SONY

2-687-966-**13** (1)

Network Camera

User's Guide

Software Version 1.0

IPELA

SNC-CS10/CS11

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Overview

- You should keep in mind that the images or audio you are monitoring may be protected by privacy and other legal rights, and the responsibility for making sure you are complying with applicable laws is yours alone.
- Access to the images and audio is protected only by a user name and the password you set up. No further authentication is provided nor should you presume that any other protective filtering is done by the service. Since the service is Internet-based, there is a risk that the image or audio you are monitoring can be viewed or used by a third-party via the network.
- SONY IS NOT RESPONSIBLE, AND ASSUMES ABSOLUTELY NO LIABILITY TO YOU OR ANYONE ELSE, FOR SERVICE INTERRUPTIONS OR DISCONTINUATIONS OR EVEN SERVICE CANCELLATION. THE SERVICE IS PROVIDED AS-IS, AND SONY DISCLAIMS AND EXCLUDES ALL WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE SERVICE INCLUDING, BUT NOT LIMITED TO, ANY OR ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR THAT IT WILL OPERATE ERROR-FREE OR CONTINUOUSLY.
- Always make a test recording, and verify that it was recorded successfully. SONY WILL NOT BE LIABLE FOR DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION OR REIMBURSEMENT ON ACCOUNT OF FAILURE OF THIS UNIT OR ITS RECORDING MEDIA, EXTERNAL STORAGE SYSTEMS OR ANY OTHER MEDIA OR STORAGE SYSTEMS TO RECORD CONTENT OF ANY TYPE.
- Always verify that the unit is operating properly before use. SONY WILL NOT BE LIABLE FOR DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION OR REIMBURSEMENT ON ACCOUNT OF THE LOSS OF PRESENT OR PROSPECTIVE PROFITS DUE TO FAILURE OF THIS UNIT, EITHER DURING THE WARRANTY PERIOD OR AFTER EXPIRATION OF THE WARRANTY, OR FOR ANY OTHER REASON WHATSOEVER.
- If you lose data by using this unit, SONY accepts no responsibility for restoration of the data.

Features

This product is a compact boxy network camera of lens changing type equipped with concentrated features necessary for a monitoring camera. The camera has the following features:

- A boxy body which is the most appropriate for security use.
- Providing an image of an adequate brightness both indoors and outdoors by using with the auto-iris lens.
- Adopting 1/4-inch elementary colors filter progressive scan CCD. Providing high quality images in color reappearance, resolution and sensitivity.
- Corresponding to variable power inputs, and the power cord wiring is easy in installation.
- SNC-CS10: Two power inputs of AC 24V/DC 12V
- SNC-CS11: Three power inputs of AC 24V/DC 12V/ PoE
- Equipped with a video output terminal and a flange focus adjusting function. It is easy to adjust the angle of view and the focus.
- Switchable video compressing formats, MPEG4 and JPEG. Enables you to plan variable monitoring styles.
- Equipped with the function to stay the video bit rate constant. You can accurately estimate the network occupation band and the memory size of the recording equipment.
- Audio can be sent and received (SNC-CS11 only).
- Supplied with the low aberration vari-focal lens adopting aspheric lens (SNC-CS11 only).

NOTICE TO USERS

Phenomena Specific to CCD Image Sensors

The following phenomena that may appear in images are specific to CCD (Charge Coupled Device) image sensors. They do not indicate malfunctions.

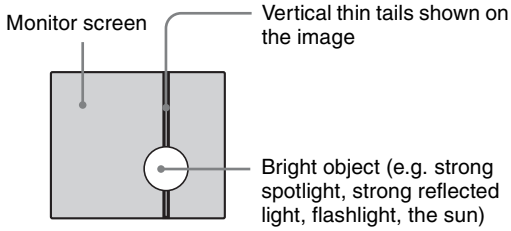
White flecks

Although the CCD image sensors are produced with high-precision technologies, fine white flecks may be generated on the screen in rare cases, caused by cosmic rays, etc.
This is related to the principle of CCD image sensors and is not a malfunction.
The white flecks especially tend to be seen in the following cases:

- when operating at a high environmental temperature
- when you have raised the gain (sensitivity)
- when using the slow shutter

Vertical smear

When an extremely bright object, such as a strong spotlight or flashlight, is being shot, vertical tails may be produced on the screen, or the image may be distorted.



Aliasing

When fine patterns, stripes, or lines are shot, they may appear jagged or flicker.

How to Use This User's Guide

This User's Guide explains how to operate the SNC-CS10 or SNC-CS11 Network Camera from a computer. The User's Guide is written to be read on the computer display.
As this section gives tips on using the User's Guide, read it before you operate the camera.

Jumping to the related page

When you read the User's Guide on the computer display, click on the sentence to jump to the related page.

Software display examples

Note that the displays shown in the User's Guide are explanatory examples. Some displays may be different from the ones which appear as you operate the application software.

Printing the User's Guide

Depending on your system, certain displays or illustrations in the User's Guide, when printed out, may differ from those as portrayed on your screen.

Installation Manual (printed matter)

The supplied Installation Manual 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 Installation Manual before operating.

System Requirements

These are the requirements for the computer that displays the image or controls the camera.

Processor

Intel Pentium III, 1 GHz or higher (Intel Pentium 4, 2.4 GHz or higher recommended)

RAM

256 MB or more

OS

Microsoft Windows 2000, Windows XP, Windows Vista

Web browser

Microsoft Internet Explorer Ver. 6.0 or later

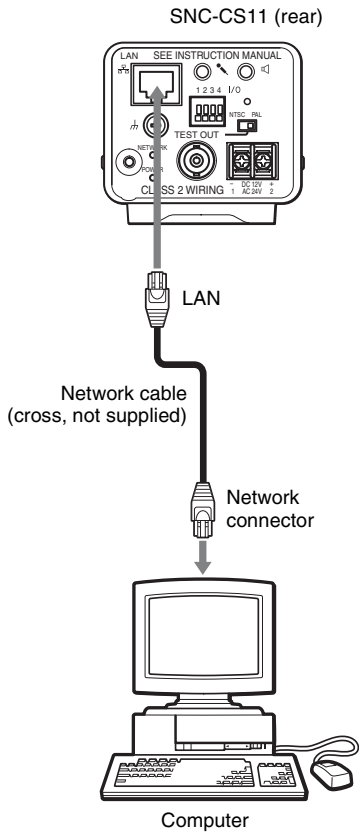
The Preparation section explains what the administrator has to prepare for monitoring the images after installation and connection of the camera.

Connecting to a Computer or a Network

To connect to the computer, use a commercially available network cable (cross cable).
To connect to the network, use a commercially available network cable (straight cable).

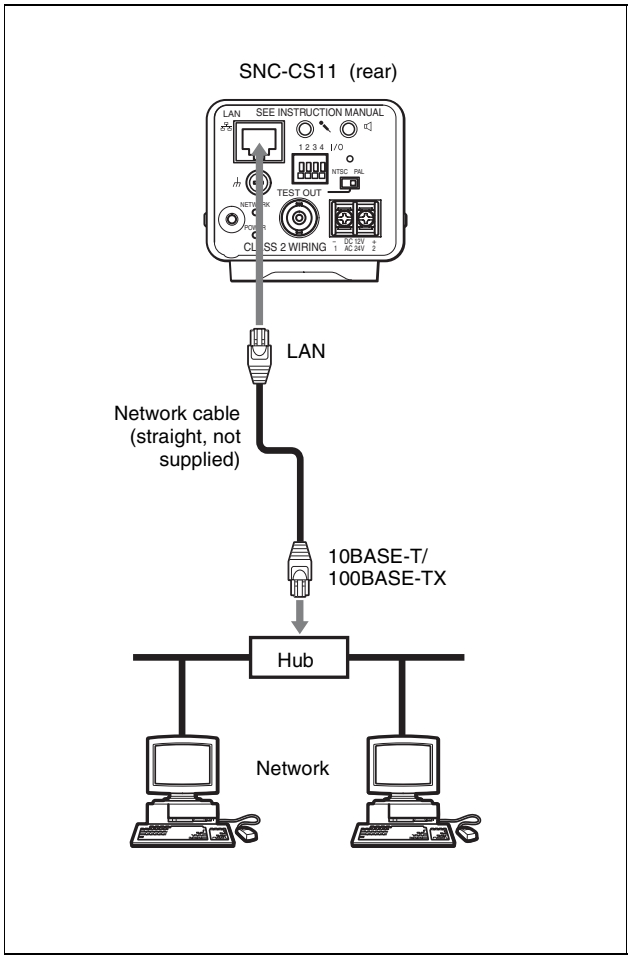
Connecting the Camera to a Computer

Using a commercially available network cable (cross), connect the LAN port on the camera to the network connector of a computer.



Connecting the Camera to a Local Network

Using a commercially available network cable, connect the LAN port on the camera to a hub in the network.



Assigning the IP Address to the Camera

To connect the camera to a network, you need to assign a new IP address to the camera when installing the camera for the first time.
You can assign an IP address in two ways:

- Using the setup program stored in the supplied CD-ROM (see page 8)
- Using the ARP (Address Resolution Protocol) commands (see page 69)

This section explains how to assign an IP address to the camera using the supplied setup program and how to configure the network.

Before starting, connect the camera, referring to "Connecting to a Computer or a Network" on page 7. Consult the administrator of the network about the assigned IP address.

Notes

- The IP Setup Program may not operate correctly if you use a personal firewall or antivirus software in your computer. In that case, disable the software or assign an IP address to the camera using another method. For example, see "Assigning the IP Address to the Camera Using ARP Commands" on page 69.
- If you are using Windows XP Service Pack 2 or Windows Vista, disable the Windows Firewall function. Otherwise the IP Setup Program will not operate correctly. For the setting, see "Configuring Windows Firewall" in "When using Windows XP Service Pack 2" on page 11 or "Configuring Windows Firewall" in "When using Windows Vista" on page 13.

Assigning an IP address using the IP Setup Program

1 Insert the CD-ROM in your CD-ROM drive.
A cover page appears automatically in your Web browser.
If it does not appear automatically in the Web browser, double-click on the index.htm file on the CD-ROM.

When you are using Windows Vista, pop-up "AutoPlay" may appear. For details, "Installing software" in "When using Windows Vista" on page 12.

2 Click the **Setup** icon of **IP Setup Program**.
The "File Download" dialog opens.

When you are using Windows XP Service Pack 2 or Windows Vista, a message regarding the active contents may appear. For details, see "Installing software" in "When using Windows XP Service Pack 2" on page 10 or "Installing software" in "When using Windows Vista" on page 12.

3 Click **Open**.

Note

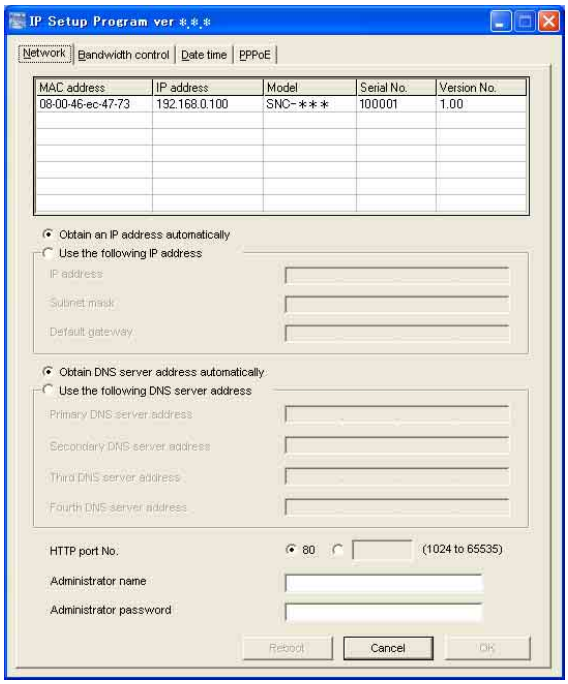
If you click "Save this program to disk" on the "File Download" dialog, you will not be able to perform set up correctly. Delete the downloaded file, and click the **Setup** icon again.

4 Install the IP Setup Program on your computer using the wizard.
If the Software License Agreement is displayed, read it carefully and click **Accept** to continue with the installation.

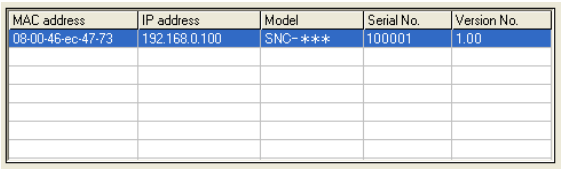
5 Start the IP Setup Program.

When you are using Windows Vista, message "User Account Control – An unidentified program wants access to your computer" may appear. In this case, click **Allow**.

The program detects the network cameras connected to the local network and lists them on the Network tab window.



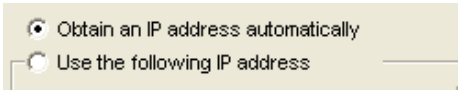
6 Click on the camera in the list to which you want to assign a new IP address.



The network settings for the selected camera are displayed.

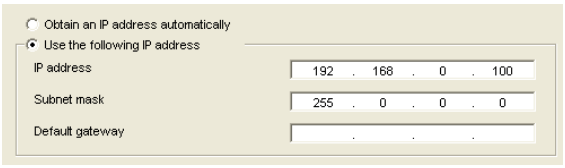
7 Set the IP address.

To obtain the IP address automatically from a DHCP server:
Select **Obtain an IP address automatically**.



The IP address, Subnet mask and Default gateway are assigned automatically.

To specify the IP address manually:
Select **Use the following IP address**, and type the IP address, Subnet mask and Default gateway in the relevant boxes.



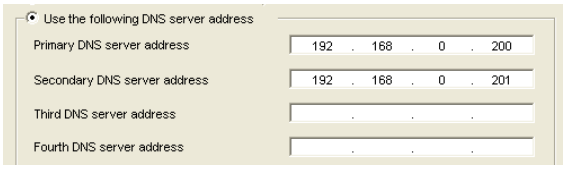
Note

When you select **Obtain an IP address automatically**, make sure that the DHCP server is operating on the network.

8 Set the DNS server address.

To obtain the DNS server addresses automatically:
Select **Obtain DNS server address automatically**.

To specify the DNS server addresses manually:
Select **Use the following DNS server address**, and type the Primary DNS server address and Secondary DNS server address in the relevant boxes.



Note

The Third DNS server address and Fourth DNS server address are invalid for this camera.

9 Set the HTTP port No.

Normally, select **80** for the HTTP port No. To use another port number, type the port number between 1024 and 65535 in the text box.

10 Type the Administrator name and Administrator password.

The factory settings of both items are “admin.”

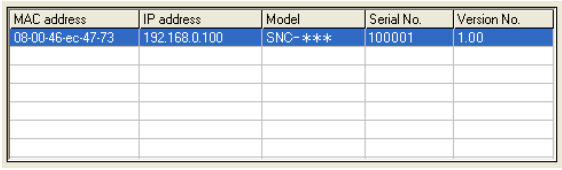
Note

You cannot change the Administrator name and Administrator password in this step. To change these items, see “Setting the User — User Menu” on page 41.

11 Confirm that all items are correctly set, then click **OK**.

If “Setting OK” is displayed, the IP address is correctly assigned.

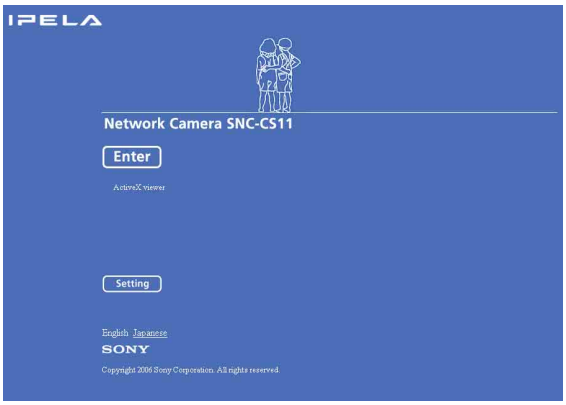
12 To access the camera directly, double-click the camera name in the list.



Tip

The factory setting of the camera network is as follows.
IP address: 192.168.0.100
Subnet mask: 255.0.0.0

The welcome page of the network camera is displayed in the Web browser.



Note

If the IP address is not set correctly, the welcome page does not appear after step 12. In this case, try to set the IP address again.

When using Windows XP Service Pack 2

Installing software

A warning message regarding the active contents may appear when you install software such as IP Setup Program from CD-ROM. In this case, operate as follows:

Example: In case of IP Setup Program

If message “Internet Explorer” appears, click **Yes**.

If message “File Download – Security Warning” appears, click **Run**.

Note

If you select **Save** in the “File Download – Security Warning” dialog, you will not be able to perform installation correctly. Delete the downloaded file, and click the **Setup** icon again.

If message “Internet Explorer – Security Warning” appears, click **Run**.

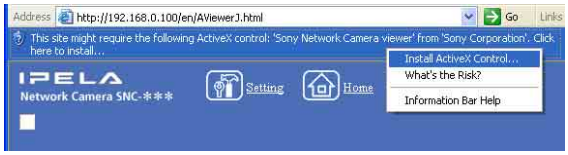
The software installation starts.

Installing ActiveX Control

During installation of ActiveX Control, the information bar or “Security Warning” may appear. In this case, operate as follows:

If message “Information Bar” appears, click **OK**.

If the information bar appears, click on the bar and select **Install ActiveX Control…**.



If " Internet Explorer – Security Warning" appears, click **Install**.

The installation of ActiveX Control starts. When installation is completed, the main viewer or the Motion detection menu appears.

Configuring Windows Firewall

The IP Setup Program or SNC audio upload tool may not operate correctly depending on the configuration of Windows Firewall. (No cameras are shown in the list even if they are detected.) In this case, confirm the Windows Firewall configuration as follows:

Example: In case of IP Setup Program

1 Select **Control Panel** from the Start menu of Windows.

2 Select **Security Center** of the working field.

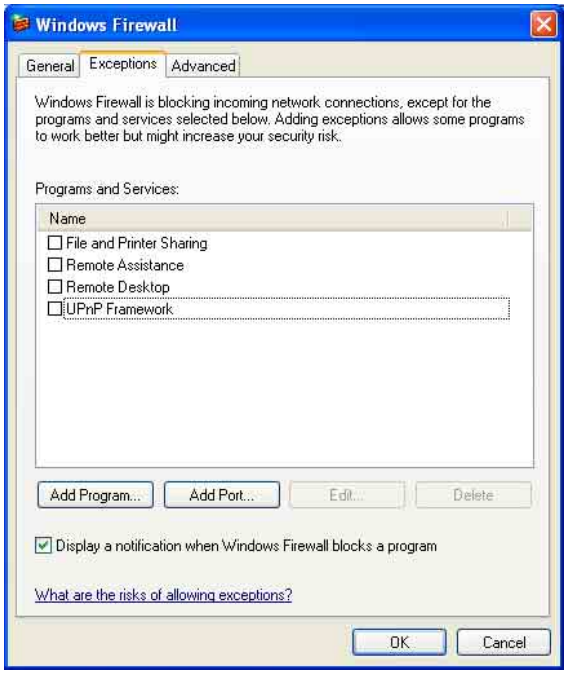
3 Select **Windows Firewall** and select **Off** in the Windows Firewall dialog.

The cameras will be displayed in the list.

If you want to keep Windows Firewall **On**, continue with the following steps.

4 Select the "Exceptions" tab.

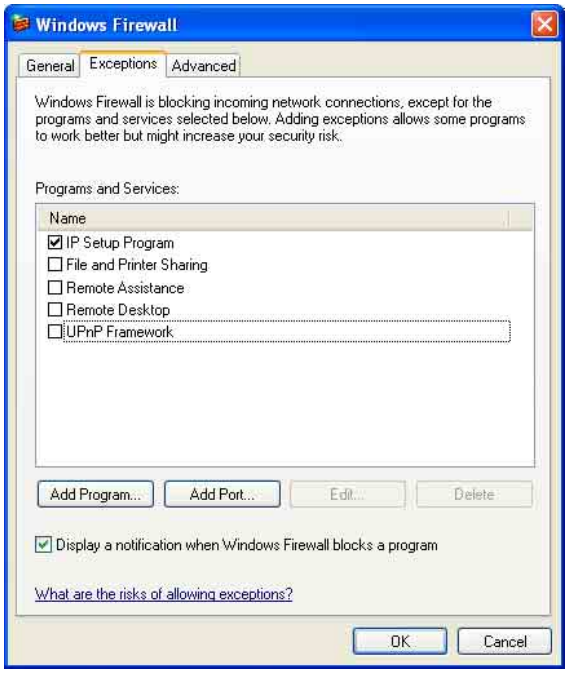
5 Select **Add Program…**.



6 In the Add Program dialog, select **IP Setup Program** and click **OK**.

Then the IP Setup Program is added to the Programs and Services list.

7 Click **OK**.



When the above procedure is completed, the cameras connected in the local network are displayed in the IP Setup Program.

When using Windows Vista

Installing software

A warning message regarding the active contents may appear when you install software such as IP Setup Program from CD-ROM. In this case, operate as follows:

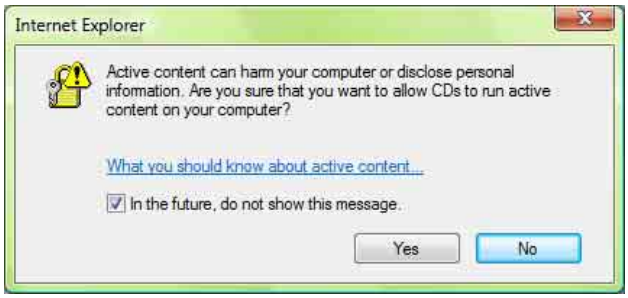
Example: In case of IP Setup Program

If pop-up "AutoPlay" appears when a CD-ROM is inserted into the CD-ROM drive, click **Install or run program**.

Note

If you click **Open folder to view files**, Web browser will not open automatically. In this case, double-click the "index.htm" file in the CD-ROM.

If message "Internet Explorer" appears, click **Yes**.



If message "File Download – Security Warning" appears, click **Run**.

Note

If you select **Save** in the "File Download – Security Warning" dialog, you will not be able to perform

installation correctly. Delete the downloaded file, and click the Setup icon again.

If message “Internet Explorer – Security Warning” appears, click **Run**.

If message “User Account Control – An unidentified program wants access to your computer” appear, click **Allow**.

The software installation starts.

Starting the software

When you start software such as IP Setup Program, message “User Account Control – An unidentified program wants access to your computer” may appear. In this case, click **Allow**.

Installing ActiveX Control

During installation of ActiveX Control, the information bar or “Security Warning” may appear. In this case, operate as follows:

If message “Information Bar” appears, click **OK**.

If the information bar appears, click on the bar and select **Install ActiveX Control…**.

If message “User Account Control – Windows needs your permission to continue” appear, click **Continue**.

If “Internet Explorer – Security Warning” appears, click **Install**.

The installation of ActiveX Control starts. When installation is completed, the main viewer or the Motion detection menu appears.

Configuring Windows Firewall

The IP Setup Program or SNC audio upload tool may not operate correctly depending on the configuration of Windows Firewall. (No cameras are shown in the list even if they are detected.) In this case, confirm the Windows Firewall configuration as follows:

Example: In case of IP Setup Program

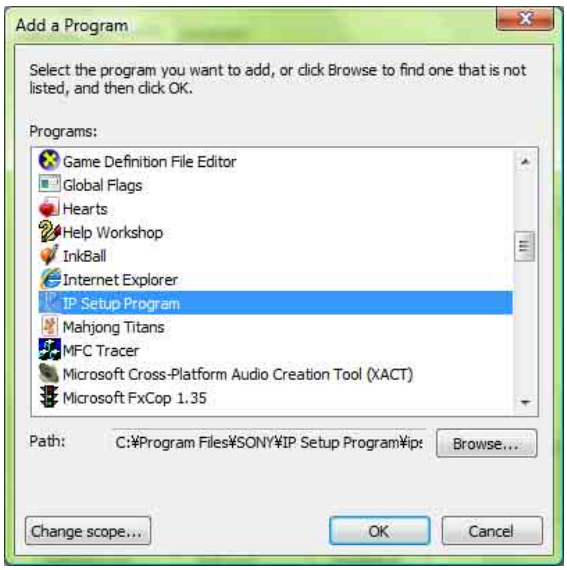
1. Select **Control Panel** from the Start menu of Windows.
2. Click **Windows Firewall**.
3. Select **Turn Windows Firewall on or off**. “User Account Control – Windows needs your permission to continue” may appear. In this case, click **Continue**.
4. Select **Off** in the “General” tab.

The cameras will be displayed in the list.
If you want to keep Windows Firewall **On**, continue with the following steps.

5 Select the “Exceptions” tab.

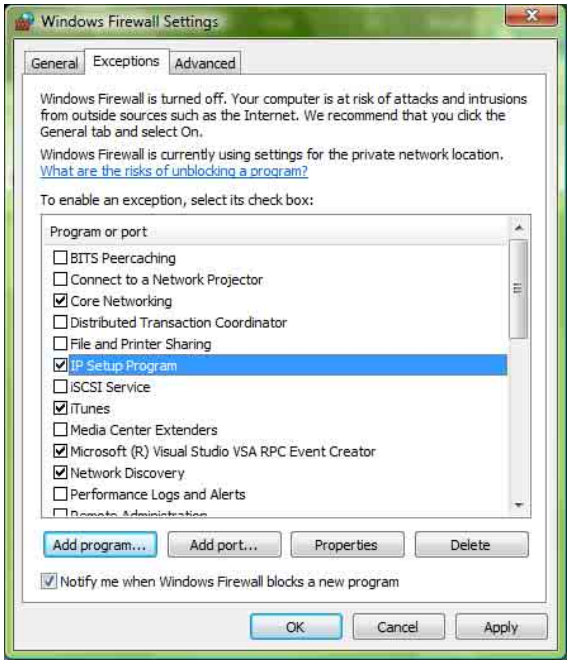
6 Select **Add Program…**.

7 If the Add Program dialog appears, select **IP Setup Program** and click **OK**.



Then the IP Setup Program is added to the Program or port list.

8 Click **OK**.



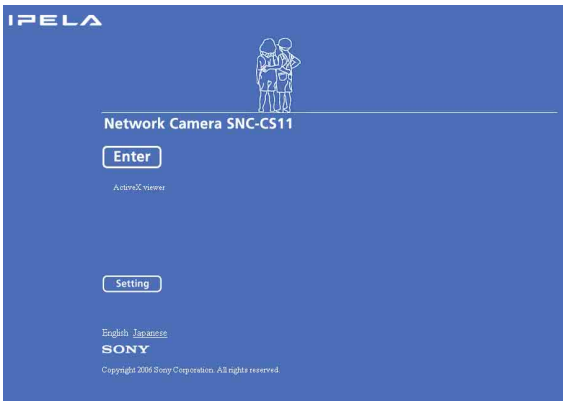
When the above procedure is completed, the cameras connected in the local network are displayed in the IP Setup Program.

Accessing the Camera Using the Web Browser

When the IP address has been assigned to the camera, check that you can actually access the camera using the Web browser installed in your computer.
Use Internet Explorer as the Web browser.

1 Start the Web browser on the computer and type the IP address of the camera in the URL box.

The welcome page of the network camera is displayed in the Web browser.



2 Click **Enter**.
The main viewer is displayed.

SNC-CS11

SNC-CS10

When the main viewer is correctly displayed, the IP address assignment is completed.

When the main viewer of the camera is displayed for the first time

When you click **Enter**, "Security Warning" is displayed. When you click **Yes**, ActiveX control is installed and the main viewer is displayed.

Notes

- If **Automatic configuration** is enabled in the Local Area Network (LAN) Settings of Internet Explorer, the image may not be displayed. In that case, disable **Automatic configuration** and set the Proxy server manually. For the setting of the Proxy server, consult your network administrator.
- When you install ActiveX Control, you should be logged in to the computer as Administrator.
- When you are using Windows XP Service Pack 2 or Windows Vista, the information bar or "Security Warning" may appear as you click **Enter**. For details, see "Installing ActiveX Control" in "When using Windows XP Service Pack 2" on page 10 or "Installing ActiveX Control" in "When using Windows Vista" on page 13.

Tip

Every page of this software is optimized as display character size **Medium** for Internet Explorer.

To display the welcome page and the main viewer correctly

To operate the welcome page and the main viewer correctly, set the security level of the Internet Explorer to **Medium** or lower, as follows:

1. Select **Tools** from the menu bar for Internet Explorer, then select **Internet Options** and click the **Security** tab.
2. Click the **Internet** icon (when using the camera via the Internet) or **Local intranet** icon (when using the camera via a local network).
3. Set the slider to **Medium** or lower. (If the slider is not displayed, click **Default Level**.)

When using antivirus software, etc. on the computer

- When you use antivirus software, security software, personal firewall or pop-up blocker on your computer, the camera performance may be reduced, for example, the frame rate for displaying the image may be lower.
- The Web page displayed when you log in to the camera uses JavaScript. The display of the Web page may be affected if you use antivirus software or other software described above on your computer.

Basic Configuration by the Administrator

You can monitor the image of the camera by logging in with the initial condition of this network camera. You can also set various functions according to the install position, network condition or purpose of the camera. We recommend you configure the following items before monitoring the image from the camera.

Setting contents	Administrator menu
Select the white balance mode according to the installing position (under tungsten bulb or daylight).	White balance (page 34)
Set the format of the image sent from the camera (MPEG 4 or JPEG).	Video mode (page 32)
Select the equipped lens.	Lens type (page 34)
Select the brightness of the image sent from the camera.	Shutter mode (page 34) Exposure compensation (page 35)
Select the quality of the image sent from the camera.	MPEG4 Tab (page 36) JPEG Tab (page 36)
Select the size of the image sent from the camera.	Image size (page 33)
Select weather the audio from the camera microphone is sent or not. (SNC-CS11 only)	Microphone (page 33)
Accord date and time of the camera with those of the computer.	Date & time Tab (page 30)
Make the setting for sending the monitor image attached to a mail.	e-Mail (SMTP) Menu (page 43)
Set the access right of the user for the camera.	User Menu (page 41)

Operating the Camera

The Operating the Camera section explains how to monitor the image from the camera using the Web browser. Use Internet Explorer as the Web browser.

The functions of the camera should be set by the Administrator. For setting the camera, see "Administrating the Camera" on page 27.

Administrator and User

This network camera classifies the people who log in as the **Administrator** and the **User**.
The **Administrator** can use all functions of this network camera including camera setting. The functions the **User** can use are monitoring the image from the camera, and controlling the camera. The **Viewer mode** setting restricts the user's access right, and the user is classified as the one of three types.

Note

The audio can be monitored only in SNC-CS11.

Each type of the user can use the following functions.

Function	Administrator	User		
		Full	Light	View
Monitor a live image	●	●	●	●
Watch date and time	●	●	●	●
Control the frame rate (Usable only when JPEG mode is selected)	●	●	–	–
Control the image view size	●	●	●	–
Zoom a image by the digital zoom	●	●	●	–
Save the still image in the computer	●	●	●	–[1)]
Send an image file to the FTP server	●	●	–	–
Send an image attached to a mail	●	●	–	–
Record an image on the inside memory of the camera	●	●	–	–
Control the Alarm out of the I/O port on the camera main unit	●	●	–	–
Switch the TCP/ UDP transmission mode (Available in MPEG4 mode only)	●[2)]	●[2)]	–	–
Control the audio (SNC-CS11 only)	●	●	●	●
Control the setting menu	●	–	–	–

● Usable function
– Not usable function

1) This function is usable with the Java applet viewer.
2) This function is not usable with the Java applet viewer.

The access rights of the administrator and the user can be set in "Setting the User — User Menu" on page 41.

Logging in to Homepage — Welcome Page

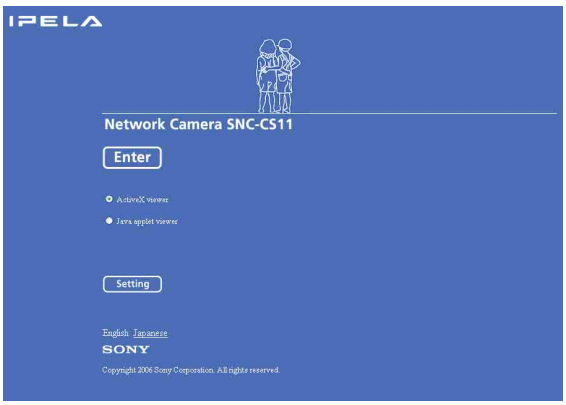
Logging in as a User

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

The welcome page of the network camera is displayed in the Web browser.

2 Select the viewer.
The usable viewers differ depending on the Video mode (page 32) of the camera.
When the Video mode is set to **MPEG4**, you can only select **ActiveX viewer**, and may not select other viewers. (MPEG4 is default. See illustration on Step 1 above.)
When the Video mode is set to **JPEG**, you can select **ActiveX viewer** or **Java applet viewer**.
For details, see "About Viewers" on page 19.

Welcome page when the Video mode is JPEG



3 Select the viewer language.
Click **English** or **Japanese** at the bottom of the welcome page.

4 Click **Enter**.
The main viewer appears.

With the ActiveX viewer (MPEG4)

With the Java applet viewer

Control the camera from the main viewer.

Note

If the Welcome page does not activate correctly, the security level of the Internet Explorer may be set to **Medium** or higher. See "To display the welcome page and the main viewer correctly" on page 15 and check the security level.

Displaying the setting window for the administrator directly

When the administrator sets the camera functions, the setting window can be displayed directly from the welcome page.

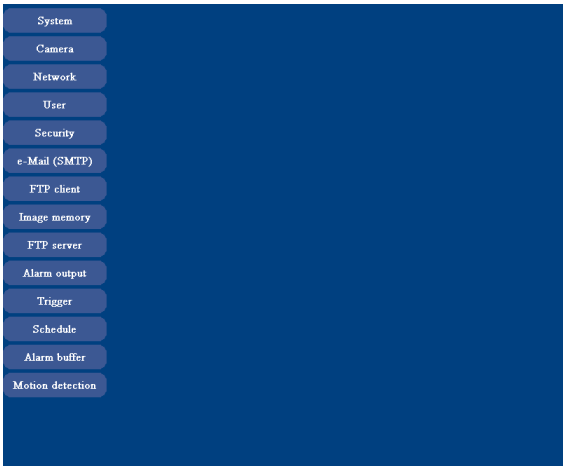
1 Select the viewer language on the welcome page. Click **English** or **Japanese** at the bottom of the welcome page.

2 Click **Setting** on the welcome page.
The following dialog appears.

3 Enter the user name and password for Administrator, then click **OK**.

The user name “admin” and the password “admin” are set at the factory for the Administrator. You can change them in the User menu of the Administrator menu (see page 41).

The Administrator mode menu appears in another window.



About Viewers

You can use the following viewer according to the **Video mode** setting in the Camera menu of the Administrator menu (page 32).

ActiveX viewer

This viewer can monitor the image in both **MPEG4** and **JPEG** video modes.
You must install this viewer when you access to the main viewer at the first time.

When you display the main viewer of the camera for the first time

When you log in the network camera using ActiveX viewer for the first time (clicking **Enter** to enter the main viewer), the Security Warning appears. Click **Yes** and install ActiveX Control. You can use all the functions of the viewer by using ActiveX Control.

Java applet viewer

You can select this viewer when the camera Video mode is set to **JPEG**. The frame rate is lower than the ActiveX viewer.
The Java applet viewer operates only when Java is installed and Java (Sun) is enabled. If it does not operate correctly, check whether the Java has been installed successfully and Java (Sun) is enabled.

For the verified Java version, contact your authorized Sony dealer.

To check the Java version

Select **Tools** from the menu bar of Internet Explorer, then select **Internet Options** and click the **Advanced mode** tab. Check the version of Java displayed in **Java (Sun)**. If **Java (Sun)** is not displayed, it means that Java is not installed. You need to install Java.

To enable Java Plug-in

Example: In case of Java Plug-in Ver. 1.6.0_01

Check “Use JRE 1.6.0_01 for <applet> (requires restart)” in “Java (Sun)”.

To install Java Plug-in

Download Java 2 Runtime Environment, Standard Edition (JRE) from the homepage of Sun Microsystems, Inc., and install it by following the instructions on the installer.

Notes

- If **Automatic configuration** is enabled in the Local Area Network (LAN) Settings of Internet Explorer, the camera image may not be displayed. In that case, disable **Automatic configuration** and set the Proxy

server manually. For the setting of the Proxy server, consult your network administrator.

- When you install ActiveX Control, you should be logged in to the computer as the Administrator.

Tip

Every page of this software is optimized for display character size **Medium** for Internet Explorer.

Configuration of Main Viewer

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

Main viewer

MPEG4

JPEG

Main menu

Setting

Click to display the Administrator menu. (page 27)
You can operate this function only when logging in as the administrator.

Home

Displays the Welcome page.

Player

Click to download the “SNC video player” application program built in the camera. The SNC video player allows you to play video data recorded on the camera with your computer. (See “Using the SNC video player — Playing Video File Recorded on Camera” on page 66.)

Camera Control Section

Frame rate

(Displayed only when the camera Video mode (page 32) is set to **JPEG**.)

Selects the frame rate to transmit images. (page 22)

View size

Selects the view size to be displayed. (page 23)

Digital zoom

Click to change the size of the digital zoom. (page 23)

Capture

Click to capture a still image shot by the camera and to store it in the computer. (See “Capturing a Monitor Image” on page 23.)

Trigger

(Displayed only when the camera **Viewer mode** (page 41) is set to **Full** and one or more triggers are enabled in the Trigger menu (page 53).)

Select the function you want to use from the drop-down list and click . The selected function is activated.
The selectable functions are as follows:
– send the still image files attached to an e-mail (page 24)
– send the still image files to an FTP server (page 24)
– record the still image files in the built-in memory (page 25)
– switch the alarm output on/off (page 25)

Transmission (Switching the TCP/UDP transmission mode)

(Displayed only when the camera Video mode (page 32) is set to **MPEG4** and using the ActiveX viewer.)

Each click switches the transmission mode of the video data among TCP mode, UDP (Unicast) mode and UDP (Multicast) mode. (page 26)
The last selected mode is saved in the computer, and will stay selected for the next starting.

Volume (SNC-CS11 only)

(Displayed when the Microphone (page 33) is set to **On**.)
Drag the bar of to adjust the volume.
When you click , the icon changes to and the audio output stops. To output the audio, click again.

Note

If the is not displayed due to the use of using Java applet viewer, Audio codec may not be set **G.711(64kbps)** (page 34) or Java may not be installed correctly.
To check if Java is installed correctly, refer to “Java applet viewer” of “About Viewers” on page 19.

Monitor Image

The image shot by the camera is shown here. Date and time is displayed at the top of the window.

Controlling the Monitor Image

You can monitor the camera image on the monitor window of the main viewer.

Monitoring the camera image

1 Log in to the home page to display the main viewer. You can see how to log in on page 18, “Logging in as a User”.

2 Select the frame rate (only when the camera Video mode is set to **JPEG**).

Click the **Frame rate** list box to select the frame rate for transmitting the image. Selectable frame rates are **1**, **2**, **3**, **4**, **5**, **6**, **8**, **10**, **15**, **20**, **25** and **30 fps**.

“fps” is a unit indicating the number of frames transmitted per second.
If you select **30 fps**, the image is sent at the maximum speed of the connected line (30 fps maximum).

Note

The frame rate options indicate the maximum number of frames that can be transmitted.
The number of frames actually transmitted may vary depending on network environments and camera settings (image size and image quality settings).

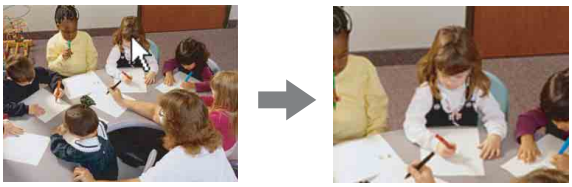
3 Select the view size.

Click **View size** list box to select the view size from among **Auto**, **640 × 480**, **320 × 240** and **160 × 120**. **Auto** is determined by the image size specified in the Camera setting page (page 33).

Zooming in the monitor image

1 Click (Digital zoom icon).

2 Click the point you want to zoom in.
The image is expanded by about 1.5 times with the clicked point at the center.



The digital zoom icon changes to .

3 To cancel zooming in, click .

Capturing a Monitor Image

You can capture a monitoring image as a still image and save it in the computer.

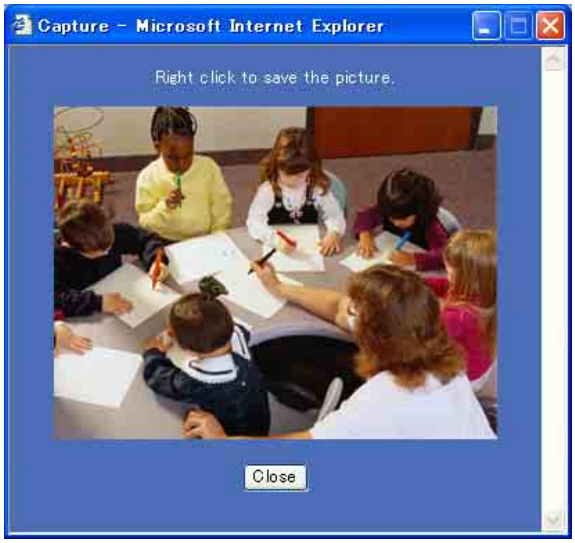
Capturing a monitor image

1 Monitor the camera image in the monitor window.

2 Click (Capture icon).
The still image of the moment you click is captured, and the still image is displayed in the monitor window.

With the ActiveX viewer

With the Java applet viewer



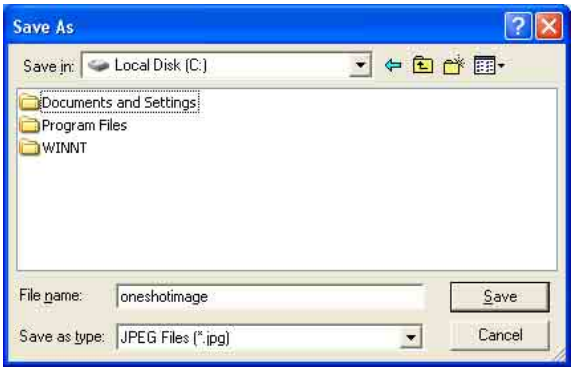
3 To cancel the still image, click **Cancel** or **Close**.

Saving the captured image

With the ActiveX viewer

1 Capture the monitor image.

2 Click **Save**.
Save As dialog appears.



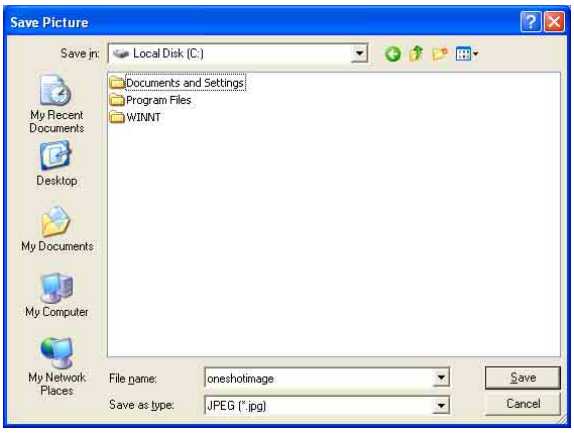
3 Select **JPEG Files** or **Windows Bitmap Files** as **Save as type**.

4 Type the **File name** and specify **Save in**, then click **Save**.

With the Java applet viewer

1 Capture the monitor image.

2 Right-click the mouse to display the menu and select **Save Picture As...**.
Save Picture dialog appears.



3 Select **JPEG** or **Bit map** as **Save as type**.

4 Type in **File name** and specify **Save in**, then click **Save**.

Sending an Image File

You can send a captured still image with an attached mail or to the FTP server.
To use this function, you need to make the **e-Mail(SMTP)** or **FTP client** active, and set the address properly in the Trigger menu on the Administrator menu (page 53).

Sending a Monitor Image via e-Mail

1 Monitor the image on the monitor window.

2 Select **e-Mail** from the Trigger list box.

3 Click  .
The still image of the moment when you click is captured, and the mail attached with the image file is sent to the mail address you have set.

Sending a Monitor Image to an FTP Server

1 Monitor the image on the monitor window.

2 Select **FTP** from the Trigger list box.

3 Click  .
The still image of the moment when you click is captured, and the image file is sent to the FTP server.

Recording a Still Image in the Built-in Memory of the Camera

You can capture a camera image as a still image and record it in the built-in memory of the camera.
To use this function, you need to make **Image memory** active and to set details of the image memory in the Trigger menu on the Administrator menu (page 54).

1 Monitor the image on the monitor window.

2 Select **Image memory** from the Trigger list box.

3 Click .
The still image of the moment when you click is captured, and the image file is recorded in the built-in memory of the camera.

Controlling Alarm output

You can control the Alarm output On (short-circuit) and Off (open).
To use this function, you need to make **Alarm output** active in the Trigger menu on the Administrator menu (page 54).

1 Monitor the image on the monitor window.

2 Select **Alarm output** from the Trigger list box.

3 Click .
Each click switches the Alarm output between On (short-circuit) and Off (open) alternately.

Tip

For the connection of peripheral devices to the Alarm output of the I/O port, see the supplied Installation Manual.

Switching TCP/UDP Transmission Mode

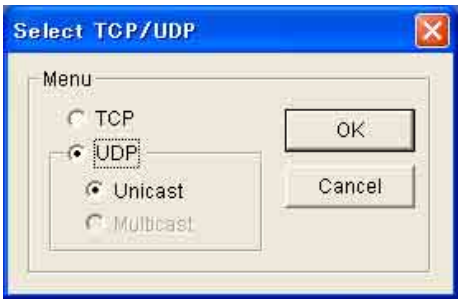
You can select the communication port of the video data as TCP or UDP.
This function can be used when the Video mode (page 32) is set to **MPEG4** and the ActiveX viewer is used.

Notes

- The function may not operate correctly when you use personal firewall software or antivirus software on your computer. In that case, disable the software or select the TCP mode.
- If you are using Windows XP Service Pack 2 or Windows Vista, disable "Windows Firewall." For details, see "Configuring Windows Firewall" in "When using Windows XP Service Pack 2" on page 11 or "Configuring Windows Firewall" in "When using Windows Vista" on page 13.

1 Display the main viewer.

2 Click TCP/UDP transmission selector icon. Transmission mode selector dialog appears.



3 Click one of the buttons **TCP, UDP (Unicast)** or **UDP (Multicast)**.

TCP: This is normally selected.
When **TCP** is selected as the communication port, HTTP communication is adopted for video communication.
HTTP is the protocol used for reading a usual Web page.
In an environment capable of reading Web page, you can watch the video by selecting TCP port.

UDP (Unicast): When **UDP (Unicast)** is selected as the communication port, RTP (Real-time Transport Protocol) is adopted for video communication. As RTP is the protocol for running video data, video can be played smoother than when TCP (HTTP) is selected. If the fire-wall is installed between the camera and the computer, or depending on the network environment, the video may not play properly when **UDP (Unicast)** is selected. In this case, select **TCP**.

UDP (Multicast): This is selectable when the multicast streaming (page 33) is **On**. When **UDP (Multicast)** is selected as the transmission port, RTP (Real-time Transport Protocol) and UDP multicast techniques are adopted for video transmission. By selecting it, the network transmission load of the camera can be reduced. If a router which does not correspond to the multicast or the fire-wall is installed between the camera and the computer, the video may not play properly. In this case, select **TCP** or **UDP (Unicast)**.

4 Click **OK** to close the dialog.

If you decide not change the transmission setting, click **Cancel**.

The Administrating the Camera section explains how to set the functions of the camera by the Administrator. For monitoring the camera image, see “Operating the Camera” on page 17.

This section explains the basic operations and each option of the Administrator menu.

Note on the display of menu options

In the setting menus of this unit, the options that you cannot currently select will be grayed out.
The options that you can currently select will be displayed automatically as you change the setting.

Basic Operations of Administrator Menu

You can use the Administrator menu to set all functions to suit the user's needs.
Click **Setting** in the welcome page or in the main viewer to display the Administrator menu.

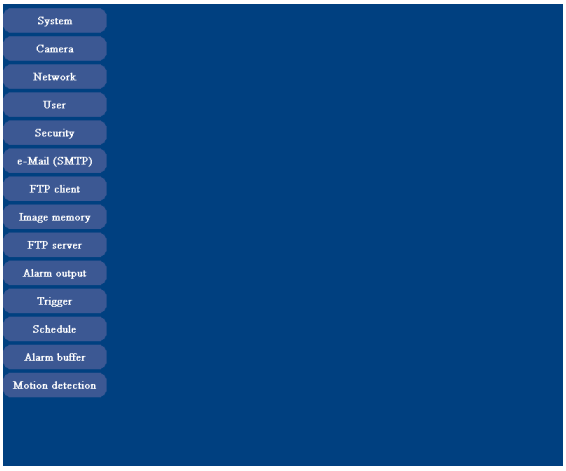
How to setup the Administrator menu

1 Log in the home page to display the welcome page.
You can see how to log in on page 14 “Logging in as a User”.

2 Select the viewer language on the welcome page.
Click **English** or **Japanese** at the bottom of the welcome page.

3 Click **Setting** in the welcome page.
The authentication dialog appears. Enter the user name and password for Administrator.
The user name “admin” and password “admin” are set at the factory for the Administrator.

Administrator menu appears.



The following steps also display the Administrator menu.

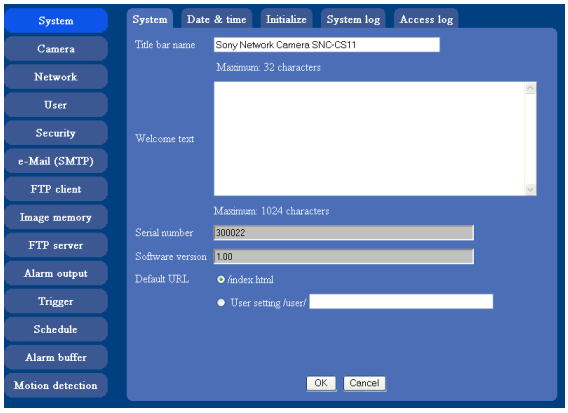
① Click **Enter** in the welcome page to display the main viewer.

② Click in the main viewer.

③ Enter the user name and password for Administrator.

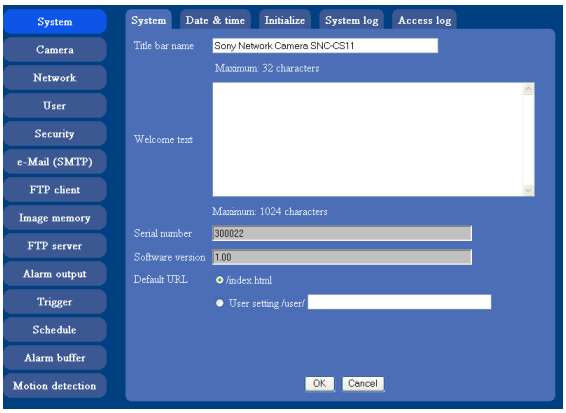
4 Click the menu name (example: System) on the left side of the Administrator menu.
The clicked menu appears.

Example: System menu



5 Select the tab above the menu, and set each setting option in the tab.

Example: “Date & time” tab of “System” menu



See page 28 to 57 for details of menu tabs and setting options.

6 After setting, click **OK**.
The setting contents become active.

Click **Cancel** to invalidate the set values and return to the previous settings.

Buttons common to every menu

The following buttons are displayed on all the menus. The functions of the buttons are the same on every menu.

OK

Click this button to validate the settings.

Cancel

Click this button to invalidate the set values and return to the previous settings.

General notes on menus

- After changing a setting on a menu, wait at least 10 seconds before turning off the power of the camera. If the power is turned off immediately, the changed setting may not be stored correctly.
- When the camera settings are changed while watching the main viewer, some settings cannot be restored. To reflect the change on the opening main viewer, click **Refresh** of the Web browser.

Configuration of Administrator menu

System
Displays the System menu.
(“Configuring the System — System menu” on page 29).

Camera
Displays Camera menu for setting the camera image and audio. (“Setting the Camera Image and Audio — Camera Menu” on page 32)

Tip

The audio settings can be selected only in SNC-CS11.

Network
Displays the network menu for setting the network connection. (“Configuring the Network — Network Menu” on page 37)

User
Displays the user menu for setting the user name and the password to log in. (“Setting the User — User Menu” on page 41)

Security
Displays the security menu for specifying the computer allowed to connect to the camera. (“Setting the Security — Security Menu” on page 42)

e-Mail (SMTP)
Displays the e-Mail (SMTP) menu for sending an e-mail. (“Sending an Image via mail — e-Mail (SMTP) Menu” on page 43)

FTP client
Displays the FTP client menu for sending an image file to FTP server. (“Sending Images to FTP Server — FTP client Menu” on page 46)

Image memory
Displays the image memory menu for recording a image file in the built-in memory of the camera. (“Recording Images in Memory — Image memory Menu” on page 48)

FTP server
Displays the FTP Server menu for the FTP server function of the camera.
(“Downloading Images from the Camera — FTP server Menu” on page 52)

Alarm output
Displays the alarm out menu for the alarm out terminal of the camera. (“Downloading Images from the Camera — FTP server Menu” on page 52)

Trigger
Displays the trigger menu for the operations when you click the trigger button in the main viewer. (“Setting the Operations from the Viewer Page — Trigger Menu” on page 53)

Schedule
Displays the schedule menu for FTP client function, e-Mail (SMTP) function, Image memory function and Alarm out function and so on. (“Setting the Schedule — Schedule Menu” on page 55)

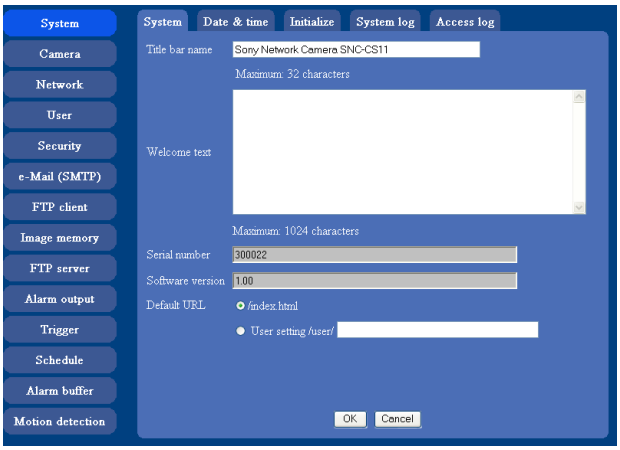
Alarm buffer
Displays the alarm buffer menu for the buffer which records the image on the alarm detection. (“Setting the Alarm Buffer — Alarm buffer Menu” on page 55)

Motion detection
Displays the Motion detection menu for the motion detection function built into the camera. (“Setting the Motion Detection Function — Motion detection Menu” on page 56)

Configuring the System — System menu

When you click **System** on the Administrator menu, the System menu appears.
Use this menu to perform the principal settings of the software.
The System menu is composed of five tabs which are **System**, **Date & time**, **Initialization**, **System Log** and **Access Log**.

System Tab



Title bar name
Type a name to display on the title bar up to 32 characters. The characters typed here are displayed on the title bar of the Web browser.

Welcome text
Type a text to show on the welcome page, with up to 1024 characters in HTML format. Use the
 tag for a line break. (A line break is equivalent to 2 characters.)

Serial number
Displays the serial number of the camera.

Software version
The software version of this camera is displayed.

Default URL
Select the homepage to be displayed when you enter the IP address of the camera in the Web address box of the browser.

To display the homepage built in the camera
Select **/index.html**.

To display your individual homepage
You can display your favorite homepage. Store the HTML file in the built-in flash memory using the Custom Homepage Installer included in the supplied CD-ROM.
For use of the Custom Homepage Installer, see page 67.

1 Select **User Setting/ user/**.

2 Type the path of the HTML file in the text box up to 64 characters.

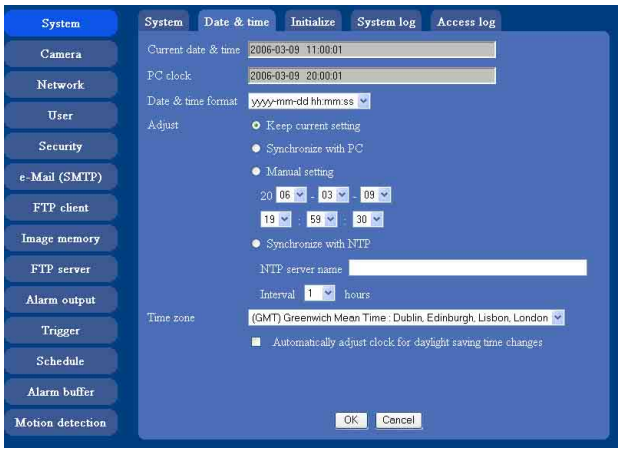
Tip

Even when you select **User Setting/ user/**, the home page inside the camera can be displayed by typing the following URL in the address box of the Web browser.

Example: When the IP address of the camera is set to 192.168.0.100
http://192.168.0.100/en/index.html

OK/Cancel
See “Buttons common to every menu” on page 28.

Date & time Tab



Current date & time
Displays the date and time set on this unit.

Note

After you have purchased this unit, be sure to check the date and time of this unit and set them if necessary.

PC clock
Displays the date and time set on your computer.

Date & time format
Select the format of date and time to be displayed on the main viewer from the drop-down list.
You can select from among **yyyy-mm-dd hh:mm:ss** (year-month-day hour:minute:second), **mm-dd-yyyy hh:mm:ss** (month-day-year hour:minute:second), and **dd-mm-yyyy hh:mm:ss** (day-month-year hour:minute:second).

Adjust
Select to set the day and time.

Keep current setting: Select if you do not need to set the date and time.
Synchronize with PC: Select if synchronizing the camera's date and time with those of the computer.
Manual setting: Select if you want to set the camera's date and time manually.
Select the lower 2-digits of year, month, date, hour, minutes and seconds from each drop-down list.
Synchronize with NTP: Select if synchronizing the camera's date and time with those of the time sever called NTP server (Network Time Protocol). Set the **NTP server name** and the **Interval**.

NTP server name
Type the host name or IP address of the NTP server, up to 64 characters.

Interval
Select the interval at which you want to adjust the camera's time referring to the NTP server' time, between 1 and 24 hours. The set interval is a guide, and does not indicate the exact time.

Note

The setting time may not accord with the exact time according to the network environment.

Time zone
Set the time difference from Greenwich Mean Time in the area where the camera is installed.
Select the time zone where the camera is installed from the drop-down list.

Automatically adjust clock for daylight saving time changes
When you select it, the clock is automatically adjusted according to the daylight saving time of the selected time zone.

Note

If the time zone selected on the **Time zone** menu is different from that set on the computer, the time is adjusted using the time zone difference and set on the camera.

OK/Cancel

See “Buttons common to every menu” on page 28.

Initialize Tab

Reboot

Reboots the camera.
Click **Reboot**, and the message “This camera will be rebooted. Are you sure?” appears. Click **OK** to reboot the camera. It takes about 2 minutes to start again.

Factory default

Resets the camera to the factory settings.
Click **Factory default**, and the message “Set up data will be initialized. Are you sure?” appears. When you click **OK**, the network indicator on the camera starts to blink. After adjustments of the default settings have finished, the camera reboots automatically. Do not turn off the camera until the camera reboots.

Tip

The camera can also be reset to the factory settings by turning the power on of this unit while pressing the reset switch on the camera. For details, see the supplied Installation Manual.

Backup setting data

Saves the setting data of the camera in a file.
Click **Save**, and follow the instructions on the Web browser to specify the folder and save the setting data of the camera. The followings are the file name preset at the factory.
SNC-CS10: snc-cs10.cfg
SNC-CS11: snc-cs11.cfg

Restore setting

Loads the stored setting data of the camera.
Click **Browse** and select the file in which the setting data is stored. Then, click **OK**, and the camera is adjusted according to the loaded data and restarted.

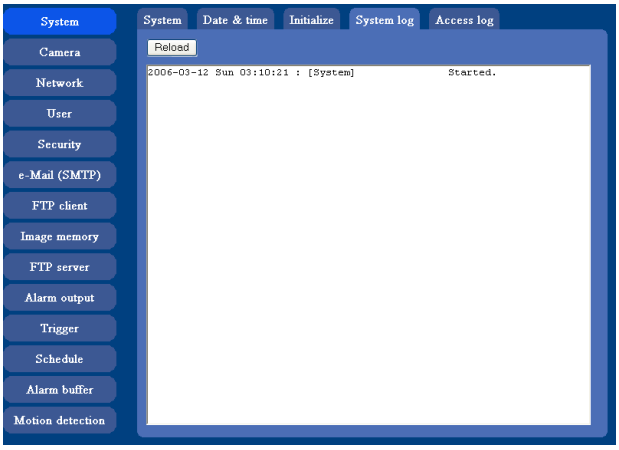
Notes

- With Restore setting, some items in the Network menu (page 37) cannot be restored.
- The following item cannot be stored or restored with Backup setting data or Restore setting.
  – a homepage created using Custom Homepage Installer

Delete user setting URL

By pressing **Delete**, you can delete the home page recorded on the flash memory of the camera with Custom Homepage Installer (page 67).

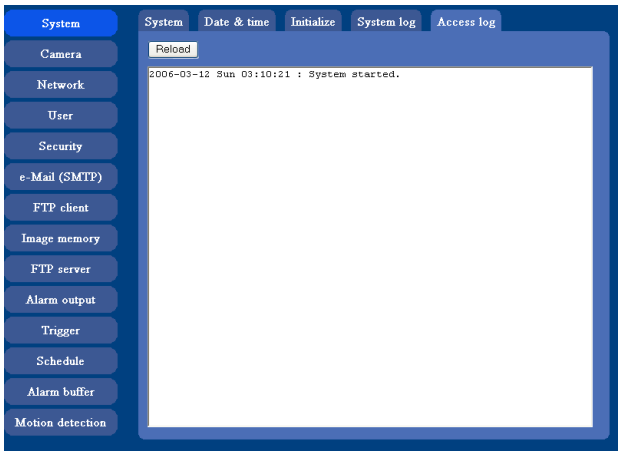
System log Tab



System log

The data of the software activity of the camera are recorded in this log. It includes data that are useful when a problem occurs.
Click **Reload** to reload the latest data.

Access log tab



Access log

The access record of the camera is displayed.
Click **Reload** to reload to the latest data.

Setting the Camera Image and Audio — Camera Menu

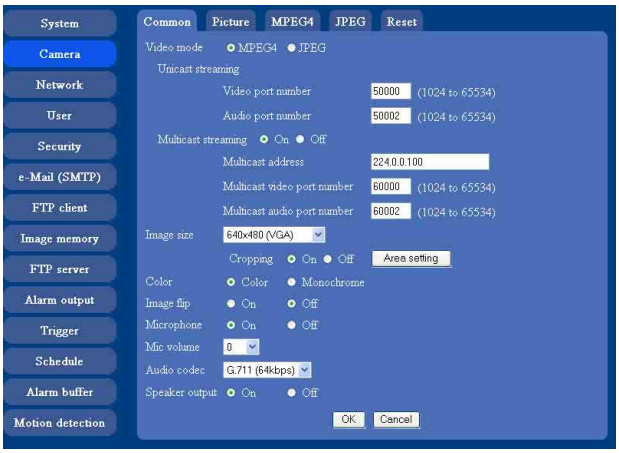
When you click **Camera** on the Administrator menu, the Camera menu appears.
Use this menu to set the functions of the camera.
The Camera menu consists of 5 tabs: **Common**, **Picture**, **MPEG4**, **JPEG** and **Reset**.

Tip

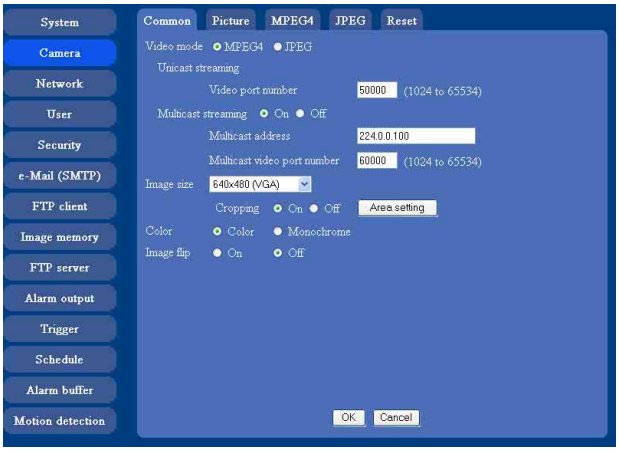
The audio settings can be selected only in SNC-CS11.

Common Tab

SNC-CS11



SNC-CS10



Video mode

Select the output format of the camera image.
MPEG4 or **JPEG** can be selected.

Unicast streaming

Specify the transmission port number of the video data and audio data used when **UDP (Unicast)** is selected with the TCP/UDP transmission switching icon in the main viewer

Video port number: Specify the transmission port number of the video data. It is initially set to 50000. Specify an even number from 1024 to 65534.

Audio port number (SNC-CS11 only): Specify the transmission port number of the audio data. It is initially set to 50002. Specify an even number from 1024 to 65534.

Multicast streaming

Set whether the camera uses the Multicast streaming or not. It reduces sending load on the camera by making the computer of the same segment network (not above the router) receive the same transmitting data.

Select **On** to allow the multicast sending and **Off** not to allow.

When select **On**, set **Multicast address**, **Multicast video port number** and **Multicast audio port number** properly.

Multicast address: Type the multicast address used on the Multicast streaming.

Multicast video port number: Specify the video transmission port number used for the Multicast streaming.

Multicast audio port number (SNC-CS11 only): Specify the audio transmission port number used for the Multicast streaming.

Image size

You can select the image size sent from the network camera.

640 × 480 (VGA), **480 × 360**, **384 × 288**, **320 × 240 (QVGA)**, **256 × 192** or **160 × 120 (QQVGA)** can be selected.

Cropping

When the image size is set to **640 × 480 (VGA)**, you can crop a portion of the image and display the cropped image on the computer. With the cropping, the transmitting data size, and thus, the network load is reduced and a higher frame rate is obtained.

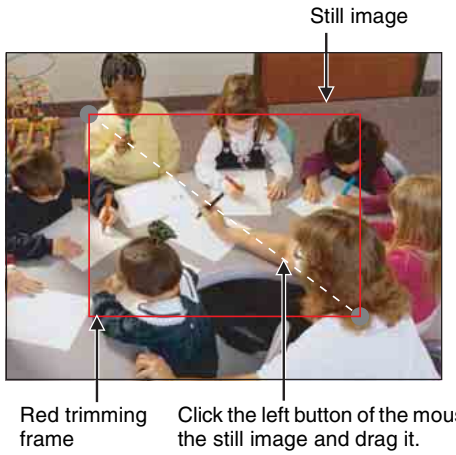
Select **On** to crop the image, or **Off**.

Notes

- When Cropping is set to **On**, Motion detection function does not work.
- While Cropping is set to **On**, the image of the composite video signal output from the video output connector of the camera may be distorted.

To crop an image

1. Set the **Image size** to **640 × 480(VGA)**.
   The **Cropping** is displayed.
2. Set the **Cropping** to **On** and click the **Area setting** button.
   The “Area setting” display appears.
3. Specify the cropping area.
   Click the left button of the mouse on the still image and drag it diagonally. The red frame that appears as you drag indicates the cropping area.



4. Click **OK** at the bottom of the window.
   The cropped image is displayed on the main viewer.
5. To close the image, click in the upper-right corner.

Color

Select **Color** or **Monochrome** for the image.

Image flip

The image can be displayed upside down. Select **On** when you fix the camera to the ceiling.

Microphone (SNC-CS11 only)

Select whether you send the audio from the microphone input connector. Select **On** to send the audio from this network camera.

Note

When you change the Microphone setting, click **Refresh** on the Web browser to reflect the change when opening main viewer page.

Mic volume (SNC-CS11 only)

Set the volume level of the audio input from the microphone input connectors. It is adjustable from **–10** to **+10**.

Audio codec (SNC-CS11 only)

Select the bit rate when you send the audio from the microphone input connectors. **G.711 (64 kbps)**, **G.726 (40 kbps)**, **G.726 (32 kbps)**, **G.726 (24 kbps)** or **G.726 (16 kbps)** can be selected.

Note

When the bit rate is set to other than **G.711 (64 kbps)**, the audio is not output in case of using Java applet viewer.

Speaker output (SNC-CS11 only)

Set whether you output the audio sent from the computer connected with the audio input connector to the speaker (active speaker for example) of the camera connected via line output connectors using SNC audio upload tool included in the supplied CD-ROM.
Select **On** to accept the audio data transmission from SNC audio upload tool.

OK/Cancel

See “Buttons common to every menu” on page 28.

Picture Tab

You can set the color condition, exposure, etc. of the camera.

White balance

Select the white balance mode from among **Auto**, **Tungsten bulb, Daylight**, **One push WB**, and **Manual**.
Auto: to automatically adjust the white balance
Tungsten bulb: to adjust the white balance for shooting indoors under the tungsten bulb (about 3200 K)
Daylight: to adjust the white balance for shooting outdoors under the daylight (about 5800 K)
One push WB: The **One push trigger** button is displayed. Click the button to adjust the white balance instantly.
Manual: When you select this, **R gain** and **B gain** are displayed and you can set them.
Selectable gain values are from 0 to 255.

Lens type

Select the equipped lens.
Auto iris lens or **Manual iris lens** can be selected.
The setting items required for each selected lens appear.
For details, refer to **Shutter mode**.
Auto iris lens: Select when the auto iris lens is equipped.
Manual iris lens: Select when the fixed iris lens is equipped.

Note

When you select **Manual iris lens** in **Lens type** while the auto iris lens is equipped, the auto iris lens will be fully open. Also, Automatic exposure by the auto iris lens is not set while the fixed iris lens is equipped, even if you select **Auto iris lens** in **Lens type**.

Shutter mode

Select the adjusting mode for the shutter speed.
There are different options for each **Lens type**.

When **Auto iris lens** is selected in **Lens type**
Auto slow shutter: If the scene becomes dark, the auto exposure setting is executed in the long exposure mode to suit the light conditon. When it is selected, **Backlight compensation** and **Exposure compensation** are displayed and can be set.
Manual: The shutter speed is fixed and the auto exposure setting is executed by the auto iris lens and the gain. When it is selected, **Flickerless mode**, **Backlight compensation** and **Exposure compensation** are displayed and can be set.

When **Manual iris lens** is selected in **Lens type**
Auto (Slow shutter on): The exposure setting is executed by automatic adjustment of the gain and the shutter speed. Also, if the scene becomes dark, the auto exposure setting is executed in the long exposure mode to suit the light conditon. When it is selected, **Backlight compensation** and **Exposure compensation** are displayed and can be set.
Auto (Slow shutter off): The exposure setting is executed by automatic adjustment of the gain and the shutter speed. Even if the scene becomes dark, the long exposure is not executed. When it is selected, **Backlight compensation** and **Exposure compensation** are displayed and can be set.

Manual: The shutter speed is fixed and you can set items about exposure manually. When it is selected, **Flickerless** is displayed and can be set. Also, when **Gain up** is set to **Auto**, **Backlight compensation** and **Exposure compensation** are displayed and can be set.

Flickerless mode

If the image is flickering under the influence of fluorescent light, select **On** so that it being reduced by **Shutter speed** being fixed to **1/50**. When **Off** is selected, **Shutter speed** is displayed and can be set.

Shutter speed

Select the shutter speed of the camera from the list box. Selectable values of the shutter speed are 1/10000, 1/4000, 1/2000, 1/1000, 1/500, 1/250, 1/100, 1/50, 1/30, 1/15, 1/8, 1/4, 1/2 and 1 second.

Note

When the **Shutter speed** is set to either **1/15**, **1/8**, **1/4**, **1/2** or **1** while the auto iris lens is epuipped, the auto iris lens is fully open.

Gain up

Select the exposure adjustment mode by gain from the list box. **Auto**, **0dB**, **6dB**, **12dB** or **18dB** can be selected.

Auto: Executes automatic adjustment of gain.
0dB, **6dB**, **12dB**, **18dB:** Set the gain to the fixed value.

Backlight compensation

Set **Backlight compensation** to **On** or **Off**.
Select **On** to active the **Backlight compensation**. If the scene is in backlight, the exposure is automatically adjusted to become brighter.

Note

When **Backlight compensation** is set to **On**, it may generate hunting according to the scene. In this case, set it to **Off**.

Exposure compensation

Select the **Exposure compensation** value from the list box to adjust the brightness of auto exposure setting. The higher value makes it brighter, and the lower value makes it darker.
The selectable values are the followings;
+2.0, +1.6, +1.2, +0.8, +0.4, ±0.0, –0.4, –0.8, –1.2, –1.6, –2.0

Gamma curve adjustment

Select the **Gamma curve adjustment** value from the list box to adjust the brightness of the image displayed in the viewer based on the recorded one.
The higher value makes it brighter, and the lower value makes it darker.
Select from **–5** to **+5**.

Saturation

Select the saturation in 7 steps, from **–3** to **+3**.
Selecting **+3** gives the image with the highest saturation.

Sharpness

Select the sharpness in 7 steps, from **–3** to **+3**.
Selecting **+3** gives the image with the highest sharpness.

Contrast

Select the contrast in 7 steps, from **–3** to **+3**.
Selecting **+3** gives the image with the highest contrast.

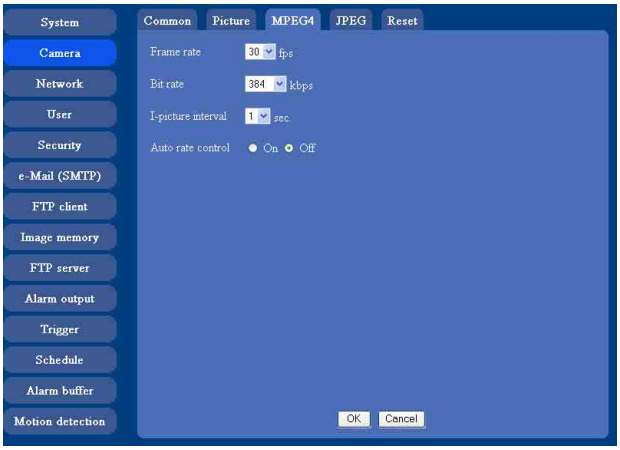
OK/Cancel

See “Buttons common to every menu” on page 28.

User preset

You can save the present settings in the camera as the custom, or you can load the settings saved in the camera.
Save: Click to save the present settings of the **Picture** tab.
Load: Click to load the saved settings. To use them, click **OK**.

MPEG4 Tab



Frame rate

Set the frame rate of the MPEG image.
Selectable values are **1**, **2**, **3**, **4**, **5**, **6**, **8**, **10**, **15**, **20**, **25** and **30** fps.

"fps" is a unit indicating the number of frames transmitted per second.

Bit rate

Set the bit rate of MPEG image transmission for a line.
Selectable values are **64**, **128**, **256**, **384**, **512**, **768**, **1024**, **1536** and **2048** kbps.

Note

The selected frame rate and bit rate are a tentative value. The actual frame rate and bit rate may be different according to the image size, the shooting scene or the network condition.

I-picture interval

Set the I-picture inserting interval of MPEG4. I-picture is the compression data serving the basic point when the data compressed by MPEG4 is depressed. In the condition that errors tends to occur, such as the network environment variation, the distortion of the image is reduced by selecting a small value. The selectable values are **1**, **2**, **3**, **4** and **5** seconds.

Auto rate control

This function adjusts the frame rate and the bit rate automatically so that the camera plays a smooth image to suit the connected computer environment. If **On** is selected, the rate of MPEG4 image is automatically adjusted.

Note

The maximum transmission rate will be the values set in **Frame rate** and **Bit rate**.

OK/Cancel

See "Buttons common to every menu" on page 28.

JPEG Tab

Frame rate

Set the maximum frame rate of JPEG image that can be monitored on the computer. Selectable frame rates are **5**, **6**, **8**, **10**, **15**, **20**, **25** and **30** fps.

Image quality

Set the quality of JPEG image.
Selectable values are from **Level 1** to **Level 5**.
Selecting **Level 5** gives the image with the highest quality.

Bandwidth control

When the Video mode is set to JPEG, the network bandwidth can be limited. Selectable bandwidths are **0.5**, **0.6**, **0.7**, **0.8**, **0.9**, **1.0**, **2.0**, **3.0**, **4.0**, and **Unlimited** Mbps. When you do not wish to limit the bandwidth, select **Unlimited**.

OK/Cancel

See "Buttons common to every menu" on page 28.

Reset Tab

Reset camera menu

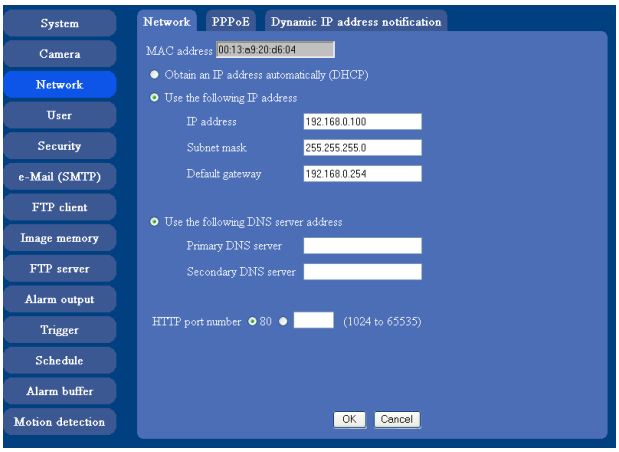
Click **Reset**, and the message “Camera menu setting is reset to default. Are you sure?” is displayed. To reset to default, click **OK**.

Configuring the Network — Network Menu

When you click **Network** on the Administrator menu, the Network menu appears.
Use this menu to configure the network to connect the camera and the computer.
The Network menu consists of 3 tabs: **Network**, **PPPoE** and **Dynamic IP address notification**.

Network Tab

This section provides the menus for connecting the camera through the network cable.



MAC address

Displays the MAC address of the camera.

Obtain an IP address automatically (DHCP)

DHCP server is installed on the network. Select it when the IP address is assigned by DHCP server. IP address is assigned automatically.

Note

When you set **Obtain an IP address automatically (DHCP)**, make sure that DHCP server is working on the internet.

Use the following IP address

Select this when a fixed IP address is set.

IP address

Type the IP address of the camera.

Subnet mask

Type the subnet mask.

Default gateway

Type the default gateway.

Obtain DNS server address automatically

Select this to obtain the address of DNS server automatically. It can be set only when **Obtain an IP address automatically (DHCP)** is selected in the Network tab.

Note

When you select “Obtain DNS server address automatically”, make sure that DHCP server is active on the network.

Use the following DNS server address

Select this when you set the fixed address as the IP address of DNS server.

Primary DNS server

Type the IP address of the primary DNS server.

Secondary DNS server

Type the IP address of the secondary DNS server, if necessary.

Host name

Type the host name of the camera to be transmitted to the DHCP server. This setting is valid only when **Obtain an IP address automatically (DHCP)** is selected in the Network tab.

Domain suffix

Type the domain suffix of the camera to be transmitted to the DHCP server. This setting is valid only when **Obtain an IP address automatically (DHCP)** is selected in the Network tab.

Note

The domain suffix is sent to the DHCP server as FQDN (Fully Qualified Domain Suffix) information when **Host name** is set.

HTTP port number

Normally select **80**. If you want to use a port number other than **80**, select the text box and type a port number between 1024 and 65535.

Note

When you have set the **HTTP port numbe**r to a number other than 80 in the Network menu or in the IP Setup Program, access the camera again by typing the IP address of the camera on your Web browser as follows:

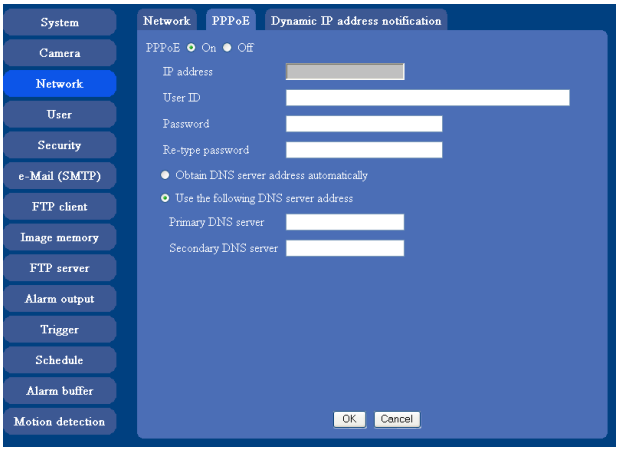
Example: when HTTP port number is set to 8000

OK/Cancel

See “Buttons common to every menu” on page 28.

PPPoE Tab - Setting of PPPoE Connection

Use it when you connect the camera with PPPoE (Point-to-Point Protocol over Ethernet). PPPoE connection is the protocol that is widely used in xDSL (digital affiliate line such as ADSL, VDSL or SDSL) as the authentication and connection system.



PPPoE

Set whether you connect the camera using PPPoE function or not. When **On** is selected, PPPoE connection is used.

IP address

When you connect to the network by PPPoE function, IP address obtained at PPPoE connection is displayed.

User ID

Type the user ID for the authentication necessary for PPPoE connection. Type up to 64 characters.

Password

Type the password for the authentication necessary for PPPoE connection. Type comfirm from 1 to 32 characters.

Re-type password

To comfirm the password, re-type the password typed in the password box.

Obtain DNS server address automatically

Select to obtain the address of DNS server automatically.

Use the following DNS server address

Select to set the fixed address as the IP address of DNS server.

Primary DNS server

Type the IP address of the primary DNS server.

Secondary DNS server

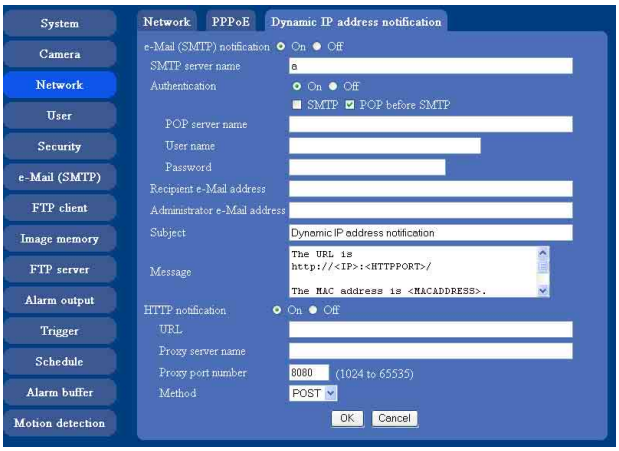
Type the IP address of the secondary DNS server, if necessary.

OK/Cancel

See “Buttons common to every menu” on page 28.

Dynamic IP address notification Tab — Notifying the IP Address

When the DHCP setting is set to **On** or PPPoE setting is set to **On** on the Network tab, you can send notification of the completion of the network settings using the SMTP or HTTP protocol.



e-Mail (SMTP) notification

Select **On** to send an e-Mail when the DHCP setting is completed.

SMTP server name

Type the name or IP address of the SMTP server to use for sending an e-Mail, up to 64 characters.

Authentication

Select the authentication required when you send an e-mail.

Off: Select if no authentication is required when an e-mail is sent.

On: Select if authentication is required when an e-mail is sent. Select one of the authentication methods from the following and specify the **POP server name**, **User name** and **Password** as required.

SMTP: Select when SMTP authentication is required.

POP before SMTP: Select when POP before SMTP authentication is required.

Note

When you set **Authentication** to **On**, make sure to select either or both **SMTP** or/and **POP before SMTP**.

POP server name

It is necessary when the **POP before SMTP** is selected in **Authentication**.

Type the POP (receiving mail) server name up to 64 characters. Or type the IP address of the POP server. This setting is necessary when the SMTP server which sends e-Mails performs authentication using the POP user account.

User name, Password

Type the user name and Password of the user who has the mail account. This setting is necessary when the SMTP server which sends e-Mails performs authentication.

Recipient e-Mail address

Type the recipient e-Mail address up to 64 characters. You can specify only one recipient e-Mail address.

Administrator e-Mail address

Type the e-Mail address of the camera administrator, up to 64 characters. This is used as the reply address or the address for a system mail from the mail server.

Subject

Type the subject/title of the e-Mail up to 64 characters.

Message

Type the text of the e-Mail up to 384 characters. (A line break is equivalent to 2 characters.) You can describe the information of the acquired IP address, etc. using the special tags mentioned below.

HTTP notification

Select **On** to output a command to the HTTP server when the DHCP setting is completed. Using this function, you can configure a useful system, for example, to view the access log stored in the HTTP server or start an external CGI program.

URL

Specify the URL to send HTTP request, using up to 256 characters. The URL is normally written as follows:

http://ip_address[:port]/path?parameter

ip_address: Type the IP address or host name of the host to which you want to connect.
[:port]: Specify the port number to which you want to connect. If you want to use the well-known port number 80, you do not need to input this value.
path: Type the command.
parameter: Type the command parameter if necessary. You can use the special tags mentioned below for the parameters.

Proxy server name

When you send HTTP request via a proxy server, type the name or IP address of the proxy server, using up to 64 characters.

Proxy port number

Specify the port number when you send HTTP request via the proxy server. Set a port number between 1024 and 65535.

Method

Select the HTTP method **GET** or **POST**.

OK/Cancel

See “Buttons common to every menu” on page 28.

About the special tags

You can use the following five special tags to allow the notification of the settings acquired by the DHCP, such as an IP address. Type the tags in the parameter section of the URL that you described in the Message field of the HTTP.

<IP>

Use this tag to embed the IP address acquired by the DHCP in the text or parameter.

<HTTPPORT>

Use this tag to embed the specified HTTP server port number in the text or parameters.

<MACADDRESS>

Use this tag to embed the MAC address of the interface whose IP address you have acquired by the DHCP, in the text or parameter.

<MODELNAME>

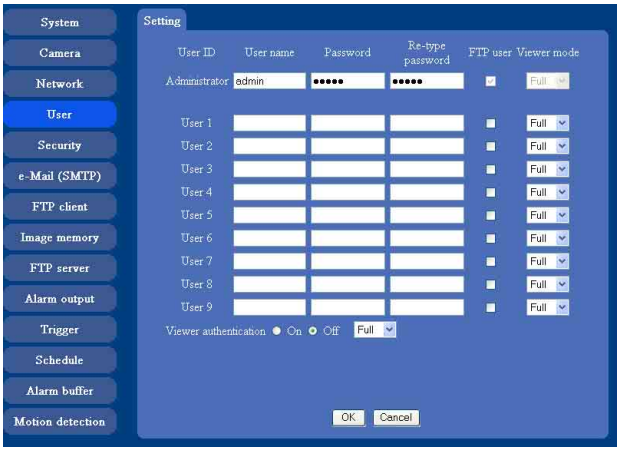
Use this tag to embed the camera's model name (SNC-CS10, SNC-CS11) in the text or parameter.

<SERIAL>

Use this tag to embed the camera's serial number in the text or parameter.

Setting the User
— User Menu

When you click **User** on the Administrator menu, the User menu appears.
Use this menu to set the user names and passwords of Administrator and up to 9 kinds of users (User 1 to User 9), and the access right of each user.



Administrator, User 1 to 9

Specify **User name**, **Password**, **Re-type password**, **FTP user** and **Viewer mode** for each user ID.

User name

Type a user name between 5 and 16 characters.

Password

Type a password between 5 and 16 characters.

Re-type password

To confirm the password, retype the password typed in the Password box.

FTP user

Set whether allowed to log in to FTP server or not.
Check the box if allowed to log in to FTP server.

Viewer mode

If the user is authenticated when the main viewer is displayed, you can select the viewer mode displayed after authentication.
Full: You can operate all functions in this mode.
Light: You can operate the functions other than the trigger button on the main viewer, TCP/UDP switching button on the main viewer, and the frame rate setting.
View: You can only monitor the camera image.

Viewer authentication

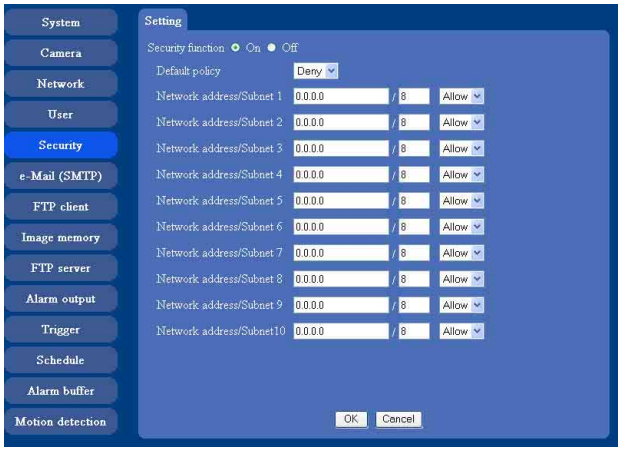
Set whether the user is authenticated or not when the main viewer is displayed.
When you select **On**, the main viewer is displayed to suit the authenticated user. When you select **Off**, select the view mode of the main viewer page which is displayed without authentication from **Full**, **Light** or **View**.

OK/Cancel

See “Buttons common to every menu” on page 28.

Setting the Security — Security Menu

When you click **Security** on the Administrator menu, the Security menu appears.
Use this menu to limit the computers that can access the camera.



Security function

To activate the security function, select **On**.
If you do not wish to use the security function, select **Off**.

Default policy

Select the basic policy of the limit from **Allow** and **Deny** for the computers specified on the Network address/ Subnet 1 to Network address/Subnet 10 menus below.

Network address/Subnet 1 to Network address/Subnet 10

Type the IP addresses and subnet mask values you want to allow or deny access to the camera.
You can specify up to 10 IP addresses and subnet mask values. For a subnet mask, type 8 to 32.
Select **Allow** or **Deny** from the drop-down list on the right for each IP address/subnet mask .

Tip

The subnet mask value represents the bit number from the left of the network address.
For example, the subnet mask value for “255.255.255.0” is 24.
If you set “192.168.0.0/24” and “Allow,” you can allow access from the computers having an IP address between “192.168.0.0” and “192.168.0.255”.

Note

You can access the camera even from a computer having an IP address whose access right is set to **Deny**, if you enter the user name and password set for the Administrator boxes in the User menu.

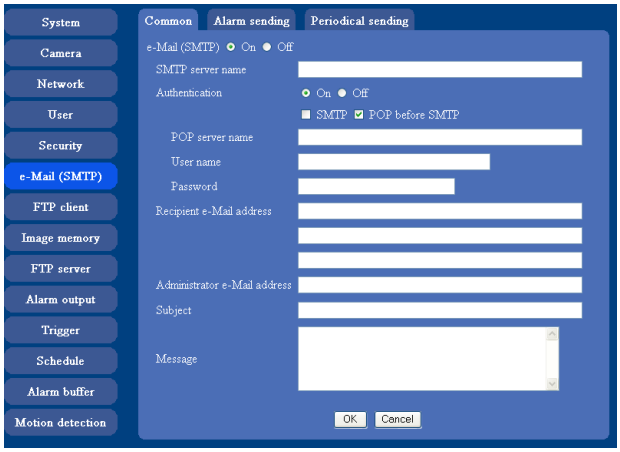
OK/Cancel

See “Buttons common to every menu” on page 28.

Sending an Image via mail — e-Mail (SMTP) Menu

When you click **e-Mail (SMTP)** on the Administrator menu, the e-Mail (SMTP) menu appears.
By using e-Mail (SMTP) function, you can send a mail with attached image file which has been shot linked with the external sensor input or with the built-in motion detection function. The image file can also be sent periodically.
The e-Mail (SMTP) menu is composed of three tabs: **Common**, **Alarm sending** and **Periodical sending**.

Common Tab — Setting the e-Mail (SMTP) Function



e-Mail (SMTP)

Select **On** when you use the e-Mail (SMTP) function. The common setting options are displayed below.
If you do not wish to use the e-Mail (SMTP) function, select **Off** and click **OK**.

Notes

- During transmission of an image file via mail, the frame rate and operation performance of the monitor image of the main viewer decline.
- While the camera Video mode is set to **MPEG4**, the image of the composite video signal output from the video output connector of the camera may be distorted during mail transmission.
- You cannot send an audio file by using the mail sending function.

SMTP server name

Type the SMTP server name up to 64 characters, or the IP address of the SMTP server.

Authentication

Select the authentication required when you send an e-mail.

Off: Select if no authentication is required when an e-mail is sent.
On: Select if authentication is required when an e-mail is sent. Select one of the authentication methods from the following and specify the **POP server name**, **User name** and **Password** as required.
SMTP: Select when SMTP authentication is required.
POP before SMTP: Select when POP before SMTP authentication is required.

Note

When you set **Authentication** to **On**, make sure to select either or both **SMTP** or/and **POP before SMTP**.

POP server name

It is necessary when the **POP before SMTP** is selected in **Authentication**.
Type the POP (receiving mail) server name up to 64 characters, or type the IP address of the POP server. This setting is necessary when the SMTP server which sends e-mails performs authentication using the POP user account.

User name, Password

Type the user name and Password of the user who has the mail account. This setting is necessary when the SMTP server which sends e-mails performs authentication.

Recipient e-Mail address

Type the recipient e-Mail address up to 64 characters. You can specify up to three recipient e-Mail addresses.

Administrator e-Mail address

Type the Administrator e-Mail address up to 64 characters.
This address is used for reply mail and sending system messages from the SMTP server.

Subject

Type the subject/title of the e-Mail up to 64 characters. When **Alarm sending** of the alarm tab is set to **On**, the mail sent due to the alarm detection will indicate the type of alarm in the subject. [**S1**] is added for sensor input detection, and [**MD**] is added for motion detection.

Message

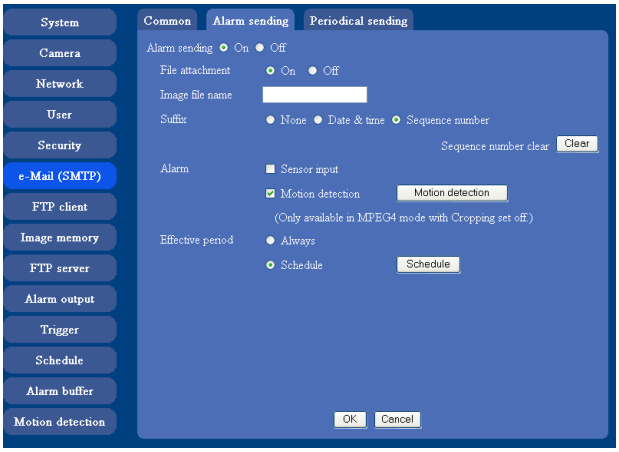
Type the text of the e-Mail up to 384 characters. (A line break is equivalent to 2 characters.)

OK/Cancel

See “Buttons common to every menu” on page 28.

Alarm sending Tab — Setting the mail sending mode when detecting the alarm

Set to send the mail with connection to the alarm detection by the external sensor input or by the built-in motion detection function.



Alarm sending

Select **On** to set to send mail with connection to the alarm detection.

File attachment

Set whether an image file is to be attached to the mail or not.

When **On** is selected, the image file made by the settings below is attached. When **Off** is selected, only the message is sent.

Image file name

Type the file name you want to assign to the image to attach a mail. You can use up to 10 alphanumeric, - (hyphen) and _ (underscore) for naming.

Suffix

Select a suffix to add to the file name.

None: No suffix is added. The Image file name is assigned to the image to be sent via an e-Mail.

Date & time: The date & time suffix is added to the Image file name.

The date/time suffix consists of lower two-digits of year (2 digits), month (2 digits), date (2 digits), hour (2 digits), minute (2 digits), second (2 digits), and consecutive number (2 digits), thus 14-digit number is added to the file name.

Sequence number: A consecutive number of 10 digits between 0000000001 and 4294967295 and two fixed digits 00 is added to the Image file name.

Tip

A consecutive number added to **Date & time** and **Sequence number** is used to identify each of multiple files created with one alarm event.

Sequence number clear

Click **Clear** to reset the Sequence number suffix to 1.

Alarm

Select the connected alarm.

Sensor input: The external sensor which is connected to the sensor input of the camera I/O port.

Motion detection: Click **Motion detection** button, and the Motion detection menu is displayed. You can set the motion detection function (page 56).

Note

Motion detection works only when the camera Video mode is set to **MPEG4** and the **Cropping** is set **Off**.

Effective period

Set the period when the alarm detection is effective.

Always: The alarm detection is always effective.

Schedule: You can specify the period when the alarm detection is effective in the schedule setting in the other section.

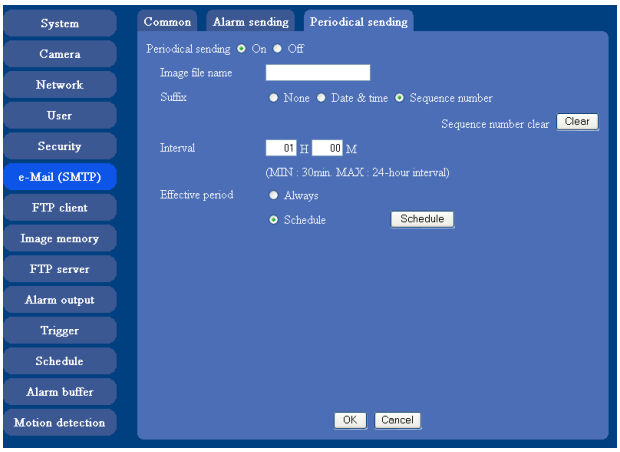
Click **Schedule** and the menu for the Effective period is displayed. (“Setting the Schedule — Schedule Menu” on page 55)

OK/Cancel

See “Buttons common to every menu” on page 28.

Periodical sending Tab — Setting the periodical mail sending mode

You can set to send mails periodically.



Periodical sending

Select **On** when you want to send mails periodically. If you select **Off**, Periodical sending is not executed.

Image file name

Type the file name of the image attached to the mail up to 10 alphanumeric, - (hyphen) and _ (under score).

Suffix

Select a suffix added to the file name used when the mail is sent.

None: The name of the sent file will be the Image file name.

Date & time: The date & time suffix is added to the Image file name.
The date & time suffix consists of lower two-digits of year (2 digits), month (2 digits), date (2 digits), hour (2 digits), minute (2 digits) and second (2 digits), and two fixed digits 00, thus 14-digit number is added to the file name.

Sequence number: A consecutive number of 10 digits between 0000000001 and 4294967295 and two fixed digits 00 is added to the Image file name.

Sequence number clear

Click **Clear** and the suffix of the sequence number returns to 1.

Interval

Type the interval at which you want to send a mail periodically. You can set the hour (H) and minutes (M) between 30 minutes and 24 hours (one day).

Effective period

Set the period when the periodical sending is effective.

Always: The periodical sending is always effective.

Schedule: You can specify the period when the periodical sending is effective in the schedule setting in the other section.
Click **Schedule** and the menu for the effective period is displayed. (“Setting the Schedule — Schedule Menu” on page 55)

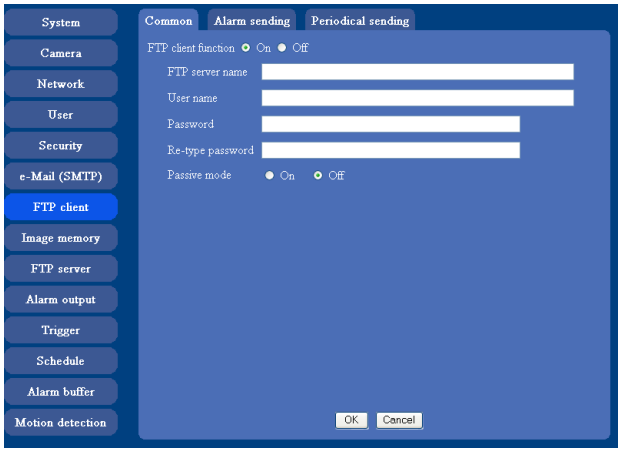
OK/Cancel

See “Buttons common to every menu” on page 28.

Sending Images to FTP Server
— FTP client Menu

When you click **FTP client** on the Administrator menu, the FTP client menu appears.
Use this menu to set up for capturing and sending still images to an FTP server. By using FTP client function, you can send the image file which has been shot and recorded linked with the external sensor input or with the built-in motion detection function to FTP server. The image file can also be sent periodically.
FTP client menu is composed of three tabs **Common**, **Alarm sending** and **Periodical sending**.

Common Tab — Setting the FTP Client Function



FTP client function

To activate the FTP client function, select **On**.
When you do not wish to use the FTP client function, select **Off**.

Note

The frame rate and operability on the main viewer may decrease while a file is being transmitted by the FTP client function.

FTP server name

Type the FTP server name to upload still images up to 64 characters, or the IP address of the FTP server.

User name

Type the user name for the FTP server.

Password

Type the password for the FTP server.

Re-type password

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

Passive mode

Set whether you use the passive mode of FTP server or not when connecting to FTP server. Select **On** to connect to FTP server using the passive mode.

OK/Cancel

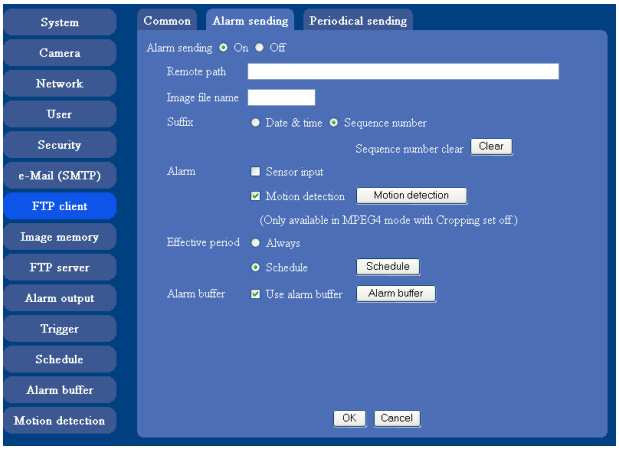
See “Buttons common to every menu” on page 28.

Alarm sending Tab — Setting the FTP client action when detecting the alarm

Set to forward the image file to the specified FTP server linked with the alarm detection by the external sensor input or by the built-in motion detection function.

Tip

Only in SNC-CS11, the image file including audio data can be forwarded.



Alarm sending

Select **On** to send the image file to FTP server linked with the alarm detection.

Remote path

Type the path to the destination up to 64 characters.

Image file name

Type the file name you want to assign to the images when sending to the FTP server. You can use up to 10

alphanumeric characters, - (hyphen) and _ (underscore) for naming.

Suffix

Select a suffix to add to the file name.

Date & time: The date & time suffix is added to the image file name.
The date/time suffix consists of lower two-digits of year (2 digits), month (2 digits), date (2 digits), hour (2 digits), minute (2 digits) and second (2 digits), and consecutive number (2 digits), thus 14-digit number is added to the file name.

Sequence number: A consecutive number of 10 digits between 0000000001 and 4294967295 and an consecutive 2 digits number is added to the image file name.

Tip

A consecutive number added to **Date & time** and **Sequence number** is used to identify each of multiple files created with one alarm event.

Sequence number clear

Click **Clear** to reset the Sequence number suffix to 1.

Alarm

Select the connected alarm.

Sensor input: The external sensor which is connected to the sensor input of the camera I/O port.

Motion detection: Click **Motion detection** button, and the Motion detection menu is displayed. You can set the motion detection function (page 53).

Note

Motion detection works only when the Video mode is set to **MPEG4** and the **Cropping** is set to **Off**.

Effective period

Set the period when the alarm detection is effective.

Always: The alarm detection is always effective.

Schedule: You can specify the period when the alarm detection is effective in the schedule setting in the other section.
Click **Schedule** and the menu for the Effective period is displayed. (“Setting the Schedule — Schedule Menu” on page 55)

Alarm buffer

Select **Use alarm buffer** when you forward the image of before and after the alarm detection (pre-alarm, post-alarm).
If you do not select it, only the image of the moment of the alarm detection is forwarded.

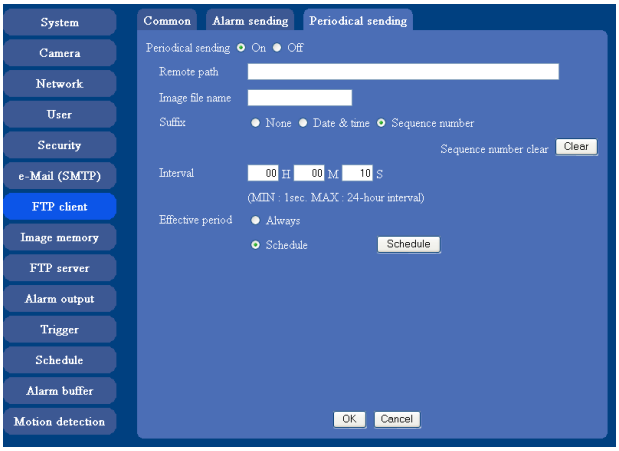
Click **Alarm buffer** to display the Alarm buffer menu. For details, see “Setting the Alarm Buffer — Alarm buffer Menu” on page 55.

OK/Cancel

See “Buttons common to every menu” on page 28.

Periodical sending Tab — Setting the Periodical FTP Client Activity

You can set to send an image file to FTP server periodically.



Periodical sending

Select **On** when you want to use periodical sending. If you select **Off**, Periodical sending is not executed.

Remote path

Type the remote path up to 64 characters.

Image file name

Type the file name of the image sent to FTP server up to 10 alphanumeric characters, - (hyphen) and _ (under score).

Note

You cannot send the audio file by using the periodical sending function of FTP. (for SNC-CS11)

Suffix

Select a suffix to be added to the file name sent to FTP server.

None: The name of the sent file will be the image file name.

Date & time: The date & time suffix is added to the image file name.
The date & time suffix consists of lower two-digits of year (2 digits), month (2 digits), date (2 digits), hour (2 digits), minute (2 digits) and second (2 digits), and consecutive number (2 digits), thus 14-digit number is added to the file name.

Sequence number: A consecutive number of 10 digits between 0000000001 and 4294967295 and two fixed digits 00 is added to the image file name.

Sequence number clear

Click **Clear** and the suffix of the sequence number returns to 1.

Interval

Type the interval at which you want to send images to the FTP server periodically. You can set the hour (H), minutes (M) and seconds (S) between 1 second and 24 hours (one day).

Note

The actual interval may be longer than the set value, depending on the image size, image quality setting, bit rate and the network environments.

Effective period

Set the period when the periodical sending is effective.

Always: The periodical sending is always effective.

Schedule: You can specify the period when the periodical sending is effective in the schedule setting in the other section.
Click **Schedule** and the menu for the effective period is displayed. (“Setting the Schedule — Schedule Menu” on page 55)

OK/Cancel

See “Buttons common to every menu” on page 28.

Recording Images in Memory
— Image memory Menu

When you click **Image memory** on the Administrator menu, the Image memory menu appears.
By using the image memory function, you can record the image file, which has been shot being linked with the external sensor input or with the built-in motion detection function, to the built-in memory (about 8 MB) of the camera. The image file can also be recorded periodically.
The recorded image and can be found or downloaded to the computer using the FTP server function. (See “Downloading Images from the Camera — FTP server Menu” on page 52.)
Image memory menu is composed of three tabs **Common**, **Alarm recording** and **Periodical recording**.

Notes

- The image files recorded in the built-in memory will be erased when the power of the camera is turned off.
- The frame rate and operability on the main viewer may decrease during image storage in the built-in memory.

Common Tab — Setting the Image memory Function

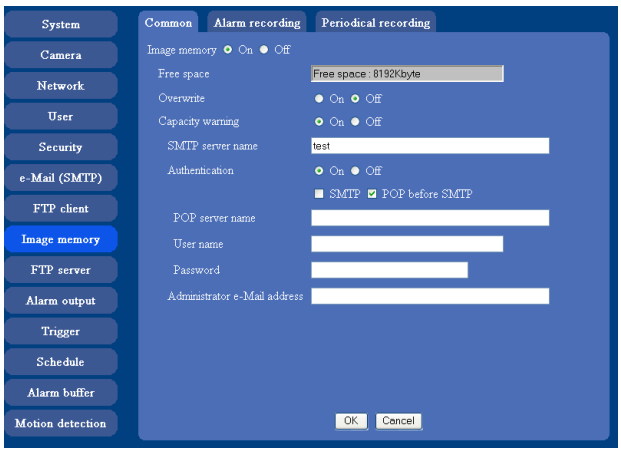


Image memory

Set whether you use the Image memory function or not. When you select **On**, the Common setting options are displayed in the below. If you do not use it, select **Off** and click **OK**.

Free space

Shows the current free space of the builtin memory.

Overwrite

Select to overwrite the file or not when there is insufficient memory space to record the image.
Select **On** to allow overwriting. The oldest file or folder is overwritten first.
Select **Off** to prohibit overwriting. In this case, a new file cannot be stored.

Capacity warning

Select **On** to send a warning mail to the Administrator when the built-in memory space is low or the memory is full. Select **Off** if you do not want to send a warning mail.

Note

When the Overwrite is set to **On**, a warning mail is not sent to the Administrator.

SMTP server name

Type the name of the SMTP server to use for sending an e-Mail, up to 64 characters.
Otherwise type the IP address of SMTP mail server.

Authentication

Select the authentication required when you send an e-mail.

Off: Select if no authentication is required when an e-mail is sent.
On: Select if authentication is required when an e-mail is sent. Select one of the authentication methods from the following and specify the **POP server name**, **User name** and **Password** as required.
SMTP: Select when SMTP authentication is required.
POP before SMTP: Select when POP before SMTP authentication is required.

Note

When you set **Authentication** to **On**, make sure to select either or both **SMTP** or/and **POP before SMTP**.

POP server name

This is necessary when **POP before SMTP** is selected in **Authentication**.
Type POP (receiving mail) server name up to 64 characters. Otherwise type the IP address of POP server.
This setting is necessary when SMTP server that sends a mail authenticates using the account of POP user.

User name, password

Type the user name and the password of the user who has the mail account. This setting is necessary when SMTP server that sends a mail authenticates.

Administrator e-Mail address

Type the e-Mail address of the recipient of the warning mail (e-Mail address of the camera Administrator), up to 64 characters.

OK/Cancel

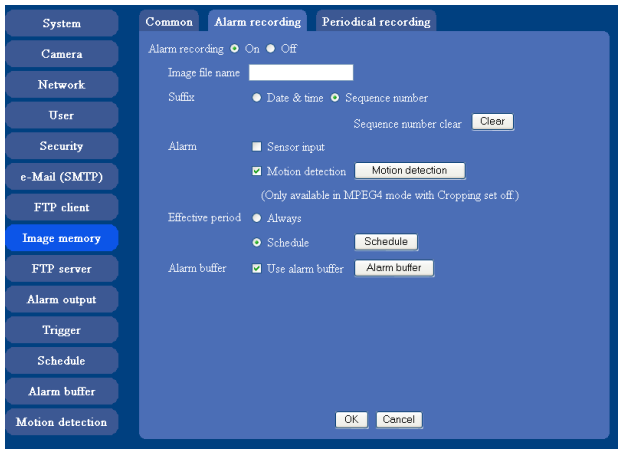
See “Buttons common to every menu” on page 28.

Alarm recording Tab — Setting the Image Memory Function when Detecting the Alarm

You can set to record the image file to the built-in memory linked with the external sensor input or with the built-in motion detection function.

Tip

Only in SNC-CS11, the image file including audio data can be recorded.



Alarm recording

Select **On** to set to record the image file to the built-in memory linked with the external sensor input or with the built-in motion detection function.

Image file name

Type the file name you want to assign to the images when saving in the built-in memory. You can use up to 10 alphanumeric characters, - (hyphen) and _ (underscore) for naming.

Suffix

Select a suffix to add to the file name.
Date & time: The Date & time suffix is added to the image file name.
The Date & time suffix consists of lower two-digits of year (2 digits), month (2 digits), date (2 digits), hour (2 digits), minute (2 digits), second (2 digits)

and consecutive number (2 digits), thus 14-digit number is added to the file name.

Sequence number: A consecutive number of 10 digits between 0000000001 and 4294967295 and an consecutive 2 digits number is added to the image file name.

Tip

A consecutive number added to **Date & time** and **Sequence number** is used to identify each of multiple files created with one alarm event.

Sequence number clear

Click **Clear** to reset the Sequence number suffix to 1.

Alarm

Select the connected alarm.

Sensor input: The external sensor which is connected to the sensor input of the camera I/O port.

Motion detection: Click **Motion detection** button, and the Motion detection setting page is displayed. You can set the motion detection function (page 53).

Note

Motion detection works only when the Video mode is set to **MPEG4** and the **Cropping** is set to **Off**.

Effective period

Set the period when the alarm detection is effective.

Always: The alarm detection is always effective.

Schedule: You can specify the period when the alarm detection is effective in the schedule setting in the other section.

Click **Schedule** and the menu for the effective period is displayed. (“Setting the Schedule — Schedule Menu” on page 55)

Alarm buffer

Select **Use alarm buffer** when you forward the image of before and after the alarm detection (pre-alarm, post-alarm).

If you do not select it, only the image of the moment of the alarm detection is forwarded.

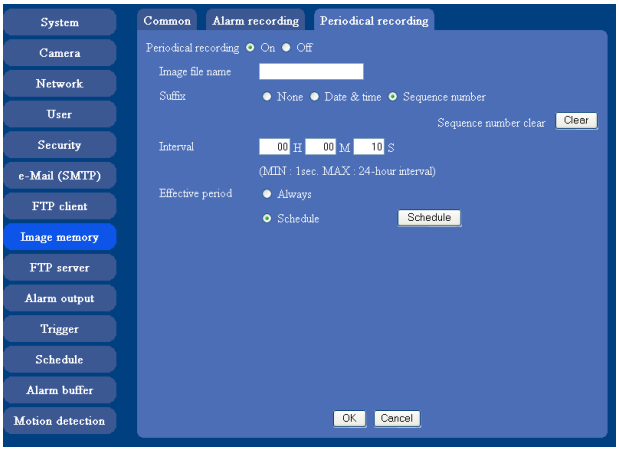
Click **Alarm buffer** to display the Alarm buffer menu. For details, see “Setting the Alarm Buffer — Alarm buffer Menu” on page 55.

OK/Cancel

See “Buttons common to every menu” on page 28.

Periodical recording Tab — Setting the Periodical recording mode

You can set to record the image file to the built-in memory periodically.



Periodical recording

Select **On** when you want to use periodical recording. If you select **Off**, the Periodical recording is not executed.

Image file name

Type the file name of the image recorded to the built-in memory up to 10 alphanumeric, - (hyphen) and _ (under score).

Note

You cannot send the audio file by using the periodical recording function. (for SNC-CS11)

Suffix

Select a suffix to add to the file name.

None: The recording file name will be the image file name.

Date & time: The date & time suffix is added to the image file name.

The date/time suffix consists of lower two-digits of year (2 digits), month (2 digits), date (2 digits), hour (2 digits), minute (2 digits), second (2 digits), and consecutive number (2 digits), thus 14-digit number is added to the file name.

Sequence number: A consecutive number of 10 digits between 0000000001 and 4294967295 and two fixed digits 00 is added to the image file name.

Sequence number clear

Click **Clear** and the suffix of the sequence number returns to 1.

Interval

Type the interval at which you want to record an image in the built-in memory periodically. You can set the hour (H), minutes (M) and seconds (S) between 1 second and 24 hours (one day).

Note

The actual interval may be longer than the set value, depending on the image size or the network environments.

Effective period

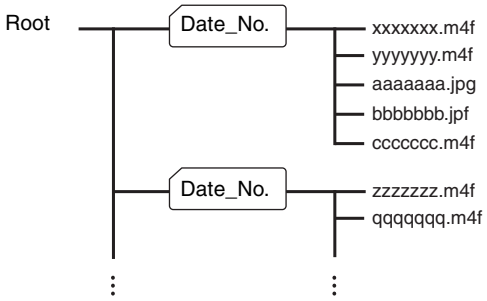
Set the period when the periodical recording is effective.
Always: The periodical recording is always effective.
Schedule: You can specify the period when the periodical recording is effective in the schedule setting in the other section.
Click **Schedule** and the menu for the effective period is displayed. ("Setting the Schedule — Schedule Menu" on page 55)

OK/Cancel

See "Buttons common to every menu" on page 28.

Folder structure of image memory

When the image memory function is used, the images are recorded with the following folder structure.



A ▭ represents a folder created automatically.
The Date_No. folder has a 9-digit name consisting of the last two digits of the year (2 digits), month (2 digits), day (2 digits), underscore and sequence number (2 digits).
In the built-in memory, one folder automatically created can store image files of about 1 MB. If the size of the image files exceeds that value, a new folder is created automatically to continue recording.

About the extension of a file

A file to be recorded/sent using the image memory function or the FTP client function has one of the following three extensions depending on the Video mode setting and the recording/sending settings of the camera.

.m4f: Represents the **MPEG4** Video mode.
.jpf: Represents the **JPEG** Video mode when **Use alarm buffer** is checked in the alarm recording/ alarm sending menu.
.jpg: Represents the **JPEG** Video mode when **Use alarm buffer** is not checked in the alarm recording/ alarm sending menu. This file can be viewed with a normal image viewer.

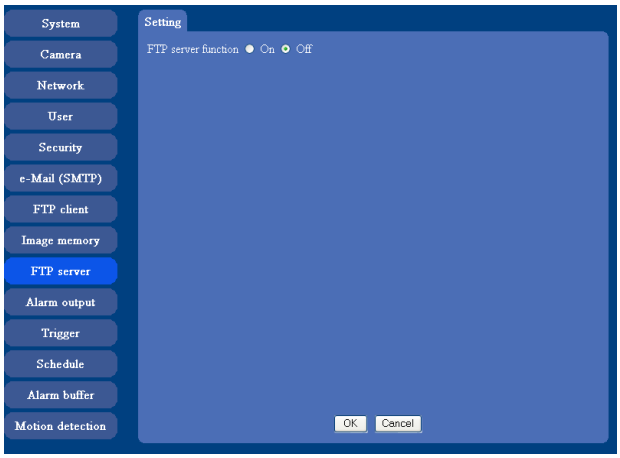
The SNC video player (page 66) allows playing of ".m4f" and ".jpf" files.

Tip

Only ".m4f" and ".jpf" files formed in SNC-CS11 include audio data.

Downloading Images from the Camera — FTP server Menu

When you click **FTP server** on the Administrator menu, the FTP server menu appears. Use this menu to set up for the FTP server function which finds a specified image file stored in the built-in memory of (about 8 MB) or download the still image file from this unit.



FTP server function

To activate the FTP server function, select **On** and click **OK**.
When you do not use the FTP server function, select **Off** and click **OK**.

OK/Cancel

See “Buttons common to every menu” on page 28.

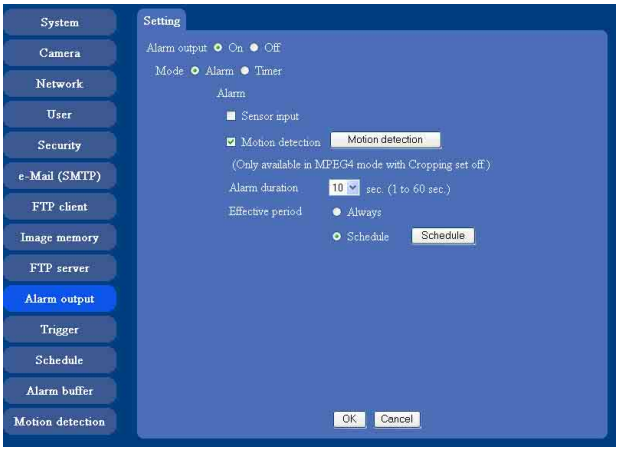
Note

Note the followings when log in to FTP server of this unit using the FTP client software on the computer.

- The frame rate and the operativity of the monitor window in the main viewer will declime.
- While recording the image using the Image memory function, you cannot delete the recording folder.
- When the recorded image file is deleted, this unit counts the free space of the built-in memory again when logging off.

Setting the Alarm Output — Alarm output Menu

When you click **Alarm output** on the Administrator menu, the Alarm output menu appears.
You can set in this menu to control the alarm out of I/O port on the rear of the camera linked to the alarm detection and the timer.



Alarm output

To activate the Alarm output function, select **On**. The basic setting options are displayed below.
When you do not use the Alarm output function, select **Off**.

Mode

Select the mode of the Alarm output function.

Alarm: Controls alarm output by synchronizing with an external sensor input or the built-in activity detection function.
Timer: Controls alarm output by the timer.

Alarm

This item is displayed when **Mode** is set to **Alarm**.
Select the alarm to link the alarm output function.
Sensor input: External sensor connected to sensor input of the camera I/O port
Motion detection: Click **Motion detection** button, and the Motion detection setting page is displayed. You can set the motion detection function (page 56).

Note

Motion detection works only when the Video mode is set to **MPEG4** and the **Cropping** is set to **Off**.

Alarm duration

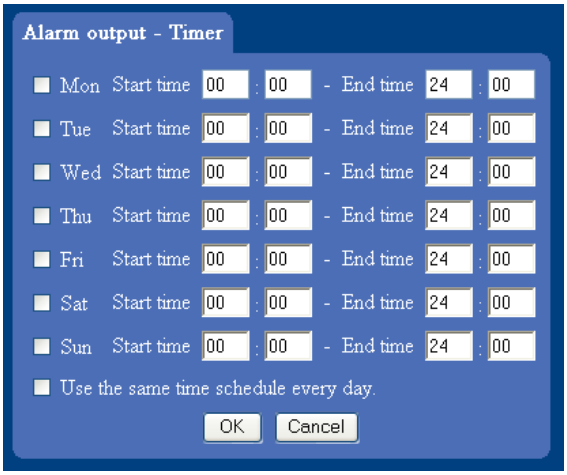
Select the duration for which the alarm output is short-circuited between 1 and 60 sec.

Effective period

This item is displayed when **Mode** is set to **Alarm**.
Set the period while the alarm detection is effective.
Always: The alarm detection is always effective.
Schedule: You can specify the period when the alarm detection is effective in the schedule setting in the other section.
Click **Schedule** and the menu for the effective period is displayed. (“Setting the Schedule — Schedule Menu” on page 55)

Schedule

This item is displayed when **Mode** is set to **Timer**.
Click **Schedule** and the menu for the effective period is displayed. (“Setting the Schedule — Schedule Menu” on page 55)

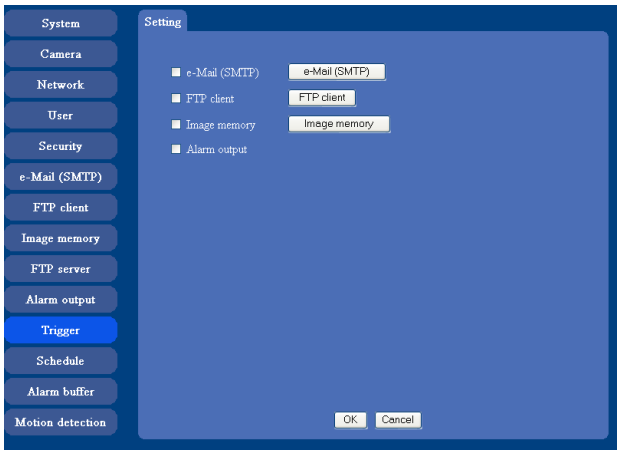


OK/Cancel

See “Buttons common to every menu” on page 28.

Setting the Operations from the Viewer Page — Trigger Menu

Click **Trigger** on the Administrator menu to display the Trigger menu.
In this menu, you will select the activities when (Trigger icon) is clicked on the main viewer.



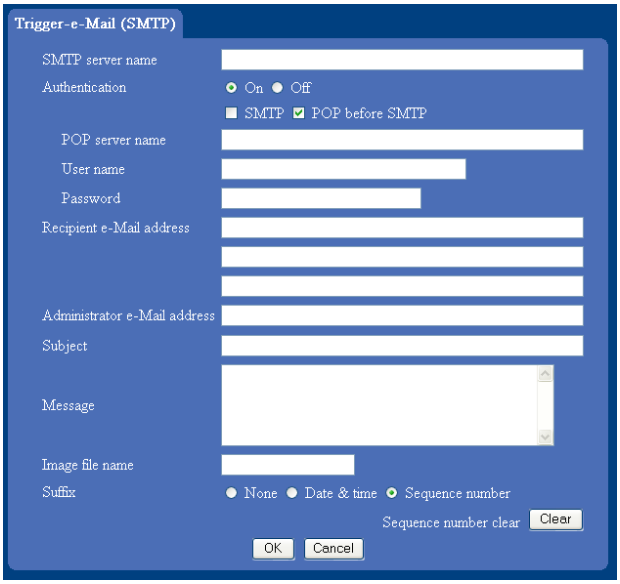
e-Mail (SMTP)

Checking this box allows you to select **e-Mail** from the trigger drop-down list in the main viewer.
By selecting **e-Mail** and clicking , a still image of the moment you click is captured, and your e-mail with the image file attached is sent to the specified mail address.

When you click **e-Mail (SMTP)** button, the **Trigger-e-Mail (SMTP)** menu is displayed. You can set necessary options here. The setting options and setting procedures are the same as those of the e-Mail (SMTP) menu (page 43).

Note

While the Video mode is set to **MPEG4**, the image of the composite video signal output from the video output connector of the camera may be distorted during mail transmission.



FTP client

Checking this box allows you to select **FTP** from the trigger drop-down list in the main viewer.
By selecting **FTP** and clicking , a still image of the moment you click is captured, and the image file is sent to the FTP server.

When you click **FTP client** button, the **Trigger-FTP client** menu is displayed. You can set necessary options here. The setting options and setting procedures are the same as those of the FTP client menu (page 46).

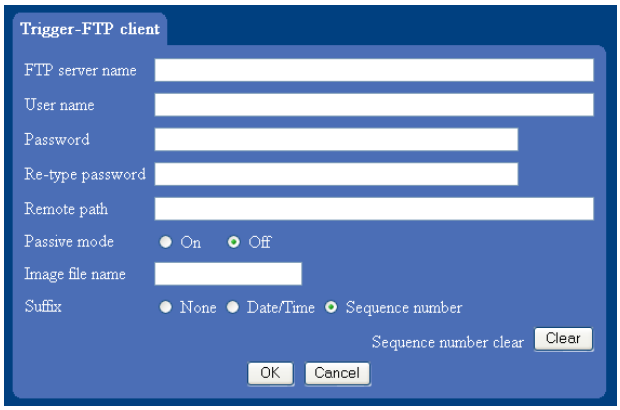
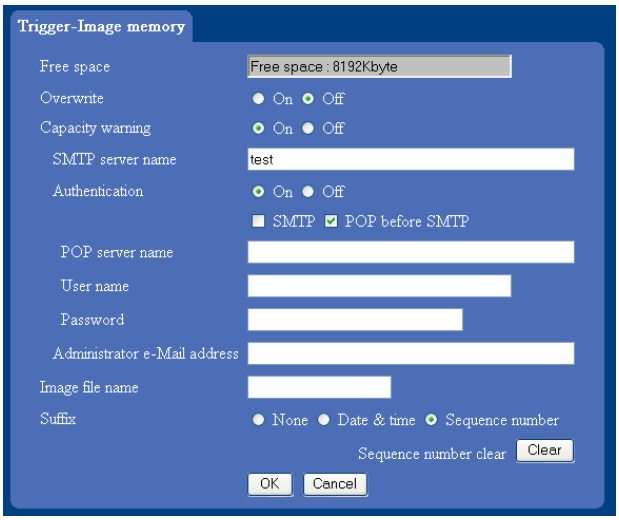


Image memory

Checking this box allows you to select **Image memory** from the trigger drop-down list in the main viewer.
By selecting **Image memory** and clicking , a still image of the moment you click is captured, and the image file is recorded in the built-in memory.

When you click **Image memory** button, the **Trigger-Image memory** menu is displayed. You can set necessary options here. The setting options and setting procedures are the same as those of the Image Memory menu (page 48).



Alarm output

Checking this box allows you to select **Alarm output** from the trigger drop-down list in the main viewer. You can control On (short circuit) or Off (open) by selecting **Alarm output** and clicking the .

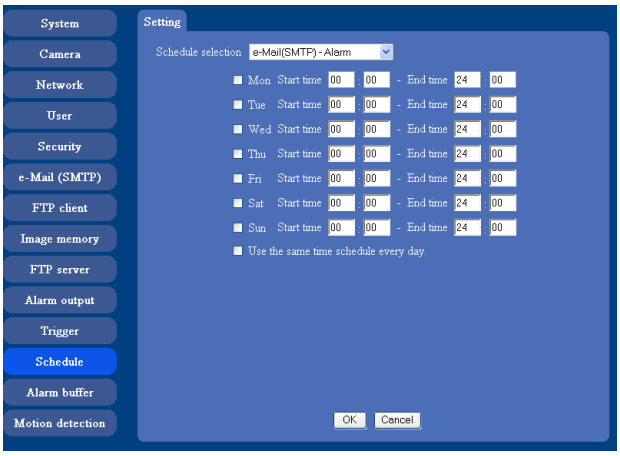
OK/Cancel

See “Buttons common to every menu” on page 28.

Setting the Schedule — Schedule Menu

When you click **Schedule** on the Administrator menu, the Schedule menu appears.
This is the same menu as the menu which is displayed when you click **Schedule** to set Effective period and Schedule in FTP client menu, e-Mail (SMTP) menu, Image memory menu, Alarm out menu and so on.

Example: When setting e-Mail (SMTP) (the alarm sending) in the Schedule menu



Schedule selection

Select the list box to specify the schedule you want to set. **e-Mail (SMTP) – Alarm**, **e-Mail (SMTP) – Periodical**, **FTP – Alarm**, **FTP – Periodical**, **Image memory – Alarm**, **Image memory – Periodical**, **Alarm output – Alarm** or **Alarm output – Timer** can be selected.

Mon (Monday) to Sun (Sunday)

The time period on the right of the checked day is the effective period of the schedule.

Start time, End time

Specify the **Start time** and the **End time**.

Use the same time schedule every day

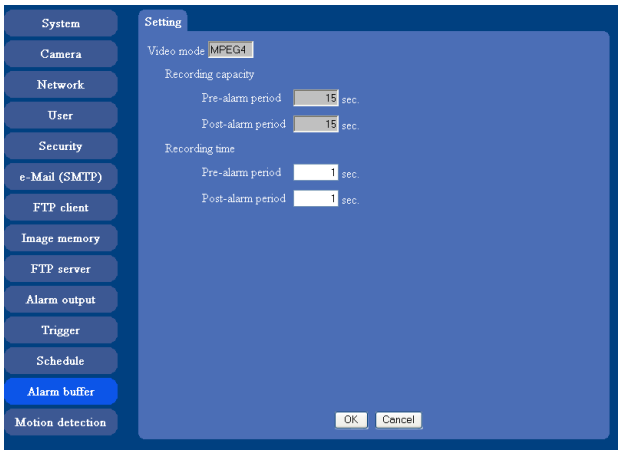
When this is checked, the **Start time** and **End time** set to **Mon** (Monday) are applied to all days. In this case, the **Start time** and **End time** of the other days than **Mon** (Monday) cannot be input.

OK/Cancel

See “Buttons common to every menu” on page 28.

Setting the Alarm Buffer — Alarm buffer Menu

When you click **Alarm buffer** on the Administrator menu, the Alarm buffer menu appears.
You can set the Pre-alarm image (the image before the alarm detection) and the Post -alarm image. These can be set when **Alarm sending** or **Alarm recording** of FTP client menu or Image memory menu is set to **On**, and besides when **Use alarm buffer** is selected.



Video mode

The Video mode setting in the Common tab of the Camera menu is displayed.
MPEG4: Shows the present output format of the camera is MPEG4.
JPEG: Shows the present output format of the camera is JPEG.

Recording capacity

Displays the maximum recording capacity of alarm buffer in the present camera setting of the Video mode, image size, bit rate and frame rate.
Pre-alarm period: Displays the maximum recording capacity of image before the alarm detection.
Post-alarm period: Displays the maximum recording capacity of image after the alarm detection.

Recording time

Set the recording time for the Pre-alarm image and Post alarm image.
Pre alarm period: Type the recording time of the image before the alarm detection.
Post alarm period: Type the recording time of the image after the alarm detection.

Note

The value of Recording capacity differs depending on Image size, Bit rate (for MPEG4) and Image quality (for JPEG) in the camera menu.

OK/Cancel

See “Buttons common to every menu” on page 28.

Setting the Motion Detection Function
— Motion detection Menu

When you click **Motion detection** on the Administrator menu, the Motion detection menu appears.
You can set the conditions to activate the built-in motion detection function in this menu.
This is the same menu with the menu which is displayed when you click **Motion detection** in Alarm sending of e-Mail (SMTP) menu, Alarm sending or FTP client menu, Alarm recording of Image memory menu and so on.

Notes

- **Motion detection** works only when the Video mode is set to **MPEG4** and the **Cropping** is set to **Off**.
- Before actual use, perform an operation test and confirm that the Motion detection function works correctly.

Monitor display

You can monitor the moving image and set the detection Window.

Window 1 to 4 check box

When you check it, the specified Window is displayed on the monitor display.

Threshold slider bar

Set the Threshold level so as to judge whether there has been any motion in the camera image or not. You can change the Threshold level displayed in the Motion detection indicator.

Motion detection indicator

The moving level of the present shooting image inside the specified Window is shown in the graph. The even line shows the threshold level for Motion detection which will be a guide to set the sensitivity properly.

Sensitivity slider bar

Use it to set the detection sensitivity of the monitoring image.
When the slider bar is moved to the left end, the sensitivity will be 0 and any motion will not be detected. The right end is the maximum sensitivity.

OK button

Click to send the set values to the camera and confirm the settings.

Setting the Motion Detection Area, Sensitivity and Threshold level

Set the motion detection working area, the sensitivity and the threshold level as follows:

1 Check Window 1 check box.
Window 1 is shown on the monitor display.

2 Settle Window 1 in the area you want to set Motion detection.
Click and drag Window 1 to move it or change the size of it.

3 Set the Sensitivity of Motion detection.
Adjust it referring to the level indicator of Motion detection.
To increase the sensitivity, move the Sensitivity slider bar to the right.
To decrease, move it to the left.
When you release the mouse, the new setting is applied to the level of motion detection indicator.

4 Set the Threshold level of Motion detection.
Adjust the Threshold slider bar in the same way of step **3** to set the level the camera executes motion detection.

5 If necessary, set the Motion detection working areas, the sensitivities and the Threshold level of the other Windows 2, 3, 4 by following steps **1** to **4**.

6 After all settings, click **OK**.

Notes

- While the Motion detection menu is displayed, motion detection of Mail (SMTP), FTP client, Image memory and Alarm output notification will not work. Make sure to close Motion detection menu after setting.
- Before using the Motion detection, perform the operation test to confirm correct operation.
- The Motion detection may not operate correctly in the following cases:
  – while changing a setting on the Camera menu
  – when the object is dark
  – when the camera is installed in an unstable place that causes vibration to the camera
  – when a small bit rate (64 kbps, 128kbps) is selected in **Bit rate** setting of MPEG4

Others

This section explains how to use the application software and commands, including the supplied CD-ROM.

Using the Supplied Setup Program

Explains the functions except the Network tab in the Setup Program.

To install the Setup Program, to assign the IP address and to set the network, see “Assigning the IP address to the Camera” on page 8 in “Preparations”.

Notes

- The IP Setup Program may not operate correctly if you use a personal firewall or antivirus software in your computer. In that case, disable the software or assign an IP address to the camera using another method. For example, see “Assigning the IP Address to the Camera Using ARP Commands” on page 69.
- If you are using Windows XP Service Pack 2 or Windows Vista, disable the Windows Firewall function. Otherwise the IP Setup Program will not operate correctly. For the setting, see “Configuring Windows Firewall” in “When using Windows XP Service Pack 2” on page 11 or “Configuring Windows Firewall” in “When using Windows Vista” on page 13.

Starting the Setup Program

Select **Program** from Start menu of Windows, then select **Program**, **IP Setup Program** and **IP Setup Program** in sequence.
The IP Setup Program starts.
Network tab appears. The IP Setup Program detects cameras connected to the local network and lists them on the Network tab window.

When you are using Windows Vista, message “User Account Control – An unidentified program wants access to your computer” may appear. In this case, click **Allow**.

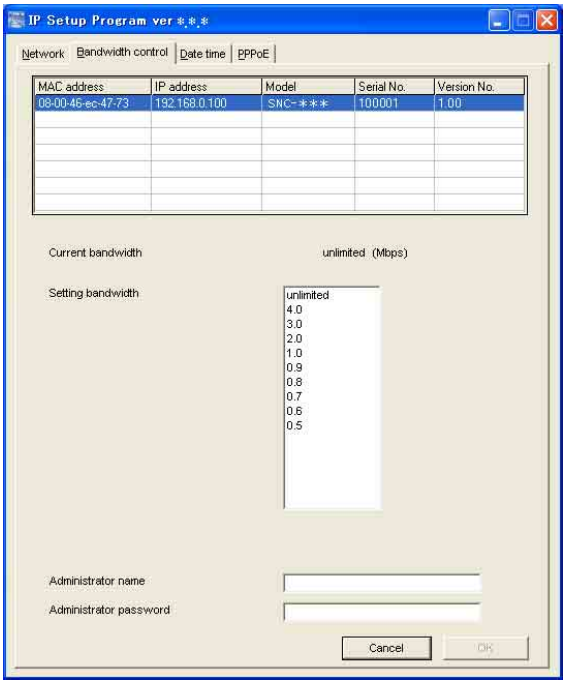
Bandwidth Control Tab

The communication bandwidth can be set when the Video mode of the camera is set to **JPEG**.

Note

When the Video mode of the camera is set to **MPEG4**, the bandwidth cannot be changed.

1 Click the **Bandwidth control** tab to display the bandwidth setting window.
The current bandwidth is displayed in **Current bandwidth**.



2 Click to select the camera to set the bandwidth from the list box.

3 Click to select the desired bandwidth from the **Setting bandwidth** list box.

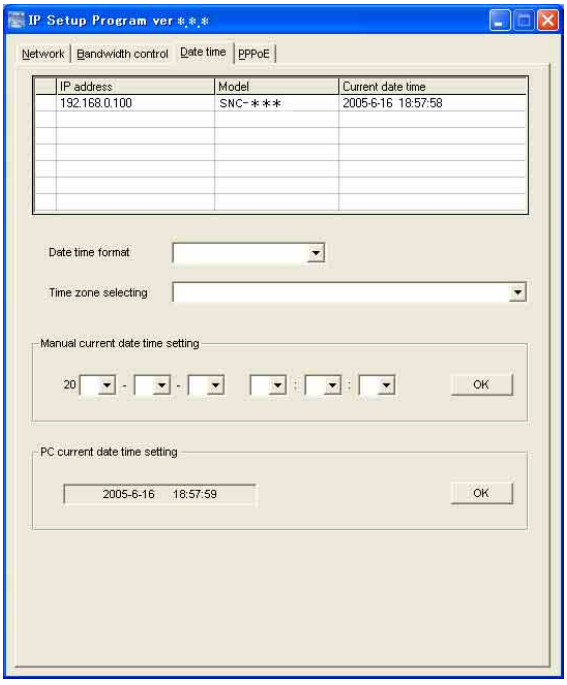
4 Type the **Administrator name** and **Administrator password** in each box.
The factory settings of both items are “admin.”

5 Click **OK**.
If “Setting OK” is displayed, the bandwidth setting is completed.

Date time Tab

You can set the date and time on the camera.

1 Click the **Date time** tab to display the date/time setting window.



2 Click to select the camera you want to set the date and time for.

You can select multiple cameras and set the date and time simultaneously.

3 Select the date/time format from the **Date time format** drop-down list.

4 Select the area where the camera is installed from the **Time zone selecting** drop-down list.

5 Set the date and time.

You can set the date and time in two ways.

Manual current date time setting

Set the current date and time on the **Manual current date time setting** boxes, and click **OK**. The setting boxes are for the year (last two digits), month, date, hour, minutes and seconds from left to right.

PC current date time setting

The date and time set on the computer is displayed in the **PC current date time setting** box. Click **OK** on the right to set the camera's date and time to the displayed computer's date and time.

Note

Due to network properties, there may be a slight difference between the displayed computer's date and time and those set on the camera.

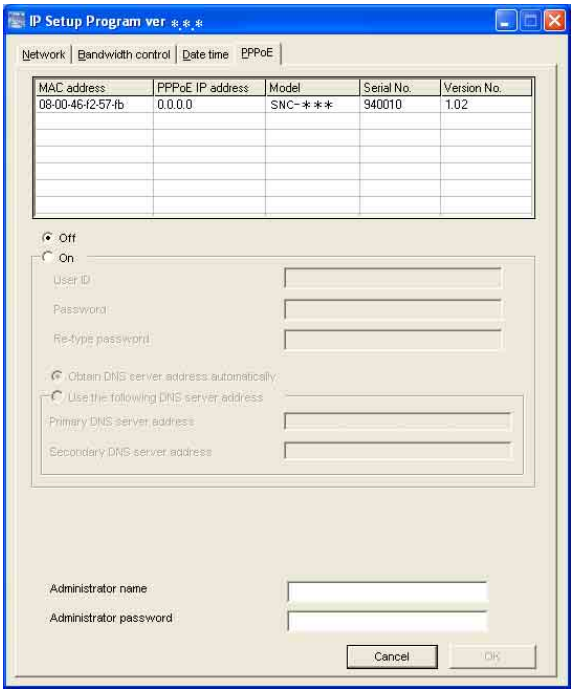
PPPoE Tab

PPPoE is used to connect to an ISP (Internet Service Provider) via the Internet. Using PPPoE, you can automatically obtain an IP address to connect to the Internet from the ISP.

The following PPPoE setting items are provided for this unit.

- User ID assigned by your ISP
- Password for the user ID
- DNS setting (automatic/manual setting)

1 Click the **PPPoE** tab to display the PPPoE setting window.



2 Click to select the camera you want to make the PPPoE settings for.

3 Select **On** below the list to enable the PPPoE setting.
To disable the PPPoE setting, select **Off**.

4 Type the user ID assigned by the ISP in the **User ID** box.

5 Type the password for the user ID in the **Password** box.

6 Retype the password for the user ID in the **Re-type password** box.

7 Set the DNS server address.

To obtain the DNS server addresses automatically:
Select **Obtain DNS server address automatically**.

To specify the DNS server addresses manually:
Select **Use the following DNS server address**, and type the Primary DNS server address and Secondary DNS server address in each box.

8 Type the **Administrator name** and **Administrator password** in each box.
The factory settings of both items are "admin."

9 Click **OK**.
If "Setting OK" is displayed, the PPPoE setting is completed.

Rebooting the Camera

Click **Reboot** on the Network tab to reboot the camera. It will take about 2 minutes to start again.

Using the SNC audio upload tool — Transmitting Audio to Camera (SNC-CS11 only)

The supplied SNC audio upload tool allows you to transmit sound from the computer to the camera. This section explains the setup and operations of the SNC audio upload tool.

The SNC audio upload tool supports the following audio data to be transmitted.

Audio CODEC	Transmission rate
G.711 (μ-LAW)	64 kbps
G.726	40 kbps
G.726	32 kbps
G.726	24 kbps
G.726	16 kbps

Note

- Only one user can transmit sound to the camera. Meanwhile, another user will not be able to transmit sound to the camera.
- You cannot upload the audio file, as the camera does not support the Voice alert function.

Installing the SNC audio upload tool

1 Insert the CD-ROM in your CD-ROM drive.
A cover page appears automatically in your Web browser.
If it does not appear automatically in the Web browser, double-click on the index.htm file on the CD-ROM.

When you are using Windows Vista, pop-up "AutoPlay" may appear. For details, "Installing software" in "When using Windows Vista" on page 12.

2 Click the **Setup** icon of **SNC audio upload tool**.
The "File Download" dialog opens.

When you are using Windows XP Service Pack 2 or Windows Vista, a message regarding the active contents may appear. For details, see "Installing software" in "When using Windows XP Service

Pack 2” on page 10 or “Installing software” in “When using Windows Vista” on page 12.

3 Click **Open**.

Note

If you click “Save this program to disk” on the “File Download” dialog, you cannot install the tool correctly. Delete the downloaded file, and click the **Setup** icon again.

4 Install the SNC audio upload tool following the wizard displayed.
If the Software License Agreement is displayed, read it carefully and accept the agreement to continue with the installation.

Connecting the Camera to the Computer

1 Connect a speaker to the 🔊 (line output) jack on the camera.

2 Connect a microphone to the microphone input jack on the computer.

Note

If the microphone input jack of the computer is not set correctly, no sound is transmitted from the computer and nothing is output from the speaker connected to the camera.
Set the microphone input jack from the control panel of Windows.

On Windows 2000

1 Select **Sounds and Multimedia** from Control Panel.

2 Click **Volume** in the **Sound Recording** section on the Audio tab.
The Recording Control window opens

3 Check **Select** in the **Microphone** section.

On Windows XP

1 Select **Sounds and Audio Device** from Control Panel.

2 Click **Volume** in the **Sound Recording** section on the Audio tab.
The Recording Control window opens.

3 Check **Select** in the **Microphone** section.

On Windows Vista

There are no settings regarding the microphone jack. If recording cannot be made, connect a microphone device to the computer and check that the recording device operates correctly, as follows.

1 Select **Sound** from Control Panel.

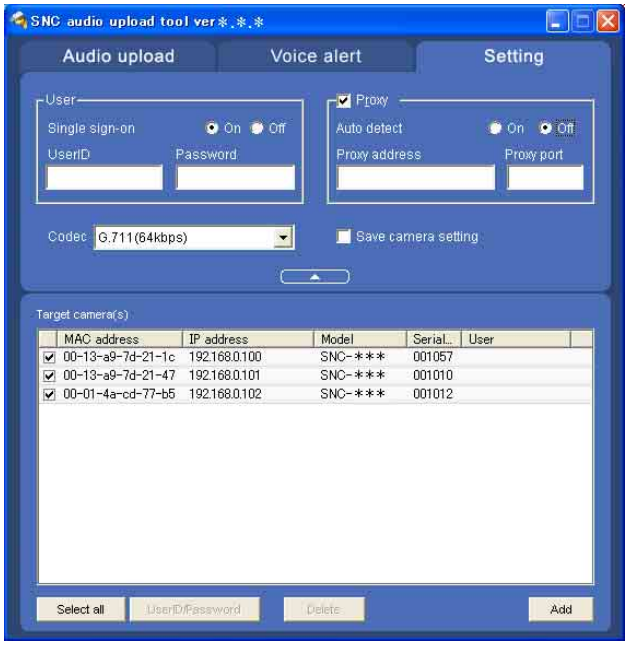
2 Open the Recording tab and check that Windows has recognized the hardware correctly.

Using the SNC audio upload tool

When you start the SNC audio upload tool, the Setting tab is displayed.

Setting tab

Use this menu to set the camera to transmit audio from a computer or upload an audio file.



User

Set the **User ID** and **Password** for the administrator. The factory setting of the User ID for the Administrator is “admin,” and the Password is “admin.”

Single sign-on: Select **On** to use the same user ID and same password for all the cameras. Select **Off** to set the user ID and password individually for each camera.
For the setting with **Off**, see “User ID/Password” on page 62.

User ID: This item can be set when **Single sign-on** is set to **On**. The user ID specified here is applicable to all cameras.

Password: This item can be set when **Single sign-on** is set to **On**. The administrator password specified here is applicable to all cameras.

Proxy

Check this box when you use a proxy server for communications. When it is not checked, direct communications with the camera is performed.

Auto detect: Select **On** to obtain the proxy setting automatically from Internet Explorer.
Proxy address: Type the IP address or host name of the proxy server.
Proxy port: Type the port number used for communications with the proxy server.

Note

The Proxy setting is applicable to all cameras. You cannot use individual proxy settings for each camera.

Codec

Select the audio mode (Codec) from the drop-down list.

Save camera setting

Check this box to store the current settings and camera list in the Setting tab. The same settings will be recalled when the camera is rebooted.

Click this button to hide the camera list. Click it again to display the camera list.

Target camera(s) (Camera list)

When the SNC audio upload tool starts, it automatically detects Sony network cameras connected to the local network and displays them in the camera list. Up to 256 cameras can be displayed in the list.
Select the check box on the left of the row to enable audio transmission and audio file uploading for that camera. You can then enable these functions simultaneously for multiple cameras.

Notes

- If you are using Windows XP Service Pack 2 or Windows Vista, disable the Windows Firewall function. Otherwise the camera list may not be displayed automatically. For details, see "Configuring Windows Firewall" in "When using Windows XP Service Pack 2" on page 11 or "Configuring Windows Firewall" in "When using Windows Vista" on page 13.
- The SNC audio upload tool cannot detect the cameras that are connected to the local network after the program has started.
- The SNC audio upload tool cannot detect the network cameras that are not equipped with the audio feature.

Camera select checkbox: The check box is located on the left end of the row. Select this check box to enable audio transmission and audio file uploading for that camera.
MAC address: Displays the MAC address of the network camera.
IP address: Displays the IP address of the network camera. "DHCP" is shown at the end of the IP address when the IP address is obtained with a DHCP server.
Model: Displays the model name of the network camera.
Serial: Displays the serial number of the network camera.
User: Displays the specified user ID and password. The password is shown with turned letters.

Select all

Click to select all the cameras in the camera list. This is usable when you delete all the cameras from the list or specify the same user ID and password for all the cameras,

User ID/Password

Use this item when you specify the user ID and password to communicate with the selected camera(s) only.
Select the camera(s) from the camera list and click this button, and the following dialog opens.
Type the user ID and password for the administrator and click **OK**.

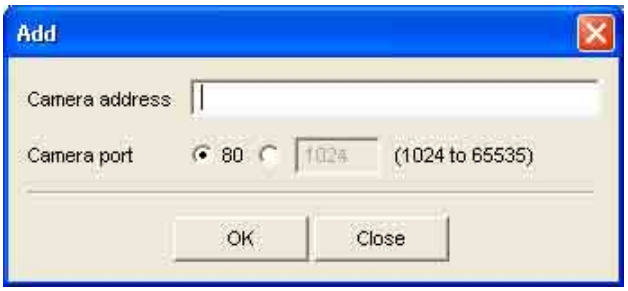
Note

If you select multiple cameras from the camera list, the same user ID and password are set for all the selected cameras. The factory settings of both items are "admin."

Add

Use this item when you add a new network camera to the camera list manually. Click this button, and the following dialog opens.

Type the IP address and port number for the camera to be added and click **OK**.



Notes

- An error dialog appears if the specified IP address already exists in the camera list, is assigned for a device other than the network camera, or does not exist in the network.
- You cannot add new cameras if the maximum of 256 cameras has been displayed in the camera list.

Delete

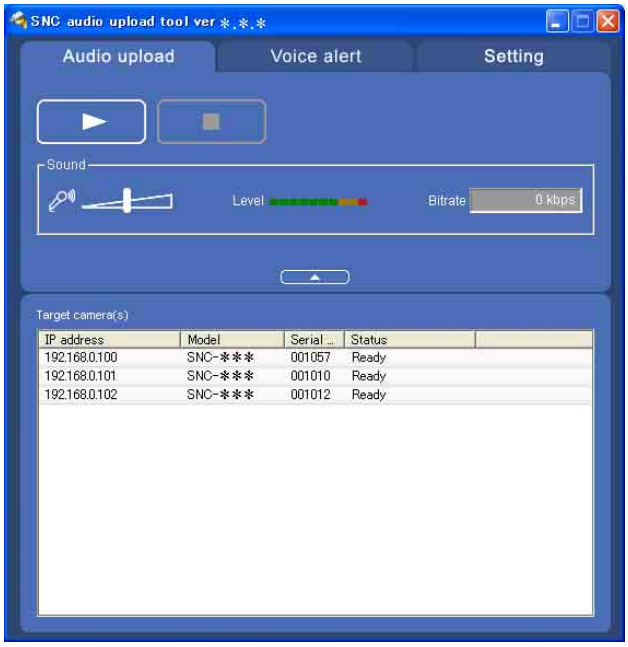
Click this button to delete the selected camera(s) from the camera list.

Note on switching the tab

If an error occurs when you switch from the Setting tab to the Audio upload tab or the Voice alert tab, the camera is shown in red. In this case, check the camera settings and the user ID and password settings.

Audio upload tab

Use this menu to transmit audio from the computer to the camera. You can transmit audio to multiple cameras displayed in the camera list simultaneously.
Before transmitting, set **Speaker output** to **On** on the Common tab of the Camera menu.



► (start) / ■ (stop)

Click ► (start) to start audio transmission. The transmission speed is displayed in the Bitrate box during transmission. You can adjust the microphone volume and enable/disable the muting, if necessary.
To stop the audio transmission, click ■ (stop).

Notes

- Audio transmission stops if you switch the tab during the transmission.
- Audio may be interrupted when the IP address is changed if **Obtain an IP address automatically (DHCP)** is set on **IP address** in the Network menu.
- Audio may be interrupted if you transmit it to many cameras simultaneously.

Sound adjustment and indicators

Adjust the microphone input volume by moving the slider bar. You can adjust the volume even during transmission.
Click to enable/disable sound muting. The microphone input volume is displayed at the Level.
The transmission rate is displayed in the Bitrate box.

Click this button to hide the camera list. Click it again to display the camera list.

Target camera(s) (Camera list)

Displays the cameras selected with the camera select checkbox of the camera list in the Setting tab.
The list shows the information and status of the selected cameras.

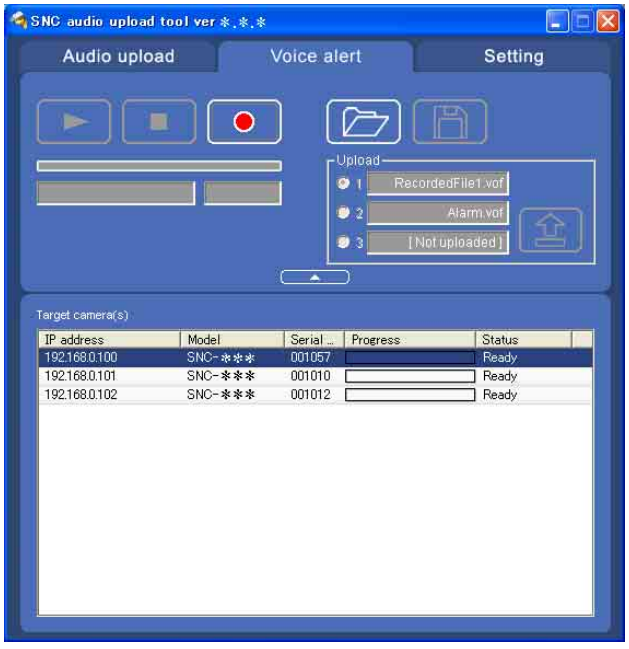
IP address: Displays the IP address of the network camera. “DHCP” is shown at the end of the IP address when the IP address is obtained with a DHCP server.
Model: Displays the model name of the network camera.
Serial: Displays the serial number of the network camera.
Status: Displays the current status of the camera.
Ready: The camera is ready for connection.
Connected: The camera connection is successful.
Fault: The camera connection is unsuccessful.
Sending: Audio data being transmitted

Voice alert tab

Use this menu to record the sound through the microphone connected to the computer and upload the recorded audio file to the camera. You can upload the audio file to multiple cameras selected from the camera list simultaneously.

Note

You cannot upload the audio file, as the camera does not support the Voice alert function.



(playback)

To start playback, open the recorded file or another audio file and click this icon.
You can check the recorded sound or the contents of the selected audio file. During playback, the progress bar shows playback progress.

(stop)

Click to stop recording or playback.

When you click it during recording, recording stops, and you can review the recorded sound or upload the recording to the camera.
When you click it during playback, playback stops and the progress bar display returns to the start position.

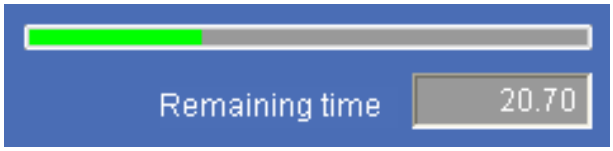
(recording)

Click to start recording of the sound input to the computer microphone. The maximum recording time is 30 seconds.
The codec specified in the Setting tab is used for the recording.
The recorded file is displayed as “RecordedFile.vof.”

Notes

- Recording or playback stops if you switch the tab during recording or playback.
- The recorded file is not stored in the computer.

Recording/playback progress bar



You can check recording or playback progress with this bar.
During recording, the right end of the bar represents 30 seconds and the remaining recording time is displayed below the bar.
During playback, the maximum time of the bar depends on the recorded time.

(file open)

Click to select a previously saved audio file. You can play the selected audio file or upload it to the camera.

(save)

Click to save the recorded audio file to the computer.

Voice alert number select

Specify the voice alert number to which you want to upload the audio file. For example, select **1** when uploading to voice alert 1.

The name of the uploaded audio file is displayed to the right of the number.
“Not uploaded” is displayed if no audio file is uploaded to the camera.
The audio file name will be “RecordedFile” + “Voice alert number” + “.vof” if you upload an audio file recorded using  and not stored in the computer.

Notes

- The voice alert number select is disabled if the camera specified in the Setting tab has old-version software.
- The audio file name for the camera selected in the camera list is displayed here. To check the uploaded file name, click on the camera in the camera list.
- The audio file is uploaded to the same voice alert number on all the cameras in the camera list. If the camera has old-version software, the audio file is automatically uploaded to voice alert number 1.

 **(upload)**
Click to upload the recorded or selected audio file to the camera specified in the Setting tab. Only one audio file can be uploaded to the camera at a time.

Note

Uploading a new audio file overwrites the audio file previously uploaded to the camera.


Click this button to hide the camera list. Click it again to display the camera list.

Target camera(s) (Camera list)

Displays the cameras selected with the camera select checkbox of the camera list in the Setting tab.
The list shows the information and status of the selected cameras.

IP address: Displays the IP address of the network camera. “DHCP” is shown at the end of the IP address when the IP address is obtained with a DHCP server.
Model: Displays the model name of the network camera.
Serial: Displays the serial number of the network camera.
Progress: Displays the progress of audio file transmission.
Status: Displays the current status of the camera.
Ready: The camera is ready for connection.
Inquiry: The camera information is being asked for.
No func: The camera does not support the Voice alert function.
Uploading: The audio file is being uploaded.
Fault: The audio file uploading is unsuccessful.
Succeeded: The audio file uploading is successful.

Uploading the recorded audio file to the camera

Tip

Before operating, create an audio file and set the camera for audio uploading. Set the camera using the Setting tab.

1. Click  (recording) in the Voice alert tab to start recording.
2. Click  (stop) to stop recording.
Recording will stop automatically in 30 seconds.
3. Select the voice alert number.
4. Click  (upload) to transmit the audio file to the camera.

Saving the recorded audio file to the computer

1. Click  (recording) in the Voice alert tab to start recording.
2. Click  (stop) to stop recording.
Recording will stop automatically in 30 seconds.
3. Click  (save).
The **Save as** dialog appears. Type the file name and save it.

Uploading the saved audio file to the camera

1. Click  (file open) in the Voice alert tab and select the audio file to be uploaded.
2. Select the voice alert number.
3. Click  (upload) to transmit the audio file to the camera.

Using the SNC video player — Playing Video File Recorded on Camera

The supplied SNC video player allows you to play video data recorded on the camera with your computer.
This section explains the setup and operations of the SNC video player.

Tip

Only in SNC-CS11, the video data file includes audio data.

Downloading the SNC video player

To download the SNC video player, click the Player located on the upper part of the main viewer of the camera.
Type the user name and password for the administrator on the download dialog and click **OK**. (The factory settings of both items are "admin".)
On the "File Download" dialog, click **Save**. The SNC video player is saved in the computer.

Note

To operate the SNC video player, a special DLL file is necessary. This file is automatically installed in the computer when you view camera images with the ActiveX viewer.

Using the SNC video player

1 Double-click the SNC video player downloaded from the camera to start this application.

2 Click the .
The Select File dialog opens.

3 Select the file you want to play.
Information boxes on the selected file are displayed on the left side of the window as follows:
Each click on the (information) switches between "display" and "Not to display" of the file information.

File information

Model name: Model name of the camera with which the file is recorded.
IP address: IP address of the camera with which the file is recorded.
Serial number: Serial number of the camera with which the file is recorded.
Record event: Type of event used for the recording: **Sensor input** or **Motion detection**.
Date&time: Recording date and time
Video: Video Codec
Audio: Audio Codec

Playing a video file

Click (start) to start playing from the beginning of the selected file.
To freeze the movie temporarily, click (pause).
Click again to restart playing.
To stop playing, click (stop).
To restart playing, click (start) again.
Play stops when the file is played to the end.

To play from a specified point

Move the slider bar below the image display, and the file will play starts according to the position of the slider bar position.

Adjusting the sound (SNC-CS11 only)

Adjust the playing sound volume by moving the slider bar. Move it to the left end for the minimum volume, and to the right end for the maximum volume.
Click the to enable/disable the sound muting.
When the sound muting is on, no sound is heard even if you move the slider bar to the right.

Saving an image

Click (capture) during playing or pause and the captured image is displayed on a pop-up dialog. To save the image, click **Save** on the dialog. You can specify the destination to which the image is to be stored and select the JPEG or Bitmap format.

Using the Custom Homepage Installer

You can store the homepage that you have created in the camera and watch it.

Notes on creating the homepage

When you are creating the homepage, note the following points.

- The file name should be typed up to 24 characters including the extension.
- The file size of the homepage should be 2.0 MB or less.
- To see the created homepage, set the **Default URL** in the System menu.

Uploading the homepage to the camera using the Custom Homepage Installer

1 Insert the CD-ROM in your CD-ROM drive.
A cover page appears automatically in your Web browser.
If it does not appear automatically in the Web browser, double-click on the index.htm file on the CD-ROM.

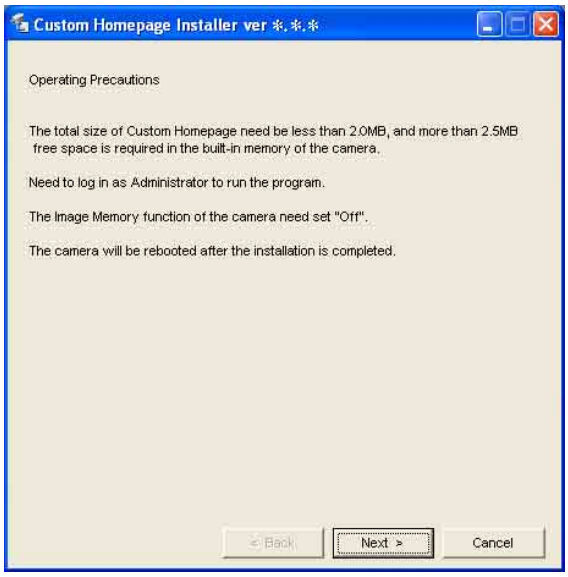
When you are using Windows Vista, pop-up "AutoPlay" may appear. For details, "Installing software" in "When using Windows Vista" on page 12.

2 Click the **Start** icon of **Custom Homepage Installer**.
The "File Download" dialog opens.

When you are using Windows XP Service Pack 2 or Windows Vista, a message regarding the active contents may appear. For details, see "Installing software" in "When using Windows XP Service Pack 2" on page 10 or "Installing software" in "When using Windows Vista" on page 12.

3 Click **Open**.
The installer starts and notes are displayed.

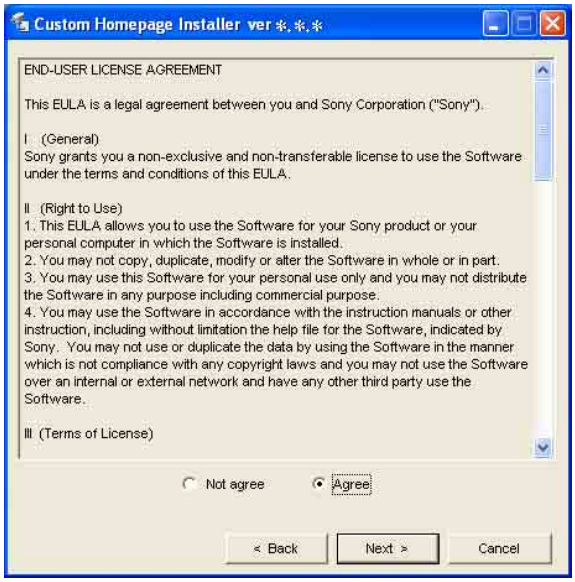
When you are using Windows Vista, message "User Account Control – An unidentified program wants access to your computer" may appear. In this case, click **Allow**.



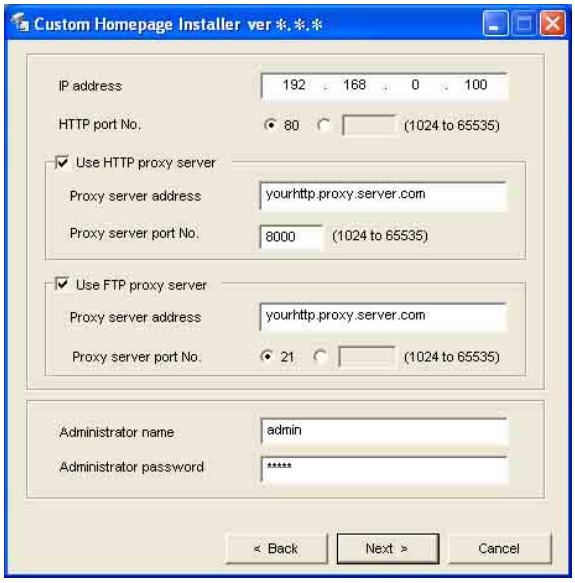
Note

If you click "Save this program to disk" on the "File Download" dialog, the CustomHomepageInstaller.exe file will be saved on the computer. Double-click the saved file to start it.

4 Read the notes carefully, and click **Next**.
The Software License Agreement is displayed.



5 Read the agreement carefully, select **Agree** if you accept it, then click **Next**.



6 Type the IP address of the camera to be uploaded in the IP address box.

7 Specify the HTTP port No. of the camera.
Initial HTTP port No. is set to 80.

8 When you use a proxy server, set the following:
For the proxy server of your environments, consult your network administrator.

When using an HTTP proxy server:
Select **Use HTTP proxy server**, and type your settings in the Proxy server address and Proxy server port No. boxes.

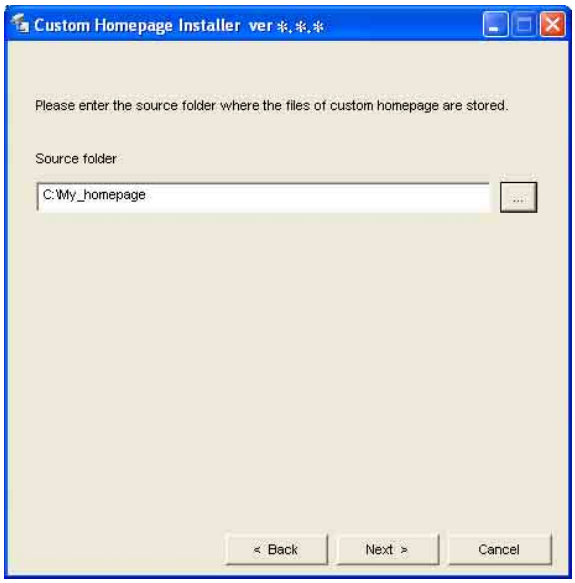
When using an FTP proxy server:
Select **Use FTP proxy server**, and type your settings in the Proxy server address and Proxy server port No. boxes.

Note

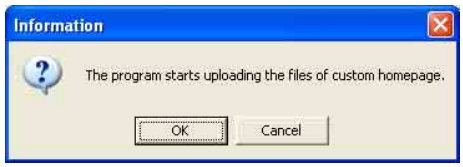
If you cannot establish communications with the camera using the proxy server being used, connect the camera to the local network and run the installer without using the proxy server.

9 Type the Administrator name and Administrator password of the camera to be uploaded.
The factory settings of both items are “admin.”

10 Confirm that all items are correct, then type the path of the folder you saved the homepage in the Source folder or click [...] to specify the folder. Click **Next>** to continue.



11 Type the path for the folder in which your homepage is stored in the Source folder box, then click **Next**.

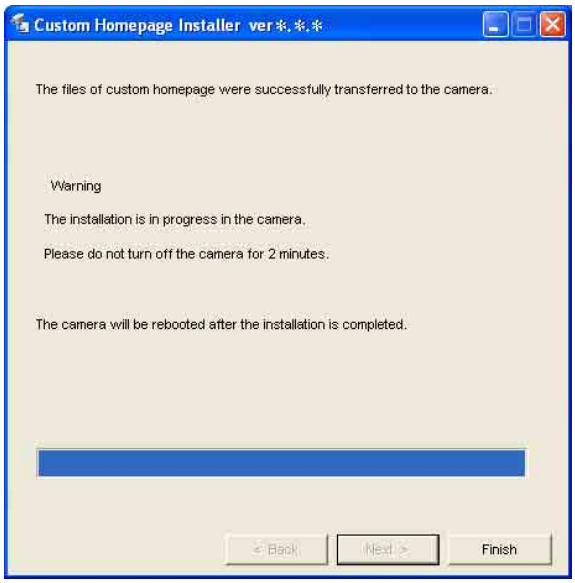


12 Click **OK**.
Uploading of the homepage file starts.

Note

Do not turn off the camera until the camera is rebooted after uploading the homepage file.

The following page will appear after a while.



After displaying this page, the camera will be adjusted and rebooted automatically in two minutes.

13 Click **Finish** to exit the program.

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 IP Setup Program.

Note

When you turn on the camera, execute the ARP and PING commands within 5 minutes. Also when you restart the camera, execute the operation within 5 minutes.

1 Open the command prompt on the computer.

2 Enter the IP address and the MAC address of the camera to assign a new IP address, using the following ARP commands.

```
arp -s <Camera's IP address> <Camera's MAC address>
ping -t <Camera's IP address>
```

Example:

```
arp -s 192.168.0.100  08-00-46-21-00-00
ping -t 192.168.0.100
```

3 When the following line is displayed on the command prompt, hold down **Ctrl** and press **C**. The display stops.

```
Reply from 192.168.0.100:bytes=32 time...
```

You will normally receive a reply after about 5 repetitions of “Request time out.”

4 Wait until the execution of PING finishes, then input the following code.

```
arp -d 192.168.0.100
```

Note

If you do not receive a reply, check the following:
– Did you enter the ARP commands within 5 minutes after it was turned on?
If not, turn off the camera and restart the operation.
– Is the NETWORK indicator on the camera flashing?
If the indicator goes off, the network connection has a problem. Connect the network correctly.
– Did you enter the IP address previously used for another device?
Assign a new IP address to the camera.
– Do the computer and the camera have the same network address?
If not, set the same network address on the computer and the camera.

Using the SNMP

This unit supports SNMP (Simple Network Management Protocol). You can read MIB-2 objects and write some MIB-2 objects using software such as SNMP manager software. This unit also supports the coldStart trap which occurs when the power is turned on or the unit restarts, and the Authentication failure trap which informs of an illegal access using SNMP.
Using CGI commands, you can set community name and access limitation, reading/writing right, host to send traps, and some MIB-2 objects. To allow these settings, you need authentication by the camera administrator.

1. Inquiry Commands

You can check the SNMP Agent settings using the following CGI commands.

<Method>
GET, POST
<Command>
"http://ip_adr/snmpdconf/inquiry.cgi?inqjs=snmp
(JavaScript parameter format)
http://ip_adr/snmpdconf/inquiry.cgi?inq=snmp
(standard format)

With the above inquiry, you can obtain the following setting information. The following explains the setting information of SNC-CS11 using the inqjs=snmp (JavaScript parameter) format.

var sysDescr="SONY Network Camera SNC-CS11"①
var sysObjectID="1.3.6.1.4.1.122.8501" ...②
var sysLocation="" ...③
var sysContact="" ...④
var sysName="" ...⑤
var snmpEnableAuthenTraps="1" ...⑥
var community="public,0.0.0.0,read,1" ...⑦
var community="private,192.168.0.101,write,2" ...⑧
var trap="public,192.168.0.101.1" ...⑨

① describes the case of "mib-2.system. sysDescr.0". You cannot change this parameter.

② describes the case of "mib-2.system. sysObjectID.0". You cannot change this parameter.

③ describes the case of "mib-2.system. sysLocation.0". This field is used to describe information on the location of this camera. Nothing is set at the factory.

④ describes the case of "mib-2.system. sysContact.0". This field is used to describe the information on administrator of this camera. Nothing is set at the factory.

⑤ describes the case of "mib-2.system. sysName.0". This field is used to describe administration mode of this camera. Nothing is set at the factory.

⑥ describes the case of "mib-2.snmpEnable AuthenTraps.0". This example shows when "1" (enable) is set. With this setting, a trap occurs when there is an Authentication failure. When "2" (disable) is set, no Authentication failure trap occurs.

⑦ describes the community name and the reading/writing attributes. This example shows the identification number "ID=1", the community name public, and enables read from any IP address (0.0.0.0).

⑧ describes the community name and the reading/writing attributes, similarly to ⑦. This example shows the identification number ID=2, the community name "private", and enables "read/write" by the SNMP request packet from the host "192.168.0.101".

⑨ describes the host name to send a trap. This example shows the identification number "ID=1", the community name "public", and enables sending of traps to the host having the IP address "192.168.0.101".

2. Setting Commands

The unit supports the following setting commands of SNMP.

<Method>
GET, POST
<Command>
http://ip_adr/snmpdconf/snmpdconf.cgi?
<parameter>=<value>&<parameter>=...&...

First, perform the settings of the following parameters.

1) sysLocation=<string>
Set the case of "mib-2.system.sysLocation.0" in the <string> position. The maximum length of <string> is 255 characters.

2) sysContact=<string>
Set the case of "mib-2.system.sysContact.0" in the <string> position. The maximum length of <string> is 255 characters.

3) sysName=<string>
Set the case of “mib-2.system.sysName.0” in the <string> position. The maximum length of <string> is 255 characters.

4) enaAuthTraps=<value>
Set the case value of “mib-2.snmp.snmp EnableAuthenTraps.0” in the <string> position. Type “1” (enable) or “2” (disable) in the <value> position.

5) community=<ID>,<rwAttr>, <communityName>,<IpAddressString>
Set the community name and the reading/writing attributes. <ID> describes the setting identification number (1 to 8), <rwAttr> describes a character representing the reading/writing attribute (“r”, “R”, “w or “W”), <communityName> describes the community name to be set, and <IpAddressString> describes the IP address of the host you allow access (0.0.0.0 for any host).

Example: To allow reading/writing by any host in the “private” community and having the ID number “2”.
community=2,w,private,0.0.0.0

6) trap=<ID>,<communityName>, <IpAddressString>
Set the host you want to send traps to. <ID> describes the setting identification number (1 to 8), <communityName> describes the community name to send traps to, and <IpAddressString> describes the IP address of the host to send traps to.

Example: To specify the destination of traps as the private community and the ID number “1”.
rap=1,public,192.168.0.101

7) delcommunity=<ID>
This parameter is used to delete the previous community setting. <ID> describes the community setting identification number (1 to 8).

8) deltrap=<ID>
This parameter is used to delete the previous setting of the host to send traps to. <ID> describes the trap setting identification number (1 to 8).

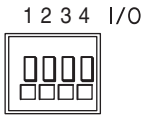
When you have finished changing the SNMP setting information using the above parameters 1) to 8), check the changed settings using an inquiry commands. If the changed settings are OK, restart the SNMP using the following CGI command.

SNMP restart command

<Method>
GET, POST

<Command>
http://ip_adr/snmpdconf/snmpdconf.cgi?snmpd=restart

Pin Assignment of I/O Port

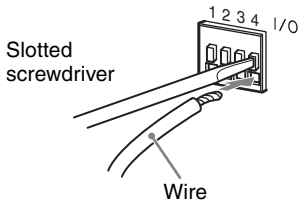


Pin No.	Signal	Description
1	Alarm output –	DC 24 V AC/DC max., 1A
2	Alarm output +	Machanical relay output, electrically isolated from the camera
3	Sensor input –	Make contact
4	Sensor input +	

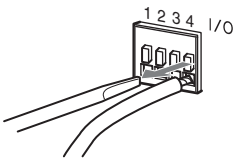
Using the I/O receptacle

While holding down the button on the slot to which you want to connect the wire (AWG No. 28 to 22) with a small slotted screwdriver, insert the wire into the slot. Then release the screwdriver from the button.

❶



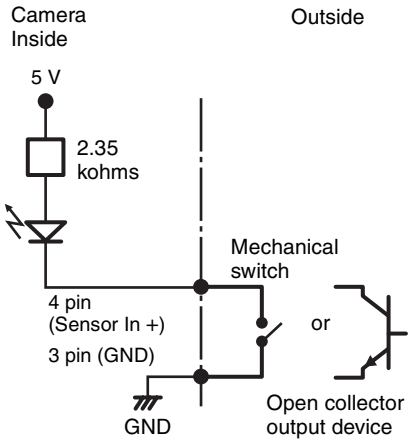
❷



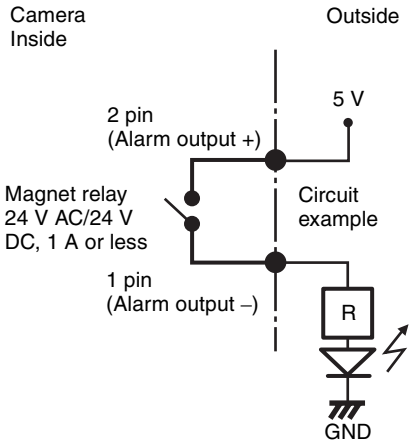
Repeat this procedure to connect all required wires.

Wiring diagram for sensor input

Mechanical switch/open collector output device



Wiring diagram for alarm output

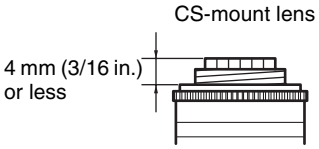


Others

Attaching a CS-mount Lens

Suitable lens

The lens must be a CS-mount type of less than 1 kg (2 lb 4 oz). The protrusion behind the mounting surface must be 4 mm (3/16 in.) or less.
When you use the C-mount lens, use the C-mount adaptor (optional).
When you use the auto iris lens with this camera, use a DC servo type lens.



Caution
When you install it into a wall or a ceiling, check that the wall or the ceiling is strong enough to hold the weight of the camera including the mounting bracket, and install it without fail. If not, the camera falls down and causes a serious injury. Also, check if the mounting is not loosened at least once a year. Make the checking interval short according to use condition.

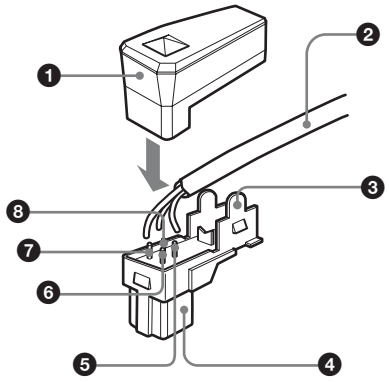
Attachment of the auto-iris lens connector (optional)

To connect the auto iris lens, first replace the plug on the lens cable with a plug that fits the LENS connector (not supplied).
When you use the auto-iris lens, you need to attach the lens connecter (optional).
To attach it, request for a technical expert who has been trained in services.
The lens connecter is optional and is not included with the camera.

1 Detach the old plug from the lens cable.

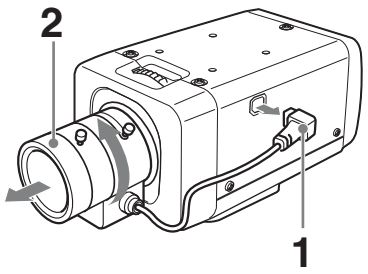
2 Solder the wires of the lens cable to the pins of the plug, and attach the cover (optional).

For cable pin assignment, refer to the instruction manual of the lens.



❶	Cover		
❷	Lens cable		
❸	Rib (If the cable is thick, cut this off.)		
❹	Plug (not supplied)		
❺	Pin 4	DC control	Drive - (Ground)
❻	Pin 2	DC control	Control +
❼	Pin 1	DC control	Control –
❽	Pin 3	DC control	Drive +

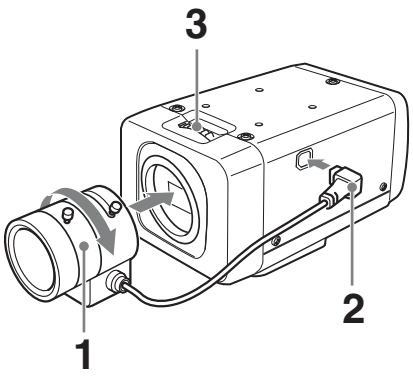
Detaching the Lens



1 Disconnect the lens cable from the auto iris lens connector.

2 Turn the lens counterclockwise to detach it from the camera.

Attaching the Lens



1 Align the lens with the lens mount of the camera, and turn it clockwise until it is secured.

2 Insert the plug of the lens cable into the auto iris lens connector.
When fitting a manual iris lens, omit step 2.

3 If the focus cannot be adjusted correctly at ∞ (infinite), adjust the focal length by turning the Back-focus ring.

Glossary

ActiveX control

A component program object that can be used with Web pages or other application programs. The technology for creating ActiveX control is part of software developed by Microsoft.

ARP commands

The commands for checking the entry of the IP address and MAC address in a host computer, or for updating them.

Bandwidth control

To limit the amount of transmitted data.

Bit rate

The rate at which data bits are transmitted.

Capture

To display the audio and video digital data from the video equipment on a computer.

Codec

Software/hardware for coding/decoding video and audio data.

Contrast

The difference in tone between the lightest and darkest portions of the image.

Default gateway

Device that can be used to access the other network.

DHCP server

Abbreviation for Dynamic Host Configuration Protocol server. The IP address of a terminal without an individual IP address can be automatically distributed by the Dynamic Host Configuration Protocol (DHCP). The DHCP server assigns the IP addresses to the terminals.

Digital zoom

Zooming in/out function of an image without using an optical zooming function.

DNS server

Abbreviation for Domain Name System server. As an IP address required for connecting to the device on an IP network is numerical and difficult to remember, the Domain Name System was established. A domain name is alphabetic and is easier to remember. When a client computer uses a domain name to connect to another computer, it asks a DNS server to translate the name into the corresponding IP address. Then the client computer can obtain the IP address of the computer to be connected.

Frame rate

The number of frames of a moving image that can be transmitted per a second.

FTP client

Software to be used for accessing the FTP server.

FTP server

A server to be used to transfer files via a network.

HTTP port

A port used to communicate between the Web server and the Web client such as a Web browser.

IP address

Abbreviation for Internet Protocol Address. An individual IP address is basically assigned to each piece of equipment connected to the Internet.

I-picture interval

The interval between I-pictures in Moving Picture Experts Group (MPEG). I-picture means the decoding picture without using the other picture's information.

Java applet

A program written in Java language that can be used in the Web browser.

Java Virtual Machine

Software that transfers the Java applet's byte code to the native code of your system to execute it.

JPEG

Abbreviation for Joint Photographic Expert Group. The still image compression technology or standards of the ISO (International Organization for Standardization) and ITU-T. Popularly used as image compression format on the Internet, etc.

MAC address

A network address that uniquely identifies each LAN card.

MPEG4

Abbreviation for Moving Picture Experts Group4. One of the MPEG standards for image compression format aiming to transmit images at a high compression rate with lower picture quality.

Multicast

The class D IP address assigned between 224.0.0.0 and 239.255.255.255. Using this IP address enables you to transmit the same data to multiple equipment.

Network address

The portion that identifies the local network (subnet) in an IP address.

Network bandwidth

Bit rate that can be used for networking.

NTP server

Network time server that transmits and receives time information over the networks.

Passive mode

The mode whereby a client FTP allows TCP connection for data transmission to the FTP server.

POP server

A server for storing incoming e-mail until you have read it.

PPPoE

A protocol to enable use of the point-to-point protocol (PPP) via the Ethernet.

Primary DNS server

One of the DNS servers that can first reply to a request by connected devices or other DNS servers.

Proxy server

A server or software that acts as an intermediary between a local network and the Internet so that it can connect to the Internet in place of a computer on a local network

Saturation

The degree to which the color is pure.

Secondary DNS Server

Subsidiary DNS server used when a primary DNS server cannot be used.

SMTP server

A server for sending or relaying e-mail messages between servers.

SNMP

A protocol for monitoring and managing network devices.

Subnet mask

32-bit stream used to distinguish the subnet address from the IP address.

TCP

Abbreviation for Transmission Control Protocol. A standard protocol used for the Internet connection. Compared with the other protocol, UDP, TCP provides reliable communication but the communication speed is slower.

UDP

Abbreviation for User Datagram Protocol. A standard protocol used for the Internet connection. Compared with the other protocol, TCP, UDP can transmit data faster, but reliable communication is not guaranteed.

Unicast

Transmission of the data to the specified equipment on a network by specifying a single address.

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