

NETWORK CAMERA

VB-C300**Operation Guide**

Before using the product, be sure to read the Start Guide and this Operation Guide.

Introduction

Thank you for purchasing the Canon Network Camera VB-C300 (hereafter referred to as the VB-C300).

This User's Manual describes how to set up and use the VB-C300. Read this manual carefully before using the VB-C300 to ensure effective operation. Make sure that you read the ReadMe file on the Setup CD-ROM.

For the latest information, please refer to Canon Web site.

On Copyrights

Videos, images or sounds taken or recorded with your VB-C300 may not be utilized or published, without consent of copyright holders, under relevant copyright law.

Notes

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

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- Windows is legally recognized as Microsoft Windows Operating System.
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Request concerning disclosure of videos and audio

With respect to the disclosure of videos and audio, we request that sufficient consideration be given to matters of privacy and rights not to be photographed.

<Reference>

- We locate camera so that people cannot make special specifications.
- When videos are taken of specific buildings, interiors and the like, we install the camera only after receiving approval from the administrator.

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

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-C300, check the law or regulation of the country or region where the camera is used.

Usage Notice of Audio

- The audio and video may be out of sync.
- The audio stream may be interrupted according to the performance of your PC and the network environment.
- You can send audio and video to up to 15 clients. However, if there are a large number of clients, the audio stream may be interrupted.
- The audio stream may be interrupted if you use anti-virus software.
- Disconnecting the LAN cable also disconnects audio. Reconnect to the camera from the NC Viewer.

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How to Read Manuals

About User's Manuals

The VB-C300 is provided with two documents; Start Guide and Operation Guide (this manual) stored on the supplied Setup CD-ROM.

For information about installation and initial set up of the VB-C300



Start Guide
(VBC300SG-E.pdf)

This document explains the safety precautions, operating environment, configuration and options, initialization, software installation, mounting, and specifications of the VB-C300. Start Guide is supplied with the camera.

For detailed information about how to use the VB-C300



Operation Guide
(VBC300OG-E.pdf)
(this document)

This document explains how to configure the basic settings of the camera, how to use the VAdmin Tools and NC Viewer, how to troubleshoot the VB-C300, specifications and detailed operation method of the VB-C300. Operation Guide is stored on the supplied Setup CD-ROM.

Icons Used in this Manual

This guide uses the following icons to attract the reader's attention to text which is particularly important.

Icon	Explanation
 Note	This icon indicates important information that must be observed or actions that are prohibited during an operation. These notes must be read to prevent possible faults or damage to the equipment.
 Tip	This icon indicates supplementary information or a reference to an operation. Users are advised to read these memos.
	Refer to the Start Guide on the supplied Setup CD-ROM.

Chapter **1**

Detailed Settings

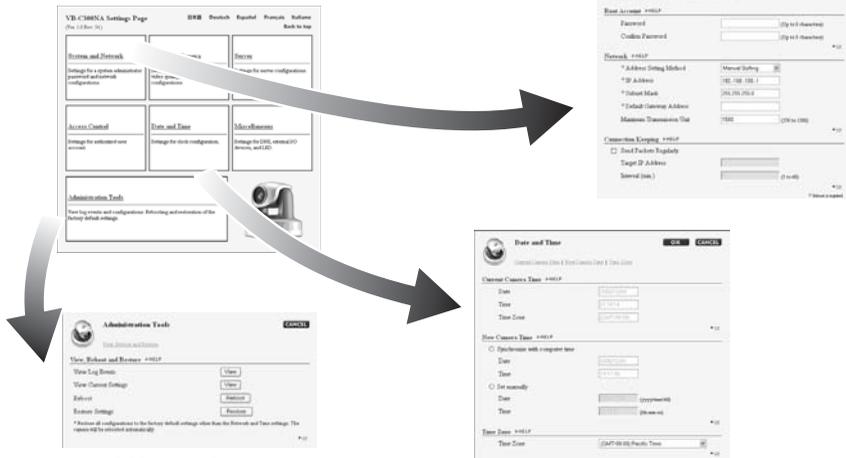
This chapter describes the detailed settings for the VB-C300 such as network connection, camera control, date, time, access control, etc.



What Can I Do on Each of the Settings Pages?

Proceed to each of the settings pages from the Settings Title Page where you can perform various settings for the VB-C300. The settings you can perform on each of the pages are shown below. For more details, see the reference pages.

● Settings Title Page



● System and Network

Set up the Administrator password, network and connectivity (→ P.1-6).

● Video and Camera

Set up the video (Capture size, quality), camera (shutter speed, focus, Day & Night mode, digital zoom, installation, etc.) and camera name (→ P.1-8).

● Server

Set up the HTTP Server, Video Server and Audio Server (→ P.1-12).

● Access Control

Specify Authorized user accounts (→ P.1-15).

● Date and Time

Display and set up the current time of the camera and set up the time zone (→ P.1-16).

● Miscellaneous

Set up the DNS, external device names and LED (→ P.1-18).

● Administration Tools

Display and execute the Administration Tools (display Log Events, display the current settings, reboot the camera, and restore the factory default settings) (→ P.1-20).



Note on Windows XP SP2

Note

- If the Windows Security Alert dialog appears, click “Unblock”.
Once you click “Unblock”, the dialog box will not be displayed again.
- If a dialog appears and blocks popup display when you click the “help” on each settings page or “View Log Events”, “View Current Settings” on Administration Tools settings page, follow the instruction displayed on the information bar to allow popup display.

Accessing the Settings Title Page

Configure various settings of the VB-C300 by accessing the Settings Pages of the camera from a Web browser.



Note In this manual, the IP address “192.168.100.1” (factory default setting) is used to explain how to set up the camera. Please use the actual IP address that is set in your VB-C300.

1

Detailed Settings

1. Start your Web browser and access to <http://192.168.100.1/admin/>.



2. Enter the user name and password.

The factory default settings are as follows:

User name: root

Password: VB-C300 (case sensitive)

(→ P.4-12)

User name “root” is the Administrator account of the Camera.

- * The default password is “VB-C300”. Be sure to change the password on the System and Network Page (→ P.1-6).



The Settings Title Page appears.

Settings Title Page

VB-C300NA Settings Page (Ver. 1.0 Rev. 54)

日本語 Deutsch Español Français Italiano Back to top

System and Network Settings for a system administrator password and network configurations.	Video and Camera Settings for a video capture size, video quality, and camera configurations.	Server Settings for server configurations.
Access Control Settings for authorized user account.	Date and Time Settings for clock configuration.	Miscellaneous Settings for DNS, external I/O devices, and LED.
Administration Tools View log events and configurations. Rebooting and restoration of the factory default settings.		



Note

- For security reasons, be sure to close the browser after you finish settings on the settings page.
- The Settings Title Page cannot login with an authorized user account. Please enter with root account.

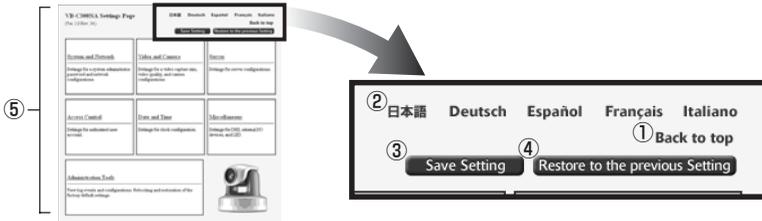


Tip

You can also click “Settings” from the VB Initial Setup Tool to display the top page of the camera, and then click “Settings” to move to the Setting Title Page (→  Start Guide P.2-10).

Settings Title Page

From the Settings Title Page, you can move to each settings page, save setting parameters after changing, and reboot.



① **“Back to top” button**

Click “Back to top” to move to the top page of the camera.

② **Language button**

Click one of the language buttons to change the display of the settings pages.

③ **“Save Setting” or “Save Setting and Reboot” button**

After changing settings on each page and clicking “OK” returns to the Settings Title Page, however, setting parameters are not saved in the VB-C300, yet. Click “Save Setting” and the changes are confirmed and saved in VB-C300. Where it is necessary to restart the VB-C300 to make the change, the “Save Setting and Reboot” button is displayed.

If no setting has been changed, neither of these buttons appears.

④ **“Restore to the previous settings” button**

Click if you want to discard the changes you have made to the settings on each page. All changes are cancelled and return to the values before you made the change.

⑤ **Title of each settings page**

Click to move to each settings page.



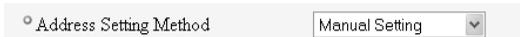
Note

- Do not open multiple web browser windows simultaneously to change the settings of different pages.
- Do not use the “Back” and “Forward” button of the web browser to move between the settings pages. Due to the effects of caching, there are possibilities that an old settings page will appear, settings will return to their original values, or unintended changes will occur.
- After changing settings, be sure to click the “Save Setting” or “Save Setting and Reboot” button on the Settings Title Page.



Tip

- A red mark indicates a setting item which requires rebooting the camera to make the new setting to take effect.



- Detail information of each setting is available by clicking “HELP” on the Settings pages.

Setting Up the Administrator Password and Network (System and Network)



You can perform the following settings on the System and Network page.

- Root Account: Set up the Administrator password.
- Network: Configure settings required for network connection (e.g., IP address).
- Connection Keeping: Transmits packets regularly to maintain network connectivity.

After changing the setting, click “OK” to return to the Settings Title Page. If you do not want to make any changes, click “CANCEL”.

▼ Root Account

Root Account ▶HELP

① Password (Up to 8 characters)

② Confirm Password (Up to 8 characters)

▲ UP

① Password

Set an administrator password. You can use up to 8 ASCII characters (including space and other printable characters). The factory default setting is “VB-C300” (case sensitive). If you are connecting to the NC Viewer or VBAdmin tools, terminate the connection and then change the password.

② Confirm Password

Re-enter the password to confirm the spelling in the field above.



Note

- Be sure to change the Root Account password to maintain system security. Do not forget the new password.
- If you have forgotten the Root Account password, press the Reset switch to initialize the settings (→ P.4-9). However, note that all settings will be initialized.

▼ Network

Network ▶HELP

① * Address Setting Method Manual Setting

② * IP Address 192.168.100.1

③ * Subnet Mask 255.255.255.0

④ * Default Gateway Address

⑤ Maximum Transmission Unit 1500 (256 to 1300)

* 02

① **Address Setting Method**

Select an address setting method from “Auto Setting (DHCP)” and “Manual Setting”. If you select “Auto Setting (DHCP)”, “IP Address”, “Subnet mask”, and “Default gateway address” are assigned by the DHCP automatically. If you select “Manual Setting”, enter these values which suit your environment.

② **IP Address**

Enter a fixed IP address.

③ **Subnet Mask**

Enter a subnet mask assigned to each network.

④ **Default Gateway Address**

Be sure to specify this address when the camera is connected to a subnet other than the subnet where the NC Viewer resides.

⑤ **Maximum Transmission Unit**

Enter a maximum transmission unit size to be sent at one time. Normally, there is no need to change this setting from 1500.

If you are using ADSL, slightly lowering the value may increase the transmission efficiency. If you are using LAN, do not change the value from 1500.



Note

- Please consult with your network administrator for the IP address, subnet mask and default gateway address settings.
- Pay much attention to the IP address, subnet mask and default gateway address settings. If any of the values is incorrect, network access becomes unavailable, and you may have to use the VB Initial Setup Tool (→ Start Guide P.2-7) to restore the default settings.
- When using “Auto Setting (DHCP)” for the address setting, the IP address may not be correctly assigned if there is a router between DHCP server and VB-C300. In this case, assign a fixed IP address with “Manual Setting”.

▼ **Connection Keeping**



① **Send Packet Regularly**

Check this option when connecting a camera to a system which automatically disconnects if it does not receive any packet for a certain period of time.

② **Target IP address**

Specify where the packet should be sent.

③ **Interval (min.)**

Specify the transmission interval from 1 to 60 minutes.

Setting Image Size, Quality and Camera Control (Video and Camera)



You can perform the following settings on the Video and Camera Page.

- Video Settings: Set up the video capture size and quality.
- Camera Settings: Set up the camera's shutter speed, focus, Day & Night mode, digital zoom, installation, etc.
- Camera Name: Enter the name of the camera. You will need this name when using VK-64 with the VB-C300.

After changing setting click "OK" to return to the Settings Title Page. If you do not want to make any changes, click "CANCEL".

▼ Video Settings



① Video Capture Size

Select the Video Capture Size for transmission from "Small", "Medium", and "Large".

Small: 160 × 120 (NTSC/PAL)

Medium: 320 × 240 (NTSC/PAL)

Large: 640 × 480 (NTSC/PAL)

② Video Quality

Select the video quality from 1 - 5 (in 5 levels). Higher value ensures higher quality but larger data size, which may cause lower frame rate.



Note

- Higher video capture size or quality causes larger data size per frame and heavier network load.

After setting, start the NC Viewer and select "Video Information" from the View menu bar to check the data size per frame (→ P.3-18).

- If you are using Network Video Recorder VK-64/VK-16 (optional), the video capture size and quality settings affect the required hard disk space on recording.

▼ Camera Settings

Camera Settings ▶ HELP

①	Shutter Speed	Auto ▼
②	Focus Mode	Auto ▼
③	Slow Shutter	Not used ▼
④	Day & Night	Manual ▼
	Brightness	Darker ▼
	Luminance Sensitivity	Low ▼
⑤	<input type="checkbox"/> Enable Digital Zoom	
⑥	<input type="radio"/> Mount	
⑦	<input type="checkbox"/> Return to Home Position when nobody has a control privilege.	

▲ UP

① Shutter Speed

Select the shutter speed for the camera. NTSC: “Auto”, “1/60”, and “1/100”. PAL: “Auto”, “1/50”, and “1/120”.



Note

- The shutter speeds of 1/60 and 1/100 can be used to suppress flicker of fluorescent lamp. If video view flicks too much, use “NTSC: 1/100 PAL: 1/120” in the place where commercial frequency is 50 Hz and “NTSC: 1/60 PAL: 1/50” in the place where commercial frequency is 60 Hz. Note that even when one of these shutter speeds is selected, the camera automatically shifts to a higher shutter speed if the exposure is too high with these values.
- Please refer to P.1-8 in the “Start Guide” to confirm whether your VB-C300 is NTSC model or PAL model.

② Focus Mode

Set the focusing mode for the camera.

Auto: Adjust the focus automatically.

Auto (for domes): When the indoor dome housing (optional) is used, select this mode not to allow the camera to focus on the surface of the dome.

Fixed at infinity: Focus is fixed at a point of infinity.



Note

If you are using the indoor dome housing other than optional dome housing (VB-RD41S - C/S) and dust or water drop exists on the surface of the dome, the camera may focus on the dome surface. Be sure to install the camera so that the distance between the dome and camera may be as short as possible.

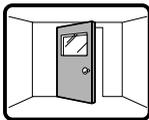


Tip

- The auto focus might have difficulty with the following objects:



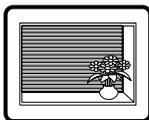
Subjects with little or no contrast (a white wall, for example)



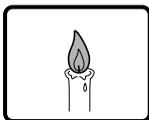
Angled subjects



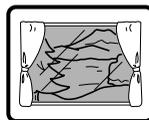
Highly reflective subjects



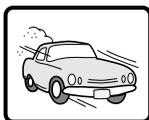
Subjects that consist entirely of oblique or horizontal lines or stripes



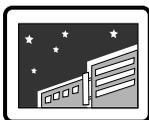
Insubstantial subjects such as flames or smoke



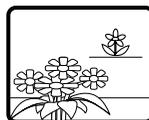
Subjects seen through glass



Quickly moving subjects



Night views or dark places



Far and near subjects in a frame

- The focusing range (approx) differs depend on the Day Mode or Night Mode. The ranges for Wide and Tele ends are the same.

Focus Mode	Day Mode	Night Mode*
Auto	0.3m (11.8 in) – ∞	
Auto (for domes)	2.0m (78.7 in) – ∞	0.3m (11.8 in) – ∞
Fixed at infinity	Point of infinity	

* When you are using an infrared lamp, the focusing range for “Auto” and “Auto (for domes)” will be approximately 0.6m (23.6in) to ∞, and for “Fixed at infinity”, it may become out of focus depending on objects.

- When focus adjustment is difficult (e.g., when shooting a night scene which has low contrast), it is recommended to fix the focus to infinity.

③ Slow Shutter

Select the longest slow shutter speed used in the Auto Exposure mode when shooting a dark image. NTSC: “Not Used”, “1/15”, and “1/8.” PAL: “Not Used”, “1/12”, and “1/6”. A longer shutter speed results in a longer trail with a moving object. Select a speed appropriate for the shooting scene (→ Start Guide P.1-8).

④ Day & Night

Specify how to switch between the Day and Night modes. Select from “Manual” and “Auto”.

* If you are using an infrared lamp, you cannot use the Auto mode.

Brightness

Specify how the camera changes from the Day Mode to Night Mode. If you want to shoot video in color as long as possible, select “Darker”. If you want to rather suppress noises in video by capturing in black and white, select “Brighter”.

Luminance Sensitivity

Luminance Sensitivity refers to the time required for determining to switch between Day and Night modes.

“Low” : approx. 30 sec. “High” : approx. 10 sec.

Day Mode or Night Mode switches when bright conditions remain above or below the threshold value for either of the above period of time.

If the brightness changes frequently, due to a light source passing in front of the camera for example, select “Low”. If the brightness does not change frequently, select “High”.

⑤ Enable Digital Zoom

Check to enable Digital zoom.

* With the digital zoom, higher magnification causes lower image quality.

⑥ Mount

Select a camera mount type. The factory default setting is Inverted.

⑦ Return to Home Position when nobody has a control privilege.

When this option is checked and the home position is specified, the camera is moved to its home position if there is no request for a control privilege. You can set Home Position from VBAAdmin Tools (→ P. 2-10).



Note

- When setting “Day & Night Mode” to “Auto”, be sure to test the camera operation in advance to check effectiveness of this option.
- When setting “Day & Night Mode” to “Auto”, use “Auto Exposure” (→ P. 3-28).
- If you are using an infrared lamp, set the “Day & Night Mode” to “Manual”. You cannot use the Auto mode.
- If you set the “Day & Night Mode” to “Auto”, the infrared cut filter may make several round trips when the camera switches the Day & Night modes.

▼ Camera Name

① Camera Name ▶HELP

Camera Name (Up to 15 characters) ▲UP

① Camera Name

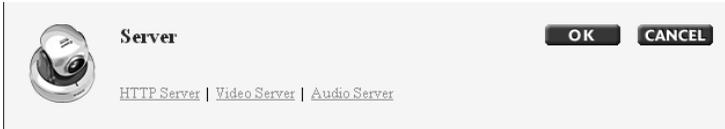
This setting is required. You can use up to 15 ASCII characters (including blank and printable characters) for the camera name.



Note

If you are using the Network Video Recorder VK-64/VK-16 (optional), the camera name specified here will be displayed when registering the camera.

Setting HTTP Server, Video Server, and Audio Server (Server)



You can perform the following settings on the Server Page.

- HTTP Server: Set the HTTP port.
- Video Server: Configure settings to transmit the video from the VB-C300.
- Audio Server: Configure settings related to audio transmission.

After changing setting click “OK” to return to the Settings Title Page. If you do not want to make any changes, click “CANCEL”.

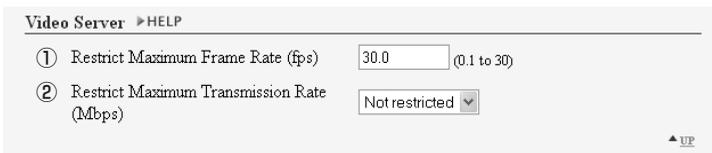
▼ HTTP Server



① HTTP Port

Enter 80 or 1024 to 65535 (Integer).
Normally use 80 (factory default setting).

▼ Video Server



① Restrict Maximum Frame Rate (fps)

Mitigate the Viewer load by limiting the maximum frame rate for transmitting video in one second. The maximum value is 30 fps (for NTSC) or 25 fps (for PAL). Enter a value from 0.1 to 30.0 (for NTSC) or 0.1 to 25.0 (for PAL) (→ Start Guide P.1-8).

② Restrict Maximum Transmission Rate (Mbps)

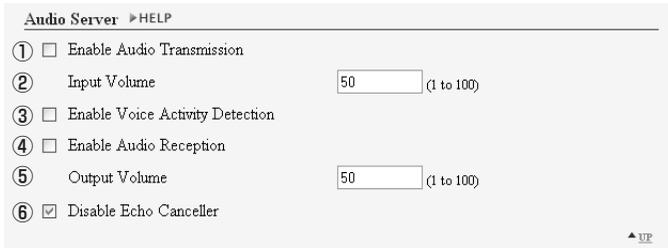
Mitigate the network load by limiting the maximum data quantity transmitted in one second. The maximum value is 10 Mbps. Select a value from 1 to 10 (Integer). If you do not want to limit the network traffic, select “Not restricted”.



Tip

If the load on the network is high, the frame rate may be decreased.

▼Audio Server



① Enable Audio Transmission

If you check this option, you can send audio to NC Viewer, through a microphone with amp connected to the camera.

② Input Volume

Specify the input audio volume from 1 to 100. The audio will be louder when you enter a larger value.

③ Enable Voice Activity Detection

Select this option, the camera transmits minimal data when audio is turned mute. In this way, you can reduce the network load.

④ Enable Audio Reception

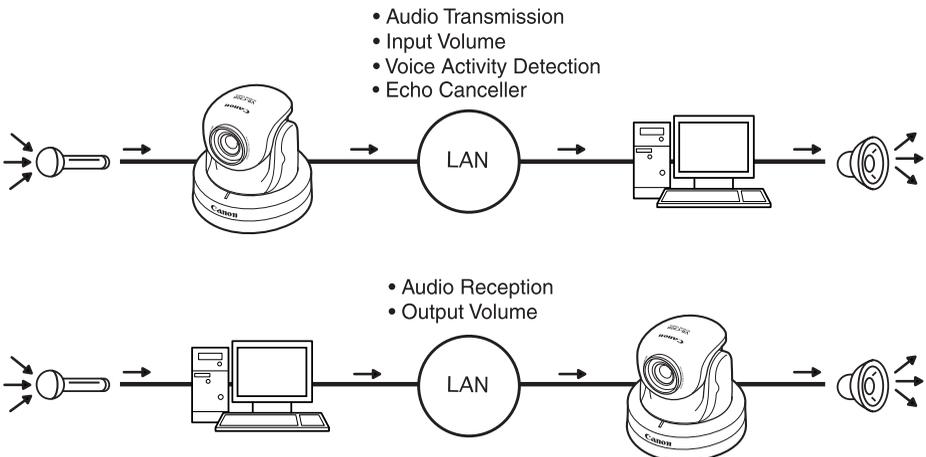
If you check this option, you can receive audio from the NC Viewer and output it from a speaker with amp connected to the camera.

⑤ Output Volume

Specify the output audio volume from 1 to 100. The audio will be louder when you enter a larger value.

⑥ Disable Echo Canceller

If you uncheck this option, echo between a microphone and speaker with amp can be avoided.



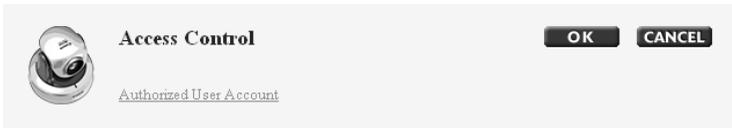


- Be sure to use a microphone and speaker with amp (→  Start Guide P.3-6).
- If you uncheck the Disable Echo Canceller box, audio quality or volume may be affected. Check or uncheck this option according to the environment and usage of the camera, as required.
- When transmitting audio, read the “Usage Notice of Audio” carefully (→ P.ii).

You must set the following settings in advance to transmit and receive audio.

- Check the Enable Audio Transmission box and Enable Audio Reception box on the Audio Server section of the Server settings page (→ P.1-13).
- Check the Send and receive audio box in the Connection Setting dialog when starting the NC Viewer (→ P.3-5, 3-23).
- When starting the NC Viewer from the VBAdmin Tools, check the Send and receive audio option on the Connection Settings tab in the Setup properties dialog (→ P.3-31).

Setting User Access Privileges (Access Control)

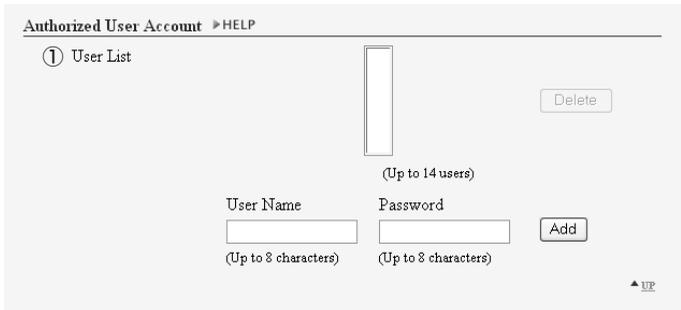


You can perform the following settings on the Access Control Page.

- Authorized User Account: Register users who can access to the camera.

After changing setting click “OK” to return to the Settings Title Page. If you do not want to make any changes, click “CANCEL”.

▼ Authorized User Account



① User List

Only users registered in this list are permitted to connect to the VB-C300. Up to 14 users can be registered in addition to the Administrator (root).

Delete button

Select a user from the User List and click “delete” to remove the user from the list.

Add/Change button

You can add authorized users to the User List by entering their User names and passwords and then clicking “Add”. The Add button changes to Change button when you select an authorized user. You can change the password by entering a new password, and then clicking “Change”. You can use up to 8 characters including A-Z, a-z, and 0-9 for the user name. You can use up to 8 ASCII characters (including blank and printable characters) for the password.



If an authorized user is registered, a screen which asks for user name and password appears when the top page is accessed.

Setting the Date and Time (Date and Time)



You can perform the following settings on the Date and Time Page.

- **Current Camera Time:** Display the date and time currently set on the VB-C300.
- **New Camera Time:** Set the date and time for the VB-C300.
- **Time Zone:** Select a time zone from the drop-down list.

After changing setting click “OK” to return to the Settings Title Page. If you do not want to make any changes, click “CANCEL”.

▼ Current Camera Time

Current Camera Time ▶HELP	
①	Date <input type="text" value="2007/01/26"/>
	Time <input type="text" value="22:04:19"/>
②	Time Zone <input type="text" value="(GMT-08:00)"/>

① Date and Time

Display the date and time currently set on the VB-C300.

② Time Zone

The time difference with Greenwich Mean Time is displayed.

▼ New Camera Time

New Camera Time ▶HELP

① Synchronize with computer time

Date

Time

② Set manually

Date (yyyy/mm/dd)

Time (hh:mm:ss)

▲UP

① Synchronize with computer time

Synchronize the camera date and time with those of the PC currently accessing the camera.

② Set manually

Set the date and time manually. Specify the date in “yyyy/mm/dd” format and time in “hh:mm:ss” in the 24-hour format.

Example: For 1:23:04 P.M, January 23 2007, enter 2007/01/23 and 13:23:04.

▼ Time Zone

Time Zone ▶HELP

① Time Zone

▲UP

① Time Zone

Select the time difference with Greenwich Mean Time from the list.

Setting Up DNS and LED, etc. (Miscellaneous)



You can perform the following settings on the Miscellaneous Page.

- DNS: Enter the name server address and host name to register a DNS host.
- External Device Names: Specify the name of the external device.
- LED Setting: Set the LED of the camera to turn On or Off.

After changing setting click “OK” to return to the Settings Title Page. If you do not want to make any changes, click “CANCEL”.

▼ DNS

① Name Server Address 1 - 2

Enter the name server address you want to register. If you are using only one name server, leave the Name Server Address 2 field blank.

② Register Host Name

Select and enter the host name you want to register. You can register a host name for the name server address 1. You can use up to 63 characters including A-Z, a-z, 0-9, “-” and “.”.



Note

The host name is useful when using the camera with “Auto Setting (DHCP)” (→ P.1-7). You must register the host name in the DNS server in advance. For more information on DNS server settings, ask the system administrator.

▼ External Device Names

External Device Names ▶HELP

①	External Input Device 1		
	Device Name	<input type="text"/>	(Up to 15 characters)
	External Input Device 2		
	Device Name	<input type="text"/>	(Up to 15 characters)
②	External Output Device		
	Device Name	<input type="text"/>	(Up to 15 characters)

▲ UP

① External Input Device 1 - 2

Device Name

To distinguish between the different external devices connected to the camera, be sure to enter a device name. You can use up to 15 ASCII characters (including blank and printable characters and excluding double quote ["]) for the device name.

② External Output Device

Device Name

To distinguish between the different external devices connected to the camera, be sure to enter a device name. You can use up to 15 ASCII characters excluding ["] for the device name.



Tip

If you are using the Network Video Recorder VK-64/VK-16 (optional), the external device name specified here will be displayed.

▼ LED Setting

LED Setting ▶HELP

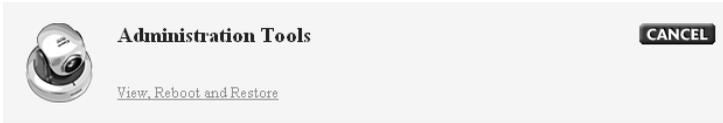
① Turn the LED OFF

▲ UP

① Turn the LED OFF

Set the operation of the LED on the front side of the camera. If "Turn the LED OFF" is checked, the LED turns Off. If the optional indoor dome housing (VB-RD41S-C/S) is used or reflected LED light is caught by the camera, use this option to prevent the LED from disturbing video shooting.

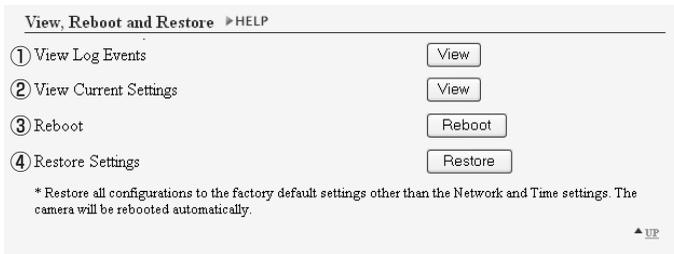
Using the Administration Tools (Administration Tools)



You can perform the following settings on the Administration Tools Page.

- View, Reboot and Restore: Display and initialize the setting for the VB-C300.

▼ Display and Execution



① View Log Events

View the historical log events of the VB-C300's operation and connection status of NC Viewer (→ P.4-4).

② View Current Settings

Display a list of current settings.

③ Reboot

Reboot the VB-C300.

④ Restore Settings

Return all the settings of the camera except for the administrator password, network address setting method, IP address, subnet mask, default gateway address, date, time, and time zone to the factory default settings. The VB-C300 will be rebooted automatically after restoring the settings.



Note

Never power off the camera while the restore operation is in progress. Powering off before completion may prevent it from starting up properly.



Tip

- It is recommended to take a note of the current settings before using the Restore Settings option (→ P.4-12).
- You can initialize the settings using the Reset switch, however, note that all settings will be initialized (→ P.4-9).

Chapter



VBAAdmin Tools

This chapter describes how to use the VBAAdmin Tools. You can create panoramas, set presets, view logs and use the NC Viewer from the VBAAdmin Tools. You must configure the detail settings as directed in Chapter 1 in advance.



Starting the VBAAdmin Tools

To Launch the VBAAdmin Tools

1. Double-click the VB Admin Tools desktop icon or select “VBAAdmin Tools” from the Start menu bar to launch the VBAAdmin Tools.

Starting up from the desktop icon

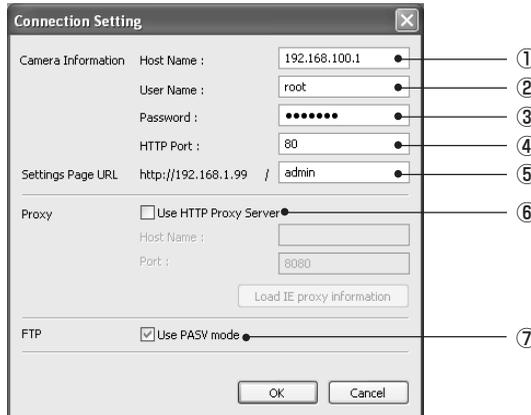


Starting up from the Start menu bar



2. The Connection Setting dialog appears.

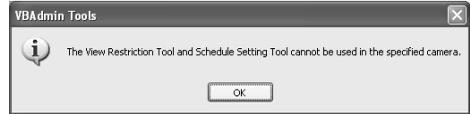
Enter connection settings and click “OK”.



- ① **Host Name (→ P.1-7)**
Specify the IP address or host name of the VB-C300.
- ② **User Name**
Enter the default Administrator account “root” for the VB-C300.
- ③ **Password (→ P.1-6)**
Enter the Administrator password (factory default setting is “VB-C300”).
- ④ **HTTP Port (→ P.1-12)**
Default setting is “80”.
- ⑤ **Setting Page URL**
The Setting Page URL for the VB-C300 is “admin” and cannot be changed.
- ⑥ **Proxy**
The VB-C300 cannot be connected via a proxy server.
- ⑦ **FTP**
Invalid for the VB-C300.

3. A confirmation message is displayed.

Click "OK".

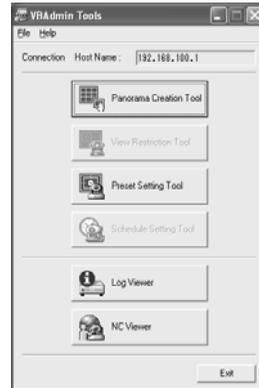


Tip

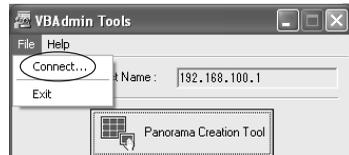
You cannot use the View Restriction Tool and Schedule Setting Tool with the VB-C300, but you can use them with the VB-C50 series.

4. The VBAAdmin Tools starts.

You can select Panorama Creation Tool, Preset Setting Tool, Log Viewer, or NC Viewer by clicking the button for each tool.



When the camera is disconnected after start up, select "Connect" from the File menu bar to display the Connection Setting dialog.



Note

Note on Windows XP SP2

If the Windows Security Alert dialog appears, click "Unblock". Once you click "Unblock", the dialog box will not be displayed again.

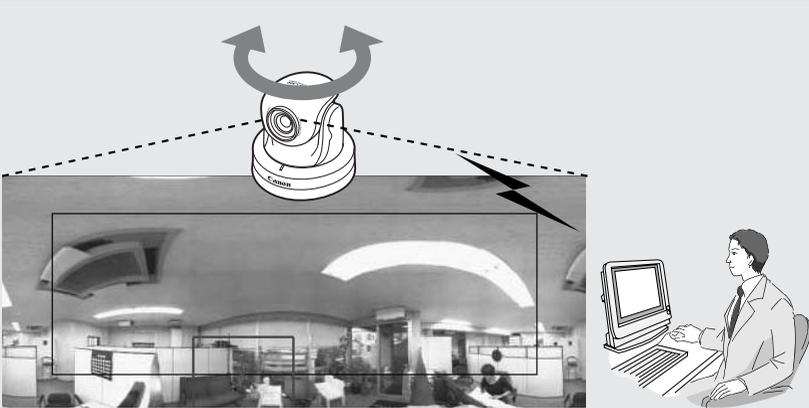


Tip

The Panorama Creation Tool and Preset Setting Tool cannot be Launched simultaneously.

Panorama Creation Tool

This tool is used to create a panorama image displaying the full view of the area covered by the VB-C300. When using the NC Viewer to perform pan, tilt, or zoom as well as define presets, you can see, at a glance, which part of the entire viewing area is currently covered.



The Panorama Creation Tool is used to take and create panorama image and register them in the VB-C300.



NC Viewer

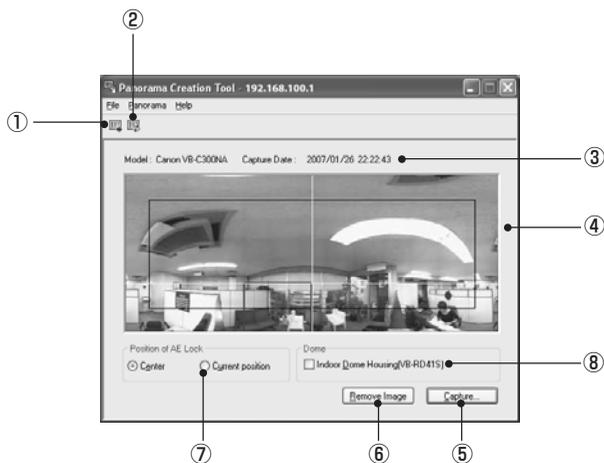


Preset Setting Tool



You can see, at a glance, where the region currently being set is located within the entire area.

Panorama Creation Tool Display Screen



- ① **Show Registered Panorama Image button**
Displays panorama image registered in the VB-C300.
- ② **Register Panorama Image button**
Register panorama image currently displayed in the panorama creation tool.
- ③ **Display Camera model and Capture Date**
Displays the model of camera currently connected and the date the panorama image was taken, if it has been captured.
- ④ **Panorama image**
Shows the panorama image that was captured.
- ⑤ **Capture button**
Captures panorama image.
- ⑥ **Remove Image button**
Deletes panorama image.
- ⑦ **Position of AE Lock**
Switch the AE lock position between the center of the panorama image and current camera position. The AE lock function sets the exposure level based on the specified position.
- ⑧ **Indoor Dome Housing(VB-RD41S)**
Check this option to prevent the VB-C300 from capturing areas obstructed by the optional indoor dome housing (VB-RD41S-C/S).

Capturing Panorama Image

To Capture...

1. Click “Capture” to start capturing.

Change the AE lock position as required.

Check the Indoor Dome Housing (VB-RD41S) option if you are using the optional indoor dome housing.



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



2. After capturing is completed, click “OK” to accept the image.

To capture the picture again, click “Recapture”. Or, a square section in the displayed grid can be captured again by double-clicking on that section. To change the AE lock position, click “Cancel” to discard the captured image and return to the initial screen.



Note

If you are using the optional indoor dome housing, select Indoor Dome Housing (VB-RD41S) option so that the area obstructed by the dome housing is not recorded (→ Start Guide P.1-9).

Registering/Deleting Panorama Image

To “Resister” the Panorama Image ...

Click “Resister Panorama Image”.

The panorama image is registered.



To Delete...

Click “Remove Image” and then click “Resister Panorama Image”.

The panorama image registered in the VB-C300 is deleted.



Tip

After registering the panorama image, the VB-C300 automatically reboots and disconnects from the VBAdmin Tools. A dialog box asking whether or not to reconnect to the VB-C300 appears after the VB-C300 restarts. Click “OK” to reconnect to the camera.

Reconnecting

Reconnections are made when a connection with the VB-C300 has been cut.

To Reconnect...

Choose “Reconnect” from the File menu bar.



Opening/Saving Panorama Image from/to Image File

You can open an image file as a panorama image, or save a panorama image as an image file. Only JPEG format images created by the Panorama Creation Tool can be used.

To Open...

Select “Open” from the File menu bar and select the desired image file in the displayed dialog.



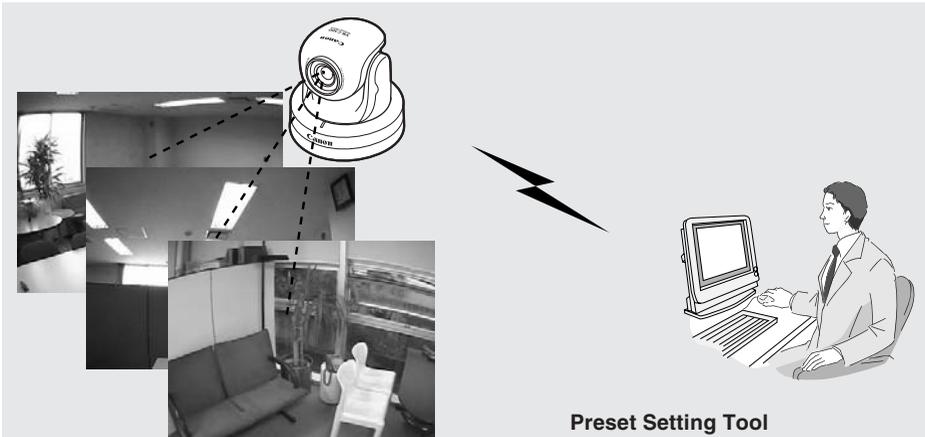
To Save...

Select “Save” from the File menu bar and select a folder to save the image, then enter its file name.



Preset Setting Tool

This tool enables easy visual setting of camera Preset and a home position. Presets are set by operating the mouse while referring to a panoramic preview.



Setting Presets



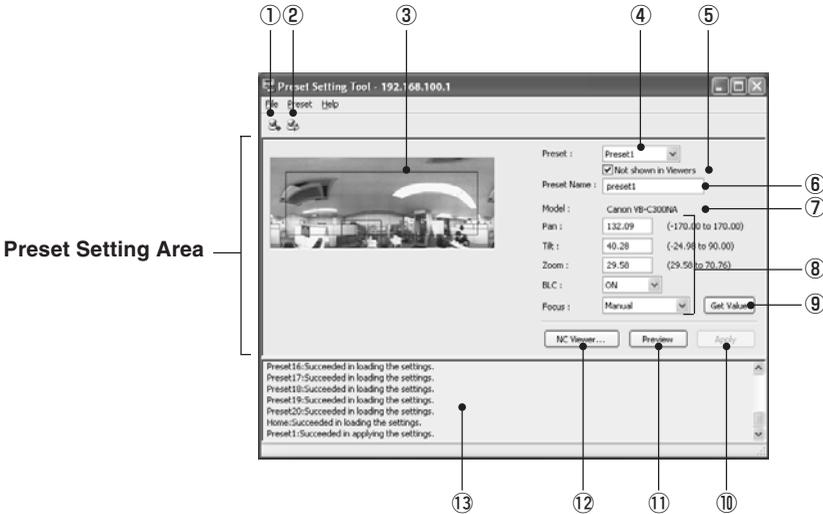
Reflecting preset settings in the NC Viewer



Preset Setting Tool Display Screen

You can set up to 20 presets and home position while referring to a panorama preview in the Preset Setting Area on the Preset Setting Tool screen.

■ Preset Setting Tool Display Screen



① **Load Preset Settings button**

Loads the preset settings currently set in the VB-C300.

② **Save Preset Settings button**

The preset settings set and applied with this tool is saved to the VB-C300.

After setting the presets, be sure to click “Save Preset Settings” to save the settings.

③ **Panorama Preview**

Panorama image registered in the VB-C300 is displayed. A yellow Preset Preview frame shows the location of the Preset Setting. By dragging it with the mouse, you can change the shape or move the frame which will then be reflected in the Preset settings.

④ **Preset Selection box**

Select the preset to set or “Home”. “Home” is the setting for home position.

⑤ **Not shown in Viewers**

Uncheck this option if you are using presets with the NC Viewer. Check this option if you want to prevent presets from being shown in NC Viewer. If you selected “Home” in the Preset Selection box, this setting will be grayed out (setting not possible).

⑥ **Preset Name**

A preset name can be assigned. If you select “Home” in the Preset Selection box, this setting will be grayed out (setting not possible).

You can use up to 15 ASCII characters (including blank and printable characters) for the preset name.

⑦ Model

The model of the camera connected is displayed.

⑧ Camera Parameters

Use “Pan” and “Tilt” to specify the central angle for the pan and tilt ranges you want to set. Use “Zoom” to enter the angle for the field of view.

● Camera Angles

- Pan Set the pan position of the camera.
- Tilt Set the tilt position of the camera.
- Zoom Set the angle of view of the camera.

● BLC

Set the backlight compensation for the camera. Select “Off” or “On”.

● Focus

Set the focusing mode for the camera. Select from “Auto”, “Auto (for domes)”, “Fixed at infinity”, and “Manual” (→P.3-14).

⑨ Get Value button

When the “Get Value” button is clicked, the current angle and focus position (for Manual mode) of the camera selected at the VB-C300 is retrieved as camera parameters.

⑩ Apply button

Settings for current Presets are applied to the VB-C300, and you can proceed to the next Preset setting. At this stage, the edited settings are not yet saved to the VB-C300. Be sure to click “Save Preset Settings” to save the settings to the VB-C300.

⑪ Preview button

The settings for camera parameters are reflected in the Preset Preview frame. The camera angle for the VB-C300 also switches to this Preset and you can confirm from the NC Viewer.

⑫ NC Viewer button

Start the NC Viewer.

Use this button if you want to set presets while watching actual video image via the NC Viewer. Orient the camera toward the position for setting the preset using the NC Viewer, then click “Get Value”, and click “Apply” to set the preset.

⑬ Status list

Displays the results of communication between this tool and the VB-C300.

Warning messages are displayed in blue and error messages are displayed in red.



Note

Edited contents will not be stored in VB-C300 at the stage when “Apply” is clicked. After confirming the edited content, be sure to click “Save Preset Settings” to save the settings to the VB-C300.

Setting Presets

To set presets, enter the camera parameter values or use one of the following methods. Select the way which suits your environment or according to your preference.



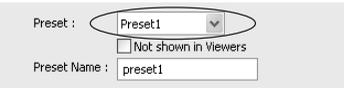
To use presets with the NC Viewer, uncheck the Not shown in Viewers option.

■ Changing Settings from Preset Preview Frame

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

To Make Settings...

1. **Select a preset to set from the Preset Selection box and enter the preset name.**



2. **Set the preset by dragging and reshaping the Preset Preview frame displayed on the Panorama image.**

Alternatively, you can click at a spot on the image to make the center of the frame move to that point. At this point, you can also enter and set values in the camera parameters.



3. **Click “Apply”.**

Check the Status List to be sure the values were applied correctly. Then when “Save Preset Settings” button is clicked, the values will be saved to the VB-C300.



■ Changing Settings from NC Viewer's Camera Angle

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

To Make Settings...

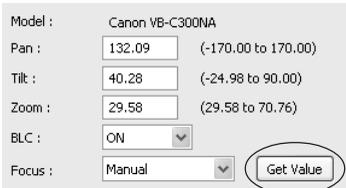
1. Select a preset to set from the Preset Selection box and enter the preset name.
2. Click "NC Viewer" to start the NC Viewer.
3. Click "Start Control" to get the camera control.



4. Operate the camera and click "Get Value" at the desired position.

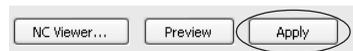
The values retrieved using "Get Value" can be checked in the Preset settings input boxes, or with the Preset Preview frame.

At this point, you can also enter and set values in the camera parameters.



5. Click "Apply".

Check the Status List to be sure the values were applied correctly. Then when "Save Preset Settings" is clicked, the values will be saved to the VB-C300.





- The Panorama Preview may be slightly different from the actual image. After the presets have been set, be sure to check in the NC Viewer that the presets are correctly reflected.
- When using the manual focus, adjust the focus manually while watching the video via the NC Viewer. After manual focusing completes, click “Get Value” to set the preset.



- Up to 20 presets can be set.
- Changes in the preset settings are not applied to the viewer while it is connected.
- To delete the set presets, use the Restore Settings option (→ P.4-8). However, note that settings are restored to the factory default settings.
- You can check Not shown in Viewers option (→ P.2-10) to prevent presets from being shown in the NC Viewer.
- Setting the preset position using the digital zoom may cause the viewing angle to be misaligned.
- It is possible to apply multiple presets and save them by clicking “Save Preset Settings” at the end.

Log Viewer

This tool enables viewing of operation status logs of the VB-C300.



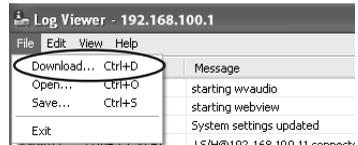
Tip

- The Log Viewer only displays logs and cannot delete them.
- To save logs, select “Save” from the File menu bar. Logs can be saved as text files.

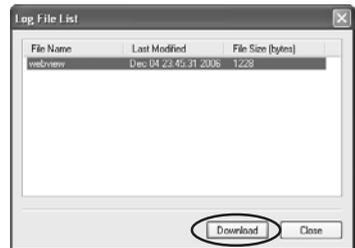
Downloading Log Files

To Download...

Starting the Log Viewer from the VBAAdmin Tools, automatically obtains and displays the latest log file. To retrieve a list of log files, choose Download from the File menu bar.



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



Viewing Logs

The following information about logs is displayed:

- **Code**

The log codes are displayed here. See “Log Messages” (→ P.4-4) for the log codes.
One of the following four icons displayed with each log code, depending on the log level.



Information level



Error level



Warning level



Unknown

- **Date & Time**

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

- **Message**

The log messages are displayed here.

■ Save Logs to File/Open Saved File

You can save a displayed log to a file as well as view a previously saved log file.

To Save...

Choose “Save” from the File menu bar.

Viewing the Pages

Choose “Open” from the File menu bar and select the log file you want to view.

■ Copying and Searching Logs

You can copy or search a displayed log.

To Copy...

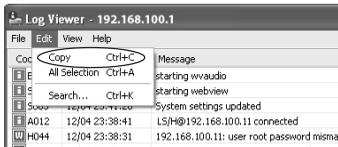
Select the log you want to copy by clicking on it, then choose “Copy” from the Edit menu bar.

To Search Data...

1. Choose “Search” from the Edit menu bar.

The Search Log dialog is displayed.

2. Enter a character string to search for and click “Search”.

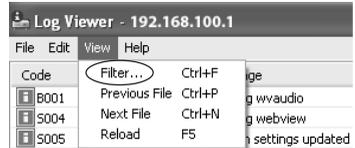


■ Conditionally Selecting and Viewing Logs

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

To Make Settings...

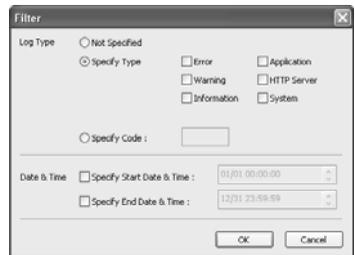
1. Choose “Filter” from the View menu bar.



2. The Filter dialog appears.

Set the search criteria and click “OK”. The search results then appear showing a list of logs that match the selected criteria.

If filtering is not required, click “Cancel”.



[Log Type]

To filter by log type, check “Specify Type” or “Specify Code”. Otherwise choose “Not Specified”.

● Specify Type

Specify the levels of the logs

From Error, Warning, and Information, select the log levels to be displayed.

Specify the modules that output the logs

Check the source module to output the logs from “Application”, “HTTP Server”, and “System”.

● Specify Code

Specify the code of the logs. The codes are compared to the characters that are entered and only logs with matching log codes will be displayed. For example, if you enter “A0”, logs with a code starting with “A0” will be displayed.

[Date & Time]

● Specify Start Date & Time

When this item is selected and a date and time is entered, logs generated after the specified start date and time are displayed.

● Specify End Date & Time

When this item is selected and a date and time is entered, logs generated before the specified end date and time are displayed.



Tip

“Application” and “System” correspond to the list of log messages (→ P.4-4).

“Application” represents logs related to video and audio.

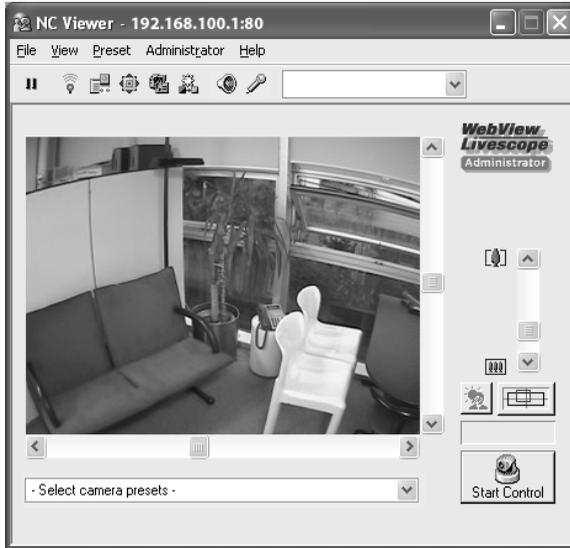
“HTTP Server” represents logs related to the HTTP module of the VB-C300.

“System” represents logs related to the VB-C300 system.

NC Viewer

The NC Viewer is the viewer for the network camera VB-C300. The NC Viewer started from the VBAAdmin Tools becomes the NC Viewer connected as the Administrator.

For the details of the NC Viewer, refer to “Chapter 3 NC Viewer and Viewer Switcher” (→ P.3-34).



Chapter

3

NC Viewer and Viewer Switcher

This chapter explains how to use the NC Viewer as well as the Viewer Switcher used to switch among Viewers.

Overview of NC Viewer

The NC Viewer is the viewer for the network camera VB-C300. The NC Viewer displays video from the VB-C300 and controls camera angle and zoom.

NC Viewer



Click



Panorama image



Note Panorama image needs to be registered on the Camera in advance (→ P.2-4).

Administrator and Authorized User

Two types of users, **Administrator** and **Authorized User** can use the NC Viewer.

Administrator is the root user who can use all the functions including the administration functions (e.g., White Balance and Night mode) of the VB-C300.

Authorized User is a normal user who can use a limited set of functions. Register Authorized User as directed in “Setting User Access Privileges (Access Control)” (→ P.1-15).

Administrator can use the functions listed below.

Functions only available to Administrator

Corresponding button or menu	Function
External Device Input button Administrator - External Device Input	Display the external device input status
External Device Output button Administrator - External Device Output	Operate External Device Output
Control for Administrators button Administrator - Control for Administrators	Exposure/Night Mode Setting
Shade Correction button Administrator - Shade Correction	Setting Shade Correction
Microphone Setting button View - Microphone	Setting Sending Audio
Administrator - White Balance	Setting White Balance
Administrator - Setup Properties	Connection Settings/Camera Control/Display Option



When you connect to the VB-C300 as Administrator, “Administrator” is displayed in red.

Start/Stop Control button



Note

If you connect to the camera as Administrator, you can continue to have it forcibly and Authorized User cannot get the camera control. After viewing, be sure to exit the viewer or click “Start/Stop Control” again to release the privilege.

Starting the NC Viewer

Starting the NC Viewer

To Launch the NC Viewer



Double-click

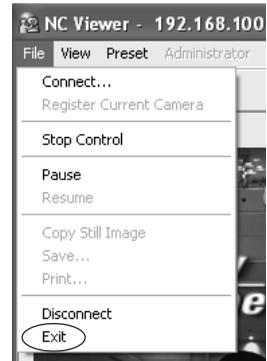


Double-click the NC Viewer icon on the desktop or select "NC Viewer" from the Start menu bar.

Terminating the NC Viewer

To terminate the NC Viewer ...

Select "Exit" from the File menu bar, or close the Viewer window.

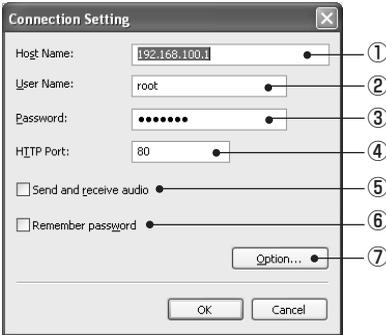


Connecting to Camera

Specify a camera or select a camera from the Camera List when you start the NC Viewer.
You can switch from a connected camera to another camera, or open multiple NC Viewer windows and display separate cameras in them.
You can launch another NC Viewer window or switch to a viewer other than the VB-C300 by using the Viewer Switcher (→ P. 3-34).

Connecting to a Specified Camera

To connect to the camera ...



1. Choose "Connect" from the File menu bar.

2. A dialog box to select a camera appears.

Enter connection settings and click "OK".

① **Host Name**

Enter the IP address or host name set on the camera (→ P.1-17).

② **User Name**

Enter the user name to connect to the camera. Users can be authorized users registered on the camera (→ P.1-15) or administrator "root".

③ **Password**

Enter the password for the specified user name.

④ **HTTP Port**

Enter the HTTP port number set on the camera (→ P.1-12). Use default setting (80) if you do not need to change.

⑤ **Send and receive audio**

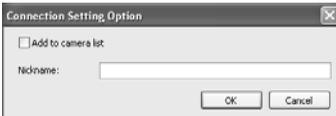
Check this box and connect a microphone and speaker with amp to the camera if you want to send and receive audio via the NC Viewer (→ P.3-23). Authorized User can only receive audio. You need other settings to transmit or receive audio (→ P.1-14).

⑥ **Remember password**

Check this option to save the password.

⑦ **Option button**

Click "Option" to open the Connection Setting Option dialog to register a camera. If you register a camera in this dialog, you can select the camera from the camera list box in the next sessions.



Check the Add to camera list option to enter the name of the camera in the Nickname text box. Click "OK" after entering information to register the camera. You can use up to 32 characters.

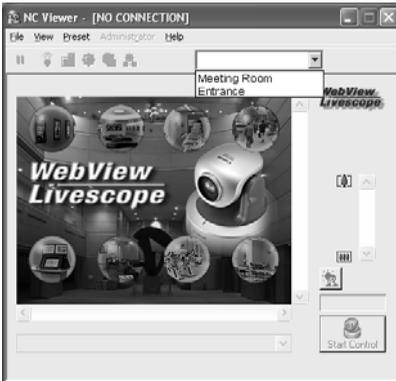


- If Administrator and Authorized User use the NC Viewer from the same PC, it is strongly recommended not to check the Remember password option.
- If you enter a wrong user name or password, the Password dialog appears. Enter the correct user name and password to connect to the camera.



Connecting to Registered Camera

To connect to the camera ...



Select a camera from the camera list box.

In this box, cameras which were registered by checking the Add to camera list option when connecting to the camera, or by setting the Register Current camera option (→ P.3-22) during a session. Refer to “Adding and Changing Camera List”.

Disconnecting

To disconnect the camera ...

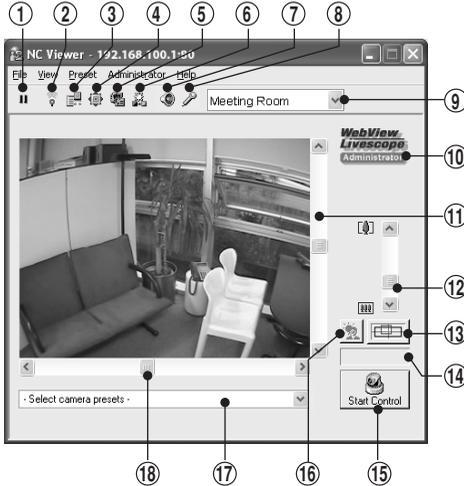


Select “Disconnect” from the File menu bar.

NC Viewer Operation

NC Viewer's Display Screen

The NC Viewer's display screen has the following buttons, boxes, etc.



- ① **Pause/Resume button**
Pauses video. Click this button again resumes video.
- ② **External Device Input button**
Display the external device input status. Only the administrator can use this button.
- ③ **External Device Output button**
Operate the external device output. Only the administrator can use this button.
- ④ **Camera Control button**
Sets camera properties (e.g., camera angle).
- ⑤ **Control for Administrators button**
Sets the exposure and Night Mode of the camera. Only the administrator can use this button.
- ⑥ **Shade Correction button**
Sets the shade correction. Only the administrator can use this button.
- ⑦ **Audio button**
Sets audio reception. You need to set audio settings in advance to display this button (→ P.3-16).
- ⑧ **Microphone button (For the administrator)**
Sets audio transmission. Only the administrator can use this button. You need to set audio settings in advance to display this button (→ P.3-16).
- ⑨ **Camera List box**
Allows selecting from multiple cameras installed.
- ⑩ **Administrator display**
When you connect to the VB-C300 as Administrator, "Administrator" is displayed in red.

⑪ **Scroll bar for tilt**

Use this scroll bar to change the tilt angle (up/down) of the camera.

⑫ **Scroll bar for zoom**

Use this scroll bar to change zoom magnification.

Slide the knob upward to zoom in (toward the telephoto end) and downward to zoom out (to wide end).

⑬ **Panorama Window button**

Displays the Panorama window. Panorama image needs to be registered on the camera in advance. If no panorama image is registered, no image is displayed (→ P.2-4).

⑭ **Camera Control Status window**

Displays camera control status (“Camera control available”, “Camera control unavailable” or “Pause”).

⑮ **Start/Stop Control button**

Use this button to obtain/release camera control.

⑯ **Backlight Compensation button**

When switched on, it is effective on images that are dark due to backlight. Click this button again turns off the function.

⑰ **Preset Selection box**

You can control the camera using a preset which is added and saved in advance (→ P.2-9).

⑱ **Scroll bar for pan**

Use this scroll bar to change the pan angle (right/left) of the camera.

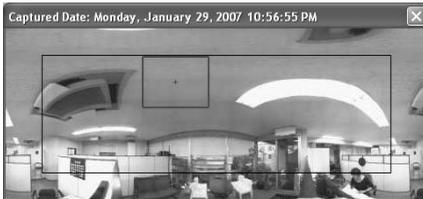


Tip

Items selected with buttons can also be selected from menu bar.

■ Panorama Window

The Panorama window appears when you click “Panorama Window”. You can click on the Panorama window or drag a yellow frame over the window to control the camera.



The black frame indicates the area where the center of the camera can move around. You cannot move the center of the camera out of this area.

The blue frame indicates the area currently captured when you do not have camera control.

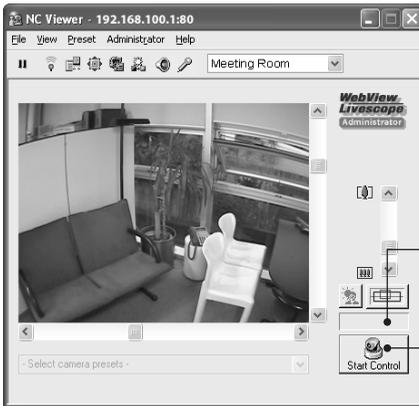
The blue frame changes to yellow when you get camera control and indicates the area currently captured by the camera. You can drag the mouse pointer inside the yellow frame to pan or tilt the camera, or drag over the frame to zoom in or out.

Starting Camera Control

The camera cannot be controlled simultaneously by multiple users. Only the user who currently has camera control can control the camera. You can use the backlight compensation or presets if you have camera control.

To control the camera ...

Click “Start Control” to obtain camera control.



Camera Control Status window
Displays camera control status.

Start/Stop Control button
Obtain/release Camera Control.

■ Camera control status window

Camera Control Status window changes as follows depending on the camera control status.

- 1  When you do not have camera control
- 2  When video image refreshing is temporarily paused by clicking “Pause/Resume”. Camera Control Status window is shown in yellow. You can select “Copy Still Image” from the File menu bar.
- 3  When you have camera control. Camera Control Status window is shown in green.
- 4  When you are disconnected from the camera for some reason, cannot connect to the camera at start up, or you are not allowed to connect to the camera. Camera Control Status window is shown in red.

■ Camera Control Privilege

If the Administrator gets the camera control, Authorized user cannot control the camera. Terminate the NC Viewer or click Start/Stop Control button again to release the camera control privilege. When the multiple Authorized user are accessing the camera, the last Authorized user who tries to get the control gets the camera control.

Controlling Camera

When you have camera control, you can operate camera's properties including angle, zoom magnification, backlight compensation.

■ Changing Camera Angle

To change the camera angle ...

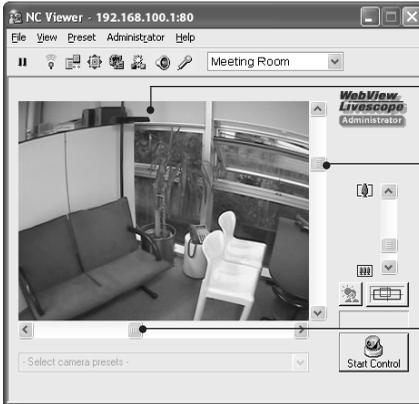
You can operate one of the following ways.

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

The camera angle changes according to the knob position of the scroll bar.

Click the arrows at the both ends of the scroll bar.

Click on the image to move the center of the camera to the clicked position.



Click on the image to move the center of the camera to the clicked position.

Scroll bar for tilt

Use this scroll bar to change the tilt angle (up/down) of the camera.

Scroll bar for pan

Use this scroll bar to change the pan angle (right/left) of the camera.

■ Changing Camera Angle in Panorama Window



Move by clicking

Click inside the Panorama window to change the pan and tilt angles so that the clicked position becomes the center of the image.

Move by dragging

Drag the yellow frame inside the Panorama window to another location to change the pan and tilt angles so that the area inside the yellow frame at the new location is captured.

■ Specifying the zoom magnification of the camera

To change the zoom magnification ...

You can operate one of the following ways.

Move up or down the knob of the scroll bar for zoom.

The camera zoom magnification changes according to the knob position of the scroll bar.

Click the arrows at the both ends of the scroll bar.

Place the wheel mouse on the image and rotate the wheel.



Digital Zoom area

Scroll bar for zoom

Slide the knob upward to zoom in (toward the telephoto end).

Slide the knob downward to zoom out (to wide end).



Tip

If the Enable Digital Zoom option on the Video and Camera page in the settings page is checked, the scroll bar for zoom is extended to allow for digital zoom (→ P.1-11).

■ Specifying Zoom Magnification Using Panorama Window



Change by dragging

If you drag a side of the yellow frame in the Panorama window to change the frame size, the zoom magnification changes so that the area inside the yellow frame is captured.

Change by wheel operation

If you are using a wheel mouse, you can rotate the wheel to change the zoom magnification.



Tip

If you click outside the yellow frame and drag the mouse, a blue frame is drawn. When you release the mouse button, the blue frame changes to yellow and the camera's pan, tilt, and zoom change so that the area inside the new yellow frame is captured.

■ Controlling Camera by Clicking Screen

You can click on the Viewer screen to change the camera's pan, tilt, and zoom settings.



Tip When you click the NC Viewer screen to control the camera, you cannot control it precisely.

■ Using a Preset

You can control the camera using a preset which is added and saved in advance (→ P.2-9).

To control the camera using a preset ...

1. Display the preset list by clicking the preset selection box.
2. Select a preset position from the list to change the video display.



Preset Selection box



Tip Presets set by the camera are shown as candidates. Set the presets using the VBAAdmin Tools in advance (→ P.2-9).

■ Compensating Backlight

When switched on, it is effective on images that are dark due to backlight.

To compensate backlight ...

Click “Backlight Compensation” to make dark image brighter.

Click this button again turns off the function.



Backlight Compensation button

■ Pausing and Resuming Video

You can pause and resume video playback.

To pause/resume video ...

1. To pause video, click “Pause/Resume”.



Alternatively, you can right-click the video screen to display the context menu and select “Pause Picture Display” to pause the playback.

2. Click “Pause/Resume” to resume the playback.

■ Displaying External Device Input status (Administrator Only)

Click “External Device Input” to display the external device input status and save any changes as logs. Only the administrator can use this function (→ P.3-3, 3-27).



■ Operating External Device Output (Administrator Only)

Click “External Device Output” to turn On or Off the external device output. Only the administrator can use this function (→ P.3-3, 3-27).



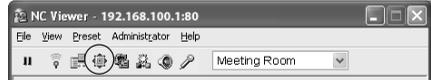
■ Setting Camera Control

You can click on the button from the dialog to change the camera's pan, tilt, and zoom settings. You can also set focus.

To Make Settings...

1. Click “Start Control” to obtain camera control.

2. Click “Camera Control” on the toolbar.



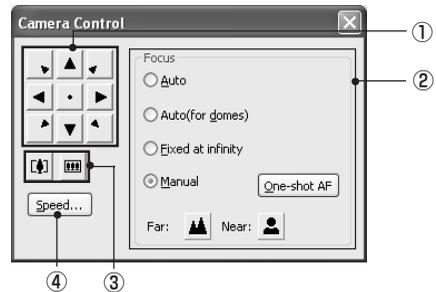
3. The Camera Control dialog appears.

① Pan/Tilt button

Pan and Tilt movements occur in the direction of the arrows on the buttons. Operation occurs when the button is held down and stops when it is released. When the “center” button is clicked, the camera faces front.

② Focus

Switch the focus to “Auto”, “Auto (for domes)”, “Fixed at infinity”, or “Manual”.



Note

- The NC Viewer's focus setting takes precedence over the focus mode set on the setting page.
- The NC Viewer's focus setting is not reflected on the settings page therefore, it can only continued with the NC Viewer.
- Note that focus will be fixed if you choose the manual focus mode.
- The NC Viewer's focus setting is reflected on other Users' focus setting.
- If you specify the shutter speed within the range from NTSC: 1/1 to 1/4, PAL: 1/1 to 1/3 with Manual Exposure (→ P.3-28), Auto, Auto (for domes), and One-Shot AF for camera control will be invalidated. Change the focus mode to Manual and adjust the focus.
- For the focusing range when the camera is set to Night Mode (→ P.1-10, 3-29) refer to the Tip on P.1-10.

Auto: Focus is adjusted automatically.

Auto (for domes): When the optional dome housing is used, select this option to automatically adjust the focus without focusing on the dome surface.

Fixed at Infinity: Focus is fixed at a point of infinity.

Manual: Hold Down the Far or Near buttons to adjust the focus. Clicking “One-shot AF” adjusts the focus automatically and fixes the focus with Manual Focus mode.

③ **Zoom button**

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

④ **Speed**

Clicking “Speed” displays the Speed dialog.
Select the operation speed.

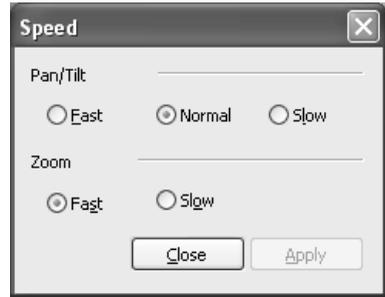
● **Pan/Tilt**

Select from Fast and Slow for Pan and Tilt.

● **Zoom**

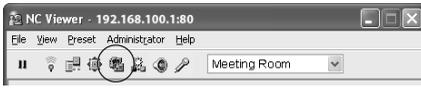
Select from Fast, and Slow for zoom.

To apply the setting, click “Apply”.



■ **Setting Administrator Control (Administrator Only)**

Click “Control for Administrator” to set the Exposure and Night Mode functions. Only the administrator can use this function (→ P.3-28).



■ **Shade Correction (Administrator Only)**

If the background of an image is bright, making the subject difficult to see, you can adjust the contrast of the darker areas to make it easier to see by clicking Shade Correction. Unlike backlight compensation, the shade correction feature allows image processing without adversely affecting the existing lighter regions. Only the administrator can use this function (→ P.3-29).

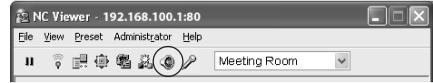


■ Receiving Audio

You can connect a microphone with amp to the camera and then receive audio from the camera.

To Make Settings...

1. Click “Audio” on the toolbar.



2. The Audio dialog is displayed.

① Receive audio data

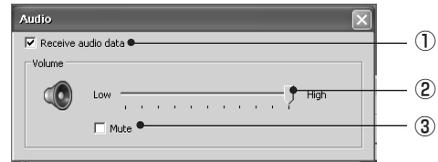
You can receive audio from the microphone with amp connected to the VB-C300 by selecting “Receive audio data”.

② Volume Slider

Adjust the PC’s speaker volume

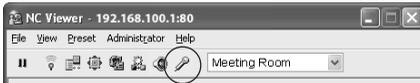
③ Mute

Selecting “Mute” turns the sound off.



■ Transmitting Audio (Administrator Only)

You can connect a microphone to the PC and speaker with amp to the camera and then transmit audio from the VB-C300 to the NC Viewer. Perform settings for an administrator to send audio to the VB-C300. Only the administrator can use this function (→ P.3-29).



Tip

You must set the following settings in advance to transmit and receive audio.

- Check the Enable Audio Transmission box and Enable Audio Reception box on the Audio Server section of on the Server settings page (→ P.1-13).
- Check the Send and receive audio box in the Connection Setting dialog when starting the NC Viewer (→ P.3-5, 3-23).
- When starting the NC Viewer from the VBAdmin Tools, check the Send and receive audio option on the Connection Settings tab in the Setup properties dialog (→ P.3-31).

Saving, Printing, and Copying Still image

■ Saving Still Image to File

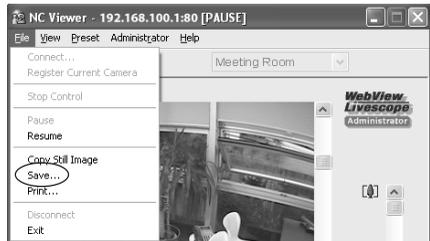
To save still image ...

1. Click “Pause/Resume” when the desired video displayed.

The video is displayed as a still image.

2. Choose “Save” from the File menu bar.

After saving the image, click “Pause/Resume” to restart video display.



Note

Please note that copyright laws prohibit the customer from using recorded videos and images for any purpose other than personal requirements, without permission from the copyright holder.



Tip

File format for the images are saved in the BMP format.

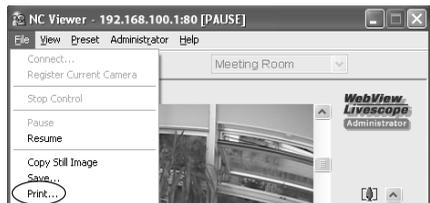
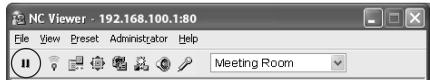
■ Printing Still Image

To print still image ...

1. Click “Pause/Resume” when the desired video displayed.

The video is displayed as a still image.

2. Choose “Print” from the File menu bar.



3. Configure printing settings.

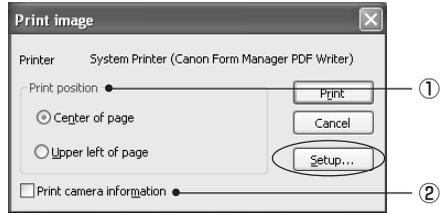
Click “Setup” to change the printing settings. After printing the image, click “Pause/Resume” to display video.

① **Print position**

You can specify where the image should be printed.

② **Print camera information**

Check this option to print camera parameters including pan and tilt with the image.

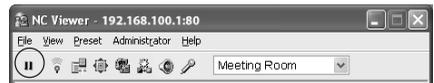


■ Copying Still Image

To copy still image ...

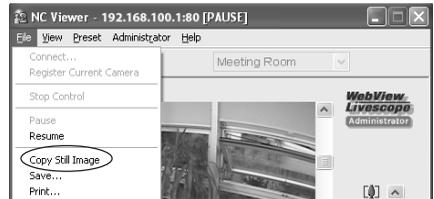
1. Click “Pause/Resume” when the desired video displayed.

The video is displayed as a still image.



2. Choose “Copy Still Image” from the File menu bar.

The image is copied to the Clipboard.



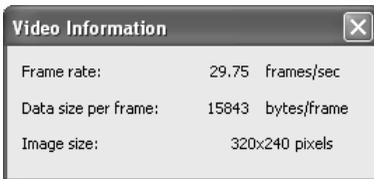
Displaying Information and Video

You can display information related to video, camera, and network in the dialog.

To view information...

1. Select “Video Information”, “Camera Information”, and “Network” from the View menu bar.

Video Information



- **Frame rate**
Number of frames per second
- **Data size per frame**
Number of bytes per frame
- **Image size**
The numbers of vertical and horizontal pixels of video data being received

Camera Information



- Pan
Pan angle of the camera
- Tilt
Tilt angle of the camera
- Zoom (viewing angle)
Zoom (viewing angle) angle of the camera
- Backlight compensation
On/Off status of backlight compensation
- Focus
Focus setting of the camera
- White balance
White balance setting of the camera
- Camera Model
Model name of the camera



Zoom (viewing angle) may be misaligned in the digital zoom region.

Network



- Indicator (camera icon)
Network bandwidth of video data
- Indicator (speaker icon)
Network bandwidth of audio data reception
- Indicator (microphone icon) (Administrator only)
Network bandwidth of audio data transmission
- Restrict transmission rate
Check this option to limit the bandwidth of video data.

Change display screen size

You can change the display screen size for video display. Select from “Large”, “Middle”, “Small”, and “Minimum”.

To change screen size ...

Select “Display Size” from the View menu bar, and select the desired size from the menu bar that appears.

The display screen size is changed.

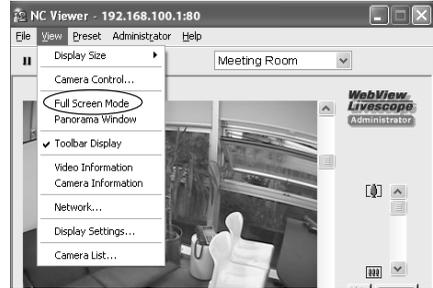


■ Changing to Full-Screen Mode

You can display video at full-screen size.

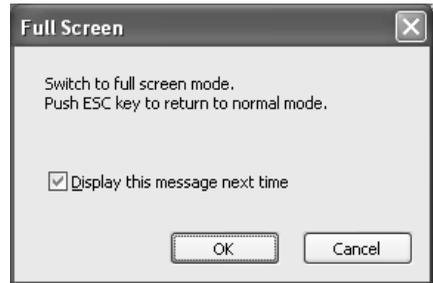
To change to full-screen ...

1. Choose “Full Screen Mode” from the View menu bar.



2. A confirmation dialog appears. Click “OK”.

The display changes to the full-screen mode. Press the Esc key to return to the previous screen.



Tip

If you uncheck the Display this message next time option in the confirmation dialog, the confirmation dialog will not appear next time.

In the full-screen mode, right-click on the display opens the menu and you can perform the following operations:

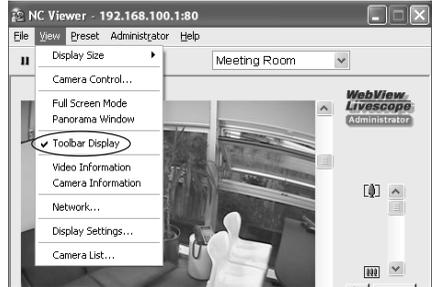
- Stop/start camera control (to stop or start controlling the camera)
- Panorama window (to display panorama window overlapped on the video screen)
- Return to normal mode (to return to the previous display mode)
- Presets list (to display or select presets currently registered)

■ Toggling Toolbar Display

To toggle toolbar display ...

Select “Toolbar Display” from the View menu bar to display or hide the toolbar.

The toolbar is displayed if there is a check mark before “Toolbar Display”.

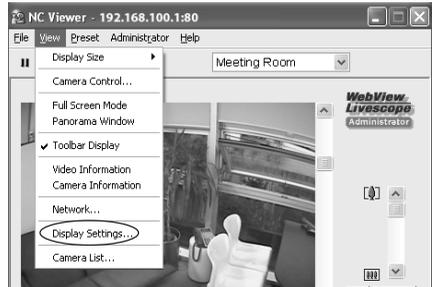


■ Setting Video Display

You can set the video display size at start up. You can also select whether or not the confirmation message is displayed when you select the full-screen mode.

To make settings ...

1. Choose “Display Settings” from the View menu bar.



2. The Display Settings dialog is displayed.

① Video display size at start up

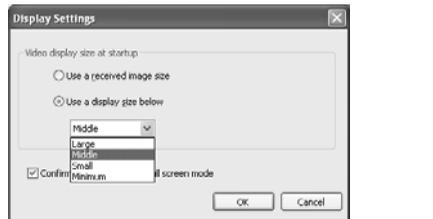
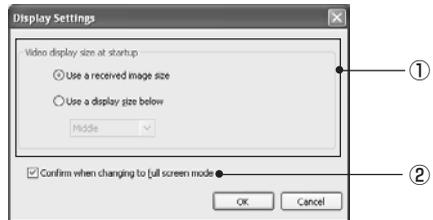
You can set the video display size at start up.

- Use a received image size

The display size is adjusted to the size of the first video received when the NC Viewer is connected to the Camera.

- Use a display size below

Select from “Large”, “Middle”, “Small”, and “Minimum”.



② **Confirm when changing to full screen mode**

Check this option to display the confirmation message before changing to the full screen mode.

Adding and Changing Camera List

If you register a camera, you can easily select the camera from the list and connect to it. This section explains how to register a camera and change a registered camera. Up to 100 cameras can be registered.

■ Registering Camera in Connection

To make settings ...

Select **“Register Current Camera”** from the **File** menu bar to register the camera currently connected.

The registered camera is listed in the Camera list box and can be selected for connection.

You can change or delete a camera in the list (→ P.3-6, 3-23).



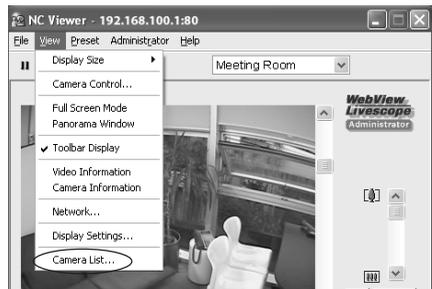
■ Adding, Changing, or Deleting Camera

▼ Adding a camera to the list

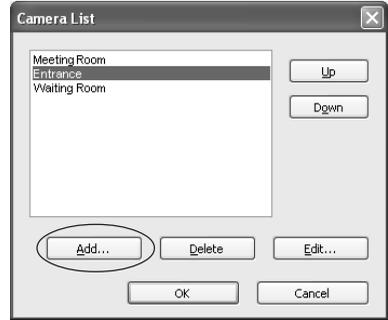
To register a camera currently not connected:

To make settings ...

1. Choose **“Camera List”** from the **View** menu bar.



2. Click “Add” from the Camera List dialog.



3. A Register Camera (Add) dialog box to select a camera appears.

Enter connection settings and click “OK” to add the camera to the list.

① Nickname

Enter a name for register a camera (You can use up to 32 alphanumeric characters).

② Host Name

Enter the IP address or host name set on the camera (→ P.1-17).

③ User Name

Enter the user name to connect to the camera. Users can authorized users registered on the camera (→ P.1-15) or administrator “root”.

④ Password

Enter the password for the specified user name.

⑤ HTTP Port

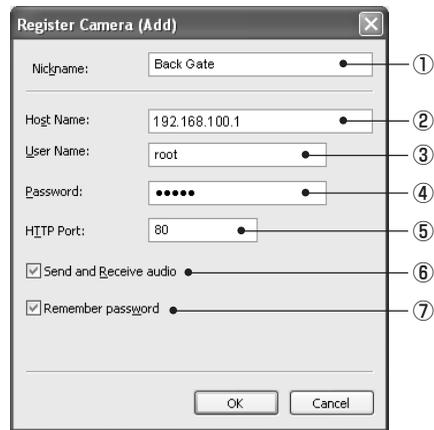
Enter the HTTP port number set on the camera (→ P.1-12). Use default setting (80) if you do not need to change.

⑥ Send and Receive audio

Check this box and connect a microphone and speaker with amp to the camera if you want to send and receive audio via the NC Viewer (→ P.3-23). Authorized User can only receive audio. You need other settings to transmit or receive audio (→ P.1-14).

⑦ Remember Password

Check this option to save the password.



If Administrator and Authorized User use the NC Viewer from the same PC, it is strongly recommended not to check the Remember Password option.

▼ To change or delete list contents:

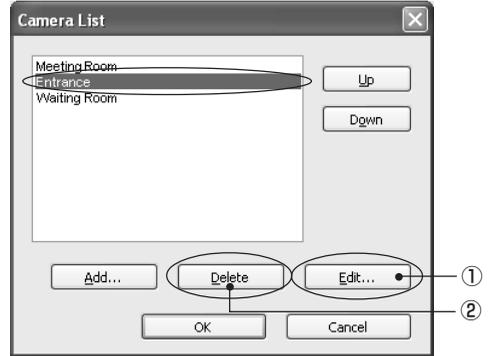
To make settings ...

Choose “Camera List” from the View menu bar.

The Camera List dialog appears.

Select a camera to change or delete from the list.

Click “Edit” to change the settings or “Delete” to delete the camera.



① Clicking “Edit” opens the Register Camera (Edit) dialog.

Change the settings. Click “OK” to reflect the new settings to the camera.

② Clicking “Delete” deletes the Camera.

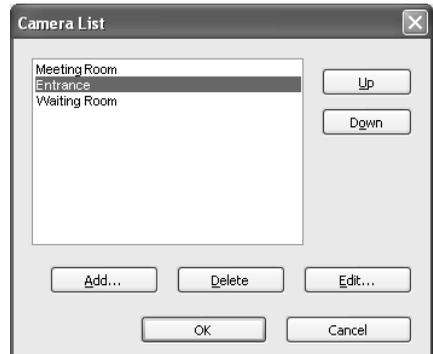
A confirmation message appears. Clicking “OK” deletes the camera.



▼ To change the order of cameras in the list:

You can change the register order of cameras by selecting a camera and clicking “Up” or “Down”.

The new order is reflected to the list display order in the Camera List box.



Operating and Setting Camera as Administrator

The following operation and setting are available only to Administrator.

Setting White Balance

Select from “Auto”, “Light Source”, and “Lock” for the white balance.



The white balance setting remains after closing the NC Viewer. Also, it is reflected on the Authorized User’s video.

To make settings ...

1. Choose “White Balance” from the Administrator menu bar.



2. The White Balance dialog appears.

① Auto

Automatically adjusts the white balance.

② Light Source

Select the light source from “Fluorescent”, “Fluorescent H”, “Mercury Light”, “Sodium Light”, “Halogen Light” according to your environment.



Fluorescent : Select this option when using the camera under neutral white or cool white fluorescent lighting.

Fluorescent H : Select this option when using the camera under a daylight fluorescent lighting.

Mercury Light : Select this option when using the camera under a mercury lighting.

Sodium Light : Select this option when using the camera under orange light of a sodium lighting.

Halogen Light : Select this option when using the camera under a halogen or incandescent lighting.

③ **Lock**

Fix adjusts the white balance using the video currently received. To forcibly adjust the white balance, capture a white object (e.g., a piece of white paper) and click “One-Shot WB”.



- Since the light source setting is based on representative characteristics of each type of lamp, correct color may not be reproduced depending on the actual lamp used. In this case, use the One-Shot WB function.
- If the image is greenish when shooting an object under a mercury lamp while the White Balance option is set to “Auto”, select “Mercury Light” with the Light Source option. If the image color is not yet correct after changing the light source to the mercury lamp, return the setting to “Auto”.
- When shooting images in day and night continuously.
If you shoot an object which shows little change in appearance in an environment where the light source gradually changes (e.g., continuous outdoor shooting for day and night), the video may show an incorrect color. In this case, use the pan, tilt, or zoom function to give change to the image and the video will return to the correct color.
- If you shoot a single color object or shoot images under a sodium-vapor lighting or mercury lighting, it may be difficult to adjust the color automatically.

Displaying External Device Input

You can display the external device input and save the logs.

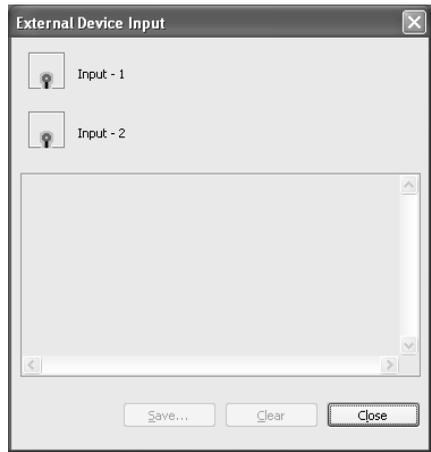
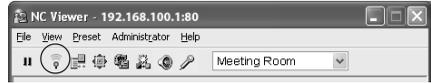
To Operate...

1. Click “External Device Input” on the toolbar.
2. The External Device Input dialog opens.

The external device input status and logs are displayed.

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

To clear the content in the display, click “Clear”.



Operating External Device Output

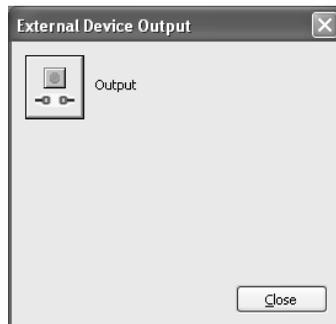
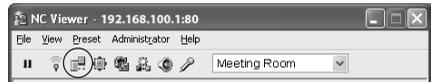
You can operate the external device output.

To Operate...

1. Click “Start Control” to get camera control, and click “External Device Output” on the toolbar.
2. The External Device Output dialog opens.

The external device output status is displayed.

The external device output status can be changed between ON and OFF by clicking the icon.

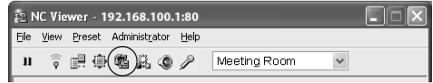


Setting Administrator Control

You can configure the exposure and Night mode settings.

To Make Settings...

1. Click “Control for Administrators” on the toolbar.
2. The Control for Administrators dialog opens.



① Exposure

Select from Auto Exposure and Manual Exposure.

② Auto Exposure

Four buttons on the right are available. The four buttons represent, from the left to the right, “Backlight Compensation, Off”, “Backlight Compensation, Low”, “Backlight Compensation, Medium”, and “Backlight Compensation, High”. Higher backlight compensation produces brighter images.

③ Manual Exposure

You can set “Aperture”, “Shutter Speed”, and “Gain”.

To apply the setting, click “Apply”.

Aperture

The further to the left you move the slide bar, the more closed the aperture and the darker the image. Conversely, the further to the right you move the slide bar, the more open the aperture and the brighter the image.

Shutter Speed

Fixes shutter speed. Higher shutter speed (e.g., 1/8000) produces darker images. Conversely, slower shutter speed (e.g., 1/1, 1/2) produces brighter images. For the NTSC model, if you specify the shutter speed within the range from 1/1 to 1/4, the auto focus and One-shot AF for camera control (→ P.3-14) will be invalidated. For the PAL model, if you specify the shutter speed within the range from 1/1 to 1/3, Auto, Auto (for domes), and One-Shot AF for camera control will be invalidated.

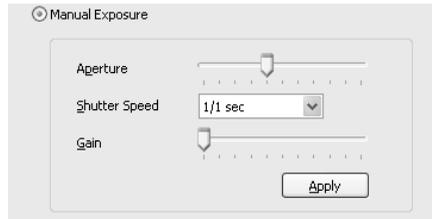
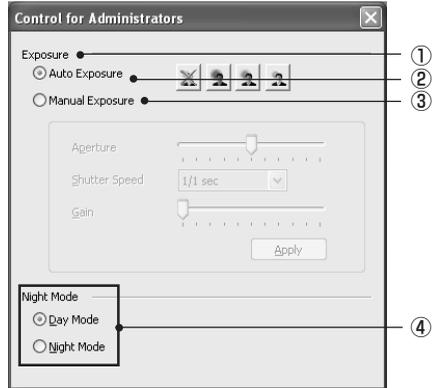
Gain

The further to the left you move the slide bar, the lower the gain (sensitivity for brightness) and the darker the image. Conversely, the further to the right you move the slide bar, the higher the gain and the brighter the image.

When setting “Day & Night Mode” to “Auto”, use “Auto Exposure” (→ P.1-11).

④ Night Mode

Set up Night Mode with night vision.



If Day & Night is set to Auto on Camera Settings Section of Video and Camera page, Night Mode setting is not available here (→ P.1-10).

Day Mode

Color images are displayed in the normal mode.

Night mode

The infrared cut filter of the VB-C300 is disabled and the images are displayed in monochrome.



For the focusing range when the camera is set to Night Mode (→ P. 1-10, 3-14) refer to the Tip on P.1-10.

Shade Correction

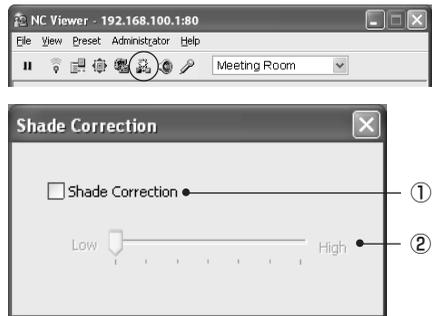
If the background of an image is bright, making the subject difficult to see, you can adjust the contrast of the darker areas to make it easier to see. Unlike backlight compensation, the shade correction feature allows image processing without adversely affecting the existing lighter regions.

To Make Settings...

1. Click the “Shade Correction” on the toolbar.

2. The Shade Correction dialog opens.

- ① **Shade Correction**
Check this option for shade correction.
- ② **Shade Correction Slider**
Adjust the level of shade correction.



Transmitting Audio

You can connect a microphone and speaker with amp to the camera and then transmit audio from the VB-C300 to the NC Viewer.



Disconnecting the LAN cable also disconnects audio. Reconnect to the camera from the NC Viewer.



You must set the following settings in advance to transmit audio.

- Check the Enable Audio Transmission box on the Audio Server section of on the Server settings page (→ P.1-13).
- Check the Send and receive audio box in the Connection Setting dialog when starting the NC Viewer (→ P.3-5, 3-23).
- When starting the NC Viewer from the VBAdmin Tools, check the Send and receive audio option on the Connection Settings tab in the Setup properties dialog (→ P.3-31).

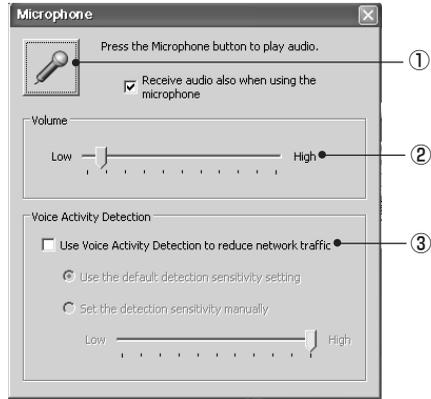
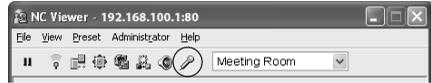
To Make Settings...

1. Click “Microphone” on the toolbar.

2. The Microphone dialog appears.

① Microphone button

Click this button to turn on the microphone for Administrator and audio transmission becomes available. Click it again to turn off the microphone and stop audio transmission.



Receive audio also when using the microphone

Check this option to receive audio even when the Microphone button is activated. It is recommended to uncheck this option if the audio from the microphone played on the speaker is hard to hear.

② Volume Slider

Adjust the volume of the input in the microphone.

③ Use Voice Activity Detection to reduce network traffic

Select to temporarily reduce audio data quantity to transmit when the audio is turned to mute. In this way, you can reduce traffic on the network you are using.

Use the default detection sensitivity setting: Operates at default sensitivity.

Set the detection sensitivity manually: Adjust the slider to set the detection sensitivity. The detection sensitivity gets lower if you move the slider bar to the left. The sound has to be softer so that to be detected as mute.

The detection sensitivity gets higher if you move the slider bar to the right. It will detect as mute even if the sound is louder.



Tip

- When the Viewer window is minimized, audio transmission pauses even if the Microphone button is active.
- If you activate another application while the Microphone button is active, the task bar icon will flash.
- If you pause the video by clicking “Pause”, audio transmission also pauses.
- Closing the Microphone dialog also terminates audio transmission.

Setup Properties

■ Configuring Connection Settings

You can configure audio settings as well as automatic reconnection when the camera and NC Viewer are disconnected due to a network trouble or other reasons.

To make settings ...

1. Choose “Setup Properties” from the Administrator menu bar.



2. Set audio connection and automatic reconnection under “Connection Settings”.

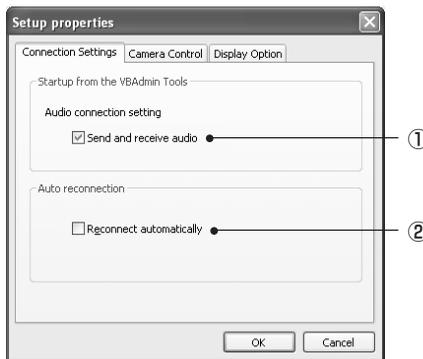
- ① **Send and receive audio**

Check this option to transmit and receive audio. You need other settings to transmit or receive audio (→ P.1-14).

- ② **Reconnect automatically**

Check this option to automatically reconnects to the camera.

By checking the Reconnect automatically option, you can automatically reconnect to the camera when you are disconnected from it due to a network trouble or camera reboot. If reconnection fails, it will be retried again in 30 seconds.



Click “OK” when finished.



The audio connection is not reestablished even if the Reconnect automatically option is checked. You need to reestablish the audio connection from the NC Viewer.

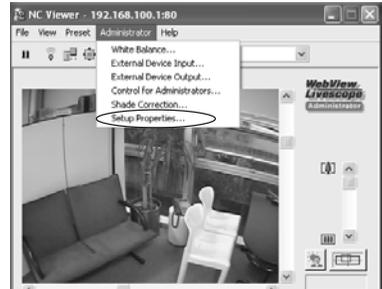
3. When the message “Try new property setting. OK ?” appears, click “OK”.

■ Setting Camera Control

If you have connected to the camera as Administrator, you can control the pan, tilt and zoom operations by clicking and holding the mouse in the viewer to start and releasing the mouse to stop.

To Make Settings...

1. Choose “Setup Properties” from the Administrator menu bar.



2. Click the Camera Control tab in the Setup properties dialog.

Check the Use the arrow button to control the camera option and click “OK”.



3. When the message “Try new property setting.” appears, click “OK”.

4. Placing the mouse cursor over the Viewer window changes its shape into an 8-direction arrow or a plus-minus icon.

Click on one of the icons and hold the mouse button in the Viewer window to start panning, tilting or zooming, and release the button to stop the operation.

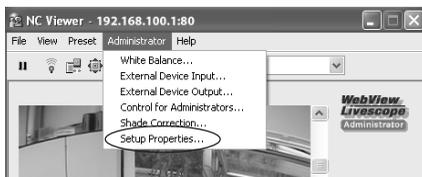


■ Setting Video Display

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

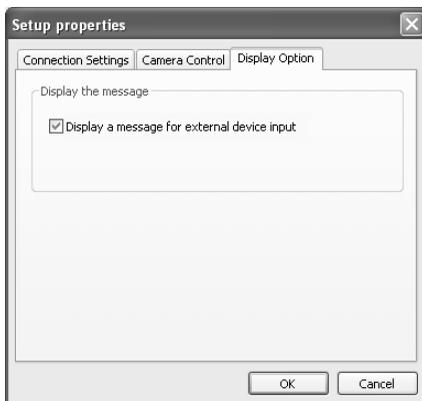
To Make Settings...

1. Choose “Setup Properties” from the Administrator menu bar.



2. Click the Display option tab in the Setup properties dialog.

Ensure that the Display a message for external device input message option is checked, and click “OK”.



3. When the message “Try new property setting.” appears, click “OK”.

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



Tip If the NC Viewer window is minimized or in full-screen mode, the notification message for external device input appears after get back to the normal display. Also, this message is not displayed when the External Device Input dialog is displayed.

Using Viewer Switcher

If you are using other cameras (e.g., VB-C50i) with the VB-C300, you can switch the Viewer to use the cameras.



To use the Viewer Switcher, install it by using the Custom Installation option as directed in “Install Necessary Software” of the Start Guide (→ Start Guide P.2-11).

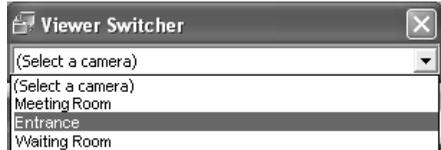
To make settings ...

1. Double-click the Viewer Switcher icon on the desktop.

Alternatively, you can select “Viewer Switcher” from the Start menu.

2. The Viewer Switcher dialog opens.

Select a camera from the camera list. The camera list contains both the camera list of the NC Viewer (→ P.3-22) and the camera site list of the Viewer for PC. The viewer corresponding to the selected camera automatically starts.



Viewer for PC

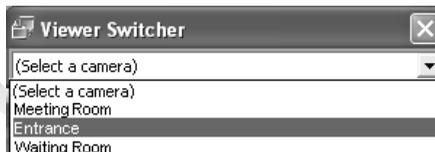


NC Viewer



VB-C50i series

Viewer Switcher



VB-C300

**Note**

- The camera must be registered in the camera list (for the VB-C300) or camera site list (for other cameras) corresponding to the viewer to be used (→P.3-22).
- Switch to the Viewer for PC when you are using a camera other than the VB-C300. Use the Viewer for PC Ver. 3.6 or later.
- When the NC Viewer launches, the Password dialog may open. Enter the correct user name and password to connect to the camera.



Chapter **4**

Appendix



Troubleshooting

Before you contact your Canon dealer or service outlet, check the items listed below. If a log message is displayed, refer to the log message list for the log details and the appropriate response.

The VB-C300 does not start up.

- When using a PoE HUB, Check that the LAN cable is connected properly.
- If you are using the AC Adapter (optional), check that the AC Adapter is connected properly.
- Power Off then On the camera (→  Start Guide P.2-5).

VBSetup.exe does not work.

- Check that the LAN cable is connected properly.
- Power Off then On the camera (→  Start Guide P.2-5). The camera stops responding to VBSetup.exe in 20 minutes after power-on.
- Check that the PC where VBSetup.exe is running is connected to the same segment of the LAN as the camera.
- VBSetup.exe may not run on Windows XP SP2. In this case, see “Note on Windows XP SP2” (→ P.1-2). This Note holds true for users who have enabled the Windows Firewall settings with Windows Server 2003 Standard Edition (SP1).

The VB-C300 top page does not appear.

- Check that the LAN cable is connected properly.
- Check that the network for the camera is set properly. In particular, check that the IP address, subnet mask, and default gateway address are set to values available for the current network.
- If the IP address has been changed, the new IP address will not take effect until the camera is rebooted.
- Check if the URL (i.e., IP address of the camera) you entered in the Web browser is correct (→ P.1-3, 1-7).

The video does not appear.

- If the video quality is poor, check the video quality setting of the camera (→ P.1-8). Also check the display color quality setting of the PC where the Viewer is running.
- Up to 15 Viewers can access the camera simultaneously. If this limit has been exceeded, a message appears instead of video.

I can't control the camera.

- Anyone who connects to the NC Viewer as the Administrator occupies camera control. Therefore, if you are connecting the NC Viewer as a Authorized user, you cannot get camera control until the Administrator releases it. See your system administrator (→ P.3-9).

The viewer is disconnected.

- Check that the network or PC is working property.
- Reboot the PC and reconnect to the camera.

I forgot the password.

- You can initialize all the settings by using the Reset switch (→ P.4-9). The initialized password is "VB-C300." However, all the network settings including the IP address and subnet mask are also initialized and need to be set again.

Log Messages

The VB-C300 Log Messages

The log messages are classified into the following five categories.

Classification	Level	Error level
crit	Error	A critical failure at software level (task stops).
err	Error	A failure affecting camera operation (task continues).
warning	Warning	A failure not affecting the camera operation.
notice	Warning	A failure external to the system.
info	Information	Information concerning normal operation.

■ Camera Messages

● A001 Camera start failure (crit)

Message	no %1 installed
%1	sources protocols
Explanation	Camera failed to capture images or initialize the protocol and could not start.
Countermeasure	Reboot the camera. If the problem persists, it is a camera failure. Call for service.

● A002 Protocol initialization failure (err)

Message	%1 protocol not installed
%1	Protocol type (LS/H)
Explanation	The camera failed to initialize the WebView. Configuration data may be destroyed.
Countermeasure	Restore the factory default settings or press the Reset switch.

● A011 Camera control device error (warning)

Message	%1 malfunction (%2)
%1	Camera type (Canon VB-C300NA Canon VB-C300PA)
%2	Error (read write timeout ...)
Explanation	An I/O error for the camera control device has occurred.
Countermeasure	If the problem persists, it is a camera failure. Call for service.

● A012 WebView Livescope client start and stop (info)

Message	%1 @ %2 %3
%1	Client type (LS/H)
%2	Client host IP address
%3	connected closed
Explanation	The HTTP WebView client (LS/H) has started or stopped.

● A016 Video data transmission quantity (info)

Message	%1 @ %2 %3 frames / %4 bytes in %5 seconds
%1	Client type (LS/H)
%2	Client host IP address
%3	Number of frames
%4	Number of bytes
%5	Video transmission period
Explanation	This message indicates the results of video transmission to the client.

● A023 Contact input change detection (err)

Message	a %1 detected at In%2
%1	Contact input change (front-edge rear-edge)
%2	Contact input terminal number (1-2)
Explanation	Input change at the contact input terminal In1/In2 has been detected. "front-edge" means change from Off to On, "rear-edge" means change from On to Off, "pulse" means change from Off to On to Off, and "notch" means change from On to Off to On. "pulse" and "notch" indicate a short On/Off (shorter than approximately 100 ms) detected during On/Off period.

● A201 Registered panorama image failure (warning)

Message	corrupt panorama image %1
%1	File name of the panorama image (e.g., camera1.jpg)
Explanation	A registered panorama image cannot be displayed.
Countermeasure	Register a correct panorama image.

■ Audio Server Messages

● B001 Audio server start and stop (info)

Message	%1 wvaudio
%1	starting shutdown
Explanation	The Audio Server has started or stopped.

● B011 Audio client start (info)

Message	[%1] %2 connected n=%3
%1	Client type (send recv)
%2	Client host IP address
%3	Total number of clients
Explanation	An audio client has been connected to the Audio Server.

● B012 Audio client stop (info)

Message	[%1] %2 closed [%3]
%1	Client type (send recv)
%2	Client host IP address
%3	Disconnection type (active passive senderr)
Explanation	An audio client has been disconnected from the Audio Server.

● B101 Abnormal request received (notice)

Message	%1 unusual request [%2]
%1	Client host IP address
%2	Error type (400 404 ...)
Explanation	A request has been rejected due to a command error (400) or parameter error (404).

● B102 Client connection rejected (notice)

Message	%1 request denied [%2]
%1	Client host IP address
%2	Rejection type (41 43 ...)
Explanation	A client connection request has been rejected due to an authentication error (41), resource shortage (43), specification of an unsupported codec (45), specification of an unsupported stream (46), restriction on the number of clients (49), operation mode (4a).
Countermeasure	41: Check the user name, password, or user list. 43: Reconnect or reboot the camera. 45 - 46: Use supported client software. 49: Check the number of clients. 4a: Check that use of the Audio Server is allowed.

● **B103 Client forcibly disconnected (notice)**

Message	%1 request denied [%2]
%1	Client host IP address
%2	Rejection type (41 43 ...)
Explanation	Although connection was allowed at the start of session, the settings have been changed to ban the client access and the client has been forcibly disconnected from the Audio Server (the rejection types are the same as B102).

● **B301 Transmission audio device error (err)**

Message	cannot use audio device for tx [%1 : %2]
%1	Error process (id buff)
%2	Error number
Explanation	An audio device error has been detected.
Countermeasure	Reboot the Camera. If the problem persists, it is an Audio Device failure. Call for service.

● **B401 Audio device initialization failed (crit)**

Message	audio device initialization error [%1]
%1	Error number
Explanation	The Audio device failed to initialize itself. The Audio Server stops.
Countermeasure	Reboot the Camera. If the problem persists, it is an Audio Device failure. Call for service.

● **B402 Audio Server initialization failed (crit)**

Message	wvaudio initialization error [%1]
%1	Error number
Explanation	The Audio Server failed to initialize itself. The Audio Server stops.
Countermeasure	Reboot the Camera. If the problem persists, it is an Audio Server failure. Call for service.

● **B403 Setting change failed (crit)**

Message	cannot set config [%1]
%1	Error number
Explanation	Update of settings failed. The Audio Server stops.
Countermeasure	Reboot the Camera. If the problem persists, it is an Audio Server failure. Call for service.

■ **System Log Messages**

● **S004 System start and stop (info)**

Message	%1 webview
%1	Start (starting) or stop (stopping)
Explanation	This message indicates start or stop of the Video Server (webview).

● **S005 System setting changed (info)**

Message	System settings updated
Explanation	The settings have been changed without reboot.

● **H043 User specification error (notice)**

Message	%1: user %2 not found: %3
%1	Client host IP address
%2	User Name
%3	URL
Explanation	An unknown user has been specified in user authentication.

● H044 Password specification error (notice)

Message	%1: user %2: password mismatch: %3
%1	Client host IP address
%2	User Name
%3	URL
Explanation	An incorrect password has been specified in user authentication.

Restoring the Factory Default Settings

Since the VB-C300 supports various functions, it is recommended to take a note of set values for each function. If you want to redo the settings from the beginning because you have forgotten them or for some other reason, first restore the factory default settings.

* Refer to P.4-12 for the factory default settings.

Restoring the Factory Default Settings via the Administration Tools Page using Web Browser

1. Start the Web browser and access the Settings Title Page.

The VB-C300's IP address, user name, and administration password are required to display the Settings Title Page.



2. Click "Administration Tools" on the Settings Title Page.

The Administration Tools page appears.



3. Click "Restore" of the Restore Settings.

When the "Restore" button is clicked, the confirmation message appears. Click "OK" to restore to the factory default settings.



Note

- Never power off the camera while the restore operation is in progress. Powering off before completion may prevent it from starting up properly.
- Once you click "OK", the process cannot be cancelled.

4. All settings in the VB-C300 will be returned to the factory default settings.

All the settings of the camera except for the Administrator password, network-related settings (i.e., IP address, subnet mask and default gateway address) date, time, and time zone are returned to the factory default settings.

Initializing the Camera from the Reset Switch

If you have forgotten the IP address or Administrator password of the VB-C300, you cannot use it via the network. In this case, press the Reset switch at the bottom of the unit.

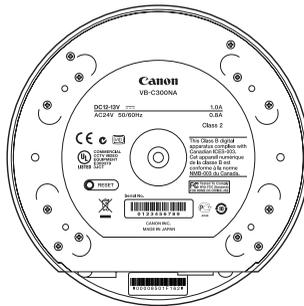
1. Power off the camera.

Refer to “Turning the Power ON and OFF” (→  Start Guide P.2-5) for how to power on or off the camera.

2. Press and hold the Reset switch and power on the camera, then hold the Reset switch for at least five seconds.

The Reset switch is located toward the rear on the bottom. Use a thin tipped object to press the Reset switch.

All settings except for the date, time, and time zone in the VB-C300 will be initialized.



Note

If you use the Reset switch to initialize the VB-C300, all the settings of the camera including the network-related settings (i.e., IP address, subnet mask, and default gateway address) are initialized. Therefore, you cannot use the camera from the PC connected to the camera via the network after reset. Set the IP address and other network parameters for your environment using VBSetup.exe on the supplied Setup CD-ROM (→  Start Guide P.2-7).

Initializing the Camera Head Position

If the preset position is misaligned, you can correct it by initializing the camera head position. When the camera head position is initialized, the camera head moves to face front, and then moves back to the former position.



Initialization starts



Initialization ends

To Make Settings...

1. Start the Web browser and enter the following URL:

<http://192.168.100.1/support/>

* The underlined IP address is an example. You should enter your IP address (→ P.1-7).

The VB-C300's IP address, user name, and administrator password are required to display the Initialize Camera Head Position Page (→ P.1-3).

2. Initialize from the Initialize Camera Head Position Page.



① Initialize Camera Head Position

The camera head position is immediately initialized by clicking “Initialize”.

3 Click “Initialize”.

The Camera Head position is initialized and a confirmation message is displayed.

Click “OK” to end initialization.



Note

During initializing,

- The camera faces to the front and returns to the former position. If you are using network recording software (e.g., VK-64), video is recorded during initialization.
- The Viewer displays captured video.
- Even if you have camera control, initialization takes precedence.
- You cannot shoot a panorama image.
- Never touch the camera head during initialization. If you do this, the head position may not be initialized correctly, or other malfunctions may result.



Tip

The Connection Setting dialog may appear.

In this case, enter the user name “root” and the administrator password (factory default Setting is “VB-C300,”) then click “OK”.

Then the Camera Head position is initialized.

Factory Default Settings

The following table lists the factory default settings. When you have changed these settings, be sure to take a note of the new values.

Item	Setting	Item Setting 1			Item setting 2		
		(m)	(d)	(y)	(m)	(d)	(y)
<ul style="list-style-type: none"> ● Administrator ID ● Administrator password 	root VB-C300						
<ul style="list-style-type: none"> ● Settings Page path 	admin						
<ul style="list-style-type: none"> ● Network <ul style="list-style-type: none"> Address Setting Method IP Address Subnet Mask Default Gateway Address Maximum Transmission Unit ● Connection Keeping <ul style="list-style-type: none"> Send Packet Regularly Target IP address Interval (min.) 	Manual Setting 192.168.100.1 255.255.255.0 1500 NO 1						
<ul style="list-style-type: none"> ● Video Settings <ul style="list-style-type: none"> Video Capture Size Video Quality ● Camera Settings <ul style="list-style-type: none"> Shutter Speed Focus Mode Slow Shutter Day & Night Brightness Luminance Sensitivity Enable Digital Zoom Mount Return to Home Position when nobody has a control privilege ● Camera Name <ul style="list-style-type: none"> Camera name 	Medium 3 Auto Auto Not used Manual Darker Low Not used Inverted Not used Camera						
<ul style="list-style-type: none"> ● HTTP Server <ul style="list-style-type: none"> HTTP Port ● Video Server <ul style="list-style-type: none"> Maximum Frame Rate (fps) Restrict Maximum Transmission rate (Mbps) ● Audio Server <ul style="list-style-type: none"> Enable Audio Transmission Input Volume Enable Voice Activity Detection Enable Receive audio Output Volume Disable echo canceller 	80 30(NTSC)/25(PAL) Not restricted Not used 50 Not used Not used 50 Used						
<ul style="list-style-type: none"> ● Authorized User Account <ul style="list-style-type: none"> User list 							
<ul style="list-style-type: none"> ● DNS <ul style="list-style-type: none"> Name Server Address 1 Name Server Address 2 Register Host Name Host Name ● External device 1 <ul style="list-style-type: none"> Device name ● External device 2 <ul style="list-style-type: none"> Device name ● External output device <ul style="list-style-type: none"> Device name ● LED Setting <ul style="list-style-type: none"> Turn the LED OFF 	Not used Not used						

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