myprojectorlamps.com

The most trusted, dependable name in projector lamp sales.

http://www.myprojectorlamps.com

http://www.myprojectorlamps.ca

http://www.myprojectorlamps.eu

The following projector manual has not been modified or altered in any way.

Multimedia Projector

MODEL PLC-WXU30

SANYO

Network Supported

❑Wireless LAN
IEEE802.11b/g

❑Wired LAN
100-Base-TX/10-Base-T

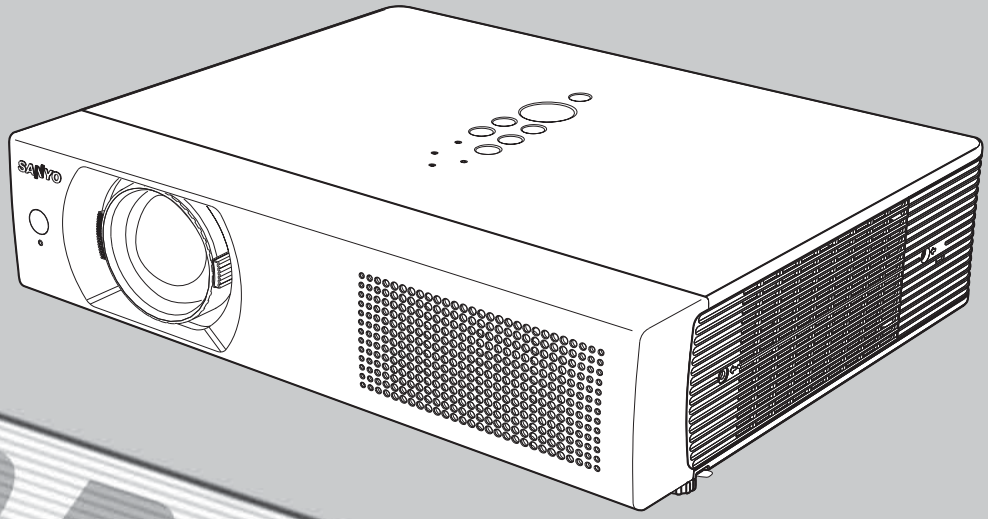
Memory Viewer

❑SD Card Memory Viewer

✻Refer to the owner's manuals below for details about network and memory viewer function.

■Network Set-up and Operation

■Memory viewer



PROJECTOR

Owner's Manual

PJLink™

Features and Design

This Multimedia Projector is designed with the most advanced technology for portability, durability, and ease of use. This projector utilizes built-in multimedia features, a palette of 16.77 million colors, and matrix liquid crystal display (LCD) technology.

◆ Compact Design

This projector is designed compact in size and weight. It is easy to carry and installed anywhere you wish to use.

◆ Capable of 360-degree Projection

This projector is capable of 360-degree projection.
*Some restriction required, see page 8.

◆ Antitheft Alarm Function

This projector is equipped with an Antitheft alarm function which sounds when vibration is detected (pp.58–61). A built-in rechargeable battery is used for the alarm.

◆ Simple Computer System Setting

The projector has the Multi-scan system to conform to almost all computer output signals quickly (p.32). Up to UXGA resolution can be accepted.

◆ Useful Functions for Presentations

- The digital zoom function allows you to focus on the crucial information during a presentation (p.39).

- Blackboards* can be used as a projection screen.
  *The board color is limited to Green (pp.36, 43).

◆ Power Management

The Power management function reduces power consumption and maintains the lamp life (p.52).

◆ Lamp Control

Brightness of the projection lamp can be selected (pp.28, 53).

◆ Quick Termination

The AC power cord can be unplugged immediately after turning off the projector without waiting for the termination of the cooling fan rotation (p.23).

◆ Logo Function

The Logo function allows you to customize the screen logo (pp.49–50). You can capture an image for the screen logo and use it for the starting-up display or between presentations.

◆ Multilanguage Menu Display

Operation menu is available in 16 languages; English, German, French, Italian, Spanish, Portuguese, Dutch, Swedish, Finnish, Polish, Hungarian, Romanian, Russian, Chinese, Korean, and Japanese (p.47).

◆ Security Function

The Security function helps you to ensure security of the projector. With the Key lock function, you can lock the operation on the top control or remote control (p.54). PIN code lock functions prevents unauthorized use of the projector (pp.22, 54–55).

◆ Helpful Maintenance Functions

Lamp and filter maintenance functions provide for better and proper maintenance of the projector.

◆ LAN Network Function

This projector is loaded with the Wired and Wireless LAN network function. You can project an image on a computer as well as operate and manage the projector via network. For details, refer to the owner's manual "Network Set-up and Operation."

◆ Memory Viewer Function

Insert the dedicated SD card memory into the projector to project images or presentation data stored within. You do not have to carry computers or other equipment for a presentation.
*SD card memory is not supplied with the projector. For details, refer to the owner's manual of Memory viewer.

◆ Input Search Function

Input signal can be searched automatically. (p.51)

✔Notes:

- The On-Screen Menu and figures in this manual may differ slightly from the product.
- The contents of this manual are subject to change without notice.

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Trademarks
Each name of corporations or products in this book is either a registered trademark or a trademark of its respective corporation.

To the Owner

Before installing and operating this projector, read this manual thoroughly.
This projector provides many convenient features and functions. Operating the projector properly enables you to manage those features and maintains it in good condition for many years to come.
Improper operation may result in not only shortening the product-life, but also malfunctions, fire hazard, or other accidents.
If your projector seems to operate improperly, read this manual again, check operations and cable connections and try the solutions in the “Troubleshooting” section in the back of this booklet. If the problem still persists, contact the dealer where you purchased the projector or the service center.

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: **TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE EXCEPT LAMP REPLACEMENT. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**

THIS SYMBOL INDICATES THAT DANGEROUS VOLTAGE CONSTITUTING A RISK OF ELECTRIC SHOCK IS PRESENT WITHIN THIS UNIT.

THIS SYMBOL INDICATES THAT THERE ARE IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS IN THE OWNER'S MANUAL WITH THIS UNIT.

NOTE: This symbol and recycle system are applied to EU countries only and not applied to the countries in the other area of the world.

Your SANYO product is designed and manufactured with high quality materials and components which can be recycled and reused.

This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste.

Please dispose of this equipment at your local community waste collection/recycling centre. In the European Union there are separate collection systems for used electrical and electronic products.

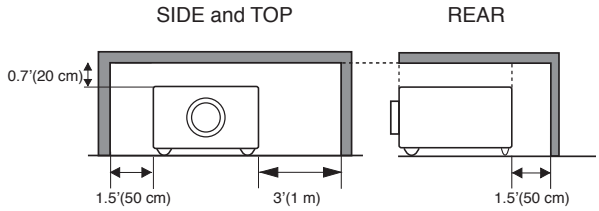
Please help us to conserve the environment we live in!

READ AND KEEP THIS OWNER'S MANUAL FOR LATER USE.

Safety Precaution

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

–This projector produces intense light from the projection lens. Do not stare directly into the lens, otherwise eye damage could result. Be especially careful that children do not stare directly into the beam.
–Install the projector in a proper position. Otherwise it may result in fire hazard.
–Allowing the proper amount of space on the top, sides, and rear of the projector cabinet is critical for proper air circulation and cooling of the unit. The dimension shown here indicate the minimum space required. If the projector is to be built into a compartment or similarly enclosed, these minimum distances must be maintained.



–Do not cover the ventilation slot on the projector. Heat build-up can reduce the service life of your projector, and can also be dangerous.
–If the projector is unused for an extended time, unplug the projector from the power outlet.

CAUTION

DO NOT SET THE PROJECTOR IN GREASY, WET, OR SMOKY CONDITIONS SUCH AS IN A KITCHEN TO PREVENT A BREAKDOWN OR A DISASTER. IF THE PROJECTOR COMES IN CONTACT WITH OIL OR CHEMICALS, IT MAY BECOME DETERIORATED.

CAUTION

Not for use in a computer room as defined in the Standard for the Protection of Electronic Computer/Data Processing Equipment, ANSI/NFPA 75.

Ne peut être utilisé dans une salle d’ordinateurs telle que définie dans la norme ANSI/NFPA 75 Standard for Protection of Electronic Computer/Data Processing Equipment.

Safety Instructions

All the safety and operating instructions should be read before the product is operated.

Read all of the instructions given here and retain them for later use. Unplug this projector from AC power supply before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.

Follow all warnings and instructions marked on the projector.

For added protection to the projector during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage due to lightning and power line surges.

Do not expose this unit to rain or use near water... for example, in a wet basement, near a swimming pool, etc...

Do not use attachments not recommended by the manufacturer as they may cause hazards.

Do not place this projector on an unstable cart, stand, or table. The projector may fall, causing serious injury to a child or adult, and serious damage to the projector. Use only with a cart or stand recommended by the manufacturer, or sold with the projector. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturers.

An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

Slots and openings in the back and bottom of the cabinet are provided for ventilation, to ensure reliable operation of the equipment and to protect it from overheating.

The openings should never be covered with cloth or other materials, and the bottom opening should not be blocked by placing the projector on a bed, sofa, rug, or other similar surface. This projector should never be placed near or over a radiator or heat register.

This projector should not be placed in a built-in installation such as a book case unless proper ventilation is provided.

Never push objects of any kind into this projector through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the projector.

Do not install the projector near the ventilation duct of air-conditioning equipment.

This projector should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied, consult your authorized dealer or local power company.

Do not overload wall outlets and extension cords as this can result in fire or electric shock. Do not allow anything to rest on the power cord. Do not locate this projector where the cord may be damaged by persons walking on it.

Do not attempt to service this projector yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Unplug this projector from wall outlet and refer servicing to qualified service personnel under the following conditions:

a. When the power cord or plug is damaged or frayed.
b. If liquid has been spilled into the projector.
c. If the projector has been exposed to rain or water.
d. If the projector does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the projector to normal operation.
e. If the projector has been dropped or the cabinet has been damaged.
f. When the projector exhibits a distinct change in performance-this indicates a need for service.

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or injury to persons.

Upon completion of any service or repairs to this projector, ask the service technician to perform routine safety checks to determine that the projector is in safe operating condition.

Air Circulation

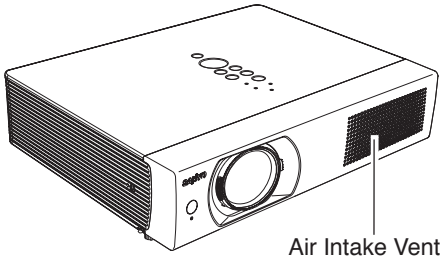
Openings in the cabinet are provided for ventilation. To ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered.

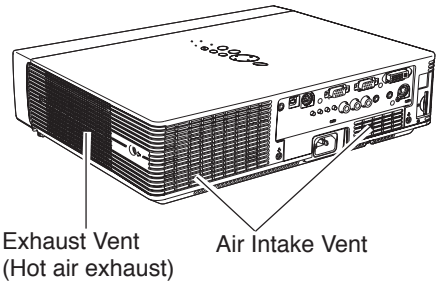
CAUTION

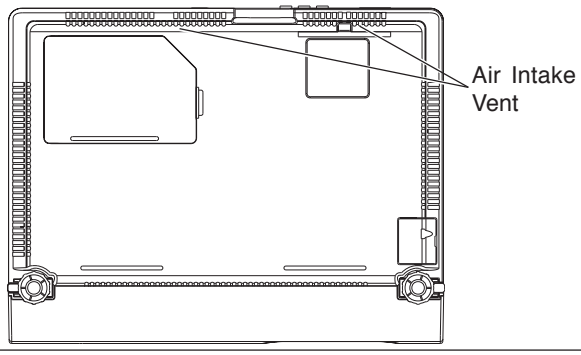
Hot air is exhausted from the exhaust vent. When using or installing the projector, the following precautions should be taken.

– Do not put any flammable object or spray can near the projector, hot air is exhausted from the air vents.
– Keep the exhaust vent at least 3' (1 m) away from any objects.
– Do not touch a peripheral part of the exhaust vent, especially screws and metallic parts. These areas will become hot while the projector is being used.
– Do not put anything on the cabinet. Objects put on the cabinet will not only get damaged but also may cause fire hazard by heat.

Cooling fans are provided to cool down the projector. The fans' running speed is changed according to the temperature inside the projector.







Moving the Projector

When moving the projector, replace the lens cover and retract adjustable feet to prevent damage to the lens and cabinet.
When the projector is not in use for an extended period, put it into the supplied carrying case with the lens side up.

CAUTION

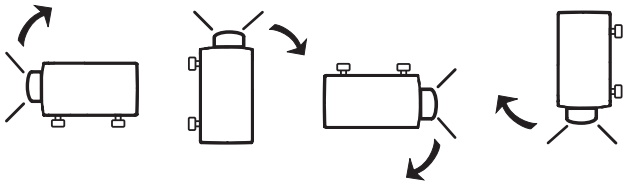
The carrying case (supplied) is intended for protection against dust and scratches on surface of the cabinet, and it is not designed to protect an appliance from external forces. Do not transport the projector by courier or any other transport service with this case, otherwise the projector can be damaged. When handling the projector, do not drop, bump, subject it to strong forces, or put other things on the cabinet.

CAUTION IN CARRYING OR TRANSPORTING THE PROJECTOR

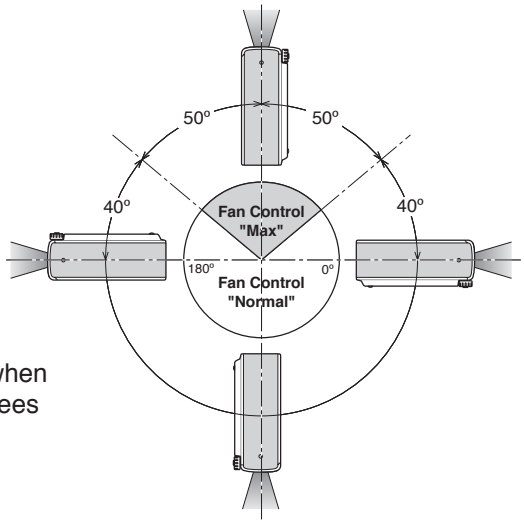
– Do not drop or bump the projector, otherwise damages or malfunctions may result.
–When carrying the projector, use a suitable carrying case.
–Do not transport the projector by courier or any other transport service in an unsuitable transport case. This may cause damage to the projector. For information about transporting the projector by courier or any other transport service, consult your dealer.
–Do not put the projector in a case before the projector is cooled enough.

Installing the Projector in Proper Directions

Use the projector properly in specified positions. Improper positioning may reduce the lamp life and result in severe accident or fire hazard.
This projector can project the picture upward, downward, or backward, perpendicular to the plane of the screen as shown in the figure below.



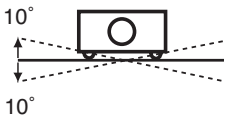
Bottom Downward (Usual) | **Front Upward** | **Bottom Upward** | **Front Downward**



Be sure to set the Fan control in MAX in the setting menu when the projector is inclined between +40 degrees to +140 degrees to the horizontal plane (p.56).

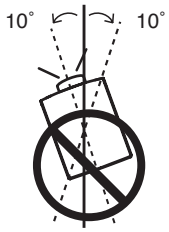
Positioning Precautions

Avoid positioning the projector as described below when installing.

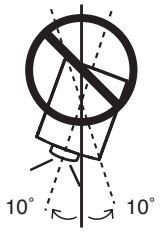


Do not tilt the projector more than 10 degrees from side to side.

Do not put the projector on either side to project an image.



In upward projection, do not tilt the projector over 10 degrees right and left.



In downward projection, do not tilt the projector over 10 degrees right and left.

Compliance

Federal Communications Commission Notice

Note: 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.

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

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

Model Number	: PLC-WXU30
Trade Name	: Sanyo
Responsible party	: SANYO FISHER COMPANY
Address	: 21605 Plummer Street, Chatsworth, California 91311
Telephone No.	: (818)998-7322

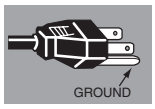
AC Power Cord Requirement

The AC Power Cord supplied with this projector meets the requirement for use in the country you purchased it.

AC Power Cord for the United States and Canada:

AC Power Cord used in the United States and Canada is listed by the Underwriters Laboratories (UL) and certified by the Canadian Standard Association (CSA).

AC Power Cord has a grounding-type AC line plug. This is a safety feature to be sure that the plug will fit into the power outlet. Do not try to defeat this safety feature. Should you be unable to insert the plug into the outlet, contact your electrician.



AC Power Cord for the United Kingdom:

This cord is already fitted with a moulded plug incorporating a fuse, the value of which is indicated on the pin face of the plug. Should the fuse need to be replaced, an ASTA approved BS 1362 fuse must be used of the same rating, marked thus ⌯. If the fuse cover is detachable, never use the plug with the cover omitted. If a replacement fuse cover is required, ensure it is of the same colour as that visible on the pin face of the plug (i.e. red or orange). Fuse covers are available from the Parts Department indicated in your User Instructions.

If the plug supplied is not suitable for your socket outlet, it should be cut off and destroyed.

The end of the flexible cord should be suitably prepared and the correct plug fitted.

WARNING : A PLUG WITH BARED FLEXIBLE CORD IS HAZARDOUS IF ENGAGED IN A LIVE SOCKET OUTLET.

The Wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow Earth
Blue . . . . . Neutral
Brown . . . . . Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured green or green-and-yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

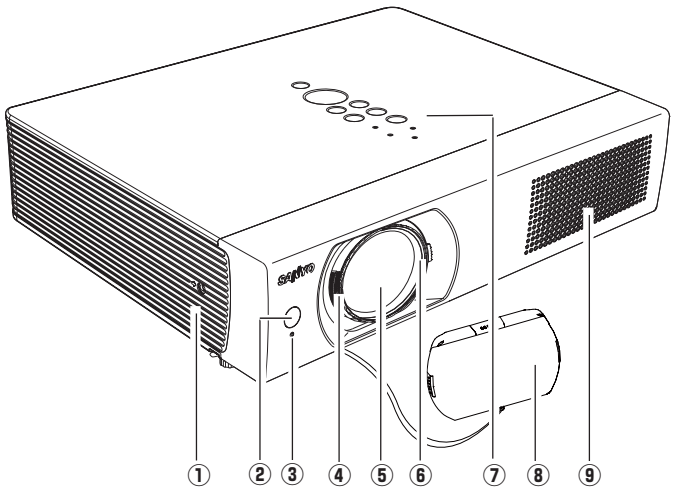
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

WARNING: THIS APPARATUS MUST BE EARTHED.

THE SOCKET-OUTLET SHOULD BE INSTALLED NEAR THE EQUIPMENT AND EASILY ACCESSIBLE.

Part Names and Functions

Front



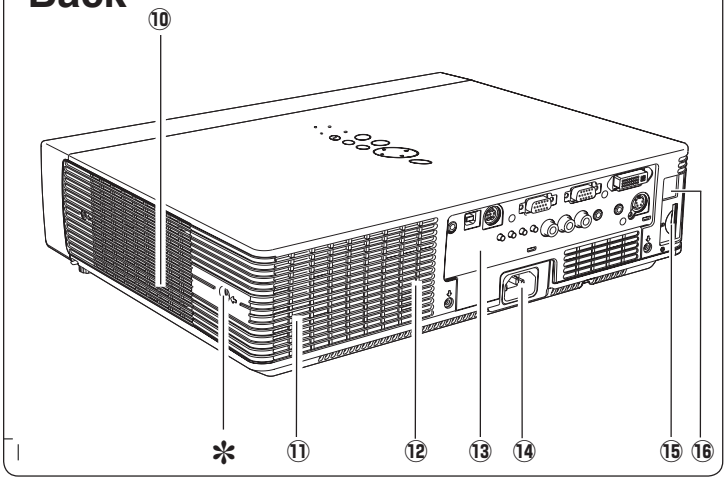
① **Alarm Speaker**
② **Infrared Remote Receiver**
③ **WIRELESS Indicator**
④ **Focus Lever**
⑤ **Projection Lens**
⑥ **Zoom Ring**
⑦ **Top Controls and Indicators**
⑧ **Lens Cover**

CAUTION

Do not turn on a projector with lens cap attached. High temperature from light beam may damage lens cap and result in fire hazard.

⑨ **Air Intake Vent**

Back



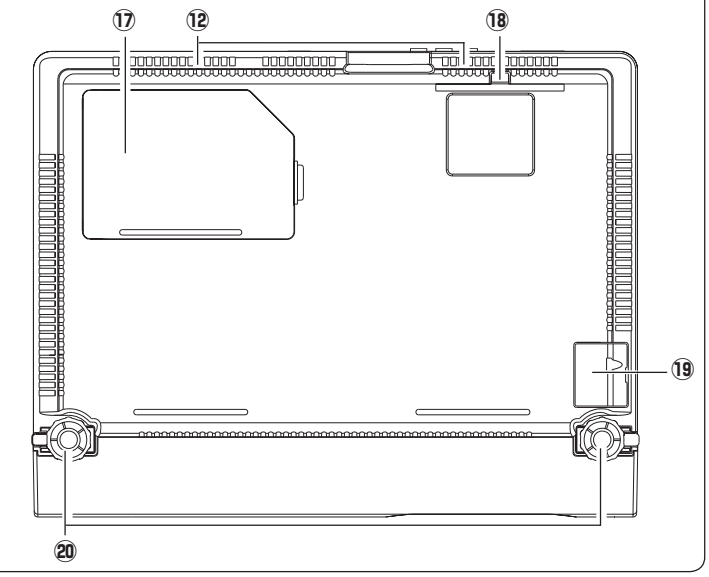
⑩ **Exhaust vent**

CAUTION

Hot air is exhausted from the exhaust vents. Do not put heat-sensitive objects near this side.

⑪ **Speaker**
⑫ **Air Intake Vent (back and bottom)**
⑬ **Terminals and Connectors**
⑭ **Power Cord Connector**
⑮ **SD Card Slot**
⑯ **LAN Connection Terminal**

Bottom



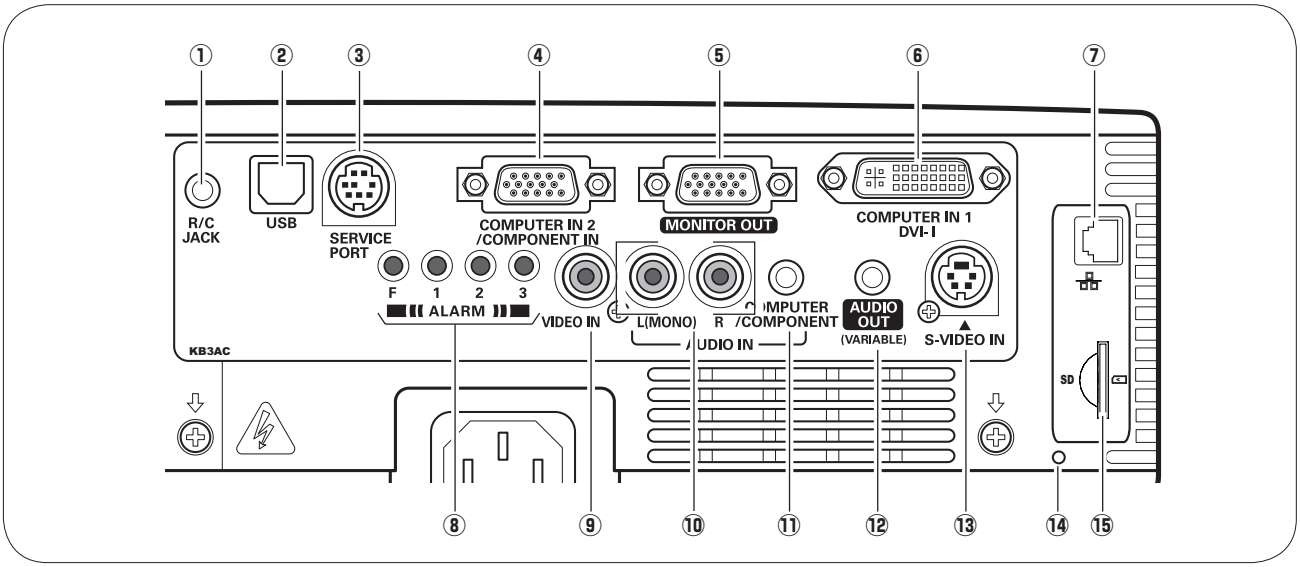
⑰ **Lamp Cover**
⑱ **Filter**
⑲ **Battery Cover**
⑳ **Adjustable Feet**

✔**Note:**
③WIRELESS Indicator and ⑯ LAN Connection Terminal are for the Network function. Refer to the owner's manual "Network Set-up and Operation".

✻ **Kensington Security Slot**
This slot is for a Kensington lock used to deter theft of the projector.

* Kensington is a registered trademark of ACCO Brands Corporation.

Rear Terminal



① **R/C JACK**
When using the wired remote control, connect the wired remote control to this jack with a remote control cable (not supplied).

② **USB (Series B)**
In order to operate the computer with the remote control and use the PAGE ▲▼ buttons on the remote control during a presentation, connect the USB port of the computer to the USB terminal with a USB cable (not supplied) (pp.13, 19).

③ **SERVICE PORT**
This jack is used to service the projector.

④ **COMPUTER IN 2/COMPONENT IN**

Connect the computer or component video (or RGB Scart) output signal to this terminal (pp.19, 21). Use the supplied VGA cable or a Component-VGA cable commercially available.

⑤ **MONITOR OUT**

This terminal can be used to output the incoming RGB analog signal from COMPUTER IN 1 and COMPUTER IN 2/COMPONENT IN terminal to the other monitor (p.19).

⑥ **COMPUTER IN 1/DVI-I**

Connect computer output (Digital/Analog DVI-I type) to this terminal (p.19).

⑦ **LAN Connection Terminal**

Connect the LAN cable (refer to the owner's manual "Network Set-up and Operation").

⑧ **ALARM buttons**

Use these buttons when setting up the Alarm function (pp.58–59).

⑨ **VIDEO IN**

Connect the composite video output signal to this jack (p.20).

⑩ **AUDIO IN**

Connect the audio output signal from video equipment connected to ⑨ or ⑬ to this jack. For a mono audio signal (a single audio jack), connect it to the L (MONO) jack (p.20).

⑪ **COMPUTER/COMPONENT AUDIO IN**

Connect the audio output (stereo) signal from a computer or video equipment connected to ④ or ⑥ to this jack (pp.19, 21).

⑫ **AUDIO OUT (VARIABLE)**

Connect an external audio amplifier to this jack (pp.19–21).
This terminal outputs sound from AUDIO IN terminal (⑩ or ⑪).

⑬ **S-VIDEO IN**

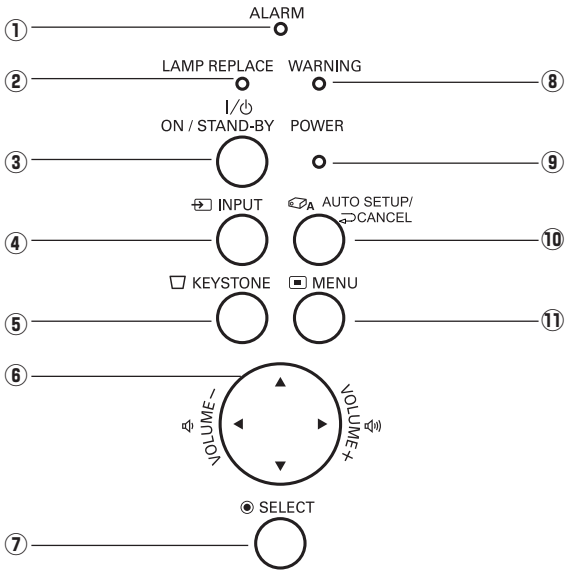
Connect the S-VIDEO output signal from video equipment to this jack (p.20).

⑭ **SD Card Indicator**

Display the status of SD card.When inserting SD Card, the indicator lights, and when removing SD Card, the indicator turns off.

⑮ **SD Card Slot**
Insert the SD card memory (not supplied) for Memory viewer operation(refer to the owner's manual of Memory viewer).

Top Control



① ALARM indicator

Blinks red when informing the setting or battery status (pp.58–59).

② LAMP REPLACE indicator

Lights yellow when the projection lamp reaches its end of life (pp.65, 71).

③ ON/STAND–BY button

Turn the projector on or off (pp.22–23).

④ INPUT button

Select an input source (pp.30–31, 40–41).

⑤ KEYSTONE button

Correct keystone distortion (pp.26, 48).

⑥ POINT ▲▼◀▶ (VOLUME +/–) buttons

–Select an item or adjust the value in the On-Screen Menu (p.24).
–Pan the image in the Digital zoom + mode (p.39).
–Adjust the volume level (Point ◀▶ buttons) (p.27).

⑦ SELECT button

–Execute the selected item (p.24).
–Expand or compress the image in the Digital zoom mode (p.39).

⑧ WARNING indicator

–Lights red when the projector detects an abnormal condition.
–Blinks red when the internal temperature of the projector exceeds the operating range (pp.62, 71).

⑨ POWER indicator

–Lights red when the projector is in stand-by mode.
–Lights green during operations.
–Blinks green in the Power management mode (p.52).

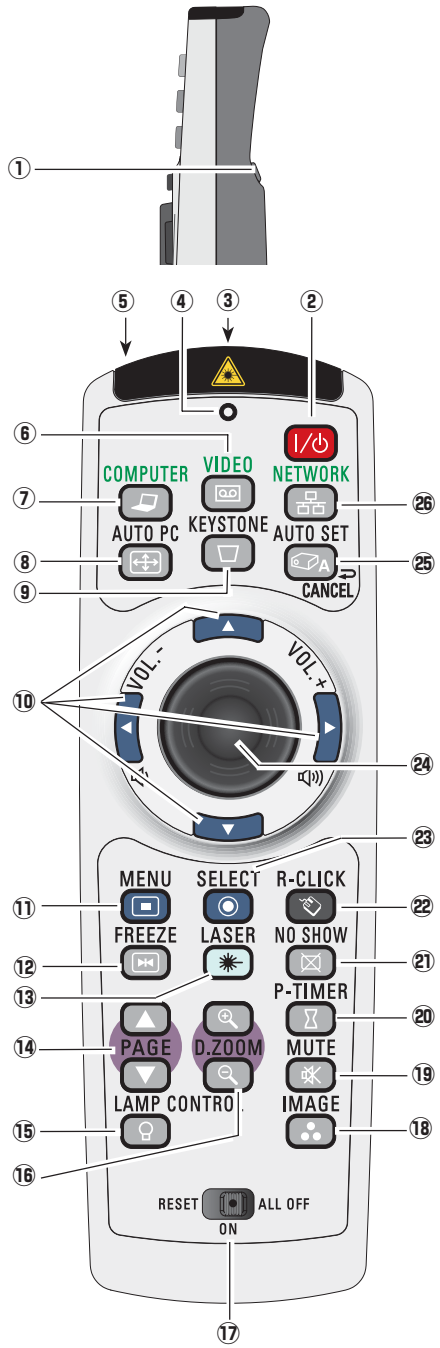
⑩ AUTO SETUP/CANCEL button

–Correct vertical keystone distortion and adjust computer display parameters such as Fine sync., Total dots, and Picture position (pp.26, 47).
–Display the image in SD card or return to the menu bar in Memory Viewer menu.
Refer to the owner's manual of "Network Set-up and Operation" and owner's manual of Memory viewer.

⑪ MENU button

Open or close the On-Screen Menu (p.24).

Remote Control



⚠ To ensure safe operation, please observe the following precautions:

– Do not bend, drop, or expose the remote control to moisture or heat.
– For cleaning, use a soft dry cloth. Do not apply benzene, thinner, splay, or any chemical material.

① **L-CLICK button**
Act as the left mouse button for wireless mouse operation. (p.15)

② **POWER ON/STAND-BY button**
Turn the projector on or off. (pp.22-23)

③ **WIRED REMOTE jack**
Connect the remote control cable(not supplied) to this jack when using as a wired remote control.Wireless remote control does not work when the remote control cable is connected to the projector

④ **SIGNAL EMISSION indicator**
Lights red while the laser beam is being emitted from the laser light window or a signal is being sent from the remote control to the projector.

⑤ **LASER LIGHT window**
A laser beam is emitted from here (p.14).

⑥ **VIDEO button**
Select the VIDEO input source. (p.40)

⑦ **COMPUTER button**
Select the COMPUTER input source. (pp.30-31,41)

⑧ **AUTO PC button**
Automatically adjust the computer image to its optimum setting. (pp.28,33,47)

⑨ **KEYSTONE button**
Correct keystone distortion. (pp.26, 48)

⑩ **Point ▲▼ ◀▶** (VOLUME + / –) buttons
– Select an item or adjust the value in the On-Screen Menu. (p.24)
– Pan the image in the Digital zoom + mode. (p.39)
– Adjust the volume level. (Point ◀▶ buttons) (p.27)

⑪ **MENU button**
Open or close the On-Screen Menu. (p.24)

⑫ **FREEZE button**
Freeze the picture on the screen. (p.28)

⑬ **LASER button**
– Operate the Laser pointer function. Laser beam is emitted while pressing this button within 1 minute. When using this laser pointer for more than 1 minute, release the LASER button and press it again. (p.14)
– Display the Pointer on the screen. (p.14)

⑭ **PAGE ▲▼ buttons**
Scroll back and forth the pages on the screen when giving a presentation. To use these buttons, connect the projector and your computer with a USB cable. (pp.11, 19)

⑮ **LAMP CONTROL button**
Select a lamp mode. (pp.28, 53)

⑯ **D.ZOOM ▲▼ buttons**
Zoom in and out the images. (pp.28, 39)

⑰ **RESET/ON/ALL-OFF switch**
When using the remote control, set this switch to “ON.” Set it to “ALL OFF” for power saving when it is not used. Slide this switch to "RESET" to initialize the remote control code or switch Spotlight and Pointer to the Laser pointer function. (pp.14-15)

⑱ **IMAGE button**
Select the image mode. (pp.29,36,43)

⑲ **MUTE button**
Mute the sound. (p.27)

⑳ **P-TIMER button**
Operate the P-timer function. (p.29)

㉑ **NO SHOW button**
Temporarily turn off the image on the screen. (p.29)

㉒ **R-CLICK button**
Act as the right mouse button for wireless mouse operation. (p.15)

㉓ **SELECT button**
– Execute the selected item. (p.24)
– Expand or compress the image in Digital zoom mode. (p.39)

㉔ **PRESENTATION POINTER button**
Move a pointer of the projector or a pointer for wireless mouse operation. (pp.14-15)

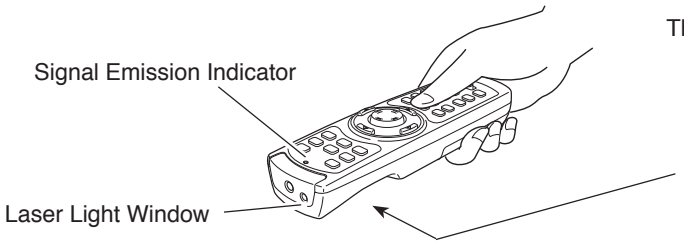
㉕ **AUTO SET/CANCEL button**
– Correct vertical keystone distortion and adjust the PC display parameters. (pp.26, 47)
– Display the image in SD card or return to the menu bar in Memory Viewer menu. Refer to the owner's manual of "Network Set-up and Operation" and owner's manual of Memory viewer.

㉖ **NETWORK button**
Select the Network input or Memory viewer input. See owner's manual “Network Set-up and Operation” and owner's manual of Memory viewer .

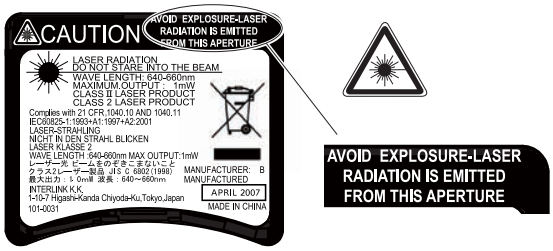
Laser Pointer Function

This remote control emits a laser beam from the laser light window. Press the LASER button to activate the laser pointer. The signal emission indicator lights red and the red laser beam is emitted. If the LASER button is pressed for more than one minute or if it is released, the laser light goes off.
The laser emitted is a Class II laser. Do not look into the laser light window or point the laser beam at yourself or other people. The following is the caution label for the laser beam.

CAUTION: Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. Never look directly into the laser light window while a laser is emitted, otherwise eye damage may result.



The caution label is put on the remote control.



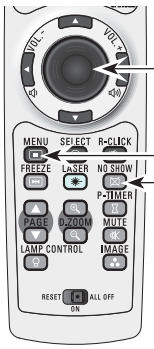
Pointer Function

You can move the Spotlight or Pointer of the projector with the remote control to emphasize a part of the projected image.

1 Press and hold the MENU and NO SHOW buttons for more than 10 seconds to activate the Pointer function. (The Laser pointer has switched to the Pointer function.)

2 Press the LASER button on the remote control pointing toward the projector. The Spotlight or Pointer is displayed on the screen with the LASER button lighting green. Then move the Spotlight or Pointer with the PRESENTATION POINTER button. If the LASER button does not light green and continues to emit a laser beam, try the abovementioned procedure until the LASER button lights green.

3 To clear the Spotlight or Pointer out the screen, press the LASER button pointing toward the projector and see if the LASER button lighting is turned off.
To switch to the Laser pointer again, press and hold the NO SHOW and MENU buttons for more than 10 seconds or slide the RESET/ON/ALL-OFF switch to “RESET” and then to “ON”.
When you reset the Pointer function, the remote control code will be reset, as well.

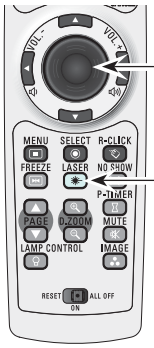


PRESENTATION POINTER button

MENU button

NO SHOW button

Press and hold the MENU and NO SHOW buttons for more than 10 seconds.

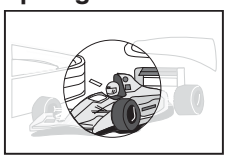


PRESENTATION POINTER button

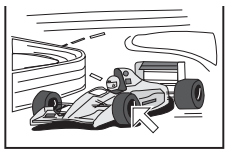
LASER button

After the Laser pointer has switched to the Pointer, use the LASER button as the Pointer function ON-OFF switch. Press the LASER button pointing toward the projector and see if it lights green.

Spotlight



Pointer



✔**Note:**

- You can choose the size of Spotlight (Large/Middle/Small) and the pattern of Pointer (Arrow/Finger/Dot) in the Setting Menu. See “Pointer” on page 53.

Wireless Mouse Operation

The remote control can be used as a wireless mouse for your computer.

1 Before operating the wireless mouse, connect your computer and the projector with a USB cable (not supplied). See “Connecting to a Computer” on page 19. When the Pointer function is used, the wireless mouse is not available.

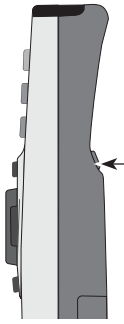
2 When a USB cable is connected to the computer and the projector, turn on the projector first, then the computer. If you turn on the computer first, the wireless mouse function may not operate correctly.

PRESENTATION POINTER button

Move the pointer on the screen with this button.

R-CLICK button

Acts as right (click) mouse button while the projector and a computer are connected with a USB cable.



L-CLICK button

Acts as left (click) mouse button while the projector and a computer are connected with a USB cable.

Remote Control Code

The eight different remote control codes (Code 1–Code 8) are assigned to this projector. Switching the remote control codes prevents interference from other remote controls when several projectors or video equipment next to each other are operated at the same time. Change the remote control code for the projector first before changing that for the remote control. See “Remote control” in the Setting Menu on page 53.

1 Press and hold the MENU and IMAGE buttons for more than five seconds to switch between the codes. The code switches sequentially for one pressing the IMAGE button. See the list below.

2 To initialize the remote control code, slide the RESET/ON/ALL-OFF switch to “RESET,” and then to “ON.” The initial code is set to Code 1.

Remote Control Code	Number of Times Pressing IMAGE Button
Code 1	1
Code 2	2
Code 3	3
Code 4	4
Code 5	5
Code 6	6
Code 7	7
Code 8	8

While pressing the MENU button, press the IMAGE button number of times corresponding to the remote control code.

MENU button

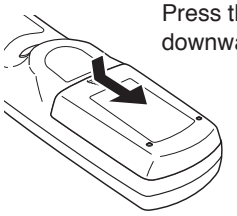
IMAGE button

RESET/ON/ALL-OFF switch

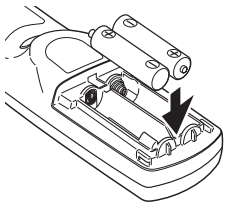
Remote Control Battery Installation

1 Open the battery compartment lid.

Press the lid downward and slide it.

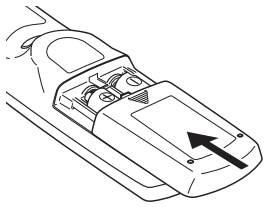


2 Install new batteries into the compartment.



Two AAA size batteries
For correct polarity (+ and –), be sure battery terminals are in contact with pins in compartment.

3 Replace the compartment lid.

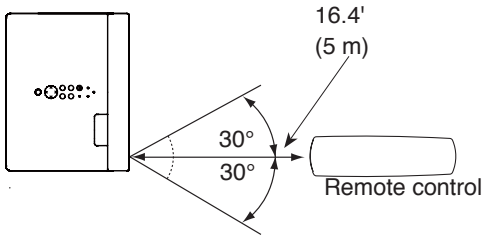


To insure safe operation, please observe the following precautions :

- Use two (2) AAA or LR03 type alkaline batteries.
- Always replace batteries in sets.
- Do not use a new battery with a used battery.
- Avoid contact with water or liquid.
- Do not expose the remote control to moisture or heat.
- Do not drop the remote control.
- If the battery has leaked on the remote control, carefully wipe the case clean and install new batteries.
- Risk of an explosion if battery is replaced by an incorrect type.
- Dispose of used batteries according to the instructions.

Remote Control Operating Range

Point the remote control toward the projector (Infrared Remote Receiver) when pressing the buttons. Maximum operating range for the remote control is about 16.4'(5 m) and 60 degrees in front of the projector.



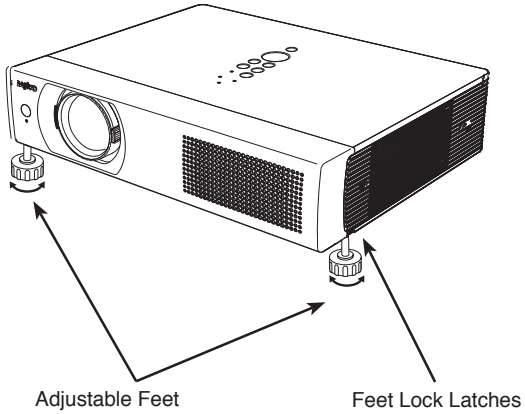
Adjustable Feet

Projection angle can be adjusted up to 8.9 degrees with the adjustable feet.

Lift the front of the projector and pull the feet lock latches on both side of the projector upward.

Release the feet lock latches to lock the adjustable feet and rotate the adjustable feet to a proper height, and tilt.

Keystone distortion can be adjusted automatically with the Auto setup function or manually by using the remote control or the menu operation (see pages 26, 47-48).

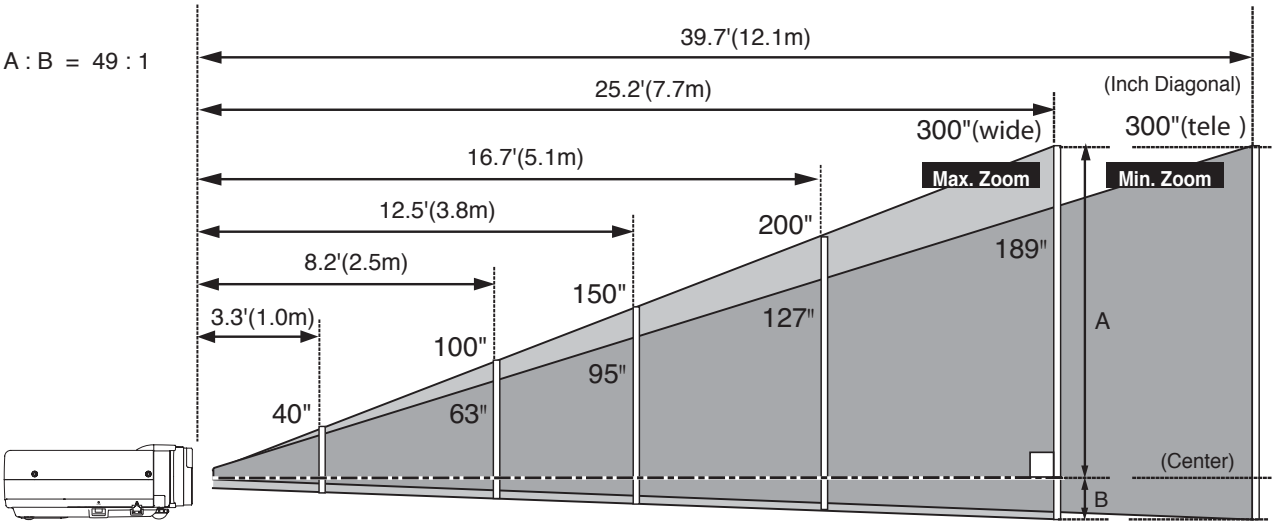


Positioning the Projector

For projector positioning, see the figures below. The projector should be set perpendicularly to the plane of the screen.

✔**Notes:**

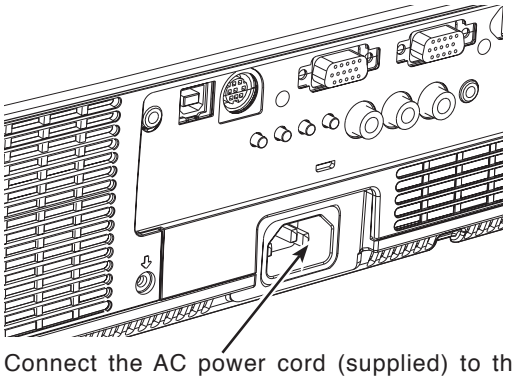
- The brightness in the room has a great influence on picture quality. It is recommended to limit ambient lighting in order to obtain the best image.
- All measurements are approximate and may vary from the actual sizes.



Screen Size (W x H) mm 16 : 10 aspect ratio	40”	100”	150”	200”	300”
	862 x 538	2154 x 1346	3231 x 2019	4308 x 2692	6462 x 4039
Zoom (min)	5.2'(1.6m)	13.1'(4.0m)	19.7'(6.0m)	26.86(8.1m)	39.7'(12.1m)
Zoom (max)	3.3'(1.0m)	8.2'(2.5m)	12.5'(3.8m)	16.7'(5.1m)	25.2'(7.7m)

Connecting the AC Power Cord

This projector uses nominal input voltages of 100-120 V or 200–240 V AC and it automatically selects the correct input voltage. It is designed to work with single-phase power systems having a grounded neutral conductor. To reduce the risk of electrical shock, do not plug into any other type of power system.
If you are not sure of the type of power being supplied, consult your authorized dealer or service station.
Connect the projector with all peripheral equipment before turning the projector on.

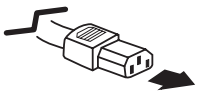
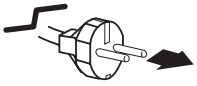
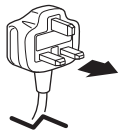


Connect the AC power cord (supplied) to the projector.
The AC outlet must be near this equipment and must be easily accessible.

CAUTION

For safety, unplug the AC power cord when the projector is not in use. When this projector is connected to an outlet with the AC power cord, it is in Stand-by mode and consumes a little electric power.

NOTE ON THE POWER CORD
AC power cord must meet requirement of the country where you use the projector.
Confirm the AC plug type with the chart below and proper AC power cord must be used.
If supplied AC power cord does not match your AC outlet, contact your sales dealer.

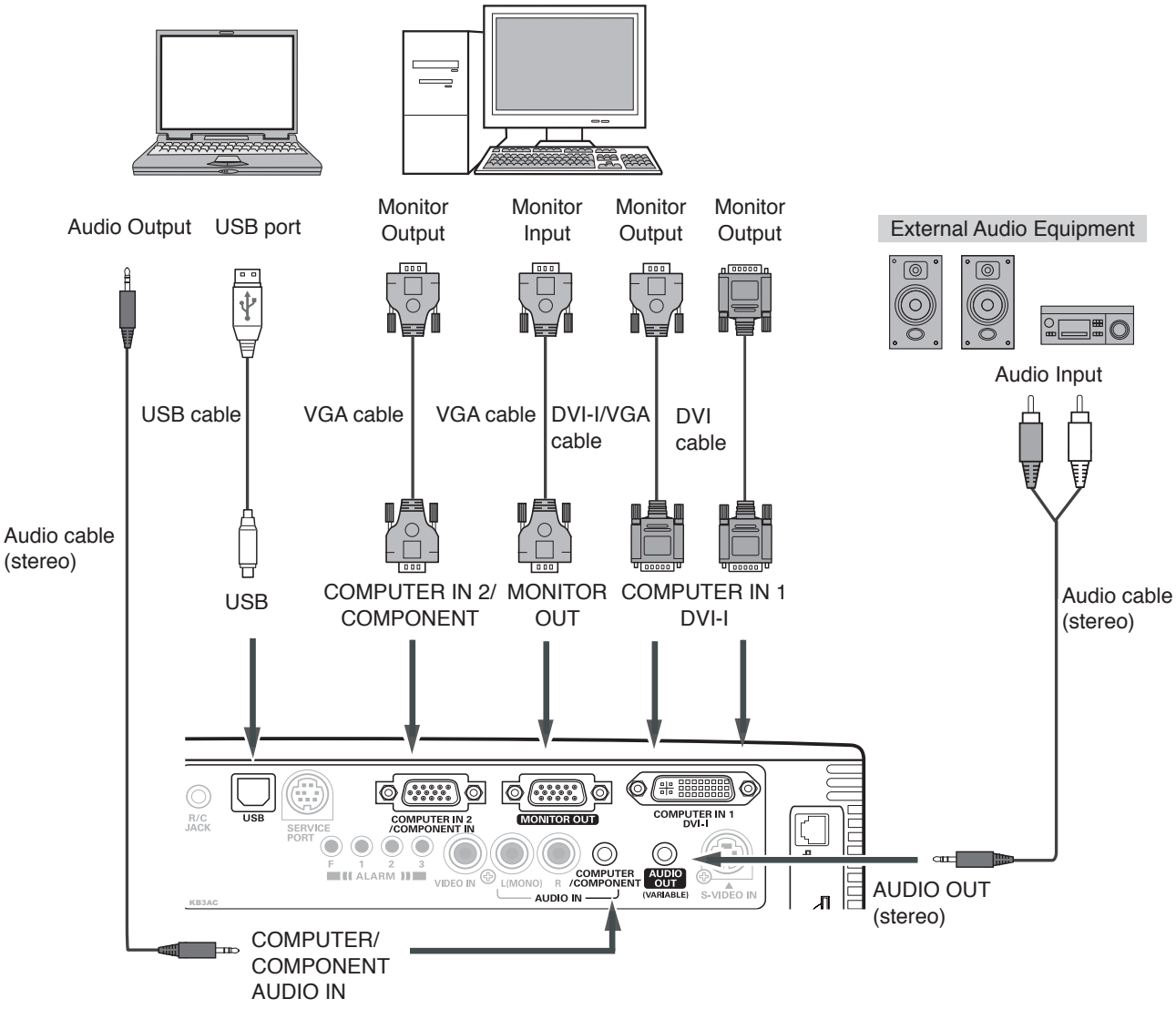
Projector side	AC outlet side		
	For the U.S.A. and Canada	**For Continental Europe**	**For the U.K.**
 To power cord connector on your projector.	To the AC outlet. **(120 V AC)**	 To the AC outlet. **(200 - 240 V AC)**	 To the AC outlet. **(200 - 240 V AC)**

Connecting to a Computer

Cables used for connection

- VGA Cable (Mini D-sub 15 pin) *
- DVI-I/VGA Cable
- DVI Cable
- USB Cable
- Audio Cables

(*One cable is supplied; other cables are not supplied with the projector.)



✔Notes:

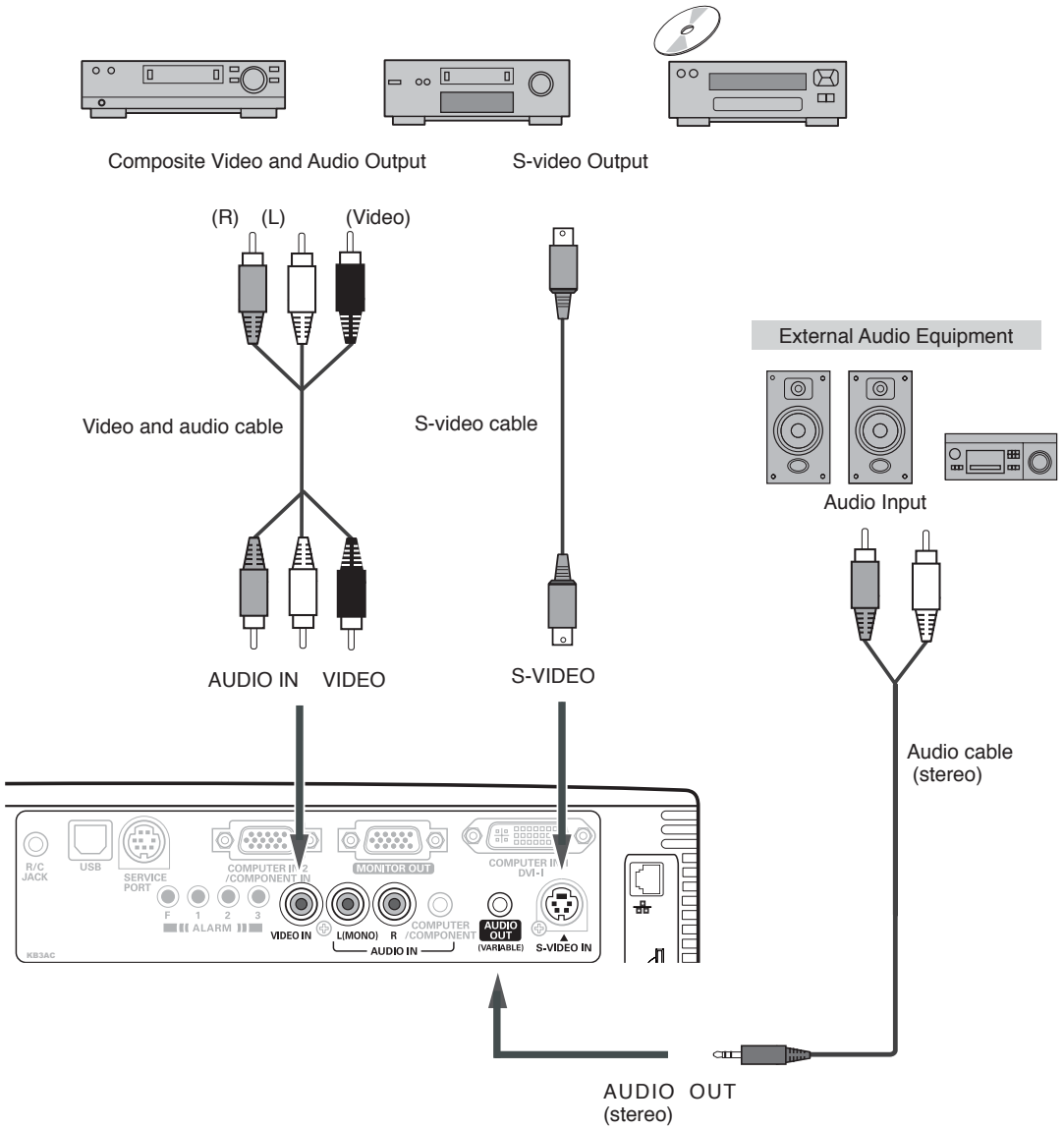
- Input sound to the COMPUTER/COMPONENT AUDIO IN terminal when using the COMPUTER IN 1/DVI-I and the COMPUTER IN 2/ COMPONENT IN terminal as input.
- When the AUDIO OUT is plugged-in, the projector's built-in speaker is not available.
- USB cable connection is needed when operating the computer with the remote control or using the PAGE ▲▼ buttons on the remote control.

⚠ Unplug the power cords of both the projector and external equipment from the AC outlet before connecting cables.

Connecting to Video Equipment

Cables used for connection
- Video and Audio Cable (RCA x 3)
- S-VIDEO Cable
- Audio Cable

(Cables are not supplied with the projector.)



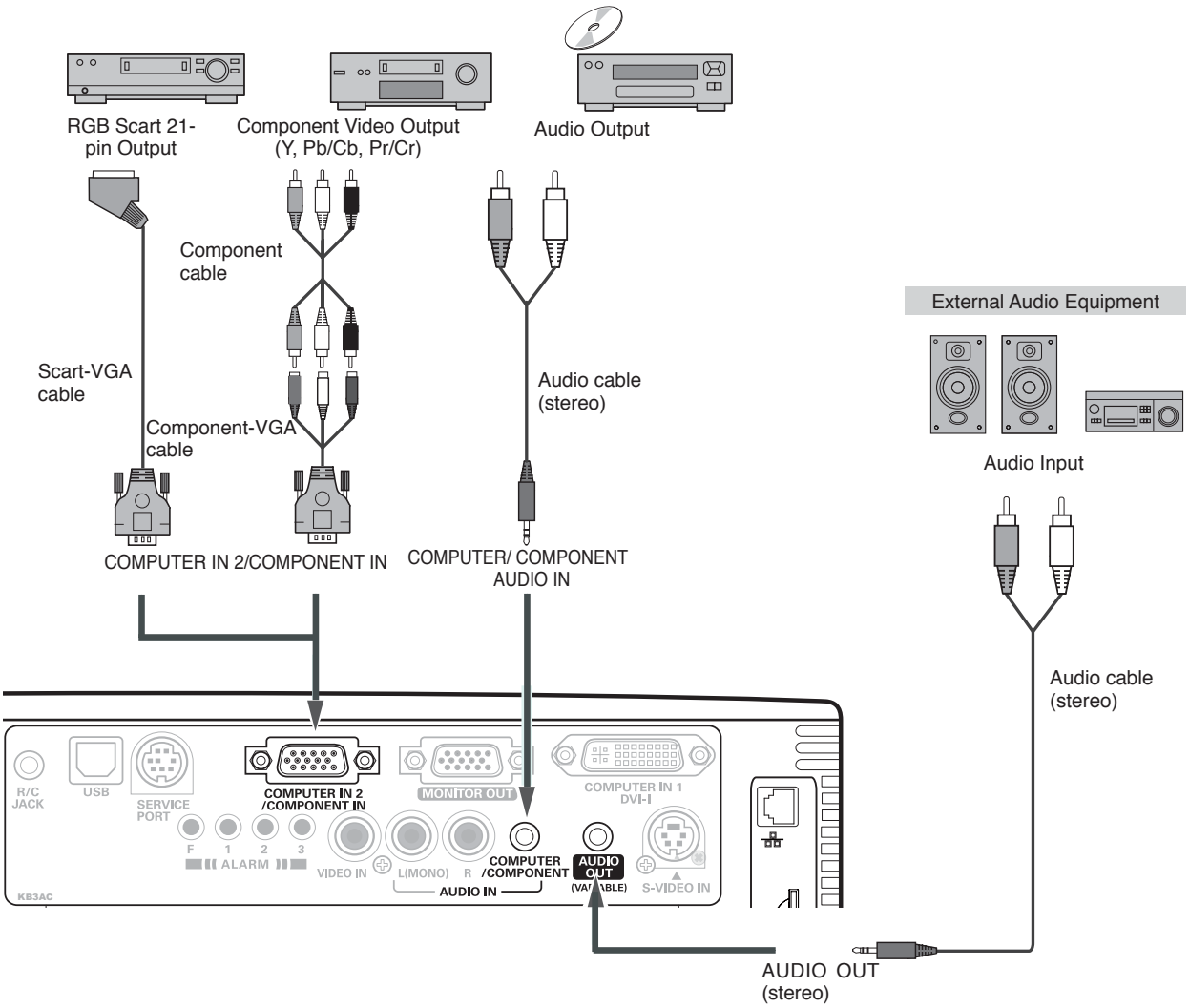
✔**Notes:**
- When the AUDIO OUT is plugged-in, the projector's built-in speaker is not available.
- The S-VIDEO jack connection overrides the VIDEO jack connection when selecting AUTO in the Input Menu (p.40).

⚠ Unplug the power cords of both the projector and external equipment from the AC outlet before connecting cables.

Connecting to Component Video Equipment

Cables used for connection
- Audio Cables
- Scart-VGA Cable
- Component Cable
- Component-VGA Cable

(Cabels are not supplied with this projector.)



✔Notes:
- When the AUDIO OUT is plugged-in, the projector's built-in speaker is not available.
- See page 77 for ordering optional cables.
- RGB Scart signal cannot be output from the MONITOR OUT terminal.

Unplug the power cords of both the projector and external equipment from the AC outlet before connecting cables.

Turning On the Projector

1. Complete peripheral connections (with a computer, VCR, etc.) before turning on the projector.
2. Connect the projector's AC power cord into an AC outlet. The POWER indicator lights red. Open the lens cover (see pages 10,64).
3. Press the POWER ON/SYAND-BY button on the top control or on the remote control. The POWER indicator lights green and the cooling fans start to operate. The preparation display appears on the screen and the count down starts.
4. After the countdown, the input source that was selected the last time and the lamp control status icon (see page 53) appear on the screen.

   If the projector is locked with a PIN code, PIN code input dialog box will appear. Enter the PIN code as instructed below.

Enter a PIN code

Use the Point ▲▼ buttons to enter a number. Press the Point ▶ button to fix the number and move the red frame pointer to the next box. The number changes to "✳." If you fixed an incorrect number, use the Point ◀ button to move the pointer to the number you want to correct, and then enter the correct number.

Repeat this step to complete entering a four-digit number.

After entering the four-digit number, move the pointer to "Set." Press the SELECT button so that you can start to operate the projector.

If you entered an incorrect PIN code, "PIN code" and the number (✳✳✳✳) will turn red for a moment. Enter the correct PIN code all over again.

What is PIN code?

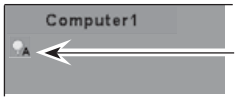
PIN (Personal Identification Number) code is a security code that allows the person who knows it to operate the projector. Setting a PIN code prevents unauthorized use of the projector.

A PIN code consists of a four-digit number. Refer to the PIN code lock function in the Setting Menu on pages 54–55 for locking operation of the projector with your PIN code.

CAUTION ON HANDLING PIN CODE
If you forget your PIN code, the projector can no longer be started. Take a special care in setting a new PIN code; write down the number in a column on page 80 of this manual and keep it at hand. Should the PIN code be missing or forgotten, consult your dealer or service center.

The preparation display will disappear after 30 seconds.

Selected Input Source and Lamp Control



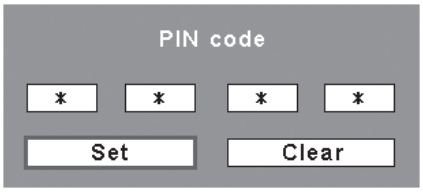
Lamp control status

(See page 51 for Lamp control status.)

✔Note:

- The Filter warning and Lamp replacement icons may appear on the screen depending on the usage state of the projector.

PIN Code Input Dialog Box



After the OK icon disappears, you can operate the projector.

✔Notes:

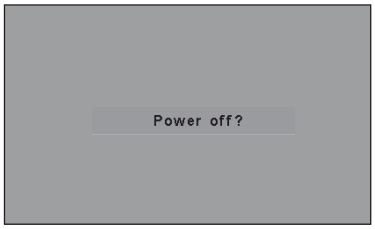
- When the Logo select function is set to "Off," the logo will not be shown on the screen (p.50).
- When the "Countdown off" or "Off" is selected in the Display function, the countdown will not be shown on the screen (p.48).
- During the countdown period, all operations are invalid.
- If the correct PIN code number is not entered within three minutes after the PIN code dialog box appeared, the projector will be turned off automatically.
- The "1234" is set as the initial PIN code at the factory.
- When the Input Search function is set to "On2", the input signal will be searched automatically (p.51)

Turning Off the Projector

1 Press the POWER ON/STAND-BY button on the top control or on the remote control, and “Power off?” appears on the screen.

2 Press the POWER ON/STAND-BY button again to turn off the projector. The POWER indicator starts to blink red, and the cooling fans keep running. (You can select the level of fans’ quietness and speed. See “Fan” on page 56.) At this time, you can unplug the AC power cord even if the fans are still running.

3 When the projector has cooled down enough, the POWER indicator stops blinking and you can turn on the projector.



“Power off?” disappears after 4 seconds.

TO MAINTAIN THE LIFE OF THE LAMP, ONCE YOU TURN THE PROJECTOR ON, WAIT AT LEAST FIVE MINUTES BEFORE TURNING IT OFF.

DO NOT OPERATE THE PROJECTOR CONTINUOUSLY WITHOUT REST. CONTINUOUS USE MAY RESULT IN SHORTENING THE LAMP LIFE. TURN OFF THE PROJECTOR AND LET STAND FOR ABOUT AN HOUR IN EVERY 24 HOURS.

✔**Notes:**

- When the On start function is set to “On,” the projector will be turned on automatically by connecting the AC power cord to an AC outlet (p.53).
- The running speed of cooling fans is changed according to the temperature inside the projector.
- Do not put the projector in a case before the projector is cooled enough.
- If the WARNING indicator blinks or lights red, see “Warning Indicators” on page 62.
- While the POWER indicator is blinking, the lamp is being cooled down and the projector cannot be turned on. Wait until the POWER indicator stops blinking to turn on the projector again.
- The fan rotation will terminate directly if the AC power cord is unplugged immediately after the projector is turned off.
- The projector can be turned on after the POWER indicator turns red. The waiting time to restart will be shortened when the normal power-off processing for fan cooling is completed, compared with the time the AC power cord is immediately unplugged after the power-off.

How to Operate the On-Screen Menu

The projector can be adjusted or set via the On-Screen Menu. For each adjustment and setting procedure, refer to the respective sections in this manual.

1 Press the MENU button on the top control or the remote control to display the On-Screen Menu.

2 Use the Point ◀▶ buttons to select a Menu icon. Use the Point ▲▼ buttons to select an item in the selected menu.

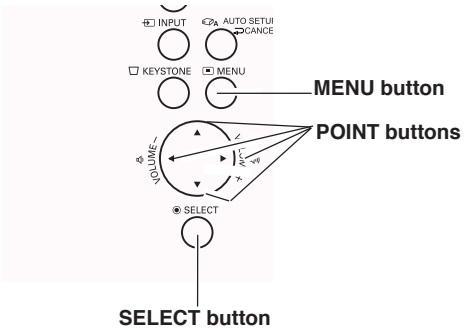
3 Press the SELECT button to show the item data. Use the Point ◀▶ buttons to adjust the values.

To close the On-Screen Menu, press the MENU button again.

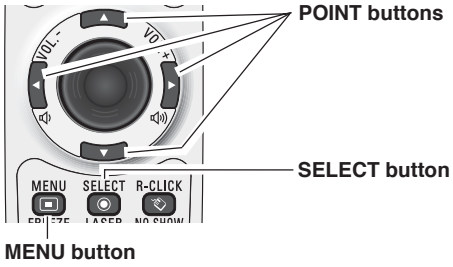
✔Note:

- The selected item is not active until the SELECT button is pressed.

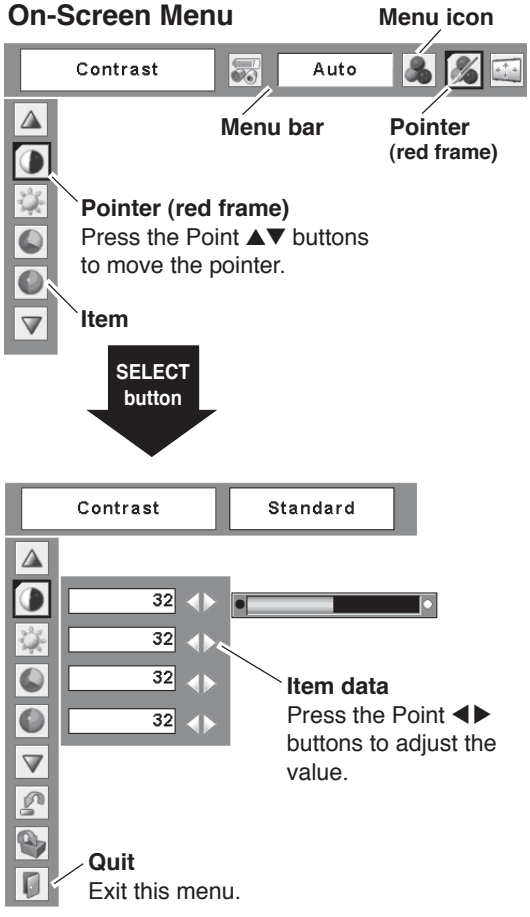
Top Control



Remote Control



On-Screen Menu



Menu Bar

For detailed functions of each menu, see “Menu Tree” on pages 71-72.

For computer source

Guide Window
Show the selected Menu of the On-Screen Menu.

PC System Menu
Used to select computer system (p.32).

Image Select Menu
Used to select an image mode among Dynamic, Standard, Real, Blackboard(Green), and Image 1–4 (p.36).

Screen Menu
Used to adjust size of the image [Normal/ True/Full/Custom/Digital zoom +/–] (pp.38–39).

Setting Menu
Used to set the projector’s operating configurations (pp.47-57).

Wireless Menu
See owner’s manual “Network Set-up and Operation”.

Input Menu
Used to select an input source either Computer or Video. (pp.30-31).

PC Adjust Menu
Used to adjust parameters to match with input signal format (pp.33–35).

Image Adjust Menu
Used to adjust computer image [Contrast/Brightness/ Color temp./White balance (R/G/B)/ Sharpness/Gamma] (pp.37–38).

Sound Menu
Used to adjust the volume or mute the sound (p.27).

Wired Menu
See owner’s manual “Network Set-up and Operation”.

For video source

Input Menu
Used to select an input source either Video or Computer (pp.40, 41).

Image Select Menu
Used to select an image mode among Dynamic, Standard, Cinema, Blackboard(Green) and Image 1–4 (p.43).

Screen Menu
Used to set size of image[Normal/ Zoom/Natural wide/ Custom](p.46,47).

Same function as menu for computer source.

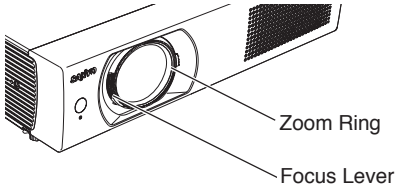
AV System Menu
Used to select system of selected video source (p.42).

Image Adjust Menu
Used to adjust picture image [Contrast/Brightness/Color/Tint/ Color temp./White balance (R/ G/B)/Sharpness/Gamma/ Noise reduction/Progressive] (pp.44–45).

Same function as computer menu.

Zoom and Focus Adjustment

Rotate the Zoom Ring to zoom in and out.
Rotate the Focus Lever to adjust the focus of the image.



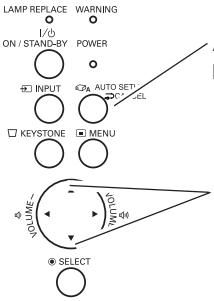
Auto Setup Function

Auto setup function is provided to automatically correct Keystone distortion according to the projector's tilt and adjust the computer display parameters (Fine sync, Total dots, and Picture position) by just pressing the AUTO SETUP/CANCEL button on the top control or the AUTO SET/CANCEL button on the remote control. The operational setup for the Auto setup can be changed in the Setting menu. Refer to page 47 for the setting of the Auto setup function.

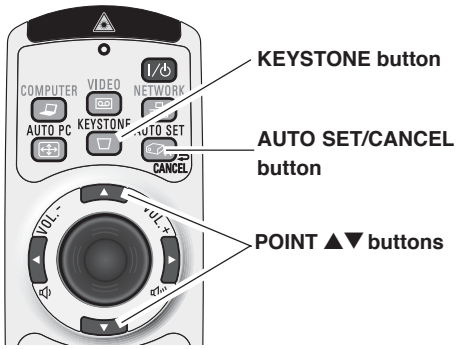
✔Notes:

- Auto Keystone corrects vertical distortion only; it does not correct horizontal distortion.
- Auto Keystone cannot work when Ceiling feature is set to "On" in the Setting menu (p.51).
- Perfect correction of the image distortion cannot be ensured with the Auto setup function. If the distortion cannot be corrected properly by pressing the AUTO SETUP/CANCEL or AUTO SET/CANCEL button, adjust manually by pressing the KEYSTONE button on the remote control or selecting Keystone in the Setting menu (p.48).
- Fine sync, Total dots, Horizontal and Vertical position of some computers cannot be fully adjusted with the Auto PC Adjustment function. When the image is not provided properly with this operation, manual adjustments are required (pp.34–35).

Top Control



Remote Control

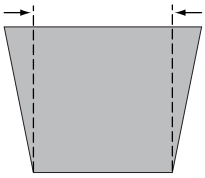


Keystone Correction

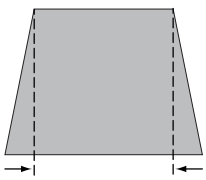
If a projected picture still has keystone distortion after pressing the AUTO SETUP/CANCEL button on the top control or the AUTO SET/CANCEL button on the remote control, correct the image manually as follows:

Press the KEYSTONE button on the remote control. The Keystone dialog box appears. Use the Point ▲▼ buttons to correct keystone distortion. The keystone adjustment can be stored (see page 48).

Reduce the upper width with the Point ▲ button.



Reduce the lower width with the Point ▼ button.



- The white arrows indicate that there is no correction.
- A red arrow indicates the direction of correction.
- An arrow disappears at the maximum correction.
- If you press the KEYSTONE button on the remote control once more while the keystone dialog box is being displayed, the keystone adjustment will be canceled.
- The adjustable range is limited depending on the input signal.

Sound Adjustment

Direct Operation

Volume

Press the VOLUME+/– buttons on the top control or on the remote control to adjust the volume. The volume dialog box appears on the screen for a few seconds.

Mute

Press the MUTE button on the remote control to temporarily turn off the sound. To turn the sound back on, press the MUTE button again or press the VOLUME +/– buttons. The Mute function is also effective for the AUDIO OUT jack.

Menu Operation

1. Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the Sound Menu icon.
2. Use the Point ▲▼ buttons to move the red frame pointer to the desired item, and then press the SELECT button.

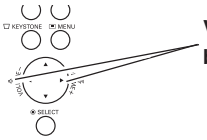
Volume

Press the Point ▶ button to turn up the volume; press the Point ◀ button to turn down the volume.

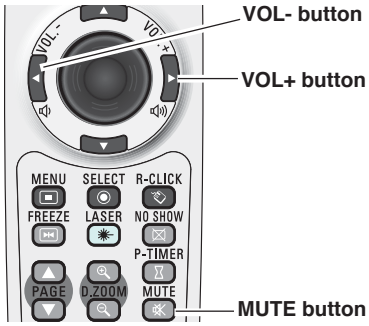
Mute

Press the Point ◀▶ buttons to switch the mute function On/ Off. When the sound is turned off, “On” is displayed. Press the Point ◀▶ buttons again to turn the sound back on.

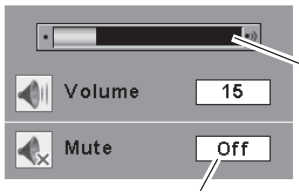
Top Control



Remote Control

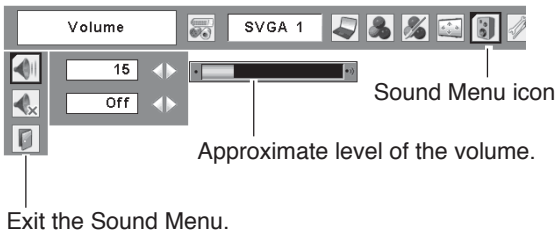


Volume Dialog Box



Press the MUTE button to set the Mute function On or Off. The dialog box disappears after 4 seconds.

Sound Menu



Remote Control Operation

Using the remote control for some frequently used operations is advisable. Just pressing one of the buttons enables you to make the desired operation quickly without calling up the On-Screen Menu.

COMPUTER/VIDEO/NETWORK button

Press the COMPUTER, VIDEO, or NETWORK button on the remote control to select the input source. See pages 30-31, 40-41 for details.
Refer to the owner's manual "Network Set-up and Operation" for details about the network input.

FREEZE button

Press the FREEZE button on the remote control to freeze the picture on the screen. To cancel the Freeze function, press the FREEZE button again or press any other button.

AUTO PC button

Press the AUTO PC button on the remote control to operate the Auto PC Adj. function. The computer screen adjustment can be done easily by pressing this button. See page 33 for details.

D.ZOOM buttons

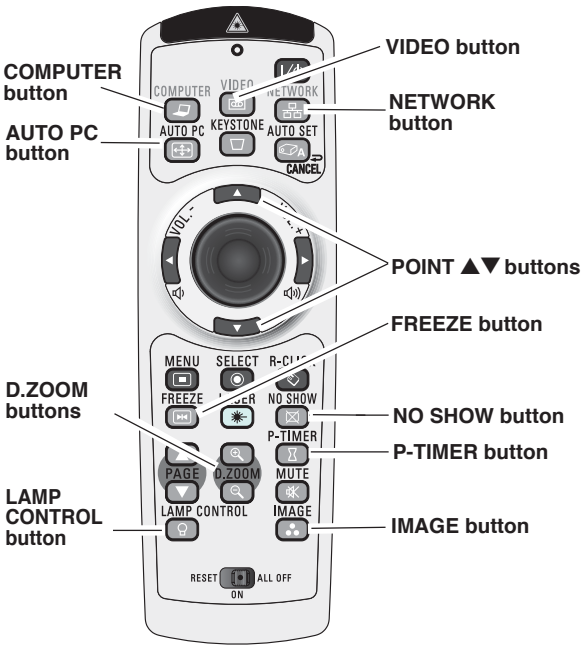
Press the D.ZOOM buttons on the remote control to enter to the Digital zoom +/– mode. See page 39 for details.

LAMP CONTROL button

Press the LAMP CONTROL button on the remote control to select the lamp mode for changing the brightness on the screen.

- Auto ..... The brightness according to the input signal (between High and Eco mode).
- High ..... Brighter than the Normal mode.
- Normal ..... Normal brightness
- Eco ..... Lower brightness reduces the lamp power consumption and extends the lamp life.

Remote Control



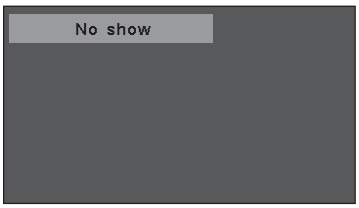
✔**Note:**

- See the next page for the description of other buttons.

NO SHOW button

Press the NO SHOW button on the remote control to black out the image. To restore to normal, press the NO SHOW button again or press any other button. When a projected image is captured and set as “User” in the Logo selection (see page 49), the screen changes each time you press the NO SHOW button as follows.

black out ➜ the captured image ➜ normal ➜ .....



“No show” disappears after 4 seconds.

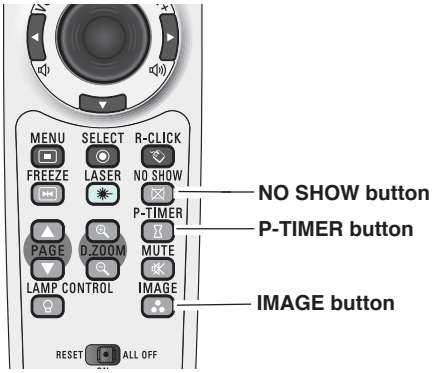
P-TIMER button

Press the P-TIMER button on the remote control. The P-Timer display “00:00” appears on the screen and the countdown starts (00:00–59:59).
To stop the countdown, press the P-TIMER button. To cancel the P-Timer function, press the P-TIMER button again.

P-Timer display

IMAGE button

Press the IMAGE button on the remote control to select a desired image mode of the screen. See pages 36, 43 for details.



✔**Note:**

- See the previous page for the description of other buttons.

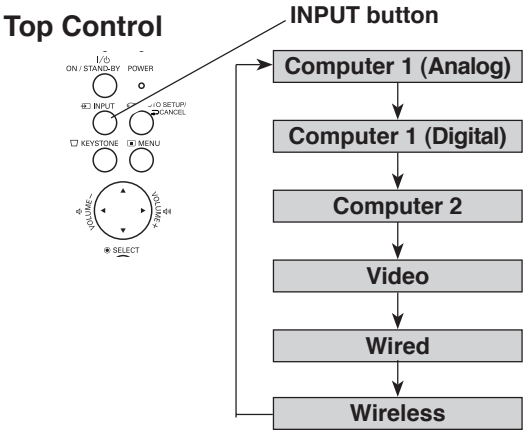
Computer Input

Input Source Selection (RGB: Computer 1 (Analog)/Computer 2)

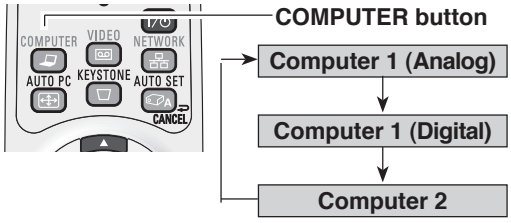
Direct Operation

Choose either Computer 1 (Analog) or Computer 2 by pressing the INPUT button on the top control or press the COMPUTER button on the remote control.
Before using these buttons, correct input source should be selected through Menu operation as described below.

Top Control



Remote Control



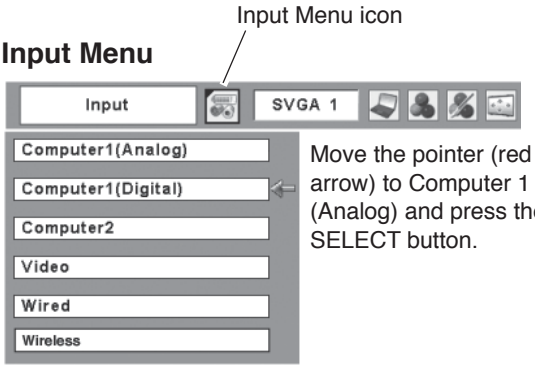
Menu Operation

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the Input Menu icon.

2 Use the Point ▲▼ buttons to move the red arrow pointer to either Computer 1 (Analog) or Computer 2, and then press the SELECT button.

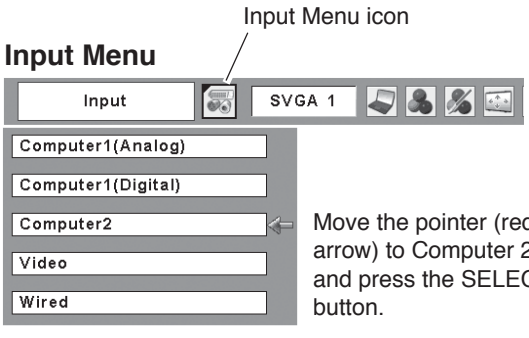
3 When selecting Computer 1 (Analog), RGB input source will be selected directly.
When selecting Computer 2, the Source Select Menu appears. Move the pointer to RGB and then press the SELECT button.

Input Menu

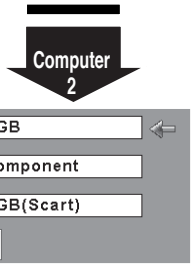


Move the pointer (red arrow) to Computer 1 (Analog) and press the SELECT button.

Input Menu



Move the pointer (red arrow) to Computer 2 and press the SELECT button.



Move the pointer (red arrow) to RGB.

✔Notes:

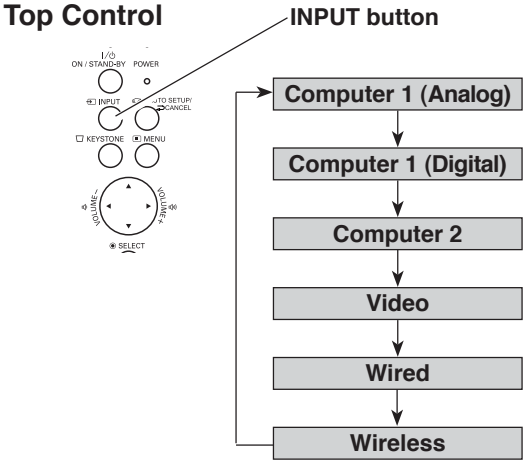
- Wired and Wireless are for the Network function. See owner's manual "Network Set-up and Operation" .
- When the Input Search function is set to "On1" or "On2", the input signal will be searched automatically (p.51).

Input Source Selection (RGB(PC digital), RGB(AV HDCP))

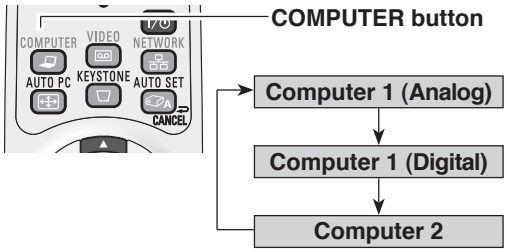
Direct Operation

Choose Computer 1(Digital) by pressing the INPUT button on the top control or press the COMPUTER button on the remote control.
Before using these buttons, correct input source should be selected through Menu operation as described below.

Top Control



Remote Control



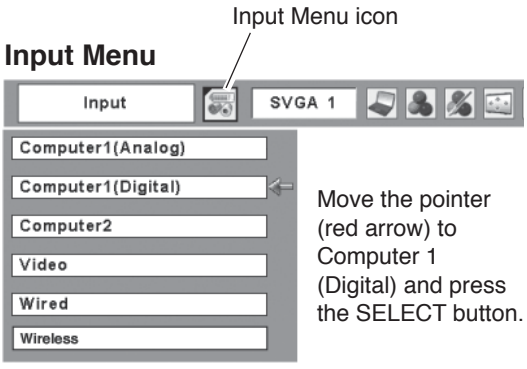
Menu Operation

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the Input Menu icon.

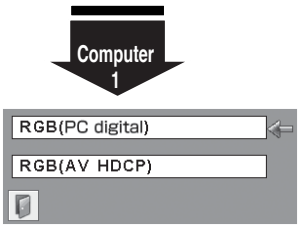
2 Use the Point ▲▼ buttons to move the red arrow pointer to Computer 1 (Digital), and then press the SELECT button.

3 After the Source Select Menu appeared for Computer 1 (Digital), move the pointer to RGB (PC digital) or RGB (AV HDCP), and then press the SELECT button.

Input Menu



Move the pointer (red arrow) to Computer 1 (Digital) and press the SELECT button.



Move the pointer to the source that you want to select and press the SELECT button.

✔Notes:

- HDCP (High-bandwidth Digital Content Protection) is a system for protecting digital entertainment content delivered by DVI (Digital Visual Interface) from being copied. The specification of HDCP is decided and controlled by Digital Content Protection, LLC. Should the specification be changed, this projector may not display the digital content protected by HDCP.
- Wired and Wireless are for the Network function. See owner's manual "Network Set-up and Operation" .
- When the Input Search function is set to "On1" or "On2", the input signal will be searched automatically (p.51).

Computer System Selection

This projector automatically tunes to various types of computers based on VGA, SVGA, XGA, SXGA, WXGA, or UXGA with its Multi-scan system and Auto PC Adjustment. If a computer is selected as a signal source, this projector automatically detects the signal format and tunes to project a proper image without any additional settings. (Signal formats provided in this projector are shown on pages 74-75.)

One of the following messages may appear when:

Auto The projector cannot recognize the connected signal conforming to the provided PC Systems. The "Auto" is displayed on the System Menu box and the Auto PC Adjustment function works to display proper images. If the image is not projected properly, a manual adjustment is required (pp.34-35).

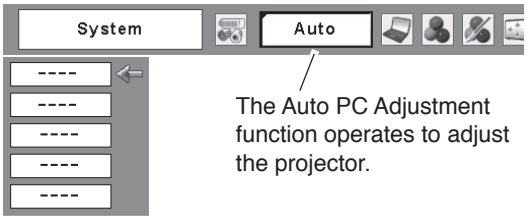
----- There is no signal input from the computer. Check the connection between your computer and the projector. (See "Troubleshooting" on page 67.)

Mode 1 The preset system is manually adjusted in the PC Adjust Menu. The adjusted data can be stored in Mode 1–5 (pp.34-35).

SVGA 1 PC Systems provided in this projector is chosen. The projector chooses a proper system provided in the projector and displays it.

*Mode 1 and SVGA 1 are examples.

PC System Menu

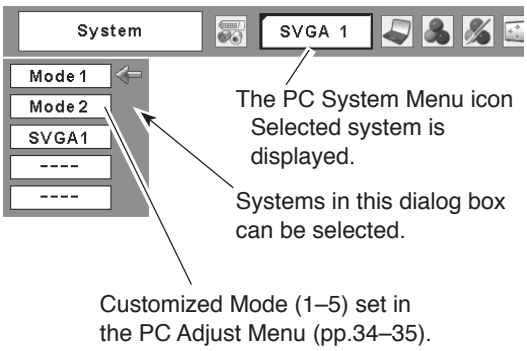


Selecting Computer System Manually

PC system can also be selected manually.

1. Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the PC System Menu icon.
2. Use the Point ▲▼ buttons to move the red arrow pointer to the desired system and then press the SELECT button.

PC System Menu



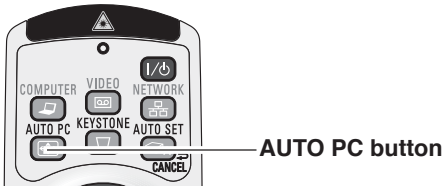
Auto PC Adjustment

Auto PC Adjustment function is provided to automatically adjust Fine sync, Total dots, Horizontal and Vertical positions to conform to your computer.

Direct Operation

The Auto PC adjustment function can be operated directly by pressing the AUTO PC button on the remote control.

Remote Control



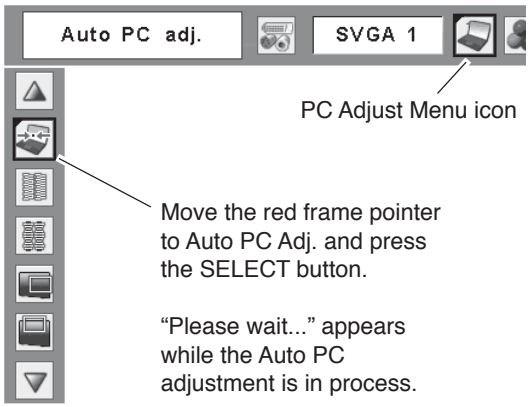
Menu Operation

Auto PC Adj.

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the PC Adjust Menu icon.

2 Use the Point ▲▼ buttons to move the red frame pointer to Auto PC Adj. and then press the SELECT button twice.

PC Adjust Menu



To store adjustment parameters

The adjusted parameters from the Auto PC Adjustment can be stored in the projector. Once the parameters are stored, the setting can be done just by selecting a Mode (1–5) in the PC System Menu (see page 32). See also "Store" on page 35.

✔**Notes:**

- Fine sync, Total dots, Horizontal and Vertical position of some computers cannot be fully adjusted with the Auto PC Adjustment function. When the image is not provided properly with this operation, manual adjustments are required (pp.34–35).
- The Auto PC Adjustment cannot be operated when 480i, 575i, 480p, 575p, 720p,1035i, or 1080i is selected in the PC System Menu (p.32), or when the signal is coming from the DVI-terminal.

Manual PC Adjustment

Some computers employ special signal formats which may not be tuned by Multi-scan system of this projector. Manual PC Adjustment enables you to precisely adjust several parameters to match those signal formats. The projector has five independent memory areas to store those parameters manually adjusted. It allows you to recall the setting for a specific computer.

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the PC Adjust Menu icon.

2 Use the Point ▲▼ buttons to move the red frame pointer to the desired item and then press the SELECT button to display the adjustment dialog box. Use the Point ◀▶ buttons to adjust the setting value.

Fine sync

Use the Point ◀▶ buttons to adjust the value, eliminating a flicker from the image displayed (from 0 to 31).

Total dots

Use the Point ◀▶ buttons to adjust the number of total dots in one horizontal period to match your PC image.

Horizontal

Use the Point ◀▶ buttons to adjust the horizontal picture position.

Vertical

Use the Point ◀▶ buttons to adjust the vertical picture position.

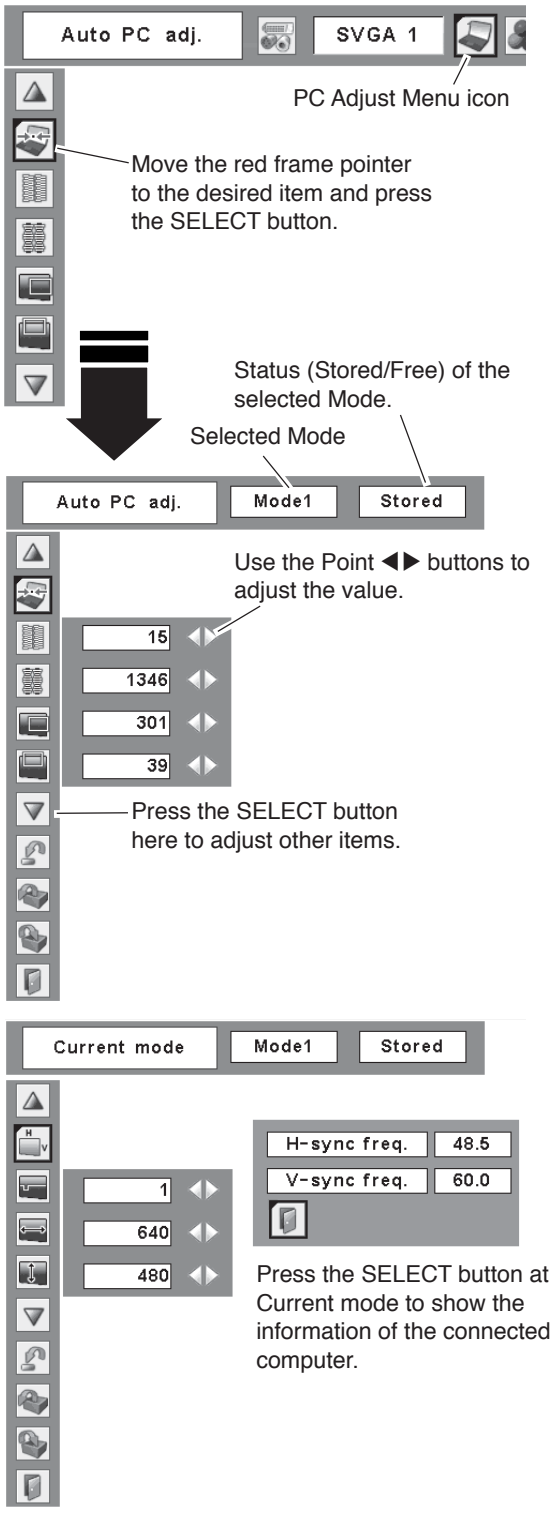
Current mode

Press the SELECT button to show H-sync freq. and V-sync freq. of the connected computer.

Clamp

Use the Point ◀▶ buttons to adjust the clamp level. When the image has dark bars, try this adjustment.

PC Adjust Menu



Display area H

Use the Point ◀▶ buttons to adjust the horizontal area displayed by this projector.

Display area V

Use the Point ◀▶ buttons to adjust the vertical area displayed by this projector.

Reset

To reset the adjusted data, select Reset and press the SELECT button. A confirmation box appears and then select [Yes]. All adjustments will return to their previous figures.

Mode free

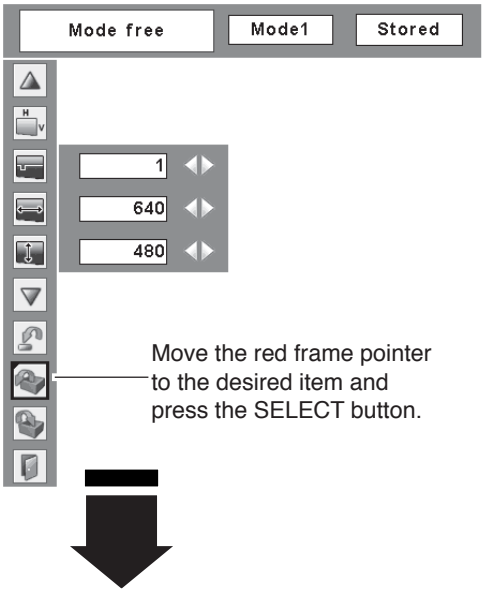
To clear the stored data, select Mode free and then press the SELECT button. Move the red arrow pointer to the Mode that you want to clear and then press the SELECT button.

Store

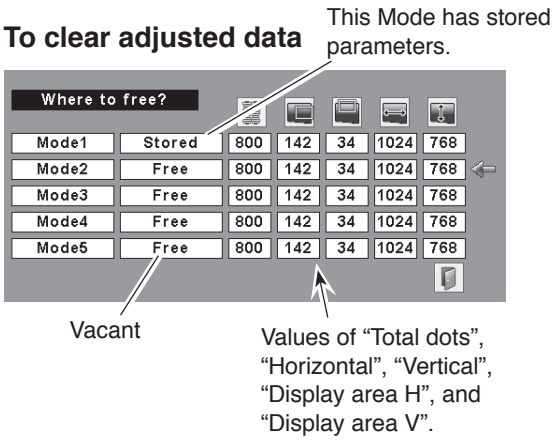
To store the adjusted data, select Store and then press the SELECT button. Move the red arrow pointer to one of the Modes 1 to 5 in which you want to store, and then press the SELECT button.

Quit

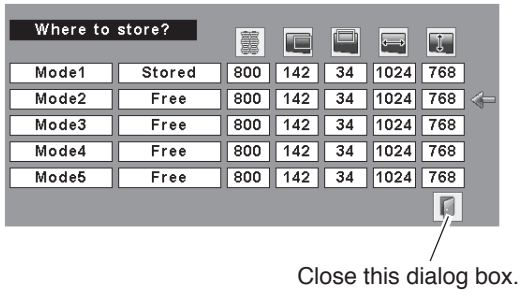
Exit the PC Adjust Menu.



To clear adjusted data



To store adjusted data



✔Notes:

- Display area (H/V) cannot be selected when 480i, 575i, 480p, 575p, 720p, 1035i, or 1080i is selected in the PC System Menu (p.32).
- PC Adjust Menu cannot be selected when Computer 1(Digital) is selected in the Input Menu (p.31).

Image Mode Selection

Direct Operation

Select the desired image mode from among Dynamic, Standard, Real, Blackboard (Green), Image 1, Image 2, Image 3, and Image 4 by pressing the IMAGE button on the remote control.

Dynamic
For viewing pictures in a bright room.

Standard
Normal picture mode preset on the projector.

Real
Picture mode with improved halftone for graphics.

Blackboard (Green)
For the image projected on a blackboard.
This mode help enhance the image projected on a blackboard. This is mainly effective on a green colored board, not truly effective on a black colored board.

Image 1–4
For viewing with the user preset image mode in the Image Adjust Menu (see pages 37-38). This Image memory is provided in each computer, component, and video input source.

Remote Control

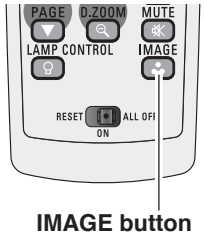
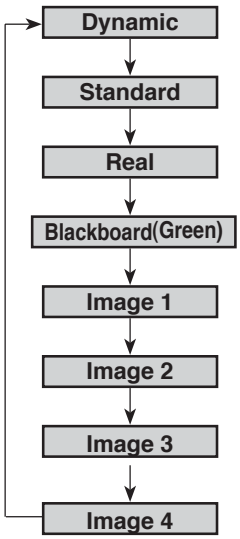


IMAGE button

IMAGE button

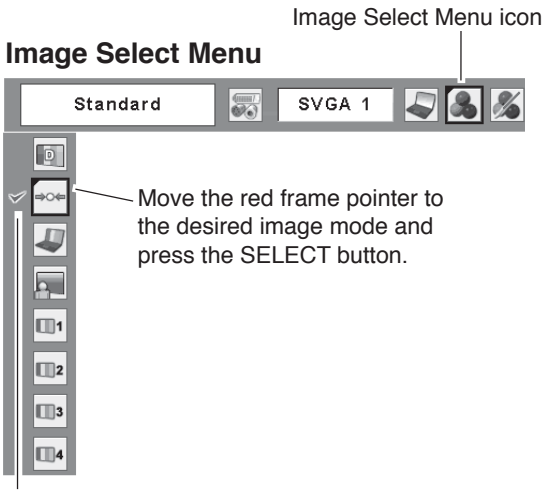


Menu Operation

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the Image Select Menu icon.

2 Use the Point ▲▼ buttons to move the red frame pointer to the desired image mode and then press the SELECT button.

Image Select Menu



Dynamic

For viewing pictures in a bright room.

Standard

Normal picture mode preset on the projector.

Real

Picture mode with improved halftone for graphics.

Blackboard(Green)

For the image projected on a blackboard. See above for further description.

Image 1~4

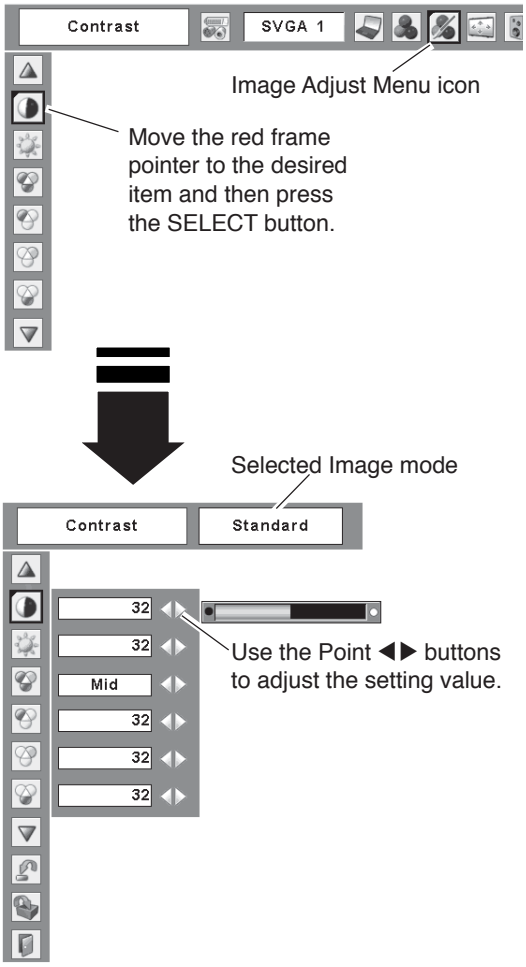
For viewing with the user preset image mode in the Image Adjust Menu (see pages 37-38).

Image Adjustment

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the Image Adjust Menu icon.

2 Use the Point ▲▼ buttons to move the red frame pointer to the desired item and then press the SELECT button to display the adjustment dialog box. Use the Point ◀▶ buttons to adjust the setting value.

Image Adjust Menu



Contrast

Press the Point ◀ button to decrease the contrast; press the Point ▶ button to increase the contrast (from 0 to 63).

Brightness

Press the Point ◀ button to decrease the brightness; press the Point ▶ button to increase the brightness (from 0 to 63).

Color temp.

Use the Point ◀▶ buttons to select the desired Color temp. level (High, Mid, Low, or XLow).

White balance (Red)

Press the Point ◀ button to lighten red tone; press the Point ▶ button to deepen red tone (from 0 to 63).

White balance (Green)

Press the Point ◀ button to lighten green tone; press the Point ▶ button to deepen green tone (from 0 to 63).

White balance (Blue)

Press the Point ◀ button to lighten blue tone; press the Point ▶ button to deepen blue tone (from 0 to 63).

Sharpness

Press the Point ◀ button to decrease the sharpness of the image; press the Point ▶ button to increase the sharpness of the image (from 0 to 15).

Gamma

Use the Point ◀▶ buttons to adjust the gamma value to obtain a better balance of contrast (from 0 to 15).

Reset

To reset the adjusted data, select Reset and press the SELECT button. A confirmation box appears and then select [Yes]. All adjustments will return to their previous figures.

✔Note:

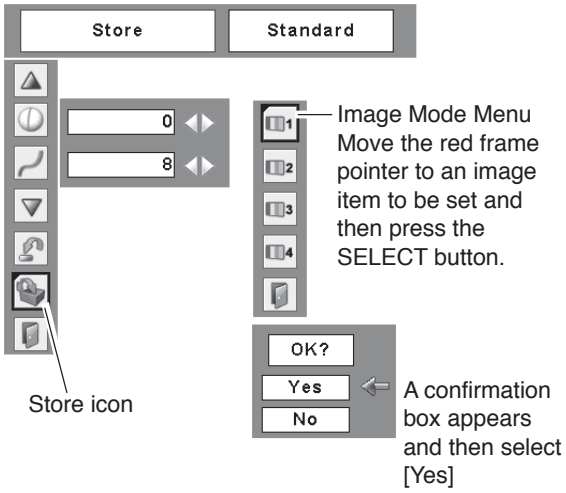
- When the White balance Red, Green, or Blue is adjusted, the Color temp. level will change to “Adj.”.

Store

To store the adjusted data, select Store and press the SELECT button. Use the Point ▲▼ buttons to select one from Image 1 to 4 and press the SELECT button.
A confirmation box appears and then select [Yes]. Stored data can be called up by selecting an “Image (1–4)” in the Image Mode Selection on page 36.

Quit

Exit the Image Adjust Menu.



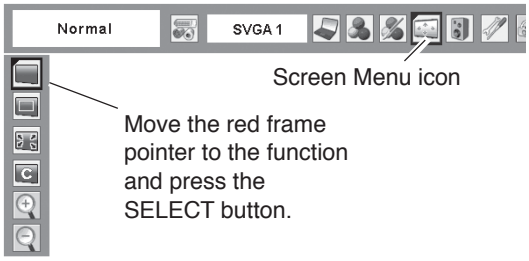
Screen Size Adjustment

This projector has the picture screen resize function, which enables you to customize the image size.

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the Screen Menu icon.

2 Use the Point ▲▼ buttons to move the red frame pointer to the desired function and then press the SELECT button.

Screen Menu



Normal

Provide the image to fit the screen size.

True

Provide the image in its original size. When the original image size is larger than the screen size (1280 x 800), the projector enters to the panning mode automatically. Use the Point ▲▼◀▶ buttons to pan the image. When adjusted, the arrows will turn red. When reached to the correction limits, the arrows will disappear.

Full

Provide the full screen image.

✔Notes:

- This Screen Menu cannot be operated when 720p(HDTV), 1035i (HDTV), or 1080i (HDTV) is selected in the PC System Menu (p.32).
- This projector cannot display any resolution higher than 1600 x 1200. If your computer’s screen resolution is higher than it, reset the resolution to the lower before connecting to the projector.
- The image data in other than 1280 x 800 is modified to fit the screen size in initial mode.
- True, Full screen, and Digital zoom +/– cannot be selected when 480i, 575i, 480p, or 575p is selected in the PC System Menu (p.32).

Custom

Adjust the screen scale and position manually with this function.
Press the SELECT button at Custom and the “Custom” is displayed on the screen for a few seconds and then the Aspect dialog box appears.

Scale H/V	Adjust the Horizontal/Vertical screen scale.
H&V	When set to “On,” the aspect ratio is fixed. The “Scale V” appears dimmed and becomes unavailable. Adjust “Scale H,” then the screen scale is automatically modified based on the aspect ratio.
Position H/V.....	Adjust the Horizontal/Vertical screen position.
Common	Save the adjusted scale to all the inputs. Press the SELECT button at Common to display a confirmation box. To save the scale, press the SELECT button at “Yes.” When Custom is selected, the saved scale is used.
Reset	Reset the all adjusted values. Press the SELECT button at Reset to display a confirmation box. To reset, press the SELECT button at “Yes.”

For zooming in and out the images

Digital zoom +

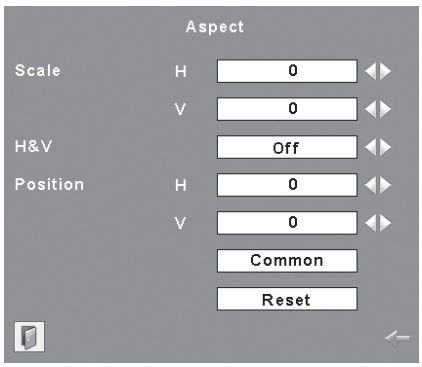
Select Digital zoom +. The On-Screen Menu disappears and “D. zoom +” appears. Press the SELECT button to expand the image size. Use the Point ▲▼◀▶ buttons to pan the image. The Panning function can work only when the image is larger than the screen size.
A projected image can be also expanded by pressing the D.ZOOM ▲ button on the remote control.

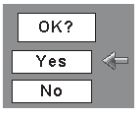
Digital zoom –

Select Digital zoom –. The On-Screen Menu disappears and “D. zoom –” appears. Press the SELECT button to compress image size.
The projected image can be also compressed by pressing the D.ZOOM ▼ button on the remote control.

To exit the Digital zoom +/– mode, press any button except the D.ZOOM ▲▼ buttons, SELECT, and Point buttons.

To return to the previous screen size, select a screen size from the Screen Size Adjustment Menu or select an input source from the Input Source Selection Menu (see pages 30-31) again, or adjust the screen size with the D.ZOOM ▲▼ buttons.



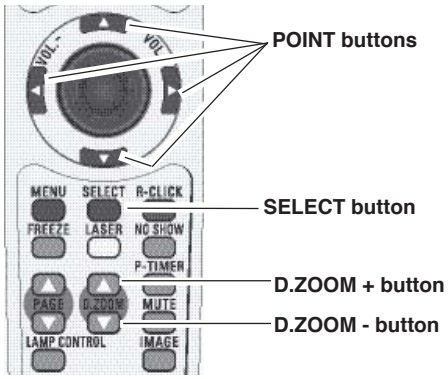


Press the SELECT button at Common or Reset, to display a confirmation box.

✔Notes:

- When no signal is detected, “Normal” is set automatically and the Aspect dialog box disappears.
- The adjustable range for Scale H/V and Position H/V is limited depending on the input signal.

Remote Control



✔Notes:

- The panning function may not operate properly if the stored Mode in the PC Adjust Menu is used (p.35).
- Minimum compression ratio can be limited depending on the input signal or when the Keystone function is working.
- True, Full screen, and Digital zoom +/– cannot be selected when 480i, 575i, 480p, or 575p is selected in the PC System Menu (p.32).
- Digital zoom +/- cannot be selected when Full screen or True is selected.

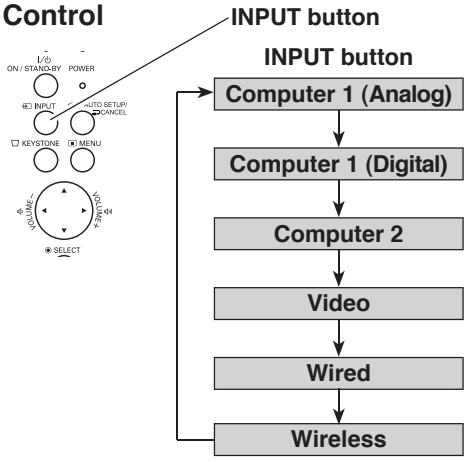
Video Input

Input Source Selection (Video, S-video)

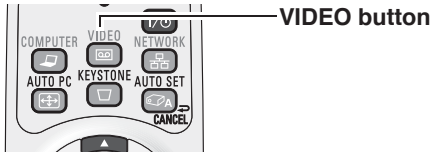
Direct Operation

Choose Video by pressing the INPUT button on the top control or the VIDEO button on the remote control.
Before using these buttons, correct input source should be selected through menu operation as described below.

Top Control



Remote Control



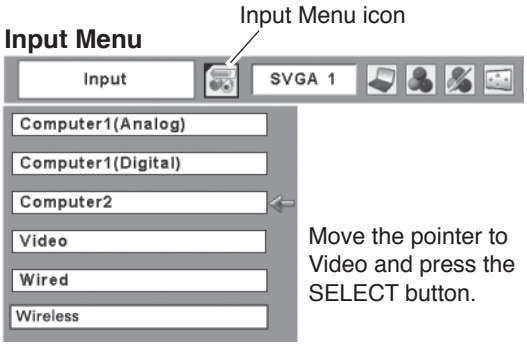
Menu Operation

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the Input Menu icon.

2 Use the Point ▲▼ buttons to move the red arrow pointer to Video and then press the SELECT button to display the Source Select Menu.

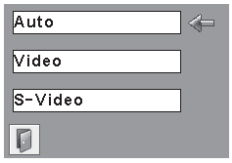
3 Move the pointer to the desired source and then press the SELECT button.

Input Menu



Move the pointer to Video and press the SELECT button.

VIDEO



Source Select Menu (VIDEO)

Move the pointer to the source that you want to select and press the SELECT button.

Auto When selecting Auto, the projector automatically detects incoming video signal, and adjusts itself to optimize its performance. The projector selects connection in the following order:

1. S-video
2. Video

Video When video input signal is connected to the VIDEO jack, select Video.

S-video When video input signal is connected to the S-VIDEO jack, select S-video.

✔**Notes:**

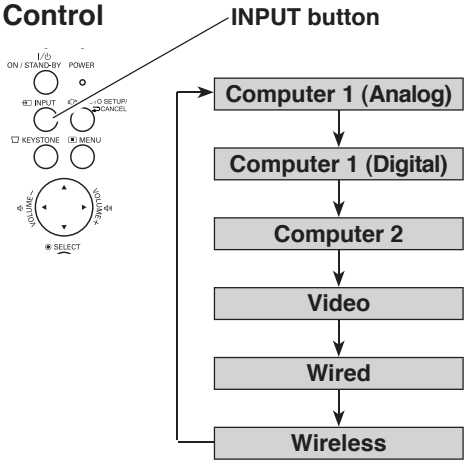
- Wired and Wireless are for the Network function. See the owner's manual "Network Set-up and Operation" .
- When the Input Search function is set to "On1" or "On2", the input signal will be searched automatically (p.51).

Input Source Selection (Component, RGB Scart 21-pin)

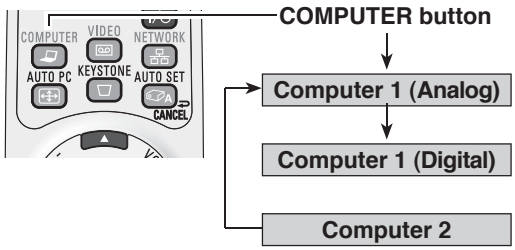
Direct Operation

Choose Computer 2 by pressing the INPUT button on the top control or press the COMPUTER button on the remote control.
Before using these buttons, correct input source should be selected through Menu operation as described below.

Top Control



Remote Control



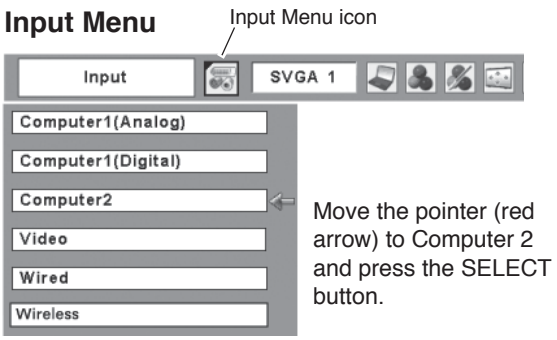
Menu Operation

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the Input Menu icon.

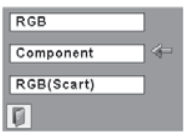
2 Use the Point ▲▼ buttons to move the red arrow pointer to Computer 2 and then press the SELECT button.

3 After the Source Select Menu appeared for Computer 2, move the pointer to Component or RGB(Scart) and then press the SELECT button.

Input Menu



Move the pointer (red arrow) to Computer 2 and press the SELECT button.



Source Select Menu

Move the pointer to Component or RGB(Scart) and press the SELECT button.

Component When the input source is coming from video equipment connected to the COMPUTER IN 2/COMPONENT IN terminal with a Component-VGA Cable, select Component.

RGB (Scart) When the input source is coming from video equipment connected to the COMPUTER IN 2/COMPONENT IN terminal with a Scart-VGA Cable, select RGB (Scart).

✔**Note:**

- Wired and Wireless are for the Network function. See owner's manual "Network Set-up and Operation" .
- When the Input Search function is set to "On1" or "On2", the input signal will be searched automatically (p.51).

Video System Selection

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀ ▶ buttons to move the red frame pointer to the AV System Menu icon.

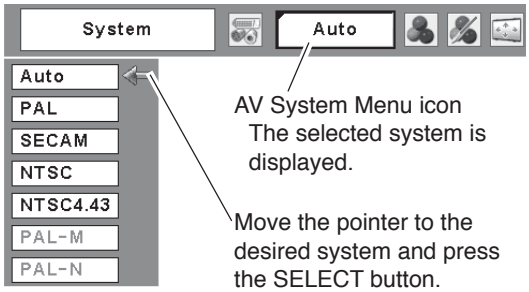
2 Use the Point ▲▼ buttons to move the red arrow pointer to the desired system and then press the SELECT button.

Video or S-Video

Auto
The projector automatically detects an incoming video system, and adjusts itself to optimize its performance. When Video System is PAL-M or PAL-N, select the system manually.

PAL/SECAM/NTSC/NTSC4.43/PAL-M/PAL-N
If the projector cannot reproduce proper video image, select a specific broadcast signal format from among PAL, SECAM, NTSC, NTSC 4.43, PAL-M, and PAL-N.

AV System Menu (Video or S-Video)

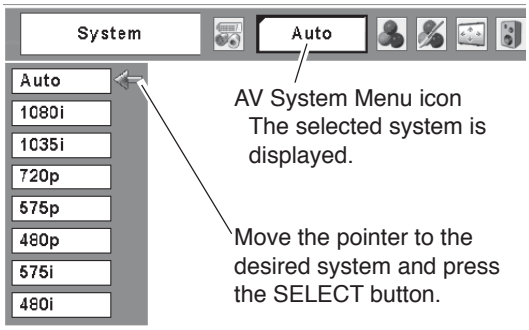


Component

Auto
The projector automatically detects an incoming video signal, and adjusts itself to optimize its performance.

COMPONENT VIDEO SIGNAL FORMAT
If the projector cannot reproduce proper video image, select a specific component video signal format from among 480i, 575i, 480p, 575p, 720p, 1035i, and 1080i.

AV System Menu (Component)



✔**Note:**
- The AV System Menu cannot be selected when selecting RGB (Scart).

Image Mode Selection

Direct Operation

Select the desired image mode from among Dynamic, Standard, Cinema, Blackboard (Green), Image 1, Image 2, Image 3, and Image 4 by pressing the IMAGE button on the remote control.

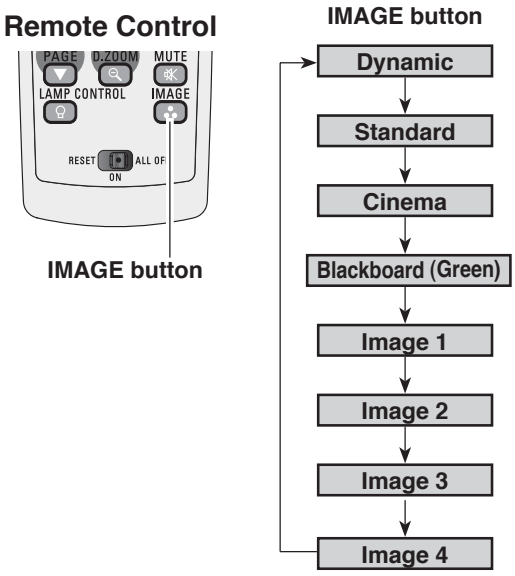
Dynamic
For viewing pictures in a bright room.

Standard
Normal picture mode preset on the projector.

Cinema
Picture mode adjusted with fine tone.

Blackboard (Green)
For the image projected on a blackboard.
This mode help enhance the image projected on a blackboard. This is mainly effective on a green colored board, not truly effective on a black colored board.

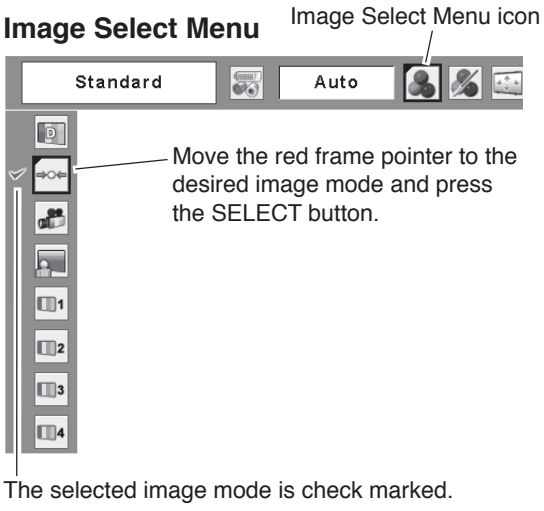
Image 1–4
For viewing with the user preset image mode in the Image Adjust Menu (see pages 44–45). This Image memory is provided in each computer, component, and video input source.



Menu Operation

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the Image Select Menu icon.

2 Use the Point ▲▼ buttons to move the red frame pointer to the desired image mode and then press the SELECT button.



Dynamic

For viewing pictures in a bright room.

Standard

Normal picture mode preset on the projector.

Cinema

Picture mode adjusted with fine tone.

Blackboard(Green)

For the image projected on a blackboard. See above for further description.

Image1–4

For viewing with the user preset image mode in the Image Adjust Menu (see pages 44–45).

Image Adjustment

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the Image Adjust Menu icon.

2 Use the Point ▲▼ buttons to move the red frame pointer to the desired item and then press the SELECT button to display the adjustment dialog box. Use the Point ◀▶ buttons to adjust the setting value.

Contrast

Press the Point ◀ button to decrease the contrast; press the Point ▶ button to increase the contrast (from 0 to 63).

Brightness

Press the Point ◀ button to decrease the brightness; press the Point ▶ button to increase the brightness (from 0 to 63).

Color

Press the Point ◀ button decrease the intensity of the color; press the Point ▶ button increase the intensity of the color (from 0 to 63).

Tint

Press the Point ◀▶ buttons to adjust the tint value to get a proper color balance (from 0 to 63).

Color temp.

Use the Point ◀▶ buttons to select the desired Color temp. level (High, Mid, Low, or XLow).

White balance (Red)

Press the Point ◀ button to lighten red tone; press the Point ▶ button to deepen red tone (from 0 to 63).

White balance (Green)

Press the Point ◀ button to lighten green tone; press the Point ▶ button to deepen green tone (from 0 to 63).

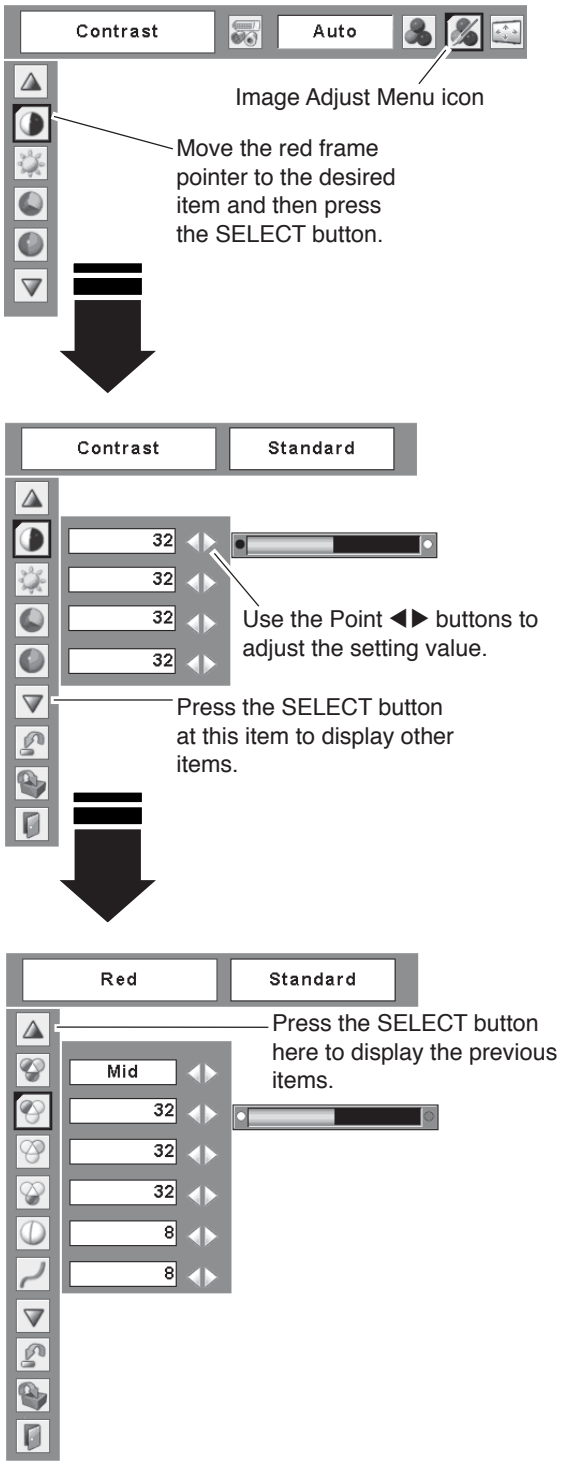
White balance (Blue)

Press the Point ◀ button to lighten blue tone; press the Point ▶ button to deepen blue tone (from 0 to 63).

✔Notes:

- When the White balance Red, Green, or Blue is adjusted, the Color temp. level will change to “Adj.”.
- Tint cannot be selected when the video system is PAL, SECAM, PAL-M, or PAL-N (p.42).

Image Adjust Menu



Sharpness

Press the Point ◀ button to decrease the sharpness of the image; press the Point ▶ button to increase the sharpness of the image (from 0 to 15).

Gamma

Use the Point ◀▶ buttons to adjust the gamma value to obtain a better balance of contrast (from 0 to 15).

Noise reduction

Noise interference on the screen can be reduced. Select one of the following options to get smoother images.

Off..... Disabled.
L1 ..... Lower reduction
L2 ..... Higher reduction

Progressive

An interlaced video signal can be displayed in progressive mode. Select one of the following options.

Off..... Disabled.
L1 ..... For an active picture.
L2 ..... For a still picture.
Film..... For watching a film. With this function, the projector reproduces pictures faithful to the original film quality.

Reset

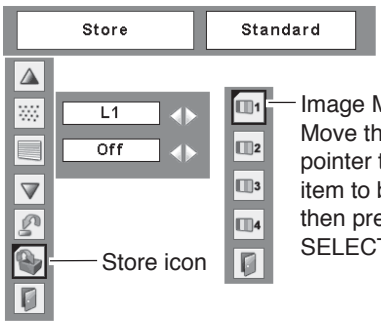
To reset the adjusted data, select Reset and press the SELECT button. A confirmation box appears and then select [Yes]. All adjustments will return to their previous figures.

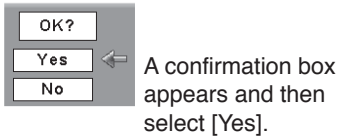
Store

To store the adjusted data, select Store and press the SELECT button. Use the Point ▲▼ buttons to select one from Image 1 to 4 and press the SELECT button.
A confirmation box appears and then select [Yes]. Stored data can be called up by selecting an “Image (1–4)” in the Image Select Menu on page 43.

Quit

Exit the Image Adjust Menu.





✔Notes:

- Noise reduction and Progressive cannot be selected when 480p, 575p, 720p, 1035i, or 1080i is selected (p.42).
- Reset and Store icons will be displayed when any adjustment is made.

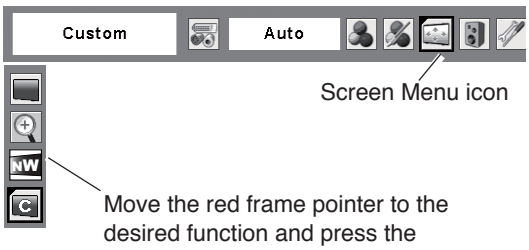
Screen Size Adjustment

This projector has the picture screen resize function, which enables you to customize the image size.

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the Screen Menu icon.

2 Use the Point ▲▼ buttons to move the red frame pointer to the desired function and then press the SELECT button.

Screen Menu



Normal

Provide the image at the 4:3 normal video aspect ratio.

Zoom

Pan the horizontal direction of the image and cut the vertical direction of the image to fit the screen size (16:9).Only for 4:3 video aspect ratio signals.

Natural wide

Modify the 4:3 aspect ratio image to fit the screen size(16:9 aspect ratio) by stretching the image to make it look natural.

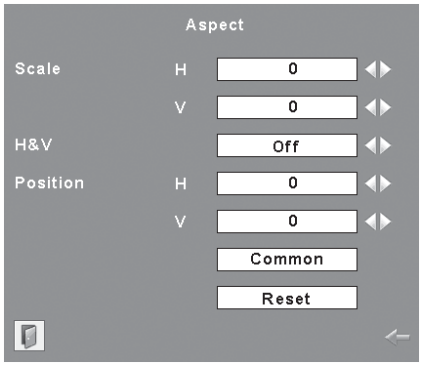
✔Note:

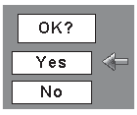
- Screen Menu cannot be operated when 720p, 1035i, or 1080i is selected in the AV System Menu (p42).

Custom

Adjust the screen scale and position manually with this function.
Press the SELECT button at Custom and the "Custom" is displayed on the screen for a few seconds and then the Aspect dialog box appears.

Scale H/V	Adjust the Horizontal/Vertical screen scale.
H&V	When set to "On", the aspect ratio is fixed. The "Scale V" appears dimmed and becomes unavailable. Adjust the "Scale H", then the screen scale is automatically modified based on the aspect ratio.
Position H/V.....	Adjust the Horizontal/Vertical screen position.
Common	Save the adjusted scale to all the inputs. Press the SELECT button at Common to display a confirmation box. To save the scale, press the SELECT button at "Yes", When Custom is selected, the saved scale is used.
Reset	Reset the all adjusted values. Press the SELECT button at Reset to display a confirmation box. To reset, press the SELECT button at "Yes".





Press the SELECT button at Common or Reset, to display a confirmation box.

✔Notes:

- When no signal is detected, "Normal" is set automatically and the Aspect dialog box disappears.
- The adjustable range for Scale H/V and Position H/V is limited depending on the input signal.
- "Wide" cannot be operated when 720p, 1035i, or 1080i is selected in the AV System Menu (p.42).

Setting

This projector has a Setting menu that allows you to set up the other various functions described below.

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the Setting Menu icon.

2 Use the Point ▲▼ buttons to move the red frame pointer to the desired item and then press the SELECT button. The Setting dialog box appears.

Language

The language used in the On-Screen Menu is available in English, German, French, Italian, Spanish, Portuguese, Dutch, Swedish, Finnish, Polish, Hungarian, Romanian, Russian, Chinese, Korean, and Japanese.

Auto setup

This function enables Auto Keystone correction and Auto PC adjustment by pressing the AUTO SETUP/CANCEL button on the top control or the AUTO SET/CANCEL button on the remote control. Settings for those functions can be altered as follows:

Auto PC Adj.

On. . . . . Enables Auto PC Adjustment when pressing the AUTO SET/CANCEL button on the remote control or the AUTO SETUP/CANCEL button on the top control.

Off. . . . . Disables Auto PC Adjustment.

Auto Keystone

Auto . . . . . Always works and corrects keystone distortion according to the projector's tilt.

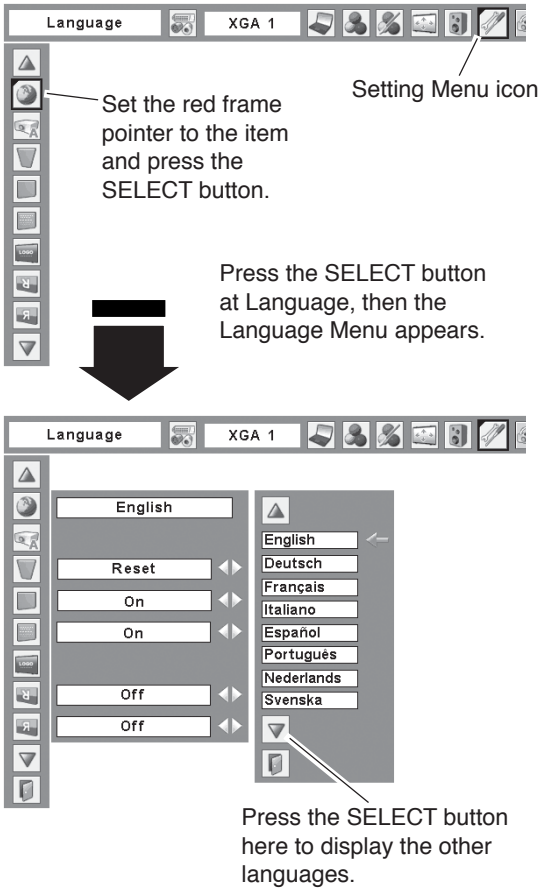
Manual . . . Works only when pressing the AUTO SET/CANCEL button on the remote control or the AUTO SETUP/CANCEL button on the top control.

Off. . . . . Disables Auto Keystone.

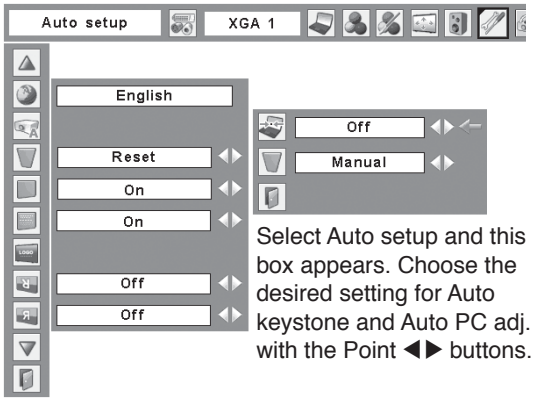
✔Notes:

- Auto PC Adj. and Auto Keystone cannot be set "Off" at the same time.
- Auto Keystone corrects vertical distortion only, not correct horizontal distortion.
- The Auto Keystone cannot work when Ceiling feature is set "On" in the Setting menu (p.51).
- Perfect correction of the image distortion cannot be ensured with the Auto setup function. If the distortion is not corrected properly by pressing the AUTO SETUP/CANCEL or AUTO SET/CANCEL button, adjust manually by pressing the KEYSTONE button on the remote control or selecting Keystone in the Setting menu (pp.26, 48).
- Fine sync, Total dots, Horizontal and Vertical position of some computers cannot be fully adjusted with the Auto PC Adjustment function. When the image is not provided properly with this operation, manual adjustments are required (pp.34–35).

Setting Menu (Language)



Auto setup



Keystone

This function is used to store or reset the keystone correction when the AC power cord is unplugged. Use the Point ◀▶ buttons to switch between each option.

Store ..... Keep the keystone correction even when the AC power cord is unplugged.
Reset ..... Release the keystone correction when the AC power cord is unplugged.

To correct keystone distortion, press the SELECT button. The “Keystone” appears on the screen. Use the Point ▲▼ buttons to correct keystone distortion (p.26).

Blue back

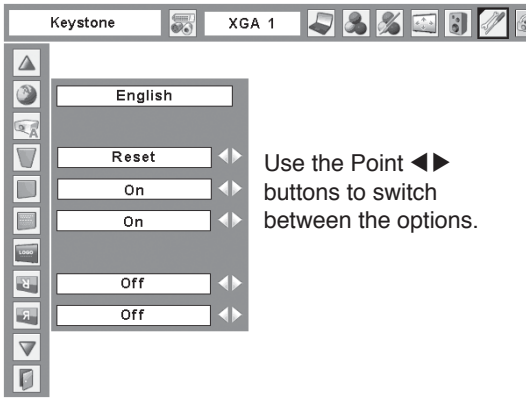
When this function is “On,” a blue image is displayed while the input signal is not detected.

Display

This function decides whether to display On-Screen Displays.

On ..... Show all the On-Screen displays. Use this function when you want to project images after the lamp becomes bright enough. The factory default setting is in this option.
Countdown Off ..... Show the input image instead of the countdown when turning on the projector. Use this function when you want to project the image as early as possible even when the lamp is not bright enough.
Off ..... Hide the On-Screen Displays except;
- On-Screen Menu
- “Power off?” (p.23)
- “No signal” for Power management (p.52)
- “Please wait ...”
- Arrows for the True function in the Screen Menu (p.38)

Keystone



Use the Point ◀▶ buttons to switch between the options.

Logo (Logo and Logo PIN code lock settings)

This function allows you to customize the screen logo with Logo select, Capture, and Logo PIN code lock functions.

✔Note:

- When “On” is selected in the Logo PIN code lock function, Logo select and Capture functions cannot be selected.

Logo select

This function decides on the starting-up display from among following options.

User..... Show the image you captured
Default..... Show the factory-set logo
Off..... Show the countdown display only

Capture

This function enables you to capture an image being projected to use it for a starting-up display or interval of presentations.

Select Capture and press the SELECT button.
A confirmation box appears and select [Yes] to capture the projected image.

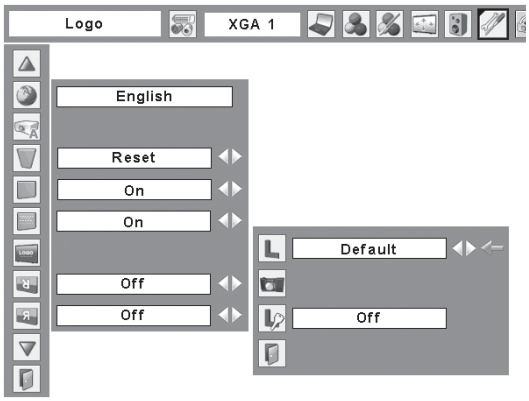
After capturing the projected image, go to the Logo select function and set it to “User”. Then the captured image will be displayed the next time you turn on the projector or when you press the NO SHOW button (see page 29).

To cancel the Capture function, select [No].

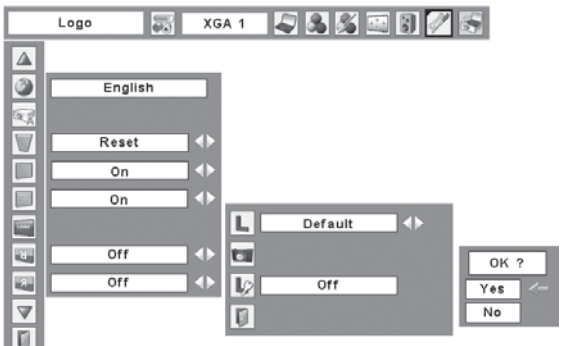
✔Notes:

- Before capturing an image, select “Standard” in the Image Select Menu to capture a proper image (pp.36, 43).
- A signal from a computer can be captured up to XGA (1024 x 768). A signal from video equipment can be captured except for 720p, 1035i, and 1080i.
- When capturing the image that has been adjusted by the Keystone function, the adjusted data is automatically reset and the projector captures an image without keystone correction.
- When the Logo PIN code lock function is set to “On,” the Capture function cannot be selected.
- When starting to capture a new image, the previously stored image is cleared even if you cancel the capturing.
- When there is no captured image or it is interrupted while capturing a image, the Capture function cannot be selected, you can only switch between Default and Off.

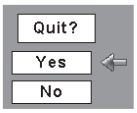
Logo select



Capture



Select [Yes] to capture the projected image.



Select [Yes] to stop capturing.

Logo PIN code lock

This function prevents an unauthorized person from changing the screen logo.

Off..... The screen logo can be changed freely from the Logo Menu (p.49).
On..... The screen logo cannot be changed without a Logo PIN code.

If you want to change the Logo PIN code lock setting, press the SELECT button and the Logo PIN code dialog box appears. Enter a Logo PIN code by following the steps below. The initial Logo PIN code is set to “4321” at the factory.

Enter a Logo PIN code

Use the Point ▲▼ buttons to enter a number. Press the Point ▶ button to fix the number and move the red frame pointer to the next box. The number changes to “✳.” If you fixed an incorrect number, use the Point ◀ button to move the pointer to the number you want to correct, and then enter the correct number.

Repeat this step to complete entering a four-digit number.

After entering the four-digit number, move the pointer to “Set.” Press the SELECT button so that you can start to operate the projector.

If you entered an incorrect Logo PIN code, “Logo PIN code” and the number (✳✳✳✳) will turn red for a moment. Enter the correct Logo PIN code all over again.

Change the Logo PIN code lock setting

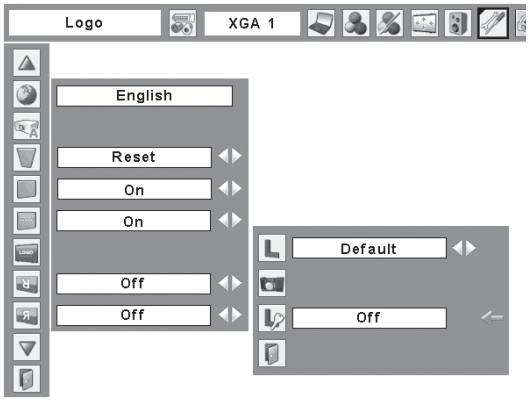
Use the Point ◀▶ buttons to switch On/Off, and then press the Point ▼ button to move the pointer to “Quit.” Press the SELECT button to close the dialog box.

Change the Logo PIN code

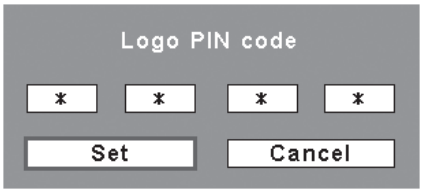
Logo PIN code can be changed to your desired four-digit number. Press the Point ▼ button to select “Logo PIN code change” and then press the SELECT button. The New Logo PIN code input dialog box appears. Set a new Logo PIN code.

Be sure to note the new Logo PIN code and keep it at hand. If you lost the number, you could no longer change the Logo PIN code setting. For details on PIN code setting, refer to “PIN code lock” on pages 54–55.

Logo PIN code lock

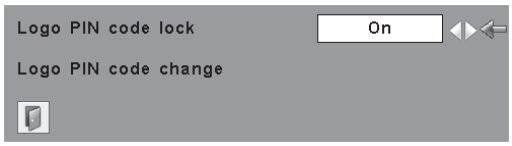


Enter a Logo PIN code



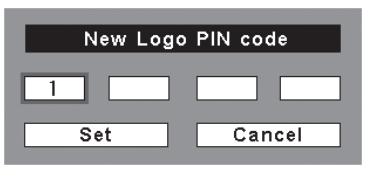
After a correct Logo PIN code is entered, the following dialog box appears.

Change the Logo PIN code lock setting



Use the Point ◀▶ buttons to switch On/Off.

Change the Logo PIN code



CAUTION:
WHEN YOU HAVE CHANGED THE LOGO PIN CODE, WRITE DOWN THE NEW PIN CODE IN COLUMN OF THE LOGO PIN CODE NO. MEMO ON PAGE 80, AND KEEP IT SECURELY. SHOULD THE LOGO PIN CODE BE LOST OR FORGOTTEN, THE LOGO PIN CODE SETTING CAN NO LONGER BE CHANGED.

Ceiling

When this function is set to “On,” the picture will be top/bottom and left/right reversed. This function is used to project the image from a ceiling-mounted projector.

Rear

When this function is set to “On,” the picture will be left/right reversed. This function is used to project the image from rear of the screen.

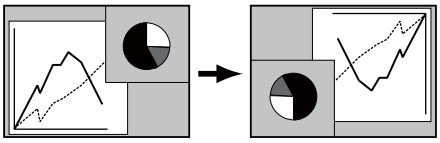
Input search

This function detects the input signal automatically. When a signal is found, the search will stop. Use the Point ◀▶ buttons to select one of the following options.

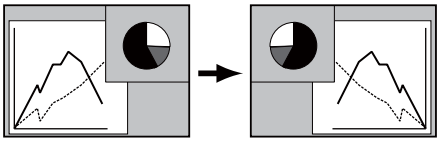
Off..... Input search will not work.
On1..... Input search works under the following situation.
– When pressing the INPUT button on the top control.
– When pressing the COMPUTER button or VIDEO button on the remote control.
On2..... Input search works under the following situation.
– When turning on the projector by pressing the POWER ON/STAND-BY button on the top control or the remote control.
– When pressing the COMPUTER button or VIDEO button on the remote control.
– When pressing the INPUT button on the top control.
– When the current input signal is cut off.*

*If the No show or Freeze function is active, cancel it to activate the Input search. It is also unavailable when On-Screen menu is displayed.

Ceiling



Rear



✔Notes:

- While Input search is set to “On1” or “On2,” the status of Input and Lamp are displayed every time the signal is switched.
- Only the last selected input source can be detected.
- If the INPUT button on the top control or COMPUTER or VIDEO buttons on the remote control is pressed during Input search is in progress, Input search will stop and go back to the previous input signal.

Standby mode

This function is available when operating the projector via network.

Normal..... Supply the power to the network function even after turning off the projector. You can turn on/off the projector via network, modify network environment, and receive an e-mail about projector status while the projector is powered off.

Eco ..... Select “Eco” when you do not use the projector via network. The projector’s network function will stop when turning off the projector.

Refer to the owner’s manual “Network Set-up and Operation”.

✔Note:

- When selecting Normal, the cooling fans may be running depending on the temperature inside the projector even if the projector is turned off.

Power management

For reducing power consumption as well as maintaining the lamp life, the Power management function turns off the projection lamp when the projector is not operated for a certain period.

If the input signal is interrupted and no button is pressed for more than 30 seconds, the timer display with “No signal” appears. It starts the countdown until the lamp is turned off. Use the Point ◀▶ buttons to set the countdown timer.

Select one of the following options:

Ready ..... When the lamp has been fully cooled down, the POWER indicator changes to green blinking. In this condition, the projection lamp will be turned on if the input signal is reconnected or any button on the top control or remote control is pressed.

Shut down..... When the lamp has been fully cooled down, the power will be turned off.

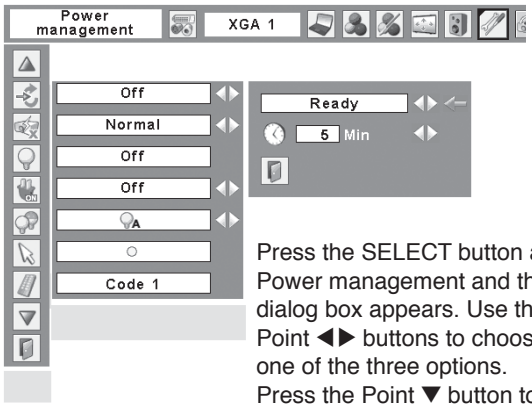
Off..... Power management function is off.

✔Note:

- Factory default is "Ready: 5 min.".

Power management

Time left before Lamp is off.



Press the SELECT button at Power management and this dialog box appears. Use the Point ◀▶ buttons to choose one of the three options. Press the Point ▼ button to select the timer, and then use the Point ◀▶ buttons to set timer.

On start

When this function is set to “On,” the projector will be automatically turned on just by connecting the AC power cord to a wall outlet.

✔Note:

- Be sure to turn off the projector properly (see “Turning Off the Projector” on page 23). If the projector is turned off in the incorrect sequence, the On start function does not work properly.

Lamp control

This function allows you to change brightness of the screen.

- Auto ..... The brightness according to the input signal (between High and Eco mode).
- High ..... Brighter than the Normal mode.
- Normal ..... Normal brightness
- Eco ..... Lower brightness reduces the lamp power consumption and extends the lamp life.

Pointer

You can emphasize a part of the projected image with this function. Use the Point ▲▼ buttons to choose either Spotlight or Pointer and press the SELECT button. Then use the Point ◀▶ buttons to select a size of the Spotlight (Large, Middle, or Small) or a pattern of the Pointer (Arrow, Finger, or Dot). See “Pointer Function” on page 14.

Remote control

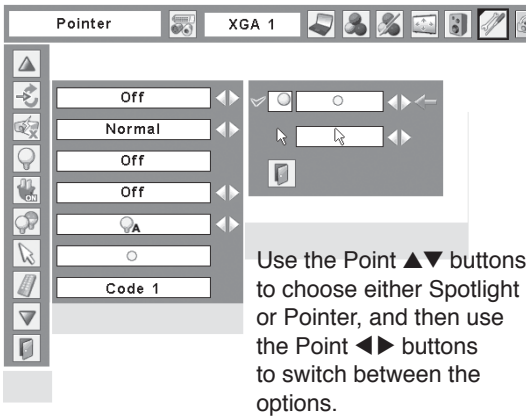
The eight different remote control codes (Code 1–Code 8) are assigned to the projector; the factory-set, initial code (Code 1) and the other seven codes (Code 2 to Code 8).

The same code should set on both the projector and the remote control. For example, operating the projector in “Code 7”, the remote control code also must be switched to “Code 7”.

To change the code for the projector
Select a remote control code in this Setting Menu.

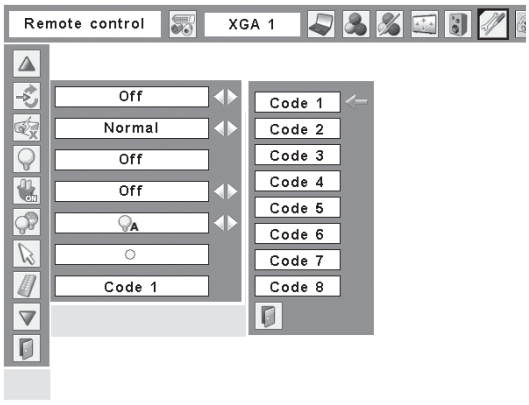
To change the code for the remote control:
While holding down the MENU button, press the IMAGE button the number of times corresponding to the remote control code for the projector. See “Remote Control Code” on page 15.

Pointer



Use the Point ▲▼ buttons to choose either Spotlight or Pointer, and then use the Point ◀▶ buttons to switch between the options.

Remote control



Security (Key lock and PIN code lock, Alarm settings)

This function allows you to use the Key lock and PIN code lock function to set the security for the projector operation.

Key lock

This function locks the top control and remote control buttons to prevent operation by unauthorized persons.

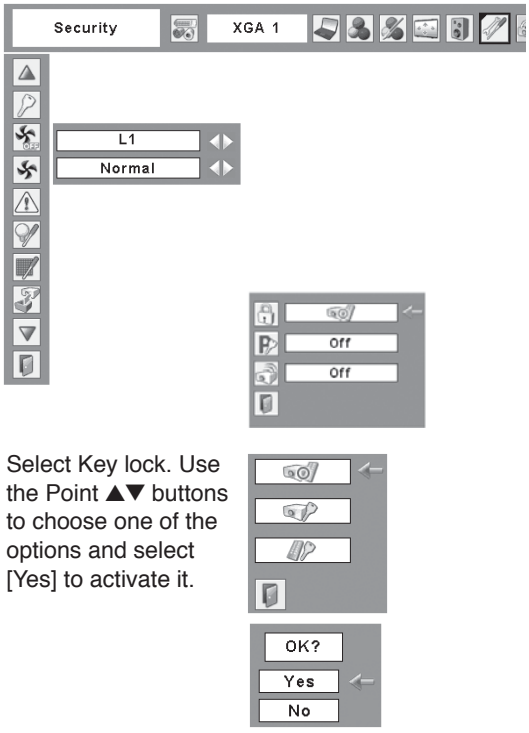
..... Unlocked.

..... Lock the operation of the top control. To unlock, use the remote control.

..... lock the operation of the remote control. To unlock, use the top control.

If the top control accidentally becomes locked and you do not have the remote control nearby or there is something wrong with your remote control, contact the dealer where you purchased the projector or the service center.

Key lock



Select Key lock. Use the Point ▲▼ buttons to choose one of the options and select [Yes] to activate it.

PIN code lock

This function prevents the projector from being operated by unauthorized persons and provides the following setting options for security.

Off..... Unlocked.

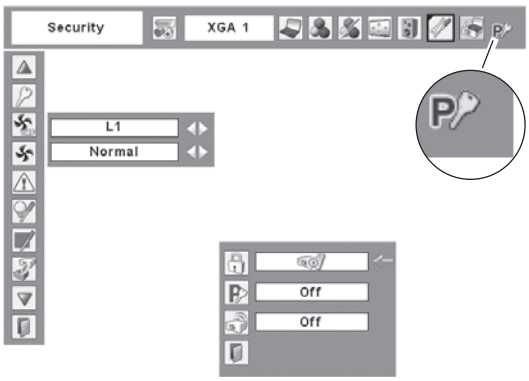
On1..... Enter the PIN code every time turning on the projector.

On2..... Enter the PIN code to operate the projector once the power cord is disconnected; as long as the AC power cord is connected, the projector can be operated without a PIN code.

Whenever you change the PIN code lock setting or the PIN code (the four-digit number), you are required to enter the PIN code. The “1234” is set as the initial PIN code at the factory.

If you want to change the PIN code lock setting, Press the SELECT button and the PIN code dialog box appears.

PIN code lock



When the projector is locked with a PIN code, the PIN code lock symbol appears on the menu bar.

Enter a PIN code

Use the Point ▲▼ buttons to enter a number. Press the Point ▶ button to fix the number and move the red frame pointer to the next box. The number changes to "✳." If you fixed an incorrect number, use the Point ◀ button to move the pointer to the number you want to correct, and then enter the correct number.

Repeat this step to complete entering a four-digit number.

After entering the four-digit number, move the pointer to "Set." Press the SELECT button so that you can start to operate the projector.

If you entered an incorrect PIN code, "PIN code" and the number (✳✳✳✳) will turn red for a moment. Enter the correct PIN code all over again.

Change the PIN code lock setting

Use the Point ◀▶ buttons to select Off, On1, or On2 and then move the pointer to "Quit" with the Point ▼ button. Press the SELECT button to close the dialog box.

Change the PIN code

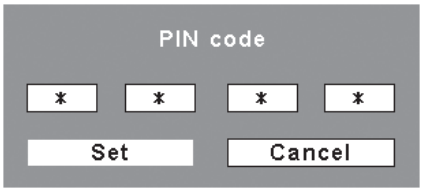
The PIN code can be changed to your desired four-digit number. Press the Point ▼ button to select "PIN code change" and press the SELECT button. The New PIN code input dialog box appears. Set a new PIN code.

CAUTION:
WHEN YOU HAVE CHANGED THE PIN CODE, WRITE DOWN THE NEW PIN CODE IN COLUMN OF THE PIN CODE NO. MEMO ON PAGE 80, AND KEEP IT SECURELY. IF YOU FORGET YOUR PIN CODE, THE PROJECTOR CAN NO LONGER BE STARTED.

Alarm

This function allows you to configure the Alarm operation. See "How to Use the Antitheft Alarm Function" on pages 58–60.

Enter a PIN code

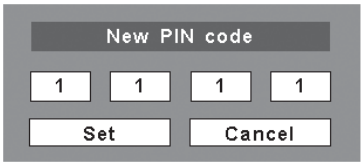


After a correct PIN code is entered, the following dialog box appears.

Change the PIN code lock setting

Use the Point ◀▶ buttons to switch between the options.

Change the PIN code



Fan

This function provides the following options in the cooling fans' operation when the projector is turned off (p.23).

L1 ..... Normal operation
L2 ..... Slower and lower-sound than the normal operation (L1), but it takes more time to cool the projector down.

Fan control

Choose the running speed of cooling fans from the following options.

Normal..... Normal speed
Max..... Faster than the normal speed.

This function is used to set the cooling fans' operation to the projector's setting environment. Set this function properly in accordance with the projector's installation method. Otherwise, the cooling fans will not work properly and that causes malfunctions of the projector and decreases the lamp life.
Be sure to set the Fan control in MAX in the setting menu when the projector is inclined between +40 degrees to +140 degrees to the horizontal plane.

Warning log

This function records anomalous operations while the projector is in operation and use it when diagnosing faults. Up to 10 warning logs are displayed with the latest warning message at the top of the list, followed by previous warning messages in chronological order.

✔Note:

- When the Factory default function is executed, all the warning log records will be deleted.

Lamp counter

This function is used to reset the lamp counter.

When the lamp life is left less than 100 hours, the Lamp replacement icon (Fig.1) will appear on the screen, indicating that the end of lamp life is approaching.

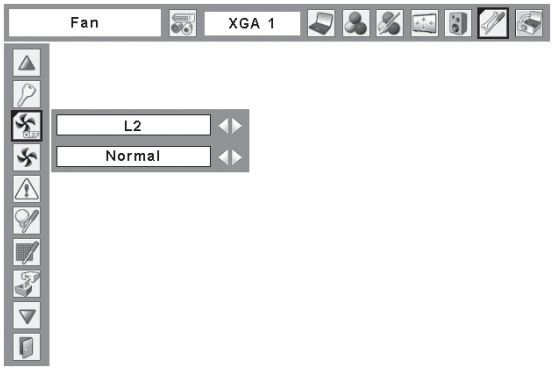
When the lamp life is left 0 hour, the Lamp replacement icon (Fig.2) will appear on the screen, indicating that the end of lamp life is reached.

When replacing the projection lamp, reset the lamp counter. See "Resetting the Lamp Counter" on page 66.

✔Note:

- The Lamp replacement icons (Fig.1 and Fig.2) will not appear when the Display function is set to "Off" (p.48), during "Freeze" (p.28), or "No show" (p.29).

Fan



Fan Control Setting

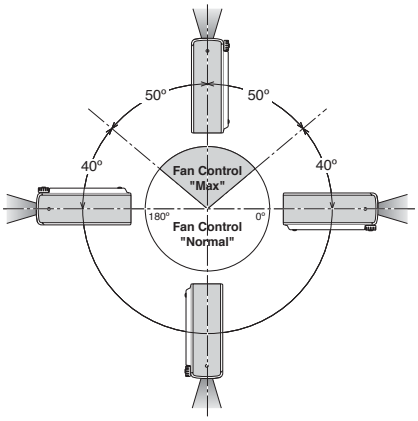


Fig.1 Lamp replacement icon

This icon appears on the screen when the end of lamp life is approaching.

✔Note:

- This icon also appears at turning on and selecting input source.

Fig.2 Lamp replacement icon

This icon appears on the screen when the end of lamp life is reached.

✔Note:

- At turning on, the icon (Fig.2) will appear. At selecting input source, the icon (Fig.1) will appear.

Filter counter

This function is used to set a frequency for the filter cleaning.

When the projector reached a specified time between cleanings, a Filter warning icon appears on the screen, notifying the cleaning is necessary. After cleaning the filter, be sure to select RESET and set the timer. The Filter warning icon will not turn off until the filter counter is reset.

For details about resetting the timer, refer to “Resetting the Filter Counter” on page 63.

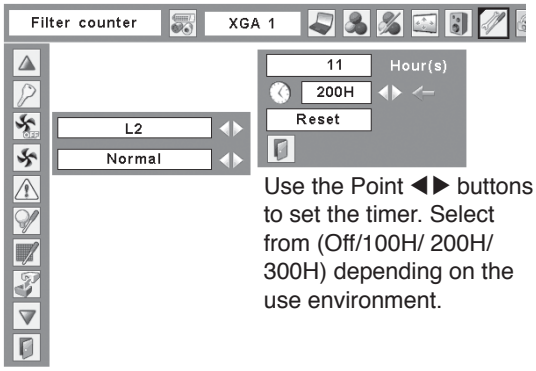
Factory default

This function returns all setting values except for the user logo, PIN code lock, Logo PIN code lock, lamp counter, and filter counter to the factory default settings.

Quit

Exit the Setting Menu.

Filter counter



Use the Point ◀▶ buttons to set the timer. Select from (Off/100H/ 200H/ 300H) depending on the use environment.

Fig.3 Filter warning icon

Filter warning icon appears on the screen at a set time.

✔Note:

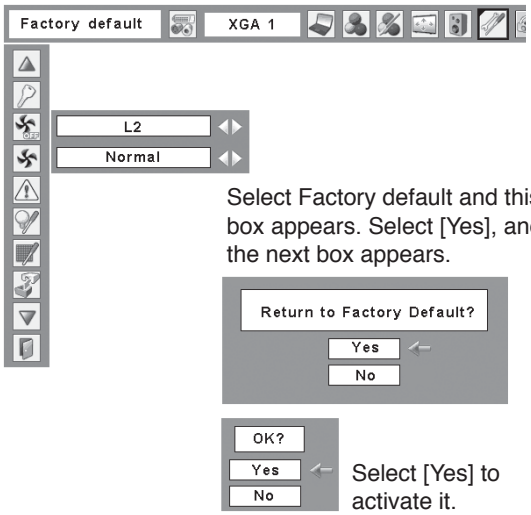
- This icon also appears at turning on..

Fig.4 Filter warning icon

✔Notes:

- At selecting input source, the icon (Fig.4) will appear..
- The Filter warning icons (Fig.3 and Fig.4) will not appear when the Display function is set to “Off” (p.48), during “Freeze”(p.28), or "No show" (p.29).

Factory default



Select Factory default and this box appears. Select [Yes], and the next box appears.

Select [Yes] to activate it.

Antitheft Alarm Function

How to Use the Antitheft Alarm Function

Antitheft alarm function is provided to prevent the projector from being stolen. When this function is set to “On,” the alarm rings as an unauthorized person tries to move the projector.
To activate the Alarm function for the first time after purchase, you must turn on the power once.

✔**Notes:**
- This function is not a guarantee against stealing.
- The alarm does not ring while the AC power cord is connected to an outlet even if the projector detects vibrations.
- The alarm will stop, as the AC power cord is connected to an outlet, except when the battery cover is open.
- Pressing the buttons is always accompanied by a sound. If no sound is produced after pressing a button, you need to press it again.

The Alarm function is operated by a built-in rechargeable battery. The alarm will not work properly if the battery is not charged enough. See page 60 for details.

Set and release the Antitheft alarm function

The Alarm setting and release and PIN Code change can be made without an AC power connection.

Set the alarm

Press the F button three times to turn the alarm function on. The ALARM indicator blinks for a few seconds and the projector enters the warning mode. (If the battery is not charged enough for the alarm function to operate normally, it bleeps and the Alarm indicator will blink red every 20 seconds.)

During the Antitheft alarm function is on, the projector emits a low-pitched sound when it detects vibration.
When the projector does not detect vibration for a few seconds after the sound, it goes back to the warning mode.
When the projector detects more vibrations after the low-pitched sound, the alarm starts ringing.

The Alarm operating configuration (Battery charge, Alarm volume, Sensitivity, and Ringing time) can be selected in the menu. See page 59.

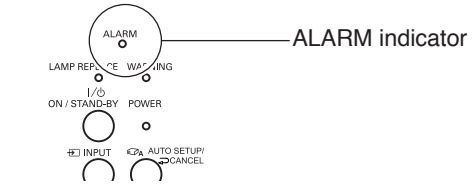
✔Notes:
- You can test the alarm sound without setting the alarm function. Press and hold the F button, then the alarm starts ringing. The duration of the alarm sound is the same as the “Ringing Time” setting (p.59).
- If you want to stop the alarm while it is ringing, insert the AC power cord to an outlet or press the F button and enter the four-digit PIN code number.

Release the alarm setting

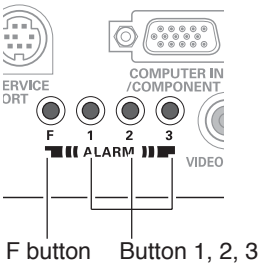
Press the F button and enter the four-digit PIN code number within about 10 seconds. (The default PIN code is set to “1111.”) When the alarm is released, you will hear a high-pitched confirmation sound.

When you enter an incorrect PIN code, you will hear a low-pitched sound. If you enter an incorrect PIN code three times in a row, the alarm will start ringing.

Top Control



Rear Terminal



Other settings

Change the PIN code

1 Press the F button and enter the four-digit PIN code number within about 10 seconds. The ALARM indicator blinks red for a few seconds and a high-pitched confirmation sound is produced.

2 While the indicator is blinking, enter a new PIN code, then you will hear a high-pitched confirmation sound and the ALARM indicator is turned off.

When you enter an incorrect PIN code, you will hear a low-pitched sound. If you enter incorrect PIN code three times in a row, the alarm will start ringing.

The PIN code for the Antitheft alarm function is a combination of 1, 2, or 3. Use the buttons 1, 2, and 3 to enter the PIN code. The default PIN code is “1111.”

Reset the settings

Select “Factory default” in the Setting menu to reset the settings for the Antitheft alarm function.

✔Note:
- This is effective only when the Antitheft alarm setting is released.

Alarm operating configuration

The Alarm operating configuration can be changed when the Antitheft alarm function is set to “Off.” See page 58 for setting or releasing this function.

Press the SELECT button at Alarm icon in the Setting Menu to display the Alarm setting dialog box. Use the Point ▲▼ buttons to select the desired option; use the Point ◀▶ buttons to set the selected option.

Battery charge
See the next page for details.

Alarm volume
Small, Medium, Large

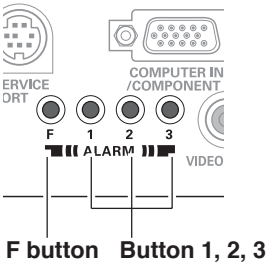
Sensitivity
Low ..... Less sensitive
Medium ..... Normal sensitivity
High ..... Highly sensitive (default)

Ringing time
10 seconds ..... Rings about 10 seconds (default).
60 seconds ..... Rings about 60 seconds.
Long time..... Rings until the end of the battery life.

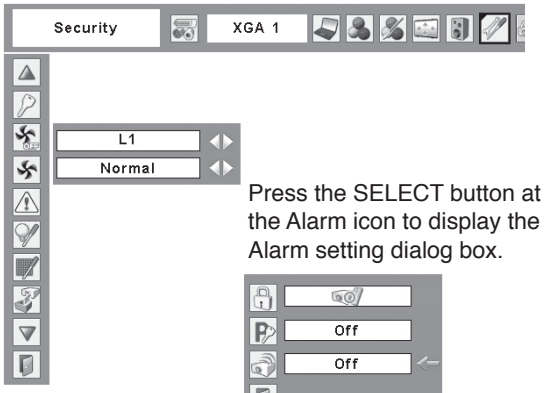
CAUTION:
WHEN YOU HAVE CHANGED THE PIN CODE, WRITE DOWN THE NEW PIN CODE IN COLUMN OF THE PIN CODE NO. MEMO ON PAGE 80, AND KEEP IT SECURELY. IF YOU FORGET YOUR PIN CODE, SOME SETTINGS OF THE ANTITHEFT ALARM FUNCTION CAN NO LONGER BE CHANGED.

Top Control

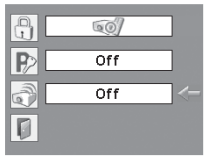
Rear Terminal

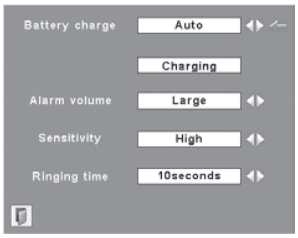


Alarm



Press the SELECT button at the Alarm icon to display the Alarm setting dialog box.





Use the Point ◀▶ buttons to set the selected option.

✔Notes:
- The Alarm icon appears dimmed and can be unavailable when the Antitheft alarm function is set to “On” or if the battery is not installed, discharged, or coming to the end of its life.
- When the “Security” is selected in the Setting menu, the Antitheft alarm setting buttons can be unavailable.
- When selecting “Long time” option in the Ringing time, the duration of alarm sounding differs depending on the battery life.

Charge the built-in batteries

Set the Battery charge option in the Alarm setting menu to “Auto.” The default setting is “Auto.”

As long as the AC power cord is connected and this option is set to “Auto,” the built-in battery for Alarm function is being charged at all times. While charging the battery, “Charging” is displayed in the menu.
The “Charging” appears dimmed when the battery is fully charged or the Battery charge option is set to “Off,” or if charging malfunction occurs. Set the option to “Off” when not using the Alarm function. This can save the power and battery life.

Replace the rechargeable batteries

Use only the specified battery for this projector. Using other types of battery may cause accident or fire hazard.

Replacement Battery: SANYO Ni-MH BATTERY PACK
Part No. 645 089 8587

How to replace the rechargeable batteries

1 Unplug the AC power cord from a wall outlet.

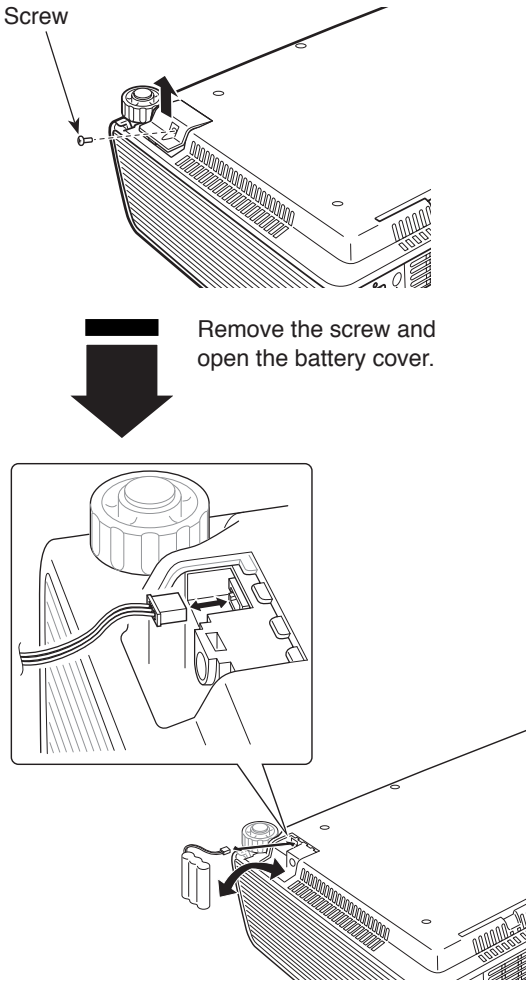
2 Set the Alarm function to “Off” (see page 58). If it is not released, the alarm will start ringing when you try to remove the rechargeable battery cover.

3 Remove the screw from the rechargeable battery cover and open the cover.

4 Pull out the battery connector and remove the battery.

5 Install new battery and plug the connector into the socket.
Note: The battery connector has polarity. Observe battery polarity when installing.

6 Put back the battery cover and secure it with the screw.
Caution: Tighten the screw securely. If you fail to do so, the alarm will not operate. Do not use any other screws. This may cause damage to the projector.



Install the battery, then put back the battery cover and secure it with the screw.

✔**Note:**
- The PIN code and settings you have changed are effective even after the battery is changed.
- Unplug the battery connector if you carry your projector frequently and use the carrying case. If you do not unplug the battery connector, the alarm may be triggered when the Alarm buttons are accidentally pressed inside the carrying case.

SAFETY PRECAUTIONS FOR SANYO Ni-MH BATTERY PACK

Observe the following precautions when handling the built-in battery pack of the projector:

- MAKE SURE THAT THE BATTERY PACK IS INSTALLED IN THE PROJECTOR WHEN RECHARGING. USING THE CHARGERS OTHER THAN THE PROJECTOR MAY CAUSE EXPLOSION OR A FIRE.
- The rechargeable battery pack is for use exclusively with this projector. Do not use in other products or this may cause accident.
- Do not throw the battery into fire or heat it. Doing so may cause an explosion or fire.
- Never attempt to disassemble, modify, reconstruct, or solder lead wires directly on to the battery.
- Do not drop or subject to strong forces. Doing so may cause the battery to leak fluid or explode.
- Do not expose to direct sunlight or high temperatures. This may degrade battery performance or cause leakage.
- Avoid contact with water or liquid. Exposure to water or liquid could result in battery corrosion or damage.
- Keep out of reach of children. They may accidentally swallow the battery.
- Do not short-circuit battery terminals with metal objects. Do not store with metal objects or in a metal case.
- The rechargeable battery pack has a limited number of charge cycles and eventually need to be replaced. If it can no longer be recharged, stop charging immediately and replace it with new one.
- Recharge the battery in a place where the temperature is always between **32˚F to 104˚F (0˚C to 40˚C)**. Charging in the temperature out of this range may result in fluid leak, heat generation, or shortening battery life.
- If you do not use the projector or the Antitheft alarm function for a long period of time, remove the battery from the projector and store it in a place where the temperature is always between **–4˚F to 86˚F (–20˚C to 30˚C)**.
- If a battery leaks and fluid comes in contact with skin, this may cause skin irritation. Flush the affected area thoroughly with water.
- If a battery leaks and fluid gets in contact with eyes, wash your eyes with water immediately and seek medical attention.
- Dispose of used batteries according to your local disposal rule and guidelines.

Maintenance and Cleaning

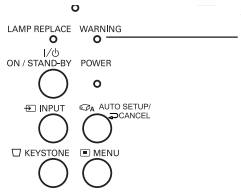
Warning Indicator

The WARNING indicator shows the state of the function which protects the projector. Check the state of the WARNING indicator and the POWER indicator to take proper maintenance.

The projector is shut down and the WARNING indicator is blinking red.

When the temperature inside the projector reaches a certain level, the projector will be automatically shut down to protect the inside of the projector. The POWER indicator is blinking while the projector is being cooled down. When the projector has cooled down enough (to its normal operating temperature), it can be turned on again by pressing the POWER ON/STAND-BY button.

Top Control



WARNING blinking red

✔**Note:**

- The WARNING indicator continues to blink even after the temperature inside the projector returns to normal. When the projector is turned on again, the WARNING indicator stops blinking.

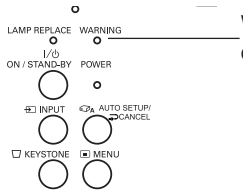
Then check the matters below:

– Did you provide appropriate space for the projector to be ventilated? Check the installing condition to see if the air vents of the projector are not blocked.
– Has the projector been installed near an Air-Conditioning/ Heating Duct or Vent? Move the installation of the projector away from the duct or vent.
– Is the filter clean? Clean the filter periodically.

The projector is shut down and the WARNING indicator lights red.

When the projector detects an abnormal condition, it is automatically shut down to protect the inside of the projector and the WARNING indicator lights red. In this case, unplug the AC power cord and reconnect it, and then turn the projector on once again to verify operation. If the projector cannot be turned on and the WARNING indicator still lights red, unplug the AC power cord and contact the service station.

Top Control



WARNING emit a red light

CAUTION
DO NOT LEAVE THE PROJECTOR WITH THE AC POWER CORD CONNECTED UNDER AN ABNORMAL CONDITION. IT MAY RESULT IN FIRE OR ELECTRIC SHOCK.

Cleaning the Filter

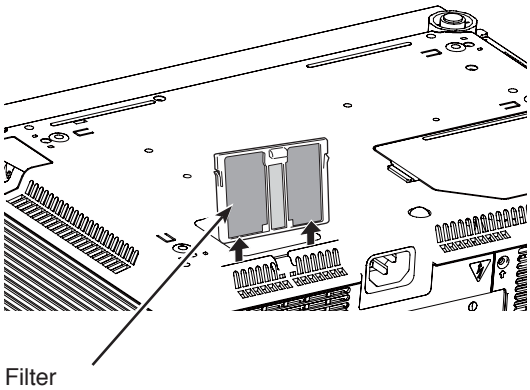
Filter prevents dust from accumulating on the optical elements inside the projector. Should the filter become clogged with dust particles, it will reduce cooling fans' effectiveness and may result in internal heat buildup and adversely affect the life of the projector. If a "Filter warning" icon appears on the screen, clean the filter immediately. Clean the filter by following the steps below.

1 Turn off the projector, and unplug the AC power cord from the AC outlet.

2 Turn the projector over and remove the filter by pulling the latches upward.

3 Gently clean the filter by using a brush or rinse it softly.

4 When rinsing the filter, dry it well. Replace the filter properly. Make sure that the filter is fully inserted to the projector.



Filter

Pull up and remove.

CAUTION

Do not operate the projector with the filter removed. Dust may accumulate on the optical elements degrading picture quality.

Do not put anything into the air vents. Doing so may result in malfunction of the projector.

RECOMMENDATION

We recommend avoiding dusty/smoky environments when you operate the projector. Usage in these environments may cause poor image quality.

When using the projector under dusty or smoky conditions, dust may accumulate on a lens, LCD panels, or optical elements inside the projector degrading the quality of a projected image. When the symptoms above are noticed, contact your authorized dealer or service station for proper cleaning.

✔Note:

- When reinserting this filter, be sure that the slit part is facing the outer side.

Resetting the Filter Counter

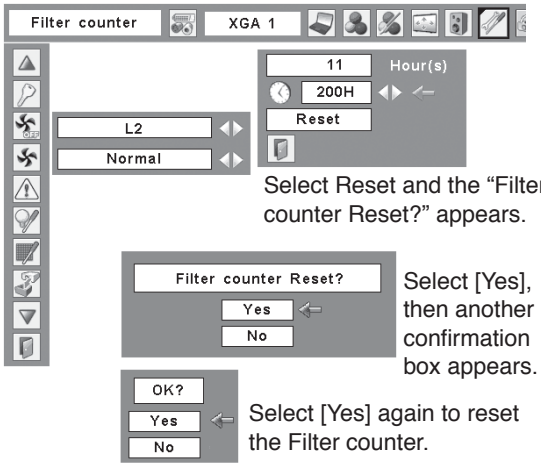
Be sure to reset the Filter counter after cleaning or replacing the filters.

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the Setting Menu icon.

2 Use the Point ▲▼ buttons to move the red frame pointer to Filter counter and then press the SELECT button. A dialog box appears showing the total accumulated time of the filter use, a timer setting option, and the reset option. Select Reset and the "Filter counter Reset?" appears. Select [Yes] to continue.

3 Another confirmation dialog box appears, select [Yes] to reset the Filter counter.

Filter counter



Select Reset and the "Filter counter Reset?" appears.

Select [Yes], then another confirmation box appears.

Select [Yes] again to reset the Filter counter.

Attaching the Lens Cover

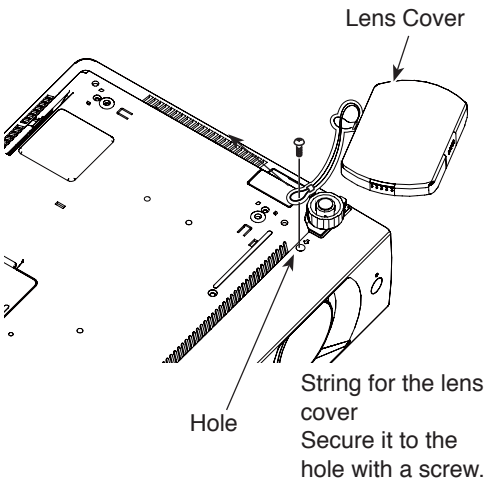
When moving this projector or while not using it over an extended period of time, replace the lens cover.

Attach the lens cover according to the following procedures.

1 Pass the string through a hole of the lens cover.

2 Turn over the projector and remove the screw with a screwdriver.

3 Attach the string with lens cover to a hole at the bottom of the projector and secure it with a screw.

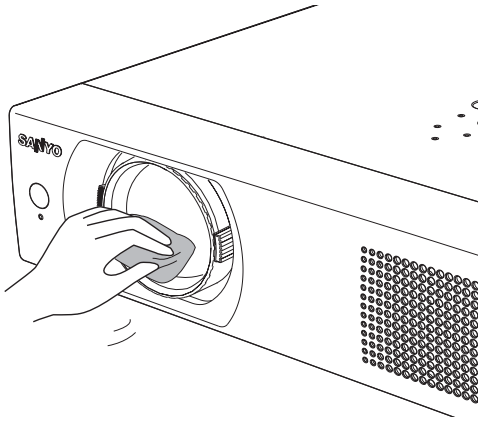


Cleaning the Projection Lens

Unplug the AC power cord before cleaning.

Gently wipe the projection lens with a cleaning cloth that contains a small amount of non-abrasive camera lens cleaner, or use a lens cleaning paper or commercially available air blower to clean the lens.

Avoid using an excessive amount of cleaner. Abrasive cleaners, solvents, or other harsh chemicals might scratch the surface of the lens.

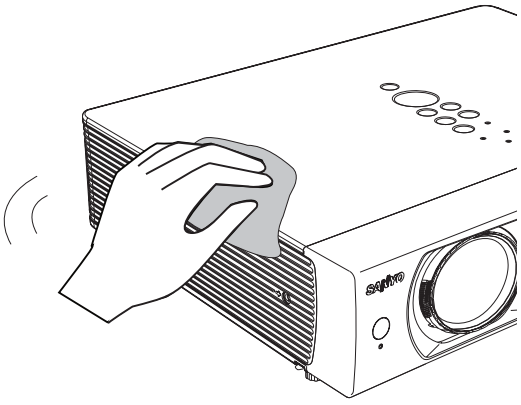


Cleaning the Projector Cabinet

Unplug the AC power cord before cleaning.

Gently wipe the projector body with a soft dry cleaning cloth. When the cabinet is heavily soiled, use a small amount of mild detergent and finish with a soft dry cleaning cloth. Avoid using an excessive amount of cleaner. Abrasive cleaners, solvents, or other harsh chemicals might scratch the surface of the cabinet.

When the projector is not in use, put the projector in an appropriate carrying case to protect it from dust and scratches.

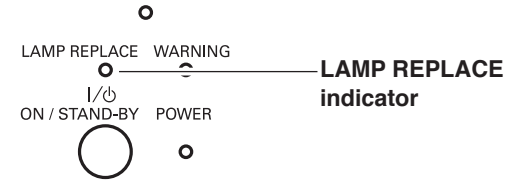


Lamp Replacement

When the projection lamp of the projector reaches its end of life, the Lamp replacement icon appears on the screen and LAMP REPLACE indicator lights yellow. Replace the lamp with a new one promptly. The timing when the LAMP REPLACE indicator should light is depending on the lamp mode.

WARNING:
TURN OFF THE UV LAMP BEFORE OPENING THE LAMP COVER

Top Control



Lamp replacement icon

✔Note:
- The Lamp replacement icon will not appear when the Display function is set to “Off” (p.48), during “Freeze” (p.28), or “No show” (p.29).

CAUTION

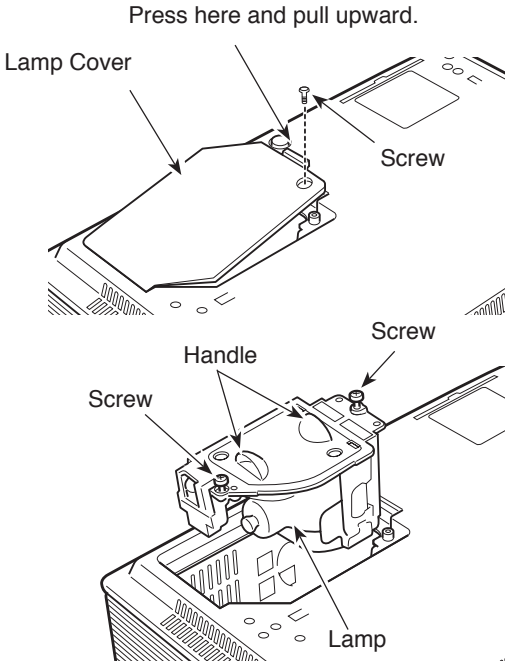
Allow a projector to cool for at least 45 minutes before you open the Lamp cover. The inside of the projector can become very hot.

CAUTION

For continued safety, replace with a lamp of the same type. Do not drop a lamp or touch a glass bulb! The glass can shatter and may cause injury.

Follow these steps to replace the lamp.

1. Turn off the projector and unplug the AC power cord. Let the projector cool for at least 45 minutes.
2. Remove the screw and open the lamp cover.
3. Remove the two (2) screws that secure the lamp. Lift the lamp out of the projector by using the handle.
4. Replace the lamp with a new one and secure the two (2) screws. Make sure that the lamp is set properly. Close the lamp cover and secure the screw.
5. Connect the AC power cord to the projector and turn on the projector.
6. **Reset the lamp counter.**
   See “Resetting the Lamp Counter” on the next page.



ORDER REPLACEMENT LAMP

Replacement lamp can be ordered through your dealer. When ordering a projection lamp, give the following information to the dealer.

- **Model No. of your projector : PLC-WXU30**
- **Replacement Lamp Type No. : POA-LMP111**
  (Service Parts No. 610 333 9740)

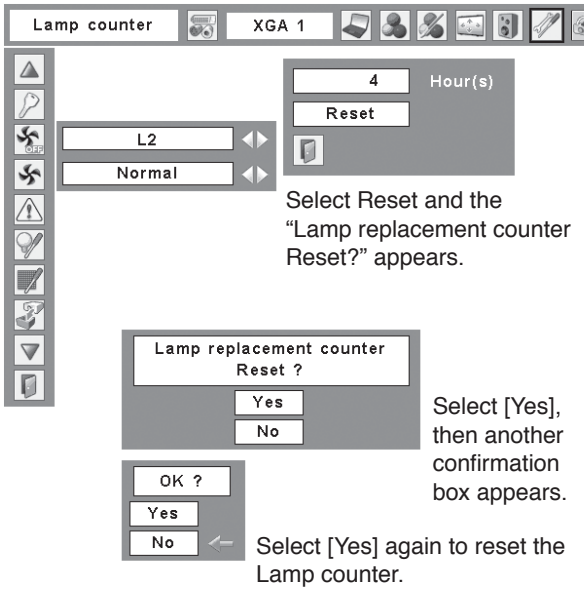
Resetting the Lamp Counter

Be sure to reset the Lamp counter after the lamp is replaced. When the Lamp counter is reset, the LAMP REPLACE indicator stops lighting and the Lamp replacement icon disappears.

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the Setting Menu icon.

2 Use the Point ▲▼ buttons to move the red frame pointer to Lamp counter and then press the SELECT button. A dialog box appears showing the total accumulated time of the lamp usage and the reset option. Select Reset and the "Lamp replacement counter Reset?" appears. Select [Yes] to continue.

3 Another confirmation dialog box appears, select [Yes] to reset the Lamp counter.



Select Reset and the "Lamp replacement counter Reset?" appears.

Select [Yes], then another confirmation box appears.

Select [Yes] again to reset the Lamp counter.

✔Note:

- Do not reset the Lamp counter without implementing lamp replacement. Be sure to reset the Lamp counter only after replacing the lamp.

⚠ LAMP HANDLING PRECAUTIONS

This projector uses a high-pressure lamp which must be handled carefully and properly. Improper handling may result in accidents, injury, or create a fire hazard.

- Lamp life may differ from lamp to lamp and according to the environment of use. There is no guarantee of the same life for each lamp. Some lamps may fail or terminate their life in a shorter period of time than other similar lamps.
- If the projector indicates that the lamp should be replaced, i.e., if the LAMP REPLACE indicator lights up, replace the lamp with a new one IMMEDIATELY after the projector has cooled down. (Follow carefully the instructions in the Lamp Replacement section of this manual.) Continuous use of the lamp with the LAMP REPLACE indicator lighted may increase the risk of lamp explosion.
- A Lamp may explode as a result of vibration, shock or degradation as a result of hours of use as its lifetime draws to an end. Risk of explosion may differ according to the environment or conditions in which the projector and lamp are being used.

IF A LAMP EXPLODES, THE FOLLOWING SAFETY PRECAUTIONS SHOULD BE TAKEN.

If a lamp explodes, disconnect the projector's AC plug from the AC outlet immediately. Contact an authorized service station for a checkup of the unit and replacement of the lamp. Additionally, check carefully to ensure that there are no broken shards or pieces of glass around the projector or coming out from the cooling air circulation holes. Any broken shards found should be cleaned up carefully. No one should check the inside of the projector except those who are authorized trained technicians and who are familiar with projector service. Inappropriate attempts to service the unit by anyone, especially those who are not appropriately trained to do so, may result in an accident or injury caused by pieces of broken glass.

Appendix

Troubleshooting

Before calling your dealer or service center for assistance, check the items below once again.

–Make sure you have properly connected the projector to peripheral equipment as described on pages 19-21.
–Make sure all equipment is connected to AC outlet and the power is turned on.
–When the projector does not project an image from the connected computer, restart the computer.

Problem:	– Solutions
No power	– Plug the power cord of the projector into the AC outlet. – See if the POWER indicator lights red. – Wait until the POWER indicator stops blinking to turn on the projector again. The projector can be turned on after the POWER indicator turns red. See page 22. – Check the WARNING indicator. If the WARNING indicator lights red, projector cannot be turned on. See page 62. – Check the projection lamp. See page 65. – Unlock the Key lock function for the projector. See page 54.
The initial display is not shown.	– Make sure "User" or "Countdown off" are not chosen at display function.(see page 48)
The initial display is not same as the default set.	– Make sure "User" or "Countdown off" are not chosen at Logo (select) function.(see page 48)
Input signal switches automatically. (or does not switch automatically)	– Make sure Input search function is adjusted properly. See page 51.
When the projector is on and you press the input button, an icon other than the Lamp mode icon appears.	– That is the Filter warning icon. Refer to page 57.
An icon other than Input mode or Lamp mode icon appears.	– That is the Lamp replacement icon or the Filter warning icon. See page 56 or 57.
Image is out of focus.	– Adjust focus of the projector. See page 26. – Provide proper distance between the projector and the projection screen. See page 17. – Check the projection lens to see if it needs cleaning. See page 64. – Moving the projector from a cool to warm place may result in moisture condensation on the projection lens. In such cases, leave the projector off and wait until condensation evaporates.
Image is Left/Right reversed. **Image is Top/Bottom reversed.**	– Check the Ceiling/Rear function. See page 51. – Check the Top/Bottom function. See page 51.
Picture is not bright enough.	– Check if the 'Contrast" or "Brightness" are adjusted properly.(see page 37,44) – Check if "Image mode" is selected properly.(see page 36,43) – Check the lamp control function.(see page 28) – Check the LAMP REPLACE indicator. If it lights, the end of lamp life is approaching. Replace the lamp with a new one promptly.(see page 65)

No image	– Check the connection between your computer or video equipment and the projector. See pages 19-21. – See if the input signal is correctly output from your computer. Some laptop computers may need to change the setting for monitor output when connecting to a projector. See your computer's instruction manual for the setting. – It takes about 30 seconds to display an image after turning on the projector. See page 22. – Check the Input singal, color system, video system or computer system mode. – Make sure the temperature is not out of the specified Operating Temperature (41˚F–95˚F [5˚C–35˚C]). – When "No Show" is operating, the image cannot be displayed. Press the NO SHOW button or any other button on the remote control.
No sound	– Check the audio cable connection from audio input source. – Adjust the audio source. – Press the Volume + button. See page 27. – Press the Mute button. See page 27. – When the AUDIO OUT is plugged-in, the projector's built-in speaker is not available – Is the image projected? You will hear the sound only when the image is projected.
The color is strange.	– Check the Input signal, color system,video system or computer system mode. – Make sure the "Blackboard" is not selected on Image select menu.(see page 36,43)
Some displays are not seen during the operation.	– Check the Display function. See page 48.
Auto PC adjustment function does not work.	– Check the Input signal. Auto PC function can not work when 480p,575p.720p,480i,575i,1035i or 1080i is selected or when the digital signal is input into DVI terminal.(see Page 34) – The icon is not available in grayout when the digital signal is input.
The setting does not remain after turning off power.	– Make sure you selected "Store" after adjusting setting. Some settings can not be stored if not registered with "Store".(see page 45)
Power management does work.	– Power management function can not work while "Freeze" or "No Show" function is running.(see page 52)
Capture function does not work.	– Check the connection and the input signal to see if there is signal.
Auto setup does not work properly.	– Make sure "Off" is not selected at the Auto setup function.(see page 47) – Make sure "On" is not selected at the Ceiling funtion.(see page 51)
Auto keystone function does not work even when the projector is tipped.	– Make sure the Auto keystone function is not set to "Manual". Press the AUTO SET UP button on the top control.(see page 26,47)

The image is distorted or runs off.	– Check "PC adjustment" menu or "Screen" menu and adjust them. (page 33-34, 38-39)
PIN code dialog box appears at start-up.	– PIN code lock is being set. Enter a PIN code (the “1234” or numbers you have set). See pages 22, 54–55.
Page Up/Down function does not work.	– Make sure your computer is connected to the projector with USB cable.(see page 19) – Check cable connection between the projector and your computer. (see page 19)
The Remote Control does not work.	– Check the batteries. – Make sure no obstruction is between the projector and remote control. – Make sure you are not too far from the projector when using the remote control. Maximum operating range is 16.4'(5 m). – Wireless reomete control does not work when the remote control cable is connected to the projector.(see page 13) – Make sure the code of the remote control is conformed to the projector’s code. See page 53. – Unlock the Key lock function for the remote control function. See page 54. – Check RESET/ON/ALL-OFF switch on the remote control is set to “ON”. See page 15.
Alarm does not stop ringing.	– Connect the AC power cord to the AC outlet. (Alarm will not stop ringing when the alarm goes off while trying to remove the rechargeable battery cover.)
Indicator blinks or lights.	– Chek the status of the projector with referring to "Indicators and projector Condition".(see page 73) – In the case of the ALARM indicator blinks, check the setting.(see page 58)
Wireless Mouse function does not work.	– Check the connection between a projector and your computer. – Check the mouse setting on you computer. – Make sure the mouse driver is installed on your computer, otherwise, the remote control can not be used as a wireless mouse. – Make sure the signal is from the computer, otherwise, the remote control can not be used as a wireless mouse. – Turn on the projector before turning on the computer.
The exclamation mark appears on the screen.	– Your operation is invalid. Operate correctly.
Top control does not work.	– The top control is not available if the top cotrol is locked at "Key lock" under "Security" of SETTING section. Please check "SETTING" section on page 54.
Uable to unlock the Logo PIN code lock, Security key lock or Security PIN code lock.	– Contact the dealer where you purchased the projector or the service center.

Warning mode is not turned on.	– If you cannot hear the bleeping sound when you press the Alarm buttons, you are not pressing the buttons correctly. Try to set the Alarm setting again.

WARNING :
High voltages are used to operate this projector. Do not attempt to open the cabinet.

If problems still persist after following all operating instructions, contact the dealer where you purchased the projector or the service center. Specify the model number and explain about the problem. We will advise you how to obtain service.

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

dnx pixelworks™

c UL US LISTED This symbol on the nameplate means the product is Listed by Underwriters Laboratories Inc. It is designed and manufactured to meet rigid U.L. safety standards against risk of fire, casualty and electrical hazards.

Menu Tree

Computer Input/Video Input

- **Input**
  - Computer 1 (Analog) → Go to **System** (1)
  - Computer 1 (Digital)
    - RGB (PC digital) → N/A
    - RGB (AV HDCP) → N/A
    - Quit
  - Computer 2
    - RGB → Go to **System** (1)
    - Component → Go to **System** (2)
    - RGB (Scart) → N/A
    - Quit
  - Video
    - Auto → Go to **System** (3)
    - Video → Go to **System** (3)
    - S-video → Go to **System** (3)
    - Quit
  - Wired → See owner's manual "Network Set-up and Operation"
  - Wireless* → See owner's manual "Network Set-up and Operation"

N/A..... not applicable
* ..... The menu will be displayed when connecting device for the input source.

Sound

- **Sound**
  - Volume — 0–63
  - Mute — On/Off
  - Quit

Computer Input

SVGA 1

- **System** (1)
  - SVGA 1
  - Mode 1
  - Mode 2
  - - - - -

✻Systems displayed in the System Menu vary depending on an input signal.

- **PC Adjust**
  - Auto PC Adj.
  - Fine sync — 0–31
  - Total dots
  - Horizontal
  - Vertical
  - Current mode — H-sync freq.
  - Clamp — V-sync freq.
  - Quit
  - Display area H
  - Display area V
  - Reset — Yes/No
  - Mode free — Mode 1 / Mode 2 / Mode 3 / Mode 4 / Mode 5 / Quit
  - Store — Mode 1 / Mode 2 / Mode 3 / Mode 4 / Mode 5 / Quit
  - Quit

- **Image Select**
  - Dynamic
  - Standard
  - Real
  - Blackboard (Green)
  - Image 1
  - Image 2
  - Image 3
  - Image 4

- **Image Adjust**
  - Contrast — 0–63
  - Brightness — 0–63
  - Color temp. — High / Mid / Low / XLow / Adj.
  - Red — 0–63
  - Green — 0–63
  - Blue — 0–63
  - Sharpness — 0–15
  - Gamma — 0–15
  - Reset — Yes/No
  - Store — Image 1 / Image 2 / Image 3 / Image 4 / Quit
  - Quit

- **Screen**
  - Normal
  - True
  - Full
  - Custom
    - Scale — H/V
    - H&V
    - Position — H/V
    - Common — Yes/No
    - Reset — Yes/No
    - Quit
  - Digital zoom +
  - Digital zoom –

Video Input

Auto — **System** (2)
- Auto
- 1080i
- 1035i
- 720p
- 575p
- 480p
- 575i
- 480i

Auto — **System** (3)
- Auto
- PAL
- SECAM
- NTSC
- NTSC 4.43
- PAL-M
- PAL-N

Image Select
- Dynamic
- Standard
- Cinema
- Blackboard (Green)
- Image 1
- Image 2
- Image 3
- Image 4

Image Adjust
- Contrast — 0–63
- Brightness — 0–63
- Color — 0–63
- Tint — 0–63
- Color temp. — High / Mid / Low / XLow / Adj.
- Red — 0–63
- Green — 0–63
- Blue — 0–63
- Sharpness — 0–15
- Gamma — 0–15
- Noise reduction — Off / L1 / L2
- Progressive — Off / L1 / L2 / Film
- Reset — Yes/No
- Store — Image 1 / Image 2 / Image 3 / Image 4 / Quit
- Quit

Screen
- Normal
- Zoom
- Natural wide
- Custom
  - Scale — H/V
  - H&V
  - Position — H/V
  - Common — Yes/No
  - Reset — Yes/No
  - Quit

Setting

Setting
- Language — 16 languages provided. / Quit
- Auto setup — Auto PC adj. (On/Off) / Auto keystone (Auto / Manual / Off)
- Keystone — Store/Reset
- Blue back — On/Off
- Display — On/Countdown off/Off
- Logo — Logo select (Off / Default / User) / Capture (Yes/No) / Logo PIN code lock (Off/On / Logo PIN code change / Quit) / Quit
- Ceiling — On/Off
- Rear — On/Off
- Input search — Off/On1/On2
- Standby mode — Eco/Normal
- Power management — Off / Ready / Shut down / Timer (1–30 Min.) / Quit
- On start — On/Off
- Lamp control — Normal/Auto/Eco
- Pointer — Spotlight/Pointer / Quit
- Remote control — Code 1–Code 8
- Security — Key lock (Off / Projector / Remote control / Quit) / PIN code lock (Off/On1/On2 / PIN code change / Quit) / Alarm (Off / Battery charge — Off/Auto / Alarm volume — Small/Medium/Large / Sensitivity — Low/Medium/High / Ring time — 10 seconds/60 seconds/Long time / Quit / On) / Quit
- Fan — L1/L2
- Fan control — Normal/Max
- Warning log
- Lamp counter — Hour(s) / Reset — Yes/No / Quit
- Filter counter — Hour(s) / Off/100H/200H/300H / Reset — Yes/No / Quit
- Factory default — Yes/No
- Quit

Indicators and Projector Condition

Check the indicators for projector condition. For Alarm indicator, see page 58.

Indicators			Projector Condition
POWER **red/green**	WARNING **red**	LAMP REPLACE **yellow**	
●	●	●	The projector is off. (The AC power cord is unplugged.)
	●	*	The projector is in stand-by mode. Press the POWER ON/STAND-BY button to turn on the projector.
○	●	*	The projector is operating normally.
	●	*	The projector is preparing for stand-by or the projection lamp is being cooled down. The projector cannot be turned on until cooling is completed and the POWER indicator stops blinking.
	●	*	The projector is in the Power management mode.
		*	The temperature inside the projector is abnormally high. The projector cannot be turned on. When the projector is cooled down enough and the temperature returns to normal, the POWER indicator stops blinking and the projector can be turned on. (The WARNING indicator keeps blinking.) Check and clean the filter.
		*	The projector has been cooled down enough and the temperature returns to normal. When turning on the projector, the WARNING indicator stops blinking. Check and clean the air filter.
●		*	The projector detects an abnormal condition and cannot be turned on. Unplug the AC power cord and plug it again to turn on the projector. If the projector is turned off again, unplug the AC power cord and contact the dealer or the service center for service and checkup. Do not leave the projector on. It may cause an electric shock or a fire hazard.

○ • • • green. • • • red ● • • • off

• • • blinks green. • • • blinks red.

When the projection lamp reaches its end of life, the LAMP REPLACE indicator lights yellow. When this indicator lights yellow, replace the projection lamp with a new one promptly. Reset the lamp replacement counter after replacing the lamp. See pages 65-66.

Compatible Computer Specifications

Basically this projector can accept the signal from all computers with the V-, H-Frequency mentioned below and less than 140 MHz of Dot Clock for analog signal and 110 MHz of Dot Clock for digital signal.
When selecting these modes, PC adjustment can be limited.

ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (KHz)	V-Freq. (Hz)
VGA 1	640 x 480	31.47	59.88
VGA 2	720 x 400	31.47	70.09
VGA 3	640 x 400	31.47	70.09
VGA 4	640 x 480	37.86	74.38
VGA 5	640 x 480	37.86	72.81
VGA 6	640 x 480	37.50	75.00
VGA 7	640 x 480	43.269	85.00
MAC LC13	640 x 480	34.97	66.60
MAC 13	640 x 480	35.00	66.67
480p	640 x 480	31.47	59.88
575p	768 x 575	31.25	50.00
480i	———	15.734	60.00 (Interlace)
575i	———	15.625	50.00 (Interlace)
SVGA 1	800 x 600	35.156	56.25
SVGA 2	800 x 600	37.88	60.32
SVGA 3	800 x 600	46.875	75.00
SVGA 4	800 x 600	53.674	85.06
SVGA 5	800 x 600	48.08	72.19
SVGA 6	800 x 600	37.90	61.03
SVGA 7	800 x 600	34.50	55.38
SVGA 8	800 x 600	38.00	60.51
SVGA 9	800 x 600	38.60	60.31
SVGA 10	800 x 600	32.70	51.09
SVGA 11	800 x 600	38.00	60.51
MAC 16	832 x 624	49.72	74.55
MAC 19	1024 x 768	60.24	75.08
XGA 1	1024 x 768	48.36	60.00
XGA 2	1024 x 768	68.677	84.997
XGA 3	1024 x 768	60.023	75.03
XGA 4	1024 x 768	56.476	70.07
XGA 5	1024 x 768	60.31	74.92
XGA 6	1024 x 768	48.50	60.02
XGA 7	1024 x 768	44.00	54.58
XGA 8	1024 x 768	63.48	79.35
XGA 9	1024 x 768	36.00	87.17 (Interlace)
XGA 10	1024 x 768	62.04	77.07
XGA 11	1024 x 768	61.00	75.70
XGA 12	1024 x 768	35.522	86.96 (Interlace)
XGA 13	1024 x 768	46.90	58.20
XGA 14	1024 x 768	47.00	58.30
XGA 15	1024 x 768	58.03	72.00

ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (KHz)	V-Freq. (Hz)
SXGA 1	1152 x 864	64.20	70.40
SXGA 2	1280 x 1024	62.50	58.60
SXGA 3	1280 x 1024	63.90	60.00
SXGA 4	1280 x 1024	63.34	59.98
SXGA 5	1280 x 1024	63.74	60.01
SXGA 6	1280 x 1024	71.69	67.19
SXGA 7	1280 x 1024	81.13	76.107
SXGA 8	1280 x 1024	63.98	60.02
SXGA 9	1280 x 1024	79.976	75.025
SXGA 10	1280 x 960	60.00	60.00
SXGA 11	1152 x 900	61.20	65.20
SXGA 12	1152 x 900	71.40	75.60
SXGA 13	1280 x 1024	50.00	86.00 (Interlace)
SXGA 14	1280 x 1024	50.00	94.00 (Interlace)
SXGA 15	1280 x 1024	63.37	60.01
SXGA 16	1280 x 1024	76.97	72.00
SXGA 17	1152 x 900	61.85	66.00
SXGA 18	1280 x 1024	46.43	86.70 (Interlace)
SXGA 19	1280 x 1024	63.79	60.18
SXGA 20	1280 x 1024	91.146	85.024
SXGA+ 1	1400 x 1050	63.97	60.19
SXGA+ 2	1400 x 1050	65.35	60.12
SXGA+ 3	1400 x 1050	65.12	59.90
MAC21	1152 x 870	68.68	75.06
MAC	1280 x 960	75.00	75.08
MAC	1280 x 1024	80.00	75.08
WXGA 1	1366 x 768	48.36	60.00
WXGA 2	1360 x 768	47.70	60.00
WXGA 3	1376 x 768	48.36	60.00
WXGA 4	1360 x 768	56.16	72.00
WXGA 6	1280 x 768	47.776	59.87
WXGA 7	1280 x 768	60.289	74.893
WXGA 8	1280 x 768	68.633	84.837
WXGA 9	1280 x 800	49.60	60.05
UXGA 1	1600 x 1200	75.00	60.00
UXGA 2	1600 x 1200	81.25	65.00
UXGA 3	1600 x 1200	87.5	70.00
UXGA 4	1600 x 1200	93.75	75.00
720p	1280 x 720	45.00	60.00
720p	1280 x 720	37.50	50.00
1035i	1920 x 1035	33.75	60.00 (Interlace)
1080i	1920 x 1080	33.75	60.00 (Interlace)
1080i	1920 x 1080	28.125	50.00 (Interlace)

When the input signal is digital from DVI terminal, refer to the chart below.

ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (KHz)	V-Freq. (Hz)
D-VGA	640 x 480	31.47	59.94
D-480p	640 x 480	31.47	59.88
D-575p	768 x 575	31.25	50.00
D-SVGA	800 x 600	37.879	60.32
D-XGA	1024 x 768	43.363	60.00
D-WXGA 1	1366 x 768	48.36	60.00
D-WXGA 2	1360 x 768	47.7	60.00
D-WXGA 3	1376 x 768	48.36	60.00
D-WXGA 4	1360 x 768	56.160	72.000
D-WXGA 5	1366 x 768	46.500	50.000
D-WXGA 6	1280 x 768	47.776	59.870
D-WXGA 7	1280 x 768	60.289	74.893
D-WXGA 9	1280 x 800	49.600	60.050

ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (KHz)	V-Freq. (Hz)	
D-SXGA1	1280 x 1024	63.98	60.02	
D-SXGA2	1280 x 1024	60.276	58.069	
D-SXGA+1	1400 x 1050	63.97	60.19	
D-720p	1280 x 720	37.50	50.00	D-720p50
D-720p	1280 x 720	45.00	60.00	D-720p60
D-1035i	1920 x 1035	33.75	60.00 (Interlace)	
D-1080i	1920 x 1080	33.75	60.00 (Interlace)	D-1080i60
D-1080i	1920 x 1080	28.125	50.00 (Interlace)	D-1080i50

✔**Note:**

- When the input signal is D-SXGA 1, D-SXGA 2, or D-SXGA+1, images may not be displayed properly depending on computers.
- The specifications are subject to change without notice.

Technical Specifications

Mechanical Information

Projector Type	Multi-media Projector
Dimensions (W x H x D)	334 mm x 78 mm x 257.5mm (Not including adjustable feet)
Net Weight	3.7 kg
Feet Adjustment	0˚ to 8.9˚

Panel Resolution

LCD Panel System	0.74” TFT Active Matrix type, 3 panels
Panel Resolution	1,280 x 800 dots
Number of Pixels	3,072,000 (1,280 x 800 x 3 panels)

Signal Compatibility

Color System	PAL, SECAM, NTSC, NTSC4.43, PAL-M, and PAL-N
High Definition TV Signal	480i, 480p, 575i, 575p, 720p, 1035i, and 1080i
Scanning Frequency	H-sync. 15 kHz–100 kHz, V-sync. 50–100 Hz

Optical Information

Projection Image Size (Diagonal)	Adjustable from 40” to 300”
Throw Distance	3.3'(1.0 m) –39.7'(12.1m)
Projection Lens	F1.7–2.5 lens with f=19.2 mm–30.2 mm with manual zoom and focus
Projection Lamp	275 W

Interface

Video Input Jack	RCA Type x 1
S-video Input Jack	Mini DIN 4 pin x 1
Audio Input Jacks	RCA Type x 2
Computer Input 1/DVI-I Input Terminal	DVI-I Terminal X 1
Computer Input 2/Component Input Terminal	Mini D-sub 15 pin X 1
Monitor Output Terminal	Mini D-sub 15 pin x 1
Computer/Component Audio Input Jack	Mini Jack (stereo) x 1
Service Port Connector	Mini DIN 8 pin x 1
USB Connector	USB Series B connector x 1
Audio Output Jack	Mini Jack (stereo) x 1 (variable)
LAN Connection Terminal	100 Base-TX (100Mbps)/10 Base-T (10Mbps), RJ45
SD Card Slot	

Audio

Internal Audio Amp	1.0 W RMS
Built-in Speaker	1 speaker, ø28 mm

Power

Voltage and Power Consumption	AC 100–120 V (4.0A Max. Ampere), 50/60 Hz (The U.S.A and Canada)
	AC 200–240 V (2.0A Max. Ampere), 50/60 Hz (Continental Europe and The U.K.)

Operating Environment

Operating Temperature	41˚F–95˚F (5 ˚C–35 ˚C)
Storage Temperature	14˚F–140˚F (-10˚C–60 ˚C)

Remote Control

Battery	AAA or LR03 Type x 2
Operating Range	5 m/±30˚
Dimensions	45 mm (W) x 23 mm (H) x 145 mm (D)
Net Weight	99 g (including batteries)
Laser Pointer	Class II Laser (Max. Output: 1 mW/Wave length: 640–660 nm)

Accessories

Owner's Manual
Quick Reference Guide
AC Power Cord
Remote Control and Batteries
VGA Cable
Lens Cover with String
PIN Code Label
Lamp Replacement Label
Alarm Label
Network Application (CD-ROM)
Soft Carrying Case

- The specifications are subject to change without notice.
- LCD panels are manufactured to the highest possible standards. Even though 99.99% of the pixels are effective, a tiny fraction of the pixels (0.01% or less) may be ineffective by the characteristics of the LCD panels.

Optional Parts

The parts listed below are optionally available. When ordering those parts, specify the item name and Model No. to the sales dealer.

	Model No.
COMPONENT~VGA Cable	**:** POA-CA-COMPVGA
SCART~VGA Cable	**:** POA-CA-SCART
VGA-Cable (10 m)	**:** KA-MC-DB10

PJ Link Notice

This projector is compliant with PJLink Standard Class 1 of JBMIA (Japan Business Machine and Information System Industries Association). This projector supports all commands defined by PJLink Class 1 and is verified conformance with PJLink Standard Class 1.

For PJ Link password, see page 49 on the owner's manual "Network Set-up and Operation."

Projector Input		PJLink Input	Parameter
Computer1 (Analog)		RGB 1	11
Computer1 (Digital)	RGB (PC digital)	DIGITAL 1	31
	RGB (AV HDCP)	DIGITAL 2	32
Computer2	RGB	RGB 2	12
	Component	RGB 3	13
	RGB (Scart)	RGB 4	14
Video	Auto	VIDEO 1	21
	Video	VIDEO 2	22
	S-video	VIDEO 3	23
Wired		NETWORK 1	51
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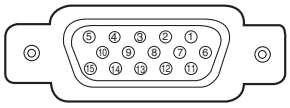
Memory viewer		STORAGE 1	41

PJLink is a registered trademark of JBMIA and pending trademark in some countries.

Configurations of Terminals

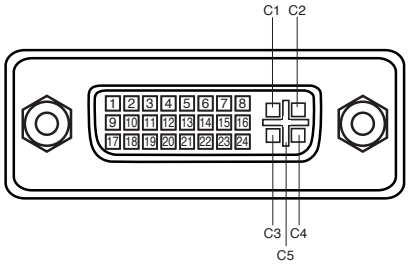
COMPUTER IN 2 /COMPONENT IN /MONITOR OUT (ANALOG)

Terminal: Analog RGB (Mini D-sub 15 pin)



1	Red (R/Cr) Input/Output	9	+5V Power
2	Green (G/Y) Input/Output	10	Ground (Vert.sync.)
3	Blue (B/Cb) Input/Output	11	Ground
4	-----	12	DDC Data
5	Ground (Horiz.sync.)	13	Horiz. sync. Input/Output (Composite H/V sync.)
6	Ground (Red)	14	Vert. sync.
7	Ground (Green)	15	DDC Clock
8	Ground (Blue)		

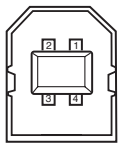
DVI-I TERMINAL (DIGITAL/ANALOG)



C1	Analog Red Input
C2	Analog Green Input
C3	Analog Blue Input
C4	Analog Horiz. sync
C5	Analog Ground (R/G/B)

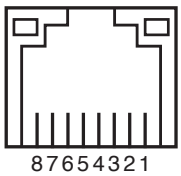
1	T.M.D.S. Data2–	9	T.M.D.S. Data1–	17	T.M.D.S. Data0–
2	T.M.D.S. Data2+	10	T.M.D.S. Data1+	18	T.M.D.S. Data0+
3	T.M.D.S. Data2 Shield	11	T.M.D.S. Data1 Shield	19	T.M.D.S. Data0 Shield
4	No Connect	12	No Connect	20	No Connect
5	No Connect	13	No Connect	21	No Connect
6	DDC Clock	14	+5V Power	22	T.M.D.S. Clock Shield
7	DDC Data	15	Ground (for +5V)	23	T.M.D.S. Clock+
8	Analog Vert. sync	16	Hot Plug Detect	24	T.M.D.S. Clock–

USB CONNECTOR (Series B)



1	Vcc
2	- Data
3	+ Data
4	Ground

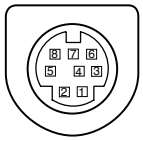
LAN TERMINAL



1	TX +	5	-----
2	TX –	6	RX –
3	RX +	7	-----
4	-----	8	-----

SERVICE PORT CONNECTOR

Terminal : Mini DIN 8-PIN



1	R X D	5	RTS/CTS
2	-----	6	T X D
3	-----	7	GND
4	GND	8	GND

PIN Code Number Memo

Write down the PIN code number in the column below and keep it with this manual securely. If you forgot or lost the number and unable to operate the projector, contact the service station.

PIN Code Lock No.

Factory default set No: 1 2 3 4*

Logo PIN Code Lock No.

Factory default set No: 4 3 2 1*

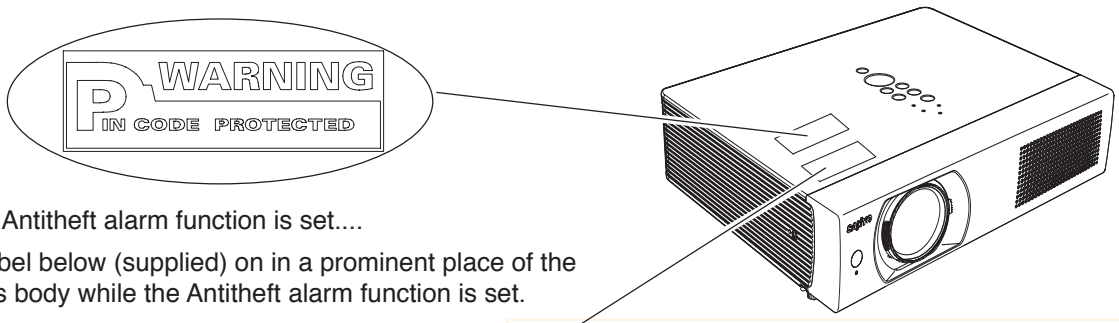
Alarm PIN Code No.

Factory default set No: 1 1 1 1*

*Should the four-digit number be changed, the factory set number will be invalid.

While the projector is locked with the PIN code.

Put the label below (supplied) on in a prominent place of the projector's body while it is locked with a PIN code.

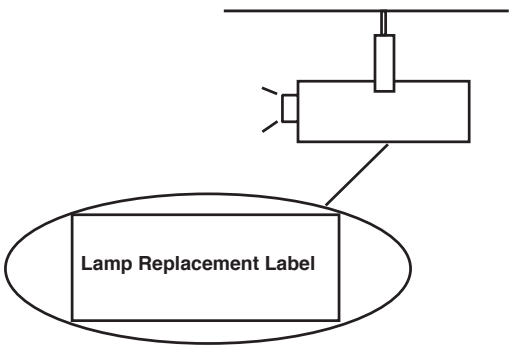


While the Antitheft alarm function is set....

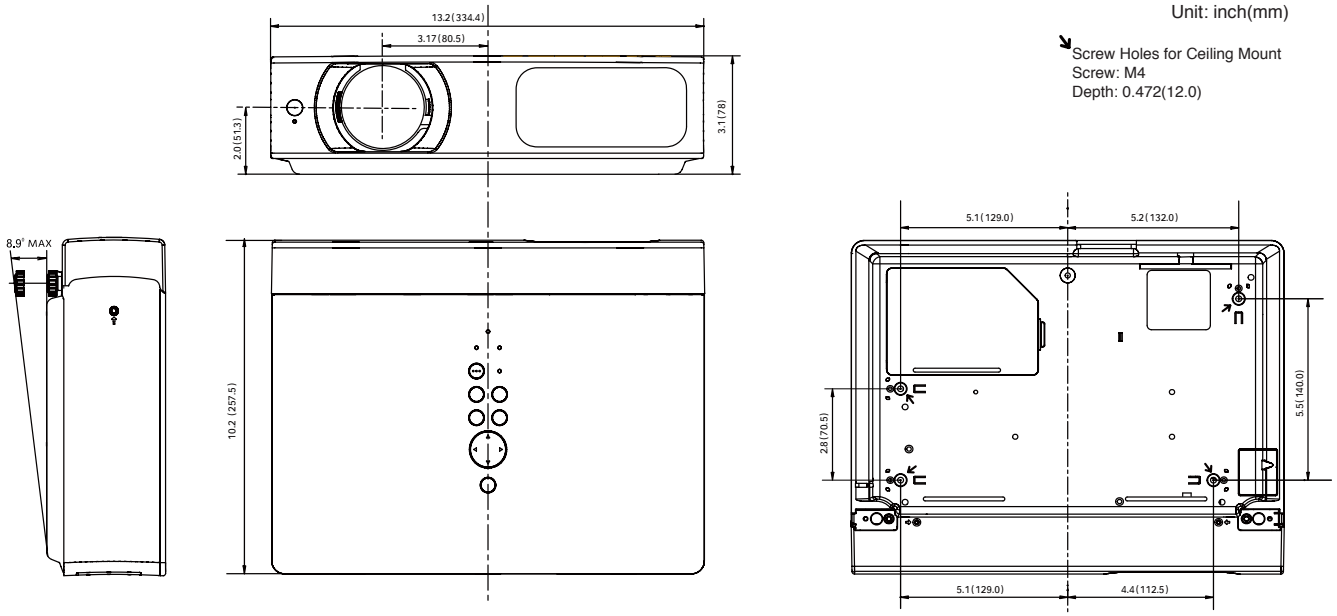
Put the label below (supplied) on in a prominent place of the projector's body while the Antitheft alarm function is set.

Lamp Replacement Label

When using the projector ceiling-mounted, put the Lamp replacement label (supplied) on in a prominent place of the projector's body to check the Replacement Lamp Type Number.



Dimensions


Unit: inch(mm)
Screw Holes for Ceiling Mount
Screw: M4
Depth: 0.472(12.0)
13.2(334.4)
3.17(80.5)
2.0(51.3)
3.1(78)
8.9° MAX
10.2 (257.5)
5.1(129.0)
5.2(132.0)
2.8(70.5)
5.5(140.0)
5.1(129.0)
4.4(112.5)

KB3AC

SANYO

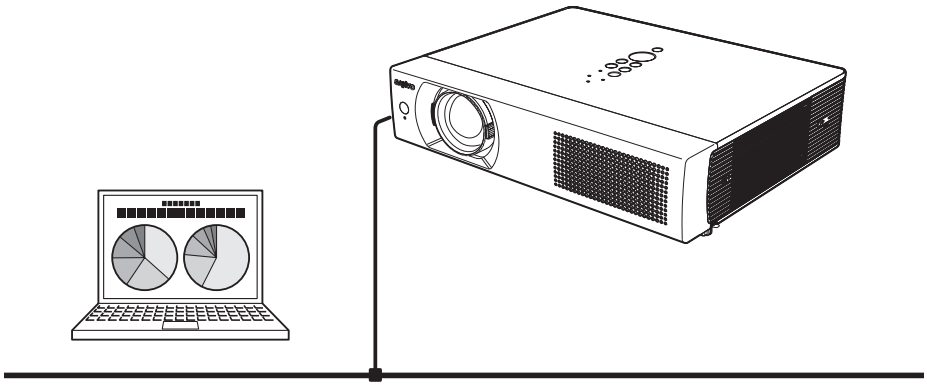
SANYO Electric Co., Ltd.

SANYO

Owner's Manual

Network Set-up and Operation

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



English
Français
Español
Deutsch
Italiano

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

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	: QXXAVC922---P
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 apparei 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 be co-located or operated in conjunction with any other antenna or transmitter.
- This equipment complies with FCC radiation exposure limits set forth for uncontrolled equipment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65. This equipment must 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 Electric Co., Ltd., declares that this WLAN Module (QXXAVC922---P) is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Česky [Czech]	SANYO Electric Co., Ltd. tímto prohlašuje, že tento WLAN Module (QXXAVC922---P) je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Dansk [Danish]	Undertegnede SANYO Electric Co., Ltd. erklærer herved, at følgende udstyr WLAN Module (QXXAVC922---P) overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
Deutsch [German]	Hiermit erklärt SANYO Electric Co., Ltd., dass sich das Gerät WLAN Module (QXXAVC922---P) in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Eesti [Estonian]	Käesolevaga kinnitab SANYO Electric Co., Ltd. seadme WLAN Module (QXXAVC922---P) vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
Español [Spanish]	Por medio de la presente SANYO Electric Co., Ltd. declara que el WLAN Module (QXXAVC922---P) cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ SANYO Electric Co., Ltd. ΔΗΛΩΝΕΙ ΟΤΙ WLAN Module (QXXAVC922---P) ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
Français [French]	Par la présente SANYO Electric Co., Ltd. déclare que l'appareil WLAN Module (QXXAVC922---P) est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Italiano [Italian]	Con la presente SANYO Electric Co., Ltd. dichiara che questo WLAN Module (QXXAVC922---P) è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo SANYO Electric Co., Ltd., deklarē, ka WLAN Module (QXXAVC922---P) atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo SANYO Electric Co., Ltd.deklaruoja, kad šis WLAN Module (QXXAVC922---P) atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Nederlands [Dutch]	Hierbij verklaart SANYO Electric Co., Ltd. dat het toestel WLAN Module (QXXAVC922---P) in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
Malti [Maltese]	Hawnhekk, SANYO Electric Co., Ltd., jiddikjara li dan WLAN Module (QXXAVC922---P) jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
Magyar [Hungarian]	Alulírott, SANYO Electric Co., Ltd. nyilatkozom, hogy a WLAN Module (QXXAVC922---P) megfelel a vonatkozó alapvetõ követelményeknek és az 1999/5/EC irányelv egyéb elõírásainak.
Polski [Polish]	Niniejszym SANYO Electric Co., Ltd. oświadcza, że WLAN Module (QXXAVC922---P) jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Português [Portuguese]	SANYO Electric Co., Ltd. declara que este (QXXAVC922---P) está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Slovensko [Slovenian]	SANYO Electric Co., Ltd. izjavlja, da je ta (QXXAVC922---P) v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]	SANYO Electric Co., Ltd. týmto vyhlasuje, že (QXXAVC922---P) spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Suomi [Finnish]	SANYO Electric Co., Ltd. vakuuttaa täten että (QXXAVC922---P) tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]	Härmed intygar SANYO Electric Co., Ltd. att denna (QXXAVC922---P) står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.
Islenska [Icelandic]	Hér með lýsir SANYO Electric Co., Ltd. yfir því að (QXXAVC922---P) er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.
Norsk [Norwegian]	SANYO Electric Co., Ltd. erklærer herved at utstyret (QXXAVC922---P) 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.

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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.
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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.

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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
CPU		Pentium 3 600MHz or higher (more than 2GHz is recommended) for Windows 2000 or Windows XP Pentium 4 3GHz or higher for Windows Vista
Memory		128MB 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
	Wired LAN	Correspond to 100BASE-TX (100Mbpd) /10BASE-T (10Mbps)
Browser Application		Microsoft Internet Explorer Ver.4.0 or later Netscape Communications Netscape Communicator Ver.6.0 or later

English

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
Communication Mode	AdHoc, Infrastructure
Data Transfer Speed	1/2/5.5/11Mbps (IEEE802.11b) 6/9/12/18/24/36/48/54Mbps (IEEE802.11g)
Wireless Frequency (Channel)	2412MHz–2462MHz (CH1–CH11)
Modulation Form	IEEE802.11g OFDM 54/4Mbps 64QAM, 36/24Mbps 16QAM, 18/12Mbps QRSK, 9/6Mbps BPSK IEEE802.11b DSSS 11/5Mbps CCK, 2Mbps DQPSK, 1Mbps DBPSK
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

Chapter 1

1. About LAN functions

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

English

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

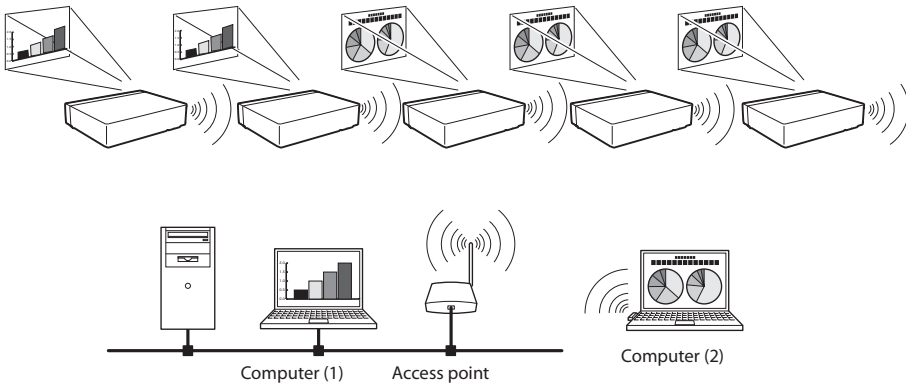
1. Download the computer image with the dedicated software faithfully to the real image.
2. The downloaded data will be compressed to the digital signal and transferred to the projector via the LAN (Wired or Wireless). (One computer can operate up to 5 projectors simultaneously.)
3. Digital signal will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

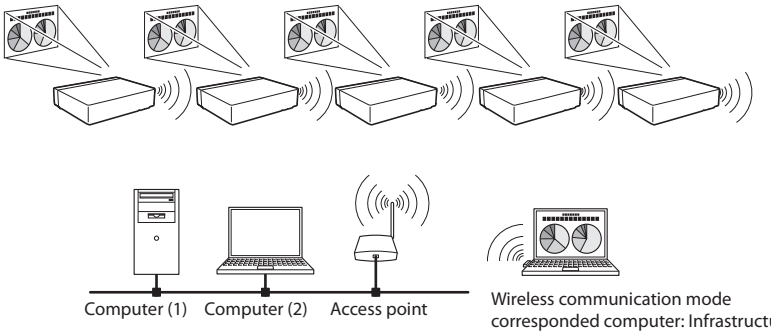


LAN connection modes

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

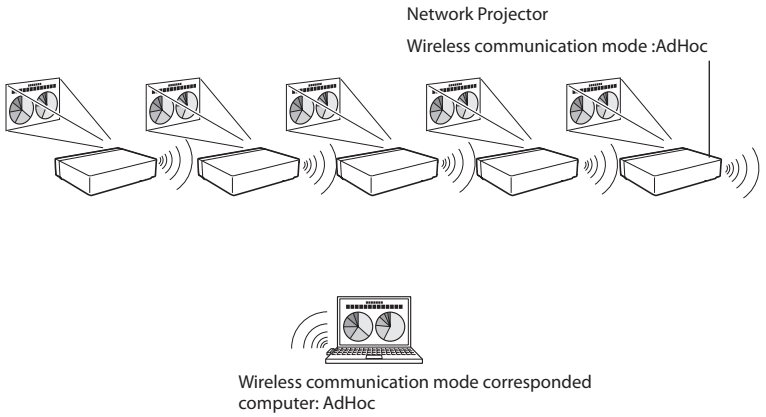
■ Wireless LAN, Infrastructure Communication Mode

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.



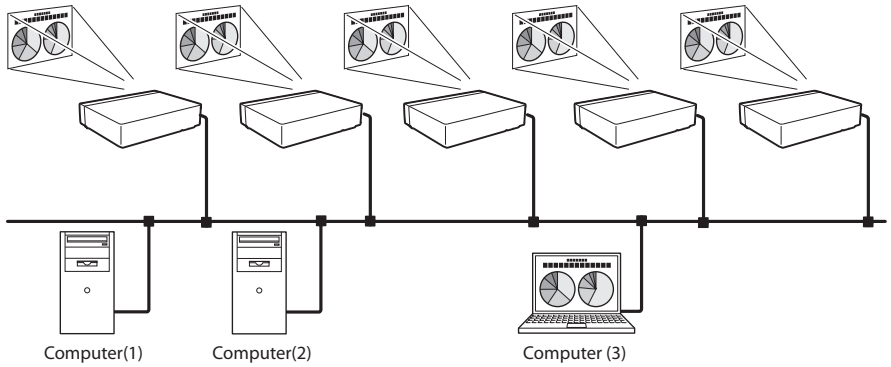
■ Wireless LAN, AdHoc Communication Mode

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 which is provided with the projector. To use the remote control, point to the projector. You do not need to connect the USB cable to operate the computer mouse.

(For details about the remote control operation, refer to the owner's manual of the projector.)

English

Chapter 2

2. Setup procedures

This chapter describes how to install the Network Capture 4 software and how to set up the networks.

English

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" (p.25–31).

Wireless LAN..... Refer to "5. Wireless LAN Configurations" (p.33–42).

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" (p.43–62).

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" (p.63-84)

- ➔ "Projector Power status and check" (p.64)
- ➔ "Controls" (p.66)
- ➔ "PC adjustment" (p.70)
- ➔ "Setting up the projector" (p.71)
- ➔ "Timer setting" (p.74)
- ➔ "Projector information" (p.77)
- ➔ "Multi-control" (p.79)

■ Project an image on the computer ➔ "8. Network capture functions" (p.85-108)

- ➔ "Use of real time capture" (p.89)
- ➔ "Use of rnetwork communication" (p.94)
- ➔ "Moderator function" (p.103)

■ Project an image on a network server ➔ "9. Network viewer functions" (p.109-126)

- ➔ "Create the image files" (p.110).
- ➔ "Create the programe files" (p.115).
- ➔ "Project the image with network viewer function" (p.120)

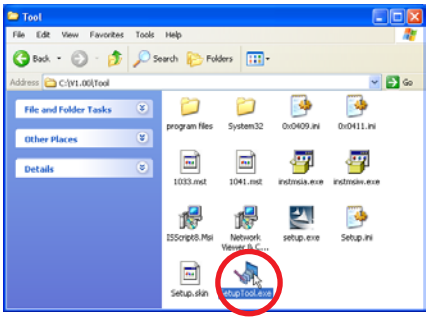
Installing the software

It is required to install the software into your computer to use the Network Capture function . Please install the software as follows.

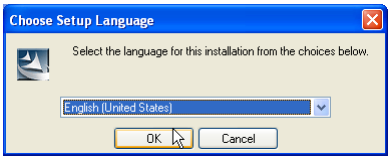
Note: To install the software into the computer with Windows 2000, Windows XP or Windows Vista, you should logon as administrator. Before installation, make sure that the other applications are closed, otherwise proper installation cannot be made.

Network Viewer & Capture 4 installation

1 Set the supplied Network Viewer & Capture 4 CD-ROM into the CD-ROM drive of your computer. Double click **SetupTool.exe** icon in the "Tool" folder in the CD-ROM.



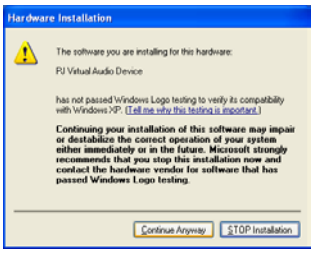
2 Select "English [United States]" from the pull-down menu on the "Choose Setup Language" window and click **OK** button to start installing and then follow the installation wizards.



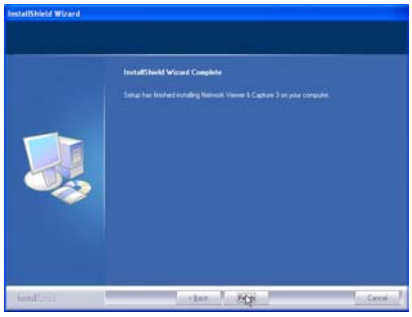
English

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 4:***

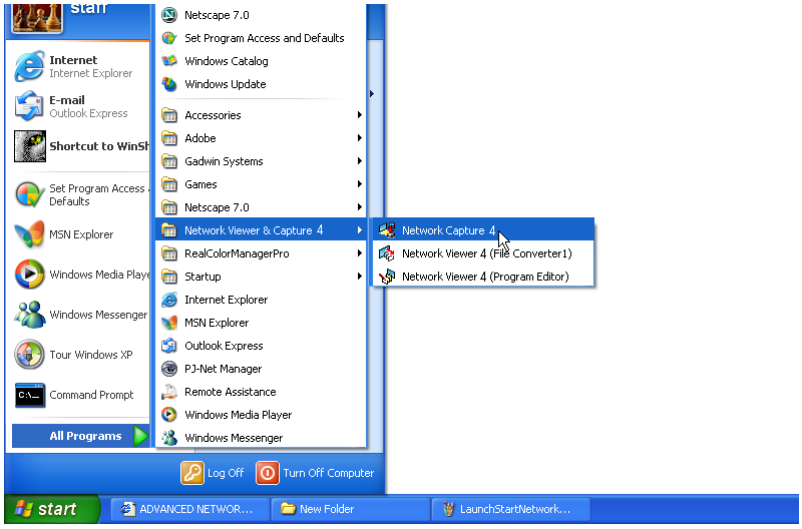
Captures the displayed image and the sound of the computer and serves them to the projector via the network.

● ***Network Viewer 4 (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 4 (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.



English

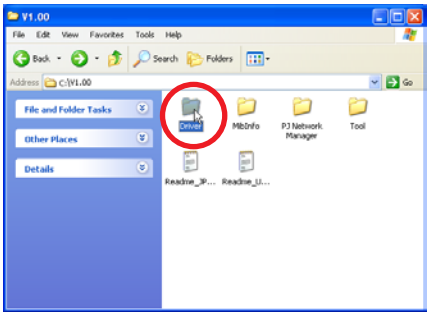
* To uninstall these software, use "Add/Remove Program" from the control panel.

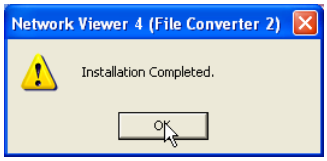
*1 This product supports the JPEG image format. This file is needed to convert to the optimized JPEG file by using the File Converter 1 software previously. Refer to the item "Creating the available data [Network Viewer 4]"(☞p.110) about data converting for the projection.

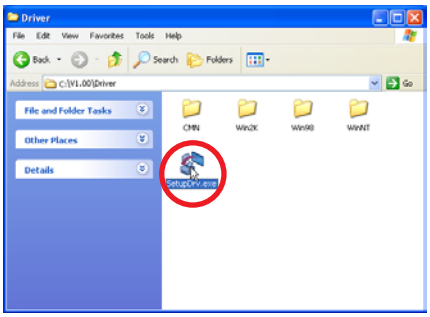
File Converter 2 installation

1 Set the supplied Network Viewer & Capture 4 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.





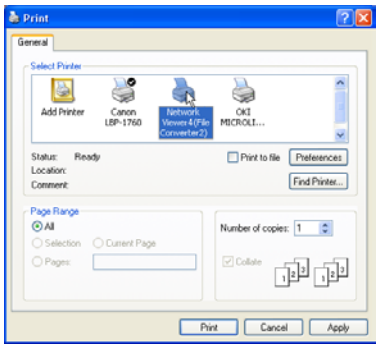


Installed software and places

Network Viewer 4 (File Converter 2) is installed in the "Printers and Faxes" folder in the "Control Panel".

● ***Network Viewer 4 (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 4 (File Converter 2), just delete the "Network Viewer 4(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.

English

Network connection standby display

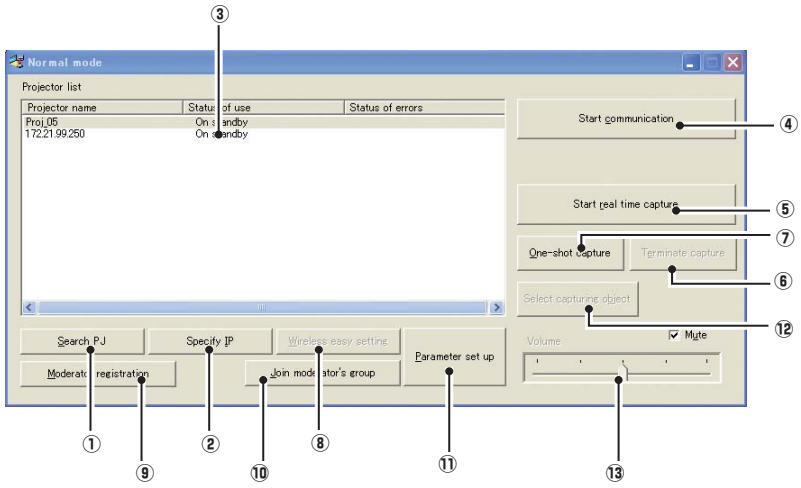
Turn on the projector and select either "Wired" or "Wireless" from the input menu of the projector. The "Please wait..." message will be displayed on the screen. After short time, the network connection standby display screen will appear as below. While the "Please wait..." message is shown, you cannot operate the projector.

Network Connection Standby Display

Network Capture 4 window

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

Select "All Programs" from the start menu --> Network Viewer & Capture 4" --> "Network Capture 4", 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, and then, the "Search specified IP address" window appears, and enter the IP address directly to specify the projector.

③ 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, the web browser gets activated and the projector setup screen will be displayed.

Note on Windows Vista
When you use the Network Capture 4 software with Windows Vista, the warning dialog "User account control" will appear. In that case, click **Allow** button to use it.

English

④ Start communication button
Enter the Communication mode, and then , the capture edit window starts. The selected projector shows the capture edit window.

⑤ 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.

⑥ Terminate capture button
Terminate the real time capture and the One-shot capture.

⑦ One-shot capture button
Copy and capture (project) the computer screen without modification. After the execution of One-shot capture, the application window disappears.

⑧ Wireless easy setting 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.39). To restore the easy setting, press the Wireless easy setting button.

⑨ Moderator registration button
Register a computer user as a moderator.

⑩ 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.

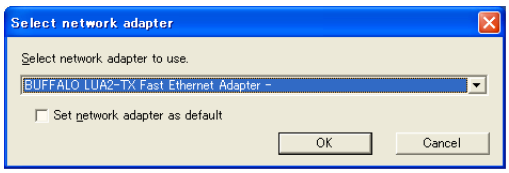
⑪ Parameter setup button
Activate the parameter setup window, and execute the connections setting, the image setting, and the moderator's function setting. For detail, refer to "Parameter set up" (p.88).

⑫ 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.88).

⑬ 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.

Using the multiple network adaptors

When your computer provides multiple network adaptors, the network adaptor selecting window will appear each time the Network Capture 4 software starts. Select a network adaptor and check the "Select a network adaptor as default" and the click OK. To change the setting, refer to the item "Parameter set up" (p.88).



Chapter 4

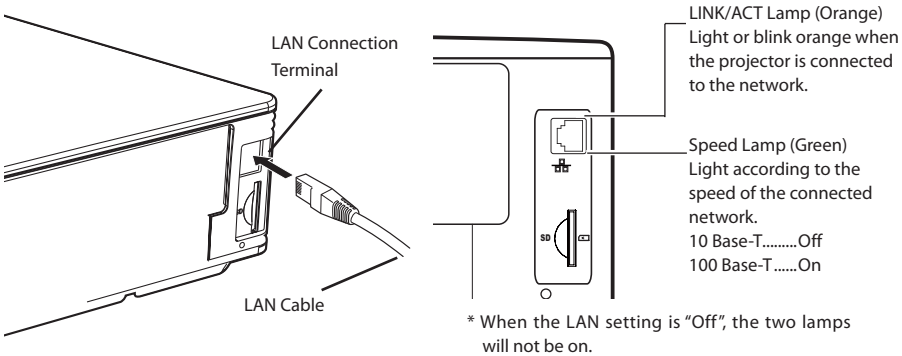
4. Wired LAN configurations

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 LAN cable to the LAN connection terminal of the projector.



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

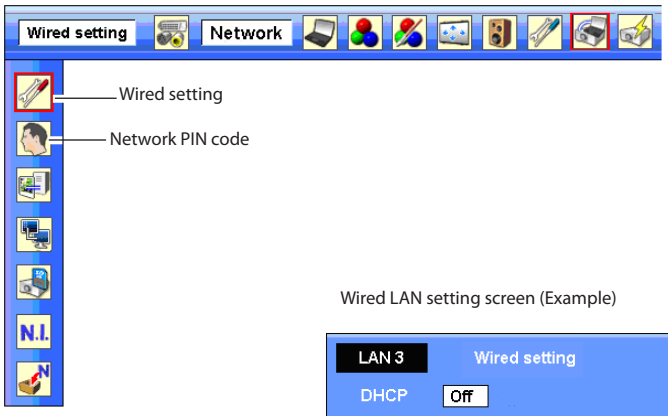
Network environment settings

Set the Wired LAN network through the projector menu.
Detailed network settings will be made with browser. Refer to "6. Basic setting and operation" (p43-62).
First, complete the settings described in this chapter before performing steps in "6. basic setting and operation."

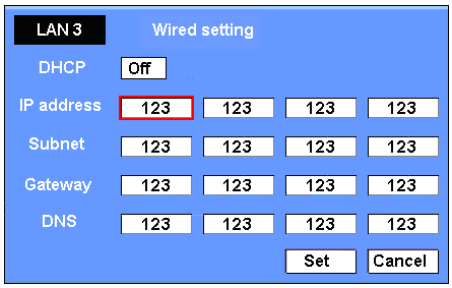
Setting Procedure

1. Turn on the projector and select "Wired" from the input menu of the projector.
   The projector's Link Lamp will be on and the Access Lamp will start to blink. If the "Wired setting" is "Off", it will not blink. Follow step 2 and 3 to blink the lamp.
2. Select "Wired Setting" in the projector menu, and press **SELECT** button.
   Select similar LAN environment among LAN1, 2 and 3 with the Point ◀ ▶ buttons. (LAN1, 2, and 3 are the factory default setting environments. You can select three different environment among setting LAN1–3. For each setting, refer to the chart on page 31.)
   When selecting "Off" in the "Wired setting", the LAN connection will be cut off. Use the function when disconnecting the projector from the network.
3. Press the Point button then 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.

4. Press **SELECT** button.
   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.
   Adjust the figures with the Point ▲▼ buttons and move among the items with the Point ◀▶ buttons.
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.30). In such cases that the LAN cannot be connected, see this screen.



Wired LAN setting screen (Example)



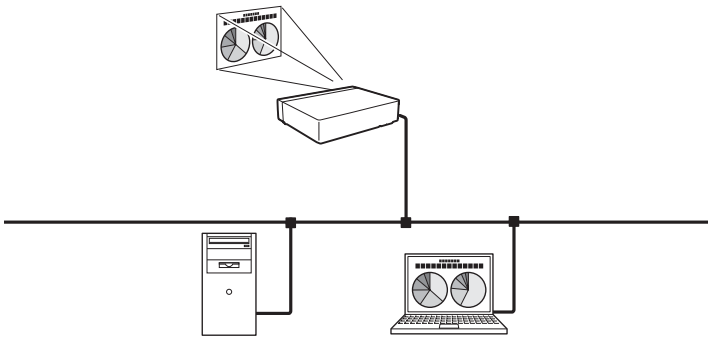
Item	Description
DHCP	Sets DHCP function On or Off. When you setup the network setting manually, select "Off". When it set On, IP address, Subnet, Gateway and DNS are automatically set according to your network environment *1.
IP address	Sets IP address of the projector
Subnet	Sets Subnet mask. Normally sets 255.255.255.0
Gateway*2	Sets IP address of the default gateway (Router)
DNS*2	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 finction (p.85) or moderator function (p.103) is to be executing, the menus "Network capture", "Network viewer" and "Memory viewer" are displayed in gray.

English

Confirming the operation

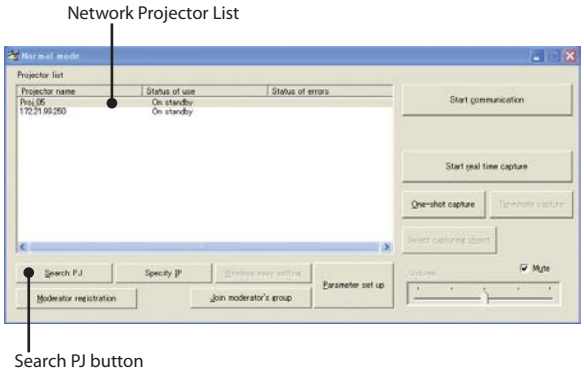
Confirm that the projector has connected to the LAN properly.



1. Activate "Network Capture 4" 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.

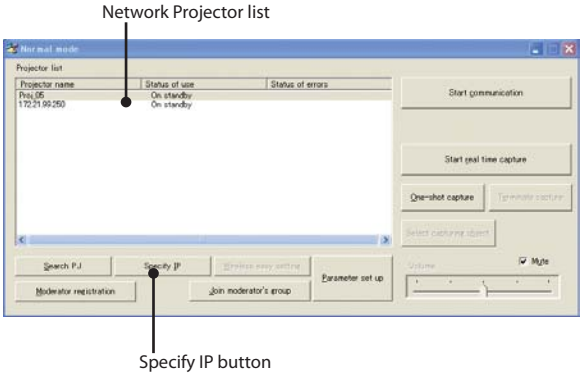
✳ If the projector is named, the name will be displayed. The name can be set with the following procedures in "6. Basic setting and operation" ➔ "Initial setting" (p48) . If the projector is not named, IP address of the projector will be displayed.

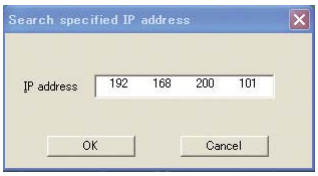
Network Capture screen



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. Enter the IP address of projecor and Click **OK**. Then, the projector will be added on the Network Projector List of the application window.





"Search specified IP address" window

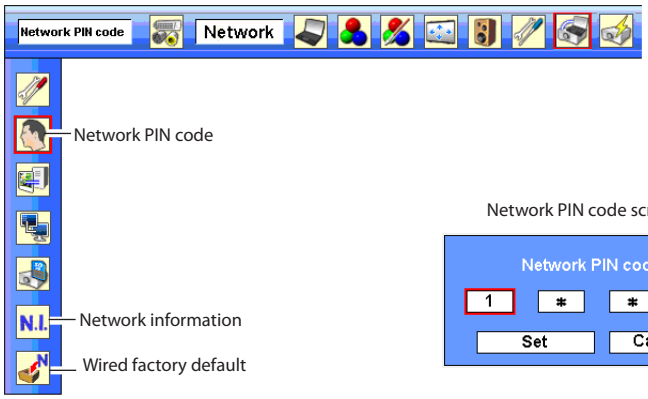
English

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 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. You can also change the Network PIN code. See "6. Basic setting and operation" ➔ "Initial setting" ➔ "Network PIN code setting" (p49).



Network information (See the menu above.)

Select Network information from the projector menu and press **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.)

Network information	
MAIN PROGRAM:	V1.000
MAC ADDRESS:	08007B650056
IP ADDRESS:	172.21.95.202

Wired factory default (See the menu above.)

Select "Wired factory default" from the projector menu and press **SELECT** button. All the LAN settings will go back to the factory default settings. For details, refer to "Wired LAN factory default settings" (p.31).

Wired LAN factory default settings

Parameter	SELECTED LAN		
	LAN1	LAN2	LAN3
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
IP CONFIGURATION	MANUAL	DHCP	MANUAL

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.

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

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.51). Complete the settings described in this chapter before performing the steps in "6. Basic setting and operation."

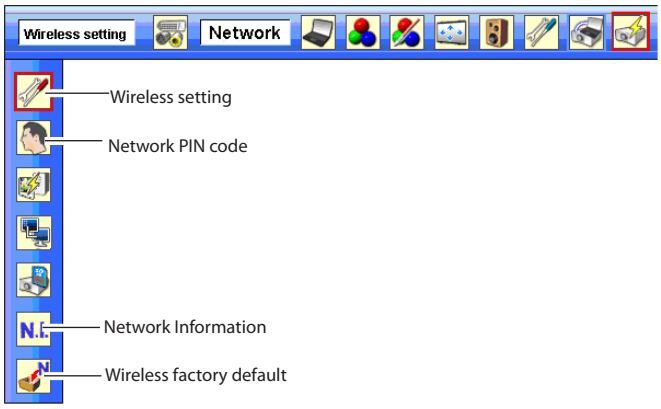
Setting procedures

With Easy wireless setting function, you can make Wireless LAN settings easily without any complicating settings (p.39).

1. Turn on the projector and select "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. Refer to "3. Names and Functions of the Operation Screen" (p.21).
2. Select "Wireless Setting" from the projector menu and press **SELECT** button.
   Select similar environment between LAN 4 and LAN 5 with the Point ◀▶ buttons. (LAN 4, LAN 5, and SIMPLE* are factory default settings. Select similar environment to the installation location. For each settings, refer to "Wireless LAN factory default setting" on page 42.)

✳ "SIMPLE" mode is used for simple setting without complicated LAN setting procedures to connect to the Wireless LAN. See "Easy wireless setting" (p.39) for details.

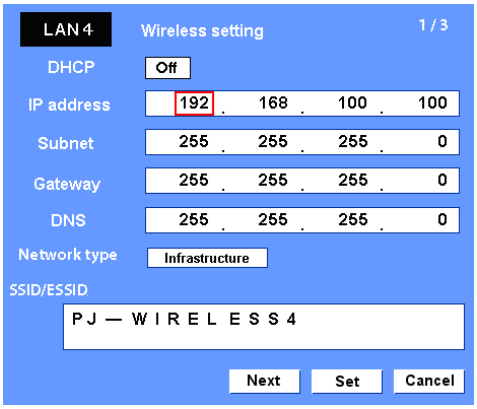
3. Press the Point button then the "Please wait..." message will appear and switching operation will start. Switching will take a while and after completing the operation the message will disappear. During the switching period, the projector cannot be operated.



4. Press **SELECT** button. 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.
   Adjust the figures with the Point ▲▼ buttons and move among the items with the Point ◀▶ buttons. 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.40).

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.28).

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*2	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.

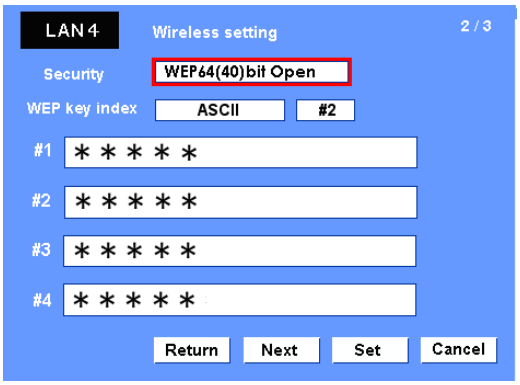
*1 Set "On" only when the DHCP server is available on your network environment.
*2 Set [255.255.255.255] if the network does not provide the gateway (router).
*3 Set [255.255.255.255] if you do not use the function E-Mail alert.
* While the network communication finction (p.85) or moderator function (p.103) is to be executing, the menus "Network capture", "Network viewer" and "Memory viewer" are displayed in gray.

English

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.33-42), 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.53) 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; use the Point ▲▼ buttons to adjust settings.

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.

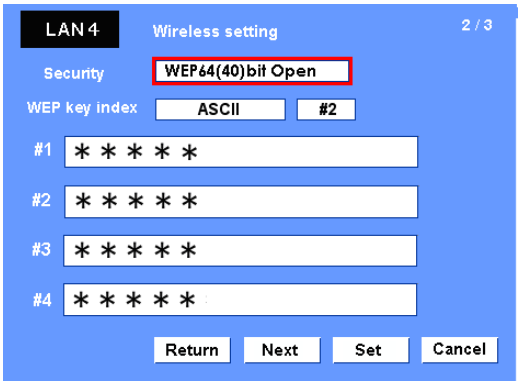
ASCII key characters : Space - 0 to 9 A to Z a to z ! " # $ % & ' ( ) * + , . / : ; < = > ? @ [¥] ^ _ ` { | } ~
HEX key characters : 0 to 9 a to f

Use of security type "WEP"

1. Use the Point ▲▼ buttons to select "WEP" security type.
2. Select "WEP 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).
   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)bt HEX	26 characters

WEP configuration screen



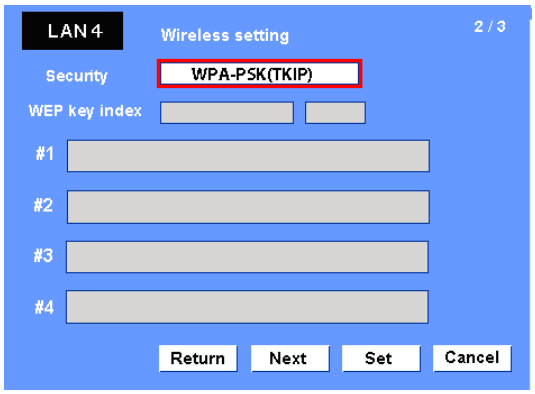
3. Use the Point ◀▶ buttons to select the Type field of the WEP key number that corresponds to the one you selected above and press **SELECT** button. The WEP key entry screen appears. In the WEP key entry field, all characters are displayed in "✻". Use the Point ▲▼ buttons to select a character; use 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.

English

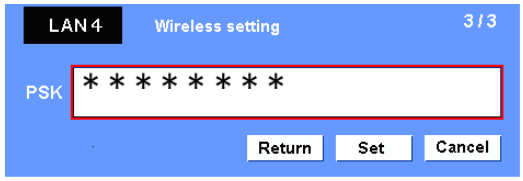
Use of security type "WPA-PSK", "PWA2-PSK"

1. Use the Point ▲▼ buttons to select "WPA-PSK" security type. WEP security setting fields are grayed out.

WPA-PSK configuration screen



2. Select "Next" and press **SELECT** button. The PSK key confirmation screen appears.



3. 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.

Available PSK key characters

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

4. Use the Point ◀▶ buttons to select "Set" and press **SELECT** button to return to the PSK confirmation screen. Select "Set" and press **SELECT** button to complete the PSK key setting and the Wireless setting screen appears. Select "Set" and press **SELECT** button to complete the network configuration.

* Security "WPA-PSK" and "PWA2-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

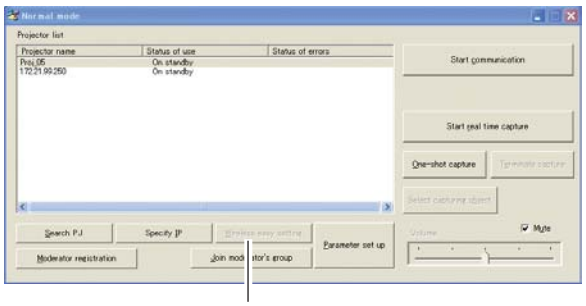
With this setting, you do not need any complicated LAN setting procedures.
The network type will be AdHoc mode.

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

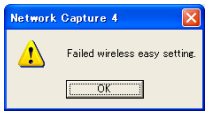
1. Turn on the projector and select "Wireless" from the input menu of the projector.
2. Select "Wireless Setting" from the projector menu and press **SELECT** button.
3. Select "SIMPLE" with the Point ◀ ▶ buttons. Press the Point button then the "Please wait..." message will appear and switching operation 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 4" 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.28) for the confirmation procedures.
   If the network setup is not succeeded, the error screen will appear.

Setting screen



Wireless easy setting button

Error Screen



English

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.42).
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 4".
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.30).

Network information

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

Wireless Information (Example)

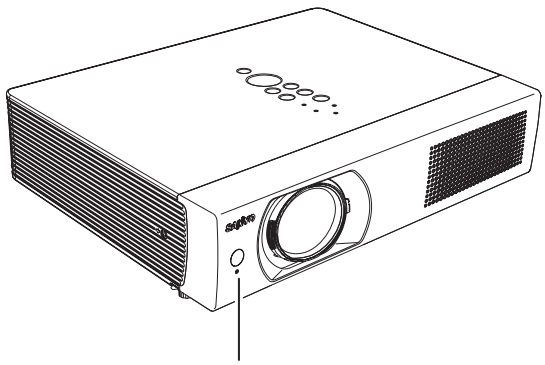
Network information	
MAIN PROGRAM:	V1.000
MAC ADDRESS:	08007B650056
IP ADDRESS:	169.254.53.0
WIRELESS MODE:	802.11b
NETWORK TYPE:	AdHoc
CHANNEL:	11
SSID/ESSID:	WIRELESS

Wireless factory default

Select "Wireless factory default" from the projector menu (p.34) and press **SELECT** button. All the LAN settings will go back to the factory default settings. For details, refer to "Wireless LAN factory default settings" (p.42).

WIRELESS indicator display

When the wireless LAN configuration is set up correctly and the wireless communication is established with the access-point or the computer in the network, the WIRELESS indicator on the front panel lights up. While the projector scans the equipment in the network, the WIRELESS indicator blinks.



Wireless LAN factory default settings

Factory default settings for LAN4, LAN5, and SIMPLE as follows.

Setting Items	Selected LAN		
	LAN4	LAN5	SIMPLE
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
IP CONFIGURATION	MANUAL	DHCP	MANUAL
WIRELESS CHANNEL	11	11	11
NETWORK TYPE	802.11b AdHoc	INFRASTRUCTURE	802.11b AdHoc
WIRELESS SSID/ESSID (SSID/ESSID)	PJ-WIRELESS	ANY	PJ-WIRELESS
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

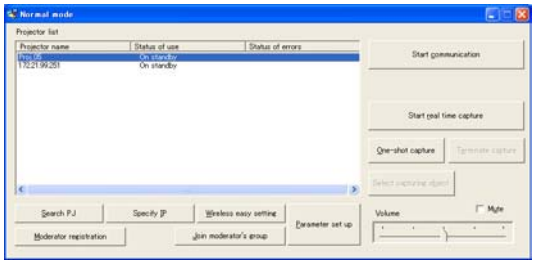
Describes basic operation and settings below by using the web browser.

- 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.

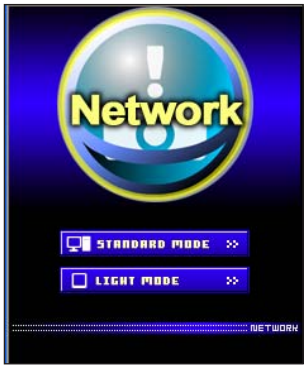
Starting up the Browser

1. Turn on the projector.
2. Start up the Network Capture 4. The Network Capture 4 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.45).



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.

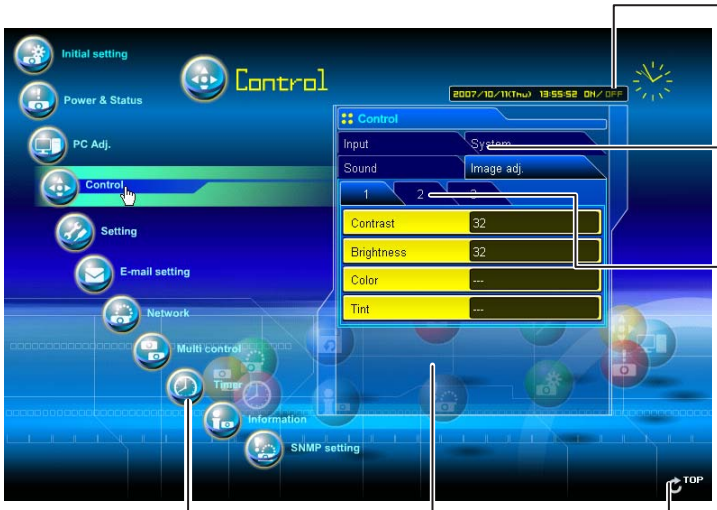
* The entered User Name must be "user" and it can not be changed.

[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*



Clock display
Display on or off by clicking text ON or OFF

Sub menu tab
Switches the sub menu tab.

Page numbers
Switches the pages by clicking the number's tab.

Main menu
For selection of control and setting items of the projector.

Setting page
Displays the control and setting items according to the selected menu.

Returns to Display Mode selection page (☞ p.44)

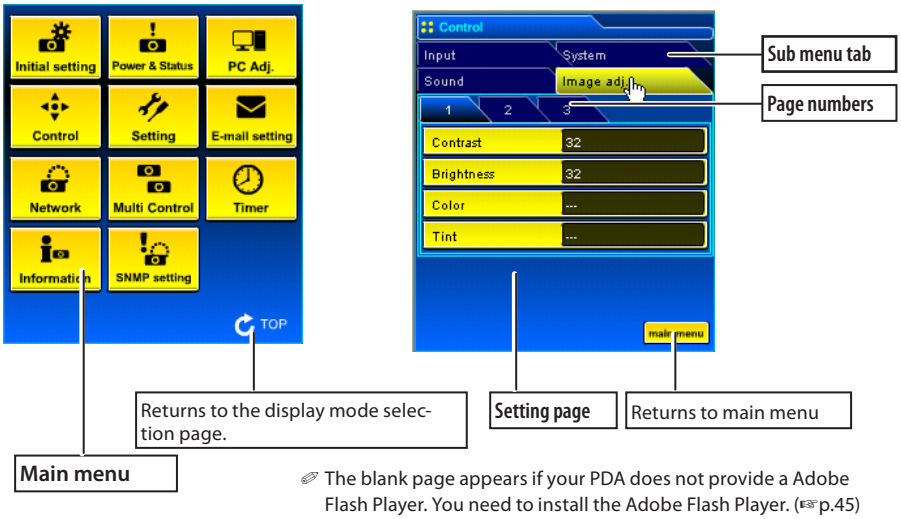
* To change the screen language, use the initial setting menu (p.48)

✎ **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

English

2 Main setting page in the Light Mode display



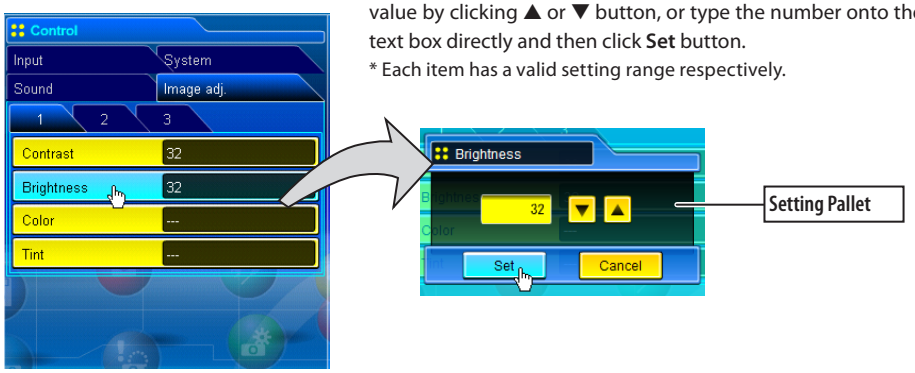
✎ The blank page appears if your PDA does not provide a Adobe Flash Player. You need to install the Adobe Flash Player. (☞p.45)

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 setting pallet appears after clicking the item. Change the value by clicking ▲ or ▼ button, or type the number onto the text box directly and then click **Set** button.

* Each item has a valid setting range respectively.

✎ 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

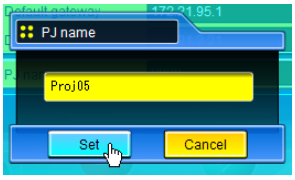
Text box setting

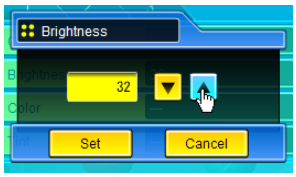
Enter the number or text and then click **Set** button.

or

Change a value with ▲ or ▼ button and then click **Set** button.

The value changes quickly when ▲ or ▼ button is kept pressing.



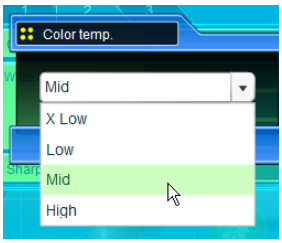


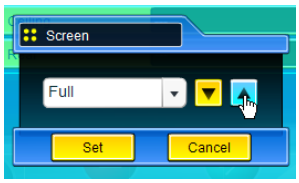
Pull-down menu setting

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

or

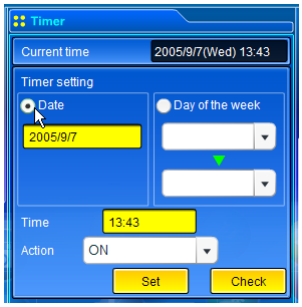
Select an item by clicking ▲ or ▼ button.





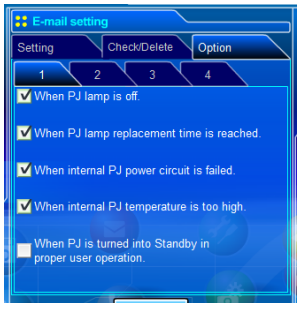
Radio button setting

Select an item by selecting a radio button



Check box setting

Select items by ticking on check boxes.



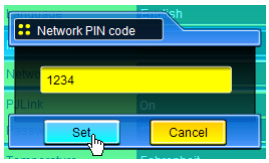
English

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.

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 (☞p.30, p.40)
PJLink	Switches PJLink password authentication on or off.
Password	Password for PJLink function

Network PIN code setting

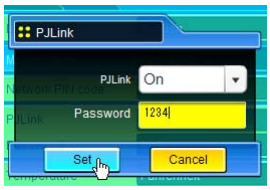


This is to set the Network PIN code to restrict the access from an unauthorized person through the network.
Enter a 4-digit number as the Network PIN code onto the text box and click **Set** button.
The projector's network part begins restarting and it takes about 20 seconds. Close (Quit) the web browser 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.30, p.40).

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 (JBMIA). 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.
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

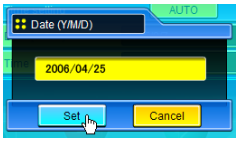
Date and time setting

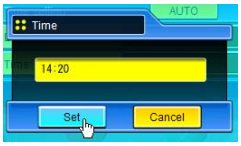
NTP is abbreviated expressions of Network Time Protocol. It is a protocol to acquire the exact current time via the network. This projector acquires the current time from the NTP server and update the time in the network module. After setting the NTP address, the projector acquires the time per 24 hours. If the projector fails acquiring the time from the NTP server, the projector try to acquire the time every 1 hour until it succeeds.
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.72)), or the network configuration is reset, or the input mode "Wired" or "Wireless" is turned. 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.

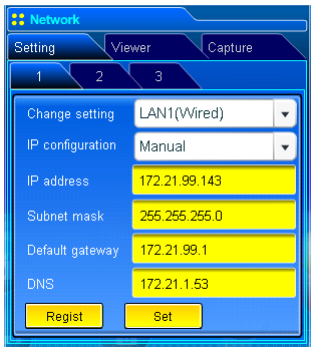
Setting of LAN

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.

English



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 **Regist** 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.

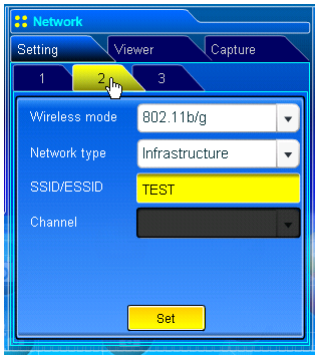
   When you use LAN4(wireless) or LAN5(Wireless), the setting items of page [2] and [3] are activated and you can setup Wireless LAN setting and Security setting. See the item "Wireless LAN Setting and Security Setting" for further setting.

Configuring wireless LAN setting and security setting

Configure the wireless LAN setting and security setting for LAN4 and LAN5.

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.

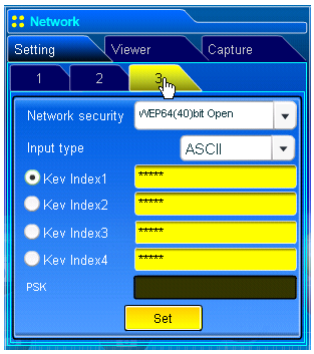


Item	Description
Wireless Mode	Select the Communication standard 802.11b or 802.11b/g
Network Type	Select either "Infrastructure" or "AdHoc". When selecting the "AdHoc", the security "WPA-PSK" and "WPA2-PSK" mode are not available.
SSID/ESSID	Set the SSID/ESSID. (up to ASCII 32 characters) SSID/ESSID 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.

English

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 ...	Sets the type of encryption. Following types are available. WEP64(40)bit Open WEP64(40)bit Share WEP128(104)bit Open WEP128(104)bit Share WPA-PSK(TKIP) WPA2-PSK(AES)
Input type.....	ASCII or HEX. See item "Notes for entering characters"
Key index1 - 4.....	Enter keys of encryption. The used number of character changes as the table below according to the type of WEP encryption and input type.

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

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.
Depending on computers and access points, you may be allowed to select only one WEP key. In that case, use key index1.

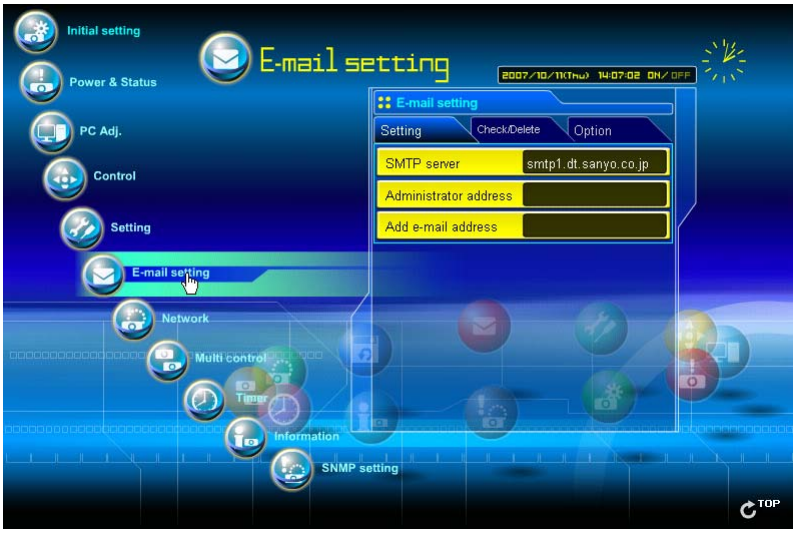
PSK..... Available when the "WPA-PSK(TKIP)" or "WPA2-PSK(AES)" is selected.
The PSK key must be no fewer than 8, nor more than 63 digits with ASCII code, and 64 digits with Hex code.

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

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*1	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.51)

- 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.

English

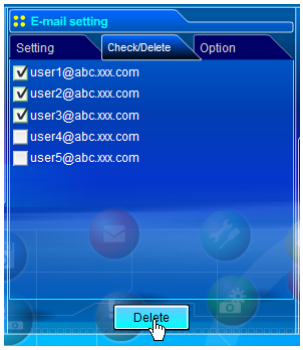
2 Registering and deleting E-mail addresses

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.

Check / Delete

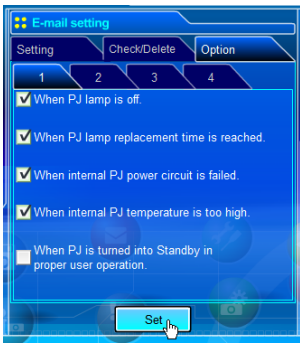


3 Option selection for sending alert mail

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.

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

✐ 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.109). For further information of the error, refer to item "Auto Display setting and control page [3]"(☞p.124).

✐ The length of message should be less than 255 characters.

✐ 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 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.64) 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,	ALL	OK
FAN,	5V	OK
MCI,	3.3V	NG

Error information

✎ The projector lamp was turned off, because the projector power circuit failed.
Unplug the projector from AC outlet and contact a qualified service personnel for service with the error information.

English

● *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.

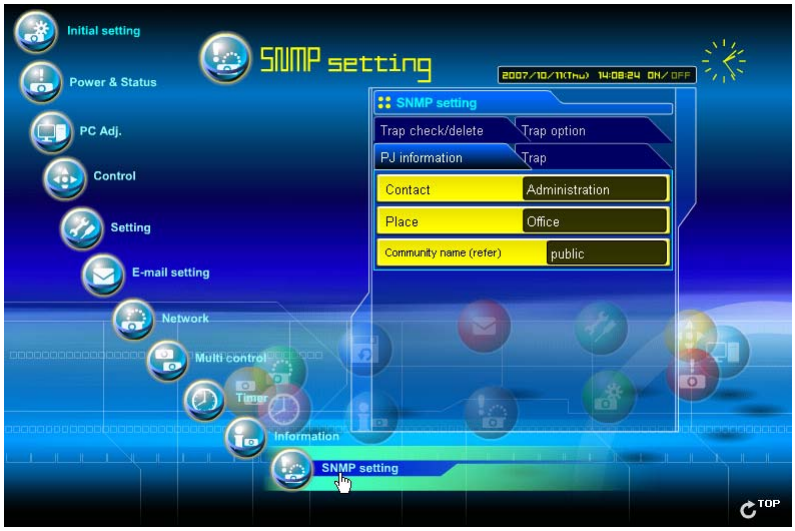
*The accumulated lamp use time reaches 1800 hours.
Prepare for the lamp replacement.

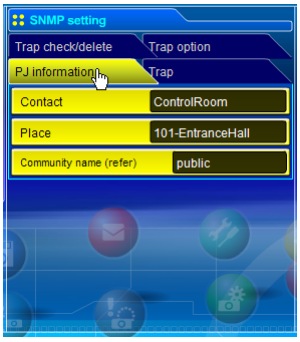
Discretional messages

✐ 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.



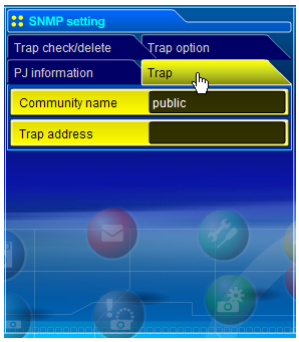


PJ information

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".

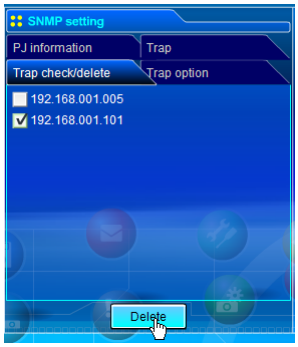
✐ The SNMP agent provided with this product is based upon MIB-2 defined by RFC1213. For private MIB information, refer to file "Mibinfo/XUPjNet.mib" in the CD-ROM.

English



Trap

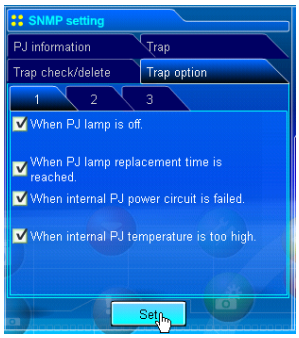
Item	Description
Community name	Enter community name to send "Trap". Default name is "public".
Trap address	Enter IP address of the SNMP manager computer to receive "Trap". Up to 10 address can be registered. ✐ Up to 10 trap addresses can be registered.



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 lamp Corres. Value reaches [ ] hours.
❏ When Power management function turns PJ lamp off.

[3]----------

❏ When the signal is interrupted.
❏ When Auto Play is failed.
❏ When accumulated filter use time reaches [ ] hours.

English

✐ 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.109). For further information of the error, refer to item "Auto Display setting and control page [3]"((☞p.123).

Chapter 7

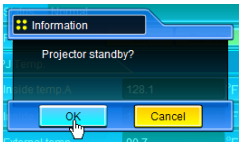
7. Controlling the projector

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

English

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 control.....Controls the projector power by clicking the "ON" or "Standby" button.

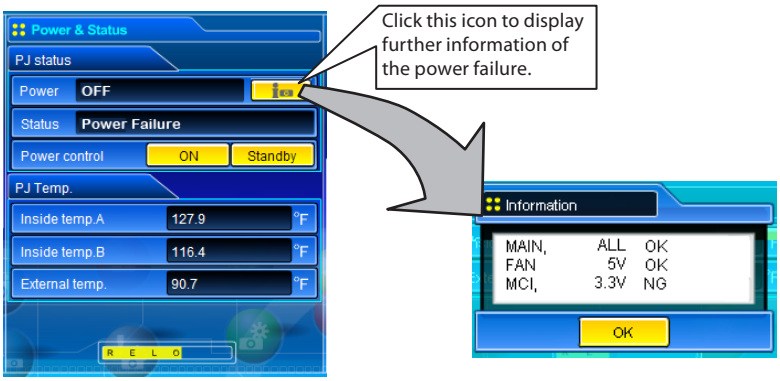
PJ temp.

Inside temp.A .....Displays the surrounding temperature of lamp in the projector.
Inside temp.B .....Displays the surrounding temperature of panel in the projector.
External temp. .....Displays the surrounding temperature of the intake vent.
⚠ .....The warning icon will appear if the temperature exceeds a specified value. Check if there is no object to obstruct the airflow around the intake or exhaust vent. It might be airfilter clogged. Replace the airfilter with new one.
* The temperature unit can be set either Centigrade or Fahrenheit in the item "Initial Setting". (☞p.50)

✎ The projector cannot be turned on while the projector is 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
Lamp failure	Lamp failure is occurring
Abnormal Temperature	The temperature of the projector became too high
Cooling down after abnormal Temp.	Projector detects abnormal temp. and is cooling down itself.
Standby after Abnormal Temp.	Projector detects abnormal temp. and is set into standby mode.
Power failure	Power failure has occurred inside the projector. Projector is turned off. Unplug the AC cord and contact a qualified service personnel for service. If the power failure occurs on the projector, "Power failure" is indicated on the status column and the information icon appears on the power column as shown below. Click this icon to display further information of the power failure.



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, unlock the security on the projector using with the projector's menu control.

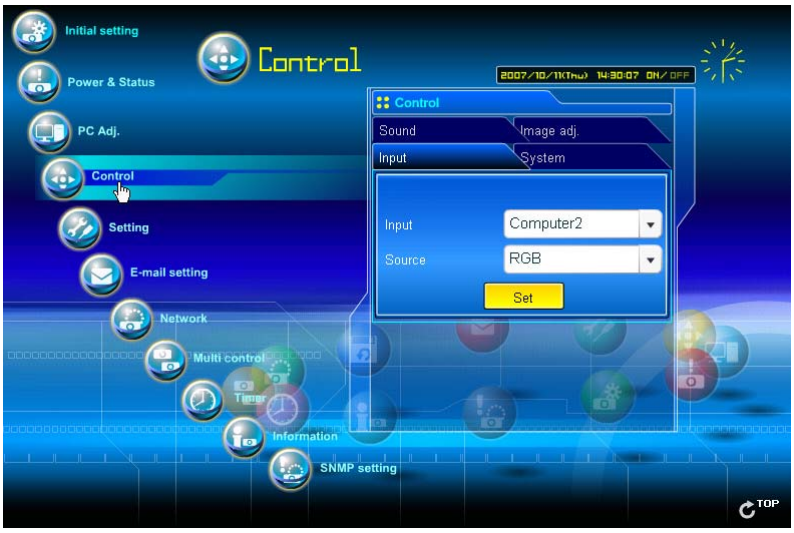
Caution about turning on/off the projector via the networks
When turning on/off the projector via the networks, preset the projector as follows:
1. Select "Setting" from the Projector menu.
2. Select "Standby mode" from the Setting menu and set it as "Normal".
If you set this function as Normal, the 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.

English

Controls

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	
Input	Selects input mode of the projector.	
Source	Selects signal source of the input.	
	Computer1 :	RGB(PC analog) RGB(PC digital) RGB(AV HDCP)
	Computer2 :	RGB Component RGB(Scart)
	Video :	Auto Video S-video
	Network:	Wired Wireless

✎ 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 standby, only the timer on the setting menu is available; others are not available.

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	It 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 listed.

Available selection at the RGB(PC digital) input

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

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 RGB(AV HDCP) input

Item	Description
AUTO	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 Component input

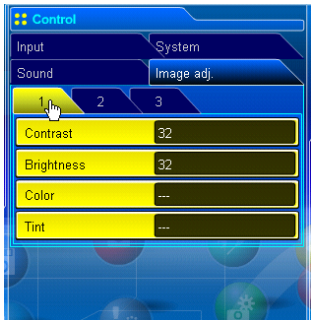
Item	Description
AUTO	It automatically switches to the proper scanning system of the input signal. * The selectable scanning systems are 480i, 575i, 480p, 575p, 720p, 1035i and 1080i.

English

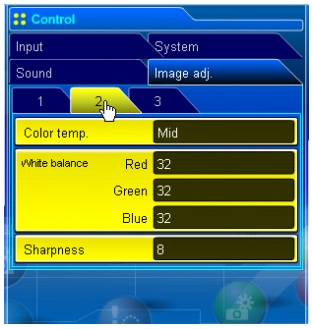
✐ If the modes (Mode1 to Mode5) stored in the item "PC Adjustment" (☞ p.70) are available, they are also listed together with the above mode.

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.

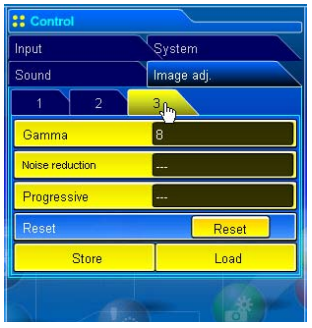


Item	Description
Contrast	Adjusts picture contrast
Brightness	Adjusts picture brightness
Color	Adjusts picture color saturation
Tint	Adjusts picture hue

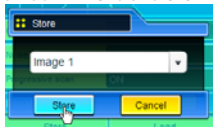


Item	Description
Color Temp.	Sets a color temperature mode.
White Balance Red, Green, Blue	Adjusts each white balance respectively.
Sharpness	Adjusts picture sharpness.

* When the value of the white balance is changed, the color temp. indicates "Adj."



Item	Description
Gamma	Adjusts brightness of darker part of the picture.
Noise reduction	Switches noise reduction mode
Progressive scan	Switches progressive mode
Reset	Resets the Image adjustment to previous levels.
Store	Stores the Image adjustment values. Select an item [Image 1 - Image 4] 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
Dynamic	✔	✔
Standard	✔	✔
Real	*	✔
Cinema	✔	*
Blackboard(Green)	✔	✔
Image 1 - 4	✔	✔

✎ The mark "✔" indicates the available image mode in the selected input source. The error message appears when the disabled image mode indicated with "*" is selected.

Sound

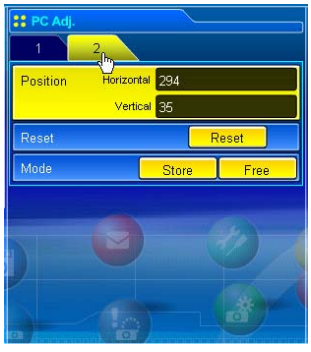
This function is to adjust the sound of the projector. The values in the text box represent the current control value or status.

Item	Description
Volume	Adjusts the sound volume from the speakers.
Mute	Suppresses the sound.

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.

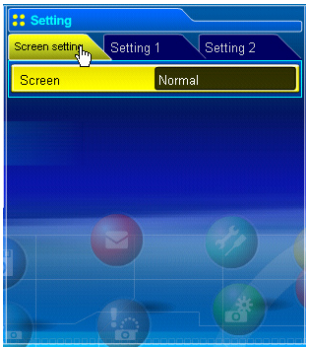
Item	Description
Current mode	Displays a current mode like VGA, SVGA, XGA, SXGA, UXGA, WXGA, etc. or MODE1 - MODE5 are the customized mode created by using the "Mode Store" function described below.
Auto PC adj.	Performs automatic adjustment.
Fine sync.	Performs Fine Sync adjustment.
Total dots	Adjust 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.



Item	Description
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 - Mode5] from the pull-down menu.
Mode Free	Clear the PC adjustment values. Select a mode no. [Mode1 - Mode5] 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], [Setting 1] or , [Setting 2] and then set up each setting.



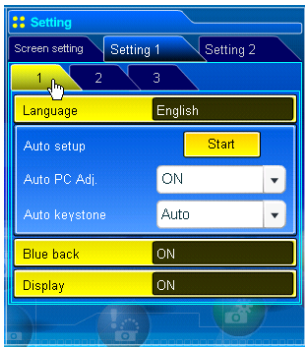
Item	Description
Screen	Switches the screen mode. There may not be available mode depending on the input mode as shown in the table below.

Input source

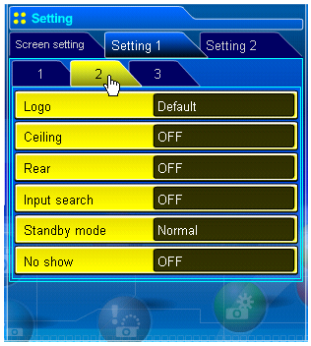
Screen mode	Video	Computer
Normal	✔	✔
True	*	✔
Full	*	✔
Zoom	✔	✔
Natural wide	✔	✔
Custom	✔	✔

✎ The mark "✔" indicates the available screen mode in the selected input source system. The error message appears when the disabled screen mode indicated with "*" is selected.

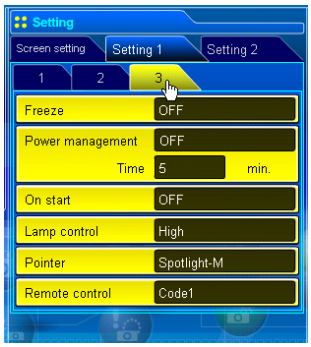
English



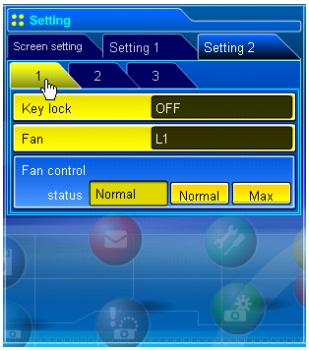
Item	Description
Language	Sets the language display of projector's on-screen display menu.
Auto setup	Executes the Auto PC Adj, and Auto Keystone function below according to the each setting after clicking **Start** button.
Auto PC Adj.	Sets Auto PC Adjustment mode.
Auto Keystone	Sets Auto Keystone mode.
Blue back	Sets the blue screen background when no signal input.
Display	Switches on or off the on-screen menu display on the screen. Countdown off Displays image during the starting up.



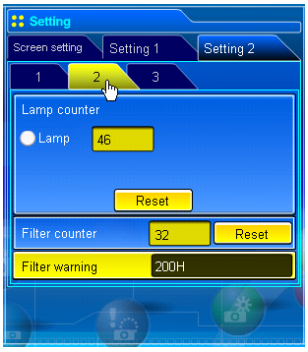
Item	Description
Logo	Sets the logo display on the screen during the startup.
Ceiling	Sets the image top/bottom and left/right reversed.
Rear	Sets the image left/right reversed.
Input search	Sets the auto-input signal detection mode.
Standby mode	Sets the network function enable or disable in the standby mode. Normal.....Enable Eco .....Disable
No show	Sets the black out image temporarily.



Item	Description
Freeze	Sets the image to freeze mode.
Power management	Sets into the selected power management mode if the input signal is interrupted and no control key is pressed for the specified period of time. *The specified time can be set 1 to 30 min.
On start	Sets the power-on mode when the AC cord is connected to the outlet.
Lamp control	Selects lamp control mode.
Pointer	Sets the pointer form.
Remote control	Sets the remote control code.



Item	Description
Key lock	Sets the prohibition of controls either Projector or Remote control.
Fan	Sets the cooling options after turning off. L1 Normal cooling L2 Silent cooling
Fan control	Sets the fan control speed.
Status	Indicates the current fan mode.

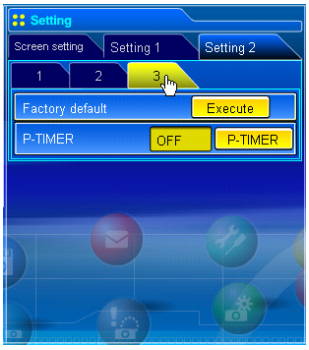


Item	Description
Lamp counter	Displays the lamp use time (Corresponding value) . Reset the time after lamp replaced.

Lamp counter resetting

1. Select a Lamp radio button and then click **Reset** button.
2. Click **OK** button to execute the reset.

Filter counter	Displays the filter use time. Reset the time after filter replaced.
Filter warning	Sets the time to indicate the filter replacement message on the screen.

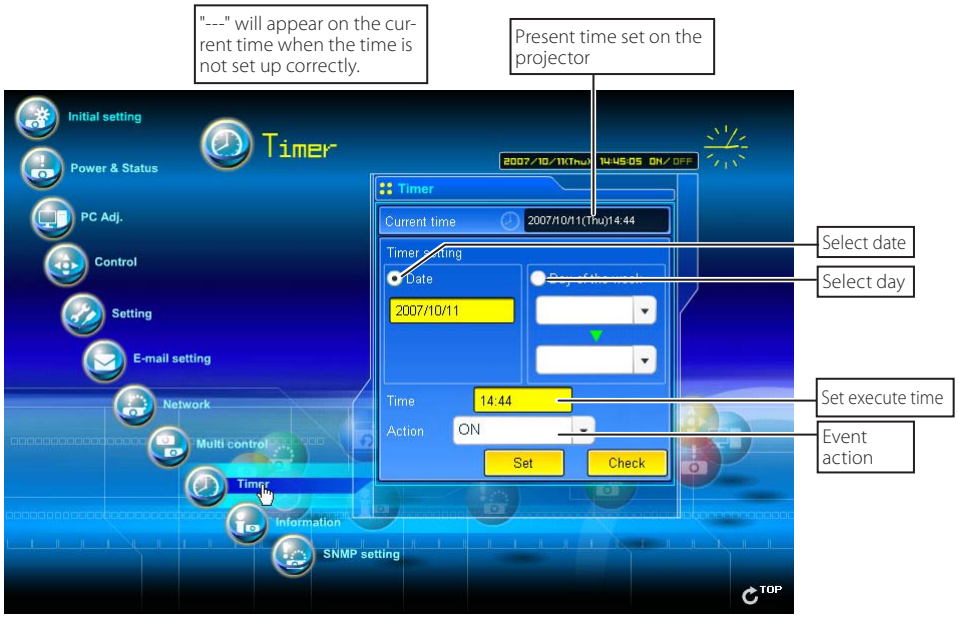


Item	Description
Factory default	Sets all of the projector control items to the factory default setting except the following items. Lamp Corres. Value, PJ time, Filter time.
P-TIMER	Switches the P-TIMER display. ON ..... Starts P-TIMER indication STOP ..... Stops P-TIMER counting OFF ..... Stops P-TIMER indication

English

Timer setting

This page is to set the timer to turn the projector off or on at a programmed day/date and time. Follow the steps below for setting.
Click **Timer** on the main menu.



How to set the timer

1 Set a day or date

To set the timer event at the same time everyday or every week,

Select **day** entry with radio button and then select desired day from the pull-down menu button. The selectable days are as follows:

- Same time everyday **- Every week (days from Monday to Sunday)**

To set the timer event on specified date,

select **date** entry with radio button and then type the date with (Year/Month/Date) format.

Ex.: Type [2007/12/20] if you specify [December 20, 2007].

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.72)), or the network configuration is reset, or the input mode "Wired" or "Wireless" is turned. 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.

2 Set an execute time

Type the time with (Hour:Minute) and 24 hours format.
Ex.: Type [18:25] if you specify [PM 6 o'clock and 25 minutes].

3 Select an event action

Select an event action from the pull-down menu.

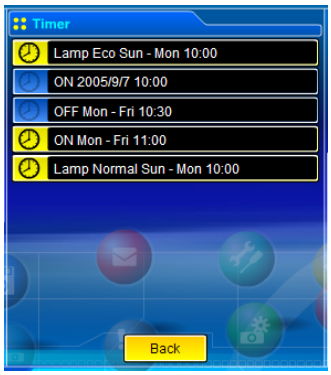
Event	Action
ON	Turns on the projector
OFF	Turns off the projector
Lamp Auto	Changes lamp mode to "Auto"
Lamp High	Changes lamp mode to "High"
Lamp Normal	Changes lamp mode to "Normal"
Lamp Eco	Changes lamp mode to "Eco"

4 Register an event

Click **Set** button to register the set timer event. Repeat steps 1 to 4 for another timer event setting.

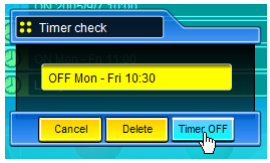
Check the timer events

To check the set timer events, click **Check** button. The timer events are listed. The event with blue background color represents the timer-OFF event.



Change the event mode

On the event list appearing by clicking **Check** button, click on the event you want to delete, disable or enable. Click **Cancel**, **Delete**, **Timer ON** or **Timer OFF** button on the popup pallet.

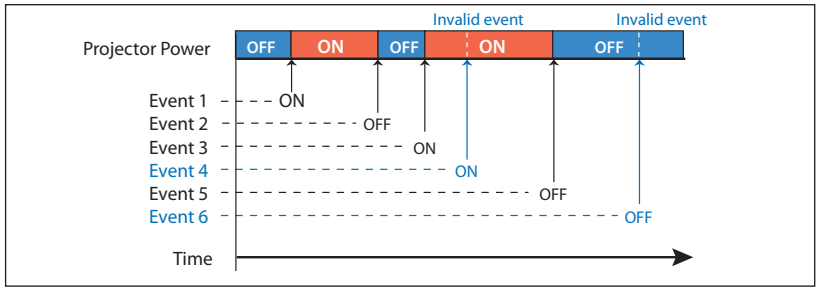


Button	Operation
Cancel	Cancels the setting
Delete	Deletes the timer event
Timer OFF	Disable the timer event temporarily
Timer ON	Enable the timer event

English

Notes on timer setting

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



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

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

Projector information

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

Items	Description
Input	Displays selected input and source.
System	Displays selected signal system.
Signal	Input signal status
Screen	Displays screen mode.
Lamp status	Displays lamp status with an animation. Refer to the table on the next page.
Security	Displays the security (PIN code lock) status

English

Indication of the lamp status

Icon display/background	Status
White-Yellow/Blue	Lamp on (Normal)
White-Yellow/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 the lamp condition)
Red/Red with X	Lamp failure (Lamp failure and lamp is being used over a specified use time, replace the lamp immediately)

Items	Description
PJ time	Displays the accumulated use time of the projector.
Lamp Corres. Value	Displays the use time (Corresponding value) of the lamp.
Filter time	Displays the use time of the filter.
Timer	Displays the timer setting status. ON Timer has been set. OFF No timer setting.

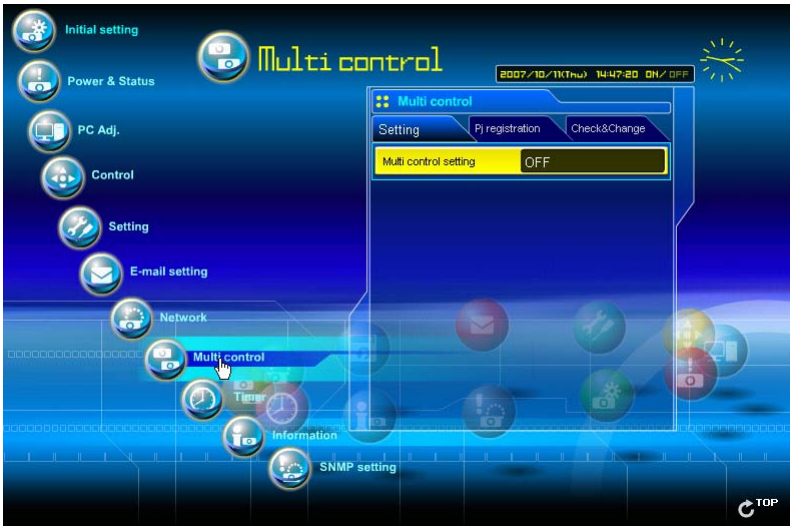
Multi-control

Controlling and setting the multi-projectors

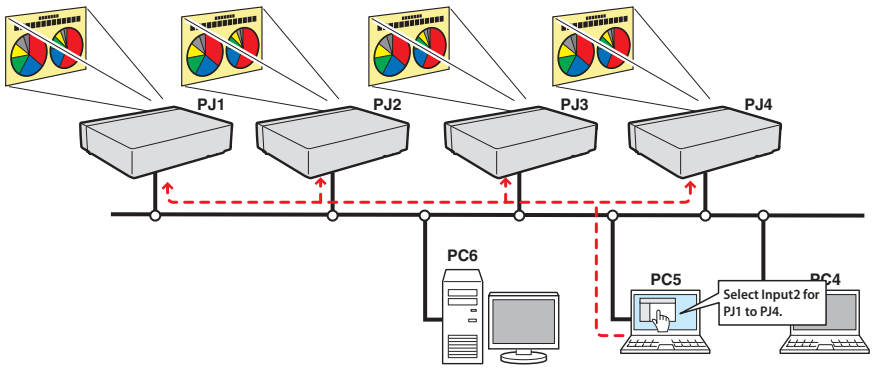
When you install multiple projectors in the network, you can control and set up them together. Click **Multi Control** on the main menu to display the control page.

Note:

To control the multiple projectors, each projector must be set the same Network PIN code.



Example of multi control



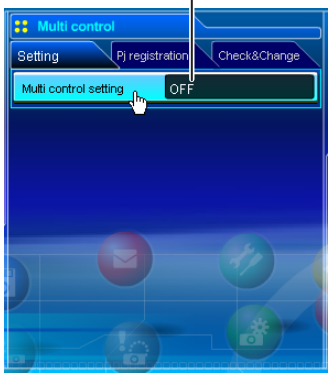
English

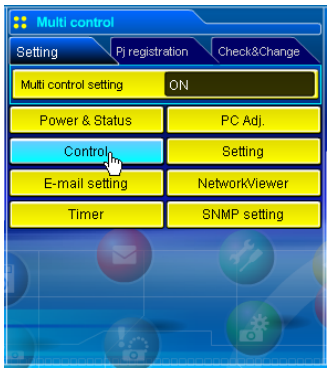
Start/stop the multi control

To start or stop controlling the multi-projectors, click Multi control setting menu and select ON or OFF.

Multi control setting

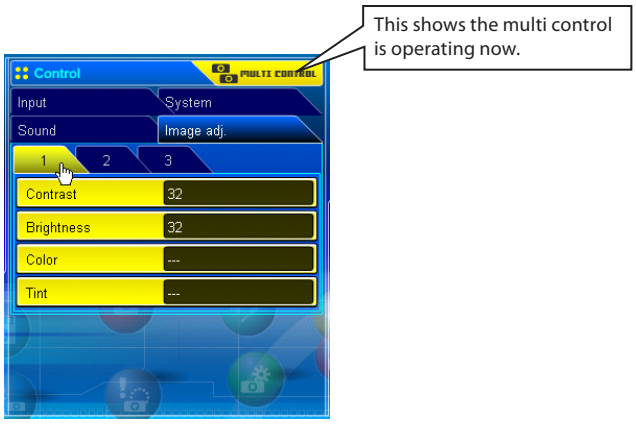
OFF.....Stops multi control function
ON.....Starts multi control function. The multi control menu will appear when ON is set. These items of menu are linked to the main menu.





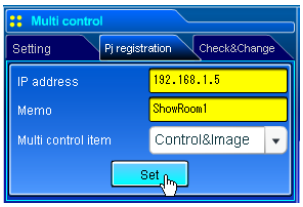
The multi controllable menus are "Power & Status", "PC adjustment", "Control", "Setting", "E-mail setting", "Timer", "SNMP setting" and "Network Viewer". Click each menu and perform setting and adjustment.

✎ The word "MULTI CONTROL" appears on the each control page while the multi control is operating.



Register the projector

To use the multi control function, register the IP address of the projector you intend to control. Click **PJ registration** sub menu tab and set the IP address, Memo and Multi control item, then click **Set** button.



Items **Description**

IP address .....Enter IP address of the projector to control
Memo.....Enter projector name or installed location etc.
Multi control item
Control ..... Controlling the projector
Both control ..... Controlling and displaying images
Visual control ..... Displaying the images

Confirmation of registered projector

To check the registered information, click **Check & Change** sub menu tab. The registered information of the projector is listed as the below.
* The word "none" is displayed if the "Memo" function is used.

* When you click on a listed IP address, the login page for the selected projector will be displayed with a new window.

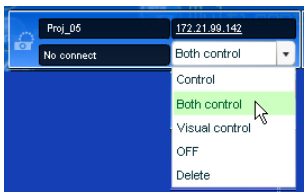
Click here to close the sub menu Check & Change.

10 projectors can be registered per page and up to 100 sets can be registered for the multi-control.

English

Change the mode of the registered projector

To change the mode of the registered projector, select a mode with the pull-down menu button under the IP address of the target projector and then click **Set** button.

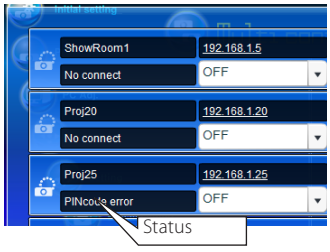


Mode	Operation
Control	Controlling the projector
Both control	Controlling and displaying images
Visual control	Displaying the images
OFF	Excluding from the multi-control
Delete	Deleting from the multi-control

* The multi control item is not changed during using the network viewer function. It is not available with the light mode.

Status

If some of the registered projectors are disabled by some reasons (such as disconnecting the power source, disconnecting the LAN cable, disconnecting from the network), control changes will continue to be effective for the projectors that are still active. At the same time, the deactivated projectors are excluded from the multi-control. The status of the registered projectors are indicated under the projector name. See the table below for status indications.

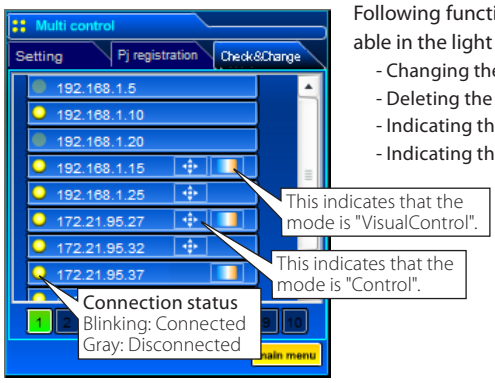


Status	Description
(blank)	The projector is connected to the network correctly
No connect	The projector may not be connected to the network. Please check the connection and network configuration of this projector.
PIN code error	The PIN code is incorrect. The PIN code for the multi-controlled projectors must be the same. Change the PIN code of this projector to the common PIN code. (p.30, p.40)
File Error	Not displaying the images. Check if this projector is using the Network Capture function or Network Viewer function individually, or in the standby mode.

* The projector updates the status at the time when the multi-control function is executed.

- If the multi-controlled projector is in the standby mode, items of "PC adj.", "Control" and "Setting" cannot be operated.
- Cannot register, delete or change the multi-control setting during using the network viewer function.
- It is recommended that a specified projector should be chosen for setting as a master when you use this multi-control function. The control for the multi-controlled projectors will become too complicated operation if this function is used for each projector.
- If the registered projector is not connected to the network, it will take a while to complete the multi-control operation because of waiting for the response from each registered projector.
- There are some disabled items in the multi-control function for the light mode.

Check & Change page in the light mode



(Check & Change page in the light mode)

Following functions in the "Check & Change" page are not available in the light mode.

- Changing the control mode.
- Deleting the registered IP address
- Indicating the each status
- Indicating the each memo

Controlling all together

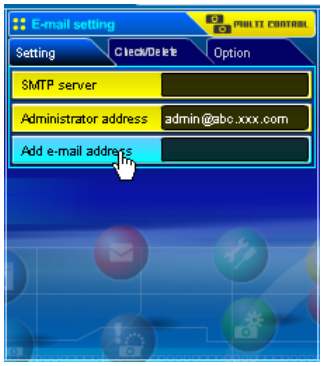
"Power & Status", "PC adjustment", "Control" and "Setting" can be controlled all together. Set "ON" the multi control setting and adjust controls of each menu. The setting value is applied to the registered projectors sequentially .

✎ This is effective only if the multi control item of the registered projector i set to either "Both control" or "Control".

Setting all together

"E-mail setting", "SNMP setting" and "Timer" can be set all together. Set "ON" the multi control setting and items of each menu. The setting value is applied to the registered projectors sequentially.

✎ This is effective only if the multi control item of the registered projector is set to either "Both control" or "Control".



English

Viewer auto setting all together

"Viewer auto display" can be set all together. Set "ON" the multi control setting and select [3] **Auto display** from **Viewer** sub menu (selected by 'Multi-control' - "Network Viewer" menu). Set the display time periods and repeat times for the auto image display. After clicking **Start** button, the registered projectors start playing back the auto image display in sequential.

- For further information of the Auto display, see "Using the network viewer function". (☞p.120)
- This is effective only if the multi control item of the registered projector is set to either "Both control" or "Visual control".

Chapter 8

8. Network capture functions

Network Capture is a function to display the screen image and reproduce the sound of the computer via the network.

- Real Time Capture
- Network Communication
- Moderator Function

About Network Capture function

The Network Capture is a function to display the screen image and reproduce the sound of the computer which has a Network Capture 4 software by the projector through the network. This function has 3 kinds of mode as below.

- Real Time Capture (☞p.89)

A function to display the screen image and reproduce the sound of the computer by the projector through the network in real time.

- Network Communication (☞p.94)

This mode is to communicate by sharing the capture image of a computer with multiple computers and a projector. User can draw the text and figure on the captured image by using a drawing tool.

- Moderator Function (☞p.103)

The moderator can project the participants' computer screen through the projector in meetings or in classes.

✐ Up to 30 computers can be registered.

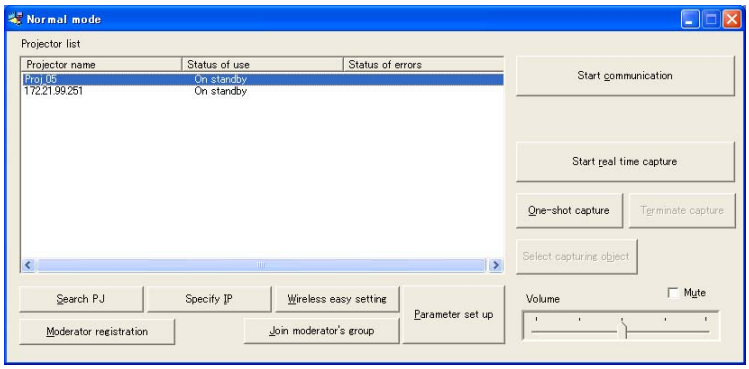
✐ The Network Capture function cannot be used when the Network Viewer function is used. The Real Time Capture, Network Communication, Moderator function and Memory Viewer function cannot be used at the same time.

Start up the Network Capture 4

To start up the Network Capture 4, click "Network Capture 4" from "Start" - "All Programs" - "Network Viewer & Capture 4" menu. The application window will appear and search the projectors in the network and list them on the projector list.

If any projector is not listed, check followings and then search again by pressing **PJ Search** button.

- Is the projector turning on and connected to the network?
- Is the network setting of projector and computer configuring correct?
- Is the same capture port no. used among computer and projectors?



Commands on the task bar

When the **Network Viewer & Capture 4** icon on the task bar is clicked, the popup menu will appear. It provides according to the operating modes as shown in the table below.

Network Capture activating

- Parameter set up...
- Window show..
- Version information..
- Shut down

Menu during Real time capturing

One-shot executing

- Start realtime capture
- One-shot capture
- Terminate capture
- Window show..
- Version information..
- Shut down

Real time capture executing

- One-shot capture
- Terminate capture
- Window show..
- Version information..
- Shut down

Menu during Network Communication

Communication executing (Main PC)

- Capture transfer
- Terminate Communication
- Version information..
- Shut down

Communication executing (Sub PC)

- Start editing
- Terminate Communication
- Version information..
- Shut down

Communication executing (Sub PC)

- Capture transfer
- End editing
- Version information..
- Shut down

Menu during Moderator function

One-shot executing

- Start realtime capture
- One-shot capture
- Terminate capture
- Window show..
- Version information..
- Shut down

Real time capture executing

- One-shot capture
- Terminate capture
- Window show..
- Version information..
- Shut down

Joining in Moderator's group (client PC)

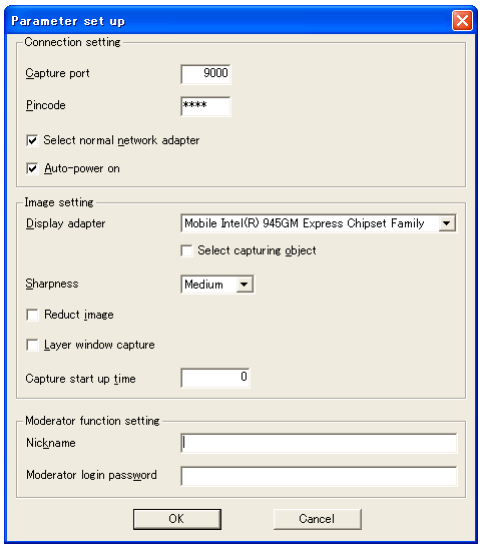
- Leave moderator's group
- Version information..
- Shut down

Items	Description
Start r / Terminate capture	Starts / Terminates the real time capturing. (☞p.89) The screen image of the computer is projected on the screen in real time.
One-shot	Transfers the one-shot screen image of the computer.
Capture transfer	Transfers the screen image of the computer to the projector. The captured image edit window appears on the computer screen.
Select capture object*	Sets to display the capture window selection dialog. * This menu will appear when "Select capturing object" is checked on the parameter setting. (p.88)
Terminate communication	Terminates the network communication.
Start editing	Acquires the screen image in the network communication and displays it on the editing window on the computer.
Terminate editing	Terminates the editing window of the network communication.
Parameter set up	Sets the communication parameter between the computer and projector. For further information, see item "Parameter set up" below.
Window show	Displays the application window on the screen.
Version information	Displays the version of this software.
Shut down	Quits the Network Capture 4 application.

Parameter set up

Click **Parameter set** up button and setup the parameters on the Parameter setup window.

Items	Description
Connection setting	
Capture port	Sets the capture port no. on the projector. Default is 9000.
Pincode	Sets the Network PIN code on the projector.
❑ Select normal network adapter	Uses default setting. Default is un-checked.
❑ Auto-power on	The projector turns on and projects the computer's captured image on the screen automatically when the network capture is executed while the projector is in the standby.
Image setting	
Display adapter	Provided for the use of a computer with multiple network adaptors installed. Select a network adaptor which has the computer's screen to project with the projector and execute the network capture function. This is useful function when you make the presentation.
Select capturing object	Check if you want to select an individual window on the computer screen. This is useful function when you open the multiple windows on the computer's screen. When you execute the capturing, the window selection dialog appears. Select a window name from the dialog window. The projected window size is automatically adjusted to fit the projector's screen size.
Sharpness	Select a capturing picture quality among "High, "Medium", "Low"
Reduct image	Check if the capturing image resolution is more than projector's panel resolution (WXGA),
Layer window capture	Check if layer window image capturing.
Capture start up time	Sets the delayed time from the capture start in second.
Moderator function setting	
Nickname	Sets moderator's nick name
Moderator login password	Sets Moderator's password



✐ To check the Capture Port number, see item "Control by the web browser" (☞ p.91). To check the PIN code, see item "Network PIN code setting" (☞ p.30, p.40).

✐ Specify the port number of TCP/IP. The default port setting is 9000. There are some reserved port numbers and also some applications may use their own port numbers. If one of those port numbers is used, the alert dialog window will appear and let you know that it is an invalid port number. In that case, use another port number.

✐ The reserved port numbers are http (80), ftp (21), telnet (23), (25), (110), etc. The port no. 4352, 10000, 10001 are reserved to control the projector through the LAN port.

Using the Real Time Capture

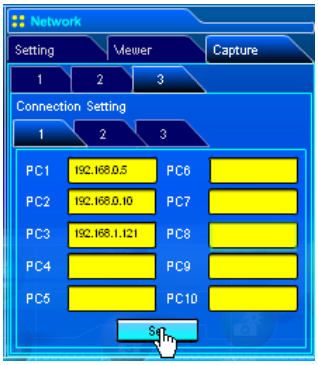
This is a function to project the screen image and reproduce the sound of the computer by the projector in real time. The captured image projected by the projector can be selected from the computer, web browser and the projector respectively.

Registering the computers

Up to 30 computers can be registered.

1 Access to the control page of the projector by using the web browser. From the **Network** menu, click **Capture** tab to display the setting page.

2 Switch to **Connection Setting** page by clicking the page number tab [3]. Enter the IP address of the computer to the PC number, and then click **Set** button. Click **Set** button to register the IP address for each page.

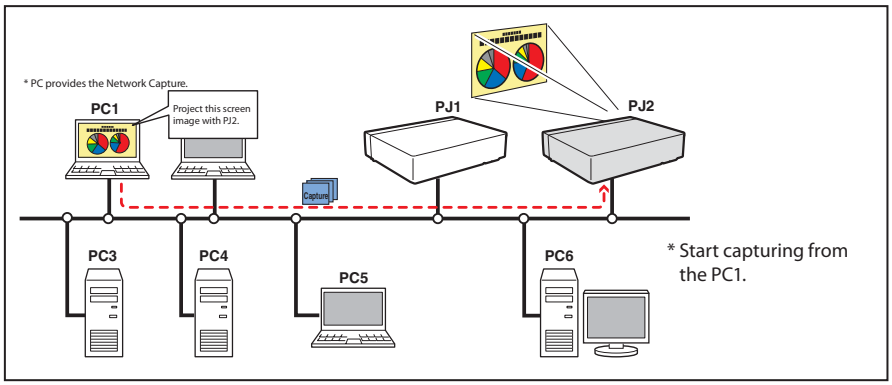


English

The registered computer enables to start capturing if only the Network Capture 4 is activated.

The transfer speed of the captured image using the Real Time Capture function is depending on the network environment and data volume of the image. It cannot be supported for movie pictures.

[1] Control by the computer



Select input mode to "Network" previously.

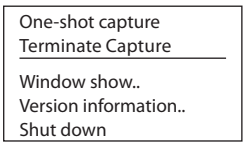
1 Start up Network Capture 4.

2 Select the projector(s) listed on the projector list on the application window and click **Start real time capture**. The application window will disappear and then the screen image of the computer will appear on the projected screen in real time.

* You can select multiple projectors (up to 5) on the projector list.

- To stop capturing, click **One-shot** on the popup menu appearing by clicking on the Network Capture 4 icon on the task bar. The captured image of the computer on the screen is frozen.
- To restart capturing, click **Capture start** on the popup menu.

3 To end capturing, click **End real time capture** on the popup menu appeared by clicking on the Network Capture 4 icon on the task bar.

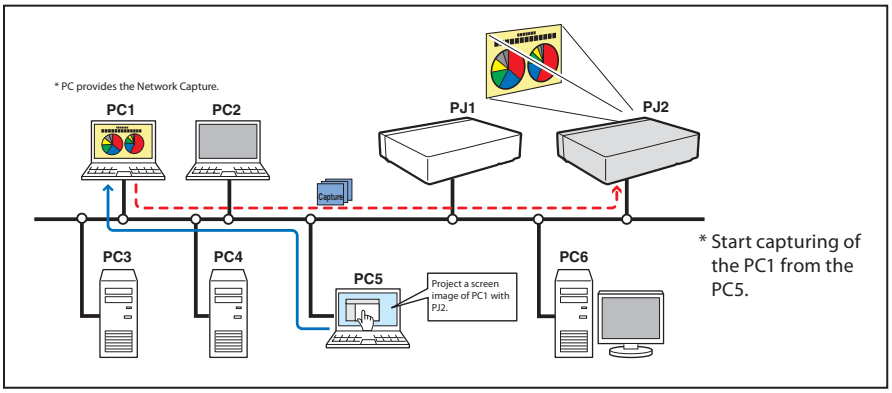


✐ When you capture the screen image of the movie player software with the real time capture function, the projector may not be able to reproduce the sound. In that case, start up the Network Capture 4 software first and then start up the movie player software.

✐ If the error message appears, check the item "Parameter set up" (☞ p.88).

✐ The sound output from the projector can be controlled with the volume slider and mute item on the application window of the Network Capture 4 software (☞ p.24, p.86).

[2] Control by the web browser



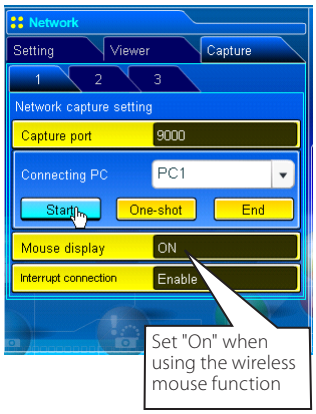
Select "Network" as input mode previously.

1 Access to the control page of the projector by using the web browser. From the **Network** menu, click **Capture** tab to display the setting page.

2 Select the computer number from the pull-down menu button of "Connecting PC" and click **Start** button. The screen image of the selected computer will appear on the projected screen in real time.

- To stop capturing, click **One-shot** button. The captured image of the computer on the screen is frozen.
- To restart capturing, click **Start** button.

3 To end capturing, click **End** button.

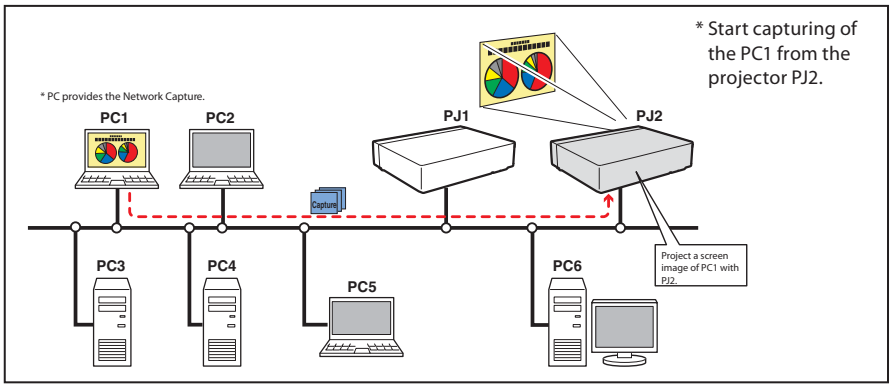


Item	Description
Interrupt connection.....	Set enable or disable the real time capturing connection from other computers during executing the real time capturing operation.

- The IP address of the connecting PC should be registered previously (☞ p.89).
- If the error message appears, check item "Parameter set up" (☞ p.88).
- To use the capture function from the web browser or projector, the Network Capture 4 on the captured computer must be activated.

English

[3] Control by the projector



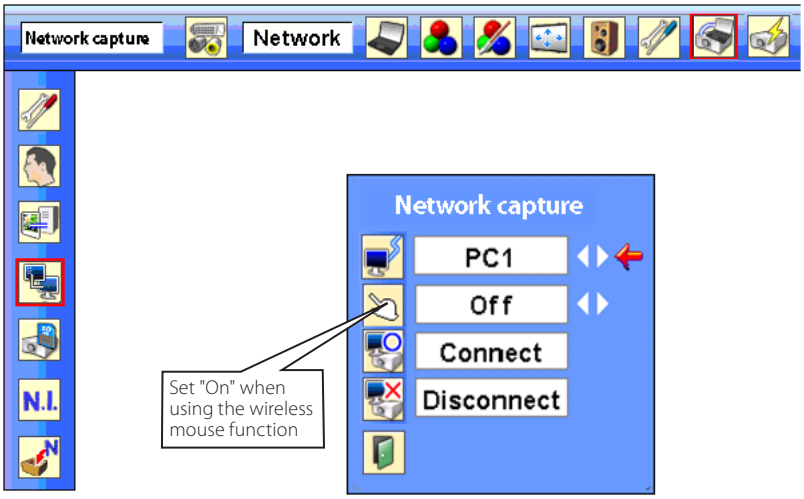
Select "Network" as input mode previously.

1 Select "Network Capture" icon from "Network" menu. Press **SELECT** button on the projector twice to display the network capture setting pallet.

2 Select PC number to connect .

3 Select "Connect" and then press **SELECT** button to start capturing. The screen image of the selected computer will appear on the projected screen in real time.

4 To end capturing, select "Disconnect" and then press **SELECT** button.



✐ The IP address of the connecting PC should be registered previously (☞ p.89).

✐ If the error message appears, check item "Parameter set up" (☞ p.88).

✐ The projector does not provide the function to register the IP address of the computer and to set the parameter of the capturing. They should be registered by using the web browser previously (☞ p.89-90).

Example of advanced use

Displays the presentation data stored in the computer by using the wireless mouse function from the projector.

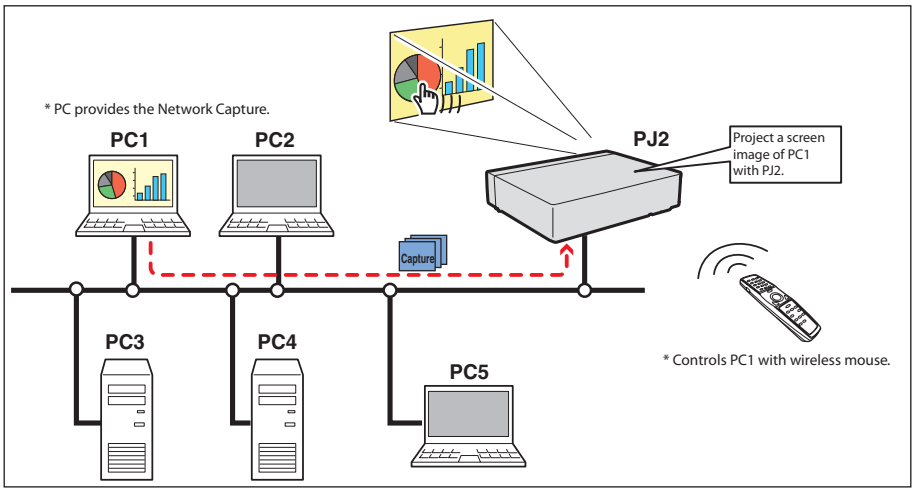
1 Start capturing of the computer PC1 by using the projector.
Select “Network Capture” icon from the menu and select "PC1" and then select "Connect" (☞ p.92).
=> The Network Capture software installed in the selected computer will start capturing.

2 On the image of the PC1 projected on the screen, search a presentation file data stored in the PC1 by using the wireless mouse function of the remote control supplied with the projector.

3 Select a desired file and double click with the remote control .
=> The application by which the document was created starts and the projector projects the presentation picture on the screen.

4 Start the presentation.
=> By using wireless mouse function, control the page browsing and some other operations for the PC1.

✎ For further instructions of the wireless mouse, please refer to the projector’s owners manual.
✎ On the projected screen using with the network capture, the shape of the mouse pointer differs from the one on the computer’s screen.



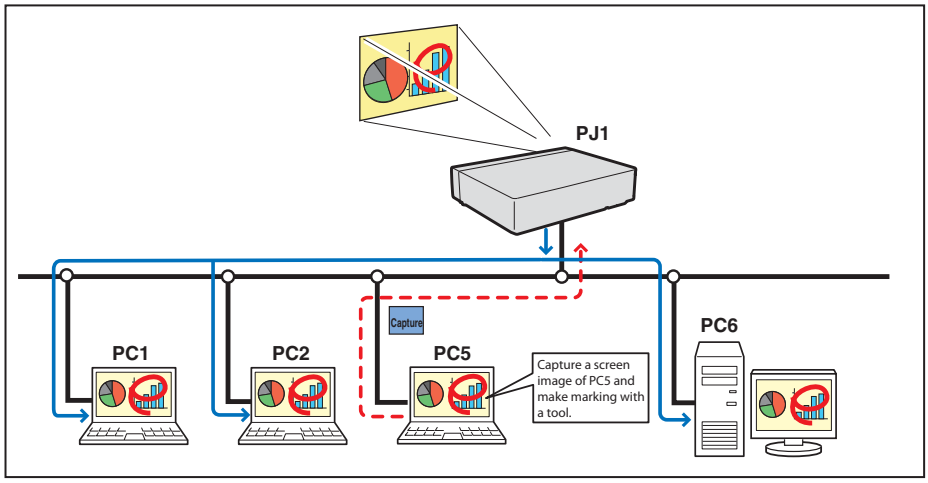
Setting condition

Projector
Input mode: Network
Registering the connection: The IP address of the computer and proper parameter must be set to the PC1 (☞ p.89-90).
Mouse Display: "On" (☞ p.91)
Computer PC1
Software: The Network Capture 4 is activated.

English

Using the Network Communication

This Network Communication is to communicate by sharing the captured image of a computer with multiple computers and a projector. Users can draw the text and figure on the captured image by using a drawing tool.
The data that has the captured image of a Main PC and communication information is sent to the projector. The projector projects this data onto the screen and serves this data to other computers (Sub PC) at the same time. The Sub PC receives served captured data and displays it on the screen. The Main PC and Sub PC also can edit the captured image by using the drawing tool. This edited image is applied to all the computers automatically.



* The Main PC is a computer which started using communication function, and serves own computer screen captured image to the Sub PC. The Main PC has an authority to quit using whole communication. To become the Main PC, execute the command "Start Communication" or "Capture transfer". For further information, see item "How to use the Network Communication". (☞p.98)
* The Sub PC is a computer which receives a captured image from the Main PC. On the communication mode, the Sub PC can become the Main PC.

Settings before using the Network Communication

To use the Network Communication, the capture setting of the projector must be set either [1] or [2] as described below.

[1] Projector searches all the available subject computers in the network automatically.

or

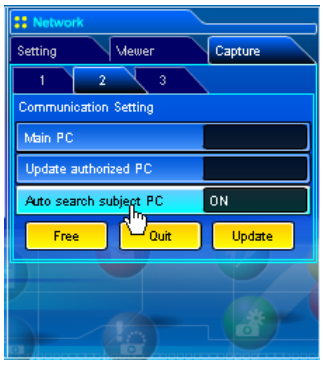
[2] Subject computers are registered to the projector.

Perform capture setting following to the description below.

[1] When serving the capture data to all the subject computers in the network.

By using the web browser, display "Communication Setting" from menu "Network"-"Capture"-"Page 2". Confirm that the item Auto search subject PC is "ON". If "OFF", change mode to "ON".

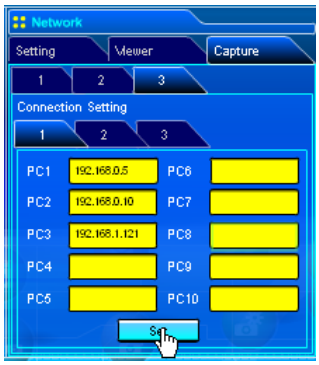
* Projector can find up to 30 computers in the network.



[2] When serving the capture data to the specific subject computers in the network.

Set the item Auto search subject PC "OFF" described in the above and then display "Connection Setting" from menu "Network"-"Capture"-"Page 3" with the web browser. Enter the IP address of subject computer and click **Set** button to register.

* Up to 30 computers can be registered to the projector.

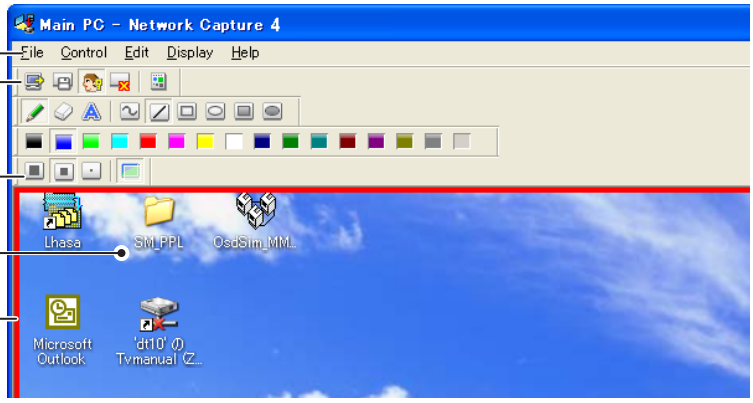


English

To display the served capture data, the software Network Capture 4 msut be installed on the computer.

Description of capture editing window

Start Network Capture 4 and select the projector(s) on the projector list on the application window and click **Communication Start** button. The application window will disappear and the capture editing window will appear on the computer screen as below. For basic operation of each menu, refer to the item "Menu tree" below.

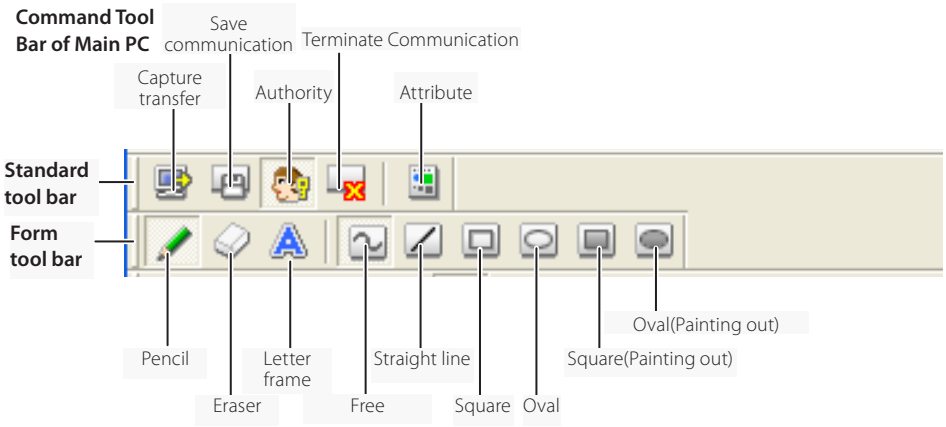


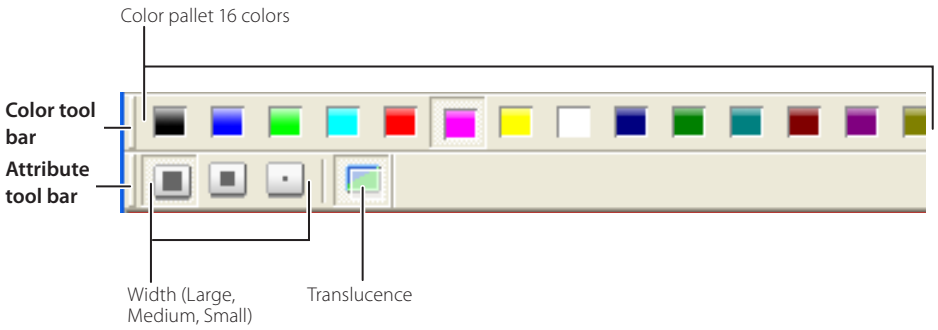
Menu tree

Menu	Submenu		Operation
File	Save Communication		Saves a captured editing image as the data(JPEG)
			Saves dialog window appears
	Terminate Communication * main pc only		Quits the communication mode
	End Editing * sub pc only		Closes the Editing window
Control	Capture transfer		Captures a screen image and sends it to the projector
	Authority		Acquires/releases the authority to edit the capture image
Edit	Tool	Pencil	Selects a pencil tool
		Eraser	Selects an eraser tool
		Letter frame	Selects a letter frame tool
	Form (Shape)	Free	Draws line with freehand
		Straight line	Draws straight line
		Square	Draws square
		Oval	Draws oval
		Square(Painting out)	Draws filled square
		Oval(Painting out)	Draws filled oval
	Attribute		Appears a attribute window
	Delete all		Deletes all the drawings on the image
	Undo		Cancels the last executed operation
Display	Full screen		Switches capture editing window, normal or full screen
	Tool bar	Standard	Switches standard tool buttons on or off
		Form(shape)	Switches form(Shape) tool buttons on or off
		Color	Switches color tool buttons on r off
		Attribute	Switches attribute tool buttons on or off
	Display on foreground		Keeps capture editing window on foreground always
Help	Version information		Displays software version number

Tool bar button names

The following commands are assigned to the tool bar buttons. For each operation, refer to the description of the item "Menu tree".





- To switch the tool bars displaying on or off, select each command from menu "Display"-"Tool bar".
- User can realign and join the tool bars (Standard, Shape, Color, Attribute), and change it to the floating pallet by a drag and drop of the tool bars.
- There are some disable buttons depending on the tools and authority mode. In that case the button appears in gray.

English

How to use the Network communication

Start the communication

1 Display an image on the computer screen.
2 Start Network Capture 4. The application window appears and the projectors in the network are listed.
3 Select the projector(s) and click **Start Communication** button. The application window disappears and the capture editing window with a captured image appears on the computer screen. The projector displays captured image on the screen.
✎ If an error message appears, check the item "Parameter set up". (☞p.88)

Join the communication (only for Sub PC)

1 Start Network Capture 4. The application window appears and lists the projector in the network.
2 Select a projector whose status on the projector list indicates "Communication starting", and click **Start communication** button. The application window disappears.
3 Click **Start editing** menu on the popup menu appeared by clicking the Network Capture 4 icon on the task bar. The capture editing window with a captured image appears on the computer screen.

Exit from the communication (only for Sub PC)

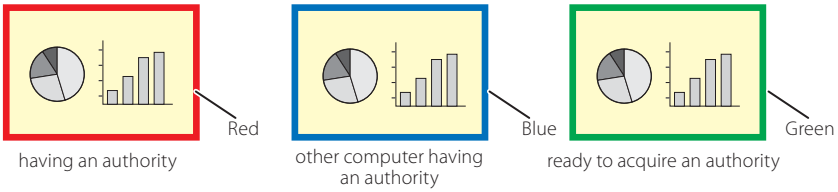
Click " :End editing" button on the standard tool bar. The capture editing window will be closed.
✎ This command is available with the Sub PC only.
✎ When "End editing" with the authority provided is executed, the authority will be released.

End the communication

Click " :Terminate Communication" button on the standard tool bar.
The capture editing window will be closed.
✎ This command is available with the Main PC only.
✎ The communication cannot be ended while other PC has the authority. To end communication forcibly, click the Capture 4 icon on the task bar and select "Shut down" on the popup menu.

How to acquire and release the editing authority

To edit the capture image, each computer needs to acquire the authority respectively. To acquire the authority, click " : Authority" button on the standard tool bar and then edit the capture image. The capture editing window indicates the authority status by changing the frame color depending on the current authority mode as follows.



Edit capture image

Drawing figures

1 Click " :Pencil" button on the form tool bar.
2 Select its attribute (shape, width, color and translucence) from the form and attribute tool bar.
3 Drag a mouse pointer on the screen image to draw the figure.

Erase drawn objects

1 Click " :Eraser" button on the form tool bar.
2 Select its attribute (shape, width) from the form and attribute tool bar.
3 Drag a mouse pointer on the screen image to erase the figure.

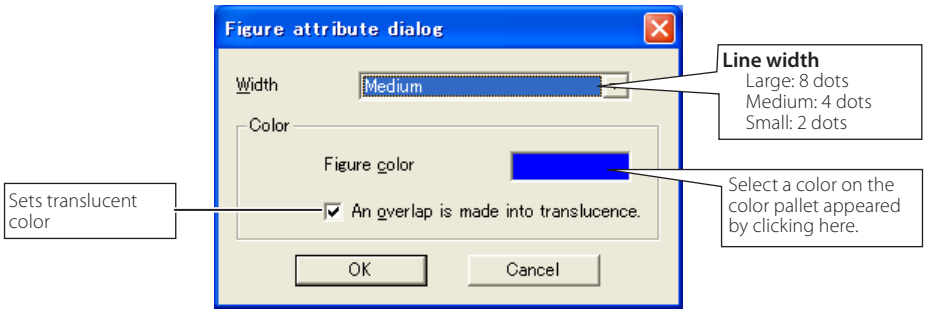
Hints of the drawing

- Straight line tool..... To draw the vertical line or horizontal line, drag a mouse pointer with shift key pressed.
- Square tool ..... To draw the quadrate, drag a mouse pointer with shift key pressed.
- Oval tool ..... To draw the perfect circle, drag a mouse pointer with shift key pressed.
- To cancel the drawing, select command "Edit"-"Undo" from the menu.
- To erase all the drawing at once, select command "Edit"-"Delete all" from the menu.
- The popup menu appeared by right clicking of the mouse is also available to select the tool and change the attribute.

English

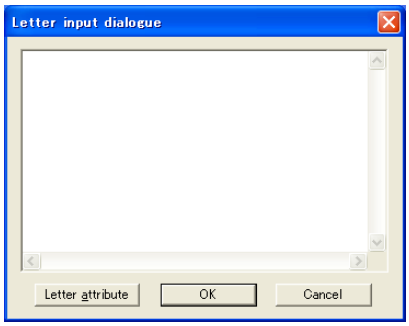
Setting of the drawing tool attribute

When clicking " :Attribute" button on the standard tool bar, the following window will appear. This window appears only if the pencil or eraser tool is selected.



Drawing letter

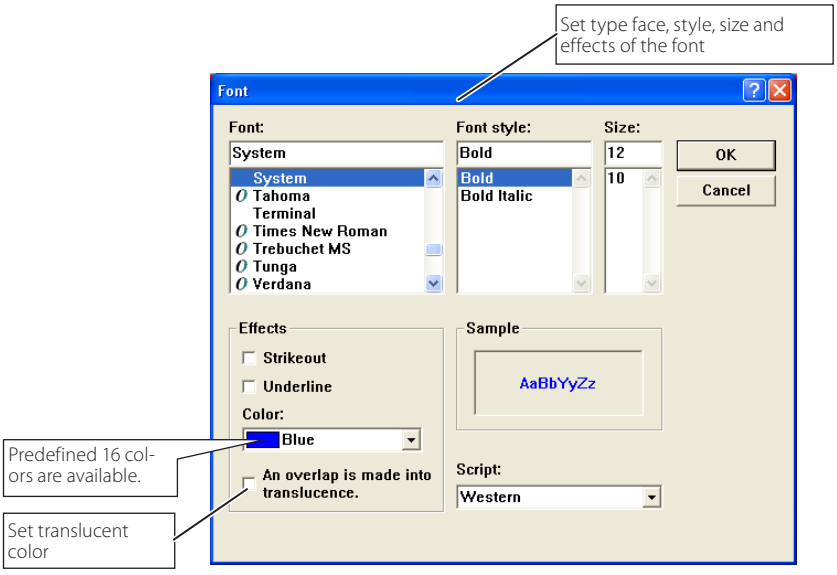
1 Click " :Letter frame" button on the form tool bar.
2 Select a color of text with color tool bar.
3 Drag a mouse pointer on the screen image to specify the area of the letter frame. The letter input dialog window will appear.
4 Enter the letter onto the window.
To change the letter attribute, click **Letter attribute** button. See the item "letter attribute setting" below.
5 Click **OK** button to fix the content. The entered letter appears on the captured image.



✎ If the entered letter overflows the area of letter frame, the letter frame is automatically extended downward.
✎ Up to 1000 characters can be used for a letter frame.

Letter attribute setting

The font attribute setting window appears when clicking " :Attribute" button on the standard tool bar with the letter frame tool selected, or clicking **Letter attribute** button on the letter input dialog window described the above.



Network Communication operation and change of state

Network Communication can be used under the environment which one or more computers are connected to the projector via the network.

Preparation

Start up the Network Capture 4 software on the subject computer. Set standby the projector or turn it on. Check IP address of the subject computer is registered in the connection list (☞p.95).

	Operation on the Main PC		Operation on the Sub PC	
On the Communication		Frame		Frame
	[1] Executing the command "Start Communication". ➔ The capture editing window appears on the screen.	R	[1] Executing the command "Start Communication". Execute the command "Start Editing" on the task bar. ➔ The capture image on the Main PC appears on the screen.	B
	[2] Editing the capture image. ➔ The editing information is automatically transferred to the Sub PC.	R	➔ The editing information on the Main PC is reflected on the Sub PC.	B
	[3] Releasing the editing authority. ➔ The color of authority status frame changes green.	G	➔ The color of authority status frame changes green.	G
	➔ The color of authority status frame changes blue.	B	[2] Acquiring the authority. ➔ The color of authority status frame changes red.	R
	➔ The editing information on the Sub PC is reflected on the Main PC.	B	[3] Editing the captured image using with the tools. ➔ The editing information is automatically transferred to the subject PC.	R
	➔ The color of authority status frame changes green.	G	[4] Releasing the editing authority. ➔ The color of authority status frame changes green.	G
	[4] Acquiring the authority. ➔ The color of authority status frame changes red.	R	➔ The color of authority status frame changes blue.	B
	[5] Repeat steps [2], [3] if required.		[5] Repeat steps [2] to [4] if required.	
	[6] Executing the command "Capture transfer" on the task bar. ➔ Updating the editing window with a new captured screen image.	R	➔ A new captured screen image appears on the editing window.	B
	[7] Repeat steps [2] to [5].			
	[8] Ending the communication. ➔ The capture editing window disappears.	R	➔ The capture editing window disappears.	

- The projector projects the edited captured image on the screen when the input mode of the projector is set "Network".
- The command "Save Communication" can be executed in any of the mode even if the PC does not have the authority.
- The arrow (➔) shows a response to the command executed.
- The execution of the command "Terminate Communication" or "End Editing" on the Sub PC has no effect on the other subject computers.

English

Executing the forcing mode

The network capture setting of the web page provides a forcing executing command. This command executes the release of authority or ending the communication forcibly. This is useful when the other subject PC keeps an authority all the time, or when the condition of the communication is not stable.
Click page 2 **Communication Setting** from the menu "Network"-"Capture". Execute command by clicking the button **Free**, **Quit** or **Update**.

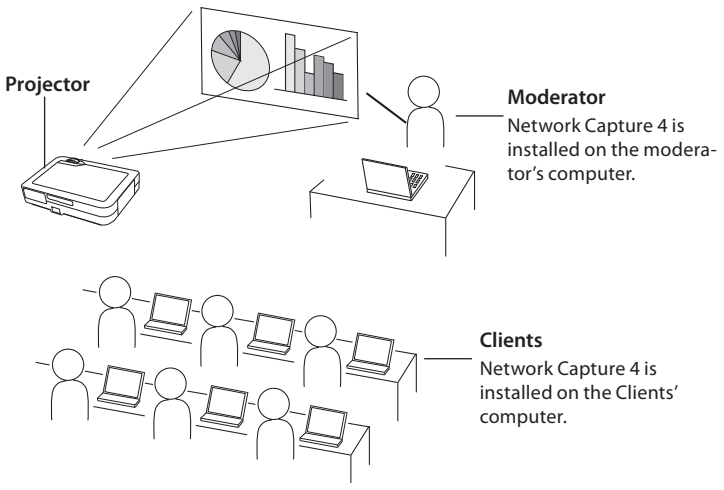
Item	Description
Free	Releases the editing authority forcibly ➔ Sets condition which all the users can acquire an authority
Quit	Quits the communication forcibly ➔ The capture editing window on all the computers closes forcibly.
Update	Acquires the latest communication status ➔ Updates the IP address of the Main PC and Update authorized PC.

Moderator function

This function is useful for a moderator or a teacher to conduct a meeting or a class, where all the participants including the moderator (teacher) are assigned a computer, to project images from each participant's computer. A moderator (teacher) has the right to decide which computer image should be projected. One moderator (teacher) can conduct up to 50 computers.
This function enables you to project the participants' data directly in a short time and in real time without taking time to transfer the data to the computer connected to the projector.
The image data will not be limited by the computer's application because the data transfer of each computer adopts the screen capturing system.

Names and terms used in this chapter have following meanings.

Moderator	Moderator or teacher
Client	Participant of meetings or the classes
Network Capture 4	The application which the moderator and client use



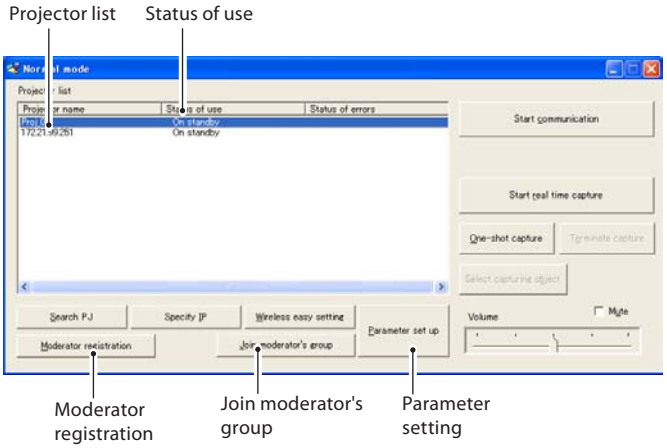
Preparation for using the moderator function

First, follow the procedure in "2. Setup Procedure" ➔ "Step 1–3" (p.16) and confirm that the setting status is set as written below.

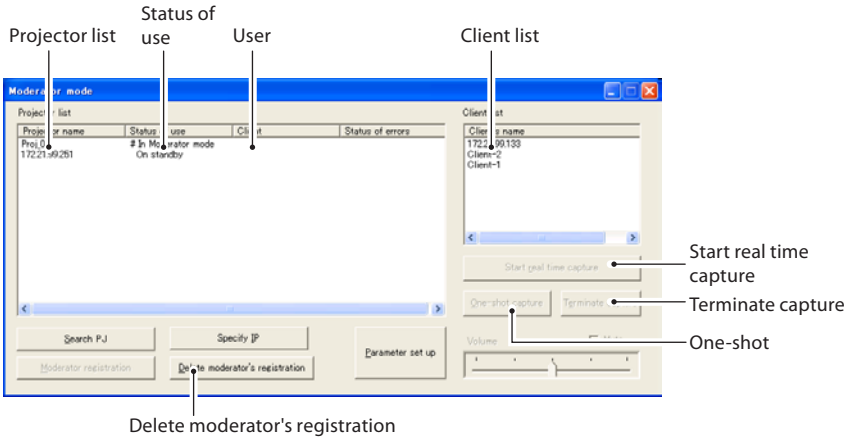
- Network Capture 4 is installed on the moderator's computer and each client's computer and each computer image can be projected.

Following application window appears when the Network Capture starts. After clicking **Moderator registration** button, the application window changes to "Moderator mode" window as shown in the lower picture below.

Normal mode application window



Moderator mode application window



Description of application window

Column	Description
Status	Indicates the projector's condition. On real time, On One-shot capture, On Standby, In Moderator mode, etc.
User	Indicates the client name (nickname or IP address) used by the projector.
Error	Indicates the error status during executing the real time capture or one-shot capture.
Parameter set up	Sets the parameter of capturing. Moderator's nickname (less than 63 characters) and moderator's password (less than 15 characters) can be setup with this item. Also see the item "Parameter set up" (p.88) for other parameter setup.
Moderator registration	Register a moderator's group
Delete moderator group	Quit a moderator's group
Join moderator's group	Join a moderator's group. Press this button after selecting the projector which is indicated with "In Moderator mode" on the status column.
Start real time capture	Capture (Project) the computer screen in real time. After the execution of "Start real time capture", and the application window disappears.
Terminate capture	Terminate the real time capture.
One-shot capture	Copy and capture (project) the computer screen without modification. After the execution of One-shot, the application window disappears.

* See item " 3. Names and function of the operating screen " (p.23) for other description of application window.

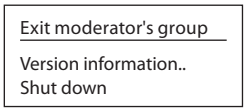
Using the moderator function

Moderator operation

1. A moderator starts up the Network Capture 4. On the application window, select a projector on the projector list to use and then click **Moderator registration** button. The mode of the application window changes from "Normal mode" to "Moderator mode".

Client operation

2. Each client starts up the Network Capture 4. On the application window, select a projector which is indicated with "In Moderator mode" on the status column and then click **Join moderator's group** button. The application window disappears.
   When exiting from the moderator's group, click **Exit moderator group** on the popup menu appearing by clicking the Network Capture 4 icon on the task bar.



Moderator operation

3. The client's and moderator's nicknames or IP addresses of the computer appear on the client list of the application window of the moderator when the client joins into the moderator's group.
4. The moderator selects a projector on the projector list and selects a client computer on the client list to display the client computer's screen.
   When you register the multiple projectors in the moderator's group, select a projector on the projector in the moderator mode and click **Moderator registration** button to register it in the moderator's group one by one.
5. Click **Start real time capture** or **One-shot capture** button. The selected projector projects the selected client computer's screen on the screen.
   When you project the capture image with the multiple projectors, select projectors on the projector list by holding the [Ctrl] key or [Shift] key.

The moderator and the clients can start the meeting with Moderator function.

English

Moderator's password setting up

This enables you to set up the password to join in the moderator's group.
Start up the network Capture 4 and click **Parameter set up** button on the application window. On the moderator function setting item on the parameter set up window, set up the password of **Moderator 's password**. Up to 15 characters can be used for the password. Default password is blank.

Following password input window appears on the screen when the client clicks **Join moderator's group** button on the application window to join in the moderator's group.

Enter a password and click **OK** button. When the password is authenticated correctly, the client can join in the moderator's group. The input password is registered in the moderator's password of the client.

Unregister moderator status

1. Select the projector(s) which is registered as a moderator from the moderator mode application window.
2. Click the **Delete moderator's group** button. Selected projector will be unregistered on a moderator, and the application window changes "Normal mode". The column of status changes from "#On Moderating" to "On Standby". When there are multiple projectors to unregister, the application window maintains "Moderator mode" until all the registered moderator's groups are unregistered.

✳ Even after the moderator is unregistered, the application window of the Network Capture 4 appears on the screen to indicate that the moderator function is unregistered.
✳ After terminating the Network Capture 4, all the clients joined in the session will be unregistered.

Error information

Error messages	Cause and corresponding
Set up the parameter.	Error when the communication is executed. The parameter setting (host name, capture port) has not been set. ➔ Check parameter setting (☞p.88)
It has not been registered to PJ as a group.	Error when Start Communication or Start real time capture is executed. The IP address of the computer has not been registered. ➔ Register the IP address by using the web browser (☞p.95)
Cannot be displayed as PJ is under display.	Error when Start Communication or Start real time capture is executed. The other capture, viewer or advanced card imager function is now operating. ➔ Wait until the communication function is available.
Cannot connect to PJ.	Cannot establish the connection with the projector when the Start communication is executed, Terminate Communication, Capture transfer, Start real time capture or End real time capture. ➔ Check connection of the network cable.
Cannot transfer data to PJ.	Cannot transfer the data to the projector when the Start Communication, Terminate Communication, Capture transfer, Start real time capture or End real time capture is executed. The time-out period is 10 seconds. ➔ Check the connection of the network cable.
Cannot receive data from PJ.	Cannot receive the data from the projector when the Start Communication, Terminate Communication, Capture transfer, Start real time capture or End real time capture is executed. The time-out period is 10 seconds. ➔ Check the connection of the network cable.
Other PC has authority. Cannot complete "Network Communication".	When executing the Terminate Communication, you cannot quit the communication because other computer has an authority
Other PC has authority. Cannot obtain authority.	Other computer has an authority.
Invalid port number	When the parameter is set, the reserved port number is specified. ➔ Check the parameter setting (☞p.88)
PJ has not started Network Communication. Close the window and open it again.	The projector might have turned off during the communication. ➔ Check the projector power and re-execute "Start communication".

Chapter 9

9. Network viewer functions

Network Viewer is a function to display the image data stored in the file servers by the projector through the network.
Describes the file converter software File Converter 1, File Converter 2, the program creator software Program Editor, and how to use Network Viewer.

Creating the available data [Network Viewer 4]

The image available with this projector is the JPEG format (.jpg). There are several types of JPEG data. Before using the images with the Network Viewer function, it should be converted to the optimized JPEG data for this projector.

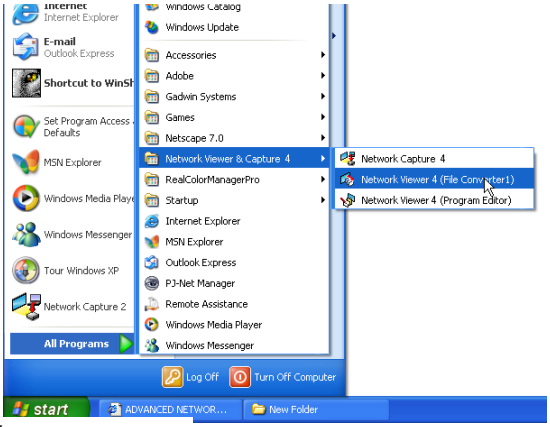
[1] How to use the Network Viewer 4 (File Converter 1)

The File Converter 1 is a software to convert the images from the JPEG, bitmap or Power Point data to the optimized JPEG data for the projector.

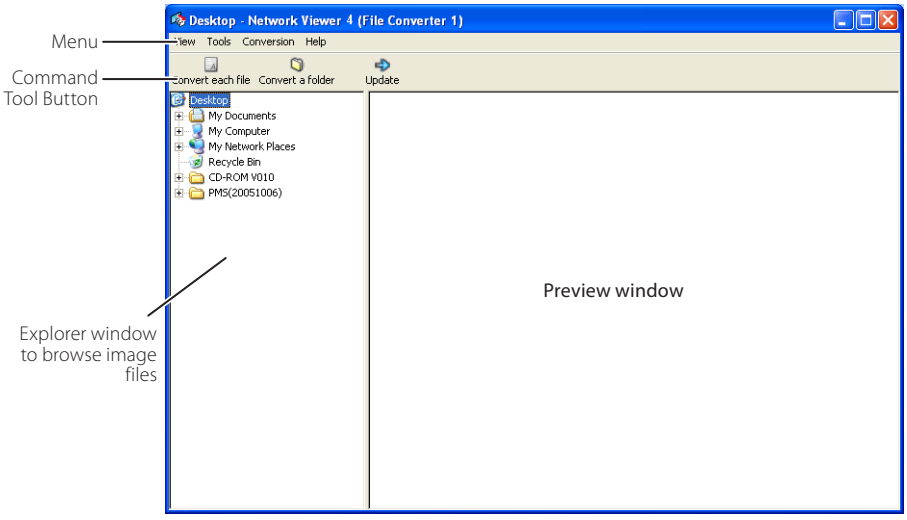
Start up and quit the File Converter 1

To start up the File Converter 1, click "Network Viewer 4 (File Converter 1)" menu from "Start" - "All Programs" - "Network Viewer & Capture 4" menu.

To quit the File Converter 1, click on the close box on the upper right-hand of the window.



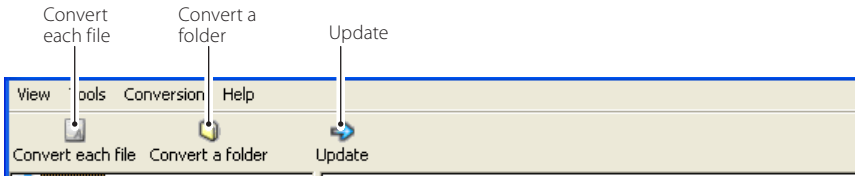
File Converter 1 window



Menu Tree

Menu	Sub Menu	Description
View	Update	Updates contents of the preview window
	Preview size	Sets size of the preview image, Large, Middle, Small
Tools	Option	Sets default of the output destination and conversion mode
Conversion	Convert each file	Converts a file into a JPEG file individually
	Convert a folder	Converts files in a folder into JPEG files at once
Help	Version information	Displays the version information

Command Tool Button

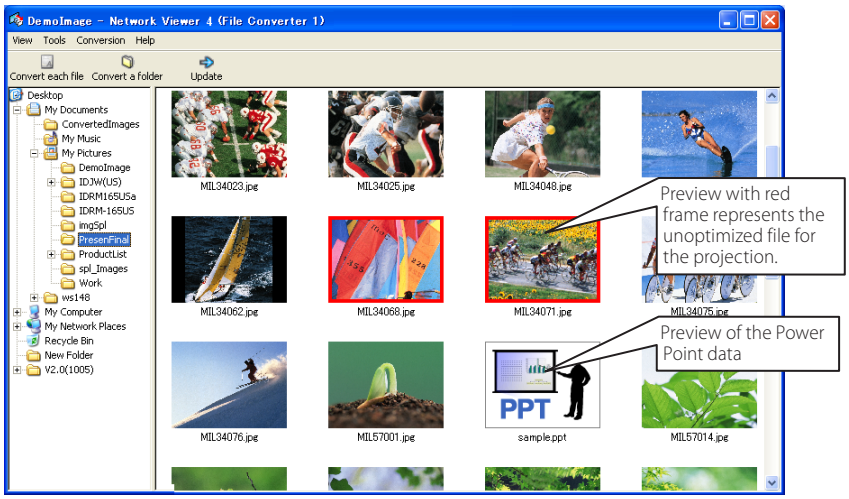


Creating the available data

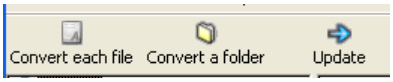
1 Select a folder in which the image files are stored by the explorer window.

The preview images of the available image data (JPEG file, Bitmap file, power point file) in the selected folder are displayed on the preview window.

✎ On the preview window, the preview displayed with the red frame represents the unoptimized JPEG file nor Bitmap file for the projection. The preview without the red frame represents the optimized JPEG file for the projection. So you do not need to convert them again, but if you change the size or image quality, reconvert them.



2 When converting each file, select a preview image first and then click **Convert each file**.

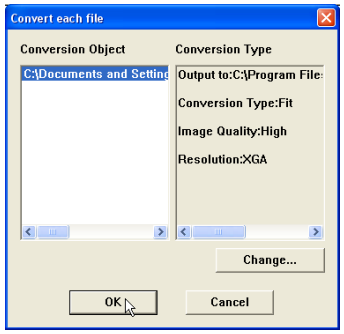


✎ To select two or more files at once, press and hold "Shift" key or "Ctrl" key and then click the preview images.

When converting all the files in a folder, select a folder and click **Convert a folder**.

3 As the confirmation window appears, check the conversion object and conversion type and then click **OK** button. The File converter 1 starts converting and stores the optimized files into the output folder. It enables you to select a local hard disk of your computer, shared computer in the network, and a directory of the FTP server. To change the conversion type or output destination, click **Change** button.

✎ If the power point file is included in the conversion object, the Microsoft Power Point software will start running and converting automatically.



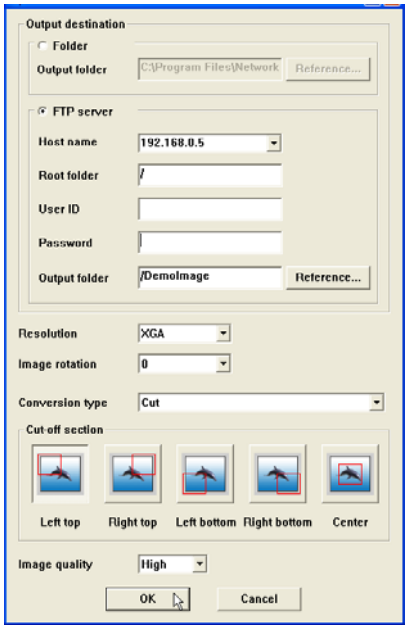
Dialog window shown during using "Convert each file" and "Convert a folder"

✎ To convert images from the power point file, Microsoft Power Point software is should be installed in your computer.

✎ In the power point file conversion, all the pages are converted into JPEG files separately.

Setting of output destination and conversion mode

When clicking **Change** button on the confirmation window in the step 3 on the previous page, following option setting window appears.



Output destination

Select either **Folder** or **FTP server** as the output destination of the converted files.

Folder

Output folder.....Specify a folder in the local hard disk or shared computer in the network

FTP server

Host name.....Enter host name or IP address of the FTP server
Root Folder.....Specify the root directory of the FTP server. Normally use "/".
User ID.....Enter your login account of the FTP sever.
Password.....Enter your password of the FTP server.
Output folder.....Specify a directory of the FTP server.

Conversion mode

Resolution.....Selects output image resolution (VGA to SXGA+)
✎ The image resolution higher than the projector's panel resolution cannot be displayed.
Image rotation.....Selects image rotation (0, 90, 180, 270).
Conversion Type
Fit.....Converts either width or height of the image to fix the maximum screen width or height.
Justify [both ends].....Converts width of the image to fix the maximum screen width.
Justify [top and bottom].....Converts height of the image to fix the maximum screen height.
Cut.....Cuts image with the screen size not depending on the image size for the cutting modes. See the right figure.
✎ Select this mode when you want to have the images with the original size. Select each mode by clicking on the button.

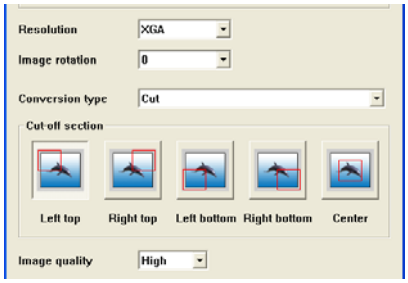


Image Quality.....Selects an image conversion quality with "High", "Mid" or "Low".

English

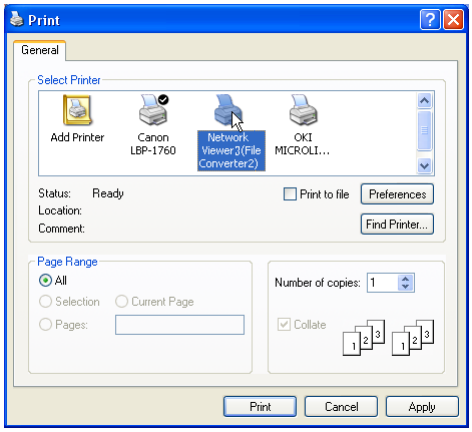
[2] How to use the Network Viewer 4 (File Converter 2)

The File Converter 2 is a kind of the printer driver software to convert to the optimized JPEG data for the projection from the any documents created by the other software such as text editor, spreadsheet or presentation software. It is possible to convert to the JPEG file from the any kinds of documents created by the software which has a "print" menu.

Creating the available data

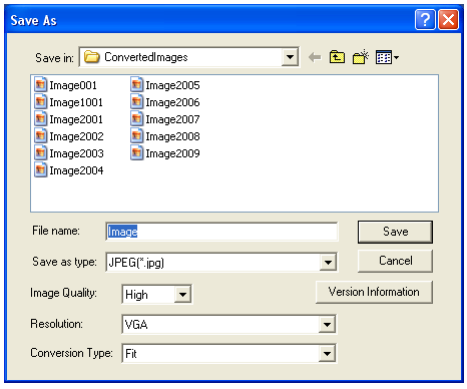
1 Open a document with the individual software.

2 Select a "Print" sub menu and open the printing dialog. On the window, select "Network Viewer 4 (File Converter 2)" icon on "Select Printer" item and click **Print** button.



✐ Set the option setting for the page layout or paper setting by clicking **Preferences** button if required.

3 Select a folder and click **Save** button.



✐ The file name is named with "Image001" as default. If the converted image has 2 or more pages, the file names are numbered from "001" to "999" in serial order.

✐ Image quality and Conversion type can be set up on this window. For further information, please see "Setting of output destination and conversion mode" (☞ p.113).

✐ The white space may appear around the edges on the converted image depending on the type of the image data.

✐ The above procedure may differ in each computer environment and applications.

Creating a program file [Program Editor]

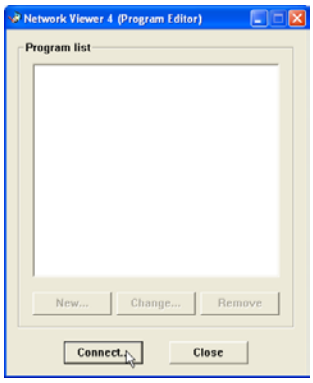
Network Viewer 4 (Program Editor) is a tool to make a program file which specifies the display order of the images and its file path in the file server (FTP server). The Program Editor creates a folder "DispParam" at the login root directory in the FTP server, and files with each program name into this folder. These files are called "Program". By specifying the program file with the Network Viewer function, you can display the images in programmed order with the projector .

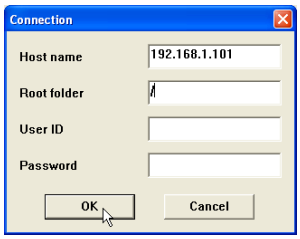
Procedure of making program

1 To start up the Program Editor, click "Network Viewer 4 (Program Editor)" menu from "Start" - "All Programs" - "Network Viewer & Capture 4" menu.

2 Click **Connect** button.

3 If the connection setting window appears, enter the each item and then click **OK** button.
The setting window disappears and then the programs are listed on the window if there are program files at the login directory in the connected FTP server.



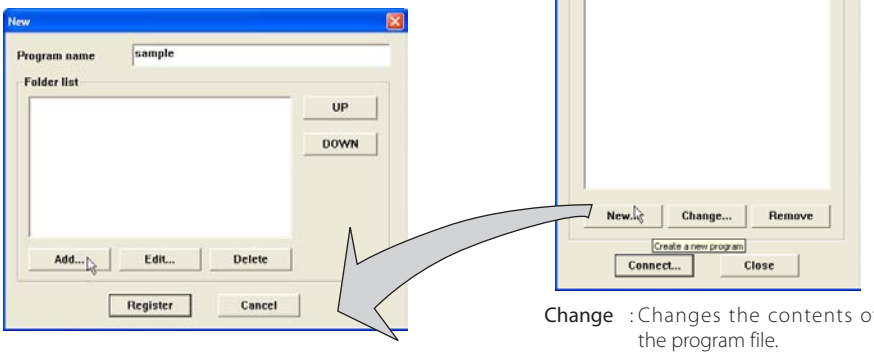


Item	Description
Host name	Enter the FTP server name or IP address
Root Folder	Specify the root directory of the FTP server. Normally use "/".
User ID	Enter your login account of the FTP sever or use blank when you login as anonymous account for the FTP server
Password	Enter your password (PIN code) or use blank when you login as anonymous account.

IMPORTANT
It is required to set the write permission mode for the login directory of the FTP server. In the read only mode, you will have an error when you register a new program.

4 Click **New** button.

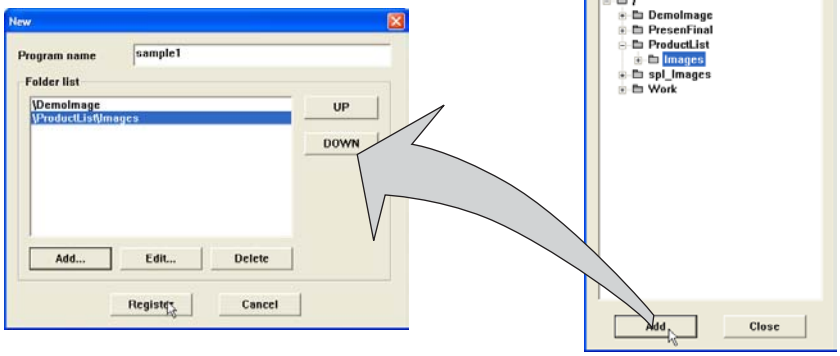
5 Enter a program name and click **Add** button.



Change : Changes the contents of the program file.

Remove : Removes the program from the list.

6 The folder selection window appears and select a folder in which the JPEG data are stored and then click **Add** button to register into the folder lists.



Add.....Displays the folder selection window.
Delete.....Deletes the folder path from the folder list.
UP .....Moves up the selected folder path.
DOWN .....Moves down the selected folder path.
Edit .....Used to set up the display order or display time of the image individually. For further information, see the item "Setting up the display order and time of the images" on the next page.

✎ The order of the display is listed in the folder list window. To change the order of the display, change the list order of the folder list by using **UP** or **DOWN** button.

✎ The programs are stored into the "DispParam" folder at the login root directory and this "DispParam" folder is made by software automatically.

7 Click **Register** button to register the folder list into the program.

8 Click **Close** button to quit the Program Editor.

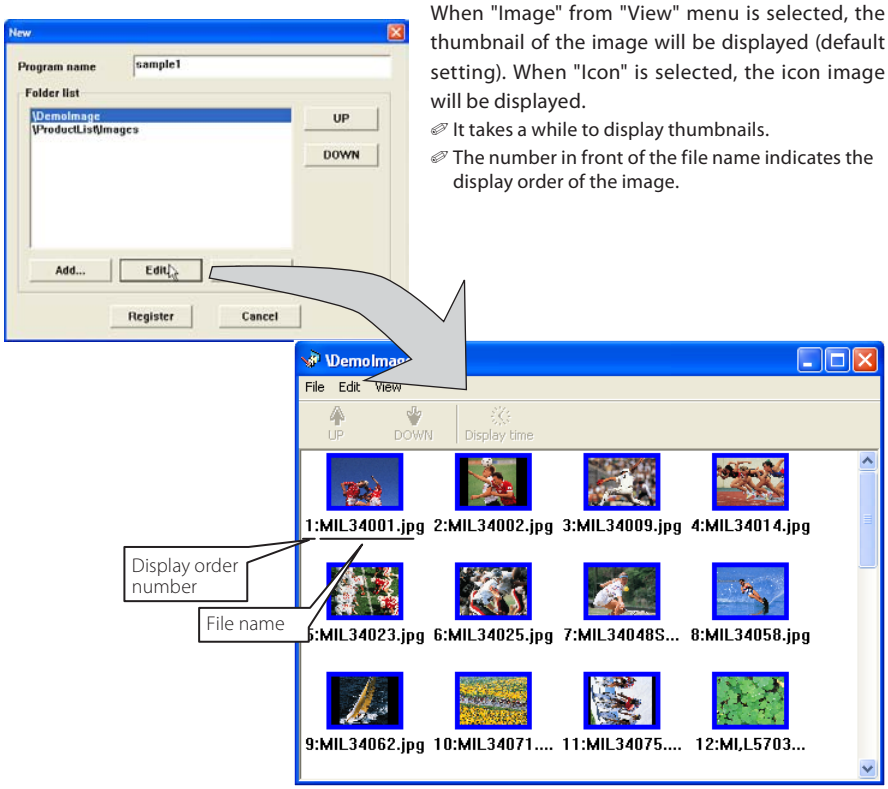
Setting up the display order and time of the images

In the default setting, the display order of the images is the same as ASCII code order of the file name. To change the display order or to set up the display time, take the following procedures.

Display the folder list window in step 6 of the previous page.

1 Select a folder list contains images to change.

2 Click **Edit** button. The images in the selected folder are displayed with the file name on the index window.



When "Image" from "View" menu is selected, the thumbnail of the image will be displayed (default setting). When "Icon" is selected, the icon image will be displayed.

- It takes a while to display thumbnails.
- The number in front of the file name indicates the display order of the image.

Menu	Sub menu	Description
File	Exit	Closes index window
Edit	UP	Steps up the display order of the selected images
	DOWN	Steps down the display order of the selected images
	Display time	Sets up the display time of the selected images
View	Image	Displays thumbnail of the images
	Icon	Displays images as the fixed icons
	Update	Updates images information on the index window

English

3 To change the display order, select*1 files and then click **UP** or **DOWN** button on the menu bar to move them onto your desired place, or select files and then drag and drop them onto your desired place with mouse.

4 To change the display time*2, select*1 files and then click **Display time** button on the menu bar to display the Display time setting window. Check "Display time" in the check box and set the display time. To cancel the display time, un-check the "Display time" in the check box.

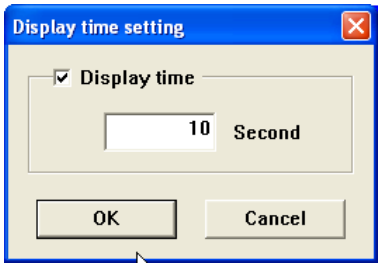
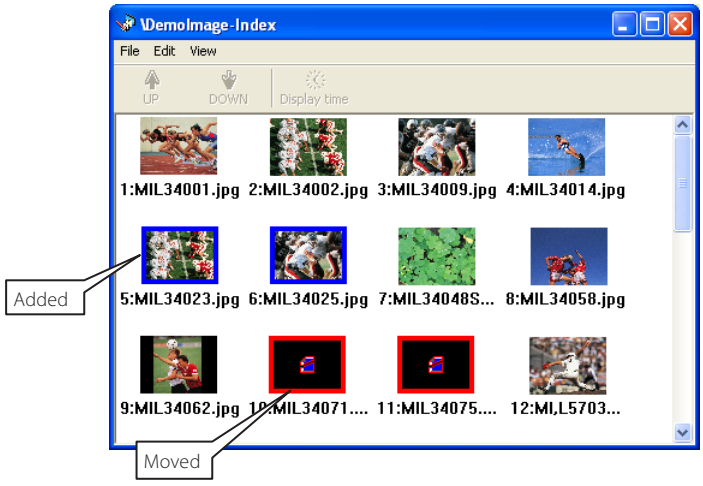


Image frame on the index window

Image frame on the index window has 3 kinds of display modes as follows.

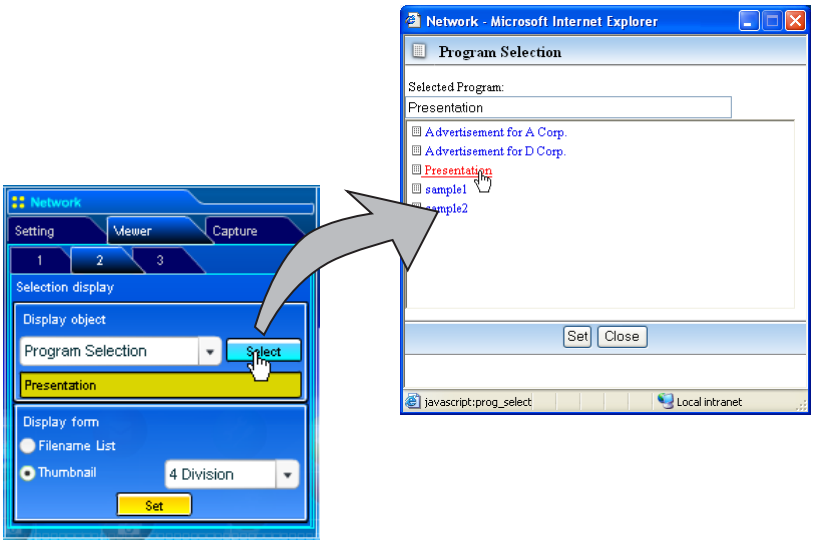
No frame : Shows that the image in the folder is unchanged
Blue frame : Shows that image is added into the folder newly
Red frame : Shows that image is deleted from the folder



*1 Multiple files canbe selected at once by "Shift" or "Control" key, or with mouse cursor.
*2 3 to 240 seconds can be set up for display time.

Example of the created program selection

Use the web browser to access to the control page of the projector. Click "Viewer" of the Network menu on the web page, then connect to the FTP server and select the program name which was made at previous section. The projector starts displaying the images along the program. For further information, please see "Using the Network Viewer function" (☞ p.120).



✐ This function is not available in the light mode.

The limitation of the Program file

There are several limitations for the program file as follows;
* The number of programs in a root folder is less than 1000.
* The number of folders in a program is less than 100.
* Total characters of folder name is less than 255.
* Total characters of program file name is less than 63.
* Do not make a program name started with ".".
* Do not make a program name contained with following characters:
  \ / : , ; * ? " < > |
* The program name started with " "(space) is registered without the space.

Using the Network Viewer function

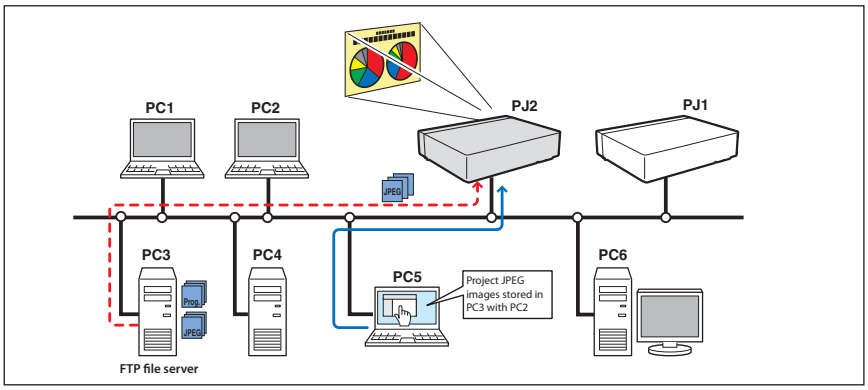
The Network Viewer is a function to acquire the JPEG image data from the file servers placed in the network and project them on the screen. The projected image data are specified by the folder unit. You can set the display time and the number of repeat, and also you can register those folders as the program.
***The network viewer function cannot be used when the network capture function is used.**

Condition to use the Network Viewer function:

* Should be possible to use the FTP service with Windows 2000 Professional or XP Professional.
* User has a full-access account to the FTP server, or the FTP server allows anyone to use with "Anonymous" account which also has a full-access mode.
* The allowed number of simultaneous access from the same IP address is no fewer than 20.

To use this function, it is necessary to disable "pop-up block" function of the web browser.

[1] Control by the web browser



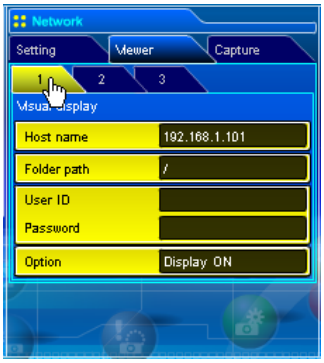
Select "Network" for input mode previously.

1 Access to the control page on the projector by using the web browser.

From the main menu, click **Network - Viewer** to display the setting page.

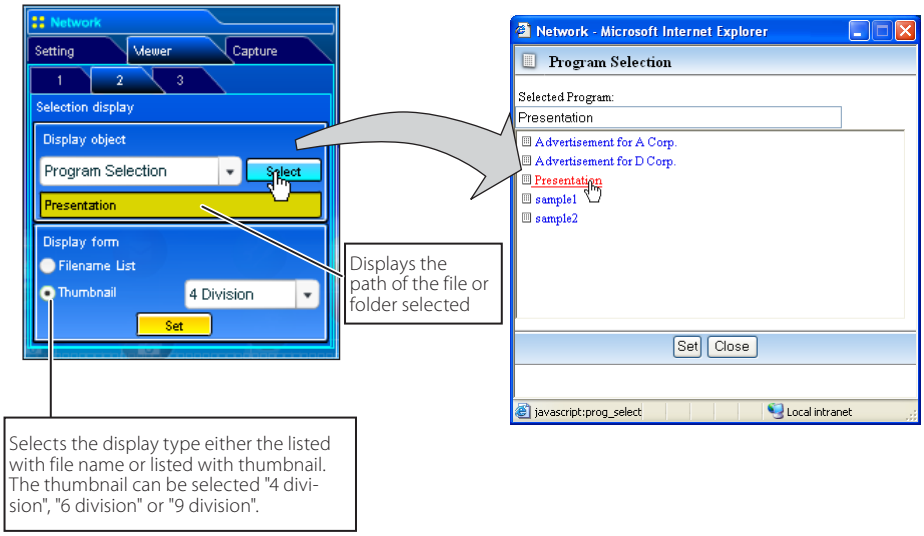
2 Setup the setting page [1] of the Visual display.

Item	Description
Host name	Enter the host name or IP address of FTP server, yourftp.server etc.
Folder Path	Use "/"(root directory) normallyl, or enter the directory name follow the "/" as shown in the below example if you have a specified directory in the server. /data/
User ID*1	Enter your login account of the FTP server
Password*1	Enter your password of the FTP server
Option*1	Set "Display ON" when you display the acquired preview images on the web browser.



3 Setup the setting page [2] of the Selection Display.

Click **Select** after selecting the display object from the pull-down menu "Folder Selection" or "Program Selection". After the list window appears, select a program or folder and then click **Set** on the window.



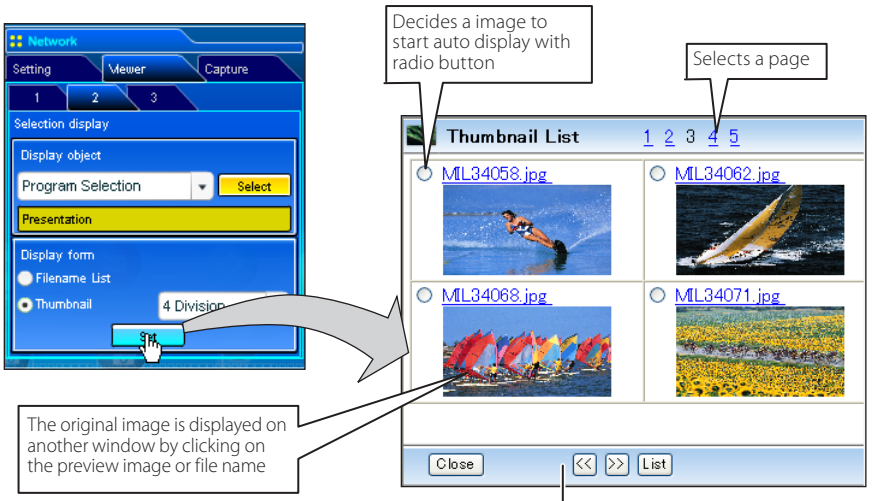
✎ This function is not available in the light mode.

✎ See the item "Creating a Program file [Program Editor]"(☞ p.115) about program.

***1 IMPORTANT NOTICE**
Please note that if you use the FTP server with personal account except anonymous account, the user ID and password may be displayed on the browser depending on the version of the browser. We recommend that this function should be used with the anonymous account normally.

English

After clicking **Set**, the file list or preview list of the selected folder or program is displayed on the window.



Button	Operation
<<	Go to the preceding start up image in the auto display function
>>	Go to the following start up image in the auto display function
List	Switches to the List mode
Thumbnail	Switches to the thumbnail mode
Close	Close the window

✐ This function is not available in the light mode.

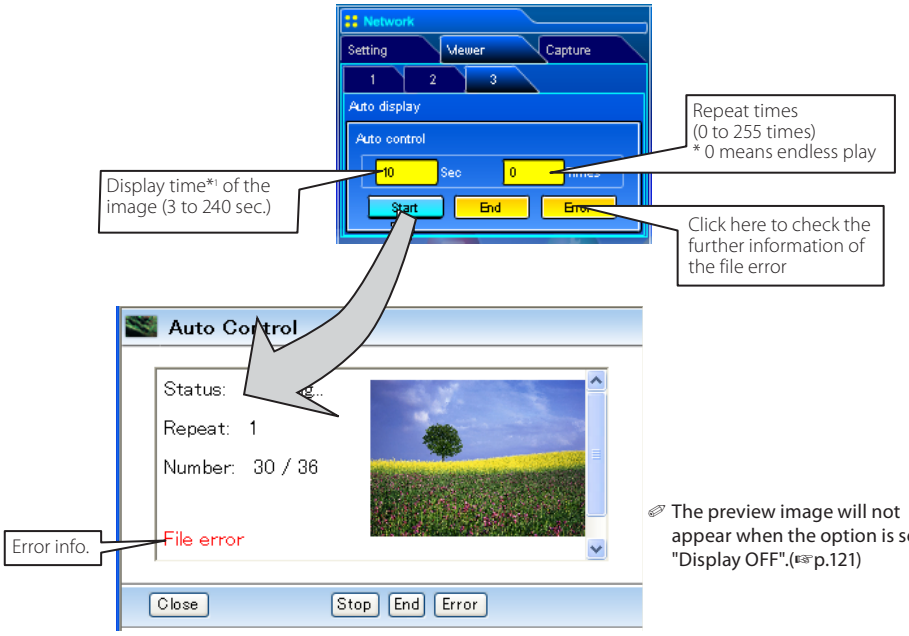
✐ The preview image will not appear when the option is set "Display OFF".(☞p.121)

✐ Up to 1000 images can be displayed.

✐ When "folder selection" is selected, images placed at the first directory in the selected folder are displayed.

✐ The display order of the images is the same as the ASCII character order when "folder selection" is selected, or is specified by the Program Editor when "program selection" is selected. (☞p.115)

4 Auto Display setting and control page [3]



✎ The preview image will not appear when the option is set "Display OFF".(☞p.121)

1. Click **Start** button to start the auto-display. The image in the selected folder or program is displayed on the projector's screen. The web browser opens another window and displays the preview images on the Auto Control window sequentially.
2. Click **Stop** button to stop the auto-display.
   - Restart the auto-display, click **Restart** button.
   * When the auto-display stops, it enables you to display the images manually by using [<<] or [>>] button.
3. Click **End** button to end the auto-display.
   - When the **Error** button is pressed, the further information of the file error is displayed.

For further error information, refer to the next page.

*1 When the program file for auto-display is selected, the display time of each image gives preference to the setting specified by the program file over the setting specified by the auto-display function above. The images for which the display time is not set shows the display time specified by the auto-display function above.

✎ The display time is greatly affected by the network environment or the operation of multi control, so the image may not be displayed as the specified display time.

✎ The timing to switch images is not the same on the screen and on the web browser.

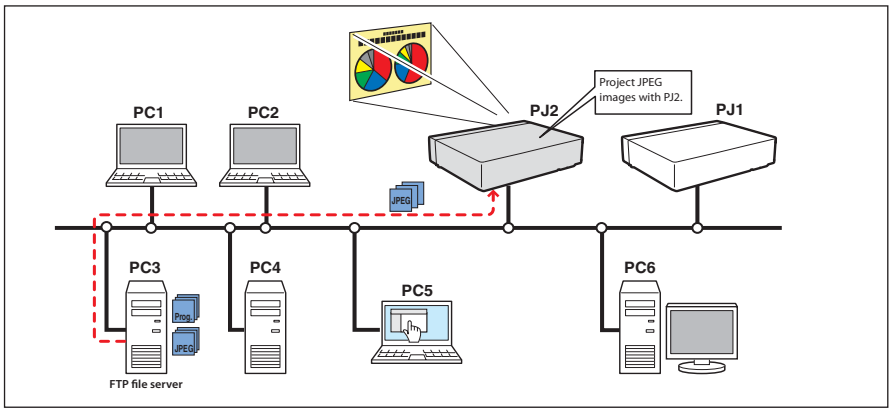
English

Error information

Error type	Description
File Error	It is displayed when the projector cannot acquire the correct file images from the FTP server, or when the master projector is turned off during the multi-control. Click **Error** button to check the details.
Connection Error	It may be displayed when the slave projector is using the Network Viewer or Capture function during the multi-control. Check which projector has an error , see item "Multi Control/Check & Change" (☞ p.81-82).

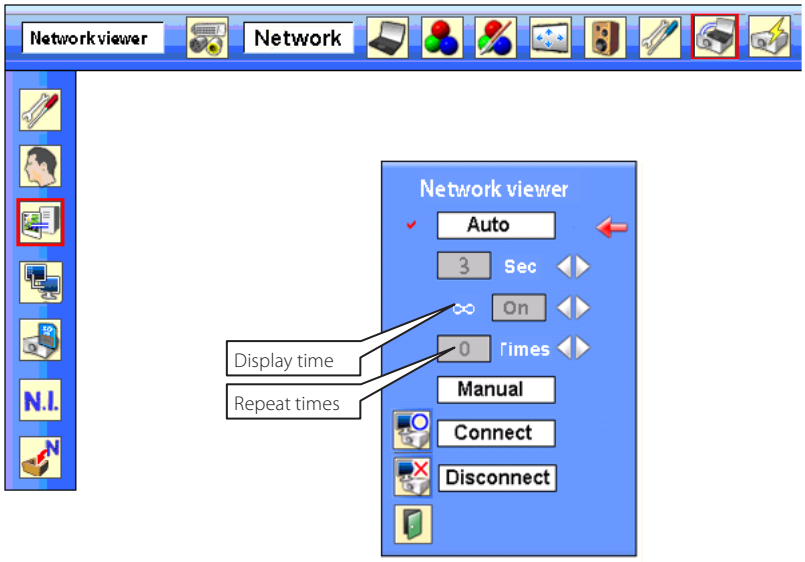
✐ When the file error occurrs during the auto-display, you may have the alert e-mail message. For further information, please see the item "3 Option selection for sending alert mail" (☞ p.55-56).

[2] Control by the projector



Select "Network" input mode previously.

1 Select "Network Viewer" icon from "Network" menu. Press **SELECT** button on the projector twice to display the network viewer setting pallet.



2 Select "Auto" or "Manual" and then press **SELECT** button. When selecting "Auto", Set display time and repeat times

3 Select "Connect" and then press **SELECT** button to start displaying. The images in the FTP server are displayed on the screen.

✎ It enables you to browse the images by using the control buttons (▲,▼) on the remote control or on the projector.

▲ : Previous image display, ▼ : Next image display

4 To stop the display, select "Disconnect" and then press **SELECT** button.

Item	Description
Auto	Auto display mode. Specifies display periods and repeating times
Sec.	Display time of the image (3 to 240 sec.)
Times	repeat times (255 times maximum) * ∞ means endless play
Manual	Manual display mode. Controls image display (browsing image backward or forward) manually.

✎ In the automatic displaying mode [Auto], when the left-click on the remote control is pressed, automatic displaying stops and the manual displaying mode is set. When the right-click is pressed, automatic displaying restarts.

✎ The image data used for this function is the program or folder that the Network Viewer function used last time. The projector cannot specify particular images or file servers itself.

✎ The display time is greatly affected by the network environment or the operation of multi control, so the image display may not be displayed as it is set for the specified display time.

English

Chapter 10

10. Appendix

Use of telnet

Web browser setting

Firewall setting

Troubleshooting

Terminology

English

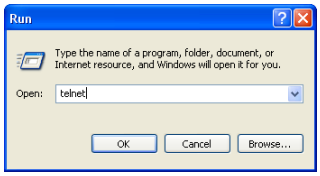
Use of telnet

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.

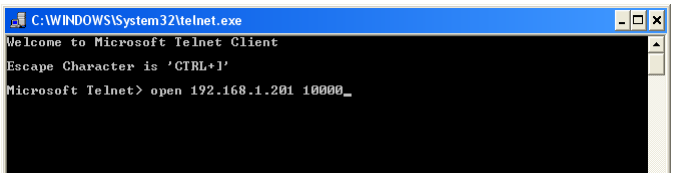
Control

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

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

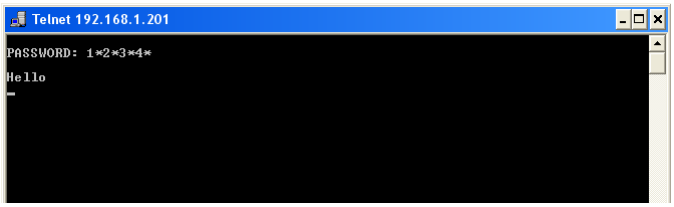


2. The telnet application will start and the following window will be displayed. Type as below to connect the projector.
   > open_192.168.1.201_10000 [return]



   * 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.

To disconnect the communication, press "Ctrl" key and "]" key at the same time.

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
C0B	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" (☞p.30, 40). If the authentication of the entered password is failed 4 times continuously, the communication will be disconnected automatically. Please try again for the connection.

Web browser setting

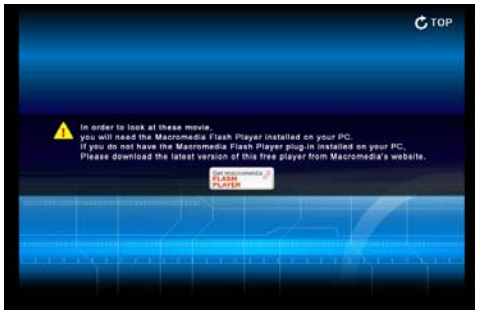
This product is designed to enable the projector to be set up and controlled from an Internet web browser. Depending on the preference settings of the web browser, some control functions may not be available. Please make sure that the following functions are set up properly in the web browser.

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 that case, the following warning message will be displayed on the top of the page. To enable the JavaScript, please see further instructions on the next page.

Flash Player enable

The setting page of this product contains the Flash contents. To display the setting page, the Adobe Flash Player version 6 or later is required to be installed on your computer. For further product information, see the Adobe homepage. (http://www.adobe.com). Even if your computer provides the Adobe Flash Player, the setting page does not appear on the web browser, in which case, check that Flash Player Plug-In(Shockwave Flash) is installed and set up correctly. please see further instructions on the next page and it is depending on the web browser.



Proxy setting

In some cases, your web browser is set up to use the proxy server for the internet or intranet connection. In that case, when you install this product into the local network, you should set up the proxy setting of web browser preference correctly. Especially when connecting the projector and computer with a UTP cross cable directly, or when the network does not provide the proxy server, make sure that "not use proxy server" is set up in your web browser preference. 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 showing examples and also refer to on-line help of your web browser.

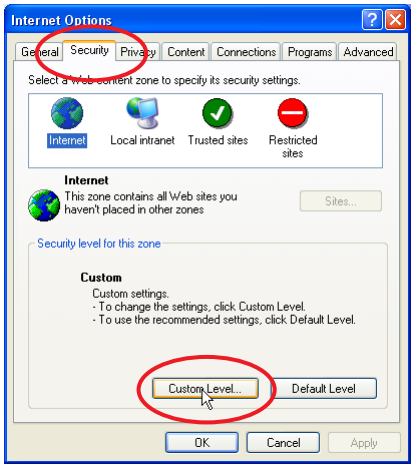
Examples: OS/Browsers

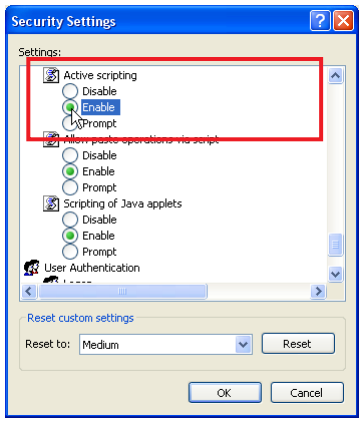
Windows XP Professional

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**.

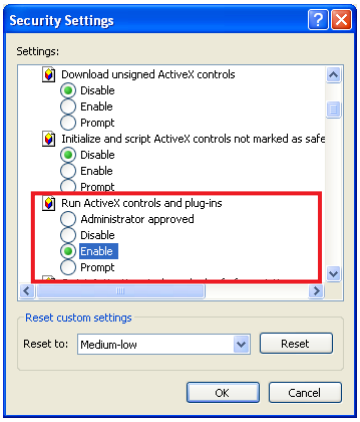




Flash Player enable

ActiveX controls and plug-ins setting

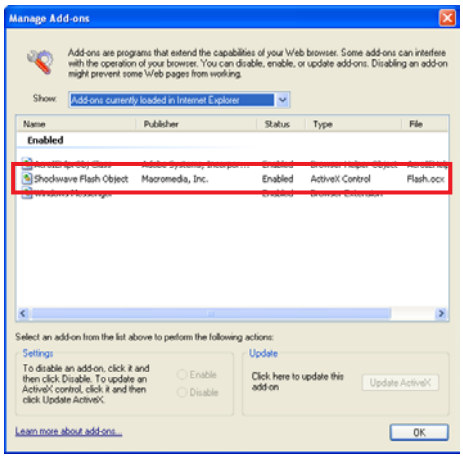
Select **Internet Options** from **Tools** menu on the web browser and then select **Security** tab and click **Customize Level…** button. On the security setting window, scroll down and find the **ActiveX controls and Plug-ins** item, make sure that "Enable" is selected in item **Run ActiveX controls and plug-ins**.



English

Flash Player Add-on setting

Select **Manage Add-ons...** from **Tools** menu on the web browser. Select "Add-ons currently located in Internet Explorer" from **Show** pull-down menu. Make sure that the "Shockwave Flash Object" is listed under the item "Enabled".



Proxy setting

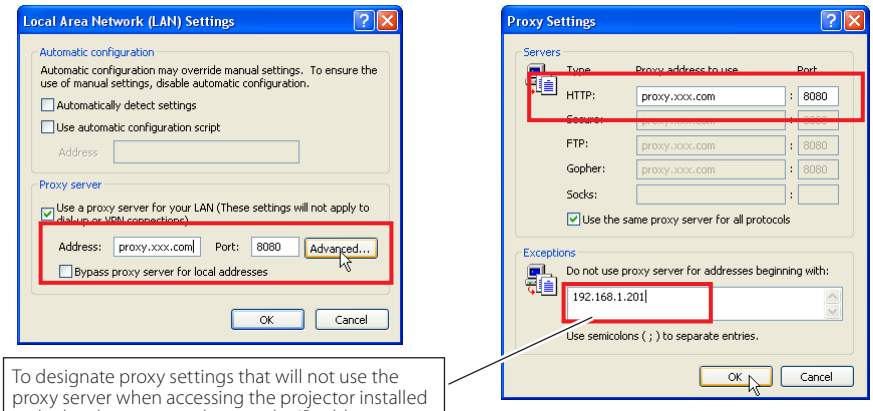
Select **Internet Options** from **Tools** menu on the web browser and then select **Connection** tab and click **LAN Settings** button. Properly set up your web browser's the proxy server settings according to the local area network environment to which the projector is connected.

- 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 UTP cross cable, it must be unchecked.

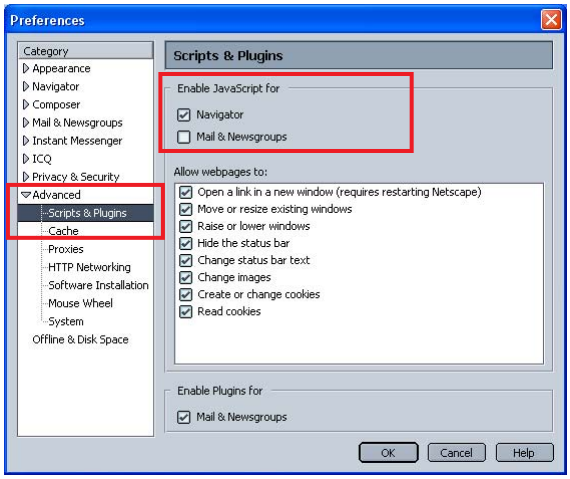


To designate proxy settings that will not use the proxy server when accessing the projector installed in the local area network, enter the IP address or domain name here.

Netscape Navigator v.7.0

JavaScript Setting

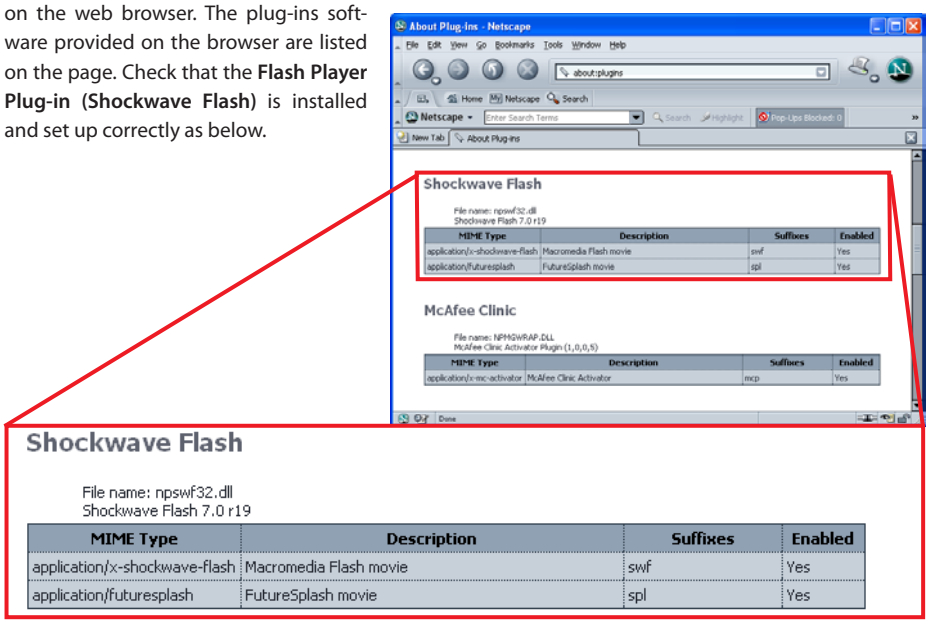
Select **Preference** from **Edit** menu on the web browser and then select the item **Advanced/Scripts & Plugins** in the **Category** column. Make sure that the **Enable JavaScript for Navigator** is checked.



Flash Player enable

Flash Player Plug-in setting

Select **About:Plug-ins** from **Help** menu on the web browser. The plug-ins software provided on the browser are listed on the page. Check that the **Flash Player Plug-in (Shockwave Flash)** is installed and set up correctly as below.



English

Proxy setting

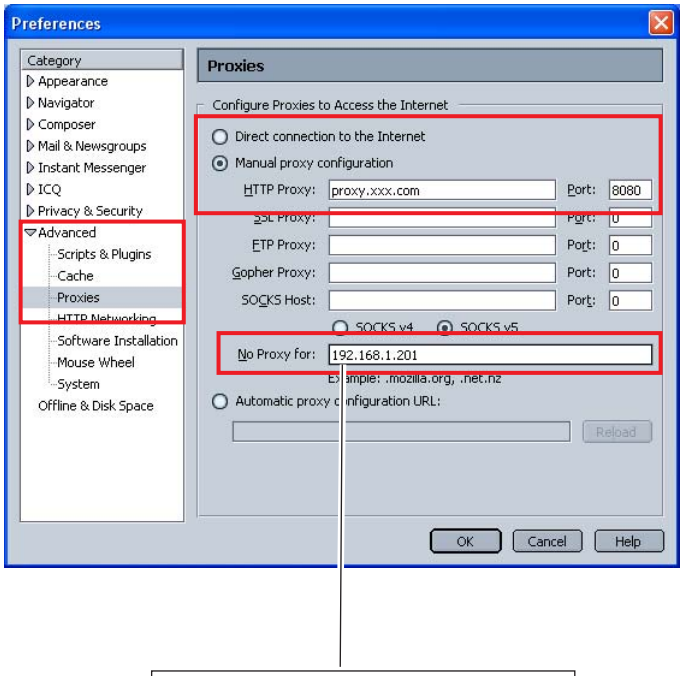
Select **Preference** from **Edit** menu on the web browser and then select the item **Advanced/Proxies** in the **Category** column. Properly set up your web browser's the proxy server settings according to the local area network environment to which the projector is connected.

- Using proxy server

When you use an external internet connection from the local area network, select the item **Manual proxy configuration**. Enter the proxy server address and port number correctly on **HTTP Proxy** item. For further instruction please consult your network administrator.

- Not using proxy server

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



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

Firewall setting

If you use Windows XP SP2 or Windows Vista and using Network Capture 4, you may see the Windows security warning dialog as below. In that case, click "Cancel the block" button on the dialog to enable the function of Network Capture 4. (This page is described with Windows XP screen the example.)

Even if you select "Block", you can cancel the blocking following to the steps below;

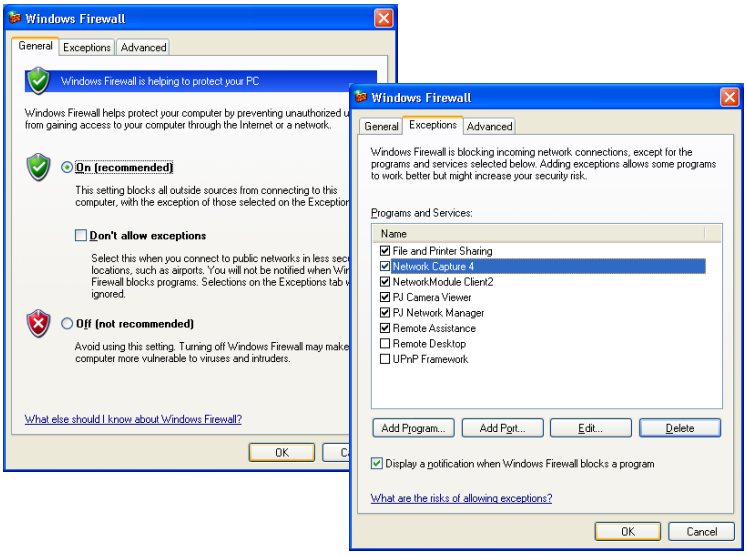
1 Open **Control Panel** form **Start** menu and double-click **Windows Firewall** icon. The firewall setting window will appear.

2 Select **General tab** and check that the setting on the firewall setting window as follows;

On (recommended)	checked
Don't allow exceptions	unchecked

3 Select **Exceptions** tab and check the name of Network Capture 4 listed on the **Programs and Services**. If there is no program name, add the program by clicking **Add Program** button.

4 Click **OK** to close setting.



English

Troubleshooting

If you have any trouble in setup or operation of the projector, refer to the troubleshooting items and check the relevant matters described.

■ The computer cannot connect projectors.

Wired LAN

Is the LAN cable connected to the projector properly?
Are the Link lamp and Access lamp of the LAN terminal lighting properly?
Not lighting : The LAN setting of the projector is set "On"?
See "Wired LAN setting" in the projector menu.
The LAN cable is connected to the network HUB properly?

Wireless LAN

Is the WIRELESS indicator on the front panel of the projector lighting?
If there are not any problems, confirm the LAN setting again.
If the computer supports Wireless LAN, activate the Network Capture 4 and try to connect with the Easy setting button. Refer to "5. Wireless LAN configuration" ➔ "Easy wireless settings" (☞p.39).
If the wireless LAN card provides the firewall function itself, set up to disable its function.

■ Cannot connect with easy wireless setting function

Depending on the wireless LAN card or computer, this easy wireless setting function may not be available.

■ Wireless LAN Connection cannot be established.

AdHoc Mode:

When selecting LAN4(factory default setting)

Check each item in the Wireless Setting menu of the projector as follows:
*IP Address ..... Is the address appropriate? Should not be the same as the other IP address.
*Sub net ..... Should be the factory default value, 255.255.0.0.
*Gateway ..... Should be the factory default value, 255.255.255.255
*Network Type..... Should be AdHoc mode
*ESSID/SSID ..... Should be the same as the setting of computer
->Check the setting for the computer
*Is the Wireless channel set as 11 both for the computer and the projector?
-> The factory default channel of the projector is 11.
*WEP (Wired Equivalent Privacy) Should be disabled.

Infrastructure Mode:

When selecting LAN5 (factory default setting)

Check each item below in the Wireless Setting menu of the projector as follows:

*IP Address.....No setting is required.
*Sub net .....Should be the same as the setting of the access point
*Gateway .....Should be the same as the setting of the access point
*Network Type .....Should be the Infrastructure mode
*ESSID/SSID.....Should be same as the setting of the access point

Check the settings for projector Client computer

*IP Address.....No setting is required. Automatically set as HDCP.
*Wireless Channel.....Should be 11
*ESSID/SSID.....Should be the same as the setting of the access point
*WEP.....Should be disabled.

*When LAN5 is used, it is necessary DHCP server is under the environment enabling those servers communicate through networks. Some access points may have the DHCP function. For detail of the settings, refer to the owner's manual for the devices or consult a system administrator of the network.

Is the segment where the projector is installed different from the computer?
Specify IP Address directly on the optional setting. Refer to "4. Wired LAN Configurations" ➔ "Confirming the Operation" (☞p.28–29).

English

■ **Connection between computer and the projector via Wired LAN cannot be established.**

When selecting LAN1 (factory default setting)

Check IP address, Sub net and Gateway of the projector and computer. For further details of the configuration, contact your system administrator.

Is the segment where the projector is installed different from the projector?
Specify IP Address directly on the optional setting. Refer to "4. Wired LAN Configurations" ➔ "Confirming the Operation" (☞p.28–29).

■ **Cannot start up the browser**

Is the connection between PC and the projector with Network Capture 4 established?

No..... Check settings for Wireless/Wired LAN.
Yes..... Check settings of the proxy setting at browser. Refer to "Web browser setting" (p.130).

■ **Although the connection between PC and the projector is established, images are not projected on the screen.**

Make sure Wireless/Wired is selected from the Input source menu of the projector.

■ **Cannot be turned on/off with the web browser.**

Make sure the settings of the projector are correct to use the projector with it.
Set the item Standby mode to "Normal" from Main menu ➔ Setting menu.
Refer to "7. Controlling the projector" ➔ " Power control and status check" (☞p.65).

■ **Wired / Wireless input cannot be changed. Network Capture 4 cannot be operated.**

Restart the projector or Network Capture 4.
Execute "Wired factory default" or "Wireless factory default" menu on the projector.

Caution: After executing "Wired factory default" or "Wireless factory default" in the projector menu, all the network settings you have made will return to the factory default settings. See the items "Wired factory default" (☞p.31) and "Wireless factory default" (☞p.42) for the each factory default value.

Network capture

■ **Why doesn't the computer screen appear on the projected screen?**

1. Make sure that the input mode of the projector is "Network".
2. Check the parameter set up (☞p.88).
   Make sure that the numbers of the capture port is the same as the projector's port number. The default port number is 9000. If the alert message "Invalid Port No." appears, your computer may be using this port number already. In that case, use another port number.
3. Check the IP address of the computer is registered to the projector correctly (☞p. 89).
4. Make sure that your computer is not using the firewall function. The projector may not be able to use the port due to this firewall function. In that case, please turn off this function temporarily. There are also some port limitations on the network equipment such as router. Please consult your network administrator.

■ **Speed of playing back images are very slow.**

When connecting on AdHoc mode, check which Wireless channel you are using.
If the computer using the same channel as yours is existing closely, the networking speed may be reduced or the communication unstable. Change the channel to resolve the problem. The channels of the projector and projector Client computer must be the same. Or adjust the Quality selection in the parameter setting.
Refer to "Parameter set up" (☞p.88).

■ **Projector does not reproduce the computer's sound during the real time capturing.**

Check that the "PJ Virtual Audio Device" is selected on the audio device panel of the computer.
Double click **Sound and Audio Device** icon on the **Control Panel** of the computer. The property window appears. Click **Audio** tab on the property window and check that "PJ Virtual Audio Device" is selected on the **Default device** of **Sound playback** item.

English

Network Viewer

■ Images from the file server don't appear on the screen?

1. Make sure that the input mode of the projector is "Network".
2. Check the account setting of the FTP server (☞p.121).
3. The files in the FTP server must be optimized JPEG and converted by the File Converter 1 or 2. Please check data format. (☞p.110)
4. There are several limitations for image file name and program name. Please check file names and program names (☞p.119).
5. Make sure that your computer is not using the firewall function. The projector may not be able to use the port due to this firewall function. In that case, please turn off this function temporarily. There are also some port limitations on the network equipment such as router. Please consult your network administrator.

■ I cannot make a new program file.

Check your account of the FTP server. "Write enable" made should be set for its account.(☞p.115)

File Converter 1

■ What kind of image formats can I convert?

The File Converter 1 makes it available to convert into the JPEG format from the following image formats.

Bitmap format (.bmp)
JPEG format (.jpeg .jpg)
Microsoft power point format (.ppt)

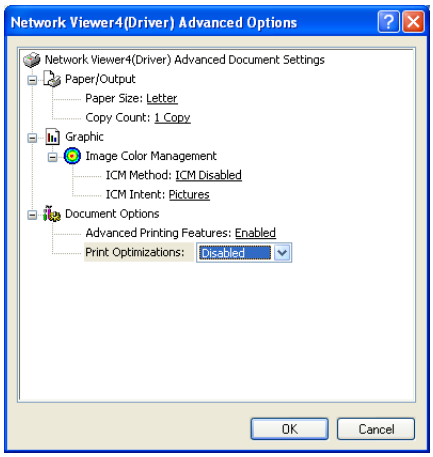
File Converter 2

■ Sometime I have the white frame images converted by the File Converter 2?

It may have images with white frame due to the paper margin of the print driver depending on the image data.

■ Sometime I have the incorrect images converted by the File Converter 2?

Try to change the mode to "Disable" on "Document options" - "Print optimization" item on the "Network Viewer4 (Driver) Advance Options" in the Network Viewer 4 (FileConverter 2) Printer driver setting.



English

Terminology

DHCP server (Dynamic Host Configuration Protocol)

It is necessary to set an IP address for each computer or equivalent equipment when a network is established by TCP/IP. If there exists DHCP server on the network, it will assign IP addresses to client computers every time they request it. If there exists equipment with DHCP server functions (such as a Windows 2000 server and a dial-up router) on the network, the DHCP server function may be automatically operating. Ask your system administrator whether the DHCP server is operating.

ESSID (Extended Service Set Identifier)

ESSID is the ID that is set to computers on Wireless LAN or access point in order to prevent each computer from being crossed. The computers or access point to which the same ESSID is set can communicate with each other. If an ESSID is different, it is impossible to communicate. ESSID distinguishes between lowercase and uppercase characters, and allows you to use English one byte characters and half-size symbols up to 32 characters.

WEP (Wired Equivalent Privacy)

WEP is a security protocol for Wireless LAN. It protects computers on Wireless LAN and access point from unauthorized access by setting a description code onto them. It is necessary to set the same decryption code for equipment.

Wi-Fi (the Standard for Wireless Fidelity)

Wi-Fi is short for Wireless fidelity and a marketing brand name for IEEE 802.11b High-Rate. Only the products that have passed an inter-operation test carried by WECA is approved as Wi-Fi. Any products approved as Wi-Fi are certified as interoperable with each other by WECA. It is recommended to use the products approved by Wi-Fi when you introduce network equipment such as local area network.

Wireless Channel

It is necessary to divide frequency spectrums into some Wireless channels for Wireless communication, and to tune to the same channel between Wireless equipment. If you use the same channel on the same floor, and there are some Wireless LANs that have a different ESSID for each, the communication speed may become slow. In that case, using different channels for each Wireless LAN is effective, which lowers a possibility of mutual interference between Wireless LANs

WECA (Wireless Ethernet Compatibility Alliance)

WECA is an organization promoting IEEE802.11b High -Range standard and assuring the compatibility of products that meet the standard.

MAC address (Media Access Control Address)

MAC address is a physical address for every network interface. The MAC address consists of 6-byte hex number. The first 3 bytes are a Vendor ID controlled and assigned by IEEE. The last 3 bytes are controlled and assigned by the manufacturers of network interface (no duplication of MAC address). Therefore, MAC address is a unique physical address in the world. Ethernet sends and receives frames on the basis of MAC address.

NETWORK OWNER'S MANUAL PLC-WXU30

SANYO Electric Co., Ltd.

Owner's Manual

PJ Network Manager

English
Français
Español
Deutsch
Italiano

This is the manual for the PJ Network Manager software.
Read this manual thoroughly to operate the PJ Network Manager software.
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.

SNMP Manager Software

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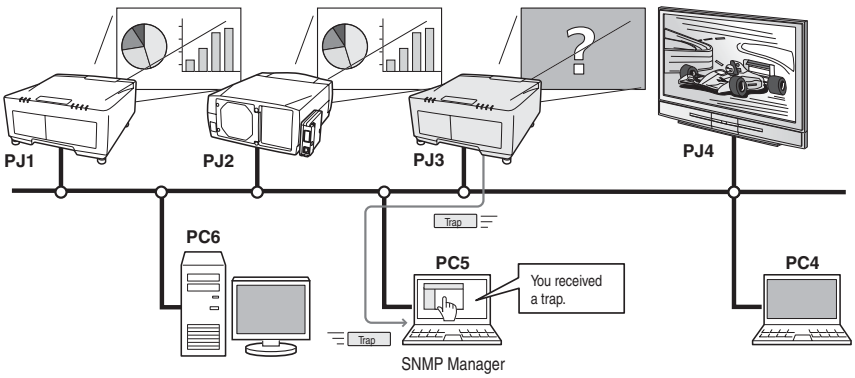
Chapter 1 Introducing

Introducing

This PJ Network Manager is a SNMP manager software for the network equipment which supports the private MIB (Management Information Base).
By installing the PJ Network Manager to the computer, you can monitor the equipment simply such as the projector, the projection monitor and the flat display monitor connected to the network.
* The PJ Network Manager can handle our products which has a SNMP agent function.

SNMP

SNMP is an abbreviation for Simple Network Management Protocol.
On the TCP/IP network, it is the protocol to monitor and control the equipment connected to the network.
SNMP realizes the management function by reading and changing the management information called MIB with SNMP protocol between the manager (management equipment) and agent (controlled equipment) which are connected with TCP/IP network.



Trademarks

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* 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.

English

Operating Environment

Item	Minimum	Recommended
CPU	Pentium III 400MHz or higher	Premtium 4 2.0GHz or higher for Windows XP Premtium 4 3.0GHz or higher for Windows Vista
Memory	128MB or higher	256MB or higher for Windows XP 1GB or higher for WIndows Vista
HDD	More than 20MB of free disk space	
Screen resolution	SVGA (16 colors or more)	XGA True color or more
LAN	10Mbps or more	100Mbps or more
OS	Windows 2000 Windows XP	Windows XP Professional SP2 Windows Vista

Limited condition

The number of agents monitored is up to 200.

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.

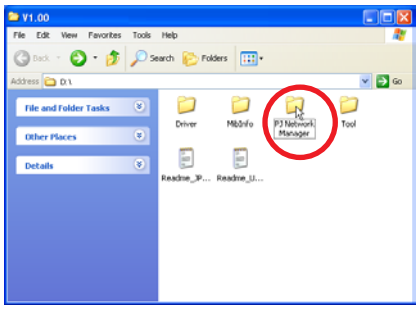
Chapter 2
Set up

2

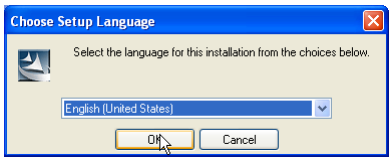
English

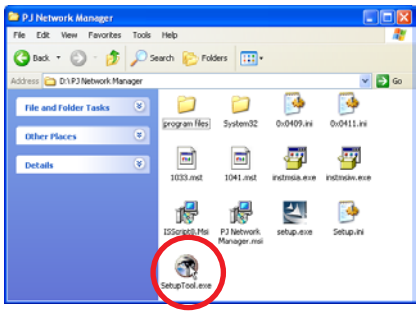
PJ Network Manager installation

1 Set the supplied CD-ROM into the CD-ROM drive of your computer. Double click **SetupTool.exe** icon in the "PJ Network Manager" folder in the CD-ROM.

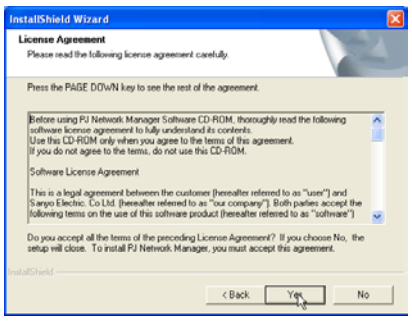


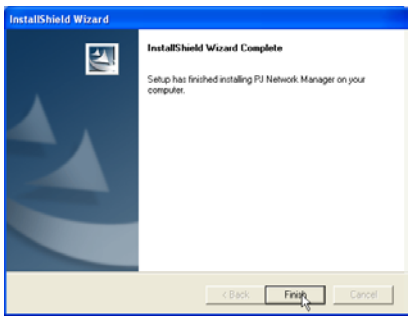
2 Select "[English [United States]" from the pull-down menu on the "Choose Setup Language" window and click **OK** button to start installing and then follow the installation wizards.





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





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.

PJ Network Manager un-installation

To remove the PJ Network Manager software from your computer, perform it with "Add & Remove Programs" on the control panel.

Chapter 3
Basic Operation

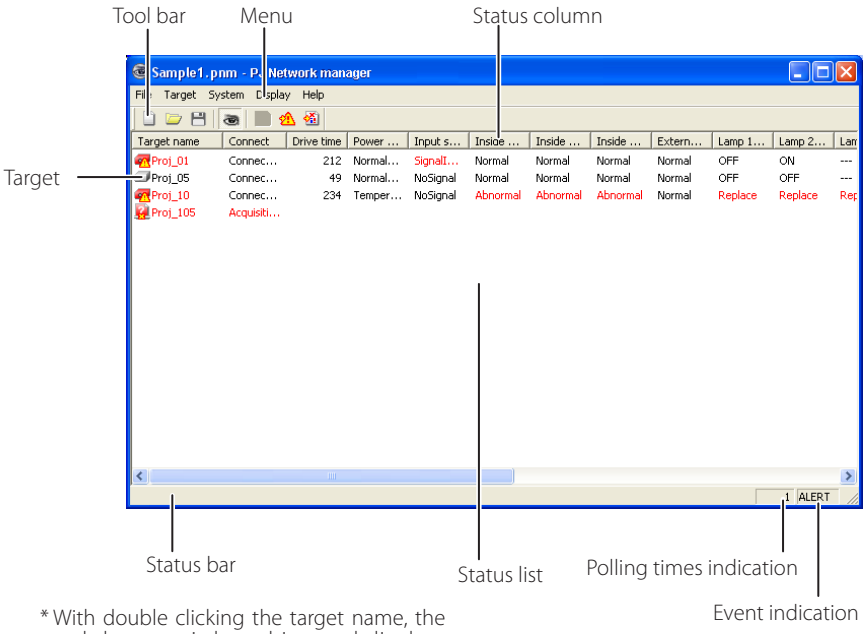
3

English

Launching and quitting PJ Network Manager

To launch PJ Network Manager, take one of the following.
- Select "PJ Network Manager" from the menu "Start" - "All programs".
- Double click a management file*1.

Name of status window



* With double clicking the target name, the web browser is launching and displays login widow of the target.(☞p.29)

Items	Description
Menu	Executes a command with menu selection
Tool bar	Executes a command assigned to a button.
Target	Network equipment for monitoring.
Status bar	Indicates the status of PJ Network Manager and explaining the command selected with cursor.
Status list	Indicates the status of targets monitoring. When some errors are detected, the target name, icon and error items are indicated with red.
Status column	Column of status list.
Polling times indication	Indicates the times of polling during the monitoring.
Event indication	Indicates the event (ALERT, TRAP, SYSERR) when the event happened.

*1 The file in which the Monitor target information and event log information are stored. Refer to item "Storing the management file" (☞p.26) for further details.

[Note]
*** The PJ Network Manager cannot open multiple status windows at the same time.**

Quitting PJ Network Manager

To quit the PJ Network Manager, click the close box on top right of the status window, or select "Exit" from the "File" menu

Menu tree

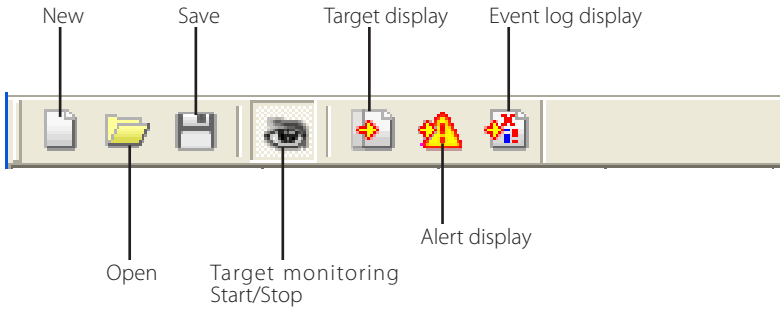
Menu	Sub menu	Operation
File	New	Creates a new management file.
	Open	Opens an existing management file.
	Save	Saves the active management file.
	Save As	Saves the active management file with a new file name.
	Exit	Quits the application.
Target	Target monitoring	Starts or stops target monitoring.
	Target addition	Adds a new target. Target information window will appear.
	Target editing	Edits selected target information.
	Target deletion	Deletes the selected target.
	Warning value setting	Sets up the warning value of the selected target.
System	Target batch registration	Imports target information defined with the external file.
	System default setting	Sets up the default setting (monitoring information, e-mail information).
	Column selection	Selects display items on the status list.
	Font setting	Sets up display font type and size on the status list.
Display	Update	Updates the information on the status list display.
	Target display	Displays selected target information.
	Alert display	Displays all of alert information on the status list.
	Event log display	Displays all the event logs.
	Tool bar	Switches tool bar on or off.
Help	Version information	Displays version of software.

What's Target

Target indicates the network equipment which provides an SNMP agent function .

Name of the button on the tool bar

The following commands are assigned to the buttons on the tool bar.

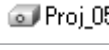


Button	Operation
New	Creates a new management file.
Open	Opens an existing management file.
Save	Saves the active management file.
Target monitoring	Starts or stops target monitoring.
Target display	Displays selected target information.
Alert display	Displays all of alert information on the status list.
Event log display	Displays all the event logs

✎ To switch the tool bar display on or off, select "Tool bar" from "Display" menu.

Icon display for the target

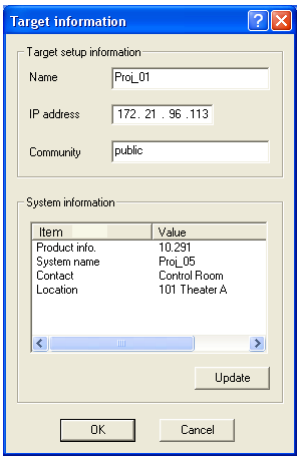
Displays icon according to the target condition.

Icon		Condition
Flat display type	Projector type	
		Normal
		Abnormal condition (One of the abnormalities, Alert, Trap or System error is happening on the target.)
		Connection error (Target has been disconnected from the network)
		Acquisition error (Target has been disconnected from the network, or does not provide SNMP function.)
		Unknown (Target monitoring is not operating)

Addition of the target

1 Select **Target Addition** from **Target** menu. The target information registering window appears.

Items	Description
Name	Enter a management name of the target equipment.
IP address	Enter IP address of the target equipment.
Community	Enter a community name in the network. Default name is "public".
System information	Displays information set on the network equipment



2 Enter target setup information and click **Update** button. The information set on the target equipment are displayed on the system information items.

✎ When the target equipment is not operating, or it is not the monitoring equipment, the error dialog "Cannot obtain information" will appear.

3 Click **OK** to close the window. Repeat the above steps to register for other equipment which is to be managed.

Editing the target

1 Select a target name to edit on the status list with right click.

2 Select **Target editing** on the popup menu. The target information window will appear and edit the contents, then click **OK** button.

✎ The system information cannot be edited.

✎ Target editing can be executed by selecting **Target editing** from Target menu.

Deletion of the target

1 Select a target name to delete on the status list with right click.

2 Select **Target deletion** on the popup menu. The confirmation dialog will appear and click **Yes** button to execute deleting.

✎ Target deletion can be executed by selecting **Target deletion** from **Target** menu.

✎ It cannot perform the target addition, editing and deletion during the target monitoring.

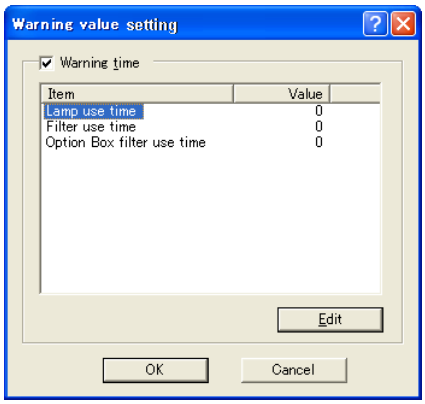
✎ Up to 200 targets can be registered.

✎ Up to 255 characters can be used for target name and community.

English

Setting up the warning value

PJ Network Manager provides a function to display the alert when the use time of the setting item reaches a specified setting time. The available setting items (use time) are depending on the target equipment.



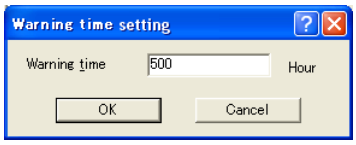
(Example of the set up window)

1 Select a target on the status list with right click.

✎ When setting multiple targets together, select targets with pressing "Shift" or "Control" key.

2 Select **Warning value setting** on the popup menu. The setting window will appear as the right figure.

3 Check **Warning time** check box. The setting items are activated. Select a setting item and click **Edit** button. Another setting window appears.



4 Enter the threshold value of selected item and then click **OK** button. The setting window will disappear.

5 Set up warning value for remaining items if available and then click **OK** button. The setting window will disappear.

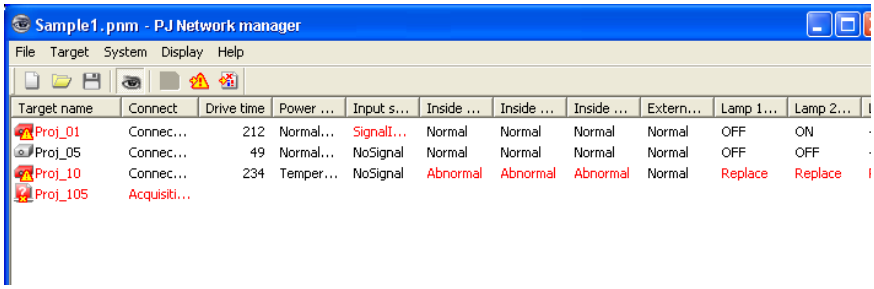
✎ To disable the warning value, clear **Warning time** check box.

✎ When selecting multiple targets, the value set to the lowest target on the status list is displayed as the current setting time. Up to 99,999 hours can be set for the use time. The warning value is stored in the management file.

Starting target monitoring

1 Click button on the tool bar to start monitoring the target.

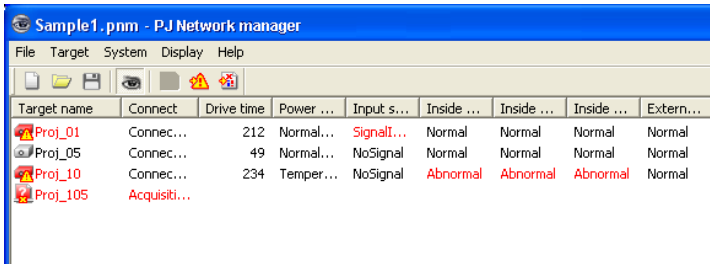
2 PJ Network Manager starts polling the target in a sequential from the top of the status list and displays the results on the status list.



When happens the alert on the target

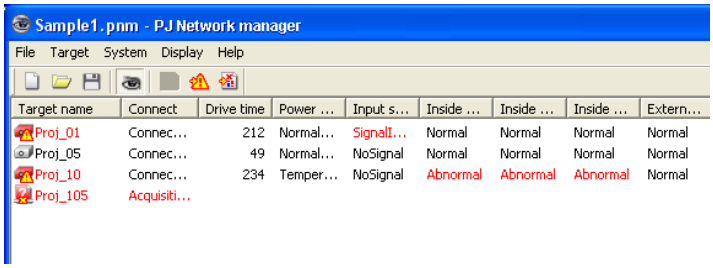
If the abnormality or connection error happens on the target, PJ Network Manager indicates target name, icon and status column item with red color to let you know the abnormality.

- When PJ Network Manager cannot acquire the MIB information of the target equipment, it indicates as Connection Error.
- The interval of target monitoring is according to the setting of **Monitoring interval** on **System default setting** from **System** menu. (☞p.15)



When happens the trap event on the target

During the target monitoring, if the predefined event (trap) happens on the target equipment, the target sends the trap information to PJ Network Manager. This trap information is displayed on the status list immediately.
The notify of the trap information is set up in the SNMP setting items of the target equipment. Projector has items such as "When PJ lamp is off", "When the life span of lamp is reached", "When internal PJ power circuit is failed" etc. For further trap information, refer to SNMP trap information in the separated booklet of the network owner's manual.



What's Trap

Trap is the event predefined by the SNMP agent. If the predefined event ("When PJ lamp is off", "When internal PJ power circuit is failed" etc.) happens, target sends trap information to the SNMP manager.

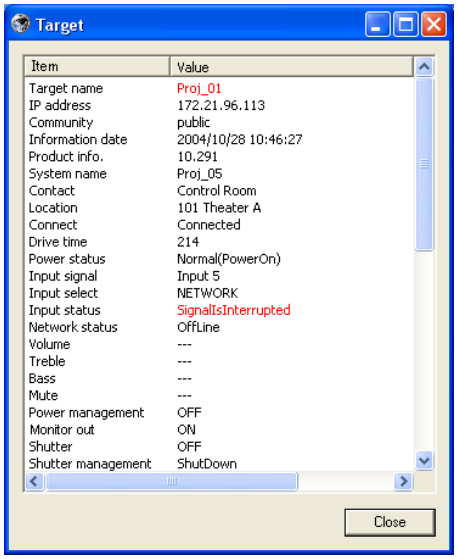
English

Stopping monitoring the target

To stop monitoring the target, click button again on the tool bar.

Displaying all the status information of the target

Select a target and click button on the tool bar. The following status window appears and displays all the available status information of the target.



- The target name and item which have an abnormality or connection error happening are indicated with red.
- When PJ Network Manager cannot acquire the value of column information, "---" is displayed.

- The above procedure can perform by selecting **Target display** from **Display** menu.

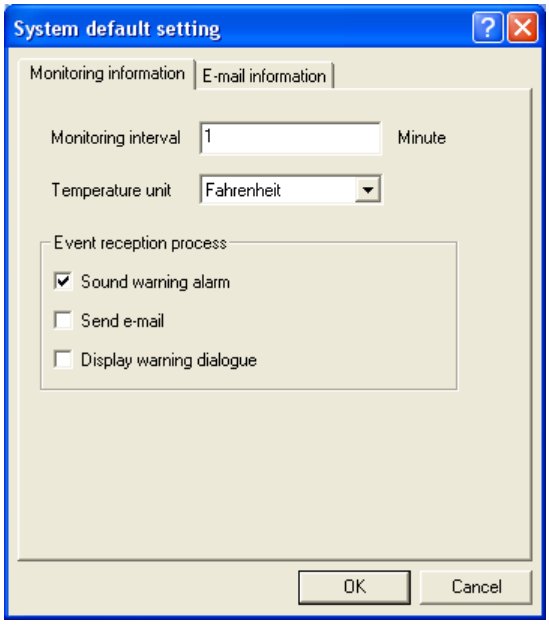
Setting up default setting

The monitoring information and e-mail information can be set up by the procedure below.

1 Select **System default setting** from **System** menu. The setting window will appear.

2 Switch by clicking **Monitoring information** or **E-mail information** tab for each setting.

Monitoring information

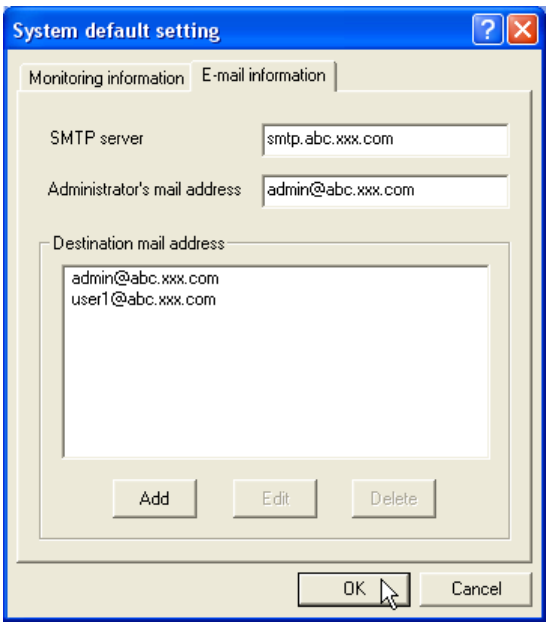


Monitoring information

Items	Description
Monitoring interval	Sets up the interval of the polling in minute unit. (1 to 99 minutes can be set)
Temperature unit	Sets up the display temperature unit Centigrade or Fahrenheit.
Event reception process	Sets up the treatment when the event (ALERT, TRAP, SYSERR) happens on the target. For further information, refer to the item "About event treatment" (☞p.24). ❒ Sound warning alarm ❒ Send e-mail ❒ Display warning dialogue

English

E-mail information



E-mail information

Items	Description
SMTP server	Sets up the IP address of SMTP mail server or server host name.
Administrator's mail address	Sets up the e-mail address of administrator
Destination mail address	Sets up the destination mail address when the event (ALERT, TRAP, SYSERR) happens on the target. The mail address entering window appears when clicking **Add** button.

- If **Send e-mail** check box of **Event reception process** on **Monitoring information** is un-checked, the alert e-mail will not be sent even if you set up the e-mail address.
- Up to 10 addresses can be set up for the destination mail address.
- For the contents of the mail, refer to item "About event treatment" (☞p.24).

Customizing the status list

Changing the status column indication

1 Select **Column selection** from **System** menu. The column selection window will appear.

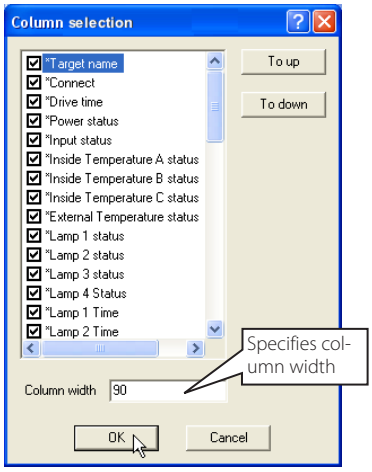
2 On the window, check the column name to be indicated on the status list.

✎ The mark [*] next to the column name indicates alert item.

3 To change the order of the display column on the status list, select a column you intend to change the order and click **To up** or **To down** button.

4 Click **OK** to close setting.

✎ When specifying the column width by numeric value, enter number (0 to 9999) onto "Column width" text box.



Column	Description
***Target name**	Name of the network equipment
***Connect**	Status of connection to the network (Connected, Un-connected)
***Drive time**	Accumulated use time of the equipment
***Power status**	Power status of the equipment (Normal(Power-on), Normal(Standby), Power Management, Power failure, lamp failure, etc.)
***Input status**	Input signal status (Signal, No signal, Signal interrupted)
***Inside Temperature A status**	Status of inside temperature A (Normal, Warning, Error)
***Inside Temperature B status**	Status of inside temperature B (Normal, Warning, Error)
***Inside Temperature C status**	Status of inside temperature C (Normal, Error)
***External Temperature status**	Status of external temperature (Normal, Warning, Error)
***Lamp1 status**	Status of Lamp1 (Off, On, Error, Replace)
***Lamp2 status**	Status of Lamp2 (Off, On, Error, Replace)
***Lamp3 status**	Status of Lamp3 (Off, On, Error, Replace)
***Lamp4 status**	Status of Lamp4 (Off, On, Error, Replace)
***Lamp1 time**	Used time of Lamp1
***Lamp2 time**	Used time of Lamp2
***Lamp3 time**	Used time of Lamp3
***Lamp4 time**	Used time of Lamp4
***Filter status**	Status of airfilter (Normal, Clogged)
***Option Box filter status**	Status of option box filter (Normal, Error, Clogged)
***Filter time**	Use time of airfilter
***Option Box filter time**	Use time of option box filter
***Error info.**	Error information (Not available for the projector)

✎ The values in parentheses are typical value and they differ depending on the connected equipment.

✎ The [*] next to the column name indicates alert items.

English

Column	Description
Input signal	Information of the input mode (Input1, Input2, etc.)
Input select	Information of the input source (RGB, VIDEO, S-VIDEO,NETWORK, etc.)
Network status	Condition of the network mode (Off line, Network Viewer, Network Capture)
Inside Temperature A	Displays inside temperature A of the equipment (in Centigrade or Fahrenheit)
Inside Temperature B	Displays inside temperature B of the equipment (in Centigrade or Fahrenheit)
Inside Temperature C	Displays inside temperature C of the equipment (in Centigrade or Fahrenheit)
External Temperature	Displays external temperature of the equipment (in Centigrade or Fahrenheit)
Lamp mode	Displays lamp mode (1: 1-lamp mode, 2: 2-lamp mode, 4: 4-lamp mode, etc.)
Lamp control	Displays lamp control mode (Auto, Normal, Eco, etc.)
Model name	Model name of the network equipment
IP address	IP address of the network equipment
Community	Community name of the network equipment (public)
Introduction date*1	Date of the network equipment installed
Product info.	Name of the network equipment
System name	System name of the network equipment (Proj_05)
Contact	Contact information of the network equipment
Location	Installed location of the network equipment
Audio system	Displays audio system mode (NORMAL, PERSONAL, MUSIC, TALK)
Volume	Sound Volume of the network equipment
Treble	Sound treble of the network equipment
Bass	Sound bass of the network equipment
Balance	Sound balance of the network equipment
Mute	Sound mute status of the network equipment (ON, OFF)
Power management	Power management status of the network equipment (OFF, READY, SHUTDOWN)
Monitor out	Monitor out status of the network equipment (ON, OFF)
Shutter	Shutter status of the network equipment (OFF, High-Contrast, Normal)
Shutter management	Shutter management status of the network equipment (Shutdown)
Fan control	Fan control status of the network equipment (Normal, Maximum)

*1 Set up the installed date when the PJ Network Manager is newly introduced.

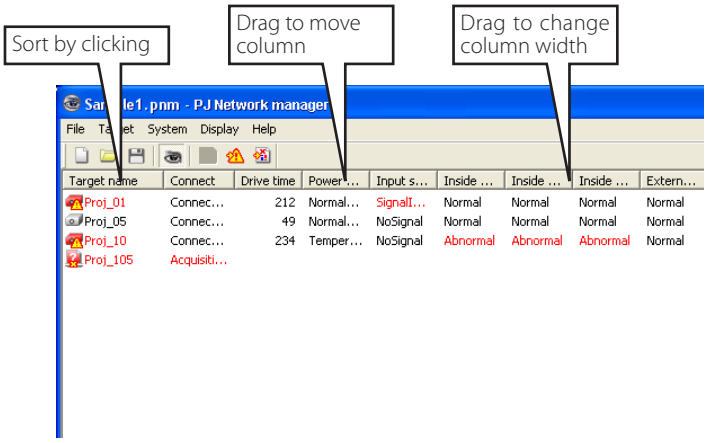
✐ There are some un-available columns depending on the products. The value of un-available column is displayed in blank or with "---".

To change order or width of the column

Drag the status column name you want to change the order and move it on a new place and drop it. To change column width, set a mouse cursor onto the right edge of the column to change, drag the mouse on it and adjust the column width.

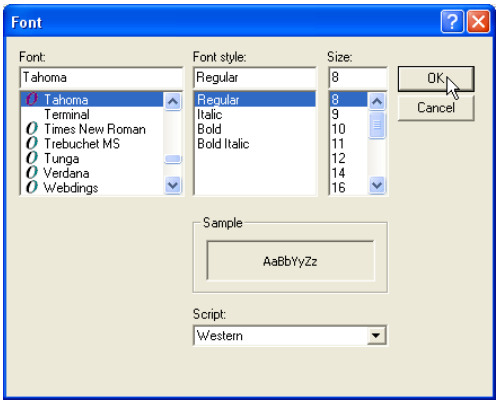
Sorting the status list

The order of the targets on the status list can be changed by clicking the column name which you want to sort. It switches ascending or descending order by clicking the column name each time.



Changing font

Select **Font setting** from **System** menu. The font setup window will appear. Select your desired type face, style and size on the window.



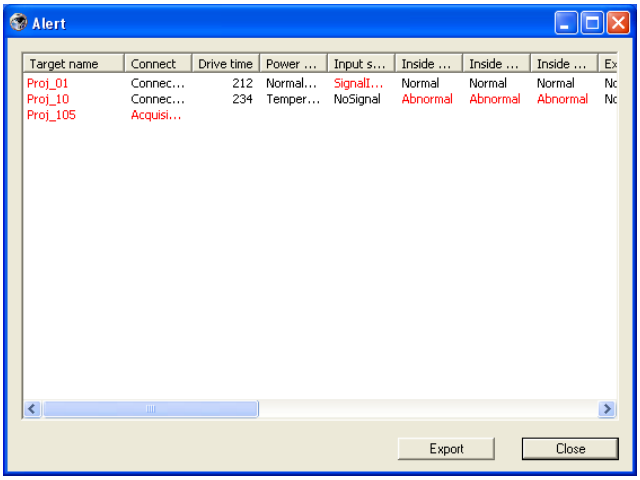
✎ Customized font property is applied to all the windows of the setting.

English

Viewing the alert information

1 Click button on the tool bar. The alert display window appears and the alert information of all the targets which are having an alert is listed on this window as the below.

2 To export the alert information as text file (CSV file), click **Export** button.



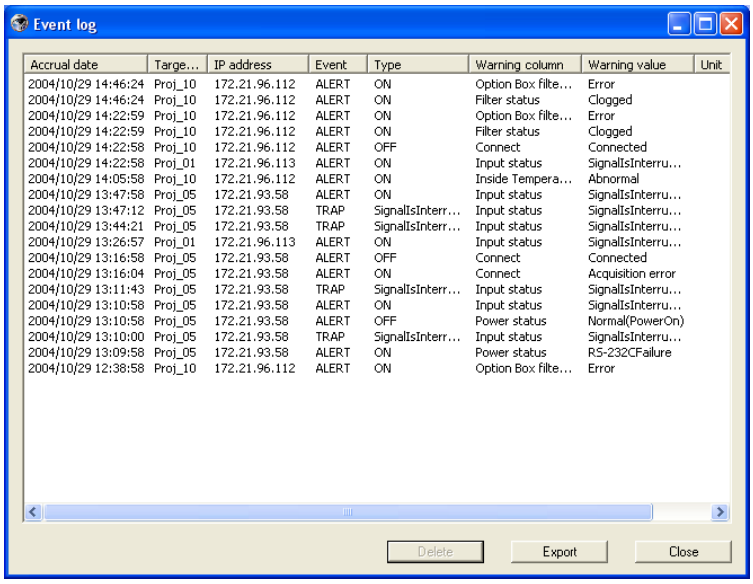
- Only the alert columns are listed.(☞p.17)
- The list order is the same as the status list order and it cannot be sorted.
- Column width can be changed with dragging the right edge of the column. The column order can be changed with drag and drop the column. Column can not be deleted.

Viewing the event log

1 Click button on the tool bar. The event log display window appears and the events which have been happened on the targets are listed on this window as the below.

2 To export these events as text file (CSV file), click **Export** button.

3 To delete the event log, select the accrual date item you intend to delete by clicking and then click **Delete** button. On the confirmation dialogue, click **Yes** to execute deletion.



Event log information items

Items	Description
Accrual date	Accrual date of the event
Target name	Name of the network equipment
IP address	IP address of the network equipment
Event	Type of the Event (ALERT, TRAP, SYSERR) (See table on the next page)
Type	Type of the Event (See table on the next page)
Warning column	Warning column of the Event (See table on the next page)
Warning value	Warning value of the Event (See table on the next page)
Unit	Displays unit of the warning value.

- The listed items are fixed.
- The order of the event log list can be changed temporarily by clicking the column name which you want to sort. It switches ascending or descending order by clicking the column name each time.
- Column width can be changed by dragging the right edge of the column. The column order can be changed with drag and drop the column. Column cannot be deleted.

Description of Event, Type, Warning column, Warning value

Event	Type	Warning Column	Warning Value	Description
ALERT	ON : Abnormality has happened OFF : Abnormality has been cleared	Connect	Un-connected Connected Acquisition error	* Refer to the next page
		Power status	PowerFailuer TemperatureError(OnCoolingDown) TemperatureError NormalAfterTempError RS232CFailure Power management(OnCoolingDown) Power management Shutter management(On cooling) Shutter management LampFailure(OnCoolingDown) LampFailure	
		Input status	SignalIsInterrupted SignalIsInputted	
		Inside Temperature status (A to C) External Temperature status	Abnormal	
		Lamp status (1 to 4)	Failure Replace	
		Lamp time (1 to 4)	(setting time)	
		Filter status	Clogged	
		Filter time	(setting time)	
		Option Box filter status	Clogged Error	
		Option Box filter time	(setting time)	
TRAP	LampFailure	Lamp status (1 to 4)	Failure	
	LampReplace		Replace	
	PowerOFF PowreFailure PowerManagement ShutterManagement	Power status	Normal(Standby) Normal(OnCoolingDown) PowerFailuer Power management Shutter management	
	TemperatureError	Inside Temperature status (A to C) External Temperature status	Abnormal	
	SignalIsInterrupted	Input status	SignalIsInterrupted	
	LampReplacementTime	Lamp time (1-4)	(lamp time)	
	FilterReplacementTime	Filter time	(filter time)	
	CloggedFilterWarning	Filter status	Clogged	
	OptionBoxFilterReplacementTime	Option Box filter time	(filter time)	
	CloggedOptionBoxFilterWarning	Option Box filter status	Clogged	
	OptionBoxError		Error	
	AutoPlayError	n/a	Error	
SYSERR	*MailError *MemoryError	n/a	n/a	

✎ For further details of each warning column and value, refer to the next page.

Description of warning value

Warning Column	Warning Value	Description
Connect	Un-connected Connected * Acquisition error	Projector has been disconnected from the network Projector has been connected to the network PJ Network Manager could not acquire the MIB information from the equipment
Power status	Power failuer	Projector turned off due to the power failure of the projector
	TemperatureError(OnCoolingDown)	On Cooling down due to temperature error occurred
	TemperatureError	The projector turned off due to temperature error occurred
	NormalAfterTempError	Normal after temperature error occurred
	RS232CFailure	The RS-232C communication error occurred
	Power management(OnCoolingDown)	Cooling down after projector lamp was off with the power management function
	Power management	The power management function turned projector lamp off
	Shutter management(On cooling)	Cooling down after projector lamp was off with the shutter management function
	Shutter management	The shutter management function turned projector lamp off
	LampFailure(OnCoolingDown)	Cooling down after the lamp failure occurred
	LampFailure	The lamp failure occurred
	Normal(Standby) *	Projector turned into standby normally
	Normal(OnCoolingDown) *	On cooling down normally due to projector turned off
Input signal status	SignalIsInterrupted SignalIsInputted *	The signal was interrupted The signal was inputted again
Inside Temperature status (A to C] External Temperature status	Abnormal	The projector turned off when the temperature was abnormally high
Lamp status	ON * Failure Replace	When the lamp is on When the lamp failed to ignite. It reached lamp replacing time.
Lamp time	(lamp time)	It reached user setting lamp replacing time
Filter status	Clogged	Filter was clogged
Filter time	(filter time)	It reached user setting filter time
Option Box filter status	Clogged Error	Filter was clogged The option box filter had an abnormality
Option Box filter time	(filter time)	It reached user setting option box filter time
(Auto play error)	Error	The error occurred during the auto image display
(Mail error) (System error)	n/a	PJ Network Manager could not send mail PJ Network Manager could not acquire the memory

✐ The warning value with "*" in the above table shows the event when the alert has cleared, alert type is "OFF".

English

✐ The column order and width of the event log window are saved to the registry of the computer.

✐ Up to 1000 of events can be stored. If it exceeds 1000 events, the oldest event is deleted and the latest event is added. The event log can be saved to the management file.

About event treatment

If the PJ Network Manager receives an event, it executes following event treatment items which are selected in the system default setting.

- ❒ Sound warning alarm
- ❒ Send e-mail
- ❒ Display warning dialogue

Sound warning alarm

If the PJ Network Manager receives an event, the computer beeps an alarm sound. The alarm sound is depending on your computer sound setting.

✐ The alarm sound is not made when your computer does not provide any speaker or the sound volume is muted.

Send e-mail

Following example message is sent to the e-mail address you set up as the destination mail address.

```
From: Test1<admin@abc.xxx.com> (manage-
ment file name)
Date : 2004/10/29 21:30
To : user@abc.xxx.com
Subject : Alert message
---------------------------------------------------------
Alert has occurred
* Accurual date : 2004/10/29 21:13:42
* target name : Proj_10
* IP address : 192.168.1.101
* Event : ALERT
* Type : ON
* Warning column : Power status
* Warning value : Power failure
```

✐ For the further information of event, type, warning column and warning value, see the item "Viewing the event log" (☞p.21).

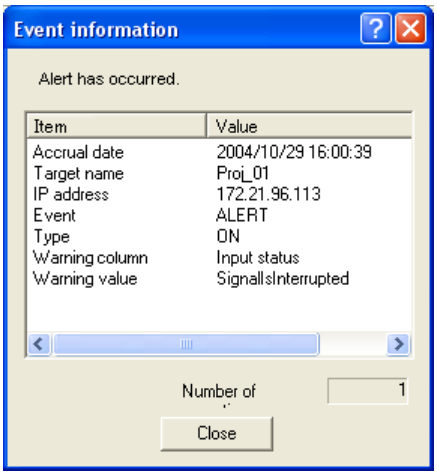
✐ The setting of event treatment, refer to item "Setting up default setting" (☞p.15).

Notes on using Windows XP Service Pack 2 (SP2) / Windows Vista

Windows Firewall is turned on by default in Windows XP SP2 and Windows Vista. Due to this Windows Firewall, the send e-mail function is not available. When using this mail function, you need to cancel the block for PJ Network Manager application. For the further details of Windows Firewall, see Windows help on your computer.

Display warning dialogue

Following dialogue window appears on the screen if event occurs.



✎ For the further information of event, type, warning column and warning value, see item "Viewing the event log"(☞p.21).

English

Storing the management file

When you monitor the network equipment with the PJ Network Manager, you can save the registered target information, system setting and event log information into the management file with a free file name. It is useful if you manage multiple equipment in the network.

Click button on the tool bar and save it with free file name. The extension is ".pnm".

The management file contains following information.

Items	Description
Header	Management file section, file version
System default setting	Default value of the system setting - Monitoring interval - Event reception process - Temperature unit - E-mail information
Target information	Information of the registered target - Target information (target name, IP address, Community, Introduction date) - target MIB information - Warning value set up
Event log information	Event log information (ALERT, TRAP, SYSERR)

✐ The maximum volume of a management file is required about 1MB. (Number of registrable targets is 200, number of events is 1000)

Information saved to the registry

Following application setting information is saved to the registry of your computer. So the setting condition is memorized even after quitting the application.

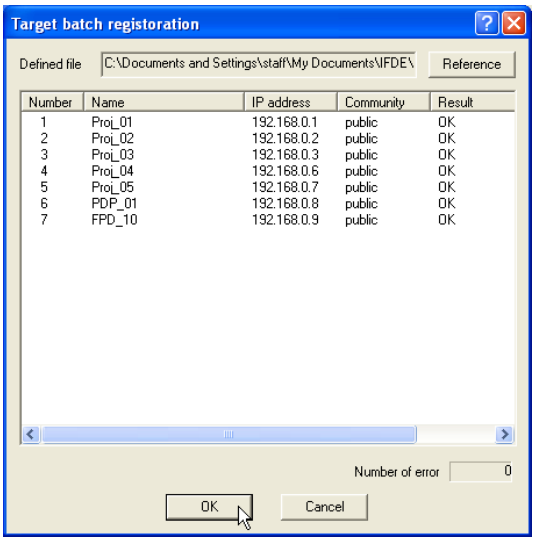
Items	Description
Status window information	Display position and size of the status list window
Status list information	Display status column, column width and column order
Event log list information	Column width and order of the event log list
Font set up	Font setting value (Type face, size and style)

Registering the target information from the defined file at once

The PJ Network Manager provides a function to import the target information from the defined file at once. Prepare the defined file (CSV data format) in which the target information is written along the format shown below.

1 Select **Target batch registration** from **System** menu. The target batch registration window appears.

2 Click **Reference** button and select a defined file to import the target information. The imported target information will be listed on the target batch registration window.



* If there is an error in the imported defined file, the error information will be indicated on the Result column. Retry importing after correcting the defined file.

3 Click **OK** button to execute the registration.

English

Format of the defined file

The defined file is a CSV data file created by the spreadsheet application and is defined as follows;

Column	Description (example)
Target name	Name of target equipment (Proj_01, Proj_03, PDP_01, etc.)
IP address	IP address (192.168.0.1, etc.)
Community	Name of SNMP community. Default value of our network products is "public"

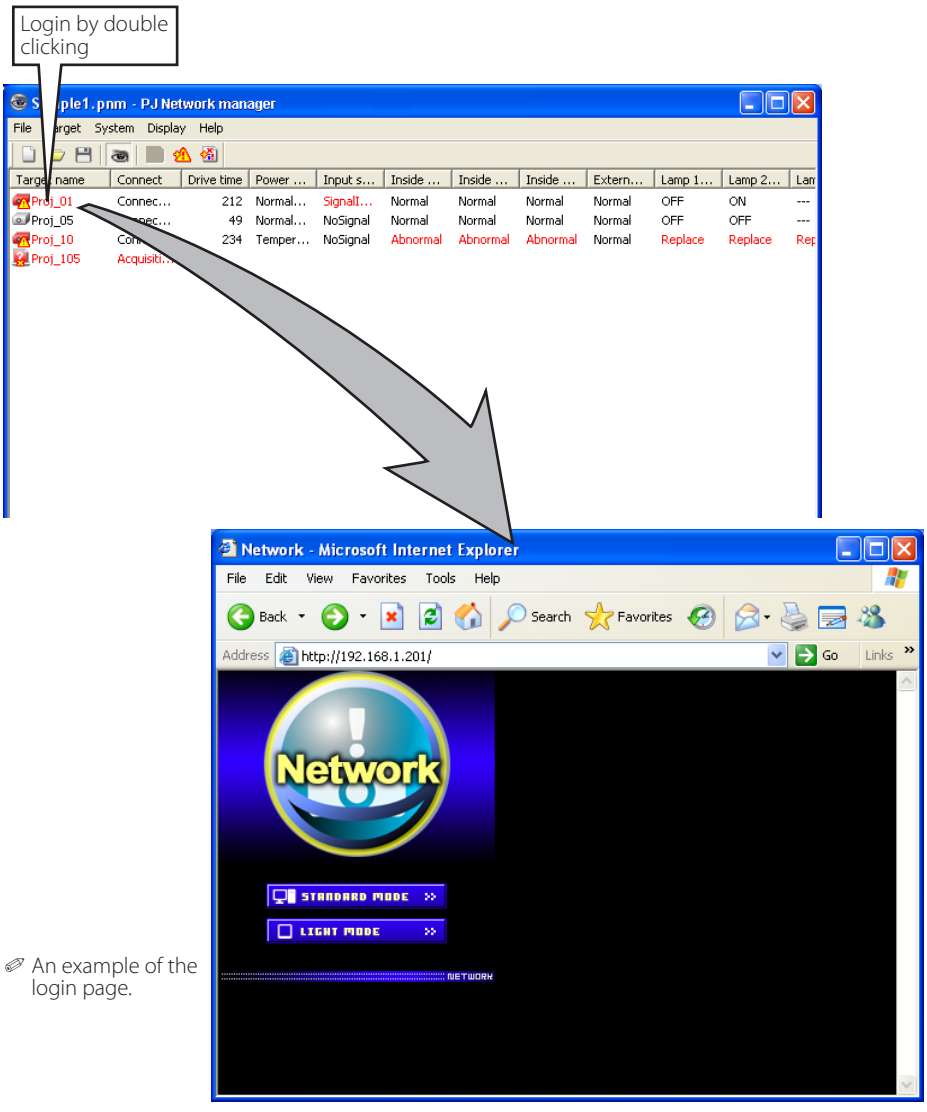
Example of the defined file

The table below shows the example of the defined file provided with the target information. Save this file as the CSV file.

Target name	IP address	Community
Proj_01	192.168.0.1	public
Proj_02	192.168.0.2	public
Proj_03	192.168.0.3	public
Proj_04	192.168.0.6	public
Proj_05	192.168.0.7	public
PDP_01	192.168.0.8	public
FPD_10	192.168.0.9	public

Login to the target equipment

After double clicking the target name on the status list, the computer launches web browser and displays the login window of the target equipment.
You can control and set up the projector remotely by using the web browser. For the further information of instruction, see the separated booklet of network owner's manual.



An example of the login page.

English

English

PJ NETWORK MANAGER OWNER'S MANUAL

SANYO Electric Co., Ltd.

Owner's Manual

Memory Viewer function

English
Français
Español
Deutsch
Italiano

This is the manual for the Memory Viewer function.
Read this manual thoroughly to operate the Memory Viewer 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.

Memory Viewer function

The Memory Viewer function is to make a presentation or project an image without using computers or some other external equipment. You do not have to carry a computer or other equipment to project images.

Store images on a dedicated SD memory card and insert it into the SD memory card slot of the projector, then you can project those images.

This projector is also equipped with dedicated Network Viewer 4 software to edit the presentation images to project with the Memory Viewer function. With this function, you can edit images, photo data, or Power Point data into a more effective presentation data. For further information of the Network Viewer software, see the chapter "9. Network viewer function" on the separated booklet of "Network Owner's manual".

Which images can be projected with the Memory Viewer function?

With the Memory Viewer function, you can project images in these formats below.

- Bitmap data
- JPEG data converted with the Network Viewer 4 [File Converter 1 and 2] software.
- Text data
- Program file created with the Network Viewer 4 [Program Editor].

*Some data may not be projected even with these formats.

Text data used with Memory Viewer

Memory viewer supports the text file with the ASCII format for single byte. Other text formats cannot be supported.

Back up the data

It is recommended that important data to edit with Network Viewer and store in SD memory card should be stored in other media in advance. We are not responsible for any data losses or damages resulting from use of the Memory Viewer function.

Trademarks

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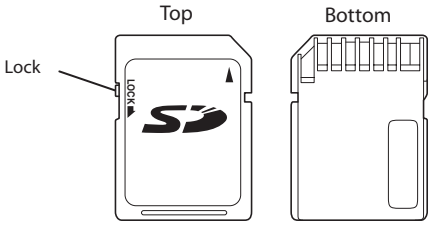
- The On-Screen Menu and figures in this manual may differ slightly from the product.
- The contents of this manual are subject to change without notice.

Memory card for the Memory Viewer function

The memory card is not provided with this projector. The types of memory card which can be used with the Memory Viewer function of this projector is "SD Memory Card". It may not be used with this projector depending on the type of the SD memory card. A new SD memory card or a card formatted by computer or camera must be formatted by this projector. The Memory Viewer function may not operate properly with a card formatted by other equipment.

Shape of SD memory card



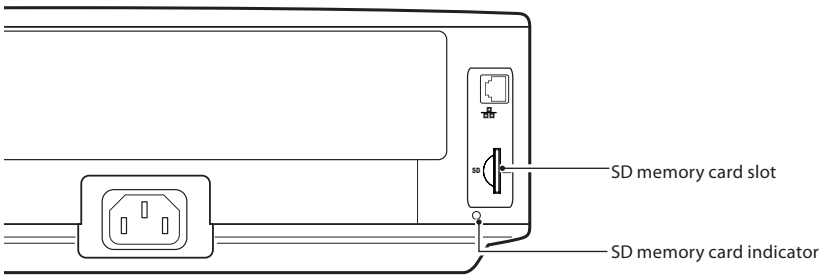
Capacity of SD Memory Card: up to 8GB

* There may not be used with this projector depending on the type or manufacturer of the SD memory card.

English

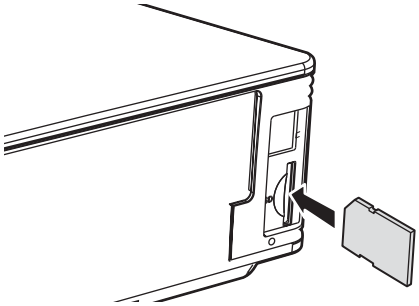
SD memory card slot

The projector provides an SD memory card slot on the back side. The SD memory card indicator lights up when the SD memory card is inserted rightly.



Inserting the SD memory card

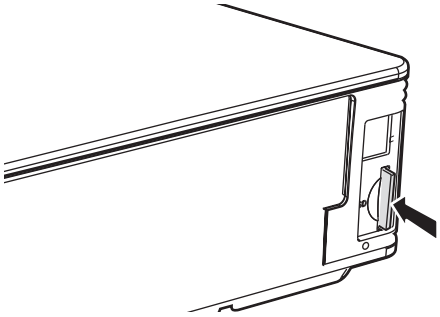
Insert the SD memory card into the card slot on the back side of the projector as shown in the figure below.



Insert a card with cutting side up until it clicks.

Removing the SD memory card

Push the SD memory card in the arrow direction gently to remove. The card comes out and you can remove it.



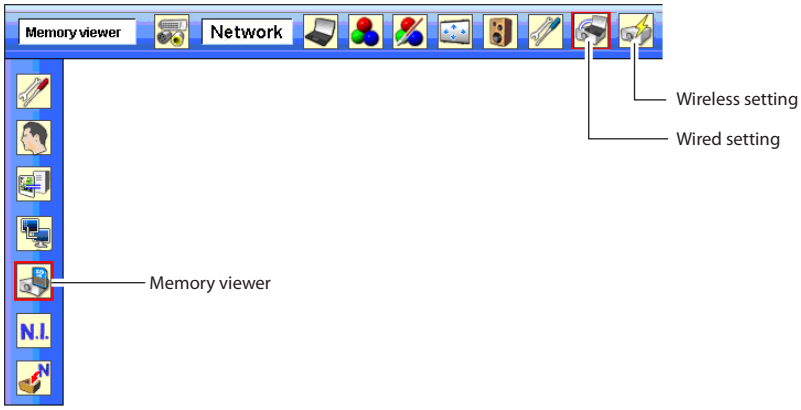
Push the card until it clicks. The card comes out.

Note:

- During accessing to the SD memory card, do not tun off the power or eject the card because the data in the card might get damaged. During accessing, the SD memory card indicator is blinking
- The SD memory card allows you to insert or remove regardless of the power status of the projector.

Entering the memory viewer mode

1. Select “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 "Ready for use" will appear.
2. Insert the SD memory card into the card slot on the back side of the projector. The card indicator lights up.
3. Select “Wired setting” or "Wireless setting" in the projector menu, and press **SELECT** button.



4. Select "Memory Viewer" with the point ▲▼ button and press **SELECT** button. The "Enter/Exit" pallet of the memory viewer appears.

5. Select "Enter" and press **SELECT** button. The memory viewer start-up image appears briefly and an image stored in the SD memory card is displayed on the screen.
   * If the image file is not available in the root directory of the SD memory card, the memory viewer browser window appears.

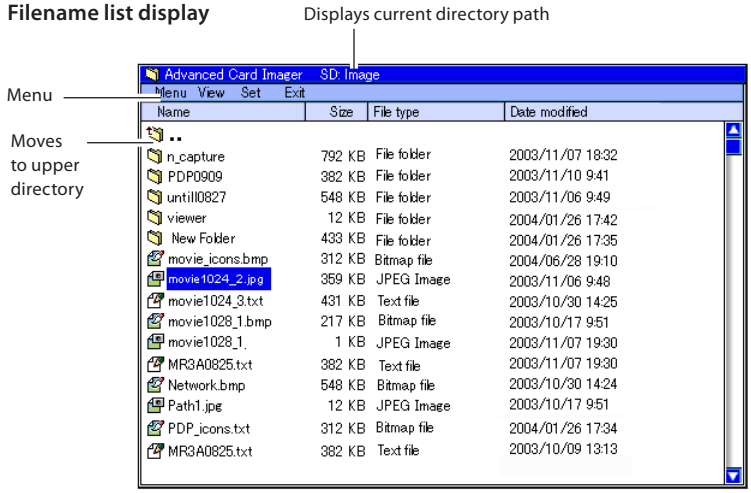
English

Displaying the memory viewer browser window

When you press **AUTO SETUP/CANCEL** button in the memory viewer mode, following browser window "Thumbnail" or "Filename list" appears on the screen.

Thumbnail display

Filename list display



* When you set up the custom screen size with the screen setting of the projector, a part of the browser window of the memory viewer may get cut off from the custom screen size. In that case, readjust the custom screen size.

Menu tree

Menu	Sub menu	description
Menu	Manual mode	Mode to select a playing file respectively Available file types are JPEG(.jpg), Bitmap(.bmp), Text(.txt). Others are not available.
	Program mode	Mode to select a program file (.dpf) created by the program editor.
	Format	Formats the SD memory card
Display	Thumbnail	Displays files with the thumbnail on the browser window.
	Filename list	Displays files with the file name on the browser window.
Set	English < >	Selects display menu language, Japanese or English. Set with ◀ ▶ button
	3 sec. < >	Sets display period of a image in the auto display mode. (3 to 240 seconds) Set with point ◀ ▶ button.
	0 times < >	Sets the repeating times in the auto display mode. (0 to 255 times). 0 means endless play. Set with point ◀ ▶ button.
Exit		Quits the Memory Viewer operation.

Icon indication

Folder icon. Displays the contents of the selected folder with SELECT button

Top directory icon. Moves to upper directory with SELECT button

JPEG file icon

Bitmap file icon

Text file icon

Program file icon (Playback with the program mode)

Un-supported file icon

Selection of memu

1. To select the menu, press **AUTO SETUP/CANCEL** button in the memory viewer mode. The cursor moves from file selection window to menu.
2. Select the sub-menu with point buttons and press **SELECT** button. To cancel the selection, press **AUTO SETUP/CANCEL** button.

Note:
* The memory viewer does not support the resolution of image more than the panel resolution of the projector.
* Text file can be displayed up to 15,000 rows with 110 characters per row.

English

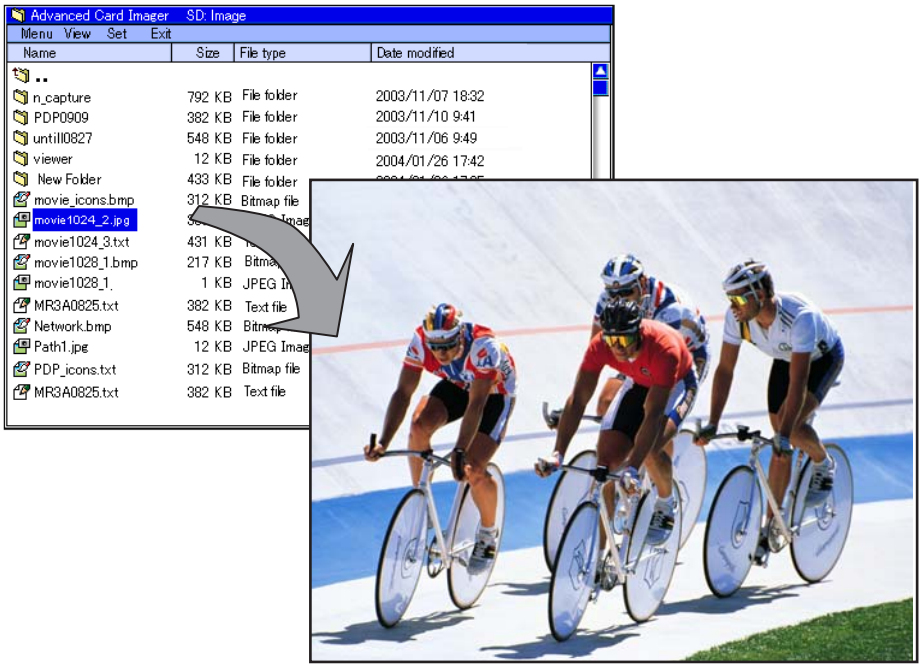
Image viewer in the manual mode

1. Select "Manual mode" from "Menu" on the browser window of the memory viewer and press **SELECT** button.
2. Select a file to display with point buttons and press **SELECT** button. The selected file image is displayed on the screen.
3. During displaying the image, you can control the displayed image with control buttons as described in the table below.

Point	Operation
▼	Manual playback with next file
▲	Manual playback with previous file
▶	Start auto-playback*
◀	Stop auto-playback*

* The display time of the image and the number of repeat at the auto-playback mode are set up from the "Set" menu on the browser window
* Point ◀▶ buttons operate as the scroll key during displaying the text file .

Note:
During operating the memory viewer, the Network Viewer and Network Capture function cannot be used. The program file does not support in the manual mode. Use it in the program mode.



* To display the portrait documents such as text files, use the point ◀▶ buttons to scroll up and down the page.

Image viewer in the program mode

1. Select "Program" on "Menu" of the browser window of the memory viewer. And press **SELECT** button. The program files (.dpf) in the DispParam folder under the top directory are displayed.
   * If the DispParam folder is not placed in the top directory, the list of the folder name is displayed. Find the DispParam folder which stores the program file manually to display the contents of the folder.
2. Select a program file with point buttons and press **SELECT** button. The dialogue window appears and select "Yes" and press **SELECT** button to start the auto display. The images programmed by program file are displayed on the screen. The display period of the image and the number of repeat are set with the program file.
3. During displaying the image, you can control the displayed image with control buttons as described in the table below.

Point	Operation
▼	Manual playback with next file
▲	Manual playback with previous file
▶	Start auto-playback*
◀	Stop auto-playback*

Termination of memory viewer

To terminate the memory viewer function, take one of methods described below.

- Terminate with projector's on-screen menu.

1. Select "Wired" or "Wireless" from the input menu of the projector. Press **SELECT** button.
2. Select "Memory Viewer" with the point ▲▼ buttons and press **SELECT** button. The "Enter/Exit" pallet of the memory viewer appears.
3. Select "Exit" and press the **SELECT** button.

- Terminate with memory viewer mode

1. During the image displaying, press **AUTO SETUP/CANCEL** button. The browser window appears on the screen.
2. Press **AUTO SETUP/CANCEL** button again. The cursor moves to menu item.
3. Select "Exit" on the browser window with the point ◀▶ buttons and press **SELECT** button.

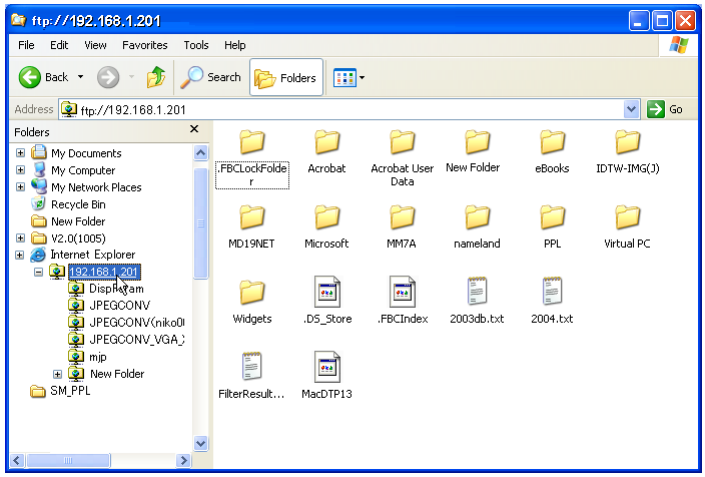
While operating the memory viewer, the Network Viewer and Network Capture function cannot be used.

* The program file (.dpf) is created with the program editor software. For further information, see the item "Creating the program file [Program Editor]" (p.115) described on the separated booklet of network owner's manual.
* The DispParam folder is automatically created when the program file with the program editor is stored. For further information, see the item "Creating the program file [Program Editor]" (p.115) described on the separated booklet of network owner's manual.
* When storing the program file into the SD memory card manually, create folder with the name of "DispParam" and store the program file into this folder.
* In the program mode, the browser window lists the program files and folders only. Other files are not listed.

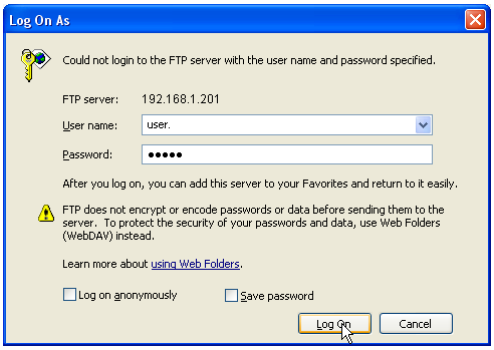
Duplicating the data into the SD memory card

It is described how to duplicate the data converted with the Network Viewer 4 [File Converter 1, File Converter 2] into the SD memory card through the network.

1. Launch the explorer software of the computer and type the IP address of the network board which has the SD memory card onto the address column. For example, "ftp://192.168.1.201".
   The contents of the SD memory card appears on the explorer window as below.
2. Move the projection data from the computer into the SD memory card.



Note:
If the network PIN code is set for the projector, the authentication window appears as below. In that case, enter "user" into the User Name column and the network PIN code of the projector into the Password column. *User Name must be "user".



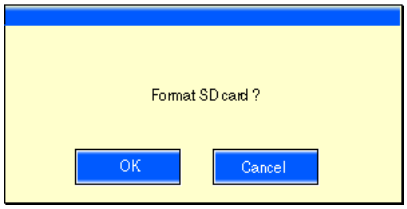
* The data converted by the Network Viewer 4 [File Converter1] can be stored into the SD memory card mounted on the projector directly. For further information, refer to chapter Network Viewer function, "Setting of output destination and conversion mode" (p.113) described on the separated booklet of Network Owner's manual.

* The program file created by the Program Editor can be stored into the SD memory card mounted on the projector directly. For further information, refer to chapter Network Viewer function, "Creating the program file" (p.115) described on the separated booklet of Network Owner's manual.

Formatting the SD memory card

A new SD memory card or a card formatted by computer or camera must be formatted by this product. Memory Viewer function may not operate properly with a card formatted by other equipment.
* It cannot be formatted when the lock switch of the card is set to "LOCK" position.

1. In the memory viewer mode, press **AUTO SETUP/CANCEL** button. The browser window appears on the screen.
2. Press **AUTO SETUP/CANCEL** button again. The cursor moves to menu item.
3. Select "Format" from "Menu" with the point buttons and press **SELECT** button. The format confirmation window appears.
4. Select "Yes" with the point buttons and press **SELECT** button to start formatting. It takes about 1-2 seconds to complete the formatting.



Note:
✎ During formatting the SD memory card, do not turn off the power or eject the card because the data in the card might get damaged. During formatting, the SD memory card indicator is blinking.

English

MEMORY VIEWER OWNER'S MANUAL

SANYO Electric Co., Ltd.