

## Network Camera

Operating Instructions

Version 1.4

**SNC-VL10P** 

#### **Owner's Record**

The model and serial numbers are located at the bottom. Record these numbers in the spaces provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No.	
Serial No.	

#### **WARNING**

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

#### For AC Adaptor

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

#### **Important**

Nameplate is located on the bottom.

#### For customers in the U.S.A.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference wll not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

If you have any questions about this product, you may call:

Sony's Business Information Center (BIC) at 1-800-686-7669

or Write to: Sony Customer Information Services Center

6900-29, Daniels Parkway, PMB 330 Fort Myers, Florida 33912

#### **Declaration of Conformity**

Trade Name: SONY Model No: SNC-VL10P

Responsible Party: Sony Electronics Inc.

Address: 680 Kinderkamack Road, Oradell,

NJ 07649 USA

Telephone No: 201-930-6972

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

#### Voor de klanten in Nederland

- Dit apparaat bevat een vast ingebouwde batterij die niet vervangen hoeft te worden tijdens de levensduur van het apparaat.
- Raadpleeg uw leverancier indien de batterij toch vervangen moet worden. De batterij mag alleen vervangen worden door vakbekwaam servicepersoneel.
- Gooi de batterij miet weg maar lever deze in als klein chemisch afval (KCA).
- Lever het apparaat aan het einde van de levensduur in voor recycling, de batterij zal dan op correcte wijze verwerket worden.



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#### **How to Use the Manual**

This manual explains how to operate the SNC-VL10P Network Camera from a client PC.

This manual is written to be read on the computer display.

As this section gives tips on using this manual, read it before you operate the camera.

#### Jumping to the related page

When you read this manual on the computer display, click on the sentence to jump to the related page.

#### Software display examples

Note that the displays shown in this manual are explanatory examples. Some displays may be different from the ones which appear as you operate the application software.

#### **Printing this manual**

Depending on your system, certain displays or illustrations in this manual, when printed out, may differ from those as portrayed on your screen.

#### **Quick Reference (printed matter)**

The supplied Quick Reference describes the names and functions of parts and controls of the Network Camera, connecting examples and how to set up the camera. Be sure to read the Quick Reference before operating.

## Required System Configuration

You will need a computer with the following features to connect to the Network Camera.

#### **CPU**

Pentium® 333 MHz

#### RAM

64 MB

#### OS

Windows 98/ Me/ NT4.0/ 2000

#### Web browser

Internet Explorer Ver. 5.0 or later Netscape Navigator Ver. 4.7 or later of Ver. 4.x-series

#### Note

Netscape Navigator of Ver. 6.x-series or later can also be used, although the Java Applet viewer is necessary.

# In

#### **Precautions**

This Sony product has been designed with safety in mind. However, if not used properly electrical products can cause fires which may lead to serious body injury. To avoid such accidents, be sure to heed the following.

#### Heed the safety precautions

Be sure to follow the general safety precautions and the "Operating Precautions."

#### In case of a breakdown

In case of system breakdown, discontinue use and contact your authorized Sony dealer.

#### In case of abnormal operation

- If the unit emits smoke or an unusual smell,
- If water or other foreign objects enter the cabinet, or
- If you drop the unit or damage the cabinet:
- 1 Disconnect the camera cable and the connecting cables.
- 2 Contact your authorized Sony dealer or the store where you purchased the product.

#### **Operating Precautions**

#### Operating or storage location

Avoid operating or storing the camera in the following locations:

- Extremely hot or cold places (Operating temperature: -10°C to +50°C [14°F to 122°F])
- Exposed to direct sunlight for a long time, or close to heating equipment (e.g., near heaters)
- Close to sources of strong magnetism
- Close to sources of powerful electromagnetic radiation, such as radios or TV transmitters

#### **Transportation**

When transporting the camera, repack it as originally packed at the factory or in materials of equal quality.

#### Cleaning

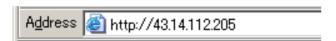
- Use a blower to remove dust from the lens or optical filter.
- Use a soft, dry cloth to clean the external surfaces of the camera. Stubborn stains can be removed using a soft cloth dampened with a small quantity of detergent solution, then wipe dry.
- Do not use volatile solvents such as alcohol, benzene or thinners as they may damage the surface finishes.

#### About the fan

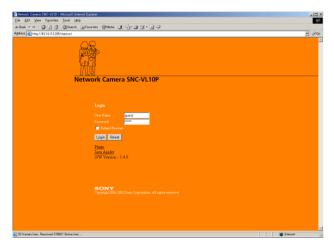
To prevent internal heat buildup, the camera has a builtin fan. If the frame rate of the camera becomes 1 fps although the other frame rate value has been set using the Frame Rate menu on the Web screen, the built-in fan may be damaged. In this case, contact your authorized Sony dealer.

## Logging In to Homepage — Login Page

1 Start the Web browser on the computer and type the IP address of the camera you want to monitor.



The Login page of **Network Camera SNC-VL10P** is displayed.



Type your user name and password in the User Name and Password areas.
If you do not know your user name and password, consult your network administrator.
The user name "guest" and its password are set as default settings. You can monitor the camera images with these settings.

#### 3 Click Login.

If you entered the user name and password that are not for Administrator, the Main Viewer page appears. (See "Configuration of Main Viewer Page" on page 8.)

If you entered the user name and password for Administrator, the Menu page appears. (See "Configuration of Menu Page" on page 14.)

#### Other Functions on Login Page

#### Reset button

Resets to the user name and password before typing.

#### **Behind Firewall check box**

If a firewall is on the network where the camera is installed and you access the camera from outside the firewall, select this check box. Then the "Firewall Viewer" opens to allow you to view the monitor image of the camera. (The same function is available after you logged in, by clicking **Firewall** on the Main Viewer page.)

#### **Plugin**

When you use Netscape Navigator Ver. 4.7 or later of Ver. 4.x-series as a Web browser, click this item to open the "Plugin Download" page to allow you to download the plugin required for the Netscape. (The same function is available after you logged in, by clicking **Plugin** on the Main Viewer page.) For details, see "About Viewers" on page 9.

#### **Java Applet**

When you use an OS other than Windows, such as Macintosh, Linux and UNIX, or Netscape Navigator Ver. 6.x or later, click this item to start the Java Applet viewer. (The same function is available after you logged in, by clicking **Java Applet** on the Main Viewer page.) For details, see "About Viewers" on page 9.

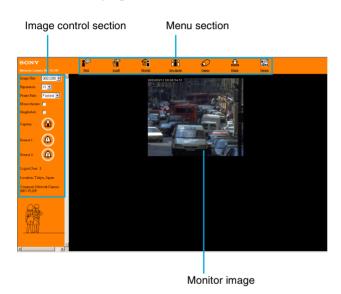
#### S/W Version

Displays the camera software version.

### **Configuration of Main** Viewer Page

When you log in with an access right other than Administrator, the Main Viewer page is displayed. When you log in as Administrator, select Home on the Menu page (page 14) to display the Main Viewer page. This section briefly explains the functions of the parts and controls on the Main Viewer page. For a detailed explanation on each part or control, see the specified pages.

#### Main Viewer page



#### **Menu Section**



#### **FAQ**

Displays the FAQ page.

See "When You Have Trouble — FAQ Page" on page



#### Logoff

Displays the Re-login page.

See "Changing the Access Right — Re-login Page" on page 13.



#### **Firewall**

If a firewall is on the network where the camera is installed and you access the camera from outside the firewall, click this item. Then the "Firewall Viewer"

See "About Viewers" on page 9.



#### **JavaApplet**

When you monitor the camera image with a computer whose OS is not Windows, such as Macintosh, Linux and UNIX, or using Netscape Navigator Ver.6.x or later, click this item. Then the "Java Applet Viewer" opens to allow you to view the monitor image of the camera. See "Controlling the Monitor Image Using the Java Applet Viewer" on page 13.



#### Camera

Displays the Camera Setting page. (The Camera&Sensor access right is required for this function.)

See "Setting the Camera — Camera Setting Page" on page 22.



When you monitor the camera image using Netscape Navigator Ver. 4.7 or later of Ver. 4.x-series, click this item to open the "Plugin Download page."

(Downloading is required only for the first time you access the camera.)

For details, see "About Viewers" on page 9.



#### Version

Displays the camera software version.

#### **Image Control Section**

#### **Image Size**

Selects the image size.

See "Selecting the image size" on page 10.

#### **Expansion**

Selects the image expansion ratio. See "Expanding the image" on page 10.

#### **Frame Rate**

Selects the frame rate to transmit images. See "Selecting the frame rate" on page 10.

#### Monochrome

Select this check box to display the image in monochrome.

See "Displaying the monitor image in monochrome" on page 11.

#### **Singleshot**

Select this check box to freeze the monitor image. See "Freezing the monitor image" on page 11.



Click to capture the monitor image.

See "Capturing the monitor image" on page 11.

### Sensor 1

Click to output an alarm from Output 1 of the Sensor I/O port on the camera.

See "Outputting an Alarm" on page 11.



Click to output an alarm from Output 2 of the Sensor I/O port on the camera.

See "Outputting an Alarm" on page 11.

#### Note

**Sensor 1** and **Sensor 2** are disabled for the users whose access right is **None**.

#### **Logon User**

Displays the number of users currently accessing this camera.

#### Location

Displays the location of the camera.

For setting the location, see "Configuring the System — System Setting Page" on page 15.

#### Comment

Displays the comment.

For setting the comment, see "Configuring the System — System Setting Page" on page 15.

## **Monitoring the Image** from the Camera

#### **About Viewers**

The Network Camera uses Wavelet algorithm to compress and transmit images. Therefore, in order to view images from the camera, you need to download a viewer plugin depending on your Web browser and/or OS.

#### **Using the Internet Explorer**

Active-X Control is necessary. When you log in the camera using the Internet Explorer for the first time, the Active-X Control is automatically downloaded. You do not need to install it. The monitor image automatically appears when you enter the Main Viewer page.

#### Using the Netscape Ver. 4.x-series

You need to download the plugin for Netscape stored in the camera. When you log in the camera using Netscape for the first time, the "Plugin Download" page appears. Click **Download SNC-V10P Plug-in Now!** and follow the instructions on the screen.

#### **Plugin Download page**



## Using an OS other than Windows such as Macintosh, UNIX and Linux or Netscape Navigator Ver. 6.x or later

Java Applet viewer is necessary. When you log in the camera for the first time, click **JavaApplet** on the Login page or the Main Viewer page to start the Java Applet viewer. (See "Controlling the Monitor Image Using the Java Applet Viewer" on page 13)

#### Java Applet Viewer page

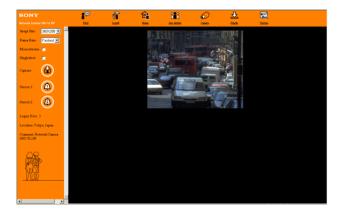


### When there is a firewall on the network where the camera is installed

To monitor the camera image outside the firewall, a Firewall viewer is necessary.

To start the Firewall viewer, select the **Behind Firewall** check box on the Login page, or click **Firewall** on the Main Viewer page.

#### Firewall Viewer page



### **Controlling the Monitor Image from the Image Control Section**

You can control the monitor image from the image control section on the viewer page.

#### Image control section



#### Selecting the image size

Click the down-arrow button in the **Image Size** box and select the image size from the drop-down list:  $720 \times 576$ ,  $720 \times 288$ ,  $360 \times 288$ ,  $180 \times 144$  or  $90 \times 72$ .

#### **Expanding the image**

Click the down-arrow button in the **Expansion** box and select the expansion ratio from the drop-down list:  $\times 1$ ,  $\times 2$ ,  $\times 3$  or  $\times 4$ .

#### **Notes**

- The available expansion ratios depend on the selected image size.
- The expansion ratios cannot be selected when using the Firewall viewer.

#### Selecting the frame rate

Click the down-arrow button in the **Frame Rate** box and select the frame rate with which the images are transmitted, from the drop-down list: **1 fps**, **3 fps**, **5 fps**, **15 fps** or **Fastest**. "fps" indicates the number of frames transmitted per second. With **Fastest**, the camera transmits the maximum number of frames as possible for the connected line. The maximum frame rate is 25 fps.

#### Note

If heat builds up inside the camera, the images are transmitted at 1 fps although another frame rate value is selected in the **Frame Rate** box. In this case, contact your authorized Sony dealer.

Select the **Monochrome** check box. By removing the check mark, the color monitor image is restored.

#### Freezing the monitor image

Select the **Singleshot** check box. The monitor image freezes at the moment you select the check box. By removing the check mark, the monitor image in motion is restored.

#### Capturing the monitor image

Click the Capture icon. The monitor image freezes at that moment and the "Save As" dialog appears. Type the file name, select the file format, specify the destination to which the file is to be stored, and click **Save**.



#### About the file format

You can save images in BMP format (.bmp) or in the Wavelet compression format (.eye). You can view the images saved as in the Wavelet compression format (.eye) using a Web browser. Double-click the file and specify the Web browser from the "Application Selection" dialog, then the image appears.

#### Note

The camera always saves the images in the  $\times 1$ expansion ratio, regardless of the expansion ratio in which the image is displayed on the Web browser.

#### **Outputting an Alarm**

Click the **Sensor 1** or **Sensor 2** icon.

When you click **Sensor 1**, the alarm set for output 1 of the Sensor I/O port located on the rear panel of the camera is output. When you click **Sensor 2**, the alarm set for output 2 of the Sensor I/O port is output.

The alarm setting is made by the Administrator. See "Configuring the Sensor I/O Port — Sensor I/O Setting Page" on page 27.

#### Note

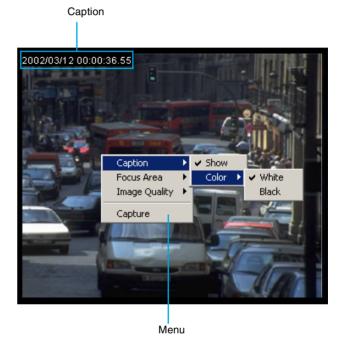
**Sensor 1** and **Sensor 2** are disabled for the users whose access right is None.

#### **Controlling the Monitor Image** Using the Menu

When you right-click on the monitor image, the image control menu appears.

#### Caption

Specifies the caption on the monitor image.



#### Show

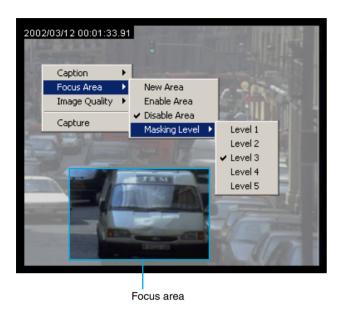
Enables or disables the caption display. Click **Show** to show the check mark to display the caption. Click it again to remove the check mark to make the caption disappear.

#### Color

Selects the caption color. When you click White to show the check mark, the caption is displayed with white letters on a black background. When you select **Black**, the caption is displayed with black letters on a white background.

#### **Focus Area**

Use this function to focus on a portion of the monitor image by masking over the other portion. The focused portion is called "forcus area." By masking the image, the transmitting data size reduces and a higher frame rate is obtained.



#### **New Area**

To determine a new focus area on the image, click **New Area**. Then drag the mouse to make a dotted frame on the area you want to set as the focus area and left-click. A new focus area is now set.

#### **Enable Area**

Click **Enable Area** to show the check mark to enable the focus area and mask over the non-focus area.

#### **Disable Area**

Click **Disable Area** to show the check mark to remove the masking and resume the normal image.

#### **Masking Level**

Selects the masking level from **Level 1** to **Level 5**. A higher masking level gives a larger masking density and higher frame rate.

#### Note

Some of the focus area functions might not be operative depending on the viewer in use.

#### **Image Quality**

Selects the image quality from **Level 0** to **Level 9**. A higher level gives a higher quality image but the frame rate becomes lower.



#### Note

**Image Quality** does not appear in the menu when you view the monitor image using the Firewall viewer.

#### Capture

When you click **Capture**, the monitor image freezes and the "Saving" dialog appears. Type the file name, select the file format, specify the destination to which the file is to be stored, and click **Save**.

This function is the same as when you click the **Capture** icon on the image control section. (See "Capturing the monitor image" on page 11.)

#### Note

**Capture** does not appear in the menu when you view the monitor image using the Java Applet viewer.

### **Controlling the Monitor Image Using the Java Applet Viewer**

When you use an OS other than Windows, such as Macintosh, UNIX and Linux, click **JavaApplet** on the Login page or the Main Viewer page. The Java Applet viewer starts.

The image control section of the Java Applet viewer is located at the bottom.



Functions of the image control section

#### **Connect/Disconnect**

To display the monitor image, click **Connect** and type the user name and password in the dialog.

Click **Disconnect** to stop transmitting the image from the camera.

#### Image Size

Selects the image size.

See "Selecting the image size" on page 10.

#### **Expansion**

Selects the image expansion ratio.

See "Expanding the image" on page 10.

#### Monochrome

Check to display the image in monochrome.

See "Displaying the monitor image in monochrome" on page 11.

## Changing the Access Right — Re-login Page

Click **Logoff** in the menu control section of the viewer, and the Re-login page is displayed.

Use this page when you want to log in the camera again as a user with a different access right or as Administrator.

To log in, type the user name and password, then click **Login**.



### When You Have Trouble

#### — FAQ Page

Click **FAQ** in the menu control section of the viewer, and the FAQ page is displayed.

There are answers to frequently asked questions on the FAQ page. Use this page when you have trouble with the camera.

#### Settings by Administrator

## Logging in as Administrator

If you log in as Administrator, you can perform all the settings of the software.

To log in as Administrator, operate as follows:

- **1** Display the Login page or the Re-login page.
- Type the user name and password for Administrator in the User Name and Password boxes.

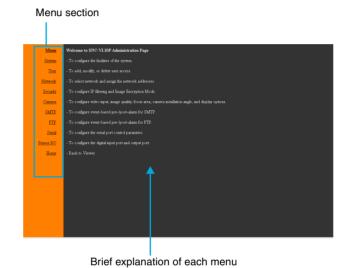
  The user name "admin" and the password "admin" are set as default settings for Administrator. We recommend that you change them on the User Setting page.
- Click Login.The Menu page appears.See "Configuration of Menu Page" on page 14.

## **Configuration of Menu Page**

When you log in as Administrator, **Welcome to SNC-VL10P Administration Page** (Menu page) is displayed.

This section briefly explains the functions of the parts and controls on the Menu page. For a detailed explanation on each part or control, see the specified pages.

#### Menu page



Menu section

Click on each menu name to display the setting page. As the menu section is displayed on each setting page, you can switch the setting page from any of them.

#### Menu

Displays the Menu page when you click it on one of the setting pages.

#### **System**

Displays the System Setting page. See "Configuring the System — System Setting Page" on page 15.

#### User

Displays the User Setting page. See "Setting the User — User Setting Page" on page 16.

#### **Network**

Displays the Network Setting page. See "Configuring the Network — Network Setting Page" on page 17.

#### **Security**

Displays the Security Setting page.

See "Setting the Security — Security Setting Page" on page 21.

#### Camera

Displays the Camera Setting page.

See "Setting the Camera — Camera Setting Page" on page 22.

#### **SMTP**

Displays the SMTP Setting page.

See "Sending Images via E-mail at Alarm — SMTP Setting Page" on page 23.

#### **FTP**

Displays the FTP Setting page.

See "Sending Images to FTP Server at Alarm — FTP Setting Page" on page 25.

#### Serial

Displays the Serial Setting page.

See "Configuring the Serial Port — Serial Setting Page" on page 26.

#### Sensor I/O

Displays the Sensor I/O Setting page. See "Configuring the Sensor I/O Port — Sensor I/O Setting Page" on page 27.

#### Home

Displays the viewer page.

See "Monitoring the Image from the Camera" on page 9.

### To return to the Menu page from the viewer page

Click **Logoff** to display the Re-login page and log in as Administrator again.

#### **Buttons common to every setting page**

The following buttons are displayed on every setting page.



#### vlaaA

Click this button to make the values set on the current setting page valid. When "Applied, OK" window appears, click **OK** to make the set values valid.

#### Cancel

Click this button to make the set values invalid and restore the previous settings.

#### Help

Click this button to display the help regarding the current setting page.

## Configuring the System — System Setting Page

When you click **System** in the menu section, the System Setting page appears.

Use this page to perform the principal settings of the software.



#### **Serial Number**

Displays the serial number of the camera.

#### **SW Version**

Displays the camera software version.

#### Installation Location

Type the installation location of the camera that you want to show on the **Location** area of the viewer page.

#### **Additional Comment**

Type a comment you want to show on the **Comment** area of the viewer page.

#### **Date & Time Format**

Select the format of date and time to be displayed as a caption on the monitor image from the drop-down list. Select **yyyy-mm-dd** (year-month-day), **mm-dd-yyyy** (month-day-year), or **dd-mm-yyyy** (day-month-year).

#### **SNC-VL10P Current Date&Time**

Displays the date and time set on the camera. You can set the date and time using the following three methods.

#### System(PC) Current Date&Time

Displays the date and time set on your computer. When you want to synchronize the camera's date and time with the date and time setting of the computer, operate as follows:

Click **Time Synchronization**, and "Applied, OK" window appears. Click **OK** to change the date and time on **SNC-VL10P Current Date& Time** to the date and time setting of the computer.

#### **Manual Date&Time Setting**

When you want to set the camera's date and time manually, operate as follows:

Type the date and time you want to set for the camera and click **Time Synchronization**. "Applied, OK" window appears. Click **OK** to change the date and time on **SNC-VL10P Current Date&Time** to the date and time you typed.

#### **Time Zone Selecting**

When you want to set the camera's date and time to the time in the area where the camera is installed, select the camera location from the drop-down list.

#### The Number of Supported Clients

Type the maximum number of clients (1 to 100) that can log in this camera at the same time.

#### **Factory Default**

Resets to the factory settings.

Click **Factory Setting**, and "All configuration information will be initialized as factory setting. Are you sure?" appears. Click **OK** to reset to the factory settings.

#### Note

The following settings cannot be reset with this operation: Date and time on the System Setting page, and IP Address, Subnet Mask, Broadcast Address and Default Gateway on the Network Setting page.

#### Reboot

Reboots the camera.

Click **Reboot**, and "The SNC-VL10P will be rebooted. Are you sure?" appears. Click **OK** to reboot the camera.

#### Note

If the setting page cannot be displayed after you have clicked **Reboot**, refresh the Web browser window. The Menu page is displayed.

#### Apply/Cancel/Help

See "Buttons common to every setting page" on page 15.

## Setting the User — User Setting Page

When you click **User** in the menu section, the User Setting page appears.

Use this page to set the user names and passwords of Administrator and up to five kinds of users (User 1 to User 5), and the access right of each user.



#### **User Account**

Type a user name up to 9 characters.

#### **Password**

Type a password up to 9 characters.

#### **Re-Type Password**

To confirm the password, type the same characters as those you typed in the Password box.

If you re-type an incorrect character, "Password is different with Re-Typed Password" will appear when you click **Apply** later. In this case, click **OK** to cancel the message and re-type the correct password.

#### **Access Rights**

Select the access right for each user from the drop-down list.

#### None

Allows only monitoring of the camera image on the viewer page, including the operations of the monitor image.

#### Sensor

Allows monitoring of the camera image and alarm output by clicking **Sensor 1** and **Sensor 2** on the viewer page.

#### Camera&Sensor

Allows monitoring of the camera image and alarm output by clicking **Sensor 1** and **Sensor 2** on the viewer page, and setting the camera on the Camera Setting page.

The access right for Administrator is fixed to **All**, allowing access to all the functions of the software.

#### **Auto Login**

Allows direct logging in the camera without displaying the Login page, affording the access right for the user specified in **Auto Login User** box.

Select **Enable** to enable the Auto Login function; **Disable** to disable it.

#### **Auto Login User**

Select the user for the Auto Login function from the drop-down list: **User 1** to **User 5**. When Auto Login is set to **Enable**, the user with the access right specified here can log in the camera.

#### Apply/Cancel/Help

See "Buttons common to every setting page" on page 15.

### Configuring the Network

#### — Network Setting Page

When you click **Network** in the menu section, the Network Setting page appears.

Use this page to configure the network to connect the camera and the computer.

You can configure four types of network: LAN, Cable (Cable Modem), xDSL (Digital Subscriber Line) and PSTN (conventional analog telephone line). The third menu on the Network Setting page will change automatically according to the selected network type.

#### Common Items



#### **Web Server Port Setting**

Type the TCP port number (1 to 65535) used to access the camera and for the camera to transmit the data. The default setting is 80.

#### **Video Server Port Setting**

Type the TCP port number (1 to 65535) used for the camera to transmit the shot images. The default setting is 8080.

#### Note

You cannot set the same port number for both the Web Server Port and the Video Server Port.

#### Select Network Interface

Select the network interface you use. By changing the network interface setting, the third menu on this page will change automatically.

#### LAN

Select this option when you use LAN (Local Area Network).

See page 18 for LAN setting.

#### Cable

Select this option when you use a Cable Modem (Cable Internet).

See page 19 for Cable Modem setting.

#### xDSL

Select this option when you use a Digital Subscriber Line such as ADSL, VDSL and SDSL. See page 19 for xDSL setting.

#### **PSTN**

Select this option when you use a conventional analog telephone line.

See page 20 for PSTN setting.

#### LAN

This menu is displayed when Select Network Interface is set to LAN.



#### **DHCP Client Protocol**

Select **Enable** when you use the DHCP server; **Disable** when you do not use it.

When you select **Enable**, an IP address is assigned to the camera automatically.

#### **IP Address**

Type the IP address of the camera. When you have set up the camera using the supplied setup program, the IP address is automatically displayed here.

#### **Subnet Mask**

Type the subnet mask.

#### **Broadcast Address**

Type the broadcast address.

When you click **Get From Subnet Mask**, the broadcast address is automatically set according to the **Subnet Mask** value.

#### **Default Gateway**

Type the default gateway.

#### **MAC Address**

Displays the MAC address of the camera.

#### **Select MTU Size**

Select the MTU (Maximum Transmission Unit) from the drop-down list: 1500 Bytes, 1300 Bytes, 1100 Bytes, 900 Bytes, 700 Bytes or 500 Bytes.

#### **DNS1 Server IP Address**

Type the IP address of DNS1 (Domain Name Server 1).

#### **DNS2 Server IP Address**

Type the IP address of DNS2 (Domain Name Server 2), if necessary.

#### **DNS3 Server IP Address**

Type the IP address of DNS3 (Domain Name Server 3), if necessary.

#### Apply/Cancel/Help

#### **Cable Modem**

This menu is displayed when Select Network Interface is set to **Cable**.

For setting the items in the LAN menu, see "LAN" on page 18.



#### **MAC Address**

Displays the MAC address of the camera.

#### **User ID**

Type the user ID for Internet connection.

#### **Password**

Type the password for Internet connection.

#### Apply/Cancel/Help

See "Buttons common to every setting page" on page 15.

#### **xDSL** Interface

This menu is displayed when Select Network Interface is set to **xDSL**.

For setting the items in the LAN menu, see "LAN" on page 18.



#### **Network Type**

Select if PPPoE (Point-to-Point Protocol over Ethernet) is used or not.

Select **PPPoE** when you use the PPPoE; **Ethernet** when you do not use it.

#### **MAC Address**

Displays the MAC address of the camera.

#### **User ID**

Type the user ID for Internet connection.

#### **Password**

Type the password for Internet connection.

#### Apply/Cancel/Help

#### **PSTN** Interface

This menu is displayed when Select Network Interface is set to **PSTN**.

For setting the items in the LAN menu, see "LAN" on page 18.



#### **MAC Address**

Displays the MAC address of the camera.

#### **User ID**

Type the user ID for Internet connection.

#### **Password**

Type the password for Internet connection.

#### **Phone Number**

Type the telephone number of the ISP access point.

#### **Connection Timeout For Idle Traffic**

Type the duration (in seconds) so that the telephone line is disconnected automatically if there is no data communication during the specified duration.

#### **Dial Tone**

Select the dialing type of the telephone line: **Tone** or **Pulse**.

#### **Script Enable**

Sets if a specified script is required for logging in or not. Select **Enable** when you use a script; **Disable** when you do not use it.

#### **Login Script**

Select the login script from the drop-down list: End, Wait For, Wait For Prompt, Send, Send CR, Send User ID, Send Password or Delay, and type a required script in the box on the right.

#### Apply/Cancel/Help

When you click **Security** in the menu section, the Security Setting page appears.

Use this page to limit the computers that can access the camera or display the monitor image.



#### **IP/Subnet Filtering Mode**

Limits access to the camera by the IP address and subnet.

#### Disable/Enable

Select **Enable** when you want to limit the access to the camera, or **Disable** when you do not want to limit the access.

To set a limit, use the following items.

#### **Default Policy**

Select the basic policy of the limit from **Allow** and **Deny**.

If you select **Allow**, you will basically allow access to the camera, and only deny access to the camera from the computers having the IP addresses specified on **IP/ Subnet Client Address 0 to 9** below. If you select **Deny**, you will basically deny access to the camera, and allow access to the camera from the computers having the IP addressed specified below only.

#### IP/Subnet Client Address 0 to 9

Type the IP addresses and subnet addresses you want to allow or deny access to the camera. You can specify up to 9 IP addresses and subnet addresses. For a subnet address, type 0 to 32.

To temporarily cancel the Default Policy for an IP address/subnet, select **Allow** or **Deny** from the dropdown list on the right.

#### **Image Encryption Mode**

Limits the display of the monitor image by the image encryption.

#### Disable/Enable

Select **Enable** when you want to encrypt the image, or **Disable** when you do not want to perform the encryption.

#### **Encryption PIN Number**

Type a PIN (Personal Identification Number) to allow displaying the monitor image of up to 11 characters. When **Image Encryption Mode** is set to **Enable**, a dialog to request the input of the PIN number appears when a user logs in the camera, returns to the viewer page from the FAQ or Version page or enters the Camera Setting page. The user can view the monitor image by typing the PIN number specified here.

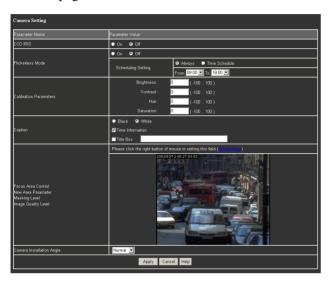
#### Apply/Cancel/Help

## Setting the Camera — Camera Setting Page

(The users having the "Camera&Sensor" access right can also access this page.)

When you click **Camera** in the menu section, the Camera Setting page appears.

Use this page to set the functions of the camera.



#### **CCD IRIS**

Turns on/off the CCD IRIS function which automatically adjusts the luminance level for optimum image output level. If you select **On**, the CCD IRIS function automatically adjusts the shutter speed to cut exposure when incoming light is excessive.

#### Flickerless Mode

Select **On** to enable the flicker canceller function (flickerless mode) to reduce flicker under fluorescent light. Select **Off** to disable the flickerless mode.

#### Note

You cannot select **On** for both CCD IRIS and Flickerless Mode simultaneously.

#### **Scheduling Setting**

Set the time when the flicker canceller function is activated.

Select **Always** to always activate the flicker canceller function. To restrict the time to activate the flicker canceller function, select **Time Schedule**, and select the start time (00:00 to 23:00) from the **From** drop-down list, and the end time (01:00 to 24:00) from the **To** drop-down list.

#### **Calibration Parameters**

Adjusts the image from the camera. Type the adjustment value in each box. The adjustment range for each item is displayed on the right of the box.

#### **Brightness**

Adjust the brightness.

#### Contrast

Adjust the contrast.

#### Hue

Adjust the hue.

#### Saturation

Adjust the saturation.

#### Caption

Specifies the caption to be displayed on the upper-left of the monitor image.

#### Black/White

Selects the caption color. When you select **White**, the caption is displayed with white letters on a black background. When you select **Black**, the caption is displayed with black letters on a white background.

#### **Time Information**

To display the date and time in the caption, select this check box.

You can specify the format of date and time with **Date** & Time Format on the System Setting page.

#### Title Box

To display a title in the caption, select this check box and type your desired title in the text box on the right. You can enter up to 128 characters, but some of the entered characters may not be displayed, depending on the image size.

#### Focus Area Control/New Area Parameter/ Masking Level/Image Quality Level

If you right-click on the monitor image displayed here, a menu appears to allow access to various settings. The menu items are the same as those in the menu displayed when you right-click on the monitor image in the viewer. (See "Controlling the Monitor Image Using the Menu" on page 11.)

#### Caption

**Show:** Enables or disables the caption display. Click to show the check mark to display the caption. Click it again to remove the check mark to make the caption disappear.

**Color:** Selects the caption color. Click to show the check mark on **White** to display the caption with white letters on a black background. Click to show the check

mark on **Black** to display the caption with black letters on a white background.

#### **Focus Area**

Use this function when you want to focus on a portion of the monitor image by masking over the other portion. The focused portion is called "focus area." With masking, the transmitting data size reduces and a higher frame rate is obtained.

**New Area:** Click to show the check mark to determine a new focus area on the image. Drag the mouse to make a dotted frame on the area you want to set as the focus area and left-click. A new focus area is now set.

**Enable Area:** Click to show the check mark to enable the predetermined focus area and mask over the non-focus area.

**Disable Area:** Click to show the check mark to remove the masking and resume the normal image.

Masking Level: Select the masking level from Level 1 to Level 5. A higher masking level gives a larger masking density and higher frame rate.

#### **Image Quality**

Selects the image quality from **Level 0** to **Level 9**. A higher level gives a higher quality image but the frame rate becomes lower.

#### Capture

When you click **Capture**, the monitor image freezes and the "Saving" dialog appears. Type the file name, select the file format, specify the destination to which the file is to be stored, and click **Save**.

This function is the same as when you click the **Capture** icon on the image control section. (See "Capturing the monitor image" on page 11.)

#### **Camera Installation Angle**

Rotates the monitor image according to the camera angle.

Select **Normal**, **90 deg**, **180 deg**, or **270 deg** from the drop-down list.

#### Note

The monitor image output from the VIDEO OUT connector (composite output) cannot be rotated.

#### Apply/Cancel/Help

See "Buttons common to every setting page" on page 15.

### Sending Images via Email at Alarm

#### — SMTP Setting Page

When you click **SMTP** in the menu section, the SMTP Setting page appears.

Use this page to set up for sending monitor images attached to an E-mail



#### **Recipient Email Address**

Type a recipient E-mail address in each box. You can set two E-mail addresses.

#### Sender Email Address

Type the sender (camera) E-mail address in the box.

#### **Options**

#### **Use Relay-Email-Server**

When you want to send E-mails passing through a specified server, select this check box and type the server name in the box.

#### **Content-Encoding-Type**

Selects the format with which the image data attached to E-mails are encoded. Select **Quoted Printable** or **Base64** from the drop-down list.

#### **Email Event**

Set the trigger with which you send E-mails. You can select one or more trigger(s) from among Activity Detection (AD), Sensor Input (SI) and Periodic Sending (PS).

#### **Activity Detection (AD)**

Select this check box to send an E-mail when an alarm triggered by the activity detection is output. You can set the time and the frame rate to save images to be attached to the E-mail in the boxes below.

Setting example: To save images during the period of time between 2 seconds before and 2 seconds after the alarm, with a frame rate of 3 fps.

**Pre-Alarm Time:** Select from the drop-down list the time in seconds you want to save images before an alarm output. (0 to 5 seconds can be set.)

**Pre-Alarm Frame Rate:** Select from the drop-down list the frame rate with which you want to save images before an alarm output. (1 to 5 fps can be set.)

**Post-Alarm Time:** Select from the drop-down list the time in seconds you want to save images after an alarm output. (0 to 5 seconds can be set.)

**Post-Alarm Frame Rate:** Select from the drop-down list the frame rate with which you want to save images after an alarm output. (1 to 5 fps can be set.)

#### Sensor Input (SI)

Select this check box to send an E-mail when an alarm triggered by the sensor input is output. You can set the time and the frame rate to save images to be attached to the E-mail in the boxes below.

**Pre-Alarm Time:** Select from the drop-down list the time in seconds you want to save images before an alarm output. (0 to 5 seconds can be set.)

**Pre-Alarm Frame Rate:** Select from the drop-down list the frame rate with which you want to save images before an alarm output. (1 to 5 fps can be set.)

**Post-Alarm Time:** Select from the drop-down list the time in seconds you want to save images after an alarm output. (0 to 5 seconds can be set.)

**Post-Alarm Frame Rate:** Select from the drop-down list the frame rate with which you want to save images after an alarm output. (1 to 5 fps can be set.)

#### Periodic Sending (PS)

Select this check box to send E-mails with images attached periodically regardless of alarm output.

Setting example: To send an E-mail with images attached every hour

**Interval:** Type the interval at which you want to send Emails in the boxes. You can set the hour (H) between 0 and 168, and the minutes (M) between 0 and 55 in units of 5 minutes.

#### Image Size

Displays the size of the image to be attached to an E-mail. It is fixed to  $360 \times 288$ .

#### **Naming Method**

Set the form of naming the image file to be attached to an E-mail. Select the check box(es) you want to add to the file name.

#### **Date & Time Suffix**

Adds the date and time to the file name.

#### **Alarm Sensor**

Adds the alarm mode to the file name.

**AD:** if the image is sent at the time of an alarm triggered by the activity detection.

**SI:** if the image is sent at the time of an alarm triggered by the sensor input.

**PS:** if the image is sent by Periodic Sending.

#### **SEQ** suffix

Adds consecutive numbers, 000 to 999, to the file name. The number is reset to 000 when you click **Apply** on the SMTP Setting page.

#### **Manual Assigned Name**

Type the file name up to 36 characters.

#### **Suffix**

Displays an extension ".eye." The image is always sent in the Wavelet compressed format and ".eye" is added to its file name.

#### The example of a display

An example of the form you have set is displayed when you click **Apply**.

#### **Subject Message Box**

Type the title of the E-mail up to 64 characters.

#### **Body Message Box**

Type the text of the E-mail up to 255 characters.

#### Apply/Cancel/Help

## **Sending Images to FTP Server at Alarm**

#### - FTP Setting Page

When you click **FTP** in the menu section, the FTP Setting page appears.

Use this page to set up for sending monitor images to an FTP (File Transfer Protocol) server. You can specify two FTP servers.



#### FTP Server 1

Set the information of FTP server 1 in the boxes.

#### Address

Type the host address of FTP server 1.

#### User ID

Type the user ID for FTP server 1.

#### **User Password**

Type the user password for FTP server 1.

#### **Pathname**

Type the default path for FTP server 1.

#### FTP Server 2

Set the information of FTP server 2 in the boxes.

#### **Address**

Type the host address of FTP server 2.

#### **User ID**

Type the user ID for FTP server 2.

#### **User Password**

Type the user password for FTP server 2.

#### **Pathname**

Type the default path for FTP server 2.

#### **FTP Event**

Set the trigger with which you send images to the FTP server(s). You can select one or more trigger(s) from among Activity Detection (AD), Sensor Input (SI) and Periodic Sending (PS).

#### **Activity Detection (AD)**

Select this check box to send images to the FTP server(s) when an alarm triggered by the activity detection is output. You can set the time and the frame rate to save images to be sent to the FTP server(s) in the boxes below.

Setting example: To save images during the period of time between 2 seconds before and 2 seconds after the alarm, with a frame rate of 3 fps.

**Pre-Alarm Time:** Select from the drop-down list the time in seconds you want to save images before an alarm output. (0 to 5 seconds can be set.)

**Pre-Alarm Frame Rate:** Select from the drop-down list the frame rate with which you want to save images before an alarm output. (1 to 5 fps can be set.)

**Post-Alarm Time:** Select from the drop-down list the time in seconds you want to save images after an alarm output. (0 to 5 seconds can be set.)

**Post-Alarm Frame Rate:** Select from the drop-down list the frame rate with which you want to save images after an alarm output. (1 to 5 fps can be set.)

#### Sensor Input (SI)

Select this check box to send images to the FTP server(s) when an alarm triggered by the sensor input is output. You can set the time and the frame rate for saving images in the boxes below.

**Pre-Alarm Time:** Select from the drop-down list the time in seconds you want to save images before an alarm output. (0 to 5 seconds can be set.)

**Pre-Alarm Frame Rate:** Select from the drop-down list the frame rate with which you want to save images before an alarm output. (1 to 5 fps can be set.)

**Post-Alarm Time:** Select from the drop-down list the time in seconds you want to save images after an alarm output. (0 to 5 seconds can be set.)

**Post-Alarm Frame Rate:** Select from the drop-down list the frame rate with which you want to save images after an alarm output. (1 to 5 fps can be set.)

#### Periodic Sending (PS)

Select this check box to send images to the FTP server(s) periodically regardless of alarm output.

Setting example: To send images to the FTP server(s) every hour

**Interval:** Type the interval at which you want to send images to the FTP server(s) in the boxes. You can set the hour (H) between 0 and 168, the minutes (M) between 0 and 59, and the seconds between 0 and 55 in units of 5 seconds.

#### **Image Size**

Displays the size of the image to be sent to the FTP server(s). It is fixed to  $360 \times 288$ .

#### **Naming Method**

Set the form of naming the image file to be sent to the FTP server(s). Select the check box(es) you want to add to the file name.

#### **Date & Time Suffix**

Adds the date and time to the file name.

#### **Alarm Sensor**

Adds the alarm mode to the file name.

**AD:** if the image is sent at the time of an alarm triggered by the activity detection.

**SI:** if the image is sent at the time of an alarm triggered by the sensor input.

**PS:** if the image is sent by Periodic Sending.

#### **SEQ** suffix

Adds consecutive numbers, 000 to 999, to the file name. The number is reset to 000 when you click **Apply** on the FTP Setting page.

#### **Manual Assigned Name**

Type the file name up to 36 characters.

#### **Suffix**

Displays an extension ".eye." The image is always sent in the Wavelet compressed format and ".eye" is added to its file name.

#### The example of a display

An example of the form you have set is displayed when you click **Apply**.

#### Apply/Cancel/Help

See "Buttons common to every setting page" on page 15.

## Configuring the Serial Port — Serial Setting Page

When you click **Serial** in the menu section, the Serial Setting page appears.

Use this page to configure the RS485/232C serial port on the rear panel of the camera.



#### Serial Port Selection

Select the protocol for the serial port from the dropdown list. The selected protocol is automatically displayed in **Port Device Name**.

#### Serial#1

Select this option when using RS-232C protocol.

#### Serial#2

Select this option when using RS-485 protocol.

#### **Port Device Name**

Displays the setting of **Serial Port Selection**.

#### Serial Transport

Select from the drop-down list, **On** to enable the RS485/232C port, or **Off** to disable it.

#### Apply/Cancel/Help

## Configuring the Sensor I/O Port

#### — Sensor I/O Setting Page

When you click **Sensor I/O** in the menu section, the Sensor I/O Setting page appears.

Use this page to configure the Sensor I/O port on the rear panel of the camera.

## **Upper Half of Sensor I/O Setting Page**



#### **Activity Detection (AD)**

Set up the activity detection that detects movement in the image shot by the camera.

#### **Available Alarm Events**

Select **Enable** if you want to output an alarm when movement is detected, or **Disable** if you do not want to output an alarm.

#### Scheduling

Using the boxes below, you can set up to 6 schedules on which the activity detection works.

Select **Enable** to enable all the schedules whose check boxes you have selected, or **Disable** to disable them.

#### Scheduling 1 to Scheduling 6

For each schedule, type the time in hours and minutes when the activity detection starts and ends, and select the check box(es) of the working days of the week. To enable each schedule you have set, select the check box on the left of **Scheduling**. You can select multiple schedules.

#### **Activity Detection Threshold**

Select the sensitivity of activity detection: **Low**, **Mid**, **High**, **Super** or **Hyper**.

The highest sensitivity is given by **Hyper**, which can detect the smallest movement.

#### **Showing Pop-up**

You can set for displaying "AD" (Activity Detection) pop-up on the lower-right of the monitor image when an alarm output is detected.

Select **On** to show a pop-up, or **Off** not to show it.

#### Output 1

Set up Output 1 of the Sensor I/O port. Output 1 can output an alarm triggered by the activity detection or manually.

#### **Output Status Control**

Select **Active** to keep Output 1 of the Sensor I/O port usually open and close it only when an alarm is output. Select **De-Active** to keep Output 1 usually closed and open it only when an alarm is ouput.

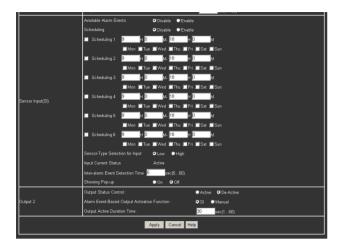
#### **Alarm Event-Based Output Activation Function**

Select **AD** to synchronize the output from Output 1 of the Sensor I/O port with an alarm by the activity detection, or **Manual** to output manually by clicking the Sensor 1 button on the viewer page.

#### **Output Active Duration Time**

Type the duration of the output from Output 1 between 1 and 60 seconds.

### Lower Half of Sensor I/O Setting Page



#### Sensor Input (SI)

Set up the sensor input, that is, the input to the Sensor I/O port on the rear panel of the camera.

#### **Available Alarm Events**

Select **Enable** if you want to output an alarm when the input to the Sensor I/O port is detected, or **Disable** if you do not want to output an alarm.

#### Schedulina

Using the boxes below, you can set up to 6 schedules on which the sensor input works.

Select **Enable** to enable all the schedules whose check boxes you have selected, or **Disable** to disable them.

#### Scheduling 1 to Scheduling 6

For each schedule, type the time in hours and minutes when the sensor input starts and ends, and select the check box(es) of the working days of the week. To enable each schedule you have set, select the check box on the left of **Scheduling**. You can select multiple schedules.

#### **Sensor-Type Selection for Input**

Select the level of the input which can be used to trigger an alarm: **Low** or **High**.

#### **Input Current Status**

Displays the current status of the device connected to the input of the Sensor I/O port.

#### **Inter-alarm Event Detection Time**

Type the duration, between 5 and 60 seconds, during which the camera can detect the next alarm input.

#### **Showing Pop-up**

You can set for displaying "SI" (Sensor Input) pop-up on the lower-right of the monitor image when an alarm output is detected.

Select **On** to show a pop-up, or **Off** not to show it.

#### Output 2

Set up Output 2 of the Sensor I/O port. Output 2 can output an alarm triggered by the sensor input or manually.

#### **Output Status Control**

Select **Active** to keep Output 2 of the Sensor I/O port usually open and close it only when an alarm is output. Select **De-Active** to keep Output 2 usually closed and open it only when an alarm is ouput.

#### Alarm Event-Based Output Activation Function

Select **SI** to synchronize the output from Output 2 of the Sensor I/O port with an alarm by the sensor input, or **Manual** to output manually by clicking the Sensor 2 button on the viewer page.

#### **Output Active Duration Time**

Type the duration of the output from Output 2 between 1 and 60 seconds.

#### Apply/Cancel/Help

### **Assigning the IP Address to the Camera Using ARP Commands**

This section explains how to assign an IP address to the camera using ARP (Address Resolution Protocol) commands without using the supplied setup program.

For the use of the setup program, see "Assigning the IP address to the Camera" in the supplied Quick Reference.

#### **Using ARP Commands on** Windows 98, NT and 2000

Open a DOS window and enter the IP address and the MAC address of the camera you want to assign a new IP address to, using the following commands.

Arp -s <SNC-VL10P IP address> <SNC-VL10P MAC address> Ping -t <SNC-VL10P IP address>

#### **Example:**

Arp -s 192.168.1.3 00-40-8c-10-00-86 Ping -t 192.168.1.3

#### **Using ARP Commands on** Windows 95

Open a DOS window and enter the IP address and the MAC address of the camera you want to assign a new IP address to, and the IP address of your computer, using the following commands.

Arp -s <SNC-VL10P IP address> <SNC-VL10P MAC address> <your PC IP address> Ping <SNC-VL10P IP address>

#### **Example:**

Arp -s 192.168.1.3 00-40-8c-10-00-86 192.168.1.2 Ping -t 192.168.1.3

#### Confirming the Setup

If the IP address is successfully assigned, a message similar to the following will appear on the screen.

Request timed out Request timed out Reply from 192.168.1.3: bytes=32 time=2ms TTL=255 Reply from 192.168.1.3: bytes=32 time=2ms TTL=255 Ping statistics for 192.168.1.3:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milliseconds;

Minimum = 1ms, Maximum = 2ms, Average = 1ms

## **Connecting the Camera** to a Network

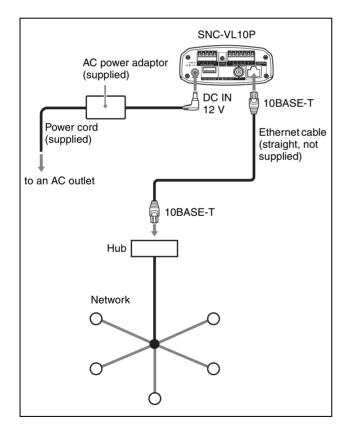
This section explains how to connect the camera to a network using various interfaces.

### Connecting to a Local Network (LAN)

1 Select Ethernet in the setup program or select LAN on Select Network Interface on the Network Setting page for the Administrator, and set the items for the LAN connection.

For details on the settings, see "LAN" on page 18. For the use of the setup program, see "Assigning the IP Address Using the Setup Program" in the supplied Quick Reference.

**2** Connect the camera to the network as follows:



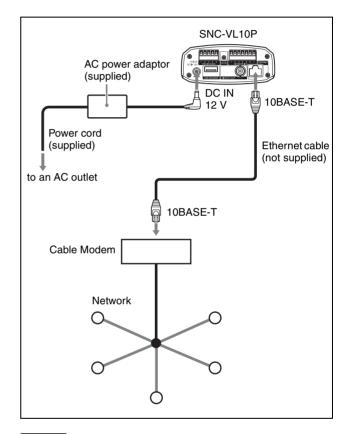
#### **Connection Using a Cable Modem**

1 Select Cable Modem in the setup program or select Cable on Select Network Interface on the Network Setting page for the Administrator, and set the items for the cable modem connection.

For details on the settings, see "Cable Modem" on page 19.

For the use of the setup program, see "Assigning the IP Address Using the Setup Program" in the supplied Quick Reference.

**2** Connect the camera to the network as follows:



#### Notes

- For details on the cable modem connection, refer to the operation manual of the modem.
- For required connection settings, check with your ISP.



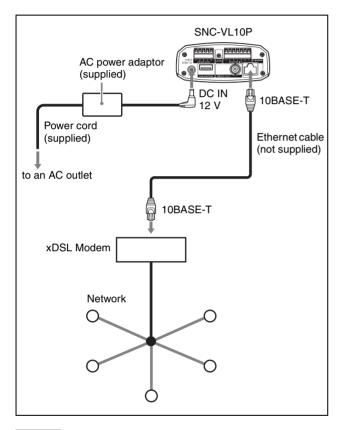
# Ott

#### Connection Using an xDSL Modem

1 Select xDSL (PPPoE) in the setup program or select xDSL on Select Network Interface on the Network Setting page for the Administrator, and set the items for the xDSL modem connection. For details on the settings, see "xDSL Interface" on page 19.

For the use of the setup program, see "Assigning the IP Address Using the Setup Program" in the supplied Quick Reference.

**2** Connect the camera to the network as follows:



#### Notes

- For details on the xDSL modem connection, refer to the operation manual of the modem.
- For required connection settings, check with your ISP.

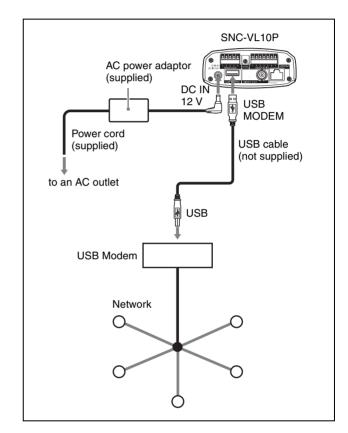
#### **Connection Using a USB Modem**

1 Select **PSTN** in the setup program or select **PSTN** on Select Network Interface on the Network Setting page for the Administrator, and set the items for the USB modem connection.

For details on the settings, see "PSTN Interface" on page 20.

For the use of the setup program, see "Assigning the IP Address Using the Setup Program" in the supplied Quick Reference.

**2** Connect the camera to the network as follows:



#### Notes

- For details on the USB modem connection, refer to the operation manual of the modem.
- For required connection settings, check with your ISP.

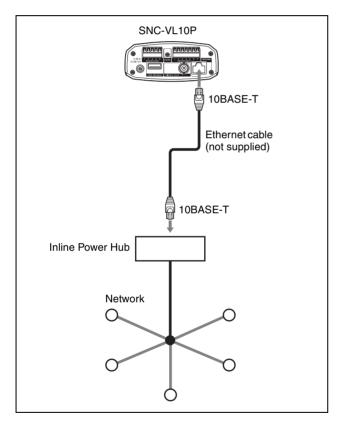
### **Connection Using an Inline Power Hub**

This camera supports the Inline Power system to supply the power via the Ethernet cable. To supply the power to the camera, connect it to a network using the Inline Power Hub conforming to IEEE802.3af.

- 1 Select Ethernet in the setup program or select LAN on Select Network Interface on the Network Setting page for the Administrator, and set the items for the LAN connection.

  For details on the settings, see "LAN" on page 18.

  For the use of the setup program, see "Assigning the IP Address Using the Setup Program" in the supplied Quick Reference.
- **2** Connect the camera to the network as follows:



#### Note

For details on the Inline Power Hub connection, refer to the operation manual of the hub.

