



\* This logo mark is issued by the IPv6 Ready Logo Program Committee, an IPv6 promotion group established mainly by the IPv6 Forum.

## View Places That You Couldn't Even See Before

The BB-HCM581A camera lets you monitor very large areas with its maximum 360° pan and 158° tilt functions. A full 42x power zoom also makes it possible to check places in super-fine detail. Thanks to its PoE\*<sup>1</sup> capability, the camera can be installed in places where it is difficult to provide power, like on factory and warehouse ceilings, or near a building entranceway or elevator hall. And dual-stack IPv4/IPv6 protocol prepares it for IPv6 services. This lets you grab every business possibility by breaking distance and time barriers with Zero Distance Management\*<sup>2</sup>.

\*1 PoE (Power over Ethernet) supplies power through an Ethernet cable.  
\*2 For details, see the bottom of this page.

**See There**  
When You Can't Be There™



Stores

School



Warehouses



Restaurant

### Zero Distance Management

Zero Distance Management is a new business style made possible by Panasonic network cameras. It allows safe, smooth, economical business management that is totally free from conventional distance and time limitations.

### System Diagram

The PoE function supplies power through an Ethernet cable\*. DDNS service and UPnP compatibility make it easy for anybody to set up and use the system over the Internet.



\*An optional AC adaptor can also be used.

# Achieving Zero Distance Management with a Variety of Functions

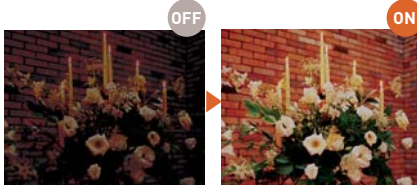


BB-HCM581A

## Capture

### Color Night View Mode

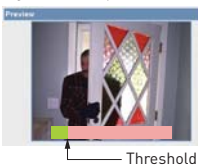
When the subject darkens, the camera automatically adjusts the brightness to show you the image.



### Motion Detection Function

This function detects changes by reacting to a camera threshold or sensitivity that is set in advance on the PC. Captured images can also be stored temporarily in the camera\*1 or sent to you by e-mail\*2 or FTP data transfer\*3.

- \*1 A maximum of approximately 350 images (320 x 240 pixels) can be stored in the camera.
- \*2 PDP before SMTP authentication and SMTP authentication (PLAIN, LOGIN and CRAM-MD5) are supported.
- \*3 The sensor's detection history also be e-mailed to you once a day at a preset time.

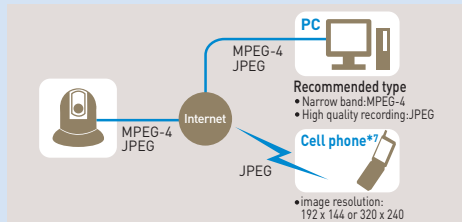


## View

### Enjoy comfortable, versatile image monitoring. Simultaneous MPEG-4 and JPEG

Cameras simultaneously send MPEG-4 images in three resolutions (VGA\*6, QVGA, and SCIF), and JPEG images in the same three resolutions in favor motion, standard, and favor clarity image-quality types. MPEG-4 is recommended for viewing smooth motion images, and JPEG is recommended for recording higher quality images.

- \*6 When viewing in VGA, only MPEG-4 playback offers a maximum of 30 fps.
- \*7 For JPEG only. The audio feature does not work on cell phones.



#### MPEG-4 Visual License

When installing the MPEG-4 viewer program on additional PCs, please purchase additional licenses (Model No. BB-HCA5A for USA, BB-HCA5CE for others).

### You can make use of your existing equipment. Analog Video Output\*8

By connecting a cable directly to the camera's video output terminal, you can use your existing TV or video recorder for monitoring. When using analog video output, the camera automatically switches to interlace scanning\*9 to suppress flicker in motion images.

- \*8-1 Compatible with both NTSC and PAL systems.
- \*8-2 A mini video cable (with 3.5-mm mini plug) is required.
- \*8-3 The camera cannot be controlled when using analog video output. The video image displays poorly in color night view mode.
- \*9 Images are output to the PC with progressive scanning.

## Control

### Monitor large areas entirely. Remote Pan/Tilt and Zoom Control

The camera angle can be varied by remote control to monitor large areas. Monitoring precision can be further increased by using the 42x zoom\*11 (21x optical zoom and 2x digital zoom).

- \*11 The zoom function cannot be used from a cell phone.



#### 42x Zoom

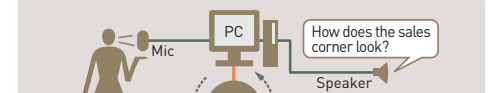


### Audio 2-Way Communication\*12

By using a separately purchased microphone and speaker, you can speak\*13 to someone near the camera while monitoring. This gives you more precise communication to lessen the inconvenience of being in a distant location.

- \*12 The audio feature does not work with cell phones.
- \*13 Walkie-talkie type conversation.

#### <Head office>



#### <Supermarket>



## Store

### SD Memory Card\*4 Recording

A large number of images can be saved onto an SD Memory Card inserted into the camera. The images on the card can be checked over the Internet, or if no network is being used, monitoring is possible using only the camera by simply storing the images onto the card.

- 2GB SD Memory Card Recording Capacity [image quality: Standard] \*The values in the table are all approximate.

Format	Resolution		
	640 x 480	320 x 240	192 x 144
JPEG	35 KB/file	16 KB/file	7 KB/file
	55,000 images	115,000 images	370,000 images
MPEG-4*5	9 hours	9 hours	17 hours

- \*4 The SD Memory Card is sold separately.
- \*5 The MPEG-4 recording times will vary depending on the subject and the maximum MPEG-4 frame rate (image refresh speed) and bit rate settings for image distribution.



## Connect

### Image Transfer Function

In accordance with preset settings\*10, the camera will automatically transfer images and a data log by e-mail to an e-mail\*2 address or by FTP to a server. This allows you to check images only when necessary, and also prevents you from forgetting to check them.

- \*10 Preset settings can include timer, alarm, and motion detection. With JPEG connection only.

## Part Names

#### Front View



#### Rear View



## Specifications [BB-HCM581A\*1]

Server		Camera		General	
Video Compression	JPEG [3 levels], MPEG4	Sensor Type	1/4 inch CCD sensor, approx. 320,000 pixels	Temperature	Operation: +32°F to +104°F [0°C to +40°C] Storage: +32°F to +122°F [0°C to +50°C]
Video Resolution	640 x 480, 320 x 240 [default], 192 x 144	Lens Focal Point	Auto/manual (40 steps)	Humidity	Operation: 20 % to 80 % [No Condensation] Storage: 20 % to 90 % [No Condensation]
Image Quality	JPEG (favor clarity, standard, favor motion), MPEG4	Lens Brightness	F1.6(wide) - F3.6(tele)	Dimension [H x W x D]	5 1/2 x 4 13/16 x 4 13/16 inches [140 x 123 x 123 mm]
Frame Rate*1	Max. 30 frames/sec. [640 x 480*, 320 x 240, 192 x 144]	White Balance	Auto/manual/hold	Weight [Only the Unit]	1.43lb. [650g]
Security	User ID/password	Exposure	Auto	Consumption	PoE: AC adaptor: 10.5W
Supported Protocols	IPv4 / IPv6 Dual-Stack IPv4: TCP, UDP, IP, HTTP, FTP, SMTP, DHCP, DNS, ARP, ICMP, POP3, NTP, UPnP™, SMTP Authentication, RTP, RTSP, RTCP IPv6: TCP, UDP, IP, HTTP, FTP, SMTP, DNS, ICMPv6, POP3, NDP, NTP, RTP, RTSP, RTCP	Required Light Intensity	2 to 100,000 lux (in Color Night View mode: 0.09 to 100,000 lux)	Power Supply	PoE: 48 V, IEEE802.3af-compliant Power over Ethernet AC adaptor (option): input 120 V AC, output 12 V DC
User Access Limit	Max. 30 simultaneous accesses (max. 10 accesses in MPEG-4 mode with sound playback)	Audio			
Buffered Images*3	Approx. 350 images (320 x 240) * standard image quality * with time display * without using SD Memory Card	Audio Communication	2-Way half duplex		
Image Transfer Method	SMTP*4, FTP, HTTP	Audio Play Method	Play with ActiveX		
Image Buffer/Transfer Triggers	Alarm, timer or motion detection	Audio Encoding Method	Encoding with ActiveX		
Camera		Audio Compression	ADPCM 32 kbps		
Zoom	42x zoom [21 x optical, 2 x digital]	Audio Bandwidth	300 Hz - 3.4 kHz		
Horizontal Viewing Angle	Tele: 2.6° (optical) / 1.3° (digital), wide: 51°	Audio Input	External microphone input terminal		
Vertical Viewing Angle	Tele: 1.9° (optical) / 0.9° (digital), wide: 38°	Audio Output	Audio line output terminal for external speaker		
Pan Angle	-175° up to +175°	Terminal			
Tilt Angle	-120° up to +0° (on a table), 0° up to +90° (on a ceiling)	Network Interface	Ethernet (10Base-T/100Base-TX)		
Revolving Speed	Pan: max. 300°/sec, tilt: max. 200°/sec	External I/O Connector	Input: 2, output: 1		
		Video Output*5	Analog composite (NTSC/PAL)		
		Audio Output*5	3.5 mm stereo mini jack [output is mono]		
		External Microphone Input	3.5 mm mini jack		
		SD Memory Card Slot	Full size (operation guaranteed for 2GB, 1GB, 512MB, 256MB, 128MB and 64MB SD Memory Cards)		

- \*1 The frame rate may slow down depending on the network environment, PC performance, image quality, SD memory recording, when color night view mode is activated, etc.
- \*2 For MPEG-4 only. Not applicable to JPEG.
- \*3 The maximum number of frames changes depending on the image quality and what object you buffer.
- \*4 PDP before SMTP authentication and SMTP authentication (PLAIN, LOGIN and CRAM-MD5) are supported.
- \*5 Use only the included Audio/Video Cable when connecting an external microphone, speaker or TV.