HIGH RELIABILITY, EASY INSTALLATION & INNOVATIVE DESIGN

REDUCED INSTALLATION COST & TIME

With the built-in PTRZ (pan, tilt, rotation, zoom) function* and the power-focus function that allows manual focus adjustments from a remote PC for a single network camera to multiple cameras, installation cost and time are significantly reduced.

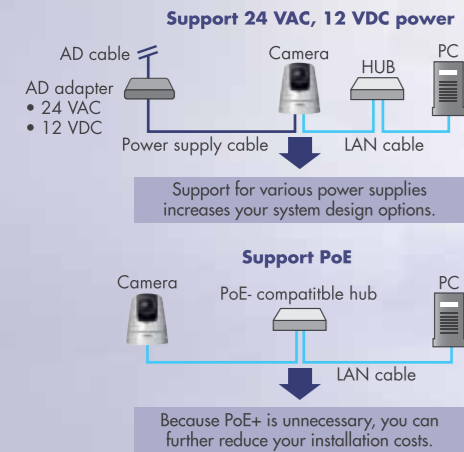*For VB-H610VE and VB-H610D models. VB-H710F model supports power zoom and power focus control.

IMPROVED INTEGRATION WITH EXISTING SYSTEMS

For improved function compatibility between video recording devices, this series supports ONVIF (Open Network Video Interface Forum) protocol's latest authentication method, Profile S. ONVIF is a communication protocol by which the control protocol systems of network cameras and the servers, etc., are standardized.

MULTIPLE POWER SUPPLIES

Over the supported 24 VAC and 12 VDC power supplies, a PoE HUB (IEEE802.3af) power supply can also be used to drive the cameras. This makes power wiring unnecessary, increases your system design options, and reduces installation costs.

Support 24 VAC, 12 VDC power

AD cable
AD adapter
• 24 VAC
• 12 VDC
Camera
HUB
PC
Power supply cable   LAN cable

Support for various power supplies increases your system design options.

Support PoE

Camera
PoE-compatible hub
PC
LAN cable

Because PoE+ is unnecessary, you can further reduce your installation costs.

AUTO IP FUNCTION

Installation work becomes simple as the IP addresses of individual cameras are automatically assigned. This lightens the workload in complicated installation work and reduces installation time.

EXPANDED RECORDING CAPABILITY

With an improved SD Card function, streaming and uploaded video feed can still be recorded even during network interruptions. These cameras can also perform "timer event recording" and "event recording" where specific events can be recorded for a specified amount of time. Camera errors and the logs during system operation can also be recorded to ease troubleshooting efforts.

In addition, the pre-installed "Recorded Video Utility" tool enables you to search, play, and export to PC the video that has been recorded, which dramatically improves ease of use for the user.

Large-capacity SDXC cards* are also supported in which large video files such as Full HD Videos can be recorded.

*The frame rate for videos saved on a SD memory card is 1 fps for JPEG videos, and a maximum of 30 fps for H.264 videos.

The maximum number of videos that can be recorded is 100,000 files per folder generated on the SD memory card (recording stream, upload, event, manual video recording and timer).

SHOCK RESISTANCE

Get accurate monitoring under any condition as this camera employs a shock-resistant exterior and Canon's proprietary lens unit retracting shock absorbing mechanism that delivers 50-J shock resistance.* In the event of impact damage, only the dome case needs to be replaced, for reduced maintenance cost.

*For VB-H610VE model. Measurement results by in-house testing methods. Does not handle all shocks.

DUSTPROOF AND WATERPROOF

The VB-H610VE camera complies with dustproofing and waterproofing standard IP66, making it reliable enough to be used in an outdoor environment even without an additional housing. Its standard internal fan and optional heater also suppress condensation and provide low-temperature resistance, so it can be used in an outdoor (undereave) installation*.

*Based on undereave installation out of direct sunlight and rain.

ENHANCED INTELLIGENT FUNCTIONS

SUPERIOR DETECTION CAPABILITIES

Intelligent Functions continue to evolve with the addition of Passing Detection. Passing is detected when a designated point on a moving object crosses a detection line.
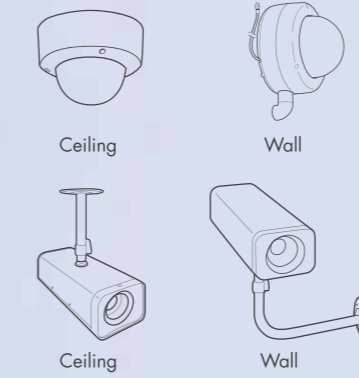
Detects abandoned objects

Detects moving objects

Detects tampering of camera

Detects ambient sounds

Detects removed objects

Detects passing objects

Canon

Delighting You Always

TAKING SECURITY TO NEW HEIGHTS
Intelligent Network Camera

VB-H610D
VB-H41
VB-H610VE
VB-H710F

PRODUCT SPECIFICATIONS

PRODUCT SPECIFICATIONS	VB-H41	VB-H610VE	VB-H610D	VB-H710F
Image Sensor	1/3 type CMOS (primary color filter)			
Number of Effective Pixels	Approx. 2.1 million pixels			
Scanning Method	Progressive			
Lens	20x Optical (12x Digital) Zoom Lens with Auto Focus	3x Optical (4x Digital) Zoom Lens (Electric Drive)		
Focal Length	f = 4.7 (W) – 94 mm (T)*¹	f = 2.8 (W) – 8.4 mm (T)		
F-number	F1.6 (W) – F3.5 (T)	F1.2 (W) – F2.0 (T)		
Viewing Angle	Horizontal: 60.4° (W) – 3.2° (T) Vertical: 35.1° (W) – 1.8° (T)	Horizontal: 112.0° (W) – 37.0° (T) Vertical: 60.1° (W) – 20.5° (T)		Horizontal: 112.0° (W) – 37.0° (T) Vertical: 60.8° (W) – 20.6° (T)
Day/Night Switch	Auto/Manual			
Min. Subject Illumination	Day Mode (color): 0.4 lux (F1.6, shutter speed 1/30 sec., when smart shade control is off) Night Mode (monochrome): 0.02 lux (F1.6, shutter speed 1/30 sec., when smart shade control is off)	Day Mode (color): 0.3 lux (F1.2, shutter speed 1/30 sec., when smart shade control is off) Night Mode (monochrome): 0.015 lux (F1.2, shutter speed 1/30 sec., when smart shade control is off)		
Focus	Auto/One-shot AF/Manual/ Fixed at infinity	One-shot AF/Manual/Fixed at infinity		
Shooting Distance (from front of lens)	Day Mode: 0.3 m (12 in.) – infinity (W), 1.0 m (3.3 ft.) – infinity (T) Night Mode: 1.0 m (3.3 ft.) – infinity (W), 1.5 m (4.9 ft.) – infinity (T)	Day Mode: 0.3 m (12 in.) – infinity Night Mode: 1.0 m (3.3 ft.) – infinity		
Shutter Speed	1, 1/2, 1/4, 1/8, 1/15, 1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/16000 sec.			
Exposure	Auto/Auto (Flickerless)/Auto (Shutter-priority AE)/Manual (Shutter Speed, Aperture, Gain)			
White Balance	Auto/Light Source (Daylight Fluorescent/White Fluorescent/Warm Fluorescent/Mercury Lamp/Sodium Lamp/Halogen Lamp)/Lock (One-shot WB)/Manual			
Metering Mode	Center-Weighted/Average/Spot			
Exposure Compensation	9 levels			
Smart Shade Control	7 levels (Increases the brightness of shaded subjects in a video)			
AGC Limit	5 levels			
Image Stabilizer	2 levels (digital)		–	
Pan Angle Range	340° (±170°)	350° (±175°)		–
Tilt Angle Range	100° (ceiling-mounted position: -90° – +10°) – When the horizontal direction of the camera is 0°	150° (±75°)		–
Rotation Angle Range	–	350° (±175°)		–
Moving Speed	Pan: Max. 150°/sec., Tilt: Max. 150°/sec.	Pan: 19.2°/sec., Tilt: 14.2°/sec., Rotation: 43.7°/sec. – When the Camera Angle Setting Tool is used		–
Video Compression Method	JPEG, H.264			
Video Size	JPEG: 1920 x 1080, 960 x 540, 480 x 270, 320 x 240 H.264: 1920 x 1080, 960 x 540, 480 x 270			
Video Quality	JPEG / H.264: 5 levels			
Frame Rate	JPEG: 0.1 – 30 fps, H.264: 1/2/3/5/6/10/15/30 fps*²			
Max. Frame Rate	1920 x 1080 (when streaming): 30 fps			
I-Frame Interval	0.5/1/1.5/2/3/4/5 sec.			
Simultaneous Client Access	Max. 30 Clients + 1 Admin Client, H.264: Max. 10 Clients			
Camera Control	Administrator, Authorized user, Guest user (level of control varies depending on user) Max. 50 user names and passwords registered for authorized users.			
Access Control	User authority (user name and password) / Host Access Restrictions (IPv4, IPv6)			
Encrypted Communications	SSL/TLS, IPsec (Auto Key Exchange/Manual)			
Protocol	IPv4: TCP/IP, UDP, HTTP, FTP, SNMP (MIB2), SMTP (Client), DHCP (Client), DNS (Client), ARP, ICMP, POP3, NTP, SMTP authentication, RTSP, WVHTTP (Canon proprietary), ONVIF IPv6: TCP/IP, UDP, HTTP, FTP, SMTP (Client), DHCPv6 (Client), DNS (Client), ICMPv6, POP3, NTP, SMTP authentication, RTSP, WVHTTP (Canon proprietary), ONVIF			
Auto IP	Available			
Audio Compression Method	G.711 µ-law (64 kbps)			
Audio Communication Method	Full-duplex (two-way) – Echo cancellation function compliant			
Audio File Playback	Sound Transfer Protocol by Canon			
Privacy Mask	Available*³			
Preset	Number of registration: Max. 8 places, Number of mask colors: 1 (select from 9 colors)			
Intelligent Function	Max. 20 positions (Preset Tour capable)			
	<Video> Detection Types: moving object detection, abandoned object detection, removed object detection, camera tampering detection, and passing detection Detection Settings: Max. 15 <Volume> Volume Detection			
Event Trigger Type	External Device Input, Intelligent Function (Video), Intelligent Function (Volume), Timer			
Image Upload	FTP/HTTP/SMTP (e-mail) Temporary storage memory in camera: Max. approx. 5 MB, Frame Rate: Max. 10 fps			
Event Notification	HTTP/SMTP (e-mail)			
Image Cropping Function	–	Digital PTZ Cropping sizes: 640 x 360/512 x 288/384 x 216/256 x 144/128 x 72		
On-Screen Display	Available			
Daylight Saving Time	Available			
Network Terminal	LAN x 1 (RJ45, 100Base-TX (auto/full-duplex/half-duplex))			
Audio Input Terminal (common for LINE IN & MIC IN)	⌀3.5 mm (⌀0.14 in.) mini-jack connector (monaural) Switch LINE IN/MIC IN in the setting page. LINE IN x 1 (connect to an amplifier microphone) or MIC IN x 1 (connect to a microphone w/o amplifier) *VB-H610VE/VB-H610D : Connect via an audio interface cable (included)			
Audio Output Terminal (LINE OUT)	⌀3.5 mm (⌀0.14 in.) mini-jack connector (monaural) LINE OUT x 1 (connect to an amplifier speaker) *VB-H610VE/VB-H610D : Connect via an audio interface cable (included)			
External Device I/O Terminal	Input x 2, Output x 2			
Memory Card	SD Memory Card, SDHC Memory Card, SDXC Memory Card Compatible. Frame Rate: Max. 1 fps			
Operating Environment	Temperature: -10°C – +50°C (+14°F – +122°F) Humidity: 5% – 85% (without condensation) *VB-H610VE equipped with separately sold Heater Unit HU600-VB Temperature: -30°C – +50°C (-22°F – +122°F) Humidity: 5% – 85% (without condensation)			
Power Supply	PoE: PoE power supply via LAN connector (IEEE802.3af compliant) AC Adapter: PA-V17 (100 – 240 V AC) (sold separately) External power source: 24 V AC/12 V DC – Heater Unit HU600-VB for VB-H610VE (sold separately): 24 V AC only			
Power Consumption	When using PoE: Max. approx. 9.0W When using AC Adapter PA-V17: Max. approx. 10.6W When using DC: Max. approx. 8.6W When using AC: Max. approx. 8.8W	When using PoE: Max. approx. 8.4W When using AC Adapter PA-V17: Max. approx. 10.72W When using DC: Max. approx. 9.0W When using AC: Max. approx. 8.1W Max. approx. 18.7W* *Equipped with separately sold Heater Unit HU600-VB	When using PoE: Max. approx. 8.4W When using AC Adapter PA-V17: Max. approx. 10.72W When using DC: Max. approx. 9.0W When using AC: Max. approx. 7.5W	When using PoE: Max. approx. 6.9W When using AC Adapter PA-V17: Max. approx. 8.64W When using DC: Max. approx. 7.0W When using AC: Max. approx. 6.5W
Included Software	VB Initial Setting Tool RM-Lite Proxy Authentication Admin Viewer/Admin Tools	VB Initial Setting Tool RM-Lite Proxy Authentication Admin Viewer/Admin Tools Camera Angle Setting Tool		
Language	English/German/French/Italian/Spanish/Japanese			
Dimensions	⌀132 x 155 (H) mm – Camera only (excluding Ceiling Bracket)	⌀180 x 147 (H) mm	⌀186 x 140 (H) mm	65 (H) x 80 (W) x 192 (D) mm
Impact Resistance	–	External materials: aluminum alloy, Dome: polycarbonate plastics With lens shock absorbing mechanism Estimated shock resistant: 50 J (based on Canon's test method)	–	–
Dustresistant/ Waterproof Specification	–	IP66-rated	–	–

*¹ (W): Maximum wide angle, (T): maximum telephoto. *² The frame rate may be reduced due to Viewer PC's specs, the number of clients accessing at the same time, network loads, image quality setting, type or movement of the subject or other reasons. *³ Audio files can be played back when an event is triggered by the intelligent function or external device input. A third-party amplifier speaker is necessary.

Information above is correct at time of publication, and is subject to changes. Please refer to the actual product brochure or www.canon-asia.com for updated specifications.

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YOUR PEACE OF MIND, SECURED.

The **VB-H41**, **VB-H610VE**, **VB-H610D** and **VB-H710F** boast of Canon's renowned lens technology, the revolutionary DIGIC DV III Image Processor used in professional video cameras, and the latest DIGIC Net II that provides rapid data transmission – giving Canon's latest lineup of network cameras the capability to capture and stream impeccable high quality Full HD videos.

Furthermore, with the cameras' pan, tilt, rotate, zoom (PTRZ) function, intelligent detection capabilities, dependable video recording, in addition to a resistant hardware, you gain trusted partners to safeguard your business.

VB-H41
[HIGH-POWER ZOOM]

Pan, Tilt, High-Powered Zoom

With a combined digital and optical zoom that reaches up to 240x, this camera fits environments where long visual depth may be required such as long hallways, auditoriums, or even transport stations.

- 60.4-degree wide angle-of-view and 20x optical zoom
- Full-HD supported (1920x1080)
- Minimum subject illumination: Color 0.4lux / B&W 0.02lux*4
- Indoor dome housing supported*1
- Image Stabilizer function
- H.264 supported
- ONVIF Profile S supported*3
- Controlled ghosting with optimized lens coating

VB-H610VE
[WATER/ VANDAL PROOF]

Highly Waterproof/ Vandal-Proof

Built with functional beauty that provides excellent protection against impacts, this camera can withstand harsh environments making it ideal for outdoor settings in buildings, factories and construction sites.

- 112-degree wide angle-of-view and 3x optical zoom
- Full-HD supported (1920x1080)
- Minimum subject illumination: Color 0.3lux / B&W 0.015lux*4
- Shock resistance (50J)
- IP66 supported
- Built-in PTRZ function
- Power focus function
- H.264 supported
- ONVIF Profile S supported*3
- Screen clipping enabled

VB-H610D
[WIDE ANGLE]

Wide Angle, High Sensitivity

This camera's angle can be controlled remotely through its PTRZ feature, thereby decreasing installation workload. It works best in corner installation like in retail outlets and offices with its wide angle capabilities.

- 112-degree wide angle-of-view and 3x optical zoom
- Full-HD supported (1920x1080)
- Minimum subject illumination: Color 0.3lux / B&W 0.015lux*4
- Built-in PTRZ function
- Power focus function
- H.264 supported
- ONVIF Profile S supported*3
- Screen clipping enabled

VB-H710F
[LOW LIGHT PERFORMANCE]

Excellent Low Light Performance

A high level of functionality through built-in intelligent functions, excellent low light performance, and design makes this camera highly-effective at night in wide-ranging security situations like museums, ATMs and banks.

- 112-degree wide angle-of-view and 3x optical zoom
- Full-HD supported (1920x1080)
- Minimum subject illumination: Color 0.3lux / B&W 0.015lux*4
- Built-in PTRZ function*2
- Power focus function
- H.264 supported
- ONVIF Profile S supported*3
- Screen clipping enabled

Notes: *1 This is a genuine Canon option. *2 VB-H710F supports only power zoom and power focus control.
*3 Profile S, the new version as of May 2012, is supported. *4 Minimum subject illumination with 1/30 shutter speed and without Smart Shade Control.

EXCEPTIONAL CAMERA PERFORMANCE

20X HIGH-MAGNIFICATION ZOOM

The VB-H41 camera is meticulously built with a best-in-class 20x optical and 12x digital (a maximum of 240x) zoom lens that comes with high-speed AF. With the built-in image stabilizer function, full-HD high quality video recording* is maintained even during PTZ to ensure that your output is recorded with minimum blur due to motion shake.

The VB-H610VE, VB-H610D and VB-H710F models are equipped with the "electronic rear focus system" 3x zoom lens for fast focus and maintaining focus while zooming.

*Full-HD image resolution is valid only within the optical zoom area. Using digital zoom will decrease the image quality.

HIGH PERFORMANCE FULL HD VIDEO

Get exceptionally high quality, low noise, vivid color reproduction, and smooth gradations with the powerful DIGIC DV III Image Processor also used in Canon EOS C300/EOS C300 PL and XF Series professional video cameras. High image quality of full HD video recording effectively minimizes deterioration in the quality of enlarged display of video feed.

OUTSTANDING LOW LIGHT PERFORMANCE

Harnessing the competencies of the DIGIC DV III Image Processor and a bright lens and video quality optimization, noise reduction control and color reproduction have been enhanced.

Use functions like Smart Shade Control (SSC) to brighten darker areas and illuminate subjects further; Automatic Night Mode Switch to adjust up to 5 levels of sensitivity and brightness in varying light conditions.

Original   Using Smart Shade Control
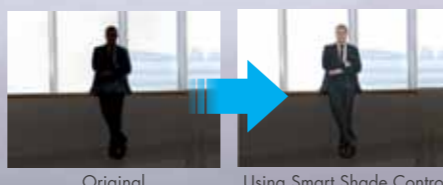
WIDE-ANGLE MONITORING

With an aperture of F1.2, and a wide 112° horizontal angle of view lens for VB-H610VE, VB-H610D and VB-H710F models, optimal low light performance and wide-angle monitoring are achieved. Utilizing the wide angle capabilities, these cameras can also clip several sections of the video and transmit them with the entire video feed simultaneously.

Transmitting a patrol of specified positions in the video feed

Specific video feed

Entire video feed
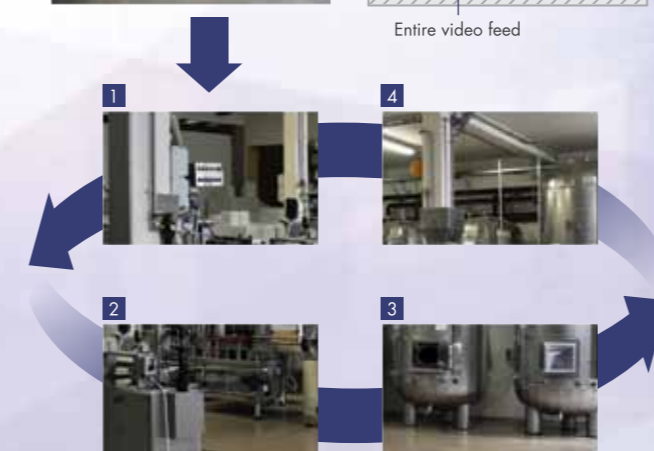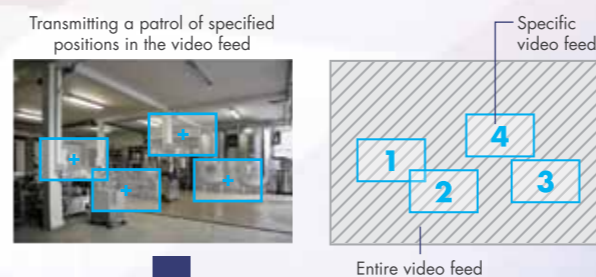
VB-H41 is also equipped with a wide end lens, allowing a horizontal angle view of 60.4°. Up to 20 preset positions can be set in the VB-H41 using PTZ and Preset Tour functions. With a panning range of ±170°, the VB-H41 can be controlled via a PC. Alternatively, it can be programmed to move from one preset position to the next at regular intervals so as to monitor a wide area.

ENHANCED TRANSMISSION PERFORMANCE

HIGH-CAPACITY, HIGH-SPEED VIDEO TRANSMISSION

With the DIGIC Net II Imaging Processor, high-quality video feeds can be transmitted without losing frames, due to its accelerated transmission performance that is 2.5 times better than conventional cameras.*1 The multi-codec function transmits JPEG and H.264*2 data at the same time, therefore allowing simultaneous support of differing requirement of applications such as live monitoring and video recording.

Note: *1 When an MJPEG is transmitted in a single stream. However, the frame rate is subject to degrade depending on your PC performance, the number of connected cameras, the number of transmissions, and network status.

*2 To display H.264 video feeds, use the software provided with the camera. This video feed cannot be displayed with the Administrator Viewer or the VB Viewer. H.264 video cannot be transmitted simultaneously in multiple streams.

SMART PRIVACY SETTING

To prevent invasion of privacy and theft of sensitive information, the Privacy Mask function allows detailed concealment of up to 8 areas even when pan/tilt/zoom is operated. By blocking certain areas of the camera's view, fine security countermeasures are realized.

Masking the keypad of ATMs

AGC (AUTO-GAIN CONTROL) LIMIT

Reduce video feed roughness and improve visibility by setting the exposure to automatic in AE mode. You can set the gain upper limit to one of five levels.

AGC limit set to OFF

Level [5]
Level [4]
Level [3]
Level [2]

AGC limit set to ON
Level [1]
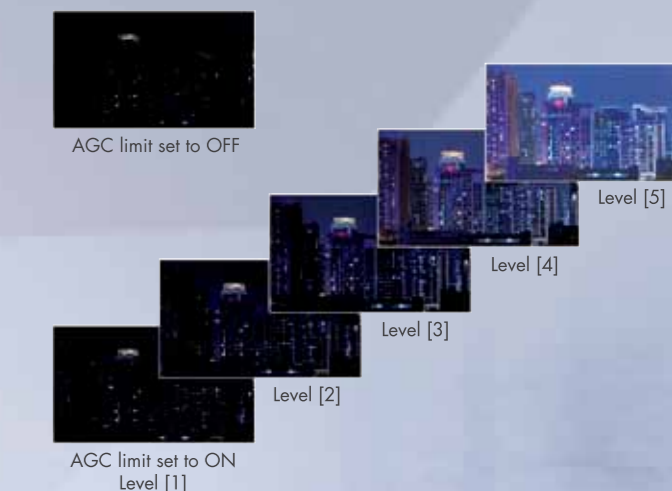
SECURED DATA TRANSMISSION

IPsec prevents IP packets from being compromised by using a unique cryptographic technology. This Internet-layer IP protection system also enables layers to protect data that is transmitted without encryption.

By encrypting with SSL/TLS, it is possible to transmit data securely. Also, encryption via hardware processing lightens the load on the transmission engine.

SUPPORTIVE MANAGEMENT TOOLS & BUNDLED SOFTWARE

EASY INSTALLATION

The provided CD recording software now has an auto installer that includes applications, certificates and libraries. Auto IP and DHCPv6 have also been added to the current Setting Page, and even a setting to toggle daylight saving time. All these come together to greatly reduce camera installation time.

USER-FRIENDLY VIEWING

Both Admin and VB Viewers support full screen, wide 16:9, Full HD display, while nearly all functions like displaying the camera control menu, can be used easily by right-clicking the mouse.

The Admin Viewer control panel and panorama display area can be shown as separate windows and placed anywhere on the screen. The control panel can also reopen in the same location after it is closed, improving usage of the Admin Viewer.

RECORDING SOFTWARE RM–LITE

Reduce initial cost with the "Network Video Recording Software". It lets you register/record up to four cameras, display live H.264, MPEG-4, and JPEG feeds on multiple screens (up to eight windows). Moreover, these cameras can be operated at multiple locations by simply switching connections.

Switch connections to use

Location A
RM-Lite Recording server

Location B
RM-Lite Recording server

Viewer

Location C
RM-Lite Recording server