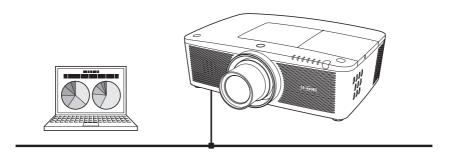


Owner's Manual

Network Set-up and Operation

Wired Setting
Projector Set-up and Operation



This is the manual for the Network function

Read this manual thoroughly to operate the Network function.

First, read the owner's manual of the projector to understand the basic operation of the projector and the safety instructions.

The safety instructions in the owner's manuals should be followed strictly.

for XL100A/XL200A

Compliance

Federal Communications Commission Notice

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipmen generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Do not make any changes or modifications to the equipment unless otherwise specified in the instructions. If such changes or modifications should be made, you could be

Canadian Radio Interference Regulations

required to stop operation of the equipment.

This Class A digital apparatus meets all requirements of the Canadian ICES-003.

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Safety instructions

<u>^</u>

CAUTION IN USING THE PROJECTOR VIA NETWORKS

- When you find a problem with the projector, remove the power cable immediately and inspect the unit. Using the projector with failure may cause fire or other accidents.
- If you remotely use the projector via networks, carry out a safety check regularly and take particular care to its environment. Incorrect installation may cause fire or other accidents.



CAUTION IN USING NETWORK FUNCTION

• We assume no responsibility for the loss or damage of data, or damage of the computer caused by using this projector. Making back-up copies of valuable data in your computer is recommended.

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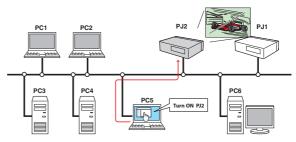
Chapter 1 Preparation

Describes features and operating environment of this projector.

Features

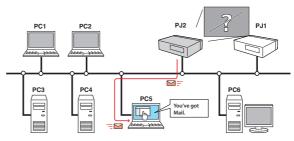
Web Management function (☞p.33)

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 (™p.26)

The projector sends messages to the registered e-mail addresses when a lamp abnormality or power failure occurs with the projector. This message describes how to solve the cause of the problems. You can take efficient action for quick recovery.

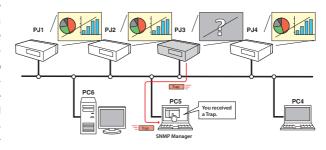


SNMP Agent function (☞p.30)

To send the information of the projector to the SNMP manager. Enables you to manage the projector condition with the supplied SNMP manager software.

SNMP Manager function

A function to manage the condition of projectors in the network by using the SNMP protocol. The managing computer needs to provide an SNMP managing software. Refer to the owner's manual of the "PJ Network Manager" supplied separately for further details.



Required operating environment for computers

When operating the projector via networks, computers should meet the operating environment below.

Оре	erating System	Windows XP (32bit version), Windows Vista (32bit version), Windows 7 (32bit version) Mac OS X v 10.4, 10.5 or 10.6	
	Recommended CPU	Windows: Pentium III 900MHz or more Macintosh: 800 MHz PowerPC G4 or faster,or 1.8 GHz Intel Core Processor or faster	
Computer environment	Memory	Windows : 64MB (Minimum)/ 128MB or more (Recommended) 128MB or more for Windows XP 1GB or more for Windows Vista or Windows 7 Macintosh : 256MB or more (512MB is recommended)	
env	Free disk space	100MB or more	
iron	Drive equipment	CD-ROM drive	
nment	Display settings	Support one of following resolutions; VGA (640 x 480), SVGA(800 x 600), XGA(1,024 x 768) Number of colors: Either of 16 bit (65,536 color 24/32 bit (16.77 million colors))	
Network card The computer must provide a 10Base-T or 100B card.		The computer must provide a 10Base-T or 100Base-TX network card.	
Web Browser*		Internet Explorer version 6.0, 7.0, 8.0 or 9.0 Safari 4 or 5 * Used 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.	
Recommended Internet Mailer*		- Microsoft Outlook - Microsoft Outlook Express * Required the internet e-mail application software to receive an e-mail alert sent from this projector. If you do not use the func- tion E-mail Alert, this application is not required.	

Network specifications of the projector

LAN Terminal

Data communication standards	10/100/1000Base-T compatible
Physical layer	10Base-T
Protocol	TCP/IP

The limitation of connection between the projector and hub or computer

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

Connection	Type of usable LAN cable	Maximum length
Projector - Hub	STP Straight Cable with category 3 or 5 *2	100m
Projector - Computer	STP Cross Cable with category 3 or 5*2	100m

^{*1} There may be other limitations depending on your network environment or LAN specification. Please consult your network administrator for further details.

Notice

Expression/Abbreviation

The OS of the computer and the Web browser described in this manual are Windows XP Professional and Internet Explorer 6.0. In case of another OS or Web browser, some instruction procedures may differ from the actual operation depending on your computer environment.

Use of this manual

This manual does not provide the detailed 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 manual.

Trademarks

Ethernet is a registered trademark of Xerox Corporation. Microsoft, Windows, Windows XP, Windows Vista and Windows 7 are registered trademarks of Microsoft Corporation in the United States and other countries. Internet Explorer is a registered trademark of Microsoft Corporation. JavaScript is a registered trademark of Sun Microsystems, Inc.

Macintosh is a registered trademark of Apple, Inc. in the USA and other countries. PowerPC is a registered trademark of IBM Corporation. Intel Core is a registered trademark of Intel Corporation in the USA and other countries.

Other product or brand names in this manual are registered trademarks or trademarks of their respective owners.

- * Unauthorized use of a part or whole of the contents in this manual is prohibited.
- * The contents of this manual are subject to change without notice.

^{*2} Category of LAN cable indicates the cable quality. Normally, a cable with category 3 or 5 is used for 10Base-T network, and a cable with category 5 is used for 100Base-TX network.

Flow of installation

To use the projector via the networks, follow the setup procedures below.

STEP 1

Connect the LAN and set the configuration.

Decide depending on the LAN environment.

→ "2. Setup Procedures" (pp.11–16).

Detailed LAN configurations need to be done with a browser later.

First, complete the Wired LAN connection between computers and projectors, then start browser configurations.

→ "3. Basic setting and operation" (pp.17–32).

STEP 2

Network Configuration has completed.

Follow each chapter to operate the projector.

- Operate and manage the projector → "4. Controlling the projector" (pp.33-46)
 - → "Power Control and status check" (p.34)
 - → "Control" (pp.36-39)
 - → "PC adjustment" (p.40)
 - → "Setting up the projector" (pp.41-43)
 - → "Projector information" (pp.44-45)

STEP 3

Install the Software on computers.

Install the software recorded in CD-ROM on each computer which will be operated. Refer to the owner's manual of PJ Network Manager.

Notice about installing Software CD-ROM

It is available for controlling and setting of the projector by using the web browser without installing any software. So it is not required to install the software into your computer. For PJ Network Manager function, it is required to install the software. Please see the owner's manual of "PJ Network Manager Function".

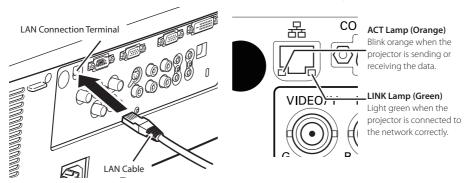
Chapter 2 Setup Procedures

Describes how to configure the network.

Setting procedures and contents differ depending on the LAN installation location. When installing, consult your system administrator to set up the LAN appropriately.

Connecting to the LAN line

Connect the LAN cable to the LAN connection terminal of the projector.



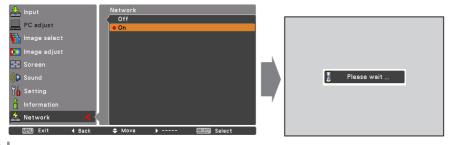
^{*} Please use a shielded LAN cable.

Network configuration

Set the Wired LAN network through the projector menu. Detailed network settings will be made with browser. Refer to "3. Basic setting and operation" (p.17-32). First, complete the settings described in this chapter before performing steps in "3. Basic setting and operation."

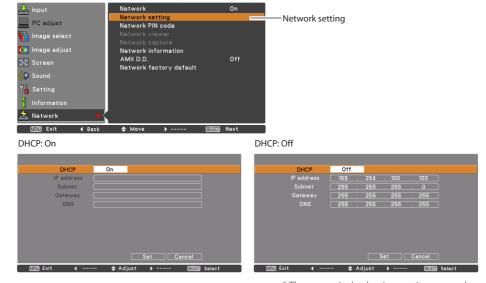
Setting Procedure

- 1. Select "Network" in the Network menu, and press Point ▶ or **SELECT** button.
- 2. Select "On" with the Point ▲▼ buttons, and the press SELECT button. Then the Menu will disappear, the "Please wait..." message will appear, and switching operation will start. Switching will take a while and the projector's LINK/ACT Lamp will be on or blink, and after completing the operation, the "Please wait..." message will disappear.



- 3. Select "Network setting" in the Network menu and press **SELECT** button, and then the LAN setting screen will appear and selected LAN settings will be displayed. Adjust each item to the setting environment. Consult your system administrator about the detailed settings.
 - Press **SELECT** button in a row where you want to adjust, and adjust the figures with the Point ▲▼ buttons and move among the items with the Point ▲► buttons, and then press **SELECT** button to fix. Move to the next row with the Point ▲▼ buttons to adjust.
- 4. After completing all the settings, select "Set" and press **SELECT** button. Now, all procedures have been done. To cancel the adjusted settings, select "Cancel" and press **SELECT** button.

You can confirm the LAN settings you have made from "Network information" (p.14). In such cases that the LAN cannot be connected, see this screen.



* The numerical value is a setting example.

Item	Description
DHCP	Sets DHCP function On or Off. When you setup the network setting manually, select "Off". When it is set On, IP address, Subnet, Gateway and DNS are automatically set
	according to your network environment *1.
IP address	Sets IP address of the projector.
Subnet	Sets Subnet mask. Normally sets 255.255.255.0.
Gateway*2	Sets IP address of the default gateway (Router).
DNS*3	Sets IP address of the DNS server.

^{*1} Set "On" only when the DHCP server is available on your network environment.

^{*2} Set [255.255.255.255] if the network does not provide the gateway (router).

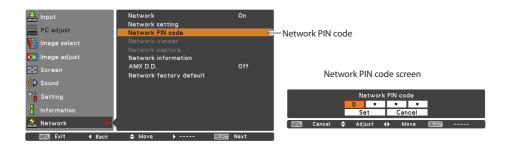
^{*3} Set [255.255.255.255] if you do not use the function E-mail alert.

Network PIN code

The Network PIN code is to restrict the access to the projector through the network. After setting the Network PIN code, you need to enter it to operate the projector via the networks.

- 1. Select "Network PIN code" in the Network menu, and press **SELECT** button. The Network PIN code screen will appear.
- 2. Set the Network PIN code.

Set the figures with the Point ▲▼ buttons and move to the next items with the Point ▲► buttons. Select "Set" and press **SELECT** button to set. To cancel the preset Network PIN code, select "Cancel". When you do not want to set the Network PIN code, set "0000". It is recommended to set the Network PIN code if you use the projector via the networks. The Network PIN code can be set also through the networks. See "3. Basic setting and operation" → "Initial setting" → "Network PIN code setting" (p.23).



Network information

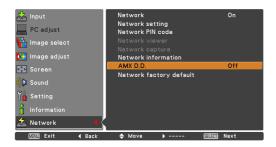
Select "Network information" in the Network menu and press Point ▶ or **SELECT** button to show LAN setting environment of the currently selected projector. (The description below is an example and different from what will be shown.)



AMX D.D.

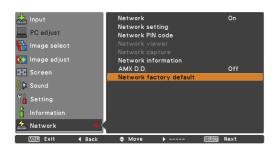
Choose "AMX D.D." in the Network menu and press SELECT button, select ON to allow the projector to be detected by AMX Device Discovery.

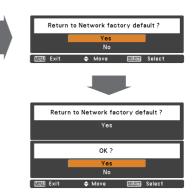
For more details, please visit the following website. http://www.amx.com/



Network factory default

- 1. Select "Network factory default" in the Network menu and press **SELECT** button.
- 2. A confirmation box appears and select "Yes" and then press **SELECT** button.
- 3. Another confirmation box appears and select "Yes" and then press **SELECT** button.
- 4. All the wired LAN settings will go back to the factory default settings. For details, refer to "Wired LAN factory default settings". (p.16)
- * "Crestron control" (p.25) settings and projector name (p.24) also will go back to the factory default settings.





Wired LAN factory default settings

Parameter	Settings
DHCP	Off
IP ADDRESS	169.254.100.100
SUBNET MASK	255.255.0.0
GATEWAY ADDRESS	255.255.255.255
DNS ADDRESS	255.255.255.255

Chapter 3 Basic Setting and Operation

Describes basic operations and settings for controlling the projector by using the web browser. It is required that computer and projector is connected to the network and the network address is properly configured.

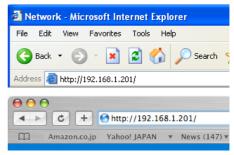
Login the setting page of the projector

[1] Enter the IP address

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

Enter the address that you configured in item "Network configuration" (

p.12).



* The numerical value is a setting example.

[2] Login

If the setting page has set the password, the authentication window will appear. In this case type "user" onto the **User Name** text area and the login Network PIN code onto the **Password** text area and then click **OK** (**Log in**) button.

* The entering User Name must be "user" and it can not be changed.

[Note]

When accessing the projector for the first time or the Network PIN code "0000" is set, the auto-login will be performed and the next main setting page is displayed.



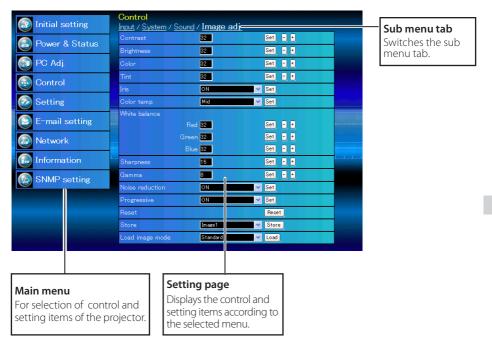
Cancel Log In

ENGLISH

[3] Display of main setting page

The following main setting page will be displayed according to your display mode selection. Perform various kinds of settings through this page. Click on the menus to display the control and setting pages.

Main setting page in the display



How to use the setting page

To control and set up the projector, use the setting menus on the web browser. Describes the basic operation and procedures commonly used on this manual.

Example of the setting page

The setting menu appears when clicking the sub menu tab.

* Each item has a valid setting range respectively.



Types of setting

Text box setting

Enter a number or text and then click **Set** button.

or

Change a value with - or + button.



Pull-down menu setting

Select an item with pull-down menu button and then click **Set** button.



The value in the text box indicates current value.

Each item has a valid setting range. The setting value exceeding this becomes invalid. Some control items can not be used depending on the selecting input mode or functions of the projector you use. In this case, the values of those items are indicated with "---".

ENGLISH

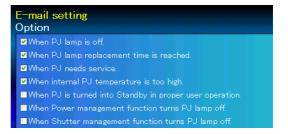
Radio button setting

Select an item by selecting a radio button.



Check box setting

Select items by ticking on check boxes.





Initial setting

After installing the projector, perform the following basic initial setting. Click **Initial Setting** on the main menu to display the initial setting page.



^{*} The serial number in the figure is used for an example.

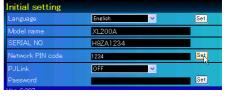
Item	Description
Language	Switches display language on the setting page. (Japanese, English)
Model name	Indicates the model name of the projector.
SERIAL NO	Indicates the serial number of the projector.
Network PIN code	Sets the Network PIN code to login the setting page. (☞ p.23)
PJLink	Switches PJLink password authentication. (ON, OFF) (🖙 p.23)
Password	Password for PJLink function. (☞ p.23)

Network PIN code setting

This is to set the Network PIN code to restrict the access from an unauthorized person through the network.

Enter a 4-digit number as the Network PIN code onto the text box and click **Set** button.

The projector begins restarting and it takes



about 10 seconds. Close (Quit) the web browser and access to the login page again in 10 seconds. This is to perform the login authentication firmly.

The default Network PIN code [0000] means no Network PIN code is set.

When you connect the projector to the network, it is recommended to set a new Network PIN code. Only a four-digit number is valid for the Network PIN code.

PJLink and password setting

This is to set the PJLink password authentication on or off. If set "On" with the PJLink pulldown menu, the password must be required. Enter a **password*** onto the text box and click **Set** button



1 to 32 alphanumeric characters can be used for the password.

What's PJLink?

The projectors equipped with PJLink function can be used together on the same network, regardless of model or brand, for centralized control and monitoring. This standard was established by the Japan Business Machine and Information System Industries Association (JBMIA). Please visit the following website. http://pjlink.jbmia.or.jp/english/

PJLink Notice

The projector is compliant with PJLink Standard Class 1 of JBMIA, and it supports all commands defined by PJLink Class 1 and is verified conformance with PJLink Standard Class 1.

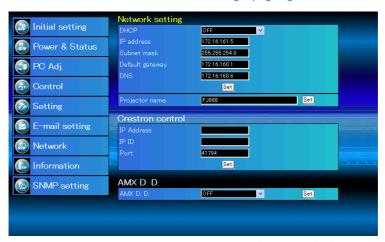
Projector Input		PJLink Input	Parameter
Input 1	RGB (PC analog)	RGB 1	11
	RGB (Scart)	RGB 2	12
	RGB (PC digital)	DIGITAL 1	31
	RGB (AV HDCP)	DIGITAL 2	32
Input 2	Video	VIDEO 1	21
	Y, Pb/Cb, Pr/Cr	VIDEO 2	22
	RGB	RGB 3	13
Input 3	Video	VIDEO 3	23
	Y, Pb/Cb, Pr/Cr	VIDEO 4	24
	S-video	VIDEO 5	25
Input 4	Network	NETWORK 1	51



Network configuration

Click **Network** on the main menu. The following setting page is displayed. The IP Address, Subnet Mask, Default Gateway, DNS (Domain Name Server) and projector name are set up on this menu.

The IP address and Subnet Mask have been configured already in chapter "Installation". If you want to change them or configure default gateway or DNS, perform them in this page. If you change them, the projector begins restarting and it takes about 10 seconds. Close (Quit) the web browser and access to the login page again in 10 seconds.



* The numerical value is a setting example.

ltem	Description
DHCP	Sets DHCP configuration. (ON/OFF)
IP address	Sets IP address of the projector.
Subnet mask	Sets Subnet mask. Normally sets 255.255.255.0.
Default gateway*1	Sets IP address of the default gateway. (Router)
DNS*2	Sets IP address of the DNS server. Must be set when using the e-mail function.
Projector name*	³ .Sets name of the projector. (64 characters maximum)

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 [192.168.001.101].

^{*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.

^{*} All the network setting will reset to the default when setting [0,0,0,0] of the IP Address.

^{*} If you make incorrect settings, you cannot find out the new network settings. Be careful to set up them correctly, otherwise you cannot connect to the projector. It is recommended to make a note of them.

ENGLISH

Crestron control

You can use Crestron RoomView® to monitor and control the projector through the network. For more information, please visit the following websites. http://www.crestron.com & www.crestron.com/getroomview

Item	Description
IP Address	Control System IP Address as a string. The default value is blank.
IP ID	Control System IP ID as a string. The default value is blank. (from 3 to 254)
Port	The default value is 41794. (from 1 to 65535)



AMX D.D.

If your network environment uses an AMX controller, select ON to allow the projector to be detected by AMX Device Discovery. (ON, OFF) For more details, please visit the following website. http://www.amx.com/





E-mail setting

This projector 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 **E-mail Setting** on the main

menu and follow the below steps.



Item	Description
SMTP server*1	Sets server name or IP address of the SMTP server. (up to 60 characters)
Administrator address.	Sets e-mail address of administrator
Add address	Sets e-mail address of the user to send mail when the projector has an
	abnormality.

1 Setting SMTP server and administrator address

Set the server name or IP address of the SMTP server* and administrator address. The administrator address is set to "Reply-To" address of the message sent from the projector.

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

If the projector sends an alert message due to the abnormality on the projector but the SMTP server is down in some other reason, the message will not be sent. In this case, the message "Unable to connect to server." will be displayed on the setting page. To clear this message, set up SMTP server address again.

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.

The projector does not send message to the address set in "Administrator address" text box. If you want to send e-mails to the administrator address, enter the administrator address into "Add address" text box.

ENGLISH

2 Registering and deleting E-mail addresses

Click "Add address" and type the e-mail address onto the text box and click **Set** button. To check the registered addresses, click **Check/Delete** sub menu tab. The addresses are listed as the figure on the right.

Up to 10 E-mail addresses can be registered.



Check / Delete

To delete the registered addresses, check the address you want to delete and click **Delete** button.



3 Option selection for sending alert mail

Click **Option** sub menu tab. Check the condition items under which alert mail will be sent and click **Set** button.

Please refer to item "Examples :Type and contents of alert mail" described on the next page.

Option nail setting



[&]quot;When PJ lamp is off" signifies the lamp goes out without user operation. "When PJ is turned into Standby in proper user operation" signifies that the projector is turned on by using the web browser and then it is turned into standby with ON/STANDBY button on the side control or the remote control.

Up to 99,999 hours can be set for use time.

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 message. This is very useful to maintain and service the projector.

The following are examples of received messages.

• When internal PJ temperature is too high:

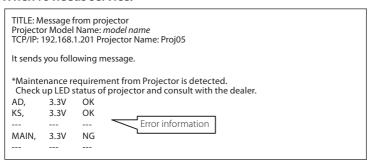
TITLE: Message from projector Projector Model Name: model name TCP/IP: 192.168.1.201 Projector Name: Proj05

It sends you following message.

*The Projector lamp is turned off, because internal projector temperature is too high. Wait for the completion of the cooling process and make sure the projector has been turned into Standby. Then turn the projector on again.

If the Indicator continues flashing, check the air filter for dust accumulation.

When PJ needs service:



The projector lamp was turned off, because the projector power circuit failed.
Unplug the AC power cord and plug it, and then turn on the projector once again to verify operation. If the problem still persists, unplug the AC power cord and ask servicing to a qualified service personnel with the error information.

ENGLISH

• When PJ lamp replacement time is reached:

TITLE: Message from projector Projector Model Name: *model name* TCP/IP: 192.168.1.201 Projector Name: Proj05

It sends you following message.

*The projector lamp has reached replacement time. Lamp ON 2000 h

Replace it with a new lamp immediately and reset the lamp counter. If the projector is used without resetting the lamp counter, the alert mail is sent to users in every poweron of the projector. This alert mail will not be sent when unchecking the mail sending condition "When PJ lamp replacement time is reached".

• When lamp corres. value reaches preselect use time:

TITLE: Message from projector Projector Model Name: *model name* TCP/IP: 192.168.1.201 Projector Name: Proj05

It sends you following message.

*The accumulated lamp use time has reached 2000 hours.



SNMP setting

This projector provides a SNMP (Simple Network Management Protocol) agent function. The SNMP consists of a manager and agents. The group which communicates information each other with SNMP is called

"Community". There are two access modes in a community, Refer (read only) and Set (read-write). This projector allows to use Refer (read only) only. The SNMP message informs the projector status called "Trap" to an administrator. Click **SNMP Setting** on the main menu and set up each item.



PJ information

Item	Description
Contact	Enter user name of the projector etc. (optional)
Place	Enter place of the projector. (optional)
Community name(refer)	Enter community name (read only). Default name is "public".

Irap	
Item	Description
Community name	Enter community name to send "Trap". Default name is "public".
Add address	Enter IP address of the SNMP manager computer to receive "Trap".

ENGLISH

Trap check/delete

Check and delete the trap address

Checking the registered trap address and deleting the address.

To delete the address, tick check box in front of the IP address and click **Delete** button.

Up to 10 trap addresses can be registered.

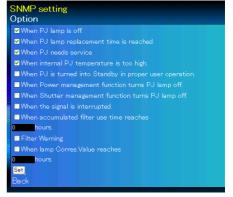


Trap option

Trap option setting

Tick check boxes in front of the condition item to send the trap.

Click Set button if you tick or un-tick the check box on a page.



[&]quot;When PJ lamp is off" signifies the lamp goes out without user operation. "When PJ is turned into Standby in proper user operation" signifies that the projector is turned on by using the web browser and then it is turned into standby with ON/STANDBY button on the side control or the remote control.

Up to 99,999 hours can be set for the time setting.

Chapter 4 Controlling the Projector

Describes controlling and setting of the projector by using the web browser.



Power control and status check

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

By clicking **ON** or **Standby** button on the page, the power of the projector can be controlled.





Popup confirmation window

Item	Description
PJ status	
Power	Displays the status of the lamp. (ON, OFF, On starting up, On cooling down)
Status	Displays the status of the projector's power. (Refer to next page.)
Power cont	trolControls the projector power by clicking the "ON" or "Standby" button.

The projector cannot be turned on while the projector is on cooling down.

The web browser checks and updates the projector's condition every 30 seconds automatically.

About projector condition

Status	Description
Normal	Projector is operating normally.
Power management in operation	Power management is operating.
Shutter management in operation Shutter management is operating.	
Lamp failure	Lamp failure is occurring.
Abnormal Temperature	The temperature of the projector became too high.
Standby after Abnormal Temp	Projector detects abnormal temp. and sets into standby mode.
Power failure	Power failure has occurred inside the projector. Projector is turned off. Unplug the AC cord and ask servicing to a qualified service personnel.
Service in need	Projector detects maintenance requirement. Check up LED status of the projector.

When a security (PIN code lock) has been set on the projector, you also cannot control it through the network. To control the projector through the network temporarily, execute "PJ lock suspend" command to unlock the security. "PJ lock suspend" is on setting sub menu [3] on Setting main menu. (Fig. p.43)

Caution about turning on/off the projector via the networks

When turning on/off the projector via the networks, preset the projector as follows:

- 1. Select "Setting" from the Projector menu.
- 2. Select "Standby mode" from the Setting menu and set it as "Network".

If you set this function as Network, the network part of the projector is constantly provided with power even if the projector is turned off. If you set this as Eco, then the network part will be turned off when you turn off the projector. Consequently, you cannot turn on/off the projector via the networks.



Control

Click **Control** on the main menu. The setting method differs depending on the contents of the page. Click on the page number to change pages and select desired setting items.

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



Input

This function is to select the input mode and source mode of the projector. Click **Set** button after selecting the input and source mode.

Item	Description	1	
Input	Selects input mode of the projector.		
Source	Selects signal source of the input.		
	RGB:	RGB (PC analog)	
		RGB (Scart)	
		RGB (PC digital)	
		RGB (AV HDCP)	
	5BNC:	Video	
		Y, Pb/Cb, Pr/Cr	
		RGB	
	VIDEO:	Video	
		Y, Pb/Cb, Pr/Cr	
		S-video	

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. For further information, refer to the projector's owner's manual.

When the projector is in standby, all the controlling items are inactive.

System

This function is to select the system of signal input to the projector. The available system mode are listed on the pull-down menu button according to the input signal. Select a system and then click **Set** button.



Available selection at the RGB(PC analog) input

Item	Description
XGA1	lt automatically switches to the proper computer system of the input signal.
	* The computer system modes (VGA, SVGA, XGA. SXGA, UXGA, WXGA) which meet the input signal are listed.

Available selection at the RGB(PC digital) input

Item	Description
D-XGA	lt automatically switches to the proper computer sys-
	tem of the input signal.
	* The computer system modes (D-VGA, D-SVGA, D-XGA.
	D-SXGA1) which meet the input signal are listed.

Available selection at the RGB(AV HDCP) input

Item	Description
D-480p	It automatically switches to the proper scanning system
	of the input signal.
	*The selectable scanning systems are D-480p, D-575p,
	D-720p, D-1035i and D-1080i.

Available selection at the Video/S-video/Scart input

Item	Description
AUTO	It automatically switches to the proper color system of the input signal.
	*The selectable color systems are PAL, SECAM, NTSC, NTSC4.43, PAL-M and PAL-N.
	* AUTO is fixed at the Scart input.

Available selection at the Component input

Available selection at the component inpat		
Item	Description	
AUTO	lt automatically switches to the proper scanning system of the input signal.	
	* The selectable scanning systems are 480i, 575i, 480p,	
	575p, 720p, 1035i, 1080i and 1080p.	

^{If the mode (Mode1 to Mode10) which is stored in the item "PC Adjustment" (☞ p.40) is available, they are also listed together with the above mode.}

Sound

This function is to adjust the sound of the projector. The values in the text box represent the current control value or status.



Item	Description
Volume	Adjusts the sound volume from the speaker. $(0 \sim 63)$
Mute	Suppresses the sound. (ON, OFF)
Built-in SP	Suppresses the built-in speaker. (ON, OFF)

Image adjustment

This function is to adjust the projected picture image and save the image mode. To store the adjusted value, click **Store** button, and to load the adjusted value, click **Load** button.

Description
Adjusts picture con- trast. (0~ 63)
Adjusts picture color saturation. (0~ 63)
Adjusts picture hue. (0~ 63)
Switches iris mode to increase the contrast intensity. (ON, OFF)
Sets a color temperature mode. (High, Mid, Low, XLow, Adj.)
. ,.
Blue Adjusts each white balance respectively. (0~ 63)
en changing the value of the te balance, the color temp. icates "Adj."

	ound / Image ad		
Contrast	32	Set - +	
Brightness	32	Set - +	
	32	Set - +	
Tint	32	Set - +	
Iris	ON	✓ Set	
Color temp.	Mid	✓ Set	
White balance			
	Red 32	Set - +	
	Green 32	Set - +	
	Blue 32	Set - +	
Sharpness	15	Set - +	
Gamma	8	Set - +	
Noise reduction	ON	✓ Set	
Progressive	ON	✓ Set	
Reset		Reset	
Store	Image 1	✓ Store	
Load image mode	Standard	∨ Load	

marcat	.cs //aj.
Sharpness	Ádjusts picture sharpness. (0~ 31)
Gamma	Adjusts brightness of darker part of the picture. (0 \sim 15)
Noise reduction	Switches noise reduction mode. (ON, OFF)
Progressive	Switches progressive mode. (ON, OFF, Film)
Reset	Resets the Image adjustment to previous levels.
Store	Stores the Image adjustment values. Select an item [Image1 - Image10]
	from the pull-down menu and click Store button.
Load	Loads the Image mode. Select an image mode from the pull-down menu and click Load button. There may not be available mode depending on the input mode as shown in the table left.

Input source		
Image mode	Video	Computer
Standard	~	V
Cinema	~	*
Real	*	~
lmage1 - 10	~	~

The mark "\u00c3" means that the available image mode in the selected input source. The error message appears when selecting the disabled image mode indicated with "*".



PC adjustment

Click **PC Adj.** on the main menu. This function is to adjust the signal from the computer connected to the projector to obtain the proper picture image on the screen.



Item	Description
Current mode	Displays a current mode like VGA, SVGA, XGA. SXGA, UXGA, WXGA, etc. or Mode1 - Mode10 which are the customized mode created by using the "Mode Store" function described below.
Auto PC adj	Performs automatic adjustment.
Fine sync	Performs Fine Sync adjustment. (0 ~ 31)
Total dots	Adjust the number of total dots in the horizontal period.
Clamp	Adjusts the phase of the clamp.
Display area	
Horizontal	Adjusts the image area horizontally.
Vertical	Adjusts the image area vertically.
Position	
Horizontal	Adjusts the horizontal position of the screen.
Vertical	Adjusts the vertical position of the screen.
Reset	Resets the PC adjustments to the previous levels.
Mode Store	Stores the PC adjustment values. Select a mode no. [Mode1 - Mode10] from the pull-down menu.
Mode Free	Clear the PC adjustment values. Select a mode no. [Mode1 - Mode10] from the pull-

down menu.



Setting up the projector

Click **Setting** on the main menu. This function is to set up the projector. Select the sub menu [Screen setting] or [Setting] and then set up each setting.



Screen setting

This function is to adjust the screen mode of the projector. The values in the text box represent the current screen status.



Item	Description
Screen	Switches the screen mode. (Normal, Wide, True, Full, Custom) There may not be avail-
	able mode depending on the input mode as shown in the table below.

Input source Screen mode Video Computer		
Normal	V	V
Wide	V	~
True	*	~
Full	*	~
Custom	~	✓

 The mark "✔" means that the available screen mode in the selected input source system. The error message appears when selecting the disabled screen mode indicated with "*".

Setting 1

Item	Description	Setting		
Input button	nput buttonSets the input search mode by pressing the INPUT button of the projector and		ng1 / 2 / 3 Mode2	✓ Set
	the remote control. (Mode1, Mode2, Mode3)	Background	Blue	∨ Set
		Display	OFF	✓ Set
Background	Sets the screen background when no signal input. (Blue, User, Black)	Logo	Default	∨ Set
Display	Switches on or off the on-screen menu			
	display on the screen. (OFF, Countdown off, ON)			
	Countdown offDisplays input image instead the countdown during the startup			ne startup.
Logo	Logo Sets on or off the logo display on the screen during the startup. (OFF, Default, User)			ault, User)

Setting 2

Item	Description	Setting		
Ceiling	Sets the image top/bottom and left/ right reversed. (ON, OFF)	Screen setting/ Set Ceiling	OFF	∨ Set
Rear	Sets the image left/right reversed. (ON, OFF)	Rear Power management	OFF	✓ Set
Power		o	Time 5 min.	Set - +
management	Sets into the selected power manage- ment mode (OFF, Ready, Shutdown) if the input signal is interrupted and no control key is pressed for the specified	On start Lamp control	OFF Eco1	∨ Set ∨ Set
		Lamp life control	Mode1	✓ Set
		Remote control	Code1	∨ Set
	period of time.	Fan speed control	Normal	✓ Set
	*The specified time can be set 1 to 30 min.			
On start	Sets the power-on mode when the AC co	ord is connecte	d to the outlet.	
Lamp control	Selects lamp control mode. (Auto, Norma	ıl, Eco1, Eco2)		
Lamp life				
control	ontrolSelects lamp life control mode (Mode1, Mode2) when the total use time exceeds the recommended total hours of use.			
Remote control Fan speed	Selects the remote control code. (Code1	- Code8)		
	ntrolSets the running speed for the cooling fans. (Normal, Max)			

Setting 3

Item	Description	Setting		
Filter		Screen setting/ Set		0.0
counter(h)	Displays the filter counter. Reset the time after filter cartridge replacement. Click "Reset", a confirmation display appears, and then click "OK", the time will be reset. * Do not reset the Filter counter when the filter cartridge is not replaced.	Filter counter(h) Scrolls remaining	9	Reset
		Filter control	Roll-up	neset
		Filter warning	OFF	✓ Set
		PJ lock suspend	Execute	
		Shutter	OFF	▼ Set
		Shutter management		
Scrolls			Time 180 min.	Set - +
remaining	Displays the scrolls remaining of the	Freeze	OFF	✓ Set
	filter. Reset the scroll counter after filter	Factory default	Execute	
	cartridge replacement. Click "Reset",			
	a confirmation display appears, and			
	then click "OK", the time will be reset.			
	* Do not reset the Scrolls remaining when the filter cartridge is not replace	d.		
Filter control	Scroll the filter. Click "Roll-up", a confirma filter will be scrolled.	ation display app	ears, and then	click "OK", the
Filter warning.	Sets the time to indicate the filter warning 1000H)	ng message on t	he screen. (OF	F, 400H, 700H,
PJ lock				
suspend	When the projector has a security of PIN by pressing Execute button.	code lock, disak	ole this functio	n temporarily
Setting p	rocedure			
1. Turn of	f the projector , disconnect AC cord from t	the outlet and th	nen connect A	C cord again.
2. Access	this page with the web browser.			
	recute button on the PJ lock suspend.			
*This fun	ction is disabled after the projector turns	on.		

Shutter.....Sets the shutter operation. (ON: close, OFF: open)

Shutter

management.....Sets the specified period of time when the projector shuts down after the projector is left with the shutter closed.

*The specified time can be set 5 to 180 min.

Freeze.....Sets the image to freeze mode. (ON, OFF)

Factory default.......Sets all of the projector control items to the factory default setting except the following items.

Lamp Corres. Value, PJ time, Network PIN code, Network setting.

*This function is not effective for the settings of Network address settings, e-mail settings, etc.



Information

This page is to display the basic information of the projector status. Click **Information** on the main menu.



Description
Displays selected input and source.
Displays selected signal system.
Input signal status. (Yes, No)
Displays screen mode.
Displays lamp status with an icon. Refer to the table as shown in the next
page.
Displays the security (PIN code lock) status. (Yes, No)
Displays the accumulated use time of the projector.
Displays the use time (Corresponding value) of the lamp.
Displays the accumulated use time of the filter.
Displays filter status with an icon. Refer to the table as shown in the next page.

Indication of the lamp status

lcon display/background	Status
White/Blue	Lamp on (Normal)
White/Red	Lamp on (Lamp is being used over a specified use time, replace lamp immediately)
Gray/Blue	Lamp off (Normal)
Gray/Red	Lamp off (Lamp is being used over a specified use time, replace lamp immediately)
Red/Blue with X	Lamp failure (Lamp failure, check lamp condition)
Red/Red with X	Lamp failure (Lamp failure and lamp is being used over a specified use time, replace lamp immediately)

Indication of the filter status

Icon display/background	Status	
Blue	Good condition.	
Yellow/Gray	Filter is almost clogged.	
Red/Gray	Filter is clogged. Replace a filter with new one. * When the projector cannot decode the return from the filter cartridge, this icon also appears.	

Chapter 5 Appendix

Connection examples

Use of telnet

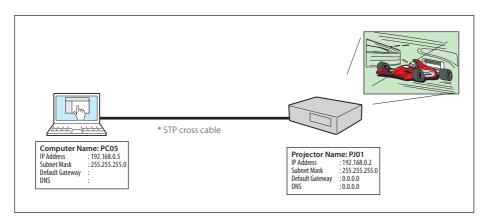
Web browser setting

Q & A

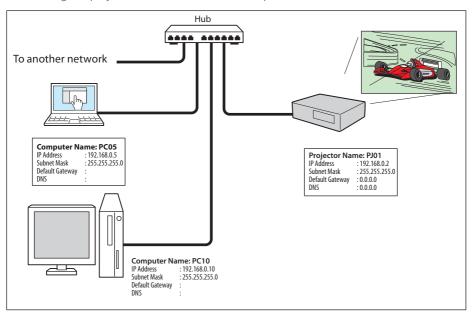
Examples of connection

Peer-To-Peer connection

Connecting the projector (PJ01) to the control computer (PC05) directly.



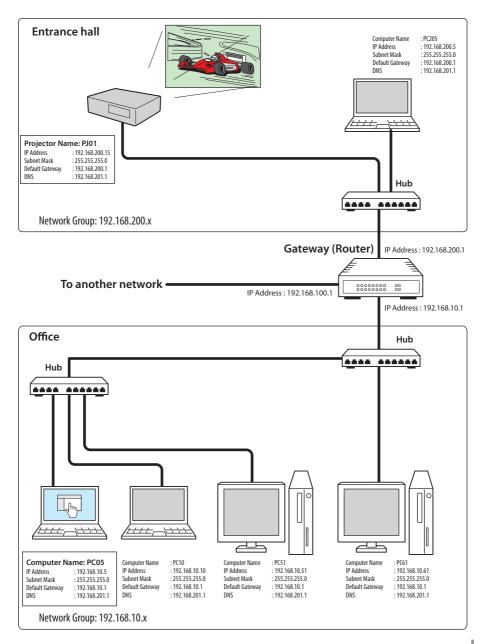
Connecting the projector (PJ01) to the control computer (PC05) via the hub.



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

The gateway (Router) installed in the network

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



Use of telnet

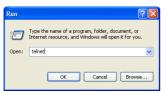
You can control the projector by using the telnet application^{*1} installed on your computer. Normally, the telnet application is available on your computer.

* The telnet 10000 port is used to control the projector.

Control

(For example, in case of using the telnet application of **Windows XP Professional**.)

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



(For example, in case of using the telnet application of **Mac OS X v 10.4**)

Select Terminal from Applications

 Vtilities.

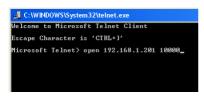


Type as below on the displayed window.

> telnet [return]



- 2. The telnet application will start and the following window will be displayed. Type as below to connect the projector.
 - > open 192.168.1.201 10000 [return]



^{*} Use the IP address assigned to the projector.



3. When communication is established correctly, the word "PASSWORD:" appears on the window. Type the login password (Network PIN code⁻²) for the projector and then press "Enter" key on the keyboard. If you do not set up the Network PIN code, just press "Enter" key.

When the word "Hello" is replied, login has been succeeded.

* The password "1234" is used for the example.





- 4. Type the commands, refer to below table, to control the projector and then press "Enter" key for termination. For example, type "C00" which is a command to turn on the projector, and press "Enter" key. Confirm the projector is turning on.
 - * Enter with ASCII 64-byte capital characters and one-byte characters.

To disconnect the communication, press "Ctrl" key and "]" key at the same time, type "close" and then press "Enter" key on the Keyboard.

> close [return]

The table below shows the typical command lists for controlling this projector and please consult your local dealer for further information of another commands.

Command list table

Command	Function
C00	Power on
C02	Power off
C09	Volume up
C0A	Volume down
COB	Audio Mute on
C0C	Audio Mute off
C1C	Menu display on
C1D	Menu display off

- *1 Further instructions about the telnet application, please see the on-line guide on your computer.
- *2 The password is a Network PIN code decided item "Network PIN code setting" (Pp.14, 23). If the authentication of the entered password is failed 4 times continuously, the communication will be disconnected automatically. Please try again for the connection.
- If the password or any command is not entered for more than 30 seconds, the communication will be disconnected automatically. Please try again for the connection.

Web browser setting

This projector is designed 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.

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 warning message "Make sure JavaScript is ON." 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 projector 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 STP 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. Please see item "Examples: OS/Browsers" in the next page for further setting up procedure.

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

ENGLISH

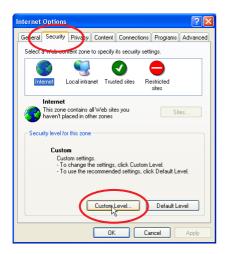
Examples: OS/Browsers

Windows XP Professional

Internet Explorer v.6.0

ActiveScript setting

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





Proxy setting

Select **Internet Options** from **Tools** menu on the web browser and then select **Connection** tab and click **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 STP 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.



ENGLISH

MAC OS X v 10.4

Safari v.5.1.2

JavaScript enable setting

Select **Preferences...** from **Safari** on the web browser and then select **Security** tab and check **Enable JavaScript**.



Proxy setting

- 1 Open Preferences... from Safari menu on the web browser Safari. The preference menu appears.
- $oldsymbol{2}$ Select $oldsymbol{\mathsf{Advanced}}$ icon and then click $oldsymbol{\mathsf{Proxies:}}$ Change $oldsymbol{\mathsf{Settings}}$
- 3 Select Proxies tab and properly set up your web browser Safari's the proxy server settings according to the local area network environment to which the projector is connected.

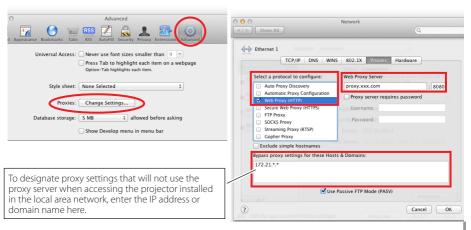
- Using proxy server

To use an external internet connection from the local area network, check the items **Web Proxy (HTTP)** and **Secure Web Proxy (HTTPS)** of **Select a proxy server to configure** window and enter the proxy server address and port correctly in **Web Proxy Server** window. For further instruction please consult your network administrator.

- Not using proxy server

Uncheck the items **Web Proxy (HTTP)** and **Secure Web Proxy (HTTPS)** of **Select a proxy server to configure**.

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



Q&A

Installation/Access

- **Q** Why doesn't the setting page appear in my web browser?
- Following causes are possible. Please check them.
 - 1. The projector does not connect to the network. Check LED indicators status. (☞ p.12)
 - Check the connection of LAN cable if the LINK Lamp does not light green.
 - Check the network configuration of the projector if the ACT Lamp does not blink orange.
 - 2. Wrong network configuration of the computer. Check the network configuration of the computer.
 - 3. The proxy setting of the web browser is not set correctly. (1887 p.54)
 - 4. The computer does not provide TCP/IP protocol.
- Q How can I restrict access from the computer?
- 1. Please use the password authentication function on the login page. (** p.23)
 - 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.
- 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 for security reason.
 - 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.)

- We use the DHCP/BOOTP server to assign the IP address. Is it possible to use the projector in this network environment?
- Possible. This projector supports the DHCP/BOOTP server. To use this projector in this network environment, set it up so that the DHCP/BOOTP server does not assign the IP address configured to this projector for another device on the network. Please consult your network administrator. (** pp.13, 24)
- Q How can I install several projectors?
- A Install and configure network one by one to avoid the IP address collision each other. To configure the IP address please see item "Network configuration". (** pp.12-13, 24)

Password/Login

- What should I do when I forget the IP address of the projector?
- A You can check the IP address in the "Network information" menu.
- Q What should I do when I forget the password (Network PIN code)?
- A Please set the new network PIN code in the "Network PIN code" menu.
- Can I register the setting page as a web browser "Favorites" or "Bookmarks"?
- A Please add "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.

Operation

- Q Why can't be turned on/off with web browser?
- A Please make sure the settings of the projector are correct to use the projector. Please set the **Standby mode** of the projector's **Setting menu** to "**Network**". Refer to "4. Controlling the Projector" → "Power control and status check". (ISS pp.34 35)
- 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.
- 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.
- 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.
- Why am I not receiving E-mail alert messages?
- 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. (187 p.26)

Others

Q What are the rules for IP address assignment?

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 [192.168.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

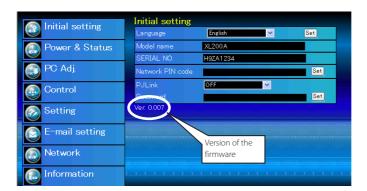
The IP address must correlate to a network number. If network numbers are different between the equipment, they cannot establish communications each other. In this case, the router is placed in the networks to make the routing.

- **Q** Can I control the projector by using the telnet application?
- A Possible. Please refer to the item "Use of telnet". (1887 p.50 51)
- **Q** What is the MAC address assigned to the projector?
- A The MAC address is displayed in "Network information" menu. (187 p.14)

Q Can I update the firmware of the projector.



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.





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