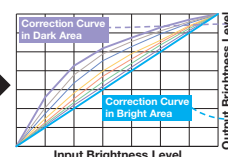ø20 mm (25/32") or less

5.5 mm (7/32") or less

Newly-developed DSP utilizes the Adaptive Black Stretch technology

The DSP to automatically detect dark areas inside an image, applying the most suitable correction curve based on brightness data of areas surrounding the dark area.
This image processing algorithm transforms shadows and dark areas into natural and crisp images in real time.
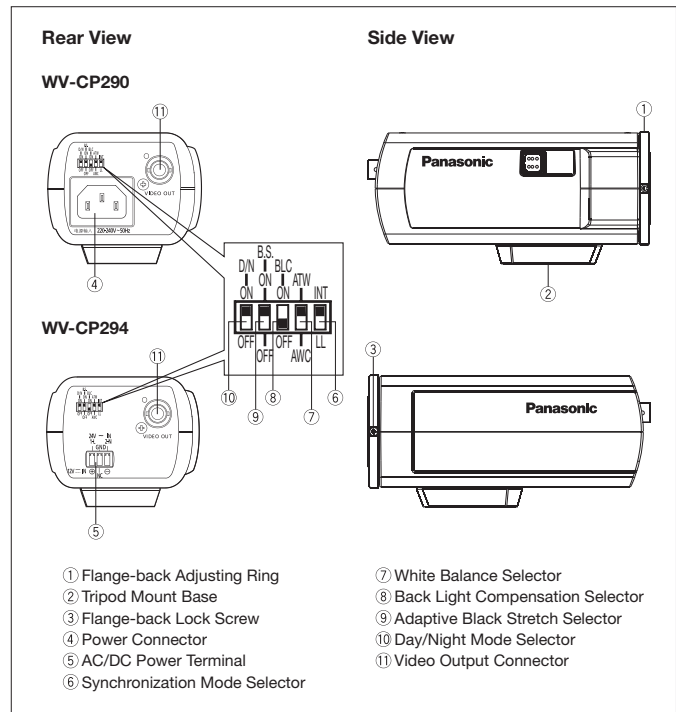
Correction Curve in Dark Area

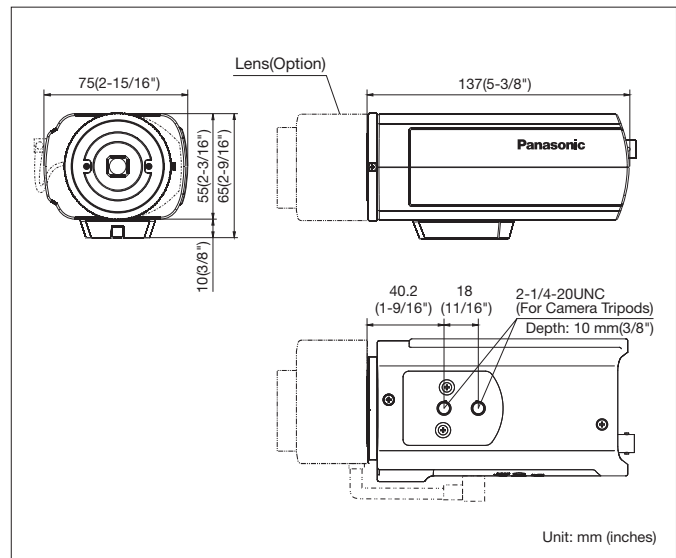Correction Curve in Bright Area

Output Brightness Level

Input Brightness Level

Before correction

After correction

Specifications

TV System		NTSC	PAL
Camera	Image Sensor	6 mm (1/3 inch) interline transfer CCD	
	Effective Pixels	768 (H) x 494 (V)	752 (H) x 582 (V)
	Scanning Mode	2:1 interlace scan	
	Scanning Area	4.9 mm (H) x 3.7 mm (V)	
	Scanning Frequency	Horizontal: 15.734 kHz	Horizontal: 15.625 kHz
		Vertical: 60 Hz	Vertical: 50 Hz
	Scanning Line	525 lines	625 lines
	Resolution	Horizontal: 540 TV lines	
		Vertical: 400 TV lines	
	Minimum Illumination	Color: 0.4 lux at F0.95, 0.6 lux at F1.2, 0.8 lux at F1.4 B/W: 0.03 lux at F0.95, 0.04 lux at F1.2, 0.05 lux at F1.4	
	Signal-to-Noise Ratio	50 dB (equivalent to AGC Off, Weight On)	
	White Balance	ATW / AWC	
	Lens Mount	CS-mount	
	Synchronization	Internal (INT), Multiplexed Vertical Drive (VD2), Line-Lock (LL)	
	Switch Function	White balance mode selector (ATW/AWC) Back Light Compensation selector (ON/OFF) Adaptive Black Stretch selector (ON/OFF) Day/Night mode selector (ON/OFF) Synchronization mode selector (INT/LL)	
Input / Output	Video Output	1.0 V [P-P] / NTSC composite 75 Ω / BNC Connector Multiplexed VD2 capable	1.0 V [P-P] / PAL composite 75 Ω /BNC Connector Multiplexed VD2 capable
General	Safety/EMC Standard	UL (UL60065), FCC (Part15 ClassA), C-UL (E60065), DOC (ICES003 ClassA)	CE (EN60065, EN55022 ClassB, EN55024), GOST (GOST R 51558), SEMKO (EN60065)
	Power Source and Power Consumption	WV-CP290: 120 V AC 60 Hz, 2.5 W WV-CP294: 24 V AC 60 Hz, 2.9 W 12 V DC, 240 mA	WV-CP290: 220 ~ 240 V AC 50 Hz, 3.2 W WV-CP294: 24 V AC 50 Hz, 2.9 W 12 V DC, 240 mA
	Ambient Operating Temperature	−10 ˚C ~ +50 ˚C (14 ˚F ~ 122 ˚F)	
	Ambient Operating Humidity	90 % or less (without condensation)	
	Dimensions (approx.)	75 mm (W) x 65 mm (H) x 137 mm (D) (2-15/16" (W) x 2-9/16" (H) x 5-3/8" (D)) (excluding the lens, connector)	
	Weight (approx.)	WV-CP290: 365 g (0.8 lbs.) WV-CP294: 330 g (0.73 lbs.)	

Part Names and Functions

Rear View   **Side View**

WV-CP290

WV-CP294

① Flange-back Adjusting Ring
② Tripod Mount Base
③ Flange-back Lock Screw
④ Power Connector
⑤ AC/DC Power Terminal
⑥ Synchronization Mode Selector

⑦ White Balance Selector
⑧ Back Light Compensation Selector
⑨ Adaptive Black Stretch Selector
⑩ Day/Night Mode Selector
⑪ Video Output Connector

Appearance

Lens(Option)

75(2-15/16")

137(5-3/8")

55(2-3/16")

65(2-9/16")

10(3/8")

40.2 (1-9/16")   18 (11/16")

2-1/4-20UNC (For Camera Tripods)
Depth: 10 mm(3/8")

Unit: mm (inches)

• All TV pictures are simulated.
• Weights and dimensions are approximate.
• Specifications are subject to change without notice.
• These products may be subject to export control regulations.
• All product pictures are NTSC models.

Important
– Safety Precaution: carefully read the operating instructions and installation manual before using this product.

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