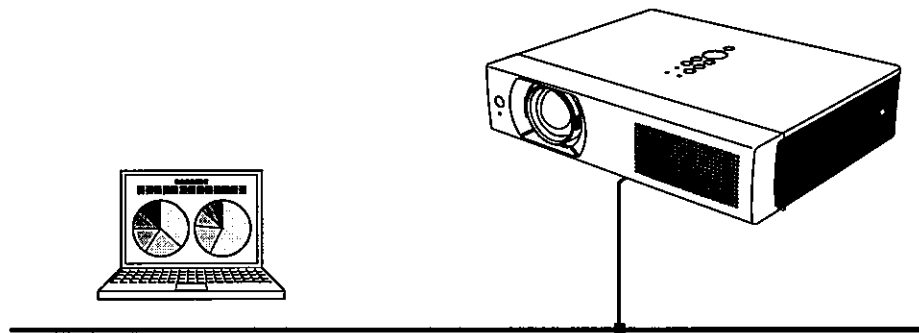




Owner's Manual

Network Set-up and Operation For Windows

Wired and Wireless Setting
Projector Set-up and Operation
Network Capture
Network Viewer
Moderator Function



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.

Compliance

This projector provides the wireless LAN module which complies with the module certification.

Federal Communications 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 does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Model Number	: 1AV4U19B25500
Trade Name	: Sanyo
Responsible party	: SANYO FISHER COMPANY
Address	: 21605 Plummer Street, Chatsworth, California 91311
Telephone No.	: (818)998-7322

This device complies with Part 15 of FCC Rules and RSS-Gen of IC Rules. Operation is subject to the following two conditions: (1) the device may not cause interference, and (2) the device must accept any interference, including interference that may cause undesired operation of this device.

CAUTION: Properly shielded a grounded cables and connectors must be used for connection to host computer and /or peripherals in order to meet FCC emission limits.
VGA cable with ferrite core must be used for RF interference suppression.

For Canadian Users

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

FCC Warning

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC RF Exposure Warning

- This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.
- This equipment complies with FCC/IC radiation exposure limits set forth for uncontrolled equipment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65 and RSS-102 of IC radio frequency (RF) Exposure rules. This equipment should be installed and operated with at least 20cm and more between the radiator and person's body (excluding extremities: hands, wrists, feet and ankles).



The CE Mark is a Directive conformity mark of the European Community (EC).



The Alert Mark is a Directive conformity mark of the European Community.

English	Hereby, SANYO FISHER Sales (Europe) GmbH, declares that this WLAN Module (1AV4U19B25500) is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Česky [Czech]	SANYO FISHER Sales (Europe) GmbH, tímto prohlašuje, že tento WLAN Module (1AV4U19B25500) je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Dansk [Danish]	Undertegnede SANYO FISHER Sales (Europe) GmbH, erklærer herved, at følgende udstyr WLAN Module (1AV4U19B25500) overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
Deutsch [German]	Hiermit erklärt SANYO FISHER Sales (Europe) GmbH, dass sich das Gerät WLAN Module (1AV4U19B25500) in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Eesti [Estonian]	Käesolevaga kinnitab SANYO FISHER Sales (Europe) GmbH, seadme WLAN Module (1AV4U19B25500) vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
Español [Spanish]	Por medio de la presente SANYO FISHER Sales (Europe) GmbH, declara que el WLAN Module (1AV4U19B25500) cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ SANYO FISHER Sales (Europe) GmbH, ΔΗΛΩΝΕΙ ΟΤΙ WLAN Module (1AV4U19B25500) ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
Français [French]	Par la présente SANYO FISHER Sales (Europe) GmbH, déclare que l'appareil WLAN Module (1AV4U19B25500) est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Italiano [Italian]	Con la presente SANYO FISHER Sales (Europe) GmbH, dichiara che questo WLAN Module (1AV4U19B25500) è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo SANYO FISHER Sales (Europe) GmbH, deklarē, ka WLAN Module (1AV4U19B25500) atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo SANYO FISHER Sales (Europe) GmbH, deklaruoją, kad šis WLAN Module (1AV4U19B25500) atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Nederlands [Dutch]	Hierbij verklaart SANYO FISHER Sales (Europe) GmbH, dat het toestel WLAN Module (1AV4U19B25500) in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
Malti [Maltese]	Hawnhekk, SANYO FISHER Sales (Europe) GmbH, jiddikjara li dan WLAN Module (1AV4U19B25500) jikkonforma mal-htigijiet essenzzjali u ma provvedimenti oħrajn rilevanti li hemm fid-Direttiva 1999/5/EC.
Magyar [Hungarian]	Alulírott, SANYO FISHER Sales (Europe) GmbH, nyilatkozom, hogy a WLAN Module (1AV4U19B25500) megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC Irányelv egyéb előírásainak.
Polski [Polish]	Niniejszym SANYO FISHER Sales (Europe) GmbH, oświadczam, że WLAN Module (1AV4U19B25500) jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Português [Portuguese]	SANYO FISHER Sales (Europe) GmbH, declara que este (1AV4U19B25500) está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Slovensko [Slovenian]	SANYO FISHER Sales (Europe) GmbH, izjavlja, da je ta (1AV4U19B25500) v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]	SANYO FISHER Sales (Europe) GmbH, týmto vyhlasuje, že (1AV4U19B25500) spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Suomi [Finnish]	SANYO FISHER Sales (Europe) GmbH, vakuuttaa täten että (1AV4U19B25500) tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]	Härmed intygar SANYO FISHER Sales (Europe) GmbH, att denna (1AV4U19B25500) står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.
Íslenska [Icelandic]	Hér með lýsir SANYO FISHER Sales (Europe) GmbH, yfir því að (1AV4U19B25500) er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.
Norsk [Norwegian]	SANYO FISHER Sales (Europe) GmbH, erklærer herved at utstyret (1AV4U19B25500) er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.

Safety instructions



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

- SANYO Electric Co., Ltd. assumes 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.

Caution about Radio Wave

This unit operates in 2.4 GHz band, the same frequency band used for industrial, scientific, and medical equipment (such as pacemaker), as well as amateur radio stations.

Please read "Safety Instructions" section and make sure the following cautions.

1. Be sure that there are no other devices in the area that may use the same frequency band as Projector.
2. If any other devices are causing radio interferences, change the communication frequency channel or move to other location.

Trademarks and Copyright

Microsoft, Windows, and Internet Explorer are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Netscape Navigator and Netscape Communicator are registered trademarks or trademarks of Netscape Communications Corporation in the United States and other countries.

Pentium is a registered trademark of Intel Corp. in the United States.

Each name of corporation or product in this Owner's Manual is either a registered trademark or a trademark of its respective corporation.

Notes

- The contents of this manual are subject to change without notice.
- You may not copy the printed materials accompanying with the software.
- We shall not be responsible for any damages caused by reliance on this manual.

Expression/Abbreviation

The OS of the computer and the Web browser described in this manual is 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 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.

Table of contents

Compliance	2
Safety instructions	4
Table of contents	5
Operating environment and configuration	8
Required operating environment for computers	8
Network specifications of the projector	9
Useful guide to the network function	10
How to project the computer screen's image via the network	10
How to setup or control the projector by using a PC via the network	10
How to use all functions concerning the network	10
1. About LAN functions	11
LAN functions and the features	12
Image projecting system via LAN	12
An example of the connection	13
LAN connection modes	14
2. Setup procedures	17
Installing the software	19
3. Names and functions of the operation screen	23
Network connection standby display	24
Network Capture 5 window	25
4. Wired LAN configurations	27
Connecting to the LAN line	28
Network environment settings	28
Confirming the operation	30
Network PIN code	32
Network information	32
Wired factory default	33
Wired LAN factory default settings	34
5. Wireless LAN configurations	35
Setting the network environment	36
Setting procedures	36
Configuring security with the projector	38
Easy wireless setting	41
Network PIN code	42

Network information.....	42
Wireless factory default.....	42
WIRELESS indicator display.....	43
Wireless LAN factory default settings	44
6. Basic setting and operation	45
Starting up the Browser	46
How to use the setting page	48
Initial setting.....	50
Network configuration	53
Configuring wireless LAN setting and security setting.....	55
E-mail setting	57
SNMP setting.....	61
7. Controlling the projector	65
Power control and status check	66
Controls.....	68
PC adjustment	72
Setting up the projector.....	73
Timer setting	76
Projector information.....	79
Multi-control	81
8. Network capture functions	87
About Network Capture function.....	88
Using the Real Time Capture	91
Using the Network Communication.....	96
How to use the Network communication	100
Network Communication operation and change of state.....	103
Executing the forcing mode	104
Moderator function	105
Preparation for using the moderator function	106
Using the moderator function	107
Moderator's password setting up.....	108
Unregister moderator status	108
Error information	109
Playing the movie files.....	110

9. Network Viewer functions.....	113
Creating the available data [Network Viewer 5].....	114
Creating a program file [Program Editor].....	119
Using the Network Viewer function.....	124
Use of the projector as FTP server.....	130
10. Network Projector [Windows Vista]	133
Use of "Connect to a Network Projector"	134
11. Appendix.....	137
Use of telnet	138
Web browser setting	140
Firewall setting	145
Troubleshooting.....	146
Terminology.....	152

Operating environment and configuration

Required operating environment for computers

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

OS		Microsoft Windows 2000 or Microsoft Windows XP or Microsoft Windows Vista (32bit version)
CPU		Pentium 3 ; 1GHz or higher (more than 2GHz is recommended) for Windows 2000 or Windows XP Pentium 4 ; 3GHz or higher for Windows Vista
Memory		256MB or more for Windows 2000 or Windows XP 1GB or more for Windows Vista
Free HDD Space		100MB
Screen Resolution		Required to support any of VGA (640 x 480), SVGA (800 x 600), XGA (1024 x 768), The color number should be either 16 bit (65536 colors) or 24/32 bit (16.77 million colors).
Communication Protocol		TCP/IP
Network Correspond	Wireless LAN	Correspond to IEEE802.11b/g, IEEE802.11n (Draft 2.0)
	Wired LAN	Correspond to 100BASE-TX (100Mbps) /10BASE-T (10Mbps)
Browser Application		Microsoft Internet Explorer Ver.4.0 or later Netscape Communications Netscape Communicator Ver.6.0 or later

Network specifications of the projector

LAN Terminal

Data communication speed	100Base-TX (100Mbps)/10Base-T (10Mbps)
Protocol	TCP/IP

Wireless LAN

Interface	IEEE802.11b/g, IEEE802.11n(Draft 2.0)
Communication Mode	AdHoc, Infrastructure
Data Transfer Speed	1/2/5.5/11Mbps (IEEE802.11b) 6/9/12/18/24/36/48/54Mbps (IEEE802.11g) Max speed 150Mbps (IEEE802.11n)
Wireless Frequency (Channel)	2412MHz~2462MHz (CH1~CH11)
Modulation Form	IEEE802.11g OFDM 54/48Mbps 64QAM, 36/24Mbps 16QAM, 18/12Mbps QPSK, 9/6Mbps BPSK IEEE802.11b DSSS 11/5Mbps CCK, 2Mbps DQPSK, 1Mbps DBPSK IEEE802.11n OFDM
Protocol	TCP/IP
Security	WEP 64Bit (Open/Shared) /WEP 128Bit (Open/Shared), WPA-PSK(TKIP), WPA2-PSK(AES), SSID, ESSID
Service area	about 30 m (without disturbance) Differs according to the operating environment.

Compliance

Countries and Standards	JAPAN: VCCI ClassB, TELEC (Wireless)
	USA: FCC Part15 Subpart C (Wireless) FCC Part15 Subpart C, Class B
	Canada: IC RSS-210 (Wireless), IC ICES-003 ClassB
	Europe: R&TTE, EMC, LVD

Useful guide to the network function

This manual describes the operation procedure of the projector's network menu and the provided application software for Windows users. Please refer to this manual depending on the situation.

● How to project the computer screen's image via the network

To project the computer screen's image via the network, you need to make a network setting in the projector and connect the projector to the network, or if you use the supplied USB memory, you can project the computer screen's image via the network without making a network setting.

Check 1 Did you make a network setting in the projector?

Yes

No

• • ➤ Project the image by using the Auto Capture program on the supplied USB memory. (p.95)



Check 2 Did you install the supplied application?

Yes

No

• • ➤
• Control by the projector (p.91, 94)
• Control by the web browser (p.91, 93)
• Use of "Connect to a Network Projector" in the Windows Vista (p.134)



Project the image by using the Real Time Capture function in the supplied 'Network Capture 5' application. (p.91, 92)

● How to setup or control the projector by using a PC via the network

To setup or control the projector via the network, you need to make a network setting in the projector and connect the projector to the network.

Check Did you make a network setting in the projector?

Yes

No

• • ➤ You cannot setup or control the projector via the network without making a network setting in the projector. Please make a network setting. [Wired LAN configurations (p.27-34)/Wireless LAN configurations (p.35-44)]



Setup or control the projector by controlling the web browser of the PC. [Setup (p.45-64)/ Control p.65-86].

● How to use all functions concerning the network

To use all functions concerning the network of this projector, you need to make a network setting in the projector and install the supplied application. Please follow the procedure on page 18.

Chapter 1

1. About LAN functions

This chapter describes the features, the mechanism, and connection procedures of the LAN.

LAN functions and the features

.....
This product is loaded with a LAN network function which enables you to project an image on the computer through a projector via Network with dedicated software.

With the software, you can also manipulate the projecting image and the projector.

This software has functions below and you can use the projector under various network environments to meet the wide-ranging needs of the operation.

- Accept both Wired and Wireless LAN environment. When the projector is operated via Wireless LAN, there is no need for wire connection.
- Remove the burden of LAN settings. Easy LAN setting function is provided.
- One computer image can be projected up to 5 projectors simultaneously.
- Network capture function to project the computer's screen image through the projector.
- Remote function which allows you to operate the projector from a distance.
- Monitoring function for the projector operation.
- E-mail function which reports the operating status to your maintenance management.
- Network viewer function which remotely operates the image data on the server to project through the projector.
- Moderator function with which the moderator can project the image on the participants' computer screen at the meetings or the classes.
- Multi control function which can operate multiple projectors (up to 100) simultaneously.

Image projecting system via LAN

.....
The images are projected through an image capturing system which helps to project the faithful computer images. With this system, you can use the product under various application environments despite the differences of application software.

Flow of Image Transfer

1. Download the computer image with the dedicated software faithfully to the real image.
2. The downloaded data will be compressed to the digital signal and transferred to the projector via the LAN (Wired or Wireless). (One computer can operate up to 5 projectors simultaneously.)
3. Digital signal will be reproduced into RGB image signal and will be projected by the projector.

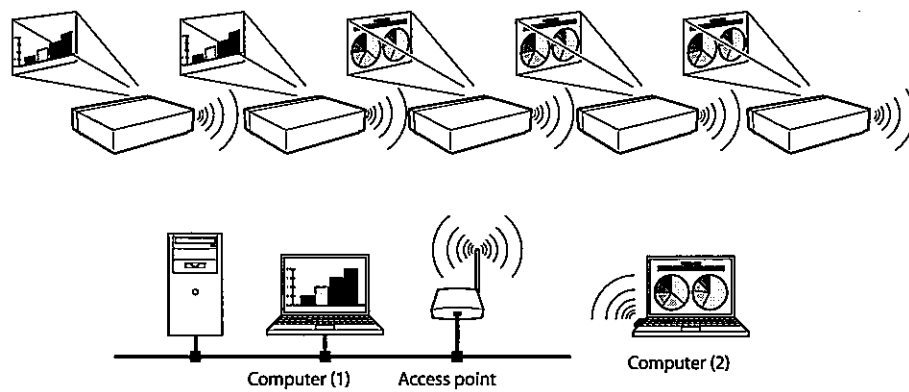
* The image will be transferred to each projector. The time lag can occur between each projection.

CAUTION: This product does not correspond to the application with DirectX, MS-Office assistant, and video replay such as DVD.

An example of the connection

The illustration below shows an example of the projection via the LAN.

You can project the image on Computer (1) (Wired LAN connection), or Computer (2) (Wireless LAN connection) through the selected projector.

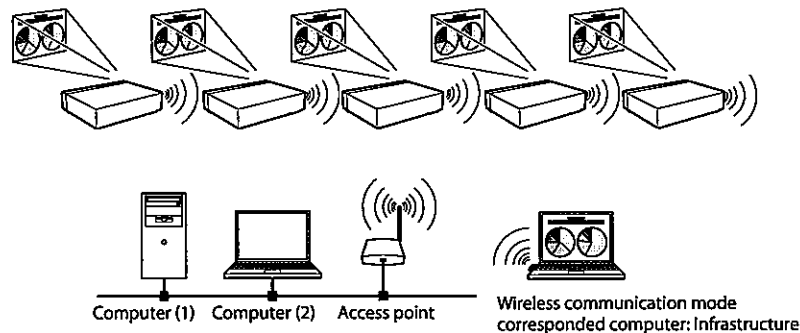


LAN connection modes

Connection modes differ depending on the LAN and computer environments.
Connect appropriately for each environment.

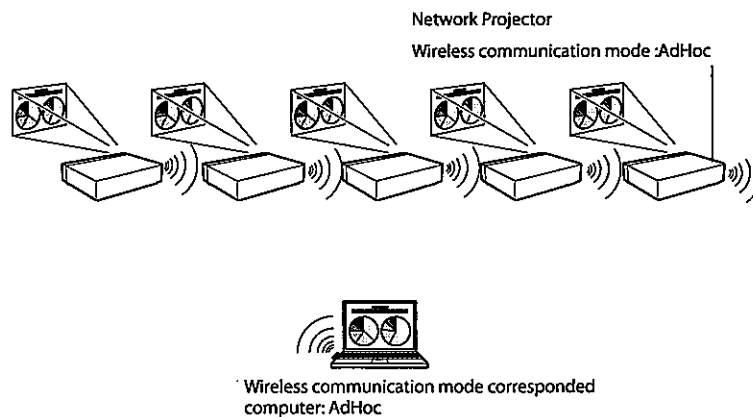
■ Wireless LAN, Infrastructure Communication Mode

Communicate over an access point between Wired LAN equipment and Wireless LAN equipment. Or, communicate over an access point among multiple Wireless LAN equipment. Wireless LAN equipment will select an access point to communicate SSID/ESSID modes. These communication modes are used when both Wireless LAN and Wired LAN are used in the same network environment.



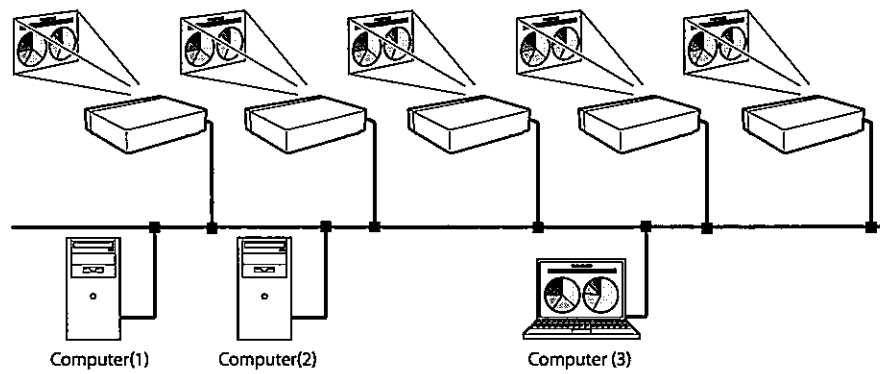
■ Wireless LAN, AdHoc Communication Mode

Communication mode between Wireless LAN equipment.
(Communication mode via SSID/ESSID)



■ Wired LAN Communication Mode

Communicate via the LAN line.



* Operate the computer mouse with the remote control.

When the projector's remote control employs mouse operating function, you can operate the computer by the remote control. To use the remote control, point to the projector. You do not need to connect the USB cable to operate the computer mouse.

Chapter 2

2. Setup procedures

This chapter describes how to install the Network Capture 5 software and how to set up the networks.

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

STEP 1 **Install the software on computers.**



Install the software recorded in CD-ROM on each computer which will be operated.
Read following pages of this chapter to install.

STEP 2 **Select Wired LAN or Wireless LAN then connect the LAN and set the configuration.**



Decide depending on the LAN environment.
Wired LAN..... Refer to "4. Wired LAN Configurations" (pp.27-34).
Wireless LAN..... Refer to "5. Wireless LAN Configurations" (pp.35-44).
Detailed LAN configurations need to be done with a browser later.
First, complete the Wired or Wireless LAN connection between computers and projectors, then start browser configurations.
→ "6. Basic setting and operation" (pp.45-64).

STEP 3 **Network Configuration has completed.**

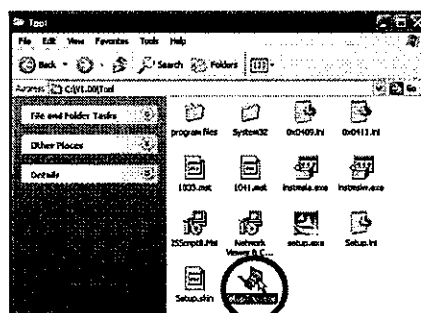
Follow each chapter to project an image and operate the projector.

- Operate and manage the projector → "7. Controlling the projector" (pp.65-86)
 - "Power Control and status check" (p.66)
 - "Controls" (p.68)
 - "PC adjustment" (p.72)
 - "Setting up the projector" (p.73)
 - "Timer setting" (p.76)
 - "Projector information" (p.79)
 - "Multi-control" (p.81)
- Project an image on the computer → "8. Network capture functions" (pp.87-110)
 - "Use of real time capture" (p.91)
 - "Use of network communication" (p.96)
 - "Moderator function" (p.107)
- Project an image on a network server → "9. Network Viewer functions" (pp.113-130)
 - "Create the available data" (p.114).
 - "Create the program files" (p.119).
 - "Project the image with network viewer function" (p.124)

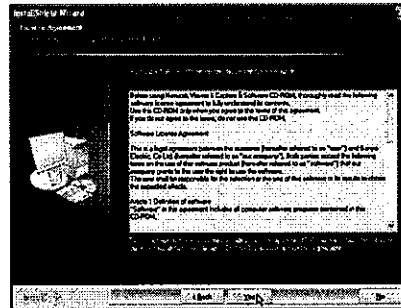
* Even if Network Capture 5 is not installed into the computer, the wireless LAN can be set up with USB memory. (p.95)

Note: To install the software into the computer with Windows 2000, Windows XP or Windows Vista, you should logon as administrator. Before installation, make sure that the other applications are closed, otherwise proper installation cannot be made.

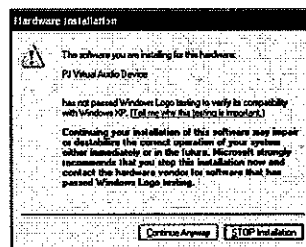
I Set the supplied Network Viewer & Capture 5 CD-ROM into the CD-ROM drive of your computer. Double click **SetupTool.exe** icon in the "Tool" folder in the CD-ROM.



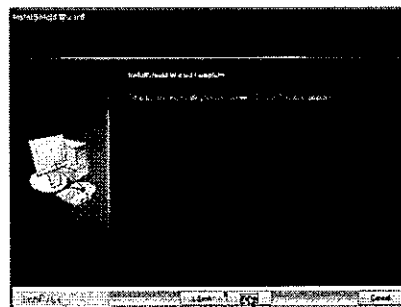
As the "License Agreement" will appear, read contents carefully and click Yes button if you agree to the license agreement to proceed with installing.



During the installation, following window may appear, click Continue Anyway button.



3 Click Finish to complete the installation.



Installed software

The following 3 softwares are installed on your computer.

- **Network Capture 5:**

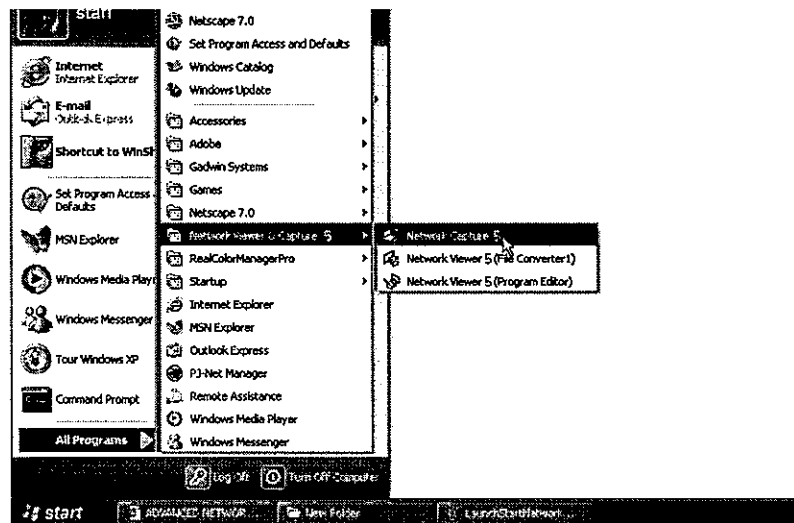
Captures the displayed image and the sound of the computer and serves them to the projector via the network.

- **Network Viewer 5 (File Converter 1):**

Converts to the JPEG*1 data format which can be projected with the projector from the JPEG, bitmap and Power Point files.

- **Network Viewer 5 (Program Editor):**

This is a tool to make the program which has a function to specify and order the projecting JPEG image data stored in the file servers.

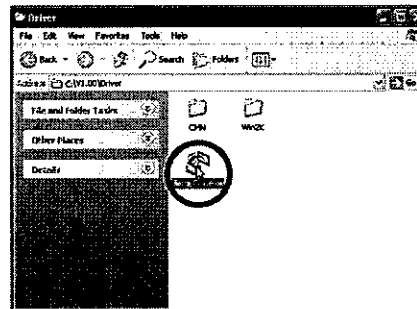
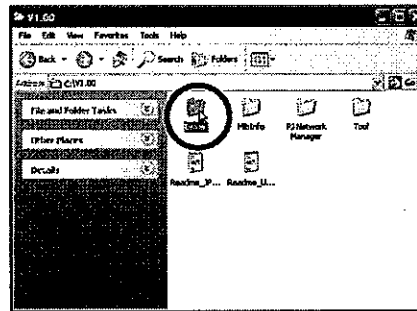
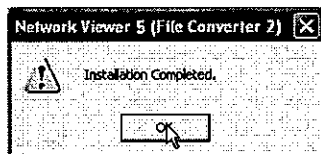
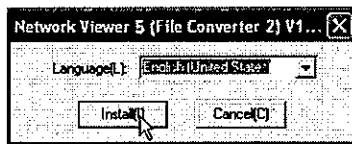


* To uninstall these software, use "Add/Remove Program" from the control panel.

*1 This product supports the JPEG image format. This file is needed to convert to the optimized JPEG file by using the File Converter 1 software previously. Refer to the item "Creating the available data [Network Viewer 5]" (p.114) about data converting for the projection.

File Converter 2 installation

- 1 Set the supplied Network Viewer & Capture 5 CD-ROM into the CD-ROM drive of your computer. Double click **SetupDrv.exe** icon in the "Driver" folder in the CD-ROM.
- 2 Select "English [United States]" from the pull-down menu on the language selection window and then click **Install** button to start installing.

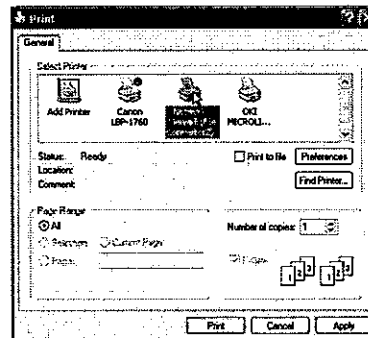


Installed software and places

NetworkViewer 5 (File Converter 2) is installed in the "Printers and Faxes" folder in the "Control Panel".

● Network Viewer 5 (File Converter 2):

This is a kind of the printer driver to convert to the JPEG data optimized to project by the projector from any of the documents created by the application software.



*To uninstall Network Viewer 5 (File Converter 2), just delete the "Network Viewer 5(File Converter 2)" icon from the "Printers and faxes" folder.

Chapter 3

3. Names and functions of the operation screen

This chapter describes the functions of each part of the operation screen.

Network connection standby display

Turn on the projector and select either "Wired" or "Wireless" from the input menu of the projector. The "Please wait..." message will be displayed on the screen. After short time, the network connection standby display screen will appear as below. While the "Please wait..." message is shown, some operations are invalid.

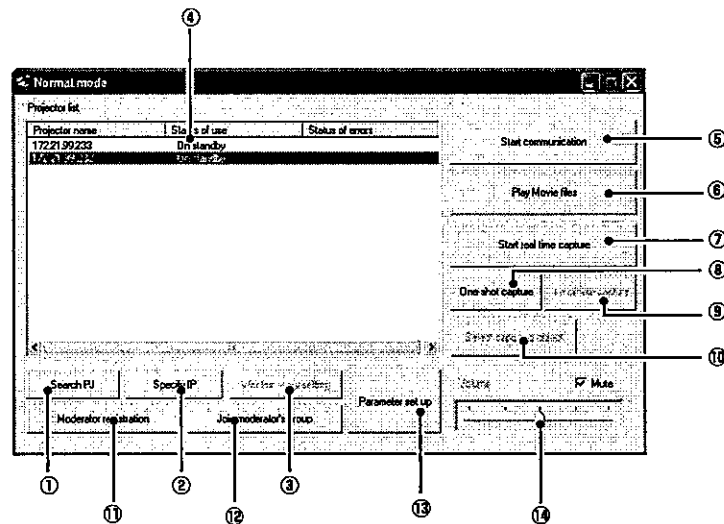
Network Connection Standby Display



Network Capture 5 window

This software is to project the computer screen via the networks.

Select "All Programs" from the start menu --> Network Viewer & Capture 5" --> "Network Capture 5", then following screen will appear. Then the program will start.



Parts Names and Functions of the Screen

- ① **Search PJ button**
Search the projector connected to the networks.
- ② **Specify IP button**
When connected to a different segment network, the projector can not be retrieved automatically. In that case, press this button, the "Search specified IP address list" window appears, and then click Add button and enter the IP address directly to specify the projector in another window. The registered multiple IP addresses can be searched at a time.
- ③ **Wireless easy setting button / Wireless easy release button**
Configure the Wireless LAN setting just by clicking this button. (The setting will be stored as AdHoc system) For details, refer to "5. Wireless LAN configurations"-->"Easy wireless setting" (p.41). To restore the easy setting, press the Wireless easy release button.
- ④ **Network Projector List**
Display all the projectors connected to the networks.
Show unoccupied projector as "On standby" and occupied projector as "Real time capturing" or "In One-shot mode". When registered in a moderator's group, "On Moderator mode" will be shown. The indication of the status of use with "#" indicates that your computer is now using the network capture function. After double-clicking on a projector name, the web browser gets activated and the projector setup screen will be displayed.

- ⑤ **Start communication button**
Enter the Communication mode, and then , the capture edit window starts. The selected projector shows the capture edit window.
- ⑥ **Play Movie files button**
The play movie files window will appear.
- ⑦ **Start real time capture button**
Capture (Project) the computer screen in real time. After the execution of "Start real time capture", the application window disappears. ... ♦
- ⑧ **One-shot capture button**
Copy and capture (project) the computer screen without modification. After the execution of One-shot capture, the application window disappears. ... ♦
- ⑨ **Terminate capture button**
Terminate the real time capture and the One-shot capture.
- ⑩ **Select capturing object button**
It is possible to designate the window to capture individually. This button is disabled by default, so the full screen is captured. It is possible to change the capturing object function setting at parameter settings. For detail, refer to "Parameter set up" (p.90).
- ⑪ **Moderator registration button**
Register a computer user as a moderator.
- ⑫ **Join moderator's group button**
Join the moderator's group which is selected in the Network Projector list. It is not available if there is no moderator registered.
- ⑬ **Parameter setup button**
Activate the parameter setup window, and execute the connections setting, the image setting, and the moderator's function setting. For detail, refer to "Parameter set up" (p.90).
- ⑭ **Volume adjust slider and Mute check box**
Adjust the audio output from the real time capturing computer. The mute check box is checked by default.

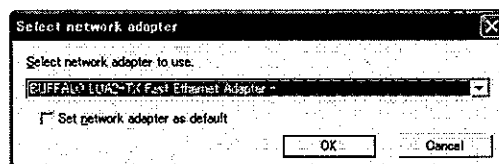
♦ To show the application window again, refer to the item "Commands on the task bar" (p.89).

Note on Windows Vista

When you use the Network Capture 5 software with Windows Vista, the warning dialog "User account control" will appear. In that case, click Allow button to use it.

Using the multiple network adaptors

When your computer provides multiple network adaptors, the network adaptor selecting window will appear each time the Network Capture 5 software starts. Select a network adaptor and check the "Set network adaptor as default" and then click OK. To change the setting, refer to the item "Parameter set up" (p.90).



Chapter 4

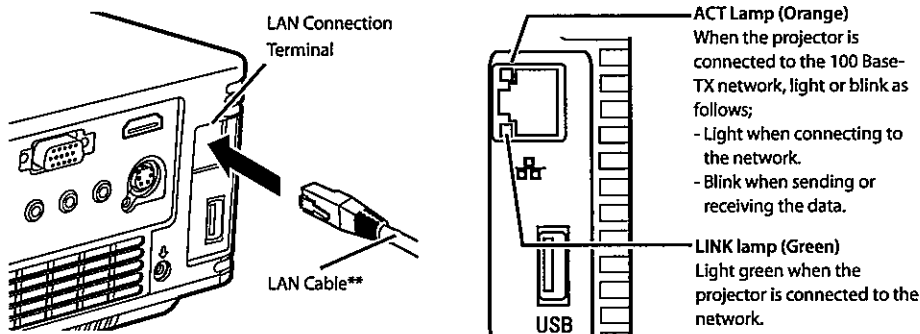
4. Wired LAN configurations

This chapter describes the preparation for Wired LAN setting with projectors and how to set the LAN environment.

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



** Please use a shielded LAN cable .

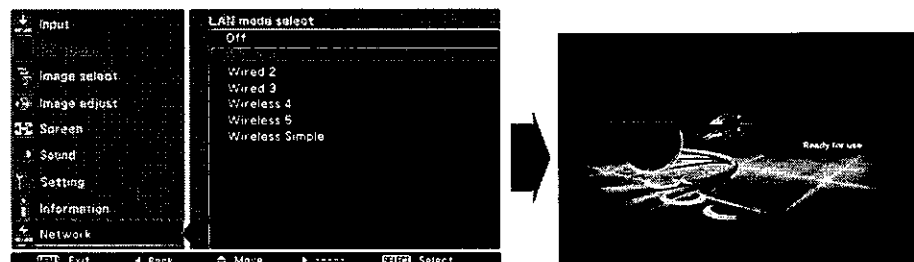
*When the LAN setting is "Off", the two lamps will not be on.

Network environment settings

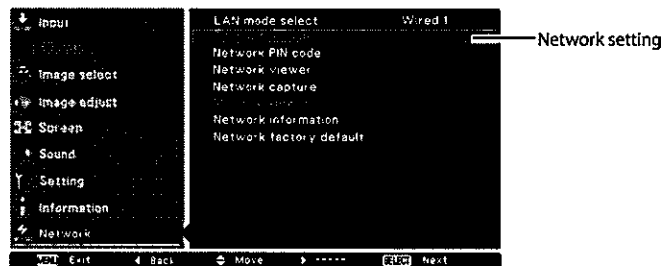
Set the Wired LAN network through the projector menu. Detailed network settings will be made with browser. Refer to "6. Basic setting and operation" (p45-64). First, complete the settings described in this chapter before performing steps in "6. Basic setting and operation."

Setting Procedure

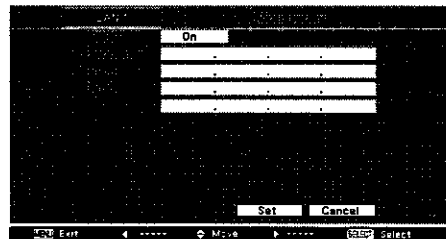
1. Turn on the projector and select "Network" from the input menu of the projector.
2. Select "LAN mode select" in the Network menu, and press Point ► or SELECT button.
3. Select similar LAN environment among Wired1, 2 and 3 with the Point ▲▼ buttons. Then the Menu will disappear, the "Please wait..." message will appear, and switching operation will start. Switching will take a while and after completing the operation, the "Ready for use" message will appear, and the projector's LINK/ACT Lamp will be on or blink.



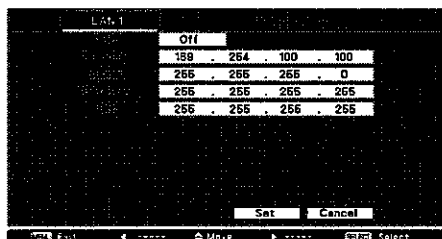
4. Select "Network setting" in the Network menu and press **SELECT** button, and then the LAN setting screen will appear and selected LAN settings will be displayed. Adjust each item to the setting environment. Consult your system administrator about the detailed settings.
Move among the items with the Point **▲▼** buttons and press **SELECT** button, move among the columns with Point **◀▶** buttons, adjust the figures with Point **▲▼** buttons, and then press **SELECT** button to set.
5. 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.
To confirm whether the settings are correct, follow the procedures described from the next page.
You can confirm the LAN settings you have made from "Network Information" (p.32). In such cases that the LAN cannot be connected, see this screen.



DHCP: On



DHCP: Off



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.

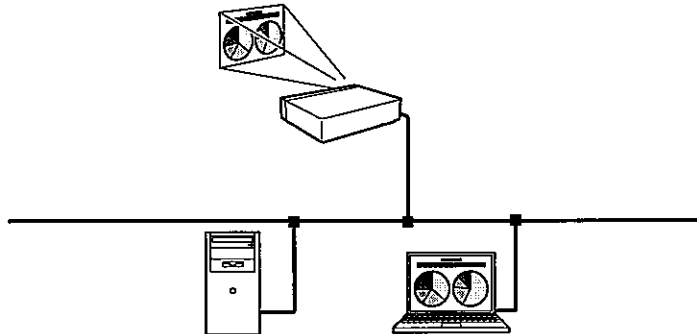
*2 Set [255.255.255.255] if the network does not provide the gateway (router).

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

* While the network communication function (p.96) or moderator function (p.105) is to be executing, the menus "Network capture", "Network viewer" and "Memory viewer" are displayed in gray.

Confirming the operation

Confirm that the projector has connected to the LAN properly.



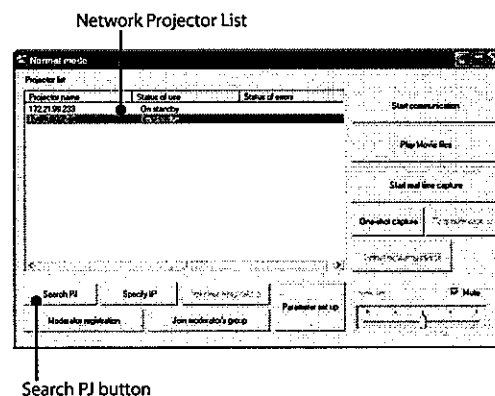
1. Activate "Network Capture 5" which is installed into the computer connected to the LAN .
2. After "Searching projector" message appears, the name of the projector* appears on the Network Projector List, then the network setting has completed properly.

When the name of the projector does not appear and error screen appears, the network has not connected yet. Try searching again with the Search PJ button. If error screen appears again, reconfirm the LAN setting. When the projector is set in the location separated by the router, see next page.

When Firewall function (Anti-virus software) is effective, network projector may not be found. In that case, disable the Firewall function and try searching again.

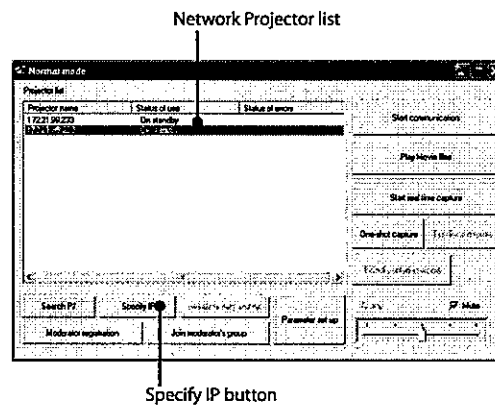
* If the projector is named, the name will be displayed. The name can be set with the following procedures in "6. Basic setting and operation" → "Initial setting" (p50) . If the projector is not named, IP address of the projector will be displayed.

Network Capture screen

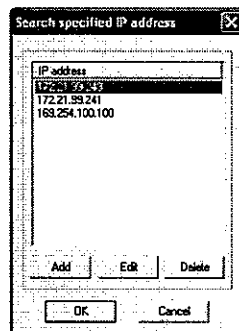


When set up the projector in the location separated by the router and the segment is different;
Projector will not be found nor displayed. In that case, the projector needs to be searched directly by
the IP address.

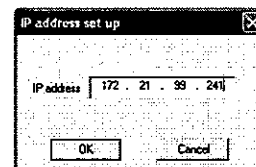
1. Press Specify IP button. "Search specified IP address" window appears.
2. Click Add button, "IP address set up" window appears. Enter the IP address of the projector and Click
OK button. Then, the projector will be added on the "Search specified IP address" window. Multiple
projectors are registered and they are stored even when the application is closed.
3. Click OK button on the "Search specified IP address" window, the registered multiple projectors
will be searched. Then, the projector will be added on the Network Projector List of the application
window.



"Search specified IP address" window



"IP address set up" window



Network PIN code

The Network PIN code is to restrict the access from the networks to the projector.

After setting the Network PIN code, you need to enter it to operate the projector via the networks.

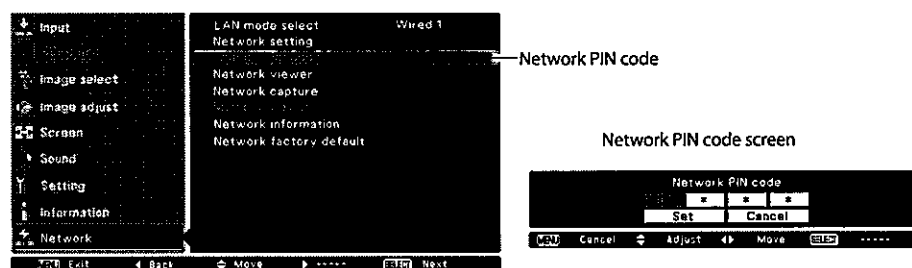
1. Select "Network PIN code" in the Network menu, and press SELECT button.

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 "6. Basic setting and operation" → "Initial setting" → "Network PIN code setting" (p51).



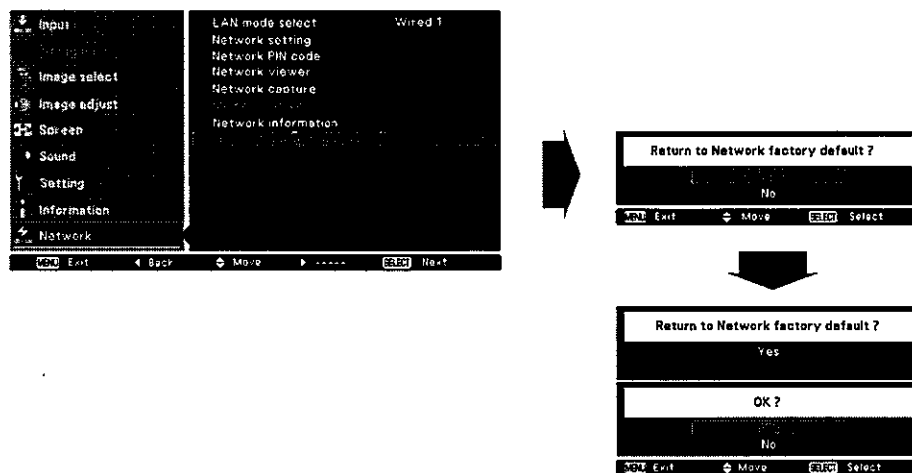
Network information

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.)



Wired factory default

Select "Wired factory default" in the Network menu and press SELECT button. All the wired LAN settings will go back to the factory default settings. For details, refer to "Wired LAN factory default settings" (p.34).



Wired LAN factory default settings

Parameter	SELECTED LAN		
	Wired 1	Wired 2	Wired 3
IP CONFIGURATION	MANUAL	DHCP	MANUAL
IP ADDRESS	169.254.100.100	192.168.100.100	192.168.100.100
SUBNET MASK	255.255.0.0	255.255.255.0	255.255.255.0
GATEWAY ADDRESS	255.255.255.255	255.255.255.255	255.255.255.255
DNS ADDRESS	255.255.255.255	255.255.255.255	255.255.255.255

Chapter 5

5. Wireless LAN configurations

This chapter describes the preparation for Wireless LAN setting with projectors and how to set the LAN environment.

This projector contains the Wireless LAN module.

The setting procedures and configurations differ depending on the LAN installation location. Consult your system administrator for installation and set the LAN appropriately.

To operate via Wireless LAN, your computer has to be equipped with a Wireless LAN card adapter which supports IEEE 802.11b/g/n(DRAFT 2.0).

If connecting in Infrastructure mode with an access point, the access point is required to support IEEE 802.11b/g/n(DRAFT 2.0).

Caution: Do not use a mobile phone or PHS near (within 20cm/8inch) the projector. It may cause malfunction.

Setting the network environment

The projector contains the Wireless LAN adapter.

Set the Wireless LAN network through the projector menu.

Detailed network settings will be made with browser. Refer to "6. Basic setting and operation" → "Network configuration" (p.53). Complete the settings described in this chapter before performing the steps in "6. Basic setting and operation."

Setting procedures

1. Turn on the projector and select "Network" in the Input menu of the projector.
2. Select "LAN mode select" in the Network menu, and press Point ► or SELECT button.
3. Select similar LAN environment among Wireless 4, Wireless 5 and Wireless Simple* with the Point ▲▼ buttons. Then the Menu will disappear, the "Please wait..." message will appear, and switching operation will start. Switching will take a while and after completing the operation, the "Ready for use" message will appear.
For each settings, refer to "Wireless LAN factory default settings" on page 44.

*"SIMPLE" mode is used for simple setting without complicated LAN setting procedures to connect to the Wireless LAN. See "Easy wireless setting" (p.41) for details.



4. Select "Network setting" in the Network menu and press SELECT button, and then the LAN setting screen will appear and the selected LAN settings will be displayed. Adjust each item to the setting environment. Consult your system administrator for the detailed settings.

Move among the items with the Point ▲▼ buttons and press SELECT button, move among the columns with Point ◀▶ buttons, adjust the figures with Point ▲▼ buttons, and then press SELECT button to set.

When the network type is "AdHoc", you do not have to change "Sub net" and "Gateway" and leave them as default settings.

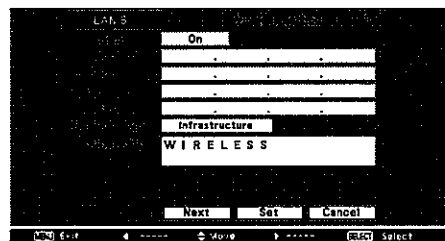
SSID/ESSID for the network type "Infrastructure" and "AdHoc" are required to be entered the same characters into the projector, the access point, and the Wireless LAN compatible computer (up to 32 characters). Characters can be selected from A~Z, a~z, blank (space), 0~9, or - (hyphen) with the Point ▲▼ buttons. Move to the next character with the Point ◀▶ buttons.

You can confirm that the projector settings from "Network Information" in the projector menu (p.42)

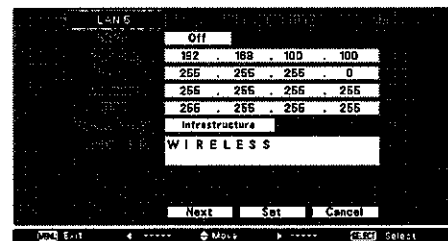
5. After completing all the settings, select "Set" and press SELECT button. Now, all procedures have been done. To cancel the adjusted settings, select the "Cancel" and press SELECT button.
To confirm whether the settings are correct, follow the procedures in "4. Wired LAN configurations"
→ "Confirming the Operation" (p.30).



DHCP: On



DHCP: Off



For configuring of WEP, WPA-PSK, WPA2-PSK security, select "Next". Refer to "Configuring security with the projector" on next page for details.

Item	Description
DHCP	Sets DHCP function On or Off. When you setup the network setting manually, select "Off". When its 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. Must be set when the E-mail function is used.
Network type	Sets Infrastructure or AdHoc mode. When the "AdHoc" is selected, the security "WPA-PSK" and "WPA2-PSK" are not available.
SSID/ESSID	Identifier of the wireless access point.

*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.

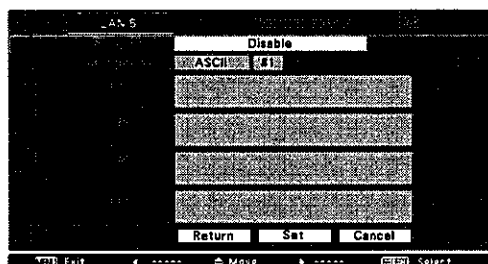
* While the network communication function (p.96) or moderator function (p.105) is to be executing, the menus "Network capture", "Network viewer" and "Memory viewer" are displayed in gray.

Configuring security with the projector

Configure security with the projector by following the steps below.

After configuring the network in "5. Wireless LAN Configurations" (p.35-44), select "Next" in the LAN setting screen and press SELECT button. The security configuration screen appears. Refer to "6. Basic setting and operation" → "Configuring wireless LAN setting and security setting" (p.55) as well.

WEP configuration screen



Use the Point ▲▼ buttons to select the security type. To disable the security, select "Disable."

Use the Point ▲▼ buttons to move among the items and adjust setting; use the Point ◀▶ buttons to move among the character positions of the key entry fields.

This projector provides the following security options. Use optimum security option on your network environment.

- WEP64(40)bit Open
- WEP64(40)bit Share
- WEP128(104)bit Open
- WEP128(104)bit Share
- WPA-PSK(TKIP)
- WPA2-PSK(AES)

Notes when entering characters:

The "¥" symbol is displayed as "\" when the ASCII key is used. The "*" symbol is treated as a character by the ASCII key, but it is not interpreted as a character by the HEX key. In HEX, the "*" symbol is displayed in red and setting is denied.

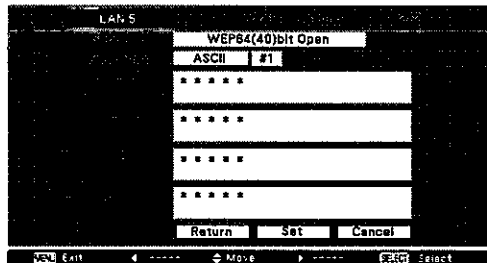
You can not set all the characters with the "*" symbol. This will be considered as no operation.

ASCII key characters : Space - 0 to 9 A to Z a to z ! " # \$ % & ' () * + , . / : ; < = > ? @ [\] ^ _ ` { | } ~
HEX key characters : 0 to 9 a to f

Use of security type "WEP"

1. Use the Point ▲▼ buttons to select "WEP" security type.
2. Select "Key index". Use the Point ▲▼ buttons to choose the HEX or ASCII key. The four (#1–#4) kinds of WEP keys can be configured. Use the Point ◀▶ buttons to move to the right frame; use the Point ▲▼ buttons to select a WEP key number (#1–#4).

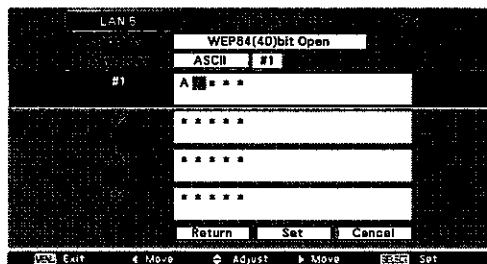
WEP configuration screen



Refer the table below for the usable number of characters at the WEP security option.

WEP option	Characters
WEP64(40)bit ASCII	5 characters
WEP64(40)bit HEX	10 characters
WEP128(104)bit ASCII	13 characters
WEP128(104)bit HEX	26 characters

3. Use the Point ▲▼ buttons to select the Type field of the WEP key number that corresponds to the one you selected above and press SELECT button. The WEP key entry screen appears. In the WEP key entry field, all characters are displayed in "*". Use the Point ▲▼ buttons to select a character; use the Point ◀▶ buttons to select a character position. Enter all the characters displayed with "*".
When you select HEX at WEP key index and the entry key contains "*", the "*" symbol is displayed in red and setting is denied.
4. Use the Point ▲▼ buttons to select "Set" and press SELECT button to return to the Wireless setting screen. Select "Set" in the Wireless setting screen to complete the network setting.



Use of security type "WPA-PSK", "WPA2-PSK"

1. Use the Point ▲▼ buttons to select "WPA-PSK" security type.

WPA-PSK(TKIP)
configuration screen



2. Use the Point ▲▼ buttons to select the key field and press SELECT button. The PSK key entry screen appears. Enter the PSK key by using the Point buttons. If the input PSK key has an error, the PSK key is indicated in red.
3. Use the Point ▲▼ buttons to select "Set" and press SELECT button to complete the network configuration, and return to the "Network setting" in the Network menu.

Available PSK key characters

ASCII code.....8 to 63 digits
Hex code.....64 digits



* Security "WPA-PSK" and "WPA2-PSK" modes are not available when the "AdHoc" network type is selected.

* When you set the PSK keys with 64 digits, the projector checks whether all of the entered PSK keys are in Hex code or not. If any of the ASCII code is included in the entered PSK keys, the entered PSK keys are indicated in red as error.

Easy wireless setting

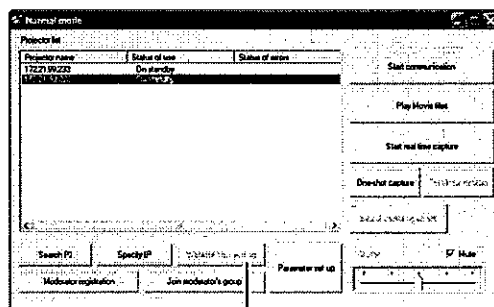
With this setting, you do not need any complicated LAN setting procedures.
The network type will be AdHoc mode.

CAUTION: This function can be used only when logged in by Administrative right with Windows XP and Windows Vista, and cannot be used with Windows 2000.
Windows XP should be Service Pack 1 or later version.

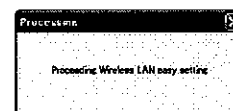
Setting Procedures

1. Turn on the projector and select "Network" in the Input menu of the projector.
2. Select "LAN mode select" in the Network menu, and press SELECT button.
3. Select "Wireless Simple" with the Point ▲▼ buttons. Press SELECT button then the "Please wait..." message will appear and switching operation will start. Switching will take a while and after completing the operation the message "Ready for use" will appear. During the switching period, the projector cannot be operated. ("SIMPLE" LAN settings will be shown by pressing SELECT button. The settings cannot be changed.)
4. Activate "Network Capture 5" which is installed in the computer.
5. Click **Wireless easy setting** button on the operation screen. The Wireless LAN setting screen will appear and the computer will start to set up the Wireless LAN setting. (Adjust the computer's Wireless LAN environment to the "SIMPLE" setting LAN environment.)
After completing the settings, the computer will start searching the projector which was set as "SIMPLE" and will display the name of the projector or the IP address on the projector list.
Confirm whether the LAN has been set correctly and works properly. Refer to "4. Wired LAN configurations" → "Confirming the operation" (p.30) for the confirmation procedures.
If the network setup is not succeeded, the error screen will appear.

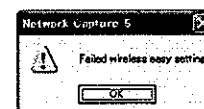
Setting screen



Wireless easy setting button



Error Screen



Computer environment and Wireless LAN connection;

Wireless LAN with Wireless Easy setting connection will be made via AdHoc mode. For setting contents, refer to "Wireless LAN factory default settings" (p.44).

With the Easy setting, computer's LAN environment setting will be switched to the setup environment. Because of that, the LAN cannot work for the other operation while using "Network Capture 5".

After terminating the application or pressing the Wireless Easy Setting button, the LAN environment will automatically go back to the previous state.

Network PIN code

The Network PIN code is to restrict the access from the networks to the projector.

After setting the Network PIN code, you need to enter it to operate the projector via the networks. Select "Network PIN code" from the projector menu and press SELECT button. Set with the same procedures as setting Wired LAN Network PIN code. Refer to "4. Wired LAN Configurations" → "Network PIN code" (p.32).

Network information

Display the current LAN connecting environment. Select "Network Information" from the projector menu and press SELECT button.



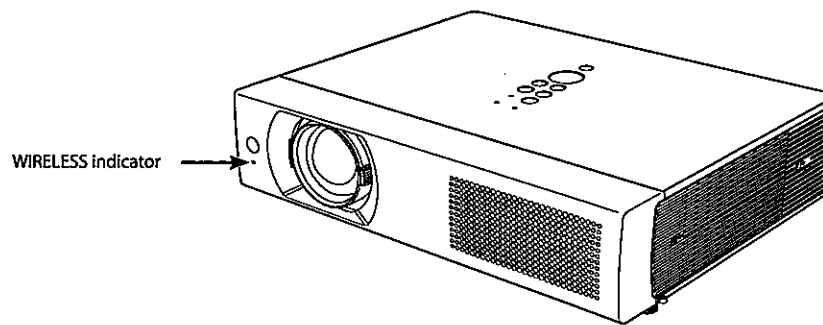
Wireless factory default

Select "Network factory default" in the Network menu (p.33) and press SELECT button. All the wireless LAN settings will go back to the factory default settings. For details, refer to "Wireless LAN factory default settings" (p.44).

WIRELESS indicator display

When the wireless LAN configuration is set up correctly and the wireless communication is established with the access-point or computer in the network, the WIRELESS indicator on the front panel lights up. When sending or receiving of data, it blinks.

Even though the wireless LAN in the network menu is selected, the WIRELESS indicator does not light, in this case, the wireless LAN configuration is not set up correctly, and please check the setting of the projector.



Wireless LAN factory default settings

Factory default settings for Wireless 4, Wireless 5, and Wireless Simple as follows.

Setting Items	Selected LAN		
	Wireless 4	Wireless 5	Wireless Simple
IP CONFIGURATION	MANUAL	DHCP	MANUAL
IP ADDRESS	169.254.100.100	192.168.100.100	169.254. *. *
SUBNETMASK	255.255.0.0	255.255.255.0	255.255.0.0
GATEWAY ADDRESS	255.255.255.255	255.255.255.255	255.255.255.255
DNS ADDRESS	255.255.255.255	255.255.255.255	255.255.255.255
WIRELESS CHANNEL	11	11	11
NETWORK TYPE	802.11b AdHoc	INFRASTRUCTURE	802.11b AdHoc
WIRELESS SSID/ESSID (SSID/ESSID)	PJ-WIRELESS5	ANY	PJ-WIRELESS5
WEP (WEP encryption)	DISABLE	DISABLE	DISABLE
WPA-PSK (PSK key)	DISABLE	DISABLE	DISABLE
WPA2-PSK (PSK key)	DISABLE	DISABLE	DISABLE

Chapter 6

6. Basic setting and operation

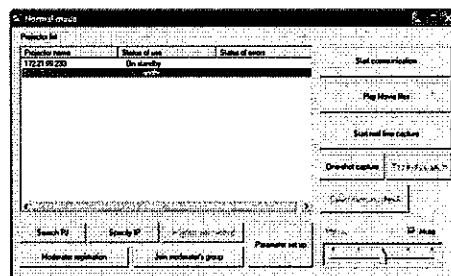
Describes basic operation and settings below by using the web browser.

- Initial setting
Setup the basic setting such as Projector name, Network PIN code, Time setting, etc.
- Network setting
Configure Wired/Wireless LAN environment.
- E-mail Setting
Configure E-mail function to manage the projector.
- SNMP Setting
Configure SNMP function to manage the projector.

Caution: When operating the projector with the browser, connect the projector to the computer with Wired or Wireless LAN. Complete the connection in advance.

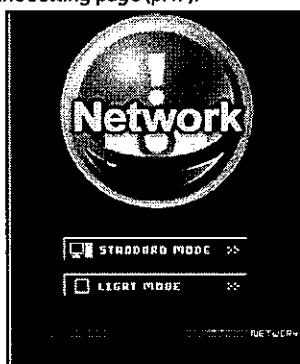
Starting up the Browser

1. Turn on the projector.
2. Start up the Network Capture 5. The Network Capture 5 searches projectors in the network and lists up the IP address or projector name of the projector on the Network Projector List.
3. Double click the projector to set from the Network Projector List.
4. The web browser will start up and display the setting page of the projector.



Select a display mode and login

This product provides 2 types of control mode, Standard Mode and Light Mode as below. Select a proper mode to match your PC and network environment by clicking on the text link. Once you select your desired display mode, the setting page you selected display mode will be displayed automatically from the next login. To change the display mode, click "Top" on lower-right corner of the setting page (p.47).



STANDARD MODE

For computer display, displays graphical menus and settings. This mode is recommended for standard use.

LIGHT MODE

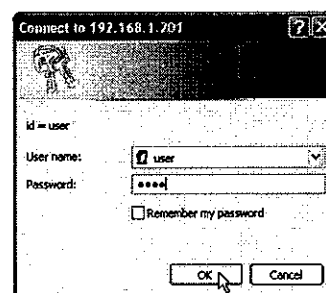
Displays with 200 x 300 dots. This mode is optimized for use of the handheld computer, PDA, etc. It is also convenient if the network traffic is heavy. (This mode has some limitations on the network viewer and multi-control functions.)

If the password has been set on the setting page, the authentication window will appear. In that case, type "user" onto the User Name text area and the login Network PIN code onto the Password text area and then click OK button.

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

[Note]

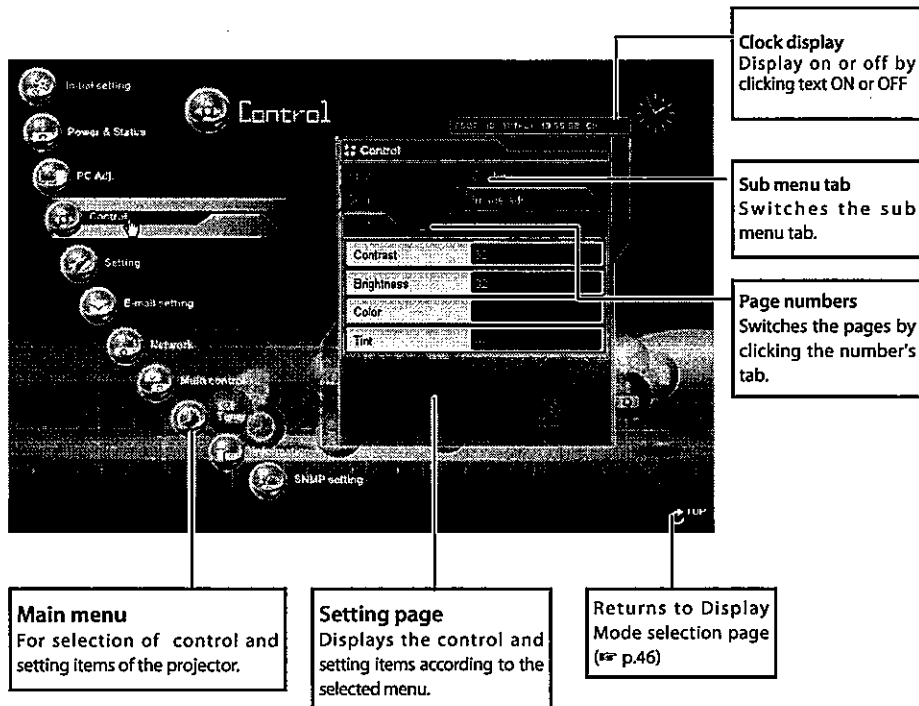
When the projector is accessed for the first time or the Network PIN code "0000" is set, the auto-login is performed and the next main setting page is displayed.



Display of main setting page

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

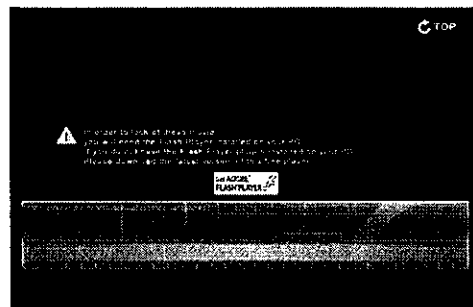
1 Main setting page in the Standard Mode display



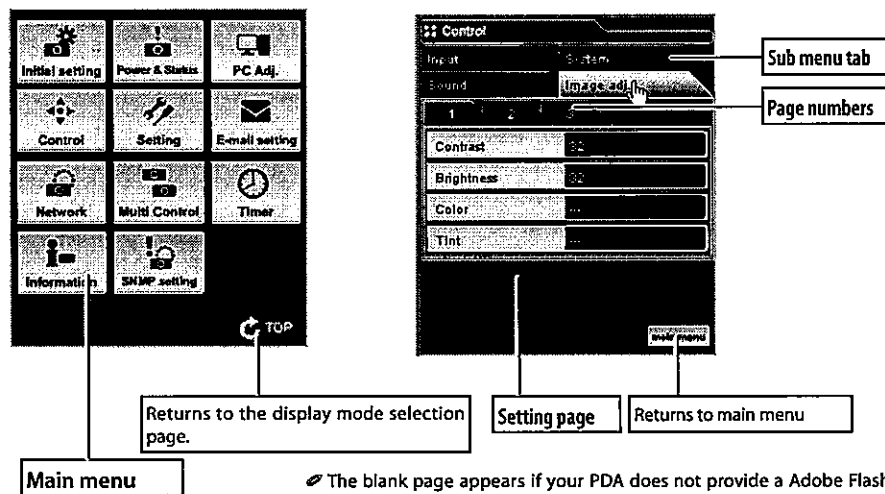
* To change the screen language, use the initial setting menu (p.50)

☛ This Standard mode display is mainly used through this manual for the setting and control description.

☛ If your computer does not have the Adobe Flash Player version 6 or later, follow the message on the control page to install the Adobe Flash Player. For further product information or installing, see the Adobe homepage.
<http://www.adobe.com>



2 Main setting page in the Light Mode display



☞ The blank page appears if your PDA does not provide a Adobe Flash Player. You need to install the Adobe Flash Player. (p.47)

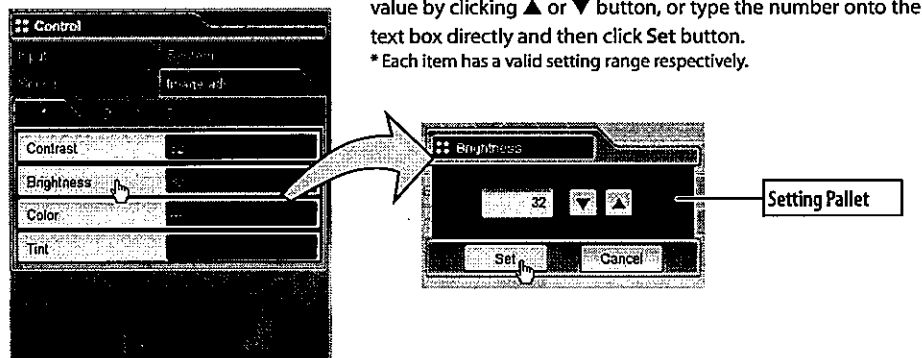
The network viewer function in the Light mode has following limitations;

- Cannot select the program or folder for the display.
- Cannot check up the images in the folder or program.

How to use the setting page

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

Example of the Setting Page



- ☞ The value in the text box indicates current value.
- ☞ Each item has a valid setting range. The setting value exceeding its range becomes invalid. Some control items can not be used depending on the selected input mode or functions of the projector you use. In that case, the values of those items are indicated with "---".

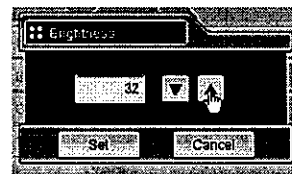
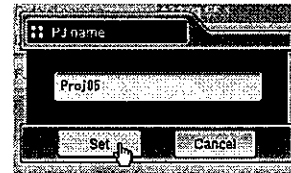
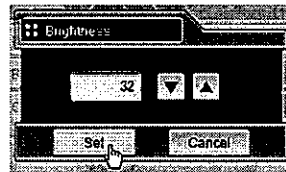
Type of the setting pallet

Text box setting

Enter the number or text and then click Set button.

or

Change a value with ▲ or ▼ button and then click Set button.
The value changes quickly when ▲ or ▼ button is kept pressing.

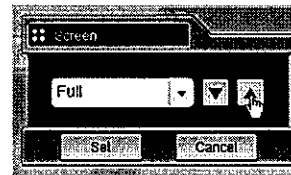
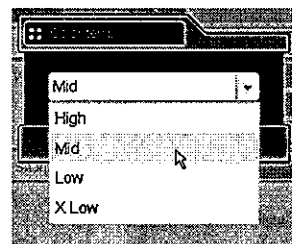


Pull-down menu setting

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

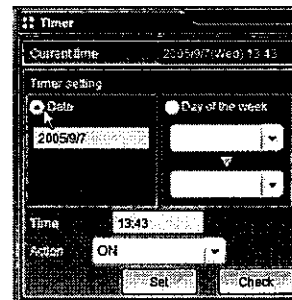
or

Select an item by clicking ▲ or ▼ button.



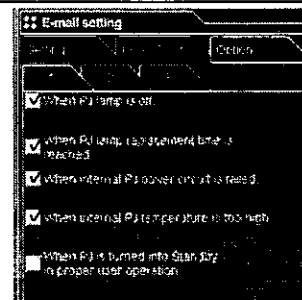
Radio button setting

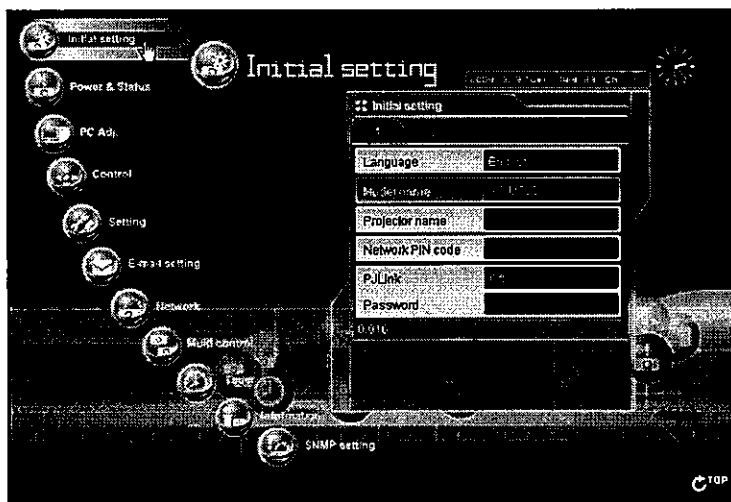
Select an item by selecting a radio button



Check box setting

Select items by ticking on check boxes.





Item	Description
Language	Switches display language on the setting page. English or Japanese.
Model name	Indicates the model name of the projector.
Projector name.....	Sets the name of projector. This projector name is listed on the application window of the Network Capture software.
Network PIN code	Sets the Network PIN code to login the setting page (see p.32, p.42)
PJLink	Switches PJLink password authentication on or off.
Password.....	Password for PJLink function

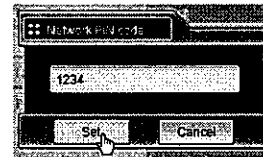
Network PIN code setting

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's network part begins restarting and it takes about 20 seconds. Close (Quit) the web browser and access to the login page again in 20 seconds. This is to perform the login authentication firmly.

The default Network PIN code as [0000], which 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.
- ☞ If you forget the Network PIN code to the projector, you can check it by selecting "Network PIN code" sub menu from "Network" menu on the projector. For further information, please see item "Network PIN code setting" (p.32, p.42).

PJLink and password setting

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

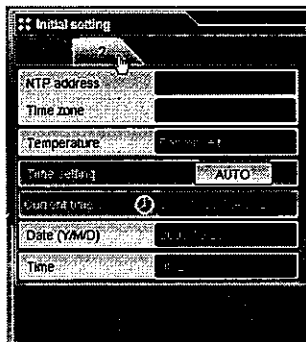
Refer to the projector owner's manual for further details of the PJLink function.



- ☞ 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 (JBMA). <http://pjlink.jbmia.or.jp/>



Item	Description
NTP address.....	Enter the address of NTP server. Please consult your network administrator for setting up of the NTP server.
Time zone.....	Sets your country or region's time zone
Temperature.....	Switches display temperature unit Centigrade or Fahrenheit
Time setting.....	When clicking AUTO button, the date and time set on your computer are set to the projector. The timer icon appears when time is set up correctly.
Current time.....	Indicates current date and time set on the projector
Date.....	Sets date in manual
Time.....	Sets time in manual

Date and time setting

NTP is abbreviated expressions of Network Time Protocol. It is a protocol to acquire the exact current time via the network. This projector acquires the current time from the NTP server and update the time in the network module. After setting the NTP address, the projector acquires the time per 24 hours. If the projector fails acquiring the time from the NTP server, the projector tries to acquire the time every 1 hour until it succeeds.

- ☛ "Time zone" is the local time as an offset from Greenwich Mean Time (GMT). "Time zone" is in \pm hour:minute format and is available from -23:59 to +23:59.
ex. Time zone: +09:00 in Tokyo, Japan
- ☛ Both of "NTP address" and "Time zone" should be set, otherwise the setting will be failed.

When the NTP address is not set, perform the time setting with "Auto-setting" or "manual setting" described below.

Auto setting

Click **AUTO** button on the page, the date and time set on your computer are set to the projector.

Note: Confirm that your computer has a correct clock time before performing the auto time setting.

Manual setting

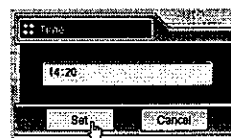
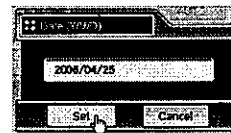
Click the item **Date** or **Time** and enter the date or time on the input box with adequate format.

Date is in year/month/day format.

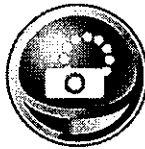
ex. 2007/10/05

Time is in 24-hour:minute format.

ex. 18:30

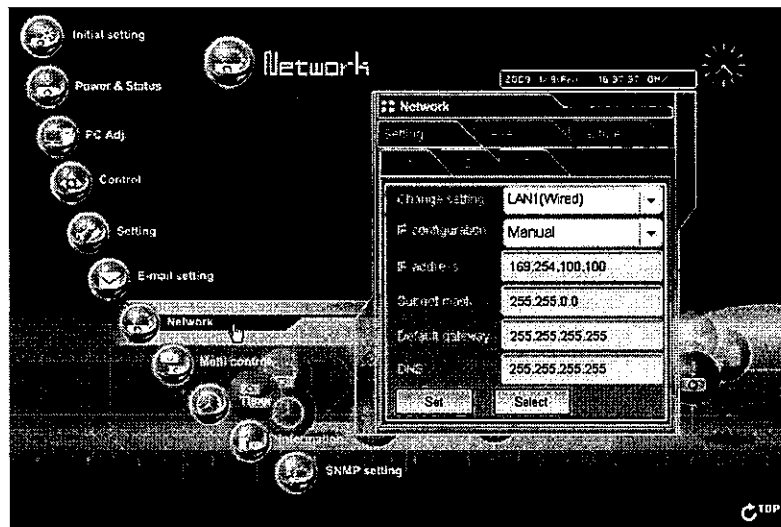


This projector does not provide the built-in battery. The date and time information are lost when the projector turns off (when "Eco" is set for the stand-by mode (Refer to p.74)), or the network configuration is reset. The timer function is disable until time is set up correctly. When using the NTP address for time setting, the current time is acquired at the projector starting up and the timer function is activated after finishing the time setting correctly.



Network configuration

Click Network on the main menu. The following setting page is displayed. Set up the projector's network environment on this Setting sub menu.



Setting of LAN

1. Select a type of LAN from Change setting pull down menu.

LAN1(Wired)
 LAN2(Wired)
 LAN3(Wired)
 LAN4(Wireless)
 LAN5(Wireless)
 Simple(Wireless)

For the default setting of the above LAN, see the items "Factory Default Setting".

Item	Description
Change setting.....	Selects LAN1 to LAN5 and Simple
IP configuration.....	Sets DHCP or Manual
IP address	Sets IP address of the projector
Subnet mask.....	Sets Subnet mask.
Default gateway*1.....	Sets IP address of the default gateway (Router)
DNS*2.....	Sets IP address of the DNS server.

*1 Set [255.255.255.255] if the network does not provide the gateway (router).

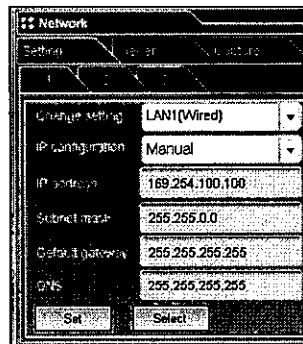
*2 Set [255.255.255.255] if you do not use the function E-mail alert.

2. Select either "Manual" or "DHCP" from IP configuration pull down menu. When "DHCP" is selected, IP address, Subnet mask, Default Gateway, DNS are automatically configured by DHCP function. Only the DNS address allows you to set up manually if the DNS address information is not provided on your DHCP server. When selecting "Manual", configure all the items manually. For further information, contact your network administrator. The address must be entered as 4 number groups separated by a dot like [192.168.001.101].

3. After completing the network configuration, press Set button to register the network information. The Simple(Wireless) setting is fixed, which cannot be changed from factory default value.

4. To apply the setting, press Set button. The network of the projector starts re-booting and applies the setting. It takes about 20 seconds to complete. Close the web browser and access to the login page again in 20 seconds.

On the screen of the projector, the "Please wait..." message will appear and switching operation will start. Switching will take a while and after completing the operation, the "Ready for use" message will appear. During the switching period, the projector cannot be operated.



When you use LAN4(Wireless) or LAN5(Wireless), the setting items of page [2] and [3] are activated and you can setup Wireless LAN setting and Security setting. See the item "Configuring Wireless LAN Setting and Security Setting" for further setting.

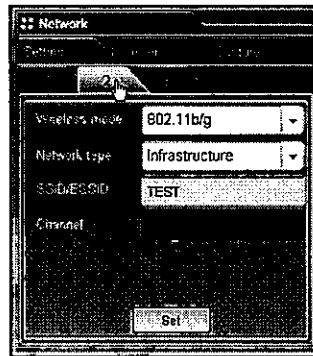
☞ When the IP address collides with the address of other equipment, the computer cannot communicate with the projector. When the IP address collides with the address of other equipment, the computer cannot communicate with the projector. Set an IP address again after selecting another LAN mode from "Change setting" or turning off and then on the projector.

Configuring wireless LAN setting and security setting

Configure the wireless LAN setting and security setting for Wireless 4 and Wireless 5.

Configuring wireless LAN setting

1. Click page [2] of setting pages. Following wireless LAN setting can be done. After completing the configuration, press Set button.



Item	Description
Wireless Mode	Select the Communication standard 802.11b or 802.11b/g/n.
Network Type.....	Select either "Infrastructure" or "AdHoc". When selecting the "AdHoc", the security "WPA-PSK" and "WPA2-PSK" mode are not available.
SSID/ESSID	Set the SSID/ESSID. (up to ASCII 32 characters) SSID/ESSID is case-sensitive. Even though all characters on the Wireless information is uppercase, it is necessary to distinguish between upper case and lower case characters.
Channel.....	If you use the projector in 802.11AdHoc mode, select the channel, from 1 to 11.

Notes for entering characters:

The "*" symbol is displayed as "\" when the ASCII key is used. The "*" symbol is treated as a character by the ASCII key, but it is not interpreted as a character by the HEX key. In HEX, the "*" symbol is displayed in red and setting is denied.

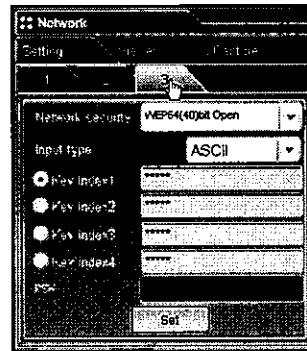
You can not set all the characters with the "*" symbol. It will be considered as no operation.

ASCII key characters : Space - 0 to 9 A to Z a to z ! " # \$ % & ' () * + , . / : ; < = > ? @ [\] ^ _ ` { | } ~

HEX key characters : 0 to 9 a to f

Configuring wireless LAN security setting

Click page [3] of setting pages. Following wireless LAN security setting can be done. After completing the configuration, press Set button.

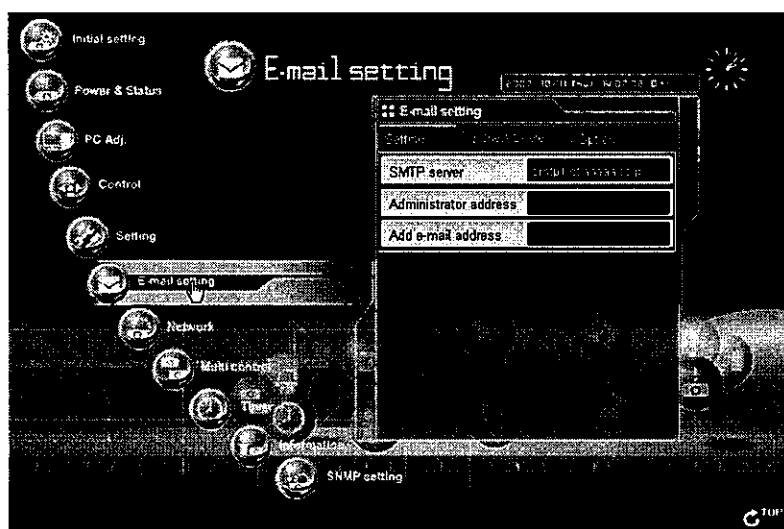


Item	Description										
Network security	<p>Sets the type of encryption. Following types are available.</p> <ul style="list-style-type: none"> WEP64(40)bit Open WEP64(40)bit Share WEP128(104)bit Open WEP128(104)bit Share WPA-PSK(TKIP) WPA2-PSK(AES) 										
Input type	<p>ASCII or HEX. See item "Notes for entering characters"</p>										
Key index1 - 4	<p>Enter keys of encryption.</p> <p>The used number of character changes as the table below according to the type of WEP encryption and input type.</p> <table border="1"> <thead> <tr> <th>WEP option</th><th>Characters</th></tr> </thead> <tbody> <tr> <td>WEP64(40)bit ASCII</td><td>5 characters</td></tr> <tr> <td>WEP64(40)bit HEX</td><td>10 characters</td></tr> <tr> <td>WEP128(104)bit ASCII</td><td>13 characters</td></tr> <tr> <td>WEP128(104)bit HEX</td><td>26 characters</td></tr> </tbody> </table> <p>Four key indexes can be set, however, the only one with check on its radio button is effective. Both of the number and value of the key index in effect must be same as those of your computer and the access point.</p> <p>Depending on computers and access points, you may be allowed to select only one WEP key. In that case, use key index1.</p>	WEP option	Characters	WEP64(40)bit ASCII	5 characters	WEP64(40)bit HEX	10 characters	WEP128(104)bit ASCII	13 characters	WEP128(104)bit HEX	26 characters
WEP option	Characters										
WEP64(40)bit ASCII	5 characters										
WEP64(40)bit HEX	10 characters										
WEP128(104)bit ASCII	13 characters										
WEP128(104)bit HEX	26 characters										
PSK	<p>Available when the "WPA-PSK(TKIP)" or "WPA2-PSK(AES)" is selected.</p> <p>The PSK key must be no fewer than 8, nor more than 63 digits with ASCII code, and 64 digits with Hex code.</p>										



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 E-mail Setting on the main menu and follow the below steps.



Item	Description
SMTP server*	Sets server name or IP address of the SMTP server
Administrator address	Sets E-mail address of administrator
Add e-mail address	Sets E-mail address of the user to send a 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*¹ 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. When the server name for SMTP server is used, DNS must be set up to activate the E-mail function.(p.53)

- ☞ 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 that 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 e-mail address" text box.

2 Registering and deleting E-mail addresses

Click "Add E-mail 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.

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

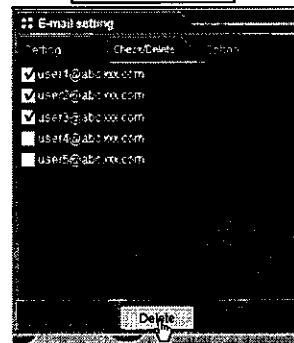
3 Option selection for sending alert mail

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

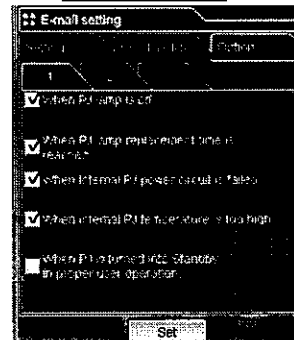
Please refer to the item "Examples :Type and contents of alert mail" described on the next page.



Check / Delete



Option



- [1] _____
- ☐ When PJ lamp is off.
 - ☐ When PJ lamp replacement time is reached.
 - ☐ When internal PJ power circuit is failed.
 - ☐ When internal PJ temperature is too high.
 - ☐ When PJ is turned into Standby in proper user operation.
- [2] _____
- ☐ When accumulated filter use time reaches [] hours.
 - ☐ When Power management function turns PJ lamp off.
 - ☐ When the signal is interrupted.
 - ☐ When Auto Play is failed.
- [3] _____
- ☐ When lamp Corres. Value reaches [] hours.
- Attached message

- ☛ "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 top control or the remote control.
- ☛ If condition "When Auto Play is failed" is checked, the trap is sent when the error occurs during the auto display operation using with the network viewer function (p.113). For further information of the error, refer to item "Auto Display setting and control page [3]" (p.128).
- ☛ The length of message should be less than 255 characters.
- ☛ Up to 99,999 hours can be set for use time.
- ☛ The optional settings return to the factory default when you unplug the AC power cord of the projector.

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 depending on 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
10-03-2007 00:59
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.

[A] 81.5 degrees fahrenheit [B] 134 degrees fahrenheit [C] 95.6 degrees fahrenheit
Temperature of Sensor B is too high.

- ☞ The projector let users know the information which thermal sensors inside the projector detected the abnormal temperature risen and so the projector was turned off. Please refer to item "Power control and status check" (☞ p.66) for the location of the sensors and each temperature. Also see the owner's manual of the projector for further details.

● When internal PJ power circuit is failed:

TITLE: Message from projector
10-03-2007 00:59
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 Projector power circuit is failed. Unplug the Projector from AC outlet and ask servicing to qualified service personnel.

MAIN,	P-FAIL	OK	} Error information
MAIN,	1.8V	OK	
MCI,	P-FAIL	NG	

- ☞ The projector detects the power failure. Unplug the AC power cord and plug it again, and then turn on the projector to verify the operation. If the problem still persists, unplug the AC power cord and ask servicing to a qualified service personnel.

● **When PJ lamp replacement time is reached:**

TITLE: Message from projector
10-03-2007 00:59
Projector Model Name: *model name*
TCP/IP: 192.168.1.201 Projector Name: Proj05

It sends you following message.

*The PJ lamp replace time is reached.

- ☞ 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 power-on of the projector. This alert mail will not be sent when the mail sending condition "When the life span of lamp is reached" is unchecked.

● **When lamp corres. value reaches preselect use time:**

TITLE: Message from projector
10-03-2007 00:59
Projector Model Name: *model name*
TCP/IP: 192.168.1.201 Projector Name: Proj05

It sends you following message.

*The accumulated lamp use time reaches 1800 hours.
Prepare for the lamp replacement.

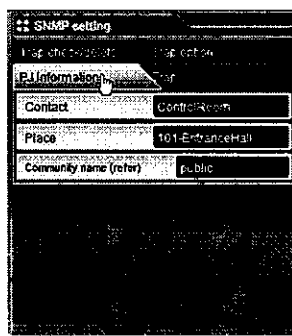
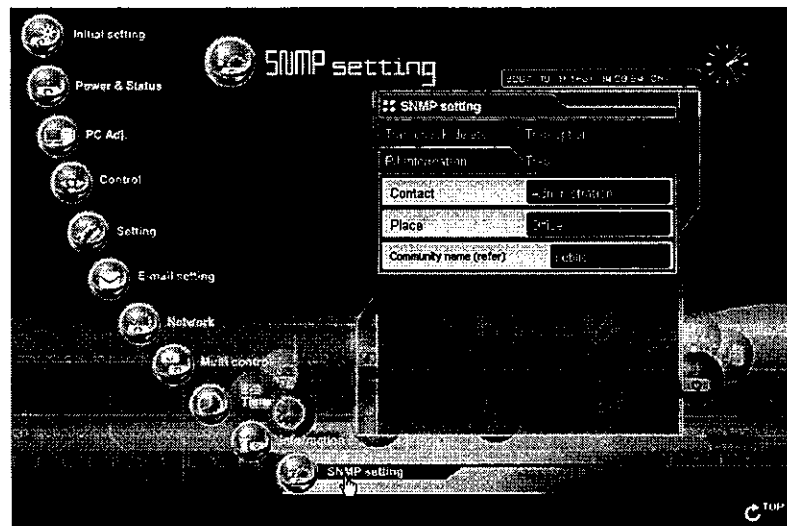
Discretional messages

- ☞ The projector sends a free message when the lamp use time (Corresponding value) reaches the preselected lamp use time. It can be used for preparation of the lamp replacement and the maintenance required.



SNMP setting

This product provides a SNMP (Simple Network Management Protocol) agent function. The SNMP consists of a manager and agents. The group which exchanges information with SNMP is called "Community". There are two access modes in a community, Refer (read only) and Set (read- write). This product 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.

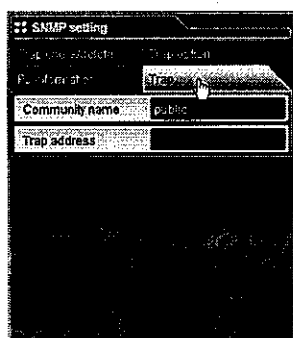


PJ information

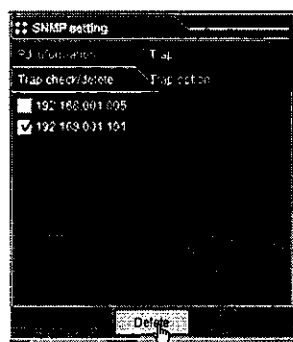
Item	Description
------	-------------

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".

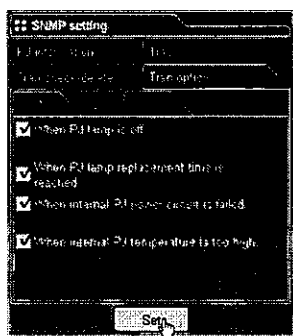
☛ The SNMP agent provided with this product is based upon MIB-2 defined by RFC1213. For private MIB information, refer to file "Mibinfo/XUPjNet.mib" in the CD-ROM.



Trap	
Item	Description
Community name	Enter community name to send "Trap". Default name is "public".
Trap address	Enter IP address of the SNMP manager computer to receive "Trap". Up to 10 address can be registered. ☞ Up to 10 trap addresses can be registered.



Trap check/delete	
Check and delete the trap address	
Checking the registered trap address and deleting the address.	
To delete the address, tick the check box in front of the IP address and click Delete button.	



Trap option

Trap option setting

Tick the 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.

[1]

☐ When PJ lamp is off.

☐ When PJ lamp replacement time is reached.

☐ When internal PJ power circuit is failed.

☐ When internal PJ temperature is too high.

[2]

☐ When PJ is turned into Standby in proper user operation.

☐ When accumulated filter use time reaches [] hours.

☐ When Power management function turns PJ lamp off.

[3]

☐ When the signal is interrupted.

☐ When Auto Play is failed.

☐ When lamp Corres. Value reaches [] hours.

☛ "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 top control or the remote control.

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

☛ If condition "When Auto Play is failed" is checked, the trap is sent when the error occurs during the auto display operation using with the network viewer function (p.113). For further information of the error, refer to item "Auto Display setting and control page [3]" (p.127).

