FOR.A®
INNOVATIONS IN VIDEO
and AUDIO TECHNOLOGY

OPERATION MANUAL

FA-90GUI

FA-9000 Series Control Software

Version 1.6.8 - Higher

FOR-A COMPANY LIMITED

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Upon Receipt

Unpacking

FA-90GUI and their accessories are fully inspected and adjusted prior to shipment. Operation can be performed immediately upon completing all required connections and operational settings.

Check your received items against the packing lists below.

ITEM	QTY	REMARKS
FA-90GUI	1	CD-ROM
Operation Manual	1	

Check

Check to ensure no damage has occurred during shipment. If damage has occurred, or items are missing, inform your supplier immediately.

Table of Contents

1. Prior to Starting

1-1. Welcome

Congratulations! By purchasing FA-90GUI FA-9000 Series Control Software you have entered the world of FOR-A and its many innovative products. Thank you for your patronage and we hope you will turn to FOR-A products again and again to satisfy your video and audio needs.
FOR-A provides a wide range of products, from basic support units to complex system controllers, which have been increasingly joined by products for computer video based systems. Whatever your needs, talk to your FOR-A representative. We will do our best to be of continuing service to you.

1-2. Features

FA-90GUI is a control software package intended for FOR-A FA-9000, FA-9100, and FA-9100RPS. This software enables remote control and monitoring of devices from a network-connected PC that has FA-90GUI installed for notification of device problems and visual display of connection statuses. The layout editing function enables you to edit the monitoring screen in any way you like to best match your particular system.

- Monitoring of FOR-A FA-9000 over a network.
- Enables setting of FA-9000 parameters using user-friendly graphical user interface
- Allows user-created layouts with graphical objects and bitmaps for a visually-organized monitor screen
- Loading and saving of FA-9000 parameters in a file

Additional features available after a key code is registered

- Stores monitoring information in a log file
- Enables printing of FA-9000 parameters and comparison chart of parameters in a file and in a device

1-3. About This Manual

This manual is intended to help the user easily operate this product and make full use of its functions during operations. Before connecting or operating your unit, read this operation manual thoroughly to ensure you understand the product. After reading, it is important to keep this manual in a safe place and available for reference.

The following conventions are used throughout this manual.

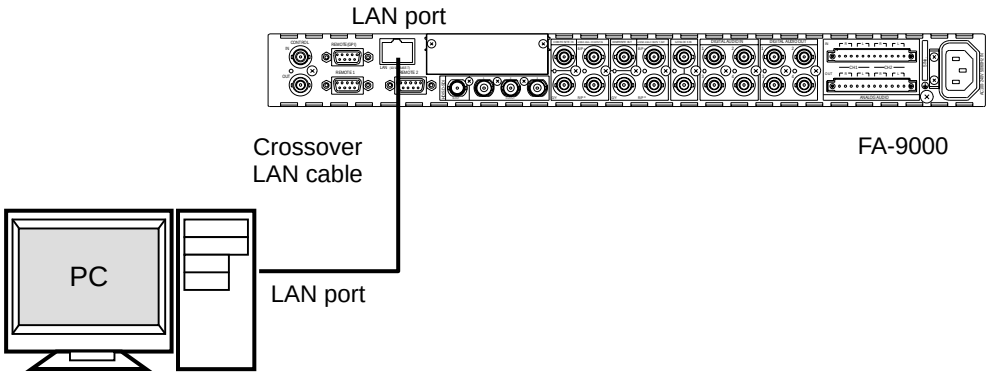
- Text enclosed by a square (such as MATT) indicates software **buttons**.
- Text enclosed by square brackets (such as [Ctrl]) indicates the **keyboard**.

2. Connection

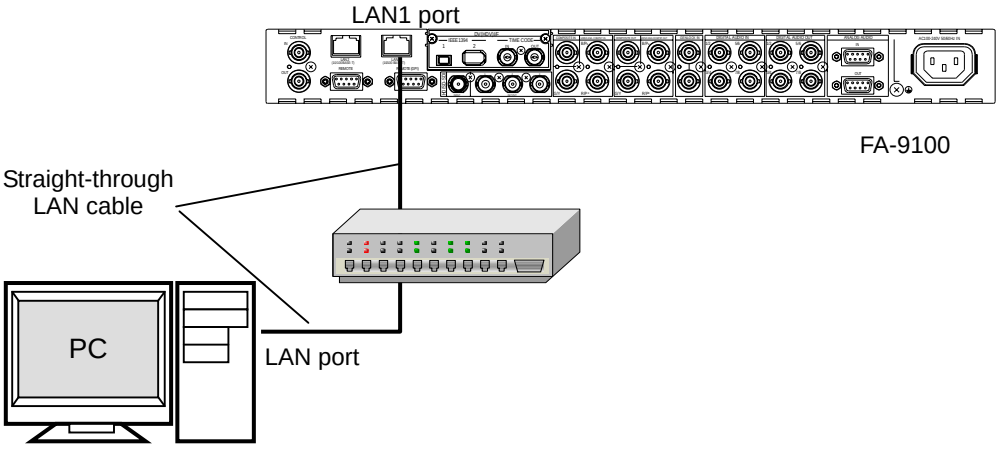
2-1. Connecting Main Unit to the Computer

FA-90GUI allows you to monitor and control Main Units (FA-9000/FA-9100/ FA-9100RPS) using the SNMP function.
In order to use FA-90GUI, perform the network settings and the SNMP settings for the main units. See “Network Settings” on the FA-9000 or FA-9100/RPS operation manual for details.

◆ **Connecting the FA-9000 and a computer using a crossover LAN cable**



◆ **Connecting the FA-9100/RPS and a computer using a hub**



IMPORTANT
Be sure that the IP address of the computer and the main units are unique from each other

3. Installing and Deleting FA-90GUI

3-1. System Requirements

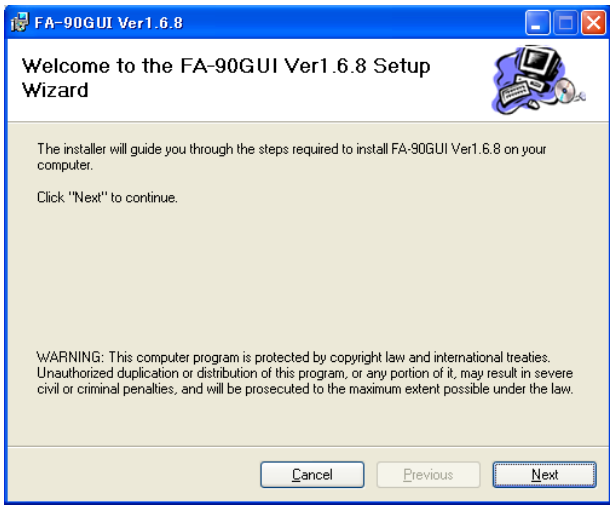
To install FA-90GUI, your computer must meet the following requirements.

OS（Platform）	Windows XP Professional SP2 or later, Windows 2000 Professional SP4
CPU	Intel® Pentium 4　2GHz or faster
Memory	Recommendation: 1GB or more RAM Minimum: 512MB RAM
Hard disk space	80GB or more of available hard disk space
Display	Resolution of 1280×1024 pixels or higher (SXGA)
Network	Standard: IEEE802.3u/IEEE802.3 (100BASE-TX/10BASE-T)

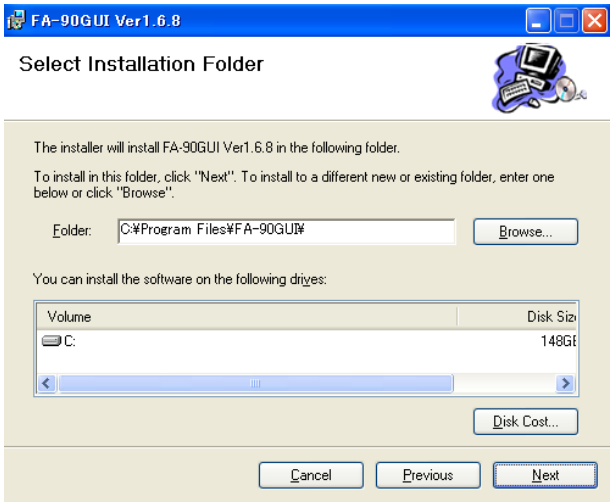
3-2. Installing FA-90GUI

In order to run FA-90GUI, the **SNMP Service** in **Windows XP/2000 Professional** must be installed. To install the SNMP Service, see the corresponding instructions for your OS in Appendix 1, “Installing SNMP Service.”

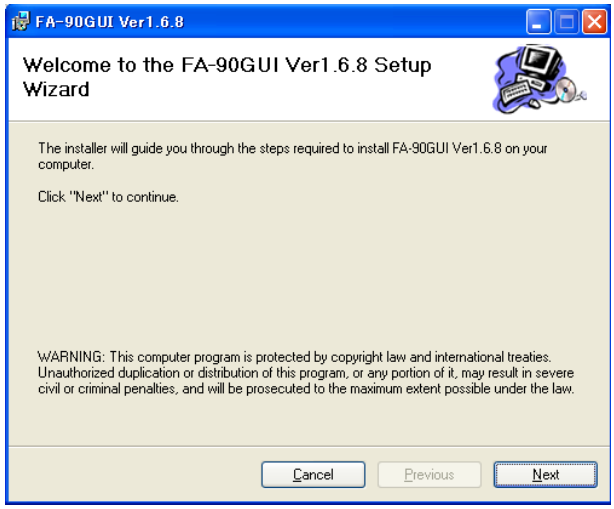
1) Insert the FA-90GUI SETUP DISK into the CD drive. After a while, the **setup wizard** is displayed. Click Next.



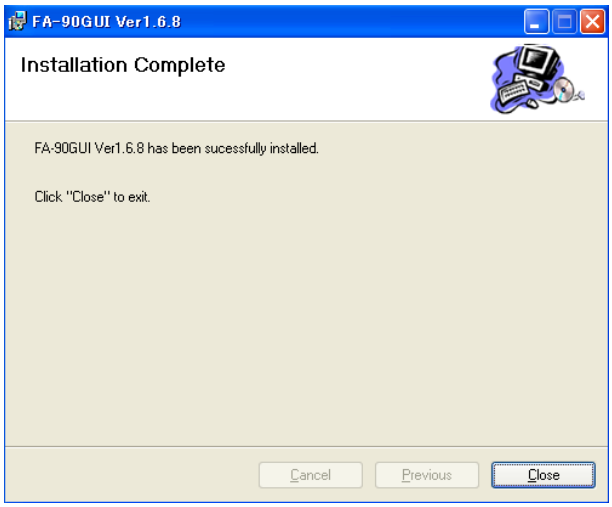
2) The **Select Installation Folder** screen is displayed. Enter the folder path, and click Next.



3) The **Confirm Installation** screen is displayed. Click Next to begin the installation. A progress bar appears to indicate the progress of the installation.



4) When the installation is completed, the **Installation Complete** screen is displayed. Click Close.



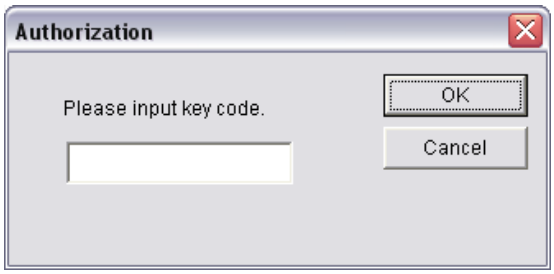
IMPORTANT
In order to run FA-90GUI, the SNMP Service in Windows XP/2000 Professional must be installed. See the corresponding instructions for your OS in Appendix 1, “Installing SNMP Service” for installing the SNMP Service. If firewall software is installed on your computer, it may interfere with the data transfer to the device.

3-3. Key Code

If a key code is entered and authenticated, additional features will be available.

3-3-1. Key Code Authentication

When you run the application for the first time, choose **Help (F) > FA-90GUI Key Code** to display the **Authorization** dialog box. In the **Authorization** dialog box, enter the key code issued at the time of the registration of FA-90GUI and click OK. See section 3-3-2, “Creating a Registration Code File.” Once the key code is authenticated, the **Authorization** dialog box will not be displayed even if **Help (F) > FA-90GUI Key Code** is chosen.



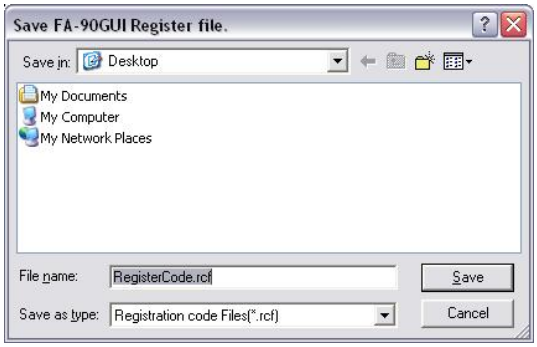
IMPORTANT
The standard functions are available without entering a key code. A key code is issued for each computer where FA-90GUI is installed. If you wish to change the computer for running FA-90GUI, please contact our sales representatives. The key code must be entered in single byte alphanumeric characters.

3-3-2. Creating a Registration Code File

Please follow the instructions below to create a registration code file required for obtaining a key code.

1) Go to **Start > All Programs > Register FA-90GUI > Register FA-90GUI**. The **Register FA-90GUI** window is diaplayed.

2) Clicking Save displays the **Save FA-90GUI Register File** dialog box. Enter the file name (default: RegisterCode.rcf) and click Save.



3) Click Quit to close the application. Please email the saved registration code file to our sales representatives.

IMPORTANT
The standard functions are available without entering a key code. The key code is issued for each computer where FA-90GUI is installed. If you wish to change the computer for running FA-90GUI, please contact our sales representatives.

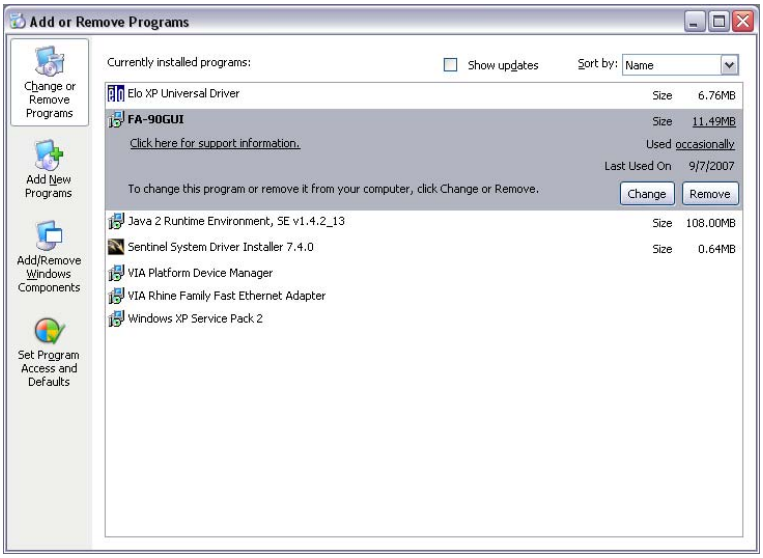
3-4. Removing FA-90GUI

Close all applications running on your computer before starting to delete FA-90GUI.

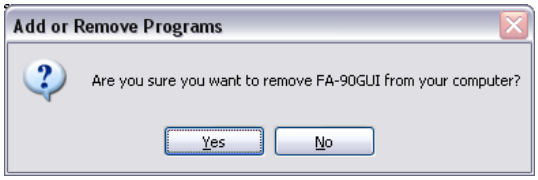
1) If FA-90GUI is running, exit the application.

2) Go to **Start > Control Panel**. Select **Add/Remove Programs**.

3) In the **Add or Remove Programs** window, select **FA-90GUI**, and click Remove.



4) You are prompted to confirm that you wish to remove FA-90GUI as shown below. Click Yes to confirm removal.

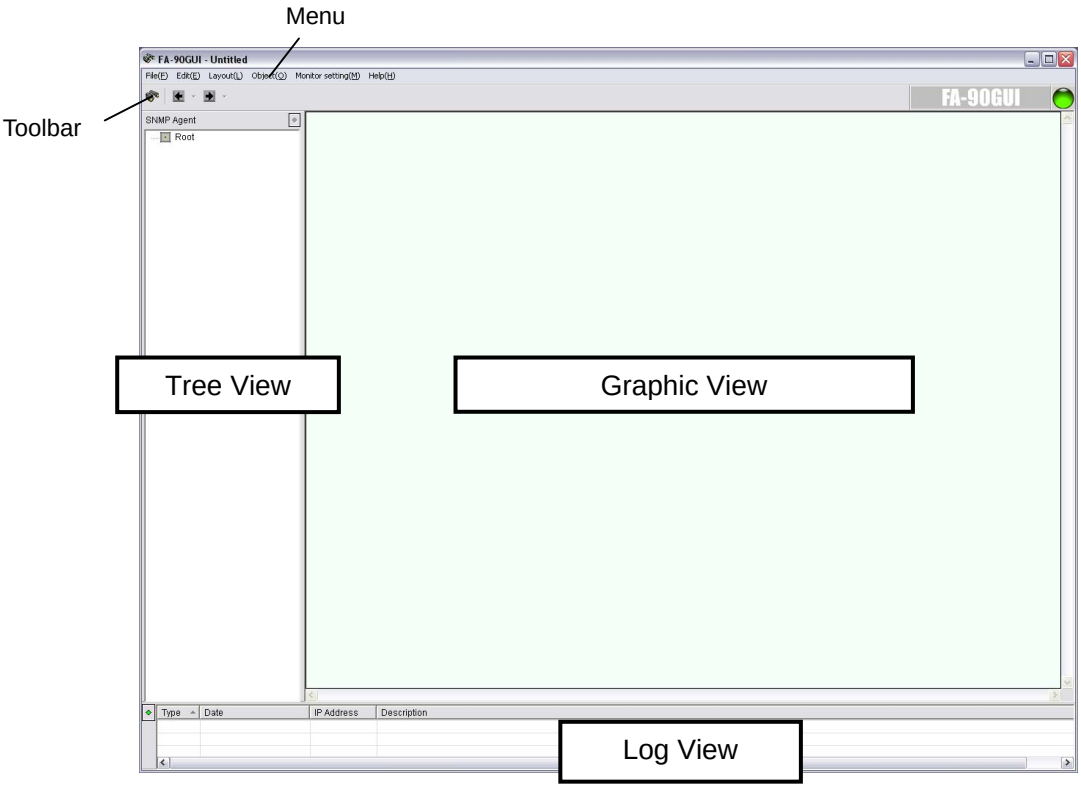


4. Starting and Exiting FA-90GUI

4-1. Starting FA-90GUI

1) Double-click the **FA-90GUI** icon on the Desktop.

2) The **FA-90GUI** window is displayed as shown in the figure below. **Monitor** mode is activated when the program is started. The **FA-90GUI** window is divided into three different panes: **Tree** view, **Graphic** view, and **Log** view.

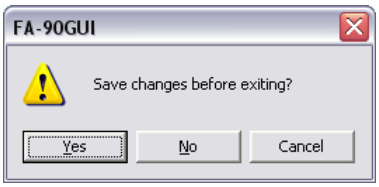


IMPORTANT
When you run the application for the first time, a key code must be entered. (See section 3-3, “Key Code.”) When you run the application for the first time, nothing may be displayed unless setup is performed. Register the device (see section 7-1, “Registering a Device”), and arrange a layout in the Graphics view pane if necessary (see section 14, “Editing Graphic View”). To register a device or edit the layout of the Graphic view, change the Monitor window view from **Monitor** mode to **Edit** mode. For details, see section 5, Switching between Monitor and Edit Modes”.

4-2. Exiting FA-90GUI

Choose **File (F) > Exit (X)**. Click OK in the confirmation message that is displayed.

A confirmation message is displayed when changes made during editing of the **Graphic** view pane or device registration is not performed. To save the changes, click Yes. To exit the application without saving, click No.



5. Switching between Monitor and Edit Modes

5-1. Monitor Mode and Edit Mode

The monitor window has two modes: **Monitor** mode and **Edit** mode.

◆ **Monitor Mode**

In this mode, monitoring is performed and the device statuses are displayed in the **Tree**, **Graphic**, and **Log** view panes. (See section 6, “Monitor Window”)
The menu bar and toolbar in the Monitor mode are displayed as shown in the figure below. (See section 18-1, “Monitor Mode” and 19-1, “Monitor Mode” for details.)

This icon appears when in Monitor mode.

◆ **Edit Mode**

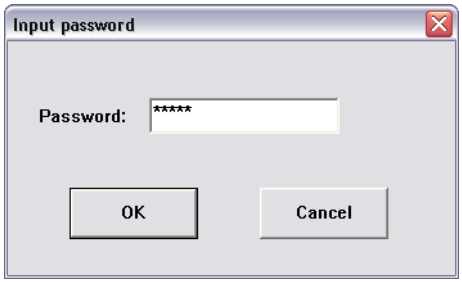
In this mode, registration of devices, creation and editing of layouts, setting of polling intervals, and other setup operations are performed.
The menu bar and toolbar in the **Edit** mode are as shown in the figure below. (See section 18-2, “Edit Mode” and 19-2, “Edit Mode” for details.)

This icon appears when in Edit mode.

5-2. Changing Modes

To switch between **Monitor** mode and **Edit** mode, either choose **Edit (E) > Change Mode (E)** on the menu bar or click the **Edit/Monitor mode** icon on the toolbar.

When switching to **Edit** mode from **Monitor** mode, the **Input password** dialog box is displayed. Enter the password, and then click OK.
If the password is not set, the **Input Password** dialog box will not be displayed.
(See section 15, “Password Settings.”)

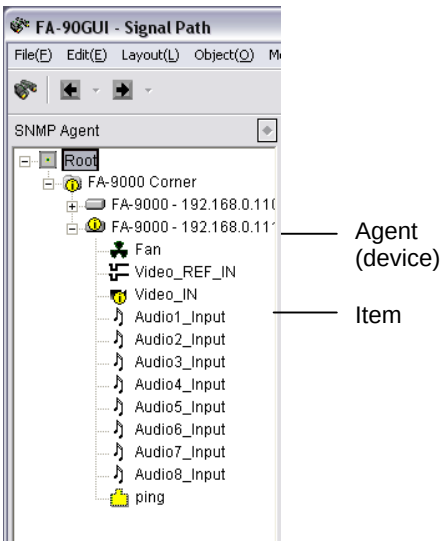


NOTE
Although the Trap information in the **LOG** view pane are cleared when switching to **Edit** mode from **Monitor** mode, the Trap information is saved in the log file.

6. Monitor Window

6-1. Tree View Pane

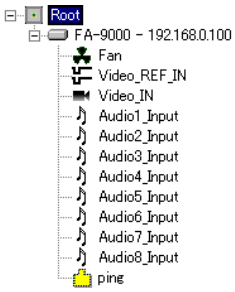
Agents (devices) and groups are displayed just below the root directly of the tree, and items are displayed just below the devices.



Status Icon

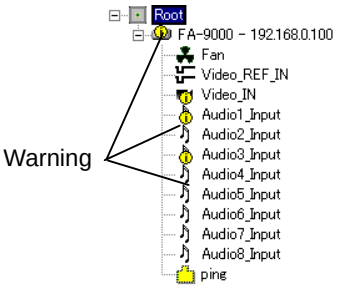
	Normal
	Warning
	Communication error
Fan	Status of internal FAN
Video_REF_IN	Status of Reference input
Video_IN	Status of Video input
Audio1_Input	Status of Audio input 1 – 8 The figure left is input 1.
ping	Status of LAN connection
Power1	Status of Power 1 and Power 2 The figure left is Power 1 *FA-9100RPS only
	Trap received from device

◆ **Normal**



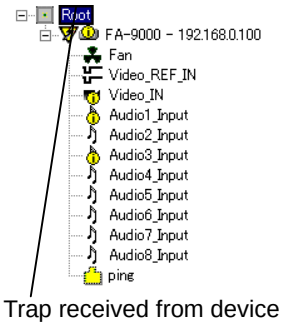
◆ **Warning**

Error occurred in the device



◆ **Trap**

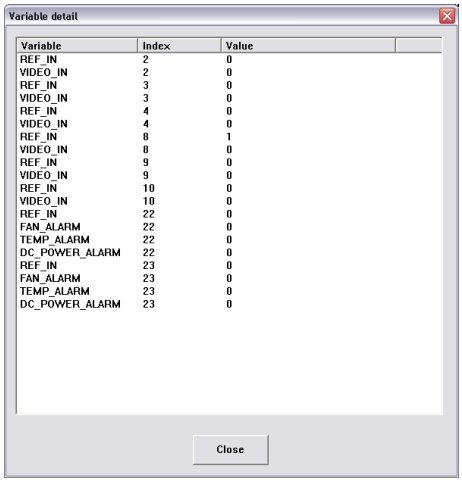
Trap received from the device



6-1-1. Device Information

The information for each device can be viewed.

1) In the Tree view pane, right-click the device you wish to view the information.
2) Choose **Agent Variable Info (I)** from the right-click menu. The **Variable detail** dialog box is displayed and the information for the device is displayed.



Items	Description
FAN	0: Normal 1: Fan failure in FA-9000
REF_IN.	0: Input present 1: No input present
Video_IN	0: Input present 1: No input present
Audio1_Input	0: Input present 1: No input present
Audio2_Input	0: Input present 1: No input present
Audio3_Input	0: Input present 1: No input present
Audio4_Input	0: Input present 1: No input present
Audio5_Input	0: Input present 1: No input present
Audio6_Input	0: Input present 1: No input present
Audio7_Input	0: Input present 1: No input present
Audio8_Input	0: Input present 1: No input present
Power1 (FA-9100RPS only)	0: Normal 1: Power failure in Power 1
Power2 (FA-9100RPS only)	0: Normal 1: Power failure in Power 2
ping	0: Communication error 1: Normal

6-1-2. Creating a Group

The devices displayed in the Tree view pane can be grouped by category such as floor where the devices are located. In the Tree view pane, right-click the root directory or a group and choose **Create Group (G)** from the right-click menu. The **Change Group Name** dialog box is displayed. Enter the group name and click OK.

6-1-3. Renaming a Group

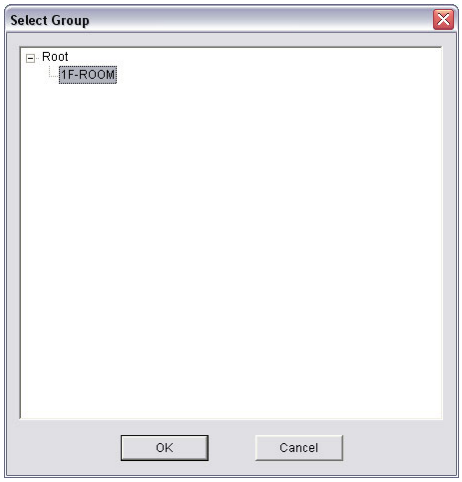
In the Tree view pane, right-click a group and choose **Change Group Name (G)** from the right-click menu. The **Create Group Name** dialog box is displayed. Enter the group name and click OK.

6-1-4. Deleting a Group

In the Tree view pane, right-click a group and choose **Delete Group (G)** from the right-click menu. A confirmation dialog box is displayed. Click OK. Since the group cannot be deleted if it contains devices or groups inside, first empty the group before deleting.

6-1-5. Moving a Device or Group

In the Tree view pane, right-click a device or group and choose **Move (M)**. The **Select Group** dialog box is displayed. Select the destination and click OK.



6-1-6. Running Internet Explorer

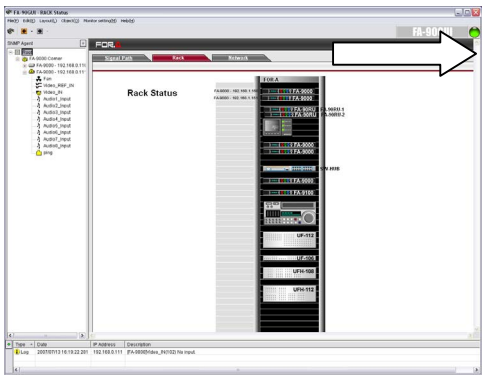
Internet Explorer can be started for performing the IP address settings and the SNMP settings for the FA-9000. In the Tree view pane, right-click the device and choose **Execute Explorer (Y)**.

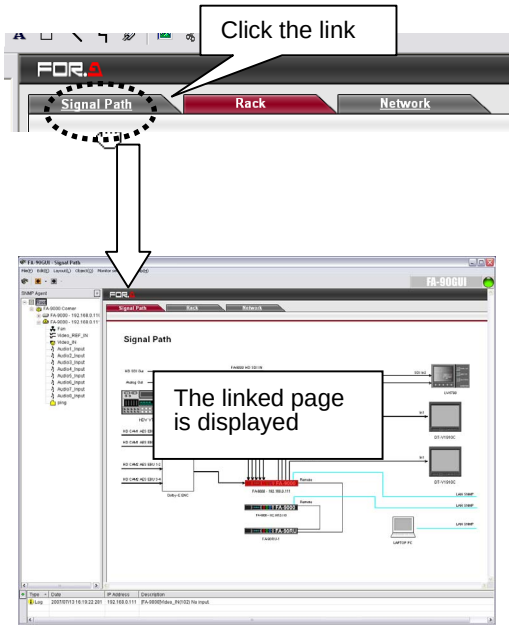
6-2. Graphic View Pane

Two types of view are available in the Graphic view pane: **Graphic** view and **List** view.

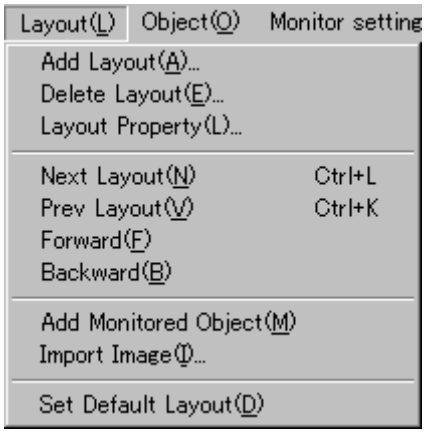
6-2-1. Graphic View

◆ **Moving Between Pages**
When there are link pages, you can click the link to move between linked pages.

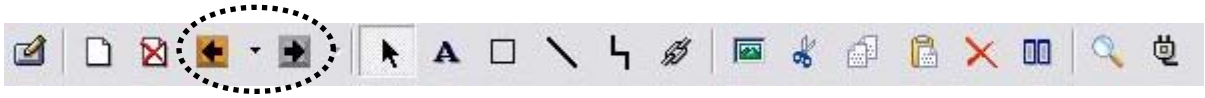




◆ **Next Layout and Prev Layout**
Choose **Layout (L) > Next Layout (N)** and **Prev Layout (V)** to move between pages.



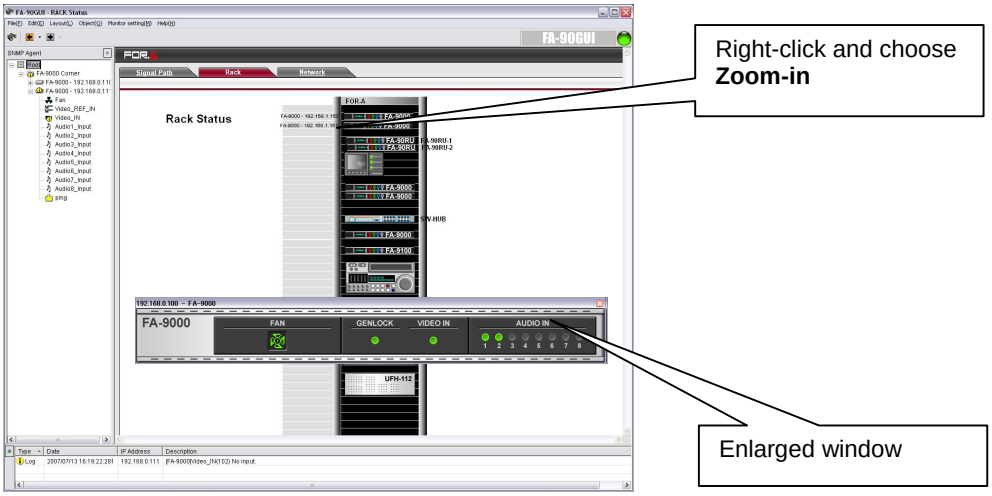
◆ **Forward and Backward**
Click the left and right arrow icons on the toolbar or choose **Layout (L) > Forward (F)** and **Backward (B)** to move between pages using the navigation history.



◆ **Zoom In**

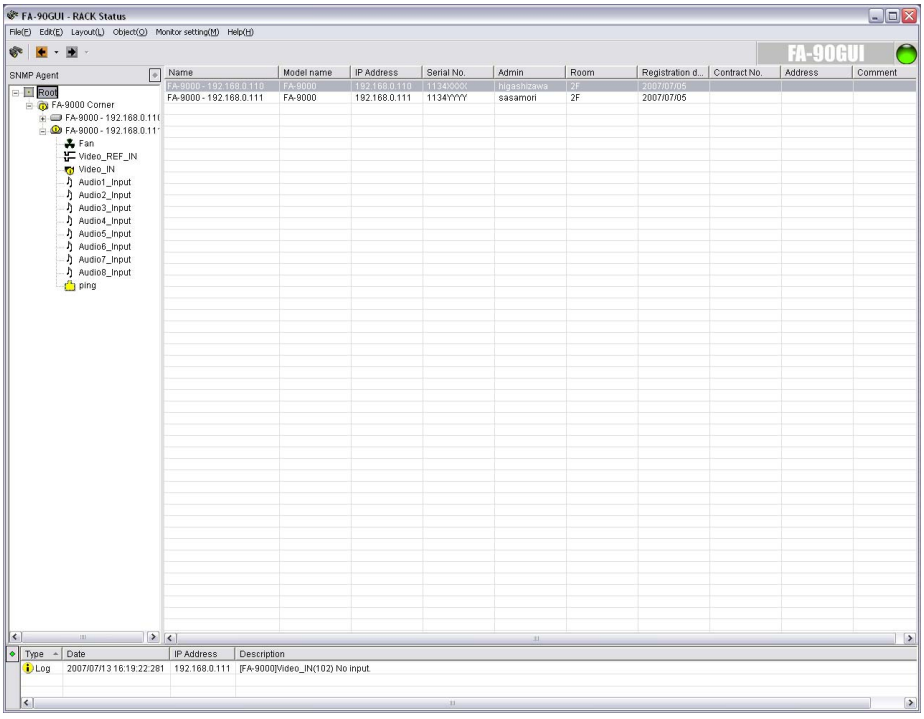
Zoom In allows you to check the operational status of the device.

Right-click the device in the Graphic view pane and choose **Zoom in (Z)** from the right-click menu to display the enlarged window. Clicking the × at the top right of the enlarged window closes the window.



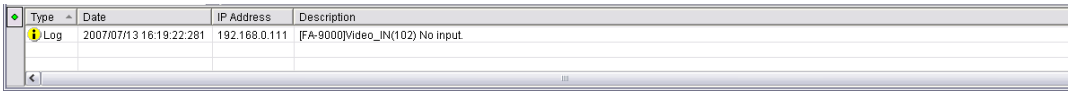
6-2-2. List View

By pressing the F7 key on the keyboard or choosing **Edit (E) > ListView (I)**, the Graphic view pane can be switched to **List** view showing information such as the device names and the model names. The registered device name, the model name, and the IP address are set automatically. The information for Serial No., Contract No., Address, and Comment can also be entered depending on your needs. Also, the sysContact and sysLocation set for the SNMP settings are set for Admin and Room respectively.



6-3. Log View Pane

In **Monitor** mode, warning and error information that occurs on the FA-9000 are displayed in the **Log** view pane. This information is reset in **Edit** mode.

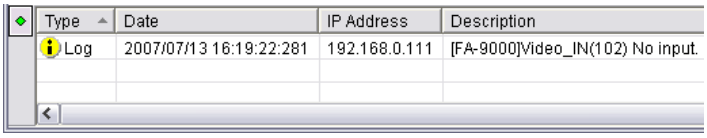


Type	Description
Log	Indicates an error.
Log	Indicates a warning.
Trap	Indicates that a trap is received from the device.

Item	Description
Date	Displays the date and time acquired from the device. For a trap, the date and time that the trap was received are displayed.
IP Address	Displays the IP address of the device.
Contents	Displays the log information.

◆ **Information display by polling**

When a warning is received by the polling, it displays the date, IP address and description of the warnings as shown in the figure below.



E.g. There is no input to VIDEO IN connector.

Items to be displayed in Log view pane by polling

Item	Description
FAN(100) Error.	Error occurred in the FA-9000 internal fan.
REF_IN(101) No Input.	There is no input signal to GENLOCK IN.
Video_IN(102) No Input.	There is no input signal to VIDEO IN.
Audio1_Input(103) No Input.	There is no input signal to AUDIO IN 1.
Audio2_Input(104) No Input.	There is no input signal to AUDIO IN 2.
Audio3_Input(105) No Input.	There is no input signal to AUDIO IN 3.
Audio4_Input(106) No Input.	There is no input signal to AUDIO IN 4.
Audio5_Input(107) No Input.	There is no input signal to AUDIO IN 5.
Audio6_Input(108) No Input.	There is no input signal to AUDIO IN 6.
Audio7_Input(109) No Input.	There is no input signal to AUDIO IN 7.
Audio8_Input(110) No Input.	There is no input signal to AUDIO IN 8.
Power1(111) Error.（FA-9100RPS only）	Error occurred in Power 1
Power2(112) Error.（FA-9100RPS only）	Error occurred in Power 2
ping(9999) ping NG	Communication error occurred between PC and FA-9000 due to disconnected LAN.

◆ **Display at receiving a trap**

When a trap is received, it displays the date, IP address and description (IP address, running time from power on, and trap information) of the trap as shown in the figure below.

E.g. There is a signal input to VIDEO IN.

Trap information to be displayed in Log view pane by a trap

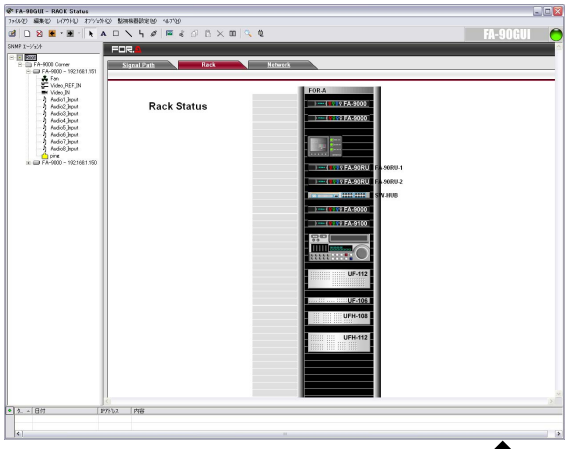
Item	Description
snmpTrapOID:warmStart forACommon:coldStart	FA-9000 is turned on.

Item	Description
snmpTrapOID:forATrapFan forACommon:FAN_STOPPED	FA-9000 internal FAN is stopped.
snmpTrapOID:forATrapFan forACommon:FAN_NORMAL	FA-9000 internal FAN is recovered.
snmpTrapOID:forATrapRefIn forACommon:NO_REFERENCE	GENLOCK IN signal is missing.
snmpTrapOID:forATrapRefIn forACommon:REFERENCE_IN	GENLOCK IN signal is recovered.
snmpTrapOID:forATrapVideoIn forACommon:NO_VIDEO	VIDEO IN signal is missing.
snmpTrapOID:forATrapVideoIn forACommon:VIDEO_IN	VIDEO IN signal is recovered.
snmpTrapOID:forATrapAudio1Input forACommon:NO_AUDIO1	AUDIO IN 1 signal is missing.
snmpTrapOID:forATrapAudio2Input forACommon:NO_AUDIO2	AUDIO IN 2 signal is missing.
snmpTrapOID:forATrapAudio3Input forACommon:NO_AUDIO3	AUDIO IN 3 signal is missing.
snmpTrapOID:forATrapAudio4Input forACommon:NO_AUDIO4	AUDIO IN 4 signal is missing.
snmpTrapOID:forATrapAudio5Input forACommon:NO_AUDIO5	AUDIO IN 5 signal is missing.
snmpTrapOID:forATrapAudio6Input forACommon:NO_AUDIO6	AUDIO IN 6 signal is missing.
snmpTrapOID:forATrapAudio7Input forACommon:NO_AUDIO7	AUDIO IN 7 signal is missing.
snmpTrapOID:forATrapAudio8Input forACommon:NO_AUDIO8	AUDIO IN 8 signal is missing.
snmpTrapOID:forATrapAudio1Input forACommon:AUDIO1_IN	AUDIO IN 1 signal is recovered.
snmpTrapOID:forATrapAudio2Input forACommon:AUDIO2_IN	AUDIO IN 2 signal is recovered.
snmpTrapOID:forATrapAudio3Input forACommon:AUDIO3_IN	AUDIO IN 3 signal is recovered.

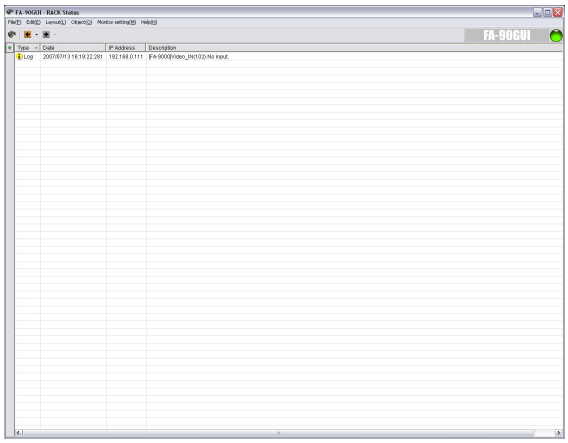
Trap information to be displayed in Log view pane by a trap (Continued from previous page)

Item	Description
snmpTrapOID:forATrapAudio4Input forACommon:AUDIO4_IN	AUDIO IN 4 signal is recovered.
snmpTrapOID:forATrapAudio5Input forACommon:AUDIO5_IN	AUDIO IN 5 signal is recovered.
snmpTrapOID:forATrapAudio6Input forACommon:AUDIO6_IN	AUDIO IN 6 signal is recovered.
snmpTrapOID:forATrapAudio7Input forACommon:AUDIO7_IN	AUDIO IN 7 signal is recovered.
snmpTrapOID:forATrapAudio8Input forACommon:AUDIO8_IN	AUDIO IN 8 signal is recovered.

Two types of view are available in the Log view pane: **Normal** and **Full Screen**. Press the F8 key on the keyboard or choose **Edit (E) > Full Screen Log (O)** to switch between **Normal** and **Full Screen**.



Normal



Full Screen

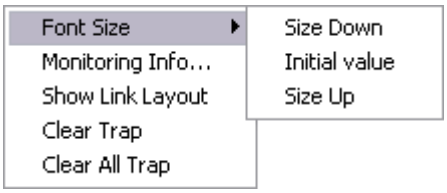
NOTE

When viewing the log in **Full Screen**, any pane other than Log view pane is invisible. To view the other panes, switch back to **Normal**.

Although the Trap information in the **LOG** view pane are cleared when switching to **Edit** mode from **Monitor** mode, the Trap information is saved in the log file.

See the SNMP settings in the FA-9000 or FA-9100/FA-9100RPS operation manual for how to set things for sending traps and how to set the IP address for the PC where the FA-90GUI is installed

Clicking the icon at the left of the **Log** view pane (or right-clicking the **Log** view pane) displays a menu.



Item	Description
Font Size	Changes the font size or the texts in the **Log** view pane smaller and larger. Selecting **Initial value** returns texts to the default font size.
Monitoring Info	Displays the **Variable detail** dialog box.
Show Link Layout	Displays the layout of the selected device.
Clear Trap	Clears the selected trap indicator. Trap indicators and trap icons in the tree continue to be displayed until the traps are cleared.
Clear All Trap	Clears all trap indicators in the log.

NOTE
For details about the log files, see section 11, “Log Files.”

7. Registering, Changing, and Deleting Devices

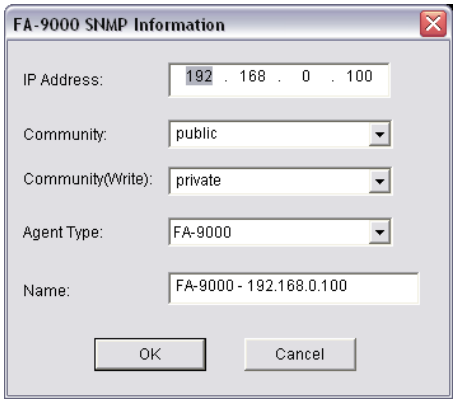
Before registering, changing, or deleting devices, you must switch to **Edit** mode. Either press F5 key on the keyboard, choose **Edit (E) > Change mode (E)** on the menu bar, or click the **Edit/Monitor** mode icon on the toolbar to switch modes.

7-1. Registering a Device

Devices can be registered in two ways.

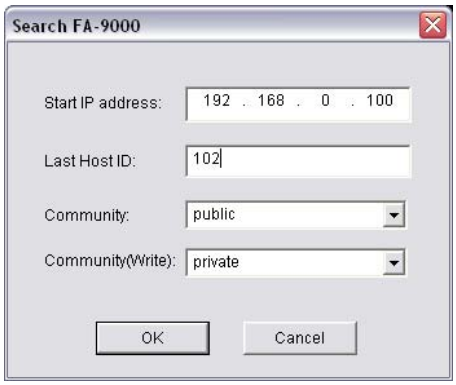
◆ **Registering by specifying a known IP address and device type**

1) In the **Tree** view pane, right-click on a device and choose **Register FA-9000(N)** from the right-click menu. The **FA-9000 SNMP Information** dialog box is displayed.
2) Enter the IP address of the device in **IP Address**.
3) Enter the community name for reading in **Community** and the community name for writing in **Community (write)** respectively, and then click OK.
4) Select the device from **Agent Type**, and then click OK.
5) The applicable device is added to the tree. (See section 6-1, “Tree View Pane”.)



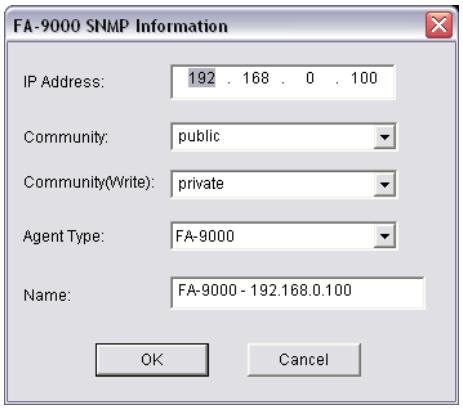
◆ **Registering by specifying an IP address range and searching**

1) In the **Tree** view pane, right-click on a device and choose **Search FA-9000 (F)** from the right-click menu. The **Search FA-9000** dialog box is displayed.
2) Enter the starting IP address in **Start IP address**.
3) Enter the host ID for the end IP address in **Last Host ID** (202 if the range of the end IP address is 192.168.0.202 / 255.255.255.0).
4) Enter the community name for reading in **Community** and the community name for writing in **Community (write)** respectively, and then click OK.
5) The search starts, and any applicable devices that are found are automatically added to the tree. (See section 6-1, “Tree View Pane”.)



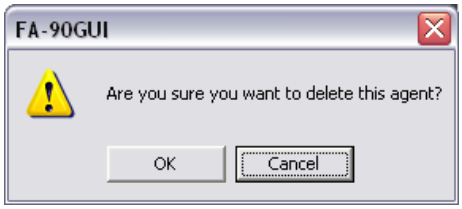
7-2. Changing Properties of a Device

To change IP address, community name, and name of a device, right-click the device in the Tree view pane and choose **Property (C)** from the right-click menu. The **FA-9000 SNMP Information** dialog box is displayed. Enter the IP address and click OK to apply the settings.



7-3. Deleting a Device

In the **Tree** view pane, right-click the device to be deleted and then select **Delete (D)**. A confirmation dialog box is displayed. Click OK.



8. Opening and Saving a Layout

The information of the Tree view pane and Graphic view pane is managed in a single file.

8-1. Open

To use a saved layout for monitoring and editing, open the layout by choosing **File (F) > Open (O)**.

8-2. Save

After you edit the layout, it can be saved by choosing **File (F) > Save (S)** or **Save As (A)**. The saved layout is used for monitoring next time you run the application.

8-3. Set Default Layout

The default page displayed when the application is started can be specified.

1) Display the page you wish to set to the default page.
2) Choose **Layout (L) > Set Default Layout (D)**.

8-4. Import and Export

Each layout can be imported and exported. If there are links on the page to be imported, reset the links after you import the page.

◆ **Export This Layout**

Display the page to be exported. Choose **File (F) > Export This Layout (L)**. The **Save As** dialog box is displayed. Specify the file name and click Save.

◆ **Import Layout**

Choose **File (F) > Import Layout (I)**. The **Open** dialog box is displayed. Select the file to be imported and click Open.

9. Linking a Device to a Layout

By linking each device with a layout, the linked page of the device which is related to such as an error item can be viewed when it is double-clicked in the Log view pane.

9-1. Linking to the Current Layout

1) Display a layout to be linked.
2) In the Tree view pane, right-click a device to link to the layout and choose **Link to Current Layout (B)** from the right-click menu.

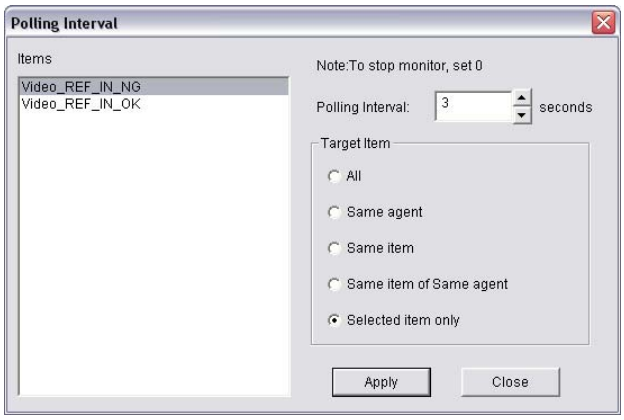
10. Polling Interval Settings

The polling interval and whether to enable or disable monitoring of each item can be set.

10-1. Polling Interval Settings

In FA-90GUI, the polling interval can be set for each item separately

1) Change to **Edit** mode. (See section 5-2, “Changing Modes”.)
2) In the **Tree** view pane, right-click an item and choose **Monitor Setting (P)** from the right-click menu. The **Polling Interval** dialog box is displayed. The **Polling Interval** dialog box is also displayed by clicking to select an item in the **Graphic** view pane and then choosing **Monitor setting (M) > Polling Interval (P)**.



3) Refer to the table below for selecting the item to set the polling interval.

Item	Description
FAN_NG, FAN_OK	FA-9000 FAN status
Video_REF_IN_NG, Video_REF_IN_OK	Video_REF_IN_NG: GENLOCK IN signal is missing.. Video_REF_IN_OK: GENLOCK IN signal is recovered.

Item	Description
Video_IN_NG, Video_IN_OK	Video_IN_NG: Video IN signal is missing. Video_IN_OK: Video IN signal is recovered.
Audio1_Input_NG, Audio1_Input_OK	AUDIO _Input1_NG: Audio IN1 signal is missing. AUDIO _Input1_OK: Audio IN1 signal is recovered.
Audio2_Input_NG, Audio2_Input_OK	AUDIO _Input2_NG: Audio IN2 signal is missing. AUDIO _Input2_OK: Audio IN2 signal is recovered.
Audio3_Input_NG, Audio3_Input_OK	AUDIO _Input3_NG: Audio IN3 signal is missing. AUDIO _Input3_OK: Audio IN3 signal is recovered.
Audio4_Input_NG, Audio4_Input_OK	AUDIO _Input4_NG: Audio IN4 signal is missing. AUDIO _Input4_OK: Audio IN4 signal is recovered.
Audio5_Input_NG, Audio5_Input_OK	AUDIO _Input5_NG: Audio IN5 signal is missing. AUDIO _Input5_OK: Audio IN5 signal is recovered.

(Continues to next page)

Item	Description
Audio6_Input_NG, Audio6_Input_OK	AUDIO _Input6_NG: Audio IN6 signal is missing. AUDIO _Input6_OK: Audio IN6 signal is recovered.
Audio7_Input_NG, Audio7_Input_OK	AUDIO _Input7_NG: Audio IN7 signal is missing. AUDIO _Input7_OK: Audio IN7 signal is recovered.
Audio8_Input_NG, Audio8_Input_OK	AUDIO _Input8_NG: N8 signal is missing. AUDIO _Input8_OK: Audio IN8 signal is recovered.
Power1 _NG, Power1_OK (FA-9100RPS only)	Power1 _NG: Error occurred in Power 1 Power1 _OK: Power 1 is operated normally
Power2 _NG, Power2_OK (FA-9100RPS only)	Power2 _NG: Error occurred in Power 2 Power2 _OK: Power 2 is operated normally
NG	LAN connection status

4) Set the polling interval by referring to the table below. The applicable range for the setting can also be specified. Items that are set with a polling interval of 0 are not monitored.

Item	Description
Polling Interval	Sets the polling interval in second units. Monitoring is not performed for a setting of 0.

Check item	Applicable setting range
All	The value set in **Polling Interval** is applied to all items of all devices regardless of the selection in **Items**.
Same agent	The value set in **Polling Interval** is applied to all items of the selected devices regardless of the selection in **Items**.
Same item	The value set in **Polling Interval** is applied to the selected items and the items with the same name as the selected items for all devices.
Same item of Same agent	The value set in **Polling Interval** is applied to the items of the selected devices, which have the same name as the items selected in **Items**.
Selected item only	The value set in **Polling Interval** is applied to the selected items of the selected devices.

5) Click Apply to finalize the polling interval settings.
6) Click Close to close the **Polling Interval** dialog box.

◆ **Update Layout**

Choosing **Monitor setting (M) > Update Layout (R)** allows to obtain the latest data from the device and refresh the screen regardless of the polling interval.

11. Log Files

The monitoring information is saved in the log files in CSV format (except the application log).

NOTE
If a key code is not registered, only the application log is saved. In **Monitor** mode, log data is continually being added to the log file. Therefore, be sure to switch to **Edit** mode before opening the file.

11-1. Log Types

- **Application log**
  This contains operation information of FA-90GUI itself.
  Folder: C:\Program Files\FA-90GUI\ApplicationLog
  File: Log_YYYYMMDD.log

- **Device status log**
  This contains the status for each device.
  Folder: C:\Program Files\ FA-90GUI \Log
  File: Polling_YYYYMMDD.csv

- **Monitor status log**
  This contains the status of items in FA-90GUI.
  Folder: C:\Program Files\ FA-90GUI \Log
  File: Variable_YYYYMMDD.csv

- **Trap log**
  This contains the trap data received from the device.
  Folder: C:\Program Files\ FA-90GUI \Log
  File: Trap_YYYYMMDD.csv

11-2. Setting Log File Size

The maximum file size can be set for each log in KB (kilobyte) unit.

Choose **File (F) > Log File Setting (M)**. The **Log File Size Setting** dialog box is displayed. Specify the size for each log and click OK.

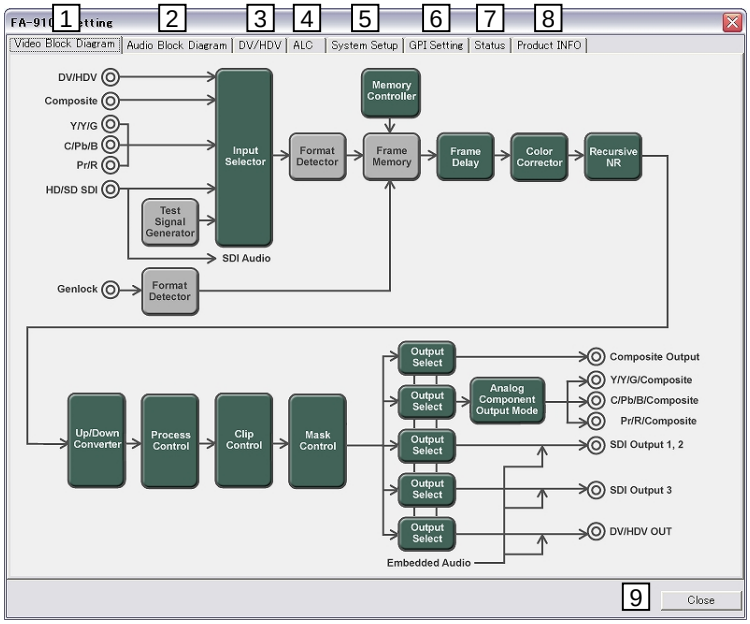
NOTE
If a key code is not registered, only the application log can be set.

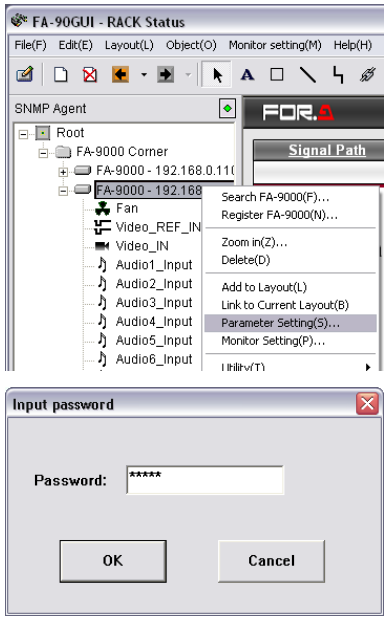
12. FA-9000 Parameter Settings

The parameters of FA-9000 can be changed from FA-90GUI.
See the FA-9000 operation manual for details on the FA-9000 parameters.

12-1. Parameter Settings

Right-click on FA-9000 in the tree view pane. Choose **Parameter Settings (S)** to open the **Input Password** dialog box. Type the password for changing parameters, then the **FA-9000 Setting** dialog box appears. The dialog box is categorized into tabs.
If the password is not set, the **Input Password** dialog box will not be displayed. (See section 15, “Password Settings.”)

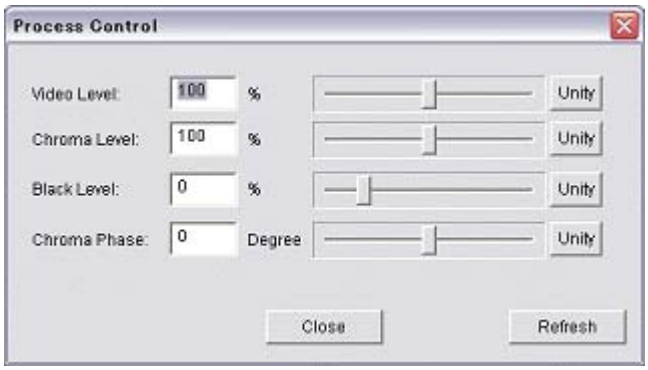




	Tab and button	Description	Refer to
1	Video Block Diagram	Video related settings	12-2
2	Audio Block Diagram	Audio related settings	12-3
3	DV/HDV	DV/HDV related settings (available when FA-90DV and/or FA-90HDV is installed.)	12-4
4	ALC Setup	ALC related settings	12-5
5	System Setup	System related settings	12-5
6	GPI Setting	GPI related settings	12-7
7	Status	Setting status display	12-8
8	Product INFO	Product's information display	12-9
9	Close	Button to close the FA-9000 Setting dialog box	

Close Buttons in **FA-9000 Setting Dialog** (No. 9 in the figure above)
Closes the **FA-9000 Setting** dialog box.

◆ **Popup Dialogs in FA-9000 Setting Dialog**
The **FA-9000 Setting Dialog** shows pop-up dialogs such as shown in the figure below as needed.



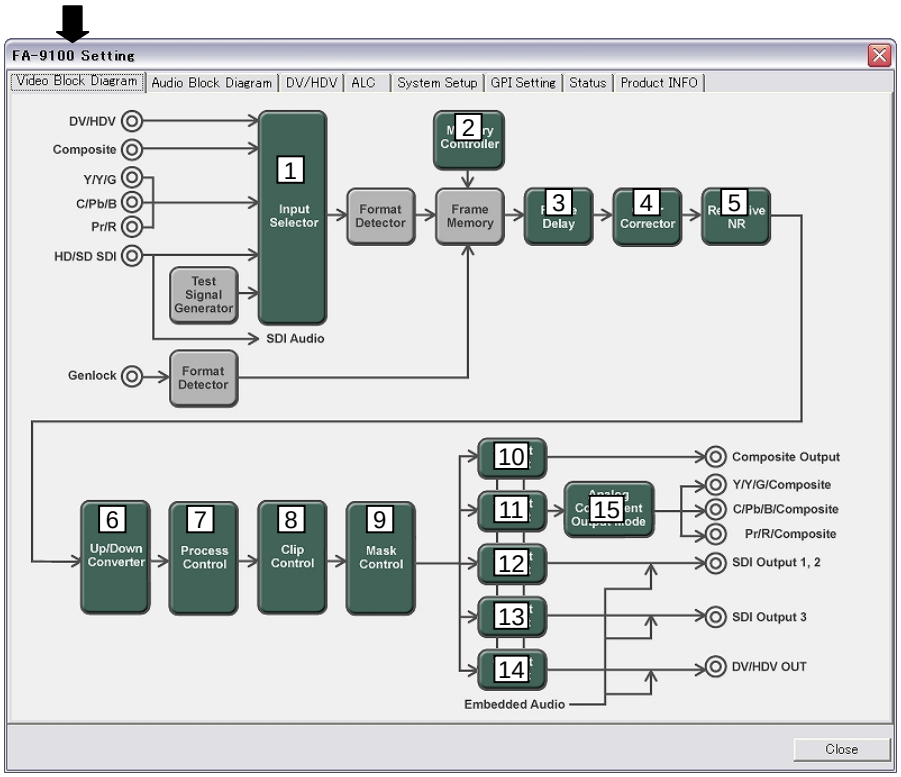
Close Button
Closes the pop-up dialog.

Refresh Button
Refreshes parameters with the latest values from the Main Unit (FA-9000 / 9100 / 9100RPS).

NOTE
Although the Trap information in the **LOG** view pane are cleared when switching to **Edit** mode from **Monitor** mode, the Trap information is saved in the log file. Since setting parameters in **Monitor** mode stops monitoring except for traps, the status in the **Tree**, **Graphic**, or **Log** view may appear different from the actual status of the device. If an optional card is installed to or uninstalled from the FA-9000 series unit while the **FA-9000 Setting** dialog box is displayed, the change is not applied to the **FA-9000 Setting** dialog box. To apply the change, close the **FA-9000 Setting** dialog box and open it again.

12-2. Video Block Diagram

Click **Video Block Diagram** tab to open **Video Block Diagram** dialog box.
Clicking any green block in the diagram opens corresponding dialog box in which you can set parameters.



		Block	Description	Refer to
1		Input Selector	Input signal selection	12-2-1
2		Memory Controller	Freeze settings	12-2-2
3		Frame Delay	Frame Delay On/Off setting	12-2-3
4	*	Color Corrector	Color correction settings	12-2-4
5		Recursive NR	Noise Reduction related settings	12-2-5
6	**	Up/Down Converter	Up/Down Converter settings	12-2-6
7		Process Control	Proc Amp settings	12-2-8
8	*	Clip Control	Color space adjustment	12-2-9
9		Mask Control	Line Mask setting	12-2-10
10	**	Output Select	Analog Composite output mode selection	12-2-11
11	**	Output Select	Analog Component output mode selection	
12	**	Output Select	SDI1 and SDI2 output mode selection	
13	**	Output Select	SDI3 output mode selection	
14	***	Output Select	DV/HDV output mode selection	
15		Analog Component Output Mode Select	Analog Component output signal type selection	12-2-12

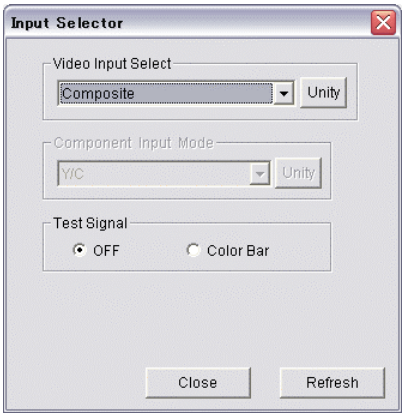
* This setting is available only if FA-90CC is installed.

** This setting is available only if FA-90UD is installed.

*** This setting is available only if FA-90DV and FA-90HDV are installed in addition to FA-90UD.

12-2-1. Input Selector Setting

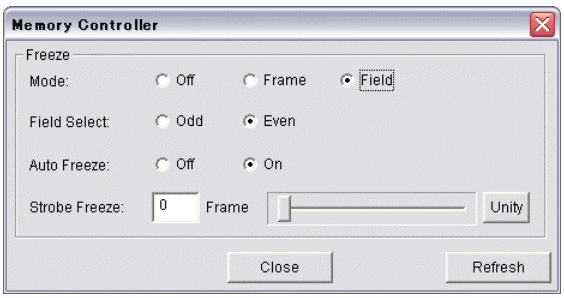
Click the **Input Selector** block in the **Video Block Diagram** dialog box to display the **Input Selector** dialog box.



Item	Default	Setting range	Description
Video Input Select	Digital Component	Composite, Component, Digital Component DV/HDV	Selects the format of the video input. *This setting is available when FA-90DV/HDV is installed.
Component Input Mode	YPbPr (SMPTE)	YPbPr (SMPTE), YPbPr (BETACAM), RGB, Y/C	Selects the signal type of the analog component input.
Test Signal	—	OFF, Color Bar	Uses an internal color bar.

12-2-2. Memory Controller Setting

Click the **Memory Controller** block in the **Video Block Diagram** dialog box to display **Memory Controller** dialog box.

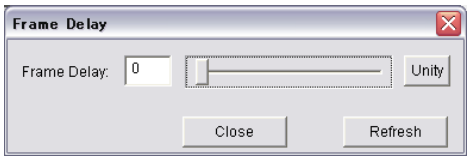


Item	Default	Setting range	Description
Mode	—	Off, Frame, Field	Selects freeze operation Off, frame freeze or field freeze.
Field Select	—	Odd, Even	Selects a field between odd and even when field freeze is set.
Auto Freeze	—	Off, On	If set to On, the last received normal field (still image) of video input is frozen to compensate for input dropout due to signal loss.
Strobe Freeze	0	0-255	**0:** Cancels Strobe Freeze. **1-255:** Sets the strobe rate in fields during the field or frame freeze.

12-2-3. Frame Delay Setting

Click the **Frame Delay** block in the **Video Block Diagram** dialog box to display **Frame Delay** dialog box.

FA-9000



FA-9100 or FA-9100RPS

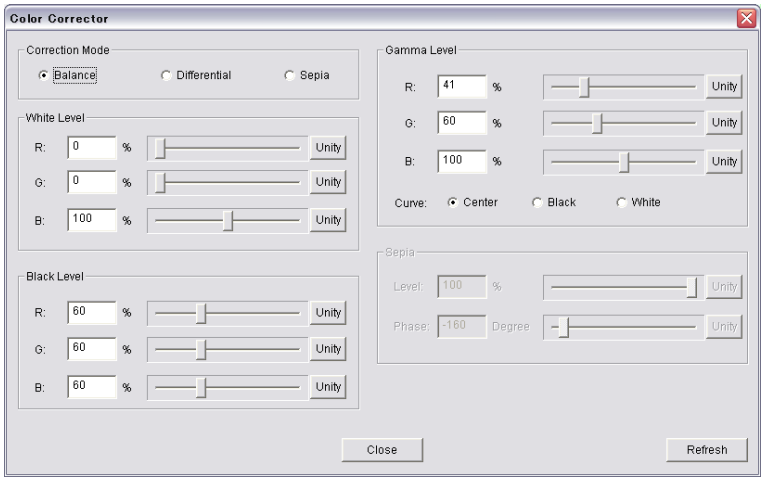
Item	Setting range	Description
Frame Delay	FA-9000: OFF, ON FA-9100 or FA-9100RPS: 0-4	**OFF:** Sets the frame delay off. (FA-9000) **ON:** Sets the frame delay on. (FA-9000) **0-4:** Delay value (FA-9100 or FA-9100RPS)

NOTE
The Scene Cut Det setting in the **ALC** dialog is set to **On**, Frame Delay is grayed out and cannot be set. (See section 12-5. "ALC Setup (FA-91ALC Option)."

12-2-4. Color Corrector Setting (FA-90CC Option)

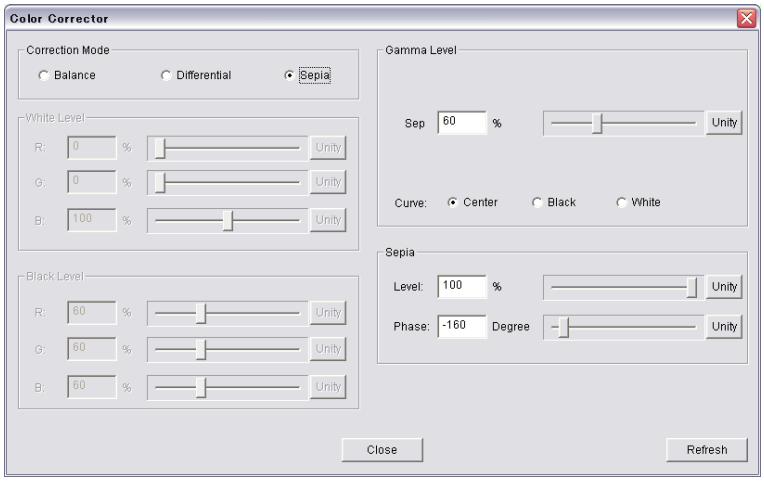
Click the **Color Corrector** block in the **Video Block Diagram** dialog box to display the **Color Corrector** dialog box. The setting items vary depending on **Correction Mode**.

◆ **When Correction Mode is set to [Balance] or [Differential] :**



Item	Default	Setting range	Description
Correction Mode	—	Balance, Differential, Sepia	Selects the correction mode from Balance (RGB), Differential (color difference), or Sepia.
White Level R, G, B	100%	0 to 200%	Sets the white level for R, G, and B separately.
Black Level R, G, B	100%	0 to 200%	Sets the black level for R, G, and B separately.
Gamma Level R, G, B	100%	0 to 200%	Sets the gamma level for R, G, and B separately.
Gamma Curve	—	Center, Black, White	Selects the gamma curve type.

◆ **When Correction Mode is set to [Sepia] :**



Item	Default	Setting range	Description
Correction Mode	—	Balance, Differential, Sepia	Selects the correction mode from Balance (RGB), Differential (color difference), or Sepia.
Sepia	100%	0 to 200%	Sets the level of the Gamma Y component.
Sepia Level	25%	0 to 100%	Adjusts the color level.
Sepia Phase	-160 Degree	-180 to 179.9 Degree	Adjusts the color phase.

IMPORTANT

The **Color Corrector** dialog is available in the following cases.

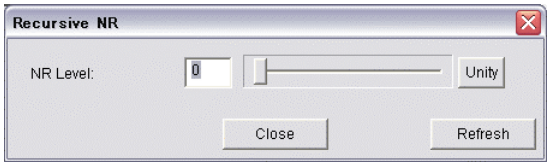
-When FA-90CC option is installed.

-When FA-91ALC option is installed. (See section 12-5. "ALC Setup (FA-91ALC Option.")

- Available parameters vary depending on the **ALC Operate Mode** setting.
  Off: **All** parameters in the dialog can be set.
  Hold: **Correction Mode** and **Gamma Curve** cannot be set.
  Auto: **No** parameters in the dialog can be set. The current value and the display value for the parameters in the dialog may not always be same due to the continuous change, even though the Refresh button may load and display the latest values.
- If you change the ALC Operate Mode to **Off** or **Hold** with the **Color Corrector** dialog box open, be sure to click the Refresh button to load the latest values.

12-2-5. Recursive NR Setting

Click the **Recursive NR** block in the **Video Block Diagram** dialog box to display the **Recursive NR** dialog box.



Item	Default	Setting range	Description
NR Level	0	0-4	Enables or disables noise reduction filter by reducing frame-recursive 3D noise in video and sets its reduction level. **0:** Off **1-4:** Low to high

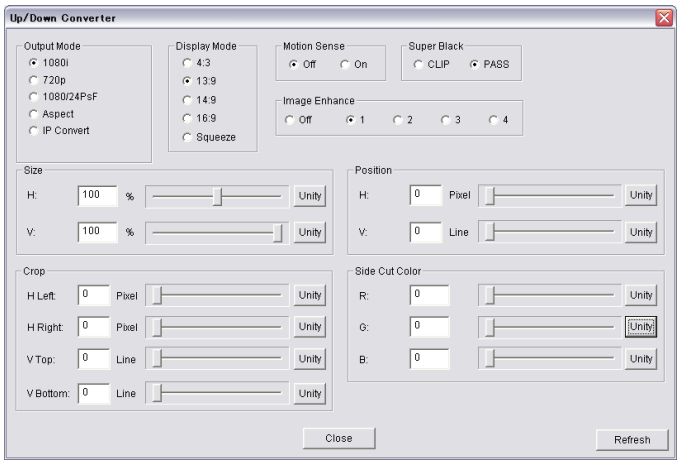
12-2-6. Up/Down Converter Setting (FA-90UD Option)

This **Video Block Diagram** dialog box is displayed when controlling FA-9000 and FA-9100/9100RPS with firmware version up to 3.00.

Click the **Up/Down Converter** block in the **Video Block Diagram** dialog box to display the **Up/Down Converter** dialog box.

IMPORTANT

The standard settings of converter are made both in the **Up/Down Converter** dialog box (see below) and in the **Output Select** block dialog box for each output (see section 12-2-11. Output Select Setting (FA-90UD Option)). Note that any conversions are not processed if set to **THROUGH** in Output Select block dialog, because **THROUGH** setting takes precedence over any other converter settings.



Item	Default	Setting range	Description
Output Mode	—	1080i, 720p, 1080/24PsF(*1), Aspect, IP Convert (*2)	**1080i, 720p, 1080/24PsF:** Select one of these formats when up-converting signal. **Aspect:** Changes only the aspect ratio. Set the ratio with H SIZE and V SIZE. **IP Convert:** Converts signal between interlaced and progressive.
Display Mode	—	4: 3, 13: 9, 14: 9, 16: 9, Squeeze	Selects the aspect ratio of the video output on the monitor. If SQUEEZE is selected, the image is expanded horizontally on the sides to fill the screen.
Motion Sense	—	Off, On	Smoothes the motion in the input video image.
Image Enhance	—	Off, 1-4	Sharpens the output video image. **1-4:** low to high

(*1) The 1080/24PsF in Output Mode is available only for FA-9100 or FA-9100RPS that supports the format.

(*2) Note that the IP conversion cannot be performed when 1080/24PsF (1080/23.98PsF or 1080/24PsF) or SDTV signal is input.

(Continued to next page.)

Item		Default	Setting range	Description
Super Black		—	CLIP, PASS	Selects the super black to be clipped or passed.
Size	H	100%	50% to 150%	Adjusts the width of the video displayed on the monitor.
	V	100%	50% to 150%	Adjusts the height of the video displayed on the monitor.
Position	H	0	#	Adjusts the horizontal position of the video displayed on the monitor.
	V	0	#	Adjusts the vertical position of the video displayed on the monitor.
Crop	Left	0	#	Crops the left side of the video.
	Right	0	#	Crops the right side of the video.
	Top	0	#	Crops the top part of the video.
	Bottom	0	#	Crops the bottom part of the video.
Side Cut Color R, G, B		0	0-255	Sets the background color of the side cut area. The value can be set for red, green and blue component separately.

The setting ranges differ depending on the setting conditions.

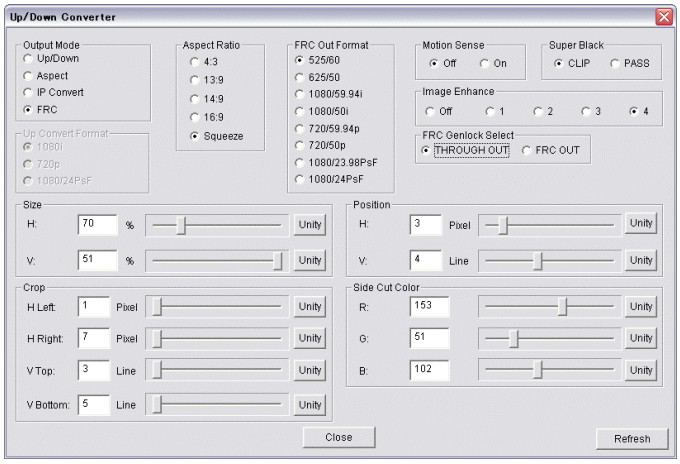
12-2-7. Up/Down Converter Setting (FA-90UD/FA-91FRC Options)

This **Video Block Diagram** dialog box is displayed when controlling FA-9100/RPS with firmware version 4.00 and higher.

Click the **Up/Down Converter** block in the **Video Block Diagram** dialog box to display the **Up/Down Converter** dialog box.

IMPORTANT

The standard settings of converter are made both in the **Up/Down Converter** dialog box (see below) and in the **Output Select** block dialog box for each output (see section 12-2-11. Output Select Setting (FA-90UD Option)). Note that any conversions are not processed if set to **THROUGH** in Output Select block dialog, because **THROUGH** setting takes precedence over any other converter settings.



Item	Default	Setting range	Description
Output Mode	—	Up/Down, Aspect, IP Convert (*1), FRC (*2)	Selects conversion mode. **Up/Down**: Performs up/down- conversion. **ASPECT**: Changes only the aspect ratio. **IP CONVERT**: Converts signal between interlaced and progressive. **FRC**: Performs frame rate conversion.
Up Convert Format	—	1080i, 720p, 1080/24PsF	Selects output signal format when up-converting signal from SD to HD. **1080i**: Up-converts signal to 1080/59.94i or 1080/50i. **720p**: Up-converts signal to 720/59.94p or 720/50p. **1080/24PsF**: Up-converts signal to 1080/23.98PsF or 1080/24PsF.

(*1) Note that the IP conversion cannot be performed when 1080/24PsF (1080/23.98PsF or 1080/24PsF) or SDTV signal is input.

(*2) Available only when FA-91FRC option is installed.

(Continued to next page.)

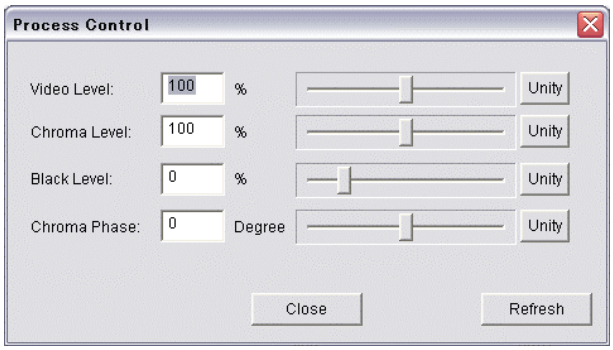
Item		Default	Setting range	Description
FRC OUT Format (*2)		—	525/60, 625/50, 1080/59.94i, 1080/50i, 720/59.94p, 720/50p, 1080/23.98PsF, 1080/24PsF	Selects output signal format in FRC mode.
FRC Genlock Select (*2)		—	THROUGH OUT, FRC OUT	Selects synchronized type in FRC mode. **THROUGH OUT**: Synchronizes the signal **before** conversion (same format as the input) to the reference signal. FRC OUT: Synchronizes the signal **after** conversion to the reference signal.
Aspect Ratio		—	4:3, 13:9, 14:9, 16:9, Squeeze	Selects the aspect ratio of the video output on the monitor. If SQUEEZE is selected, the image is expanded horizontally on the sides to fill the screen.
Motion Sense		—	Off, On	Smoothes the motion in the input video image.
Image Enhance		—	Off, 1 to 4	Sharpens the output video image. **1-4:** low to high
Super Black		—	CLIP, PASS	Selects the super black to be clipped or passed.
Size	H	100%	50% to 150%	Adjusts the width of the video displayed on the monitor.
	V	100%	50% to 150%	Adjusts the height of the video displayed on the monitor.
Position	H	0	#	Adjusts the horizontal position of the video displayed on the monitor.
	V	0	#	Adjusts the vertical position of the video displayed on the monitor.
Crop	Left	0	#	Crops the left side of the video.
	Right	0	#	Crops the right side of the video.
	Top	0	#	Crops the top part of the video.
	Bottom	0	#	Crops the bottom part of the video.
Side Cut Color R, G, B		0	0 to 255	Sets the background color of the side cut area. The value can be set for red, green and blue component separately.

The setting ranges differ depending on the setting conditions.

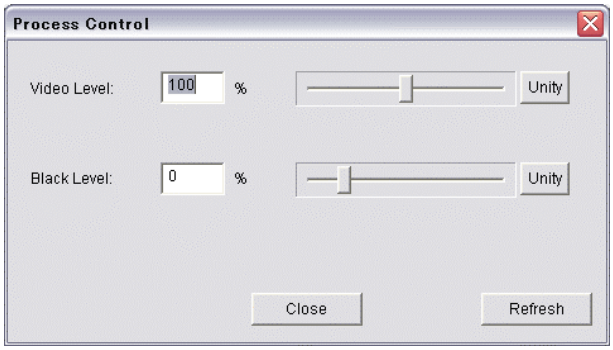
12-2-8. Process Control (Proc Amp) Setting

Click the **Process Control** block in the **Video Block Diagram** dialog box to display the **Process Control** dialog box. The setting items displayed for the color corrector (FA-90CC option) vary depending on **Correction Mode**.

◆ **The FA-90CC option is not installed or Correction Mode is set to [Differential] or [Balance].**



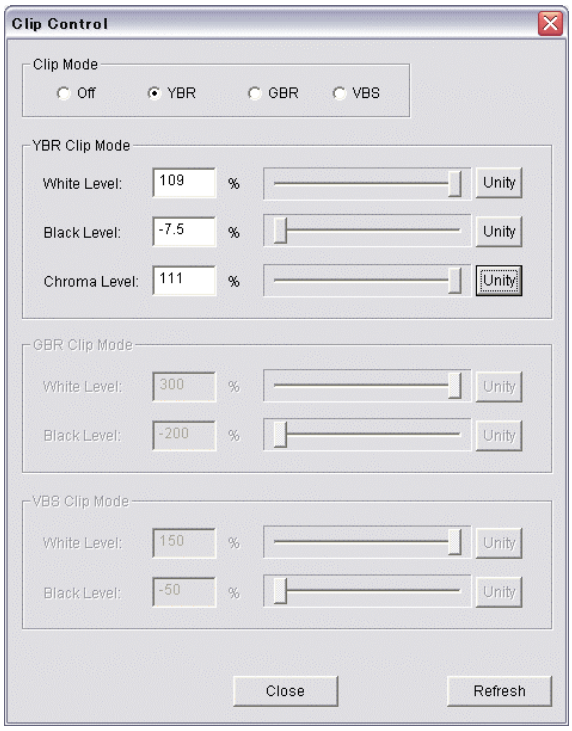
◆ **Correction Mode is set to [Sepia]**



Item	Default	Setting range	Description
Video Level	100%	0 to 200%	Adjusts the video level.
Chroma Level	100%	0 to 200%	Adjusts the chrominance level.
Black Level	0%	-20 to 100%	Adjusts the black level.
Chroma Phase	0 Degree	-179.8 to 180 Degree	Adjusts the chrominance phase.

12-2-9. Clip Control Setting (FA-90CC Option)

Click the **Clip Control** block in the **Video Block Diagram** dialog box to display the **Clip Control** dialog box. The setting items displayed vary depending on **Clip Mode**.

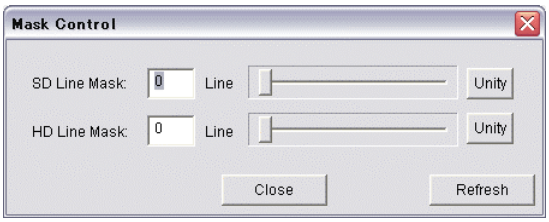


Item		Default	Setting range	Description
Clip Mode		—	Off, YBR, GBR, VBS	Selects the clip mode from Off, YBR Clip, GBR Clip, and VBS Clip. YBR Clip is for clipping in YPbPr color space, GBR Clip in GBR color space and VBS in composite color space.
YBR Clip Mode	White Level	109%	50 to 109%	Sets the upper threshold of Y signal.
	Black Level	-7.5%	-7.5 to 50%	Sets the lower threshold of Y signal.
	Chroma Level	111%	50 to 111%	Sets both upper and lower thresholds of PbPr signals simultaneously.
GBR Clip Mode	White Level	300%	50 to 300%	Sets the upper threshold of GBR color space.
	Black Level	-200%	-200 to 50%	Sets the lower threshold of GBR color space.
VBS Clip Mode	White Level	150%	50 to 150%	Sets the upper threshold of VBS (analog composite) color space.
	Black Level	-50%	-50 to 50 %	Sets the lower threshold of VBS (analog composite) color space.

IMPORTANT
The **Clip Control** block is available if the FA-90CC option is installed.

12-2-10. Mask Control Setting

Click the **Mask Control** block in the **Video Block Diagram** dialog box to display **Mask Control** dialog box.



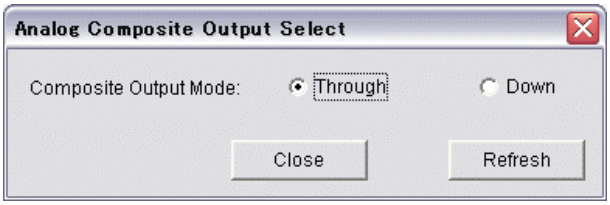
Item	Default	Setting range	Description
SD Line Mask	0 Line	0 to 30 Line	Sets on which line the SD-SDI signal is masked.
HD Line Mask	0 Line	0 to 30 Line	Sets on which line the HD-SDI signal is masked.

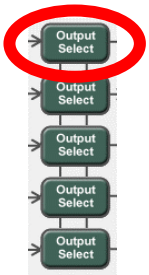
12-2-11. Output Select Setting (FA-90UD Option)

Click the **Output Select** block in the **Video Block Diagram** dialog box to display **Analog Composite Output Select** dialog box.

The **Output Mode** setting in the Up/Down Converter dialog box (see section 12-2-6 and 12-2-7), input signal format and the **Output Select** setting in this section determine which format is applied to each output. Note that neither FA-90UD nor FA-91FRC are used if set to **Through** in **Output Select**.

◆ **Output Signal Setting for COMPOSITE OUT**

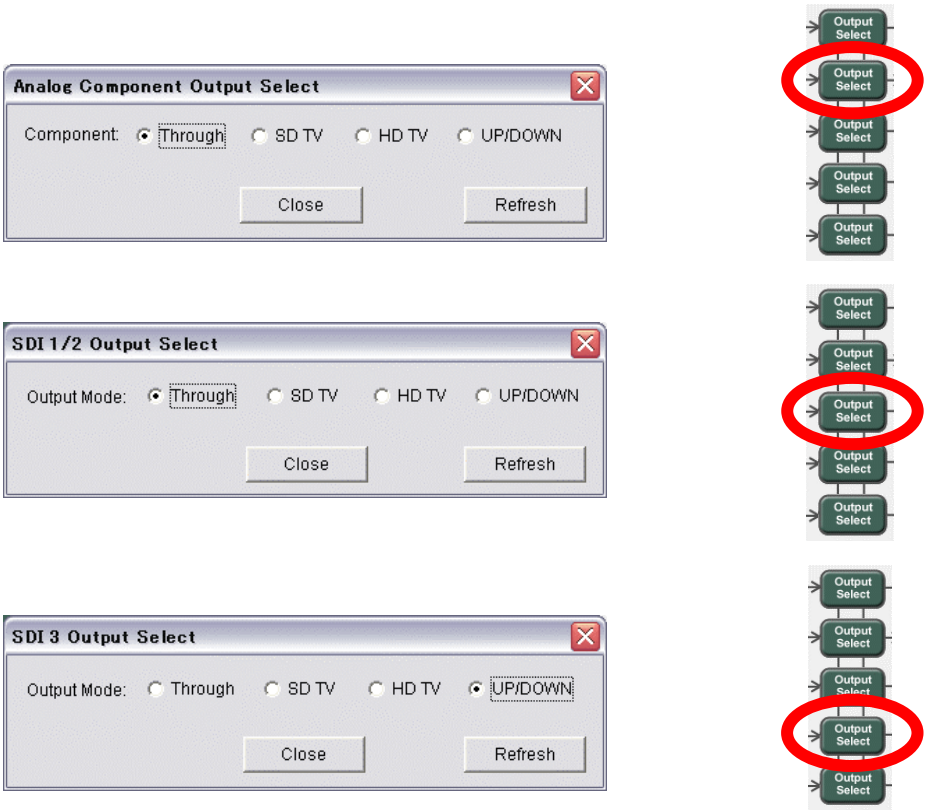




Setting	Output Mode setting (12-2-6 or 12-2-7)	Input signal format	Output signal format
Through	---	SDTV	Passes through the input signal.
		HDTV	Outputs Black Burst signal with the same frame rate.
Down	1080i, 720p, 1080/24PsF, Up/Down	---	Outputs the SD signal.
	Aspect, IP Convert	SDTV	Outputs the SD signal.
		HDTV	Outputs the Black Burst signal with the same frame rate.
	FRC	---	Output the SD signal if set to SDTV. Outputs the Black Burst signal with the same frame rate as the HDTV if set to HDTV.

Click the **Output Select** block in the **Video Block Diagram** dialog box to display the **Output Select** dialog box (**Analog Composite Output Select**, **SDI1/2 Output Select**, **SDI3 Output Select** and **DV/HDV Output Select**).

◆ **Output Signal Setting for HD/SD ANALOG COMPONENT OUT and SDI OUT1-3**



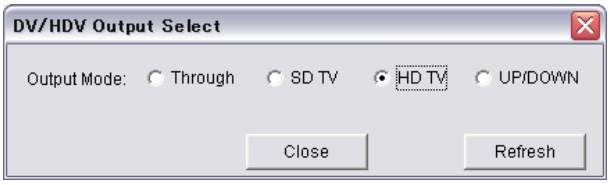
Setting	Output Mode setting (12-2-6 or 12-2-7)	Input signal format	Output signal format
Through	---	---	**Passes through the input signal.**
SDTV	1080i, 720p, 1080/24PsF, Up/Down	---	**Outputs the SD signal.**
	Aspect	---	Outputs the aspect-ratio-converted signal.
	IP Convert	HDTV	Outputs the IP-converted signal.
		SDTV	Passes through the input signal.
	FRC	---	Outputs the signal of the specified output format.
HDTV	1080i, 720p, 1080/24PsF, Up/Down	---	**Outputs the HD signal of the specified output format.**
	Aspect	---	Outputs the aspect-ratio-converted signal.
	IP Convert	HDTV	Outputs the IP-converted signal.
		SDTV	Passes through the input signal.
	FRC	---	Outputs the signal of the specified output format.

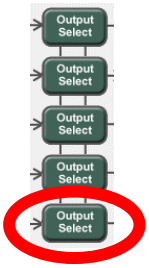
(Continued to next page)

Setting	Output Mode setting (12-2-6 or 12-2-7)	Input signal format	Output signal format
UP/DOWN	1080i, 720p, 1080/24PsF, Up/Down	**SDTV**	**Outputs the HD signal of the specified output format.**
		HDTV	**Outputs the SD signal.**
	Aspect	---	Outputs the aspect-ratio-converted signal.
	IP Convert	HDTV	Outputs the IP-converted signal.
		SDTV	Passes through the input signal.
	FRC	---	Outputs the signal of the specified output format.

IMPORTANT
As for HD/SD Analog Component Output, the output signal type is further subdivided by the Analog Component Output Mode setting. (See section 12-2-12.) Note that Black is output if Y/C or Composite is selected for Analog Component when an HD signal is routed.

◆ **Output Signal Setting for DV/HDV**





Setting	Output Mode setting (12-2-6 or 12-2-7)	Input signal format	Output signal format
Through	---	---	**Passes through the input signal.**
SDTV	1080i, 720p, 1080/24PsF, Up/Down	---	**Outputs the DV signal.**
	Aspect	---	Outputs the aspect-ratio-converted signal.
	IP Convert	HDTV	Outputs the IP-converted HDV signal.
		SDTV	Outputs the DV signal without IP conversion.
	FRC	---	Outputs the signal of the specified output format.
HDTV	1080i, 720p, 1080/24PsF, Up/Down	---	**Outputs the HDV signal.**
	Aspect	---	Outputs the aspect-ratio-converted signal.
	IP Convert	HDTV	Outputs the IP-converted HDV signal.
		SDTV	Outputs the DV signal without IP conversion.
	FRC	---	Outputs the signal of the specified output format.

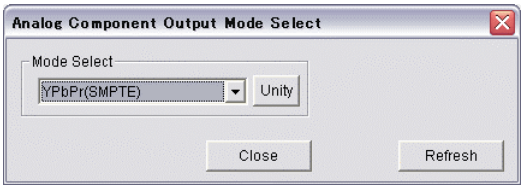
(Continued to next page)

Setting	Output Mode setting (12-2-6 or 12-2-7)	Input signal format	Output signal format
UP/DOWN	1080i, 720p, 1080/24PsF, Up/Down	**SDTV**	**Outputs the HDV signal.**
		HDTV	**Outputs the DV signal.**
	Aspect	---	Outputs the aspect-ratio-converted signal.
	IP Convert	HDTV	Outputs the IP-converted HDV signal.
		SDTV	Outputs the DV signal without IP conversion.
	FRC	---	Outputs the signal of the specified output format.

IMPORTANT
The **Analog Composite Output Select**, **Analog Component Output Select**, **SDI 1/2 Output Select**, and **SDI 3Output Select** blocks are available if the FA-90UD option is installed. The FRC (frame rate conversion) mode is available if the FA-91FRC option is installed. DV/HDV Output Select is available when FA-90UD or FA-90DV/FA-90HDV is installed.

12-2-12. HD/SD Analog Component Output Mode Setting

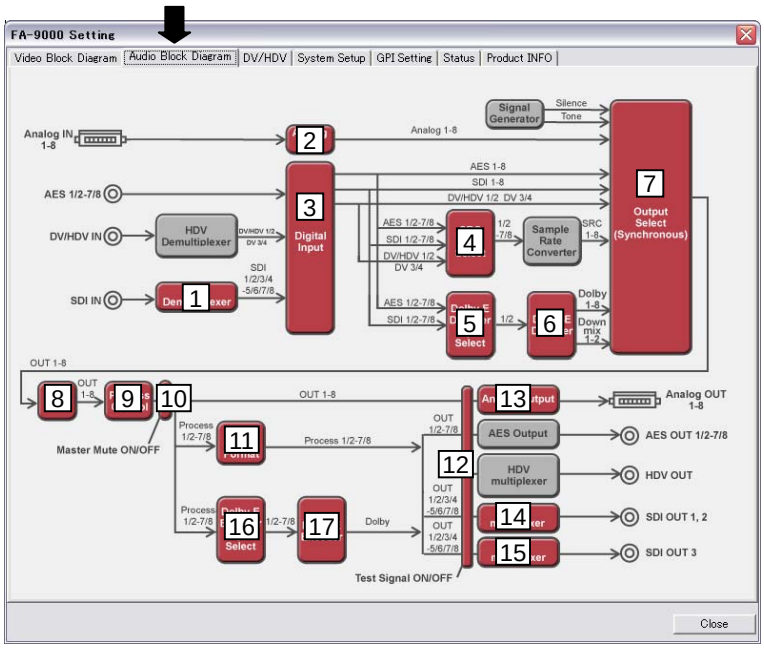
Click the **Analog Component Output Mode** block in the **Video Block Diagram** dialog box to display **Analog Component Output Mode Select** dialog box.



Item	default	Setting range	Description
Mode Select	YPbPr (SMPTE)	YPbPr (SMPTE), YPbPr (BETACAM), RGB, Y/C, Composite	Selects the signal type of the analog component output. *Composite is selectable in FA-9100 and FA-9100RPS only.

12-3. Audio Block Diagram

Click the **Audio Block Diagram** tab to display the **Audio Block** dialog box.
Clicking any red block in the diagram opens corresponding dialog box in which you can set parameters.



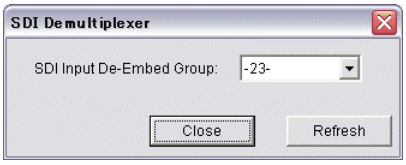
		Block	Description	Refer to
1		SDI Demultiplexer	Embedded audio group selection of SDI input	12-3-1
2		Analog Input	Aanalog audio input adjustmet	12-3-2
3		Digital Input	Digital audio input adjustment	12-3-3
4		SRC Input Select	Input source selection (SRC1-8) used for Sampling Rate Converter	12-3-4
5	*	Dolby-E Decoder Input Select	Input source selection used for Dolby-E Decoder	12-3-5
6	*	Dolby-E Decoder	Dolby-E Decoder settings	12-3-6
7		Output Select	Output audio selection	12-3-9
8		Delay	Output audio delay settings	12-3-10
9		Process Control	Output audio control (Gain, Polarity and Mode)	12-3-11
10		Master Mute ON/OFF	Mute On/Off setting for the master audio output	12-3-12
11		Digital Output Format	Digital output format settings	12-3-13
12		Test Signal ON/OFF	Test Signal On/Off setting	12-3-14
13		Analog Output	Analog output audio adjustment (Level and Gain)	12-3-15
14		SDI multiplexer	Embedded audio control for SDI1 and SDI2 outputs	12-3-16
15		SDI multiplexer	Embedded audio control for SDI3 output	
16	**	Dolby-E Encoder Input Select	Dolby-E Encoder Input selection	12-3-7
17	**	Dolby-E Encoder	Dolby-E Encoder setting	12-3-8

* This setting is available only if FA-90DE-D is installed.

** This setting is available only if FA-91DE-ED is installed.

12-3-1. SDI Demultiplexer Setting

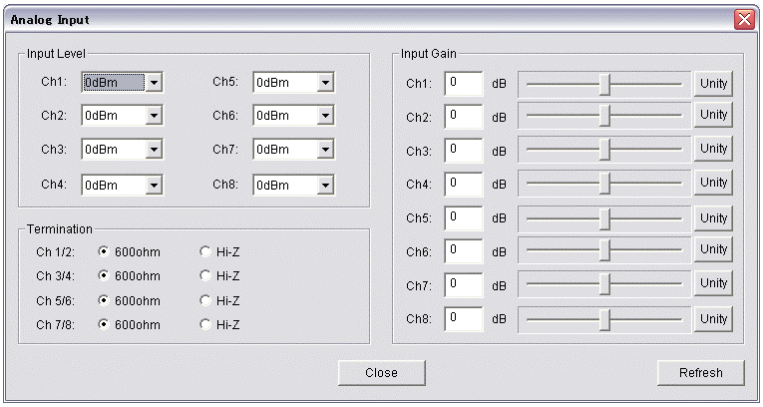
Click the **SDI Demultiplexer** block in the **Audio Block** dialog box to display the **SDI Demultiplexer** dialog box.



Item	Setting range	Description
SDI Input De-Embed Group	12--, --34, 1-3-, 2-4, 1--4, -23-	Selects the embedded audio groups to be used from the input SDI data stream. FA-9000 supports up to two groups (total of 8 channels) to be used.

12-3-2. Analog Input Setting

Click the **Analog Input** block in the **Audio Block** dialog box to display the **Analog Input** dialog box.



Item	Default	Setting range	Description
Input Level Ch 1-8	—	-10 dBm, 0 dBm, +4 dBm, +8 dBm	Sets the analog audio input level.
Input Gain Ch 1-8	0 dB	-20 to 20 dB	Sets the analog audio input gain.
Termination Ch 1/2-7/8	—	600ohm, Hi-Z	Sets the impedance for the analog input. **600 ohm:** 600 ohm **Hi-Z:** high impedance

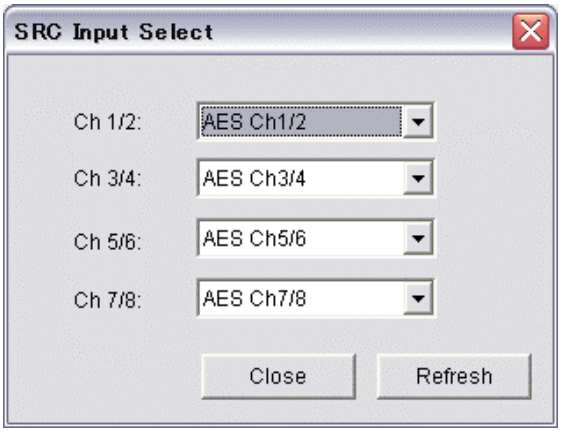
12-3-3. Digital Input Setting

Click the **Digital Input** block on the **Audio Block** dialog box to display **Digital Input** dialog box.

Item	default	Setting range	Description
AES/EBU Input Gain Ch 1-8	0 dB	-20 to 20 dB	Sets the AES/EBU input gain.
SDI Input Gain Ch 1-8	0 dB	-20 to 20 dB	Set the SDI embedded audio input gain.
DV/HDV Gain Ch 1-4	0 dB	-20 to 20 dB	Sets input gain of DV/HDV audio. * This setting is available when FA-90DV and/or FA-90HDV is installed.
AES Input Hysteresis Ch 1/2-7/8	—	OFF, Group A, Group B	If set to Group A or Group B, the input differential hysteresis is set to the same for multiple channel pairs when the synchronized AES/EBU signals are read directly from buffer (not via the SRC).

12-3-4. SRC Input Select Setting

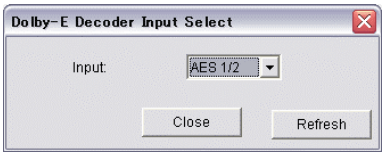
Click the **SRC Input Select** block in the **Audio Block** dialog box to display the **SRC Input Select** dialog box.



Item	Setting range	Description
SRC Input Select Ch 1/2-7/8	AES Ch1/2-7/8, SDI Ch1/2-7/8, DV/HDV Ch1,2, DV Ch3,4	Selects the audio source, which will be processed by the Sampling Rate Converter, for Ch1/2-7/8. Up to 4 pairs of channels can be selected for audio source from AES/EBU and SDI embedded audio inputs (total of 8 pairs of channels). *DV/HDV Ch1,2 and DV Ch3,4 are selectable when FA-90DV and/or FA-90HDV is installed.

12-3-5. Dolby-E Decoder Input Setting (FA-90DE-D/ FA-91 DE-ED Option)

Click the **Dolby-E Decoder Input Select** block in the **Audio Block** dialog box to display the **Dolby-E Decoder Input Select** dialog box.

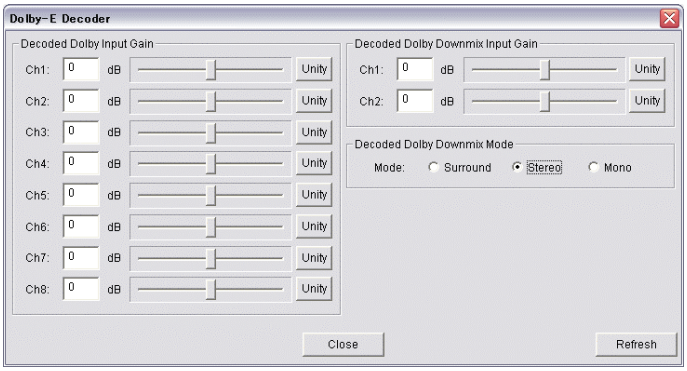


Item	Setting range	Description
Input	AES 1/2-7/8, SDI 1/2-7/8	Selects a signal input to the Dolby-E decoder circuit.

IMPORTANT
The Dolby-E Decoder Input Select block is available if the FA-91DE-ED (FA-9100/RPS only) or FA-90DE-D option is installed.

12-3-6. Dolby-E Decoder Setting (FA-90DE-D / FA-91DE-ED Option)

Click the **Dolby-E Decoder** block in the **Audio Block** dialog box to display the **Dolby-E Decoder** dialog box.

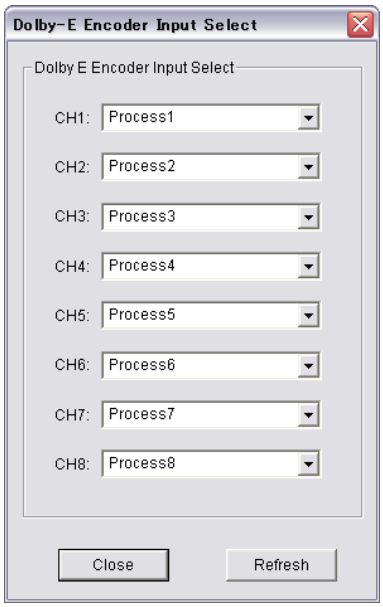


Item	Default	Setting range	Description
Decoded Dolby Input Gain Ch 1-8	0 dB	-20 to 20 dB	Used to set the gain for the decoded Dolby input Ch 1-8.
Decoded Dolby Downmix Input Gain Ch1-2	0 dB	-20 to 20 dB	Used to set the gain for the downmixed audio of the decoded Dolby input Ch 1-2.
Decoded Dolby Downmix Mode	—	Surround, Stereo, Mono	Used to select the downmix mode for the decoded Dolby input Ch1 and Ch2. **Surround:** Converts to two-channel audio. This audio output can be divided to Stereo and Surround (Ls+Rs) afterwards. **Stereo:** Converts to stereo. **Mono:** Converts to monaural.

IMPORTANT
The Dolby-E Decoder block is available if the FA-91DE-ED (FA-9100/RPS only) or FA-90DE-D option is installed.

12-3-7. Dolby-E Encoder Input Setting (FA-91DE-ED Option)

Click the **Dolby-E Encoder Input Select** block in the **Audio Block** dialog box to display the **Dolby-E Encoder Input Select** dialog box.

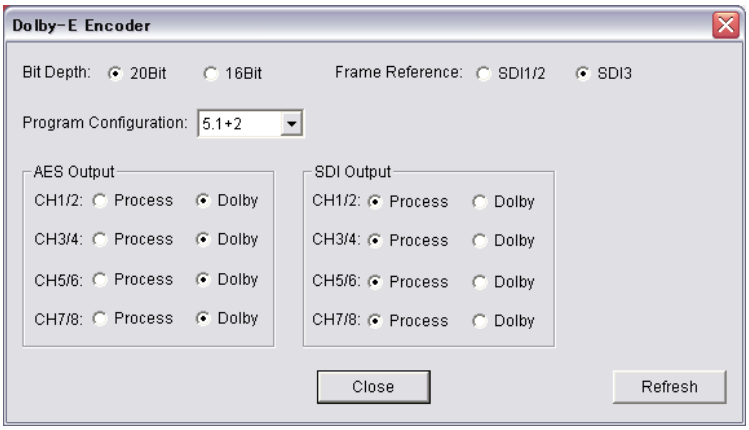


Item	Setting Range	Description
Dolby E Encoder Input Select CH1-8	Proccess 1-8, 1kHz Tone, Silence	Selects a signal input to the Dolby encoder option.

IMPORTANT
The Dolby-E Encoder Input Select block is available if the FA-91DE-ED option is installed.

12-3-8. Dolby-E Encoder Setting (FA-91DE-ED Option)

Click the **Dolby-E Encoder** block in the **Audio Block** dialog box to display the **Dolby-E Encoder** dialog box.

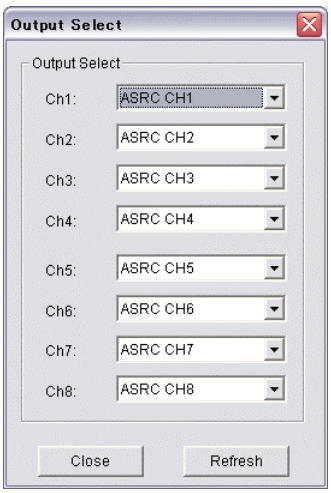


Item	Setting Range	Description
Bit Depth	20Bit, 16Bit	Sets the bit depth for the Dolby encode output. Enabled if Program Config is set to the value supporting16Bit.
Frame Reference	SDI1/2, SDI3	Selects which video output is synchronized with the Dolby encode output.
Program Configuration	Bit Depth 20bit: 5.1+2, 5.1, 5.1+2x1, 4x2, 3x2, 8x1, 6x1 Bit Depth 16bit: 5.1, 3x2, 6x1	Sets the configuration for Dolby Encode. （The setting range varies depending on the bit depth.）
AES Output CH1/2-7/8	Process, Dolby	Selects for AES OUTPUT whether to output the Dolby encode or audio input signal that is processed.
SDI Output CH1/2-7/8	Process, Dolby	Selects for SDI OUTPUT whether to output the Dolby encode or audio input signal that is processed.

IMPORTANT
The Dolby-E Encoder block is available if the FA-91DE-ED option is installed.

12-3-9. Output Select Setting

Click the **Output Select** block in the **Audio Block** dialog box to display the **Output Select** dialog box.

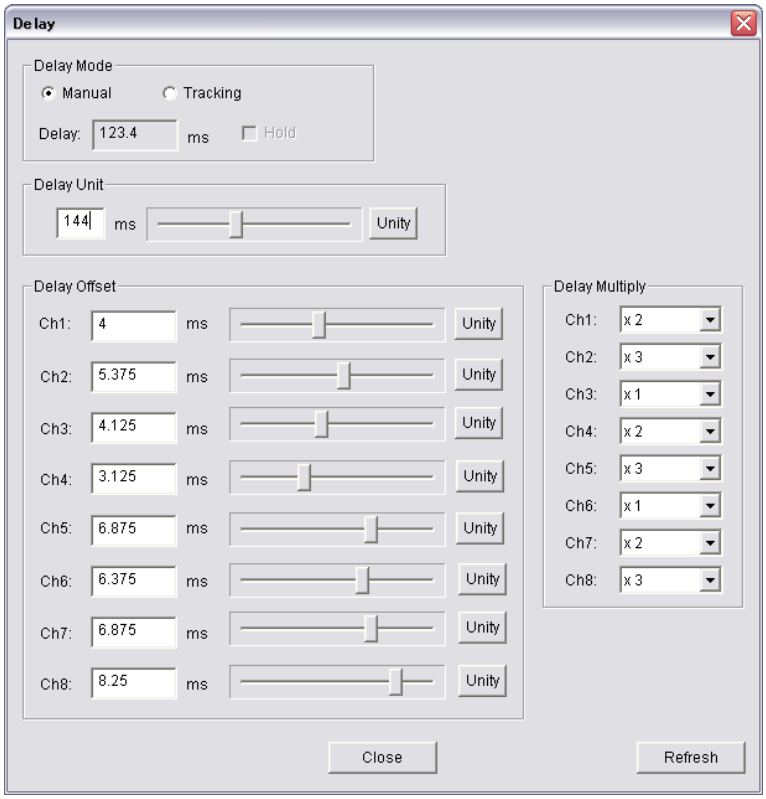


Item	Setting range	Description
Output Select Ch1-8	SILENCE, 1kHz Tone, 500Hz Tone, ASRC 1-8, ANALOG 1-8, AES 1-8, SDI 1-8, DV/HDV1,2, DV3,4, Dolby 1-8, Dolby Downmix 1-2	Selects the source for the audio output channels. **SILENCE:** Outputs the silent audio signals. **1kHz, 500Hz Tone:** Uses the internal 1kHz or 500Hz Tone. **ASRC1-8:** Uses the audio signals selected at the previous section 12-3-4, "SRC Input Select Settings". **ANALOG1-8:** Uses the analog audio input. **AES 1-8:** Uses the AES/EBU audio input. **SDI 1-8:** Uses the embedded audio of the SDI input. **SDI 1-8:** Uses the embedded audio of the SDI input. **DV/HDV1,2:** Uses the audio of DV/HDV input 1 and 2. **DV3,4:** Uses the audio of DV input 3 and 4. **Downmix1-2:** Uses the downmixed audio from the decoded Dolby input.

IMPORTANT
Dolby 1-8 and Dolby Downmix 1-2 are selectable if the FA-91DE-ED (FA-9100/RPS only) or FA-90DE-D option is installed. DV/HDV1,2 and DV3,4 are selectable when FA-90DV and FA-90HDV are installed.

12-3-10. Delay Setting

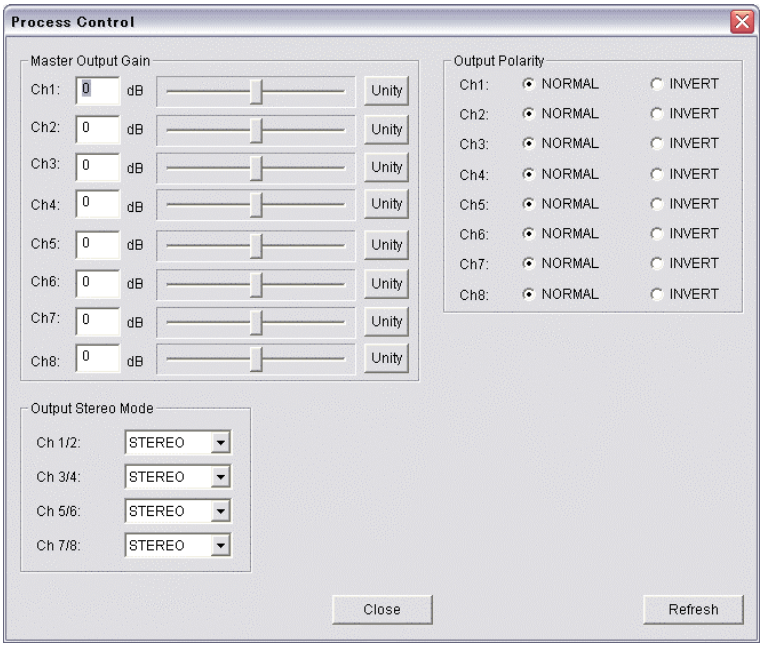
Click the **Delay block** in the **Audio Block** dialog box to display the **Delay** dialog box.



Item	Default	Setting range	Description
Delay Mode	—	Manual, Tracking	Sets the delay mode. *Available in FA-9100 and FA-9100RPS only If Delay Mode is set to Auto or Hold, the Delay Unit, Delay Offset, and Delay Multiply settings are disabled.
		Hold	When Delay Mode is set to Tracking, checking the Hold checkbox fixes the Delay value. *Available in FA-9100 and FA-9100RPS only
Delay Unit	0 ms	0 to 360 ms	Sets the delay unit. This setting is common to all channels.
Delay Offset Ch1-8	0 ms	0 to 10 ms	Used to provide precise adjustment of the delay.
Delay Multiply Ch1-8	—	×0, ×1, ×2, ×3	Sets the multiply-factor of delay for each channel.. Each channel delay can be set individually by multiplying the value set for the Delay Unit by this factor (0 to 3).

12-3-11. Process Control (Proc Amp) Setting

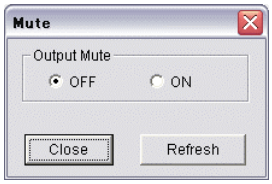
Click the **Process Control** block in the **Audio Block** dialog box to display the **Process Control** dialog box.



Item	Default	Setting range	Description
Master Output Gain Ch 1-8	0 dB	-20 to 20 dB	Sets the master audio output gain. This setting is applied to all audio outputs (ANALOG, AES/EBU, and SDI EMBEDDED AUDIO).
Output Polarity Ch 1-8	—	NORMAL, INVERT	Selects the audio channel output polarity between normal and invert. Setting to INVERT reverses the polarity.
Output Stereo Mode Ch 1/2-7/8	—	STEREO, L-R SWAP, MONO L, MONO R, MONO SUM	Set the stereo mode for the audio output. **STEREO:** Outputs the left audio input signal to LEFT and right audio input signal to RIGHT. **L-R SWAP:** Outputs the left audio input signal to RIGHT and right audio input signal to LEFT. **MONO L:** Outputs the left audio input signal to both LEFT and RIGHT. **MONO R:** Outputs the right audio input signal to both LEFT and RIGHT. **MONO SUM:** Combines the left and right audio input signals, divide the combined signals by two, and then outputs to both LEFT and RIGHT.

12-3-12. Master Mute ON/OFF Setting

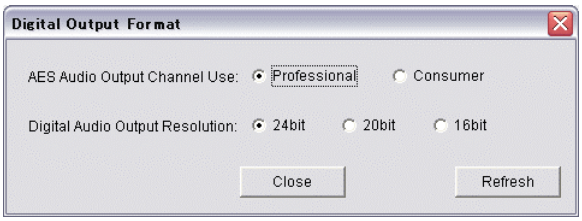
Click the **Master Mute ON/OFF** block in the **Audio Block** dialog box to display the **Mute** dialog box.



Item	Setting range	Description
Output Mute	OFF, ON	Setting to ON mutes all outputs.

12-3-13. Digital Output Format Setting

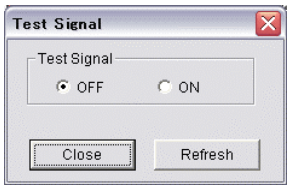
Click the **Digital Output Format** block in the **Audio Block** dialog box to display the **Digital Output Format** dialog box.



Item	Setting range	Description
AES Audio Output Channel Use	Professional, Consumer	Selects the channel status. **Professional:** For Broadcasting **Consumer:** For Consumer use
Digital Audio Output Resolution	24 bit, 20 bit, 16 bit	Selects the word length of the audio output.

12-3-14. Test Signal ON/OFF Setting

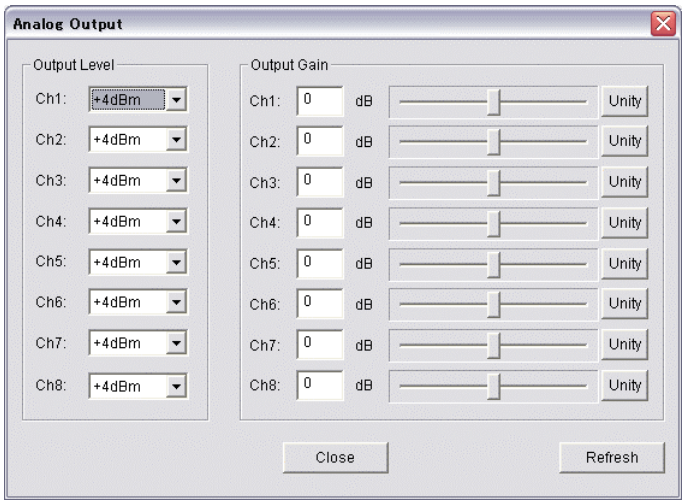
Click the **Test Signal ON/OFF** block in the **Audio Block** dialog box to display the **Test Signal** dialog box.



Item	Setting range	Description
Test Signal	OFF, ON	Used to set the Test Signal ON or OFF.

12-3-15. Analog Output Setting

Click the **Analog Output** block in the **Audio Block** dialog box to display the **Analog Output** dialog box.

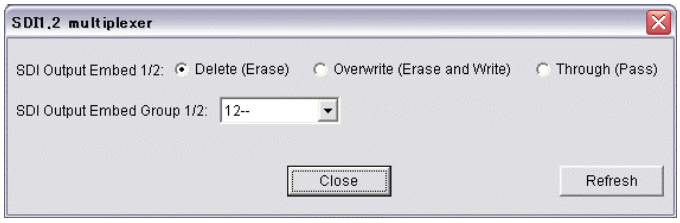


Item	Default	Setting range	Description
Output Level Ch 1-8	+4 dBm	-10 dBm, 0 dBm, +4 dBm, +8 dBm	Sets the analog audio output level.
Output Gain Ch 1-8	0 dB	-20 to 20 dB	Sets the analog audio output gain.

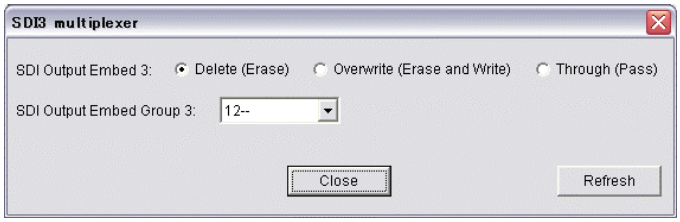
12-3-16. SDI Multiplexer Setting

Click the **SDI multiplexer** block in the **Audio Block** dialog box to display the **SDI multiplexer** dialog box.

◆ **SDI Output 1,2**



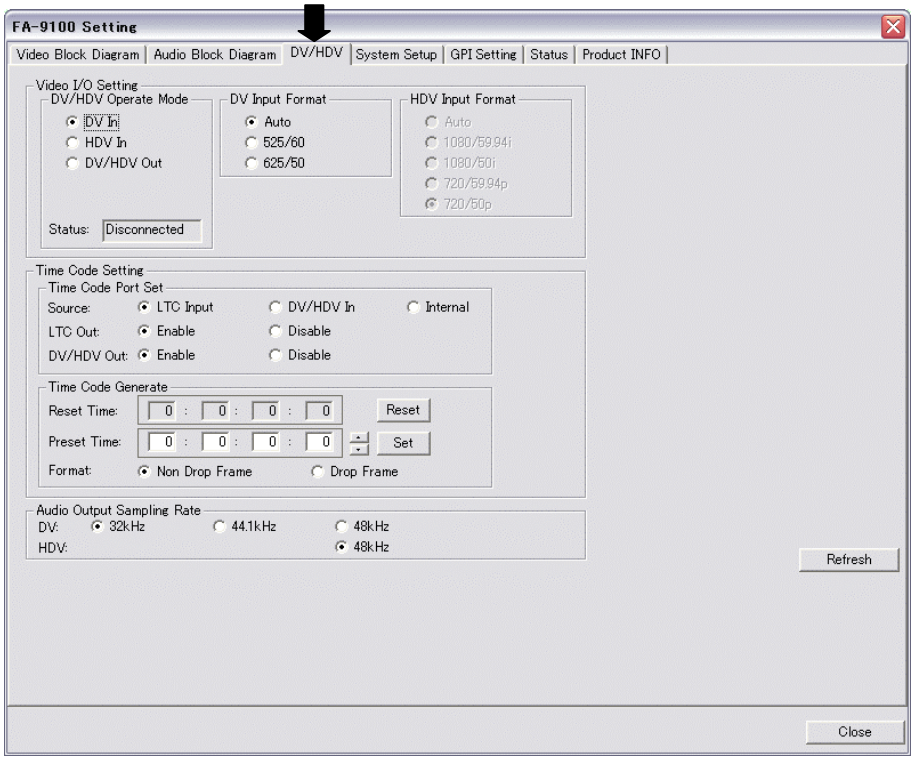
◆ **SDI Output 3**



Item	Setting range	Description
SDI Output Embed 1/2,3	Delete (Erase), Overwrite (Erase and Write), Through (Pass)	Sets embedded audio output for HD/SD-SDI OUT. **Delete (Erase):** Deletes without passing through the input embedded audio. **Overwrite (Erase and Write):** Embeds other audio into the SDI bitstream. **Through (Pass):** Passes through the embedded audio without processing.
SDI Output Embed Group 1/2,3	12--, --34, 1-3-, -2-4, 1--4, -23-	Selects to which audio groups in the SDI bitstream the audio source is embedded.

12-4. DV/HDV Setting (FA-90DV, FA-90HDV Option)

Click the **DV/HDV** tab to display the **DV/HDV** dialog box.



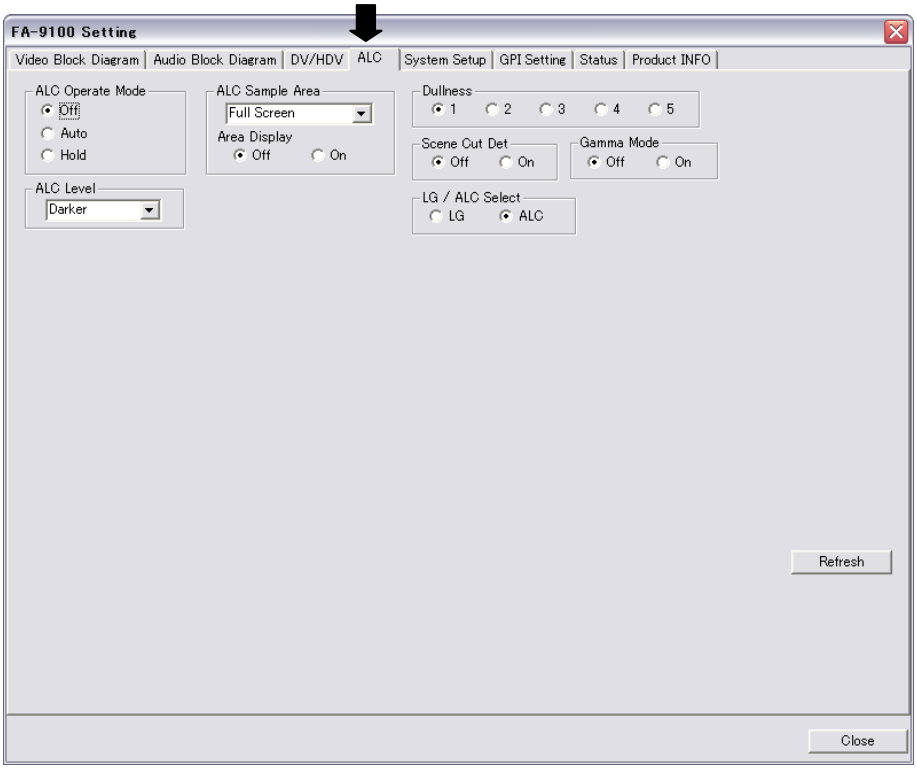
Item	Setting range	Description
DV/HDV Operate Mode	DV In, HDV In DV/HDV Out	Sets DV/HDV input/output. **DV In:** Sets the connector for DV input. **HDV In:** Sets the connector for HDV input. **DV /HDV Out:** Sets the connector for DV or HDV output.
DV/HDV Operate Mode Status	Connected, Disconnected, Connection Error,	Displays the connection status with the DV/HDV device. **Connected:** Properly connected with the DV/HDV device. **Disconnected:** Not connected with DV/HDV devices. **Connection Error:** Unable to connect with the DV/HDV device.
DV Input Format	AUTO, 525/60, 625/50	Selects when DV/HDV Operate Mode is set to DV In. **AUTO:** Auto-detects between 525/60 and 625/50. **525/60:** Sets 525/60 for DV In. **625/50:** Sets 625/50 for DV In.

(Continued to next page.)

Item	Setting range	Description
HDV Input Format	AUTO 1080/59.94i 1080/50i 720/59.94p 720/50p	Selects when DV/HDV Operate Mode is set to HDV In. **AUTO:** Auto-detects among 1080/59.94i, 1080/50i, 720/59.94p and 720/50p. **1080/59.94i:** Sets 1080/59.94i for HDV In. **1080/50i:** Sets 1080/50i for HDV In. **720/59.94p:** Sets 720/59.94p for HDV In. **720/50p:** Sets 720/50p for HDV In.
Time Code Port Set Souce	LTC Input DV/HDV In Internal (*1)	Selects which time code to be used. **LTC Input:** Uses the time code input from TIMECODE IN on the rear panel. **DV/HDV In:** Uses the time code embedded on the DV/HDV signals. **Internal:** Uses the time code generated in FA-9100/RPS.
Time Code Port Set LTC Out	Enable Disable	**Enable:** Outputs time code to the LTC output. **Disable:** Stops time code output for LTC output.
Time Code Port Set DV/HDV Output	Enable Disable	Selects when DV/HDV Operate Mode is set to DV /HDV Out. **Enable:** Embeds time code onto the DV/HDV output. **Disable:** Not embed time code onto the DV/HDV output.
Time Code Generate Reset	Internal TimeCode Reset	Starts the time code count from :00:00:00.
Time Code Generate Preset Time	Digits starting from the left. Time (0 to 23), Minute (0 to 59), Second (0 to 59), Frame (0 to 29)	Sets time code count for preset.
Time Code Generate Set	(Preset Time)	Starts time code count from Time Code Generate Preset Time.
Time Code Generate Format	Non Drop Frame Drop Frame	Selects a time code format.
Audio Output Sampling Rate DV	32kHz 44.1kHz 48kHz	Selects the audio sampling rate for DV output.
Audio Output Sampling Rate HDV	48kHz(fixed)	Displays the audio sampling rate for HDV output.
(*1) This item is automatically set to "Internal" and the time code input from TIMECODE IN cannot be used when the frame rates of input video and output video setting are different.		

12-5. ALC Setup (FA-91ALC Option)

Click the **ALC** tab to display the **ALC** dialog box.



Item	Setting range	Description
ALC Operate Mode	Off, Auto Hold	**Auto**: Enables Auto Level Controller. **Hold**: Stops Auto Level Controller. The video levels are held at their last set level if changing ALC Operate Mode from **Auto** to **Hold**. **Off**: Disables Auto Level Controller. The video levels return to the state before ALC is applied if changing ALC Operate Mode from **Auto** to **Off**. Setting to **Off** enables the manual level control. See section 12-2-4. "Color Corrector Setting (FA-90CC Option)" and "Manual Level Control" in the FA-9100/9100RPS operation manual.
ALC Level	Darker, Dark, Standard, Bright, Brighter, User1, User2, User3, User4, User5	Selects a level for automatic control. Available options are 10: Five fixed options and five custom options. **Darker** < **Dark** < **Standard** < **Bright** < **Brighter** (Each levels are fixed) **User1** to **User5**: Custom levels The customization can be done on the FA-9100/ FA-9100RPS. (See "Customizing User Level" in the FA-9100/9100RPS operation manual.)

(Continued to next page.)

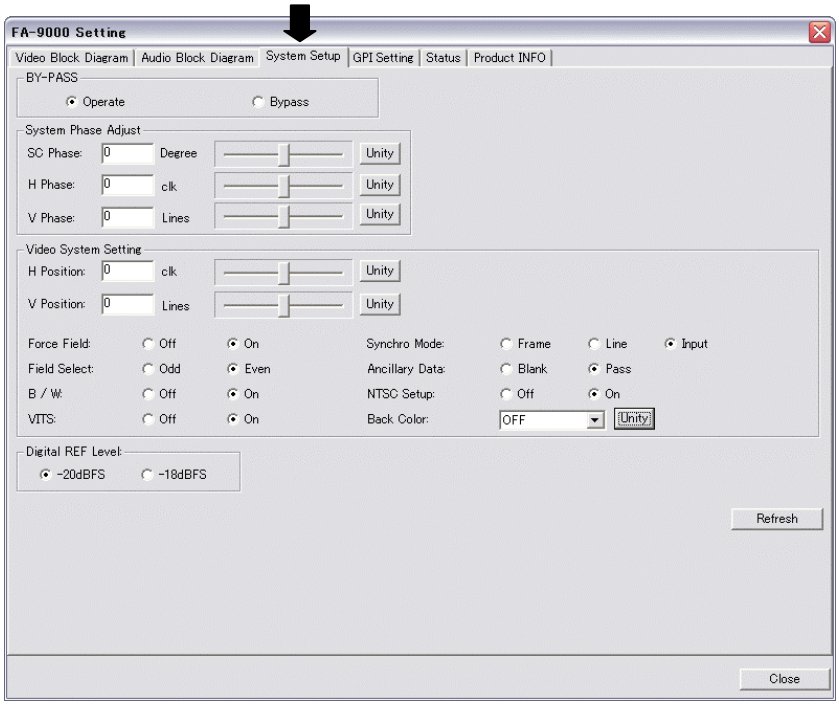
Item	Setting range	Description
Sample Area	Full Screen, to Bottom Right, Area1, Area2	Specifies a sample area for automatic control. The sampling data are used for subsequent calculation of the level control. Available options are 10: Eight fixed options and two custom options. ● Fixed Areas **Full Screen**, **Letter Box**, **Pillar Box**, **Center**, **Top-L**, **Top-R**, **Bottom-L**, **Bottom-R** ● Custom Areas **Area1**, **Area2** The customization can be done on the FA-9100/ FA-9100RPS. (See "Customizing Sample Area" in the FA-9100/9100RPS operation manual.)
Area Display (Mark indication)	Off, On	Sets sample area display On/Off. If set to **On**, the sample area appears as a semi-transparent white rectangle in all output video. The sample area is not marked at startup. Area Display is automatically set to **Off** when changing ALC Operate Mode to **Off**.
Dullness (Filtering strength)	1 to 5	Sets the filtering strength for calculating mean distance applied to the histograms created using the sample data. The larger the value, the results are more stable but less subservient to inputs. The lower the value, the results are less stable but more subservient to inputs.
Scene Cut Det (*1) (Cut detection)	Off, On	When set to **On**, the cut transitions are detected and the images around them are adjusted accordingly even if there are sharp luminance changes. When the setting is changed, a confirmation message appears. Click **OK** to confirm the change. Or, click **Cancel** to cancel the operation.
Gamma Mode	Off, On	When set to **On**, video levels are adjusted using the GAMMA LEVEL settings. (See section 12-2-4. "Color Corrector Setting (FA-90CC Option.")
LG / ALC Select	LG, ALC	FA-91LG and FA-91ALC options cannot be used at the same time. Select either of them for use here. It takes about **5 seconds** to switch between LG and ALC.

(*1) Two or three frames are delayed with cut detection. The amount of delay depends on the input signal format.

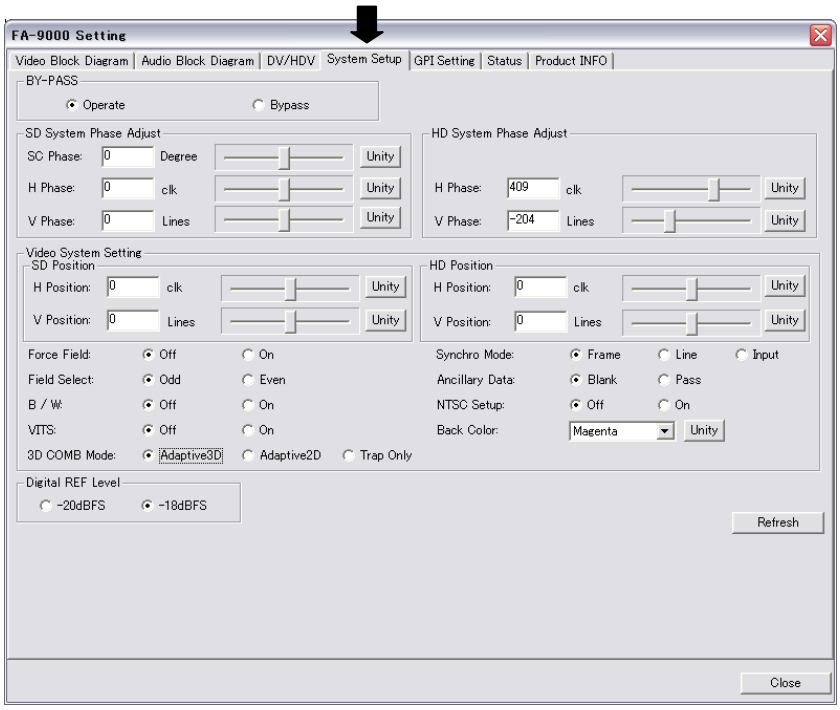
525/60 (NTSC), 625/50(PAL): 2 frames
1080/59.94i, 50i, 23.98PsF, 24PsF: 2 frames
720/59.94p, 50p: 3 frames

12-6. System Setup Setting

In the **System Setup** dialog box, you can verify or make the settings for the system.



FA-9000



FA-9100 or FA-9100RPS

FA-9000 Setting

Item	Default	Setting Range	Description
BY-PASS	—	Operate, Bypass	**Operate:** Activates the internal processing functions. **Bypass:** Bypasses through the video/audio input signal.
SC Phase	0 Degree	-179.8 to 180 Degree	Adjusts the subcarrier phase of the system referring to genlock signal. (black burst only).
H Phase	0 clk	-1024 to 1023 clk	Adjusts the horizontal/vertical phase of the system referring to genlock signal. (black burst only).
V Phase	0 Lines	-512 to 511 Lines	
H Position	0 clk	-764 to 764 clk	Adjusts horizontal/vertical position of SD output video.
V Position	0 Lines	-512 to 511 Lines	
Force Field	—	Off, On	Selects the display mode between half-field and frame. **Off:** Frame **On:** Half-field
Field Select	—	Odd, Even	Selects which field to output between even or odd if the Force Field is set to on.
B/W	—	Off, On	Selects the output video mode between black and white, and color. **Off:** Color **On:** Black and white
VITS	—	Off, On	Select on, if the input signal includes teletext contents. If it is set to off, the horizontal blanking is applied from 0 to 20H.
Synchro Mode	—	Frame, Line, Input	Sets I/O delay mode. **FRAME:** Frame delay, max. 1-frame. **LINE:** Line delay, max. 1-line. **INPUT:** Minimum delay (Video signal is output regardless of reference signal)
Ancillary Data	—	Blank, Pass	**Blank:** Deletes the ancillary data area of output signal except embedded audio and adds blanks. **Pass:** Passes through all the ancillary data including embedded audio.
NTSC Setup	—	Off, On	Switches between 0IRE setup and 7.5IRE setup according to the analog signal used.
Back Color	OFF	OFF, BLACK, BLUE, RED, MAGENTA, GREEN, CYAN, YELLOW	Used to select a matte to output for the signal loss from 7 colors. Off is not to output any matte. The screen appears in black.
Digital REF LEVEL	—	-20dBFS -18dBFS	Used to set the standard level for digital audio.

FA-9100 or FA-9100RPS Setting

Item		Default	Setting Range	Description
BY-PASS		—	Operate, Bypass	**Operate:** Activates the internal processing functions. **Bypass:** Bypasses through the video/audio input signal.
SD System Phase Adjust	SC Phase *2	0 Degree	-179.8 to 180 Degree	Adjusts the subcarrier phase of the system referring to genlock signal. This setting is applied to SD output video.
	H Phase *2	0 clk	-1024 to 1023 clk	Adjusts the horizontal/vertical phase of the system referring to genlock signal. This setting is applied to SD output video.
	V Phase *2	0 Lines	-512 to 511 Lines	
HD System Phase Adjust	H Phase *2	0 clk	-1024 to 1023 clk	Adjusts the horizontal/vertical phase of the system referring to genlock signal. This setting is applied to HD output video.
	V Phase *2	0 Lines	-512 to 511 Lines	
SD Potsition	H Position *2	0 clk	-764 to 764 clk	Adjusts horizontal/vertical position of SD output video.
	V Position	0 Lines	-512 to 511 Lines	
HD Potsition	H Position *2	0 clk	-764 to 764 clk	Adjusts horizontal/vertical position of HD output video.
	V Position *1*2	0 Lines	-512 to 511 Lines	
Force Field		—	Off, On	Selects the display mode between half-field and frame. **Off:** Frame **On:** Half-field
Field Select		—	Odd, Even	Selects which field to output between even or odd if the Force Field is set to on.
B/W		—	Off, On	Selects the output video mode between black and white, and color. **Off:** Color **On:** Black and white
VITS		—	Off, On	Select on, if the input signal includes teletext contents. If it is set to off, the horizontal blanking is applied from 0 to 20H.
Synchro Mode		—	Frame, Line, Input	Sets I/O delay mode. **FRAME:** Frame delay, max. 1-frame. **LINE:** Line delay, max. 1-line. **INPUT:** Minimum delay (Video signal is output regardless of reference signal)
Ancillary Data		—	Blank, Pass	**Blank:** Deletes the ancillary data area of output signal except embedded audio and adds blanks. **Pass:** Passes through all the ancillary data including embedded audio.
NTSC Setup		—	Off, On	Switches between 0IRE setup and 7.5IRE setup according to the analog signal used.

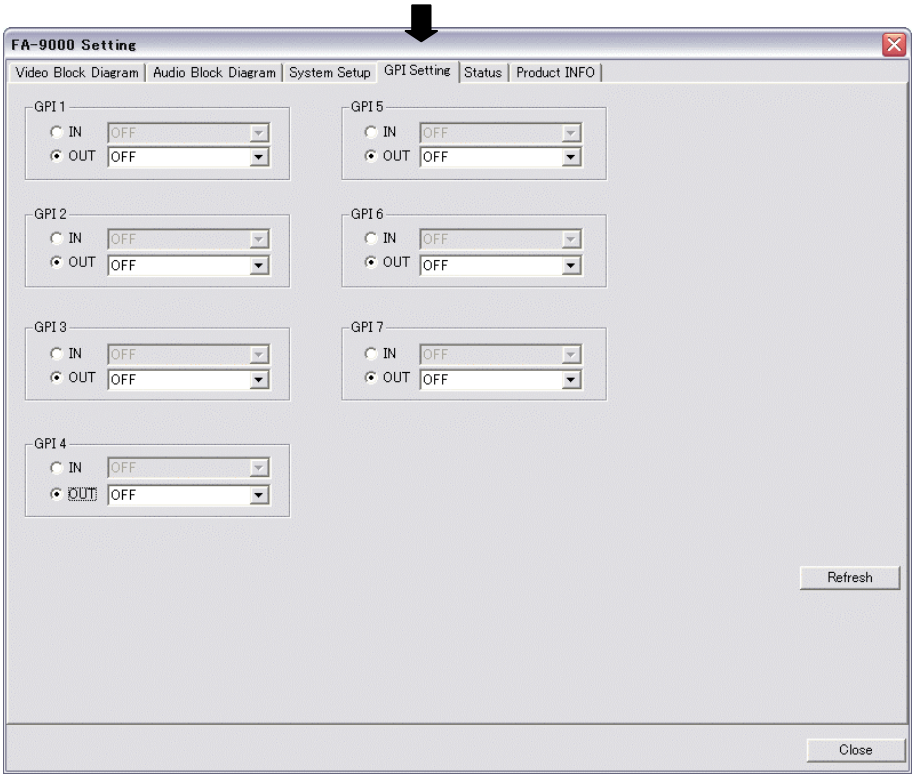
Back Color	OFF	OFF, BLACK, BLUE, RED, MAGENTA, GREEN, CYAN, YELLOW	Used to select a matte to output for the signal loss from 7 colors. Off is not to output any matte. The screen appears in black.
3D COMB Mode	—	Adaptive3D, Adaptive2D, Trap Only,	Selects the COMB Filter type.
Digital REF LEVEL	—	-20dBFS -18dBFS	Used to set the standard level for digital audio.

NOTE

Depending on the FRC setup (See section 12-2-7. "Up/Down Converter Setting (FA-90UD/FA-91FRC Options"), SD System Phase Adjust, HD System Phase Adjust, SD Position, HD Position and Synchro Mode cannot be set freely and some fields are grayed out.

12-7. GPI Setting

In the **GPI Setting** dialog box, you can verify and make the settings for the GPI.



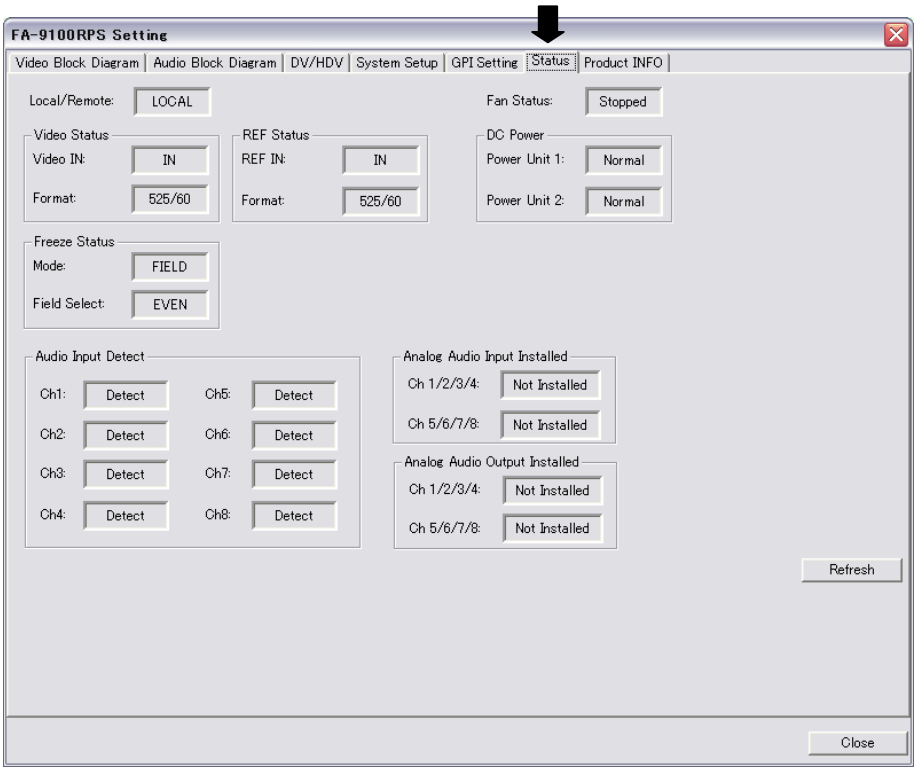
Item	Setting range	Description
I/O settings GPI 1-7	IN, OUT	Selects input or output to use each GPI1 to 7 port for.
GPI IN 1-7	OFF, BYPASS, FRAME FREEZE, FIELD FREEZE, TEST COLORBAR, EVENT0-30, LOGO INSERT COMPOSITE, LOGO INSERT COMPONENT, LOGO INSERT SDI 1/2, LOGO INSERT SDI 3, LOGO INSERT DV/HDV, LOGO SET ID1-8	Used to assign functions to respective GPI IN ports. The following settings are available only when FA-91LG is installed: LOGO INSERT COMPOSITE, LOGO INSERT COMPONENT, LOGO INSERT SDI 1/2, LOGO INSERT SDI 3, LOGO SET ID1-8 The following setting is available only when FA-91LG, FA-90DV, and FA-90HDV are installed: LOGO INSERT DV/HDV
GPI OUT 1-7	OFF, FREEZE, VIDEO IN, AUDIO IN, REF IN, FAN ALARM, POWER1 ALARM, POWER2 ALARM	Used to assign functions to respective GPI OUT ports. *POWER1 ALARM and POWER2 ALARM are functional in FA-9100RPS only.

IMPORTANT
The GPI IN functions for FA-91LG option cannot be set from the FA-90GUI. Therefore, **GPI Setting** dialog box may not be properly displayed if GPI IN commands for FA-91LG are set in the FA-9100/RPS.

I/O setting	Function	Description
INPUT	OFF	No function
	BYPASS	Selects OPERATE or BY-PASS
	FRAME FREEZE	Selects FRAME FREEZE ON/OFF
	FIELD FREEZE	Selects FIELD FREEZE ON/OFF
	TEST COLORBAR	Selects TEST SIGNAL ON/OFF
	EVENT0 - EVENT30	Loads EVENT00 (EVENT01 to EVENT30).
	LOGO INSERT COMPOSITE	Selects LOGO INSERT ON/OFF for COMPOSITE OUT
	LOGO INSERT COMPONENT	Selects LOGO INSERT ON/OFF for COMPONENT OUT
	LOGO INSERT SDI 1/2	Selects LOGO INSERT ON/OFF for SDI1/2 OUT
	LOGO INSERT SDI 3	Selects LOGO INSERT ON/OFF for SDI 3 OUT
	LOGO INSERT DV/HDV	Selects LOGO INSERT ON/OFF for DV/HDV OUT
	LG LOGO ID1 - LG LOGO ID8	Sets LOGO1 (LOGO ID2-LOGO ID 8) to the output logo.
OUTPUT	OFF	No function
	FREEZE	FREEZE ON: Low FREEZE OFF: High (Open Collector)
	VIDEO IN	Video signal present: Low Video signal not present: High (Open Collector)
	AUDIO IN	Audio signal present: Low Audio signal not present: High (Open Collector)
	REF IN	REF signal present: Low REF signal not present: High (Open Collector)
	FAN ALARM	FAN failure: Low FAN normal: High (Open Collector)

12-8. Checking Status

In the **Status** dialog box, you can verify the status of devices.



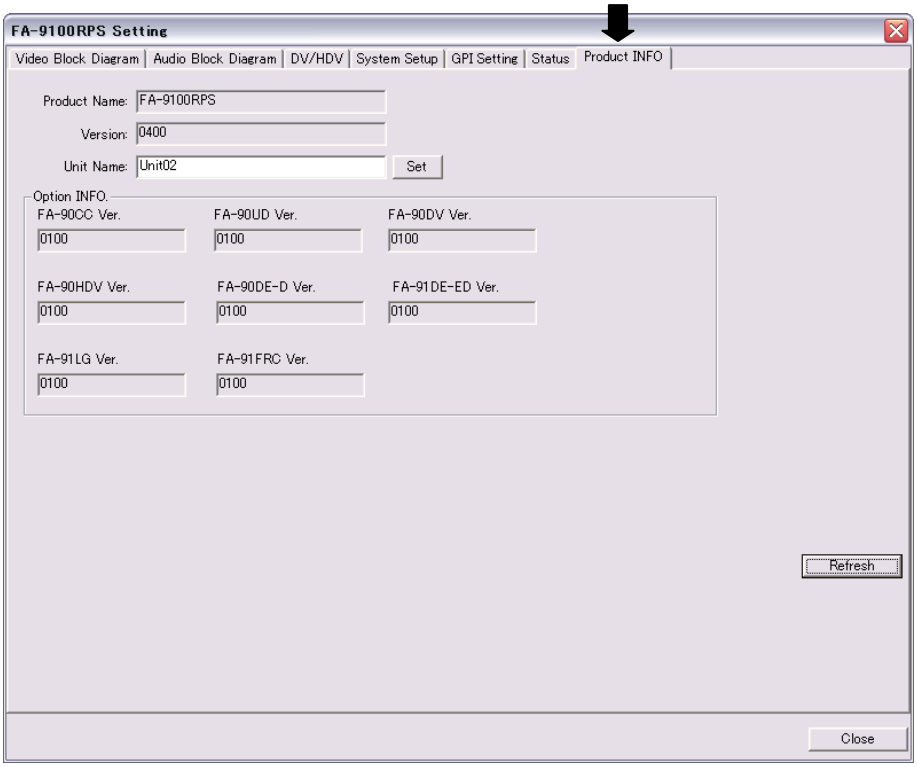
Item	Setting range	Description
Local/Remote	LOCAL, REMOTE	**LOCAL:** Used to control locally on the FA-9000 front panel. **REMOTE:** Used to control from the remote control unit (FA-90RU).
Fan Status	Stopped, Normal	**Stopped:** Fan failure **Normal:** Fan is normal
Power Unit 1	Normal, Abnormal	**Normal:** Power 1 is normal **Abnormal:** Power failure in Power 1 *Available in FA-9100RPS only
Power Unit 2	Normal, Abnormal	**Normal:** Power 2 is normal **Abnormal:** Power failure in Power 2 * Available in FA-9100RPS only
Video IN	IN, None	**IN:** Video signal is present **None:** No Video signal is present.
Video Format	None, 525/60, 625/50, 1080/59.94i, 1080/50i, 720/59.94p, 720/50p, 1080/23.98PsF, 1080/24PsF	**None:** No Video signal is present. **Video standard:** Format of the video input signal

(Continues to next page)

Item	Setting range	Description
REF IN	IN, None	**IN:** REF signal is present. **None:** No REF signal is present.
REF Format	None, 525/60, 625/50, 1080/59.94i, 1080/50i, 720/59.94p, 720/50p, 1080/23.98PsF, 1080/24PsF	**None:** No REF signal is present. **Video standard:** Format of the REF signal
Freeze Field Select	ODD, EVEN	Freeze Field setting **ODD:** Freeze on the odd field. **EVEN:** Freeze on the even field.
Audio Input Detect Ch 1-8	Detect, No Detect	**Detect:** Audio input signal is present. **No Detect:** No Audio input signal is present.
Analog Audio Input Installed Ch 1-4, Ch 5-8	Installed, Not Installed	**Installed:** Analog Audio input option is installed. **Not Installed:** No Analog Audio input option is installed.
Analog Audio Output Installed Ch 1-4, Ch5-8	Installed, Not Installed	**Installed:** Analog Audio output option is installed. **Not Installed:** No Analog Audio output option is installed.

12-9. Checking Product Information

In the **Product INFO** dialog box, you can verify the products' information.



Item	Description
Product Name	Product's name
Version	Version of the product
Unit Name	Unit Name
FA-90CC Ver.	Version of the FA-90CC option
FA-90UD Ver. or FA-91FRC Ver. (*1)	Version of the FA-90UD option or FA-91FRC option
FA-90DV Ver.	Version of the FA-90DV option
FA-90HDV Ver.	Version of the FA-90HDV option
FA-90DE D Ver.	Version of the FA-90DE-D option
FA-91DE-ED Ver. (*1)	Version of the FA-91DE-ED option
FA-91LG Ver. (*1)(*2)	Version of the FA-91LG option
FA-91ALC Ver. (*1)	Version of the FA-91ALC option

(*1) FA-9100 or FA9100RPS only

(*2) Note that FA-90GUI cannot control FA-91LG option.

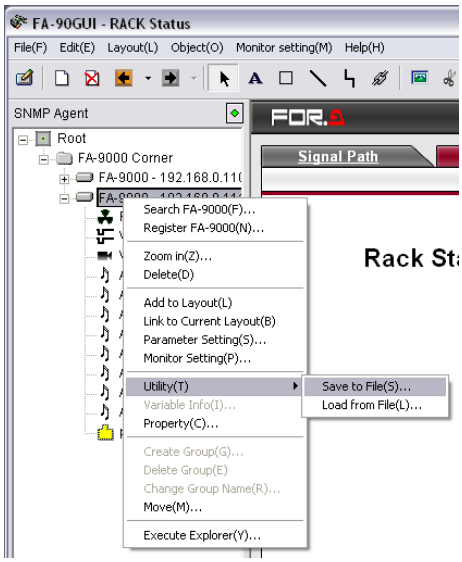
13. Working with Parameter Setting Files

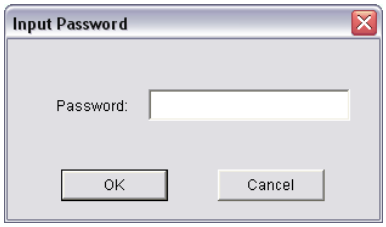
13-1. Saving and Loading Parameters

The parameters of the FA-9000 can be saved in a file, and the saved parameters in a file can be loaded into the FA-9000.

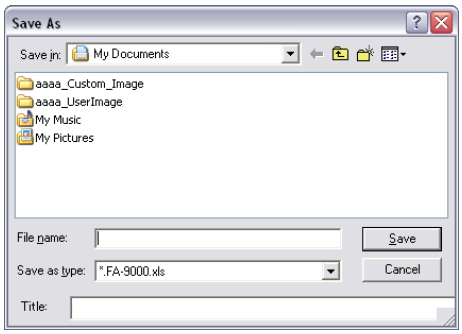
◆ **Saving the current parameters in a file**

1) In the **Tree** view pane, right-click the device you wish to save the parameters of and choose **Utility (T) > Save to Files (S)** from the right-click menu. The **Input Password** dialog box is displayed. If the password is not set, the **Input Password** dialog box will not be displayed. (See section 15, “Password Settings.”)





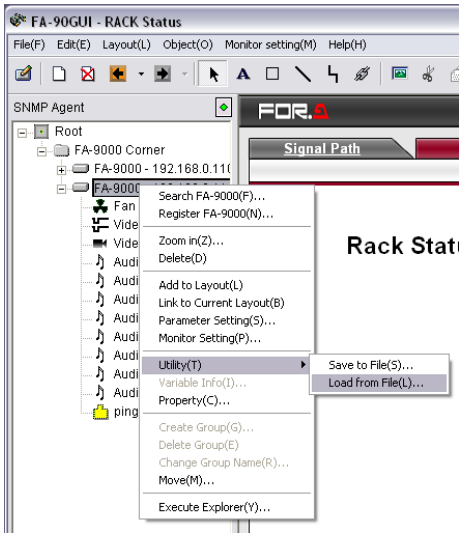
2) Enter the password in the **Input Password** dialog box, then the **Save as** dialog box is displayed. Enter the file name and click Save. If Excel2002 or later is installed on your computer, the file will be saved in xls format. Otherwise, the file will be saved in csv format.



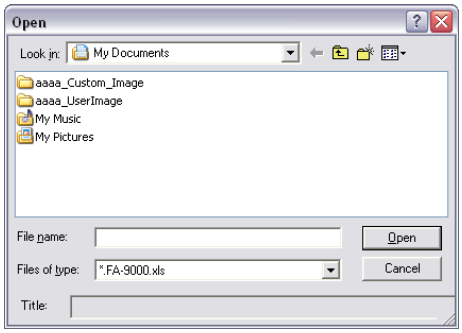
NOTE
The parameters are saved in CSV format. If Excel2002 or 2003(SP2) is used, they can be saved in XLS format. (See Appendix 5. About Excel2002 and 2003 (SP2).)

◆ **Loading the parameters into the FA-9000**

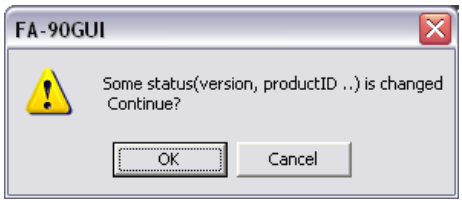
1) In the **Tree** view pane, right-click the device you wish to load the parameters into and choose **Utility (T) > Load from file (L)** from the right-click menu. The **Input Password** dialog box is displayed. If the password is not set, the **Input Password** dialog box will not be displayed. (See section **15**, "**Password** Settings.")



2) Enter the password in the **Input Password** dialog box, then the **Open** dialog box is displayed. Enter the file name and click Open. If Excel2002 or later is installed on your computer, the file will be saved in xls format. Otherwise, the file will be saved in csv format.



3) The error message appears, if the version or option status of the file and the device are not compliant. To force loading, click OK. To stop loading, click Cancel. If you forcibly load the file, the option parameter may become incorrect.



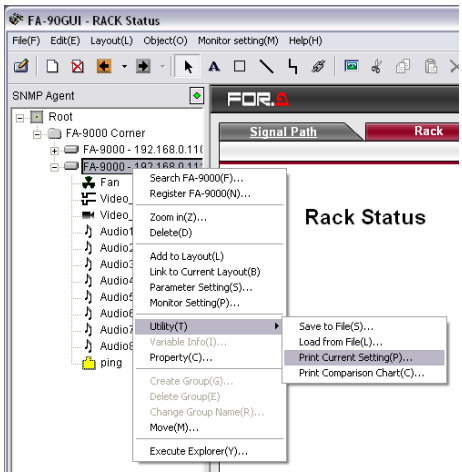
NOTE
Transmitting the parameter settings to the device may fail depending on the network environment and the device condition. Prior to loading the file into the device, make sure that the device is stable and the amount of data on the network is small While saving, loading or processing the settings, it suspends monitoring devices in the monitor mode and restart monitoring after completing the operation. The log is cleared when restarted. If Excel2002 or 2003(SP2) is used, the parameters can be saved in XLS format. (See Appendix 5. About Excel2002 and 2003 (SP2).)

13-2. Printing Current Parameters or a Comparison Chart

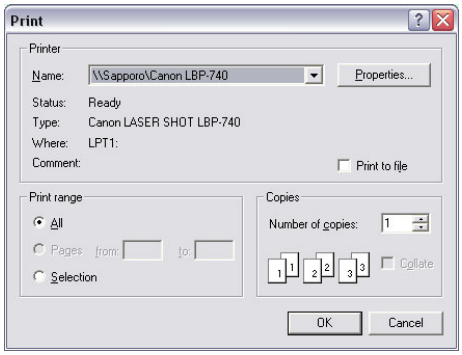
The current parameters of a device or a comparison chart of the parameters in a device and in a file can be printed. To use this printing function, a key code must be registered and the Excel2002 or higher must be installed.

◆ **Printing the current parameters of a device**

1) In the **Tree** view pane, right-click the device you wish to print the parameters of and choose **Utility (T) > Print current setting (P)** from the right-click menu. The **Input Password** dialog box is displayed. If the password is not set, the **Input Password** dialog box will not be displayed. (See section 15, “Password Settings.”)



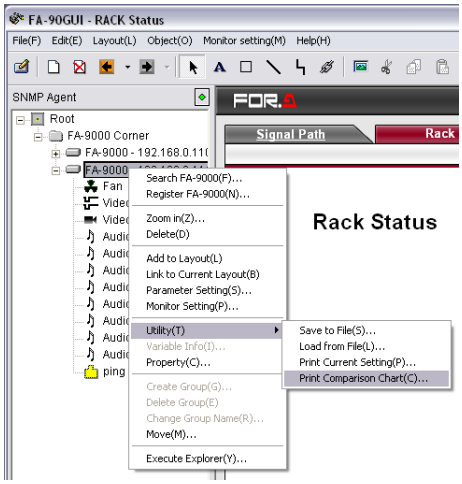
2) Enter the password in the **Input Password** dialog box, then the **Print** dialog box is displayed. Check the printer settings and click OK.



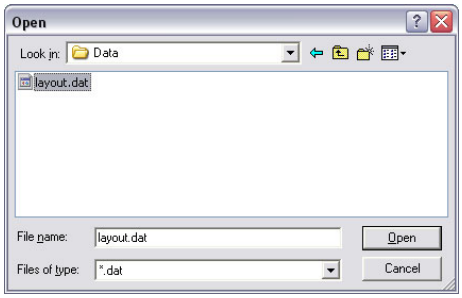
IMPORTANT
In order to use this printing function, a key code must be registered. While processing these printing operations, it suspends monitoring devices in the monitor mode and restart monitoring after completing the operation.

◆ **Printing a comparison chart of the parameters**

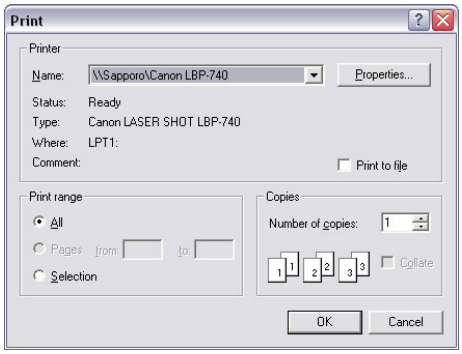
1) In the **Tree** view pane, right-click the device you wish to compare the parameters of and choose **Utility (T) > Print Comparison Chart (C)** from the right-click menu. The **Input Password** dialog box is displayed. If the password is not set, the **Input Password** dialog box will not be displayed. (See section 15, “Password Settings.”)



2) Enter the password in the **Input Password** dialog box, then the **Open** dialog box is displayed. Select the file and click Open.



3) The **Print** dialog box is displayed. Check the printer settings and click OK.



IMPORTANT
In order to use this printing function, a key code must be registered. In order to link FA-90GUI to Excel, the change in the configuration file is required. See Appendix 5. About Excel2002 and 2003 (SP2). While processing these printing operations, it suspends monitoring devices in the monitor mode and restart monitoring after completing the operation.

The printed chart is the result of comparison of parameters in the file and the device. It marks the different values in red and underline. The identical values are printed in black without underline.

AUDIO Delay

Name	Value
Audio Delay Unit	360
Audio Output Delay Offset Ch1	80
Audio Output Delay Offset Ch2	80
Audio Output Delay Offset Ch3	80
Audio Output Delay Offset Ch4	0
Audio Output Delay Offset Ch5	0
Audio Output Delay Offset Ch6	80
Audio Output Delay Offset Ch7	0
Audio Output Delay Offset Ch8	80

IMPORTANT

Do not operate the **Print Current Setting** or **Print Comparison Chart** while opening the setting file in Excel or other application.

While processing these printing operations, it suspends monitoring devices in the monitor mode and restart monitoring after completing the operation.

14. Editing Graphic View

The **Graphic** view pane presents a visual depiction of the device status.
In the **Graphic** view pane, you can use the drawing functions to create facility drawings, rack drawings, block diagrams, and other drawings. The **Graphic** view pane can span multiple pages and use link settings for moving between the pages.

NOTE
When the program is started for the first time, nothing may be displayed unless setup is performed. Register the device first (see section 7-1, “Registering a Device”), and then arrange a layout in the Graphic view pane.

14-1. Creating a New Layout

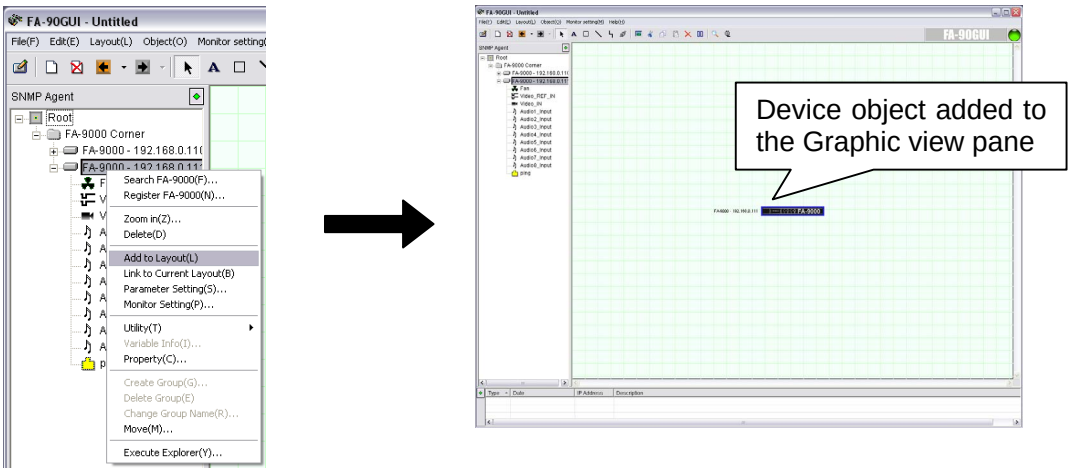
Choose **File (F) > New (N)** to create a new layout.

14-2. Page Title Settings

1) Choose **Layout (L) > Layout Property (L)**. The **Layout Property** dialog box is displayed.
2) Enter the page title in the **Layout name** text box.
3) After entering the name, click OK.

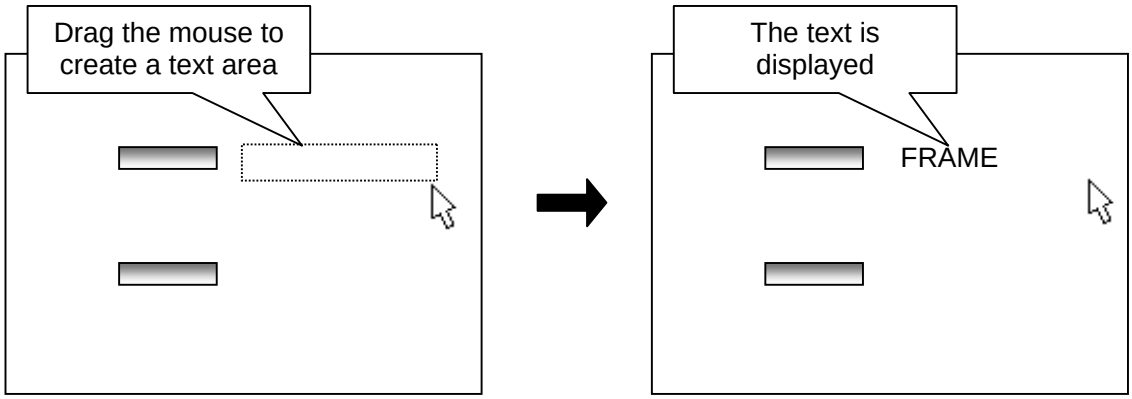
14-3. Adding a Device to Graphic View Pane

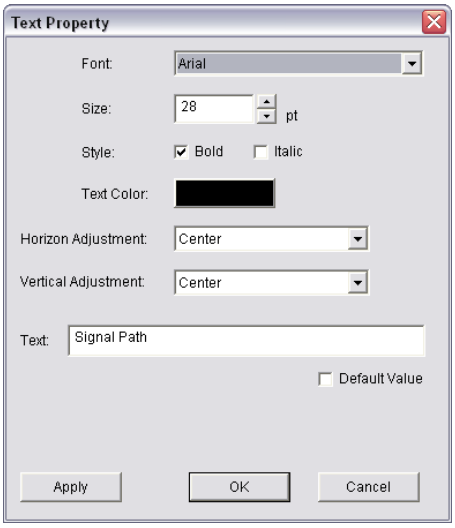
1) In the **Tree** view pane, right-click the device to be added to the Graphic view pane.
2) Choose **Add to Layout (L)** from the right-click menu. A device object is added to the **Graphic** view pane.



14-4. Drawing Texts

1) Click the A icon on the toolbar.
2) Move the mouse to the Graphic view pane, and then left-click. Move the mouse while holding down the left-mouse button (drag) to create a text area.
3) Release the left-mouse button. The **Text Property** dialog box is displayed.
4) Enter the text in the **Text** box. Make the settings for the font size, color, and other properties.





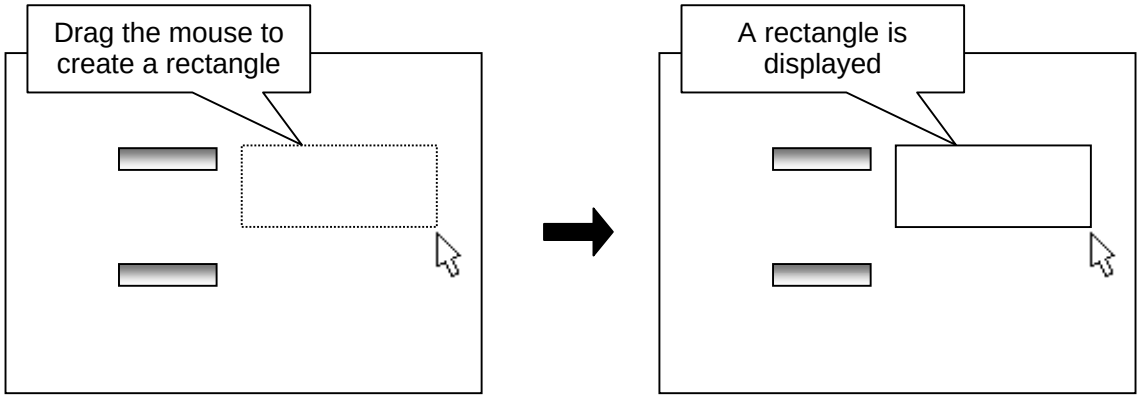
Text Property

Item	Description
Font	Text font
Size	Text size
Style	No check marks (Standard), Bold, Italic can be selected
Text Color	Text color
Horizon Adjustment	Text alignment position in the horizontal direction Left: Object inner left side Center: Object center Right: Object inner right side OutsideLeft: Object outer left side OutsideRight: Object outer right side
Vertical Adjustment	Text alignment position in the vertical direction Top: Object inner top side VCenter: Object center Bottom: Object inner bottom side OutsideTop: Object outer top side OutsideBottom: Object outer bottom side
Default Value	Sets the properties as the defaults. Any text that is drawn will all have these same properties.

5) Clicking Apply displays the text based on the settings that were made. (The **Text Property** dialog box continues to be displayed.) Clicking OK displays the text based on the settings and closes the **Text Property** dialog box.

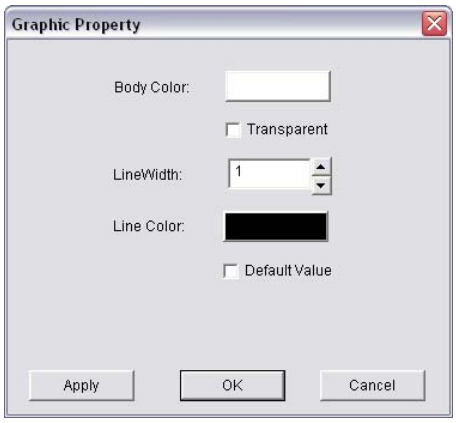
14-5. Drawing a Rectangle

1) Click the icon on the toolbar.
2) Move the mouse to the Graphic view pane, and then left-click. Move the mouse while holding down the left-mouse button (drag) to create a rectangle.
3) Release the left-mouse button. A rectangle is displayed.



4) The drawn rectangle can be resized while maintaining the aspect ratio by selecting the rectangle and dragging one of the corners or sides. To resize the rectangle without maintaining the aspect ratio, hold down [Ctrl] on the keyboard while resizing the rectangle.

5) To change the color, line thickness, or line color of the rectangle, click the icon on the toolbar. Select the rectangle, and then right-click to choose **Graphic Property (G)**. The **Graphic Property** dialog box as shown below is displayed. The properties for the rectangle are set here.



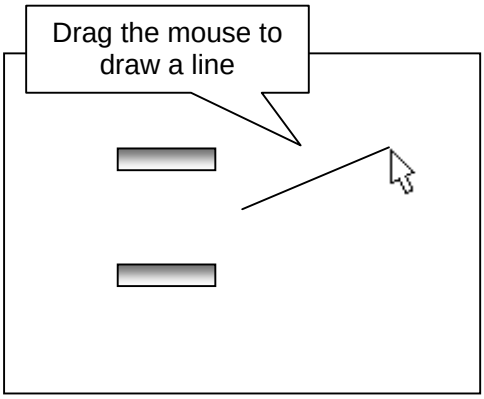
Graphic Property

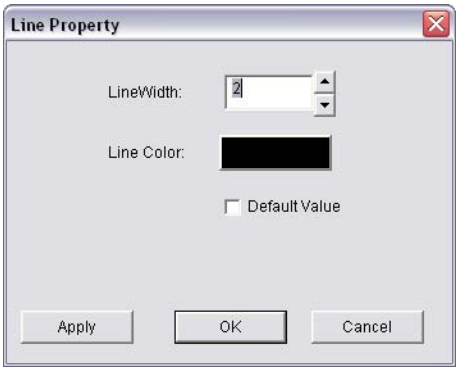
Item	Description
Body Color	Fill-in color of the graphic
Transparent	Make the graphic transparent.
LineWidth	Line thickness
Line Color	Line color
Default Value	Sets the properties as the defaults. Any rectangles that are drawn will have these same properties.

6) Clicking Apply displays the rectangle based on the settings that were made. (The **Graphic Property** dialog box continues to be displayed.) Clicking OK displays the rectangle based on the settings and closes the **Graphic Property** dialog box.

14-6. Drawing Lines

1) Click the icon on the toolbar.
2) Move the mouse to the Graphic view pane, and then left-click. Move the mouse while holding down the left-mouse button (drag) to draw a line. The line moves by 45 degrees if you drag while holding down [Shift] on the keyboard.
3) Release the left-mouse button. A line is displayed.
4) To change the line color or line width, click the icon on the toolbar. Select the line, and then right-click to choose **Line Property (I)**. The **Line Property** dialog box as shown below is displayed.





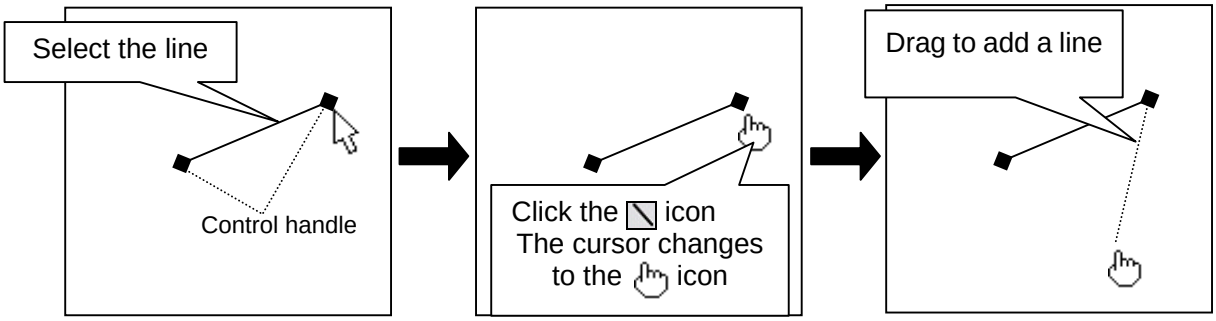
Line Property

Item	Description
LineWidth	Line thickness
Line Color	Line color
DefaultValue	Sets the properties as the defaults. Any lines that are drawn will have these same properties.

◆ **Adding a Line**

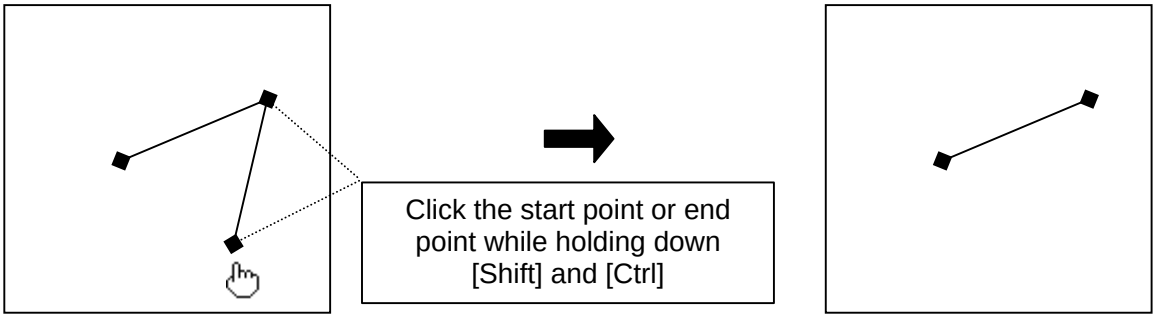
A line can be added to the start point or end point.

1) Select the line (Control handles are displayed).
2) Click the icon on the toolbar.
3) Moving the cursor over a control handle changes the cursor to . Drag this to add a line.



◆ **Deleting an Added Line**

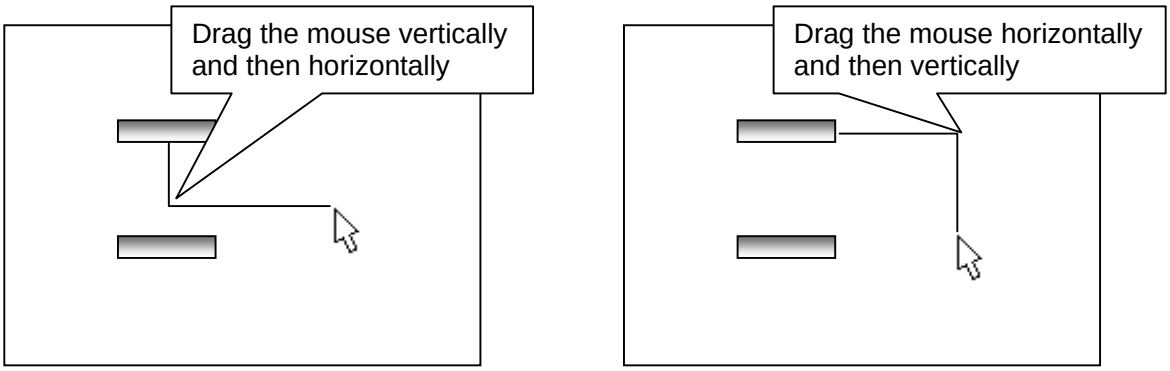
1) Select the line (Control handles are displayed).
2) Click the icon on the toolbar.
3) Click the start point or end point while holding down [Shift] and [Ctrl] on the keyboard. The added line is deleted.



NOTE
Selecting a line and pressing [Delete] on the keyboard will delete the entire line, including the added portion.

14-7. Drawing Wires

1) Click the icon on the toolbar.
2) Move the mouse to the Graphic view pane, and then left-click. Move the mouse while holding down the left-mouse button (drag) to draw a line.
3) Release the left-mouse button. A line is displayed. The line shape changes based on the direction that you drag.

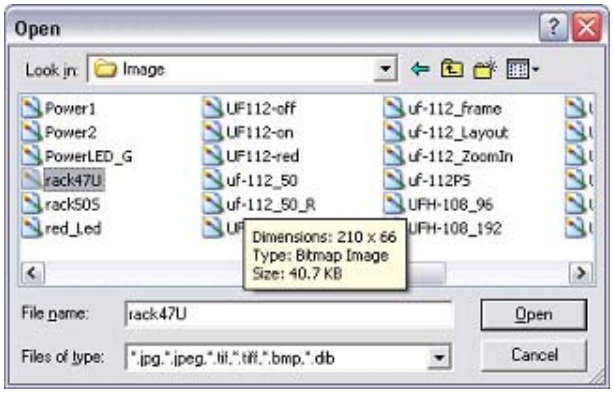


◆ **Adding or Deleting a Wire**

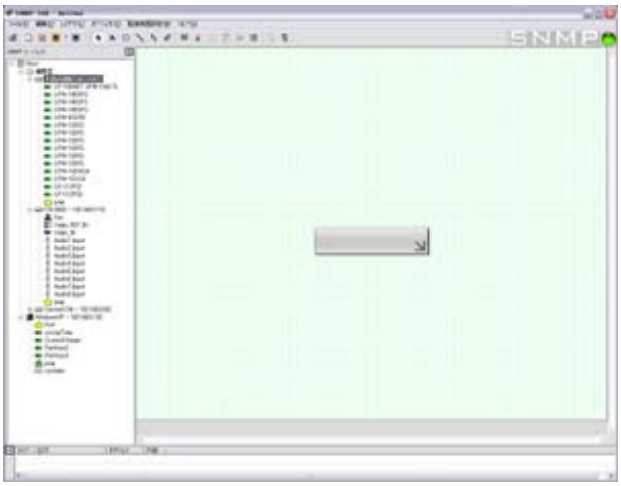
Wires are added and deleted using the same procedure as adding and deleting of lines.

14-8. Inserting an Image File

1) Click the  icon on the toolbar, or choose **Layout (L) > Import Image (I).** The **Open** dialog box is displayed.



2) Select a file, and click Open.
3) The image is inserted in the center of the **Graphic** view pane.



4) The image can be resized while maintaining the aspect ratio by dragging one of the corners or sides. To resize the image without maintaining the aspect ratio, hold down [Ctrl] on the keyboard while resizing the image.

14-9. Adding and Deleting Pages

◆ **Adding a Page**

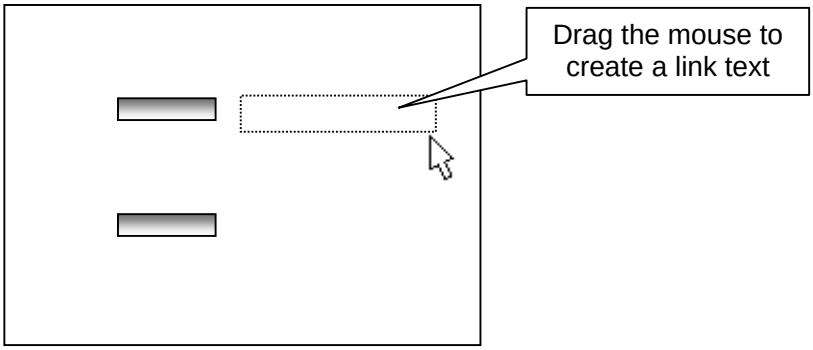
1) Click the icon on the toolbar. The **Add Layout** dialog box is displayed.
2) Enter the page title in **Layout name**, and then click OK.

◆ **Deleting a Page**

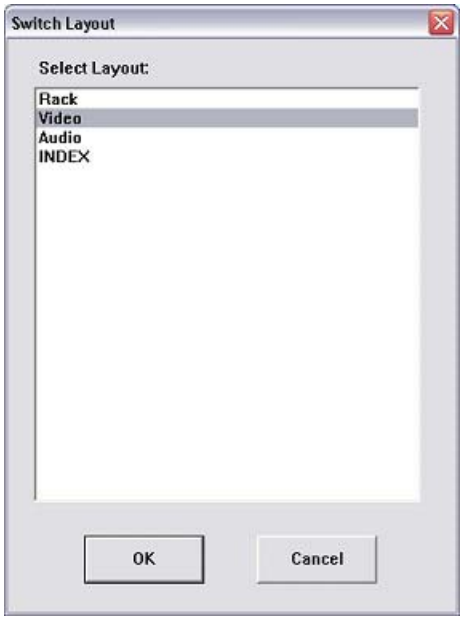
1) Display the page to be deleted.
2) Click the icon on the toolbar.
3) A confirmation dialog box is displayed. Click OK. The page is deleted.

14-10. Creating a Page Link

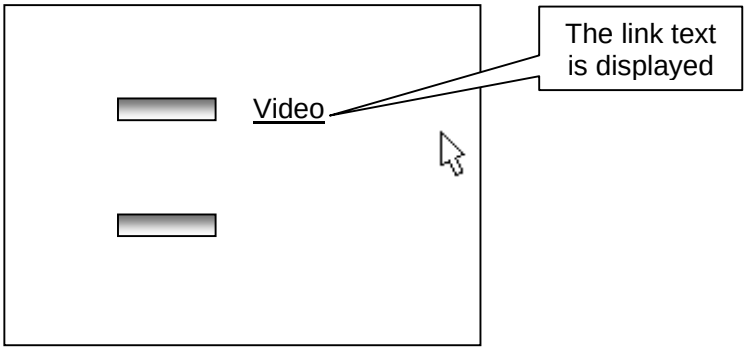
1) Click the icon on the toolbar.
2) Move the mouse to the Graphic view pane, and then left-click. Move the mouse while holding down the left-mouse button (drag) to create a link text area.



3) Release the mouse button. The **Switch Layout** dialog box is displayed.
4) Select the page to be linked to.



5) The link text is displayed as the page title of the linked page.
You can designate the font and other properties of the link text in the same way as text objects. To make text settings, right-click and choose **Text Property (E)** from the right-click menu.

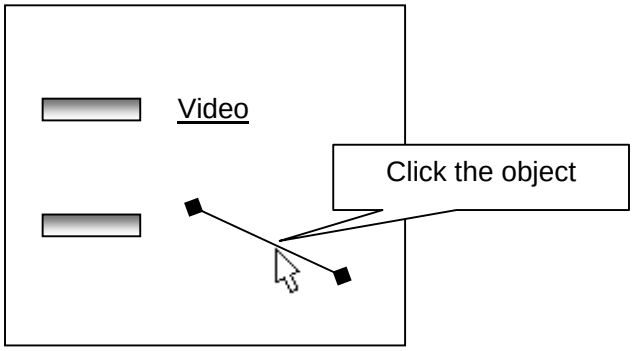


14-11. Other Operations

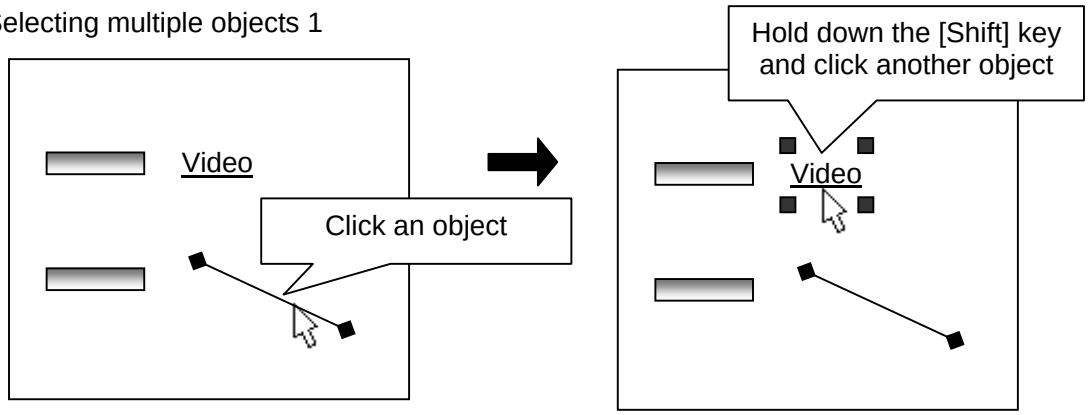
◆ **Selecting an Object**

When an object is selected, the control handles are displayed. These handles can be used to delete, move, or perform other operations on the object.

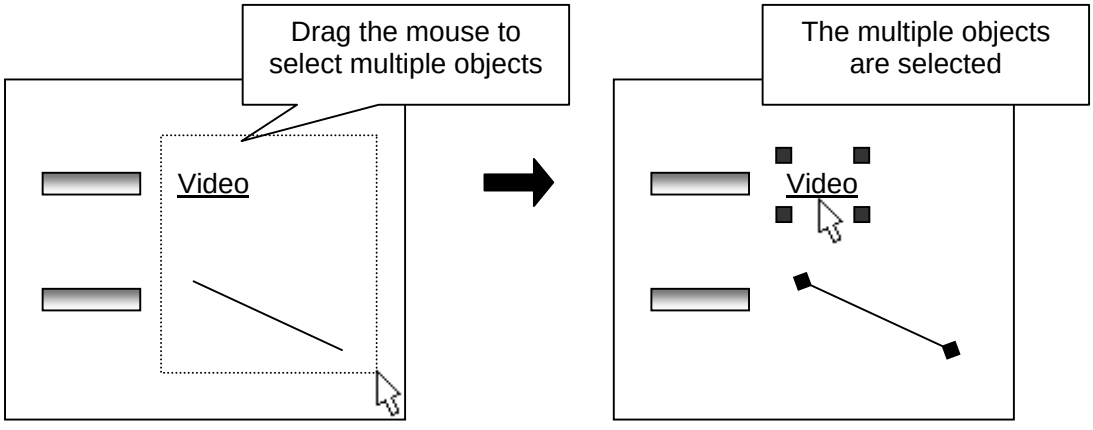
- Selecting a single object



- Selecting multiple objects 1



- Selecting multiple objects 2



NOTE
Choosing **Edit (E) > Select All (A)** selects all objects in the **Graphic** view pane.

◆ **Cutting an Object**
Selecting an object and then choosing **Edit (E) > Cut (T)** removes the object from its original location and copies it to the clipboard.

◆ **Copying an Object**
Selecting an object and then choosing **Edit (E) > Copy (C)** copies the object to the clipboard.

◆ **Pasting an Object**
Choosing **Edit (E) > Paste (P)** pastes the object that was copied to the clipboard.

◆ **Duplicating an Object**
Selecting an object and then choosing **Edit (E) > Duplicate (W)** duplicates the object.

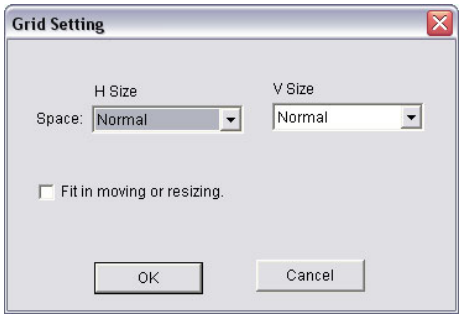
◆ **Deleting an Object**
Selecting an object and then choosing **Edit (E) > Delete (D)** deletes the object.
You can also delete an object by choosing **Delete** from the right-click menu or pressing [Delete] on the keyboard.

◆ **Locking or Unlocking an Object's Position**
Selecting an object and then choosing **Object (O) > Lock (L)** locks the object. Choosing **Object (O) > Unlock (U)** unlocks all objects that were locked.

◆ **Grid settings**
A grid is displayed during editing of the layout. The grid settings can be made by choosing **Edit (E) > Grid Setting (G)**.

Grid Setting

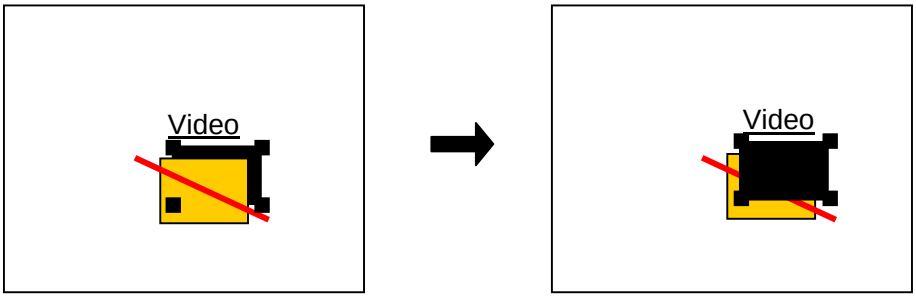
Item	Description
H Size V Size	Horizontal/Vertical grid square size No grid: No grid is displayed. Small: Small grid square. Normal: Medium grid square. Large: Large grid square.
Fit in moving or resizing:	Selecting this check box makes moving and resizing of the object easier to align with the grid. The movement unit is Small regardless of the H Size and V Size.



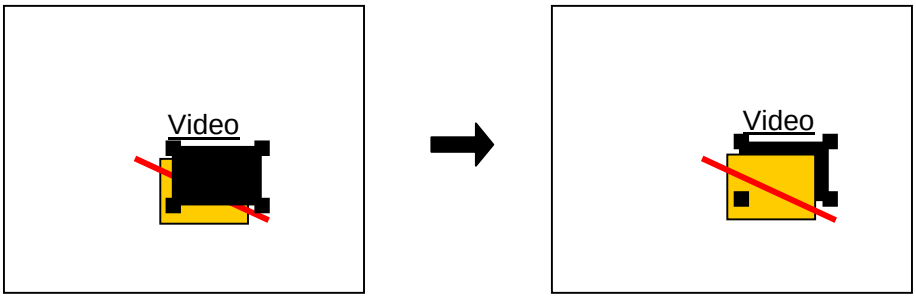
14-12. Changing Object Layers

The layer order of the selected object can be arranged.

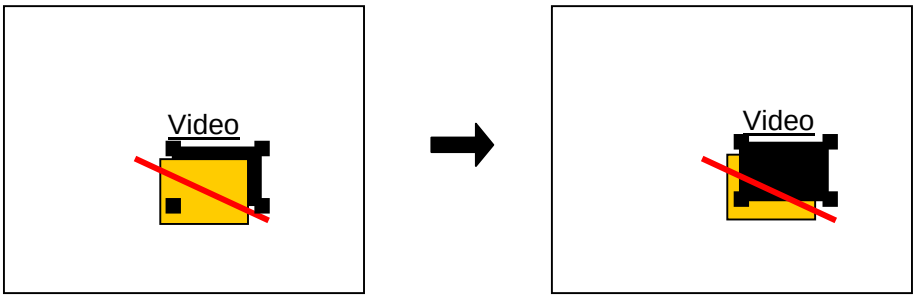
- Choosing **Object (O) > Arrange (A) > Top (T)** moves an object to the top.



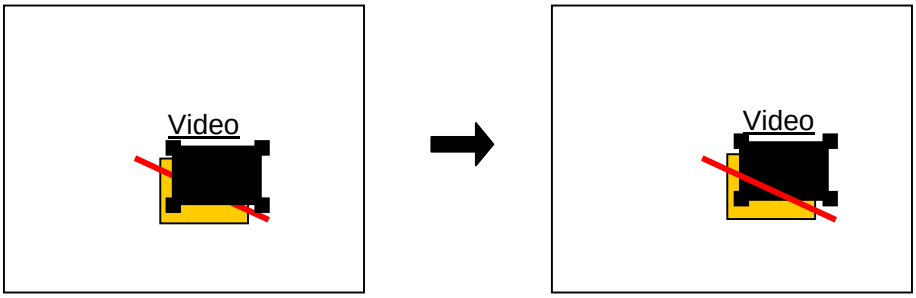
- Choosing **Object (O) > Arrange (A) > Bottom (B)** moves an object to the bottom.



- Choosing **Object (O) > Arrange (A) > Up (U)** moves an object one layer up.



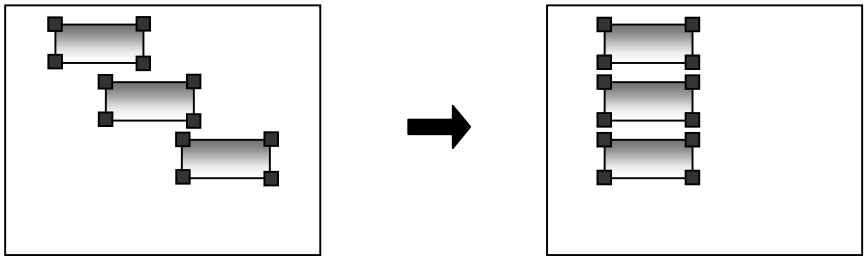
- Choosing **Object (O) > Arrange (A) > Down (D)** moves an object one layer down.



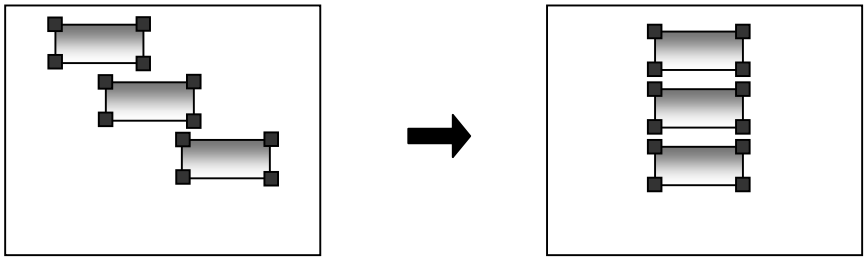
14-13. Aligning Objects

The positions of multiple selected objects can be aligned. The objects are aligned based on the bottommost object.

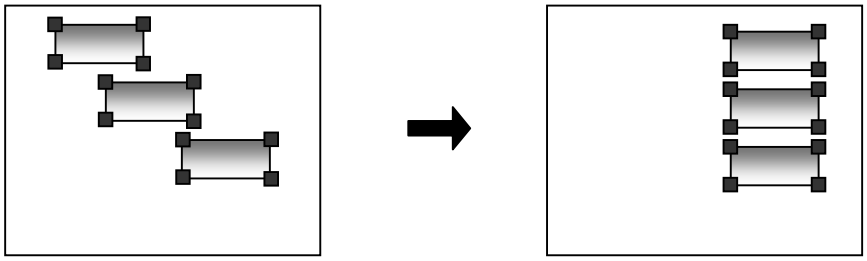
- **Choose Object (O) > Align (N) > Align left (L)** to align the objects with the left side of the bottommost object.



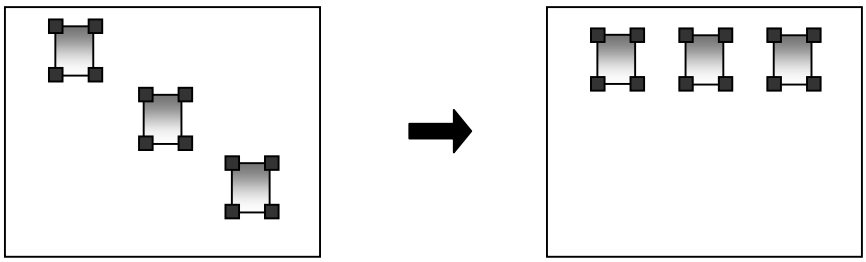
- **Choose Object (O) > Align (N) > Align center (C)** to align the objects with the center of the bottommost object.



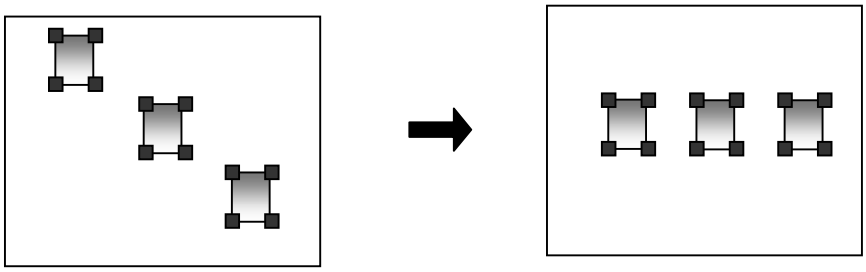
- **Choose Object (O) > Align (N) > Align right (R)** to align the objects with the right side of the bottommost object.



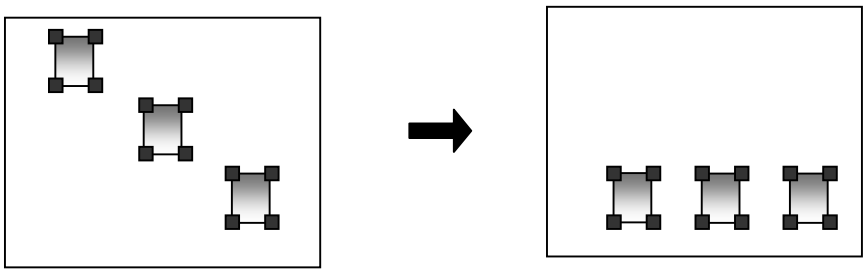
- **Choose Object (O) > Align (N) > Align top (T)** to align the objects with the top side of the bottommost object.



- **Choose Object (O) > Align (N) > Align vertical center (V)** to align the objects with the vertical center of the bottommost object.



- **Choose Object (O) > Align (N) > Align bottom (B)** to align the objects with the bottom of the bottommost object.



14-14. Undo and Redo

When editing a layout, Undo and Redo can be use to undo the last action and redo the action that was undone.

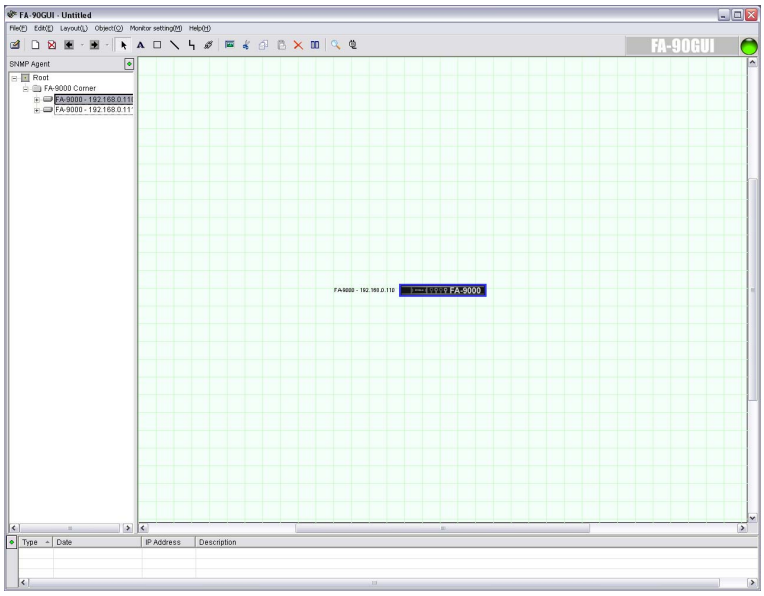
◆ **Undo**
Choose **Edit (E) > Undo (Z)** to go one step backward.

◆ **Redo**
Choose **Edit (E) > Redo (R)** to go one step forward in the command history.

NOTE
The history is cleared when leaving the page, for example, when adding a page or creating a new layout.

14-15. Enabling Scroll Bar

Choose **Edit (E) > Enable Scroll Bar (I)** to show the scroll bar in the **Graphic** view pane.



14-16. Resetting Scroll Bar Position

Choose **Edit (E) > Reset Scroll Position (S)** to reset the scroll bar in the **Graphic** view pane to its original position.

15. Password Settings

You can set password for changing mode and changing parameters.

15-1. Setting Password for Changing Mode

1) Change to **Edit** mode.
2) Go to **File (F) > Change Password (C) > Edit Mode Password (E)**. The **Change Password** dialog box is displayed.
3) In **Old**, enter the old password, and enter the new password in **Password** and **Retype Password**. If you are setting a password for the first time, leave **Old** blank.
4) Click OK to set the new password. The new password will be required when switching to **Edit Mode** from now on.

IMPORTANT
If Password is left blank, the Input Password dialog box will not be displayed even when switching to Edit Mode.

15-2. Setting Password for Changing Parameters

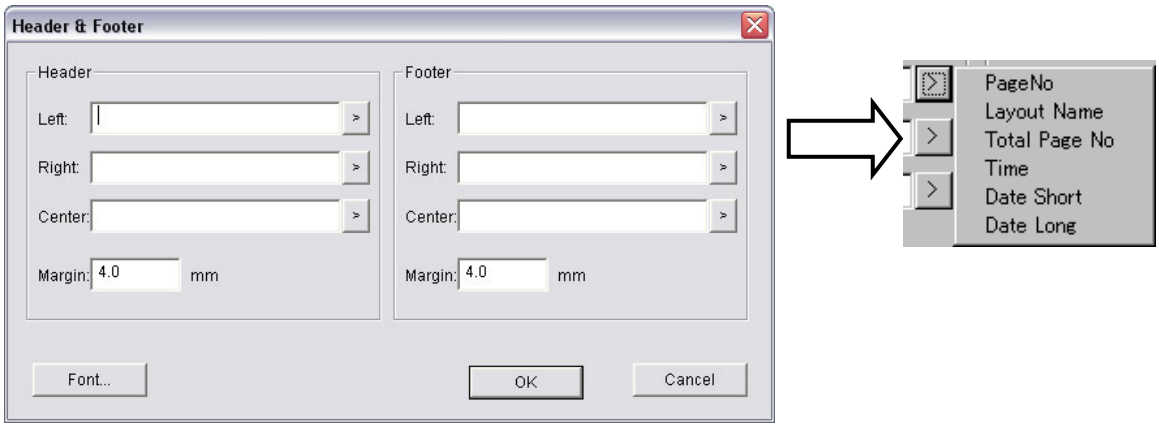
1) Change to **Edit** mode.
2) Choose **File (F) > Change Password (C) > Parameter Setting Password (M)** to display the **Change Password** dialog box as shown above.
3) In **Old**, enter the old password, and enter the new password in **Password** and **Retype Password**. If you are setting a password for the first time, leave **Old** blank.
4) Click OK to set the new password. The new password will be required when changing parameters from now on.

IMPORTANT
If Password is left blank, the Input Password dialog box will not be displayed even when changing parameters.

16. Printing

16-1. Header and Footer Settings

1) Change to **Edit** mode.
2) Choose **File (F) > Header Footer (H)**. The **Header & Footer** dialog box is displayed.



Header & Footer

Item	Description
Header	Header settings Left: Information printed at top left. Right: Information printed at top right. Center: Information printed at top center. Margin: Top margin for printing. (3-30mm)
Footer	Footer settings Left: Information printed at bottom left Right: Information printed at bottom right Center: Information printed at bottom center Margin: Bottom margin for printing. (3-30mm)

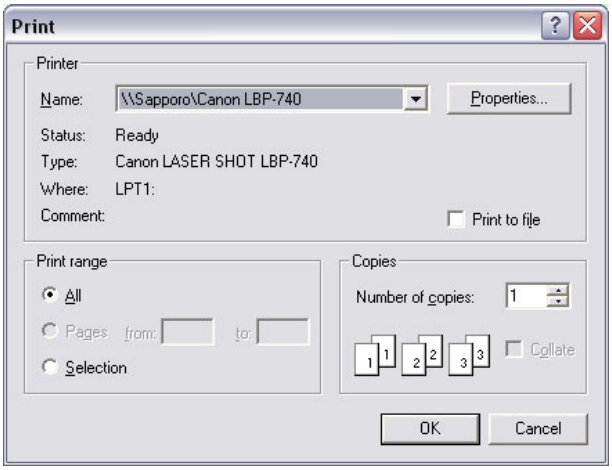
Control text	Menu item	Setting item
&p	PageNo	Page number
&n	Layout name	Layout name
&P	Total no. of pages	Total no. of pages
&t	Time	Current time
&d	Date Short	Date (short)
&D	Date Long	Date (long)

In addition to fixed text, control text can also be specified for the information printed in the header and footer. The control text can be selected from the menu by clicking [>].

3) The header and footer font can be specified by clicking Font.
4) Click OK to finalize the header and footer settings.

16-2. Printer Setting

The contents in the Graphic view pane can be printed.
1) Change to **Edit** mode.
2) Choose **File (F) > Print (P)** to display the **Print** dialog box.

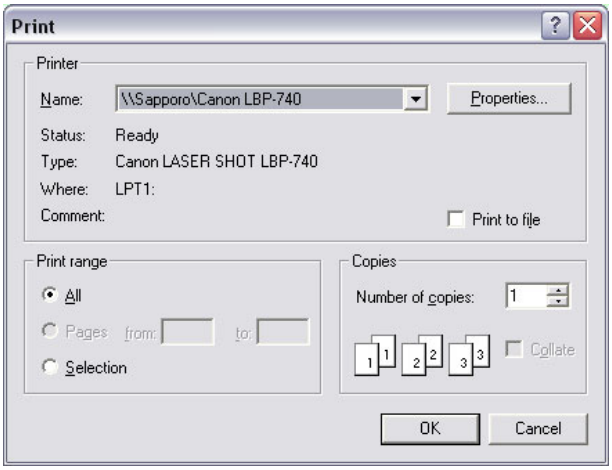


3) Set the printer settings, print range, and number of copies, and then click OK to print.

NOTE
The contents in Monitor mode cannot be printed out.

16-3. Printing Agent List

The agent list can be printed.
1) Change to **Edit** mode.
2) Choose **File (F) > Print Agent List (B)** to display the **Print** dialog box.



3) Set the printer settings, print range, and number of copies, and then click OK to print.

17. Product Information

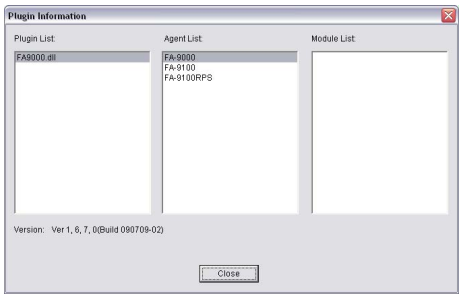
17-1. About FA-90GUI

The information of FA-90GUI can be viewed. Choose **Help (H) > About FA-90GUI (A)**. A window as shown at right appears to display the information of FA-90GUI.

17-2. Plugin Information

The information of the plugin can be viewed.

1) Choose **Help (H) > Plugin Info (P)**. The **Plugin Information** dialog box is displayed.
2) Selecting a device in **Plugin List** displays the version information of the plugin.



18. Menu

18-1. Monitor Mode

◆ **File (F)**

Menu	Description	Refer to
Print Agent List (B)	Prints the agent list.	16-3
Exit (X)	Exits the application.	4-2

◆ **Edit (E)**

Enable Scroll Bar (I)	Shows/Hides the scrollbars in the **Graphic** view pane.	14-15
Reset Scroll Position (S)	Returns the scrollbars in the **Graphic** view pane to the default position.	14-16
Change Mode (E)	Used to switch between **Edit** mode and **Monitor** mode. When switching from **Monitor** mode to **Edit** mode, the **Input password** dialog box is displayed. Enter the password, and then click OK.	5-2
ListView (L)	Used to switch the Graphic view pane between **Graphic** view and **List** view back and forth.	6-2-2
Full Screen Log (O)	Used to switch the Log view pane between **Normal** and **Full Screen** back and forth.	6-3

◆ **Layout (L)**

Next Layout (N)	Used to go to the next page.	6-2-1
Prev Layout (V)	Used to go back to the previous page.	
Set Default Layout (D)	Specifies the default page displayed for when the application is started.	8-3

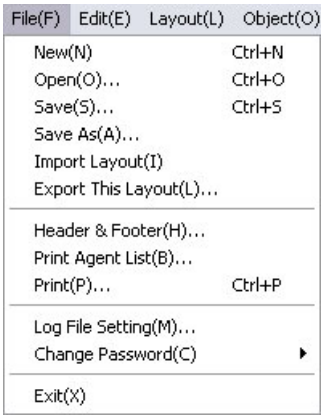
◆ **Monitor setting (M)**

Zoom in (Z)	Displays the enlarged window for the agent selected in the **Graphic** view pane.	6-2-1
Monitoring Info (I)	Displays the monitoring information for the selected agent.	6-1-1
Update Layout (R)	Obtains the monitoring information and refreshes the screen.	10-1

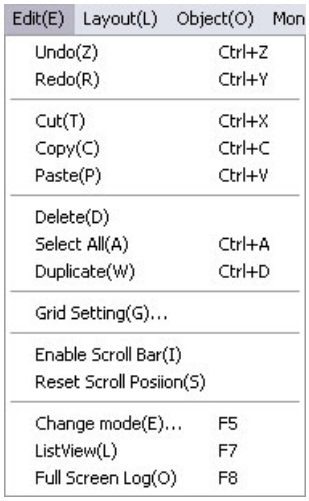
◆ **Help (H)**

Plugin Info (P)	Displays the plugin information.	17-2
About FA-90GUI (A)	Displays the software version information.	17-1

18-2. Edit Mode



File (F)



Edit (E)

Layout (L)

Items indicated by an asterisk (*) are displayed only in **Edit** mode.

◆ **File (F)**

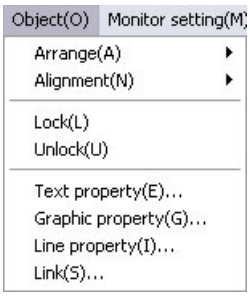
	Menu	Description	Refer to
*	New (N)	Creates a new layout.	14-1
*	Open (O)	Opens a saved file.	8-1
*	Save (S)	Saves a layout.	8-2
*	Save As (A)	Saves a layout with a new name.	8-2
*	Import Layout (I)	Imports a layout.	8-4
*	Export This Layout (L)	Exports a layout.	8-4
*	Header & Footer (H)	Header/footer settings for printing.	16-1
	Print Agent List (B)	Prints the agent list.	16-3
*	Print (P)	Prints a layout.	16-2
*	Log File Setting (M)	Sets the maximum file size of a log.	11-2
*	Change Password (C)	The password settings can be made for changing mode and parameters.	15
	Exit (X)	Exits the application.	4-2

◆ **Edit (E)**

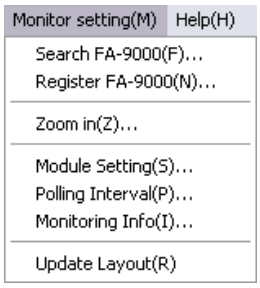
	Menu	Description	Refer to
*	Undo (Z)	Used to undo the last action.	14-14
*	Redo (R)	Used to redo the action that was undone.	14-14
*	Cut (T)	Removes the objects selected in the Graphic view pane from their original locations and copies the objects to the clipboard.	14-11
*	Copy (C)	Copies the objects selected in the Graphic view pane to the clipboard.	
*	Paste (P)	Pastes the objects in the clipboard to the Graphic view pane.	
*	Delete (D)	Deletes the objects selected in the Graphic view pane.	
*	Select All (A)	Selects all objects in the **Graphic** view pane.	
*	Duplicate (W)	Duplicates the objects selected in the Graphic view pane.	
*	Grid Setting (G)	Sets a grid.	
	Enable Scroll Bar (I)	Shows/Hides the scrollbars in the **Graphic** view pane.	14-15
	Reset Scroll Position (S)	Returns the scrollbars in the **Graphic** view pane to the default position.	14-16
	Change Mode (E)	Used to switch between **Edit** mode and **Monitor** mode. When switching from **Monitor** mode to **Edit** mode, the **Input password** dialog box is displayed. Enter the password, and then click OK.	5-2
	ListView (L)	Used to switch the Graphic view pane between **Graphic** view and **List** view back and forth.	6-2-2
	Full Screen Log (O)	Used to switch the Log view pane between **Normal** and **Full Screen** back and forth. To view any pane other than Log view pane, switch back to **Normal**.	6-3

◆ **Layout (L)**

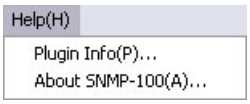
*	Add Layout (A)	Adds a new page.	14-9
*	Delete Layout (E)	Deletes a page.	14-9
*	Layout Property (L)	Used to set the page title.	14-2
	Next Layout (N)	Used to go to the next page.	6-2-1
	Prev Layout (V)	Used to go back to the previous page.	
	Forward (F)	Uses to move between pages using the navigation history.	
	Backward (B)	Uses to move between pages using the navigation history.	
*	Add Monitored Object (M)	Adds a device or an item selected in the Tree view pane to the Graphic view pane.	14-3
*	Import Image (I)	Imports an image file to the Graphic view pane.	14-8
	Set Default Layout (D)	Specifies the default page displayed for when the application is started.	8-3



Object (O)



Monitor Settings (M)



Help (H)

◆ **Object (O)**

	Menu	Description	Refer to
*	Arrange (A)	Moves the selected object forward/backward.	14-12
*	Alignment (N)	Aligns the selected object.	14-13
*	Lock (L)	Locks the positions and properties of the selected objects.	14-11
*	Unlock (U)	Unlocks all locked objects.	
*	Text Property (E)	Sets the properties of a text object.	14-4
*	Graphic Property (G)	Sets the properties of a rectangle object.	14-5
*	Line Property (I)	Sets the properties of a line object.	14-6
*	Link (S)	Creates a link between pages.	14-10

◆ **Monitor Setting (M)**

*	Search FA-9000 (F)	Registers FA-9000 by specifying an IP address range and searching. The applicable devices that are found are automatically added to the tree.	7-1
*	Register FA-9000 (N)	Registers a FA-9000 by specifying the IP address and agent type.	7-1
	Zoom In (Z)	Displays the enlarged window for the agent selected in the **Graphic** view pane.	6-2-1
	Module Settings (S)	Opens the module setting dialog box for the agent or module selected in the **Graphic** view pane.	12-1
*	Polling Interval (P)	Sets the polling interval for the module selected in the **Graphic** view pane.	10

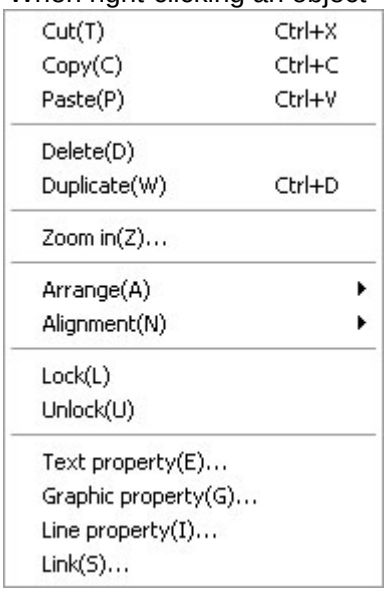
◆ **Help (H)**

	Plugin Info (P)	Displays the plugin information.	17-1
	About FA-90GUI (A)	Displays the software version information.	17-2

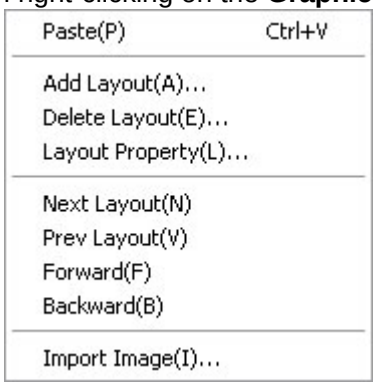
18-3. Right-Click Menu

The following menus appear when right-clicking in the **Graphic** view pane (**Edit** mode only). The right-click menus have the same functionality as the main menu.

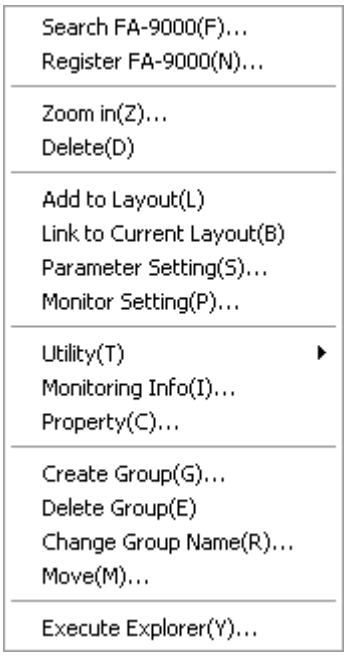
When right-clicking an object



When right-clicking on the **Graphic** view pane



The following menu appears when right-clicking in the **Tree** view pane.



◆ **Right-Click Menu**

Menu	Description	Refer to
Search FA-9000 (F)	Registers FA-9000 by specifying an IP address range and searching. The applicable devices that are found are automatically added to the tree.	7-1
Register FA-9000 (N)	Registers a FA-9000 by specifying the IP address and agent type.	7-1
Zoom in (Z)	Displays the enlarged window for the agent selected in the **Graphic** view pane.	6-2-1
Delete (D)	Deletes the device selected in the **Tree** view pane.	7-3
Add to Layout (L)	Adds the object selected in the **Tree** view pane to the **Graphic** view pane.	14-3
Link to Current Layout (B)	Associates a page to a device.	9
Parameter Settings (S)	Opens the parameter setting dialog box for the device selected in the Tree view pane.	12-1
Monitor Setting (P)	Used to set the polling interval.	7-1 10
Utility (T)	Saves and loads parameters, and prints the comparison chart for the agent selected in the Tree view pane.	13
Monitoring Info (I)	Displays the module details of the agent selected in the Tree view pane.	6-1-1
Property (C)	Sets the IP address, community name, and name of the device selected in the Tree view pane.	7-2
Create Group (G)	Creates a group to the Tree view pane.	6-1-2
Delete Group (E)	Deletes a group selected in the Tree view pane. A group must be emptied before deleted.	6-1-4
Change Group Name (R)	Changes the group name selected in the Tree view pane.	6-1-3
Move (M)	Moves the device or group selected in the Tree view pane to the rood directory or another group.	6-1-5
Execute Explorer (Y)	Runs Internet Explorer.	6-1-6

19. Toolbar

19-1. Monitor Mode

Icon	Function	Menu	Description	Refer to
	Switch Edit/Monitor mode	Change Mode (E)	Used to switch between **Edit** mode and **Monitor** mode. When switching from **Monitor** mode to **Edit** mode, the **Input password** dialog box is displayed. Enter the password, and then click OK.	5-2
	Move between layouts	Forward (F) Backward (B)	Used to move between pages.	6-2-1

19-2. Edit Mode

Icon	Function	Menu	Description	Refer to
	Switch Edit/Monitor mode	Change Mode (E)	Used to switch between **Edit** mode and **Monitor** mode.	5-2

<Adding and deleting a layout and moving between pages>

	Add layout	Add Layout (A)	Adds a new page.	14-9
	Delete layout	Delete Layout (E)	Deletes a page.	14-9
	Move between layouts	Forward (F) Backward (B)	Used to move between pages.	6-2-1

<Editing the Graphic view pane>

Icon	Function	Menu	Description	Refer to
	Select object	—	Used to select objects.	14-11
	Create text	—	Used to create a text object.	14-4
	Create rectangle	—	Used to create a rectangle object.	14-5
	Draw line	—	Used to create a line object.	14-6
	Draw wire	—	Used to create a wire object.	14-7
	Link	—	Used to create links in the Graphic view pane.	14-10
	Import image	Import Image (I)	Imports an image file to the Graphic view pane.	14-8
	Copy	Copy (C)	Copies the object selected in the Graphic view pane to the clipboard.	14-11
	Cut	Cut (T)	Copies the object selected in the Graphic view pane to the clipboard and deletes it.	
	Paste	Paste (P)	Pastes the object that was copied to the clipboard to the Graphic view pane.	
	Delete	Delete (D)	Deletes the object selected in the Graphic view pane.	
	Duplicate	Duplicate (W)	Duplicates the object selected in the Graphic view pane.	

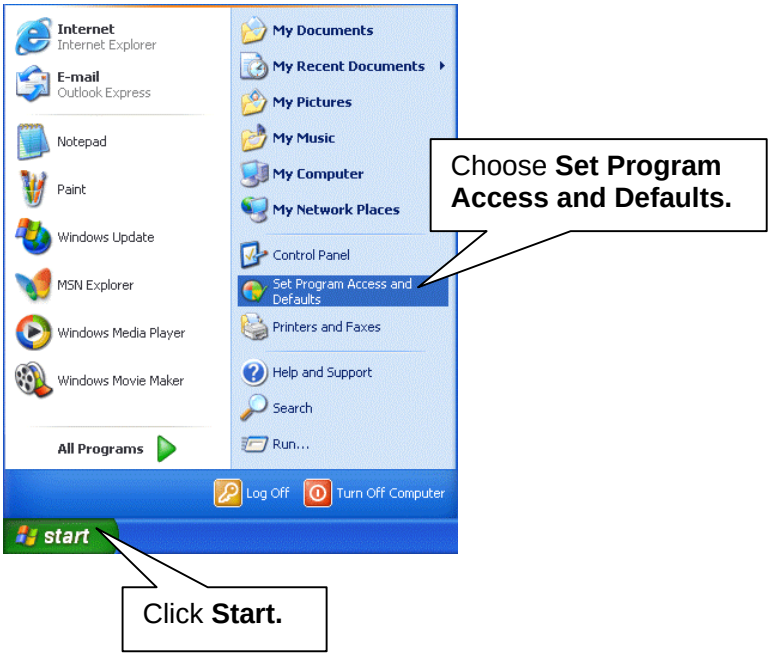
<Agent search and registration>

	Search FA-9000	Search FA-9000(F)	Registers FA-9000 by specifying an IP address range and searching. The applicable devices that are found are automatically added to the tree.	7-1
	Register FA-9000	Register FA-9000(N)	Registers a FA-9000 by specifying an IP address and a device type.	7-1

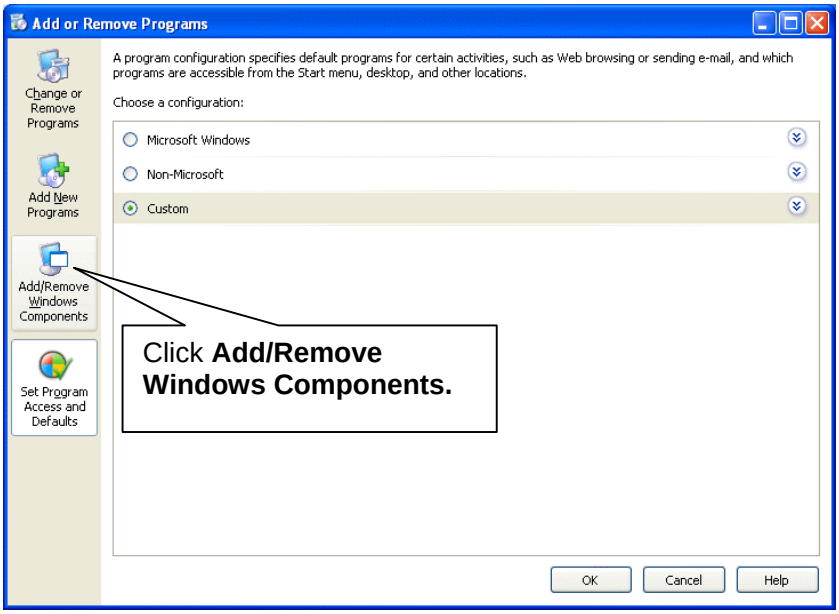
Appendix 1. Installing SNMP Service

1-1. Installing SNMP Service on Windows XP

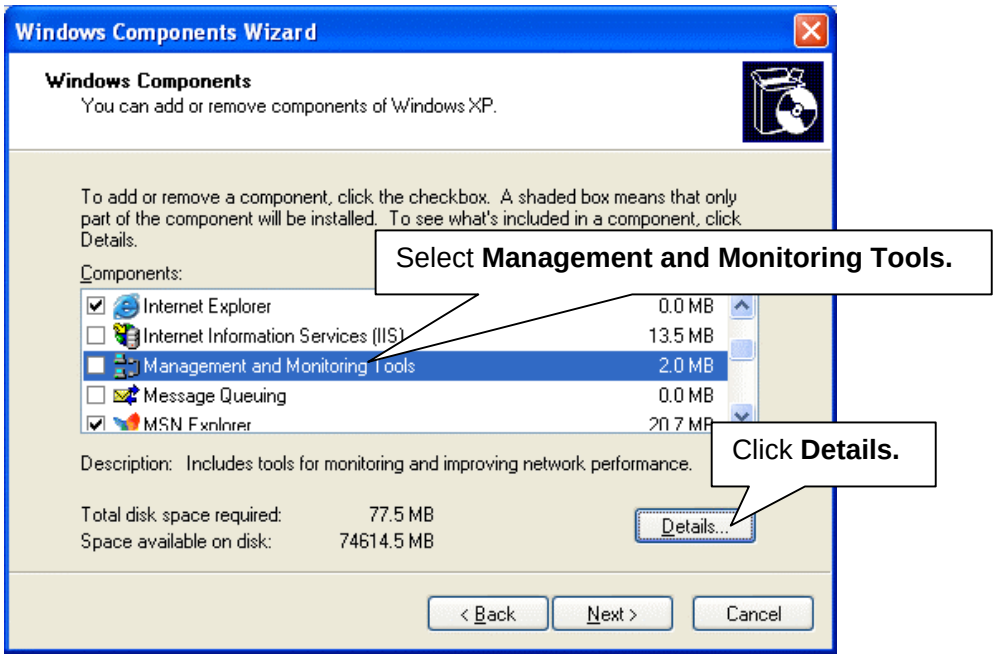
1) Go to **Start > Set Program Access and Defaults**.



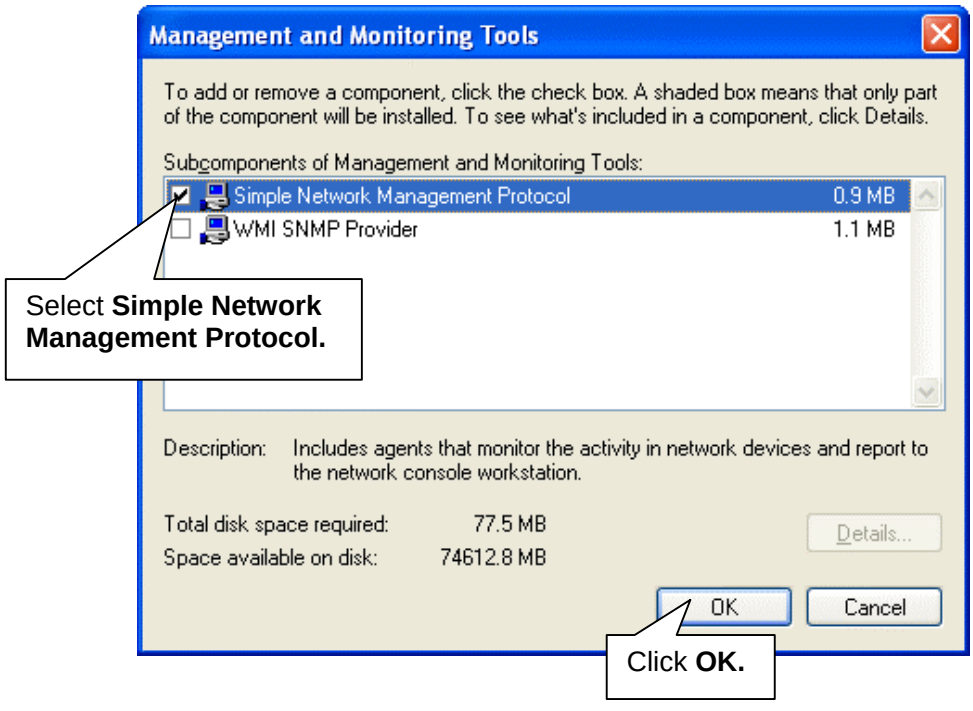
2) The **Add or Remove Programs** dialog box is displayed. Click the **Add/Remove Windows Components** button.



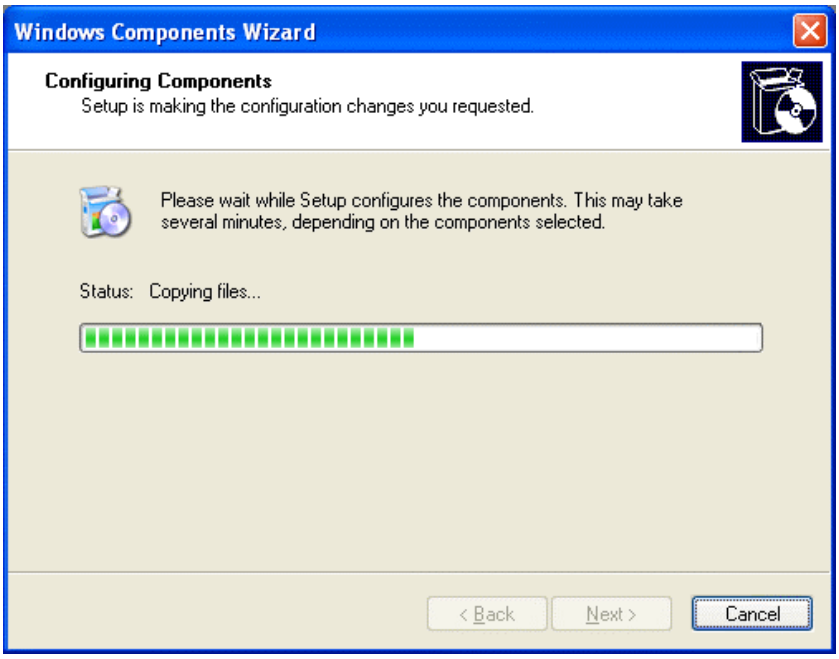
3) The **Windows Components Wizard** is displayed. Select the **Management and Monitoring Tools**, and click Details.



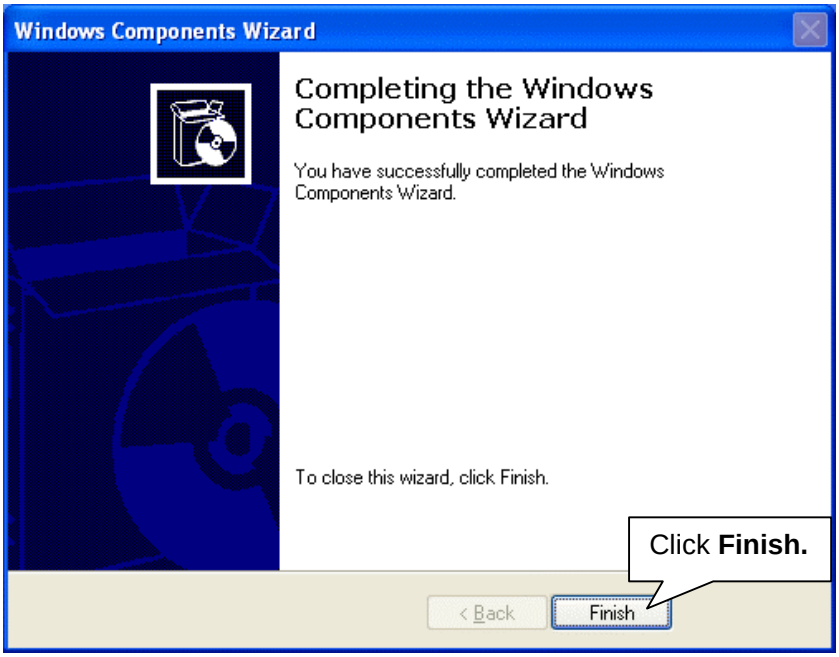
4) The **Management and Monitoring Tools** dialog box is displayed. Select the **Simple Network Management Protocol** check box, and click OK.



5) The **Windows Components Wizard** is displayed. The setup starts to make the configuration changes you requested.



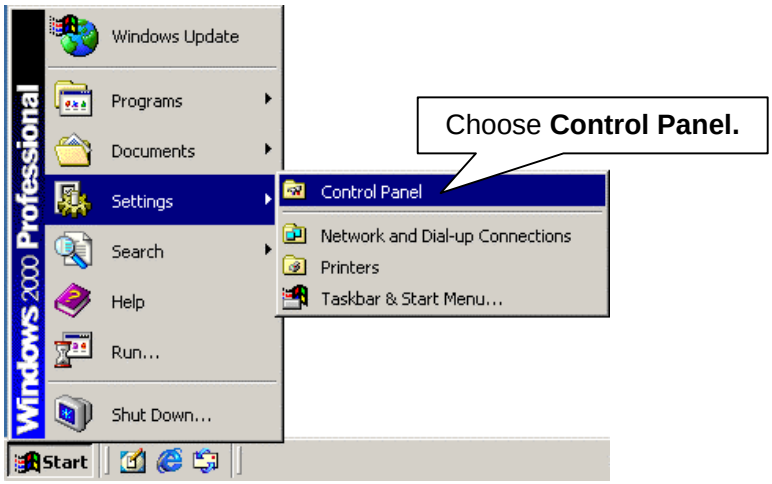
6) The **Completing the Windows Components Wizard** page appears. Click Finish.



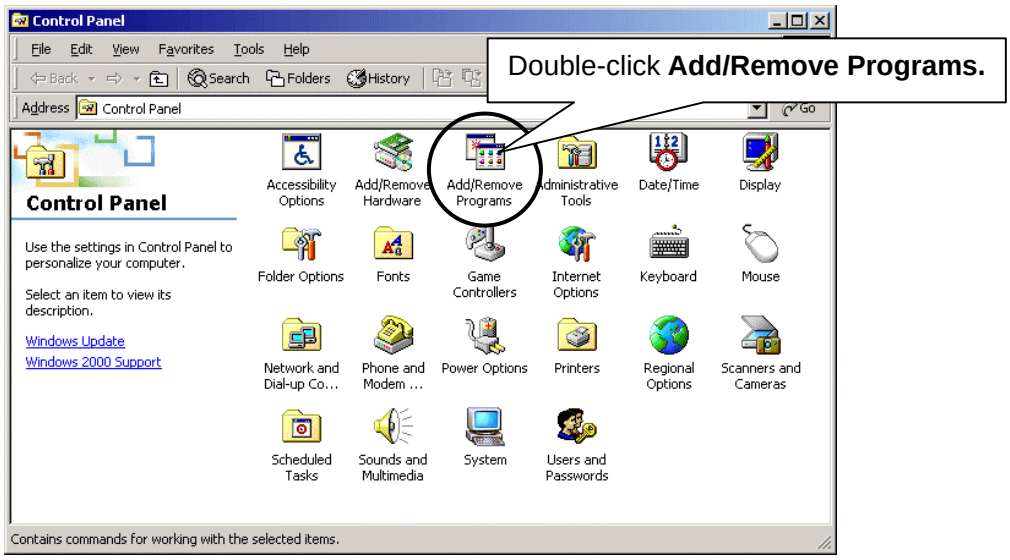
NOTE
During the **Simple Network Management Protocol (SNMP)** installation, the system may ask you to insert the Windows XP installation CD-ROM. Insert the CD-ROM into the CD-ROM drive as necessary.

1-2. Installing SNMP Service on Windows 2000

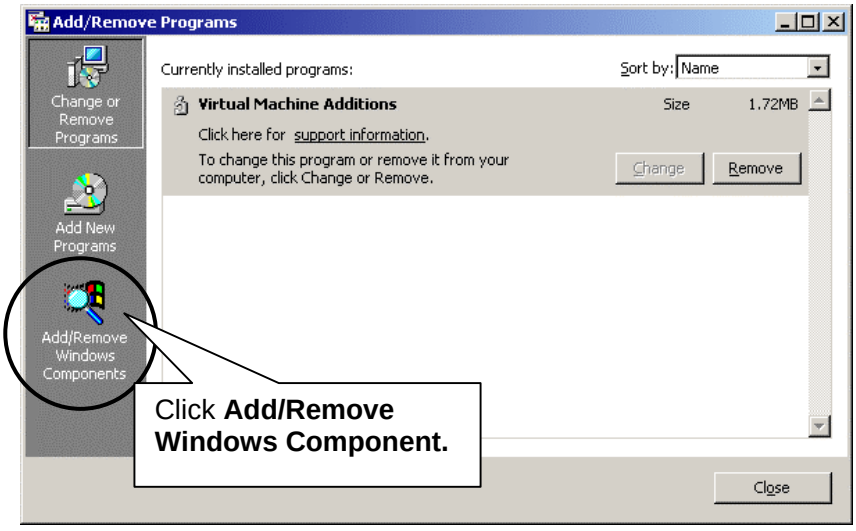
1) Go to **Start > Settings > Control Panel**.



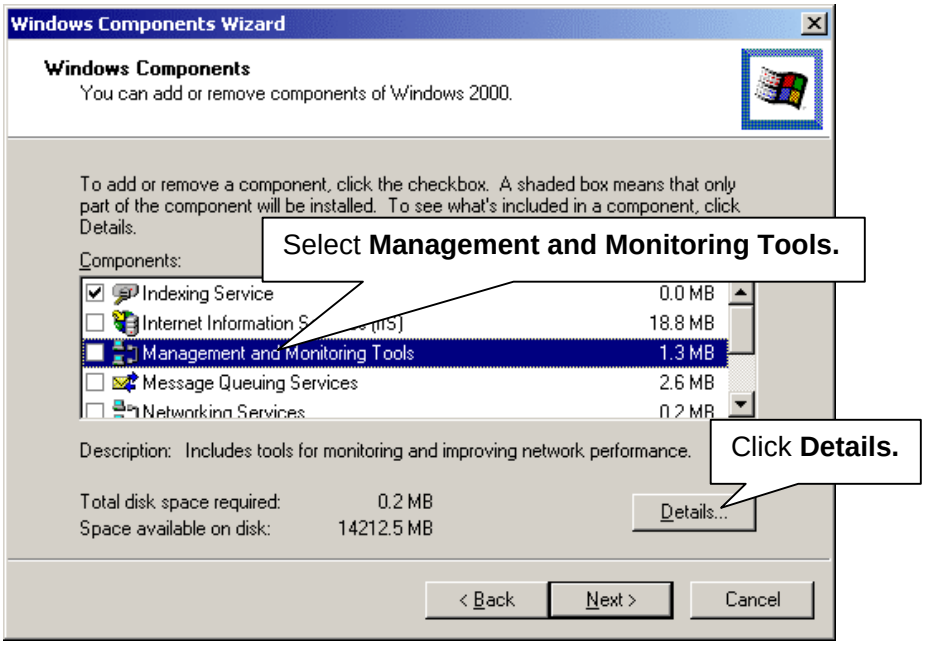
2) Double-click the **Add/Remove Programs** icon in the **Control Panel**.



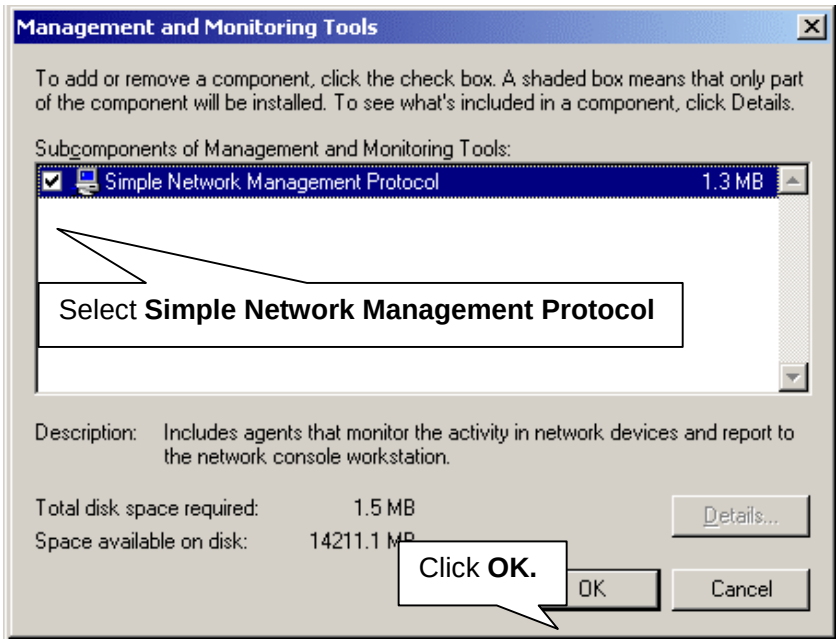
3) Click the **Add/Remove Windows Components** button in the **Add/Remove Programs** dialog box.



4) In the **Windows Components Wizard**, select the **Management and Monitoring Tools** check box, and click Details.



5) If the **Simple Network Management Protocol (SNMP)** checkbox is already selected, the installation is not necessary. If not, select the **Simple Network Management Protocol (SNMP)** checkbox, and click OK.

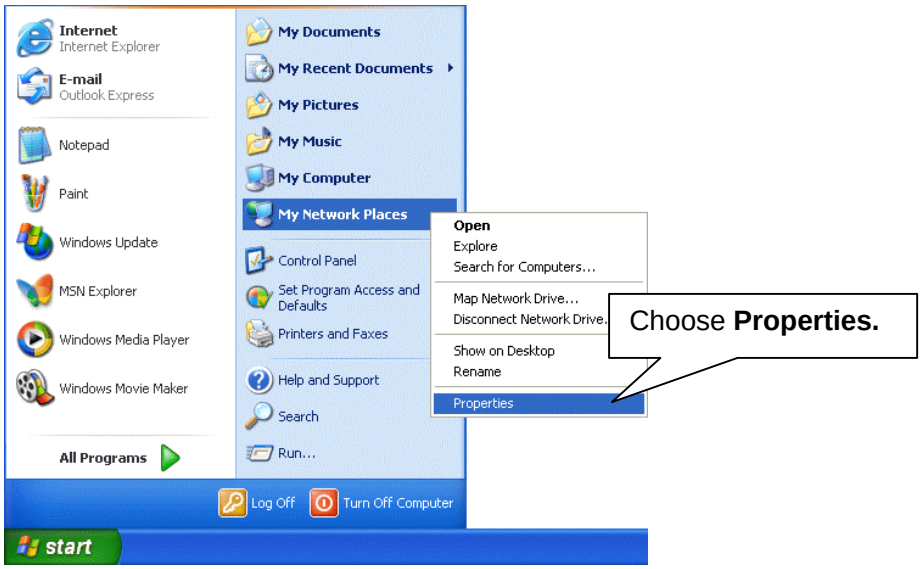


NOTE
During the **Simple Network Management Protocol (SNMP)** installation, the system may ask you to insert the Windows 2000 installation CD-ROM. Insert the CD-ROM into the CD-ROM drive as necessary.

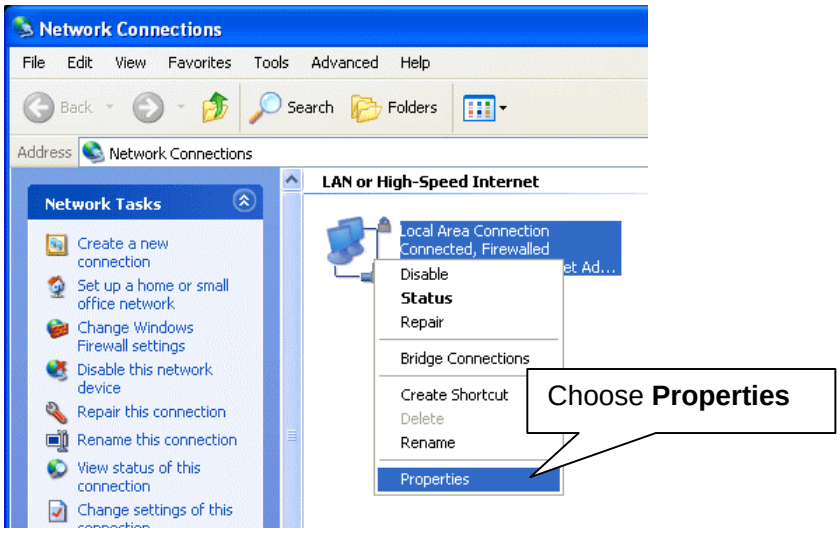
Appendix 2. Setting IP Address

2-1. Setting IP Address in Windows XP

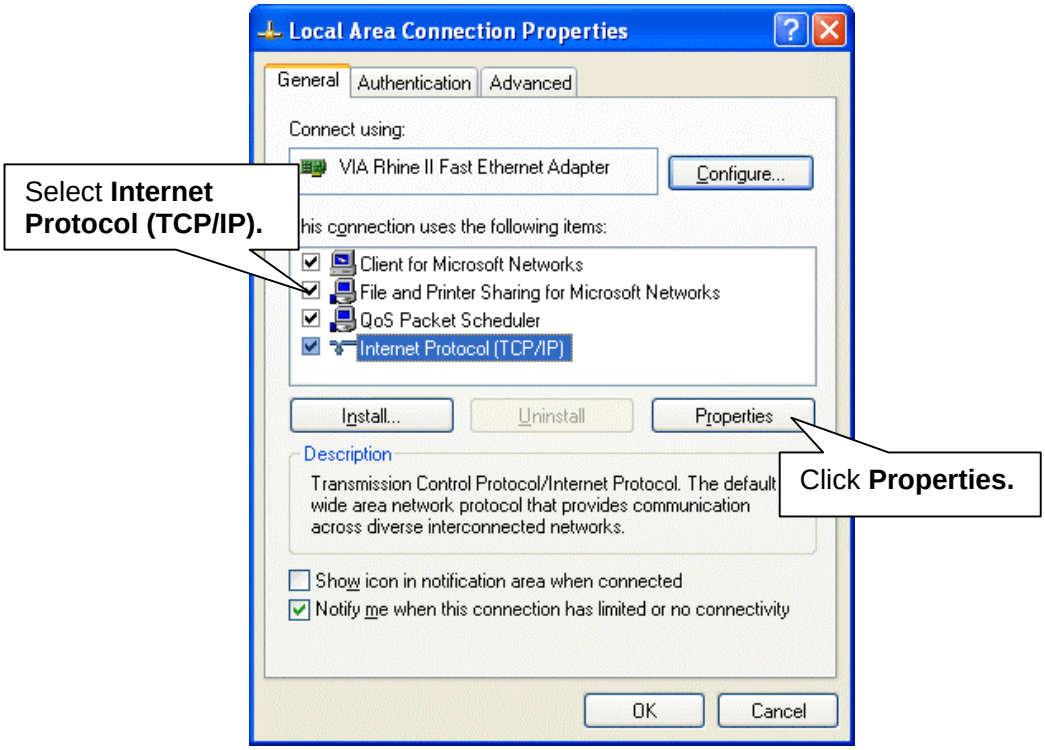
1) Go to **start > My Network Places.** Right-click **My Network Places**, and choose **Properties**.



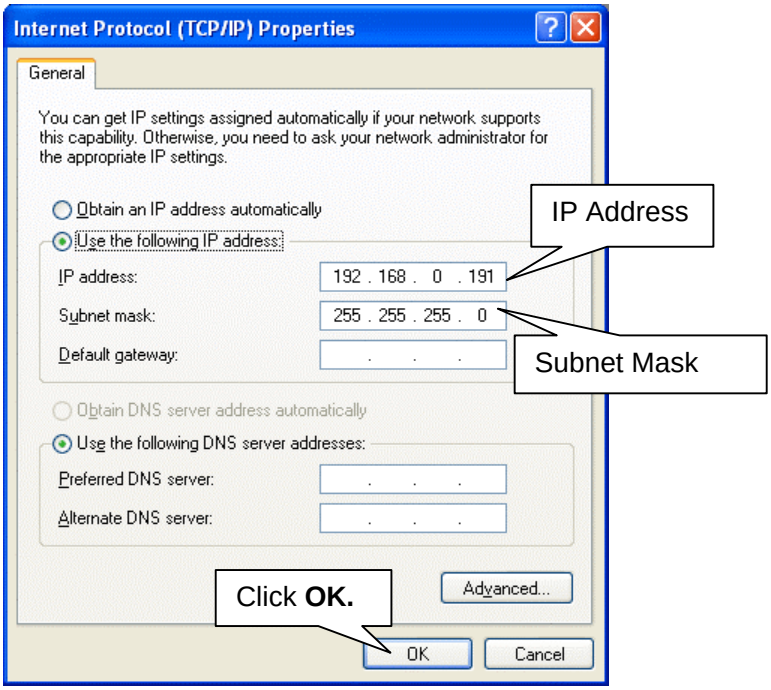
2) The **Network Connections** window is displayed. Right-click the **Local Area Connection** icon and choose **Properties**.



3) The **Local Area Connection Properties** dialog box is displayed. Select the **Internet Protocol (TCP/IP)** check box, and click Properties.



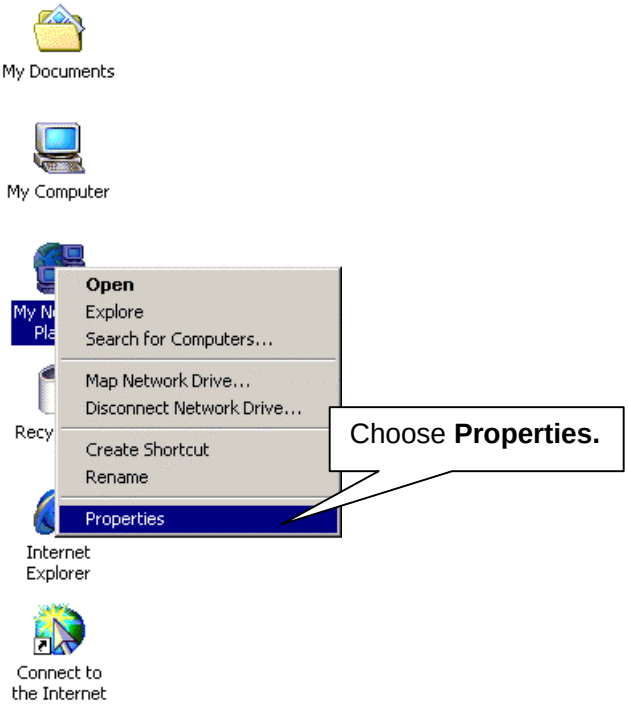
4) The **Internet Protocol (TCP/IP) Properties** dialog box is displayed. Enter the IP address and subnet mask as shown in the figure below. Click OK.



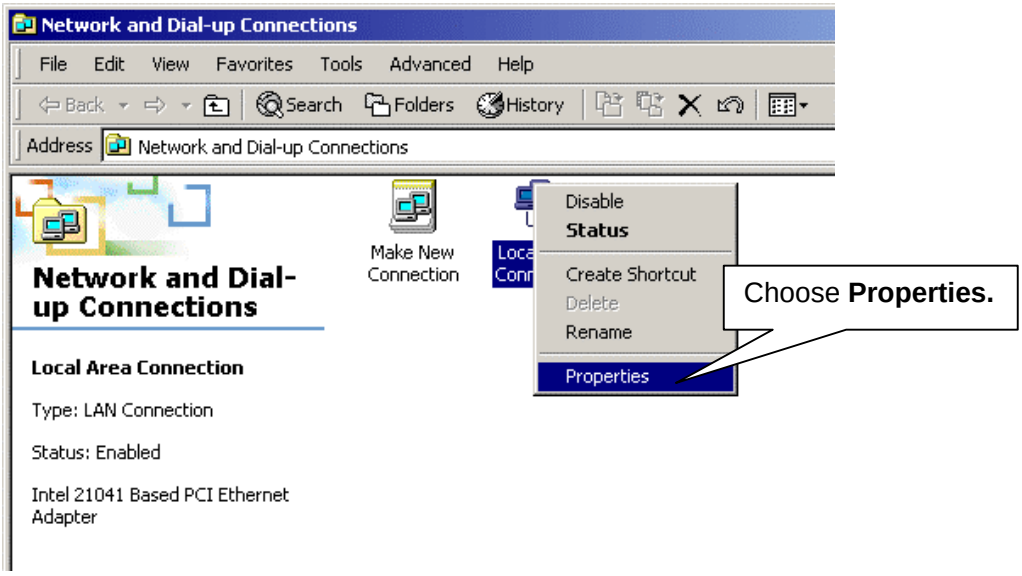
5) Click OK in the **Local Area Connection Properties** dialog box.

2-2. Setting IP Address in Windows 2000

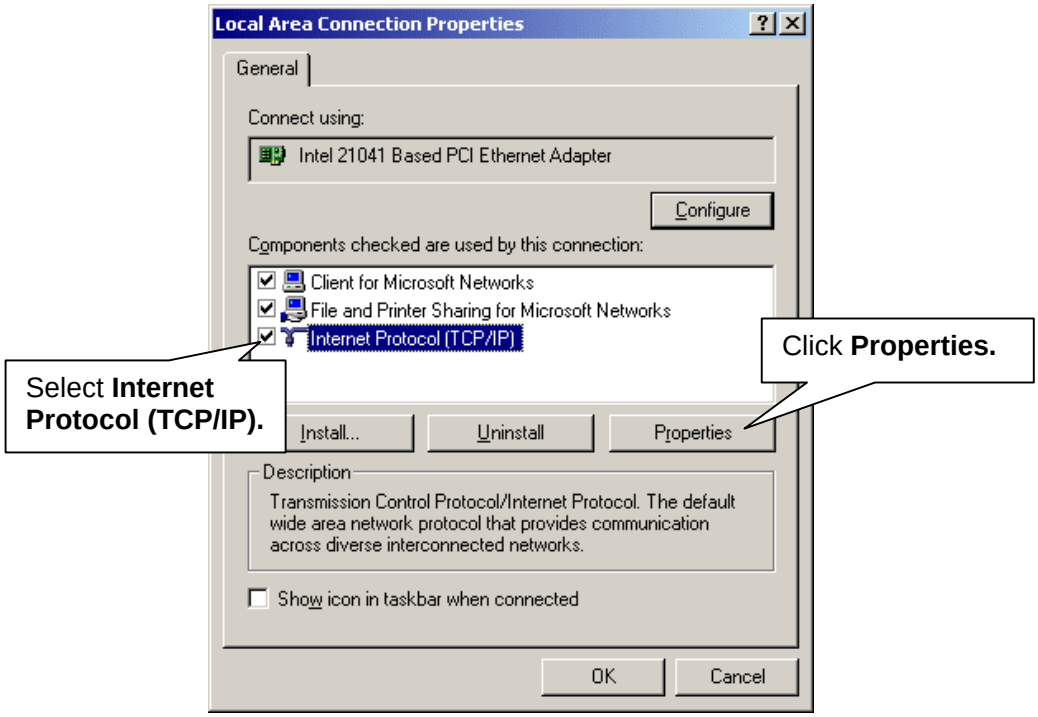
1) On the desktop, right-click the **My Network Places** icon, and choose **Properties**.



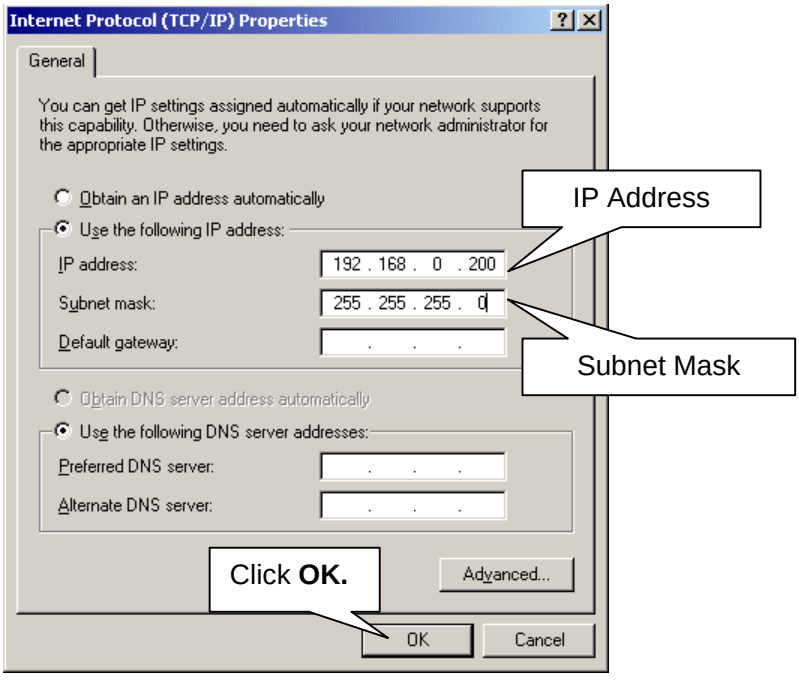
2) The **Network and Dial-up Connections** window is displayed. Right-click the **Local Area Connection** icon, and choose **Properties**.



3) The **Local Area Connection Properties** dialog box is displayed. Select the **Internet Protocol (TCP/IP)** check box and click Properties.



4) The **Internet Protocol (TCP/IP) Properties** dialog box is displayed. Enter the IP address and subnet mask as shown in the figure below. Click OK.



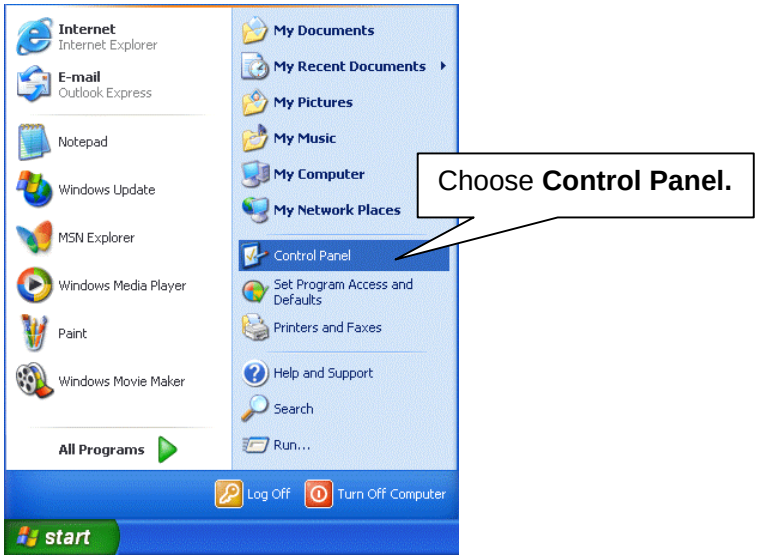
5) Click OK in the **Local Area Connection Properties** dialog box.

Appendix 3. Firewall Settings

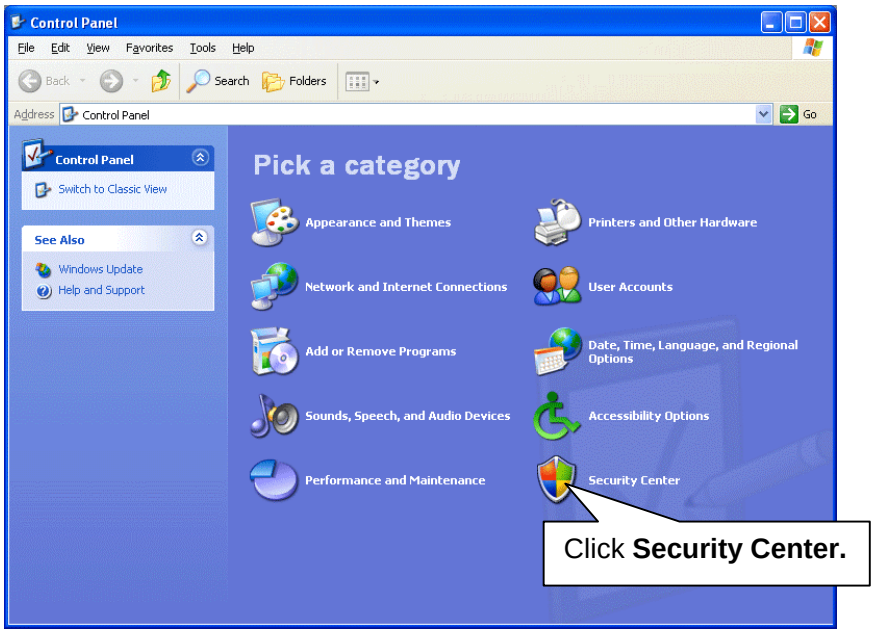
3-1. Firewall Settings in Windows XP SP2

In Microsoft Windows XP SP2, Windows Firewall needs to be turned off.

1) Go to **Start > Control Panel**.

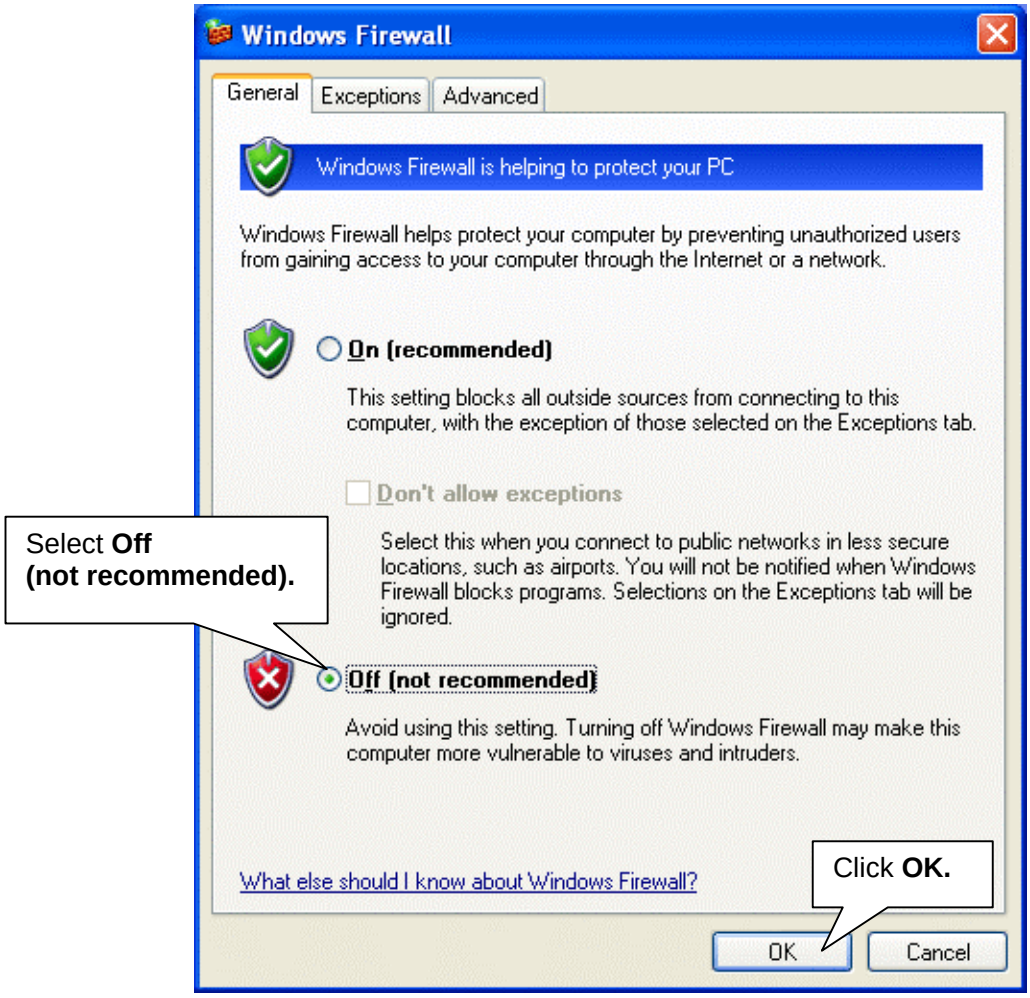


2) The **Control Panel** is displayed. Click the **Security Center** icon.



3) The **Windows Security Center** window is displayed. Click the **Windows Firewall** icon.

4) The **Windows Firewall** dialog box is displayed. Select **OFF (not recommended)** radio button, and click OK.



Appendix 4. Timeout Settings

The appendix 4 describes how to set the connection timed out for Ping, SNMP GET and SNMP SET for FA-90GUI.

1. Quit **FA-90GUI**, if it is launched.
2. Open the configuration file (**SnmpIF.ini**) in the **\Program Files\FA-90GUI** directory with Windows **Notepad.exe**.
3. Change the following values at the [**Setting**] section in **SnmpIF.ini**.

PingTimeout (millisecond)
Default value: 30ms,
Setting Range: 30ms to 60000ms in 1ms steps
PingTimeout=**30**

Get Request Timeout (millisecond)
Default value: 3000ms
Setting Range: 3000ms to 60000ms in 1ms steps
GetTimeout=**3000**

Set Request Timeout (millisecond))
Default value: 6000ms
Setting Range: 6000ms to 120000ms in 1ms steps
SetTimeout=**6000**

IMPORTANT

- The **SnmpIF.ini** file is read at FA-90GUI startup.
- The timeout values in **SnmpIF.ini** cannot be set individually for FA-9000 devices. If a number of FA-9000 series units are configured, these values are applied for all FA-9000 series units.
- When the timeout values in **SnmpIF.ini** are not set, are wrong or exceed the setting range, the default values are applied for them.
- The millisecond accuracy is not guaranteed because of the variations in the NIC drivers and other network situations.

Be careful **not to set** the following values in **SnmpIF.ini**.

[Setting]
# The wait time (milliseconds) until the next Get request is issued.
GetWait=**0**
# The wait time (milliseconds) until the next Set request is issued.
SetWait=**100**
LogLevel=**1**

Appendix 5. About Excel2002 and 2003 (SP2)

To save, load, and print the current parameters or a comparison chart, follow the procedure below to link the FA-90GUI to Excel.

1. Quit **FA-90GUI**, if it is launched.
2. Open the **Application.cfg** file in the **\Program Files\FA-90GUI\Config** directory with Windows **Notepad.exe**.
3. Change the following values at the [**MibSettingFile**] section in **Application.cfg**.

   To process in **native Excel format**
   FileType=xls
   ;FileType=csv

   Remove the semi-colon in front of "FileType=xls" and leave it in front of "FileType=csv."

   To process in CSV format (default):
   ;FileType=xls
   FileType=csv

   Remove the semi-colon in front of "FileType=csv" and leave it in front of "FileType=xls."

IMPORTANT
Only **Excel2002** and **Excel2003 (SP2)** support this Excel linkage function.

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