

## Enjoy Greater Monitoring Convenience



Now in addition to JPEG format, you can choose MPEG-4 with simultaneous audio recording. This lets you record smooth moving images even with limited network speeds. Equipped with a wealth of new functions, the BB-HNP15 boosts the accuracy of motion detection, lets you customise the operating screens, and converts recorded data to other formats, like Windows Media Player, for easier, more comfortable monitoring. If you want to get the most out of your network camera system, with applications like market surveys or heightened security, you'll enjoy the added convenience of the BB-HNP15 - and the additional business opportunities that it delivers.



Parking lots



Stores



Entrances



Warehouses

See There  
When You Can't Be There™

### Zero Distance Management

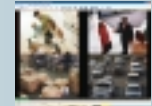
Zero Distance Management is a new business style made possible by Panasonic network cameras. It allows safe, smooth, economical business management that is totally free from conventional distance and time limitations.

### System Diagram

Panasonic network cameras make it possible to monitor from any place, at any time, over the Internet. The BB-HNP15 further increases this monitoring convenience.



# Monitor with Higher Accuracy and Greater Speed



BB-HNP15

## Select extended recording or enhanced-quality recording. MPEG-4 and JPEG recording

Select MPEG-4\*1 recording when you want smooth motion images even with limited network speeds or a smaller volume of image data, and select JPEG when you want to take beautiful images at set intervals.

\*1 When using a camera that supports the MPEG-4 format.

## Excellent versatility. Recording format exchange

Desired parts of recorded motion images, still images, and audio can be converted to common formats for handy data exchanging.

### ■ Conversion Table

Source Data	File Type
Motion image*4	MPEG-1
	ASF
Still image	AVI
	JPEG
Audio*4	WAV*5

\*4 For playback using Windows Media Player.

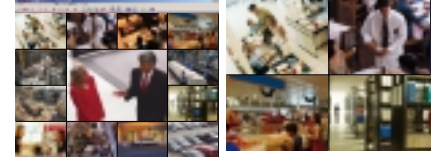
\*5 For only the audio portion.

## Work in the layout that you prefer. Enhanced viewer functions

You can choose either of two layout modes: the full-screen mode, which fills the screen with the image, or the window mode, which also displays a title, menu, and tool bar. The multi-camera display lets you monitor up to 16 cameras or view the playback of up to 4 cameras. The order of the display images and the size of the display frames can be easily changed by drag & drop operation.

• Window mode

• Full screen mode



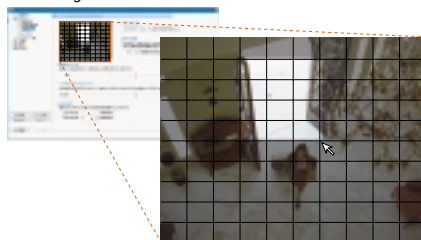
## Increased monitoring accuracy. Enhanced recording functions

The detection range on the PC can be limited by dividing the screen into a grid of 100 squares and masking all unnecessary squares. This suppresses the detection of motion in those squares to detect and record the desired motion with greater accuracy. Other convenient recording functions include alarm recording\*2, manual recording, motion detection recording\*2, and timer recording\*3.

\*2 Alarm recording and motion detection recording can only be used with the JPEG format.

\*3 Up to 10 timer recordings can be set per camera.

### ■ Setting screen

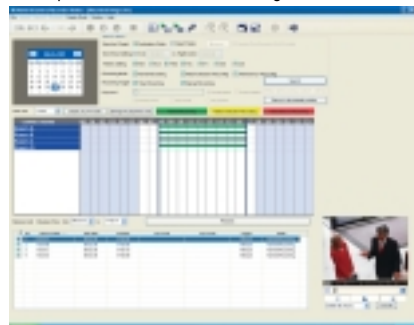


Clicking a square removes it from the motion detection range.

## Higher work efficiency. Graphic display of recorded images in list form

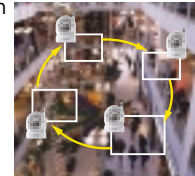
Recorded images are easily displayed. Screens with graphic expressions, such as a calendar or date and time, make it easy to check images according to the camera name, recording time zone, or recording method. This also makes it easy and convenient to retrieve and play recorded images, and to convert or edit files.

### ■ Graphical list of recorded image files



## Convenient multi-location monitoring. Sequential display function

When monitoring with multiple cameras, the camera displaying the image can be automatically switched at preset intervals. This is also handy when recording the images for later viewing, as it lets you check all of the locations regularly and completely.



## Other features

- Search functions
- Recording time display
- Log analysis

## Specifications [BB-HNP15]

Camera registration monitoring		Recording		Image operation	
No. of registrable camera units	Up to 64 camera units. Note that the actual number of registrable camera units varies depending on the performance of the PC used.	No. of camera units for simultaneous recording	Dependent on camera type and performance of PC. See the hardware specifications below.	Recorded image view	A list of recorded image files, or a graphical list can also be displayed.
Camera image view	Sequential display, Up to 16 multi-camera display, full screen display, layout change	Recording capacity limit function	Maximum recording capacity value can be set for individual camera units (whether to save new data by overwriting or to stop recording when the set capacity is reached can be selected). In addition to a capacity limit for each camera, there is also a capacity limit for the entire storage media.	Operation of recorded images	Recorded images can be copied or deleted.
Image display size	Automatically adjusted to match the camera layout.	Motion detection recording (JPEG only)	The unit can be set to activate recording when motion is detected (sensitivity and threshold value can be adjusted) or to record for a certain time length before and after motion detection.*1 Motion detection can be disabled in specified areas. Motion detection can be confirmed on-screen.	Automatic backup of recorded images	Automatic backup function
Camera setup	Each camera can be set up individually (camera name, resolution, image quality setting, recording format, timer setting, etc.)	Timer recording	Programming of start and stop schedules based on day of week and time. Key word can also be set for recording. (10 schedules can be registered per camera).	Format conversion	All or part of the recorded images can be converted to MPEG-1, MPEG-4, or JPEG format files, or only the audio portion can be converted to WAV files.
Selected camera image display	Automatically adjusted to match the camera layout.	Alarm recording (JPEG only)	Recording is triggered by the reaction of a sensor mounted to the camera. A certain time length before and after the sensor reaction can also be recorded.	Image search	Search recorded images in 1-day units using the recording time, or using a key word set before recording. Searching can also be done for particular, desired folders.
Image zoom in/out	None (Automatically adjusted to match the camera layout.)	Disk capacity limit function	Monitors the free space on the specified recording disk, and stops recording when the free space becomes smaller than the set value.	System requirements	
Camera control	Control of basic camera functions (pan/tilt/zoom, brightness, resolution, image quality, sound level).	Continuous playback	Playback of images with voices, playback of image files. Playback speed can be varied. Playback in reverse is possible. Simultaneous playback of images from multiple cameras is also possible.	Item	Description
Preset	Preset functions set in cameras can be used			OS	Windows® XP(32bit)/Vista(32bit)
				Web browser	Internet Explorer 6.0 or later
				File system	NTFS (NT File System) recommended
				Recording condition	<ul style="list-style-type: none"> <li>• When 10 network camera units are connected CPU: Intel® Pentium® 4 3GHz or greater, or equivalent compatible processor, RAM: 1024 MB or more*4</li> <li>• When 2 network camera units are connected CPU: Intel® Pentium® 4 2.6GHz or greater, or equivalent compatible processor, RAM: 512 MB or more*4</li> </ul>
				Voice	Audio output function (including speaker or headphone)

### JPEG Data size for 1 image frame (image only), Data format: JPEG

resolution [dot]	size (KB) standard
1280 x 1024	approx.77
640 x 480	approx.35
320 x 240	approx.16
194 x 144	approx.7
160 x 120	approx.5

The approximate recording capacity is calculated by using the following formula:  
Size [KB] x Frame rate (images/sec) x Recording time (sec)  
Example  
• The calculation for a 1-hour recording of 640 x 480 resolution images at a frame rate of 5 images/sec in Favor Clarity mode is as follows:  
50 KB x 5 images/sec x 3,600 sec (1 hour) = 900,000 KB ≈ 879MB  
• In case of images with voices, 4 KB is added per each second:  
900,000 KB + 4 KB x 3,600 sec = 914,400 KB ≈ 893 MB

### MPEG-4 Data size for 1 second of motion images (images only), Data format: MPEG-4

resolution [dot]	MPEG-4 bit rate*
640 x 480	768kbps
320 x 240	384kbps
194 x 144	128kbps

\*MPEG-4 bit rate: This depends on the value set at the camera for MPEG-4 bit rate for image distribution.

The approximate recording capacity is calculated by using the following formula:  
MPEG-4 bit rate (Kbps)/8 bits x time (sec).

Example  
• The calculation for 640 x 480 resolution images at an MPEG-4 bit rate of 768 Kbps is as follows: 768 Kbps/8 bits x 3,600 seconds (1 hour) = 345,600 KB ≈ 337.5 MB  
• In case of images with voices, 4 KB is added per each second:  
345,600 KB + 4 KB x 3,600 sec = 360,000 KB ≈ 352 MB

\*1-1 Folders on the network allotted to the drive can be specified for saving data.

\*1-2 When a network drive is specified as a folder for saving data, the amount of data flowing over the network increases. This may remarkably degrade the operating performance for watching or recording camera images, watching previously recorded images, etc., and may also result in errors. It is recommended that a folder on a local disk be specified for saving data.

\*2 MPEG-4 camera using an MPEG-4 connection: 640 x 480, 320 x 240, 192 x 144. MPEG-4 camera using a JPEG connection: 1280 x 1024, 640 x 480, 320 x 240, 192 x 144

\*3 The detection level varies depending on the camera resolution, image quality setting, subject conditions, network conditions, etc.

\*4 This specification is required for using all network cameras to simultaneously record at a resolution of 320 x 240 in standard image quality, while monitoring with all registered cameras at a frame rate of 2 fps.