Panasonic

Super Dynamic 6 Weather Resistant Dome Camera
WV-CW590 Series
WV-CW590A Series

NTSC **WV-CW594** (24 V AC) PAL **WV-CW590** (220 ~ 240 V AC)   **WV-CW594** (24 V AC)
WV-CW590A (24 V AC)   **WV-CW590A** (220 ~ 240 V AC)   **WV-CW590A** (24 V AC)

WV-CW590   WV-CW590A

WV-CW590A / WV-CW594A
RAIN WASH COATING

SD6 Super Dynamic

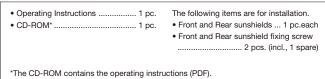IP66 standard   36x OPTICAL ZOOM   day/night IR removable

All-in-one 24-hour outdoor surveillance camera featuring 36x zoom and *Super Dynamic 6* technology

Key Features

- *Super Dynamic 6* technology delivers 128x (NTSC) / 160x (PAL) wider dynamic range compared to conventional cameras.
- High resolution: 650 TV lines
- High sensitivity with Day/Night function: 0.5 lx (Color) at F1.4 (Wide), 0.04 lx (B/W) at F1.4 (Wide). IR cut filter switches on/off to enhance the sensitivity in B/W mode.
- Adaptive Digital Noise Reduction: Integration of 2D-DNR and 3D-DNR ensures noise reduction in various conditions.
- Electronic sensitivity enhancement: Auto (Up to 32x) / Manual (Up to 512x)
- Electronic shutter from 1/100(NTSC), 1/120 (PAL) to 1/10,000 s
- 36x zoom lens: 3.3 ~ 119 mm (approx. 720x with digital zoom)
- Pan/Tilt speed of max. 400°/s at preset mode and 0.065°/s super fine control at manual mode
- 5 degrees upper view for various applications
- 256 preset positions that can be activated from the system controller with a switcher or recorder (specific models).
- Auto tracking: The camera follows the largest movement in the image automatically. The camera will pan and tilt to keep the subject in the center of the image.
- VMD (Video Motion Detector) with Mask 8 x 6 areas
- Scene Change Detection alarms when lens is covered, spray painted, removed or defocused.
- 4 alarm inputs and 2 outputs terminals
- Alarm actions include Terminal output, Camera positioning, Auto pan, Patrol, SEQ, Sort, Auto track, B/W and command output.
- Auto Image Stabilizer for applications where vibration or wind is a concern.
- Internal <NTSC/PAL> / Multiplexed Vertical Drive (VD2) <NTSC> synchronization

- Over the coaxial cable or RS485 data (Panasonic, Pelco P/D Protocol) communication
- 16 alphanumerics camera title display
- Multi language: English, French, Italian, Spanish, German, Russian, Chinese, Japanese
- IP66 rated water and dust resistant. Compatible with IEC60529 measurement standard.
- Built-in fan/heater for temperature changes of –50 °C ~ +50 °C(-58°F ~122°F)
- Built-in sun shield permits camera locations in direct sunlight.
- **Rain wash coating dome cover (WV-CW590A/WV-CW594A)**

Standard Accessories

- Operating Instructions .... 1 pc.
- CD-ROM* .... 1 pc.

The following items are for installation.
- Front and Rear sunshields ... 1 pc.each
- Front and Rear sunshield fixing screw .... 2 pcs. (incl., 1 spare)

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

Optional Accessory

Wall Mount Bracket
WV-Q122
(PAL model only)

Specifications

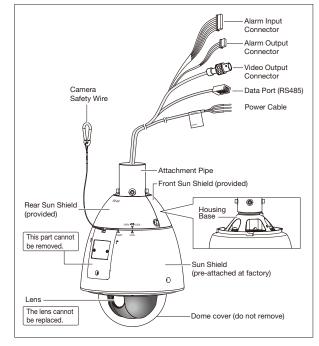| TV System		NTSC	PAL
Camera	Image Sensor	1/4 type interline transfer CCD	
	Effective Pixels	976 (H) x 494 (V)	976 (H) x 582 (V)
	Scanning Mode	2:1 interlace	
	Scanning Area	3.66 mm(H) x 2.74 mm(V) (5/32"(H) x 3/32"(V))	3.66 mm (H) x 2.73 mm (V) (5/32"(H) x 3/32"(V))
	Scanning Frequency	Horizontal: 15.734 kHz Vertical: 59.94 Hz	Horizontal: 15.625 kHz Vertical: 50 Hz
	Horizontal Resolution	650 TV lines	
	Minimum Illumination	Color (30 IRE): 0.5 lx (SENS UP: OFF), 0.016 lx (SENS UP: 32x) at F1.4 B/W (10 IRE): 0.04 lx (SENS UP: OFF), 0.0013 lx (SENS UP: 32x) at F1.4	
	Signal-to-Noise Ratio	52 dB minimum (AGC: OFF)	
	White Balance	AWC (2,000 ~ 10,000 K), ATW1 (2,700 ~ 8,000 K), ATW2 (2,400 ~ 8,000 K)	
	Light Control	ALC (Adjustable OPEN/CLOSE output target level) / MANUAL	
	AGC	ON (LOW, MID, HIGH) / OFF	
	Super Dynamic 6	ON / OFF	
	Dynamic Range	52 dB typical (Super Dynamic 6 : ON)	54 dB typical (Super Dynamic 6 : ON)
	Electronic Shutter	OFF (1/60), AUTO, 1/100, 1/250, 1/500, 1/1,000, 1/2,000, 1/4,000, 1/10,000	OFF (1/50), AUTO, 1/120, 1/250, 1/500, 1/1,000, 1/2,000, 1/4,000, 1/10,000
	Electronic Sensitivity UP	32x max. AUTO, 512x max. FIX	
	Digital Noise Reduction	High or Low	
	Black and White Mode	Auto / ON / OFF	
	Scene File	10 patterns (Shutter, AGC, Sens UP, White balance, VMD)	
	Scene Select Setting	INDOOR (L) / INDOOR (H) / OUTDOOR (L) / OUTDOOR (H)	
	Video Motion Detection	OFF / MOTION DET / SCENE CHANGE	
	Privacy Zone	ON / OFF (8 zone settings)	
	Auto Image Stabilizer	ON / OFF	
	Camera Title	16 alphanumeric characters	
	Auto Focus	MANUAL / AUTO (PAN,TILT,ZOOM linked)	
	Synchronization	Internal (INT), Multiplexed Vertical Drive (VD2)	Internal (INT)
Lens	Focal Length	3.3 mm ~ 119 mm	
	Zoom Ration	36x (Approx. 720x with digital zoom)	
	Zoom Speed	approx. 6.0 seconds (Tele ~ Wide) in manual mode	
	Zoom Limit	1x ~ 720x (Over 36x is digital zoom)	
	Angular Field of View	H: 1.7° (Tele) ~ 60.2° (Wide), V: 1.3° (Tele) ~ 46.0° (Wide)	
	Maximum Aperture Ratio	1:1.4 (Wide) ~ 4.2 (Tele)	
	Focusing Range	2.0m (6.6ft.) ~ ∞	
	Aperture Range	F1.4 ~ 22, Close	
Pan and Tilt	Panning Range	360° endless	
	Panning Speed *1	Manual: approx. 0.065 °/s ~ 120 °/s, 8 steps, 16 steps, 64 steps, Preset: approx. 400 °/s	
	Tilting Range	–5° ~ 185° (horizontal - vertical - horizontal) (According to the TILT ANGLE)	
	Tilting Speed *1	Manual: approx. 0.065 °/s ~ 120 °/s, 8 steps, 16 steps, 64 steps, Preset: approx. 400 °/s	
	Pan/tilt accuracy	Less than ±0.3°	
	Proportional Pan/Tilt Control	ON / OFF	
	Number of Preset Positions	256	
	Auto Mode	OFF, SEQ, SORT, AUTO PAN, PATROL, AUTO TRACK	
	Auto Track	Standard Auto Track	
	Patrol	STOP / PLAY / LEARN	
	Image Hold	ON / OFF	
	Digital Flip	ON / OFF	
	Area Title	8 area titles, 16 characters/area	
	Preset Alarm	ON / OFF	
Alarm	Alarm Source	Terminal input, VMD, Command alarm	
	Alarm Actions	Preset position 1 ~ 4, PATROL 1 ~ 4, AUTO TRACK 1 ~ 4, SEQ, SORT, AUTO PAN, B/W	
Input / Output	Video Output	1.0 V [p-p] / NTSC composite 75 / BNC Connector	1.0 V [p-p] / PAL composite 75 / BNC Connector
	Controller Interface	Coaxial Multiplex System, RS485	
	External I/O Terminals	4 inputs (ALARM IN 1 ~ ALARM IN 4), 2 outputs (ALARM / AUX1, BW / AUX2)	
General	Setup Method	OSD setup menu	
	Password Lock	All menus	
	Safety/EMC Standard	UL (6500), FCC (Part15 ClassA), C-UL (E60065), DOC (ICES003 ClassA)	CE (EN60065, EN55022 ClassB, EN55024), GOST (GOST R 51558)
	Language	English, Russian, German, French, Italian, Spanish, Portuguese, Chinese,Japanese	
	Power Source and Power Consumption	24 V AC, 60 Hz, 98 W	WV-CW590: 220-240 V AC, 50 Hz, 80 W WV-CW594: 24 V AC, 50 Hz, 98 W
	Ambient Operating Temperature	–50 °C ~ +50 °C (–58 °F ~ 122 °F) *2	
	Ambient Operating Humidity	90 % or less (without condensation)	
	Water and Dust Resistance	IP66, IEC60529 measuring standard compatible	
	Dimensions	229 mm (D) x 360 mm (H) diameter of the dome: 150 mm (9"(D) x 14-1/8"(H) dome:5-7/8")	
	Mass (approx.)	4.5 kg (9.9 lbs.) (including front and rear sunshields)	
	Finish	Camera: Die cast aluminum, coated (Paint color: Natural Silver) Sunshield*3: ASA resin, coated (Paint color: Natural Silver) Dome: Clear polycarbonate resin	

*1 Actual speed depends on type of controller being used.
*2 When power is on continuously (however, the camera's interior temperature is -10 °C or higher)
*3 Sunshield cannot be removed

Avoid installing this product in the following locations.
• 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 where corrosive gas is produced, Locations where it may be damaged by briny air such as seashores.
• Locations where the temperature is not within –50 °C to +50 °C {–58 °F to +122 °F}.
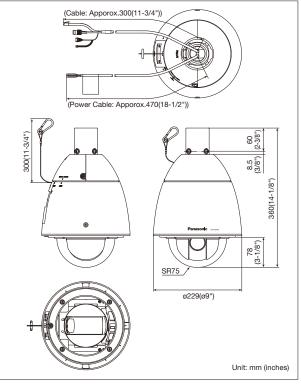• Locations subject to vibrations (This product is not designed for on-vehicle use.)
• Locations subject to condensation as the result of severe changes in temperature (In case of installing the product in such locations, the dome cover may become foggy or condensation may be caused on the cover.)

Part Names and Functions

Appearance

Unit: mm (inches)

DISTRIBUTED BY:

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