Canon

NETWORK CAMERA
VB-C60
Operation Guide
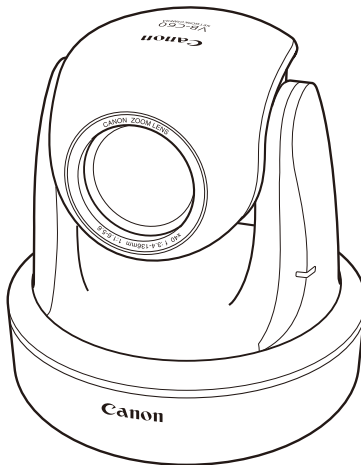
Be sure to read *Start Guide* and this *Operation Guide* before using the network camera.

Introduction

Thank you for purchasing Canon Network Camera VB-C60/VB-C60B (hereafter referred to as "VB-C60".)

The only difference between VB-C60 and VB-C60B is the exterior color.

This *Operation Guide* describes how to set up and use VB-C60. Read these guides carefully before using the VB-C60 to ensure that you make the best possible use of this product. Also, be sure to read the ReadMe file on the Setup CD-ROM.

For the latest information on this product (firmware, bundled software, operation manuals, operating environment, etc.), visit our website.

Copyright

Videos, images or sounds recorded with your VB-C60 may not be utilized or published, without consent of copyright holders, if any, except in such a way as permitted for personal use under the relevant copyright law.

Notes

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2. The contents of this guide are subject to change without any prior notice.
3. This document has been prepared with utmost attention to accuracy. If you have any comment, however, please contact the Customer Service Center indicated on the back cover.
4. Canon shall assume no liability for any outcome of using this product, regardless of Items 2 and 3 above.

Notes on privacy and publicity rights regarding the utilization of video/audio

When using the VB-C60 (for image or audio recording), it is the responsibility of the users to take all care to protect privacy and avoid any violation of publicity rights. Canon shall have no liability whatsoever in this regard.

Reference

● Please be sure to gain approval of the building management office before installing a camera, if copyrighted architectural structures or copyrighted premises are got into the frame.

Legal Notice

In some countries or regions, monitoring via a camera is banned by the law or regulation, and the law or regulation depends on the country or region. Before using the VB-C60, confirm the law or regulation of the country or region where the camera is used.

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Notes on Use of Bundled Software RM-Lite (Disclaimer)

Malfunction, failure of RM-Lite or other factors may cause problems, such as recording failure, recorded data corruption or loss. Canon shall have no liability whatsoever for any loss or damages incurred by the user as a result of such problems.

Notes on License Agreement for Bundled Software

Regarding the license agreement for the bundled software, see the following file in the BundledSoftware folder in the LICENSE folder found in the bundled Setup CD-ROM.

Software type	File name
VB Initial Setting Tool, VBAdmin Tools	VBTools.txt
Network Video Recording Software RM-Lite	RM-Lite.txt

MPEG-4

NOTICE ABOUT THE MPEG-4 VISUAL STANDARD: THIS PRODUCT IS LICENSED UNDER THE MPEG-4 VISUAL PATENT PORTFOLIO LICENSE FOR THE PERSONALAND NON-COMMERCIAL USE OF A CONSUMER TO (i) ENCODING VIDEO IN COMPLIANCE WITH THE MPEG-4 VISUAL STANDARD ("MPEG-4 VIDEO") AND/OR (ii) DECODING MPEG-4 VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION INCLUDING THAT RELATING TO PROMOTIONAL, INTERNAL AND COMMERCIAL USES AND ADDITIONAL LICENSING MAY BE OBTAINED FROM MPEG LA, LLC. SEE HTTP://WWW.MPEGLA.COM.

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Open Source Software

The product (VB-C60 and bundled RM-Lite Viewer) contains Open Source Software modules. For details, see OpenSourceSoftware.pdf found in the bundled Setup CD-ROM. Each module's license conditions are also available in the LICENSE folder on the same Setup CD-ROM.

Software under GPL and LGPL

If you would like to obtain the source code under GPL/LGPL, please contact the dealer, where you purchased the product, or a sales agent.

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Chapter 1   Detailed Settings

Chapter 2   VBAdmin Tools

Chapter 3   VB-C60 Viewer

Chapter 4   Creating Web Pages for Video Distribution

Chapter 5   Appendix

How to Read This Document

Operation Manuals

This camera comes with *Start Guide*, and *Operation Guide* (this document) included in Setup CD-ROM.

Start Guide (Bundled)

The safety precautions to be followed when using the VB-C60, types of bundled software, operating environment, initial settings of the camera, installation method, etc., are explained. The *Start Guide* comes with the VB-C60. In this manual, items that should be referenced in the *Start Guide* are described as follows. See "Features of VB-C60" (→ *Start Guide*).

Operation Guide (this document) (VBC60OG_E.pdf)

The document explains the basic setting procedures for the VB-C60, how to use it, VBAdmin Tools and VB-C60 Viewer, troubleshooting, etc. This document is included in the Setup CD-ROM.

Also, a simplified version of the recording software **RM-Lite** (→*Start Guide* "Network Video Recording Software RM-Lite") is stored in the Setup CD-ROM. The following operation manuals are available:

Administrator's Manual (RM10AM_E.pdf)

This document explains the items to note when using RM-Lite, as well as operating environment requirements, system configuration, installation and setup methods, and other details on how to use the software. Be sure to read this document.

Viewer Operation Guide (RM10VOG_E.pdf)

This document explains a basic operation of the RM-Lite Viewer. For the detailed operating procedures of the viewer, refer to *Administrator's Manual*.

Icons Used in This Document

This document uses the following icons to indicate particularly important information the user should read.

Icon	Meaning
Caution	Inappropriate handling against the instruction accompanied by this icon may result in property damage. Be sure to observe these precautions.
Note	An important item or prohibited item that should always be observed during operation is explained. Be sure to read these instructions to prevent mechanical failure or damage.
Tip	Supplementary information or a reference to the operation is explained. Users are recommended to read these memos.

Top Page of the Camera

The top page of the VB-C60 showing the Setting Menu, VB-C60 Viewer display, etc., is explained.

Access the top page of the camera in the web browser.

From the top page of the camera, you can access VB-C60 Viewer for displaying images and the Setting Menu that lets you specify detailed settings of the VB-C60.

If you are accessing the camera for the first time, see the *Start Guide* bundled with the camera.

> ## 📓 Note
> This document explains relevant operations based on the IP address 192.168.100.1 (factory setting). In reality, the customer must enter the IP address set for the camera.

Accessing the Top Page of the Camera

1. Access "http://192.168.100.1/" via the web browser.

2. The top page of the camera is displayed.

   An overview of each link is given below.

(1) Language Button

   Use this button to switch the display language.

(2) Setting Page (Setting Menu) Link

   Click this link to display the Setting Menu of the camera.

(3) Sample page link

   Click this link to display sample pages of the camera.

(4) VB-C60 Viewer launch link

Clicking this link launches VB-C60 Viewer, which displays the image captured by the camera in the web browser.

VB-C60 Viewer consists of two viewers: [Admin Viewer] and [VB Viewer] (→ P. 3-2).

● Explanation of each link

[Admin Viewer]

Launches Admin Viewer.

[VB Viewer]

Launches VB Viewer.

Accessing the Setting Menu

To specify detailed settings of the VB-C60, click (2) to proceed to the Setting Menu. For details on the Setting Menu, see "Setting Menu" in "Chapter 1 Detailed Settings" (→ P. 1-2).

Accessing Sample Pages

To access a sample page, click (3).

One of three sample pages, each showing a still image, video or image for mobile phone, can be displayed.

🔅 Tip

For specific instructions on how to use the sample pages, see "Chapter 4 Creating Web Pages for Video Distribution" (→ P. 4-2).

Accessing VB-C60 Viewer

Select [Admin Viewer] or [VB Viewer] from the (4) [VB-C60 Viewer] links to access VB-C60 Viewer.
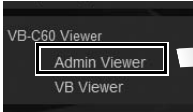
Admin Viewer
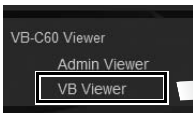
VB Viewer

User Authentication When Accessing Setting Menu or Admin Viewer

User authentication is required when accessing the camera's [Setting Menu] or [Admin Viewer].
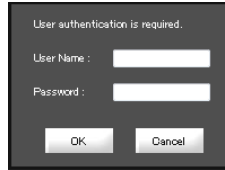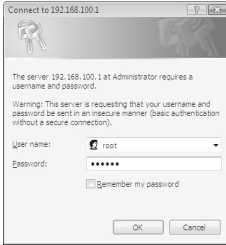
Authentication Screen on [Setting Page]   Authentication Screen on [Admin Viewer]

The factory settings are specified below.

> User name: root
>
> Password: VB-C60

The user name "root" is the Administrator account for the camera.

<table>
<tr><td colspan="1" align="center">Note</td></tr>
<tr><td>

Be sure to change the default Administrator password to ensure security of the system. Don't forget the new password.
If the sample pages (→ P. 4-4) must be deleted for security reasons, access the file found at the following path via FTP and back up a copy of the file to a PC, etc., before deleting the sample pages.
Path to English samples   : /mnt_flash/www/html/sample/en/
Path to Japanese samples : /mnt_flash/www/html/sample/ja/
Path to French samples   : /mnt_flash/www/html/sample/fr/
Path to Italian samples   : /mnt_flash/www/html/sample/it/
Path to German samples   : /mnt_flash/www/html/sample/de/
Path to Spanish samples   : /mnt_flash/www/html/sample/es/
To restore deleted sample pages, you must rewrite to the above paths the backup files that have been copied to a PC, etc. Be sure to create a backup before deleting a file.

</td></tr>
</table>

Note

● If the Administrator and Authorized User are sharing VB-C60 Viewer on the same PC, it is strongly recommended that the [Remember my password] check box be cleared.

● If a wrong user name or password is entered, the camera cannot be connected. Connect the camera by entering the correct user name and password.

● If you have forgotten the Administrator Password, press the reset switch to initialize the settings. See "Initializing with the Reset Switch on the Camera" (→ P. 5-21). Take note, however, that this will reset all settings of the camera, except for time and date, to their factory settings.

Tip

For details on VB-C60 Viewer and user types, see "Overview of VB-C60 Viewer" in "Chapter 3 VB-C60 Viewer" (→ P. 3-2).

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Detailed Settings

The following explains the detailed settings on network connection, camera control, date & time, access control, etc.

Setting Menu

You can move to each setting page from the Setting Menu to set various items regarding the camera.

Items that can be set on each setting page are explained below. See each reference page for details.

● Setting Menu
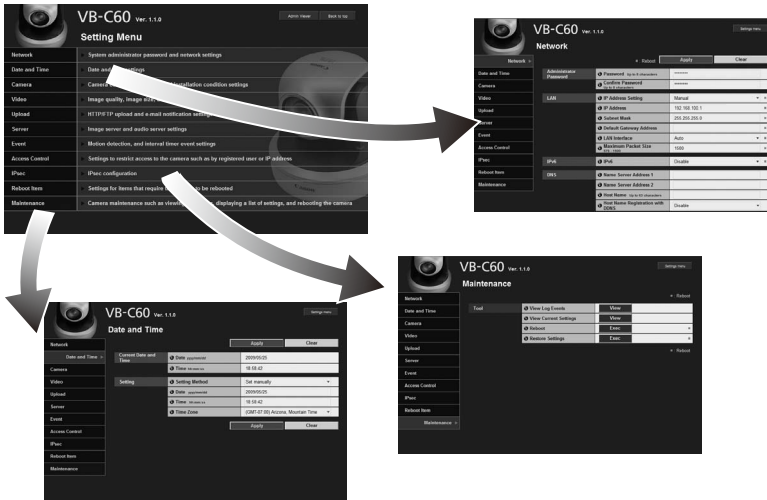
● Network

Set the Administrator password, LAN, IPv6, DNS and SNMP (→ P. 1-7).

● Date and Time

Set the date & time and time zone of the camera (→ P. 1-12).

● Camera

Set the camera name, initial camera settings, camera control, day/night, installation conditions, camera position control, external input device name and external output device name (→ P. 1-14).

● Video

Set the image quality, image size and frame rate in JPEG and MPEG-4 (→ P. 1-22).

● Upload

Set HTTP/FTP upload and e-mail notification (→ P. 1-24).

● Server

Set the image server, audio server and HTTP server (→ P. 1-30).

● Event

   Set the image buffer, motion detection, external device input, interval timer and audio file
   upload (→ P. 1-34).

● Access Control

   Set the authorized user accounts, user privileges and host access restriction (→ P. 1-40).

● IPsec

   IPsec configuration (→ P. 1-44).

● Reboot Item

   Set items requiring rebooting (reboot items) (→ P. 1-48).

● Maintenance

   "Tool" (View Log Events, View Current Settings, Reboot, Restore Settings) (→ P. 1-50).

> ### 📝 Note
>
> #### Notes on Use with Windows Vista/XP
>
> ● When the [Windows Security Alert] dialog box appears, click the [Unblock] button.
>   Once this button is clicked, this warning dialog box will no longer appear.
>
>
>
> ● If the dialog box appears and pop-up is blocked when accessing [HELP] of each setting
>   page or [View Log Events] or [View Current Settings] on the maintenance page, enable
>   [Pop-up] by following the procedure explained in the information bar.
>
>
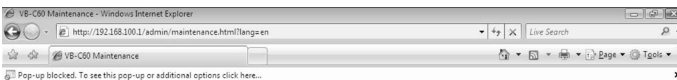
Accessing the Setting Menu

The various settings of the VB-C60 are specified by accessing the camera in the web browser. First, access the top page (→ P. xi).

For entry of the user name and password, see (→ P. xiv).

Setting Menu

You can access each setting page and Admin Viewer from the Setting Menu.

"VB-C60" is displayed as the model name.
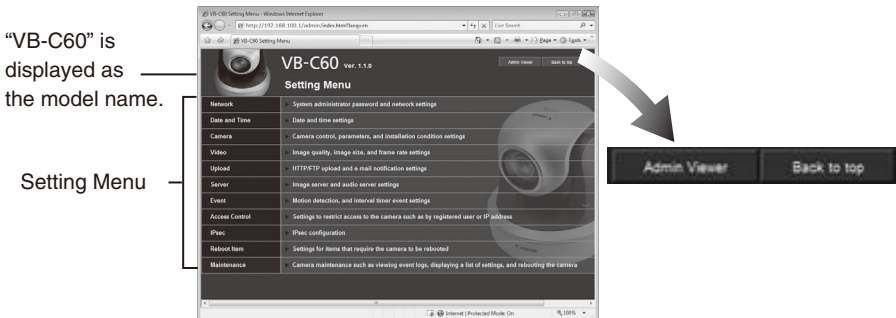
Setting Menu

(1) [Back to top] button

Clicking this button switches the display to the top page of the camera.

(2) [Admin Viewer] button

Clicking this button switches the display to Admin Viewer.

(3) Setting Menu

Clicking a desired button switches the display to each setting page.

📝 Note

Once all settings are complete on the setting page, close the web browser for security reasons.

Items Common to All Setting Pages

■ Application of Setting Changes

When any setting is changed on each setting page, the grayed-out [Apply] button shown on the top right of the setting page turns blue.

Apply	Clear

To make the new setting effective, click the [Apply] button.

To restore the original setting, click the [Clear] button.

■ Setting Changes Requiring Rebooting

The items whose setting will become effective only after the camera is rebooted are accompanied by an orange icon.

● IP Address Setting	Manual	▼ (■)

If any item accompanied by an orange icon is changed, the [Apply] button shown on the top right of each setting page changes to [Apply and reboot].

■ : Reboot	Apply and reboot	Clear

To confirm the new setting, click the [Apply and reboot] button. The new setting will be reflected and the camera will be rebooted.

To restore the original setting, click the [Clear] button.

📷 Note

If you switch to a different setting page without clicking the [Apply] button or [Apply and reboot] button, the changes you have made will be lost. To make the changes effective, be sure to click the [Apply] button or [Apply and reboot] button.

■ Returning to the Setting Menu

To return to the Setting Menu from each setting page, click the [Settings menu] button on the top right of the setting page.

VB-C60 Ver. 1.1.0   Settings menu

📷 Note

● Be sure to change the settings of each camera within one setting page.

● Do not move between setting pages using the [Back] and [Forward] buttons of the browser. The new settings may return to the original settings or unwanted setting changes may occur.

🔅 Tip

Click 🛈 [Help] at the beginning of any item on a setting page to display a detailed explanation of the setting item.

Setting the Administrator Password, LAN, IPv6, DNS, etc. (Network)

Network

■ : Reboot   OK   Clear

You can set the following items.

● Administrator Password

Set the Administrator password.

● LAN

Set the IP address and other items needed to establish LAN connection.

● IPv6

Set IPv6.

● DNS

Set the name server address, host name and DDNS.

● SNMP

Set the SNMP.

Administrator Password

| Administrator Password | ⓘ Password Up to 8 characters | .... |
| | ⓘ Confirm Password Up to 8 characters | .... |

(1) [Password]

Set the Administrator password. You can use up to eight (single-byte) ASCII characters (space or printable characters). The factory setting is "VB-C60." If Admin Viewer or VBAdmin Tools is connected, change the password after terminating the connection.

(2) [Confirm Password]

Enter the same password for confirmation.

📝 Note

● Be sure to change the default Administrator password to ensure security of the system. Don't forget the new password.

● If you have forgotten the Administrator Password, press the reset switch to initialize the settings. See "Initializing with the Reset Switch on the Camera" (→ P. 5-21). Take note, however, that this will reset all settings of the camera, except for time and date, to their factory settings.

LAN

(1) [IP Address Setting]

Select [Auto (DHCP)] or [Manual] as the address setting mode. If [Auto (DHCP)] is selected, the values automatically acquired from the DHCP server will be entered in [IP Address], [Subnet Mask] and [Default Gateway Address]. If [Manual] is selected, directly enter the values appropriate for the environment in which the camera is used.

(2) [IP Address]

If [Manual] was selected in (1), enter a fixed IP address.

(3) [Subnet Mask]

If [Manual] was selected in (1), enter the subnet mask specified for each network.

(4) [Default Gateway Address]

Enter an appropriate value if [Manual] was selected in (1). Be sure to set the default gateway address when connecting the camera to a subnet different from that of the viewer.

(5) [LAN Interface]

Select [Auto], [Full Duplex] or [Half Duplex]. Normally [Auto] should be used.

(6) [Maximum Packet Size]

Enter the maximum transmission unit. Normally the default setting of 1500 needs not be changed.

Note

● For [IP Address], [Subnet Mask] and [Default Gateway Address], contact your network administrator.

● If any of the [IP Address], [Subnet Mask] and [Default Gateway Address] settings is wrong, network access may be disabled. In this case, use VB Initial Setting Tool ("Perform Initial Setting of the Camera" in *Start Guide*) to set the address again.

● If the [IP Address], [Subnet Mask], [Default Gateway Address], [LAN Interface] or [Maximum Packet Size] setting is changed, the camera may become no longer accessible from the active browser. Check beforehand the precautions explained in "Notes" in "Setting the Items Requiring Rebooting (Reboot Item)" (→ P. 1-49). Also check the precautions in the same section before changing each setting in "[IPv6]" (→ P. 1-9) and "DNS" (→ P. 1-10).

● If [Auto (DHCP)] is selected as the address setting mode, the IP address may not be assigned correctly in certain environments, such as when a router is present between the DHCP server and this camera. In this case, assign a fixed IP address by selecting [Manual].

● If you are using IPv6, set 1280 or greater value under [Maximum Packet Size].

Tip

● If you are using optical fiber or ADSL, you may be able to improve the sending efficiency by slightly reducing the maximum packet size.

● You can use the VB Initial Setting Tool to check the IP address assigned by [Auto (DHCP)].

IPv6

| IPv6 | ⓘ IPv6 | Enable | ▼ |
| | ⓘ IPv6 Address | | |

(1) [IPv6]

Select [Disable] or [Enable] regarding the use of IPv6.

(2) [IPv6 Address]

If [Enable] is selected for IPv6, an automatically acquired address will be shown.

Tip

In an environment where IPv6 cannot be used, the [IPv6 Address] field remains blank even when [Used] is selected for IPv6.

DNS

DNS	ⓘ Name Server Address 1	
	ⓘ Name Server Address 2	
	ⓘ Host Name Up to 63 characters	
	ⓘ Host Name Registration with DDNS	Disable ▾

(1) [Name Server Address 1], [Name Server Address 2]

Enter each name server address you want to register. If only one address is registered, keep the [Name Server Address 2] field blank.

(2) [Host Name Registration with DDNS]

Select [Enable] and enter the host name. The host name can be registered in the name server.

You can use up to 63 (single-byte) characters including A to Z, a to z, 0 to 9, "-" (hyphen), _ (underscore) and "." (period).

🔅 Tip

● For added convenience, register the host name if the camera is to be used by [Auto (DHCP)] (→ P. 1-8). Certain items must be set beforehand for registration in the DNS server. For the DNS server settings, contact your System Administrator.

● If [Name Server Address 1] cannot be used, [Name Server Address 2] will be accessed. However, [Name Server Address 2] must be already set.

SNMP

SNMP	ⓘ SNMP	Enable ▾
	ⓘ Community Name Up to 31 characters	public
	ⓘ Administrator Contact Information Up to 63 characters	
	ⓘ Administration Function Name Up to 31 characters	
	ⓘ Installation Location Up to 31 characters	

(1) [SNMP]

Select whether to use SNMP from [Disable] or [Enable]. When [Enable] is selected, the SNMP Manager can reference information set in the camera.

(2) [Community Name]

Set a community name for SNMP. It is recommended that you change the default community name to ensure security of the system.

(3) [Administrator Contact Information]

Set contact information (e-mail address, etc.) for the Administrator of the camera. The settings can be referenced by the SNMP Manager.

(4) [Administration Function Name]

Set the camera name used for administration. The settings can be referenced by the SNMP Manager.

If this field is left blank, "VB-C60" will be used by default.

(5) [Installation Location]

Set information regarding the installation location of this camera. The settings can be referenced by the SNMP Manager.

🔅 Tip

● The information set in the camera is read-only from the SNMP Manager.

● Use the SNMP Manager SNMP MIB2 (supporting RFC1213).

● The camera's SNMP does not support IPv6.

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Detailed Settings

Setting the Date and Time (Date and Time)

Date and Time

| OK | Clear |

You can set the following items.

- Current Date and Time

  The date and time set in the camera is shown.

- Setting

  Select the date & time setting method and time zone for this camera.

Current Date and Time

| Current Date and Time | ⓘ Date yyyy/mm/dd | 2008/05/23 |
| | ⓘ Time hh:mm:ss | 09:43:57 |

[Date], [Time]

The date and time currently set in the camera is shown.

Setting

Setting	ⓘ Setting Method	Set manually
	ⓘ Date yyyy/mm/dd	2008/05/23
	ⓘ Time hh:mm:ss	09:43:57
	ⓘ Time Zone	(GMT+09:00) Osaka, Sapporo, Tokyo

(1) [Setting Method]

Select [Set manually], [Synchronize with NTP server], [Synchronize with NTP broadcast] or [Synchronize with computer time].

(2) [Date], [Time]

Set the following items according to the selection for [Setting Method] made in (1).

[Set manually]

You can set a desired date and time. Enter the date in the order of <year/month/day> and time in the order of <hours:minutes:second> in the 24-hour format. (Two digits each for month, day, and hour.)

Example: To specify August 23, 2008 1:23:04 pm, enter "2008/08/23" and "13:23:04."

Setting	ⓘ Setting Method	Set manually ▼
	ⓘ Date yyyy/mm/dd	2008/05/23
	ⓘ Time hh:mm:ss	09:43:57
	ⓘ Time Zone	(GMT+09:00) Osaka, Sapporo, Tokyo ▼

[Synchronize with NTP server]

The camera will synchronize with that time of the NTP server. Enter the IP address of the NTP server.

ⓘ Setting Method	Synchronize with NTP server ▼
ⓘ NTP Server (IP Address)	
ⓘ Time Zone	(GMT+09:00) Osaka, Sapporo, Tokyo ▼

[Synchronize with NTP broadcast]

The camera will synchronize with the NTP broadcast time.

ⓘ Setting Method	Synchronize with NTP broadcast ▼
ⓘ Time Zone	(GMT+09:00) Osaka, Sapporo, Tokyo ▼

[Synchronize with computer time]

The camera will synchronize with the date and time of the computer currently accessing the camera. The time zone will also be selected automatically.

ⓘ Setting Method	Synchronize with computer time ▼
ⓘ Date yyyy/mm/dd	2008/05/31
ⓘ Time hh:mm:ss	20:35:39
ⓘ Time Zone	(GMT+09:00) Osaka, Sapporo, Tokyo

(3) [Time Zone]

Select from the list an applicable time difference from the Greenwich Mean Time.

💠 Tip

● If you select [Synchronize with computer time], clicking the [Apply] button to apply the setting will set the setting shown under [Setting Method] to [Set manually].

● If [Synchronize with NTP Server] is selected, the date and time will not be changed when the IP address of the NTP server is wrong or otherwise the NTP server cannot be connected.

● The camera's NTP does not support IPv6.

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Detailed Settings

Setting the Camera Control and External Device Name (Camera)

Camera

: Reboot   [OK]   [Clear]

You can set the following items.

- Camera Name

  Enter the name of the camera. The camera name is required if the RM-series software is used with the camera.

- Initial Camera Settings

  Set the AE mode, slow shutter, shutter speed and focus mode.

- Camera Control

  Set the digital zoom and image stabilizer.

- Day/Night

  Set the Day/Night switching mode.

- Installation Conditions

  Set whether or not you will use a dome, the LED setting, and the mounting method.

- Camera Position Control

  Set whether or not to limit the camera's pan/tilt/zoom operations to the preset positions registered beforehand. Also, set the operation to be performed when control privileges are not requested.

- External Device Name

  Set the external input device name and external output device name.

General

General   ⓘ Camera Name Up to 15 characters | Camera

[Camera Name]

Be sure to enter the camera name into [Camera Name (alphanumeric characters)].

Up to 15 ASCII characters (spaces or printable characters) can be used for the [Camera Name (alphanumeric characters)].

🐾 Tip

If you are using the optional recording software (RM-64/RM-25/RM-9 or bundled RM-Lite), the camera name set here will be shown when the camera is registered.

Initial Camera Settings

Initial Camera Settings	ⓘ AE Mode	Auto ▾
	ⓘ Slow Shutter	Disable ▾
	ⓘ Focus Mode	Auto ▾

Initial Camera Settings	ⓘ AE Mode	Shutter Priority AE ▾
	ⓘ Shutter Speed	1/100 ▾
	ⓘ Focus Mode	Auto ▾

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Detailed Settings

(1) [AE Mode], [Slow Shutter], [Shutter Speed]

Set the camera exposure control and shutter speed.

[AE Mode]

[Auto]

The exposure is controlled automatically.

[Flickerless]

In this mode, image flickers caused by fluorescent lights, etc., can be reduced. The shutter speed is automatically adjusted according to the brightness of the environment in which the camera is used.

[Shutter-priority AE]

In this mode, a desired shutter speed can be specified.

[Slow Shutter]

Slow shutter can be set only when [Auto] is selected under [AE Mode].
Set the maximum slow shutter time to be used in the auto exposure mode when capturing video in a dark place. Select [Disable], [1/15] or [1/8]. The longer the shutter time, the more likely a residual image generates when a moving subject is captured. Accordingly, select an appropriate time according to the capture condition.

[Shutter Speed]

Shutter Speed can be set only when [Auto (Shutter-priority AE)] is selected under [AE Mode]. Select a desired shutter speed of the camera from the 12 levels from [1/8] to [1/8000]. When capturing a moving subject, selecting a higher shutter speed lets you capture less blurry image.

(2) [Focus Mode]

Set the focus mode of the camera.

[Auto]

The subject is automatically brought into focus. Normally [Auto] should be selected.

[Fixed at infinity]

The focus can be fixed to near infinity.

Note

- Where an outdoor scene is captured from inside a room through a glass window, etc., the camera may focus on the glass surface if there is dust or water on the glass surface. In this case, use the camera by installing it at the shortest possible distance (within 30 cm) from the glass surface.

- The initial camera settings (1) and (2) define the defaults that apply when the camera is started. Setting changes will be reflected only after the camera is reconnected or camera is rebooted.
Specify the settings used in the actual operating environment, using Control for Admin in VB-C60 Viewer. See "Opening Control for Admin" (→ P. 3-23).

- If the subject is a traffic signal, electronic scoreboard, etc., the captured image may flicker. In this case, try changing the [AE Mode] setting to [Auto (Shutter-priority AE)] and selecting a shutter speed lower than 1/100, to see if the problem improves.

1

Tip

- Auto focus may not work properly with the following subjects:

A white wall or other subject having no contrasting bright/dark areas

A slanting subject

A subject reflecting strong light
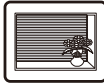
A subject consisting only of slant lines or horizontal stripes

A subject having no form, such as flame or smoke

A subject seen through glass

A fast-moving subject
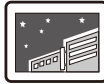
A dark area or night view

A subject that is simultaneously far and near

- The focus ranges (rough guide) are shown in the table below according to the settings of [Day/Night], etc.

	Day/Night setting		Day mode		Night mode	
	Dome	Infrared lamp	Wide end	Tele end	Wide end	Tele end
Auto	Not used	None	0.3m~∞	1.5m~∞	0.5m~∞	1.8m~∞
	Used	None	2.1m~∞		2.4m~∞	
	Not used	Yes			0.5m~∞	1.8m~∞
	Used	Yes			0.5m~∞	2.4m~∞
Fixed at infinity		None	Point of infinity			
		Yes	Point of infinity Note) The camera may be out of focus.			

- When it is difficult to focus on a night view or other subject having no contrasting bright/ dark areas, it is best to set the focus mode to "Fixed at infinity."

Camera Control

Camera Control	ⓘ Digital Zoom	Disable ▼
	ⓘ Image Stabilizer	Disable ▼

(1) [Digital Zoom]

Select [Enable] or [Disable] for digital zoom.

* The higher the digital zoom ratio, the lower the image quality becomes.

(2) [Image Stabilizer]

Select the image stabilizer setting from among the following: [Disable], [On1] and [On2]. The Image Stabilizer has the effect of correcting blurry images. If you selected [On1] but the image is still blurry, try using [On2].

If you select [On1] or [On2] as the image stabilizer setting, the viewing angle will be smaller and the image more coarse than when [Disable] is selected. This is not a malfunction.

	Compensable level of blurriness	Viewing angle ratio	Effective pixels
Disable	—	100%	Approx. 310,000 pixels
On1	Small	83%	Approx. 210,000 pixels
On2	Large	50%	Approx. 80,000 pixels

📷 Note

- If you use [On2], it is best to select a received image size smaller than "320 x 240".
- The Image Stabilizer is not effective when the subject is shaking.
- Image Stabilizer does not work against significant vibration exceeding a certain level or momentary vibration.
- See P. 3-22 for the notes on using the viewer when the Image Stabilizer is set.

Day/Night

Day/Night	ⓘ Mode	Auto ▾
	ⓘ Switching Brightness	Standard ▾
	ⓘ Response (sec.)	20 ▾

(1) [Mode]

Select [Manual] or [Auto] as the Day/Night mode.

If you have selected [Manual], you can manually switch between [Day Mode] and [Night Mode] using Night mode on Admin Viewer (P. 3-32).

If you have selected [Auto], set [Switching Brightness] and [Response (sec.)] according to the environment in which the camera is installed as well as the desired switching conditions.

* [Auto] cannot be used in an environment where infrared illumination is also used.

(2) [Switching Brightness]

Set the brightness at which the Day mode and Night mode will be switched. Select [Darker], [Slightly Darker], [Standard], [Slightly Brighter] or [Brighter]. Select [Darker] to capture video in color whenever possible.

Select [Brighter] to reduce noise. Note that this will cause the camera to switch to black & white earlier.

(3) [Response (sec.)]

Set the time in seconds needed to make judgment on day/night mode switching. Select [5], [10], [20], [30] or [60].

If the brightness remains above or below the level set in (2) for the number of seconds set above, the day mode and night mode will switch.
If the brightness changes frequently, such as when a light source passes in front of the camera, select [30] or [60]. If the change in brightness is minimal, select [5] or [10].

📓 Note

- If you want to set [Auto] for [Day/Night], conduct a thorough operation test and check the effectiveness of the setting beforehand.
- If [Auto] is selected under [Day/Night], set [Exposure] of VB-C60 Viewer to [Auto], [Auto (Flickerless)] or [Auto (Shutter-priority AE)] (→ P. 3-27).
- If infrared illumination is also used, set [Manual] under [Day/Night]. It cannot be used in [Auto].
- If [Auto] is set under [Day/Night], the infrared cutoff filter may move several times back and forth while the mode is being switched between [Day Mode] and [Night Mode]. Pan, tilt, zoom and manual focus do not work during this period.

1 Detailed Settings

Installation Conditions
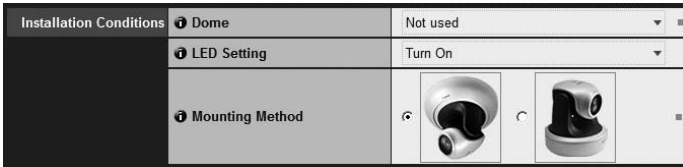
(1) [Dome]

Select whether or not a dome is used. To use the camera with a dome housing, select [Used].

(2) [LED Setting]

Select the status of the LED on the camera's head arm from [Turn Off] or [Turn On]. If you are using the optional Indoor Dome Housing (VB-RD51S-C/S) or if image capture is obstructed, for example by reflected LED light entering the capture area, or you do not want to turn on the LED, set this to [Turn Off].

(3) [Mounting Method]

Select an appropriate method according to the orientation in which the camera is mounted. The factory setting is "On the ceiling."

🔅 Tip

● Even when [Turn Off] is selected under [LED Setting], the LED comes on briefly when the camera starts.

● The image showing a ceiling-mounted camera under [Mounting Method] shows the camera with a Ceiling Mount Cover (Ceiling Mount Cover is an option).

Camera Position Control

| Camera Position Control | ⓘ Restricted to Presets | No Restriction ▼ |
| | ⓘ Camera Position without Control | Do not return to Home Position ▼ |

(1) [Restricted to Presets]

Select the camera control preset from [No Restriction] or [Preset Only]. If [Preset Only] is selected, you can limit the camera control by any non-administrator user to the preset angles only.

(2) [Camera Position without Control]

If control privileges are not requested when the home position has already been set, select either [Do not return to Home Position] or [Return to Home Position] as the camera movement.

If you select [Return to Home Position] and no one has camera control privileges, the camera automatically moves to the home position. To use this function, set the home position of the camera in advance. Set the home position using "Preset Setting Tool" (→ P. 2-22).

External Input Device 1, 2/External Output Device 1, 2

| External Input Device 1 | ⓘ Device Name (alphanumeric characters) Up to 15 characters | |
| External Input Device 2 | ⓘ Device Name (alphanumeric characters) Up to 15 characters | |

| External Output Device 1 | ⓘ Device Name (alphanumeric characters) Up to 15 characters | |
| External Output Device 2 | ⓘ Device Name (alphanumeric characters) Up to 15 characters | |

[Device Name] for external input device/external output device

Be sure to enter each device name to identify the corresponding external device being connected. Enter the device name (single-byte alphanumerics) using up to 15 characters (ASCII characters (space or printable characters) excluding a double quotation mark (")).

⊗ Tip

If you are using Admin Viewer and an optional recording software (RM-64/RM-25/RM-9 or bundled RM-Lite), the external device name set here will be shown when the camera is registered.

1

Detailed Settings

Setting the Image Size, Quality and Frame Rate (Video)

Video

≡ : Reboot | Apply | | Clear |

You can set the following items.

- JPEG

  Set the image quality, size and maximum frame rate in JPEG.

- MPEG-4

  Set the video quality, size and capture frame rate in MPEG-4.

JPEG

JPEG	ⓘ Image Quality: 160 x 120	3 ▼
	ⓘ Image Quality: 320 x 240	3 ▼
	ⓘ Image Quality: 640 x 480	3 ▼
	ⓘ Image Size: Image Transmission	320 x 240 ▼
	ⓘ Maximum Frame Rate: Image Transmission 0.1 - 30	30.0
	ⓘ Image Size: Upload	320 x 240 ▼

(1) [Image Quality]

Select a desired quality from 1 to 5 (total 5 levels) for image transmitted at each image size in JPEG.

The greater the value, the higher the quality becomes.

(2) [Image Size: Image Transmission]

Select the image transmission size from [160 x 120], [320 x 240] and [640 x 480]. The default image size used by each viewer is selected.

(3) [Maximum Frame Rate: Image Transmission]

Limit the maximum transmission frame rate per second to reduce the viewer load. The maximum is 30 frames/sec. Enter a value between 0.1 and 30.0.

(4) [Image Size: Upload]

Select [160 x 120], [320 x 240] or [640 x 480] for the size of transmitted image using the upload function. For details of upload settings, see "Setting HTTP/FTP Upload and E-mail Notification (Upload)" (→ P. 1-24).

MPEG-4

MPEG-4	ⓘ Video Quality	3	▼
	ⓘ Video Size	320 x 240	▼ ▪
	ⓘ Capture Frame Rate	30	▼ ▪

(1) [Video Quality]

Select a desired quality from 1 to 5 (total 5 levels) for video transmitted in MPEG-4.

The greater the value, the higher the quality becomes.

(2) [Video size]

Select [320 x 240] or [640 x 480] for the size of video transmitted.

(3) [Capture Frame Rate]

Select [10], [15] or [30] (fps) as the capture frame rate.

🖝 Note

● If a higher video size or quality is set, the data size per frame will increase and the network load will increase.

    JPEG   : The frame rate may drop.

    MPEG-4   : Video may be temporarily disrupted.

● The data size may increase depending on the type or movement of the subject. If the frame rate remains low or other undesirable condition continues for a long period, lower the image size or quality setting.

● Note that if you are using the optional recording software (RM-64/RM-25/RM-9 or bundled RM-Lite), the amount of hard disk space used will also be affected during recording.

1

Detailed Settings

Setting HTTP/FTP Upload and E-mail Notification (Upload)

Upload

■ : Reboot | OK | Clear

You can set the following items.

- General Upload

  Set the upload operations.

- HTTP Upload

  Set the upload via HTTP connection.

- FTP Upload

  Set the upload via FTP connection.

- E-mail Notification

  Set items relating to sending of event information and video by e-mail.

General Upload

General Upload | ⓘ Upload | HTTP Upload ▾ ■

[Upload]

Select [Upload Disabled], [HTTP Upload] or [FTP Upload] as the upload mode.

📔 Note

- To use the upload function, the [Event] menu must also be set (→ P. 1-34).
- If you are using both e-mail notification by text with image and image upload by HTTP/FTP, set [320 x 240] or less under [Image Size: Upload] (→ P. 1-22)
- If you set the camera to perform upload or e-mail notification continuously, some images or e-mails may not be sent properly, depending on the image size and network conditions to the server. In this case, an event log message is displayed.

🔅 Tip

To lower the upload or e-mail notification load, try the following measures. Also check the settings including network to the server.

- Reduce the image file size:
    - Set a lower value under [Image Quality] for JPEG (→ P. 1-22).
    - Set a lower value for [Image Size: Upload] for JPEG (→ P. 1-22).

● Reduce the uploading frequency:
  - Reduce the value in [Pre-event Buffer (number of image frames)] or [Post-event Buffer (number of image frames)] (→ P. 1-34).
  - If [Motion Detection Event] is enabled, disable [ON Event Operation], [OFF Event Operation] or [Continuous Motion Operation] (→ P. 1-35).
  - If [External Device Input Event] is enabled, disable [ON Event Operation] or [OFF Event Operation] (→ P. 1-37).
  - If [Interval Timer Event] is enabled, increase the value in [Interval of the Timer] (→ P. 1-38).

● Reduce the e-mail notification frequency:
  - If [Motion Detection Event] is enabled, disable [ON Event Operation], [OFF Event Operation] or [Continuous Motion Operation] (→ P. 1-35).
  - If [External Device Input Event] is enabled, disable [ON Event Operation] or [OFF Event Operation] (→ P. 1-37).
  - If [Interval Timer Event] is enabled, increase the value in [Interval of the Timer] (→ P. 1-38).

HTTP Upload

HTTP Upload	ⓘ Notification	Notification Only with HTTP ▾
	ⓘ URI Up to 255 characters	
	ⓘ User Name Up to 31 characters	
	ⓘ Password Up to 31 characters	********
	ⓘ Proxy Server Up to 63 characters	
	ⓘ Proxy Port 1 - 65535	80
	ⓘ Proxy User Name Up to 31 characters	
	ⓘ Proxy Password Up to 31 characters	********
	ⓘ Parameter (query string) Up to 127 characters	
	ⓘ HTTP Upload Test	Exec

(1) [Notification]

Select [Notification Only with HTTP] or [Image attached Notification with HTTP] as the content of notification.

(2) [URI]

Enter the URI to upload to (using up to 255 characters).

(3) [User Name], [Password]

Enter the user name and password required for authentication.

(4) [Proxy Server]

Enter the host name or IP address of the proxy server (using up to 63 characters).

(5) [Proxy Port]

Enter the port number of the proxy server (default = "80").

(6) [Proxy User Name], [Proxy Password]

Enter the user name and password of the proxy server.

(7) [Parameter (query string)]

Enter an appropriate parameter (using up to 127 characters). The parameter can be entered using "%" characters (→ P. 5-2).

(8) [HTTP Upload Test]

Clicking the [Exec] button initiates an upload test based on the settings currently applied.

📖 Note

Enter [Proxy Server], [Proxy Port], [Proxy User Name] and [Proxy Password] if connecting via a proxy.

FTP Upload

(1) [Notification]

The notification setting is set to [Image data upload with FTP].

(2) [FTP Server]

Enter the host name or IP address of the FTP server (using up to 63 characters).

(3) [User Name], [Password]

Enter the user name and password required for authentication.

(4) [PASV Mode]

Select [Enable] or [Disable] for the PASV mode when uploading via FTP.

(5) [File Upload Path]

Enter the path to the folder to upload the image file to (using up to 255 characters).

(6) [File Naming]

Set a desired file naming mode.

[YYMMDDHHMMSSms]

Image is uploaded according to the file name format of
"{year}{month}{day}{hour}{minute}{second}{ms}.jpg." Example: 20080123112122000.jpg)

[YYMMDD Directory/HHMMSSms]

A sub directory named "{year}{month}{day}" is created first, and then the image is
uploaded using the file name "{hour}{minute}{second}{ms}.jpg." (Example: 20080123/
112122000.jpg)

[Loop]

Image is updated under a file name consisting of a number up to the value set in
[**Maximum Number of Loops**]. (Example: 0000.jpg, 0001.jpg)

[User setting]

Images are uploaded with the file name specified by [**Subdirectory Name to Create**] and
[**File Name to Create**].

🛈 File Naming	Loop ▾
🛈 Maximum Number of Loops 0 - 9999	0

[Maximum Number of Loops]

If [**Loop**] is selected as the recording mode, enter the maximum number of loops in a
range of 0 to 9999.

🛈 File Naming	User Setting ▾
🛈 Subdirectory Name to Create Up to 127 characters	
🛈 File Name to Create Up to 127 characters	image.jpg
🛈 FTP Upload Test	Exec

[Subdirectory Name to Create], [File Name to Create]

If File Naming is set to [**User Setting**], enter the subdirectory name to be created as well as
the name of the created file (using up to 127 characters). Each parameter can be entered
using "%" characters (→ P. 5-2).

(7) [FTP Upload Test]

Clicking the [**Exec**] button initiates an upload test based on the settings currently applied.

E-mail Notification

E-mail Notification	ⓘ Notification	Text Only ▼
	ⓘ Mail Server Name Up to 63 characters	
	ⓘ Mail Server Port 1 - 65535	25
	ⓘ Sender (From) Up to 63 characters	
	ⓘ Recipient (To) Up to 63 characters	
	ⓘ Authentication	None ▼
	ⓘ Subject Up to 31 characters	
	ⓘ Message Up to 255 characters	
	ⓘ E-mail Notification Test	Exec

(1) [Notification]

Select [Text only] or [Text with image] as the content of notification.

(2) [Mail Server Name]

Enter the host name or IP address of the SMTP server (using up to 63 characters).

(3) [Mail Server Port]

Enter the port number of the SMTP server (default = "25").

(4) [Sender (From)]

Set the e-mail address of the sender (using up to 63 characters).

(5) [Recipient (To)]

Set the e-mail address of the recipient (using up to 63 characters).

(6) [Authentication]

Select [None], [POP before SMTP] or [SMTP-AUTH] as the e-mail authentication mode.

Set an appropriate mode according to the authentication mode used by the SMTP server to send to.

[User Name], [Password], [POP Server]

If [POP before SMTP] is selected as the e-mail authentication mode, enter the user name, password, and host name or IP address of the POP server, required for authentication.

ⓘ Authentication	POP before SMTP	▾
ⓘ **User Name** Up to 31 characters	username	
ⓘ **Password** Up to 31 characters	********	
ⓘ **POP Server** Up to 63 characters	servername	

[User Name], [Password]

If [SMTP-AUTH] is selected as the e-mail authentication method, enter the user name and password required for authentication.

ⓘ Authentication	SMTP-AUTH	▾
ⓘ **User Name** Up to 31 characters	username	
ⓘ **Password** Up to 31 characters	********	

(7) [Subject]

Enter the subject of the e-mail to be sent (using up to 31 characters).

(8) [Message Body]

Enter the message (text) of the e-mail to be sent (using up to 255 characters). The test can be entered by parameters having "%" characters (→ P. 5-2).

(9) [E-mail Notification Test]

Clicking the [Exec] button initiates an e-mail notification test based on the settings currently applied.

Setting the Image Server, Audio Server and HTTP Server (Server)

Server

■ : Reboot   OK   Clear

You can set the following items.

● Image Server

Set the items needed to deliver image from the camera.

● Audio Server

Set the items relating to transmitting/receiving audio.

● HTTP Server

Set the HTTP port and web page delivery.

Image Server

Image Server	ⓘ Maximum Number of Clients 0 - 30	30
	ⓘ Camera Control Queue Length 0 - 30	30
	ⓘ Maximum Connection Time (sec.) 0 - 65535	0
	ⓘ Camera Control Time (sec.) 1 - 3600	20

(1) [Maximum Number of Clients]

Set the maximum number of clients that can be connected to the camera at the same time. Up to 30 clients can be set. If 0 is set, connection is prohibited except for Admin Viewer.

(2) [Camera Control Queue Length]

Set the maximum queue length of requests for the camera control privilege from clients. The maximum value is 30. Enter an integer between 0 and 30. If 0 is entered, camera control by non-administrator users is prohibited.

(3) [Maximum Connection Time (sec.)]

Set the time in seconds during which an individual client can connect to the camera. The maximum time is 65535 seconds. Enter an integer from 0 to 65535. If 0 is entered, the connection time becomes unlimited.

(4) [Camera Control Time (sec.)]

Set the maximum time during which the viewer can control the camera. The maximum time is 3,600 seconds. Enter an integer from 1 to 3600.

Audio Server

(1) [Audio Transmission from the Camera]

When [Enable] is selected, the audio input through the microphone attached to the camera can be transmitted to VB-C60 Viewer.

(2) [Input Volume]

Set the audio input volume between 1 and 100. The greater the value, the larger the input volume.

(3) [Voice Activity Detection]

If [Enable] is selected, the audio transmission size is reduced temporarily when no audio is output. This way, the load of the applicable network can be reduced.

(4) [Audio Reception from the Viewer]

If [Enable] is selected, the audio from the optional RM Viewer or bundled RM-Lite Viewer can be received and output from the speaker with amplifier connected to the camera.

(5) [Output Volume]

Set the audio output volume between 1 and 100. The greater the value, the larger the output volume.

(6) [Echo Canceller]

If [Enable] is selected, echo between the microphone and speaker is suppressed.

(7) [Audio Input]

Set the microphone input. Select [Line In], [Microphone In (dynamic microphone)] or [Microphone In (condenser microphone)].

• Audio Transmission
• Input Volume
• Voice Activity Detection
• Echo Canceller

LAN

• Audio Reception
• Output Volume

LAN
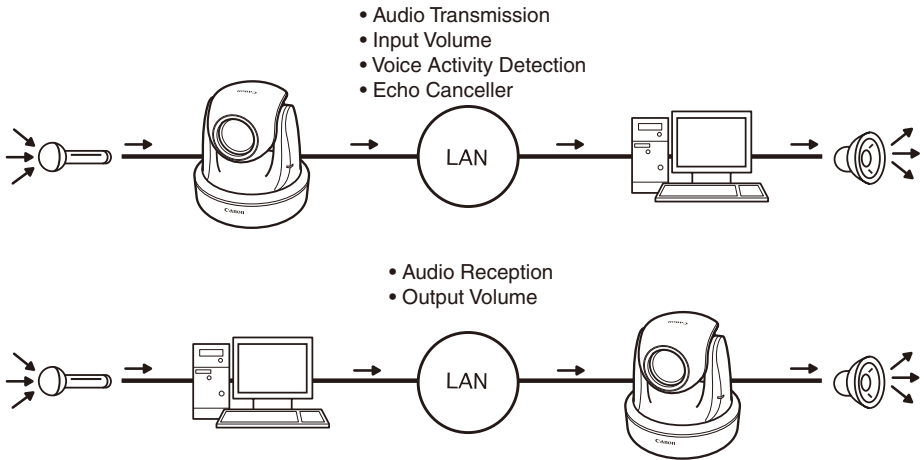
Note

Switch [Line In] and [Microphone In] on each setting page according to the specification of the microphone (→ P. 1-31).
If a wrong input is used, the camera or microphone may be damaged. Be sure to set the correct input.

Note

● The volume, sound quality, etc., may change depending on the characteristics of the microphone used.

● To output audio from the audio output terminal of the camera, send audio from RM-Lite Viewer. Audio cannot be sent from VB-C60 Viewer See "Audio Transmission/Reception (Two-way Communication)" in RM-Lite Viewer (→Start Guide).

● Connect a speaker with an amplifier to the camera. See "Audio Input/Output Terminals" (→Start Guide).

● If [Enable] is selected under [Echo Canceller], the sound quality or volume may be affected. Utilize this function as necessary according to the installation environment and how the camera is used.

● To transmit audio, read "Notes" in "Audio Input/Output Terminals" of Start Guide carefully.

HTTP Server

HTTP Server	ⓘ HTTP Port 80,1024 - 65535	80	=
	ⓘ Global Address for the Web Page	IP Address	▾
	ⓘ IP Address (global address for the web page)		
	ⓘ Port Number (global address for the web page) 1 - 65535		

(1) [HTTP Port]

Set the HTTP port number in a range of 80 and 1024 to 65535.

Normally "80" (factory setting) should be used.

(2) [Global Address for the Web Page]

If a fixed global address is assigned to the camera using the NAT function of the router (→ P. 4-12), set the global address and port number here. If [IP Address] is selected, enter the specified IP address in the [IP Address] field. If [Host Name] is selected, the host name specified in [DNS] under [Network] will be used. Set the necessary items under [DNS] (→ P. 1-10).

🔒 Note

● If the setting of [HTTP Port] is changed, the camera may no longer become accessible from the active browser. Check beforehand the precautions explained in "Notes" in "Setting the Items Requiring Rebooting (Reboot Item)" (→ P. 1-49).

● If [IP Address] is selected under [Global Address for the Web Page], be sure to set both [IP Address (global address for the web page)] and [Port Number (global address for the web page)]. If [Host Name] is selected, also be sure to set [Host Name] under [DNS] on the [Network] setting page.

1

Detailed Settings

Setting the Image Buffer, Motion Detection, Audio Playback and Interval Timer (Event)

Event

	OK	Clear

You can set the following items.

- Image Buffer

  Set the items associated with the temporary saving of image in the image buffer.

- Motion Detection

  Set the operation to be performed at the time of motion detection.

- External Device Input

  Set the operation to be performed when an event is input from an external device.

- Interval Timer

  Set the timer period for e-mail notification or upload.

- Sound Clip Upload

  Set the audio file to be registered as a sound playback.

Image Buffer

Image Buffer	ⓘ Frame Rate 1 - 10	1
	ⓘ Pre-event Buffer (number of image frames) 0 - 100	0
	ⓘ Post-event Buffer (number of image frames) 0 - 100	0

(1) [Frame Rate]

Set the frame rate that applies when image is temporarily saved in the image buffer when an event occurs.

(2) [Pre-event Buffer (number of image frames)]

Set the number of images to be buffered before the event.

(3) [Post-event Buffer (number of image frames)]

Set the number of images to be buffered after the event.

📖 Note

- The maximum image buffer size is approx. 4 MB. If a large image size is set, the Frame Rate, Pre-event Buffer and Post-event Buffer may not be achieved as specified (→ P. 1-24).
- If buffering cannot be achieved as specified, an event log message appears. Before using a large image size, confirm that no messages appear in the event log (→ P. 1-24).

> ### ❋ Tip
>
> Regardless of the image buffer frame rate setting, only a single image will be uploaded when a timer event occurs.

Motion Detection

Motion Detection	ⓘ Motion Detection Event	Enabled	
	ⓘ ON Event Operation	Enable	▾
	ⓘ OFF Event Operation	Enable	▾
	ⓘ Continuous Motion Operation	Enable	▾
	ⓘ Upload	Enable	▾
	ⓘ E-mail Notification	Enable	▾
	ⓘ Audio Playback at ON Event	Enable	▾
	ⓘ Audio Playback at OFF Event	Enable	▾
	ⓘ Sound Clip	sound1	▾
	ⓘ Volume 1 - 100	50	
	ⓘ Automatic Tracking at ON Event	Enable	▾
	ⓘ Maximum Tracking Time (sec.) 1 - 300	60	

(1) [Motion Detection Event]

Shows whether motion detection events are enabled/disabled. To change this setting, use Motion Detection Setting Tool in VBAdmin Tools (→ P. 2-34). When motion detection events are enabled, the camera provides event notification to a viewer capable of displaying the detected event, such as the Admin Viewer.

(2) [ON Event Operation]

Select the operation to be performed upon an ON event. If [**Enable**] is selected, (5), "Upload" and (6), "E-mail Notification" are displayed. When the mode changes to [**Detected**] (ON event), the process set in (5) or (6) is performed.

(3) [OFF Event Operation]

Select the operation to be performed upon an OFF event. If [**Enable**] is selected, (5), "Upload" and (6), "E-mail Notification" are displayed. When the [**Detected**] mode is finished (OFF event), the process set in (5) or (6) is performed.

(4) [Continuous Motion Operation]

Select the operation to be performed during motion detection. If [**Enable**] is selected, (5), "Upload" and (6), "E-mail Notification" are displayed. When the mode changes to [**Detected**] (detected period), the process set in (5) or (6) is performed.

(5) [Upload]

Select the upload operation. If [Enable] is selected, upload is performed every time a motion detection event occurs. To use this function, the [General Upload] sub-menu and [HTTP Upload] or [FTP Upload] sub-menu must also be set from the [Upload] menu.

(6) [E-mail Notification]

Select the e-mail notification operation to be performed. If [Enable] is selected, e-mail notification is performed every time a motion detection event occurs. To use this function, the [E-mail Notification] sub-menu must also be set from the [Upload] menu.

(7) [Audio Playback at ON Event]

Select the audio playback operation to be performed upon an ON event. If [Enable] is selected, the sound specified under [Sound Clip] will be played when the mode changes to [Detected] (ON event).

(8) [Audio Playback at OFF Event]

Select the audio playback operation to be performed upon an OFF event. If [Enable] is selected, the sound specified under [Sound Clip] will be played when the mode changes to [Detected] (OFF event).

(9) [Sound Clip]

Select the audio to be played. For registration of sound clips, see "Sound Clip Upload" (→ P. 1-39).

(10) [Volume]

Set the sound clip volume as an integer between 1 and 100. The greater the value, the larger the volume.

(11) [Automatic Tracking at ON Event]

Select the automatic tracking operation. If [Enable] is selected, the camera will automatically start shaking its head upon entering the [Detected] mode (ON event).

(12) [Maximum Tracking Time (sec.)]

Set the time during which automatic tracking is continued between 1 and 300 seconds.

📷 Note

● The motion detection function cannot be interlocked with external device output. However, interlocking is possible if the optional recording software RM-64/RM-25/RM-9 is used.

● For the notes on use of motion detection, see "Notes on Use of Motion Detection, Tracking, Stream for Recording, Image Stabilizer and Bundled Recording Software RM-Lite". (→ *Start Guide*)

External Device Input

External Device Input	ⓘ External Device Input Event	Enable	▾
External Device Input 1	ⓘ ON Event Operation	Enable	▾
	ⓘ OFF Event Operation	Enable	▾
	ⓘ Preset	Preset 1	▾
	ⓘ Upload	Enable	▾
	ⓘ E-mail Notification	Enable	▾
	ⓘ Audio Playback at ON Event	Enable	▾
	ⓘ Audio Playback at OFF Event	Enable	▾
	ⓘ Sound Clip	sound2	▾
	ⓘ Volume 1 - 100	50	

(1) [External Device Input Event]

Select whether to [Enable] or [Disable] external device input events.

(2) [ON Event Operation]

Select the operation to be performed upon an ON event. If [Enable] is selected, (4) "Preset," (5) "Upload," and (6) "E-mail Notification" are displayed. When an ON input is received from an external device (ON event), the processes set in (4), (5) and (6) are performed.

(3) [OFF Event Operation]

Select the operation to be performed upon an OFF event. If [Enable] is selected, (4) "Preset," (5) "Upload," and (6) "E-mail Notification" are displayed. When an OFF input is received from an external device (OFF event), the processes set in (4), (5) and (6) are performed.

(4) [Preset]

Select the preset position. If you want to operate the camera according to events notified from an external device, set an appropriate preset position using Preset Setting Tool of VBAdmin Tools (→ P. 2-22), and then select the corresponding preset between [Preset 1] and [Preset 20]. If the camera need not be operated, select [None].

(5) [Upload]

Select the upload operation. If [Enable] is selected, upload is performed when an event is input from an external device. To use this function, the [General Upload] sub-menu and [HTTP Upload] or [FTP Upload] sub-menu must also be set from the [Upload] menu.

(6) [E-mail Notification]

Select the e-mail notification operation to be performed. If [Enable] is selected, e-mail notification is performed when an event is input from an external device, provided that [Enable] is selected. To use this function, the [E-mail Notification] sub-menu must also be set from the [Upload] menu.

1

Detailed Settings

(7) [Audio Playback at ON Event]

Select the audio playback operation to be performed upon an ON event. If [Enable] is selected, the sound specified in [Sound Clip] is played when an ON event is input from an external device.

(8) [Audio Playback at OFF Event]

Select the audio playback operation to be performed upon an OFF event. If [Enable] is selected, the sound specified in [Sound Clip] is played when the event input from an external device turns OFF.

(9) [Sound Clip]

Select the audio to be played. For registration of sound clips, see "Sound Clip Upload" (→ P. 1-39).

(10) [Volume]

Set the sound clip volume as an integer between 1 and 100. The greater the value, the larger the volume.

Interval Timer

Interval Timer	ⓘ Interval Timer Event	Enable	▾
	ⓘ Interval of the Timer	1 min.	▾
	ⓘ Upload	Disable	▾
	ⓘ E-mail Notification	Disable	▾

(1) [Interval Timer Event]

Select the time event setting from [Enable] or [Disable]. If you select [Enable], (2) Interval of the Timer, (3)Upload and (4) E-mail Notification appear.

(2) [Interval of the Timer]

Select a desired timer interval from the pull-down menu in a range of [1 sec.] to [24 hours].

(3) [Upload]

Select the upload operation. If [Enable] is selected, upload is performed at the specified intervals. To use this function, the [Upload] menu must also be set.

(4) [E-mail Notification]

Select the e-mail notification operation to be performed. If [Enable] is selected, e-mail notification is performed at the specified intervals. To use this function, the [E-mail Notification] sub-menu must also be set from the [Upload] menu.

Sound Clip Upload

(1) [Browse File]

Specify the audio file you want to register as the sound clip, and then click the [Add] button.

(2) [Sound Clip Name]

Set the name of the audio file to be registered as a sound playback (using up to 15 characters). To delete a registered sound, click [Delete] next to the name of the playback sound you want to delete.

Tip

You can set only audio files whose playback time is not longer than 20 seconds and file type is ".wav" (µ-law PCM 8 bits, sampling frequency 8000 Hz, monaural).

1

Detailed Settings

Setting User Access Privileges (Access Control)

Access Control

| OK | Clear |

You can set the following items.

- **Authorized User Account**

    Register users who can access this camera.

- **User Authority**

    Set the privileges of authorized users and guest users.

- **Host Access Restriction**

    Specify the hosts from which access is permit and restricted.

Authorized User Account

Authorized User Account

User Name Up to 8 characters

Password Up to 8 characters

Add

User List

Delete

(1) [User Name], [Password]

Enter the user name and password and then click [Add]. The authorized user will be added to the user list.

The user name can consist of up to eight (single-byte) characters of A to Z, a to z, 0 to 9, - (hyphen) and - (underscore).

The password can consist of up to eight (single-byte) ASCII characters (space or printable characters).

(2) [User List]

A list of authorized users is shown. User privileges can be set for these users. Up to 50 users can be registered other than the Administrator (root).

Also, the user list can be sorted using the ▲ and ▼ buttons on the right.

To delete a user, select the applicable user from the user list and then click [Delete].

User Authority

[Privileged Camera Control], [Camera Control], [Image Distribution], [Audio Distribution]

Set the user privileges of authorized users and guest users. Select the check boxes corresponding to the items you want to permit for each user.

💠 Tip

Authorized users can have higher privileges than guest users.

Host Access Restriction

(1) [Host List]

A list of hosts from which access is permitted and restricted is shown.

(2) [Apply the list to HTTP Server]

If [Yes] is selected, the host list is applied to HTTP server access. Not only access from various viewers, but access to the top page and setting pages is also limited.

The list is also applied when distributing image and audio.

(3) [Apply the list to Image Transmission]

If you select [Yes], the host list is applied when the image transmission function is used. Access from various viewers can be restricted.

The list is also applied when distributing audio.

(4) [Apply the list to Audio Transmission]

If [Yes] is selected, the host list is applied when the audio distribution function is used. Utilization of audio can be restricted.

1

Detailed Settings

📝 Note

● If no host list is available, access is permitted to all hosts.

● If a host list is given that indicates prohibition of all accesses, the host restriction function is disabled and access is permitted to all hosts.

● To prohibit access via a proxy server in HTTP connection, a proxy server address must be set.

● If Host Access Restriction is set wrongly, access to the setting pages itself may be prohibited, in which case restoring the factory settings will become the only means for recovery.

● If host access control is implemented, this camera cannot be accessed by IPv6.

● If the [Host List] or [Apply the list to HTTP Server] setting is changed, the camera may become no longer accessible from the active browser. Check beforehand the precautions explained in "Notes" in "Setting the Items Requiring Rebooting (Reboot Item)" (→ P. 1-49).

💡 Tip

The Host Access Restriction function restricts the hosts on which the viewer and other client applications are running, where access is restricted using a list containing one or more entries in the following format.

Listing Format

  [!] addr [-addr2]

● "addr" conforms to the standard IP address format.

● The addresses "addr" and "addr2" give the IP address range, and if IP address A is between addr and addr2, A is included in the range of addr to addr2. It is possible to omit addr2, in which case the value of addr2 becomes the same as that of addr.

● If the entry starts with "!," access is prohibited. If "!" does not precede the entry, access is permitted.

● If a given host address corresponds to multiple entries, whether access is permitted or prohibited is determined by the setting of the first applicable entry after the beginning of the host list. Accordingly, take note that in Examples 3 to 5 below, an entry of permitted address must be specified in an entry of prohibited address.

● Redundant and conflicting entries in the list are automatically deleted from the list.

● If the host address does not belong to any entry, access is permitted.

1

Detailed Settings

Example of description

Example 1. Prohibit access from a given access

!172.20.0.10

Access from the host whose address is 172.20.0.10 is prohibited.

Example 2. Prohibit access from hosts in a given range

!172.20.0.0-172.20.0.20

Access from the hosts whose address is in a range of 172.20.0.0 to 172.20.0.20 is prohibited.

Example 3. Permit access from hosts in a given range and prohibit access from all other hosts

172.20.0.10-172.20.0.12

!0.0.0.0-255.255.255.0

Access is permitted only from the hosts whose address is in a range of 172.20.0.10 to 172.20.0.12.

Example 4. Prohibit access from hosts in a given range, but permit access from hosts at certain addresses within that range

172.20.0.10

!172.20.0.0-172.20.0.20

Access from the hosts whose address is in a range of 172.20.0.0 to 172.20.0.20 is prohibited, but access is permitted only from the host whose address is 172.20.0.10.

Example 5. Prohibit access from hosts in a given range, but permit access from hosts in a given range within that range

172.20.0.10-172.20.0.15

!172.20.0.0-172.20.0.20

Access from the hosts whose address is in a range of 172.20.0.0 to 172.20.0.20 is prohibited, but access is permitted from the hosts whose address is in a range of 172.20.0.10 to 172.20.0.15.

IPsec Settings (IPsec)

IPsec

■ : Reboot | OK | Clear

You can set the following items.

● Various settings can be specified for up to five communicating devices.

IPsec Set

IPsec Sets 1 to 5 are available, where IPsec settings for each communication using each IPsec Set.

IPsec Set 1	ⓘ IPsec	Manual ▼ ■
	ⓘ IPsec Mode	Tunnel Mode ▼ ■
	ⓘ Destination Address (IPv4/IPv6)	192.168.200.0 ■
	ⓘ Source Address (IPv4/IPv6)	192.168.100.1 ■
	ⓘ Security Protocol	ESP ▼ ■
	ⓘ Security Gateway Address (IPv4/IPv6)	192.168.10.1 ■
	ⓘ Destination Prefix Length	24 ■

(1) [IPsec]

Select [Manual] if IPsec will be used. Select [Disable] if IPsec will not be used.

(2) [IPsec Mode]

Select [Tunnel Mode] or [Transport Mode] as the IPsec operation mode.

(3) [Destination Address (IPv4/IPv6)]

Enter the IP address of the connection destination.

(4) [Source Address (IPv4/IPv6)]

Enter the IP address of the sender.

(5) [Security Protocol]

Select [ESP], [AH] or [ESP and AH] as the IPsec protocol to be used.

If [ESP] is selected, enter only the setting items relating to ESP.

If [AH] is selected, enter only the setting items relating to AH.

If [ESP and AH] is selected, enter all setting items.

(6) [Security Gateway Address (IPv4/IPv6)]

If the IPsec operation mode was set to [Tunnel Mode] in (2), set the IP address of the security gateway.

(7) [Destination Prefix Length]

This setting is required only when the IPsec operation mode was set to [Tunnel Mode] in (2).

Enter a desired prefix length for connection destination in a range of 0 to 128.

If IPv4 is used, enter a desired length in a range of 0 to 32.

■ If [ESP] or [ESP and AH] was set under [Security Protocol] in (5), the following items must be set.

ⓘ IPsec	Manual ▾
ⓘ IPsec Mode	Tunnel Mode ▾
ⓘ Destination Address (IPv4/IPv6)	192.168.200.0
ⓘ Source Address (IPv4/IPv6)	192.168.100.1
ⓘ Security Protocol	ESP ▾
ⓘ Security Gateway Address (IPv4/IPv6)	192.168.10.1
ⓘ Destination Prefix Length	24
ⓘ SA ESP Encryption Algorithm	AES ▾
ⓘ SA ESP Authentication Algorithm	HMAC_SHA1_96 ▾
ⓘ SA ESP Encryption Key (outbound)	0F445981962E9AC7E79385E037C35FC3
ⓘ SA ESP Authentication Key (outbound)	BB64787768DFC8DE7EB4D84EC81B45 3168F3B32F
ⓘ SA ESP SPI (outbound)	1000
ⓘ SA ESP Encryption Key (inbound)	6F822A37272BF55EB581A91A53770C57
ⓘ SA ESP Authentication Key (inbound)	81E4DC85387FB09192B26CA1A2FBD97 202159B96
ⓘ SA ESP SPI (inbound)	2000

(8) [SA ESP Encryption Algorithm]

Select [AES], [3DES], [DES] or [NULL] as the ESP encryption algorithm according to the encryption algorithm supported by the device to connect to.

Normally [AES] or [3DES] is recommended.

(9) [SA ESP Authentication Algorithm]

Select [HMAC_SHA1_96], [HMAC_MD5_96] or [No Authentication] as the ESP authentication algorithm according to the authentication algorithm supported by the device to connect to.

If [ESP] is used alone, [No Authentication] cannot be selected.

1

Detailed Settings

(10) [SA ESP Encryption key (outbound)]

Set the SA encryption key for outbound. If [AES], [3DES] or [DES] was selected in (8), set a 128-bit, 192-bit or 64-bit hexadecimal, respectively. This item need not be set if [NULL] was selected.

(11) [SA ESP Authentication key (outbound)]

Set the SA authentication key for outbound. If [HMAC_SHA1_96] or [HMAC_MD5_96] was set in (9), set a 160-bit or 128-bit hexadecimal, respectively. This item need not be set if [No Authentication] was selected.

(12) [SA ESP SPI (outbound)]

Set the SA SPI value for outbound. Set a desired value in a range of 256 to 4294967295.

(13) [SA ESP Encryption key (inbound)]

Set the SA encryption key for inbound. If [AES], [3DES] or [DES] was selected in (8), set a 128-bit, 192-bit or 64-bit hexadecimal, respectively. This item need not be set if [NULL] was selected.

(14) [SA ESP Authentication key (inbound)]

Set the SA authentication key for inbound. If [HMAC_SHA1_96] or [HMAC_MD5_96] was set in (9), set a 160-bit or 128-bit hexadecimal, respectively. This item need not be set if [No Authentication] was selected.

(15) [SA ESP SPI (inbound)]

Set the SA SPI value for inbound. Set a desired value in a range of 256 to 4294967295. Since this setting is used as an ID for identifying the SA, be careful not to specify an inbound SPI whose value is already used as the SPI for another ESP.

1

Detailed Settings

■ If [AH] or [ESP and AH] was set under [Security Protocol] in (5), the following items must be set.

ⓘ Security Protocol	AH ▾ ▪
ⓘ Security Gateway Address (IPv4/IPv6)	192.168.10.1 ▪
ⓘ Destination Prefix Length	24 ▪
ⓘ SA AH Authentication Algorithm	HMAC_SHA1_96 ▾ ▪
ⓘ SA AH Authentication Key (outbound)	6F92282D51B290EA4B51D8833A4EFF2 95A6E5F40 ▪
ⓘ SA AH SPI (outbound)	3000 ▪
ⓘ SA AH Authentication Key (inbound)	7E0E6F639A0A81A83B6C5642EFE8598 81B2883AE ▪
ⓘ SA AH SPI (inbound)	4000 ▪

(16) [SA AH Authentication Algorithm]

Select [HMAC_SHA1_96] or [HMAC_MD5_96] as the AH authentication algorithm according to the authentication algorithm supported by the device to connect to.

(17) [SA AH Authentication key (outbound)]

Set the SA authentication key for outbound. If [HMAC_SHA1_96] or [HMAC_MD5_96] was set in (16), set a 160-bit or 128-bit hexadecimal, respectively.

(18) [SA AH SPI (outbound)]

Set the SA SPI value for outbound. Set a desired value in a range of 256 to 4294967295.

(19) [SA AH Authentication key (inbound)]

Set the SA authentication key for inbound. If [HMAC_SHA1_96] or [HMAC_MD5_96] was set in (16), set a 160-bit or 128-bit hexadecimal, respectively.

(20) [SA AH SPI (inbound)]

Set the SA SPI value for inbound. Set a desired value in a range of 256 to 4294967295. Since this setting is used as an ID for identifying the SA, be careful not to specify an inbound SPI whose value is already used as the SPI for another ESP.

📌 Note

● To use this camera using IPsec, the communicating destinations and network must be set beforehand. For these settings, contact your System Administrator.

● If you change any setting from the [IPsec] menu, the active browser may become unable to connect to the camera. Check beforehand the precautions explained in "Notes" in "Setting the Items Requiring Rebooting (Reboot Item)" (→ P. 1-49).

Setting the Items Requiring Rebooting (Reboot Item)

Reboot Item

■ : Reboot   [OK]   [Clear]

The following items that require rebooting, if changed, are gathered here.

● LAN, IPv6, Installation Conditions, MPEG-4, HTTP Server

LAN	IP Address Setting	Manual
	IP Address	192.168.100.1
	Subnet Mask	255.255.255.0
	Default Gateway Address	172.30.10.1
	LAN Interface	Auto
	Maximum Packet Size 576 - 1500	1500
IPv6	IPv6	Disable
Installation Conditions	Dome	Not used
	Mounting Method	
MPEG-4	Video Size	320 x 240
	Capture Frame Rate	30
HTTP Server	HTTP Port 80,1024 - 65535	80

(1) [LAN]

IP address and other settings required for LAN Connection (→ P. 1-8)

(2) [IPv6]

Settings relating to use of IPv6 (→ P. 1-9)

(3) [Installation Conditions]

Settings relating to camera installation conditions (→ P. 1-20)
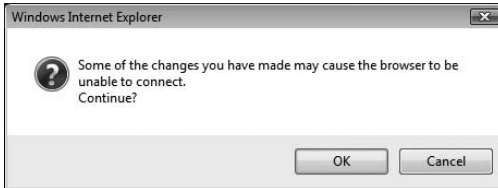
(4) [MPEG-4]

Settings relating to video size and frame rate in MPEG-4 (→ P. 1-23)

(5) [HTTP Server]

HTTP port number settings (→ P. 1-33)

Note

These settings relate to network connection. If any setting is changed to a value that may disable camera connection from the active browser, the following dialog box appears and alerts the user.

To apply the new setting, click [OK].

Depending on the new setting, it may not be possible to connect to the camera again after rebooting. In this case, a candidate URI is displayed as shown below,

If you want to connect to the camera again, try using the displayed URI.
If the camera cannot be connected using the displayed URI, contact your System Administrator.

* In the [Reboot Item] menu, the [IP Address Setting], [IP Address], [Subnet Mask], [Default Gateway Address] and [HTTP Port] settings relate to network connection.

1

Detailed Settings

Viewing Event Logs and Current Settings, and Performing Maintenance (Maintenance)

The following items can be used here.

● Tool

   Display and initialize the settings of the camera.

Tool

(1) [View Log Events]

   Historical data of the camera such as operations and connections with various viewers, etc., is shown.

(2) [View Current Settings]

   A list of current settings is shown.

(3) [Reboot]

   The camera is rebooted.

(4) [Restore Settings]

   All setting items of this camera, except for the Administrator password, network settings (IP address setting, IP address, subnet mask, default gateway), date & time, time zone, LAN interface, maximum packet size and IPv6, are reset to their factory settings by discarding the values set by the user. Clicking this button reboots the camera automatically.

Note

While [Restore Settings] is in progress, never turn off the camera. If the power is turned off, the camera may not reboot correctly.

Tip

● It is recommended that you write down the current settings before restoring the factory settings using [Restore Settings] (→ P. 5-20).

● Although the camera can also be reset to the initial state using the reset switch, take note that this initializes all settings of the camera other than date and time (→ P. 5-21).

2

VBAdmin Tools

How to set the camera using VBAdmin Tools is explained. You can create panorama images, set view restrictions, set presets, set motion detection, view logs, and launch Admin Viewer. Set each item after specifying the necessary detailed settings according to Chapter 1.

Overview of VBAdmin Tools

VBAdmin Tools consists of multiple applications for [Panorama Creation Tool], [View Restriction Setting Tool], [Preset Setting Tool], [Motion Detection Setting Tool], [Log Viewer] and [Admin Viewer]. You can remotely set the camera, view privileged images, check the operating condition, acquire logs, and perform other operations with ease.

VBAdmin Tools (P. 2-6)

This is the main panel for VBAdmin Tools. You can start each tool from this panel. First, install VBAdmin Tools. See "Install the Necessary Software" (→*Start Guide*).


Panorama Creation Tool (P. 2-9)

A panorama image capture/creation tool that displays the entire area that can be captured by this camera. When a panorama image is captured and registered, it is displayed in the panorama display area of VB-C60 Viewer. When setting view restrictions and presets, you can see at a glance which part of the entire area is occupied by the set area.

View Restriction Setting Tool (P. 2-14)

A tool that lets you visually set view restrictions. You can set the desired range with the mouse by referring to the preview in the panorama mode.
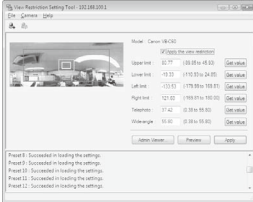

Preset Setting Tool (P. 2-22)

A tool that lets you visually set presets and the home position. You can specify the desired setting with the mouse by referring to the preview in the panorama mode. You can also set [Preset Tour] whereby the camera tours and monitors multiple presets.

2

VBAdmin Tools
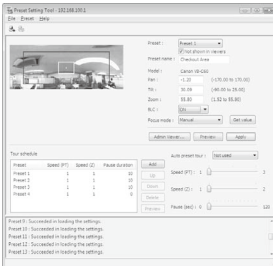
Motion Detection Setting Tool (P. 2-34)

This tool is used to set the motion detection function that performs upload, notifies the viewer, records a log, etc., if a change has occurred in the captured image due to movement of a subject. You can set the position and size of the motion detection area, detection judgment conditions, etc., while checking the image on the camera.
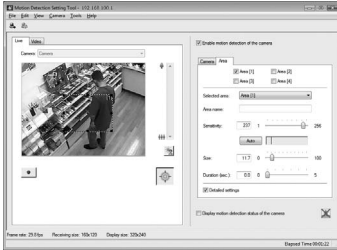
Log Viewer (P. 2-45)

This viewer shows the logs of operating conditions output to the camera.
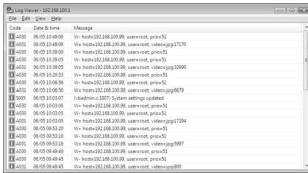
Admin Viewer (P. 3-6)

This viewer is used by the camera's Administrator. It provides privileged functions not available in VB Viewer, such as camera control, exposure, white balance and external device output.

📷 Note

On the control panel of Windows, the decimal point in a value is always indicated by "." regardless of the settings of "Region and Language Options." Also, the date is displayed in the "yyyy/mm/dd" or "mm/dd" format, while the time is displayed in the "hh:mm:ss" format.

* y, m, d, h, m and s indicate year, month, day, time, minute and second, respectively.
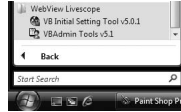
Launching VBAdmin Tools

How to Launch

1. Double-click the [VBAdmin Tools] icon on the desktop, or select [WebView Livescope] →
   [VBAdmin Tools] from [Programs] in the [Start] menu.

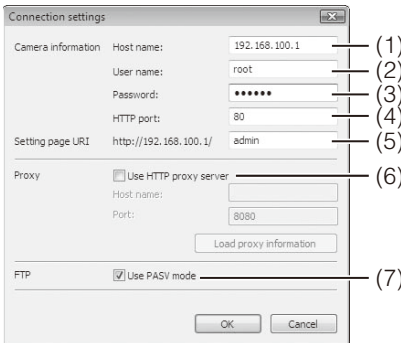   Starting from the Desktop Icon   Or starting from the [Start] menu

2. The dialog box for specifying the camera to connect to appears.

   To use VBAdmin Tools, you must connect to the camera first. Enter each item and then click
   [OK].

   (1)Host name (→ P. 1-8, P. 1-10)

   Specify the IP address or host name of the camera.

   (2)User name

   Enter the Administrator account "root" set for the camera.

   (3)Password (→ P. 1-7)

   Enter the Administrator password (the factory setting is "VB-C60" for both VB-C60 and
   VB-C60B).

   (4)HTTP port (→ P. 1-33)

   The default is "80".

   (5)Setting page URI

   The Setting page URI set for this camera is fixed to "admin" and cannot be changed.

(6)Proxy

* For the proxy settings, check with your Network Administrator.

• [Use HTTP proxy server]

Select this check box to connect to the camera via 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 (default = "8080").

• [Load proxy information]

Click this button to automatically import the proxy server information set by Internet Explorer.

(7)FTP

Not used with this camera. This function can be used with earlier cameras than VB-C50i.

To use Panorama Creation Tool and Log Viewer of VBAdmin Tools, the camera must establish an FTP connection first. You can select PASV or PORT as the FTP connection mode.

• [Use PASV mode]

Select this check box if you want to use the PASV mode. Normally the PASV mode should be used. If this check box is cleared, connection will be made in the PORT mode.

3. VBAdmin Tools launches.

You can click the button for each of the six tools to launch [Panorama Creation Tool], [View Restriction Setting Tool], [Preset Setting Tool], [Motion Detection Setting Tool], [Log Viewer] or [Admin Viewer].

If the connection has been cut off, select [Connect] from [File] in the menu bar to open the [Connection settings] dialog box.
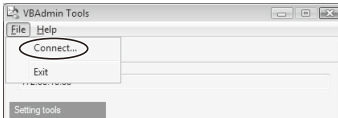
Note

Notes on Use with Windows Vista/XP

If the [Windows Security Alert] dialog box appears, click [Unblock].

Once this button is clicked, this warning dialog box will no longer appear.

Note

If connection is made by entering the IPv6 address, Admin Viewer cannot be used on Internet Explorer 6.

Tip

● [Panorama Creation Tool], [View Restriction Setting Tool], [Preset Setting Tool] and [Motion Detection Setting Tool] cannot be launched simultaneously. [Log Viewer] and [Admin Viewer] can be launched simultaneously.

● If other Canon network camera is connected, the available tools will change.

Panorama Creation Tool

A panorama image capture/creation tool that displays the entire area that can be captured by this camera. When panning, tilting or zooming the camera or setting a preset using VB-C60 Viewer, you can see at a glance which part of the entire area is occupied by the set area.
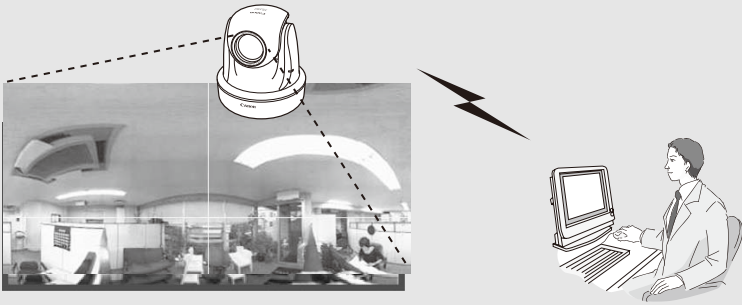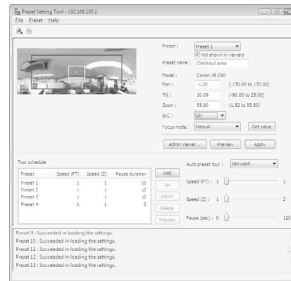

Capturing/Creating Panorama Images with Panorama Creation Tool and Registering Them to This Camera
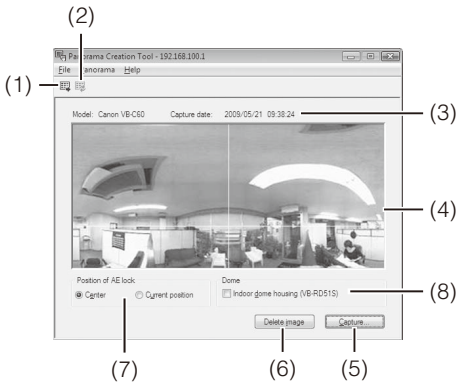
Admin Viewer

Preset Setting Tool

You can see at a glance which part of the entire area is occupied by the set area.

Display Screens of Panorama Creation Tool

(1) [Show registered panorama image] button

Show the panorama images registered in the camera.

(2) [Register panorama image] button

Register the currently displayed panorama image in the camera.

(3) Camera Model/Date Display

Shows the model of the currently connected camera, and if there is a panorama image, the date it was captured.

(4) Panorama Image Display

Display the captured panorama image.

(5) [Capture] button

Capture a panorama image.

(6) [Remove image] button

Delete the captured panorama image.

(7) [Position of AE lock]

Switch the AE lock position between [Center] and [Current position]. AE lock is a function that lets you capture images based on the brightness of the set position.

(8) [Indoor dome housing (VB-RD51S)]

When this check box is selected, the area concealed by the optionalIndoor Dome Housing (VB-RD51S-C/S) is not captured.

Capturing Panorama Images

How to Capture

1. Click the [Capture] button to start capturing an image.

   If necessary, switch the AE lock position.

   If the optional Indoor Dome Housing is used, select the [**Indoor dome housing (VB-RD51S)**] check box.
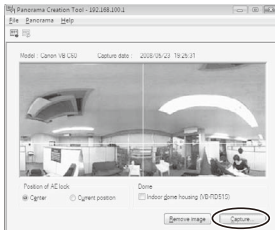
   To stop the capture in the middle, click the [**Stop**] button.

2. If you are happy with the captured image, click the [OK] button.

   To recapture an image, click the [**Recapture**] button.

   Also, double-clicking each part of the displayed grid lets you recapture the applicable part only.

   To discard the captured image, click the [**Cancel**] button.

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VBAdmin Tools

> ### ☼ Tip
>
> While a panorama image is being captured, the image stabilizer function is temporarily disabled.

Registering/Deleting Panorama Images

When the panorama image has been captured, send it to this camera. The image will be reflected upon registration.

How to Register

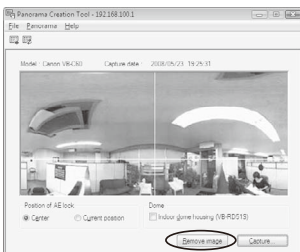Click the [Register panorama image] button.

The panorama image is registered.

How to Delete

To delete the panorama image you have captured, click the [Remove image] button and then click the [Register panorama image] button.

The panorama image saved in the camera is deleted.

> ### 🔆 Tip
>
> When the panorama image has been registered, the camera is automatically rebooted and its connection with VBAdmin Tools is terminated. After the camera is rebooted, a dialog box appears asking if you want to connect the camera again. Clicking the [OK] button reconnects the camera.

Reconnecting

Reconnects the camera if it is disconnected.

How to Reconnect

Select [Reconnect] from [File] in the menu bar.

Opening Panorama Images from Image Files/Saving as Image Files

You can open image files as panorama images or save captured panorama images as image files. Only the JPEG image files created in Panorama Creation Tool can be handled.

How to Open from Image Files

Select [Open] from [File] in the menu bar. In the displayed dialog box, select the image file you want to use.
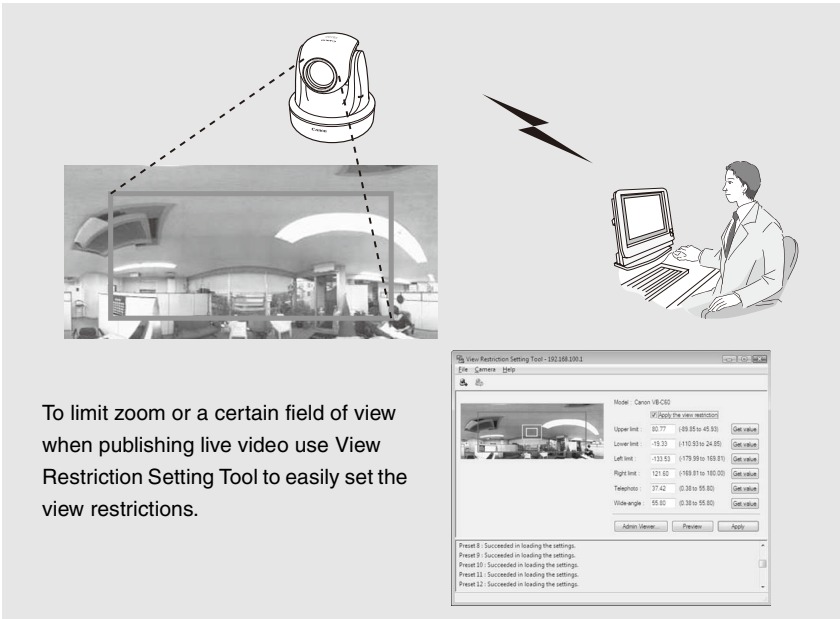
How to Save

Select [Save] from [File] in the menu bar. In the displayed dialog box, select the folder you want to save and enter the file name.
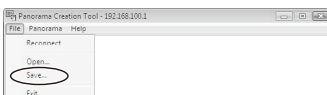
View Restriction Setting Tool

View Restriction Setting Tool is a tool that limits the range that can be captured by the camera. If view restrictions have been set, you can limit the displayable capture range using VB-C60 Viewer.

To limit zoom or a certain field of view when publishing live video use View Restriction Setting Tool to easily set the view restrictions.

Applying View Restriction Setting

Restrictions set by View Restriction Setting Tool are applied in the following cases.

• When Admin Viewer was accessed as an authorized user
• Accessing VB Viewer
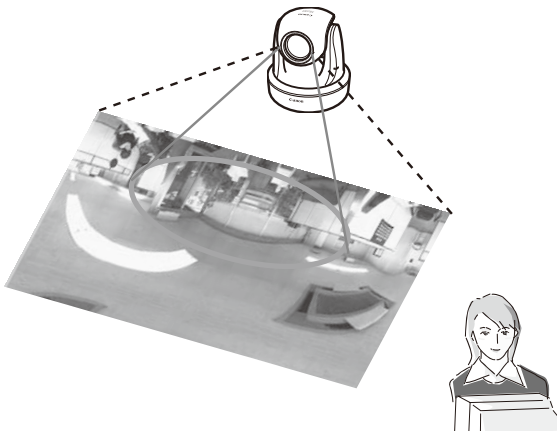
Display Screens of View Restriction Setting Tool

2

VBAdmin Tools
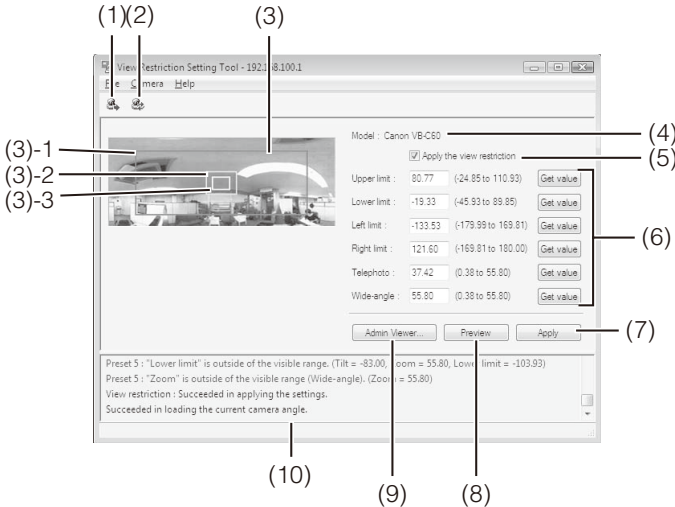
(1) [Load view restriction settings] button

Load the current view restriction settings of the camera.

(2) [Save view restriction settings] button

Save the view restriction settings set/applied using this tool, in the camera.

If view restrictions have been set, be sure to save the settings in the camera using the [Save view restriction settings] button.

(3) Panorama Preview

The panorama images registered in the camera. are displayed. Also, a view restriction preview frame recreating the view restriction settings is displayed, where you can drag the frame to change its shape and reflect the new frame in the view restriction settings.

● View restriction preview frame

(3)-1 Pan/tilt preview frame (red frame) ....Range of field of view defined by top/bottom/left/right edges

(3)-2 Wide-angle preview frame (green frame) ....Wide-angle restriction setting (restriction of capture frame)

(3)-3 Telescopic preview frame (yellow frame) ....Telescopic restriction setting (restriction of maximum zoom ratio)

(4) [Model]

The model of the connected camera is displayed.

(5) [Apply the view restriction]

To use view restrictions, select this check box.

(6) View restriction setting entry boxes and [Get value] button

You can enter a value in each view restriction setting entry box to change the applicable setting.
You can load the current camera angle into each setting by clicking the [Get value] button.

● View restriction settings

[Upper limit] ...Top limit of the view restriction. Use the [Get value] button to acquire the top edge value of the viewing angle.

[Lower limit]....Bottom limit of the view restriction. Use the [Get value] button to acquire the bottom edge value of the viewing angle.

[Left limit] ....Left limit of the view restriction. Use the [Get value] button to acquire the left edge value of the viewing angle.

[Right limit] .....Right limit of the view restriction. Use the [Get value] button to acquire the right edge value of the viewing angle.

[Telephoto] .....Telescopic limit of the view restriction. Use the [Get value] button to acquire the zoom ratio of the viewing angle.

[Wide-angle] ..Wide angle limit of the view restriction. Use the [Get value] button to acquire the zoom ratio of the viewing angle.

(7) [Apply] button

Apply the current view restriction settings to this camera. At this point, the settings are not yet saved in the camera. Be sure to click [Save view restriction settings].

(8) [Preview] button

Reflect the settings in the view restriction setting entry boxes in the view restriction preview frame.

(9) [Admin Viewer] button

Launches Admin Viewer.

(10) Status List

The results of operations performed with this tool are displayed.

Warning messages are shown in blue, while error messages are shown in red.

> 🐻 **Note**
> ● Clicking the [Apply] button alone does not save the edited results in the camera. To make the edited results effective, click the [Save view restriction settings] button.
> ● If connection is made by entering the IPv6 address, Admin Viewer cannot be used on Internet Explorer 6.

Setting View Restrictions

You can set view restrictions by entering values in the view restriction setting entry boxes, or by changing the current settings in the view restriction preview frame or from the camera angle in Admin Viewer. Select appropriate settings according to the environment in which the camera is operated or based on your preference.

■ Changing Settings from View Restriction Preview Frame

Use the preview frame on the panorama image to set view restrictions.

How to Set

1. Select the [Apply the view restriction] check box.

    Model : Canon VB-C60
    ☑ Apply the view restriction

2. Drag to change the Pan/tilt preview frame (red frame), Telescopic preview frame (yellow frame) or Wide-angle preview frame (green frame) displayed on the panorama image to set view restrictions.

    When the telescopic/wide-angle preview frames are enlarged/shrunk, the aspect ratio remains the same.

    At this time, you can also enter view restrictions by entering values in the view restriction setting entry boxes.

3. Click [Apply].
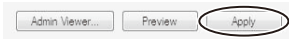
Confirm on the status list that the settings have been applied correctly, and then click the [Save view restriction settings] button to save the settings in the camera.

■ Changing Settings from Camera Angle in Admin Viewer

Launch Admin Viewer and set each view restriction while checking the position on the image.

How to Set

1. Select the [Apply the view restriction] check box.

2. Click the [Admin Viewer] button to launch Admin Viewer.

   User authentication is required to access Admin Viewer (→ P. xiv).
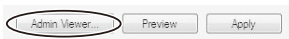
3. Click "Obtain/release Camera Control" button on Admin Viewer to obtain the control privileges of the camera.

"Obtain/release Camera Control" button

4. Operate the camera to adjust the top edge, bottom edge, left edge, right edge, telescopic or wide angle to desired positions, and then click each [Get value] button.

    The loaded view restriction can be checked in the view restriction setting entry box or view restriction preview frame.

Upper limit :		(-89.85 to 45.93)	Get value
Lower limit :		(-110.93 to 24.85)	Get value
Left limit :		(-179.99 to 169.81)	Get value
Right limit :		(-169.81 to 180.00)	Get value
Telephoto :		(0.38 to 55.80)	Get value
Wide-angle :		(0.38 to 55.80)	Get value

Admin Viewer...	Preview	Apply

5. Click [Apply].

Admin Viewer...	Preview	Apply

    Check the status list to make sure the settings have been applied correctly, and then click the [Save view restriction settings] button to save the settings in the camera.

📖 Note

- If you have changed the setting for the camera mounting method, recapture the panorama image and register it again.
- The panorama preview may be slightly different from the actual image. After view restrictions have been set, be sure to confirm with VB Viewer that the view restrictions have been reflected correctly.
- Confirm the settings using VB Viewer. (View restrictions are not applied to Admin Viewer.)
- If the image stabilizer setting is changed after view restrictions have been set, the set view restrictions no longer agree with the view restrictions applied during operation (→ P. 3-22).
- If the image stabilizer or electronic zoom setting has been changed, check the view restriction settings again.

🔅 **Tip**

● Even when view restrictions are set, an area outside the view restriction may still appear momentarily when the camera is controlled near the boundary of the view restriction.

● To cancel the view restrictions, clear the [Apply the view restriction] check box and then click the [Apply] button, followed by the [Save view restriction settings] button.

● If the setting fields are cleared while the [Apply the view restriction] check box is selected, the maximum view restriction will be set.

● The controllable range and range that can be captured are as follows.
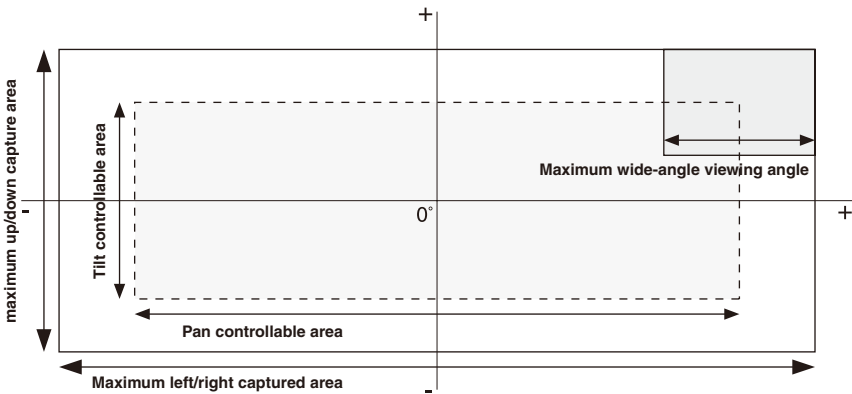
● The pan and tilt ranges vary depending on the zoom ratio (view angle).

When the view restriction is set, the camera operation angle is automatically restricted.

When a wide-angle is used without changing the camera operation angle, the view restriction is violated, and therefore the operation angle is automatically narrowed.

Restricted view angle

Camera operation angle

Camera

Captured image angle
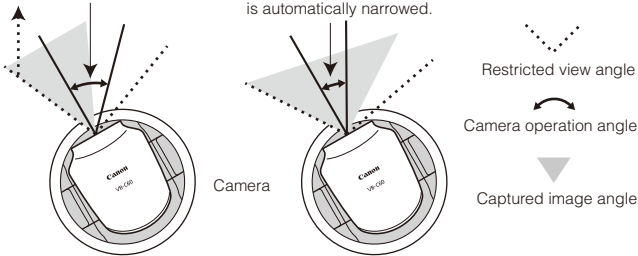
● If the view restriction will be exceeded as a result of controlling the zoom toward the wide-angle side, the camera will first pan and tilt to a position where the maximum wide-angle zoom will be within the viewing restriction area. Wide-angle zoom control will then be enabled within the view restriction area.

Captured image

Restricted view angle

First, the center of the maximum wide-angle zoom is panned and tilted.

After panning and tilting, wide-angle zoom control is enabled within the view restriction.

▶▶ Zoom out ▶▶   ▶▶ Zoom out ▶▶
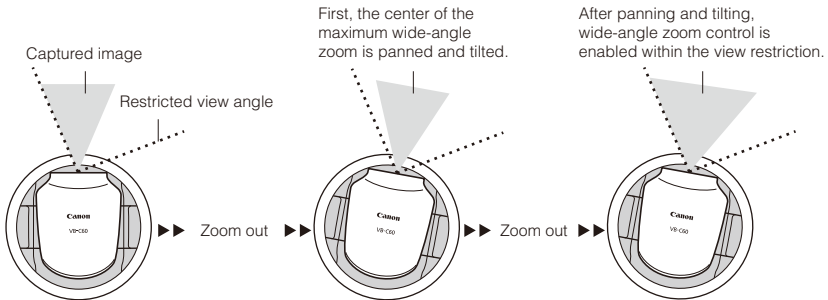
● Reducing the view restriction may also reduce the zoom range.

Preset Setting Tool

A tool that lets you set presets and the home position in a more visual, easy manner. You can specify a desired setting with the mouse by referring to the preview in the panorama mode. You can also set [Preset Tour] whereby the camera goes around and monitors multiple presets.

Set preset tour after the presets have been set.

Preset Setting Tool

Reflecting in VB-C60 Viewer

Executing preset tour

Display Screens of Preset Setting Tool

The display screens of Preset Setting Tool are divided into "Preset Setting Area" and "Preset Tour Setting Area." In the "Preset Setting Area," up to 20 presets and the home position are set while referring to the panorama preview. In the "Preset Tour Setting Area," "Preset Tour" is set whereby the camera goes around and monitors multiple presets.

The following explains the display screen "Preset Setting Area."

For the "Preset Tour Setting Area," see "Preset Tour" (→ P. 2-29).

■ Display Screen of "Preset Setting Area"
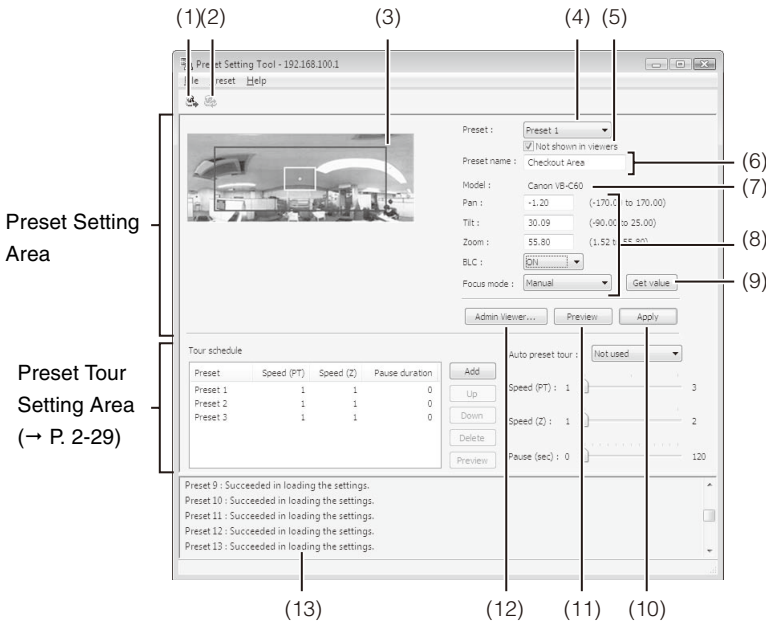
(1) **[Load preset settings] button**

Clicking this button loads the current preset settings of the camera.

(2) **[Save preset settings] button**

Save in the camera the preset information values that have been set/applied using this tool.

If a preset has been set, be sure to save it with the [**Save preset settings**] button.

(3) Panorama Preview

The panorama images registered in the camera. are displayed. Also, the preset preview frame (yellow) recreating the preset settings is displayed, where you can drag to resize/move the frame and reflect the new frame in the preset settings.

(4) [Preset]

Select the preset or home position you want to set.

(5) [Not shown in viewers]

If presets are used from VB-C60 Viewer, clear this check box. If [Home position] was selected in [Preset], this setting is grayed out (disabled).

(6) Preset name

You can enter a preset name. You can set a name in Japanese or single-byte alphanumerics. If [Home position] was selected in [Preset], this setting is grayed out (disabled).

If names are entered in both Japanese and single-byte alphanumerics, the Japanese name is given priority and displayed in the preset of VB-C60 Viewer. Be sure to enter a preset name in single-byte alphanumerics.

Up to 15 ASCII characters (space or printable characters) can be used in the Preset name.

(7) [Model]

The model of the connected camera is displayed.

(8) Camera Parameter

Enter the center angle of the desired angle in [Pan] and [Tilt]. In [Zoom], enter the view angle.

- Camera angle

   Pan .... Set the pan position of the camera.

   Tilt .... Set the tilt position of the camera.

   Zoom .... Set the viewing angle of the camera.

- Backlight Compensation

   Set [BLC] of the camera. Select [OFF] or [ON].

- Focus Mode

   Set [Focus mode] of the camera. Select [Auto], [Fixed at infinity] or [Manual] (→ P. 3-26).

(9) [Get value] button

Load the camera angle, focus position (in the manual mode) and backlight compensation settings currently selected in the camera, as camera parameters.

(10) [Apply] button

Apply the current preset and preset tour settings to the camera.

(11) [Preview] button

Reflect the settings of camera parameters in the preset preview frame. Also, the camera angle switches to this preset, and the new angle can be checked in Admin Viewer.

(12) [Admin Viewer] button

Launches Admin Viewer.

Use this button if you want to set a preset while actually checking the image using Admin Viewer.

Orient the camera to the position you want to set as a preset using Admin Viewer, and then click the [Get value] button and [Apply] button in this order to set the preset.

(13) Status List

Shows the result of communication between this tool and the camera.

Warning messages are shown in blue, error messages in red.

📷 Note

● Sending the edited results to the camera using the [Apply] button does not save the edited results in the camera. After confirming the edited results, be sure to click the [Save preset settings] button to save the settings in the camera.

● If connection is made by entering the IPv6 address, Admin Viewer cannot be used on Internet Explorer 6.

Setting the Preset

A preset can be set in one of the following two ways. Select appropriate settings according to the environment in which the camera is operated or based on your preference.

📷 Note

To use presets in VB-C60 Viewer, unselect the [Not shown in viewers] check box.
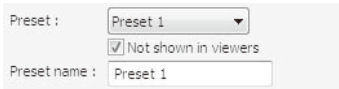
■ Changing Settings in Preset Preview Frame

Use the preview frame on the panorama image to set presets.

How to Set

1. Select the preset you want to set from the preset selection box, and then fill the [Preset name] field.

    Be sure to enter the preset name (single-byte alphanumerics).

2. Drag to move/resize the preset preview frame displayed on the panorama image to set the preset.

    Clicking on the image moves the preview frame until the clicked point becomes the center.

    At this time, you can also edit the camera parameter values to fine-tune the set position.

3. Click [Apply].

    Confirm on the status list that the settings have been applied correctly, and then click the [Save preset settings] button to save the settings in the camera.
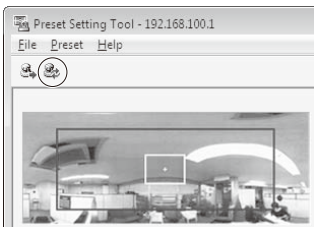
■ Changing Settings from Camera Angle in Admin Viewer

Launch Admin Viewer and set its viewing angle as a preset.

How to Set

1. Select the preset you want to set from the preset selection box, and then fill the [Preset name] field.

2. Click the [Admin Viewer] button to launch Admin Viewer.

   User authentication is required to access Admin Viewer (→ P. xiv).

3. Click "Obtain/release Camera Control" button on Admin Viewer to obtain the control privileges of the camera.

4. Operate the camera to adjust to a desired position, and then click the [Get value] button.

   The loaded values can be checked by the camera parameters or in the preset preview frame.

   At this time, you can also edit the camera parameter values to fine-tune the set position.

5. Click [Apply].
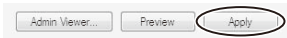
Admin Viewer...   Preview   Apply

Check the status list to make sure the settings have been applied correctly, and then click the [Save preset settings] button to save the settings in the camera.

Preset Setting Tool - 192.168.100.1
File Preset Help
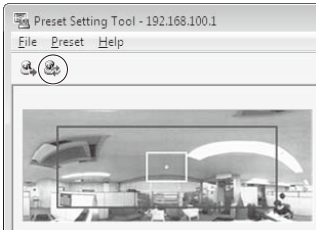
Note

● The preview based on the panorama preview function may vary slightly from the actual image. After setting a preset, be sure to confirm with Admin Viewer that the preset has been reflected correctly.

● To apply the manual focus mode, manually adjust the focus while checking the actual image using Admin Viewer. After the focus has been adjusted, set the focus using the [Get value] button. You can save the focus value using the [Save preset settings] button.

● If the image stabilizer setting is changed after a preset has been set, the set viewing angle will no longer agree with the viewing angle during operation (→ P. 3-22). If the image stabilizer setting has been changed, check the preset settings again.

● If a dome housing is used, be sure to set presets with the dome installed.

● If the camera mounting method has been changed, set presets again.

Tip

● Up to 20 presets can be set.

● Changes to preset settings are not reflected in the connected viewer.

● You can disable presets in VB-C60 Viewer by selecting the [Not shown in viewers] (→ P. 2-24) check box.

● Preset positions cannot be set in the digital zoom area.

● You can also set multiple presets and save them all at once using the [Save preset settings] button.

Preset Tour

Set a preset tour whereby the camera goes around and monitors the multiple presets currently set.

■ Display Screen "Preset Tour Setting Area"
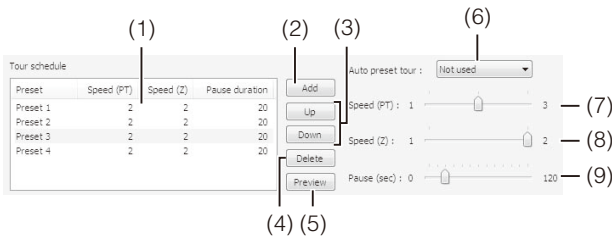
(1) Tour schedule list

A list of presets for which preset tour has been set is displayed.

(2) [Add] button

Add to the tour schedule list the preset you have set.

(3) [Up] and [Down] buttons

Select each preset in the list and click the [Up] or [Down] button to change the sequence of preset tour. In preset tour, the presets are checked one by one from the top.

(4) [Delete] button

Delete the selected preset.

(5) [Preview] button

Reflect the selected preset setting in the preset preview frame. Also, the camera angle switches to this preset, and the new angle can be checked in Admin Viewer.

(6) Auto preset tour

Select the timing of preset tour from the following options.

[Not used]

Preset tour is not performed.

[For viewers]

Preset tour is performed when a camera is connected via VB-C60 Viewer, etc.

[Always]

Preset tour is always performed.

(7) [Speed (PT)]

Set the moving speed of the camera during panning/tilting between 1 and 3. Moving the slide bar from the left to right increases the value and consequently raises the speed.

(8) [Speed (Z)]

Set the speed of the camera during zoom in a range of 1 to 2. Moving the slide bar from the left to right increases the value and consequently raises the speed.

(9) [Pause (sec)]

Set the time at which the camera stops at the preset position between 0 and 120 seconds in 5-second units.

📷 Note

If the following warning is displayed, consider changing the settings by referring to the table below.

Example of Warning Screen

Preset Setting Tool

Attention :
 The current Preset Tour settings may cause the pan/tilt mechanism to require repairs after a short time.
 Please note that the repair of the consumable mechanical parts such as pan/tilt mechanism may be out of warantee.

Recommended Preset Tour settings to reduce the machine-load :
 - Adjust the Preset Tour configuration so that the total amount of camera movement (angle/time) decreases.
 - Set the pause time in the preset position longer with the "Pause (sec)" setting.

Click the "Cancel" button to return to the setting screen.

OK   Cancel

* The touring time on the screen changes depending on the settings.

Clicking Cancel returns the display to the setting screen.
Clicking OK saves the set data.
(If you are using Preset Setting Tool, click [Save] on the setting page.)

As a rough guide, the pan/tilt mechanism can withstand 300,000 back-and-forth movements in full-angle operation *. The total touring time is determined by a combination of moving speed, moving range and pause duration. Set an appropriate time by referring to the table below.

Total touring time until preset tours corresponding to 300,000 back-and-forth movements are completed in the pan direction (rough guide)

Setting Speed (PT) to 1

Pause (sec.)	Pan Direction Movement Range (degree)		
	± 50	± 100	± 150
0	11616	11475	11427
10	17000	14166	13222
20	22666	17000	15111
30	28333	19833	17000

(Unit: hour)

Setting Speed (PT) to 2

Pause (sec.)	Pan Direction Movement Range (degree)		
	± 50	± 100	± 150
0	5950	5808	5761
10	11333	8500	7555
20	17000	11333	9444
30	22666	14166	11333

(Unit: hour)

Example: Speed (PT): 1, Pause: 30 seconds, Moving range (angle) in pan direction: If ± 50 degrees, 300,000 back-and-forth movements will be completed in 28333 hours.

* Based on our measurement standards

Tip

● Preset tour is not performed while the camera is being controlled with VB-C60 Viewer, etc.

● Preset tour is disabled when options such as RM-64/RM-25/RM-9, bundled RM-Lite, and Motion Detection Setting Tool are connected to the camera.

■ Setting the Preset Tour

How to Set

1. Select the touring method from [Auto preset tour].

    Select [For viewers] or [Always].
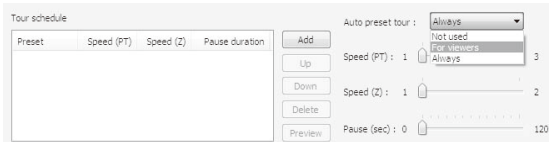
2. Select from [Preset] in the preset setting area the preset number you want to add to the tour schedule, and then click the [Add] button.

    The preset is registered in the tour schedule list. Up to 20 presets can be registered.
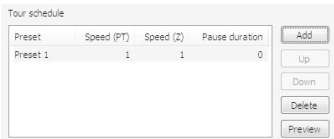
3. Select a preset in the tour schedule list and set the pan/tilt/zoom speeds for each preset using the [Speed (PT)], [Speed (Z)] and [Pause (sec)] slide bars, as well as the time in seconds during which the camera remains stationary at the preset position.

    Clicking the [Preview] button reflects the selected preset settings in the preset preview frame. Also, the camera angle switches to this preset, and the new angle can be checked in Admin Viewer.

4. Click [Apply].

   Confirm on the status list that the settings have been applied correctly, and then click the [Save preset settings] button to save the settings in the camera.
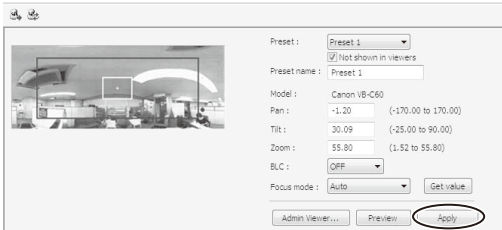
📷 Note

If preset tour is used, do not use the motion detection function. Also note that when [Auto] is set under [Day/Night], the pause time may become longer.

💡 Tip

The home position cannot be added to the tour schedule list.

Motion Detection Setting Tool

This tool is used to set the motion detection function that performs upload, notifies the viewer, records a log, etc., if a change has occurred in the captured image due to movement of a subject. You can set the position and size of the motion detection area, detection judgment conditions, etc., while checking the image on the camera.

You can set the Motion Detection function with ease using Motion Detection Setting Tool.
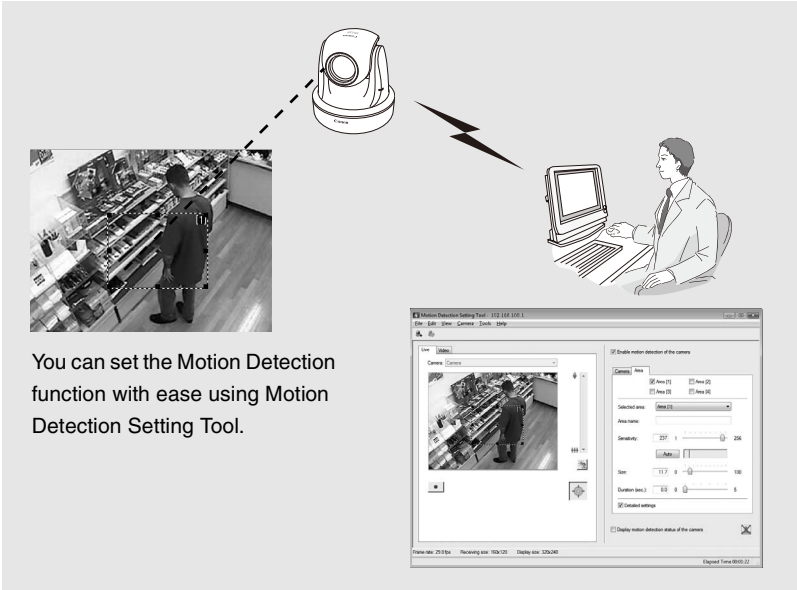
The Motion Detection function determines the following items to specify when the camera mode should change to [Detected] and the specified operations such as event upload should be performed, upon change in the viewer image inside the motion detection area: (1) [Sensitivity] indicating the degree of change, (2) [Size] indicating the ratio of the changed area, and (3) [Duration] indicating how long the change continues.

Note
Notes on Use of This Camera **The Motion Detection function is not suitable in applications where high reliability is required. If high reliability is always required for monitoring, etc., it is recommended that you don't use this function. Canon shall assume no liability for any accident, loss or other undesirable outcomes resulting from operating the motion detection function.**

■ **Display Screen of Motion Detection Setting Tool (Live Mode)**
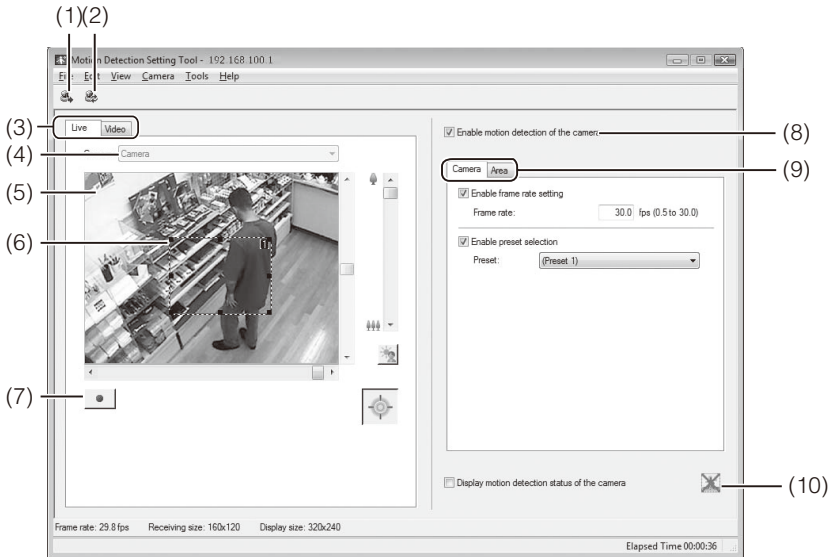
(1) [Load Motion Detection Settings] button

Clicking this button loads the current motion detection settings of the camera.

(2) [Save Motion Detection Settings] button

Clicking this button saves the motion detection setting edited by this tool.

If you have set motion detection, be sure to save the settings using [Save Motion Detection Settings].

(3) Live mode tab (Live/Record)

• [Live]

Video is displayed and the camera is controlled. The displayed video is also recorded.

• [Video]

You can set motion detection judgment conditions while playing the recorded video. For the specific screen views and operating procedures, see P. 2-43.

(4) Camera Selection box

The name of the connected camera is shown.

(5) Viewer

Video is displayed and the camera is controlled.

(6) Motion detection area frame

The range in which motion detection is performed is shown by a dotted-line frame. You can drag the mouse to resize/move the frame.

(7) [Start recording] button

Clicking this button starts recording video.

(8) [Enable motion detection of the camera]

Select this check box if you want to enable the motion detection function.

(9) Settings tabs (Camera/Area)

- [Camera]

Set the frame rate and preset position (→ P. 2-37).

- [Area]

Select the motion detection area and the sensitivity, size and duration for each area. For the specific screen views and operating procedures, see P. 2-38.

(10) [Display motion detection status of the camera]

Selecting this check box displays the motion detection status of the camera. You can check if the settings are enabled on the camera (→ P. 2-41).

■ Flow of Motion Detection Setting

The motion detection function is set according to the procedure below. For details on the setting method, see each setting page.

1. Launches Motion Detection Setting Tool.

The Motion Detection Setting Tool window appears ("Display Screen of Motion Detection Setting Tool (Live Mode)" (→ P. 2-35)).

Set motion detection in the Settings tab on the right side of the screen. The Settings tab has two tabs: [Camera] and [Area].
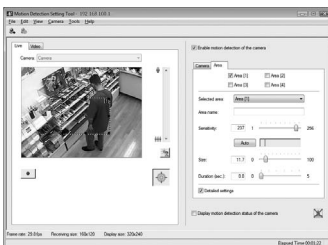
2. Set the frame rate of the camera and a desired camera orientation used for detection ([Camera] tab → P. 2-37).

3. Set the detection area ([Area] tab, → P. 2-38)

4. Set the conditions specifying the degree of change triggering the [Detected] mode ([Area] tab, → P. 2-38).

5. Save the settings.

Tip

● The Motion Detection Setting Tool viewer window shows a 160 x 120 black & white image regardless of the camera settings.

● In the [Area] tab, you can set the [Detected] judgment conditions for each area while checking the viewer image on the left side of the screen. For the applicable display screen, etc., see "[Detected] Mode and Display Screen" (→P.2-42). You can also set judgment conditions while playing the recorded video in the [Live] tab (→ P. 2-43).

● Motion Detection function

• When setting this function, confirm that detection will actually be performed correctly.

• If the subject is moving fast or the entire image is dark, motion detection may not operate correctly.

• If a change occurs due to light, wind, etc., false detection may occur.

■ Setting Motion Detection

How to Set

1. Enable motion detection.

Select the [Enable motion detection of the camera] check box.

2. Set the frame rate and camera position based on which to perform motion detection ([Camera] tab).

As for the camera position, set a desired detection position in the live video viewer or select an applicable preset in the [Camera] tab.

Set the preset beforehand using Preset Setting Tool (→ P. 2-25).

2

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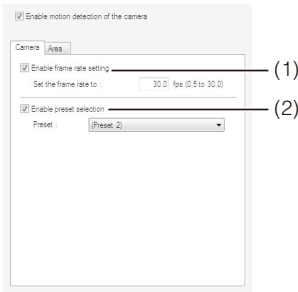
(1)Setting Frame Rate

When this check box is selected, the camera's frame rate for motion detection can be changed. Enter a desired rate in a range of fps 0.5 to 30.0.

(2)Enable preset selection

When this check box is selected, you can select the camera position using a preset.

📷 Note

The value set in [Maximum Frame Rate: Image Transmission] (→ P. 1-22) must be greater than the frame rate set by this tool.

🔅 Tip

● If the network load is heavy, the specified frame rate may not be achieved.

● By setting a lower frame rate, the video extracted from the captured video will be included in the scope of motion detection. This way, you can also perform motion detection for slow-moving subjects, etc.

● The frame rate set here is applied only to motion detection.

● Presets outside the view restriction are not shown in the preset list.

---

3. Set the motion detection area ([Area] tab).

Up to four motion detection areas can be created, where the frame of each area can be resized/moved by dragging. To resize the frame, drag "■" at four corners/on four sides. To move the frame, drag a point inside the frame. You can also set a separate motion detection level for each area. This camera lets you set the motion detection level while playing the video recorded in the [Live] tab (→ P. 2-43).

2

VBAdmin Tools
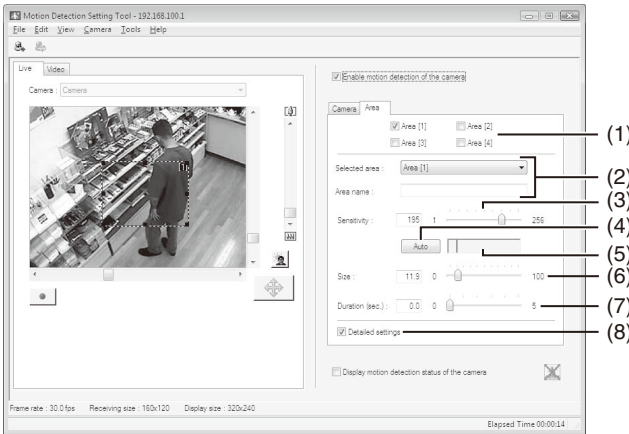
(1) Motion Detection Area

Select the check box corresponding to the motion detection area you want to use, and the detection area frame will be displayed in the viewer. Up to four detection areas can be created.

(2) [Selected Area]

If multiple motion detection area frames have been created, a separate motion detection level can be set for each area frame.

Next, set the name of the selected area. (The area name can be omitted.)

Up to 15 ASCII characters (space or printable characters) can be used in [**Area name**].

You can enter the [**Area name**] using up to 15 JIS X 0208-1990 characters.

(3) [Sensitivity]

Set the motion detection sensitivity in a range of 1 to 256. Set a desired value by dragging the slide bar. The greater the value, the higher the detection sensitivity becomes.

(4) [Auto] button

Clicking [**Auto**] allows the sensitivity to be set automatically at which the mode will change to [**Detected**] when a change occurs in the image shown inside the motion detection area. Click this button when nothing is moving.

(5) Detection Indicator

The level of the motion detected by the camera is shown in a graph in real time (→ P. 2-42).

(6)[Size]

The camera mode will change to [Detected] if the ratio of the area in which change has been detected (red or yellow rectangle) to the area of the selected active detection area frame (frame indicated by blue solid lines) exceeds the value set here (→ P. 2-42). However, the mode will not change to [Detected] even when the set value of [Size] has been exceeded, if the change has not continued for the duration in seconds set in [Duration]. Set a desired value between 0 and 100% by dragging the slide bar.

(7)Duration

The camera mode will change to [Detected] if the change occurring in the image inside the detection area has satisfied the conditions set in (3) [Sensitivity] and (6) [Size] for the duration set in [Duration].

Normally [Duration] is fixed to "0.2". If the [Detailed Settings] check box is selected, however, you can set a desired value in a range of 0 to 5 seconds by directly entering a value or dragging the slide bar.

(8)[Detailed Settings]

When this check box is selected, you can enter [Sensitivity], [Size] and [Duration] values. If the check box is cleared [Duration (sec.)] is fixed to "0.2".

🔅 Tip

● Even when a change has occurred in the image shown inside the viewer's motion detection area frame, the camera will not recognize it as [Motion] if the [Sensitivity] setting is low. Even when the sensitivity is raised, the camera mode will not change to [Detected] unless the part of the area frame that has moved meets the [Size] and [Duration] settings for motion.

● You can also select the setting area by clicking a desired motion detection area frame in the viewer. The selected detection area frame is shown by blue solid lines.

● By setting the selected area to [Not selected], you can show the detection statuses for all motion detection areas at once. Clicking a point in the viewer where no area frame is set has the same effect.

4. Check the motion detection status of the camera.

To check the level of motion detection operation based on the specified settings, select the [Display motion detection status of the camera] check box. The motion detection status will be shown by the icons specified below.

If the [Display motion detection status of the camera] check box is selected, the settings cannot be saved. To save the settings, clear this check box.

(Detection disabled)

☑ Display motion detection status of the camera   Not detected   👤
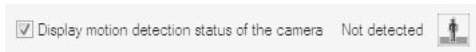
[Detected]

[Not detected]

📷 Note

● If a proxy server is used, the video frame rate may drop depending on the proxy load. Accordingly, it is recommended that you don't connect the camera via a proxy while this function is set.

● It is recommended that the motion detection level be set in a condition as close as possible to the condition in which the camera is actually used.

🔧 Tip

● The status of the detection in peak block view and [Display motion detection status of the camera] in this tool may not match the actual motion detection status of the camera.

● When the motion detection function of the camera is enabled, the video frame rate may drop compared to when the function is disabled.

● Clicking [Edit] in the menu bar and selecting [Copy sensitivity settings] copies the settings of [Sensitivity], [Size] and [Duration] for the currently selected area (1 to 4). If a different area (1 to 4) is subsequently selected and [Paste sensitivity settings] is selected from [Edit] in the menu bar, the copied settings will be pasted to the selected area.

5. Click [Save motion detection settings] to save the settings.

Tip

[Detected] Mode and Display Screen
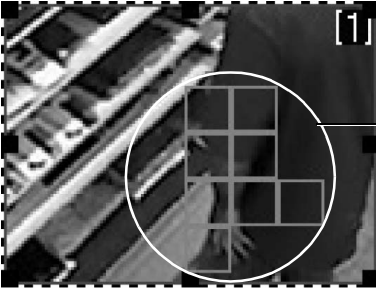
The area frame in which the camera is detecting motion is displayed by blue solid lines in the viewer.

The area in which the camera is detecting motion at the specified sensitivity is displayed by a yellow or red rectangle inside the motion detection area frame.

> Yellow rectangle: The camera detected a motion, but it did not meet the [Size] or [Duration] setting and thus the mode has not changed to [Detected].

> Red rectangle: The camera detected a motion, but it met the [Size] or [Duration] setting and thus the mode has not changed to [Detected].
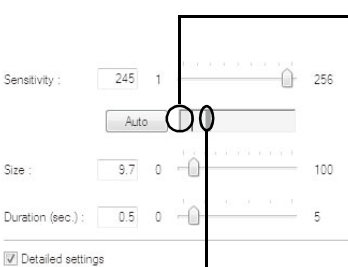
If a change occurred in the image, the value set in [Size] is shown by a vertical bar on the indicator. The following two indicator colors are used.

> Green: The area of the motion detected by the camera does not meet [Size].

> Yellow: The area of the motion detected by the camera meets [Size].

Peak block

A red peak block will be displayed when both the [Size] and [Duration] conditions are satisfied and the camera mode changes to [Detected]. Set the motion detection level while checking when a peak block is actually displayed at a given level of motion.

Sensitivity :	245	1		256
Size :	9.7	0		100
Duration (sec.) :	0.5	0		5

Auto

☑ Detailed settings
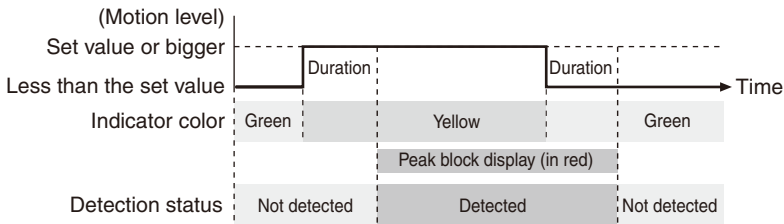
If a motion corresponding to [Size] or greater has remained detected for the specified duration or longer, the mode changes to [Detected] and a peak block is displayed. Even when the specified size becomes no longer met in the [Detected] mode where a peak block is still displayed, the [Detected] mode will be maintained for the specified duration.

Setting the Motion Detection Sensitivity While Checking the Recorded Video

To set the motion detection level at which the camera mode will change to [Detected], you can adjust the settings while checking the actual motion in the viewer. The camera lets you set a desired motion detection level while playing the live video recorded in the Live tab (→ P. 2-35), so you need not repeat the actual motion in front of the camera.

* If you are using Windows Vista without SP1, recording by Motion Detection Setting Tool may not be possible.

1. Selecting [Video recording options] from [Tools] in the menu bar opens the Video recording options dialog box.

   Video recording options dialog box
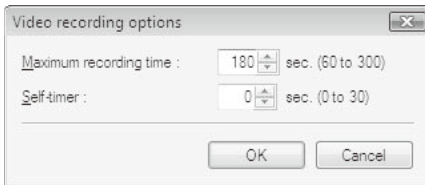
   (1)[Maximum recording time]

   Set the maximum recording time. Set a desired value in a range of 60 to 300 seconds.

   (2)[Self-timer]

   Set the time after clicking the Rec. Start button when recording will be started. Set a desired value in a range of 0 to 30 seconds.

2

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2. Adjust the camera position and click the Start recording button in the [Live] tab.

Recording 00:04 / 03:00 (Max.)

Recording of the video shown in the viewer will start. Record the video needed to adjust the motion detection level by creating motion in front of the camera.

To stop recording, click the Stop button.

3. Adjust the motion detection sensitivity in the [Area] tab while checking the video in the [Video] tab.

(1)List of recorded video

A list of recorded video is shown.

(2)[Delete] button

Clicking this button deletes the video selected from the list of recorded videos.

(3)[Delete all] button

Clicking this button deletes all videos shown in the list of recorded videos.

(4)Control buttons

The available buttons are "Move to Start", "Rewind", "Play", "Fast Forward" and "Move to End" from the left.

When the [Loop playback] check box is selected, the video is played repeatedly.

Log Viewer

This viewer lets you view the operating condition log of the camera.
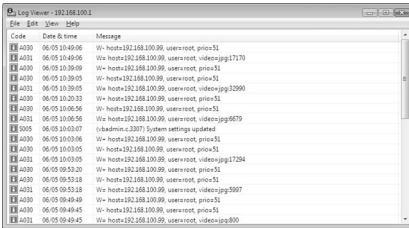
💠 Tip

● Log Viewer only has a log viewing function and logs cannot be deleted.

● Logs are saved by selecting [Save] from [File] in the menu bar. Logs can be saved in the text format.

Downloading Log Files

How to Download

Launch Log Viewer from VBAdmin Tools, and the latest log files will be downloaded and displayed automatically. To download a new log file list, select [Download] from [File] in the menu bar.
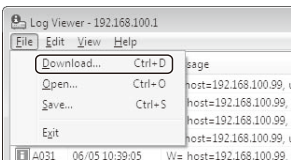
When the list has been downloaded, a dialog box showing the log file list opens. Select the log file you want to view and click [Download], and the selected log file will be downloaded.
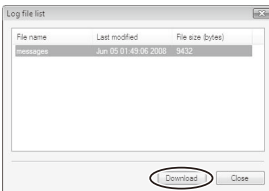
Viewing Logs

The log contains the following information.

- Code

  The log code is shown. For the log code, see "List of Log Messages" (→P.5-7).

  The log code is shown together with one of three icons corresponding to the applicable level.

  If the log has no log code, no icon is shown.

	Information level		Error level
	Warning level		

- Date & Time

  The date and time at which the log was generated is shown.

- Message

  A message regarding the log is shown.

◼ Saving a Log to a File/Opening a Saved Log

You can save the displayed log to a file or view a log file saved before.

How to Save

Select [Save] from [File] in the menu bar.
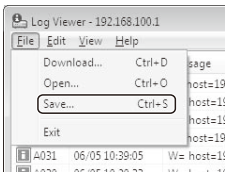
How to View

Select [Open] from [File] in the menu bar and then select the log file you want to view.
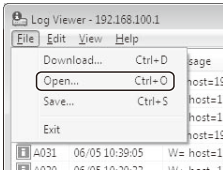
■ Copying/Searching Logs

You can copy the displayed log or search logs.

How to Copy

Click to select the log you want to copy, and then select [Copy] from [Edit] in the menu bar.
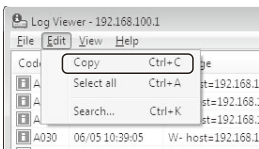
How to Search

1. Select [Search] from [Edit] in the menu bar.

    The Search dialog box appears.
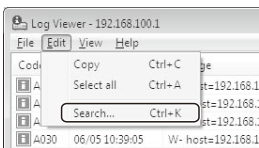
2. Enter a desired character string, and then click [Search].

■ Showing All Logs

How to Display

Select [Show all logs] from [View] in the menu bar.

All event logs are shown, including the logs specified in the log message list (→ P. 5-7), just like when [View Log Events] (→ P. 1-50) is selected from [Maintenance] → on the setting page.
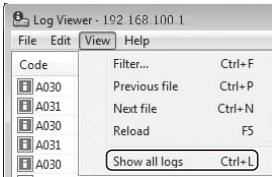
■ Showing Filtered Logs

You can filter logs by type, code and date & time to show only the necessary information.

How to Set

1. Select [Filter] from [View] in the menu bar.
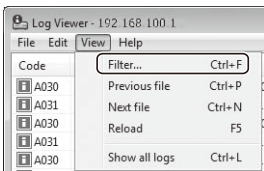
2. The Filter dialog box appears.

   Setting the following conditions and clicking [OK] shows only the logs matching the specified conditions.

   To cancel filtering, click [Cancel].
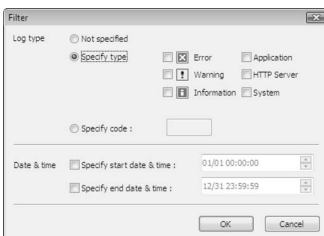
[Log type]

Select the [Specify type] or [Specify code] check box to filter logs by type. If you don't want to filter logs by type, select [Not specified]. Logs without log code are shown with [Not specified] selected, when [Show all logs] is selected from [View] in the menu bar.

● Specify type

Specify the log level

Select the level of logs to be displayed from among [Error], [Warning] and [Information].

Specify log output module

Select the output source module whose logs will be displayed, from among [Application], [HTTP Server] and [System].

● Specify code

Specify the log code. The entered characters are compared against all logs and only the logs matching the code are displayed. If "A0" is entered, for example, logs starting with "A0" are displayed.

[Date & Time]

● [Specify start date & time]

When this check box is selected and a date and time is entered, logs generated on or after the specified date and time are displayed.

● [Specify end date & time]

When this check box is selected and a date and time is entered, logs generated on or before the specified date and time are displayed.

⚙ **Tip**

[Application], [HTTP Server] and [System] support the log message list (→ P. 5-7).

3

VB-C60 Viewer

The following explains VB-C60 Viewer, which allows you to access the camera using a web browser to display live video, pan, tilt and zoom of the camera, control the exposure, control the night mode, adjust the white balance, control the focus and control the smart shade control function, etc.

Overview of VB-C60 Viewer

VB-C60 Viewer is a viewer that lets you access the network camera VB-C60 via a web browser to display image and operate the camera via pan, tilt and zoom control, etc.

Two types of viewers, Admin Viewer and VB Viewer, are available for VB-C60 Viewer.

Note

Use RM-Lite Viewer if you want to display MPEG-4 video from the camera.
Only JPEG video can be displayed using the built-in VB-C60 Viewer.

Major Differences Between Admin Viewer and VB Viewer

● The operable ranges are different.

Admin Viewer : In addition to displaying video from the camera, you can use the basic camera controls such as pan, tilt and zoom operations as well as an administrative control functions such as focus, exposure and white balance.

VB Viewer : You can only display video from the camera and access basic camera controls such as pan, tilt and zoom operations.

● Accessible controls are different.

Admin Viewer : Users with the Privileged Camera Control can use this viewer.
Password authentication is required.
Authorized users must have the Privileged Camera Control assigned by the Administrator beforehand (→ P. 1-41).

VB Viewer : Users with the Camera Control can use this viewer.
You can set the applicable options to enable/disable password authentication or limit pan, tilt and zoom controls of the camera, etc (→ P. 1-41).

User Authorities and Camera Control Privileges

The relationships of user authorities and camera control privileges are specified below.

User authority	Camera control privileges		Image Distribution	Audio Distribution
	Privileged Camera Control	Camera Control		
Administrator	○	○	○	○
Authorized User	○ (Can be changed)	○ (Can be changed)	○ (Can be changed)	○ (Can be changed)
Guest User	×	○ (Can be changed)	○ (Can be changed)	○ (Can be changed)

* Can be changed: The Administrator can change a given authority of an authorized user or guest user.

The user can have four authorities including Privileged Camera Control, Camera Control, Image Distribution and Audio Distribution.

To use Admin Viewer, the user must have the Privileged Camera Control.

To display video using VB Viewer, the user must have the Image Distribution. To also operate the camera using VB Viewer, the user must have the Camera Control, as well.

The Audio Distribution authority is required to receive audio using Admin Viewer and VB Viewer.

[Administrator]

This user has all authorities. The user name is fixed to "root."

The Administrator can launch Admin Viewer from the [Admin Viewer] link on the top page.

3

VB-C60 Viewer

[Authorized User]

The authorized user can launch Admin Viewer from the [**Admin Viewer**] link on the top page if he/she has the Privileged Camera Control. Upon losing the Privileged Camera Control, the authorized user can no longer launch VB Viewer. However, he/she can still launch Admin Viewer. Launching of VB Viewer by a given authorized user can be prohibited by disabling all authorities of the user (→ P. 1-41).

[Guest User]

This user can only perform pan, tilt and zoom controls of the camera, backlight compensation, video display and audio distribution.
The Administrator can launch VB Viewer from the [**VB Viewer**] link on the top page. The Administrator can prevent all camera accesses by a guest user by disabling all authorities of the user.

Note

● Admin Viewer launched by an [**Administrator**] can take over the camera control privileges from Admin Viewer launched by an [**Authorized User**] at any time. The Administrator can retain the camera control privileges, in which case authorized users cannot obtain the camera control privileges. After viewing the necessary information, the Administrator should always close the viewer or click "Obtain/release Camera Control" button to release the control privileges.

● Admin Viewer launched by an [**Administrator**] can access only one camera at a time. If one user is accessing the camera from a given PC with the Administrator authorities, other users cannot access the camera from other PCs with the Administrator authorities. On the other handAdmin Viewer launched by an [**Authorized User**] allows the camera to be accessed from multiple PCs at the same time. Take note, however, that if the camera is to be controlled, the control privileges are given to the user who accessed the camera last.

Tip

● The factory setting is to also give the Privileged Camera Control to [Authorized User].

● If all authorities of a guest user are disabled, the user authentication dialog box will appear when the user launches VB Viewer. When an authorized user or Administrator name and password are entered, a guest user can use VB Viewer based on the authorized user or Administrator authorities.

● List of Authorized User Authorities
The authorities of authorized users are assigned as follows.

List of Authorized User Authorities

Given camera privileges	Viewer	Operations
Privileged Camera Control Camera Control Image Distribution Audio Distribution	Admin Viewer (Viewer Screen)	PTZ operation of the camera, On/Off switch of backlight compensation, image display size switch, Audio button operation, Reconnect button operation, full screen mode and pausing video
	Admin Viewer (Administrator Control Screen)	All operations in [Control for Admin] [Details] Smart Shade Control, focus, exposure, white balance, Night Mode, detection display of external device input, detection display of motion detection area and external device output control
	VB Viewer	All operations possible on the VB Viewer [Details] PTZ operation of the camera, On/Off switch of backlight compensation, image display size switch, Audio button operation, Reconnect button operation, full screen mode and pausing video
Camera Control Image Distribution Audio Distribution	VB Viewer	All operations possible on the VB Viewer [Details] PTZ operation of the camera, On/Off switch of backlight compensation, image display size switch, Audio button operation, Reconnect button operation, full screen mode and pausing video
Image Distribution Audio Distribution	VB Viewer	Image display size switch, Audio button operation, Reconnect button operation, full screen mode and pausing video * When the camera control button is pressed, the user authentication dialog box will appear.The user can control the camera by entering the Administrator's user name and password here.
Image Distribution	VB Viewer	Image display size switch, Audio button operation, Reconnect button operation, full screen mode and pausing video

* If the image distribution authority is disabled, the applicable user can no longer use VB Viewer.

Launching VB-C60 Viewer

The various settings of VB-C60 Viewer are specified by accessing the camera via a web browser. First, access the Settings title page.

> ### 📖 Note
> This document explains relevant operations based on the IP address "192.168.100.1" (factory setting). In reality, the customer must enter the IP address set for the camera.

How to Launch

1. Access "http://192.168.100.1/" in the web browser.
2. Click [Admin Viewer] or [VB Viewer] according to the user.

3. If [Admin Viewer] has been clicked, enter the user name and password.

   The factory settings are specified below (→ P. xiv):
   User Name: root,
   password: VB-C60
   The user name "root" is the Administrator account for the camera.

   * The password is "VB-C60." Be sure to change them on the [Network] setting page (→ P. 1-7).

4. VB-C60 Viewer launches.

Shutting Down VB-C60 Viewer

How to Shut Down

Close the web browser in the viewer to shut down.

Connecting from VBAdmin Tools

Only the Administrator can connect to this viewer.

How to Launch

1. Launches VBAdmin Tools.

    (For information on how to launch VBAdmin Tools, see "Launching VBAdmin Tools" (→ P. 2-6) in "Chapter 2 VBAdmin Tools".)

2. Click [Admin Viewer].

3. **Enter the user name and password.**

The factory settings are specified below (→ P. xiv):
User Name: root
password: VB-C60
The user name "root" is the Administrator account for the camera.
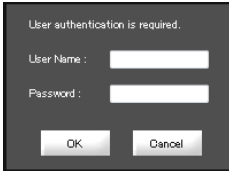
* The password is "VB-C60." Be sure to change them on the [**Network**] setting page (→ P. 1-7).

4. **Admin Viewer launches in the web browser.**

Note

If a wrong user name or password is entered, the camera cannot be connected. Connect the camera by entering the correct user name and password.

How to Operate VB-C60 Viewer

Display Screens of Admin Viewer

The following gives an overview of the functions of buttons, boxes and other screen elements displayed when Admin Viewer is launched.
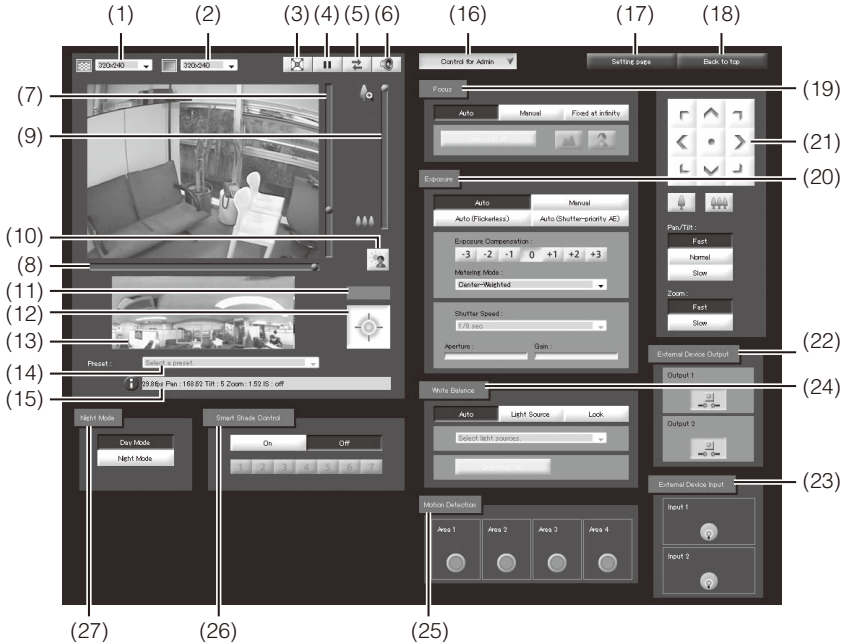
(1) **Video Capture Size**

Set the size of video received from the camera.

(2) **Video Display Size**

Set the display size of video shown on the screen.

(3) **"Full Screen Mode" button**

Live video is shown in the full-screen mode.

(4) **"Pause/Resume" button**

Displayed video is paused. Clicking the button again while the video is paused resumes live video.

(5) **[Reconnect] button**

The camera is reconnected.

(6) "Audio Reception" button

Audio from the camera is received and output.

(7) Scroll bar for tilt

This scroll bar is used to perform tilt (up/down) control of the camera.

(8) Scroll bar for pan

This scroll bar is used to perform pan (left/right) control of the camera.

(9) Scroll bar for zoom

This scroll bar is used to control the zoom ratio.
You can zoom in (show a telephoto view) by moving the knob upward or zoom out (show a wide-angle view) by moving the knob downward.

(10) [Backlight Compensation] button

This button turns on/off backlight compensation. This control is effective when the image is dark due to backlight. Clicking the button again cancels backlight compensation.

(11) Control Privilege Status Indicator

Whether or not the current client has the camera control privileges is shown in this area.

(12) "Obtain/release Camera Control" button

This button is used to obtain/release the camera control privileges.

(13) Panorama Display Area

Panorama images registered in the camera are displayed in this area. Operate the camera by operating the frame line inside the panorama display area.

(14) Preset

You can control the camera using presets already registered in the camera.

(15) Information Filed

Information messages, warning messages and error messages are shown to the viewer.

(16) [Control for Admin] button

This button is used to show/hide the operation panel for Administrator control.

(17) [Setting Page] button

The screen switches to the Settings Menu page.

(18) [Back to top] button

The screen switches to the top page of the camera.

(19) [Focus]

You can control the focus.

3-10

(20) [Exposure]

You can control the exposure.

(21) [Camera Control] button

You can control the camera pan, tilt and zoom. You can also change the zoom speeds.

(22) [External Device Output]

Control the output to an external device.

(23) [External Device Input]

The status of input from an external device is shown.

(24) [White Balance]

You can control the white balance.

(25) [Motion Detection]

The status of motion detection is shown.

(26) [Smart Shade Control]

You can operate the Smart Shade Control.

(27) [Night Mode]

You can switch the Day mode and Night mode.

Display Screens of VB Viewer

The following gives an overview of the functions of buttons, boxes and other screen elements displayed when VB Viewer is launched.
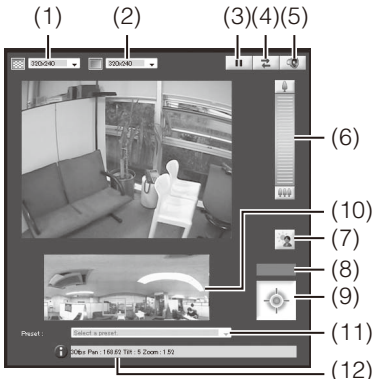
(1) Video Capture Size

Set the size of video received from the camera.

(2) Video Display Size

Set the display size of video shown on the screen.

(3) "Pause/Resume" button

Displayed video is paused. Clicking the button again while the video is paused resumes live video.

(4) "Reconnect" button

The camera is reconnected.

(5) "Audio Reception" button

Audio from the camera is received and output.

(6) Zoom Controller

This bar is used to control the zoom ratio.

(7) "Backlight Compensation" button

This button turns on/off backlight compensation. This control is effective when the image is dark due to backlight. Clicking the button again cancels backlight compensation.

(8) Control Privilege Status Indicator

Whether or not the current client has the camera control privileges is shown in this area.

(9) "Obtain/release Camera Control" button

This button is used to obtain the camera control privileges.

(10) Panorama Display Area

Panorama images registered in the camera are displayed in this area. Operate the camera by operating the frame line inside the panorama display area.

(11) Preset

You can control the camera using presets already registered in the camera.

(12) Information Filed

Information messages, warning messages and error messages to the user are shown.

Obtaining the Camera Control Privilege

The camera cannot be controlled by multiple users at the same time. Only the user with the control privileges can control the camera. To perform pan, tilt and zoom operations, implement backlight compensation and preset or otherwise control the camera, you must obtain the control privileges first.

How to Operate

Click "Obtain/release Camera Control" button to obtain the control privileges.

Admin Viewer

VB Viewer

Control Privilege Status Indicator
The status of camera control privileges is shown.

"Obtain/release Camera Control" button
Obtains/releases Camera Control.
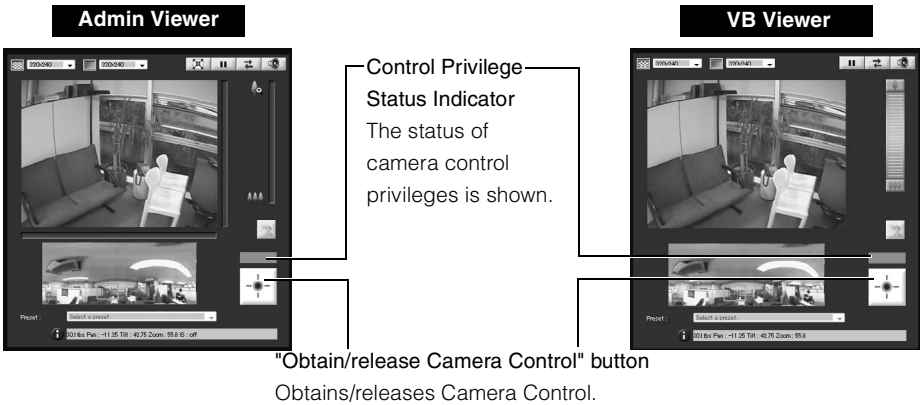
* With VB Viewer, you can only obtain the camera control privileges.

■ Camera Control Privilege Status Indicator

How the camera control buttons and Camera Control Status Indicator are shown changes as follows according to the status of control privileges.

Control privileges not assigned

The Control Privilege Status Indicator is shown in gray.

Control privileges assigned

The Control Privilege Status Indicator is shown in blue.

Waiting for control privileges

While you are waiting for control privileges in VB Viewer, the remaining standby time is shown in the Control Privilege Status Indicator.

Video paused

While video is paused (→P. 3-19), an icon indicating the paused status is shown in the Control Privilege Status Indicator.

3

VB-C60 Viewer

Control the camera

■ Changing the camera angle

How to Operate

Admin Viewer

One of the following operating methods can be used.

Move the knob of the scroll bar for pan or tilt.

The camera angle will change according to the knob position on the scroll bar. You can also move the knob by clicking a blank point on the scroll bar.

Clicking on the image moves the center of the camera to the applicable position.

Scroll bar for tilt
Scroll bar for changing the tilt (up/down) setting of the camera

Scroll bar for pan
Scroll bar for changing the pan (left/right) setting of the camera

Tip

You can also operate the pan and zoom using the applicable camera operation buttons (→P. 3-26).

VB Viewer

Clicking on the image moves the center of the camera to the applicable position.

* VB Viewer has no scroll bar for tilt or pan.

■ Changing the camera angle in the panorama display area

The frame displayed in this area indicates the range currently captured by the camera.

When a **blue** frame is displayed: Control privileges have not been acquired. When a **yellow** frame is displayed: Control privileges have been acquired.

Moving by clicking

Clicking on the panorama window moves the pan/tilt positions until the clicked location becomes the center.

Moving by dragging

Drag the inside of the yellow frame on the panorama window to move the frame, and the pan/tilt positions will move so that the area inside the frame will be captured.

⚡ Tip

● Camera controls based on clicking the VB-C60 Viewer screen are not precise.

● If Admin Viewer is used as an administrator, the camera can be operated by ignoring the view restrictions.
If Admin Viewer is used as an authorized user, the camera is operated only inside the view restriction.

● With VB Viewer, the camera is operated only inside the view restriction.

3

VB-C60 Viewer

■ Changing the Camera Zoom Ratio

How to Operate

Admin Viewer

Move the knob on the scroll bar for zoom in/out.

The camera zoom ratio will change according to the knob position on the scroll bar. You can also move the knob by clicking a blank point on the scroll bar.

Zoom telephoto end

Optical telephoto end
(When digital zoom is on)

Scroll bar for zoom
Scrolling upward has a zoom-in (telescopic) effect, while scrolling downward has a zoom-out (wide-angle) effect.

Wide end
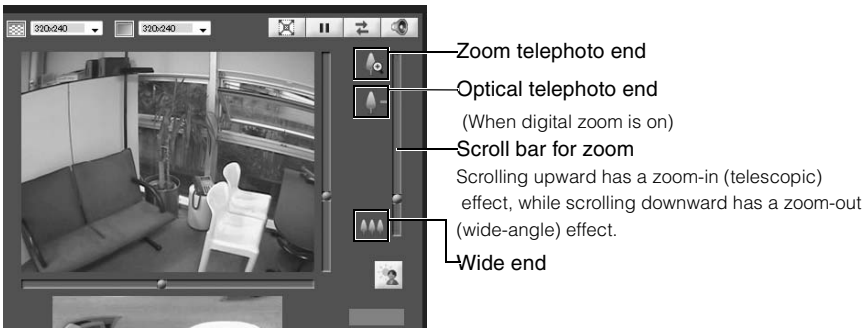
💮 Tip

● When [Enable] is set under [Digital Zoom] in the [Camera] area of the setting page, the icon indicating the optical telephoto end appears (→ P. 1-18).

● You can also operate the zoom using the applicable camera operation buttons (→ P. 3-26).

VB Viewer

Click the setting bar for zoom.

The camera zoom ratio will change according to the relative vertical position of the clicked point. You can also operate the zoom by clicking the icons at the top and bottom of the zoom setting bar.

Setting bar for zoom
The top end corresponds to the zoom-in (telescopic) limit, while the bottom end indicates the zoom-out (wide-angle) limit.
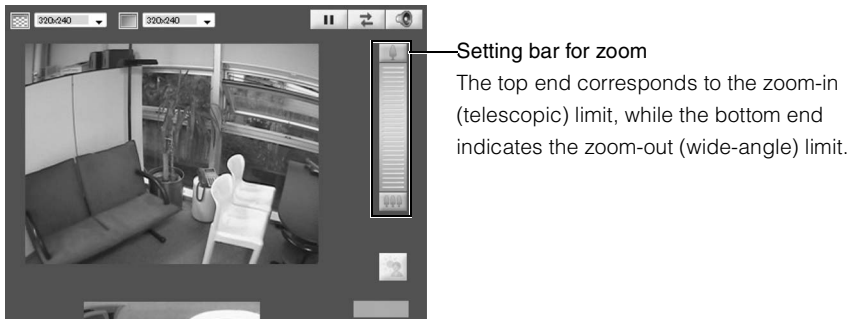
■ Changing the zoom ratio in the panorama display area

Changing by dragging

Drag the yellow frame line on the panorama window to change the frame size, and the zoom ratio will change so that the area inside the new frame will be captured.

🔆 Tip

Clicking the mouse button outside the yellow frame and dragging the mouse draws a blue frame. When the mouse is released, the blue frame changes to yellow and the pan/tilt/zoom positions will move/change so that the area inside the frame will be captured.

■ Using Presets

You can control the camera using presets already registered in the camera (→ P. 2-22).

How to Operate

1. Click the [Preset] selection box to display a preset list.

2. Selecting a desired preset from the list changes the camera angle to the selected preset.

 —————— Preset

🔆 Tip

Register presets beforehand using VBAdmin Tools (→ P. 2-25). Registered presets are displayed in the preset selection box.

3

VB-C60 Viewer

■ Compensating Backlight

This control is effective when the image is dark due to backlight.

How to Operate

Clicking [Backlight Compensation] brightens the image that was previously dark due to backlight.

Clicking the button again cancels backlight compensation.

Admin Viewer	VB Viewer

Setting Video and Audio

You can change the video capture size, change the video display screen, show video in the full-screen mode, pause video, reconnect the camera and set audio reception.

Admin Viewer	VB Viewer
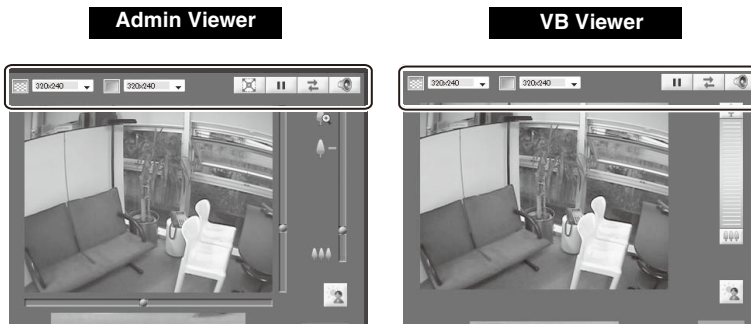
■ **Changing the Video Capture Size**

You can set a desired resolution for video received from the camera. Select from [160x120], [320x240] and [640x480].
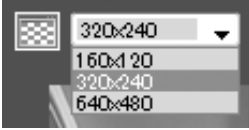
■ **Changing the Video Display Screen**

You can change the video display screen. Select from [160x120], [320x240] and [640x480].
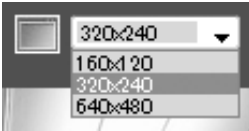
Tip

● When the viewer is launched, the video capture size set for the camera is applied (→ P. 1-22).

● When the viewer is launched, the video display size becomes [320x240].

■ **Viewing Video in the Full-screen Mode (Admin Viewer Only)**

You can show video over the entire display. Click this button, and a new window will open to show video in the full-screen mode.

To close the full-screen display window, click the close button of the window.

■ **Pausing/Resuming Video**

You can pause/resume video.

Click this button to pause/resume video.

3

VB-C60 Viewer

■ Saving the Paused Image

How to Operate

1. Click the "Pause/Resume" button to pause video.

2. Bring the cursor over the video screen and right-click the mouse to display the pop-up menu.

3. Select [Save Picture As].

4. Enter a file name and save the image.

* Although the sample screen is that of Admin Viewer, you can also save the image in VB Viewer using the same operation.

☼ Tip

When the control is paused, the display size setting, Pause/Resume button, Control for Admin button and all functions of Control for Admin excluding the following items are grayed out.
• External input status display
• Motion detection status display
These functions are enabled again once the control is resumed.

■ Reconnecting

This function is used to connect to the camera again.

To reconnect the camera, click this button.

☼ Tip

Once the camera is reconnected, audio reception will stop.
The control privileges will be abandoned and the video capture size and video display size will also return to the defaults.

■ Receiving Audio

You can receive audio through the microphone attached to the camera.

Click this button to receive audio.

🔅 Tip

- To receive audio, set [Enable] for [Audio Transmission from the Camera] under [Audio Server] of [Server] on the setting page beforehand (→ P. 1-31).
- Audio cannot be received if you are using a proxy server.

Displaying Information

Viewer information, warning messages, etc., are shown.
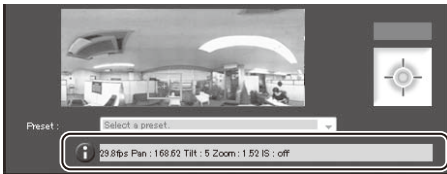
■ Information Messages

An information message is indicated by a blue icon.

An information message appears when a camera operation has been successful.

Help messages on various buttons, pull-down lists, etc., and pan, tilt and zoom information, frame rate information and Image Stabilizer settings from the camera are shown.

■ Warning Messages

A warning message is indicated by a yellow icon.

If an unsupported web browser is used or audio reception stops, a message will be displayed to alert the user.

■ Error Messages

An error message is indicated by an orange icon.

An error message will be displayed if the viewer generates an error.

🔧 Note

If the Image Stabilizer is turned on, the actual viewing angle of image display becomes smaller than the viewing angle displayed in the information area.(When On1 is set, Approx. 83%, or when On2 is set, approx. 50%.)
Also, the actual viewing angle of video display is smaller than the viewing angle (frame) displayed in the panorama display area.

🔆 Tip

For details on the above messages, see "List of VB-C60 Viewer Messages" (→ P. 5-17).

Performing Operations and Settings as the Administrator

The operations and settings that can only be performed in the Admin Viewer are explained.

Opening Control for Admin

How to Operate

1. Click "Obtain/release Camera Control" to obtain the control privileges.

2. Click [Control for Admin].
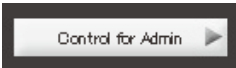
3. The Control for Admin appears.

* Control for Admin can be opened even when camera control privileges have not been acquired. However, all items in the Control for Admin operation area are grayed out except for the external input status display and motion detection status display.

Operating the External Device Output

You can operate the external device output and display the current output status using an icon.
The [ON]/[OFF] status can be switched by clicking this icon.
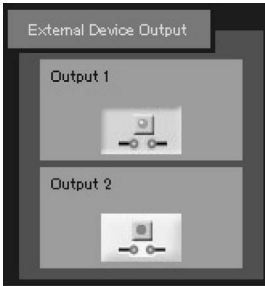
Example:

Top: Output OFF

Bottom: Output ON

Displaying the External Device Input Status

You can check the status of external device input and display it using an icon. When the external device receives a contact input signal, the input will turn ON and an applicable icon will appear.
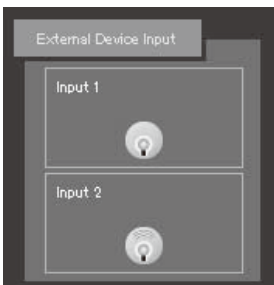
Example:

Top: Input OFF

Bottom: Input ON

Displaying the Motion Detection Status

You can display the detection status of the motion detection function.

Example:

Areas 1 to 3: Detection status OFF

Area 4: Detection status ON

💡 Tip

Set the motion detection options beforehand using "Motion Detection Setting Tool" (→ P. 2-34) of VBAdmin Tools.

Controlling/Setting the Camera

Click the applicable camera control buttons to perform pan, tilt and zoom operations and set the speed of each operation.
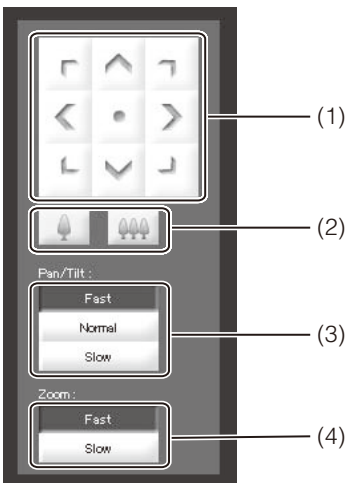
(1) [Pan/Tilt] button

Pan/tilt the camera in the direction of each arrow. Press and hold a button, and the camera will zoom continuously. Click the center button, and the camera will face the front.

(2) [Zoom] button

You can zoom in to/out of the displayed image. Press and hold a button, and the camera will zoom continuously.

(3) [Pan/Tilt] speed

Select a desired operation speed from [Fast], [Normal] and [Slow].

(4) [Zoom] speed

Select a desired operation speed from [Fast] and [Slow].

> ## Tip
> Even when the [Pan/Tilt] and [Zoom] speed settings are changed, the speed of pan, tilt and zoom operations performed using the scroll bars and in the panorama mode will not change.

Setting the Focus

Select the focus setting from [Auto], [Manual] and [Fixed at infinity].
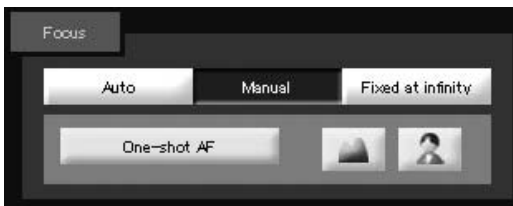
[Auto]   : The subject is automatically brought into focus.

[Manual]   : The focus can be adjusted by pressing the (Far)/ (Near) buttons continuously.
Clicking the [One Shot AF] button activates auto focus and once the subject is brought into focus, the focus function stops in the manual mode.

[Fixed at infinity] : The focus can be fixed near infinity.

Note

● Even when the focus mode is changed using Admin Viewer, it is not reflected in the settings on the setting page.

● Take note that if manual focus is set, the focus will remain fixed.

● When the focus is set using Admin Viewer, the focus mode of other users will also change to the same mode.

● If a shutter speed of 1/1 to 1/4 is selected in the manual exposure mode (→ P. 3-27), the [Auto] and [One-shot AF] focus modes of camera control are disabled. Switch the focus mode to [Manual] to bring the subject into focus.

● Refer to the memo in P. 1-17 for the focus range that applies when the Night Mode (→ P. 1-19, P. 3-32) is set.

Setting the Exposure

You can set various options relating to exposure operation.
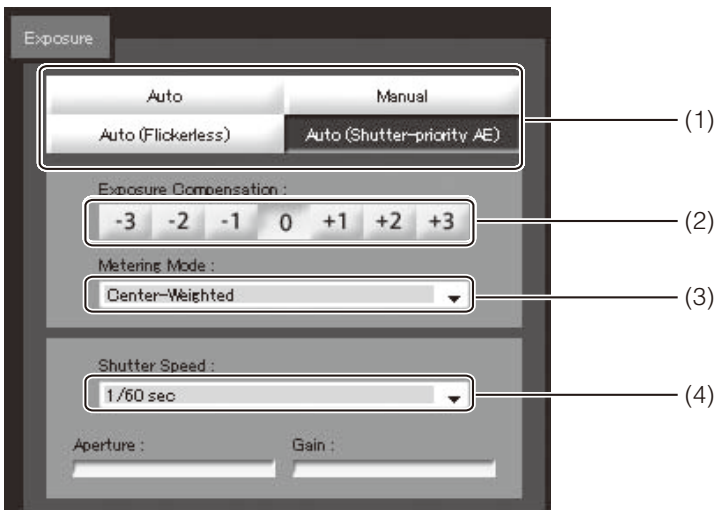
(1) Exposure Mode

Select [Auto], [Manual], [Auto (Flickerless)] or [Auto (Shutter-priority AE)].

If [Auto] was selected for [Day/Night] under [Camera] on the setting page (→ P. 1-19), select [Auto], [Auto (Flickerless)] or [Auto (Shutter-priority AE)].

For explanation on each item set in the exposure mode, see the setting page (→ P. 1-15).

(2) Exposure Compensation

When [Auto], [Auto (Flickerless)] or [Auto (Shutter-priority AE)] is selected as the exposure mode, a desired exposure compensation value can be selected from seven levels (-3 to +3) using an applicable button.

To darken the image, select a negative value. To brighten the image, select a positive value.

(3) Metering Mode

When [Auto], [Auto (Flickerless)] or [Auto (Shutter-priority AE)] is selected as the exposure mode, select a desired metering mode from [Center-Weighted], [Average] and [Spot].

[Center-Weighted]

The entire screen is metered by focusing on the center of the screen.
Even when slightly darker/brighter areas are present on the periphery of the screen, an appropriate exposure can be achieved for the subject near the center.
Use this mode if the subject is positioned near the center of the screen.

[Average]

The entire screen is metered by averaging.
A stable exposure can be achieved even in a capture environment where there are notable brightness differences within the screen.
Use this mode to stabilize the exposure in locations where vehicles or people are moving.

[Spot]

The center of the screen is metered.
An appropriate exposure can be achieved for the subject at the center of the screen regardless of the brightness/darkness on the periphery of the screen.
Use this mode if you want to adjust the exposure to the center of the screen because the subject is receiving a spotlight or backlight, etc.

(4) [Shutter Speed]

When [Manual] or [Auto (Shutter-priority AE)] is selected as the exposure mode, select a desired shutter speed. If [Manual] is selected, set the shutter speed from the pull-down menu in a range of [1/1 sec] to [1/8000]. If [Auto (Shutter-priority AE)] is selected, set the shutter speed from the pull-down menu in a range of [1/8] to [1/8000].

(5) [Aperture]

When [Manual] is selected as the exposure mode, set a desired value of aperture.
Moving the slider to the left closes the aperture and darkens the image. Moving the slider to the right opens the aperture and brightens the image.

(6) [Gain]

When [Manual] is selected as the exposure mode, set a desired value of gain.

Moving the slider to the left decreases the gain (sensitivity to brightness) and darkens the image. Moving the slider to the right increases the gain and brightens the image.

Note

If the subject is a traffic signal, electronic scoreboard, etc., the captured image may flicker. In this case, try changing the exposure mode to [Auto (Shutter-priority AE)] and then select a shutter speed lower than 1/100, to see if the situation improves.

Setting the White Balance

Select a desired white balance setting from [Auto], [Light Source] and [Lock].
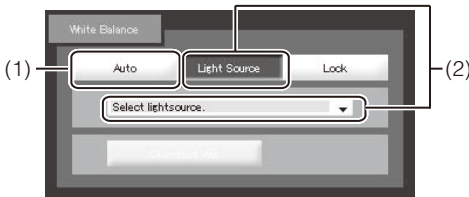
(1) [Auto]

The white balance is adjusted automatically.

(2) [Light Source]

Select the light source from the pull-down menu below according to the condition in which the camera is used.

[Daylight Fluorescent] : Select this option to capture video under daylight fluorescent lighting.

[White Fluorescent] : Select this option to capture video under neutral white or cool white fluorescent lighting.

[Warm Fluorescent] : Select this option to capture video under warm color fluorescent lighting.

[Mercury Lamp] : Select this option to capture video under mercury lamps.

[Sodium Lamp] : Select this option to capture video under orange sodium lamps.

[Halogen Lamp] : Select this option to capture video under halogen bulbs or incandescent bulbs.

3

VB-C60 Viewer
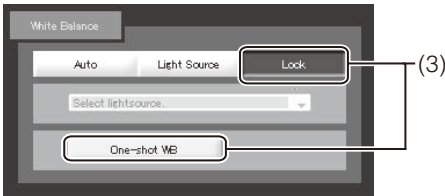
(3) [Lock]

The white balance is fixed to that of the video currently received.
To forcibly fix the white balance according to the light source, use [One-shot WB].

Example of setting method:

Irradiate a white subject (white paper, etc.) using the light source and capture the subject over the entire screen. In this condition, select [One-shot WB].

📋 Note

● Since the light source selection options are based on representative characteristics, proper colors may not be achieved depending on the applicable light source. In this case, use the [One-shot WB] function.

● If the image looks greenish under mercury lamps in the [Auto] mode, select the [Mercury Lamp] mode under Light Source. If the image is still not shown in appropriate colors under mercury lamps when the [Mercury Lamp] mode is selected under Light Source, use the [Auto] mode.

● Notes on capturing video continuously day and night.
If a subject that seldom changes is captured in a location where the light source changes gradually, such as when you are capturing such a subject continuously day and night, the image may not be shown in appropriate colors.
In this case, proper colors can be obtained by adding changes to the captured images using pan/tilt/zoom operations.

● When the subject has only one color or when sodium lamps, mercury lamps and certain other fluorescent lightings are used, camera colors may not be adjusted automatically.

Setting the Smart Shade Control

Smart Shade Control is a function that, unlike the Backlight Compensation, brightens only dark areas while keeping bright areas intact.

- (1)
- (2)

(1) Smart Shade Control

Set [OFF] or [ON].

(2) Adjusting the Smart Shade Control

When [On] is selected for Smart Shade Control, set one of seven control levels from [1] (weak) to [7] (strong).

Example: If the background is bright and the subject is hard to see, this function brightens dark areas to make the subject clearer.
Compared to Backlight Compensation, Smart Shade Control can reduce blown-out of bright areas.

OFF   Smart Shade Control   Backlight Compensation

☀ Tip

● When [On] is selected for Smart Shade Control, the video file size increases.

● When [On] is selected for Smart Shade Control, screen noises may increase. If noises are noticeable, lower the control level.

3

VB-C60 Viewer

Setting the Night Mode

Switch between [Day Mode] and [Night Mode].
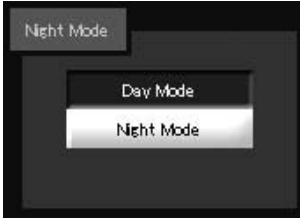
💡 Tip

The Night Mode cannot be used if [Auto] is set for Day/Night under [Camera] on the setting page (→ P. 1-19).

[Day Mode]

Color image can be viewed in the normal mode.

[Night Mode]

The infrared cutoff filter is disabled and images are shown in black & white.

💡 Tip

See the memo in P. 1-17 for the focus range that applies when [Night Mode] is set (→ P. 1-19, P. 3-32).

Creating Web Pages
for Video Distribution

This chapter explains how to distribute image using the VB-C60.

You can distribute image in various ways, such as displaying video or still images or showing multiple images on a Web page.

Web Pages for Image Distribution

You must create a dedicated Web page to distribute information from the camera you have installed. "VB-C60 Viewer" can be used as the camera's viewer, where you can set detailed parameters.
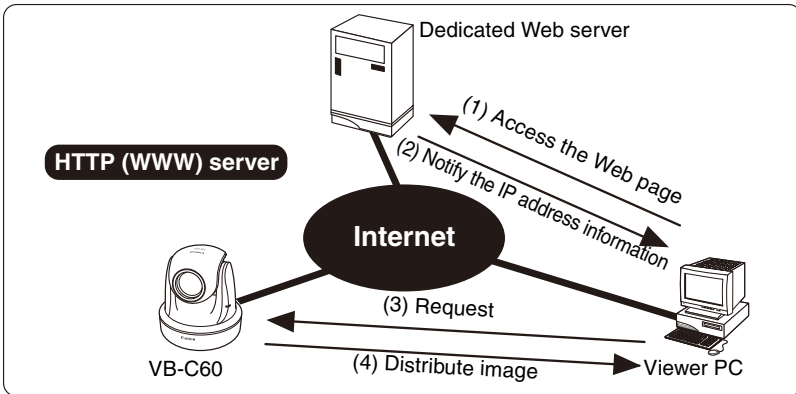
If a link corresponding to the image request is selected in (1), the Web server will send a file containing the IP address information of the camera from the server in (2). If VB Viewer is used, the camera will deliver video to the viewer PC upon the request in (3).

■ Sample Web Page for Video Distribution (Built in the Camera)

The above page is built in the camera. It can be accessed from the following URL:

http://192.168.100.1/

* The underlined portion is an example of IP address. In reality, the customer must enter the IP address set for the camera (→ P. 1-8).

🐾 Note

● Use a firewall or take other security measures to prevent direct attacks to the camera from the Internet or other external sources.

● The VB-C60 has a built-in Web server. Write desired content for the Web page for video distribution in the flash memory in the camera beforehand, and you can publish the Web page and distribute image over the Web using the camera alone. For information on how to save Web page data, see "How to Create a Web Page Using VB Viewer" (→ P. 4-6).
Please make sure that the web server and the camera's IP address or global address are on the same subnet, when using a dedicated web server.

🔅 Tip

You can utilize the language setting function of the browser to create a multi-language Web page.
For example, set the top page for Japanese users as index-ja.html and English page for overseas users as index.html, and separate the URL with slashes, such as http://192.168.100.1/sample/. This way, the server will send appropriate files according to the browser's language setting for the accessed page. For details on the language setting function, see the browser's Help.

* The underlined portion is an example of IP address. In reality, the customer must enter the IP address set for the camera (→ P. 1-8).

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Creating Web Pages for Video Distribution

Viewing Sample Pages

This camera stores sample pages for video distribution. You can view the sample pages by following the procedure below. Use these samples as a reference when creating a Web page.

How to View

1. Launch the Web browser and enter the following URI:
    http://<u>192.168.100.1</u>/sample/
    *   The underlined portion is an example of IP address. In reality, the customer must enter the IP address set for the camera (→ P. 1-8).
    *   You can also select "Sample Page" on the top page to view the sample pages (→ P. xi).

2. When the following pages are displayed, click the sample page you want to view.
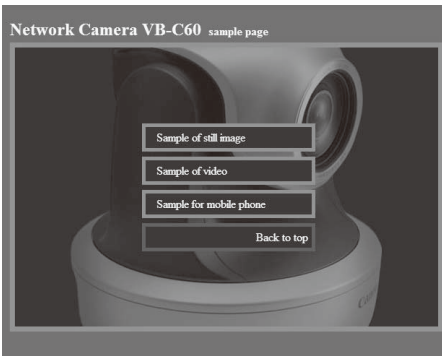
Note

Sample pages are intended for those familiar with HTML and JavaScript. Sample pages do not guarantee functionality of the images.

■ **Example of sample page**

Still image sample

This is a sample page for acquiring still images from the camera and displaying the acquired images.

Movie sample

This is a sample page for displaying live video.

Sample for mobile phone

This is a sample page for displaying still images with camera operation function for mobile phones.
(These images can also be displayed in normal Web browsers for PCs.)

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Creating Web Pages for Video Distribution

Distributing Video Using VB Viewer

How to provide image using VB Viewer is explained, together with application examples.

How to Create a Web Page Using VB Viewer

You can display VB Viewer by incorporating it into your Web page.

```
<iframe src="http://192.168.100.1/viewer/live/en/live.html"
       scrolling="no"
       width=490 height=500>
</iframe>
```

* The underlined portion is an example of IP address. In reality, the customer must enter the IP address set for the camera (→ P. 1-8).
If you are saving the Web page to the flash memory in the camera, you can also omit the IP address, as follows:

<iframe src="/viewer/live/en/live.html" …>

Saving Web Page Data

This camera has an internal flash memory where you can save Web page data. To save data, transfer the files via FTP. Save the data files in the /usr/www/html/local folder.

Devices	File system (Accessing from a FTP client)	URI (Accessing via a Web browser)
Onboard flash memory	ftp://<IP address>/usr/www/html/local	http://<IP address>/local/

🐾 Note

- If the available space in the flash memory becomes low, the writing speed may drop. Save only the minimum required files in the flash memory.
- For the user name and password used for FTP authentication, see P. xiv.

● If the Web page data grows too big, it may no longer be possible to change the camera settings.

When saving Web page data to the flash memory in the camera, make sure the total data size does not exceed 3 Mbytes.

If Web page data is saved to the flash memory in the camera, be sure to check the event logs after changing any settings to confirm that an error was not generated while saving the new settings (S306, S307). If an error is recorded, delete the Web page data and set the data again.

For details on the applicable errors, see P. 5-16.

Example of How to Create a Web Page Using VB Viewer

Sample Web pages created using VB Viewer are explained.

Use these samples as the base to create your original Web page.

4 Creating Web Pages for Video Distribution

```
sample.htm
<html>
<head>
<title>VB Viewer Sample Page</title>
</head>

<body bgcolor="gray">
<center>
<h1>LiveApplet</h1>

<iframe src="http://192.168.100.1/viewer/live/en/live.html"
        scrolling="no"
        width=490 height=500>
</iframe>

</center>
</body>
</html>
```

* The underlined portion is an example of IP address. In reality, the customer must enter the IP address set for the camera (→ P. 1-8).
If you are saving the Web page to the flash memory in the camera, you can also omit the IP address, as follows:


```
<iframe src="/viewer/live/en/live.html" …>
```

VB Viewer Parameters

You can change the parameters to create a Web page matching your purpose or what you want to express on the page.

Use each parameter after fully understanding what it means.

■ Description of object tags

Attribute name	Omission	Description
src	Not permitted	Specify the URI of VB Viewer. The Japanese version and English version of VB Viewer can be referenced at the following URIs, respectively: English version src="http://<IP address>/viewer/live/en/live.html" Japanese version src="http://<IP address>/viewer/live/ja/live.html" French version src="http://<IP address>/viewer/live/fr/live.html" Italian version src="http://<IP address>/viewer/live/it/live.html" German version src="http://<IP address>/viewer/live/de/live.html" Spanish version src="http://<IP address>/viewer/live/es/live.html" If you are saving the Web page to the flash memory in the camera, you can also omit the IP address, as follows: English version src="/viewer/live/en/live.html" Japanese version src="/viewer/live/ja/live.html" French version src="/viewer/live/fr/live.html" Italian version src="/viewer/live/it/live.html" German version src="/viewer/live/de/live.html" Spanish version src="/viewer/live/es/live.html" * To hide the scroll bars, also specify the following parameters: scrolling="no"
height	Not permitted	Specify the height of the display area of VB Viewer in pixels. If video is to be displayed in QQVGA (160 x 120) or QVGA (320 x 240), specify a value of 500 or greater for height. If video is to be displayed in VGA (640 x 480), specify a value of 740 or greater for height.

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Creating Web Pages for Video Distribution

Attribute name	Omission	Description
width	Not permitted	Specify the width of the display area of VB Viewer in pixels. If video is to be displayed in QQVGA (160 x 120) or QVGA (320 x 240), specify a value of 490 or greater for width. If video is to be displayed in VGA (640 x 480), specify a value of 810 or greater for width.

Distributing Video Using a Browser Only

You can provide video from the VB-C60 directly to a browser using the WebView-HTTP protocol. Examples are explained below.

Displaying Live Video at the Time of Access as a Still Image

You can provide as a still image the video captured by the camera the moment the client accesses your Web page.

See the applicable sample page for a specific example.

<IMG SRC="http://192.168.100.1/-wvhttp-01-/GetOneShot">

* The underlined portion is an example of IP address. In reality, the customer must enter the IP address set for the camera → P. 1-8).

Example of Image Distribution Using One Global Address

To publish live video from the camera over the Internet, you need one fixed global address.

Some providers offer access services where one fixed global address is assigned. You can use this global address. In this case, you need a router with NAT function.

Example: Assume that your provider assigned the global address 192.168.1.10.

You also set the local address 192.168.100.2 for the camera.

(Router: 192.168.100.1)
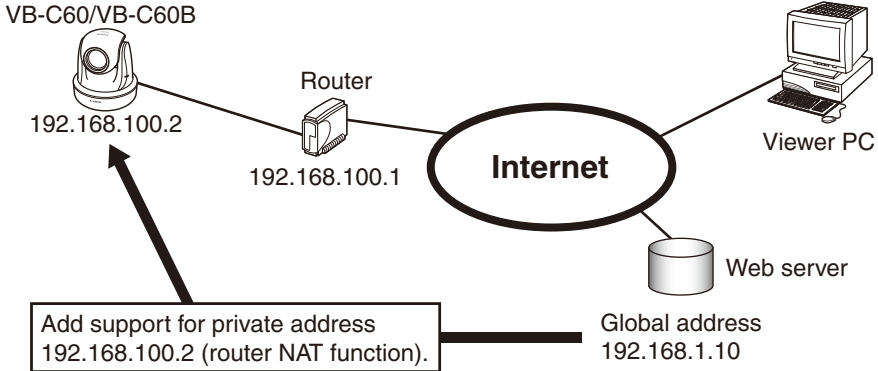
In this case, VB Viewer cannot be displayed even when "http://192.168.100.2/sample/" is accessed via the Internet. Set 192.168.1.10 in [Global Address for the Web Page] (→ P. 1-33). Also, specify the Web page for video distribution as explained below.

Specify VB Viewer (→ P. 4-6) as follows:

```
<iframe src="http://192.168.1.10/viewer/live/en/live.html"
        scrolling="no"
        width=490 height=500>
</iframe>
```

* The underlined portion is an example of IP address. In reality, specify the value you have set under "[Global Address for the Web Page]" (→ P. 1-33).

Note

● For the router settings, contact the router manufacturer.

● To distribute audio, be sure to set "[Global Address for the Web Page]" (→ P. 1-33).

● For information on saving web contents for video distribution, see "Note" on P. 4-3.

Distributing Still Images to Mobile Phones

You can use a Web service for mobile phones to view still images and control the camera. You can easily create a still image distribution page for mobile phones in HTML using WebView-HTTP protocol image.cgi commands. The VB-C60 stores a sample page for distributing still images to mobile phones, and you can view the sample page as follows.

1. Launch the Web browser and enter the following URI:
   http://192.168.100.1/m/

   * The underlined portion is an example of IP address. In reality, the customer must enter the IP address set for the camera (→ P. 1-8).

2. Select the language (Japanese/English/French/Italian/German/Spanish).

3. The sample page will be displayed.

   Sample pages have been created to allow for camera controls such as adjustment of camera orientation, zoom and brightness. You can perform various operations by pressing the corresponding dial keys on the mobile phone.

🔲 Note
Sample pages do not guarantee functionality of the images. When distributing images to mobile phones, it is the responsibility of the user to confirm the display of images and other functionality.

🔅 Tip
You can control the camera only when no other user has the camera control privileges.

Overwriting a Sample Page

Access the flash memory in the camera via FTP and rewrite the HTML files located at the following paths, to change the screen display and operation details.

Path to English sample:	/mnt_flash/www/html/sample/en/mobile/
Path to Japanese sample:	/mnt_flash/www/html/sample/ja/mobile/
Path to French sample:	/mnt_flash/www/html/sample/fr/mobile/
Path to Italian sample:	/mnt_flash/www/html/sample/it/mobile/
Path to German sample:	/mnt_flash/www/html/sample/de/mobile/
Path to Spanish sample:	/mnt_flash/www/html/sample/es/mobile/

```
<IMG SRC="/-wvhttp-01-/image.cgi?v=jpg:160x120&pan=-17000&tilt=0&zoom=5580"ALT="
Position 1"><BR>
```

For example, overwrite the underlined value of pos1.html to change the control position for position [1]. For the image.cgi command parameters, see the table below.

📷 Note
Before overwriting any sample page stored in the flash memory of the camera, back up the applicable file.

■ About the Parameters of image.cgi

Command	Explanation
pan	Specify the pan position of the camera in units of 0.01 degree. Specifying a positive value pans the camera to the right. Specifying a negative value pans the camera to the left. Example: 90 degrees to the right ⇨ Pan = 9000 35 degrees to the left ⇨ Pan = -3500
tilt	Specify the tilt position of the camera in units of 0.01 degree. Specifying a positive value tilts the camera upward. Specifying a negative value tilts the camera downward. Example: 20 degrees upward ⇨ Tilt = 2000 15 degrees downward ⇨ Tilt = -1500

Command	Explanation
zoom	Specify the viewing angle of the camera (horizontal direction) in units of 0.01 degree. Example: Viewing angle of 50 degrees ⇨ Zoom = 5000 Viewing angle of 5 degrees ⇨ Zoom = 500
v	Specify the image size in one of the following formats: QQVGA ⇨ v=jpg: 160 x 120 QVGA ⇨ v=jpg: 320 x 240 VGA ⇨ v=jpg: 640 x 480

⚙ Tip

As for pan, tilt and zoom, a relative position from the current position can be specified using "d" indicating the current position.

Example:

Pan 10 degrees to the right from the current position ⇨ Pan = d+1000

Tilt 5 degrees downward from the current position ⇨ Tilt = d-500

Narrow the viewing angle by 2 degrees ⇨ Zoom = d-200

Widen the viewing angle by 2 degrees ⇨ Zoom = d+200

Also, a ratio of the current viewing angle can be specified using "v." In this specification method, set a ratio based on the current viewing angle being 100. (One half the viewing angle corresponds to 50, while twice the viewing angle corresponds to 200.)

Example:

Pan to the right by the viewing angle (= 1 screen) from the current position ⇨ Pan = v+100

Tilt downward by one half the screen from the current position ⇨ Tilt = v-50

Halve the viewing angle ⇨ Zoom = v+50

Double the viewing angle ⇨ Zoom = v+200

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Creating Web Pages for Video Distribution

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Appendix

Modifiers

You can specify parameters using the "% characters" explained below.

%n	Reason for capture (number)	0 (Test) | 1 (Contact input 1) | 2 (Contact input 2) | 33 (Interval timer) | 130 (Motion detection [Area 1]) | 131 (Motion detection [Area 2]) | 132 (Motion detection [Area 3]) | 133 (Motion detection [Area 4])
%N	Reason for capture (character string)	<External device input name (alphanumeric characters)>|<Motion detection area name (1/2/3/4)>| Null (null character / interval timer test)
%X	Width of image	Number of pixels in horizontal direction
%Y	Height of image	Number of pixels in vertical direction
%C	Camera number	1
%D	Camera name	Setting for [Camera Name (alphanumeric characters)]
%P	Pan position	-179.99 ~ 180.00
%T	Tilt position	-179.99 ~ 180.00
%Z	Zoom position	0.1 ~ 300.00
%V	Camera server	VB-C60
%y	Year of capture time	2001 ~ 2031
%m	Month of capture time	1 ~ 12
%d	Day of capture time	1 ~ 31
%w	Day of week of capture time	0 ~ 6 (Sunday through Saturday)
%H	Hours of capture time	00 ~ 23
%M	Minutes of capture time	00 ~ 59
%S	Seconds of capture time	00 ~ 59
%s	Milliseconds of capture time	000 ~ 999
%z	Time zone of capture time	-1200 ~ +1300
%a	Weekday name of capture time	Sun | Mon | Tue | Wed | Thu | Fri | Sat
%b	Month name of capture time	Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec
%h	Host name	

* A runtime error will occur if the specified name does not match.

* If this modifier is not defined, "%" will be deleted.

■ Available Modifiers

The modifiers that can be used for each setting item are specified below.

[HTTP Upload] (→ P. 1-25)

[Parameter (query string)]

All modifiers can be used.

[FTP Upload] (→ P. 1-26)

[Subdirectory Name to Create]

Only the modifiers %y, %m, %d, %w, %H, %h, %n can be used.

[File Name to Create]

Only the modifiers %y, %m, %d, %w, %H, %M, %S, %s, %n can be used.

[E-mail Notification] (→ P. 1-28)

[Message Body]

All modifiers can be used.

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Appendix

Troubleshooting

Before contacting your store or Canon's Customer Service Center, check the items specified below. If a log message is displayed, check the details of the message and corresponding countermeasure in the log message list.

The camera does not start
● If you are using a PoE HUB, check if the LAN cable is connected correctly. ● If you are using an AC adapter (optional), check if the AC adapter is connected correctly. ● Reconnect the power. See "Connect the Camera to the Network and Turn on the Power" (→*Start Guide*).

VB Initial Setting Tool does not operate
● Check if the LAN cable is connected correctly. ● See "Connect the Camera to the Network and Turn on the Power" (→*Start Guide*), and try reconnecting the camera power. The camera no longer responds to VB Initial Setting Tool after 20 minutes from the power on. ● Check if the camera and the PC in which VB Initial Setting Tool is operating are connected to the LAN in the same segment. ● The VB Initial Setting Tool may not function when the [Windows Firewall] function is enabled. In this case, see "Notes on Use When the [Windows Firewall] Function is Enabled" (→*Start Guide*). ● Check if you are using an older version of VB Initial Setting Tool.

The top page of the camera is not displayed
● Check if the LAN cable is connected correctly. ● Check if the network to which the camera is connected is set up correctly. In particular, check if the IP address, subnet mask and default gateway address are set within the ranges supported by the applicable network. ● If you have changed the IP address, the new address will not become effective until the camera is rebooted. ● Check if the correct URI (IP address of the camera) has been entered in the web browser (→ P. xi, P. 3-6, P. 4-2).

Video is not displayed
● If you want to improve the video quality, refer to "Setting the Image Size, Quality and Frame Rate (Video)" (→P.1-22) in "Chapter 1 Detailed Settings" to change the settings to adjust the quality. ● Up to 30 viewers can access the camera at the same time. If this limit has been exceeded, video is not displayed and a message appears.

There is no audio
● If there is no audio, check the audio server settings of the camera and also check the sound and audio device settings of the PC. ● If you are using Admin Viewer with the Administrator authorities, check if the camera is connected to RM-series Viewer or other viewer that lets the Administrator use audio. ● Audio cannot be used if you are using a proxy server.

Stream recording cannot be used
● Stream recording cannot be used if HTTP or FTP upload is selected for [Upload] in the [Upload] menu. To use stream recording, set [Upload Disabled] under [Upload] (→ P. 1-24).

The camera cannot be controlled
● If you connect to Admin Viewer as an Administrator, you will have an exclusive possession of the camera control privileges. If you connect to Admin Viewer as an authorized user, you cannot control the camera unless the current Administrator releases the camera control privileges. Contact your Administrator (→ P. 3-3).

The viewer gets disconnected
● Check the network and PC for abnormality. ● Reboot the PC and connect again.

You forgot your password
● You can initialize all settings of the camera, except for the date and time, using the reset switch (→ P. 5-21). The Administrator password required for initialization is "VB-C60." Note, however, that network settings such as the IP address and subnet mask will be initialized and must be set again.

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Appendix

Data cannot be uploaded
● Check the upload destination in the [Upload] menu, as well as the upload operation upon event in the [Event] menu, to see if both are set correctly.   ● You can perform operation check based on the currently set upload destination by running a test (→ P. 1-26, P. 1-26) from the [Upload] menu.   ● Check [View Log Events] in the [Maintenance] menu or logs on the server to check the detailed operating environment. For [View Log Events], see "Application (uploader) messages" in P. 5-9. Also see "Notes" in P. 1-24.   ● For the server settings, contact your System Administrator.

Files cannot be saved in VBAdmin Tools.
● Saving of files to certain folders is prohibited in Windows Vista and later operating systems. Accordingly, an attempt to save a file may fail. Specify [Documents], [Pictures] and other folders.

List of Log Messages

Log Messages on the VB-C60

Log messages are classified into the following six types.

Category	Level	Code	Fault level
alert	Error	5xx	Hardware-level failure (System operations will stop)
crit	Error	4xx	Software-level failure (Task operations will stop)
err	Error	3xx	Operational error (Operations will continue)
warning	Warning	2xx	Non-operational error
notice	Warning	1xx	Error external to the system
info	Information	0xx	Information on normal operation

■ Application (camera) messages

A030 Startup and shutdown of WebView Livescope Client [info]

Description	%1%2 host=<Host>, user=<User>, prio=<Priority> (A030)
%1	W: WebView session, V: Session-less video client, N: Session-less event client
%2	Connect, -: Disconnect
Meaning	The camera server client was connected or disconnected.

A031 Transmitted video data size [info]

Description	%1= host=<Host>, user=<User>, video=<jpg | mp4>:< Number of frames> (A031)
%1	W:WebView session, V: Session-less video client

A040 Cause of rebooting [info]

Description	%1 %2 (A040)
%1	Date & time information (Wed Jun 30 21:49:08 1993 format)
%2	Cause of rebooting (A4xx message)
Meaning	The camera was rebooted due to the cause of rebooting A4xx.

A101 Invalid user name [notice]

Description	user <User name> not found (A101)
Meaning	The camera was accessed by an unauthorized user.

A102 Invalid password [notice]

Description	user <User name> password mismatch (A102)
Meaning	The password is invalid.

A111 Invalid host [notice]

Description	host <IP address> access denied (A111)
Meaning	The camera was accessed from a host from which access is prohibited.

A160 Recovery of pan/tilt subsystem [notice]

Description	<pan | tilt> recovered (A160)
Meaning	The pan/tilt sub-system that had stopped functioning has recovered.
Remarks	See A460.

A201 Registered panorama image error [warning]

Description	corrupt panorama image - ignored (A201)
Meaning	The panorama image is invalid.
Countermeasure	Recapture a panorama image and register it again.
Remarks	A file may have been registered while still open.

A250 Control error during camera initialization [warning]

Description	Camera control timeout - < Camera command> (A250)
Meaning	An initialization error occurred due to a command timeout (upright position/on ceiling, initialization of camera platform, dome).
Countermeasure	If the problem persists after rebooting the camera, the camera is faulty.

A260 Slipped pan/tilt position [warning]

Description	<Pan/tilt slipped> - c=< Error code> (A260)
Meaning	The pan/tilt position has slipped.

A330 Video input error [err]

Description	video input timeout - resetting (A330)
Meaning	The video input has been reset because video input stopped.
Countermeasure	If the error occurs repeatedly, the camera is damaged. Contact our Customer Service Center.

A350 Camera control system [err]

Description	camera status timeout - resetting (A350)
Meaning	The camera control system has been reset due to a communication timeout with the camera.
Countermeasure	If the error occurs repeatedly, the camera is damaged. Contact our Customer Service Center.

A450 Camera initialization failed [crit]

Description	camera initialization failed - <Error code> (A450)
Meaning	The camera control function has stopped because the camera control system could not be initialized.
Countermeasure	If the error persists after rebooting the camera, the camera is damaged. Contact our Customer Service Center.

A460 Stopping of pan/tilt subsystem function [crit]

Description	<Pan/tilt> stopped - c=< Error code> (A460)
Meaning	An error occurred during pan/tilt control, so the control function was disabled.
Countermeasure	If the error persists after rebooting the camera, the camera is damaged. Contact our Customer Service Center.
Remarks	To reset the error, send http://[IP address]/-wvhttp-01-/platformreset (if the camera is not damaged.)

■ Application (uploader) messages

A004 Starting and stopping of uploader [info]

Description	%1 uploader (A004)
%1	Starting or stopping.
Meaning	The uploader was started or stopped.

A120 Resolution of upload destination name failed [notice]

Description	uploader cannot resolve the server name (A120)
Meaning	The name of the upload destination could not be resolved.

A121 Connection to upload destination failed [notice]

Description	uploader cannot connect to the server (A121)
Meaning	The upload destination could not be connected ( ).

A122 Connection to upload destination failed [notice]

Description	uploader cannot connect the server (A122)
Meaning	The upload destination could not be connected due to a reason other than A120 and A121.

A130 Stream recording buffer recovered [notice]

Description	stream buffer recovered - lost=<Number of destroyed frames> (A130)
Meaning	The image buffer for stream recording has recovered.

A134 Invalid upload setting (FTP/HTTP mode) [notice]

Description	ftp/http mode invalid. uploader set <none> forcibly (A134)
Meaning	The upload mode setting is invalid. The upload function was forcibly disabled.

A135 Invalid upload setting (FTP PORT/PASV mode) [notice]

Description	ftp port/pasv mode invalid. uploader set <pasv> forcibly (A135)
Meaning	The PORT/PASV mode setting in connection with FTP upload is invalid. The PASV mode was forcibly set.

A136 Invalid upload setting (HTTP notification only/image mode) [notice]

Description	http notice/image mode invalid. uploader set <image> forcibly (A136)
Meaning	The notification only/image mode setting in connection with HTTP upload is invalid. The image mode was forcibly set.

A137 Invalid upload setting (E-mail notification) [notice]

Description	mode invalid. uploader set <none> forcibly (A137)
Meaning	The e-mail notification setting is invalid. E-mail notification was forcibly disabled.

A138 Invalid upload setting (E-mail notification authentication mode) [notice]

Description	authentication mode invalid. uploader set <smtp auth> forcibly (A138)
Meaning	The setting for e-mail notification authentication mode is invalid. "SMTP_AUTH" was forcibly set.

A220 Video input warning detected [warning]

Description	video%1 warning - <Cause of error> (A220)
%1	Video input number
Meaning	An error that permits recovery of the video input system was detected.

A230 Video input warning detected [warning]

Description	stream buffer overflowed (A230)
Meaning	The image buffer for stream recording overflowed and the application began discarding images.

A270 Upload image buffer overflowed [warning]

Description	%1 images are lost due to upload buffer overflow (A270)
%1	Number of discarded upload images
Meaning	Upload images overflowed from the image buffer.
Countermeasure	Make adjustments to reduce the number of event occurrences. Also adjust the upload quality, image size and frame rate.

A271 E-mail communication buffer overflowed [warning]

Description	mail queue is full (A271)
Meaning	E-mails overflowed from the communication buffer.
Countermeasure	Make adjustments to reduce the number of event occurrences. Also adjust the upload quality and resolution.

A272 Upload communication buffer overflowed [warning]

Description	ftp/http queue is full (A272)
Meaning	Upload data overflowed from the communication buffer.
Countermeasure	Make adjustments to reduce the number of event occurrences. Also adjust the upload quality, image size and frame rate.

A321 Video control command failed [err]

Description	video%1 command error - <Cause of error> (A321)
%1	Video input number
Meaning	Issuance of a command to the video input system failed. If this error occurs frequently, an A42x error will occur.

A420 Video input initialization failed [crit]

Description	video%1 initialization failure - <Cause of error> (A420)
%1	Video input number
Meaning	The video input function was stopped because the video input system could not be initialized.

A421 Video control command failed [crit]

Description	video%1 command error - <Cause of error> (A421)
%1	Video input number
Meaning	The video input function was stopped because issuance of an essential command to the video input system failed.

A422 Video input frozen [crit]

Description	video%1 stalled (A422)
%1	Video input number
Meaning	The video input function was stopped because video generation stopped.

A423 Video input error detected [crit]

Description	video%1 fatal error - <Error code> (A423)
%1	Video input number
Meaning	The video input function was stopped because an error that does not permit recovery of the video input system was detected.

A470 Uploader initialization failed [crit]

Description	uploader initialization failure - %1 (A470)
%1	Error number
Meaning	The uploader could not be initialized.
Countermeasure	If the problem persists after rebooting the camera, the camera is faulty.

■ Application (audio server) messages

B001 Starting and shutdown of audio server [info]

Description	%1 wvaudio (B001)
%1	starting	shutdown
Meaning	The audio server was started/shut down.

B011 Audio client connected [info]

Description	[%1] %2 connected n=%3 (B011)
%1	Client type (send | recv)
%2	Client host IP address
%3	Total number of clients
Meaning	An audio client was connected.

B012 Audio client closed [info]

Description	[%1] %2 closed [%3] (B012)
%1	Client type (send | recv)
%2	Client host IP address
%3	Disconnection type (active | passive | sender)
Meaning	An audio client was disconnected.

B101 Error request received [notice]

Description	%1 unusual request[%2] (B101)
%1	Client host IP address
%2	Error type (400 | 404 | ...)
Meaning	The request was denied due to a command error (400) or parameter error (404).

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B102 Client connection denied [notice]

Description	%1 request denied[%2] (B102)
%1	Client host IP address
%2	Denial type (41 | 43 | ...)
Meaning	Client connection was denied due to an authentication error (41), insufficient resource (43), specification of unsupported codec (45), specification of unsupported stream (46), host access restriction (48), too many clients (49) or invalid operation mode (4a).
Countermeasure	41: Check the user name, password or user list used for connection, 43: Reconnect or reboot the camera, 45 or 46: Use supported client software, 48: Check the host access restriction, 49: Check the maximum number of clients that can be connected, 4a: Check the applicable settings to see if the audio server is used.

B103 Client forcibly disconnected [notice]

Description	%1 access denied[%2] (B103)
%1	Client host IP address
%2	Denial type (41 | 48 | 4a)
Meaning	Connection was initially permitted, but the setting has subsequently been changed to prohibit access, thereby triggering a forced disconnection (the denial type is the same with B102).

B301 Audio sending device error [err]

Description	cannot use audio device for tx[%1:%2] (B301)
%1	Error handling (ld | buff)
%2	Error number
Meaning	An audio device error was detected.
Countermeasure	If the error is not reset automatically, arrange for servicing.

B401 Audio device initialization failed [crit]

Description	audio device initialization error[%1] (B401)
%1	Error number
Meaning	The audio device could not be initialized. The audio server stops.
Countermeasure	If the problem persists after rebooting, the camera is faulty. Arrange for servicing.

B402 Audio server initialization failed [crit]

Description	wvaudio initialization error[%1] (B402)
%1	Error number
Meaning	The audio server could not be initialized. The audio server stops.
Countermeasure	If the problem persists after rebooting, the camera is faulty. Arrange for servicing.

B403 Settings change failed [crit]

Description	cannot set config[%1] (B403)
%1	Error number
Meaning	The settings could not be updated. The audio server stops.
Countermeasure	If the problem persists after rebooting, the camera is faulty. Arrange for servicing.

■ HTTP Server Messages

H143 User name specification error [notice]

Description	(http_auth.c.XXX) get_password failed (H143)
Meaning	An unknown user was specified in user authentication.

H144 Password specification error [notice]

Description	(http_auth.c.XXX) password doesn't match for %1 %2, IP:%3 (H144)
%1	URL XSS vulnerability countermeasure implementation (process equivalent to ftpd)
%2	User name
%3	IP address
Meaning	A wrong password was specified in user authentication.

H145 Connection denied due to host access limitation [notice]

Description	(mod_haccess.c.XXX) host %1 access denied (H145)
%1	IP address
Meaning	Connection was denied due to access limitation imposed on the host.

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Appendix

■ System Messages

S004 Starting and stopping of system [info]

Description	%1 webview (S004)
%1	Starting or stopping.
Meaning	The video server (webview) has started or stopped.

S005 System settings changed [info]

Description	(vbadmin.c.XXX) System settings updated (S005)
Meaning	Settings not requiring rebooting were changed.

S240 Camera error [warning]

Description	serviceman call (S240)
Meaning	The camera generated an error that requires servicing.

S306 Error on saving settings [err]

Description	Can't update system settings (S306)
Meaning	An error generated while the system was saving settings. Settings could not be saved.
Countermeasure	Provide enough memory space by deleting unnecessary files in the user memory area, etc.

S307 Error on saving settings [err]

Description	(vbadmin.c XXX) Can't update system settings (S307)
Meaning	An error generated while settings were saved by the setup protocol. Settings could not be saved.
Countermeasure	Provide enough memory space by deleting unnecessary files in the user memory area, etc.

List of VB-C60 Viewer Messages

Messages Displayed in the Information Field

Messages displayed in the information field of the viewer are classified into the following three types.

Icon	Category	Explanation
	Information Messages	Help messages on various buttons, pull-down lists, etc., and PTZ, frame rate and other information from the camera are shown.
	Warning Messages	If an unsupported browser is used or audio session stops, a message will be displayed to alert the user.
	Error Messages	An error message will be displayed if the viewer generates an error.

■ Information Messages
* When the mouse is brought over any of the following GUI parts, a corresponding message appears.

Message	GUI part
Changes video display size.	Video Display Size Change UI
Changes video capture size.	Video Capture Size Change UI
Switches to full screen mode.	Full Screen Mode button
Pauses/Resumes video.	Pause/Resume button
Reconnects to the camera.	Reconnect button
Starts/stops receiving audio.	Audio On/Off button, Audio Start/Stop button
Displays camera controls for administrators.	Control for Admin buttons
Changes the camera zoom ratio.	Scroll bar for zoom
Zooms the camera in.	Zoom Controller (tele)
Zooms the camera out.	Zoom Controller (wide)
Switches on/off backlight compensation.	Backlight Compensation button
Displays camera control privilege status.	Camera Control Status Indicator
Switches on camera control privileges.	Start Control button

Message	GUI part
Switches on/off camera control privileges.	Start Control button
Centers the camera's image on the clicked position.	Video Display area
Displays a panorama image. The camera can also be controlled.	Panorama Display area
Moves the camera to preset positions.	Preset
Displays information.	Information Field

Message	Explanation
Connection closed by the camera.	The camera was disconnected.
{n}fps Pan : {p} Tilt : {t} Zoom : {z}	Communicating with the camera normally.
{n}fps Pan : {p} Tilt : {t} Zoom : {z} IS : {Image Stabilizer value}	Communicating with the camera normally.
Audio connection has been closed.	The video session has continued after the audio session was disconnected (applicable to both transmission and reception).

■ Warning Messages

Message	Explanation
Your web browser is not supported.	Image was displayed in an unsupported web browser.

■ Error Messages

Message	Explanation
Could not connect to the camera.	Connection failed due to an invalid IP address, etc.
The camera is busy.	The connection limit was exceeded.
Failed to get camera control privileges.	The request for control privileges was denied because the camera was being used by Admin Viewer, etc.
Cannot connect to the camera.	The camera could not be connected due to address limitation.
Failed to establish audio connection.	Connection for audio reception failed.
You are not connected to the camera.	An attempt was made to operate the camera when the camera was not connected.
Please get camera control privileges.	An attempt was made to operate the camera without camera control privileges.
Another user is already connected as an administrator.	Admin Viewer is currently connected to the camera.
The viewer is already connected in another window.	The viewer is already available in another window.
Cookie is not available or blocked on your web browser.	Cookies is not available or blocked on your web browser.
JavaScript is not available or disabled on your web browser.	Java script is not available or blocked on your web browser.

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Appendix

Restore Settings

Since the VB-C60 supports various functions, it is recommended that you write down the settings for respective functions. If you forgot the settings and want to set the camera from the beginning, restore the factory settings first.

* For the factory settings, see P. 5-23.

Restoring the Settings from the Maintenance Page in the Web Browser

1. Launch the Web browser and display the menu page from which to access various settings.

   To display the settings menu page, you need to enter the IP address of the camera, user name and Administrator password (→ P. xiv, P. 1-8).
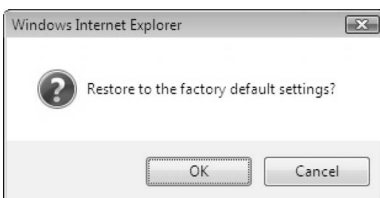

2. On the settings menu page, click [Maintenance].

   The maintenance page appears.

3. Click [Exec] under [Restore Settings].

   A confirmation message appears, asking if you want to restore the factory settings. To restore the factory settings, click [OK].

> # Note
>
> - While [Restore Settings] is in progress, never turn off the camera. If the power is turned off, the camera may not reboot correctly.
> - Once [OK] is clicked, you can no longer stop the process to restore the factory settings.

4. The camera will be reset to the factory settings.

All settings will be reset to the factory settings, except for the Administrator password, camera's IP address, subnet mask, default gateway address and other network settings, and date & time and time zone.

Initializing with the Reset Switch on the Camera

If you forgot or don't know the IP address of the camera or your Administrator password, you cannot operate the camera via the network. In this case, press the reset switch at the back of the camera.

1. Turn off the camera.

For information on how to turn [On]/[Off] the camera power, see "Connect the Camera to the Network and Turn on the Power" in *Start Guide*.

2. Turn on the power while pushing the reset switch, and keep pushing the reset switch for 5 seconds or more.

The reset switch is located in a recessed area at the back. Push the switch using the tip of a long object such as a clip. All settings of the camera, except for the date and time, are initialized.

Reset switch

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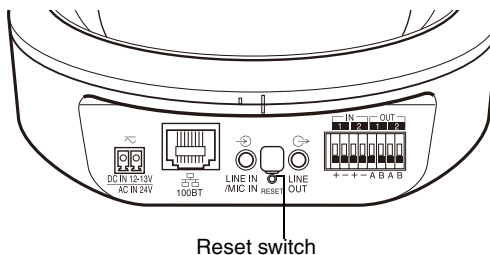
Note

If the reset switch is pushed, network-related settings will also be initialized including the camera's IP address, subnet mask, default gateway address etc. Accordingly, you can no longer operate the camera from the PC you were using to connect to the camera before. When initializing the camera, use "VB Initial Setting Tool" installed in your PC to set an IP address appropriate for the environment in which the camera is used. See "Perform Initial Setting of the Camera" (→*Start Guide*).

List of Factory Settings

The factory settings are shown. If you have changed settings, be sure to write down the new settings.

Item	Setting	Setting 1 (year/month/day)	Setting 2 (year/month/day)
● User Name (Administrator ID) ● Administrator password	root VB-C60		
● Path to Setting pages	admin		
● LAN IP Address Setting IP Address Subnet Mask Default Gateway Address LAN Interface Maximum Packet Size ● IPv6 IPv6 IPv6 Address ● DNS Name Server Address 1 Name Server Address 2 Host Name Host Name Registration with DDNS ● SNMP SNMP Community Name Administrator Contact Information Administration Function Name Installation Location	Manual 192.168.100.1 255.255.255.0 Auto 1500 Enable Disable Disable Public VB-C60		
● Current Date and Time ● Setting Setting Method NTP Server (IP Address) Time Zone	Set manually (GMT+09:00) Osaka, Sapporo, Tokyo		

Item	Setting	Setting 1 (year/month/day)	Setting 2 (year/month/day)
● Camera Name Camera Name (alphanumeric characters) ● Initial Camera Settings AE Mode Slow Shutter Shutter Speed Focus Mode ● Camera Control Digital Zoom Image Stabilizer ● Day/Night Mode Switching Brightness Response (sec.) ● Installation Conditions Dome LED Setting Mounting Method ● Camera Position Control Restricted to Presets Camera Position without Control ● External Input Device 1 Device Name (alphanumeric characters) ● External Input Device 2 Device Name (alphanumeric characters) ● External Output Device 1 Device Name (alphanumeric characters) ● External Output Device 2 Device Name (alphanumeric characters)	Camera Auto Disable 1/100 Auto Disable Disable Manual Standard 20 Not used Turn On On the ceiling No Restriction Do not return to Home Position		
● JPEG Image Quality: 160 x 120 Image Quality: 320 x 240 Image Quality: 640 x 480 Image Size: Image Transmission Maximum Frame Rate: Image Transmission Image Size: Upload ● MPEG-4 Video Quality Video Size Capture Frame Rate	3 3 3 320 × 240 30.0 320 × 240 3 320 × 240 30		
● General Upload Upload	Upload Disabled		

Item	Setting	Setting 1 (year/month/day)	Setting 2 (year/month/day)

● HTTP Upload
  Notification
  URI
  User Name
  Password
  Proxy Server
  Proxy Port
  Proxy User Name
  Proxy Password
  Parameter (query string)
● FTP Upload
  Notification
  FTP Server
  User Name
  Password
  PASV Mode
  File Upload Path
  File Naming
    Subdirectory Name to Create
    File Name to Create
    Maximum Number of Loops
● E-Mail Notification
  Notification
  Mail Server Name
  Mail Server Port
  Sender (From)
  Recipient (To)
  Authentication
  User Name
    Password
    POPServer
    Subject
    Message Body
	Notification Only with HTTP
	
	80
	
	Image Data Upload with FTP
	
	Enable
	
	YYMMDDHHMMSSms
	
	image.jpg
	0
	
	Text Only
	
	25
	
	None		

● Image Server
  Maximum Number of Clients
  Camera Control Queue Length
  Maximum Connection Time (sec.)
  Camera Control Time (sec.)
● Audio Server
  Audio Transmission from the Camera
    Input Volume
    Voice Activity Detection
  Audio Reception from the Viewer
    Output Volume
    Echo Canceller
    Audio Input
● HTTP Server
  HTTP Port
  Global Address for the Web Page
  IPAddress
  (global address for the web page)
  Port Number
  (global address for the web page)
	30
	30
	0
	20
	
	Disable
	
	50
	Disable
	Disable
	50
	Disable
	Line In
	
	80
	IP Address		

Item	Setting	Setting 1 (year/month/day)	Setting 2 (year/month/day)
● Image Buffer 　Frame Rate 　Pre-event Buffer (number of image frames) 　Post-event Buffer (number of image frames) ● Motion Detection 　Motion Detection Event 　ON Event Operation 　OFF Event Operation 　Continuous Motion Operation 　Upload 　E-mail Notification 　Audio Playback at ON Event 　Audio Playback at OFF Event 　Sound Clip 　　Volume 　Automatic Tracking at ON Event 　　Maximum Tracking Time (sec.)	1 0 0 Enabled Disable Disable Disable Disable Disable Disable Disable 50 Disable 60		
● External Device Input 　External Device Input Event ● External Device Input 1 　ON Event Operation 　OFF Event Operation 　　Preset 　　Upload 　　E-mail Notification 　Audio Playback at ON Event 　Audio Playback at OFF Event 　　Sound Clip 　　Volume ● External Device Input 2 　ON Event Operation 　OFF Event Operation 　　Preset 　　Upload 　　E-mail Notification 　Audio Playback at ON Event 　Audio Playback at OFF Event 　　Sound Clip 　　Volume ● Interval Timer 　Interval Timer Event 　Interval of the Timer 　Upload 　E-mail Notification ● Sound Clip Upload 1 　Browse File 　Sound Clip Name ● Sound Clip Upload 2 　Browse File 　Sound Clip Name ● Sound Clip Upload 3 　Browse File 　Sound Clip Name	Enable Disable Disable None Disable Disable Disable Disable 50 Disable Disable None Disable Disable Disable Disable 50 Enable 1 min. Disable Disable		

Item	Setting	Setting 1 (year/month/day)	Setting 2 (year/month/day)
● Authorized User Account User Name Password User List ● User Authority Authorized User Privileged Camera Control Camera Control Image Distribution Audio Distribution Guest User Camera Control Image Distribution Audio Distribution ● Host Access Restriction Host List Apply the list to HTTP Server Apply the list to Image Transmission Apply the list to Audio Transmission	 Checked Checked Checked Checked Checked Checked Checked No No No		

Item	Setting	Setting 1 (year/month/day)	Setting 2 (year/month/day)
● IPsec Set 1 IPsec IPsec Mode Destination Address (IPv4/IPv6) Sender Address (IPv4/IPv6) Security Protocol **Security Gateway** **Address (IPv4/IPv6)** Destination Prefix Length SA ESP Encryption Algorithm SA ESP Authentication Algorithm SA ESP Encryption Key (outbound) SA ESP Authentication Key (outbound) SA ESP SPI (outbound) SA ESP Encryption Key (inbound) SA ESP Authentication Key (inbound) SA ESP SPI (inbound) SA AH Authentication Algorithm SA AH Authentication Key (outbound) SA AH SPI (outbound) SA AH Authentication Key (inbound) SA AH SPI (inbound)	Disable Tunnel Mode ESP 0 AES HMAC_SHA1_96 HMAC_SHA1_96		
● IPsec Set 2 IPsec IPsec Mode Destination Address (IPv4/IPv6) Sender Address (IPv4/IPv6) Security Protocol **Security Gateway** **Address (IPv4/IPv6)** Destination Prefix Length SA ESP Encryption Algorithm SA ESP Authentication Algorithm SA ESP Encryption Key (outbound) SA ESP Authentication Key (outbound) SA ESP SPI (outbound) SA ESP Encryption Key (inbound) SA ESP Authentication Key (inbound) SA ESP SPI (inbound) SA AH Authentication Algorithm SA AH Authentication Key (outbound) SA AH SPI (outbound) SA AH Authentication Key (inbound) SA AH SPI (inbound)	Disable Tunnel Mode ESP 0 AES HMAC_SHA1_96 HMAC_SHA1_96		

Item	Setting	Setting 1 (year/month/day)	Setting 2 (year/month/day)
● IPsec Set 3 　IPsec 　IPsec Mode 　Destination Address (IPv4/IPv6) 　Sender Address (IPv4/IPv6) 　Security Protocol 　**Security Gateway** 　　　　**Address (IPv4/IPv6)** 　Destination Prefix Length 　SA ESP Encryption Algorithm 　SA ESP Authentication Algorithm 　SA ESP Encryption Key 　(outbound) 　SA ESP Authentication Key 　(outbound) 　SA ESP SPI (outbound) 　SA ESP Encryption Key (inbound) 　SA ESP Authentication Key 　(inbound) 　SA ESP SPI (inbound) 　SA AH Authentication Algorithm 　SA AH Authentication Key 　(outbound) 　SA AH SPI (outbound) 　SA AH Authentication Key 　(inbound) 　SA AH SPI (inbound)	Disable Tunnel Mode ESP 0 AES HMAC_SHA1_96 HMAC_SHA1_96		
● IPsec Set 4 　IPsec 　IPsec Mode 　Destination Address (IPv4/IPv6) 　Sender Address (IPv4/IPv6) 　Security Protocol 　**Security Gateway** 　　　　**Address (IPv4/IPv6)** 　Destination Prefix Length 　SA ESP Encryption Algorithm 　SA ESP Authentication Algorithm 　SA ESP Encryption Key 　(outbound) 　SA ESP Authentication Key 　(outbound) 　SA ESP SPI (outbound) 　SA ESP Encryption Key (inbound) 　SA ESP Authentication Key 　(inbound) 　SA ESP SPI (inbound) 　SA AH Authentication Algorithm 　SA AH Authentication Key 　(outbound) 　SA AH SPI (outbound) 　SA AH Authentication Key 　(inbound) 　SA AH SPI (inbound)	Disable Tunnel Mode ESP 0 AES HMAC_SHA1_96 HMAC_SHA1_96		

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Item	Setting	Setting 1 (year/month/day)	Setting 2 (year/month/day)
● IPsec Set 5 IPsec IPsec Mode Destination Address (IPv4/IPv6) Sender Address (IPv4/IPv6) Security Protocol **Security Gateway** 　　　　**Address (IPv4/IPv6)** Destination Prefix Length SA ESP Encryption Algorithm SA ESP Authentication Algorithm SA ESP Encryption Key (outbound) SA ESP Authentication Key (outbound) SA ESP SPI (outbound) SA ESP Encryption Key (inbound) SA ESP Authentication Key (inbound) SA ESP SPI (inbound) SA AH Authentication Algorithm SA AH Authentication Key (outbound) SA AH SPI (outbound) SA AH Authentication Key (inbound) SA AH SPI (inbound)	Disable Tunnel Mode ESP 0 AES HMAC_SHA1_96 HMAC_SHA1_96		

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