

**Panasonic**  
ideas for life

Color Dome Cameras  
**WV-CF294/284 Series**



HIGH PERFORMANCE  
COMPACT COLOR DOME CAMERA  
WITH NEWLY-DEVELOPED  
DIGITAL SIGNAL PROCESSOR

ADVANCED FEATURES, HIGH PICTURE QUALITY, COST EFFICIENCY



# Superb Picture Quality that Approaches Real

The new WV-CF294/284 Series of compact dome cameras from Panasonic are equipped with a recently-developed high-performance image processing algorithm like those seen by the human eye. The WV-CF294/284 Series also provides easier installation including plug-and-play. Also features high cost performance. The WV-CF294/284 Series can be used at a variety of

High image quality

## Equipped with Adaptive Black Stretch

Transforms dark areas into natural and crisp images

### Adaptive Black Stretch

The image processing algorithm built into the newly-developed DSP enables the transformation of shadows and dark areas into natural and crisp images in real time. It can reproduce images that are more similar to human sight.

Reproducing clear images down to the smallest detail

### Horizontal resolution of 540 TV lines in color mode

It can reproduce images clearly, down to the smallest detail, making it easier to identify subjects.

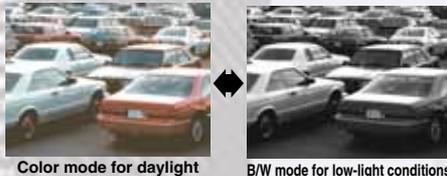
Powerful in low light

### Minimum illumination intensity of 0.9 lux (0.09 fc) in color mode

Introduction of a new circuit provides high sensitivity at a minimum illumination intensity of 0.9 lux (0.09 fc) in color mode. Clear and color monitoring is possible even in low light.

### Day/Night feature

When surrounding areas dim, the mode automatically switches from color to black and white while sensitivity is increased. Additionally, when the surrounding area brightens, the mode automatically switches back to color.



\* No IR filter shifting



Newly-developed DSP

## Equipped with additional correction features

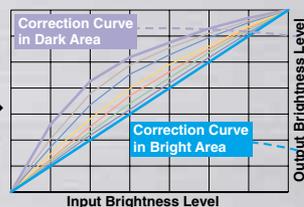
Both cameras are equipped with various correction features including Back-Light Compensation (BLC), Auto Tracing White Balance (ATW) and Automatic Light Control (ALC). These features enable installation in a wide-range of environments.

## Newly-developed DSP utilizing the first Adaptive Black Stretch technology in the Security industry

The first DSP to automatically detect dark areas inside an image, detecting brightness data around dark area and conducting tone correction in real time by determining the most suitable correction curve for each area. This image processing algorithm corrects for shadows and dark areas producing natural, crisp images in real time.



Before correction



After correction

# Quality. Easy Installation. High Cost Performance.

performance DSP that provides better image quality. Adaptive Black Stretch technology transforms dark areas into crisp images  
ing further accuracy and simple focus adjustment through a newly-developed Auto Back Focus\* mechanism.  
of sites including offices, retail stores, restaurants and shopping malls. \* WV-CF294/WV-CF294T only



## Easy installation

# Newly-developed Auto Back Focus (ABF)

## Accurate focus adjustment

Auto Back Focus (ABF) (WV-CF294/WV-CF294T only)

The WV-CF294 and WV-CF294T are equipped with the newly-developed Auto Back Focus (ABF). After adjusting the viewing angle, you can precisely focus the camera simply by pushing the Auto Back Focus (ABF) button on the camera body.



## Easy viewing angle adjustment

3.6x Variable Focal Lens (WV-CF294/WV-CF294T only)

The WV-CF294/WV-CF294T comes equipped with a 3.6x variable focal lens. The focal length is 2.8~10.0mm, enabling a variety of viewing angle adjustments. It allows installation in high locations such as airport ceilings and hotel ballrooms. The WV-CF284/WV-CF284T comes equipped with a 2x variable focal lens with a focal length of 2.8~6.0mm.

## Monitor output terminal

When connecting a portable LCD to the monitor output terminal, you can adjust the viewing angle while confirming the image on the spot.

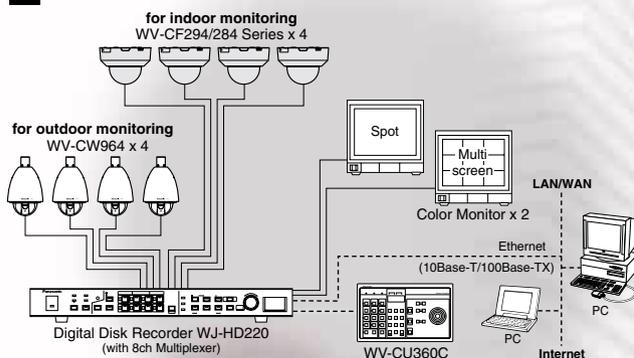


## Three-way hinge

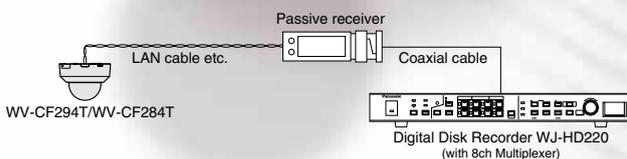
The camera platform inside the dome has a three-way hinge that allows horizontal and vertical rotation, as well as swivel rotation, enabling flexible camera angle adjustment. Additionally, you can install the camera anywhere, not only on the ceiling but also on walls or inside elevators.

## System Examples

### 1 BNC Cable Connection



### 2 Unshielded Twisted Pair (UTP) Cable Connection



## Plus, other features for flexible system configuration

Unshielded Twisted Pair (UTP) cables  
(WV-CF294T/WV-CF284T only)

The WV-CF294T and WV-CF284T support Unshielded Twisted Pair (UTP) cables.

## 24V AC/12V DC

Both 24V AC/12V DC are available. Accordingly, you can use these cameras in a variety of installation environments.

## Multi-channel camera systems

Simultaneously supports two types of synchronization modes, Internal and VD2. These cameras also easily facilitate the establishment of multi-channel systems using multiple cameras.

## Can be installed in junction boxes

These cameras can be easily installed in existing junction boxes.



## STANDARD PRODUCT CONFIGURATIONS

<p>Color Dome Camera <b>WV-CF294</b></p>  <ul style="list-style-type: none"> <li>• Auto Back Focus (ABF)</li> <li>• 3.6x Variable Focal Lens</li> </ul>	<p>Color Dome Camera <b>WV-CF284</b></p>  <ul style="list-style-type: none"> <li>• 2x Variable Focal Lens</li> </ul>	<p>Color Dome Camera <b>WV-CF294T</b></p>  <ul style="list-style-type: none"> <li>• Auto Back Focus (ABF)</li> <li>• 3.6x Variable Focal Lens</li> <li>• UTP Cable Connection</li> </ul>	<p>Color Dome Camera <b>WV-CF284T</b></p>  <ul style="list-style-type: none"> <li>• 2x Variable Focal Lens</li> <li>• UTP Cable Connection</li> </ul>
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## OPTIONAL COMPONENTS & ACCESSORIES

<p>Digital Disk Recorders <b>WJ-HD316A</b> (16ch) <b>PS•Data</b></p> <p><b>WJ-HD309A</b> (9ch) <b>PS•Data</b></p> 	<p><b>WJ-HD220</b> (8ch) <b>PS•Data</b></p> 
<p>System Controllers <b>WV-CU650</b> <b>PS•Data</b></p>  <p><b>WV-CU360C</b> <b>PS•Data</b></p> 	<p>LCD AV Monitors <b>WV-LC1710</b> 43.2cm (17") <b>WV-LD2000</b> 50.8cm (20") <b>WV-LD1500</b> 38.1cm (15")</p> 

## SPECIFICATIONS

Model No.	WV-CF294	WV-CF284	WV-CF294T	WV-CF284T
<b>Image Sensor</b>	1/4-type interline transfer CCD			
<b>Effective Pixels</b>	768 (H) x 494 (V)			
<b>Scanning Area</b>	3.6 (H) x 2.7 (V) mm (equivalent to scanning area of 1/4" pick-up tube)			
<b>Scanning System</b>	2 : 1 interlace			
<b>Scanning Lines</b>	525 lines			
<b>Scanning Frequency</b>	Horizontal: 15.734 kHz Vertical: 59.94 Hz			
<b>Synchronization</b>	Internal or multiplexed vertical drive (VD2)			
<b>Resolution</b>	Horizontal: 540 TV lines (at center) Vertical: 350 TV lines (at center)			
<b>Video Output</b>	1.0 V [P-P] NTSC composite 75 Ω			
<b>White Balance</b>	ATW only			
<b>Signal-to-Noise Ratio</b>	50 dB (equivalent to AGC Off, weight On)			
<b>Minimum Illumination</b>	0.9 lux (0.09 fc) at F1.3 (WIDE)	0.9 lux (0.09 fc) at F1.4 (WIDE)	0.9 lux (0.09 fc) at F1.3 (WIDE)	0.9 lux (0.09 fc) at F1.4 (WIDE)
<b>Light Control Mode Setting</b>	ALC/ELC			
<b>Switch Function</b>	Light control mode selector (ALC/ELC), Backlight compensation selector (ON/OFF), Adaptive Black Stretch selector (ON/OFF), Day/Night mode selector (ON/OFF)			
<b>Lens</b>	3.6x variable focal lens    2x variable focal lens    3.6x variable focal lens    2x variable focal lens			
<b>Focal Length</b>	2.8 ~ 10 mm	2.8 ~ 6.0 mm	2.8 ~ 10 mm	2.8 ~ 6.0 mm
<b>F number</b>	F1.3 ~ 3.1, close	F1.4 ~ 1.8, close	F1.3 ~ 3.1, close	F1.4 ~ 1.8, close
<b>Focus Range</b>	∞ - 1.2 m			
<b>Angle of View</b>	Horizontal 73.5°(WIDE)~ 20.8° (TELE)	72.6°(WIDE)~ 35.6° (TELE)	73.5°(WIDE)~ 20.8° (TELE)	72.6°(WIDE)~ 35.6° (TELE)
	Vertical 54.4°(WIDE)~ 15.6°(TELE)	54.0°(WIDE)~ 26.7°(TELE)	54.4°(WIDE)~ 15.6°(TELE)	54.0°(WIDE)~ 26.7°(TELE)
<b>Adjusting Angle</b>	Panning range: +180° ~ -140° Tilting range: ±75° Azimuth range: ±100°			
<b>Ambient Temperature</b>	-10 °C ~ +50 °C (14 °F ~ 122 °F)			
<b>Ambient Humidity</b>	Less than 90 %			
<b>Power Source and Power Consumption</b>	12 V DC, 220 mA 24 V AC 60 Hz, 2.7 W			
<b>Dimensions</b>	ø129.5 mm x 93 mm (H) (ø5-1/8" x 3-5/8" (H))			
<b>Weight</b>	Approx. 460 g (1.0 lbs.)			

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

• 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.

# Panasonic

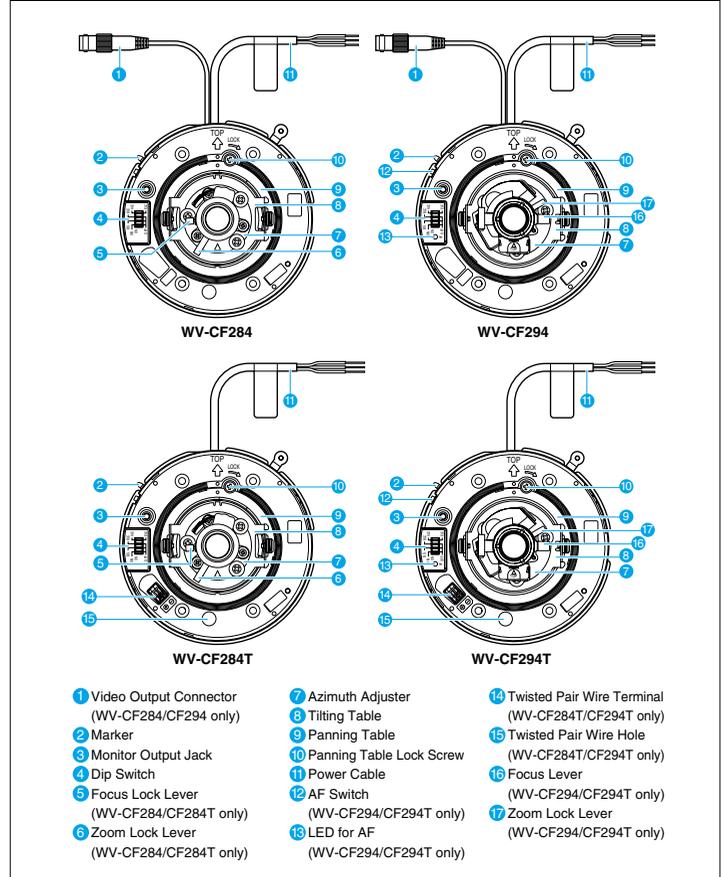
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Unit Company of Panasonic Corporation of North America  
**Security Systems**

Website : [www.panasonic.com/security](http://www.panasonic.com/security)

For Customer Support : call **1.877.733.3689**

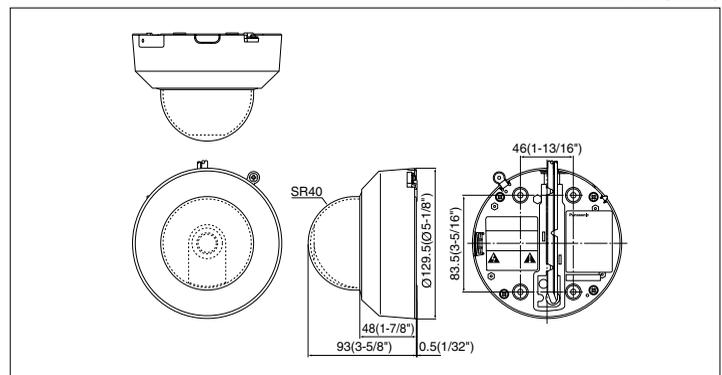
Executive Office : Three Panasonic Way 2H-2, Secaucus, New Jersey 07094

## MAJOR OPERATING CONTROLS & TERMINALS



## APPEARANCE

Unit: mm (inches)



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