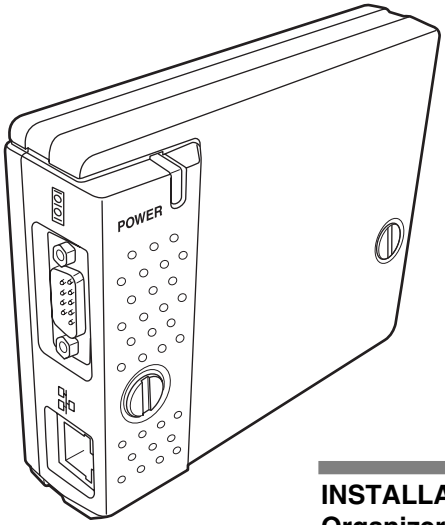
SANYO

PJ-Net Organizer

Model No. POA-PN01A



Preparation

Installation

Basic Setting and Operation

Controlling the Projector

Controlling the Multi-Projectors

Controlling External Equipment

Appendix

INSTALLATION and OPERATION of the PJ-Net Organizer

This PJ-Net Organizer is an optional product to control and set up a projector via a network. Attach this product to the projector and connect a network cable. By accessing the connected projector using the web browser on your computer, the projector can be controlled and set up remotely.

This product is only used for SANYO projectors that have a terminal for the PJ-Net Organizer.

This manual explains the installation of the PJ-Net Organizer and its operation.

OWNER'S MANUAL

Compliances

Federal Communication Commission Notice

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

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

Use of shielded cable is required to comply with class B limits in Subpart B of Part 15 of FCC Rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Model Numbers	: POA-PN01A
Trade Name	: Sanyo
Responsible party	: SANYO FISHER COMPANY
Address	: 21605 Plummer Street, Chatsworth, California 91300
Telephone No.	: (818)998-7322

Trademark

PJ-Net Organizer is a trademark of Sanyo Electric Co., Ltd. Ethernet is a registered trademark of Xerox Corporation. Microsoft, Windows, Windows NT are registered trademarks of Microsoft Corporation. Macintosh, Mac OS are registered trademarks of Apple Computer Inc. Internet Explorer is a registered trademark of Microsoft Corporation. Netscape Navigator and Netscape Communicator are trademarks or registered trademarks of Netscape Communications Corporation. JavaScript is a registered trademark of

Expression/Abbreviation

The following abbreviations may appear in this manual:

- Windows 95, Windows 98, Windows 2000, Windows Me, Windows XP, Windows NT4.0 ➜ Windows
- Macintosh, Power Macintosh ➜ Macintosh
- Mac OS 8 or later ➜ Mac OS

In some cases, the "PJ-Net Organizer" is explained as "this product" or "Network Board" in this manual. The word "projector" found in this manual means "projector provided with PJ-Net Organizer" unless otherwise noted.

Use of this manual

This manual does not provide the description of basic operation and functions for computer, web browser, projector and network. For instructions about each piece of equipment or application software, please refer to the respective booklet.

CAUTION ON USE IN NETWORK

- When you receive an alert e-mail from the projector, you must check the projector immediately. Fire or accident may result if the projector is used in an abnormal condition.
- When you install the projector at remote location and use it through the network, you must perform the safety inspections periodically. In this case you must pay attention to the change of environment in which you installed the projector. It may cause fire or an accident depending on the change of environment.

CAUTION

SANYO Electric Co. Ltd assumes no responsibility for the loss or damage of data or damage of the computer caused by use of this product.

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Features

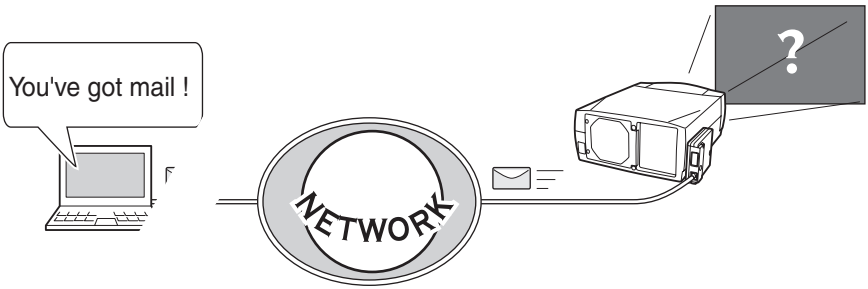
Web Management function

With this function, you can monitor projector functions such as power status, lamp status, input mode, signal condition, lamp-use time, etc. through the network by using the web browser installed on your computer.

E-Mail Alert function

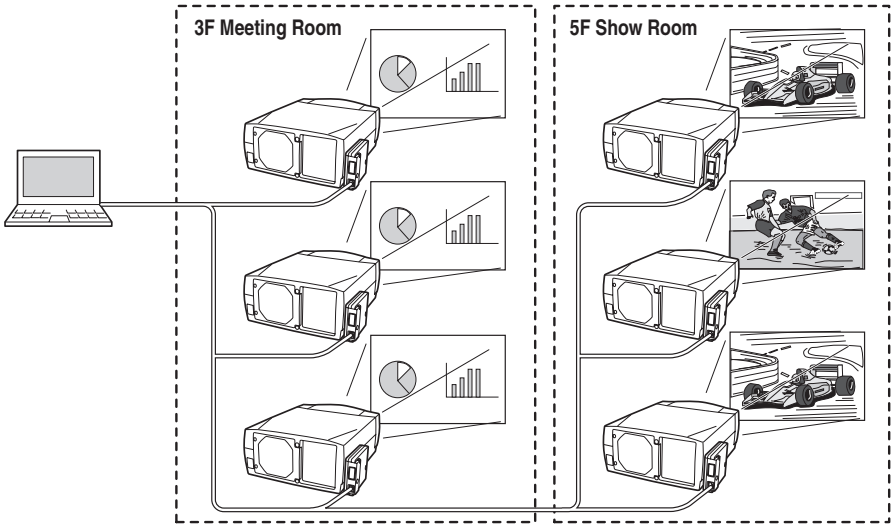
Projector (PJ-Net Organizer) se
when a lamp abnormality or po
it describes how to solve the
quick recovery.

ages to the registered e-mail addresses
e occurs with the projector. In this message,
the problems. You can take efficient action for



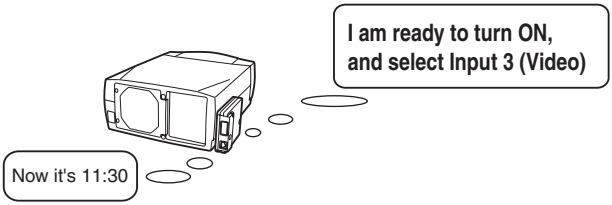
Multi-control function

A single computer can control and set up the multiple computers at the same time.



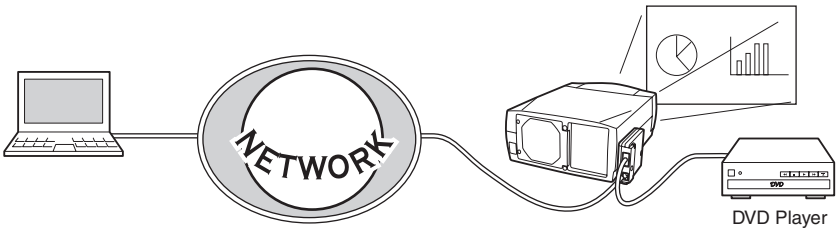
Automatic On/Off using Timer function

Automatically turn on or off the projectors at specified date/day and time by using the clock function.



Control port ready for external equipment via network

This product provides a serial port (RS-232C) for controlling external equipment. By connecting the equipment which has a serial port, it can be controlled by a computer via the network. * This product does not provide the interface driver software to control external equipment.



Operating Environment

To perform the management and setting up the projector using this product, the environment described below is required.

Operating System

Windows 95 / Windows 98 / Windows 2000 / Windows Me / Windows NT / Windows XP
Mac OS 8.0 or later

Network

Network must handle Ethernet correctly and accept TCP/IP protocol.

Computer

The computer must provide a 10Base-T or 100Base-TX network card.

Web browser application*

- Microsoft Internet Explorer version 5.0 or later
- Netscape Navigator version 4.7 or later

* Use to control and set up the projector. The layout of pages in the browser may slightly differ from each type of application or operating system you use.

Internet mail application*

- Microsoft Outlook
- Microsoft OutlookExpress
- Netscape Mail

* Required the internet e-mail application software to receive an e-mail alert sent from this product. If you do not use the function E-mail Alert, this application is not required.

The limitation of connection between this product and Hub or Computer

Suitable LAN cables are limited by length and type as follows;

Connection	Type of usable LAN cable	Maximum length
PJ-Net Organizer - Hub	UTP Strait Cable with category 3 or 5	100m
PJ-Net Organizer - Computer	UTP Cross Cable with category 3 or 5	100m

✐ Category of LAN cable indicates the cable quality. Normally, cable with category 3 or 5 is used for 10Base-T network and cable with category 5 is used for 100Base-TX network.

✐ There may be other limitations depending on your network environment or LAN specification. Please consult your network administrator for further details.

1

Installation

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Installation

Flow of installation

The following are instructions for attaching this product to the projector and connecting it to the network. Please review the entire procedure to become familiar with it.

1 Check package (p.11)

Please check the contents of a package. This product contains a network board and an owner's manual (this manual). Also please check the name and function of each part.

2 Installation (p.12-14)

1. Mount this product onto the projector.
2. Connect the LAN cable and join it to the network.
3. Confirm that the network menus are activated on the setting menu of the projector.

3 Network configuration (p.15-24)

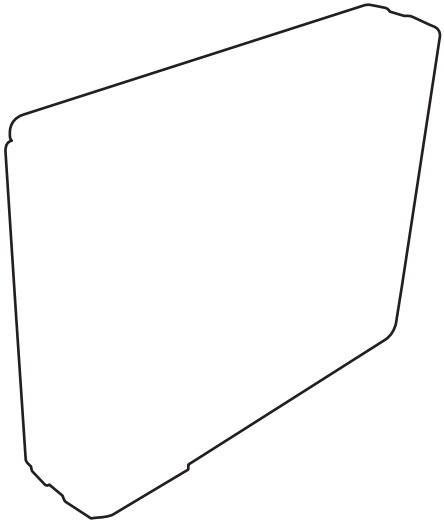
Configure the network of the projector. Separate configurations must be set up for each network to which the projector will be connected.

- ☛ Configure the network with the projector.
- ☛ Configure the network with the computer.

Setting up is completed.

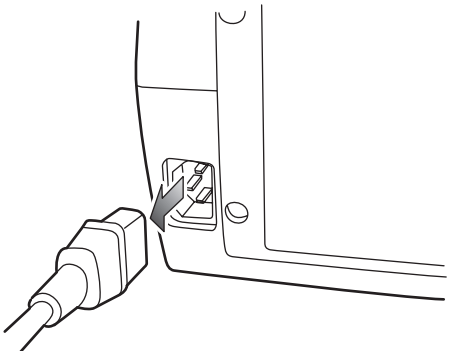
The preparation is completed to control the projector connected to the network. At next step, set up and control the projector via the network by using the web browser installed on your computer. Please see chapter "2: Basic setting and operation" on page 25.

Name and function of each part

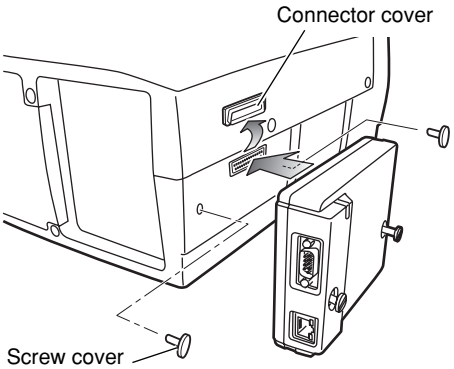


(1) Mounting

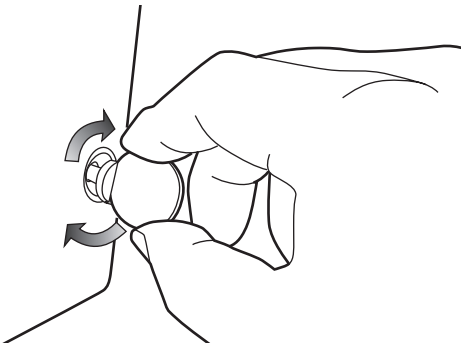
1 Disconnect the AC plug from the projector.



2 Remove the connector cover and screw covers from the projector and insert plug on this product to the option connector.



3 Tighten two screws by using a coin etc.



⚠*Caution*

- The AC cord must be disconnected from AC power outlet when mounting or removing this product. It may damage the product.
- Do not connect the AC cord until after connecting the LAN cable and computer.

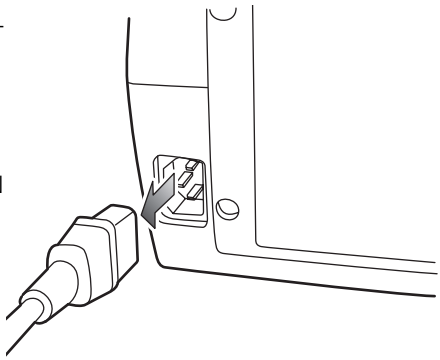
(2) Connection of LAN cable

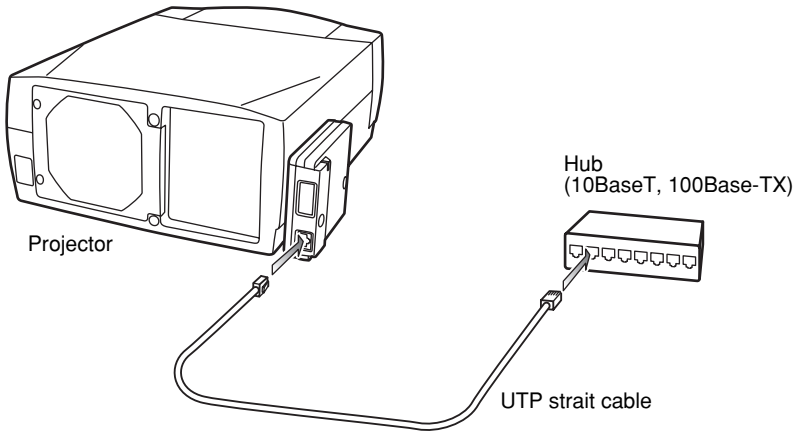
To connect to the network, it is required to use the UTP (Unshielded Twisted Pair) strait cable with RJ-45 plug. There are two different types of cables depending on whether the network is constructed with 10Base-T or 100Base-TX. Prepare the Hub (10Base-T or 100Base-TX) to distribute the network cable if required.

1 Disconnect the AC plug from the projector.

2 Connect the UTP strait cable to the LAN port on the network board.

3 Connect the UTP strait cable to the hub.





- Use the UTP cross cable when you connect the computer and projector directly not using the hub.
- When you connect the projector into the 10Base-T network, use cable with category 3 or 5. When you connect the projector into the 100Base-TX network, use cable with category 5.
- The length of cable between hub and projector should be less than 100m.

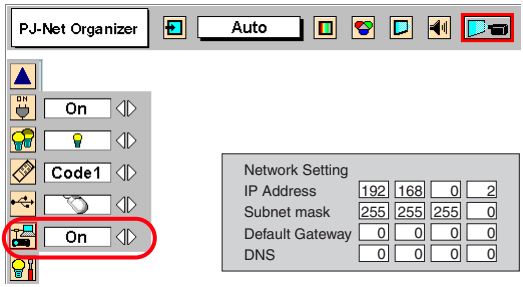
(3) Confirmation of network menu activity

When installing this product onto the projector, the network on-screen menu items for this product are activated automatically. If not activated, the product may not have been installed correctly. Please check chapter "Mounting" on page 12.

Turn on the projector and display the menu on the screen.

Confirmation of network setting menu (PJ-Net Organizer)

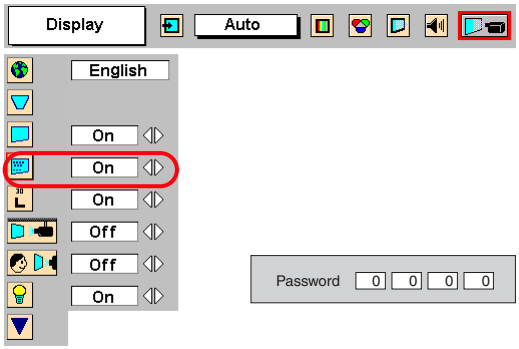
Using the pointers on the remote control handset or on the projector, select the **PJ-Net Organizer** icon from the **Setting** sub menu, and then press the **SELECT** button once. Check if the setting is **On**. If not, switch to **On** by using the pointer ◀/▶. The power indicator on this product will illuminate red. Press the **SELECT** button again, the network setting menu appears on the screen as follows. For further information about network setting, please see chapter "Network configuration"on next page.



* The above on-screen display may differ from the actual display depending on the functions of the projector you use.

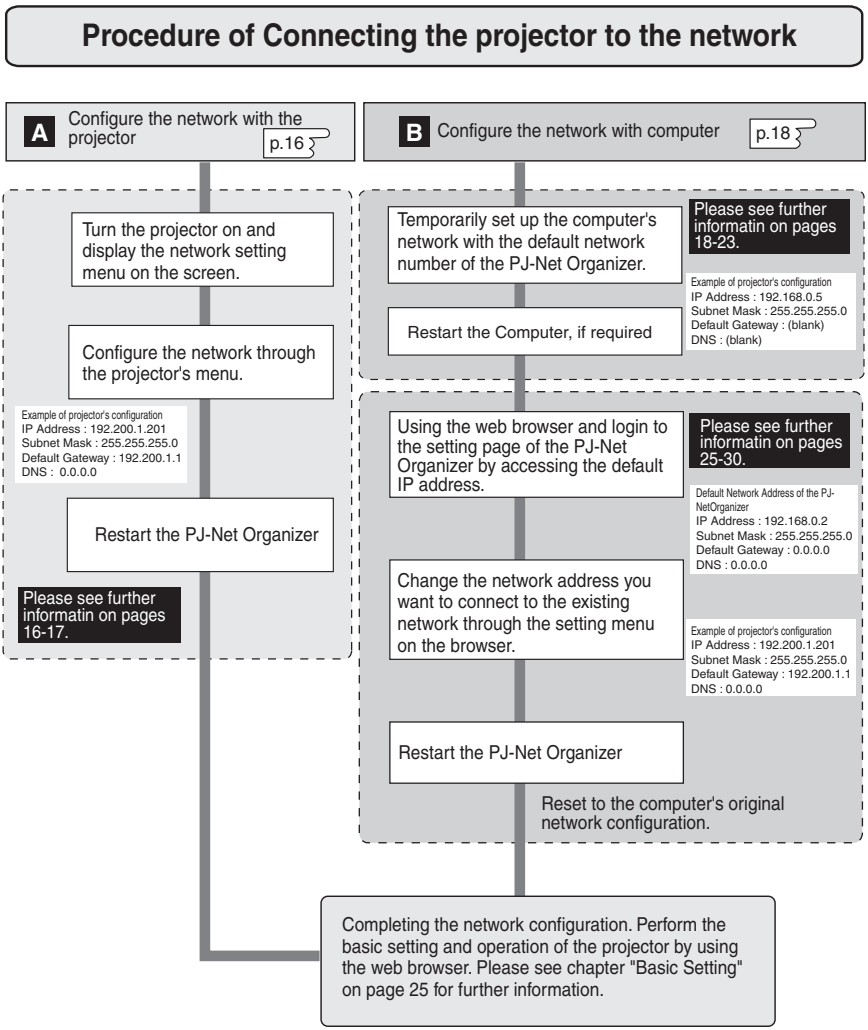
Confirmation of password setting menu (Display)

Using the pointers on the remote control handset or on the projector, select the **Display** icon from the **Setting** sub menu, and then press the **SELECT** button twice. The password setting menu appears on the screen. If not, please check if the function of PJ-Net Organizer is **On** as explained on previous item "Confirmation of network setting menu". For further information about password setting, please see "Password setting menu" on page 17.



(4) Network configuration

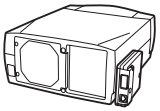
When you connect a projector to a network, the network number of projector must be the same as the network you intend to connect. You should configure projector's network first. Make sure that the projector is connected to the network correctly. There are 2 ways to configure the network, by using the projector's menu **[A]**, or by using the computer **[B]**. Refer to the chart below and use the method you prefer.



A Configure the network with the projector

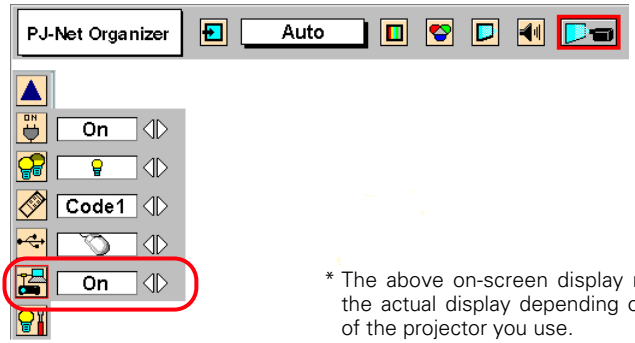
This example explains how to set the following configuration.

IP Address	: 192.200.1.201
Subnet Mask	: 255.255.255.0
Default Gateway	: 192.200.1.1
DNS	: 0.0.0.0



1 Selection of network menu [PJ-Net Organizer]

Turn on the projector and display the menu on the screen. Select the **PJ-Net Organizer** icon from the **Setting** sub menu using the pointers, and then press the **SELECT** button on the remote control or on the projector. Confirm that its mode is set **On**. If not, change mode to **On** using the pointer ◀ / ▶.



* The above on-screen display may differ from the actual display depending on the functions of the projector you use.

2 Configuration for IP Address/ Subnet mask/Default Gateway*/DNS*

Press the **SELECT** button again, the following network setting menu appears on the screen. Enter the specified network address. The following is an example of a network configuration.

NETWORK SETTING				
IP Address	192	200	1	201
Subnet mask	255	255	255	0
Default Gateway	192	200	1	1
DNS	0	0	0	0

* In the network environments not using a Gateway or Router, the Default Gateway address should be set to [0.0.0.0]. If you do not use the functions E-mail or DNS server, it is also set [0.0.0.0] for the DNS address.

How to enter the numbers

To move the selection and change the values, Use the pointers ▲/▼/◀ / ▶ on the projector or on the remote control handset.

The ◀ / ▶ keys are used to move the selection item.

The ▲/ ▼ keys are used to change the number value.

3 Restart the Network board

Press the **SELECT** button again. The network configuration display disappears and the network board begins restarting*1. It takes about 60 seconds. Do not disconnect the AC cord from the projector.

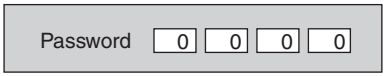
Completing of installation

Now the installation is completed. The IP address of this projector was set to "192.200.1.201". Next, please see chapter "Basic setting and operation" on page 25. It describes basic setup and operation of the projector.

Password setting menu [Display]

A password can be set to restrict access to the setting pages of the projector using the web browser. The default password is set "0000" as no password.

Use the projector's menu and select the **Display** icon on the **Setting** sub menu, and then press the **SELECT** button on the projector twice. The following setting display appears on the screen. The numbers on the display indicates the current password. To change the password, enter your desired number by using the pointers on the projector or remote control handset, and then press the **SELECT** button. The password setting display disappears and the network board begins restarting*1. It takes about 60 seconds. Do not disconnect the AC cord from the projector.



*1 The network board begins restarting automatically when the network configuration or password setting is changed and pressing the **SELECT** button. After the power indicator turns off twice, and it lights continuously. This indicates that restarting is completed and it takes about 60 seconds.

✐ Password setting must be done when you connect the projector to the network. This setting is carried out through the projector's menu and also it can be set through the network using the web browser. For further information please refer to chapter "Initial Setting/Password setting" on page 29.

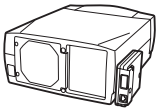
✐ Valid characters for password are only numeric numbers 0 to 9.

✐ This password is not to restrict the use of the projector. This password is to set the security against the use of the projector through the network.

B Configure the network with the computer

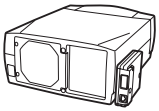
This example explains how to set the following configuration.

IP Address	: 192.200.1.201
Subnet Mask	: 255.255.255.0
Default Gateway	: 192.200.1.1
DNS	: 0.0.0.0



The default network configuration is set as follows.

IP Address	: 192.168.0.2
Subnet Mask	: 255.255.255.0
Default Gateway	: 0.0.0.0
DNS	: 0.0.0.0



Make sure that the projector is connected to the network and then connect the AC cord to the outlet.

1 Temporarily*1 set up your computer network configuration to the same IP network number as the PJ-Net Organizer. For example, change your computer network configuration as follows and restart the computer.

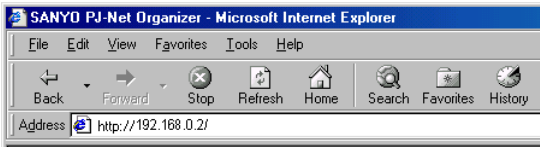
IP Address	: 192.168.0.2
Subnet Mask	: 255.255.255.0
Default Gateway	: (blank)
DNS	: (blank)

The network configuration of computer differs depending on each network environment or your computer. For further information, please see the next chapter "Configure the network of computer".

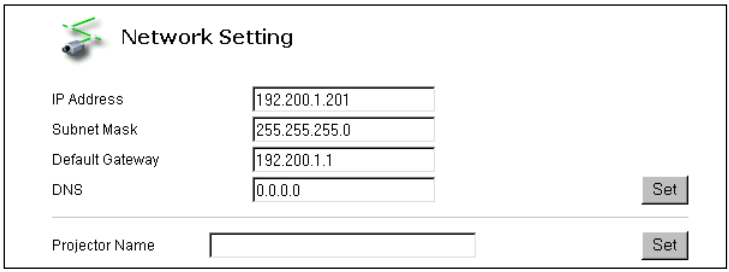
*1 Change your computer's network configuration temporarily. After completing the set up for the projector, you must set up again to the original network configuration for your computer. It is recommended to make a note of those network settings.

2 Configure the network of the projector by using the web browser.

1. Enter the IP address of the projector as the URL. The login page will be displayed and login. For further information, please see chapter "2: Basic Setting and Operation" on page 25.



2. Configure the network through the setting page on the browser. For further information, please see chapter "Network Configuration" on page 30.



Completing of installation

Now the installation is completed. The IP address of this projector has been set to "192.200.1.201". You must reset the network configuration of the computer to the original and restart the computer.

Next, please see chapter "Basic Setting and Operation" on page 25. It describes how to operate and set up the projector .

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✎ If you use a cable to connect the projector and computer directly, without using a hub, you must use a UTP cross cable. In this case, you cannot access the login page if the setting of web browser is set to "Use proxy server". It must be changed to the "Not use proxy server". For further information, please see the "Web browser setting" on page 64.

✎ When you set up the network of projector which has a default setting by using the computer, it must be carried out in the network which does not provide any gateways (routers). If it has the gateways (routers), you must carry out the configuration by using the projector's menu.

Configure the network of computer

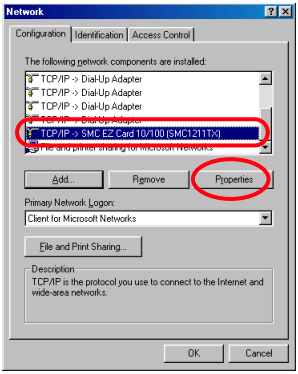
When you use the projector through the network, the IP address of the projector must be the same IP network number of the existing network. Also it is required to use the same IP network number of the computer to set up the projector. In the network included with the gateway (router), it must be used with the IP network number specified by the gateway (router).

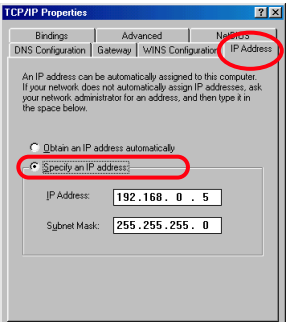
Configure the computer's network by following steps:

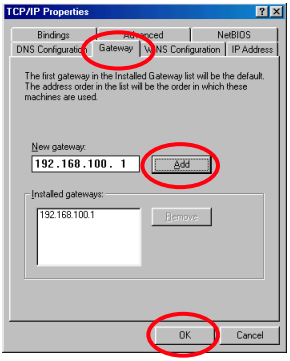
Windows 98/95/Me

This example explains how to set the following network address.

IP Address	: 192.168.0.5
Subnet Mask	: 255.255.255.0
Gateway Address	: 192.168.100.1







1 Select the **Control Panel** menu from [Start] - [Setting] menu.

2 Double click the **Network** icon on the control panel window.

3 Select the **TCP/IP***[1] item on the "Current Network Component" column on the "Network configuration" tab on the "Network" dialog window, and then press the **Properties** button.

4 Click **IP Address** tab, and then select the **Specified IP address**. Enter the IP Address*[2] and Subnet Mask.

5 Click the **Gateway** tab and enter the Gateway Address then press the **Add** button. Please make sure that the entered gateway address appears on the "Installed Gateway column.

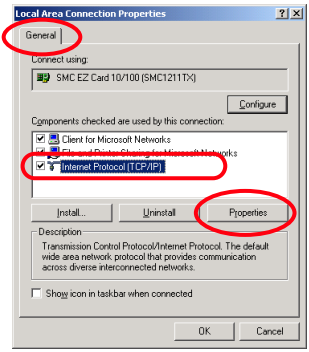
✎ This setting is not needed if the network does not provide the gateway (router).

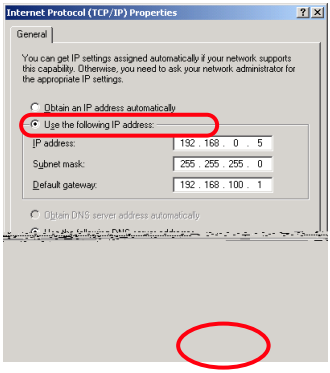
6 Click the **OK** button, the setting window will be closed and restart the computer.

Windows 2000/NT4.0

This example explains how to set the following network address.

IP Address	: 192.168.0.5
Subnet Mask	: 255.255.255.0
Gateway Address	: 192.168.100.1





1 Select the **Network and Dial-up Connections** menu from [Start] - [Settings] menu.

2 Click the **Local Area Connection** icon with right button of the mouse and then select the **Properties** menu from the popup menu. The right window will appear on the screen.

3 Select the **Internet Protocol(TCP/IP)***1 on the General tab of the "Local Area Connection Properties" dialog window and then press the **Properties** button.

4 On the "Internet Protocol (TCP/IP) Properties" dialog window, select the **Use the following IP address** button and then enter the IP Address*2 and Subnet mask.

5 Enter the Default gateway address.

✎ This setting is not needed if the network does not provide the gateway (router).

6 Click the **OK** button, the setting window will be closed.

✎ To change the configuration, you may need administrator privileges.

ENGLISH

*1 Select the "TCP/IP" item of the LAN card you use. If the "TCP/IP" item is not listed in the column, you need to install the TCP/IP protocol. For further information refer to the user's manual of your computer.

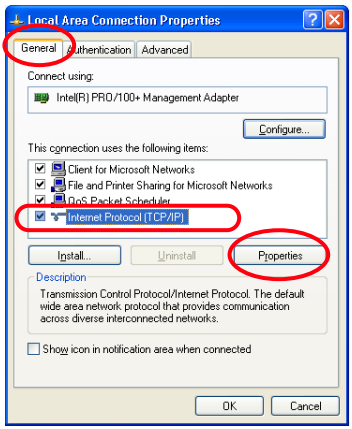
*2 If the network already has the TCP/IP protocol set, enter with the same IP network number for the IP address and Subnet mask.

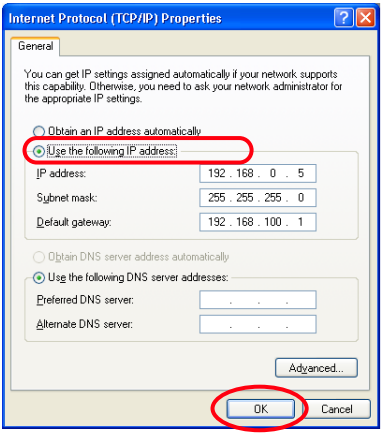
*3 There are some ways to set up the network depending on your computer's appearances.

Windows XP

This example explains how to set the following network address.

IP Address	: 192.168.0.5
Subnet Mask	: 255.255.255.0
Gateway Address	: 192.168.100.1





1 Select the **Control Panel** menu from the [Start] menu. Click the **Network and Internet Connection** and then click the **Network** on the control panel.

2 Click the **Local Area Connection** icon with right button of the mouse and then select the **Property** menu. The right window will appear on the screen.

3 Select the **General** tab on the "Local Area Connection Properties" dialog window. Select the **Internet Protocol(TCP/IP)***1 and then press the **Properties** button.

4 On the "Internet Protocol (TCP/IP) Properties" dialog window, select the **Use the following IP address** button and then enter the IP address*2 and Subnet mask.

5 Enter the Default gateway address.
✎ This setting is not needed if the network does not provide the gateway (router).

6 Click the **OK** button, the setting window will be closed.

*1 Select the "TCP/IP" item of the LAN card you use. If the "TCP/IP" item is not listed in the column, you need to install the TCP/IP protocol. For further information refer to the user's manual of your computer.

*2 If the network already has the TCP/IP protocol set, enter with the same IP network number for the IP address and Subnet mask.

*3 There are some ways to set up the network depending on your computer's appearances.

Macintosh

This example explains how to set the following network address.

IP Address	: 192.168.0.5
Subnet Mask	: 255.255.255.0
Gateway Address	: 192.168.100.1

1 Select **TCP/IP***1 menu from the [Apple] - [Control Panel] menu.

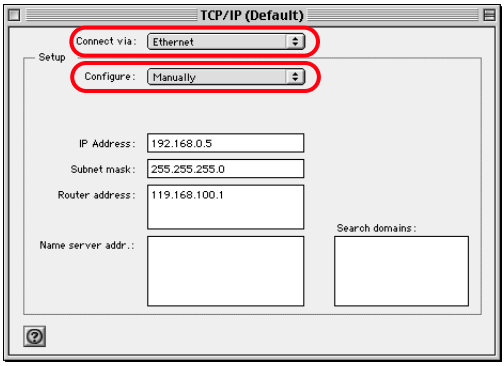
2 Select **Ethernet** from the "Connect via" pull down menu and **Manually** from the "Configure" pull down menu of the TCP/IP Control Panel.

3 Enter the IP Address*2 and Subnet Mask.

4 Enter the Router Address.

✎ This setting is not needed if the network does not provide the gateway (router).

5 Close the setting window and save the setting.



ENGLISH

*1 Select the "TCP/IP" item of the LAN card you use. If the "TCP/IP" item is not listed in the column, you need to install the TCP/IP protocol. For further information refer to the user's manual of your computer.

*2 If the network already has the TCP/IP protocol set, enter with the same IP network number for the IP address and Subnet mask.

Notice about system construction

For installation of multiple projectors into the same network with PJ-Net Organizer.

Do not install multiple projectors with PJ-Net Organizers that have their default network settings to the same network. The use of the PJ-Net Organizers which have the default IP address set to the same network settings will cause IP addresses to collide and create a malfunction. When you install multiple projectors into the same network, configure the network with the following steps.

1. Change the IP address from the default IP address. To change the IP address, use the network setting menu on the projector. Please see chapter "Network Configuration" on page 15 for further information.
2. Make sure that there is no network equipment set with the same IP address in the network, and then connect to the network.
3. When installing other projectors, follow the above steps to change the IP address and connect to the network.

In case of installing the projector with PJ-Net Organizer into the network constructed with the DHCP/BOOTP server.

This PJ-Net Organizer does not support the DHCP/BOOTP server. The static IP address must be configured by the manual. To use this product in this network environment, set it up so that the DHCP/BOOTP server does not assign the IP address configured to this product for another device on the network. Please consult your network administrator for further information.

2

Basic Setting and Operation

ENGLISH

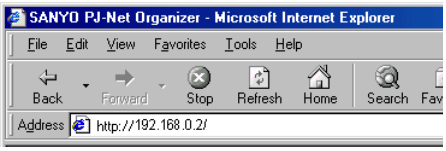
Basic Setting and Operation

This chapter describes basic operations and settings for controlling the projector via a network using this product. It is required that computer and projector are connected to the network and the network address be properly configured.

Login or logout the setting page of the projector

1 Enter the IP address

Launch the web browser installed in your computer, enter the IP address into the "Address" on the browser and the press the "Enter" key.



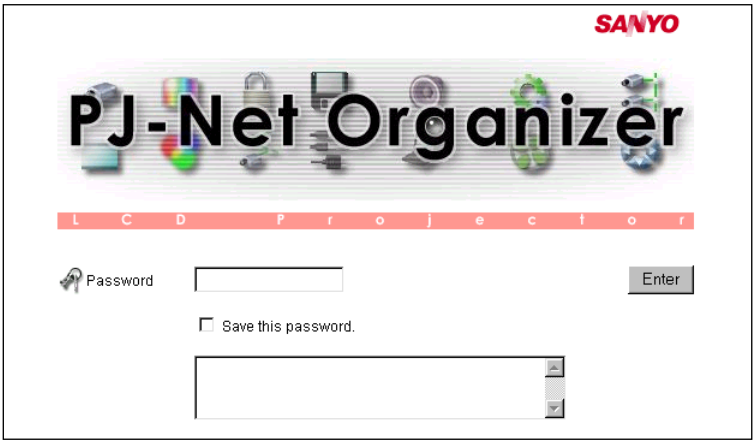
Enter the IP address that you configured in chapter "Network Configuration" on page 15. The default IP address is [192.168.0.2].

2 Login

The following login page appears on the browser. Type the password and press the **Enter** button. If you check the item "Save this password", you will automatically login* without entering the password for the next login.

[Note]

When accessing projector at first time or setting the no password [0000], the auto-login will be performed and the next main setting page is displayed.

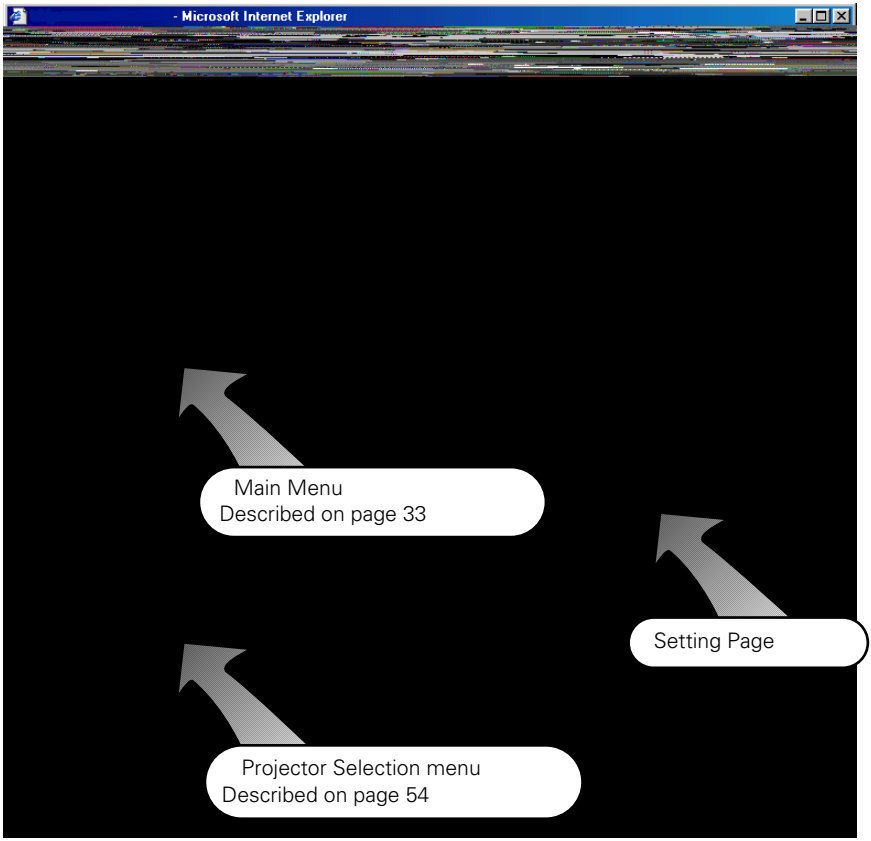


✎ The function of "Save this password" uses the cookies function and JavaScript function of the web browser. If you cannot automatically login even if the "Save this password " is checked, check your browser preference and change setting to "Accept all cookies" and "JavaScript Enable" if required. Please see chapter "Appendix: Web browser setting/Cookies enable, Active Script (JavaScript enable)" on page 64 for further information.

3 Display of main setting page

The following main setting page of the projector is displayed. Perform the various kinds of setting through this page. Click on the linked text to display the control and setting pages.

- ☛ The main menu which can be set up and control the projector appears on the left upper side of the page.
- ☛ The projectors connected to the network are listed on the left lower side of the page. It can be listed on this sub menu when the projector connected to the network is registered in the multi-control function. For further information, please see chapter "Control the Multi Projectors" on page 49.
- ☛ On the main page, the control and status items for selected menu are displayed. The "Power & Status" page is displayed as the default. This page indicates the power control and current status of the projector. For further information, please see chapter "Control the projector" on page 33.



4 Logout

Click on the **Log Out** linked text on the main menu.
The web browser will logout from the setting page and displays the login page automatically.

[Important]
If you check the "Save this password" item at the login page, the saved password will be cleared when logout is performed. In environments where the setting computer is used by several people, it is recommended for security reasons that personnel logout or not save the password at the login page.

Initial Settings

After installing this product onto the projector, perform the following basic initial setting.

Click on the **Initial Setting** on the main menu to display the initial setting page.
The Languages, Date/Time and Password can be set in this page. The model name of the projector on which this product is mounted is displayed on the page.

1 Language Setting

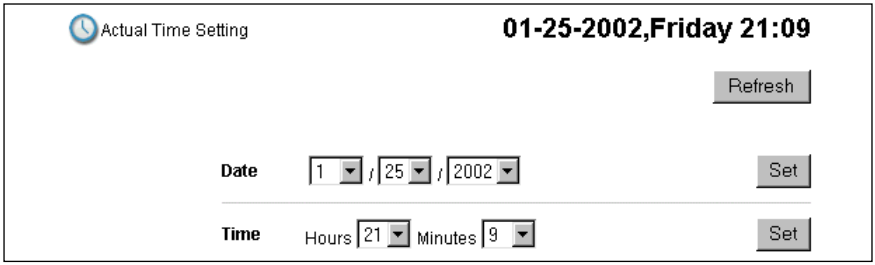
This setting is to select the display language of the web page. Select your language from the pull down menu button and then press the **Set** button. The selectable language is English or Japanese. You may find the unrecognized character text in the menu if the computer does not provide Japanese fonts.

[Note]
This language selection is realized by using the JavaScript function of the web browser. If the preference of the browser is set not to use the JavaScript, language selection function will not operate correctly. Please change your preference to use the JavaScript function.
There are various kind of ways to change this preference depending on the web browser's version and application. Please refer to chapter "Appendix: Web browser setting/Active Script (JavaScript enable)" on page 64.

⚠Caution

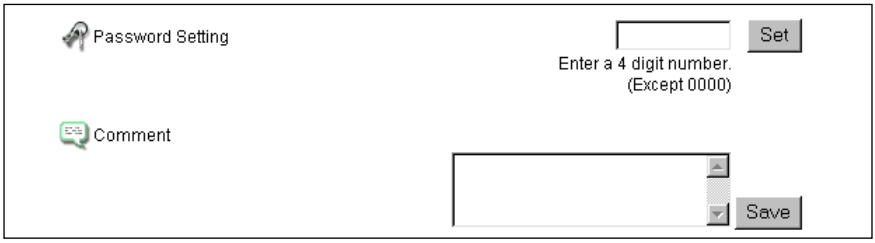
Use of Battery
This product provides a lithium battery. When the battery runs down, the clock and timer functions do not operate properly. Contact your local dealer for the replacement of battery. The replacement must be carried out by a qualified service personnel.

2 Date/Time Setting



Set present date and time by using the pull down menu buttons and press each **Set** button. Confirm that the date and time are set correctly.
The displayed date and time are not updated automatically, press the **Refresh** button to get the current date and time.

3 Password Setting

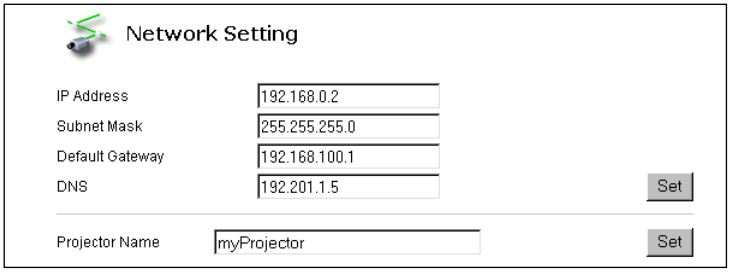


This page is to set the password to restrict the access from an unauthorized person through the network.
Enter the password onto the text box and press the **Set** button. The PJ-Net Organizer begins restarting and it takes about 40 seconds. Close (Quit) the web browser and access to the login page again in 40 seconds. This is to perform the login authentication firmly.
The default password [0000] means no password. You should change password from the default in normal use. When you connect the projector with this product to the network, you should set a password. Only a four-digit numeric number is valid characters for the password.
For use of comment text area, it is convenient to put a hint note to remind you the password or the installed location of the projector. This note will be indicated on the login page.

✎ If you forgot the password to the projector, you can check it by selecting the "Display" sub menu from the "Setting" menu on the projector. For further information, please see chapter "Password Setting" on page 17.

Network Configuration

Click on the **Network Setting** linked text on the main menu. The following setting page is displayed. This page is to set the IP Address, Subnet Mask, Default gateway, DNS (Domain Name Server) and projector name.



1 Configure the network

The IP address and Subnet Mask have been configured already in chapter "Installation". If you want to change them or configure default gateway*1 or DNS*2, perform them in this page. Enter an applicable address number onto each parameter and press the **Set** button.

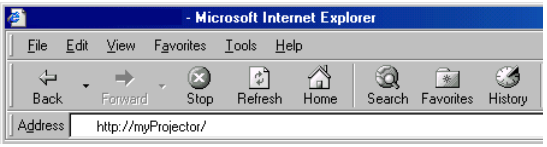
The PJ-Net Organizer begins restarting and it takes about 40 seconds. Close (Quit) the web browser and access to the login page again in 40 seconds.

✎ You must use the number specified by your administrator. The address must be entered as a group with four numbers split by a dot like [192.168.1.101].

2 Name the projector

You can name*3 the projector. By setting this name properly for the DNS server, the projector can be accessed by using this name instead of the IP address.

For further information, please consult your network administrator.



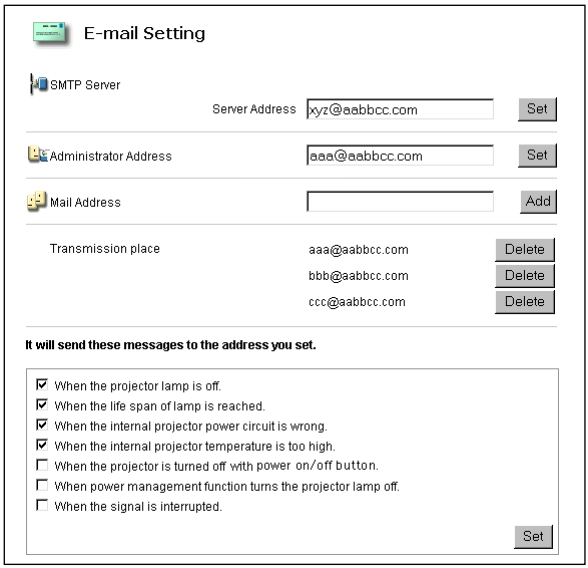
*1 Set [0.0.0.0] if the network does not provide the gateway (router).

*2 Set [0.0.0.0] if you do not use the function E-Mail alert.

*3 If you use the DNS server, register the host name registered to the DNS server as a projector name. You can access with this projector name from any computers in your network. If you do not use the DNS server, access with the assigned IP address to the projector.

E-mail Setting

This product has an E-mail function which can send an alert message to users or an administrator if it detects an abnormality on the projector or run out of the life span of the lamp. Click on the **E-Mail Setting** linked text on the main menu and follow the below steps.



1 SMTP Server*1

Type the address of SMTP server for E-mail and press the **Set** button.

2 Administrator Address

Type the E-mail address of administrator and press the **Set** button. This address is set to "Reply-To" address sent from the projector.

3 Registering and deleting E-mail addresses

Type the E-mail address to which an alert message is sent and press the **Add** button. The registered addresses are listed on the below column as the "Mail To" address. To delete the registered addresses, press the **Delete** button next to the E-mail address you want to delete.

4 Condition selection for sending alert message

Check the condition items under which alert messages will be sent and press the **Set** button.

Please refer to chapter "Examples :Type and contents of alert messages" described on next page.

*1 The SMTP server is a server for sending E-Mail. Please contact your network administrator to have this SMTP server address.

✐ To use the E-Mail function, it must be set the DNS address on the Network Setting page correctly.

✐ You cannot use this E-mail function if the DNS server and SMTP server cannot be used in your network environment. If the SMTP server is located in your LAN (Local Area network), the address set to SMTP server should be specified the in SMTP server located in your LAN. The server located outside of your LAN may not be available for security reason. For further information please contact your network administrator.

✐ Up to 10 e-mail addresses can be registered.

ENGLISH

Examples: Type and contents of alert mail

When the projector has an abnormality, the following alert messages are sent to the registered E-mail address according to your selected condition. Administrator or user can take an efficient action quickly by receiving this massage. This is very useful to maintain and service the projector.
The following are examples of received messages.

● When the internal temperature is too high:

TITLE: Message from projector
01-01-2001 00:59
Projector Model Name: XP41/XP46
TCP/IP: 192.168.0.2 Projector Name: myProjector

It sends you following massage.

*The Projector lamp is turned off, because internal projector temperature is too high.
Wait Temperature Warning Indicator turned off,turn the Projector on again.
If the Indicator continues to flash,check the air filter for dust accumulation.

[A] 36.5 Degree [B] 46.5 Degree [C] 58.2 Degree
Temperature of Sensor C is too high.

✎ The PJ-Net Organizer let users know the information which thermal sensor [A], [B] or [C] inside the projector detected the abnormal temperature risen and so the projector was turned off. Please refer to page 35 for the location of the sensors [A], [B] and [C], and temperature. Also see the owner's manual of the projector for further details.

● When the internal power circuit is failed:

TITLE: Message from projector
01-01-2001 00:58
Projector Model Name: XP41/XP46
TCP/IP: 192.168.0.2 Projector Name: myProjector

It sends you following massage.

*The Projector lamp was turned off, because projector power circuit failed.
Unplug the projector from AC outlet and ask servicing to qualified service personnel.

✎ The Projector lamp was turned off, because the projector power circuit failed. Unplug the projector from AC outlet and ask servicing to a qualified service personnel.

● When the life span of lamp is reached:

TITLE: Message from projector
01-01-2001 00:58
Projector Model Name: XP41/XP46
TCP/IP: 192.068.0.2 Projector Name: myProjector

It sends you following massage.

*The life span of lamp is reached.

✎ Replace it with a new lamp immediately and reset the lamp counter. If the projector is used without reset the lamp counter, the alert mail is sent to users in every power-on of the projector. This alert mail will not be sent when unchecking the mail sending condition "When the life span of lamp is reached".

3

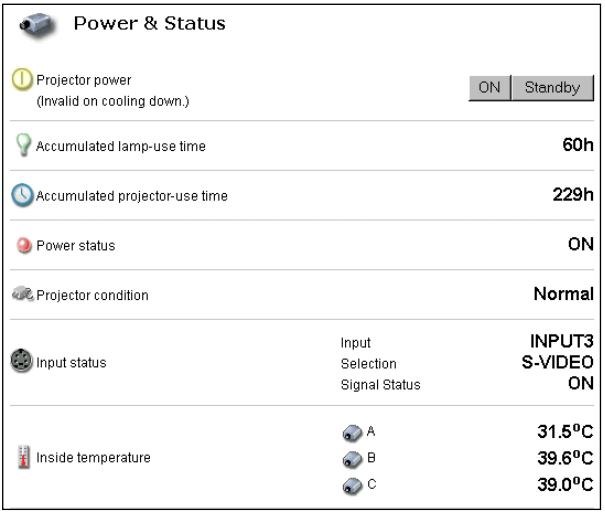
Controlling the Projector

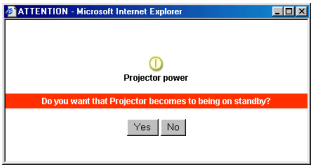
ENGLISH

Power on/off the projector

Click on the **Power & Status** linked text on the main menu. The control page will be displayed.

By Pressing the **On** or **Standby** button on the page, the power of the projector can be controlled. When you press the **Standby** button, another confirmation popup window*1 will appear, and then press the **Yes** button if it is set to standby.





[Note]

*1 This popup window is realized by using the JavaScript function of web browser. If the preference of the browser is set not to use JavaScript, the projector will be into the standby mode without displaying the popup window for confirmation. Please change your preference to use the JavaScript function.
There are various kind of ways to change this preference depending on the web browser's version and application. Please refer to chapter "Appendix: Web browser setting/Active Script (JavaScript enable)" on page 64

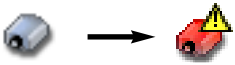
✎ The projector is not turned on for about 90 seconds after switching into the standby mode. After the power status indicator on the control page changes from "On Cooling down" to "OFF", then try to turn on the projector with **On** button.

✎ The web browser checks and updates projector's condition every 20 seconds automatically.

✎ During the standby and within 1 minute after turned on the projector, the temperature at sensors [A], [B] and [C] are not indicated on the page.

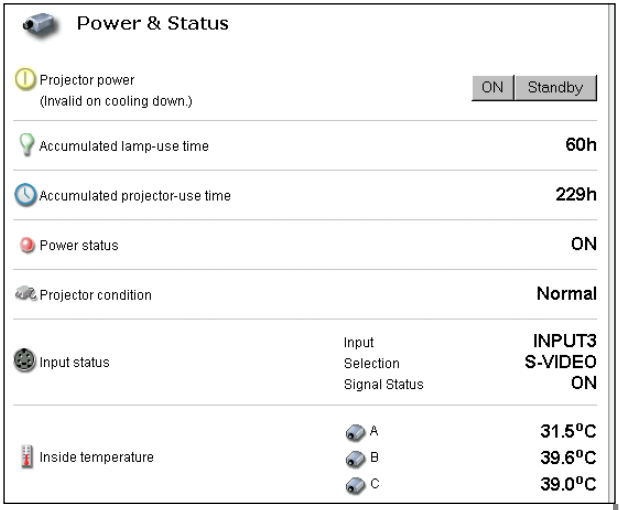
Check the status of projector

In the "Power & Status" page, you can control the projector power, and also you can check the status of the projector as follows:

Items	Description
Accumulated lamp-use time	It displays in 1 hour units (h) When resetting the lamp counter, this time will be reset to 0.
Accumulated projector-use time	It displays the accumulated used time in an hour unit (h). This cannot be reset.
Power status	It displays the status of the lamp, OFF, On starting up, ON, On cooling down or On power management operating.
Projector condition	It displays the condition of the projector's power, Normal, Power Failure, Temperature Error, Normal after temperature over.
Input status	It displays the selected input mode, signal mode and signal status.
Internal temperature	It displays the temperature at internal thermal sensors in degrees. The icons [A], [B] and [C] on the page represent the thermal sensors located in the projector. If the temperature at one of those sensors exceeds specified temperature, the appearance of its icon changes to the following alert icon to let users know about the abnormal temperature. Please check surrounding temperature of the projector, check for clogged air filters and check area surrounding the ventilation fans. 

The icons [A], [B] and [C] represent the sensors located in the projector as follows:
[A]: Surrounding temperature of the projector *
[B]: Surrounding temperature of the lamp
[C]: Surrounding temperature of the panels

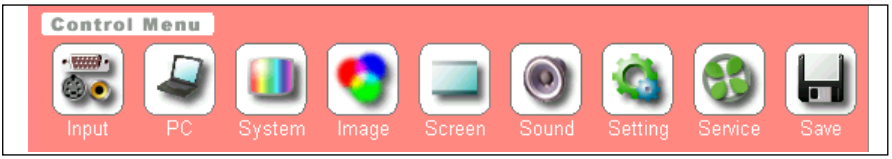
*



Control the projector

Click on the **Control** linked text on the main menu. The control menu will be displayed on the lower side of the page. When you click each control icon, the control page is displayed according to the control menu you selected.

✐ Please see the owner's manual of the projector to have the further information of each control item.



✐ The control page displays valid control items depending on the selected input mode, signal or functions of the projector you use, therefore, there may be different controls between the described items and actual control items on the page display.

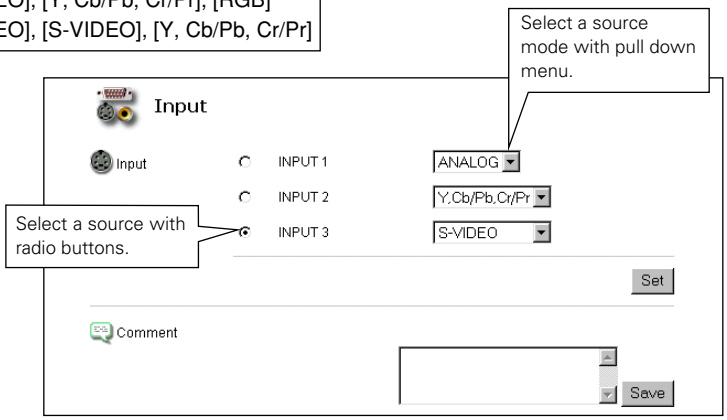
✐ When the projector is in standby, only the timer on the setting menu is effective; others are inactive.

Input

Select the input mode and source to the projector in this page. Select the input source with the radio button, and input source mode with the pull down menu. Then set the selected input source and source mode by pressing the **Set** button. The available selections are listed below.

You can save your note regarding to the input mode and source in the comment text area. Press the **Save** button to save.

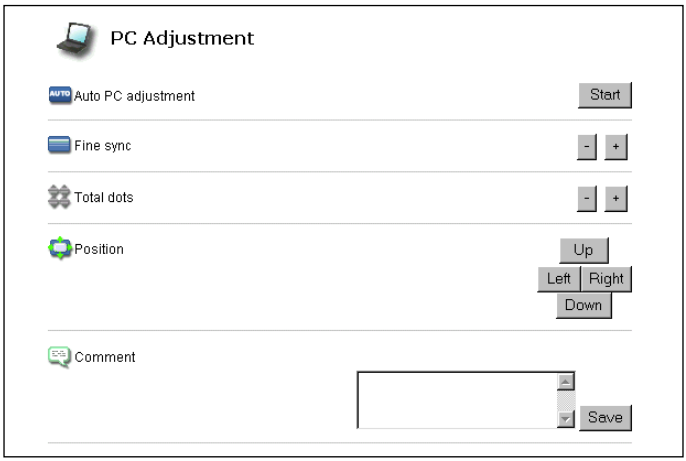
Input	Input Signal
INPUT1	[ANALOG], [DIGITAL]
INPUT2	[VIDEO], [Y, Cb/Pb, Cr/Pr], [RGB]
INPUT3	[VIDEO], [S-VIDEO], [Y, Cb/Pb, Cr/Pr]



PC Adjustment

This function is to adjust the signal from the computer connected to the projector to obtain the proper picture image on the screen. The available parameters and operation are listed below.

Adjustment Items	Operation
Auto PC adjustment	Press the **Start** button to start automatic adjustment.
Fine sync	Press the **-** or **+** button repeatedly to adjust the fine sync.
Total dots	Press the **-** or **+** button repeatedly to adjust the number of total dots in the horizontal period.
Position	Press the **Up**, **Down**, **Left** or **Right** button repeatedly to adjust the picture position.
Comment	Type the comment in the text area and then press the **Save** button.



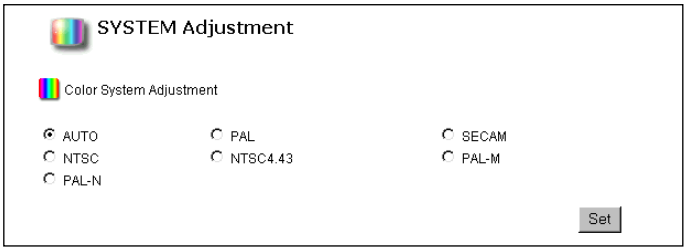
✎ These parameters will appear only when the analog computer input mode is selected.

SYSTEM Adjustment

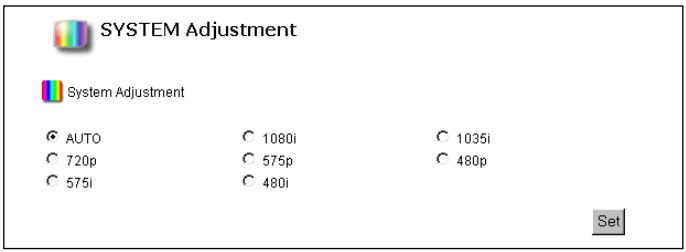
This function is to select the color system of video signal or scanning system of component signal input to the projector. Select a system with the radio buttons to match the color system or scanning system of input source, and then press the **Set** button. The available systems and operation are listed below.

Adjustment items	Operation
Color system (VIDEO/S-VIDEO Input)	AUTO: Automatically detect the color system of input signal. PAL, SECAM, NTSC, NTSC4.43, PAL-M, PAL-N: Manually select the color system of input signal.
Scanning system ((Y, Cb/Pb, Cr/Pr Input)	AUTO: Automatically detect the scanning system of input signal. 1080i, 1035i, 720p, 575p, 480p, 575i, 480i: Manually select the scanning system of input signal.

Available selection when the VIDEO/S-VIDEO input



Available selection when the Y, Cb/Pb, Cr/Pr input



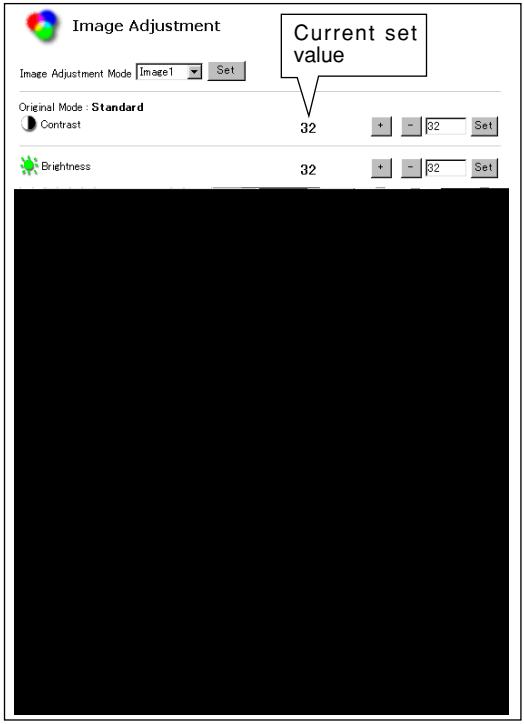
✐ These selections will not appear when the source mode is selected to the computer mode.

Image Adjustment

This function is to adjust the projected picture image and set the image mode. For selection of image mode, select desired image mode among the "Standard", "Real", "Cinema", "Image1", "Image2", Image3" and "Image4" with the "Image Adjustment Mode" pull down button and then press the **Set** button. The setting items are switched automatically according to selected input mode, computer or video input. To adjust the controls, press the **+** or **-** buttons to increase or decrease the value, or enter the value directly onto the text area of the control and then press **Set** button. The adjustment items and operation are listed below. The value next to each control represent the current control value and status.

The mode "Image1" to "Image4" can be stored as your preferred image mode through "Save Adjustment" item located on lower part of the page. Select an image number from the pull down menu button and then press the **Save** button. To cancel your change, press the **Return** button.

The "Original Mode" is to indicate which image mode are applied to the user preset modes "Image1" to "Image4".



* The displayed adjustment items may differ from the actual depending on the functions of projector you use.

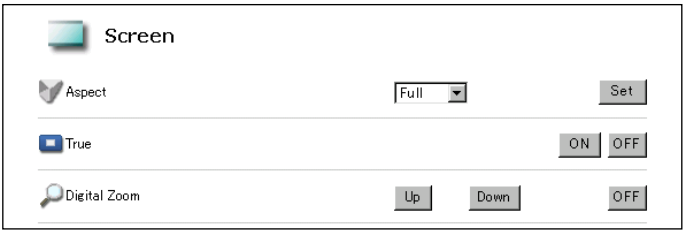
Adjustment items	Operation
Image adjustment mode	Select image mode among the Standard, Real **, Cinema*, Image1 to Image4 with pull down button menu . Image1 to 4 are user preset mode.
Adjustment items	Contrast, Brightness, Sharpness*, Gamma, White Balance, Color Temperature, Tint*, Color*, Noise Reduction*, Progressive*, Auto Picture Control * Controls for video input, ** Controls for computer input
Comment	Type the comment in the text area and press the **Save** button.

✎ Range of control value is as follows: Sharpness: 0 to 31, Gamma: 0 to 15, others: 0 to 63

Screen Adjustment

This function is to adjust the screen mode of the projector. The setting items are switched automatically according to selected input mode, computer or video input. The adjustment items and operation are listed below.

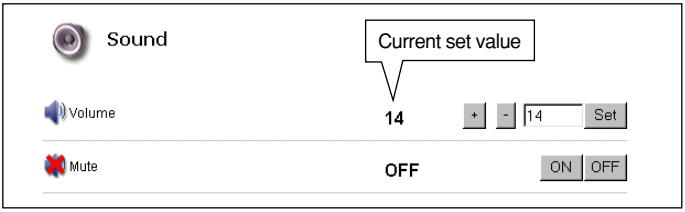
Adjustment items	Operation
Aspect	Used to change the screen mode. Select the screen mode and press the **Set** button. * Items of the mode selection may appear with the radio button or the pull down menu depending on the function of the projector you use. The options “Normal”, “Wide”, “Fill”, “Zoom” and “Zoom Wide” are prepared for the screen mode and they are decided by the input signal and the function of the projector you use.
True*	Press the **ON** or **OFF** button to select the projected image mode.
Digital Zoom*	Expand or compress the projected image by pressing the **Up** or **Down** button repeatedly. To restore the projected image, press the **OFF** button. * These items are only available in the computer input mode.



Sound Adjustment

This function is to adjust the sound of the projector. The adjustment items and operation are listed below. The value next to each control represents the current control value or status.

Adjustment items	Operation
Volume	Press the **+** or **-** button to increase or decrease the sound volume, or enter the value* directly onto the text area of the control and then press the **Set** button.
Mute	To cut off or restore the sound by pressing the **ON** or **OFF** button. The mute will be set **OFF** if the volume is changed.



✎ The volume adjustment range is 0 to 63.

Setting

This function is to set up the projector. The value next to each setting represents the current status or mode. The setting items and operation are listed on the next page.

ENGLISH

The setting items and their operations are listed below.

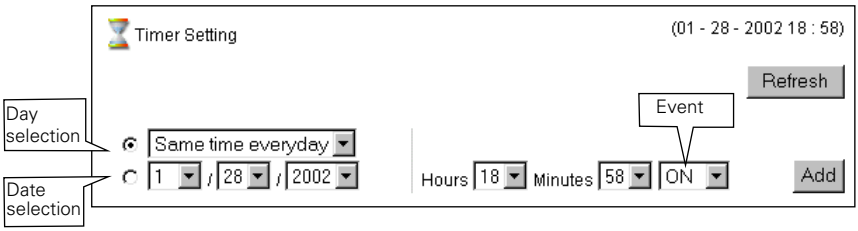
Setting items	Operation
Language	Select the language used in the on-screen menu of the projector. Select your desired language with the pull down menu button, and then press the **Set** button.
Keystone	Correct the distortion of the projected image with the **Left**, **Right**, **Up** and **Down** buttons. To cancel the keystone correction, press the **OFF** button.
Blue back	When this setting is **ON**, the projector displays a blue image when no input signal is selected.
Display	This setting is to select whether to display the on-screen display menu.
Logo	When this setting is **ON**, the projector displays a logo when starting up.
Ceiling	When this setting is **ON**, the picture is reversed top/bottom and left/right.
Rear	When this setting is **ON** the picture is reversed left/right.
No Show	When this setting is **ON** the picture on the screen is black out.
Freeze	When this setting is **ON**, the picture on the screen is frozen.
Power Management	When this setting is **ON**, the projector will automatically turn the lamp off if the input signal is interrupted and no control button is pressed for 5 minutes and 30 seconds. Set **OFF** to disable this function.
On Start	When this setting is **ON**, the projector is automatically turned on just by connecting the AC power cord to a wall outlet.
Timer Setting	Turns the projector on or off at a preselected day/date and time. Please see chapter [Timer Setting] on the next page for more information.
Remote Control	Either of two different remote control codes can be set; factory-set normal code (Code1) and secondary code (Code2).
Lamp Counter Reset	This is used to reset the lamp-use time. When replacing the lamp, reset the lamp-use time by pressing the **Yes** button. Another popup window*1 will appear for confirmation and then press the **Yes** button to reset.
Lamp Mode*	This is used to switch the lamp mode. When **Eco** is selected, the projector reduces the brightness and sets into the low power consumption mode. * Some projectors may not have this menu.
P-TIMER	When **P-TIMER** button is pressed, the timer display "00:00" appears on the screen and timer starts to count the time (00:00 ~ 59:59). To stop the time counting, press **P-TIMER** button and press this button again to cancel the P-TIMER function. The status is changed as **OFF** -> **STOP** -> **ON** when this button is pressed repeatedly.

[Note]

*1 This popup window is realized by using the JavaScript function of web browser. If the preference of the browser is set not to use the JavaScript, the lamp counter is reset immediately without displaying the popup window for confirmation. To display the confirmation window, please change your preference to use the JavaScript function.
There are various kind of ways to change this preference depending on the web browser's version and application. Please refer to chapter "Appendix: Web browser setting/Active Script (JavaScript enable)" on page 64.

How to set the Timer

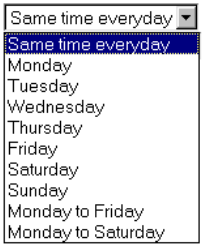
This function is used to turn the projector off or on at a preselected day/date and time. Follow the below steps for setting.



1 Select a day or date

To set the timer event at same time everyday,
select "day" entry with radio button and then select desired day with the pull down menu button. The selectable days are as follows:

- Same time everyday **- Every week (a day from Monday to Sunday)**
- Every week (Monday to Friday) **- Every week (Monday to Saturday)**



To set the timer event on specified date,
select "date" entry with radio button and then select desired date with the pull down menu buttons, Month/Date/Year.

2 Select time

Select time with the pull down menu buttons, Hours/Minutes.

3 Select an event "ON" or "OFF".

Select an event **ON** or **OFF** with the pull down menu button to turn on or off the projector.

4 Register an event

Press the **Add** button to register the set timer event. Repeat steps 1 to 4 for another timer event setting. Examples of valid timer events are shown below.

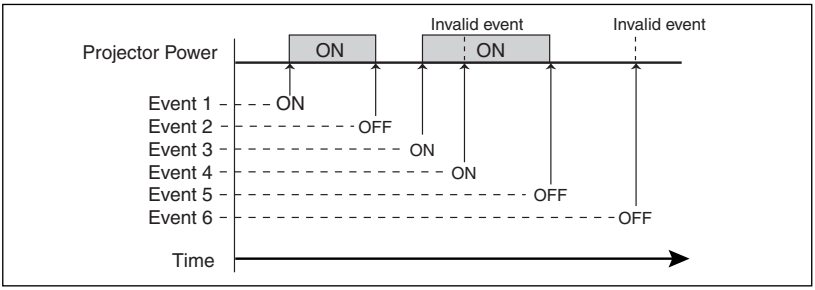
ENGLISH

Getting the current time

The displayed time is the value set when the setting page was displayed. This time value is not updated automatically. To update the display time press the **Refresh** button.

Notes on timer setting

✎ Up to 10 timer events can be registered. Timer events always operate according to the next valid event depending on the projector's power status. In the example below, event 3 turns on the projector so next event 4 (also turning on projector) will not be effective because the projector is already turned on. Similarly, when the projector is turned off by event 5, event 6 OFF will not be effective in turning it off again. But these secondary events (event 4 and event 6) will become effective if a person turns off the projector (after event 3 and before event 4) or turns on the projector (after event 5 and before event 6).



✎ When the timer events are set at the same time, the last event set will override the previous events. For example, if there is an event like "On at 8:00 everyday" and then new event is set like "Off at 8:00 everyday", only the last setting event is effective.

✎ When the timer event **ON** occurs during cooling down period, this is invalid event because of the projector cannot be turned on during this cooling down period.

Cancel the timer

To cancel the timer event press the **Delete** button next to the event you wish to delete. Please confirm that the event is deleted from the list.

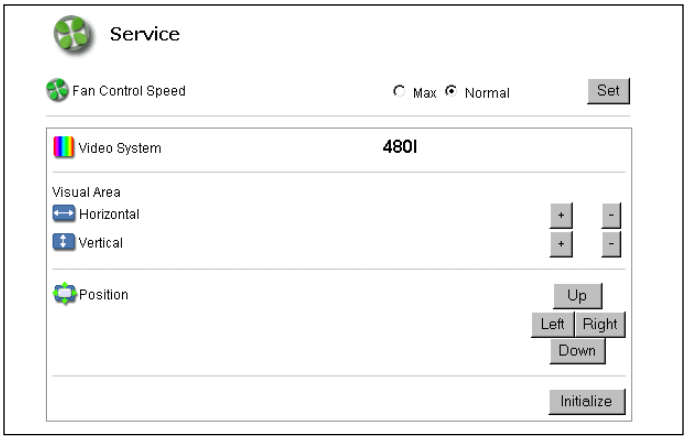
✎ The timer operates by using the clock function provided in this product. Before setting the timer, please confirm that the current date and time are set correctly. Timer and clock functions are functioning using a lithium battery provided in this product. When the battery runs down, the clock and timer functions will not operate correctly. Consult your local dealer for the replacement of battery. The replacement must be carried out by a qualified service personnel.

Service

This function sets parameters for service items of the projector. As these service items are used mainly for maintenance, please use the default setting unless a change is needed. The adjustments and operation are listed below. To restore to default setting, press the **Initialize** button.

Adjustments	Operation
Fan Control Speed	Select the **Max** or **Normal** with radio buttons and then press the **Set** button.
Video System*	It displays the current selected video system. The video systems and displays are listed below.
Horizontal*	Adjust the valid horizontal width with the **+** and **-** buttons.
Vertical*	Adjust the valid vertical height with the **+** and **-** buttons.
Position*	Adjust the screen position with the **Up**, **Down**, **Left** and **Right** buttons.

* These items are available in the video input mode for models PLC-XP41 series and PLC-XP46 series only.



- The indication of video system in this page is displayed as follows.

Video System	Input Signal
480I	NTSC [VIDEO], [S-VIDEO], [Y, Cb/Pb, Cr/Pr]
480P	NTSC [Y, Cb/Pb, Cr/Pr]
575I	PAL [VIDEO], [S-VIDEO], [Y, Cb/Pb, Cr/Pr]
575P	PAL [Y, Cb/Pb, Cr/Pr]
720P	[Y, Pb, Pr]
1035I	[Y, Pb, Pr]
1080I	[Y, Pb, Pr]

✎ The adjustments of Visual Area and Position are effective only for video input mode. These adjustment values are stored with each video system mode as the above.

Save Actual Adjustment

This function is to save and load the control values of the projector. The storable control items are Input, PC, System, Image and Screen controls, and these control items differ from each selected input mode and functions of the projector you use.

1 Adjust and set the controls

Set the controls properly according to the selected source. (see pages 36-40 for further adjustment)

2 Display the current setting information

Click the **Save** icon from the control menu. The current setting information is displayed on the page at the right.

3 Name the current setting

Scroll down and display the item **Save Adjustment**. Select your desired set number (set1~ set10) with the pull down menu button. Name this set number like "DVD Player No.3" onto the **Memo** text area.

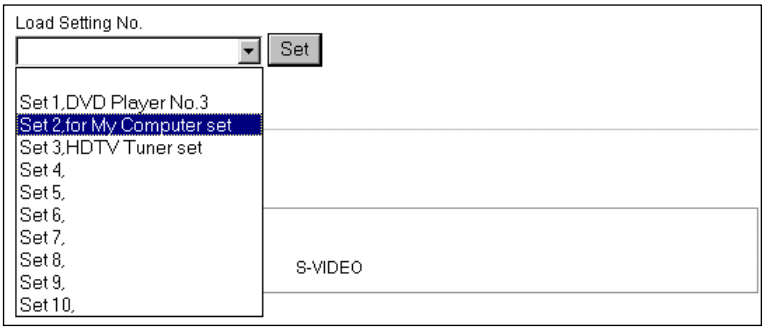
4 Save the current setting

Press the **Save** button to store the current setting and name into the selected set number.

✎ You can store up to 10 sets of controls.

To load the control set

Display the **Load Setting No.** on upper part of the page. Select your desired set number with the pull down menu button and then press the **Set** button. The setting values of the selected set number are applied to the current settings.



Example of setting

Control the projector's menu

Click on the **Display Menu** on the main menu. The following menu control page is displayed. This page is to control the on-screen display menu of the projector. The control items and their functions are listed below.

Control items	Operation
Display Menu	To switch the on-screen display menu on or off by pressing the **ON** or **OFF** button. The same operation with the **MENU** button on the projector and remote control handset.
Cursor	Used to select an item or adjust value in on-screen menu by pressing the **Up**, **Down**, **Left** and **Right** button. The same operation with the pointers on the projector and remote control handset. Used to execute the item selected by pressing the **Set** button. The same operation with the **SELECT** button on the projector and remote control handset.

4

Controlling the Multi-Projectors

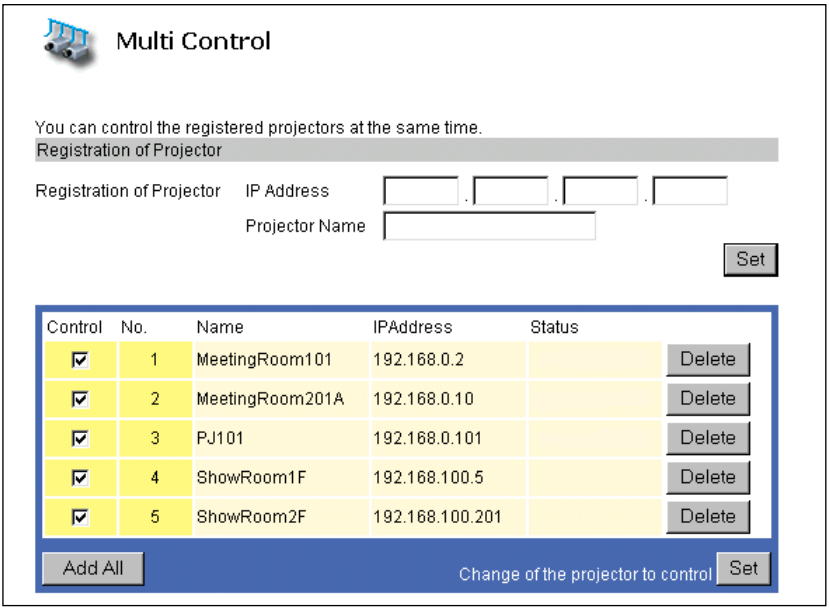
ENGLISH

Multi-Control

This function enables control of multiple projectors equipped with the PJ-Net Organizers that are connected to the network at the same time. Click on the **Multi Control** linked text on the main menu to display the control page.

Note:

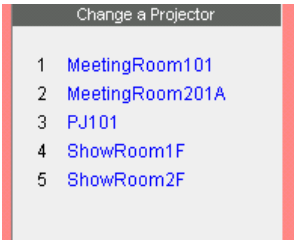
To control the multiple projectors, each projector must have the same password.



Register IP address and projector name

Enter the IP address of the projector onto the text box. Name the projector name* if required and then press the **Set** button to register.

After the registration, the IP address and projector name are listed on the page. At the same time, your registered projector name is listed on the sub-menu "Change a Projector"*[1]. For further information, see chapter "Selection of another projector" on page 54.



* Normally, the projector in the network is recognized with the IP address. This product allows you to name the projector instead of the IP address. By registering the projector's nickname like "MeetingRoom101", it can be managed and recognized easily. If you use the DNS server, register the host name registered to the DNS server as projector name. For further information please consult your network administrator.
If you do not register the projector name, the IP address is listed on the sub menu "Change a Projector".

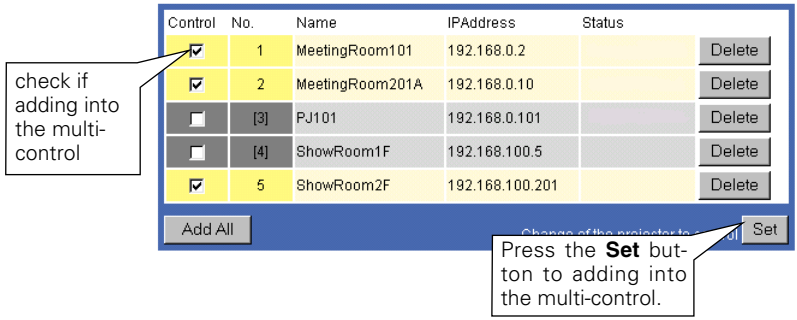
[Note]

*1 If the JavaScript setting of the web browser is set "JavaScript Disable", The registered projector name will not be listed on the Change a Projector" sub menu, Please change the JavaScript setting. See chapter "Web browser setting/Active Script (JavaScript enable)" on page 64 for further instructions.

* If you do not use the projector name, a word "None" will be displayed in the Name column.

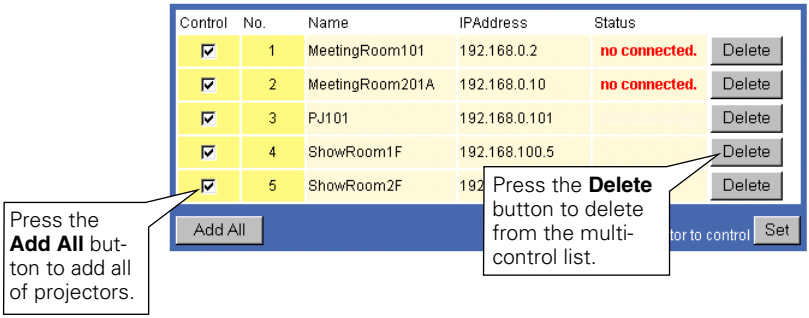
Exclude/Add the projectors from/into the multi-control

To add or exclude projectors from multi-control, check or uncheck the "Control" check boxes for your desired projectors and then press the **Set** button. The gray background color shows that the projector is excluded from multi-control.



Add all of listed projectors into multi-control

To add all of listed projectors into the multi-control, press the **Add All** button. The status of the registered projectors are indicated on the column "Status". For further description of "Status" , see page 53.



Delete from the multi-control list

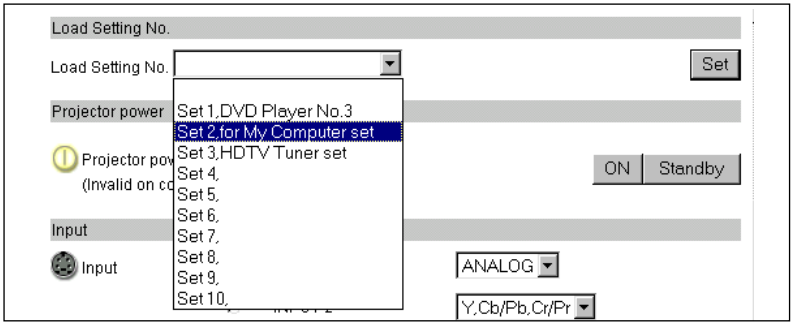
To delete the registered projector from the multi-control list, press the **Delete** button.

✎ If you not register the projector name, the word "None" is displayed on the projector name column.

✎ You can register the projectors up to 100 sets for the multi-control.

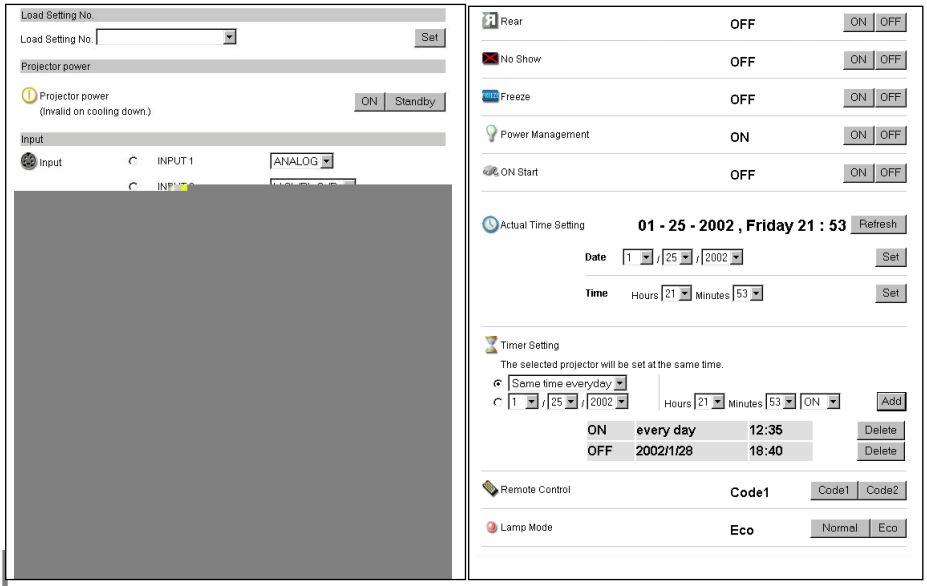
Load and apply the setting value

The control sets saved for each projector (p. 46) can be used while the multi-controlled projectors function is being used. Select a setting number from the item **Load Setting No.** with the pull down menu button and then press the **Set** button. The control values stored with selected set number for each projector will be applied to the individual projector assigned to that set. The control values will not be applied to all of the projectors under multi-control.



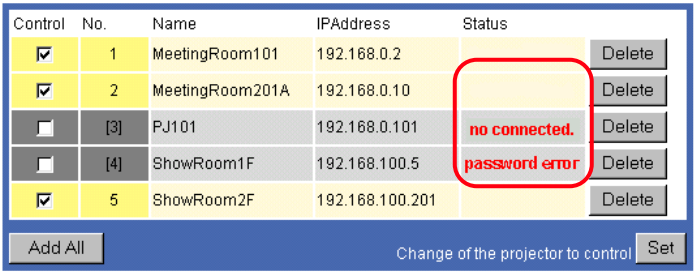
Control multi-projectors at the same time

The valid controls are shown below. Please refer to chapter "Control the Projector" on page 33 for further control and description. When the control button or setting button is pressed, the registered projectors for the multi-control are controlled at the same time. * These control items differ from each selected input mode and functions of the projector you use.



Status

If some of the registered projectors are deactivated by some means (such as disconnecting the power source, disconnecting the LAN cable, disconnecting from the network), control changes will continue to be effective for the projectors that are still activated. At the same time, the deactivated projectors are excluded from the multi-control, and they will be displayed with gray background color as shown below. The status of the registered projectors are indicated in the "Status" column. See the table below for status indications.



Status	Description
(none)	Connected correctly
no connected	It is not connected to the network. Please check the connection and network configuration of this projector.
password error	The login password is incorrect. The password for the multi-controlled projectors must be the same. Change password of this projector to the common password.

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- If the multi-controlled projector is in the standby mode, any change is not effective except timer setting.
- It is recommended that a specified projector should be chosen for setting when you use this multi-control function. The control for the multi-controlled projectors will become too complicated operation if this function is used for each projector.
- If the registered projector is not connected to the network, it will take some time to complete the multi-control operation because of waiting for the response from each registered projector.

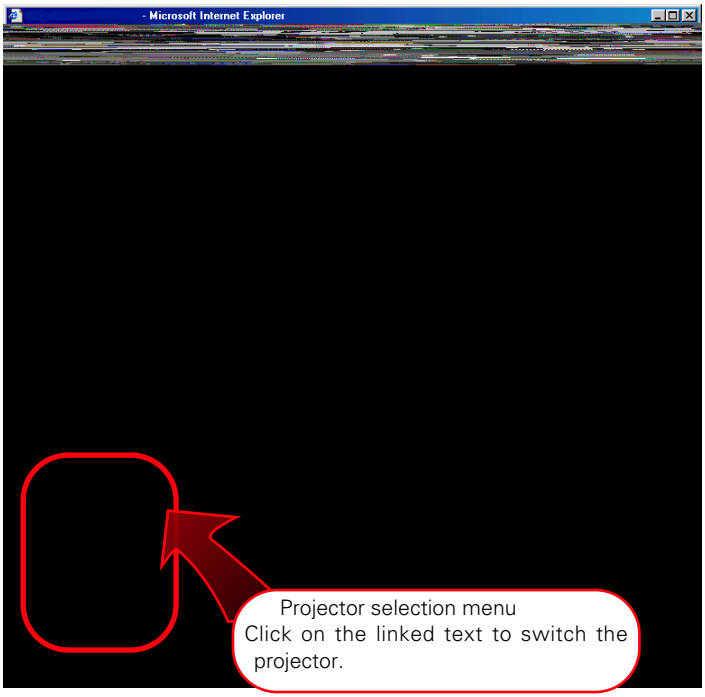
Selection of another projector

When you register the projectors for the multi-control, the IP addresses of the registered projectors are listed on the "Change a Projector" menu on the lower left side of the page. If each projector has a name, the projector name is indicated instead of the IP address. To register the projector name, see chapter "Except/Add the projectors from/into the multi-control" on page 51.

1 To switch the projector to control, click on the linked text of IP address or projector name.

2 The login page for the selected projector is displayed with a new window and then enter the password for this projector and login.

You can control and set up this projector.



5

Controlling External Equipment

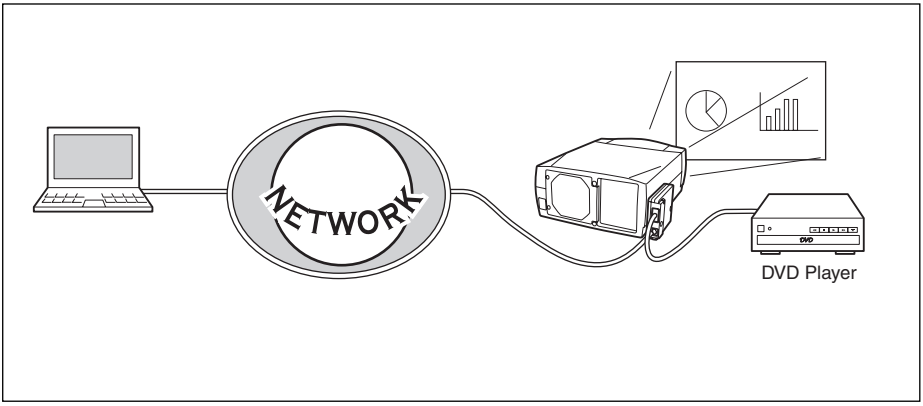
ENGLISH

Controlling External Equipment

This product provides with a serial control port (RS-232C) to control the external equipment which has an RC-232C port. This function allows external equipment to be controlled by the computer through the network. Before connecting the external equipment, perform the setting "Serial port setting" on the next page.

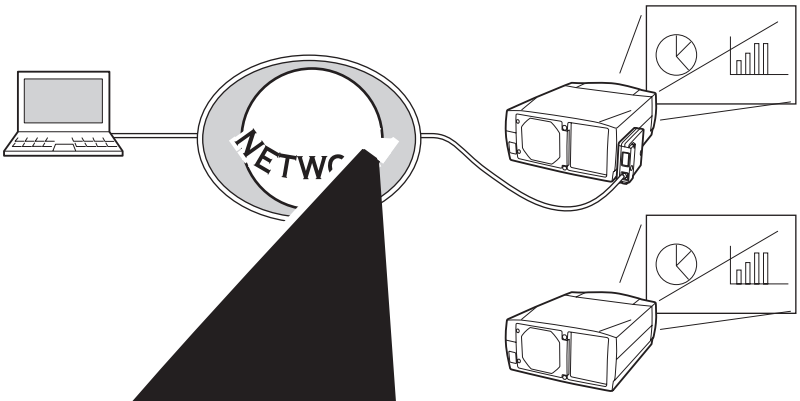
Control Example 1

Control AV equipment through network



Control Example 2

Control a projector which is not on the network function through network.

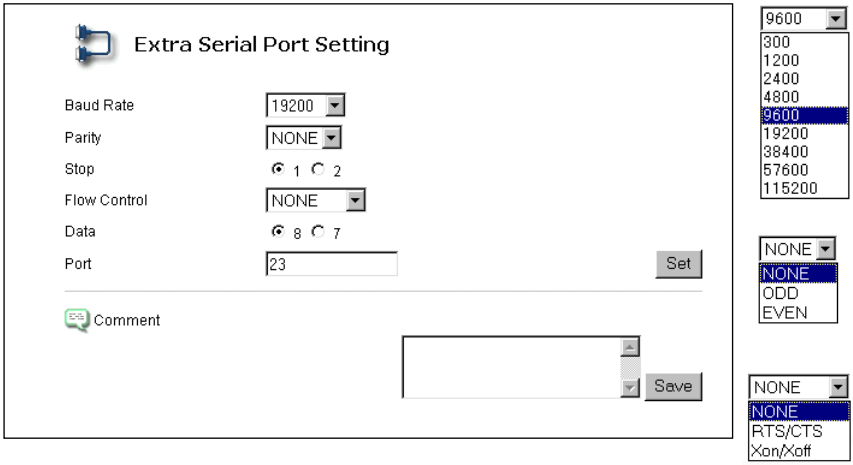


✎ Exclusive external equipment is required. This product does not pro ult your local dealer.

✎ Ther ormal and Reverse type. Usually, when connecting r a computer, use Reverse type of serial cable. W al type.

Serial port setting

Set up the extra serial port of this product. Click on the **Extra Serial Port Setting** linked text on the main menu and the following setting page will be displayed. To communicate with external equipment correctly, software communication conditions must be set to the same values as that the connected equipment is using. After fixing the setting, press the **Set** button*1. Enter your note into the comment column and press the **Save** button.



Setting Items	Description
Baud Rate	Communication speed for serial port, select with pull down menu button.
Parity	Parity check, the ways for errors detecting of transferred data.
Stop	Stop bit, indicates the end of communication.
Flow Control	Ways for communication flow.
Data	Indicates the length of data.
Port	Indicates the port number of TCP/IP. The default number is 23. Use the same port number specified by application. There are some reserved port number*2. If one of those port numbers is used, the alert dialog window will appear and let you know that it is an invalid port number.

*1 This product will logout and restart automatically when the port number is changed and it takes about 40 seconds.

*2 The reserved port numbers are http (80), ftp (21), telnet (23), etc.

Use of Telnet

The following is a control example of external equipment connected to this product by using the telnet application*1 installed on your computer. The telnet application is needed to use commands*2 which controls the external equipment.

Preparation

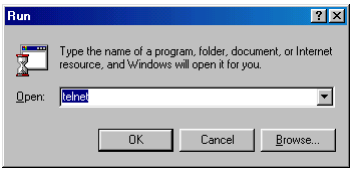
1 Disconnect AC plug from the projector and connect an external equipment to the extra serial port with an RS-232C serial cable.
2 Turn the projector and external equipment on.
3 Display the "Extra Serial Port Setting" page with the web browser. (refer to page 57).
4 Change the serial port setting to be the same communication condition as the connected external equipment and then press the **Set** button.
The following example setting is for our projector communication condition. When controlling our projector set as follows:

Baud rate	19200
Parity	NONE
Stop	1
Flow Control	NONE
Data	8
Port	23

Control

(For example, in case of using the Telnet application in the Windows 98.)

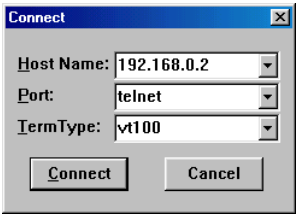
1 Select the **Run...** submenu from the **Start** menu on the computer. Type "telnet" onto the **Open** text area on the displayed window and press the **OK** button.



2 Launch the telnet application and the following window will be displayed. Select the **Remote System** from the **Connect** pulldown menu.

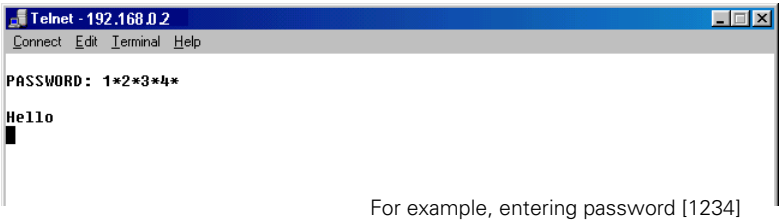
*1 Further instructions about the telnet application, please see the on-line guide on your computer. Macintosh does not provide the telnet application.
*2 The commands are defined by each product independently, so please consult the manufacturer or sales dealer for further information of the commands.

3 The following window will appear. Type as follows and then press the **Connect** button.



Host name : 192.168.0.2
(type projector IP address)
Port : telnet or 23
Terminal type : vt100

4 When communication is established, the word "PASSWORD:" appears on the window. Type the login password* for the projector and then press the "Enter" key on the keyboard. If you do not register the login password, just press the "Enter" key. When the word "Hello" is replied, login has been successful.



For example, entering password [1234]

5 Type the commands from the key board to control the external equipment and then enter the "Enter" key for termination. For example, type "C00" and enter the "Enter" key. The extra projector will be turned on. The "C00" is a command to turn the projector on.

To disconnect the communication, select the **Disconnect** sub menu from the **Connect** pulldown menu. To quit the telnet application, select the **Quit telnet** sub menu from the **Connect** menu.

ENGLISH

* The password is a login password decided on page 17 or 29. If the authentication of the entered password is failed 4 times continuously, the communication will be disconnected automatically. Please try again for the connection.

6

Appendix:A

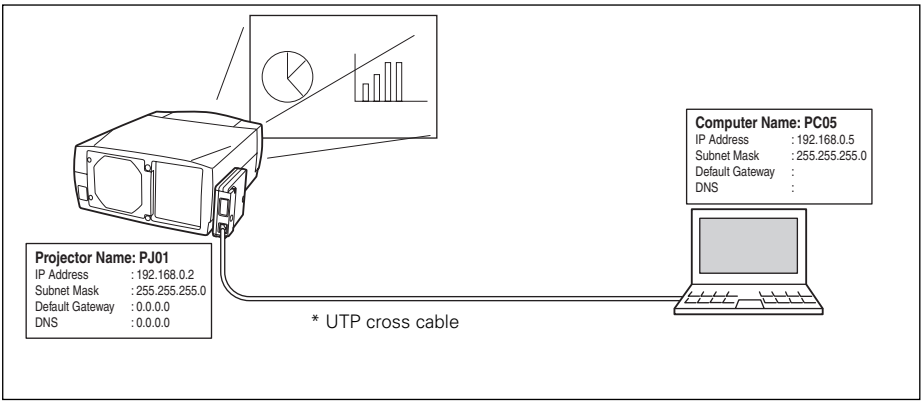
Connection examples
Web browser setting
Technical data

ENGLISH

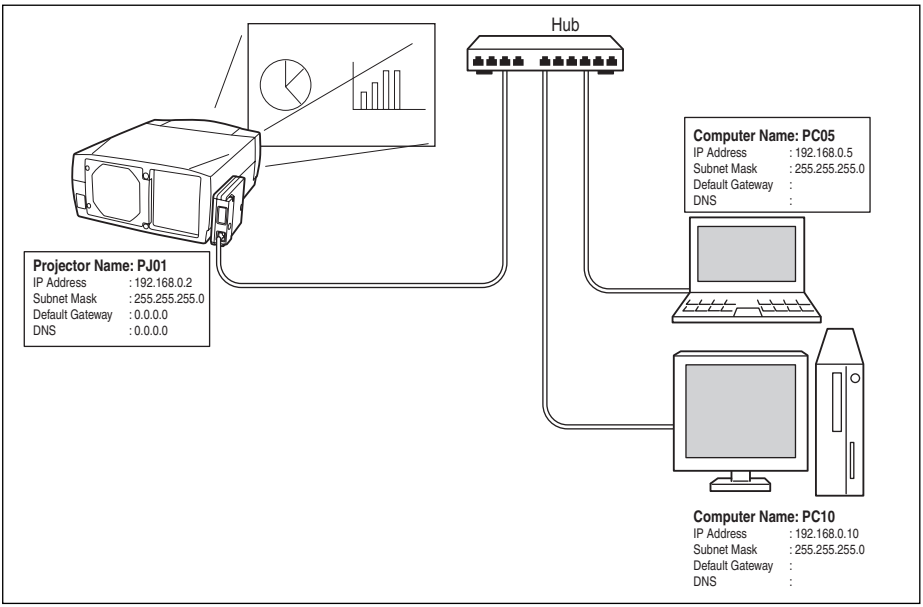
Examples of Connection

Peer-To-Peer connection

Connect the projector (PJ01) to the control computer (PC05) directly



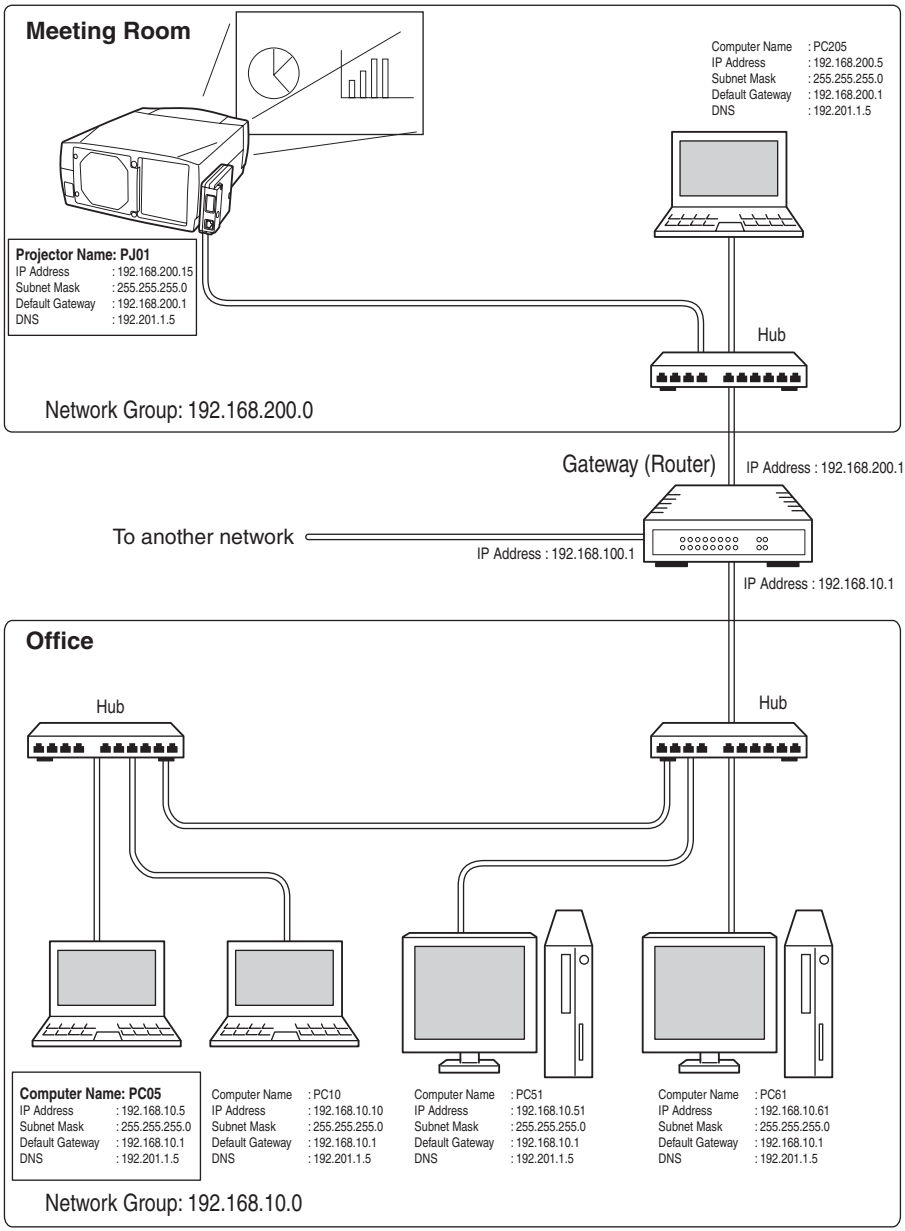
Connect the projector (PJ01) to the control computer (PC05) via the hub.



✎ When the projector is connected to the computer directly without hub, the UTP cross cable should be used .

The gateway (Router) installed in the network

Connect the projector (PJ01) to the control computer (PC05) via the gateway.



Web browser setting

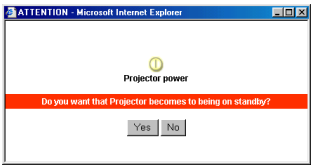
This product is designed enable the projector to be set up and controlled from an Internet web browser. Depending on the preference settings of the web browser, some control functions may not be available. Please make sure that the following functions are set up properly in the web browser.

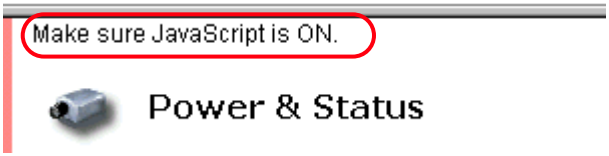
Cookies enable

This is to enable the auto-login function in the login page. If you checked the "Save this Password" item on the login page, the auto-login will be executed without entering the password at the next login. Explain how to set up this function with each OS and browser application individually on the next page.

Active Script/JavaScript enable

There are some control items used with the JavaScript function in the setting pages. If the web browser is set not to use this JavaScript function, it may not control the projector properly. In this case, the following warning message will be displayed on the top of the page. To enable the JavaScript, please see further instructions on the next page.





Proxy setting

In some cases, your web browser is set up to use the proxy server for the internet or intranet connection. In this case, when you install this product into the local network, you should set up the proxy setting of web browser preference correctly. Especially when connecting the projector and computer with a UTP cross cable directly, or when the network does not provide the proxy server, make sure that "not use proxy server" is set up in your web browser preference. To set up the proxy setting, please see further instructions on next page.

✐ There are various ways to change your browser preferences depending on the version, Windows, Macintosh or applications. Please see the setting instructions on next page for example and also refer to on-line help of your web browser.

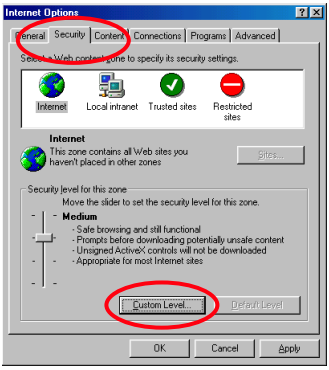
Setting examples: OS/Browsers

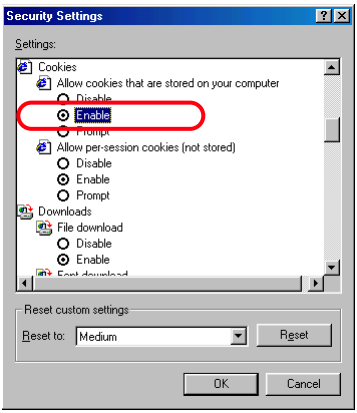
Windows 95/98

Internet Explorer v.5.5

Cookies setting

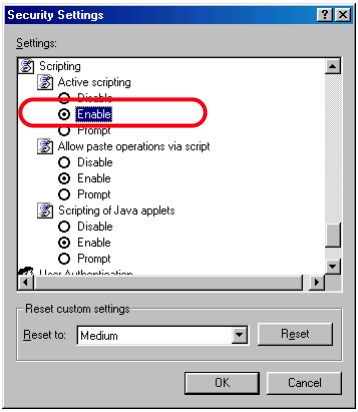
Select the **Internet Options** menu from the **Tool** menu on the web browser and then select **Security** tab and press the **Customize Level...** button. On the security setting window, scroll down and find the **Cookies** item, make sure that the "Enable" is selected in the item **Allow cookies that are stored on your computer**.





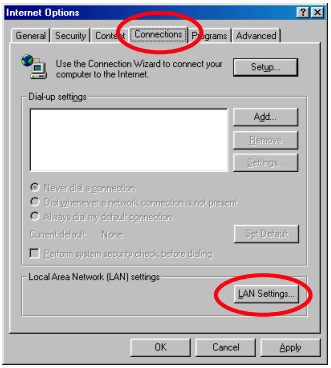
ActiveScript setting

Select the I**nternet Options** menu from the **Tool** menu on the web browser and then select **Security** tab and press the **Customize Level...** button. On the security setting window, scroll down and find the **Scripting** item, make sure that the "Enable" is selected in item **Active Scripting**.



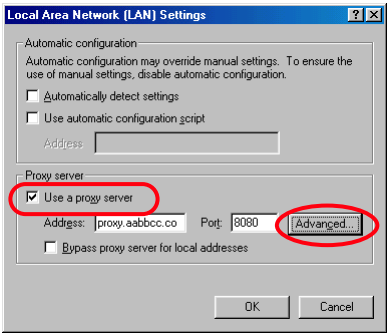
Proxy setting

Select the **Internet Options** menu from the **Tool** menu on the web browser and then select **Connection** tab and press the **LAN Settings** button. Properly set up your web browser's the proxy server settings according to the local area network environment to which the projector is connected.



- Using proxy server

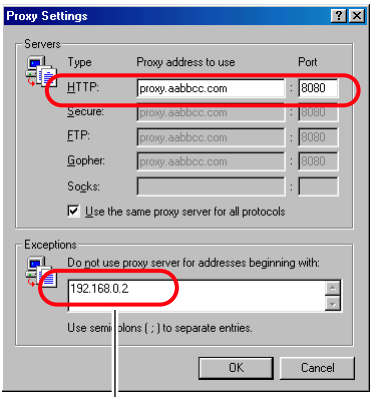
To use an external internet connection from the local area network, check the item **Use a proxy server** and enter the proxy server address and port correctly in the proxy settings window. For further instruction please consult your network administrator.



- Not using proxy server

Uncheck the item **Use a proxy server**.

If you connect the projector to the computer directly with UTP cross cable, this must be unchecked.



To designate proxy settings that will not use the proxy server when accessing the projector installed in the local area network, enter the IP address or domain name here.

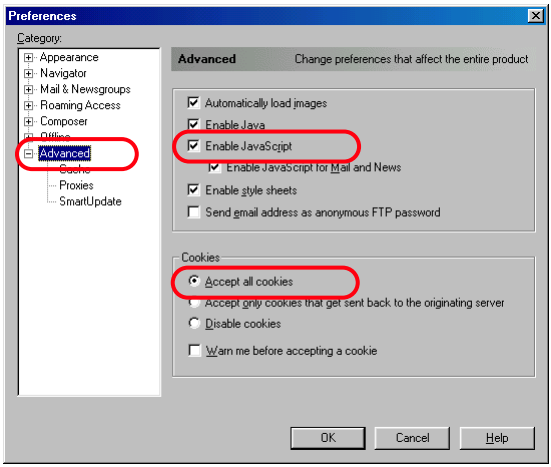
Netscape Navigator v.4.7

Cookies setting

Select the **Preference** menu from the **Edit** menu on the web browser and then select the item **Advanced** in the **Category** column. Make sure that the **Allow all cookies** is checked in the **Cookies** column.

JavaScript Setting

Select the **Preference** menu from the **Edit** menu on the web browser and then select the item **Advanced** in the **Category** column. Make sure that the **Enable JavaScript** is checked.



ENGLISH

Proxy setting

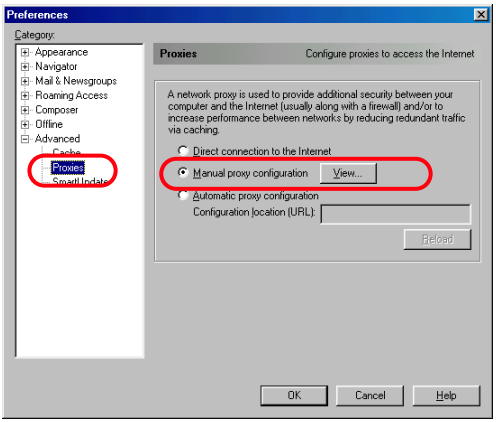
Select the **Preference** menu from the **Edit** menu on the web browser and then select the item **Advanced/Proxies** in the **Category** column. Properly set up your web browser's the proxy server settings according to the local area network environment to which the projector is connected.

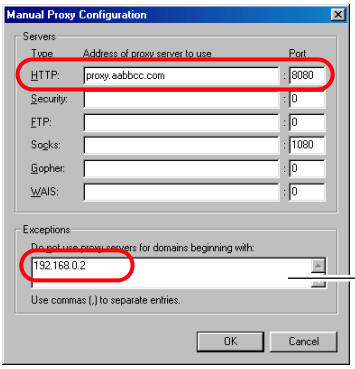
- Using proxy server

When you use an external internet connection from the local area network, select the item **Manual proxy configuration** and press the **View** button. The proxy setting window will appear. Enter the proxy server address and port number correctly on the **HTTP** item in the proxy settings window. For further instruction please consult your network administrator.

- Not using proxy server

Select the item **Direct connection to the Internet** in the proxy setting window.
If you connect the projector to the computer directly with UTP cross cable, this must be selected.





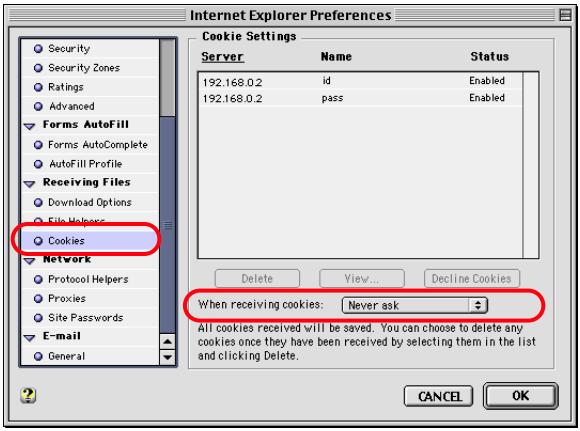
To designate proxy settings that will not use the proxy server when accessing the projector installed in the local area network, enter the IP address or domain name here.

Mac OS 8.6

Internet Explorer v.5.0

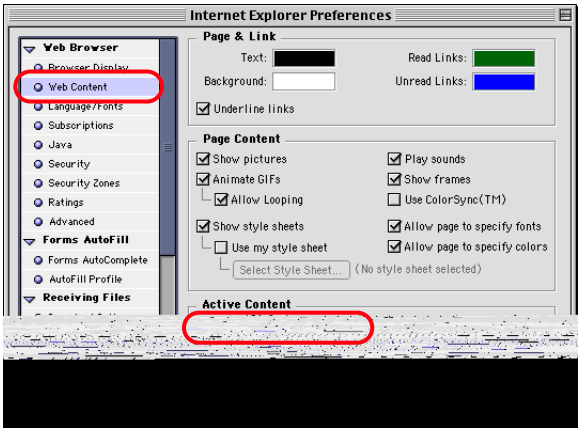
Cookies setting

Select the **Preference** menu from the **Edit** menu on the web browser and then select **Cookies** under the **Receiving Files** heading the preference settings window. Make sure that the **Never ask** is selected in the item **When receiving cookies**.



ActiveScript setting

Select the **Preference** menu from the **Edit** menu on the web browser and then select **Web Content** under the **Web Browser** heading the preference settings window. Make sure that the **Enable scripting** is checked in the **Active Content** column.



ENGLISH

Proxy setting

Select the **Preference** menu from the **Edit** menu on the web browser and then select **Proxies** under the **Network** heading the preference settings window. Properly set up your web browser's the proxy server settings according to the local area network environment to which the projector is connected.

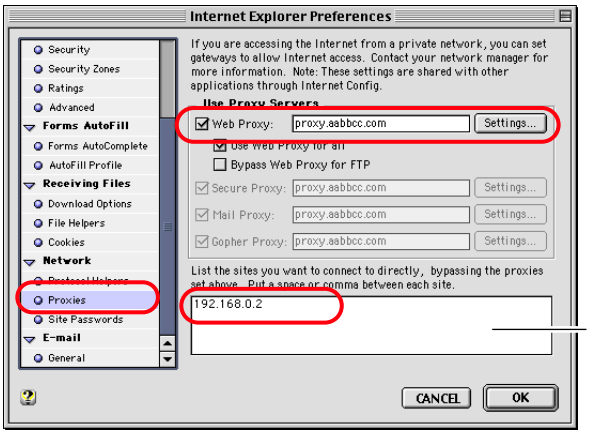
- Using proxy server

When you use an external Internet connection from the local area network, check the item **Web Proxy** and enter the proxy server address correctly. To make advanced settings, press the **Settings** button to display the Web proxy settings window. For further instruction please consult your network administrator.

- Not using proxy server

Uncheck the item **Web Proxy**.

If you connect the projector to the computer directly with UTP cross cable, this must be unchecked.



To designate proxy settings that will not use the proxy server when accessing the projector installed in the local area network, enter the IP address or domain name here.

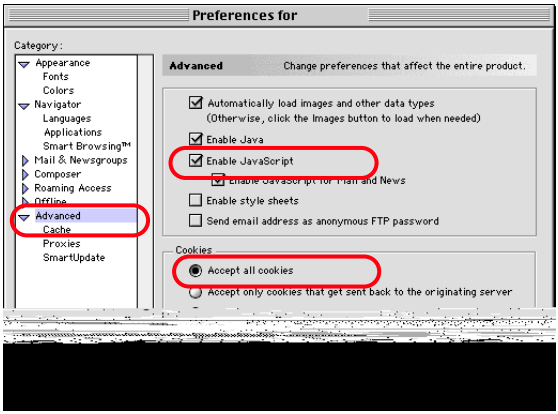
Netscape Navigator v.4.7

Cookies setting

Select the **Preference** menu from the **Edit** menu on the web browser and then select the item **Advanced** in the **Category** column. Make sure that **Accept all cookies** is checked in the **Cookies** column.

JavaScript Setting

Select the **Preference** menu from the **Edit** menu on the web browser and then select the item **Advanced** in the **Category** column. Make sure that **Enable JavaScript** is checked.



Proxy setting

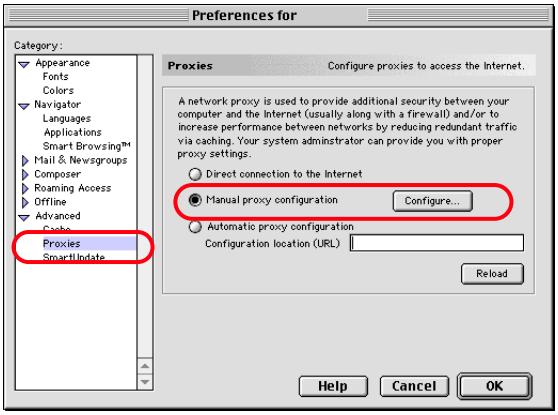
Select the **Preference** menu from the **Edit** menu on the web browser and then select **Proxies** under the **Advanced** heading in the Category column. Properly set up your web browser's the proxy server settings according to the local area network environment to which the projector is connected.

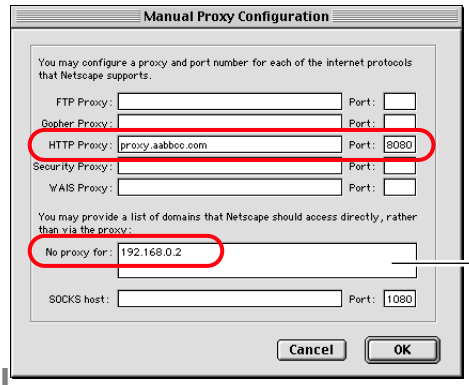
- Using proxy server

When you use an external Internet connection from the local area network, select item **Manual proxy configuration** and press the **Configure** button. The proxy setting window will appear. Enter the proxy server address and port number correctly on the **HTTP proxy** item in the proxy settings window. For further instruction please consult your network administrator.

- Not using proxy server

Select item **Direct connection to the Internet** in the proxy setting window.
If you connect the projector to the computer directly with UTP cross cable, this must be selected.





To designate proxy settings that will not use the proxy server when accessing the projector installed in the local area network, enter the IP address or domain name here.

Product specification

Type	PJ-Net Organizer	
LAN interface	Applicant regulation	IEEE802.3 (10Base-T)
		IEEE802.3u (100Base-TX)
	Data transfer speed	10Mbps/100Mbps
	data transfer mode	Half duplex/Full Duplex
	Terminal	8-pin modular (RJ-45)
Network protocol	TCP/IP specification	TCP/IP
Serial interface	RS-232C	
	Baud rate	0.3/1.2/2.4/4.8/9.6/19.2/28.8/57.6/115.2 Kbps
	Flow control	Hardware flow control (RTS/CTS, Xon/Xoff)
	Parity check	Odd/Even
	Terminal	D sub 9-pin Male
Power source	Supplied from the projector	
Power consumption	3.0 watts	
Dimensions (W x H x D)	4.2" x 1.1" x 5.28" (105 x 27.5 x 132mm)	
Weight	0.54 lbs (245 g)	
Built-in battery	Lithium battery, Type CR2032, 3.0V	
Operating temperature	41˚F ~ 95 ˚F (5˚C ~ 35 ˚C)	
Storage temperature	14˚F ~ 140˚F (-10˚C ~ 60˚C)	

* The specifications are subject to change without notice.

Applicable projector model list

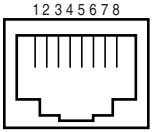
PLC-XP46 series
PLC-XP41 series
PLV-70 series

* The above models are the applicable projectors which can be connected for this product. For further information please consult your local dealer.

Port Specification

LAN port specification

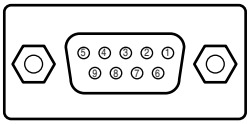
8-pin modular connector (RJ-45)



pin No.	Signal	Function
1	TX+	Transfer data (+)
2	TX-	Transfer data (-)
3	RD+	Receive data (+)
4	(not used)	
5	(not used)	
6	RD-	Receive data (-)
7	(not used)	
8	(not used)	

Serial port specification

D sub 9-pin connector (RS-232C)



Pin No.	Signal	Function
1	CD	Carrier detection
2	RXD	Receive data
3	TXD	Transfer data
4	DTR	Data terminal ready
5	Ground	Ground
6	DSR	Data set ready
7	RTS	Request to send
8	CTS	Clear to send
9	(not used)	

Appendix:B
FAQ

FAQ

Installation/Access

Q **Why doesn't the setting page appear in my web browser?**

A Following causes are possible. Please check them.

1. The projector does not connect to the network.
   Check LED indicators status (p.11).
   - Check the connection of LAN cable if the LINK indicator does not illuminate orange.
   - Check the network configuration of the projector if ACT indicator does not illuminate green.
2. Function "PJ-NET Organizer" in the projector is not set to"ON".
   Set up by using the projector's on-screen menu (p.14/16).
3. Wrong network configuration of the projector
   Check the network configuration of the projector by using the projector's on-screen menu (p.14/16).
4. Wrong network configuration of the computer.
   Check the network configuration of the computer. See chapter "Configure the network of computer" on page 20.
5. The PJ-Net Organizer is used with the default setting. (p.14).
6. The proxy setting of the web browser is not set correctly (p.64).
7. The computer does not provide TCP/IP protocol.

Q **No setting page in my web browser? Is the problem in the network or in the projector? I would like to find out the problem whether it is in the network or in the projector**

A Check it by the following steps

1. Disconnect the projector from the network and connect the projector and computer with the UTP cross cable directly.
2. Change network configuration of the computer and projector as shown in the example below.

(Projector setting)	
IP Address	: 192.168.0.2
Subnet Mask	: 255.255.255.0
Default gateway	: 0.0.0.0
DNS	: 0.0.0.0

(Computer setting)	
IP Address	: 192.168.0.5
Subnet Mask	: 255.255.255.0
Default gateway	: (blank)
DNS	: (blank)

3. Enter the projector's IP address [192.168.0.2] at the "Address" column on the Web browser. [Note] Make sure that the proxy setting of your web browser is set "Not use a proxy server". See further information on page 64.
4. If the login page appears, this product is operating properly. The problems may be in the network configuration of the computer or in the network. Please try to set up the network by following chapter "Network configuration" on page 15.
   If the login page does not appear, please check for proper mounting of this product onto the projector by referring to the "Installation" chapter on pages 9 to 14.

Q **How can I restrict access from the computer.**

A
1. Please use the password authentication function on the login page (p.29).
2. Please use the IP filtering function provided with the gateway (router) to restrict the accessing from the computer. For further information please consult your network administrator.

Q **Can I access the projector installed on the company's local area network from a remote location?**

A There are some ways to access to the projector in the LAN, but you must consult your network administrator.

- ☛ Use of modem
  (Connect to the company's network from your home or some other places by using modem.)
- ☛ Use of private line
  (Connect to the company's network from the branch office or maintenance office by using private line.)
- ☛ Use of internet
  (Connect to the company's network from your home, branch office or some other places by using the internet.)

Q **We use the DHCP/BOOTP server to assign the IP address. Is it possible to use the PJ-Net Organizer in this network environment?**

A Possible. As the PJ-Net Organizer does not support the DHCP/BOOTP server, the fixed IP address must be configured manually. Please consult your network administrator. (p.24)

Q **How can I install several projectors equipped with the PJ-Net Organizer?**

A Install and configure network one by one to avoid the IP address collision each other. (p.24)
To configure the IP address please see chapter “Network configuration” on page 15.

Q **How many projectors can I control with multi-control function?**

A It has been designed to control up to 100 sets but it depends on the network environment.

Password/Login

Q **What should I do when I forget the password?**

A Select the **Display** icon from the **Setting** menu by using control keys on the projector and then press the **SELECT** button. The current password will appear on the screen. (p.14/17)

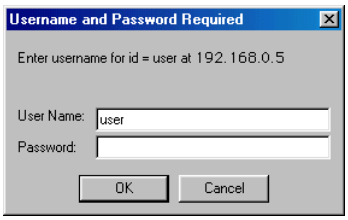
Q **Why can't I save the password? Why is the password not working?**

A The function of "Save this password" uses the cookies function and JavaScript function of the web browser. If you cannot automatically login even if the "Save this password " is checked, check your browser preference and change setting to "Accept all cookies" and “JavaScript Enable”. Please see chapter “Appendix: Web browser setting/Cookies enable, Active Script (JavaScript enable)” on page 64 for further instructions. In environments where the setting computer is used by several people, it is recommended for security reasons that personnel logout or not save the password at the login page. The saved password will be cleared when the “Logout” is executed.

Q Can I register the setting page as a web browser “Favorites” or “Bookmarks”?

A Please add the “Login” page to your “Favorites” or “Bookmarks”. Do not add the specified setting page because it will not be able to perform the password authentication correctly.

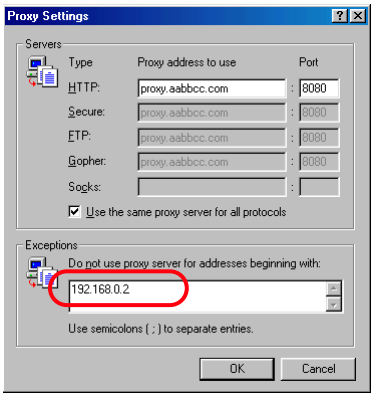
Q Why does the following password authentication window sometimes appear at login?



A Depending on the web browser application type, version or OS you are using, the authentication window may appear. In this case, take one of the following steps:

- ☛ Type “user” onto the **User Name** text box and type the login password onto the **Password** text box then press the **OK** button.
- ☛ Quit the web browser and restart it. Then access the login page again.

In a network having a proxy server, the password authentication window may also appear. In this case, to stop the window from appearing, register the projector IP address in the proxy setting to bypass the proxy server and connect directly to the projector. (p.64)



Operation

Q **Why can't I change the controls in the setting page with web browser?**

A Please make sure the projector is turned on. If it is in the standby mode, the setting is not effective to the projector. To control the projector with a web browser, the projector must be in the powered-on condition. Also, projectors registered for multi-control cannot have any controls changed if they are in standby mode. But timer and clock settings are always effective, even for projectors in standby mode.

Q **Why does it sometimes take a lot of time to complete the page display?**

A The display speed of the page depends on the network environment in which both the projector and computer are placed. It may take much time to complete the page display if network traffic is heavy. Please consult your network administrator. By changing the preference of your web browser to "not show pictures", you may have page display more quickly at the heavy network traffic. Please see the browser's on-line help for further information.

Q **I use many of the projectors in the network. How can I use names of the projectors to recognize each projector instead of IP addresses?**

A You can manage the projectors with nicknames instead of the IP address. Please see chapter "Control the Multi-Projectors" for further information. (p.49) By registering the projector name and IP address with the DNS server, it can be accessed with the nickname from the any computer referred to the DNS server. Please consult your network administrator. (p.30, 50)

Q **How many numbers of the E-mail address can I register in the E-mail setting page.**

A You can register up to 10 addresses.

Q Why am I not receiving E-mail alert messages?

A Make sure that the registered E-mail address and SMTP server address are correct. If the SMTP server is located in your LAN (Local Area network), the address should be set to the SMTP server in your LAN. The SMTP server located outside of your LAN may not be available for security reason. For further information please contact your network administrator. (p.31)
It may be required for the authentication depending on the SMTP server. This product does not support this kind of SMTP server.

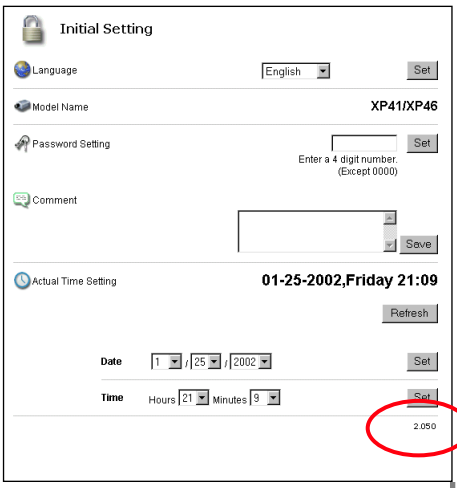
Others

Q Can I develop a driver to control external serial equipment?

A This product does not provide any driver software. To control the external equipment connected to the extra serial port, it should be required to clarify the commands and communication condition defined by each equipment. If they are clarified, it can be controlled by using the Telnet application installed on your computer. Please see chapter "Use of telnet" on page 58.

Q Can I update the firmware of the PJ-Net Organizer.

A It is possible to update the firmware through the network. It is required to have a special tool for the updating. For further information please consult your local dealer. The version number of the firmware is indicated on the lower part of the"Initial Setting" page.



Q What are the rules for IP address assignment?

A If the network is constructed with TCP/IP protocol, a unique IP address is required for each piece of network equipment. The following are basic rules of the assignment.

Rule1

Do not configure the same IP address to the network equipment in the same network group. Each piece of equipment must be assigned a unique IP address.

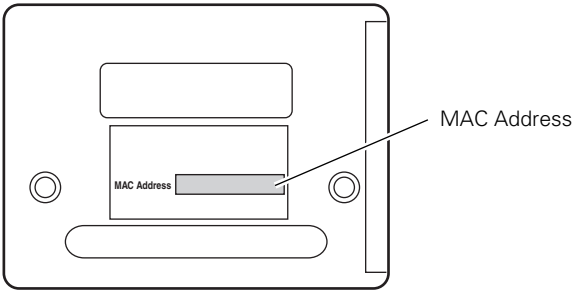
If the IP address is set [192.068.x.x], the Subnet Mask should be set [255.255.255.0] for example.

Rule2

The start address [xxx.xxx.xxx.0] and the last address [xxx.xxx.xxx.255] of the IP address must not be assigned to any other equipment. These address numbers are reserved.

Rule3

The IP address must correlate to a network number. If network numbers are different between the equipment, they cannot establish communications each other. In this case, the router is placed in the networks to make the routing.

Q What is the MAC address assigned to the PJ-Net Organizer?

A The MAC address is indicated on the rating label at the bottom of the cabinet case.