# Canon

**NETWORK CAMERA SERVER** 

# VB150

# **User's Manual**

Introduction

Before Using the VB150

Setting Up the VB150

**Detail Settings** 

**VB Administration Tools** 

**Appendix** 





Be sure to read the " $\triangle$ Safe Use of Equipment" section before using this equipment. Store this manual in a readily accessible location for future reference.



1

4

## Introduction

Thank you for purchasing the Canon Network Camera Server VB150 (referred to hereafter as the VB150).

This manual describes how to set up and use the VB150. Read this manual carefully before using the VB150 to ensure effective operation. In particular make sure that you read the "△Safe Use of Equipment" in this manual, as well as the supplied CD-ROM Readme file.

#### **Exclusion of Liability**

If the Product is connected to a recording device (for example a VCR), Canon Inc. accepts no responsibility whatsoever for any financial losses that may be incurred as a result of the loss of recorded information or images, regardless of the internal or external cause of the loss.

#### **Copyright Information**

Video or still pictures recorded using your VB150 cannot be used in ways that infringe copyright laws or without the consent of the owner, unless intended for personal use only.

#### Notes

- 1. The unauthorized transfer of all or any part of the contents of this Manual is forbidden.
- 2. The contents of this Manual are subject to change without notice.
- 3. Every effort has been made to ensure that this Manual is flawless. However, if you find any oversights, please let us know.
- Notwithstanding above, Canon accepts no liability for any results arising from the operation of this product.

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#### Request concerning disclosure of live videos

With respect to the disclosure of live videos, we request that sufficient consideration be given to matters of privacy and rights not to be photographed. Canon considers the following points concerning such matters when it operates camera sites for which it has been responsible to install and operate:

- We take measures such as adding limitations on zoom magnifications so that people cannot make special specifications.
- When videos are taken of specific buildings, interiors and the like, we install the camera only after receiving approval from the administrator.

Please note that the operator of the camera site and not Canon has full responsibility regarding the disclosure of live videos

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## **Checking the Package Contents**

The VB150 package contains the following items. If any of these items is missing, please contact the retailer from which you purchased the product.

#### 1. VB150 main unit



## 3. AC cable 1 meter (3 ft. 3/32 in.)



\* The cable length may differ depending on the country in which the product was purchased.

#### 5. CD-ROM



#### **CD-ROM** contents

not in the main manual)
VBSetup.exe (VB Initial Setup Tool)
MonSetup.exe (Viewer for PC installer)
AdmSetup.exe (VB Administration Tools installer)
CltSetup.exe (VBCollector installer)
vb150rfu.exe (Firmware upgrade tool)

VB150-E.pdf (This manual in PDF)

Readme (Notes of caution, etc.,

APEX-E.pdf (Picture Recording User's Guide in PDF) HPEX-E.pdf (Guide to Creating Web Pages for Video Distribution in PDF)

VIEWER-E.pdf (Viewer software users manual)
Vbfiles (complete built-in file system)

#### 2. AC Adapter PA-V16



#### 4. RS-232C cable (miniDIN-miniDIN)

Used for controlling the VC-C4/VC-C4R
 3 meters (9 ft. 10 <sup>3</sup>/<sub>32</sub> in.)



\* When using the VC-C50i/VC-C50iR, please purchase a separate cable.

#### 6. User's Manual (This document)



#### 7. Warranty Card



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## **How to Read This Manual**

# For information about setting up the VB150



Read this manual carefully before using the VB150.

User's Manual (This document)

# For information about picture recording



Picture Recording User's Guide (APEX-E.pdf) This guide describes a couple of specific examples of the picture recording function using the VB150. A list of the log messages is also contained in this guide. Sections where the user should refer to this manual are indicated by the A icon accompanied by the relevant page number.

# For information about creating a web page for video distribution



Guide to Creating Web Pages for Video Distribution (HPEX-E.pdf) This guide describes how to create a dedicated Web page for distributing live video using the VB150.

Sections where the user should refer to this manual are indicated by the icon accompanied by the relevant page number.

# For information about using the Viewer



Viewer Software User's Manual (VIEWER-E.pdf) This manual describes how to use the Viewer for Java and the Viewer for PC.

Sections where the user should refer to this manual are indicated by the icon accompanied by the relevant page number.

# **⚠** Safe Use of Equipment



An exclamation point, within a triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the equipment.



#### ⚠ Important Warnings

#### **A** CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The serial number of this equipment may be found on the bottom of the equipment. No others have the same serial number as yours.

You should record the number and other vital information here and retain this book as a permanent record of your purchase to aid identification in case of theft.

**Date of Purchase** 

**Dealer Purchased from** 

**Dealer Address** 

Dealer Phone No.

Model No. VB150

Serial No.

**MAC Address** 

# 2

#### ⚠ Important Operational Instructions

#### ♠ WARNING:

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

#### **↑** CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK AND TO REDUCE ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

#### FDA regulation

This network camera server has not been evaluated by the Food and Drug Administration (FDA) for use as a medical device. When incorporated into a system with medical applications, FDA regulations may apply. Therefore, please consult your legal advisor to determine whether FDA regulations apply.

#### FCC NOTICE Network Camera Server VB150 (D78-0147)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Use of shielded cable is required to comply with class B limits in Subpart B of Part 15 of FCC Rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Canon U.S.A. Inc.

One Canon Plaza, Lake Success, NY 11042, U.S.A.

Tel No. (516) 328-5600

#### IC NOTICE

This product does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the Interference-causing equipment standard entitled 'Digital Apparatus', ICES-003 of the Industry Canada.

#### **NOTIFICATION IC**

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norma sur le matériel brouilleur: "Appareils Numériques", NMB-003 édictées par l'Industrie Canada.

Dieses Produkt ist zum Gebrauch im Wohnbereich, Geschäfts- und Gewerbebereich sowie in Kleinbetrieben vorgesehen.

In these safety instructions, the word "equipment" refers to the Canon Network Camera Server VB150 and all its accessories.

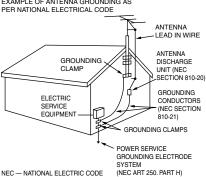
- Read Instructions All the safety and operating instructions should be read before the equipment is operated.
- Retain Instructions The safety and operating instruction should be retained for future reference.
- Heed Warnings All warnings on the equipment and in the operating instructions should be adhered to.
- Follow Instructions All operating and maintenance instructions should be followed.
- 5. Cleaning Unplug this equipment from the wall outlet before cleaning.
  - Wipe the equipment with a clean soft cloth. If necessary, put a cloth in diluted neutral detergent and wring it well before wiping the equipment with it. Finally, clean the equipment with a clean dry cloth. Do not use benzene, thinner or other volatile liquids or pesticides as they may damage the product's finish. When using chemically-treated cleaning cloths, observe those precautions accordingly.
- Accessories Do not use accessories not recommended in this manual as they may be hazardous. Always use specified connection cables. Connect devices correctly.
- 7. Water and Moisture Hazard of electric shock Do not use the equipment near water or in rainy/moist situations. Do not put a heater near this equipment.
- Placing or Moving Do not place on an unstable cart, stand, tripod, bracket or table. The equipment may fall, causing serious injury to a child or adult, and serious damage to the equipment. An equipment and cart

combination should be moved with care.



- Quick stops, excessive force, and uneven surfaces may cause the equipment and cart combination to overturn.
- Power Sources The PA-V16 AC adapter should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your equipment dealer or local power company.
- Polarization The PA-V16 AC adapter is equipped with a polarized 2-prong plug (a plug having one blade wider than the other).
  - The 2-prong polarized plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still fails to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- 11. Power Cord Protection Power cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to plugs and the point from which the cords exit the equipment.
- 12. Outdoor Antenna Grounding If an outside antenna is connected to the equipment, be sure the antenna is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/ NFPA No.70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See figure 1.





- 13. Lightning For added protection of this equipment during a lightning storm, or when it is left unattended and unused for long periods of time, disconnect it from the wall outlet and disconnect the antenna. This will prevent damage to the equipment due to lightning and power-line surges.
- 14. Power Lines An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
- Overloading Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
- 16. Object and Liquid Entry Never push objects of any kind into this equipment through openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Be careful not to spill liquid of any kind onto the equipment.
- 17. Servicing Do not attempt to service this equipment yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified personnel.
- 18. Damage Requiring Service Disconnect this equipment from the wall outlet and all power sources including batteries, and refer servicing to qualified service personnel under the following conditions.

- a. When the power-supply cord or plug is damaged.
- b. If any liquid has been spilled onto, or objects have fallen into, the equipment.
- c. If the equipment has been exposed to rain or water.
- d. If the equipment does not operate normally even if you follow the operating instructions. Adjust only those controls that are covered by the operation instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the equipment to its normal operation.
- e. If the equipment has been dropped or the cabinet has been damaged.
- f. When the equipment exhibits a distinct change in performance. This indicates a need for service.
- 19. Replacement Parts When replacement parts are required, be sure the service technician has used replacement parts that are specified by Canon or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
- 20. Safety Check Upon completion of any service or repairs to this equipment, ask the service technician to perform safety checks to determine that the equipment is in safe operating order.
- 21. Do not install the equipment in the following locations as this can cause a fire or electric shock:
  - Hot locations
  - Close to a fire
  - Very humid or dusty locations
  - Locations exposed to direct sunlight
  - Locations exposed to salt spray
  - Close to flammable solvents (alcohol, thinners, etc.)
- 22. When any of the following occurs, immediately unplug the PA-V16 AC adapter from the main power supply to turn off the equipment and contact your nearest Canon supplier. Do not continue to use the equipment as this can cause a fire or electric shock.

- The equipment emits any smoke, heat, abnormal noise, or unusual odor.
- A metal object falls into the equipment.
- The equipment is damaged in some way.
- 23. Please observe the following when using the equipment. Failure to do so can result in a fire or electric shock.
  - Do not use flammable sprays near the equipment.
  - Do not subject the equipment to strong impacts.



#### **Maintenance**

#### Cleaning the Equipment

- 1. Unplug the AC adapter from the wall outlet.
- Carefully wipe the equipment with a soft cloth that has been moistened with water or a mild detergent.





Do not use flammable solvents such as alcohol, benzene or thinners.

The use of such substances can cause a fire or electric shock.

- 3. Wipe with a dry cloth.
- 4. When you have finished, plug the AC adapter back in to the wall outlet.

#### Icons Used in This User's Manual



Indicates important information that must be observed or actions that are prohibited during an operation. These notes must be read to prevent possible faults or damage to the equipment.



Indicates supplementary information or a reference to an operation. Users are advised to read these memos.



Refer to the PDF manual on the supplied CD-ROM.



# **Before Using the VB150**

This chapter contains information that you should read before using the VB150. It also describes the features of the VB150, the system overview, the operating environment, and the name and functions of the system components.

## Features of the VB150

The VB150 is a system that distributes live video via the Internet or an intranet. It can be used in a wide variety of applications such as distributing live video from a Web site or monitoring.

#### ■WebView Livescope built in

The VB150 comes with Canon's own WebView Livescope network video distribution system built in.

#### ■Broadband video distribution function

Video can be captured at a maximum of 30 fps. Motion-JPEG is used to compress the video images. The network auto negotiates between Ethernet 100 Mbps and 10 Mbps. Also, a wireless LAN card can be used for IEEE 802.11b-compliant 11 Mbps communication. If a PC card modem is used, the public switched telephone network can also be used. Since video quality (1-99) and the frame rate (0.1-30 fps) can be freely set, video can be distributed under conditions that best suit the network bandwidth.

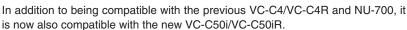
#### ■Simultaneous video reception by up to 50 clients

Up to 50 clients can view video simultaneously with a single VB150 unit.

#### ■Remote camera control from the viewer \*

Two types of viewer software are provided: Viewer for PC and Viewer for Java. These viewers can be used to freely control the angle (pan and tilt) and the zoom magnification of cameras installed in a remote location, enabling viewing videos with plenty of ambiance.

# ■Compatible with the Communication Cameras VC-C50i/VC-C50iR (new function of firmware Ver. 1.1)





#### **■**Control for up to 4 cameras

Up to 4 video cameras can be connected to the VB150, and videos that you view can be switched from the viewer. If the Communication Cameras VC-C50i/VC-C50iR and VC-C4/VC-C4R are used, all four cameras can be controlled (using the cascade function of the VC-C50i/VC-C50iR and the VC-C4/VC-C4R).

#### **■**Compatible with wireless LANs

A wireless LAN card can be used to connect the VB150 to a network.

#### **■**Compatible with various networks (new function of firmware Ver. 1.1)

In addition to operating the VB150 with previous fixed IP addresses, it is now also compatible with PPPoE, and when an ADSL circuit is used, the VB150 can be operated by connecting to the ADSL modem and bypassing the router.

#### ■Motion-detection based picture recording

The VB150 can detect image changes caused by moving people or objects, perform external device output and record pictures.

#### ■Panorama picture creation function and various settings \*

The camera's entire recordable area can be created as a panorama picture and saved. The saved picture can then be used to easily and visually set view restrictions and presets.

#### **■**Camera position preset function \*

When presets such as camera angles (direction in which camera is aimed or zoom position) are stored in advance, the camera can be controlled by simply selecting the desired preset from the viewer. Up to 8 sets of presets can be stored.

#### ■View restriction function \*

Restrictions can be applied to zoom magnifications and angle settings to prevent clients from seeing certain camera angles. When using the VB150 to operate a fixed point camera over the Internet, for example, it is possible to consider privacy when distributing videos ( $\rightarrow$  P.1, "Request Concerning the Disclosure of Live Pictures").

#### **■**Built-in Web server and FTP server

The VB150 has a built-in Web server. If Web page data is written onto a flash memory card (sold separately), the VB150 will be able to distribute Web pages and videos over the Web. Since the VB150 also has a built-in FTP server, Web page data can be sent from a remote location as a file (FTP).

#### **■**Easy setting and administration

Since the VB150 provides settings pages that utilize the Web, you can use a PC and Web browser to make settings and perform administrative tasks remotely without going to the location where the VB150 is installed. The VB Administration Tools can be used to create panorama pictures, view logs, and to specify preset, view restriction, and motion detection settings.

#### ■Plenty of expandability

The VB150 includes 2 card slots, allowing a modem, wireless LAN or flash memory card to be added to suit various applications.

#### **■**Log function

The Log function lets you save log information such as errors and access conditions in a file and send it to specific email addresses.

#### ■Strengthened security function

Passwords can be used to restrict destinations where videos are sent. (Up to 50 clients can be registered).

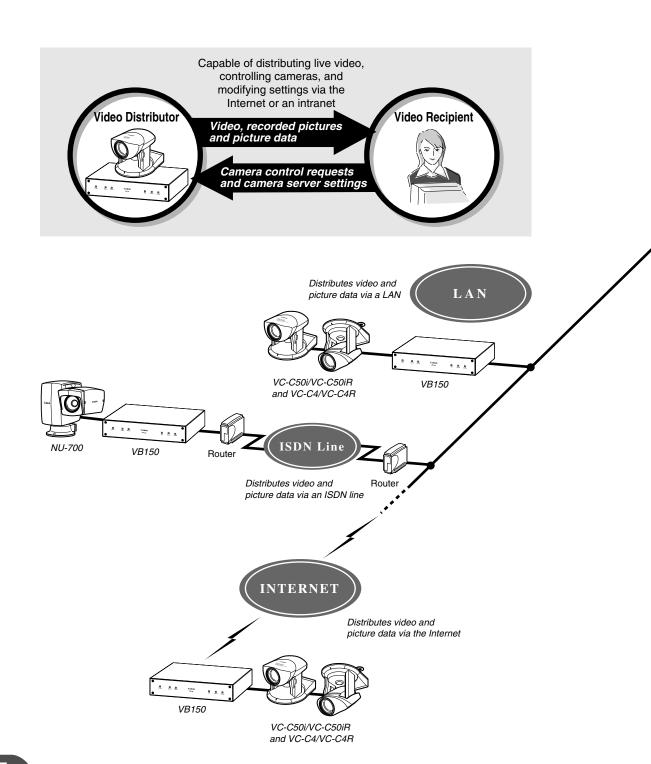
#### ■Picture recording via link with external device or schedule

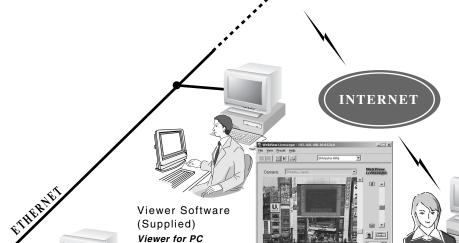
Still pictures can be recorded based on ON/OFF events from an external device or schedules set in advance. Up to 30,000 still pictures can be recorded. Moreover, if VBCollector is used, still pictures recorded by the VB150 can be automatically collected by a PC and viewed.

<sup>\*</sup> Only available when VC-C50i/VC-C50iR/VC-C4/VC-C4R/NU-700 is connected to the VB150.

# **System Overview**

The system is made up of the VB150 and viewer software. The viewer software can display videos distributed from the VB150 on the viewer screen and allows user to control the camera.





Controls camera angle, zoom, etc., and monitors camera images



Controls camera angle, zoom, etc., and monitors camera images

#### Viewer Software for Monitoring (Sold separately)

#### Network Video Recorder VK-64

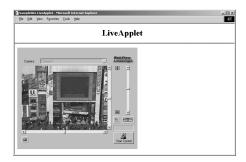
Records images from multiple cameras at the same time

#### WebView Livescope MV/LE

Monitors images from multiple cameras at the same time



VK-64 screen





The manual for the viewer software (Viewer for PC/Viewer for Java) is provided on the supplied CD-ROM, VIEWER-E.pdf (Viewer Software User's Manual).

# **Operating Environment**

For latest information, please refer to our WebView Product web page: canon.com/webview/

## Viewer Software (→ 🏝 Viewer Software User's Manual)

The viewer software that are supplied with the VB150. They lets you view the video captured by the camera connected to the VB150 and control the camera.

#### Viewer for Java Ver. 3.4

Operating System	tem Windows 2000 (SP4 or later)/ Windows XP (SP1a or later)	
Web Browser	Netscape 7.1 or later, or Microsoft Internet Explorer 6.0 (SP1 or later)	
Java VM	Java Plug-in 1.4.2 or later (Java VM provided by Sun Microsystems) MSVM Release 5.0.0.3810 (Java VM provided by Microsoft)	

<sup>\*</sup> This viewer is installed on the VB150 and is automatically downloaded when connected to the VB150.

#### Viewer for PC Ver. 3.4

Operating System	Windows 2000 (SP4 or later)/ Windows XP (SP1a or later)	
Web Browser	Netscape 7.1 or later, or Microsoft Internet Explorer 6.0 (SP1 or later)	

<sup>\*</sup> Must be installed from the supplied CD-ROM. (

A Viewer Software User's Manual P.26)



- The manual for the viewer software is on the supplied CD-ROM(VIEWER-E.pdf).
- Although Ver. 3.3 or earlier viewers can be used, some of the features are different. Therefore, we recommend you to use the latest version.
   On Macintosh computers, some of the features of Ver. 1.2 viewer are not available.

## VB Initial Setup Tool Ver. 1.1 (→ P.27)

This tool is for performing initial settings for the VB150.

Operating System	Windows 2000 (SP4 or later)/Windows XP (SP1a or later)
Web Browser	Microsoft Internet Explorer 6.0 (SP1 or later)

## VB Administration Tools Ver. 1.2 ( $\rightarrow$ P.61)

This tool lets you create panorama pictures from the VB150 and then easily use them to visually set view restrictions and presets. The motion detection setting is also available.

Operating System	Windows 2000 (SP4 or later)/ Windows XP (SP1a or later)	
Web Browser	Microsoft Internet Explorer 6.0 (SP1 or later)	

<sup>\*</sup> Must be installed from the supplied CD-ROM. ( $\rightarrow$  P.63)

<sup>\*</sup> This viewer may not run stably on operating systems and Web browsers other than those listed above.

## **VB**Collector Ver. 2.0 (→ ♠ Picture Recording User's Guide P.13)

This tool is for collecting and viewing still pictures recorded by the VB150 on a PC.

Operating System Windows 2000 (SP4 or later)/Windows XP SP1a	
Web Browser	Microsoft Internet Explorer 6.0 (SP1 or later)
Hard Disk	20GB HDD or greater (NTFS formatted)

- \* Must be installed from the supplied CD-ROM. (→ ⚠ Picture Recording User's Guide P.14)
- \* You need a flash memory card (sold separately) to record still pictures.
- \* If you have a structure where the camera server is saving every second and where it will be made to carry out the maximum of 16 tasks (

  A Picture Recording User's Guide P.21), it is recommended that you use a 42.2 Ghz or greater Pentium PC with 512 MB or more of memory.

## Multipoint Recording Software for Monitoring Use (Sold separately)

Videos distributed from VB150 can be recorded and recorded video can be displayed with the software.

#### Network Video Recorder VK-64 v1.0 (Viewer System Requirements)

	Minimum	Recommended
CPU	Pentium III 700MHz or greater	Pentium 4 2.2GHz or greater
Operating System	Windows 2000 Server (SP3 or later) Windows 2000 Professional (SP3 or later) Windows XP Professional	Windows XP Professional
Memory	256MB RAM or greater	1GB RAM or greater  * For more than 16 Camera Servers, 1GB or greater required.
Hard Disk	2GB HDD or greater	
Display	1024 × 768 with 16 bit color	1024 × 768 with 16 bit color  * A high performance video card is desirable. With PCI video cards, display performance may be reduced.
Sound	Audio playback support is necessary for event notification alert sounds.	

#### Network Video Recorder VK-64 v1.0 (Storage Server System Requirements)

	Minimum	Recommended
CPU	Pentium III 1GHz or greater	Pentium 4 2.2GHz or greater
Operating System	Windows 2000 Server (SP3 or later) Windows 2000 Professional (SP3 or later) Windows XP Professional	Windows 2000 Server (SP3 or later) Windows XP Professional
Memory	768MB RAM or greater	1GB RAM or greater * For more than 48 Camera Servers, 1.5GB or greater required.
Hard Disk	20GB HDD or greater SCSI or IDE, NTFS formatted	

<sup>\*</sup>The requirements for Storage Server will vary according to the environment you will use (number of Camera Servers, setting of recording frame rate etc.). Please contact dealers that handle Canon products for further information.

## Viewer Software for Monitoring Use (Sold separately)

If WebView Livescope MV Ver. 2.1 is used, up to 16 viewer screens can be displayed and monitored. There is also a limited edition of MV Ver. 2.1, called MV LE, which allows up to 4 viewer screens to be displayed.

#### WebView Livescope MV Ver. 2.1/LE

PC	CPU: Pentium III 600 MHz or better, RAM: 128 MB or better, Hard disk capacity: 50 Mbytes or better (MV), 20 MB or better (LE),
Operating System	Windows Me / Windows 2000 (SP1 or later)/ Windows XP
Web Browser	Microsoft Internet Explorer 5.0 or later required
Display	XGA (1024 × 768) or better, 16-bit color display or better

## **Compatible Cameras (Sold separately)**



**Canon Communication Camera** VC-C50i



Canon Communication Camera VC-C50iR



**Canon Communication Camera** VC-C4



VC-C4R



Canon Communication Camera Canon Remote Control Pan-tilt Head NU-700



- The wide-angle converter WL-37 is sold separately for the VC-C50i/VC-C4.
- While cameras other than those shown above can be used, the camera control functions will not be available. Only the video functions can be used.

## **Compatible Networks**

- 10Base-T/100Base-TX Ethernet (auto-negotiation)
- Wireless LAN (using an operation-confirmed wireless LAN card)
- Public Switched Telephone Networks (using an operation-confirmed modem card)

## **Compatible PC Cards (Sold separately)**

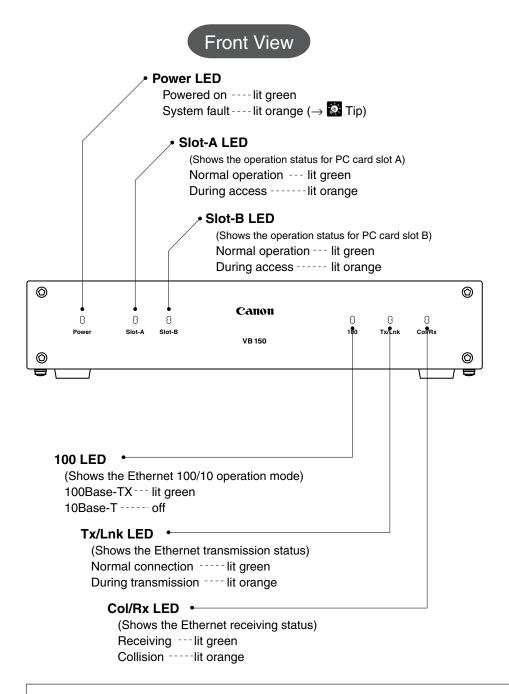
Use an operation-confirmed PC card (flash memory, wireless LAN and modem card). Details are available at the following.

URL: http://www.canon.com/webview/

## **Compatible Cables (Sold separately)**

RS-232C cables for camera control ( $\rightarrow$  P.2) is also available in lengths other than the ones provided. Also, note that the supplied RS-232C cable for camera control cannot be used for the VC-C50i/VC-C50iR and NU-700. For further information, contact your Canon dealer.

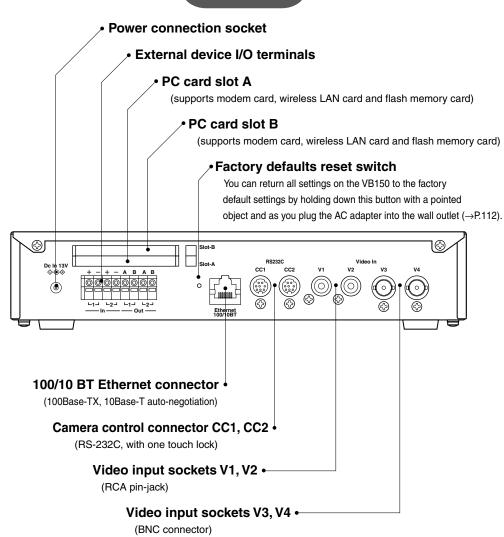
## **System Components and Their Operation**





When you turn the VB150 power on, the power LED glows orange for several seconds and then turns green. This is normal and does not indicate a fault.

#### Rear View





- Refer to page 113 for information on how to use a PC card.
- Camera control connectors can only be used for the VC-C50i/VC-C50iR/VC-C4/VC-C4R/NU-700.



Tin



The video cable supplied with the Canon Communication Camera VC-C4/VC-C4R is compatible with the RCA pin-jack. To connect these cameras to a BNC socket, use a third party  $Pin \rightarrow BNC$  conversion adapter.



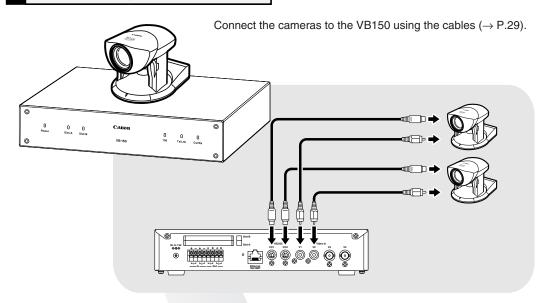
# **Setting Up the VB150**

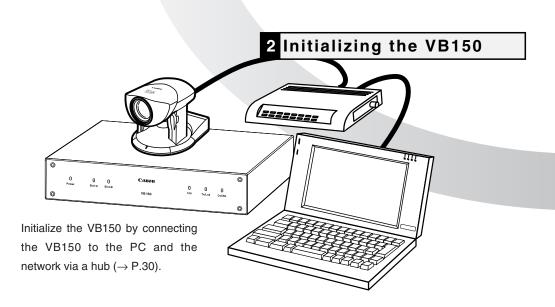
This chapter describes how to connect up the equipment in the system, how to specify the basic system settings and how to check that the camera image is displayed correctly.

# **Setup Workflow**

The procedure for setting up the VB150 and checking the video image begins with connecting the camera to the VB150, connecting the VB150 to the PC via a hub and specifying the various settings. The next step is to check that video from the camera can be displayed and that the camera can be controlled.

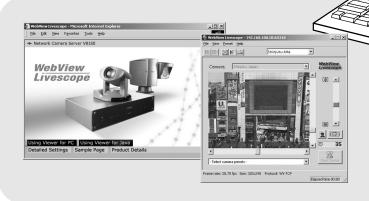
### 1 Connecting the camera

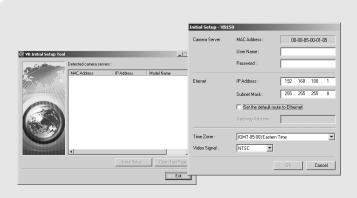




## 3 Checking operation

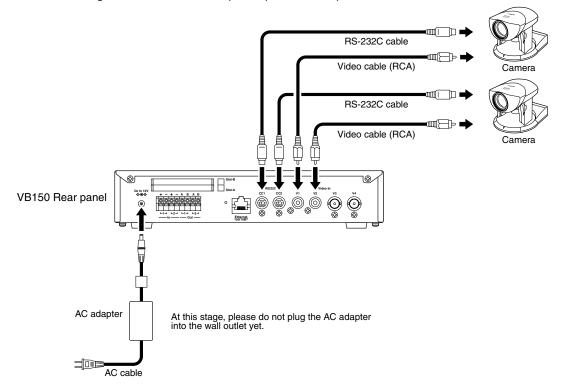
Access the VB150 from a Web browser. Display the video from the top page of the camera server and check that video is displayed properly ( $\rightarrow$  P.33).





## 1. Connecting the camera

In this description, we begin by connecting 2 cameras to the VB150. The RS-232C cables are connected to the CC1 and CC2 port on the VB150 and the video cables are connected to V1 and V2. In this way, one camera is connected to CC1-V1 and the other to CC2-V2. The video cable is supplied with the VC-C4/VC-C4R. When using the VC-C50i/VC-C50iR, please purchase a separate cable.



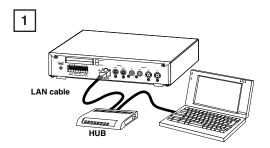
Camera connection is now complete.



- The video cable supplied with the Canon Communication Camera VC-C4/ VC-C4R, is compatible with the RCA pin-jack. To connect these cameras to a BNC socket, use a third party Pin → BNC conversion adapter. (→ P.24)
- $\bullet$  Canon Communication Camera VC-C50i/VC-C50iR/VC-C4/VC-C4Rs can be cascade-connected and controlled ( $\to$  P.44).

# 2. Initializing the VB150

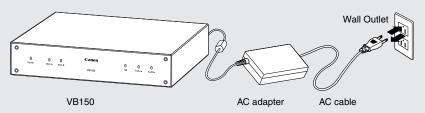
When you have completed connecting the cameras, the next step is to initialize the VB150.



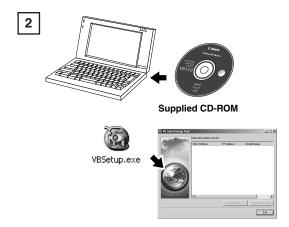
Connect the VB150 to the network using a LAN cable. Turn on the power to your equipment in the following order: Network device (hub in this case), PC, camera, and then VB150.

### ⚠ Precautions for Turning the VB150 On and Off

The VB150 has no power switch. To turn the VB150 off and on, unplug the AC adapter. When you unplug the AC adapter from the wall outlet, wait at least 5 seconds and then plug the AC adapter into the wall outlet. Be sure to observe the precautions given in " $\triangle$ Important Safety Instructions" ( $\rightarrow$  P.9).



• If the VB150 will not be used for some time, unplug the AC adapter from the wall outlet.



Insert the supplied CD-ROM into the PC and double click the VB Initial Setup Tool, "VBSetup.exe" to launch the program.



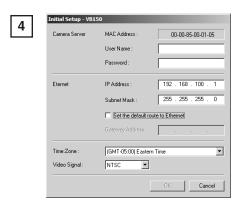
The VB150s connected to the network are automatically detected and their MAC address, the currently set IP address and the model name are displayed. The factory default setting is:

#### IP address: 192.168.100.1.

The MAC address for the VB150 can be found on the warranty card or on the seal attached on the bottom of the unit.

Note that VBSetup.exe cannot be used across segments.

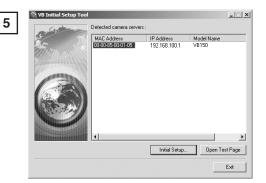
If a multiple number of VB150s are connected to the network, all of them are displayed. Select a MAC address to be used for initial setup by clicking on it, then click the "Initial Setup..." button.



When the "Initial Setup" dialog box appears, enter the user name and password set as the factory defaults.

User Name : root Password : VB150

Then enter the IP address and subnet mask you want to set for the VB150. If you want to specify a default gateway address, enable the [Set the default route to Ethernet] check box and then enter the default gateway address. Although the time zone and video signal can also be specified here, there is basically no need to change the time zone setting. Then click the OK button.



A setup progress window appears and your settings will be saved. To setup more than one VB150, repeat steps 3 through 5.

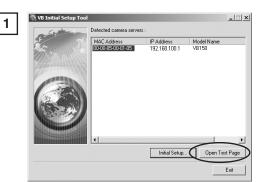
Initial settings are now complete.



- Set the IP address to a value that suits your environment.
- Where the IP address has been automatically obtained from the DHCP server, you cannot change the IP address setting from the VB Initial Setup Tool. If you wish to change the IP address, change it from the Network Settings page (→ P.38).
- Please consult with your network administrator for the IP address, subnet mask and default gateway address settings.
- If 20 minutes or more passes after the VB150 is turned on, the VB150 stops sending requests for IP addresses allocation and they cannot be detected using this tool. If this occurs, restart the VB150.
- ◆ VBSetup.exe can only be used for the Ethernet settings. Use the Network Settings page for the wireless LAN, PPP, and PPPoE settings (→ P.39-41).
- To restore the factory default settings, refer to page 108.
- Be sure to turn off the power to the VB150 and to the camera before you change the camera's connection to the VB150. After you have changed the connection, turn on the power to the camera first, and then to the VB150.

# 3. Checking operation

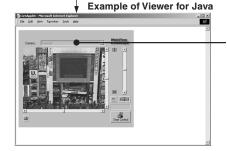
When you have completed the initial setup, check that the VB150 works properly. Use the VB150 top page to simplify checking.



Select the MAC address of the VB150 you want to check the operation of and click the [Open Test Page] button.



Your Web browser starts up and the top page of the VB150 appears (URL: http:// <IP address>/). Click the [Using Viewer for Java] button and check that the video is displayed properly.



#### **Camera Selection box**

This box allows you to switch cameras when multiple cameras are connected to the VB150.

Operation checking is now complete.



2

- The [Using Viewer for PC] on the top page must be installed before use (→ P.19, ♣ Viewer Software User's Manual P.26).
- lacktriangle We recommend that you create a panorama picture (ightarrow P.67).

<sup>\*</sup> The picture displayed in the viewer is an example.



# **Detail Settings**

This chapter describes the method for specifying detailed settings.

The VB Administration Tools described in Chapter 4 provide a convenient way to set view restrictions and presets.

## **Detail Settings**

## **Accessing the Settings Title Page**

The various settings on the VB150 are specified by using a browser to access Web pages on the VB150. You begin by accessing the **Settings Title Page**.



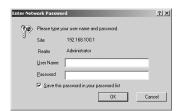


Use the browser to access

http://"IP address"/"path".

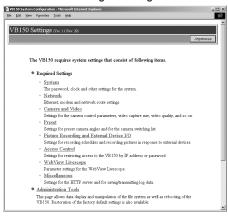
Use the IP address specified in "Initializing the VB150" ( $\rightarrow$  P.30). If this is the first time you have accessed the VB150, enter "admin", which is the default setting for "path", in the "path" field. The "path" component can be changed at any time on the System Settings page ( $\rightarrow$  P.37)

2



You are now asked for your user name and password. In the factory default settings, the user name is "root" and the password is "VB150". Enter these settings. These can also be changed on the System Settings page. ( $\rightarrow$  P.37)

#### **Settings Title Page**

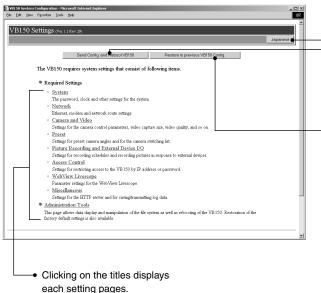


The Setting Title Page appears.

## **Settings Title Page**

From this settings title page, you can move to each settings pages and confirm the changes to the settings, write the changes to the VB150 memory and perform restarts.

### Settings Title Page for VB150



### "Japanese" button

Click this button to display the settings page in Japanese. The button then changes to "English" and switches the display back to English when clicked.

"Send Config. and Reboot VB150" button

After you have changed the settings on a page, click the "OK" button on that page. This returns you to the title page. At that point, the changes have not been sent to the VB150. Clicking this button confirms the changes, writes them into the VB150 memory and automatically restarts the VB150 to validate the changes. If the changes do not require restarting, the "Send Config. to VB150" button is displayed instead of this button.

- "Restore to previous VB150 Config." button Click this button when you want to cancel the changes you have made to the settings page. All the changes are discarded and returns to its previous values.
- If no settings have been changed, these 2 buttons are not displayed.



- Do not open multiple browser windows at the same time to change settings in parallel.
- Do not use the "Back" and "Forward" buttons in your browser to move between settings pages. Due to the effects of caching, there are possibilities that an old settings page will appear, settings will return to their original values, or unintended changes will occur.
- When you change the settings, you should always click the "Send Config. to VB150", or the "Send Config. and Reboot VB150" button.

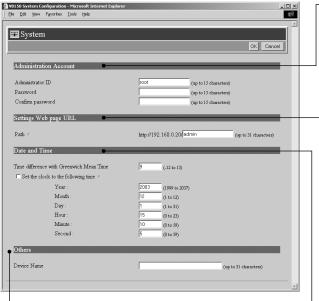


Those settings that require the VB150 to be restarted for the changes to take effect are marked with a red tick.



## System Settings Page

Use this page to set the administrator ID and password as well as the date and time.



#### Others

"Device Name"

Sets the device name. The device name is used as the subject in log mail ( $\rightarrow$  P.58), as a message body parameter specification in picture mail ( $\rightarrow$  P.49) and is used in MV 2.1 ( $\rightarrow$  MV Manual P.23). The device name can consist of up to 31 alphanumeric characters and can include underscores and hyphens.

Example: If "Tokyo-showroom" is set as the device name and log mail is set, the log mail will be sent with the following subject line:

Subject: Syslog message from Tokyo-showroom If no device name is specified, "VB150" is used.

### Administration Account

"Administrator ID"

Sets the ID used by the administrator. Up to 15 characters can be set consisting of alphanumeric characters, underscores and hyphens. The default setting is "root".

"Password"

Sets the password. Up to 15 ASCII characters can be used (spaces or printable characters). The default setting is "VB150".

"Confirm password"

Confirms the password in the field above.

#### Settings Web page URL

Sets the "path" component for the settings title page ( $\rightarrow$  P.35). This URL is used subsequently when you access the settings title page after restarting the system. (Up to 31 characters can be set consisting of alphanumeric characters, underscores and hyphens.).

The default setting is "admin".

#### Date and Time

"Time difference with Greenwich Mean Time" The factory default time difference setting is set to +9 hours from Greenwich Mean Time. Please change this setting as needed.

You can only change the date and time on the VB150 when the "Set the clock to the following time" option is ticked. Because this setting is returned to the VB150 when the "Send Config. and Reboot VB150" button is clicked, the values for the settings from year to second must be matched to the time when the button is clicked.

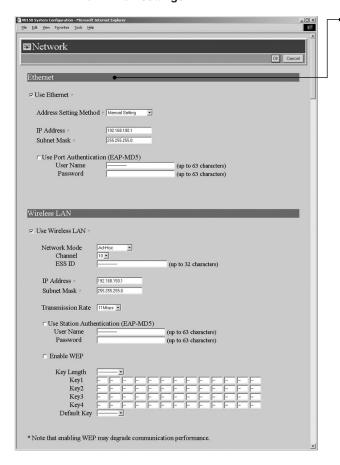


- For reasons of system security, we recommend that you change the administrator ID and password at regular intervals. It is also a good idea to change the URL of the settings page. However, be sure to make a note of the new settings (→ P.114, 115) so that you do not forget them.
- If you have forgotten the Administrator ID or password, press the Factory Defaults Reset switch to return these settings to their factory default values (→ P.112). However, note that all settings are returned to the factory default settings.

Click the [OK] button to change the settings. To discard the changes, click the [Cancel] button. This returns you to the settings title page.

## **Network Settings Page**

Use this page to specify the settings for connecting to an Ethernet, Wireless LAN, PPP or PPPoE network. For a LAN connection, specify Ethernet settings and for a wireless LAN connection, specify wireless LAN settings. For connection made with a modem, specify PPP or PPPoE settings.



#### Ethernet

"Use Ethernet"

Tick this check box to use Ethernet.

## "Address Setting Method"

In "Address Setting Method", select "Auto Setting (DHCP)" or "Manual Setting". If you select "Manual Setting", specify the settings in "IP Address" and "Subnet Mask".

#### "IP Address"

Enter a network interface-specific IP address.

#### "Subnet Mask"

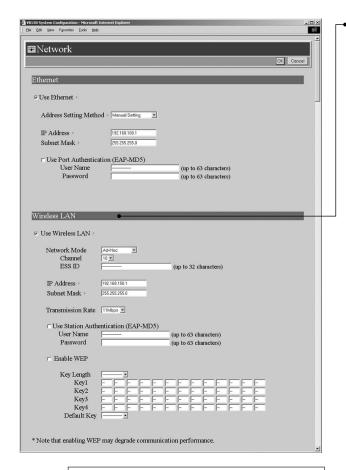
Enter the subnet mask specified for the network to be connected.

"Use Port Authentication (EAP-MD5)"
Tick this check box when using the switching HUB and you wish to use the IEEE802.1x authentication function. Once ticked, specify the settings in "User Name" and "Password" to be used for authentication.

- Be sure to specify the gateway address in the Default Route field (→ P. 41).
- Contact the network administrator for the IP address, subnet mask, and default gateway address settings.



- If you are using Ethernet, take particular care with the IP address, subnet mask and route settings. If errors are found in any of these items, you may be completely unable to access the VB150 via Ethernet and it may only be possible to recover the problem by using the Initial Setup Tool (→ P.30) to correct the error.
- When you change an IP address, please re-access the Settings Title Page with the new IP address (→ P.35).





Two modes are used for wireless LANs: "Ad-Hoc" mode and "802.11 Ad-Hoc" mode for communication between stations, and "Infrastructure" mode for access via access points. In each case the same settings as for the communication destination are required.

#### Wireless LAN

"Use Wireless LAN"
Tick this check box to use a wireless LAN.

"Network Mode"
Select Ad-Hoc, "802.11 Ad-Hoc" or Infrastructure mode.

#### "Channel"

If "Ad-Hoc" or "802.11 Ad-Hoc" is selected as the network mode, select a number from 1 to 14 as the channel to be used for communication.

#### "ESS ID"

Enter the ESS ID. This setting is only available when "802.11 Ad-Hoc" or "Infrastructure" is selected as the network mode. The ESS ID can consist of any characters except for double quotation marks (").

## "IP Address"

Enter a network interface-specific IP address. Note that you cannot specify the same IP address as that specified for the Ethernet.

#### "Subnet Mask"

Enter the subnet mask specified for the network to be connected.

"Transmission Rate"
Select the transmission rate.

"Use Station Authentication (EAP-MD5)"
Tick this check box when using a wireless
LAN access point and you wish to use the
IEEE802.1x authentication function. Once
ticked, specify the settings in "User Name"
and "Password" to be used for
authentication.

### "Enable WEP"

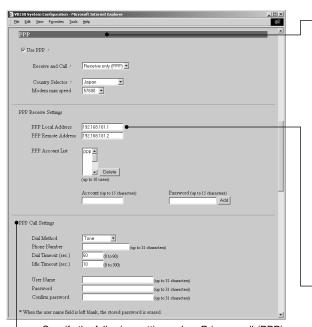
For encrypted communication, set the same encryption keys.

Select 64 bit or 128 bit as the "Key Length" used, enter the encryption key and then select the key to be used for transmission in the "Default key".

- Contact the network administrator for the IP address, subnet mask, and encryption settings.
- Match the WEP to the hexadecimal setting for the communications access point. Only hexadecimal values can be entered on the VB150.



- If a wireless LAN is to be used, give serious consideration to the installation location and communications security.
- If you are using a wireless LAN, take particular care with the IP address, subnet mask and route settings. If errors are found in any of these items, you may be completely unable to access the VB150 via a wireless LAN.
- When you change an IP address, please re-access the Settings Title Page with the new IP address (→ P.35).
- Turn the VB150 off before you insert a wireless LAN card or a modem card.
- Physically different networks should be used for Ethernet and wireless LAN connections.



 Specify the following settings when Primary call (PPP) is selected in the "Receive and Call".

#### "Dial Method"

Select the type of line to be used when PPP connection is established by outgoing call.

#### "Phone Number"

Set the phone number to be dialed when PPP connection is established by outgoing call. Example: 0312345678

#### "Dial Timeout"

Sets an upper limit on the time you wait for a connection when PPP connection is established by outgoing call.

### "Idle Timeout"

Sets the disconnection time (amount of time that the VB150 can remain connected to the network without communication) when PPP connection is established by outgoing call.

#### "User Name"

Enter the user name to be used when PPP connection is established by outgoing call.

#### "Password"

Enter the password to be used when PPP connection is established by outgoing call.

#### "Confirm password"

Re-enter the password you entered above to confirm the password.

#### PPP

"Use PPP"

Tick this option to allow PPP connections using a modem cards.

#### "Receive and Call"

If Receive only (PPP) is selected, PPP connection will be established by incoming call, and if Primarily Call (PPP) is selected, PPP connection will be established by outgoing call.

#### "Country Selector"

When the global modem is used, select the country where the VB150 will be used. This setting is ignored if the global modem is not used.

#### "Modem max speed"

Select the maximum baud rate as the limit on the modem speed. Normally, there is no need to change this setting. Set a low speed when the line condition is poor.

#### "PPP Local Address"

Sets the local address. If PPP connection is established by incoming call, this address is set for the VB150 side.

### "PPP Remote Address"

Sets the remote address. If PPP connection is established by incoming call, this address is set for the viewer PC or router side.

### "PPP Account List"

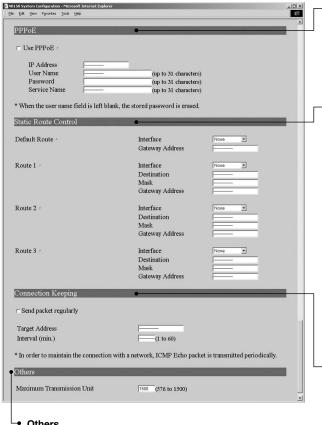
PPP connection is only permitted to accounts with combinations of a name and a password that match those included in this list. (Passwords are not displayed in the list.) If you select an account and click the "Delete" button, the combination of a account name and a password is removed from the list. Up to 10 accounts can be registered on the list.

#### "Add PPP Account"

Use this to add account and password combinations to the PPP account list. Enter the account name and password, and click the "Add" button. The account name can be up to 15 characters including alphanumeric characters, underscores and hyphens. Passwords can consist of up to 15 ASCII text characters (space or printable characters).



- If you are using PPP, take care when entering the phone number. Also, when Primarily Call(PPP) is selected, the VB150 will continue calling to the specified phone number. Be mindful of phone charges that apply when using Primarily Call(PPP).
- If you have selected Primarily Call(PPP), appropriate settings must also be made on the receiving PC.
- If you are using PPP to connect to Windows RAS Server, MS-CHAP cannot be used for authentication.
- Turn the VB150 off before you insert a modem card.



#### Others

"Maximum Transmission Unit"

Enter the maximum transmission unit size to be sent at one time. There is normally no need to change this from 1500.

If you are using ADSL, you may experience increased data transmission efficiency if you slightly lower the value of the setting. When you are using Ethernet, maintain the value at 1500.

#### **PPPoE**

"Use PPPoE"

Tick this check box if you connect using PPPoE (e.g. FLETs ADSL). Once ticked, specify the settings in "User Name", "Password" and "Service Name" specified by your provider.

#### Static Route Control

Route settings are required when communicating with a wide-area network through a router. When using Ethernet or wireless LAN together with PPP, set the route as needed.

"Default Route"

Specify the route that would normally be used. A gateway address is required if a router on the Ethernet or the wireless LAN side is used.

"Route 1-3"

Use this setting if you require connection routes other than the normal route. You can select from Ethernet, wireless LAN, PPP and PPPoE as the interface. Specify the destination route in the Destination and Mask fields. You must specify a gateway address if you are using a router on an Ethernet or wireless LAN network.

#### Connection Keeping

When this is selected, an ICMP Echo packet is transmitted periodically to a specified address in order to maintain the network connection.

"Send packet regularly" Tick this check box to enable this function.

"Target Address" Specify where the packet should be sent.

"Interval (min.)"

In minutes from 1 to 60, specify the interval at which packet should be sent.



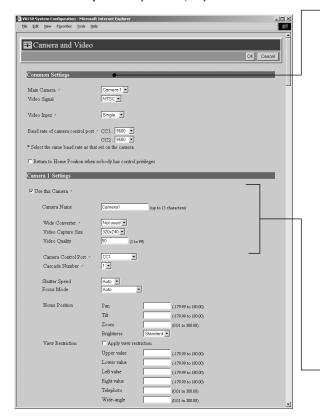
- When directly connecting the VB150 to an ADSL modem, the connection method needs to be PPPoE (e.g. FLETs ADSL).
- For the packet target address in the connection keeping function, we recommend that you consider the impact on traffic conditions and set the IP address that is nearest after the auto dial-up router.

Click the [OK] button to change the settings. To discard the changes, click the [Cancel] button. This returns you to the settings title page.

## **Camera and Video Settings Page**

Use this page to set the camera control parameters and the video capture size and quality.

Using the VB Administration Tools is a convenient way to set the view restrictions and the homeposition ( $\rightarrow$  P. 72, 77).



## Common Settings

"Main Camera"

Sets the camera selected when the VB150 starts up.

"Video Signal"

Select NTSC or PAL. The default setting is NTSC.

"Video Input" (See "Note")

Select Single or Multiple. If Multiple is selected when more than one camera is connected to the VB150, multiple camera video images can be displayed at the same time.

"Baud rate of camera control port CC1/CC2" For CC1 and CC2, select the same baud rate as that set on the camera.

On the VC-C50i/VC-C50iR/VC-C4/VC-C4R/NU-700, the default setting is 9600. There is basically no need to change this.

"Return to Home Position when nobody has control privileges"

The camera is moved to its home position if there is no request for control privileges.  $(\rightarrow P.43)$ 

#### Settings for cameras 1 to 4

The camera1 to 4 correspond to cameras which are connected to V1 to V4. ( $\rightarrow$  P.24, 29)

"Use this Camera"

When you tick this option, this camera is used and the settings below are enabled.

#### "Camera Name"

Used in the camera selection box on the viewers. This setting is required.

#### "Wide Converter"

Always select "Used" when a wide-angle converter (for VC-C50i/VC-C4) is mounted on the camera.

"Video Capture Size"

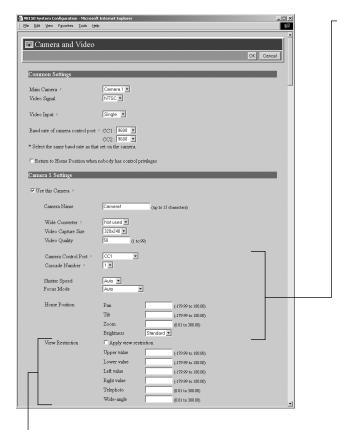
The available settings are 640  $\times$  240, 320  $\times$  240 and 160  $\times$  120.

#### "Video Quality"

Enter a value between 1 and 99. The greater the value, the better the quality. However, since picture data will also be larger, higher-quality pictures may lower the frame rate.



If multiple cameras are connected to the VB150, the bundled viewer software ( $\rightarrow$  P.19) can be used to switch between video images. However, the MV2.1/LE software (sold separately P.21) allows the images to be displayed concurrently. When this software is used, set "Video Input" to "Multiple". The frame rate for each camera is between 3 and 5 fps.



"View Restriction"

If you tick the "Apply view restriction" option, the settings below are enabled. Use this setting to prevent clients from seeing certain camera angles. Using the VB Administration Tools is a convenient way to set the view restrictions ( $\rightarrow$  P.70).

"Upper value, Lower value, Left value, Right value" Sets the extent of the field of view provided to users.

(Specify settings so that the upper value is greater than the lower value and the left value is less than the right value.)

"Telephoto, Wide-angle"

Sets the zoom angles provided to users.

(Specify settings so that the telephoto setting is less than or equal to the wide-angle setting.)

"Camera Control Port"

Select the camera control connector ( $\rightarrow$  P. 24) to which the camera is connected. Select "Not controlled" for cameras that are not connected or not controlled.

#### "Cascade Number"

If cameras are cascade connected, select numbers assigned to the cameras. Numbers in ascending order from 1 are assigned to each camera starting with the first camera connected to camera control connector CC1 and CC2 ( $\rightarrow$  P. 44).

"Shutter speed"

Sets the camera shutter speed.

"Focus Mode"

Sets the focusing mode for the camera.

- When the VC-C50i/VC-C50iR/VC-C4/VC-C4R are used in combination with an outdoor housing, set Focus Mode to "Auto (for domes)," in order to avoid focusing on the wall of the outdoor housing.
- When the NU-700 is used, "Auto (for domes) and "Fixed at infinity" cannot be used.

#### "Home Position"

This is the standard camera position used for picture recording, etc. When this is specified, the camera moves to its home position if there is no request for control privileges ( $\rightarrow$  P. 42).

This setting can also be specified with the "Preset Setting Tool", one of the VB Administration Tools  $(\rightarrow P.77)$ .

"Pan"

Sets the pan position of the camera.

"Tilt"

Sets the tilt position of the camera.

"Zoom"

Sets the value for the camera's angle of zoom.

"Brightness"

Sets the target value for the camera's auto exposure feature. Select "Brighter" if the picture is too dark due to backlight or other factors.



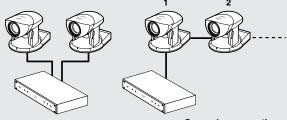
When a view restriction is set, areas outside the restrictions may be captured momentarily if the camera is controlled close to the restriction limits.

Click the [OK] button to change the settings. To discard the changes, click the [Cancel] button. This returns you to the settings title page.



Cascade connections for the VC-C50i/VC-C50iR/VC-C4/VC-C4R

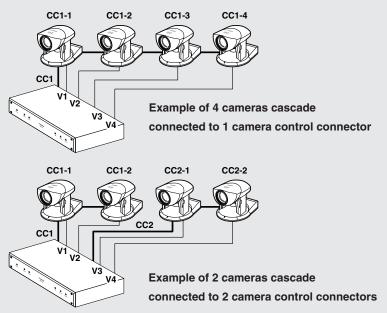
The cascade function of the VC-C50i/VC-C50iR/VC-C4/VC-C4R can be used with the VB150. This enables control of up to 4 cameras from a single VB150. Furthermore, the VC-C50i/VC-C50iR and the VC-C4/VC-C4R can coexist.



Connection to separate terminals

Cascade connection

 When cascade connected, ID numbers in ascending order from 1 are assigned to each camera starting with the first camera connected to camera control connectors CC1 and CC2. Cameras can be connected to video inputs in any desired combination.

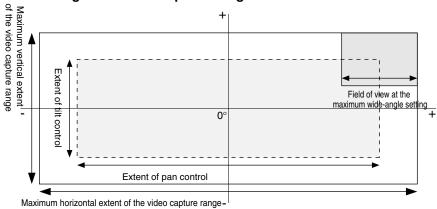


 In cascade connections, if an abnormality occurs with the first camera in the connection, control for all other cameras in the cascade may not work normally.

## View Restriction Settings

You can set the visible range by restricting the camera pan, tilt and zoom ratio (field of view angle) settings. Please use the VB Administration Tools ( $\rightarrow$  P.72) to set view restrictions.

## **■**Controllable Range and Video Capture Range



The view restriction is specified as the visible range. The visible range is larger than the area where pan and tilt can be controlled.

## **■**Controllable Range and Video Capture Range for Each Camera



Controllable range	Angle			
Pan control range	ntrol range -100° to 100°			
Tilt control range	-30° to 90°			
Zoom control range (with wide converter)	2.0° to 41°			
Horizontal video capture range (with wide converter)	-121° to 121°			
Vertical video capture range (with wide converter)	-46° to 106°			



Controllable range	Angle	
Pan control range	-170° to 170°	
Tilt control range	-90° to 10°	
Zoom control range	2.0° to 41°	
Horizontal video capture range	-180° to 180°	
Vertical video capture range	-106° to 26°	



Controllable range	Angle
Pan control range	-100° to 100°
Tilt control range	-30° to 90°
Zoom control range (with wide converter)	3.7° to 47° (4.6° to 61°)
Horizontal video capture range (with wide converter)	-124° to 124° (-131° to 131°)
Vertical video capture range (with wide converter)	-48° to 108° (-53° to 113°)



Controllable range	Angle
Pan control range	-170° to 170°
Tilt control range	-90° to 10°
Zoom control range	3.7° to 47°
Horizontal video capture range	-180° to 180°
Vertical video capture range	-108° to 28°



Controllable range	Angle
Pan control range	-170° to 170°
Tilt control range	-50° to 30°
Zoom control range	0.5° to 47°
Horizontal video capture range	-180° to 180°
Vertical video capture range	-67° to 47°



Do not attempt to manually change the camera head angle of the VC-C50i/VC-C50iR/VC-C4/VC-C4R/NU-700. If the camera head is accidentally moved by hand or other objects touching it, be sure to reboot the VB150. ( $\rightarrow$  P.59)



## **About View Restriction**

• The pan and tilt range changes with the zoom ratio (field of view angle).

When you set the view restriction, the angles of camera movement are automatically restricted.

If the zoom is set to wide-angle and the angle of camera movement remains the same, video capture extends beyond the permitted range.

Consequently, the angle of movement is automatically reduced.

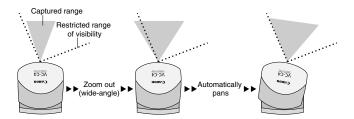
Restricted range of visibility

Angle of camera movement

Camera

Captured range

If the visible range is exceeded because the zoom is set to wide range, the camera angle (pan, tilt) will be adjusted automatically.

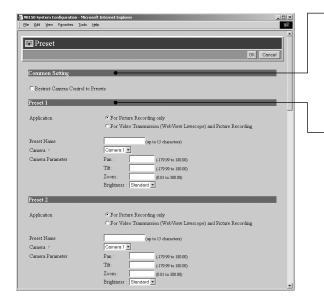


- If the visible range is restricted, the zooming range may also be restricted.
- When a view restriction is set, areas outside the restrictions may be captured momentarily if the camera is controlled close to the restriction limits.

## **Preset Settings Page**

Use this page to specify the settings for preset camera positions provided to users.

Using the VB Administration Tools is a convenient way to set presets ( $\rightarrow$  P.77).



#### Common Setting

"Restrict Camera Control to Presets"
Camera control by using the Viewer for
PC and the Viewer for Java can be
restricted to the preset angles specified in
Preset 1-8

## Presets 1-8 Up to 8 presets can be specified.

#### "Application"

Use these options to specify whether this preset can be used only for picture recording ( $\rightarrow$  P.48) or is also made available in the viewers. If it is also provided in the viewers, always specify the preset name.

#### "Preset Name"

Enter a name consisting of up to 15 alphanumeric characters.

#### "Camera"

Selects the camera for which the preset position is set.

#### "Camera Parameter"

Use this to set the video capture settings to be provided.

#### "Pan"

Sets the pan position of the camera.

#### "Tilt"

Sets the tilt position of the camera.

### "Zoom"

Sets the value for the camera's angle of zoom.

#### "Briahtness"

Sets the target value for the camera's auto exposure feature. Select "Brighter" if the picture is too dark due to backlight or other factors.

Note

Changes in the preset settings are not applied to the viewer while it is connected.

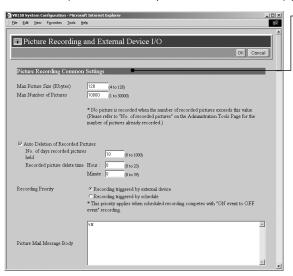


- Presets can be set visually and more easily from the VB Administration Tools.
   Please use the VB Administration Tools for the settings (→ P.77).
- If "Restrict Camera Control to Presets" is selected, the presets can be displayed alone without displaying the camera control GUI on the Viewer for Java (→ A Guide to Creating Web Pages for Video Distribution P.9).

Click the [OK] button to change the settings. To discard the changes, click the [Cancel] button. This returns you to the settings title page.

## Picture Recording and External Device I/O Settings Page

Use this page to specify the operating condition for the picture recording function. Settings on this page can be used to record still pictures in response to inputs from an external device (sensor, etc.) and based on a predetermined schedule (up to **30,000** pictures).





- Still pictures are recorded on a flash memory card (sold separately). Even if the settings on this page are specified, the picture recording function does not perform if there is no memory card in the VB150 slot.
- The data size that can be recorded for a still picture is less than or equal to the size specified in the "Max Picture size". If this amount is exceeded, the picture will not be recorded. The number of pictures that can be recorded depends on flash memory card capacity, however the maximum number of pictures that can be recorded is 30,000.

#### Picture Recording Common Settings

"Max Picture size"

Sets an upper limit for the picture size. If the picture data size exceeds this value, pictures will not be recorded.

"Max Number of Pictures"

Sets an upper limit for the number of pictures to be recorded. This value can be from 1 to 30,000. The number of recorded pictures can be confirmed on the Administration Tools Settings Page ( $\rightarrow$  P.59).

"Auto Deletion of Recorded Pictures"
Recorded pictures can automatically be deleted on the specified time after the specified number of days has passed. Check this setting before you start recording pictures.

"No. of days recorded pictures held" Specifies how many days the recorded picture data will be kept in a flash memory card. The recorded data which exceeded the days specified in "No. of days recorded pictures held" is erased daily at the time specified in "Recorded picture delete time". We recommend that you use VBCollector for saving recorded pictures to a PC (

 Picture files are placed in the /card /images directory.

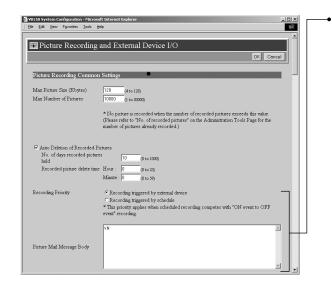
A Flash Memory card is required for recording pictures.

Files created at yyyy/mm/dd HH:MM:SS:CC (CC = 1/100th sec. units) are placed in the yyyymmdd/HHQQ (QQ = 15-min. units) subdirectory under the name "HHMMSSCC.jpg".

"Recorded picture delete time"
Sets the time at which picture files are deleted.



- The data size for a still picture varies depending on the settings for video capture size and video quality (→ P.42), and the subject. As a guide, approximately 5-10 KB is the standard when the video capture size is set to 320 × 240 and the video quality is set to 30 (In some cases this may be exceeded). To check the amount of data for a still picture, select "View" "Video information" from the menu after you start up the Viewer for PC then check the "Size" value.
- When recording pictures, it is convenient to do so in combination with VBCollector, which automatically collects recorded still pictures.
   (→ ▲ Picture Recording User's Guide P.13)



"Recording Priority"

When there is a conflict between the timing of recording specified in a schedule and "Recording between ON event and OFF event", this setting specifies which recording takes priority. Tick "Recording triggered by external device" or "Recording triggered by schedule" (Recording triggered by external device P.50, Recording triggered by Schedule P.52). The factory default setting gives priority to "Recording triggered by external device".

"Picture Mail Message Body"

When pictures that were recorded using "Recording triggered by external device" ( $\rightarrow$  P.50) are sent via e-mail, the information given here is sent as the message body. You can specify ASCII text (spaces or printable characters, excluding quotation marks) or parameters denoted by percentage symbols (%). Be sure to make the "Picture recording and output: triggered by external device" settings ( $\rightarrow$  P.50) and "Mail" settings ( $\rightarrow$  P.57).

 With picture recording triggered by schedule, (→ P.52) recorded pictures cannot be sent as
 Picture Mail

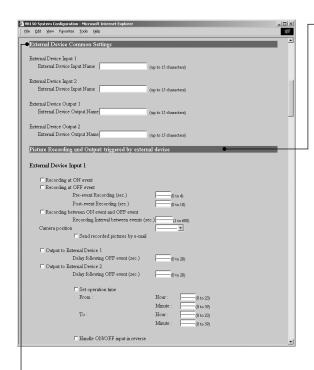
## Specifying parameters in Picture Mail messages

By using a percentage symbol (%), the parameters listed below can be included in the body of a Picture Mail message.

Parameter	Description	Values
%n	Reason for shot (number)	1 (external device input 1), 2 (external device input 2), 129 (Motion detection)
%N	Reason for shot (text)	"External Device Input Name" ("External Device Input 1/2" if omitted), Motion detection
%X	Image width	No. of horizontal pixels
%Y	Image height	No. of vertical pixels
%Q	Video quality	1-99
%C	Camera number	1-4
%D	Camera name	"Camera Name" setting
%P	Pan position	-179.99 to 180.00
%T	Tilt position	-179.99 to 180.00
%Z	Zoom position	0.01 to
%V	Camera server	"Device Name" setting (or VB150)
%y	Year of shot	1999-2037
%m	Month of shot	1-12
%d	Date of shot	1-31
%w	Day of shot	0-6 (correspond to Sun. to Sat.)
%H	Hour of shot	00-23
%M	Minute of shot	00-59
%S	Second of shot	00-59
%z	Time zone of shot	-1200 to +1300
%a	Weekday of shot	Sun, Mon, Tue, Wed, Thu, Fri, Sat
%b	Name of month of shot	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec
%t	Tab	
%q	1 11 1	
%%	'%'	

<sup>\*</sup> For undefined characters, the '%' is deleted.

<sup>\*</sup> With the exception of %t, %q and %%, you cannot use the same parameter multiple times on the same line. (The parameter (including '%') is ignored from the second instance onwards.)



#### External Device Common Settings

When using WebView Livescope MV Ver. 2.1 (sold separately  $\rightarrow$  P.21), if these settings are made, all names will be applied to MV. Since these settings are not applied to the viewers ( $\rightarrow$  P.19), these settings are only required if MV is used.

"External Device Input 1/2"

"External Device Input Name"
Enter on external device input name consisting of up to 15 alphanumeric characters.

"External Device Output 1/2"

"External Device Output Name"
Enter on external device output name consisting of up to 15 alphanumeric characters.



Tip

Use the Motion Detection Setting Tool ( $\rightarrow$  P.82) for picture recording and external device control based on motion detection.

## Picture Recording and output : triggered by external device

Use this setting to operate the picture recording function when recording is performed in conjunction with an external device such as a sensor or switch.

For a detailed example of actual operation, see ( $\rightarrow A$  Picture Recording User's Guide P.1).

### "External Device Input 1/2"

Up to 2 recordings from external devices can be set.

## "Recording at ON event"

Tick this option to record pictures when an "ON" event is detected from an external device.

#### "Recording at OFF event"

Tick this option to record pictures when an "OFF" event is detected from an external device.

#### "Pre-event Recording (sec.)"

When you want to record the pictures that proceeds an ON or OFF event, use this setting to enter the required number of seconds.

#### "Post-event Recording (sec.)"

When you want to record the pictures that follows an ON or OFF event, use this setting to enter the required number of seconds.

"Recording between ON event and OFF event" Tick this option to record pictures for as long as an "ON" status continues from the external device.

"Recording Interval between events" Records pictures at set intervals between ON and OFF event. Specify a value between 1 and 600 seconds as the sampling interval.

#### "Camera Position"

Selects the camera angle used when pictures are recorded. Select "Not specified", "Home 1" to "Home 4" or "Preset 1" to "Preset 8".

"Send recorded pictures by e-mail" You need to make "Mail" settings ( $\rightarrow$  P.57)

#### "Output to External Device 1/2"

Tick this check box when you want to control output to an external device. Keep in mind that output to an external device may not always be possible from Admin Viewer or WebView Livescope MV Ver. 2.0/2.1.

"Delay following OFF event (sec.)"
When controlling output to an external device and output must retain ON after input is set to OFF, use this setting to specify a delay of up to 20 seconds.

## "Set operation time"

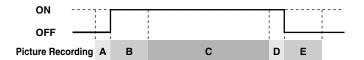
When you tick this option, input from an external device is limited to the operation time specified below. Enter the start time and end time for the intervals during which external input is acceptable.

"Handle ON/OFF input in reverse" On some devices, ON and OFF are reversed. Use this setting for such devices.

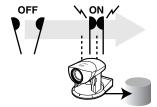


## **Picture Recording Triggered by External Devices**

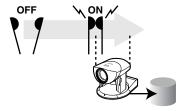
Tip



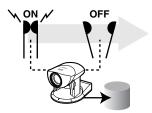
 Picture recording triggered by an external device can be performed based on the timing of ON and OFF events or by recording pictures between ON event and OFF event.



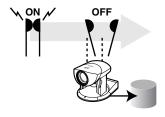
A: Pre-event recording for an ON event (Fixed at 1 sec. intervals. -4 to 0.)



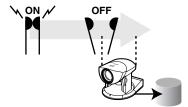
B: Post-event recording for an ON event (Fixed at 1 sec. intervals. 0 to 10.)



C: Recording between ON event and OFF event (exclude B and D)



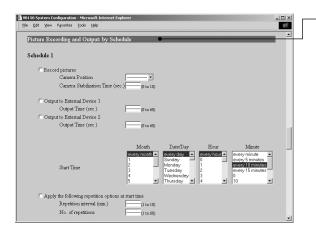
D: Pre-event recording for an OFF event (Fixed at 1 sec. intervals. -4 to 0.)



E: Post-event recording for an OFF event (Fixed at 1 sec. intervals. 0 to 10.)

- For A and D, recording is controlled to the pre-event recording time, and for B and E, it is controlled to the post-event recording time.
- In the case of C, the "Recording between ON event and OFF event" setting is applied (between 1 and 600 seconds).

For example, if "Pre-event recording" is set to 2 seconds and "Post-event recording" is set to 5 seconds, 7 pictures will be recorded in total.



## Picture Recording and Output: by Schedule

Use this setting to operate the picture recording function based on a schedule set beforehand. For a detailed example of actual operation, see (→♠ Picture Recording User's Guide P.3).

"Schedule 1 to 4" Up to 4 schedules can be specified.

"Record pictures"

When this option is ticked, picture recording is performed based on the settings below.

#### "Camera Position"

Selects the camera angle used for picture recording. Select "Not Specified", "Home 1" to "Home 4" or "Preset 1" to "Preset 8".

"Camera Stabilization Time (sec.)"
When the camera moves to the specified position, this setting specifies the delay time for the camera to stabilize before still picture is captured.

"Output to External Device 1/2" Select this check box if output to external device 1/2 is to occur at the time given below.

"Output Time (sec.)"

Sets the duration for which output is ON at the specified time. If zero is specified, output is only ON momentarily.

"Start Time"

Sets the start time for picture recording and output to an external device triggered by the schedule.

"Apply the following repetition options at start time"

Picture recording and output to the external device after the Start Time is repeated at the number of times specified in "Repetition interval (min.)" and "No. of repetitions".

Specify "No. of repetitions" between 1 and 60 at the interval.

Specify "Repetition interval (min.)" between 1 and 10 minutes.



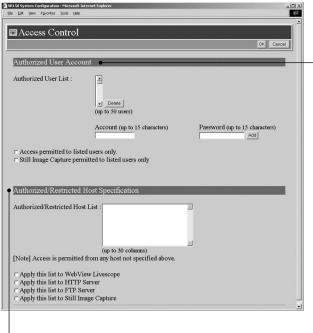
Tip

- In Windows is being used, multiple numbers of schedule start times can be selected by clicking while holding down the Ctrl key. A series of items can be selected by pressing SHIFT while clicking on the first and last item in the series. For example, it is possible to set the schedule "from the 10th to the 15th of February and March at 10 and 30minutes past every hour". However, the selection method varies with the environment being used.
- When the start time comes, the repetitions that started at the previous start time are stopped even when the number of repetitions has not yet been reached.
- If a camera position is specified and the camera cannot be moved to that position, no picture is recorded. Note that this may result in no picture being recorded when the camera is controlled using the Admin Viewer, for example.

Click the [OK] button to change the settings. To discard the changes, click the [Cancel] button. This returns you to the settings title page.

## **Access Control Settings Page**

From this page, you can permit access to the VB150 to specific authorized users only, and you can control who may and may not access from a specific host. In either case, access by restricted user is prohibited.



#### Authorized/Restricted Host Specification (→ P.54)

### "Authorized/Restricted Host List"

In this list, you can describe the details of how access from the hosts is permitted or denied.

See the next page for the description format.

## "Apply this list to WebView Livescope"

When this is selected, the list is applied to the host that can access the WebView Livescope server. Use this when you want to restrict access from the Viewer for PC or Viewer for Java etc.

#### "Apply this list to HTTP server"

When this is selected, the list is applied to the host that can access the HTTP server. In this case, control extends also to the Viewer for Java, etc.Use this when you want to restrict access not only from the viewer but also to the Web page.

#### "Apply this list to FTP server"

When this is selected, the list is applied to the host that can access the FTP server.

#### "Apply this list to Still Image Capture"

When this is selected, the list is applied to the host that can capture still images.

### **Authorized User Account**

#### "Authorized User List"

Only users registered in this list are permitted to connect to the VB150. **Up to 50 users can be registered.** 

#### "Delete"

Select a user account from the Authorized User List and click the delete button to remove the user from the list.

#### "Add"

You can add authorized users to the list by entering their account name and password.

"Access permitted to listed users only"
When this option is ticked, only users registered in the list are permitted to connect to the VB150.

 Access using the viewer Ver.3.1 or before and WebView Livescope MV Ver.1.0 is prohibited.

"Still Image Capture permitted to listed users only"

When this option is ticked, only users registered in the list are permitted to capture still images.

It is useful when distributing video as a still picture. See ( $\rightarrow A$  Guide to Creating Web Pages for Video Distribution P.20)

Click the [OK] button to change the settings. To discard the changes, click the [Cancel] button. This returns you to the settings title page.

## **Authorized/Restricted Host List Descriptions**

The Host Restriction function applies to hosts running client applications such as viewer. Access restrictions are imposed using a list made up of one or more entries written using the format described below.

## **Listing Format**

## [!] addr [-addr2]

- "addr" is written in standard IP address format.
- Because the IP addresses in the "addr" and "addr2" parameters define the range of IP addresses, if an IP address A is higher than "addr" or lower than "addr2", A is included in the addr-addr2 range. The addr2 parameter can be omitted, in which case it is taken to be the same value as addr.
- For a host IP address A for which access permission is to be authorized or restricted, the first entry that includes A is requested from the top of the list of authorized/restricted hosts. If the entry obtained begins with "!", access is denied. If not, access is authorized.
- Redundant or contradictory entries included in the list are automatically deleted.
- If the given address does not belong to any of the entries, access is authorized.

## **Listing Guidelines**

If the list of authorized and restricted hosts contains an error, access that was originally permitted may subsequently be denied. To avoid this problem, compile the lists very carefully using the examples below as a guide.

### Example 1: To prohibit access from a host

!172.20.0.0

Access from the host with an IP address of 172.20.0.0 is prohibited.

### Example 2: To prohibit access from hosts in a given address range

!172.20.0.0-172.20.0.20

Access from hosts with IP addresses from 172.20.0.0 to 172.20.0.20 is prohibited.

## Example 3: To authorize access from hosts in a given address range while prohibiting access from other hosts

172.20.0.10-172.20.0.12

10.0.0.0-255.255.255.255

Access is only authorized from hosts with IP addresses from 172.20.0.10 to 172.20.0.12.

# Example 4: To prohibit access from hosts in a given address range while permitting access from one host within that range

172.20.0.10

!172.20.0.0-172.20.0.20

Access from hosts with IP addresses from 172.20.0.0 to 172.20.0.20 is prohibited, except for the host at 172.20.0.10, from which access is permitted.

# Example 5:To prohibit access from hosts in a given address range while permitting access from a range of hosts within that range

172.20.0.10-172.20.0.15

!172.20.0.0-172.20.0.20

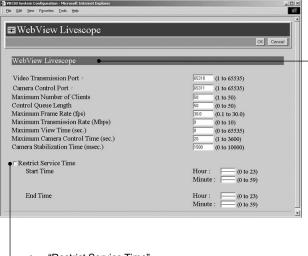
Access from hosts with IP addresses from 172.20.0.0 to 172.20.0.20 is prohibited, except for the hosts with addresses between 172.20.0.10 and 172.20.0.15, from which access is permitted.



- If you do not make a list, access is permitted to all hosts.
- If the list provided prohibits access for all hosts, the Host Restriction function is disabled and access is permitted to all hosts.
- To prohibit access over HTTP connection via a proxy server, the address of the proxy server must be set.
- If you set the host restriction incorrectly, access to the settings page itself may be denied. In this event, the problem can only be recovered by restoring the factory default settings.

## WebView Livescope Settings Page

Use this page to specify settings such as frame rate and camera control time.



"Restrict Service Time"

When you want to set video distribution time for the viewers ( $\rightarrow$  P.19), tick this option and specify the Start and End times.

The Admin Viewer can be used to display video at times other than the time specified. ( $\rightarrow$  P.94)

 If you want to restrict video service time, use "Restrict Service Time".

Tip

• The "Maximum Frame Rate" and "Maximum number of Clients" settings are useful in limiting the volume of network traffic.

#### WebView Livescope

"Video Transmission Port"

Sets the TCP port number for the video transmission protocol. Enter a value between 1 and 65535. The default setting is 65310. Normally, there is no need to change this setting.

#### "Camera Control Port"

Sets the TCP port number for the camera control protocol. Enter a value between 1 and 65535. The default setting is 65311. Normally, there is no need to change this setting.

#### "Maximum Number of Clients"

Sets the maximum number of clients that can be connected simultaneously from the viewers ( $\rightarrow$  P.19). Enter a value from 1 to 50.

#### "Control Queue Length"

Sets the length of the queue when multiple clients are waiting for control privileges under the viewer.

Enter a value between 0 and 50. The maximum number is 50. When set to "0", only the Admin Viewer is permitted to control the camera

### "Maximum Frame Rate (fps)"

Sets the maximum number of frames captured per second. The maximum frame rate is 30.0 fps and enter a number between 0.1 and 30.0.

## "Maximum Transmission Rate (Mbps)"

Sets the upper limit of the volume of data to be transmitted in one second. This function is used to reduce the load on the network. The maximum is 10Mbps and enter an integer of 0 to 10Mbps. 0 is limitless.

#### "Maximum View Time (sec)"

Sets the maximum time the client can view video using the viewer. Enter a value between 0 and 65535. A setting of 0 disables the time limitation.

"Maximum Camera Control Time (sec)" Sets the maximum time for which camera control privileges can be maintained under the viewer. Enter a value between 1 and 3600.

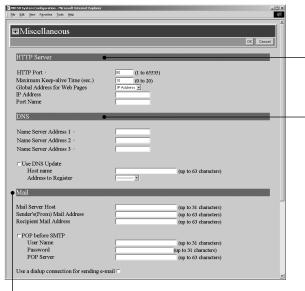
#### "Camera Stabilization Time"

When the GetStillImage command (→ Guide to Creating Web Pages for Video Distribution P.21) has been requested, this setting specifies the delay to allow the camera to stabilize before a still picture is captured. Enter a value between 0 and 10000. The maximum delay is 10000 milliseconds.

Click the [OK] button to change the settings. To discard the changes, click the [Cancel] button. This returns you to the settings title page.

## **Miscellaneous Settings Page**

Use this page to specify various other settings.



#### Mail

Recorded pictures and log messages are emailed to the specified recipient address via the specified mail forwarding server using the SMTP.

"Mail Server Host"
Specifies the SMTP server.

"Sender's (From) Mail Address" Specifies the mail sender.

"Recipient Mail Address" Specifies the mail recipient.

#### "POP before SMTP"

Set up where the mail host server requires POP user authentication. Specify the settings in "User Name" and "Password" necessary for authentication, and enter the POP server address in "POP Server".

"Use a dialup connection for sending e-mail"
Selecting this checkbox establishes a dialup connection
when mail is sent.

#### HTTP Server

#### "HTTP Port"

Sets the TCP port number for the HTTP. Enter a value between 1 and 65535. The default setting is No. 80.

### "Maximum Keep-alive Time"

Sets the time for which keep-alive connection can be maintained. The maximum time is 20 and enter a value from 0 to 20. If the setting is 0, keep-alive connections are prohibited.

#### "Global Address for Web Pages"

If a private address has been set in the VB150 and you want to use the router's NAT functions to have a fixed global address for the VB150 (→ ♣ Guide to Creating Web Pages for Video Distribution P.22), enter a global address here, and this will let you view sample pages (→ ♣ Guide to Creating Web Pages for Video Distribution P.3).

If "IP Address" is selected, enter the IP address specified in "IP Address". If "Host Name" is selected, the "Host Name" and "Zone Name" specified in "DDNS" are used, so perform the necessary settings in "DDNS".

#### DNS

Sets the domain name server address.

"Name Server Address 1 to 3" Enter the addresses.

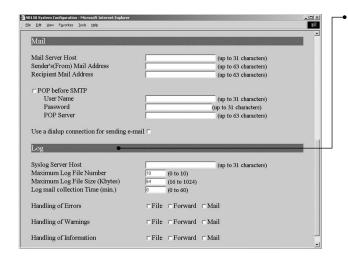
Enter the addresses from the top down. If you are only registering 1 or 2 addresses, the remaining fields can be left blank.

#### "Use DNS Update"

Register the host name when operating the VB150 with "Auto Setting (DHCP)" ( $\rightarrow$  P.38).



- A portion of the sample pages will not function if "HTTP Port" is set to a number other than 80 (→ ♣ Guide to Creating Web Pages for Video Distribution P.18).
- To send mail using a dialup connection, specify the appropriate settings in "PPP Call Settings" (→ P.40). You can also set "Receive only (PPP)" in the "Receive and Call" setting. In this case, a PPP connection is only established when mail is sent.



#### Log

"Syslog Server Host" Sets the Syslog server.

"Maximum Log File Number" Sets the maximum number of log files saved as back-up files. Enter a value between 0 and 10. The maximum number is 10.

"Maximum Log File Size (K bytes)" Sets the maximum log file size. Enter a value between 16 and 1024. The maximum size is 1024 KB.

"Log mail collection time (min.)" Log messages containing errors. warnings and other information are collected for a set period beginning from the first log entry. This setting specifies that collection period. Enter a value between 0 and 60. The maximum time is 60 minutes.

"Handling of Error/Warning/Information" Tick the "File" option to save log messages to files.

Tick the "Forward" option to send the log messages to the host specified in the Syslog Server Host.

Tick the "Mail" option to send the log messages by email.



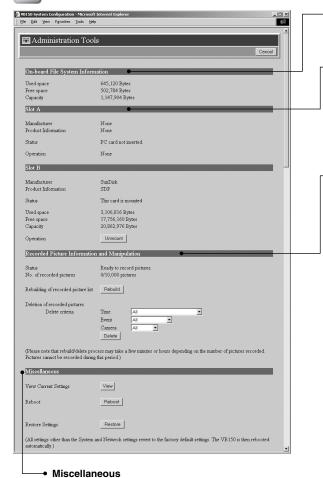
- The log message will be stored on the flash memory card (sold separately). Even if settings are made for this page, this function will not operate unless a flash memory card is inserted into the slot on the VB150.
- See Log Messages in the "A Guide to Creating Web Pages for Video Distribution" (CD-ROM) for log message details.
- The log message for external device input (sensor, etc.) is A023. If the "Log mail collection time" has been set, this message will be sent after a specified waiting time.



- Log files will be created in the /card/logs directory (a flash memory card is required to save log messages in a file). The most recent log file will be saved as "log". The log file size is specified in "Maximum Log File Size" and if the log file exceeds the specified size, back-up files named "log.0..." are created.
- Only the number of back-up log files that are specified in "Maximum Log File Number (N+1)" will remain. These will be listed in the order, "log.0, log.1,..., log.N". For example, if "Maximum Log File Number" is set to 10, files named "log.0, log.1,..., log.9" will be created in the same directory. The file named "log.0" is the most recent back-up file (the most recent log file is listed as "log").
- Log files will be overwritten in order after the number of files specified in "Maximum Log File Number" have been created.

Click the [OK] button to change the settings. To discard the changes, click the [Cancel] button. This returns you to the settings title page.

## **Administration Tools Settings Page**



"View Current Settings"
Displays a list of current settings.

"Reboot" Reboots the VB150.

"Restore Settings"

All but the System settings and Network settings will be restored to the factory default settings. Click "Restore"-"OK" buttons and the VB150 will be rebooted automatically.

### **On-board File System Information**

The On-board File System displays the used space, free space and capacity (used space + free space) in bytes.

#### Slot A/B

If a PC card, used for communications and storage, is inserted into the slot, the "Manufacturer" and "Product Information" is displayed. Depending on the card type and its status, the operation buttons are displayed and the card status can be controlled. The card slots are labelled A and B from the bottom upwards (→ P.23).

## Recorded Picture Information and Manipulation

This section displays the status of recorded picture processing and the number of recorded pictures. The maximum number of pictures that can be recorded is 30,000. Under certain circumstances, the "Rebuild' button for "Rebuilding of recorded picture list" and the "Delete" button for "Deletion of recorded pictures" may be displayed, and if the pictures cannot be recorded the reason will be displayed.

"Rebuilding of recorded picture list" Normally, there is no need to reconstruct the picture list. Click "Rebuild" button if you have removed a memory card and modified the content of that memory card (erased files, etc.) on another PC.

"Deletion of recorded pictures" Deletes pictures recorded on a card. Specify the delete criteria below and then click the "Delete" button.

### "Time"

Select the period of time following the recording of the pictures after which the pictures are deleted.

### "Event"

Select whether the pictures to be deleted are those where recording was performed in response to inputs from an external device, according to a schedule or motion detection.

#### "Camera"

Select camera by which the pictures were recorded.

You can also select a combination of Time, Event and Camera.



- We recommend that you make a note of current server settings before you
  restore the default settings in "Restore Settings" (→ P.114, 115).
- While the factory defaults reset switch can also be used to restore the factory default settings, note that this resets all the settings (→ P.112).

Click the [Cancel] button to exit from this page. This returns you to the settings title page.



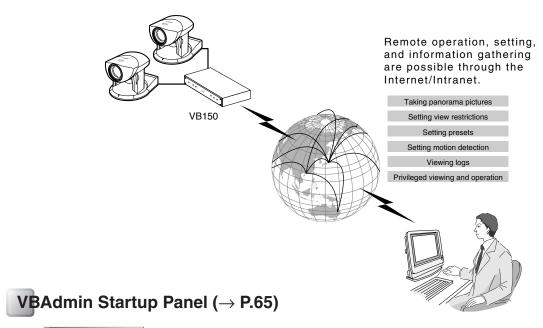
# **VB Administration Tools**

This chapter describes how to use the VB Administrator Tools in order to create panoramas, set view restrictions, make presets, set motion detections, view logs, and use the Admin Viewer. Although view restriction and preset settings can be made following the procedures described in Chapter 3, the VB Administration Tools makes it easier to adjust these settings.

## **Overview of VB Administration Tools**

VB Administration Tools is an application that simplifies the management and operation of the VB150.

VB Administration Tools comprises "VBAdmin Startup Panel" and "Panorama Creation Tool," "View Restriction Tool," "Preset Setting Tool," "Motion Detection Setting Tool," "Log Viewer," and "Admin Viewer" applications. Operations such as setting the VB150 or viewing pictures from a remote location with special privileges, checking operating status or obtaining logs are easily performed through the Internet or Intranet.





This is the main panel of VB Administration Tools. The tools are started up from this panel.

Install VB Administration Tools first from the supplied CD-ROM. (  $\rightarrow$  P.63)

## Panorama Creation Tool (→ P.67)



This tool is used to take or create panorama pictures.

## View Restriction Tool ( $\rightarrow$ P.72)



This tool makes it easy to adjust view restrictions. Restrictions can be set by operating the mouse while referring to panorama previews.

## **Preset Setting Tool (→ P.77)**



This tool makes it easy to adjust preset camera positions and set the home position. Presets can be set by operating the mouse while referring to panorama previews.

## **Motion Detection Setting Tool (→ P.82)**



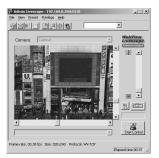
This is a tool for specifying the Motion Detection function settings. It allows you to set the sensitivity while monitoring the motion detection location and the motion detection conditions, and also allows scheduled operation, etc.

## Log Viewer (→ P.91)



This tool enables viewing of operation status logs that are output to the VB150.

## Admin Viewer (→ P.94)



This tool has a special privileges function aimed at administrators of the VB150. Use it when setting presets, view restrictions, etc.

# **Installing VB Administration Tools**



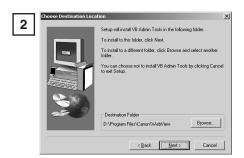
When using the VB Administration Tools, it is recommended that you have Microsoft Internet Explorer 6.0 (SP1a) or later installed on your PC.

### To Install...



If any other applications are running, please exit them before installation.

Load the supplied CD-ROM into the CD-ROM drive. Double-click "AdmSetup.exe" on the CD-ROM to start up the installer. Click the Next button.



Specify the target directory for the installation and click the Next button.

If you have no special directory preference, just click Next.



Specify the menu name to be registered in the Program menu of the Start button, then click Next.



Check the settings and items you have selected thus far, and click Next. The installation will proceed by copying files and making registry settings, etc.





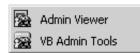
Click Finish to complete the installation.





VB Admin Tools

Admin Viewer



When installation is complete, two icons are created on the desktop: "VB Admin Tools" and "Admin Viewer".

Also, When [Program] - [WebView Livescope] is selected from the Start menu, two shortcuts are created in the same way.



VB Administration Tools cannot be installed or operate normally in machines where the VB150-related applications listed below have been installed. Please uninstall these applications before installing VB Administration Tools:

- VB Administration Tools Ver.1.0/1.1
- WebView Livescope Helper Viewer Ver. 3.1 or earlier
- WebView Livescope Camera Server
- WebView Livescope Manager
- WebView Livescope MV Manager Ver. 1.0
- WebView Livescope MV Station Ver. 1.0

# **Starting Up VB Administration Tools**

VB Administration Tools can be started up using the icon created on the desktop or by selecting it from the Start menu.

### To Start Up...

1

Starting up from the desktop icon



VB Admin Tools

Starting up from the Start menu



When starting up tools from the VBAdmin Startup Panel, double click the VB Admin Tools desktop icon or select VB Admin Tools from the Start menu.



When VB Administration Tools starts up, the Server Setting dialog box appears. To use VB Administration Tools, it must first be connected to the VB150. Enter the required information in the fields and click OK.

## ■ Host Name (→ P.38)

Specify the IP address or host name of the VB150.

Cancel

#### ■ Administrator Account (→ P.37)

Enter the administrator account that has been set in the VB150. (The default setting is "root".)

#### ■ Administrator Password (→ P.37)

Enter the administrator password that has been set in the VB150. (The default setting is "VB150".)

#### **■** HTTP Port (→ P.57)

Enter the HTTP port number that has been set in the VB150. (The default setting is 80.)

### ■ URL for settings ( $\rightarrow$ P.37)

Enter the "path" component for the settings title page that has been set in the VB150. (The default setting is "admin".)

#### ■ Proxy

\*Please consult with the network administrator for proxy settings.

#### [Use HTTP Proxy Server]

Select this item if the connection to the VB150 is to pass through a proxy server.

### [Host Name]

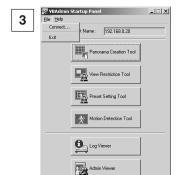
Specify the host name or IP address of the proxy server.

### [Port]

Enter the port number of the proxy server. (The default setting is 8080.)

### [Use HTTP Proxy Server]

Click to automatically gather proxy server information set in Internet Explorer.



The VBAdmin Startup Panel starts up. The six tools---Panorama Creation Tool, View Restriction Tool, Preset Setting Tool, Motion Detection Setting Tool and Log Viewer, and Admin Viewer---can be started up from the Startup Panel by clicking on each button.



Exit

If the connection is disconnected after the VB Admin Startup Panel has started up, choose Connect from the File menu. The Server Setting dialog box then appears.

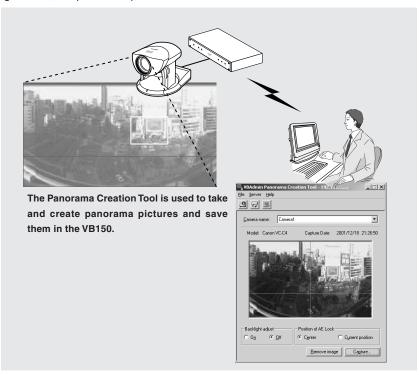


- The Panorama Creation Tool, View Restriction Tool, Preset Setting Tool and Motion Detection Setting Tool cannot be started up simultaneously. Log Viewer and Admin Viewer can be started up at the same time.
- If the connection to the VB150 is made through a proxy server, the Panorama Creation Tool, Log Viewer, and Admin Viewer cannot be used.

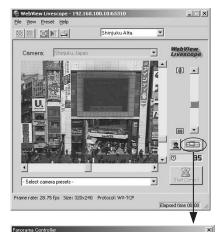
# **Panorama Creation Tool**

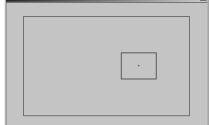
The Panorama Creation Tool is used to take and create panorama pictures of the camera connected to the VB150.

After being created, the panorama picture can be viewed when accessed from the viewer.

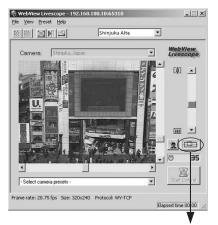


## Without a panorama picture





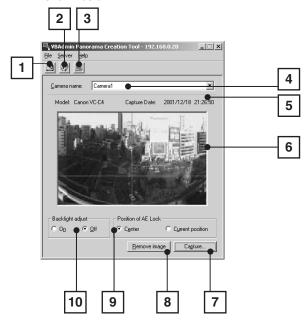
## With a panorama picture





## **Panorama Creation Tool Display Screen**

An overview of the functions of the GUI displayed when the Panorama Creation Tool starts up is shown below.



- Display Connect Information button (→ P.71)
  Displays the VB150's connection information in a dialog box.
- Reload Camera Information button
  Loads camera information and
  panorama information. If VB150
  settings were changed after this tool
  was started up, this button can be
  used to get the latest information.
- Update Panorama Image button
  (→ P.70)

  Sends panorama pictures to the
  VB150 and reloads them. After taking
  a panorama shot, be sure to click
  this button.
- Camera Selection box
  In this selection box, cameras for
  capturing panorama pictures can be
  changed or selected from the cameras
  connected to the VB150.

Camera model and captured date display

The model of camera currently

The model of camera currently connected and the date the panorama picture was captured, if one was captured, are displayed here.

- Panorama picture display
  Shows the panorama picture that was captured.
- Capture button (→ P.69)Captures panorama pictures.
- Remove image button (→ P.70)
  Deletes panorama pictures.
- Position of AE Lock switching
  Switches AE lock position between
  "Center" and "Current position". The
  AE Lock function captures pictures
  based on the brightness of the
  selected position.
- Backlight adjust switching
  Adjusts backlight when "On" is selected. When switched on, it is effective on images that are dark due to backlight.



Since the range that can be captured varies with the model of camera, the display ranges of the panorama pictures are different.



VC-C4 panorama picture



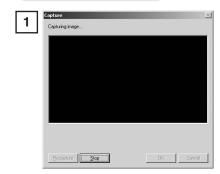
VC-C4R panorama picture

## **Capturing Panorama Pictures**



The entire panorama picture area is displayed during capturing. If the VB150 is accessed from the viewer and pictures are viewed, even when view restrictions ( $\rightarrow$  P.42, 72) have been set, there is a possibility that third parties that were originally not intended to see the pictures may see them. Please keep this sufficiently in mind when capturing and displaying panorama pictures.

#### To Capture...



Capture X

Becklure Step OK Curcel

In the Camera Selection box, select the camera to be used for capturing, select the AE lock position and whether or not to use backlight adjustment, then click the Capture button.

\* The following dialog appears when NU-700 ( $\rightarrow$  P.21) is used.



The capturing process takes approximately 5 minutes in Quick Mode and 30 minutes in High-quality Mode.

Capturing starts. To stop capturing while it is in progress, click the Stop button.



When capturing ends and the picture is satisfactory, click OK.

Panorama creation can be discarded, or the AE lock position or backlight adjustment settings can be changed by clicking Cancel button. When clicked, the captured picture is discarded and the initial screen returns ( $\rightarrow$  P.68).

To capture the picture again, click Re-capture. Or, a square section in the displayed grid can be captured again by double-clicking on that section.

## **Updating/Deleting Panorama Pictures**

When capturing ends, the panorama picture is reflected when it is sent to the VB150 and loaded.

### To Update...



Click the Update Panorama Image button. Or choose Update Panorama Image from the Server menu.

When the panorama picture is updated, the VB150 automatically restarts and the connection with VB Administration Tools is cut. A dialog box asking whether or not to reconnect to the VB150 appears after the VB150 restarts. Since reconnection occurs when OK is clicked, it is possible to continue capturing and updating panorama pictures with a different camera. You can exit Panorama Creation Tool while still connected or without reconnecting to the VB150.

## To Delete...



Click the "Remove image" button and then the Update Panorama Image button to delete the panorama picture.

The panorama picture saved in the VB150 is deleted.

## Reconnecting

Reconnections are made when a connection with the VB150 has been cut.



To make a reconnection, choose Reconnect from the File menu.

## **Opening/Saving Pictures**

Panorama pictures can be retrieved from picture files or saved as picture files.



To retrieve a picture file and use it for a panorama picture, choose Open from the File menu. When the dialog box appears, select the picture file you want to use.

To save a captured panorama picture as a picture file, choose Save from the File menu. When the dialog box appears, select the folder where the file is to be saved and enter the file name.

In both cases, only the JPEG format is supported.

## **Displaying Connection Information**

Connection information during connection with the VB150 can be displayed.



Choose Connect Information from the Server menu and a dialog box showing the connection information appears.

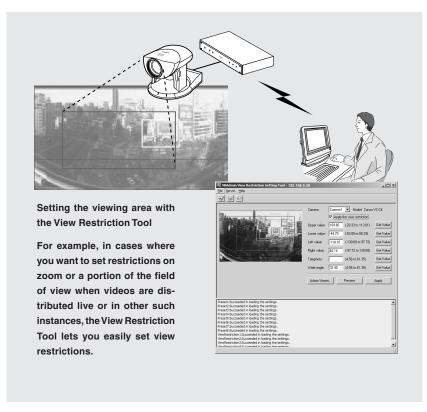
The IP address that was set in the VB150 is displayed in the "Host name" ( $\rightarrow$  P.38). The "Video Transmission Port" and the "Camera Control Port" that were set on page 56 and the "HTTP port" that was set on page 57 are all displayed.

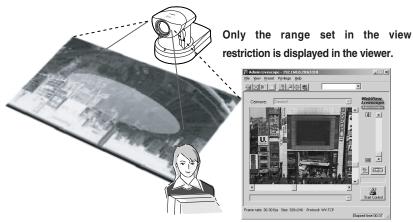


- Panorama pictures must be updated when the location where the VC-C50i/ VC-C50iR/VC-C4/VC-C4R/NU-700 is placed has been changed or when the model has been changed (from a VC-C4 to a VC-C4R, for instance).
- While the Panorama Creation Tool is starting up, the video capture size (→ P.42) automatically becomes 160 x 120. It returns to the original specified size when you exit this tool.

# **View Restriction Tool**

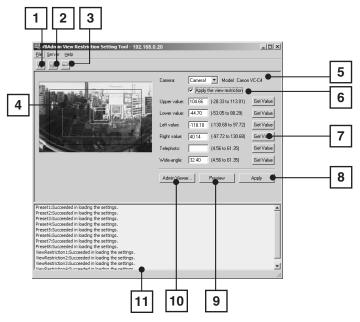
The View Restriction Tool is used to set view restriction visually and more easily for the VB150. The viewing range is simply set using mouse operations such as dragging, while viewing the panorama picture.





# **View Restriction Tool Display Screen**

An overview of the functions of the GUI displayed when the View Restriction Tool starts up is shown below.



- Load Settings button
  Loads the view restriction settings currently set in the VB150.
- Save Settings button
  Saves to the VB150 the view restriction settings that were sent by clicking the Apply button.

  After setting the view restrictions, be sure to click the Save Settings button to save the settings to the VB150.
- Stop Communication button
  This button can be clicked during communication with the VB150 to cut the connection.
- Panorama Preview
  Displays the panorama picture of the camera currently selected with this tool. The frames that reproduce the values of all the view restriction settings are displayed on the panorama picture. These frames can be displayed when "Apply the view restriction" is selected. The view restrictions can be set by dragging the mouse to change the shapes of the frames.
  - View Restriction Preview frames Pan · Tilt Preview Frame (red)................ Upper · Lower · Left · Right value restriction area Wide-angle Preview Frame (green) ..... Zoom field of view (wide angle) restriction area Telephoto Preview Frame (yellow) ...... Zoom field of view (telephoto) restriction area
- Camera Selection box
  Select and switch the camera to be used to apply view restriction settings from the cameras connected to the VB150.

- Apply the view restriction

  View restriction settings are applied when this item is selected.
- View Restriction Value Input boxes and Get Value button
  The view restriction settings can be edited by entering values in the View Restriction Value
  Input boxes. When the Get Value button is clicked, current angle of the camera selected
  with this tool can be retrieved and reflected in each setting value listed below.

### View restriction setting values

Upper value ... Value for the upper limit of the view restriction. The upper value of the selected camera angle is obtained using the Get Value button.

Lower value ... Value for the lower limit of the view restriction. The lower value of the selected camera angle is obtained using the Get Value button.

Left value ...... Value for the left limit of the view restriction. The left value of the selected camera angle is obtained using the Get Value button.

Right value .... Value for the right limit of the view restriction. The right value of the selected camera angle is obtained using the Get Value button.

Telephoto ...... Value for the telephoto limit of the view restriction. The zoom value of the selected camera angle is obtained using the Get Value button.

Wide-angle .... Value for the wide-angle limit of the view restriction. The zoom value of the selected camera angle is obtained using the Get Value button.

8 Apply button

Sends to the VB150 the current view restriction settings edited with this tool. You can go to the next camera settings by clicking this Apply button. At this stage, the edited settings are not yet saved to the VB150. Be sure to click the Save Settings button to save the settings to the VB150.

9 Preview button

Clicking this button allows checking of the set values specified in the View Restriction Value Input boxes with the View Restriction Preview frame.

- Admin Viewer button
  This button can be used to start up Admin Viewer.
- Status List
  Displays the results of communication between this tool and the VB150. Warning messages are displayed in blue and error messages are displayed in red.



Edited content will not be reflected in the viewer accessed to the VB150 at the stage when the Apply button is clicked. After confirming the edited content, be sure to click the Save Settings button to save the settings to the VB150.

# **Setting View Restrictions**

### **Changing Settings from the View Restriction Preview Frame**

The View Restriction Preview frame on the panorama picture can be used to set view restrictions.

### To Make Settings...

Admin Viewer...

2



be set, and select "Apply the view restriction". Set the view restrictions by using the mouse to move or change the shape of the Pan  $\cdot$  Tilt Preview Frame (red), Telephoto Preview Frame (yellow), and Wideangle Preview Frame (green) displayed on the panorama picture.

From the Camera Selection box, select the camera to

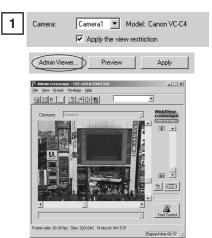
When enlarging or reducing the Telephoto Preview and Wide-angle Preview frames, however, the vertical:horizontal ratio is fixed.

Click the Apply button. Check the Status List to be sure the values were applied correctly. Then when the Save Settings button is clicked, the values will be saved to the VB150.

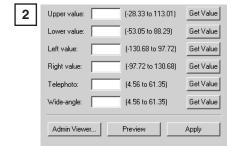
# Retrieving values from the camera angle of the Admin Viewer and changing settings

Admin Viewer can be used to set the view restriction while confirming camera images.

### To Make Settings...



From the Camera Selection box, select the camera to be set, and select "Apply the view restriction." Click the Admin Viewer button to start it up.



Use Admin Viewer to move the camera angle to the position you want to set with the Upper, Lower, Left, Right, Telephoto, and Wide-angle values, then click the Get Value button for each. The values retrieved using the Get Value buttons can be checked in the View Restriction Value Input boxes, or with the View Restriction Preview frame.

Set these values so that Upper > Lower, Left < Right, and Telephoto ≦ Wide-angle

Click the Apply button. Check the Status List to be sure the values were sent correctly. Then when the Save Settings button is clicked, the values will be saved to the VB150.





Note

When a view restriction is set, areas outside the restrictions may be captured momentarily if the camera is controlled close to the restriction limits.

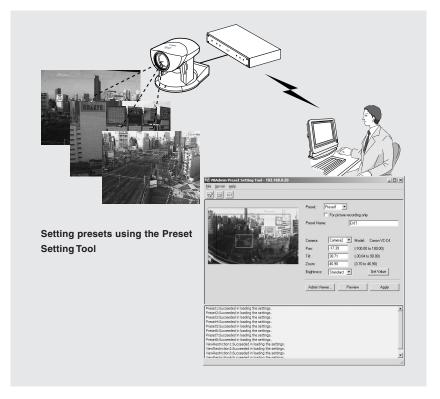


Tin

- Since the previews using the Panorama Preview may be slightly different from the actual picture, after the view restrictions have been set, please check to be sure the viewer is correctly reflecting the view restrictions in the actual picture. In this event, since Admin Viewer normally operates the camera irrespective of the view restriction settings, please choose [View Restriction] - [ON] from the Privilege menu (→ P.96).
- When you want to clear the view restriction settings, clear the "Apply the view restriction" check box, click the Apply and then Save Settings button save to the change the VB150.
- Even the "Apply the view restriction" is selected, view restriction is not applied when an input box is left blank. In this case, the maximum value is applied.
- For details on view restriction settings, see p.43.

# **Preset Setting Tool**

The Preset Setting Tool is an easy way to set the preset functions of the VB150. Settings can be made using simple mouse operations such as clicking and dragging while referring to the panorama picture. You can also set the home position with this tool.

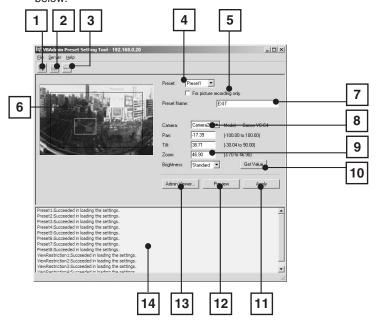


### Reflecting preset settings to the viewer



# **Preset Setting Tool Display Screen**

An overview of the functions of the GUI displayed when the Preset Setting Tool starts up is shown below.



- Load Settings button
  Loads the current preset settings currently set in the VB150.
- Save Settings button
  Saves to the VB150 the preset settings that were sent by clicking the Apply button. After setting the presets, be sure to click the Save Settings button to save the settings to the VB150.
- Stop Communication button
  This button can be clicked during communication with the VB150 to cut the connection.
- Preset Selection box
  Select the preset to set or "Home". "Home" is the setting for home position.
- For picture recording only
  Select whether the preset settings can be used by the viewer. When this is checked, presets are used for picture recording only; when it is not checked, presets can be used not only for picture recording but for the viewer as well. If you selected "Home" in the Preset Selection box, this setting will be grayed out (setting not possible).
- Panorama Preview
  Displays the panorama picture of the camera currently selected with this tool. The Preset
  Preview frame (yellow) which reproduces the preset values is displayed on the panorama
  picture. The preset settings can be made by dragging this frame to move it or change its
  shape, or clicking on the panorama picture.

Also, when a view restriction is set for a currently selected camera, the view restriction frame is displayed on the panorama picture in blue or red. If the frame is red, this indicates that the entered preset values are outside the view restriction.

- 7 Preset Name
  - A name can be assigned to the preset. If you selected "Home" in the Preset Selection box, this setting will be grayed out (setting not possible).
- Camera Selection box
  Select the camera to be used to apply preset settings.
- Camera Parameters
  Use "Pan" and "Tilt" to specify the central angle for the pan and tilt ranges you want to set.
  Use "Zoom" to enter the angle for the field of view.
  - Camera Angles
    - Pan ..... Sets the pan position of the camera.
    - Tilt ...... Sets the tilt position of the camera.
    - Zoom ... Sets the zoom ratio (field of view angle).
  - Brightness

Sets the target value for the camera's auto exposure feature. Select "Brighter" if the picture is too dark due to backlight or other factors.

- Get Value button

  When the Get Value button is clicked, the current angle of the camera selected at the VB150 is retrieved as camera parameters.
- Apply button
  Sends to the VB150 the current preset settings edited with this tool. You can go to the next preset settings by clicking this Apply button. At this stage, the edited settings are not yet saved to the VB150. Be sure to click the Save Settings button to save the settings to the VB150.
- Preview button
  Reflects the specified camera parameters to the Preset Preview frame on the panorama picture and the camera angles currently set in the VB150 are changed to these specified values.
- Admin Viewer button
  This button can be used to start up Admin Viewer.
- Status List
  Displays the results of communication between this tool and the VB150. Warning messages are displayed in blue and error messages are displayed in red.



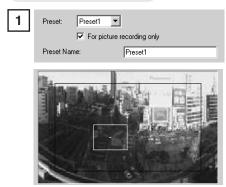
Edited content will not be reflected in the viewer accessed to the VB150 at the stage when the Apply button is clicked. After confirming the edited content, be sure to click the Save Settings button to save the settings to the VB150.

# **Setting Presets**

### **Changing Settings from the Preset Preview Frame**

The Preset Preview frame on the panorama picture can be used to set presets.

### To Make Settings...



From the Preset Selection box, select the preset to be set and enter a name in Preset Name. Next, select a camera from the Camera Selection box. Drag the Preset Preview frame shown on the panorama picture to move or change its shape and set the preset. Alternatively, you can click at a spot on the picture to make the center of the frame move to that point.

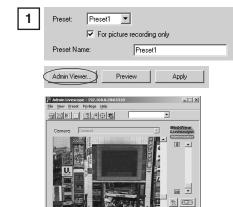


Click the Apply button. Check the Status List to be sure the values were applied correctly. Then when the Save Settings button is clicked, the values will be saved to the VB150.

# Retrieving values from the camera angle of the Admin Viewer and changing settings

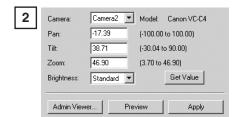
Start up Admin Viewer and set the camera angle as a preset.

### To Make Settings...



30.30 fps Size: 320x240 Protocol: WV-TCP

From the Preset Selection box, select the preset to be set, and enter the Preset Name. Click the Admin Viewer button to start it up.



Use Admin Viewer to move the camera angle to the position you want to set preset camera angle, then click the Get Value button. The values retrieved using the Get Value buttons can be checked in the Preset Values entry box, or with the Preset Preview frame.



Click the Apply button. Check the Status List to be sure the values were applied correctly. Then when the Save Settings button is clicked, the values will be saved to the VB150.



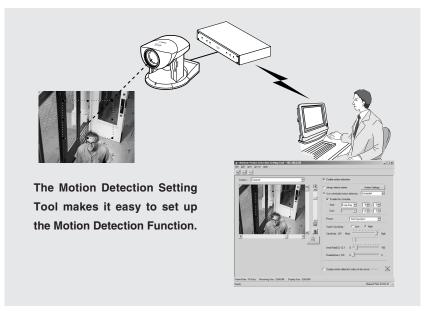
Changes in the preset settings are not applied to the viewer while it is connected.

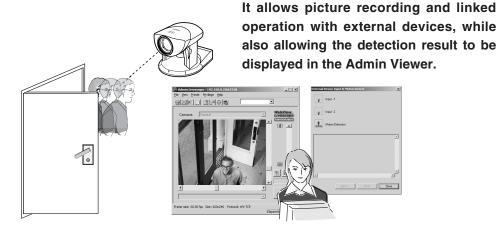


- If view restrictions are to be used, be sure that the Preset Preview Frame (yellow) does not protrude outside the View Restriction Frame (blue).
- Since the previews using the Panorama Preview may be slightly different from the actual picture, after the presets have been set, please check to be sure the viewer is correctly reflecting the presets in the actual picture.
- Once presets have been set, they cannot be deleted. If you do not want to these presets to be used, select "For picture recording only" so that the presets cannot be used in the Viewer for PC. In the Viewer for Java, use of the presets can be disabled by changing the LiveApplet parameters and disabling the Preset Selection box display.

# **Motion Detection Setting Tool**

The Motion Detection Setting Tool is used to specify the settings for the Motion Detection Function, which records pictures, sends data to external devices and records data in the log when there is a change to all or part of the video image resulting from objects moving around. This tool allows you to monitor the image from the camera while you set the area of motion detection, set the detection sensitivity and specify the actions performed when motion is detected. Refer to  $(\rightarrow \cite{A}$  Picture Recording User's Guide P.5) for detailed example of actual operation.





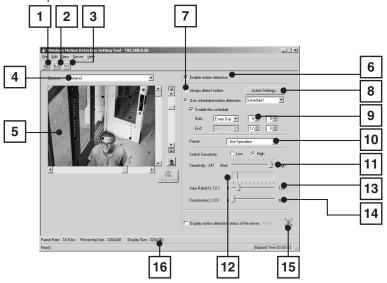


[Notes on Using This Function]

The Motion Detection Function is not suited to applications where high levels of reliability are demanded. Therefore, we recommend that you not use this function for monitoring or other purposes if consistently high levels of reliability are required. Canon accepts no liability whatsoever for faults, etc. resulting from the use of the Motion Detection Function.

# **Motion Detection Setting Tool Display Screen**

An overview of the functions of the GUI displayed when the Motion Detection Setting Tool starts up is shown below.



- Load Settings button
  Loads the motion detection settings currently set in the VB150.
- Save Settings button
  Saves the current motion detection settings edited using this tool to the VB150. After setting the motion detection function, be sure to click the Save Settings button to save the settings to the VB150.
- Stop Communication button
  This button can be clicked during communication with the VB150 to cut the connection.
- Camera Selection box
  This box allows you to choose which of the cameras connected to the VB150 is shown in the video display area and to switch between cameras.
- Video display area
  Displays and controls the camera image. Camera control privileges can be acquired using the Start Control button, the pan and tilt scroll bars, the zoom scroll bar and the backlight compensation button and the camera can be controlled in the same way as a normal viewer. It also displays the location where this tool will look for motion.
  - Motion detection area frame ..... The dotted frame specifies the area in the video display
    area within which motion is to be detected. The frame
    can be reshaped and moved by dragging the mouse.
    The portion of the image in which a change was actually
    detected is indicated by a red rectangle.
- Enable motion detection
  Selecting this checkbox switches the motion detection function on.
- Always detect motion/Use scheduled motion detection
  Selects whether motion is detected constantly or detected according to a set schedule.

- Action Settings button
  - Clicking this button opens the "Actions when motion is detected" dialog box, allowing you to specify the action performed when motion is detected.
- 9 Schedule settings

If the "Use scheduled motion detection" checkbox is selected, the schedule settings can be specified here.

[Schedule selection box]

...... Eight schedules (1-8) can be set and this box selects the schedule.

[Enable this schedule]

............ Selecting this checkbox allows you to switch motion detection on and off for each schedule setting.

[Start] ...... Sets the schedule starting time.

"High" limits the available sensitivity range to 129 to 256.

[End] ...... Sets the schedule ending time.

- Detection preset selection box
  - Select which of the preset positions set using the Preset Setting Tool ( $\rightarrow$  P.77) you want to use to detect motions.
- Sensitivity scroll bar
  Sets the sensitivity for motion detection. The range of available sensitivity settings is 1 to
  256 and the value is selected by dragging the button in the Sensitivity scroll bar. Selecting
  the "Low" radio button limits the available sensitivity range to 1 to 128, while selecting
  - 12 Detection indicator
    - Shows the "Area Ratio" and the status of the variations in the image. This indicator provides a guide for checking the motion detection settings.
- Area Ratio scroll bar
  Dragging the Area Ratio scroll bar sets

Dragging the Area Ratio scroll bar sets the proportion of the preset motion detection area (dotted frame) that is occupied by the area in which changes in the image are actually detected (red rectangle). The available settings are 0 to 100 percent.

Duration scroll bar

If the size of the area in which motion is detected exceeds the values set above, dragging the button on the Duration scroll bar sets the time limit for which such motion must continue before it is regarded as "detected motion". The available settings are 0 to 5 seconds.

Display motion detection status of the server

Displays the results of motion detection of the server. This allows you to check whether the settings are valid on the VB150.

Status bar

Upper-left level ..... Displays the "Frame Rate", "Receiving Size" and "Display Size".

Lower-left level ..... Displays the status of this tool and control privileges as well as the

functions of buttons.

Lower-right level ... Displays the elapsed time since this tool was started.

# **Specifying the Motion Detection Function Settings**

Use the following procedure to specify the Motion Detection Function settings:

- (1) Choose whether motion is detected constantly or detected according to a schedule.
- (2) Set the desired detection location and detection area ( $\rightarrow$  P.86).
- (3) Set the detection sensitivity to determine what level of image variation constitutes movement (→ P.87).
- (4) Set the actions to be performed when motion is detected ( $\rightarrow$  P.88).
- (5) Check the motion detection status of the server ( $\rightarrow$  P.89).
- (6) Send the settings to the VB150 to apply the specified settings ( $\rightarrow$  P.90).

### Continuous motion detection

Enable continuous motion detection.

### To Make Settings...



Select the "Enable motion detection" checkbox.

Click the "Always detect motion" radio button to select it.

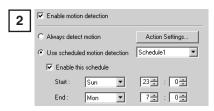
### Scheduled motion detection

Set the schedule and then enable motion detection according to that schedule.

### To Make Settings...



Select the "Enable motion detection" checkbox. Click the "Use scheduled motion detection" radio button to select it.



Select the schedule you want to set in the "Schedule selection box" and then select "Enable this schedule".

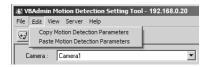
Set the starting and ending times.

You can continue by selecting another schedule in the "Schedule selection box", but you cannot set schedules with overlapping times. For example, if you select the schedules shown below, a warning message appears and you should reset the schedules so that they no longer overlap.

• Schedule 1

Start: Sunday, 23:00 End: Monday, 07.00 • Schedule 2

Start: Monday, 05:00 End: Monday, 21.00



A quick and convenient way of setting multiple schedules with the same detection settings (Sensitivity, Area Ratio, Duration) is to copy and paste the settings using "Copy Motion Detection Parameters" and "Paste Motion Detection Parameters" in the Edit menu.

### Setting the detection location and area

In this procedure, you display the location where you want to detect motions by selecting a preset, and then set the detection area on the video display area. You cannot specify a random location other than the presets.

### To Make Settings...



(Preset1)

Select the registered preset name in the "Detection preset selection box". The available presets must be registered beforehand using the Preset Setting Tool ( $\rightarrow$  P.77).



Preset:

To control the camera to the location other than those registered in presets, choose "-Not Specified-" in the "Detection preset selection box".

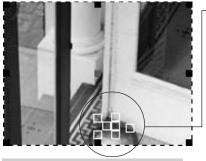
▼



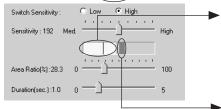
To set the detection area on the video display area, drag the motion detection area frame to move the frame or change its shape. To change the shape of the frame, drag the square black buttons (**III**) on each corner. To move the frame, click inside the frame and drag.

### Setting the motion detection parameters

These settings determine how great the variation must be, how large the changed area must be as a proportion of the whole detection area, and how long the variation must continue before it is recognized as motion and the specified action is performed. These 3 parameters are specified as the "Sensitivity", "Area Ratio" and "Duration" respectively.



The area in which motion is detected appears as a red rectangle in the image. You can set the amount of motion required before the red rectangle is displayed while monitoring the actual image.



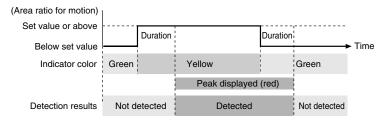
When the variation occurs in the image, the detection indicator shows the following:

[Green] ..... The area of the change was smaller than the specified area ratio.

[Yellow] .... The area of the change equalled or exceeded the specified area ratio.

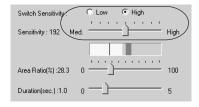
If all the detection conditions are satisfied and motion is detected, a red peak block appears.

You can set the amount of motion for which the peak block is displayed while monitoring the actual image.



## ■ Setting the sensitivity

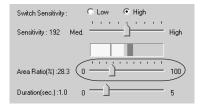
### To Make Settings...



The available sensitivity settings are 1 to 256 and the setting is selected by dragging the button on the Sensitivity scroll bar. Selecting the "Low" radio button limits the available sensitivity range to 1 to 128, while selecting "High" limits the available sensitivity range to 129 to 256.

### ■ Setting the area ratio

### To Make Settings...

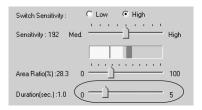


Dragging the Area Ratio scroll bar sets the proportion of the preset motion detection area (dotted frame) that is occupied by the area in which changes in the image were actually detected (red rectangle). Values between 0% and 100% can be set.

The specified area ratio is displayed in the Detection Indicator.

### Setting the duration

### To Make Settings...



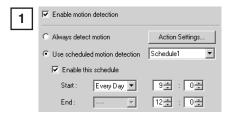
If the size of the area in which actual variation occurs in the image exceeds the specified area ratio, dragging the button on the Duration scroll bar sets the time limit for which such motion must continue before it is regarded as "detected motion". The available settings are 0 to 5 seconds.

Also, if motion is detected but the area becomes less than the area ratio, the "motion detected" status is maintained for the duration set here.

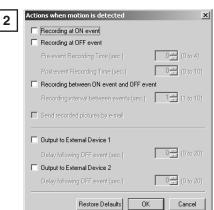
## **Setting the Action Performed**

This step specifies the actions taken when motion is detected.

#### To Make Settings...



Click the "Action Settings" button.



The "Actions when motion is detected" dialog box appears.

See "Picture Recording Triggered by External Devices" on P.51 for information on the correlation between the ON and OFF settings for each parameter.

You can also send recorded pictures as e-mail by selecting "Send recorded pictures by e-mail ( $\rightarrow$  P.50, 57)".

When you have completed the settings, click "OK".

### **Displaying Motion Detection Status of the Server**

The Motion Detection Setting Tool is a PC-based simulation of the motion detection module on the VB150. Depending on the processing capacity of the PC and the network status between the PC and VB150, there may be a divergence between the PC and the actual processing on the VB150. As a result, the motion detection module on the VB150 is enabled and the detection statuses are displayed using icons.



If you select the "Display motion detection status of the server" checkbox, the icons shown below are used to show the status of motion detection.



[Detection disabled]



[Detected]



[Not detected]



- The motion detection status of the server display may not match the "Motion detected (peak display)" in this tool.
- Set up the Motion Detection Function again if you have controlled the camera from the Admin Viewer's "Camera-specific features" dialog box (effective when using the VC-C50i/VC-C50iR/NU-700) after setting up the Motion Detection Function.
- When "Display motion detection status of the server" option is selected, external device and log output, and picture recording are not performed.



Tin

- When the VB150 Motion Detection Function is enabled, the processing load on the VB150 is high. Consequently, the video distribution frame rate may be slower than when the function is disabled. Also, because the video distribution frame rate may be further slowed when the data is sent via a proxy, the use of proxies is not recommended.
- Because the Motion Detection Function detects motion by comparing consecutive image frames, small movements are less likely to be detected when the video quality is poor.
- The motion detection settings should be adjusted and set in conditions that are as close as possible to those for actual operation.
- For detailed information on specifying the settings, see P.5 in the ♣ Picture Recording User's Guide.

### Saving Settings to the VB150

The specified settings function initially by being saved to the VB150.



Click the "Save Settings" button. Check the Status bar to determine whether the settings were saved correctly.

# **Setting the Frame Rate**

You can set the frame rate for motion detection processing in the Motion Detection Setting Tool and the motion detection module on the VB150. Setting a slow frame rate is effective for detecting slowly moving objects.

#### To Make Settings...



Select "Options" in the "View" menu.



Select the "Enable frame rate setting" checkbox and set a value between 0.5 and 30.0 fps as the "Frame rate". The "Update frame rate display every" setting determines the frequency with which the frame rate shown in the Status bar is updated. Set an interval between 1 and 10 seconds.



- When the network load is high, the specified frame rate may not be achieved.
- The frame rate specified in the "Maximum Frame Rate" (→ P.56) must be higher than the one specified using this tool.



- When a slow frame rate is set, motion detection is applied to images sampled from the captured video. In this way, motion can be detected even in slowly moving objects.
- The frame rate specified above only applies to motion detection. For the Viewer for PC, Viewer for Java, Admin Viewer etc., the frame rate specified in "Max Frame Rate" (→ P.56) is applied.

# Log Viewer

The VB150 includes a feature that writes operating status to a log file and saves it. Log Viewer simplifies the reading of log files and provides management and resolution of errors. Log Viewer not only displays all logs, it is also capable of filtering so that only the required information is displayed.

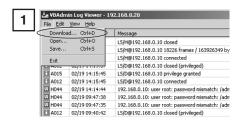




To view logs, it is necessary first to make log settings (see p.58 for details) on the VB150 so that logs will be written into a file on the VB150. Also, Log Viewer is used only for viewing logs; it cannot save or delete logs.

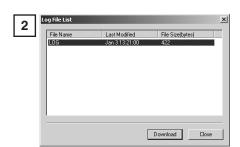
# **Downloading Log Files**

### To Download...



When Log Viewer is started up from the VBAdmin Startup Panel, it automatically retrieves the most recent log file and displays it. To retrieve a list of log files, choose Download from the File menu.

To abort the download while it is in progress, click Cancel in the dialog box.



When the list is retrieved, a list of log files appears in the dialog box. Select the log file you want to view by clicking on it, then click the Download button and the selected file will be downloaded.

To abort the download while it is in progress, click Cancel in the dialog box.

# Viewing the Log



The following content is displayed in the log.

### ●Code

The log displays error codes. For error codes, refer to Log Messages on the supplied CD-ROM ( Quide to Creating Web Pages for Video Distribution).

Error codes are displayed with one of four types of icons according to level.



Information level



Error level



Warning level



Unknown

Date & Time

The date and time when the log was generated is displayed.

Message

Log messages are displayed.

### Saving a log to a file/opening a saved file

You can save a displayed log to a file.



You can save the log you are currently viewing to a file by choosing Save from the File menu. To view a log file you have saved previously, specify the log file in Open.

## Copying and searching a log

You can copy or search a displayed log.

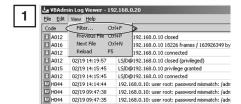


To copy a specific log, select the log you want to copy by clicking on it, then choose Copy from the Edit menu. Also, you can search for the log that contains the specified characters by selecting Search.

## Using selection criteria to display logs

Logs can be filtered according to type, code, or date and time so that only the required information is displayed.

#### To Set Selection Criteria...



Choose Filter from the View menu.



OK Cancel

The Filter dialog box appears. Set the following selection criteria and click OK to display only the logs that match those criteria. If no change is required, click Cancel.

#### [Error Type]

If logs are to be filtered according to type of error, select Specify Type or Specify Code; if not, select Not Specified.

- Specify Type
  - Specifying the levels of the logs From Error, Warning, and Information, select the error levels to be displayed.
  - Specifying the modules that output the logs From Application, HTTP Server, System, and Driver, select the output source modules to be displayed.
- Specify Code

Specify the error code of the logs. The error codes of the logs are compared to the characters that are entered and only logs with matching error codes will be displayed. For example, if "A0" is entered, logs whose error codes start with "A0" will be displayed.

### [Date & Time]

- Specify Start Date & Time Logs generated after the specified date and time can be displayed by selecting this item and entering a date and time.
- Specify End Date & Time Logs generated before the specified date and time can be displayed by selecting this item and entering a date and time.



- "Application", "HTTP Server", "Driver", and "System" correspond to the Log Messages contained in the "Guide to Creating Web Pages for Video Distribution" (CD-ROM). The page references shown below are for the PDF file.
- Application: Log messages related to applications (→ P.23) These log messages refer to applications such as WebView and picture recording.
- ullet HTTP Server: Log messages related to the HTTP server (ightarrow P.27) These log messages refer to the system's HTTP server.
- Driver: Log messages related to the driver (→ P.30) These log messages refer to the PC card.
- System: Log messages related to the system (→ P.31) These log messages refer to the OS, network, or firmware upgrades.

# **Admin Viewer**

Admin Viewer is a viewer containing functions for managing the VB150. Compared to the Viewer for PC and Viewer for Java ( $\rightarrow$  P.107) with Admin Viewer, it is possible to retrieve exclusive camera control privileges, ignore view restrictions, and operate external devices.



#### **Control button**

Click this button to retrieve camera control privileges.

### [Special privileges of Admin Viewer]

- Connections are also possible outside service times (→ P.56).
- Connection time is unlimited (→ P.56).
- Exclusive camera control privileges. Invalidates control privileges held by and requests obtained from other viewers.
- Ignores view restrictions.
- Operates external devices (→ P.96).
- Displays notification message when motion is detected (→ P.95).
- lacktriangle Camera control by clicking or using dialog boxes ( $\rightarrow$  P.97).
- Controlling NU-700 (→ P.99).
- Controlling VC-C50i/VC-C50iR ( $\rightarrow$  P.99).



Since most operations and settings of Admin Viewer are common with the Viewer for PC, basic camera control and the like are omitted here. This chapter describes only the functions and operations that are unique to Admin Viewer. The manual for the viewer is provided on the supplied CD-ROM (VIEWER-E.pdf).

### About the special privileges of administrators

Since Admin Viewer has more special privileges than the Viewer for PC and Viewer for Java, please keep in mind the following points when using Admin Viewer:

- Since connection time is unlimited, please exit the viewer after viewing.
- When camera control privileges have been obtained, Admin Viewer forcibly continues to obtain these privileges. After viewing, be sure to exit the viewer or click the Control button again to release these privileges.
- When making settings, keep in mind that images outside the view restrictions are displayed also in the Viewer for PC and Viewer for Java that are connected simultaneously with Admin Viewer.

# Starting Up Admin Viewer

Click the "Admin Viewer" on the VBAdmin Startup Panel or double-click the "Admin Viewer" icon on the desktop.



When the Admin Livescope window appears, click the File then the Connect. The "Camera server address setting" dialog box appears. Enter the following items:

- ullet Host Name (The IP address set on the VB150, ightarrow P.38)
- User Name (root,  $\rightarrow$  P.37)
- lacktriangle Password ( $\rightarrow$  P.37)

Then click the OK button. The video will then be displayed.

# **Operating External Devices**

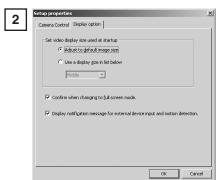
## Setting notification of changes in external device input status

A message box can be displayed in the event of a change in external device input status.

### To Make Settings...



Choose Setup Properties from the View menu.



When the Setup Properties dialog box appears, click the "Display option" tab.

Check to be sure the "Display notification message for external device input and motion detection" check box is selected, then click OK.



A message appears in the event a change occurs in the external device input status or when motion is detected.



If the Admin Viewer window is minimized or in full-screen mode, the notification message for external device input appears after the normal display is restored. Also, this message is not displayed when the External Device Input & Motion Detect dialog box is displayed.

## Displaying and saving the external device input status

The external device input and motion detection statuses can be displayed and, when required, saved as a log.

### To Set External Device Input...



Choose External Device Input from the Privilege menu.



The External Device Input & Motion Detect dialog box appears and the external device input and motion detection statuses are displayed.

To save this content as a log, click Save, then specify a file name and where it should be saved.

To clear the content in the display, click Clear.

To close the dialog box, click Close.

### **Operating External Device Output**

The ON/OFF status of external device output can be changed.

### To Set External Device Output...



Click the Control button to get camera control privileges, then choose External Device Output from the Privilege menu.



The External Device Output dialog box appears. The external device output status can be changed using the ON/OFF buttons for each terminal.

To close the dialog box, click Close.



- For more about external device input/output, see (→ ♣ Picture Recording User's Guide P.1, 3).
- Depending on the settings content, some operations are not available from Admin Viewer.

# **Enabling/Disabling View Restrictions**

View restrictions can be enabled or disabled when controlling the camera.

### To Enable or Disable View Restrictions...



Choose either "ON" or "OFF" for View Restriction in the Privilege menu.

# **Operating a Camera**

The Admin Viewer provides camera control methods not available in the Viewer for PC or Viewer for Java.

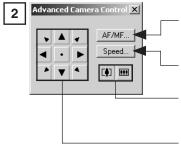
### Advanced Camera Control

In the dialog box, you can set the focus and speed, and control the pan, tilt and zoom by pressing the respective button to start and releasing the button to stop.

### To Make Settings...



Click the "Advanced camera control" button on the toolbars.



#### AF/MF button

Displays a dialog box for switching between Auto Focus and Manual Focus.

#### Speed button

Displays a dialog box for camera operation speed.

#### Zoom button

Lets you zoom in or zoom out. Zoom occurs when the button is held down and stops when it is released.

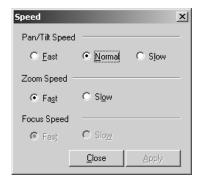
### Pan & Tilt/Home buttons

Pan and Tilt movements occur in the direction of the arrows on the buttons. Operation occurs when the button is held down and stops when it is released. The center button is the Home button which, when clicked, returns the camera to its home position.



The Focus dialog box appears when the AF/MF button is clicked.

"Auto" is auto focus, "Auto (for domes)" is for the camera used in combination with a camera dome so that auto focus does not focus on the camera dome wall surface, and "Fixed at infinity" enables focusing on infinity. Under "Manual" focus, the focus can be adjusted by holding down the Far or Near buttons.



The Speed dialog box appears when the Speed button is clicked.

For the camera's "Pan/Tilt Speed", select pan and tilt speeds as Fast, Normal or Slow.

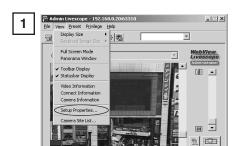
For the camera's "Zoom Speed", select camera zoom speed as Fast or Slow.

The "Focus Speed" parameter can only be used with the NU-700. You can select Fast or Slow as the focusing speed.

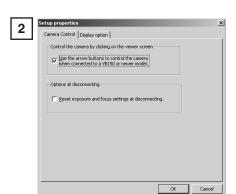
### Clicking the screen to control the camera

You can control the pan, tilt and zoom operations by clicking and holding the mouse in the viewer to start and releasing the mouse to stop.

### To Make Settings...

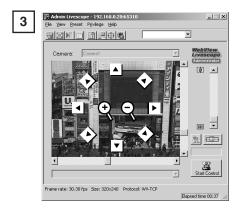


Choose Setup Properties from the View menu.



When the Setup Properties dialog box appears, click the Camera Control tab.

Check to be sure the "Use the arrow buttons to control the camera when connected to a VB150 or newer model" check box is selected, then click OK.



Set the mouse cursor over the viewer. There are eight arrows, such as the up arrow at the top of the screen and the down arrow at the bottom of the screen, for making changes with the mouse cursor. There are also two central buttons, plus on the left and minus on the right, for making changes with the mouse cursor. In each case, click and hold to enable pan, tilt and zoom operations.

### **Controlling NU-700**

NU-700-specific features can be used.

### To Make Settings...



Exposure

Auto Exposure

Manual Exposure

Fixed Agenture

Fixed Spirit History

Digital zoom

Zoom to

Lix C 2x C dx C 8x C 12x

Night vision

Miscelaneous functions

Infrared Light

Miscelaneous functions

No Fixer

Click the "Camera-specific features" button on the toolbars.

"Manual Exposure", "ND Filter" and "Wiper" settings can be specified. Refer to the User's Manual supplied with the NU-700 for details.

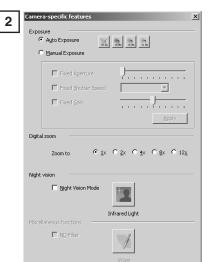
## Controlling VC-C50i/VC-C50iR

VC-C50i/VC-C50iR-specific features can be used.

### To Make Settings...



Click the "Camera-specific features" button on the toolbars.



"Manual Exposure", "Digital Zoom", "Night Vision" and "Infrared Light" settings can be specified. Refer to the manual supplied with the VC-C50i/VC-C50iR for details.

### **Settings When Quitting the Admin Viewer**

You can set the exposure and focus settings to reset to the initial settings upon quitting the Admin Viewer.

### To Make Settings...



Choose Setup Properties from the View menu.



When the Setup Properties dialog box appears, click the Camera Control tab.

Tick "Reset exposure and focus settings at disconnecting" and then click OK. When quitting the Admin Viewer, the exposure and focus settings are reset to the initial settings below.

- The exposure setting in the "Camera-specific features" dialog box is reset to automatic exposure.
- The focus setting in the "Advanced Camera Control" dialog box is reset to the initial setting in the "Camera and Video Settings Page" in "Detail Settings" (→ P.42).



# **Troubleshooting**

Before you contact your Canon dealer or service outlet, check the items listed below. If a log message is displayed, refer to the Log Messages on the supplied CD-ROM "Guide to Creating Web Pages for Video Distribution" for the log details and the appropriate response.

### The Power LED does not light. The Power LED stays orange.

- lacktriangle Check that the AC cable is connected correctly. ( $\rightarrow$  P.29)
- If the Power LED stays orange and does not change to green, this indicates that there is a system fault. Restore the factory default settings (→ P.112). If this does not resolve the problem, contact your Canon dealer.

### The Initial Setup Tool does not work.

• There will no longer be any effect on the Initial Setup Tool 20 minutes or more after power is turned on. If 20 minutes or more have passed, try turning the VB150 off and then on again, then repeat the setup procedure from the beginning (→ P.30).

### I forgot the password.

■ Restore the factory default settings. (→ P.112)

### I cannot access the VB150 over the network.

- lacktriangle Check that the LAN cable is connected correctly. (ightarrow P.30)
- If the initial setup (→ P.30) is not performed, the IP address of the VB150 is set to its factory default value of 192.168.100.1. Perform the initial setup to suit your network environment.
- Check that the VB150 network settings are correct. In particular, check that the IP address, subnet mask and default gateway address settings are valid for the network you are using.
  (→ P.31. 38)
- ullet If access control for the VB150 is being used, check the settings ( $\rightarrow$  P.53).
- Check that the IP address or URL settings in the viewer software are correct.
- If the NAT function of the router is used, check that the VB150's IP address noted on the Web page is correct. (→ ♣ Guide to Creating Web Pages for Video Distribution P.22)

### The video does not appear.

- ullet Check that the camera is switched on and that the video cable is connected correctly ( $\to$  P.29).
- If the video quality is poor, check the video quality settings on the VB150 (→ P.42). Also, check settings such as the display color setting as on the viewer PC.
- If you cannot see the video using the Viewer for Java, check system settings such as the browser version (→ P.19). Up-to-date information is provided at the following. (URL: http://www.canon.com/webview/)
- To view video using the Viewer for PC, it must first be installed. Please install Viewer for PC after confirming the operating environment (→ P.19).
- lacktriangle Check whether the video transmission port has been changed. ( $\rightarrow$  P.56).
- lacktriangle Check whether the video service time has been set. ( $\rightarrow$  P.56).

### I cannot control the camera.

- lacktriangle Check that the RS-232C cable for camera control is connected correctly. ( $\rightarrow$  P.29)
- Check that the VB150 control port for the corresponding camera is set correctly. (→ P.56)
- Check to see if the camera control is restricted (→ P.56) or the camera angle is restricted by a preset (→ p.47).
- If multiple VC-C4/VC-C4Rs are cascade connected, check that the cables are connected correctly and that the settings are specified properly (→ P.43).
- lacktriangle Check whether the camera control port is set to "Not Controlled" ( $\rightarrow$  P.43).

### I cannot record or search pictures.

- lacktriangle Check that the flash memory card has been inserted properly. ( $\rightarrow$  P.113)
- When the number of recorded pictures exceeds the limit, erase pictures that you do not need or replace the memory card (→ P.48, 59, 113).
- lacktriangle Check that the power to the camera is on and the cable has been connected properly. (ightarrow P.29)
- The system tried to record the picture, but the picture may be bigger than the Max Picture Size specified on the VB150. Set a larger value as the Max Picture Size (→ P.48).
- If there is an error in the search results, try to recover the index (/card/images/index.vbi).
  Click on the "Rebuild" button (Rebuilding of recorded picture list) on the Administration
  Tools settings page to recover the index (→ P.59).

#### The wireless LAN card does not work and communication fails.

- If you are using Infrastructure mode, check whether the ESS ID specified on the VB150 matches the ESS ID of the access point (→ P.39).
- If you are using Ad-Hoc mode, check that the channel set on the VB150 matches channel on the PC (→ P.39).
- In 802.11 Ad-Hoc mode, check whether the PC is also in 802.11 Ad-Hoc mode and whether the ESS ID and channel setting of the VB150 are the same as the PC.
- If you are using Infrastructure mode, check with the network administrator to determine whether you have access privileges to the access point.
- If the encryption key is enabled (→ P.39), check that the specified encryption key is the same as that used by the other party.
- If the wireless LAN card inserted in the VB150 and the wireless LAN devices used by the other party are made by different manufacturers, the connection itself may not be guaranteed to work correctly. Check with the wireless LAN device manufacturer.
- There may be something in the installation location that is blocking the radio waves (such as a concrete or metal wall) or there may be something generating radio interference (such as a cordless phone). Change the installation location and try again.



- If you have a problem, consult the ReadMe also. The ReadMe file may contain important information not included in this manual. Be sure to read this file.
- The latest information is available at the following.
   URL: http://www.canon.com/webview/)

# **Specifications**

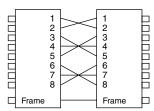
VB150			
Software	Operating System	DRYOS (Canon realtime operating system)	
	Protocols	TCP/IP, HTTP, FTP, SMTP, WebView (from Canon), DHCP	
	Video compression method	Motion-JPEG (video quality settings variable from 1 to 99) JPEG (for still pictures)	
	Video transmission rate	0.1 to 30 fps (variable)	
	Output image sizes	160 × 120, 320 × 240, 640 × 240 (pixel)	
	Display image sizes	80 × 60, 160 × 120, 320 × 240, 640 × 480 (pixel)	
	Server	HTTP, FTP, WebView Livescope	
	Log management	Syslog format (supports email, syslog and flash memory cards)	
	Camera control	Pan, tilt, zoom, brightness, shutter speed, focus mode, view restriction, camera control time, control queue length (VC-C50i, VC-C50iR, VC-C4, VC-C4R and NU-700)	
	Connection limitation	Access control (password/host), maximum view time, service period, number of concurrent connections (max. 50)	
Interface	Video input	4 (NTSC/PAL, BNC (2), RCA (2))	
	Serial port	RS-232C (2) (mini-DIN8, camera control)	
	Network	Ethernet (1) (RJ45, 100Base-TX/10Base-T auto-negotiation, wireless LAN (1 PC card slot used) PSTN (1 PC card slot used).	
	PC card slot	2 slots (3.3V/5V)	
	Display LED	Power, Network and PC card slot status display	
	External I/O	Input (2), output (2)	
Main unit specifications	Dimensions	$248\times167\times52~\text{mm (9}~^3/_4\times6~^9/_{16}\times2~^1/_{16}~\text{in.) (W}\times\text{D}\times\text{H)}$ (excluding attachments)	
	Weight	1.2kg	
	Operating environment	Temp.: 0-40°C; Humidity: 20-85% RH (condensation free)	
	Power supply	AC adapter, power consumption 17 W or less	

 DRYOS is a realtime OS built into Canon products and intended for the Internet and an intranet mobile devices and digital office equipment.

AC Adapter		
Model	PA-V16	
Input	100-240 V AC, 50/60 Hz	
Output	13 V DC, 1.8 A	
Polarity	Exterior (-), interior (+)	
Size	$58 \times 118 \times 25$ mm (2 $^{9}/_{22}$ x 4 $^{21}/_{22}$ x 1 in.) (W $\times$ D $\times$ H) (excluding attachments)	
Weight	Approx. 205 g	

• These specifications are subject to change without notice due to product improvements, etc.

### Wire connection of the camera control cable (RS-232C)



Male 8pin mini-DIN Male 8pin mini-DIN

# **External Device I/O Terminals**

### **External Device Input Terminals (In1, In2)**

The external device input terminals consist of 2 terminals (In1 and In2), one of which is '+' (red) and another is '-' (black). The '-' terminal is grounded on the inside of the main unit. By connecting two cables to the + and - terminals and then electrically short-circuiting across the terminals (ON) or separating the connection (OFF), an interrupt can be generated for the internal controller. See "Picture Recording and External Device I/O Settings Page" (→ P.48) for information on the settings.

Connect any sensors and switches to terminals with electrically separate GND terminals and power supplies.

### External Device Output Terminals (Out1, Out2)

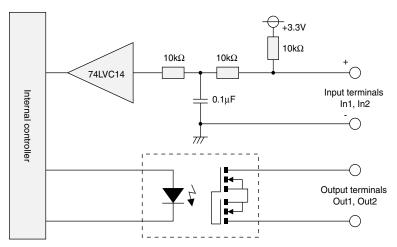
The external device output terminals consist of 2 white terminals (Out1 and Out2). Both terminal combinations are peers. The Internal controller switches the two output terminals to disconnected or connected condition. The output terminals use optocouplers and are separate from the internal circuit in the VB150. Loads connected to the output terminals should be within the following ratings:

### Rating across the output terminals

DC: Up to 50V

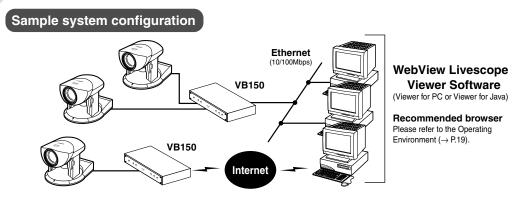
Continuous load current: 200 mA

#### ■Internal Connection Chart



# **System Configuration**

### Example of basic system configuration - Viewing videos using a viewer



This system configuration consists of the VB150 with **Viewer Software** ( $\rightarrow$  P.19). The Viewer Software consists of the **Viewer for PC** and the **Viewer for Java**.

The Viewer for PC must be installed in advance from the supplied CD-ROM, while Viewer for Java is not installed in advance but automatically downloaded from the VB150. Since Viewer for Java is downloaded each time you want to view video, it is useful when viewing video for the first time. The Viewer for PC, however, is more convenient when you want to view video frequently.

If you want to distribute live video of places such as popular tourist destinations from Web pages, it is best for your Web page visitors to use the Viewer for Java that does not need to be installed in advance.

### ■Viewer software types and functions

Viewer Software	Functions	
Viewer for Java	Video from the VB150 can be displayed by a Web browser that can run Java applet.  Because the Viewer for Java is automatically downloaded and does not need to be pre-installed, unlike the Viewer for PC, it is compatible with any platform that supports Java-capable environments.  Because it uses the HTTP protocol, the Viewer for Java penetrates firewalls. However, it may not run stably on some platforms or browser types.  Also, because the viewer is downloaded when the Web page loads, start-up times and execution speeds are slower than the Viewer for PC.	
Viewer for PC	<ul> <li>An application for viewing video from the VB150 that is launched from a Web browser.</li> <li>The Viewer for PC must be pre-installed.</li> <li>Install the Viewer for PC from the supplied CD-ROM.</li> <li>Compared with the Viewer for Java, start-up is faster because the viewer does not need to be downloaded. This viewer is recommended for users who use it frequently.</li> <li>Because it supports the HTTP protocol, the Viewer for PC penetrates firewalls unscathed.</li> </ul>	



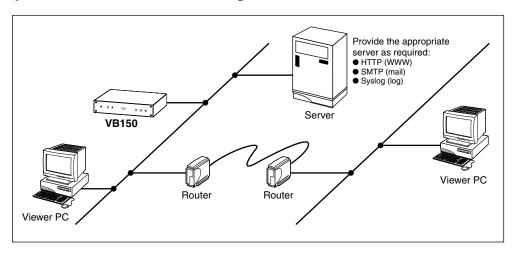
- Install the Viewer for PC from "MonSetup.exe" on the supplied CD-ROM.
- The Viewer Software user's manual is on the supplied CD-ROM. (VIEWER-E.pdf)
- To connect the VB150 to the Internet, you require a leased line connection to an Internet service provider or a LAN-type dialup IP connection. If you are using a LAN-type dialup connection, check that the connection supports bidirectional calling.

# **Sample Network Configurations**

This section describes some typical installation modes for the VB150.

Be sure to assign a fixed IP address on the VB150.

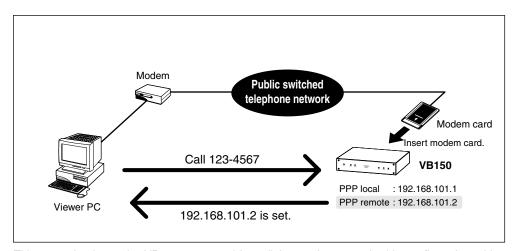
#### Sample LAN Environment Configuration



This example shows the VB150 connected to a LAN by Ethernet. In this configuration, video can be seen by viewers in the same Ethernet segment as the VB150 and by viewers with access to that segment.

To send log information such as faults and access statuses by e-mail and save that information to another computer, an SMTP server or a Syslog server is required.

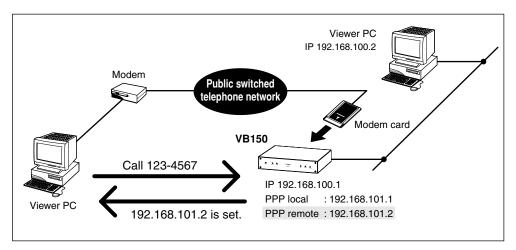
### **Sample Dialup Environment Configuration**



This example shows the VB150 connected in a dialup environment. In this configuration, video can be accessed by viewers which can dial up to the VB150 using a modem.

In this situation, a modem card must be inserted into the card slot (use an operation-confirmed modem card). PPP (Point to Point Protocol) is used as the network protocol. For information on settings, refer to Chapter 3 ( $\rightarrow$  P.35).

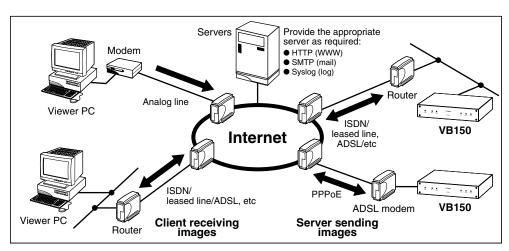
### Sample LAN plus Dialup Environment Configuration



This example shows the VB150 connected to a LAN and a dial up environment. Video can be seen by viewers in the same Ethernet segment as the VB150, viewers who can access the segment, or by viewers which can dial up to the VB150 with a modem. Use an operation-confirmed modem card. Details are available at the following.

URL: http://www.canon.com/webview/

### Sample Internet Environment Configuration



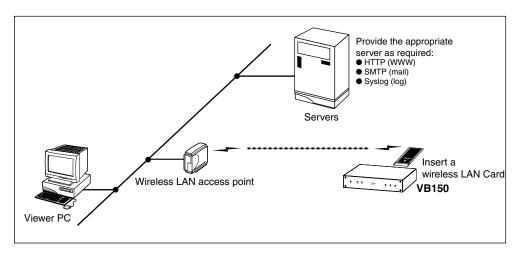
This example shows an environment in which the VB150 is connected to the Internet.

In this case, one fixed global address is required for the VB150.

See ( $\rightarrow$  A Guide to Creating Web Pages for Video Distribution P.22).

When directly connecting the VB150 to an ADSL modem, the connection method needs to be PPPoE (e.g. FLETs ADSL).

### **Sample Wireless LAN Environment Configuration**



This example shows the VB150 connected to a wireless LAN. In this configuration, you need to insert a wireless LAN card into the VB150 card slot. Refer to P.39 for details about the settings. Use an operation-confirmed wireless LAN card. Details are available at the following.

URL: http://www.canon.com/webview/

# **Upgrading the Firmware Remotely**

When a new version of the firmware is released, the firmware can be upgraded remotely. To upgrade remotely, use the "vb150rfu.exe" program on the CD-ROM and the new firmware.



#### Obtain the new firmware.

Visit the following Web site (URL:http://www.canon.com/webview) for the latest information on new firmware.

- Launch the "vb150rfu.exe" program on the enclosed CD-ROM and use the procedure below to perform the remote upgrade.
- ① Enter the IP address, user name and password.



- Server Address: Camera server IP address (→ P.38)
- ullet HTTP Port : The HTTP port No. of the camera server ( $\rightarrow$  P.57)
- Administrator Name: Server administrator user name (→ P.37)
- Administrator Password: Server administrator password (→ P.37)
  - 2 The current version is displayed.



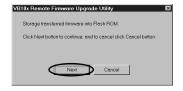
3 Specify the firmware file to be transferred to the server.



5 The completion window appears.



4 Store the transferred firmware in flash ROM.





- Do not turn the VB150 off until the completion window appears. Turning the VB150 off before the completion window appears may prevent the VB150 from starting up properly.
- When upgrading from Ver. 1.0 to Ver. 1.1, please follow the instructions as specified on the following Canon website: http://www.canon.com/webview

# **Restoring the Factory Default Settings**

There are 2 ways to restore the factory default settings on the VB150, as described below. When you restore the factory default settings, the procedure in "Initializing settings other than system/ network settings" resets all the settings except the system settings ( $\rightarrow$  P.37) and the network settings ( $\rightarrow$  P.38). The procedure in "Initializing all settings" resets all the settings to their factory default values.

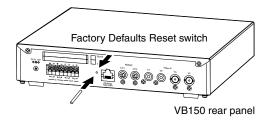
### Initializing settings other than system/network settings



Launch the Web browser to access the VB150 Settings Title Page ( $\rightarrow$  P.36) and open the Administration Tools Settings Page ( $\rightarrow$  P.59). Click the Restore button to restore all the factory default settings, except for the System ( $\rightarrow$  P.37) and Network ( $\rightarrow$  P.38-41) settings. Note that once this button is clicked, the VB150 will restart automatically to restore the settings so that you cannot cancel the process.

This button can be used when the VB150 is accessible via the network. Use this button when you want to restore the settings other than the System and Network settings.

### Initializing all settings



Unplug the AC adapter to turn the VB150 off. Use a pointed object such as the end of a paper clip to press the Factory Defaults Reset switch and then plug the AC adapter to turn the VB150 on. Be sure to hold down the Factory Defaults Reset switch for at least 5 seconds after the power is turned on. All VB150 settings will return to the factory default values, but the content of Web pages used for distributing videos that is saved on the VB150 will remain as is. Note that once the process is executed, it cannot be canceled.

Use the Factory Defaults Reset switch when you have forgotten the password or IP address and that you cannot access the VB150 via the network.



- Be sure to make a note of the current settings before you restore the factory default settings using the Restore button (→ P.114, 115).
- Once the Factory Defaults Reset switch is pressed, the VB150's network-related settings, such as the IP address, subnet mask, and default gateway address will return to their factory default values, making it impossible to operate the VB150 from a PC connected to it. In this event, reset the IP address for your environment (→ P.31).

# Using a PC Card

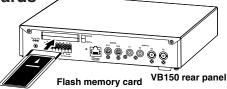
The VB150 has 2 card slots, and you can store Web page data, etc. by inserting a flash memory card into one of these slots.

### **Procedure for Using Flash Memory Cards**



# Insert the flash memory card into the VB150.

You can insert the card into either slot. But if flash memory cards are



inserted in both slots, you cannot use both cards at the same time. Preparation is complete when the LED on the front of the VB150 changes from green to orange.

## 2

#### Create the directories.

Create directories named "htdocs" and "logs", for Web page data (hereafter referred to as content) and log data respectively, on the flash memory card. You can create the directories using ftp commands or by inserting the flash memory card into a notebook PC etc and using file operations.



#### Save the content.

You can save the content to the flash memory card using either file operations on a notebook PC etc or remotely using FTP. When a flash memory card is inserted correctly, it is mounted in the VB150 file system as a directory named "/card". The content data is stored as files in the /card/htdocs directory (file names made up of eight alphanumeric characters followed by a three-character extension). Data can also be stored in the flash memory built into the VB150. However, due to the limited available space (550 kilobytes), only the minimum required amount of data can be stored.

Device	File system (accessed by an ftp client)	URL (accessed from a Web browser)
On-board flash memory	ftp://IP address/htdocs	http://IP address/
Flash memory card	ftp://IP address/card/htdocs	http://IP address/opt/



- To use a Web browser as an FTP client:
- Insert "user name@" before the IP address, as in "ftp://root@192.168.100.1/card/htdocs". The FTP user is restricted to the system administrator ( $\rightarrow$  P.37). The VB150 does not support anonymous FTP.
- Use a flash memory card for which operation has been checked. Refer to the Canon website for details.

See http://www.canon.com/webview/ for details.

# Appendix

# **Factory Default Setting**

Item	Setting	Item Setting 1 ( (y) (m) (d))	Item setting 2 ( (y) (m) (d))
●Administrator ID	root		
●Administrator password	VB150		
●Settings page path	admin		
●Device name	None		
●Date and time Offset from GMT	9		
●Ethernet Address Setting Method IP address Subnet mask Use Port Authentication (EAP-MD5) User Name Password	Use Manual Setting 192.168.100.1 255.255.255.0 No check None		
●Wireless LAN Network Mode Channel ESS ID IP address Subnet mask Use Station Authentication (EAP-MD5) User Name Password Enable WEP Key Length Key 1~4 Default Key	Use Ad-Hoc 10 ANY 192.168.150.1 255.255.255.0 No check None None No check 64bit 00 Key 1		
●PPP Receive and Call Country Selector Modem max speed PPP local address PPP remote address PPP account list Dial Method Phone Number User Name Password	Use Receive only (PPP) Japan 57600 192.168.101.1 192.168.101.2 None None None None None		
●PPPoE IP Address User Name Password Service Name	No check None None None None		
Static route settings     Interface     Destination     Mask     Gateway address	None None None None		
●Connection keeping Target Address Interval	No check 0.0.0.0 1		
Others Maximum Transmission Unit	1500		
●Camera Common Settings Main camera Video Signal Video Input Baud rate Return to Home Position	Camera 1 NTSC Single 9600 No check		
●Camera Settings Camera Name Wide converter Video Capture size Video Quality Camera control port/ Cascade Number	Check Camera 1 Not Used 320 x 240 50 Camera 1: CC1/1 Camera 2: CC2/1 Camera 3: Not controlled/ None Camera 4: Not controlled/ None		

Item	Setting	Item setting 1 ( (y) (m) (d))	Item setting 2 ( (y) (m) (d))
●View restrictions Upper/Lower value Left/Right value Telephoto/Wide	None/None None/None None/None	3 (4) (7)	
●Preset	None		
●Picture recording	None		
●Access Control	None		
●WebView Livescope Video Transmission Port Camera Control Port Max Clients Control Queue Length Max Frame rate (fps) Maximum Transmission Rate (Mbps) Max View Time (sec) Max Camera Control Time (sec) Camera Stabilization Time Service time restriction	0		
Miscellaneous Settings     HTTP Port     Maximum keep-alive     Time (sec)     Global Address for     Web pages     IP Address     Host Name	80 10 None None None		
Name Server Address (1) Name Server Address (2) Name Server Address (3)	None None None		
Use DNS Update Host name IP Address	None Ethernet		
Mail Server Host Sender's Mail Address Recipient Mail Address PoP before SMTP User Name Password POP Server Use a dialup connection for sending e-mail	None None No check None None None No check		
Syslog Server Host Max Log File Number Max Log File Size (Kbytes) Log mail collection time	None 10 64		
Handling of Error Handling of Warning Handling of Information	No checks No checks No checks		
●Home position Pan Tilt Zoom Brightness Shutter speed Focus mode	None None None Standard Auto Auto		

# Index

<a></a>	<e></e>
Access control	Error code
Administrator ID       37, 111         Advanced camera control       97         AE lock       68, 69         Applet       107         Area ratio       84, 86, 87, 88	Factory default setting 24, 35, 37, 49, 55, 59, 103, 112, 113, 114
<b> Backlight adjustment</b>	Field of view angle       43, 45, 47, 79         Filter       89, 91, 93         Firewall       107         Firmware       111
Baud rate	Flash memory card 19, 24, 48, 58, 104, 113 Focus mode
<c></c>	<g></g>
Camera control connector       24, 43, 44         Camera control time       56         Camera name       42, 49         Cascade       29, 43, 46, 104	Gateway address
Channel       39         Connection information       68         Connection keeping       41         Control queue length       56         Controllable range and video capture range       45         Country selector       40         Create the directories       113	<b><h>&gt;</h></b> Home position       43, 97         Host       53, 54, 57, 58, 65, 71, 94         HTTP       55, 93, 105         HTTP port       57, 65, 71, 111         HTTP server       53, 57, 93
<d></d>	<l></l>
Device name       37, 49         Detection indicator       84, 87         Dial timeout       40         Dialup       57         DNS       57         Duration       84, 86, 87, 88	Idle timeout

< <b>K</b> >	Parameter 42, 47, 49, 79, 81, 86
	Password
Keep-alive time 57	103, 111, 112
	PC card 22, 23, 24, 59, 93, 113
<l></l>	Picture mail 37, 49
	Picture recording 43, 48, 50, 51, 52, 59,
LAN 17, 30, 38, 39, 105, 107, 108,	78, 81, 82, 93
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