

SANYO

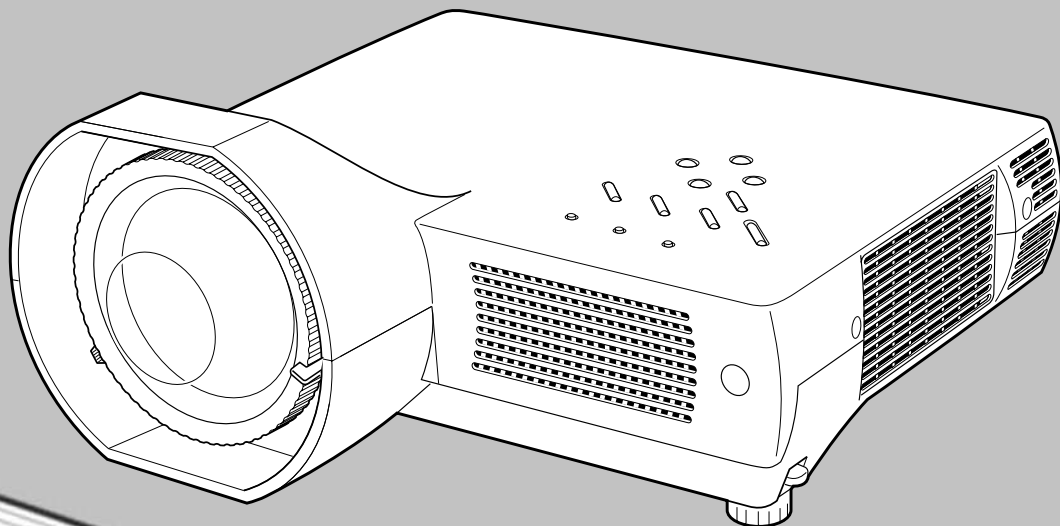
Multimedia Projector

MODEL PLC-WXL46A

Network Supported

* Refer to the owner's manual below for details about network function.

- Network Set-up and Operation
- PJ Network Manager



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.

◆ Large Screen in Limited Space

Short focus lens allows you to project large images from short distance. (p.13)

◆ Security Features

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.47).

The PIN code lock guards the projector from an unauthorized user. (pp.18, 47-48)

◆ Logo Function

The Logo function allows you to customize the screen logo. The Logo page identifies the owner of the projector. (pp.42, 43)

◆ Closed Caption

This is a printed version of the program sound or other information displayed on the screen. You can turn on the feature and switch the channels. (p.50)

◆ Simple Computer System Setting

The projector has a Multi-scan system to conform to almost all computer output signals quickly. (p.26)

◆ Compatibility

The projector widely accepts various video and computer input signals including; Computers, 6 Color systems (PAL, SECAM, NTSC, NTSC4.43, PAL-M, or PAL-N), Component video, S-video and RGB scart.

◆ LAN Network Function

This projector is loaded with the Wired function. You can manage the projector via network. For details, refer to the owner's manual "Network Set-up and Operation."

◆ Quick Termination

The AC power cord can be unplugged immediately after turning off the projector without waiting for the projector to cool down. (p.19)

◆ Digital Zoom (for Computer)

The digital zoom function allows you to focus on crucial information during a presentation. You can expand the images approx. 16 times the screen size and compress them to approximately a quarter of the screen size. (p.33)

◆ Blackboard Function

A blackboard can be used as a projection screen. (pp.30, 37)

*The board color is limited to Green.

◆ Colorboard Function

At the time of simple projection on the colored wall, you can get the close color image to the color image projected on a white screen by selecting the similar color to the wall color from the preset four colors.

◆ Multilanguage Menu Display

The 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.41)

◆ Switchable Interface Terminal

The projector provides a switchable interface terminal. You can use the terminal as computer input or monitor output conveniently. (p.44)

◆ Power Management

The Power management function reduces power consumption and maintains lamp life. (p.45)

◆ Input Search Function

Input signal can be searched automatically. (p.44)

✓ Note:

- 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.

Table of Contents

Features and Design	2	Image Level Adjustment	31
Table of Contents	3	Screen Size Adjustment	32
To the Owner	4	Video Input	34
Safety Instructions	5	Input Source Selection (Video, S-video)	34
Air Circulation	6	Input Source Selection (Component, RGB Scart 21-pin)	35
Installing the Projector in Proper Position	6	Video System Selection	36
Moving the Projector	6	Image Level Selection	37
Compliance	7	Image Level Adjustment	38
Part Names and Functions	8	Screen Size Adjustment	40
Front	8	Setting	41
Back	8	Setting	41
Bottom	8	Maintenance and Cleaning	51
Rear Terminal	9	Warning Indicator	51
Top Control	10	Cleaning the Air Filters	52
Remote Control	11	Resetting the Filter Counter	52
Remote Control Battery Installation	12	Attaching the Lens Cover	53
Operating Range	12	Cleaning the Projection Lens	53
Installation	13	Cleaning the Projector Cabinet	53
Positioning the Projector	13	Lamp Replacement	54
Adjustable Feet	13	Lamp Replacement Counter	55
Connecting to a Computer	14	Appendix	56
Connecting to Video Equipment	15	Troubleshooting	56
Connecting to Component Video Equipment	16	Menu Tree	59
Connecting the AC Power Cord	17	Indicators and Projector Condition	61
Basic Operation	18	Compatible Computer Specifications	62
Turning On the Projector	18	Technical Specifications	64
Turning Off the Projector	19	Dimensions	65
How to Operate the On-Screen Menu	20	PJ Link Notice	66
Menu Bar	21	Configurations of Terminals	67
Focus Adjustment	22	PIN Code Number Memo	68
Keystone Correction	22		
Sound Adjustment	23		
Remote Control Operation	23		
Computer Input	25		
Input Source Selection	25		
Computer System Selection	26		
Auto PC Adjustment	27		
Manual PC Adjustment	28		
Image Level Selection	30		

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 the projector, read this manual thoroughly.

The projector provides many convenient features and functions. Operating the projector properly enables you to manage those features and maintain 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 on pages 56~58 of this manual. 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.

FOR EU USERS

The symbol mark and recycling systems described below apply to EU countries and do not apply to countries in other areas of the world.

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

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

Note:

If a chemical symbol is printed beneath the symbol mark, this chemical symbol means that the battery or accumulator contains a heavy metal at a certain concentration. This will be indicated as follows: Hg: mercury, Cd: cadmium, Pb: lead

In the European Union there are separate collection systems for used electrical and electronic equipment, batteries and accumulators.

Please, dispose of them correctly at your local community waste collection/recycling centre.

Please, help us to conserve the environment we live in!

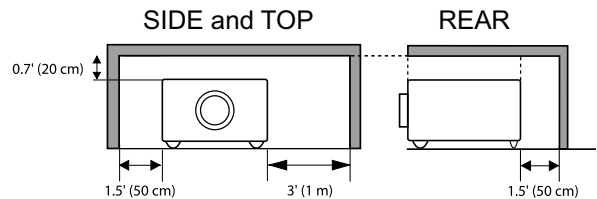


Safety Precaution

WARNING: • THIS APPARATUS MUST BE EARTHED.

- **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. Avoid staring 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 dimensions 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.
- Do not project the same image for a long time. The afterimage may remain on the LCD panels by the characteristic of panel.



CAUTION

DO NOT SET THE PROJECTOR IN GREASY, WET, OR SMOKY CONDITIONS SUCH AS IN A KITCHEN TO PREVENT A BREAKDOWN OR 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.

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

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.

NOTE FOR CUSTOMERS IN THE US

 LAMP(S) INSIDE THIS PRODUCT CONTAIN MERCURY AND MUST BE RECYCLED OR DISPOSED OF ACCORDING TO LOCAL, STATE OR FEDERAL LAWS.

Safety Instructions

Air Circulation

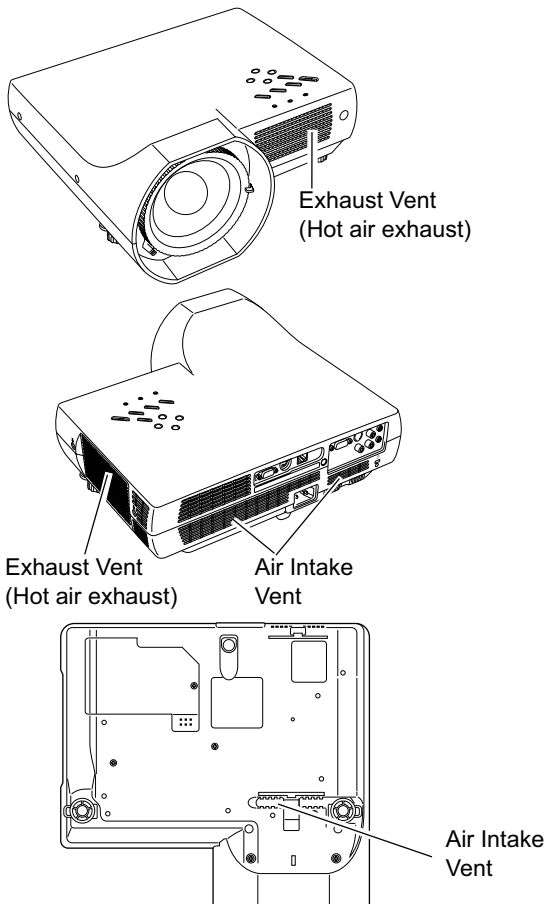
Openings in the cabinet are provided for ventilation. To ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered.

CAUTION

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

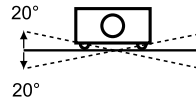
- Do not put any flammable objects or spray can near the projector. Hot air is exhausted from the air vents.
- Keep the exhaust vent at least 3' (1 m) away from any objects.
- Do not touch a peripheral part of the exhaust vent, especially screws and metallic part. This area will become hot while the projector is being used.
- Do not put anything on the projector. 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 fan's running speed is changed according to the temperature inside the projector.



Installing the Projector in Proper Position

Install the projector properly. Improper Installation may reduce the lamp life and cause fire hazard.



Do not roll the projector more than 20 degrees from side to side.



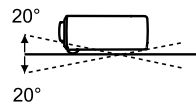
Do not point the projector up to project an image.



Do not point the projector down to project an image.



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



Do not pitch the projector more than 20 degrees backward and forward.

CAUTION

Choose the running speed of cooling fans in the fan control setting according to the altitude in which the projector is being used (p.49). Failure to do so may affect the projector life.

Moving the Projector

When moving the projector, replace the lens cover and retract the adjustable feet to prevent damage to the lens and cabinet. When the projector is not in use for an extended period, put it into a suitable case. Handle the projector carefully; 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 it is cooled enough.

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. If it is not installed and used in accordance with the instructions, it 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-WXL46A
Trade Name : Sanyo
Responsible party : SANYO NORTH AMERICA CORPORATION
Address : 21605 Plummer Street, Chatsworth, California 91311
Telephone No. : (818)998-7322

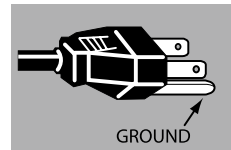
AC Power Cord Requirement

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 \diamond . 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 BARE 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 \perp 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.

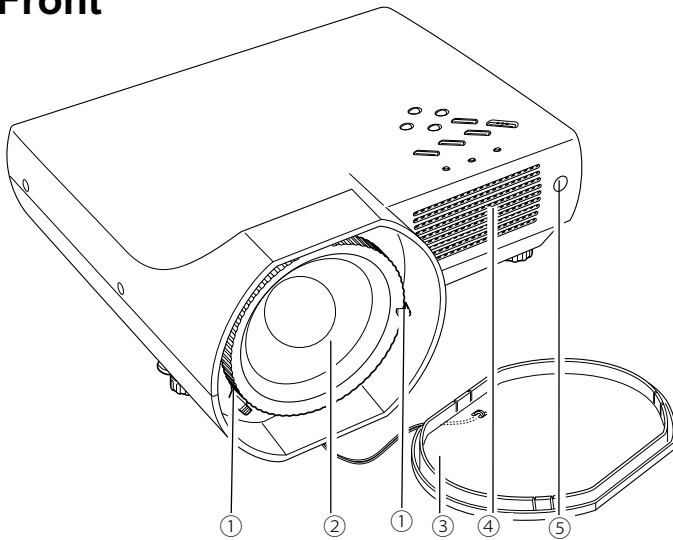
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

WARNING: THIS APPARATUS MUST BE EARTHED.

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

Part Names and Functions

Front



- ① **Focus Lever**
- ② **Projection Lens**
- ③ **Lens Cover**
(See p. 53 for attaching)

CAUTION

Do not turn on the projector with putting the lens cover on. The light beam may damage lens cover and result in fire hazard.

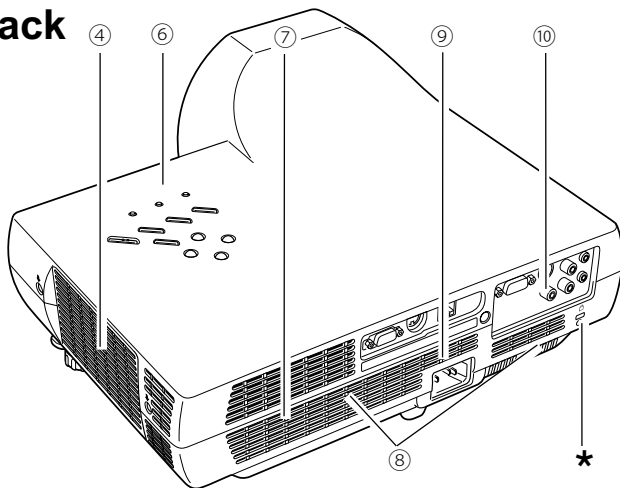
Attach the lens cover while the projector is not in use to avoid scratching the lens surface.

- ④ **Exhaust Vents**

CAUTION

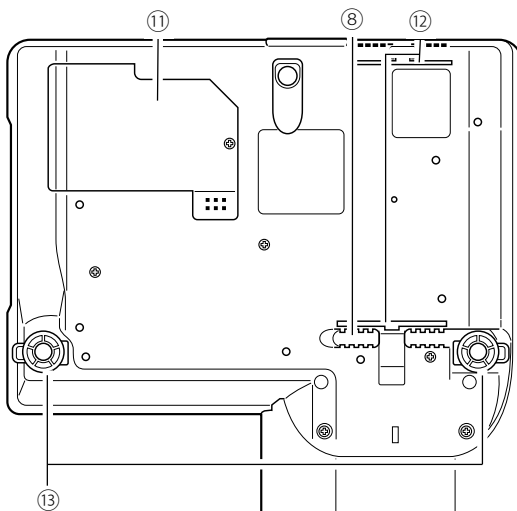
Hot air is exhausted from the exhaust vent. Do not put heat-sensitive objects near this side.

Back



- ⑤ **Infrared Remote Receiver**
- ⑥ **Top controls and Indicators**
- ⑦ **Speaker**
- ⑧ **Air Intake Vent**
- ⑨ **Power Cord Connector**
- ⑩ **Terminals and Connectors**
- ⑪ **Lamp Cover**
- ⑫ **Air Filters**
- ⑬ **Adjustable Feet**

Bottom

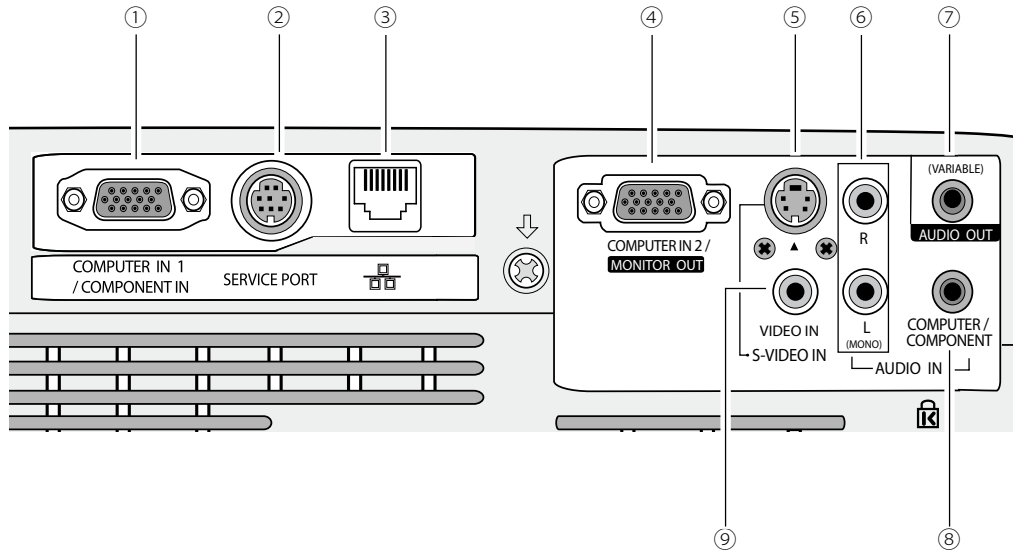


*** Kensington Security Slot**

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 **COMPUTER IN 1/COMPONENT IN**

Connect output signal from a computer, RGB scart 21-pin video output, or component video output to this terminal (pp.14, 16).

When the cable is of the longer variety, it is advisable to use this terminal and not COMPUTER IN 2/MONITOR OUT.

② **SERVICE PORT**

When controlling the projector from a computer, connect the computer to this connector with a control cable.

③ **LAN Connection Terminal**

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

④ **COMPUTER IN 2/MONITOR OUT**

This terminal is switchable and can be used for input from a computer or output to the other monitor.

Set the terminal up as either Computer input or Monitor output properly. [Used for Monitor out, this terminal outputs only incoming signal from COMPUTER IN 1/COMPONENT IN terminal (pp. 14, 44)].

⑤ **S-VIDEO IN**

Connect the S-VIDEO output from video equipment to this jack (p.15).

⑥ **AUDIO IN**

Connect the audio output from video equipment connected to ⑤ or ⑨ to this jack. [When the audio output is monaural, connect it to L (MONO) jack (p.15).

⑦ **AUDIO OUT (VARIABLE)**

Connect an external audio amplifier to this jack (pp.14 - 16).

This terminal outputs sound from AUDIO IN terminal (⑥ or ⑧).

⑧ **COMPUTER/COMPONENT AUDIO IN**

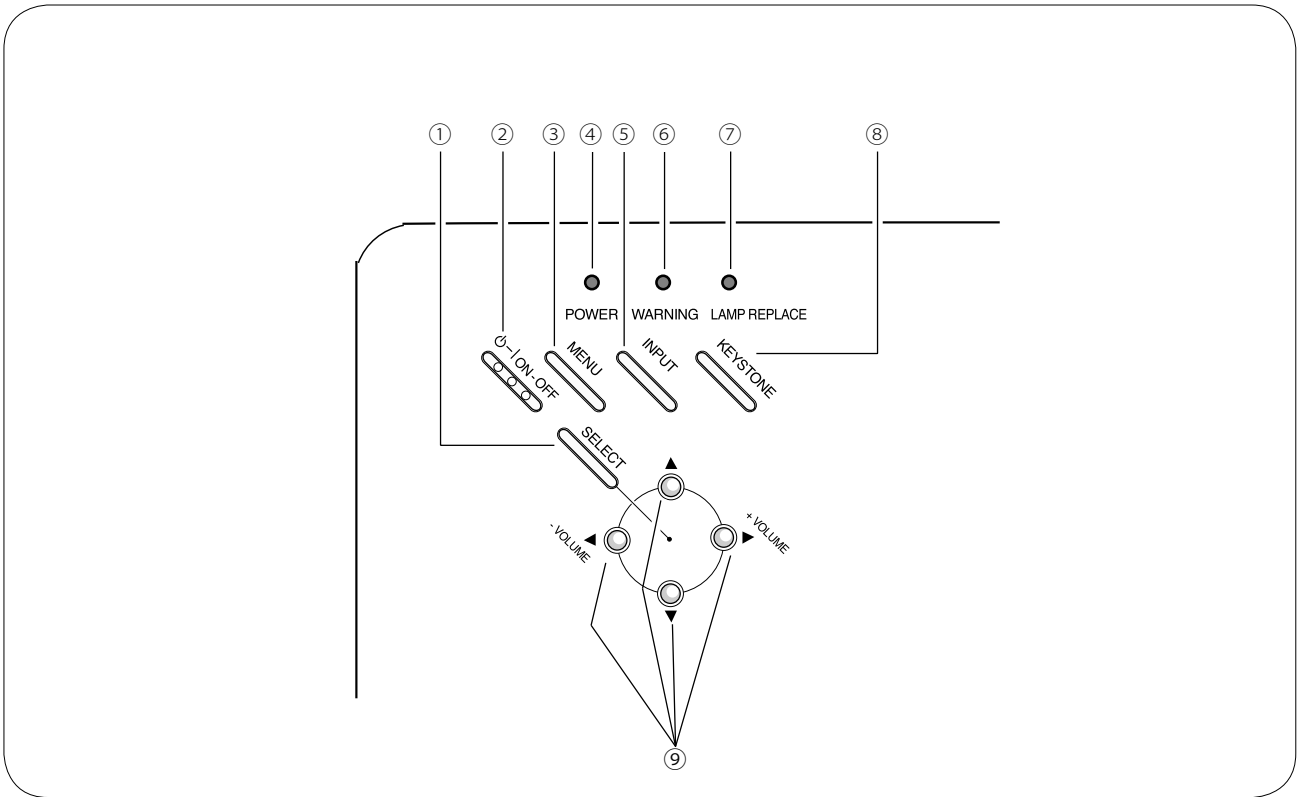
Connect the audio output (stereo) from a computer or video equipment connected to ① or ④ to this jack (pp.14, 16).

⑨ **VIDEO IN**

Connect the composite video output from video equipment to VIDEO jack (p.15).

Part Names and Functions

Top Control



① **SELECT button**

- Execute the selected item (p.20).
- Expand or compress the image in Digital zoom mode (p.33).

② **ON-OFF button**

Turn the projector on or off (pp.18-19).

③ **MENU button**

Open or close the On-Screen Menu (p.20).

④ **POWER indicator**

- Lights red when the projector is in stand-by mode.
- Lights green during operations.
- Blinks green in the Power management mode (pp.45, 61).

⑤ **INPUT button**

Select input source (pp.25, 34, 35).

⑥ **WARNING indicator**

- Lights red light when the projector detects an abnormal condition.
- Blinks red when the internal temperature of the projector exceeds the operating range(pp.51, 61).

⑦ **LAMP REPLACE indicator**

Turn yellow when the life of the projection lamp draws to an end (pp.54, 61).

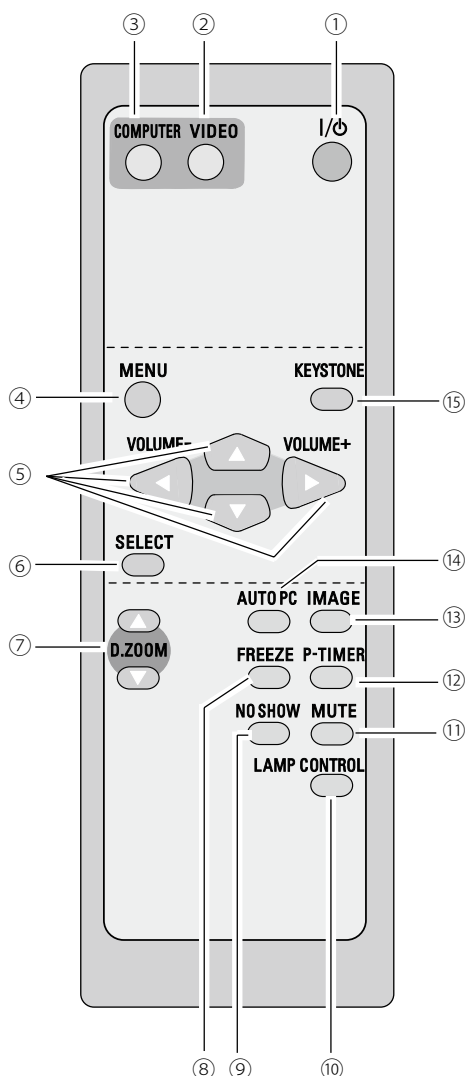
⑧ **KEYSTONE button**

Correct the keystone distortion (pp.22, 41).

⑨ **POINT (▲▼◀▶) buttons**

- Select an item or adjust the value in the On-Screen Menu (p.20).
- Pan the image in Digital zoom + mode (p.33).
- Adjust the volume level (Point ◀▶ buttons) (p.23).

Remote Control



- ① **POWER ON/STAND-BY button**
Turn the projector on or off (pp.18, 19).
- ② **VIDEO button**
Select VIDEO input port (pp.23, 34).
- ③ **COMPUTER button**
Select COMPUTER input port (pp.23, 25, 35).
- ④ **MENU button**
Open or close the On-Screen Menu (p.20).
- ⑤ **Point ▲▼◀▶ (VOLUME + / -) buttons**
 - Select an item or adjust the value in the On-Screen Menu. (p.20)
 - Pan the image in Digital zoom + mode (p.33).
 - Adjust the volume level (Point ◀▶ buttons) (p.23).
- ⑥ **SELECT button**
 - Execute the selected item (p.20).
 - Expand or compress the image in Digital zoom mode. (p.33)
- ⑦ **D.ZOOM ▲▼ buttons**
Zoom in and out the images (pp.24, 33).
- ⑧ **FREEZE button**
Freeze the picture (p.23).
- ⑨ **NO SHOW button**
Temporarily turn off the image on the screen (p.24).
- ⑩ **LAMP CONTROL button**
Select the lamp mode (pp.24, 46).
- ⑪ **MUTE button**
Mute the sound (p.23).
- ⑫ **P-TIMER button**
Operate the P-timer function (p.24).
- ⑬ **IMAGE button**
Select the image level (pp.24, 30, 37).
- ⑭ **AUTO PC button**
Automatically adjust the computer image to its optimum setting (pp.24, 27).
- ⑮ **KEYSTONE button**
Correct the keystone distortion (pp.22, 41).



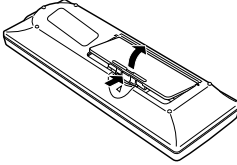
To ensure safe operation, observe the following precautions:

- 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, spray, or any other chemicals.

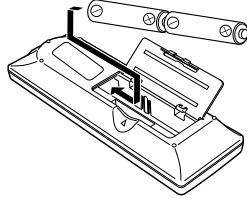
Part Names and Functions

Remote Control Battery Installation

- 1** Open the battery compartment lid.

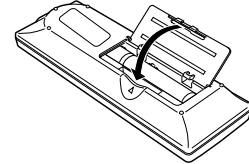


- 2** Install new batteries into the compartment.



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

- 3** Replace the compartment lid.

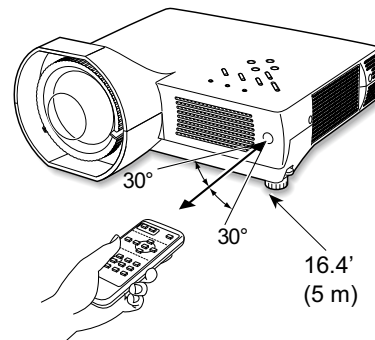


To ensure safe operation, please observe the following precautions:

- Use two (2) AA or LR6 type alkaline batteries.
- Always replace batteries in sets.
- Do not use a new battery with a used battery.
- Avoid contact with water or liquid matter.
- 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 explosion if a battery is replaced by an incorrect type.
- Dispose of used batteries according to the instructions.

Operating Range

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



Installation

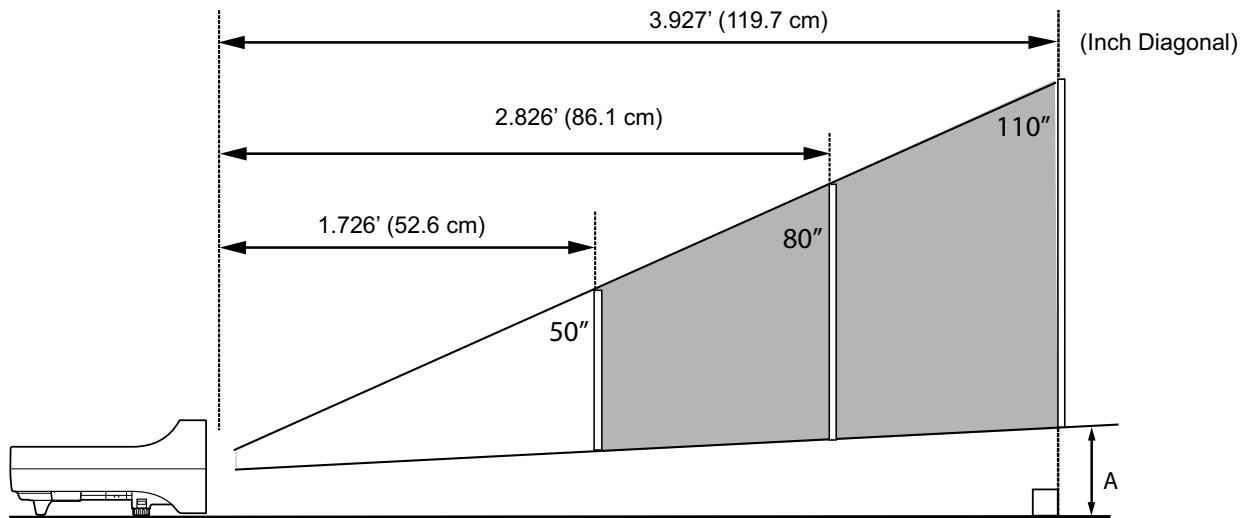
Positioning the Projector

For the projector positioning, see the figures below.

The projector should be set perpendicularly to the plane of the screen.

✓ **Note:**

- This projector is not equipped with an optical zoom. To adjust the screen size, change the throw distance.
- The brightness in the room has a great influence on picture quality. It is recommended to limit the ambient lighting in order to get the best image.
- All measurements are approximate and may vary from the actual sizes.

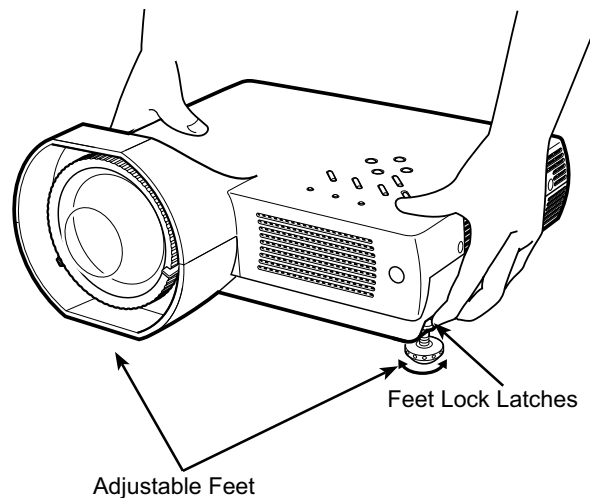


Screen Size (W x H) mm	50"	80"	110"
16:10 aspect ratio	1077 x 673	1723 x 1077	2369 x 1481
Throw distance	1.726' (52.6 cm)	2.826' (86.1 cm)	3.927' (119.7 cm)
A	0.623' (19.0 cm)	0.846' (25.8 cm)	1.069' (32.6 cm)

Adjustable Feet

Projection angle can be adjusted up to 10.0 degrees with the adjustable feet.

- 1 Lift the front of the projector and pull the feet lock latches on both sides of the projector upward.
- 2 Release the feet lock latches to lock the adjustable feet and rotate the adjustable feet to adjust the position and tilt.
- 3 To retract the adjustable feet, lift the front of the projector and pull and undo the feet lock latches. Keystone distortion of the projected image can be corrected by remote control operation or menu operation (pp.22, 41).

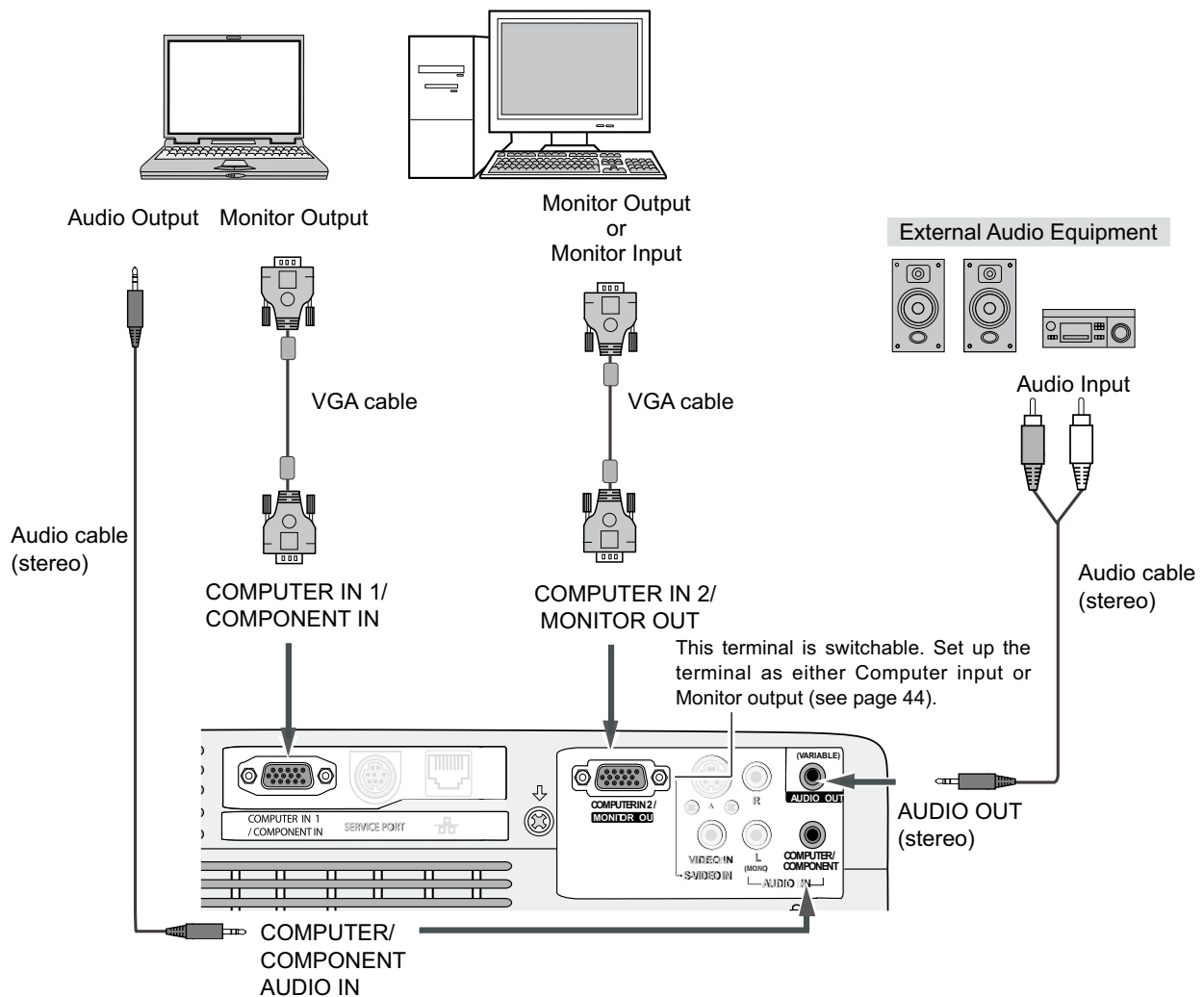


Installation

Connecting to a Computer

Cables used for connection

- VGA Cables (Mini D-sub 15 pin)*
 - Audio Cables (Mini Plug: stereo)
- (*One cable is supplied; other cables are not supplied with the projector.)



✓Note:

- Input sound to the COMPUTER/COMPONENT AUDIO IN terminal when using the COMPUTER IN 1/COMPONENT IN and the COMPUTER IN 2/MONITOR OUT terminal as input.
- When the AUDIO OUT is plugged-in, the projector's built-in speaker is not available.
- When the cable is of the longer variety, it is advisable to use the COMPUTER IN 1/COMPONENT IN and not the COMPUTER IN 2 /MONITOR OUT.

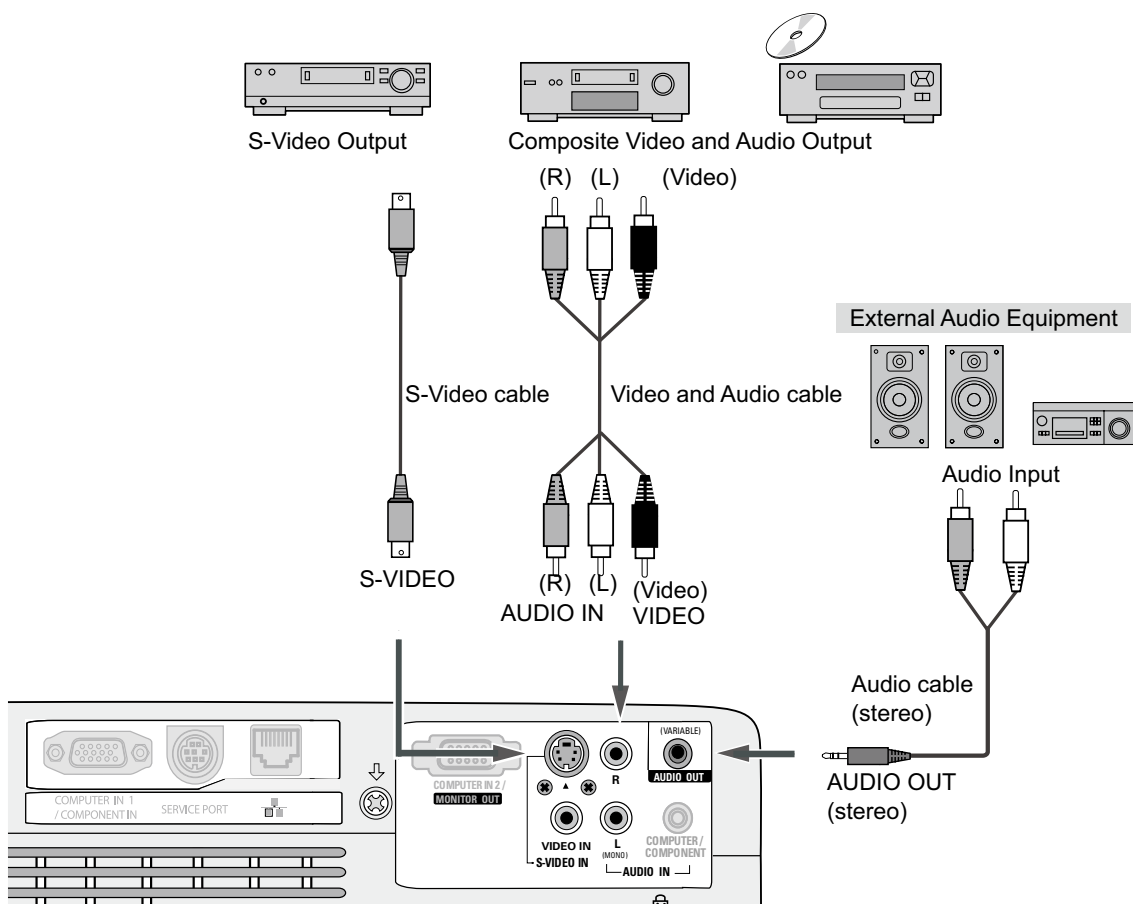


Unplug the power cords of both the projector and external equipment from the AC outlet before connecting the cables.

Connecting to Video Equipment

Cables used for connection

- Video and Audio Cable (RCA x 3)
 - S-VIDEO Cable
 - Audio Cable (Mini Plug: stereo)
- (Cables are not supplied with the projector.)



✓ **Note:**

- 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 "Auto" is selected in the Input Menu (p.34).



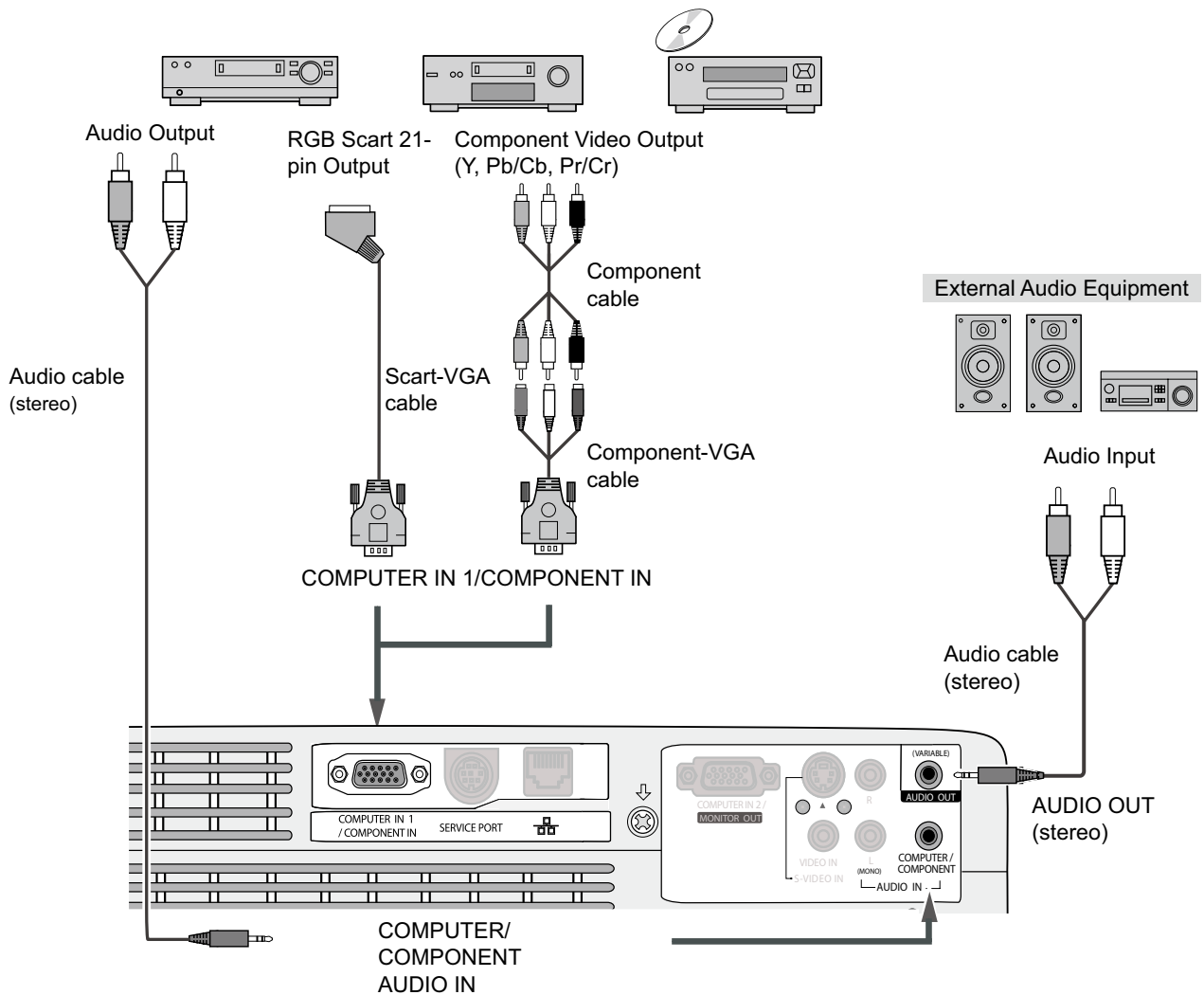
Unplug the power cords of both the projector and external equipment from the AC outlet before connecting the cables.

Installation

Connecting to Component Video Equipment

Cables used for connection

- Audio Cables (Mini Plug: stereo)
 - Scart-VGA Cable
 - Component Cable
 - Component-VGA Cable
- (Cables are not supplied with the projector.)



✓ Note:

When the AUDIO OUT is plugged-in, the projector's built-in speaker is not available.



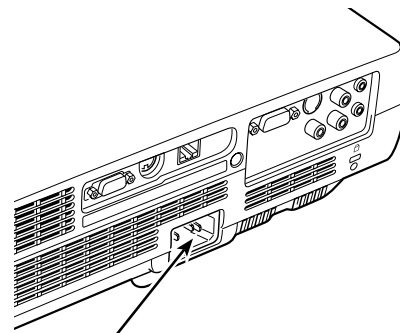
Unplug the power cords of both the projector and external equipment from the AC outlet before connecting the cables.

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 it on.



Connect the AC power cord (supplied) to the projector.



CAUTION

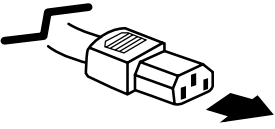
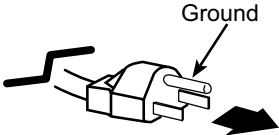
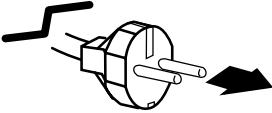
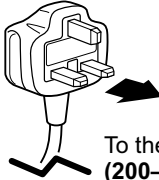
The AC outlet must be near this equipment and must be easily accessible.

✓ **Note:**

Unplug the AC power cord when the projector is not in use. When the 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 the requirements 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 the supplied AC power cord does not match your AC outlet, contact your sales dealer.

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

Basic Operation

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 turns red. Open the lens cover.
- 3 Press the POWER ON/STAND-BY button on the remote control. The POWER indicator becomes 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 46) will appear on the screen. If the projector is locked with a PIN code, a PIN code Input Dialog Box appears. Enter the PIN code as instructed below.

Enter a PIN code

Select a number by pressing the Point ▲▼ buttons, and then press the Point ► button to fix the number and move the pointer. The number changes to "*". If you fixed an incorrect number, move the pointer to the number you want to correct by pressing the Point ► button, and then select the correct number by pressing the Point ▲▼ buttons.

Repeat this step to complete entering a four-digit number. "1234" is set as the initial PIN code at the factory.

After entering the four-digit number, move the pointer to "Set" by pressing the Point ► button. 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 (****) turns red. 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 the 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 47–48 for locking operation of the projector with your PIN code.



CAUTION ON HANDLING THE 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 68 of this manual and keep it on hand. Should the PIN code be missing or forgotten, consult your dealer or service center.



The preparation display disappears after 30 seconds.

Selected Input Source and Lamp Control

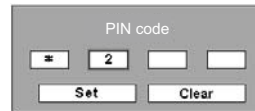
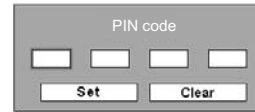


See page 46 for the Lamp control.

✓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



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

✓Note:

- When the Input Search function is set on On1 or On2, the input signal will be searched automatically (p.44).
- When the Logo select function is "Off," the logo will not be displayed on the screen (p.42).
- When the "Countdown off" or "Off" is selected in the Display function, the countdown will not be shown on the screen (p.41).
- During the countdown period, all operations are invalid.
- If the 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.

Turning Off the Projector

- 1** Press the POWER ON/STAND-BY button 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 the fans' quietness and running speed. See page 49.) 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 to be turned on again, the POWER indicator stops blinking.



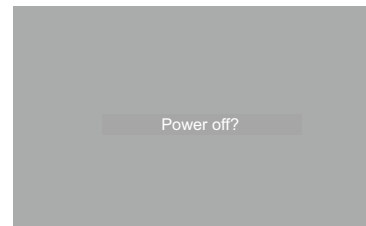
TO MAINTAIN THE LAMP LIFE, ONCE YOU TURN THE PROJECTOR ON, WAIT AT LEAST 5 MINUTES BEFORE TURNING IT OFF.



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.

✓ **Note:**

- When the On start function is "On," this projector is turned on automatically by connecting the AC power cord to an AC outlet (p. 46).
- 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 emits a red light, see "Warning Indicator" on page 51.
- 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.



"Power off" disappears after 4 seconds.

Basic Operation

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.

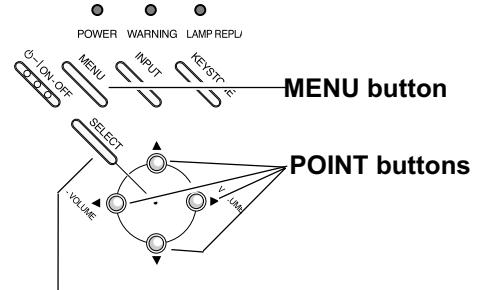
- 1 Press the MENU button on the top control or on the remote control to display the On-Screen Menu.
- 2 Use the Point ◀▶ buttons to select a Menu icon; use the Point ▲▼ buttons to select an item.
- 3 Press the SELECT button to show the item data. To adjust the data, use the Point ◀▶ buttons. Refer to the relevant pages for more details about each adjustment.

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

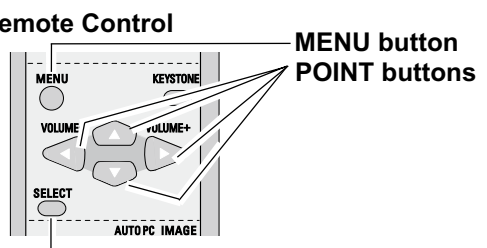
✓ **Note:**

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

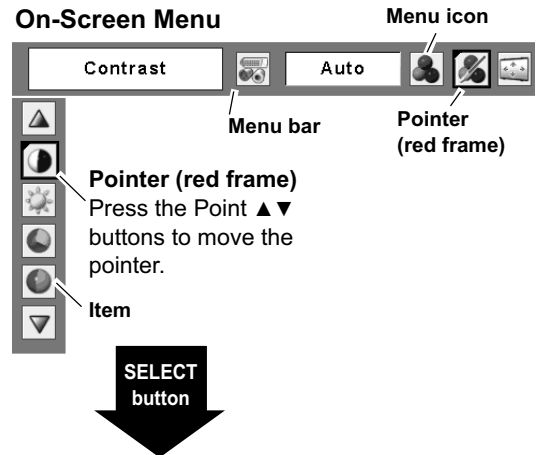
Top Control



Remote Control

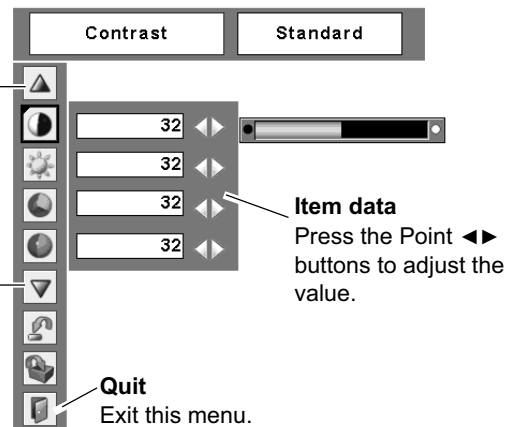


On-Screen Menu



Press the SELECT button here to display previous items.

Press the SELECT button here to display next items.



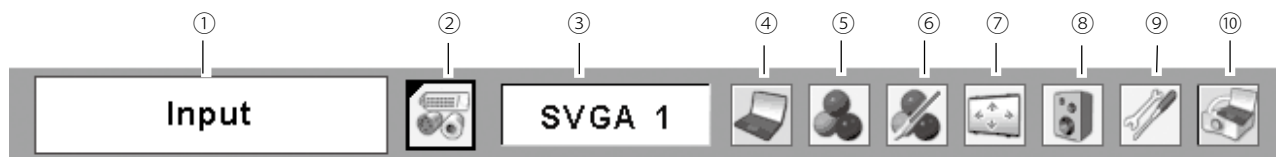
Item data
Press the Point ◀▶ buttons to adjust the value.

Quit
Exit this menu.

Menu Bar

For detailed functions, see Menu Tree on pages 59-60.

For computer source



① Guide Window

Shows the selected Menu of the On-Screen Menu.

② Input Menu

Used to select the input source, Computer or Video (p.25).

③ PC System Menu

Used to select the computer system (p.26).

④ PC Adjust Menu

Used to adjust parameters to match with input signal format (pp.27–29).

⑤ Image Select Menu

Used to select an image level from Dynamic, Standard, Real, Blackboard (Green), Colorboard and Image 1–4 (p.30).

⑥ Image Adjust Menu

Used to adjust the computer image from Contrast, Brightness, Color temp., White balance (R/G/B), Sharpness, and Gamma (pp.31–32).

⑦ Screen Menu

Used to adjust the size of image from Normal, True, Full, Custom, and Digital zoom +/- (pp.32–33).

⑧ Sound Menu

Used to adjust the volume or mute the sound (p.23).

⑨ Setting Menu

Used to set the projector's operating configurations (pp.41–50).

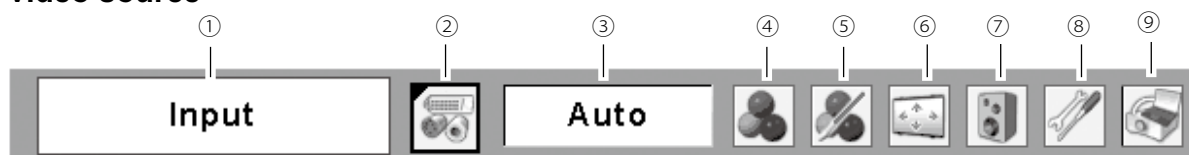
⑩ Wired setting Menu

See owner's manual "Network Set-up and Operation".

✓ Note:

Items will be same as the items in video source when 480i, 575i, 480p, 575p, 720p, 1035i or 1080i is selected.

For video source



① Guide Window

Shows the selected Menu of the On-Screen Menu.

② Input Menu

Used to select input source, Video or Computer (pp.34–35).

③ AV System Menu

Used to select the system of selected video source (p.36).

④ Image Select Menu

Used to select an image level from Dynamic, Standard, Cinema, Blackboard (Green), Colorboard and Image 1–4 (p.37).

⑤ Image Adjust Menu

Used to adjust the picture image from Contrast, Brightness, Color, Tint, Color temp., White balance (R/G/B), Sharpness, Gamma, Noise reduction, and Progressive (pp.38–39).

⑥ Screen Menu

Used to set the size of image to Normal, Full, Zoom, Wide, Natural wide, or Custom (p.40).

⑦ Sound Menu

Used to adjust the volume or mute the sound (p.23).

⑧ Setting Menu

Used to set the projector's operating configurations (pp.41–50).

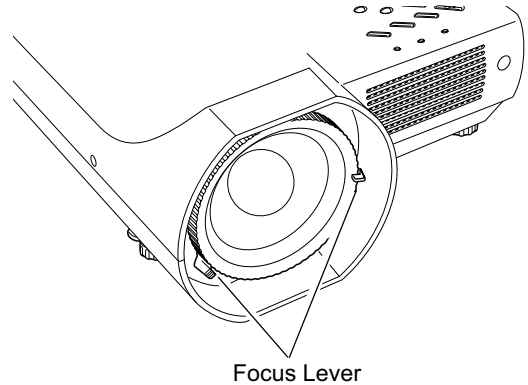
⑨ Wired setting Menu

See owner's manual "Network Set-up and Operation".

Basic Operation

Focus Adjustment

Adjust the lens focus with the focus lever.

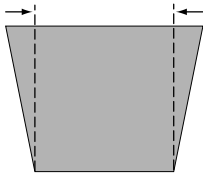


Keystone Correction

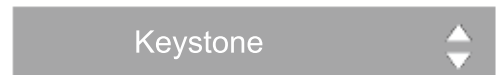
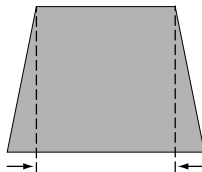
If a projected picture has keystone distortion, correct the image with the Keystone function.

Press the KEYSTONE button on the top control or on the remote control. The keystone dialog box appears. Correct keystone distortion with the Point ▲▼ buttons. Keystone adjustment can be stored (p.41).

Reduce the upper width with the Point ▲ button.

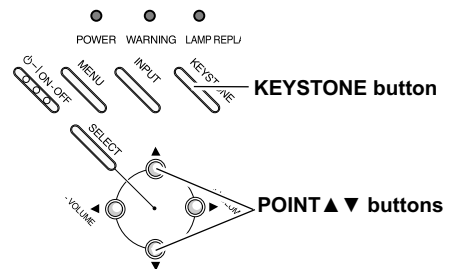


Reduce the lower width with the Point ▼ button.

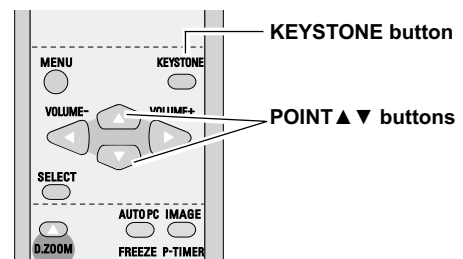


- The arrows are white when there is no correction.
- The direction of the arrow which are being corrected turns red.
- The arrows disappear at the maximum correction.
- If you press the KEYSTONE button on the remote control once more while the keystone dialog box is being displayed, the keystone adjustment is canceled.
- The adjustable range can be limited depending on the input signal.
- The projected picture may fluctuate momentarily depending on the keystone adjustment.
- "Keystone" disappears after 4 seconds.

Top Control



Remote Control



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 turn off the sound. To restore the sound to its previous level, press the MUTE button again or press the VOLUME+/- buttons. Mute function is also effective for 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 Press the Point ▲▼ buttons to move the red frame pointer to the desired item, and then press the SELECT button.

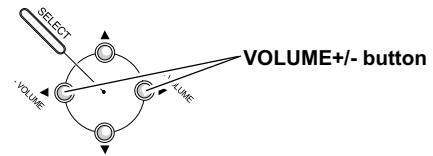
Volume

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

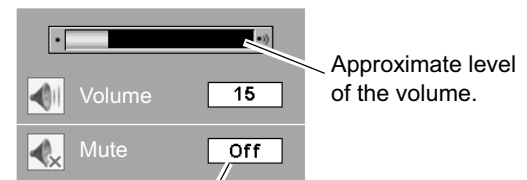
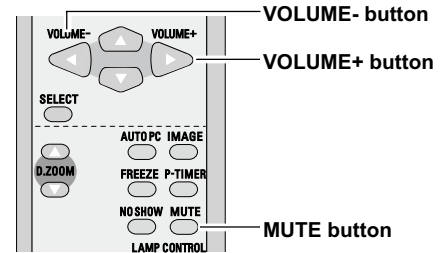
Mute

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

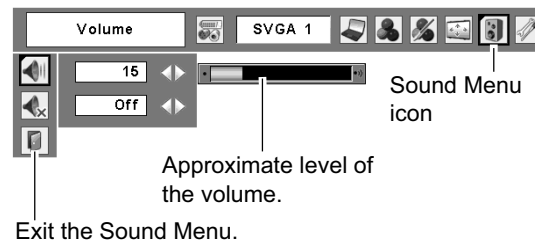


Remote Control



Press the MUTE button to set the Mute function On or Off. The display 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.

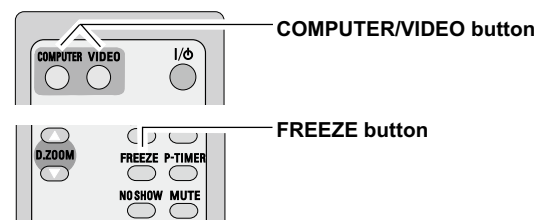
COMPUTER/VIDEO button

Press the COMPUTER or VIDEO button to select an input source. See pages 25, 34–35 for more details.

FREEZE button

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

Remote Control



✓ Note:

See the next page for the description of other buttons.

Basic Operation

AUTO PC button

Press the AUTO PC button to operate the Auto PC function. See page 27 for more details.

D.ZOOM buttons

Press the D.ZOOM buttons to zoom in and zoom out the images. See page 33 for more details.

NO SHOW button

Press the NO SHOW button to black out the image. To restore to normal, press the NO SHOW button again or press any other button. When the projected image is captured and is set as "User" in the Logo selection (p.42), the screen changes each time you press the NO SHOW button as follows.

black out → the captured image → normal →

KEystone button

For details, see page 22.

IMAGE button

Press the IMAGE button to select an image level of the screen. See pages 30, 37 for more details.

P-TIMER button

Press the P-TIMER button. The timer display "00:00" appears on the screen and the timer starts to count time (00:00–59:59).

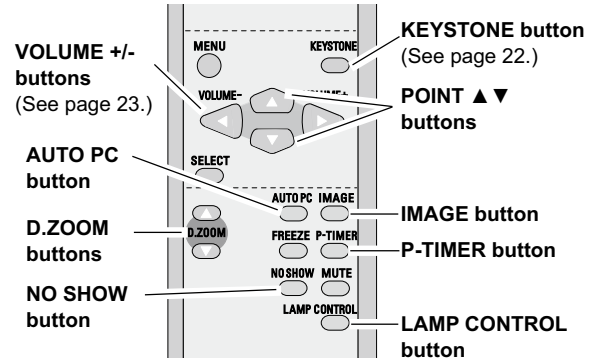
To stop the P-Timer, press the P-TIMER button. Press the P-TIMER button again, then the P-timer display disappears.

LAMP CONTROL button

Press the LAMP CONTROL button to select the lamp mode to change the brightness of the screen.

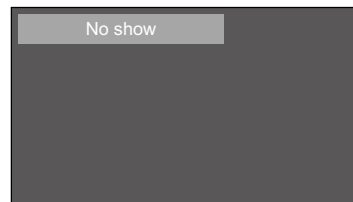
- ☾ Normal ... Normal brightness
- ☾ Eco Lower brightness reduces the lamp power consumption and extends the lamp life.

Remote Control



✓ Note:

See the previous page for the description of other buttons.



"No show" disappears after 4 seconds.



P-Timer display

Computer Input

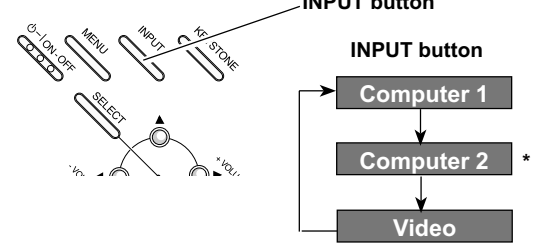
Input Source Selection

Direct Operation

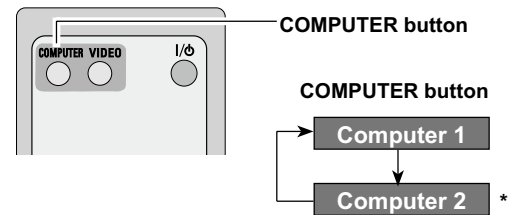
Select either Computer 1 or Computer 2 by pressing the INPUT button on the top control or the COMPUTER button on the remote control.

Before using INPUT or COMPUTER button, select the correct input source through Menu operation as described below.

Top Control



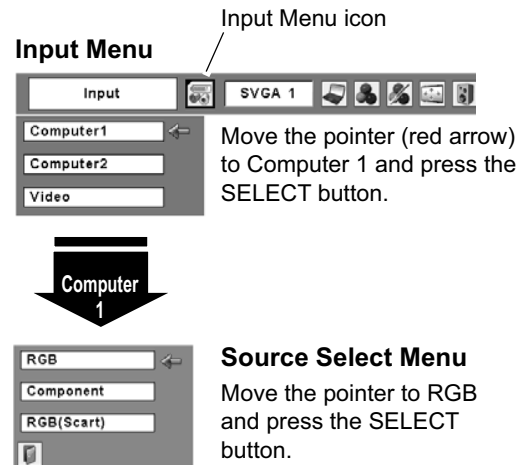
Remote Control



*See Notes at the bottom of this page.

Menu Operation

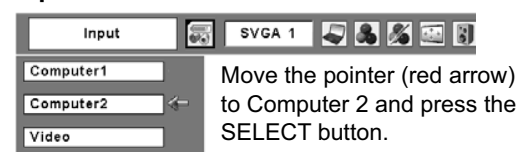
- 1 Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the Input Menu icon.
- 2 Use the Point ▲▼ buttons to move the red arrow pointer to either Computer 1 or Computer 2, and then press the SELECT button.
- 3 After the Source Select Menu appeared for Computer 1, move the pointer to RGB and then press the SELECT button.



✓Note:

- Computer 2 is not displayed when the COMPUTER IN 2/ MONITOR OUT terminal is set as Monitor out (p.44).
- Computer 2 (COMPUTER IN 2/MONITOR OUT) can accept only the RGB signal.
- When the Input Search function is set On1 or On2, the input signal will be searched automatically (p.44)

Input Menu



Computer Input

Computer System Selection

The 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 computer is selected as a signal source, the projector automatically detects the signal format and tunes to project proper images without any additional setting. (Signal formats provided in this projector is shown on page 62.)

One of the following messages may appear when:

Auto The projector cannot recognize the connected signal conforming to the provided PC Systems. "Auto" is displayed on the PC System Menu icon and the Auto PC Adjustment function works to display proper images. If images are not projected properly, adjust manually. (pp.28–29)

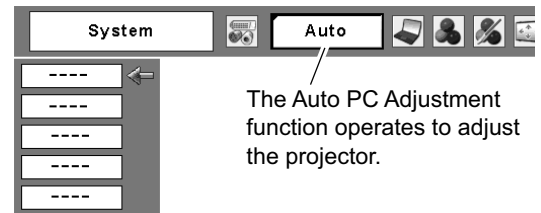
---- There is no signal input from computer. Check the connection between your computer and the projector. (See "Troubleshooting" on page 56.)

Mode 1 The preset system is manually adjusted in the PC Adjust Menu. The adjusted data can be stored in Mode 1–5 (pp.28–29).

SVGA 1 A PC System provided in the projector is selected. The projector selects a proper system provided in the projector and displays it.

*Mode 1 and SVGA 1 are examples.

PC System Menu

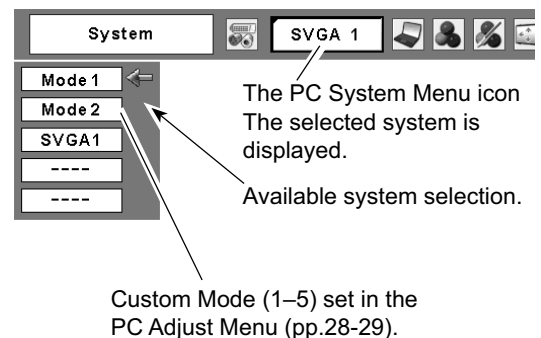


Selecting Computer System Manually

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



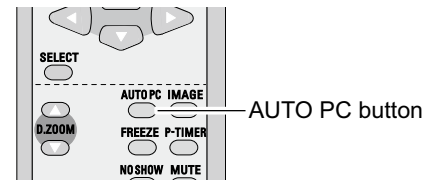
Auto PC Adjustment

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 with 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 PC Adjust Menu.
- 2 Use the Point ▲▼ buttons to move the red frame pointer to Auto PC adj. and then press the SELECT button twice.

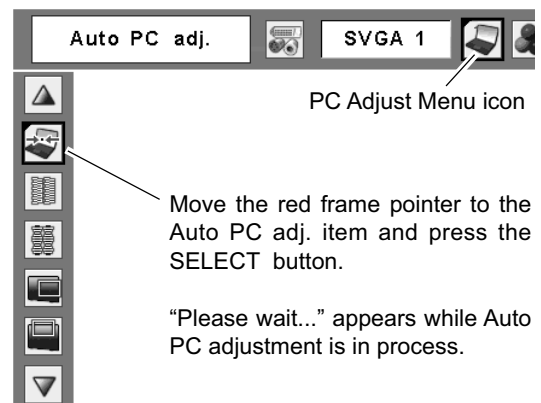
To store the adjusted parameters

The system parameters adjusted in the Auto PC Adjustment can be stored in the projector. Once parameters are stored, the setting can be done just by selecting a Mode in the PC System Menu (p.26). See "Store" on page 29, for details.

✓ Note:

- Fine sync, Total dots, Horizontal, and Vertical positions of some computers cannot be fully adjusted with this Auto PC Adjustment function. When the image is not provided properly with this operation, manual adjustments are required (pp.28–29).
- The Auto PC Adjustment cannot be operated when 480i, 575i, 480p, 575p, 720p, 1035i, or 1080i is selected in the PC System Menu (p.26).

PC Adjust Menu



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 (Mode 1–5) to store those parameters manually adjusted, which 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. Press the Point ◀▶ buttons to adjust the value.

Fine sync

Use the Point ◀▶ buttons to adjust the value to cut off 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.

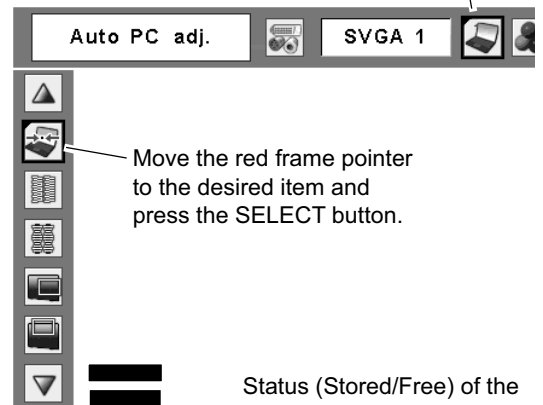
Current mode

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 PC Adjust Menu icon

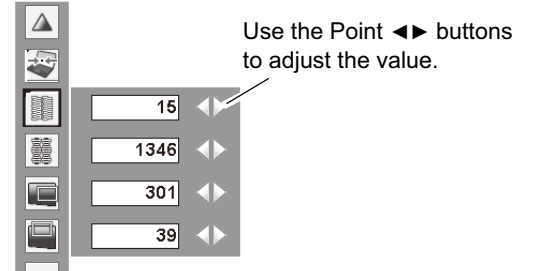


Move the red frame pointer to the desired item and press the SELECT button.

Status (Stored/Free) of the selected Mode.

Selected Mode

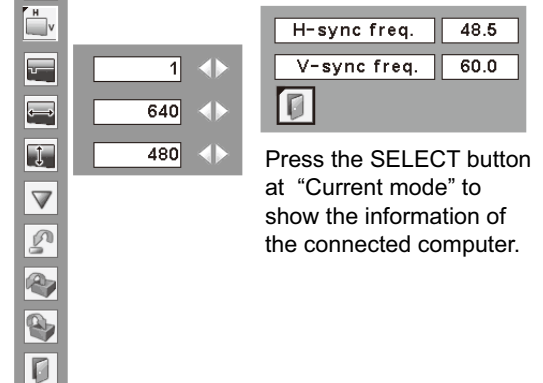
Fine sync Mode1 Stored



Use the Point ◀▶ buttons to adjust the value.

Press the SELECT button here to move on to other items.

Current mode Mode1 Stored



Press the SELECT button at "Current mode" to show the information of the connected computer.

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 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

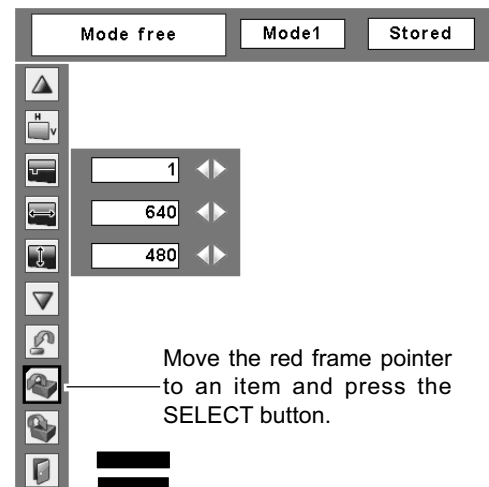
To store the adjusted data, select “Store” and then press the SELECT button. Move the red arrow pointer to one of the Mode 1 to 5 in which you want to store, and then press the SELECT button.

Quit

Exit the PC Adjust Menu.

✓ Note:

Display area (H/V) cannot be selected when 480i, 575i, 480p, 575p, 720p, 1035i, or 1080i is selected in the PC System Menu (p.26).



Move the red frame pointer to an item and press the SELECT button.

To clear adjusted data

This Mode has stored parameters.

Where to free?		800	142	34	1024	768
Mode1	Stored	800	142	34	1024	768
Mode2	Free	800	142	34	1024	768
Mode3	Free	800	142	34	1024	768
Mode4	Free	800	142	34	1024	768
Mode5	Free	800	142	34	1024	768

Vacant Mode

Values of “Total dots,” “Horizontal,” “Vertical,” “Display area H,” and “Display area V.”

To store adjusted data

Where to store?		800	142	34	1024	768
Mode1	Stored	800	142	34	1024	768
Mode2	Free	800	142	34	1024	768
Mode3	Free	800	142	34	1024	768
Mode4	Free	800	142	34	1024	768
Mode5	Free	800	142	34	1024	768

Close this dialog box.

Image Level Selection

Direct Operation

Select an image level from among Dynamic, Standard, Real, Blackboard (Green), Colorboard, Image 1, Image 2, Image 3, and Image 4 with the IMAGE button on the remote control.

Dynamic

For viewing pictures in a bright room.

Standard

Normal picture level preset on the projector.

Real

Picture level with improved halftone for graphics.

Blackboard (Green)

For viewing the image projected on a blackboard. This mode assists to enhance the image projected on a blackboard. This is mainly effective on a green colored board, not truly effective on a black colored board.

Colorboard

At the time of simple projection on the colored wall, you can get the close color image to the color image projected on a white screen by selecting the similar color to the wall color from the preset four colors.

Image 1-4

User preset image in the Image Adjust Menu (pp.31-32).

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 level and then press the SELECT button.

Dynamic

For viewing pictures in a bright room.

Standard

Normal picture level preset on this projector.

Real

Picture level with improved halftone for graphics.

Blackboard(Green)

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

Colorboard

At the time of simple projection on the colored wall, you can get the close color image to the color image projected on a white screen by selecting the similar color to the wall color from the preset four colors. Press the SELECT button to choose the color.

Image 1-4

User preset image in the Image Adjust Menu (pp.31-32).

Remote Control

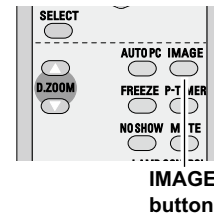


IMAGE button

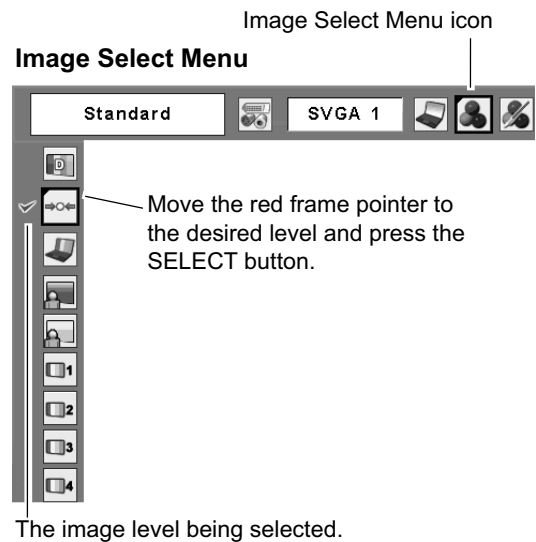
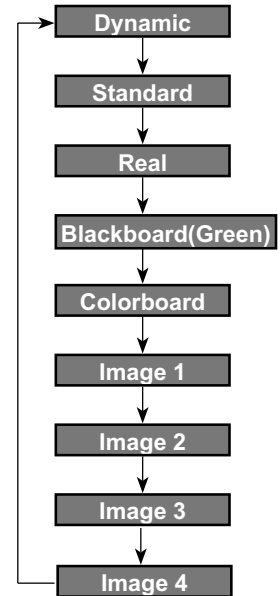


Image Level Adjustment

- 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. The level of each item is displayed. Use the Point ◀▶ buttons to adjust each level.

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 (XLow, Low, Mid, or High).

White balance (Red)

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

White balance (Green)

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

White balance (Blue)

Press the Point ◀ button to lighten the blue tone; press the Point ▶ button to deepen the 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).

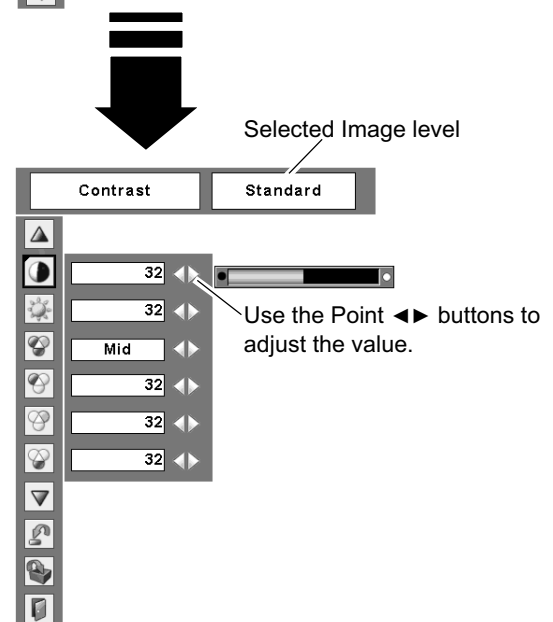
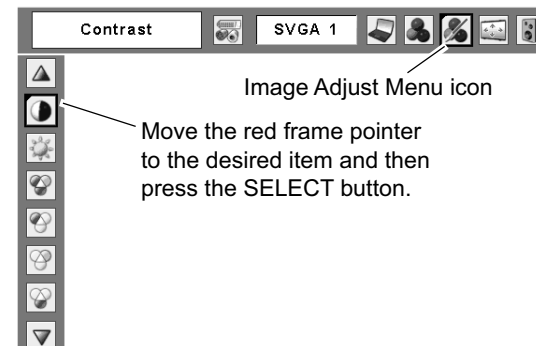
Gamma

Use the Point ◀▶ buttons to adjust the gamma value to get 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 return to their previous figures.

Image Adjust Menu



✓ **Note:**

After adjusting the White balance Red, Green, or Blue, the Color temp. level will change to “Adj.”.

Computer Input



Store

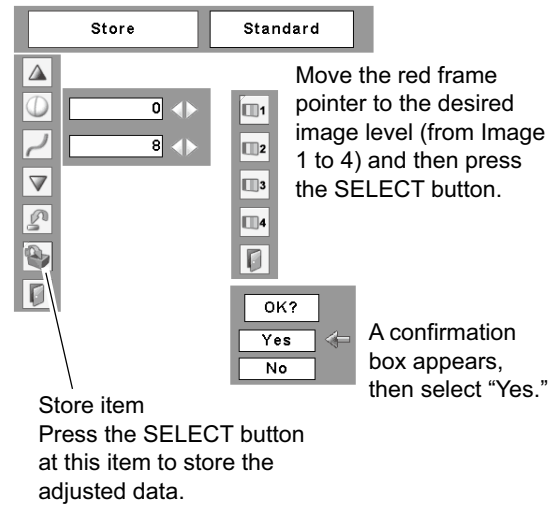
To store the adjusted data, select "Store" and press the SELECT button. The Image Level Menu appears. Use the Point ▲▼ buttons to choose one of the four image level and press the SELECT button. A confirmation box appears and then select "Yes."

The stored data can be called up by selecting "Image" in the Image Level Selection on page 30.



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 and move the red frame pointer to the desired function and then press the SELECT button.



Normal

Provide the image to fit the screen size while maintaining the aspect ratio of input signal.



True

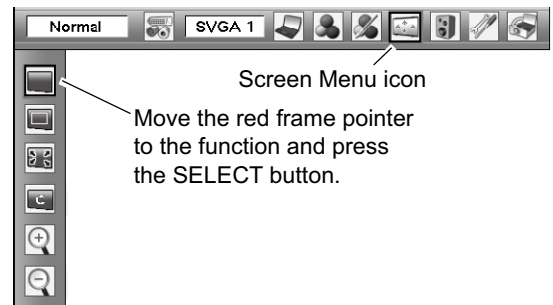
Provide the image in its original size. When the original image size is larger than the screen size (1280 x 800), the projector automatically switches to the panning mode. Use the Point ◀▶ ▲▼ buttons to pan the image. When adjusted, the arrows turn red. When reached to the correction limit, the arrows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



Full

Provide the full screen image.

Screen Menu



✓Note:

- This projector cannot display any resolution higher than 1920 x 1200. If your computer's resolution is higher than that, lower the resolution before connecting to the projector.
- The image data other than 1280 x 800 is modified to fit the screen size in initial mode.
- True and D.Zoom+/- are not available when the 4:3 or 16:9 function is selected in the Screen aspect (p.44).
- The items will be same as the items in video source when 480i, 575i, 480p, 575p, 720p, 1035i or 1080i is selected in the PC system Menu (p.26).

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.

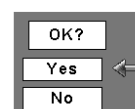
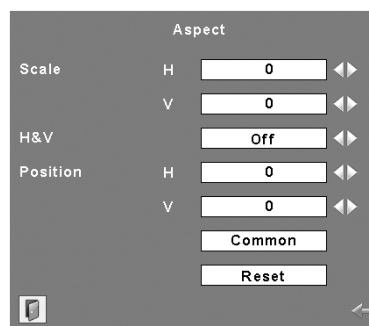
Scale H/V.....Adjust the Horizontal/Vertical screen scale.

H&VWhen set to “On,” the aspect ratio is fixed. “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.”



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

✓Note:

- 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.
- When “Custom” is selected , “Digital zoom -” is invalid.

For zooming in and out the images

Digital zoom +

When Digital zoom + is selected, the On-Screen Menu disappears and “D. zoom +” is displayed. 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 -

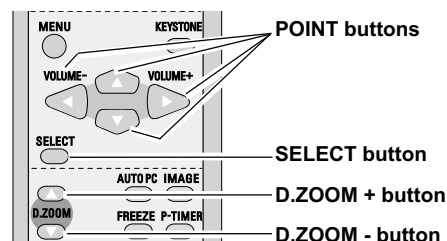
When Digital zoom - is selected, the On-Screen Menu disappears and “D. zoom -” is displayed. Press the SELECT button to compress image size.

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 ▲▼, SELECT, and Point buttons.

To return to the previous screen size, select a screen size in the Screen Size Adjustment or select an input source from the Input Source Selection (p.25) again, or adjust the screen size with the D.ZOOM ▲▼ buttons.

Remote Control



✓Note:

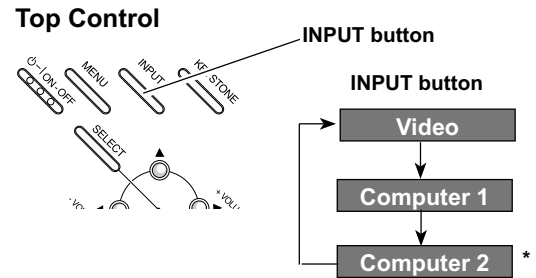
- The minimum compression ratio can be limited depending on the input signal or when the Keystone function is working or when the custom is selected for the screen size.
- The items will be same as the items in video source when 480i, 575i, 480p, 575p, 720p, 1035i or 1080i is selected in the PC system Menu (p.26).
- Digital zoom +/- cannot be selected when Full or True is selected.
- When “Custom” is selected , “Digital zoom -” is invalid.
- True and D.Zoom+/- are not available when the 4:3 or 16:9 function is selected in the Screen aspect (p.44).

Video Input

Input Source Selection (Video, S-video)

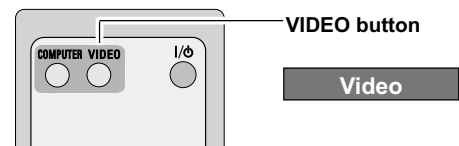
Direct Operation

Select Video by pressing the INPUT button on the top control or the VIDEO button on the remote control. Before using INPUT or VIDEO button, select the correct input source through menu operation as described below.



*See Notes at the bottom of this page.

Remote Control



Menu Operation

- 1 Use the MENU button to display the On-Screen Menu. Press 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.

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

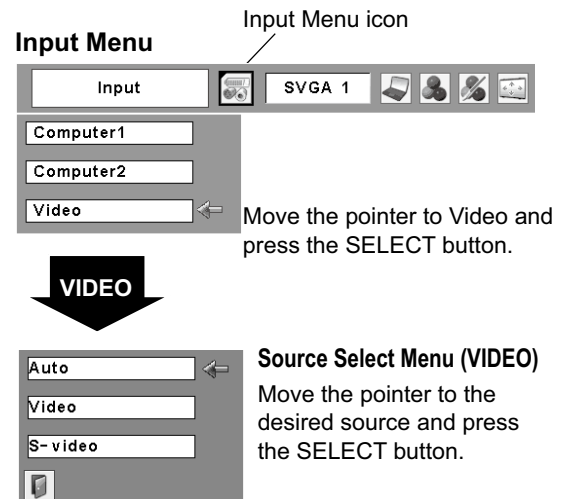
1. S-video
2. Video

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

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

✓Note:

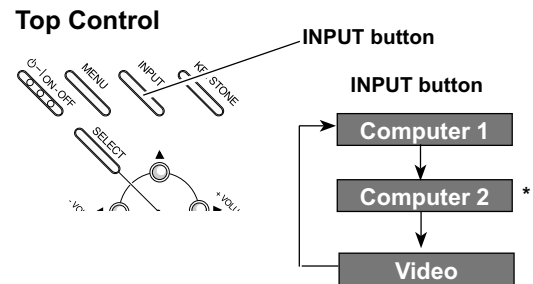
- Computer 2 is not displayed when the COMPUTER IN 2/MONITOR OUT terminal is set as Monitor out (p.44).
- When the Input Search function is set On1 or On2, the input signal will be searched automatically (p.44).



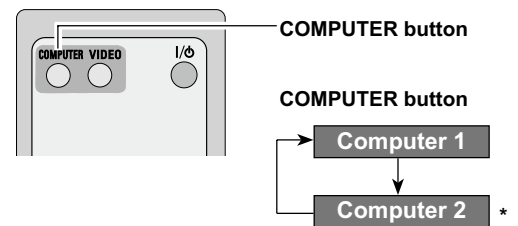
Input Source Selection (Component, RGB Scart 21-pin)

Direct Operation

Select Computer 1 by pressing the INPUT button on the top control or COMPUTER button on the remote control. Before using INPUT or COMPUTER button, select the correct input source through Menu operation as described below.



Remote Control



*See Note at the bottom of this page.

Menu Operation

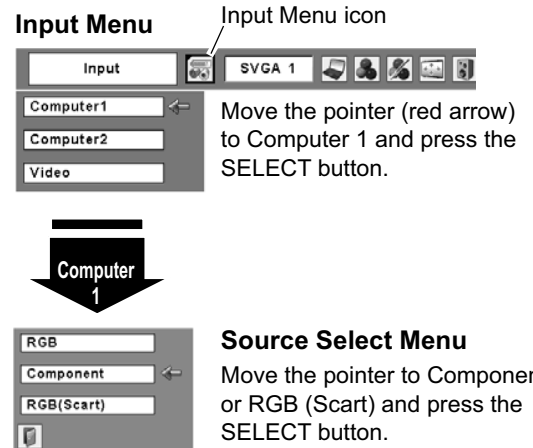
- 1 Use the MENU button to display the On-Screen Menu. Press the Point ◀▶ buttons to move the red frame pointer to the Input Menu icon.
- 2 Use the Point ▲▼ buttons to move the red arrow pointer to Computer 1 and then press the SELECT button.
- 3 After the Source Select Menu appeared for Computer 1, move the pointer to Component or RGB (Scart) and then press the SELECT button.

Component When the input source is coming from video equipment connected to the COMPUTER IN 1/COMPONENT IN terminal with a Component-VGA Cable (not supplied), select Component.

RGB (Scart) When the input source is coming from video equipment connected to the COMPUTER IN 1/COMPONENT IN terminal with a Scart-VGA Cable (not supplied), select RGB (Scart).

✓ **Note:**

- Computer 2 is not displayed when the COMPUTER IN 2/ MONITOR OUT terminal is set as Monitor out (p.44).
- Computer 2 (COMPUTER IN 2/MONITOR OUT) can accept only RGB signal.
- When the Input Search function is set On1 or On2, the input signal will be searched automatically (p.44)



Video Input

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

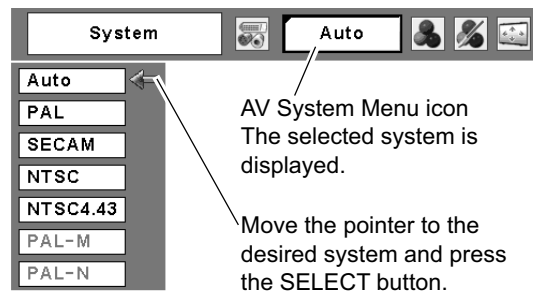
Auto

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

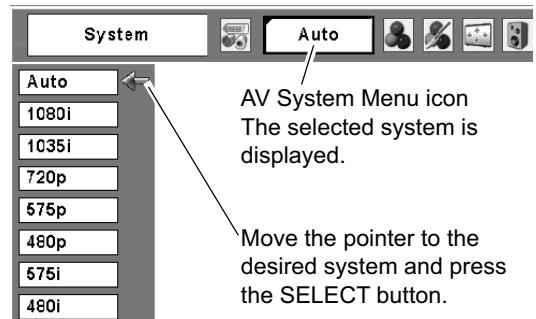
Auto

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 Level Selection

Direct Operation

Select an image level from among Dynamic, Standard, Cinema, Blackboard (Green), Colorboard, Image 1, Image 2, Image 3, and Image 4 with the IMAGE button on the remote control.

Dynamic

For viewing pictures in a bright room.

Standard

Normal picture level preset on this projector.

Cinema

Picture level adjusted for the picture with fine tone.

Blackboard (Green)

For viewing the image projected on a blackboard. This mode assists to enhance the image projected on a blackboard. This is mainly effective on a green colored board, not truly effective on a black colored board.

Colorboard

At the time of simple projection on the colored wall, you can get the close color image to the color image projected on a white screen by selecting the similar color to the wall color from the preset four colors.

Image 1–4

User preset image in the Image Adjust Menu (pp. 38-39).

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 level and then press the SELECT button.

Dynamic

For viewing pictures in a bright room.

Standard

Normal picture level preset on this projector.

Cinema

Picture level with improved halftone for graphics.

Blackboard(Green)

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

Colorboard

At the time of simple projection on the colored wall, you can get the close color image to the color image projected on a white screen by selecting the similar color to the wall color from the preset four colors. Press the SELECT button to choose the color.

Image 1–4

User preset image in the Image Adjust Menu (pp. 38-39).

Remote Control

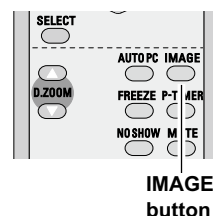


IMAGE button

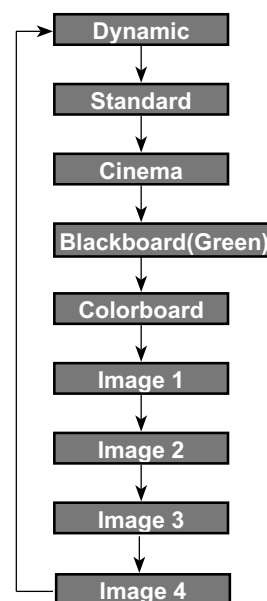


Image Select Menu

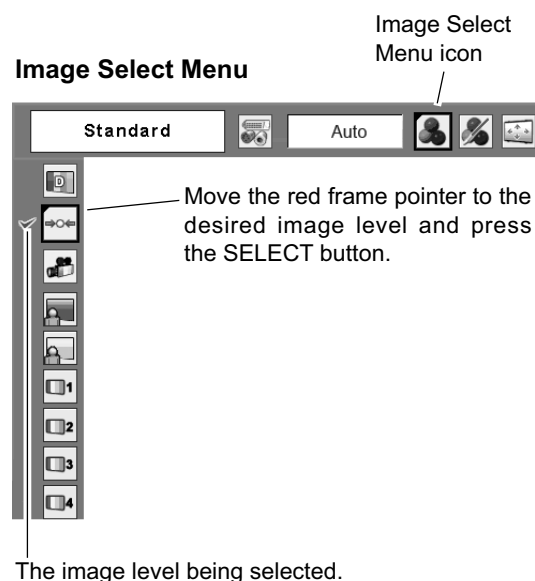


Image Level Adjustment

- 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. The level of each item is displayed. Adjust each level by pressing the Point ◀▶ buttons.

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

Tint

Use 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 (XLow, Low, Mid, or High).

White balance (Red)

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

White balance (Green)

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

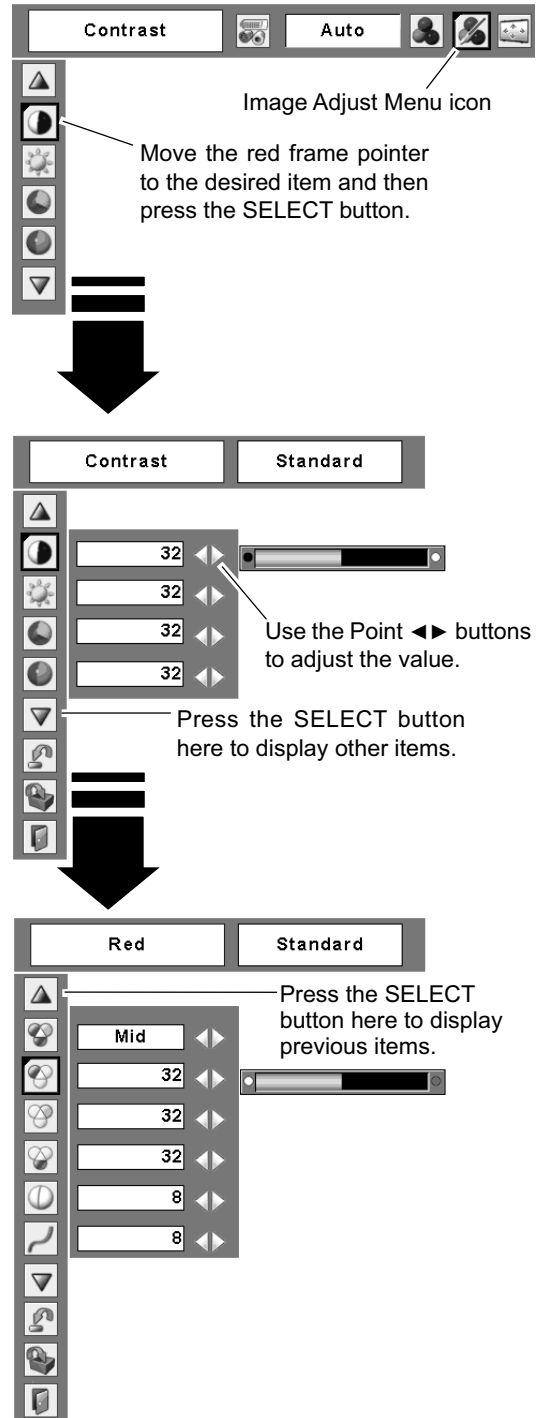
White balance (Blue)

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

✓ Note:

- The Tint cannot be selected when the video system is PAL, SECAM, PAL-M, or PAL-N.
- After adjusting the White balance Red, Green or Blue, the Color temp. level will change to "Adj."

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 get 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.
- L1Lower reduction
- L2Higher reduction

Progressive

An interlaced video signal can be displayed in a progressive picture. 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 return to their previous figures.

Store

To store the adjusted data, select Store and press the SELECT button. Select a level from Image 1 to 4 with the Point ▲▼ buttons and press the SELECT button. A confirmation box appears and then select "Yes." Stored data can be called up by selecting "Image" in the Image Level Selection on page 37.

Quit

Exit the Image Adjust Menu.

✓ Note:

Noise reduction and Progressive cannot be selected when 480p, 575p, 720p, 1035i, or 1080i is selected (p.36).

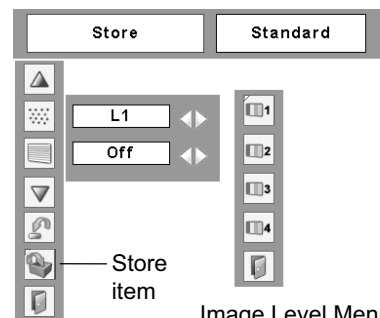
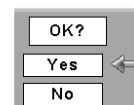


Image Level Menu

Move the red frame pointer to an image item to be set and then press the SELECT button.



A confirmation box appears and then select "Yes."

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 and move the red frame pointer to the desired function and then press the SELECT button.

Normal

Provide the image to fit the screen size while maintaining the aspect ratio of input signal.

Full

Provide the full screen image.

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.

Wide

Provide the image at a wide screen ratio of 16:9.

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.

Custom

Adjust the screen scale and position manually. Press the SELECT button at Custom icon. "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.

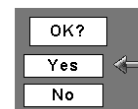
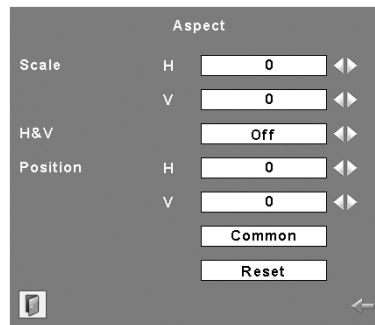
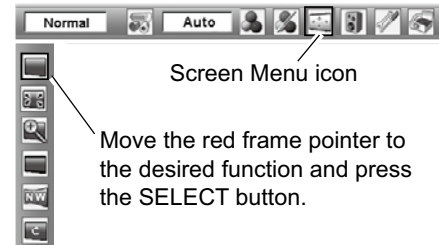
H&V When selecting "On," the aspect ratio is fixed. "Scale V" appears dimmed and becomes unavailable. Adjust Scale H, then the screen scale is automatically modified based on the aspect ratio.

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 the 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 the confirmation box. To reset, press the SELECT button at "Yes."

Screen Menu



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

✓ Note:

- Zoom, Wide and Natural wide are not available when 720p, 1035i, or 1080i is selected in the AV System Menu (p.36).
- When no signal is detected, Normal is set automatically and Aspect dialog box disappears.
- The adjustable range of Scale H/V and Position H/V can be limited depending on the input signal.
- Zoom, Natural wide and Wide are not available when the 4:3 or 16:9 function is selected in the Screen aspect (p.44).

Setting

Setting

This projector has Setting menu that allows you to set up the other various functions described as follows:

- 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 item that you want to set 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, or Japanese.

Keystone

This function corrects distortion of a projected image. Select either Store or Reset with the Point ◀▶ buttons, and then press the SELECT button. The keystone dialog box appears. Correct keystone with the Point ▲▼ buttons (p.22).

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

Reset.....Reset the keystone correction when the AC power cord is unplugged.

Blue back

Press the Point ◀▶ buttons to switch on/off. When this function is “On,” a blue image is displayed while the input signal is not detected.

Display

Press the Point ◀▶ buttons to switch on/off. This function decides to display the On-Screen Displays.

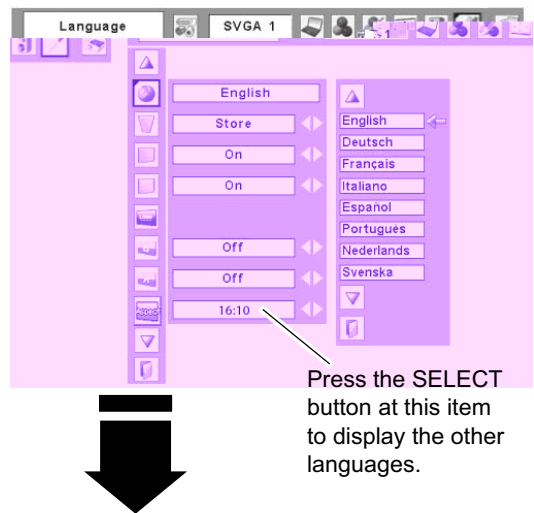
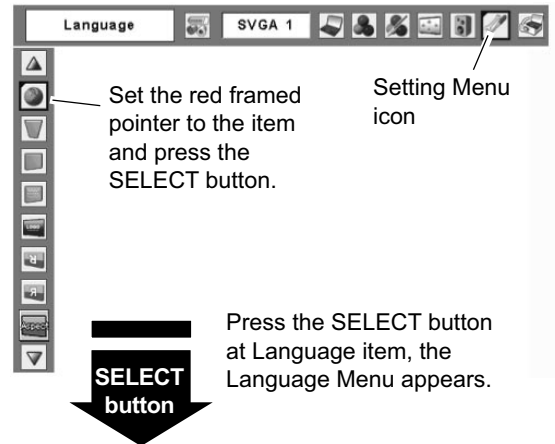
OnDisplay all the On-Screen Displays. Use this function when you want to project images after the lamp becomes bright enough. This mode is set as a default.

Countdown off... Display 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.....Do not show the On-Screen Displays. except:

- On-Screen Menu
- “Power off?”
- P-Timer
- “No signal” for Power management item (p.45)
- “Please wait...”
- Arrows for panning mode (pp.32–33)

Setting Menu (Language)



Press the SELECT button at this item to close the dialog box.

Setting



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 Logo PIN code lock function, Logo select and Capture functions cannot be selected.



Logo select

This function decides the start-up display as follows:

- User.....The image you captured
- Default.....The factory-set logo
- Off.....Countdown only



Capture

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

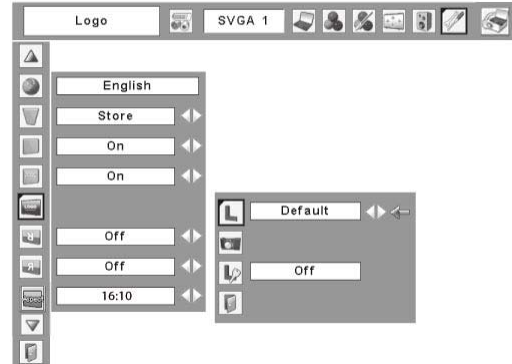
After capturing the projected image, go to the Logo select function and set it to "User." Then the captured image is displayed when the projector is turned on next time or the NO SHOW button is pressed (p 24).

To capture the image, select "Yes." To cancel the Capture function, select "No."

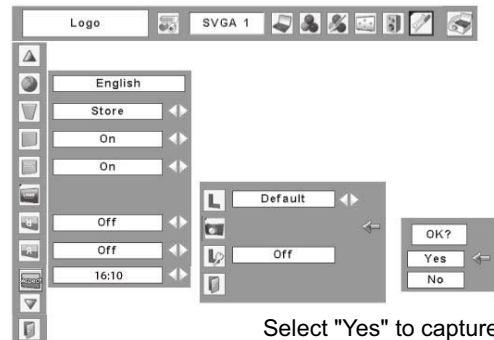
✓ **Note:**

- Before capturing an image, select "Standard" in the Image Select Menu to capture a proper image (pp.30, 37).
- A signal from a computer can be captured up to WXGA(1280 x 800). A signal from video equipment can be captured except for 720p, 1035i, and 1080i.
- When you capture the image that has been adjusted by the Keystone or the Custom function, the adjusted data is automatically reset and the projector captures an image without keystone or custom adjustment.
- When the Logo PIN code lock function is "On," Capture menu cannot be selected.
- When you start to capture a new image, the previously stored image is cleared even if you cancel the capturing.
- "User" cannot be selected when the image is not captured.

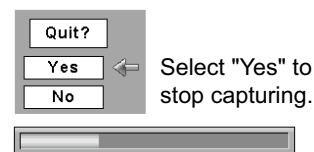
Logo select



Capture



Select "Yes" to capture the projected image.



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 select menu (p.42).
- On.....the screen logo cannot be changed without the Logo PIN code.

If you want to change the Logo PIN code lock setting, enter a Logo PIN code along the following steps. The initial Logo PIN code is set "4321" at the factory.

Enter a Logo PIN code

Select a number by pressing the Point ▲▼ buttons. And then press the Point ► button to fix the number and move the pointer. The number changes to "*". If you fixed an incorrect number, move the pointer to the number you want to correct by pressing the Point ◀ button, and then select the correct number by pressing the Point ▲▼ buttons.

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

After entering the four-digit number, move the pointer to "Set" by pressing the Point ► button. Press the SELECT button so that you can change the following Logo PIN code lock settings.

If you entered an incorrect PIN code, "Logo PIN code" and the number (****) turns red. Enter a correct Logo PIN code all over again.

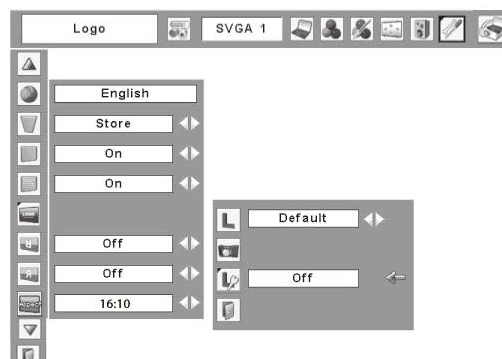
Change the Logo PIN code

Logo PIN code can be changed to your desired four-digit number. Select "Logo PIN code change" with the Point ▼ button and press the SELECT button. Set a new Logo PIN code.

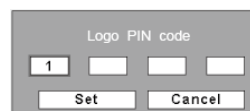
Be sure to note the new Logo PIN code and keep it on hand. If you lost the number, you could no longer change the Logo PIN code setting. For details on PIN code setting, refer to relevant instructions of the PIN code lock function on pages 47–48.

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 68, AND KEEP IT SECURELY. SHOULD THE LOGO PIN CODE BE LOST OR FORGOTTEN, THE LOGO PIN CODE SETTING CAN NO LONGER BE CHANGED.

Logo PIN code lock



Logo PIN code lock Dialog Box



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



Select On/Off by pressing the Point ◀► buttons or change the Logo PIN code. Select Logo PIN code change by pressing the Point ▼ button.

Setting

Ceiling

When this function is set to “On”, the picture is 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 is left/right reversed. This function is used to project the image to a rear projection screen.

Screen aspect

This function is used to project the image to a 4:3 or 16:9 projection screen.

4:3 Set to a 4:3 projection screen.

16:9 Set to a 16:9 projection screen.

16:10 16:10 is the aspect of the LCD panel. The original Screen Menu is available.

Terminal

The COMPUTER IN 2/MONITOR OUT terminal on the back of the projector is switchable for computer input or monitor output (p.9). Select Computer 2 or Monitor Out with the Point ◀▶ buttons.

Computer 2.....computer input
Monitor Out.....monitor out

Terminal function is not available when Computer 2 to the input source is selected. Change the input source to the others (Computer1 or Video) so that the Terminal function is available (pp.25, 34–35).

Input search

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

Off Input search does not work.

On1 Input search works under the situation below.

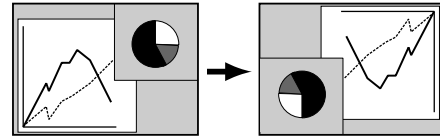
- When the COMPUTER button or VIDEO button on the remote control is pressed.

On2 Input search works under the situation below.

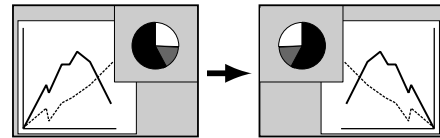
- When the projector is turned on with pressing the POWER ON/STAND-BY button on the remote control. (After the countdown)
- When the COMPUTER button or VIDEO button on the remote control is pressed.
- When the current input signal is missed. *

* If the No show or Freeze function is active, cancel it to activate the Input search. It is not available when On-Screen menu is displayed.

Ceiling



Rear



✓Note:

- When the 4:3 or 16:9 function is selected, True and D.Zoom+/- are not available in the PC screen (pp.32-33).
- When the 4:3 or 16:9 function is selected, Zoom, Natural wide and Wide are not available in the AV screen (p.40).

✓Note:

- While Input search is set On1 or On2, the status of Input and Lamp are displayed every time the signal is switched.
- Only the input source selected at the last time can be detected.
- If COMPUTER/VIDEO button on the remote control is pressed during Input search is in progress, Input search will stop.

Standby mode

This function is available when operating the projector via network.

Network..... 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 Network, 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 input signal is interrupted and no button is pressed for a certain period.

When the input signal is interrupted and no button is pressed for more than 30 seconds, the timer display with "No signal" appears. The countdown starts to turn off the lamp.

Select one of the operations.

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

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

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

Then set the countdown timer with the Point ◀▶ buttons.

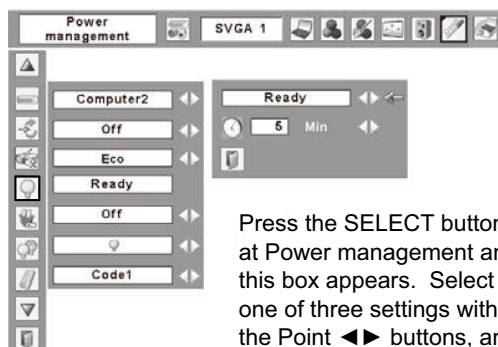
✓ **Note:**

Factory default is "Ready: 5 min."

Power management



Time left before Lamp is off.



Press the SELECT button at Power management and this box appears. Select one of three settings with the Point ◀▶ buttons, and go to the timer with the Point ▲▼ buttons and set time with the Point ◀▶ buttons.

Setting



On start

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

✓ **Note:**

Be sure to turn the projector off properly (see “Turning Off the Projector” on page 19). If the projector is turned off in the incorrect sequence, the On start function does not operate properly.



Lamp control

You can change the brightness of the screen.

- Normal ... Normal brightness
- Eco Lower brightness reduces the lamp power consumption and extends the lamp life.

✓ **Note:**

Lamp mode cannot be changed for a while after turning on the projector. Lamp needs some time to stabilize after the power is turned on. Stored lamp mode will be active after the lamp is stabilized.



Remote control

This projector provides two different remote control codes; the factory-set, initial code (Code 1) and the secondary code (Code 2). This switching function prevents remote control interference when several projectors or video equipment are operated at the same time.

When the projector is operated in “Code 2,” both the projector and the remote control must be switched to “Code 2.”

To change the code for the projector:

Select either “Code 1” or “Code 2” in this Setting Menu.

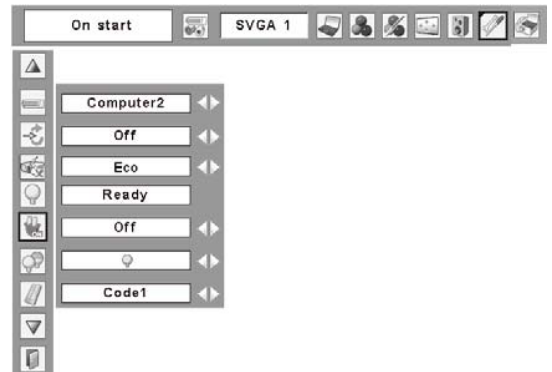
To change the code for the remote control:

Press and hold both the MENU and IMAGE buttons together for more than 5 seconds. After changing the code, make sure the remote control operates properly.

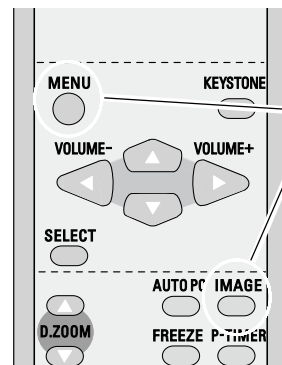
✓ **Note:**

- When different codes are set on the projector and on the remote control, any operation cannot be made. In that case, switch the code on the remote control to fit the code on the projector.
- If the batteries are removed from the remote control for a long period of time, the remote control code will be reset.

On start



Remote control



Press and hold MENU and IMAGE buttons for more than 5 seconds.




Security (Key lock and PIN code lock settings)

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

Key lock

This function locks operation of the top control or the remote control.

It is useful to prevent operation by an unauthorized person.

- not locked.
- 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 or there is something wrong with your remote control, contact the dealer where you purchased the projector or the service center.

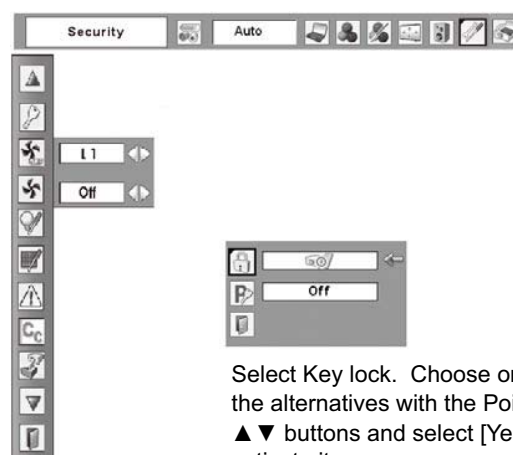
PIN code lock

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

- Off..... The projector is not locked with the PIN code.
- On1.....Requires to enter a PIN code every time turning on the projector.
- On2.....Requires to enter a PIN code to operate the projector once the power cord is unplugged; as long as the AC power cord is connected, the projector can be operated without a PIN code.

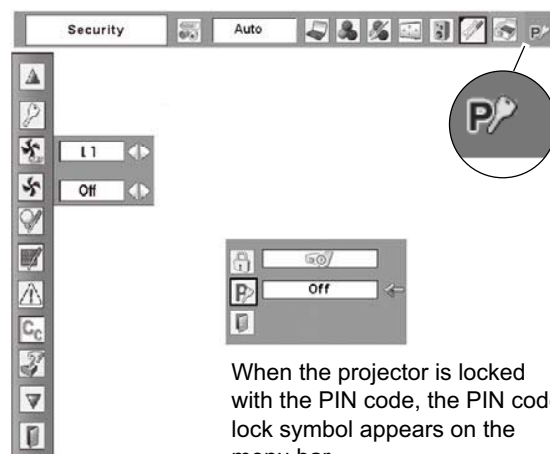
Whenever you change the PIN code lock setting or the PIN code (a four-digit number), you are required to enter the PIN code. "1234" is set as the initial PIN code at the factory.

Key lock



Select Key lock. Choose one of the alternatives with the Point ▲ ▼ buttons and select [Yes] to activate it.

PIN code lock



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

Setting

Enter a PIN code

Select a number by pressing the Point ▲▼ buttons. And then press the Point ◀▶ button to fix the number and move the pointer. The number changes to "*". If you fixed an incorrect number, move the pointer to the number you want to correct by pressing the Point ◀▶ button, and then select the correct number by pressing the Point ▲▼ buttons.

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

After entering the four-digit number, move the pointer to "Set" by pressing the Point ◀▶ button. Press the SELECT button so that you can change the following PIN code lock settings. If you entered an incorrect PIN code, "PIN code" and the number (****) turns red. Enter a correct PIN code all over again.

Change the PIN code lock setting

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

Change the PIN code

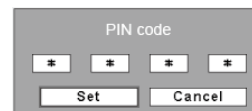
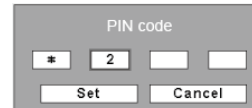
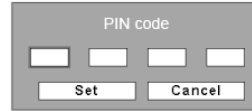
The PIN code can be changed to your desired four-digit number.

Select "PIN code change" with the Point ▼ button, and press the SELECT button to display the New PIN code input dialog box.

Select a number by pressing the Point ▲▼ buttons. And then press the Point ▶ button to fix the number and move the pointer. Repeat it to complete entering a four-digit number. After entering the four-digit number, move the pointer to "Set" by pressing the Point ▶ button. Then press the SELECT button.

CAUTION:
WHEN YOU HAVE CHANGED THE PIN CODE, WRITE DOWN THE NEW PIN CODE IN COLUMN OF THE PIN CODE NO. MEMO ON PAGE 68, AND KEEP IT SECURELY. IF YOU FORGET YOUR PIN CODE, THE PROJECTOR CAN NO LONGER BE STARTED.

Enter a PIN code



The input numbers change to "*" for security reasons.

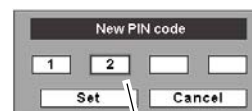
Move the pointer to "Set" by pressing the Point ▶ button. And then press the SELECT button.

Change the PIN code lock setting



Select a desired setting with the Point ◀▶ buttons.

Change the PIN code



The input numbers are being displayed for confirmation.



Fan

This function provides the following options in the cooling fans' operation after turning off the projector (p.19).

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



Fan control

Choose the running speed of cooling fans from the following options according to the ground elevation under which you use the projector.

- Off..... Normal speed. Set this function to "Off" when using the projector in non-high altitude environment.
- On 1..... Faster than Off mode. Select this mode when using the projector in high altitudes (about 1,200 meters or more above the sea level) where the fans have less cooling effect.
- On 2..... Faster than On 1 mode. Select this mode when using the projector in higher altitudes than above where the fans have lesser cooling effect.



Lamp counter

This function is used to reset the lamp replacement counter. When replacing the projection lamp, reset the lamp replacement counter by using this function. See page 55 for operation.



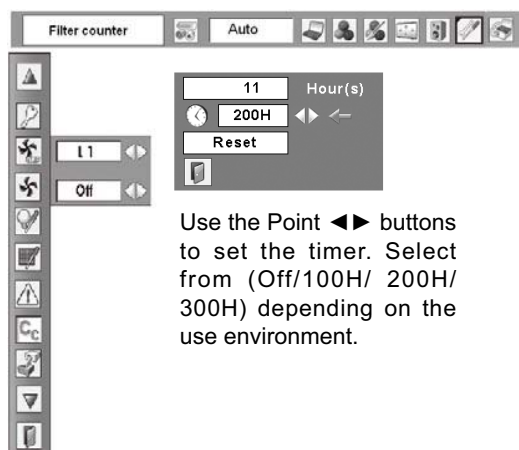
Filter counter

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 52.

Filter counter



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

✓Note:

Setting "Fan control" to On1 or On2 affects L2 operation in "Fan."

✓Note:

- Fan noise becomes louder in On 1 and On2.
- Failure to set the running speed of cooling fans properly may affect the projector life.

Lamp replacement icon

Lamp replacement



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

✓Note:

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

Fig.1 Filter warning icon

Filter warning



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

✓Note:

This icon also appears at turning on.

Fig.2 Filter warning icon



✓Note:

- At selecting input source, the icon (Fig.2) will appear.
- The Filter warning icons (Fig.1 and Fig.2) will not appear when the Display function is set to "Off" (p.41), during "Freeze"(p.23), or "No show" (p.24).

Setting



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.



Closed Caption

Closed Caption is a function that displays the audio portion of a TV program as text on the screen. If the input signal contains closed captions, you can turn on the feature and switch the channels. Press the Point ◀▶ buttons to select Off, CC1, CC2, CC3 or CC4. If the closed caption is not clear, you can change the text from Color to White.

✓ **Note:**

The Closed Caption is available only under the situation below.

- When the input signal is NTSC of composite and S-video, and the system is set according to the signal or set on "Auto".
- The system must be set on NTSC or Auto in Video System Selection. (p.36)
- The icon of Closed Caption is displayed in gray while it is not available.
- The closed caption is unavailable when On-Screen menu and P-Timer are displayed.



Factory default

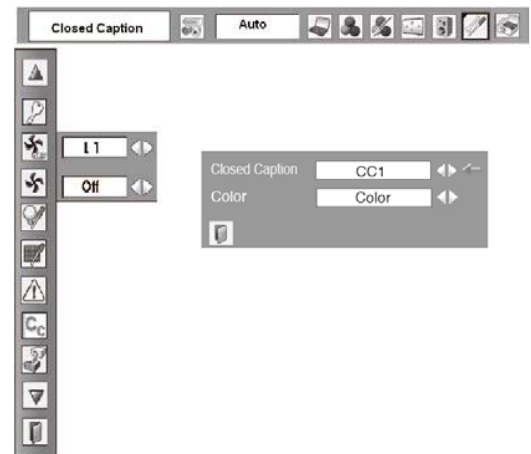
This function returns all setting values except for the user logo, PIN code lock, Logo PIN code lock, the lamp counter and the filter counter to the factory default settings.



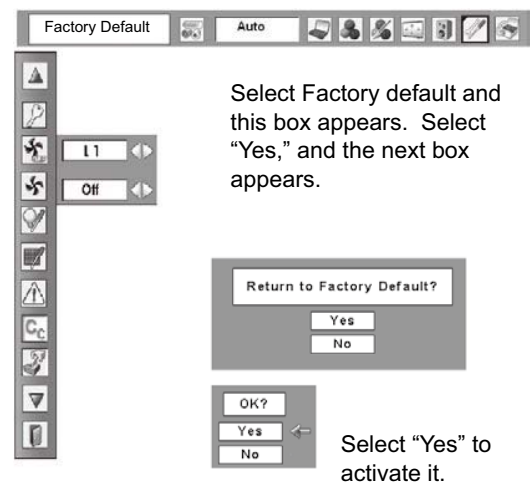
Quit

Exit the Setting Menu.

Closed Caption



Factory default



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.

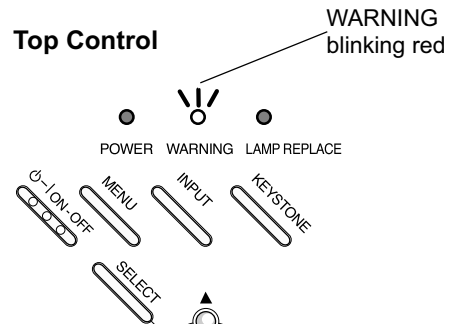
When the temperature inside the projector reaches a certain level, the projector is automatically shut down to avoid overheating. The POWER indicator is blinking while the projector is being cooled down. When the projector has cooled down enough (to its normal operating temperature), it can be turned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

✓ **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.

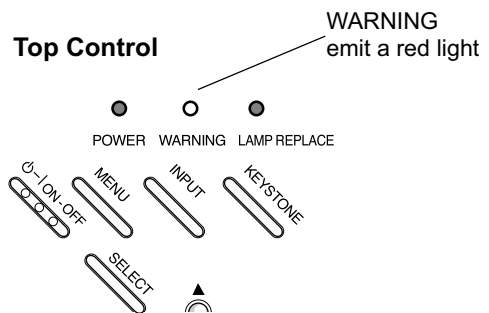
Then check the matters below:

- Did you provide appropriate space for the projector to be ventilated? Check the installing condition to see if ventilation slots 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.
- Are the air filters clean? Clean the air filters periodically. (p.52)



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 plug it, and then turn on the projector once again to verify operation. If the projector cannot be turned on and the WARNING indicator lights red, unplug the AC power cord and contact the service station.



CAUTION

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

Maintenance and Cleaning

Cleaning the Air Filters

Air filters prevent dust from accumulating on the surface of the optical elements inside the projector. Should the air filters become clogged with dust particles, they will reduce cooling fans' effectiveness and may result in a buildup of internal heat and adversely affect the life of the projector. Clean the air filters by following the steps below.

- 1 Turn off the projector, and unplug the AC power cord from the AC outlet.
- 2 Turn over the projector and remove the air filters by pulling the latches upward.
- 3 Clean the air filters with a brush or rinse them softly. When rinsing the air filters, dry them well.
- 4 Replace the air filters properly. Make sure that the air filters are fully inserted.



CAUTION

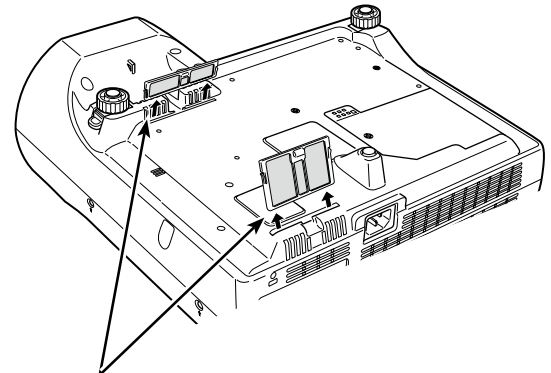
Do not operate the projector with the air filters removed. Dust may accumulate on the optical elements degrading picture quality. Do not put anything into the air intake vents. Otherwise it may result in malfunction of the projector.

RECOMMENDATION

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

When you use the projector under dusty or smoky conditions, dust may accumulate on the 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.



Air filters
Pull up and remove.

✓Note:

When reinserting the air filters, 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

11 Hour(s)
200H ◀▶
Reset

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

Filter counter Reset?
Yes
No

Select [Yes], then another confirmation box appears.

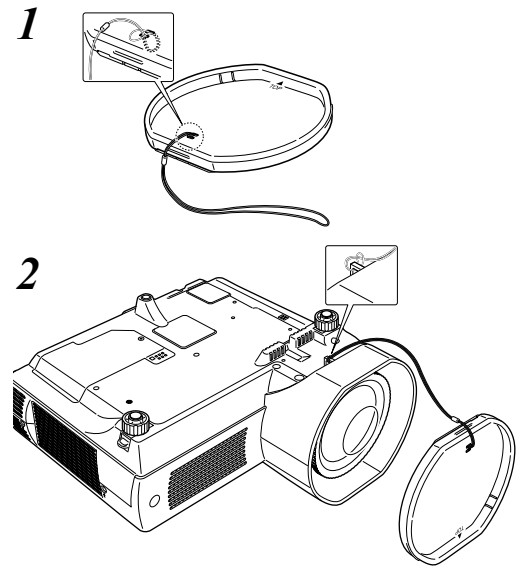
OK?
Yes
No

Select [Yes] again to reset the Filter counter.

Attaching the Lens Cover

When moving the projector or while it is not in use, replace the lens cover.

- 1** Thread the string through the hole on the lens cover and then tie a knot in the string to secure it in place.
- 2** Thread the other end of the string through the hole on the bottom of the projector. Then pass the lens cover through the resulting loop of the string and pull it to tighten the knot.



Cleaning the Projection Lens

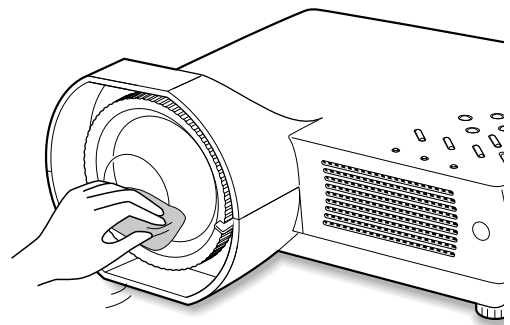


This projector is equipped with a plastic lens. Do not rub the lens with a hard fiber cloth or hit it with something hard to prevent the lens from scratching. Do not use a chemical cleaner (liquid and solid) to avoid deteriorating the lens.

Unplug the AC power cord before cleaning.

First, remove the dust with a blower. Then gently wipe the lens surface. Use a lens cleaning paper moistened with methyl alcohol (methanol). Avoid excessive use of cleaner. Do not use abrasive cleaners, solvents, or other harsh chemical cleaners to avoid damages the lens.

When the projector is not in use, replace the lens cover.

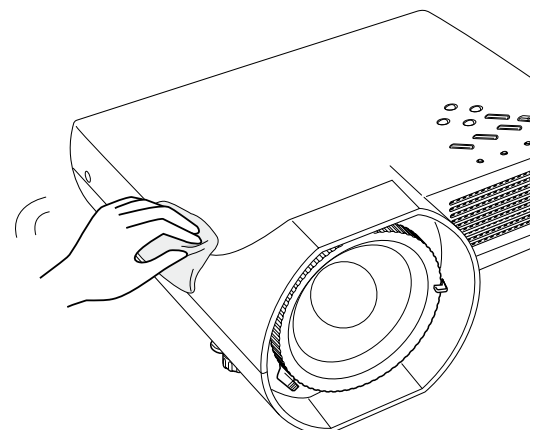


Cleaning the Projector Cabinet

Unplug the AC power cord before cleaning.

Gently wipe the projector body with a soft dry cleaning cloth. When it is heavily soiled, use a small amount of mild detergent and finish with the cleaning cloth. Avoid excessive use 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 case to avoid dust and being scratched.



Maintenance and Cleaning

Lamp Replacement

When the projection lamp of the projector reaches the end of its life, the LAMP REPLACE indicator emits a yellow light. If this indicator lights yellow, replace the lamp with a new one promptly.



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

Top Control

POWER WARNING LAMP REPLACE

This indicator turns yellow when the projection lamp reaches the end of its life.

Lamp replacement icon

Lamp replacement

✓Note:

The Lamp replacement icon will not appear when the Display function is set to "Off" (p.41), during "Freeze" (p.23), or "No show" (p.24).



CAUTION

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

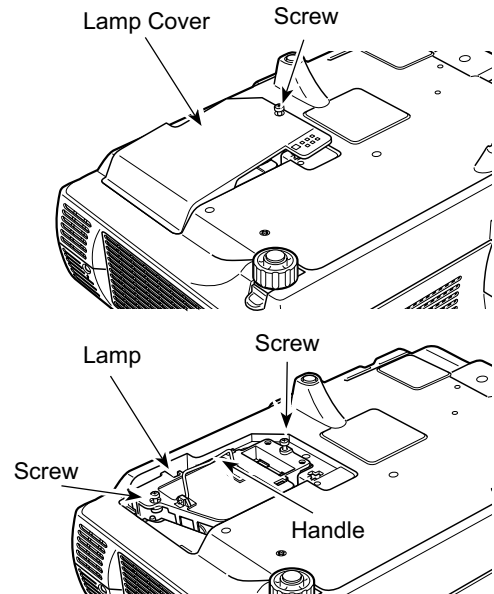


CAUTION

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 Turn the projector over. Remove the screw that secures the lamp cover, and then open the lamp cover.
- 3 Loosen the two screws that secure the lamp. Lift the lamp out of the projector by using the built in handle.
- 4 Replace the lamp with a new one and secure it with the two screws. Make sure that the lamp is set properly. Put the lamp cover back and secure it with the screw.
- 5 Connect the AC power cord to the projector and turn on the projector.
- 6 **Reset the lamp replacement counter.** See "Lamp Replacement 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-WXL46A**
- Replacement Lamp Type No. : **POA-LMP106**
(Service Parts No. 610 332 3855)

Lamp Replacement Counter

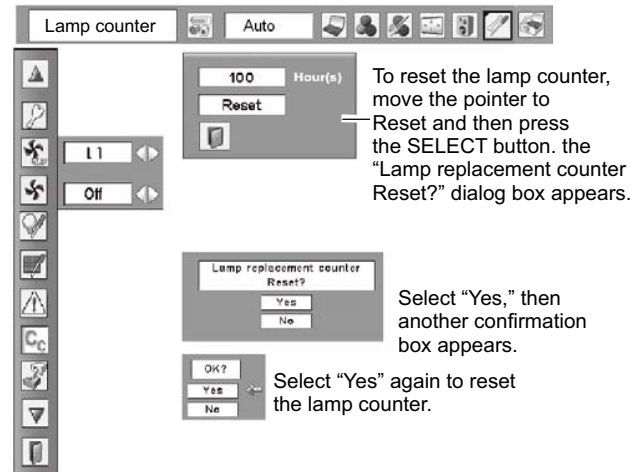
Be sure to reset the Lamp replacement counter after the lamp is replaced. When the Lamp replacement counter is reset, the LAMP REPLACE indicator stops lighting.

- 1 Turn the projector on and 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. The first dialog box appears showing the total accumulated lamp time and reset option. If you select Reset, "Lamp replacement counter Reset?" appears. Select "Yes" to continue.
- 3 Another confirmation dialog box appears, and select "Yes" to reset the Lamp replacement counter.

✓ **Note:**

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

Lamp counter



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 it comes to the end of life. 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 14-16.
- Make sure all equipment is connected to the AC outlet and the power is turned on.
- When you operate the projector with a computer and it does not project an image, restart the computer.

Problem:	Solutions
No power	<ul style="list-style-type: none">– 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 19).– Check the WARNING indicator. If the WARNING indicator lights red, the projector cannot be turned on (see on page 51).– Check the projection lamp (see page 54).
PIN code dialog box appears at start-up	<ul style="list-style-type: none">– PIN code lock is being set. Enter a PIN code; the "1234" or numbers you have set (see pages 18, 47–48).
The initial display is not shown.	<ul style="list-style-type: none">– Make sure "Off" or "Countdown Off" are not chosen at Display function (see page 41).
The initial display is not same with the default one.	<ul style="list-style-type: none">– Make sure "User" or "Off" are not chosen at Logo function (see page 42).
Input signal switches automatically. (or does not switch automatically)	<ul style="list-style-type: none">– Make sure Input search function is adjusted properly (see page 44).
No image	<ul style="list-style-type: none">– Check the connection between your computer or video equipment and the projector (see pages 14-16)– See if the input signal is correctly output from your computer. Some laptop computers may need to be changed the setting for monitor output when connected to the 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 if the selected system is corresponding with your computer or video equipment (see pages 26, 36)– Select correct input source once again through menu operation (see pages 25, 34–35).– 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 can not be displayed. Press the NO SHOW button or any other button on the remote control.
Image is out of focus.	<ul style="list-style-type: none">– Adjust focus of the projector (see page 22).– Provide proper distance between the projector and the projection screen (see page 13).– Check the projection lens to see if it needs cleaning (see page 53).– Moving the projector from a cool to warm place may result in moisture condensation on the projection lens. If this occurs, leave the projector off and wait until condensation evaporates.– Projecting from the excessive slant angle to the screen may cause keystone distortion and partial imperfect focus.

Picture is not bright enough.	<ul style="list-style-type: none"> – Check if "Contrast" or "Brightness" are adjusted properly (see pages 31, 38). – Check if "Image level" is selected properly (see pages 30, 37). – Check the LAMP REPLACE indicator. If it lights, the end of lamp life is approaching. Replace the lamp with a new one promptly (see pages 54-55, 61). – Check the Lamp control function (see pages 24, 46).
The color is strange.	<ul style="list-style-type: none"> – Check the Input signal, color system, video system, or computer system mode. – Adjust the Image level properly (see pages 31, 38).
Image is Left/Right reversed. Image is Top/Bottom reversed.	<ul style="list-style-type: none"> – Check the Ceiling/Rear function (see page 44). – Check the Ceiling function (see page 44).
The image is distorted or runs off.	<ul style="list-style-type: none"> – Check the PC Adjustment menu or Screen menu and adjust them (see pages 26-29, 32-33, 40).
No sound	<ul style="list-style-type: none"> – Check the audio cable connection from audio input source. – Adjust the audio source. – Press the Volume + button (see page 23). – Press the Mute button (see page 23). – 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.
Some displays are not seen during the operation.	<ul style="list-style-type: none"> – Check the Display function (see page 41).
Auto PC adjustment function does not work.	<ul style="list-style-type: none"> – Check the Input signal. Auto PC Adjustment function can not work when 480p, 575p, 720p, 480i, 575i, 1035i, or 1080i is selected (see page 27).
The setting does not remain after turning off power.	<ul style="list-style-type: none"> – Make sure you selected "Store" after adjusting settings. Some settings cannot be stored if not registered with "Store."
Power management function does not work.	<ul style="list-style-type: none"> – Power management function cannot work while "Freeze" or "No Show" function is running.
Image disappears automatically	<ul style="list-style-type: none"> – Check the power management function in the Setting. The power management is set to "On" at the factory.
Capture function does not work.	<ul style="list-style-type: none"> – Check the connection and the Input signal to see if there is signal.
The Remote Control does not work.	<ul style="list-style-type: none"> – Check the batteries. – Make sure no obstruction is between the projector and the 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). – Make sure the code of the remote control is conformed to that of the projector (see page 46). – Unlock the Key lock function for the remote control (see page 47).
The top control does not work	<ul style="list-style-type: none"> – Unlock the Key lock function for the top control of the projector (see page 47).

Appendix

Indicator blinks or lights.	– Check the status of the projector with referring to "indicators and Projector Condition" (see page 61).
Computer 2 cannot be selected.	– Select Computer 2 in the Terminal function (see page 44).
The terminal function cannot be selected.	– The Terminal function cannot be selected after Computer 2 is selected. Select other input source such as Computer 1 or Video with the COMPUTER button or the VIDEO button on the remote control so that the Terminal function can be selected.
The exclamation mark appears on the screen.	– Your operation is invalid. Operate correctly.
Unable to unlock the Logo PIN code lock or Security PIN code lock.	– Contact the dealer where you purchased the projector or the service center.

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.



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



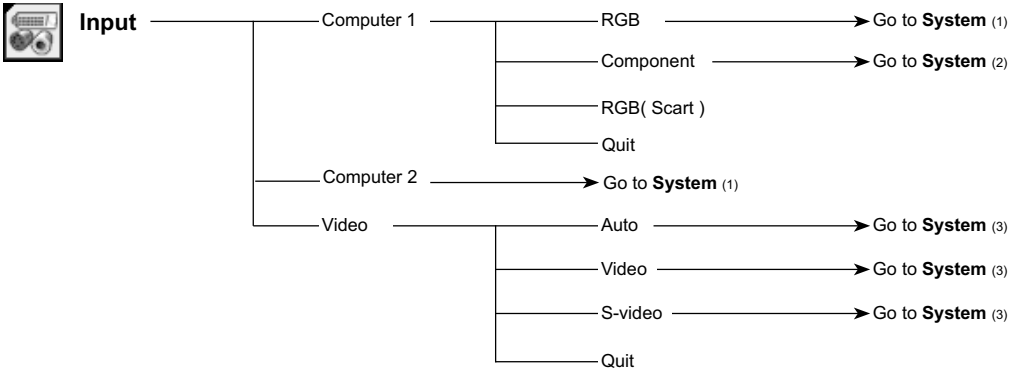
This symbol on the nameplate means the product is Listed by Underwriters Laboratories Inc. It is designed and manufactured to meet rigid U.L. safety standards against risk of fire, casualty and electrical hazards.



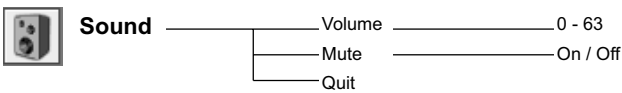
Pixelworks ICs used.

Menu Tree

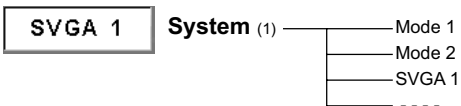
Computer Input/Video Input



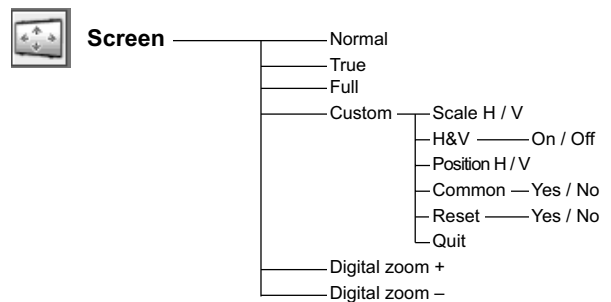
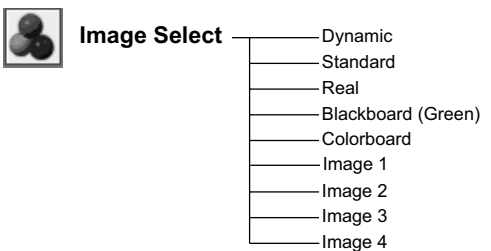
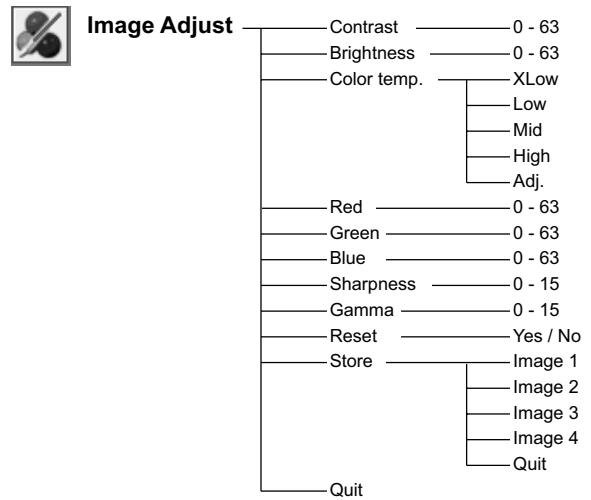
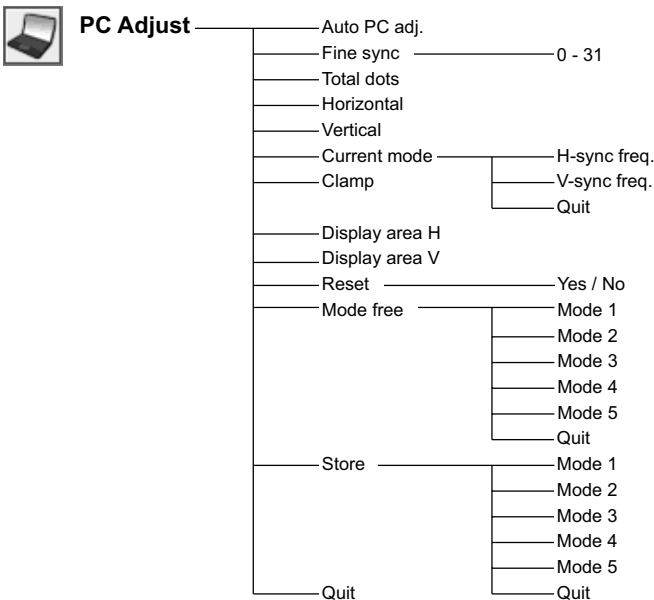
Sound



Computer Input

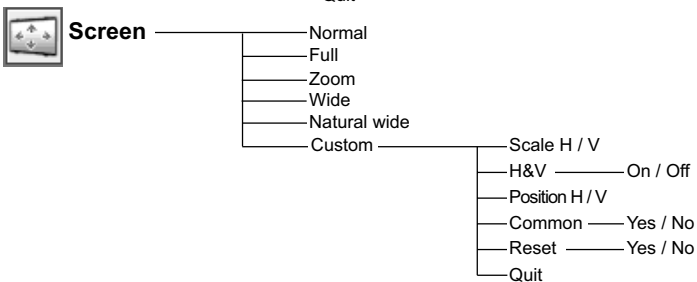
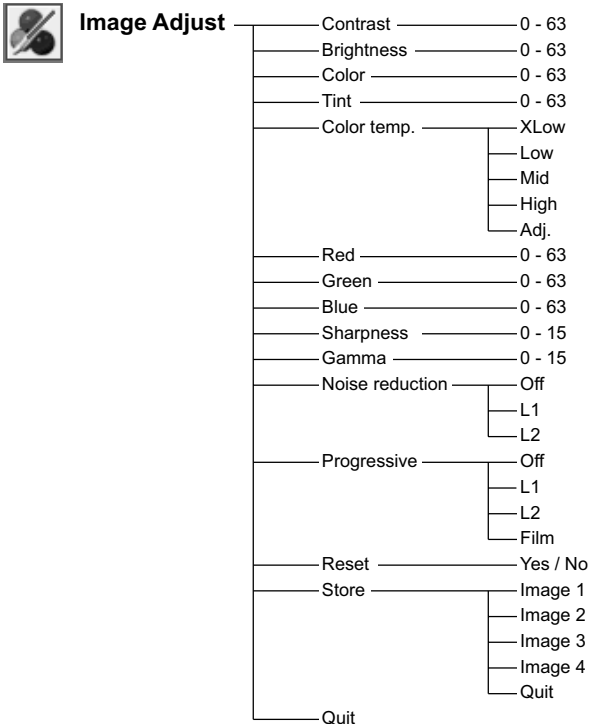
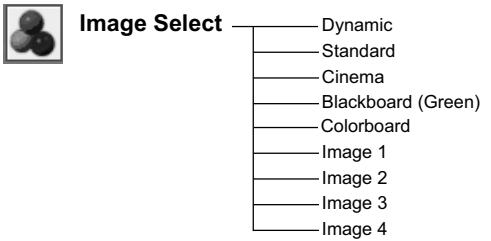
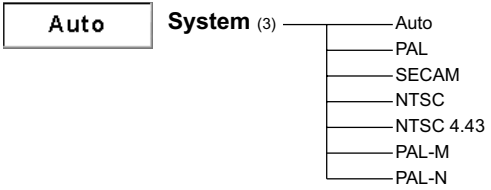
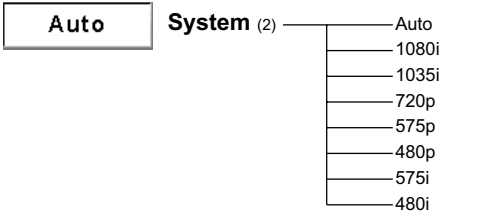


*Systems displayed in the System Menu vary depending on an input signal.

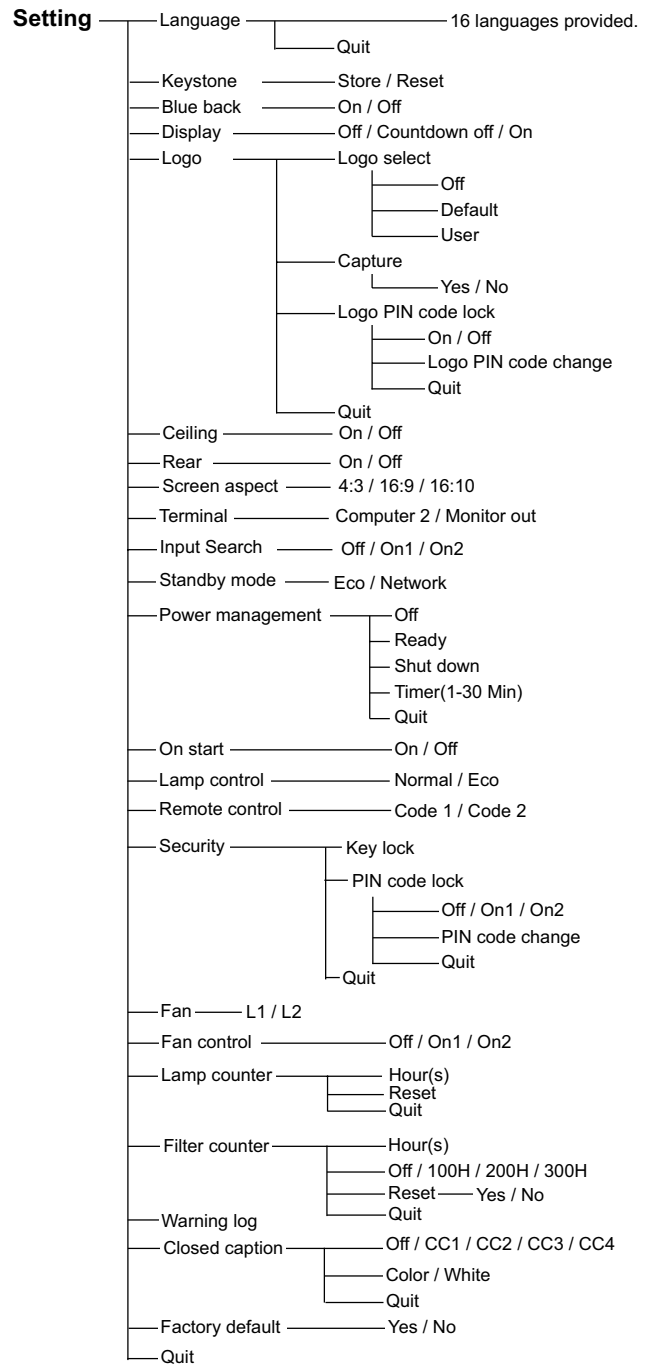


Appendix

Video Input



Setting



Indicators and Projector Condition

Check the indicators for projector condition.

Indicators			Projector Condition
POWER red/green	WARNING red	LAMP REPLACE yellow	
●	●	●	The projector is off. (The AC power cord is unplugged.)
⦿	●	*	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.
⦿	●	*	The projector is ready to be turned on with the POWER ON/STAND-BY button.
○	●	*	The projector is operating normally.
⦿	●	*	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 lights red and the projector can be turned on. (The WARNING indicator keeps blinking.) Check and clean the air filters.
⦿	⦿	*	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 filters.
●	⦿	*	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 the end of its 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 54-55.

Appendix

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.

When selecting these modes, Screen, Auto PC adjustment and PC adjustment can be limited.

ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (kHz)	V-Freq. (Hz)
VGA1	640x480	31.47	59.88
VGA2	720x400	31.47	70.09
VGA3	640x400	31.47	70.09
VGA4	640x480	37.86	74.38
VGA5	640x480	37.86	72.81
VGA6	640x480	37.50	75.00
VGA7	640x480	43.269	85.00
MAC LC13	640x480	34.97	66.60
MAC 13	640x480	35.00	66.67
480p	640x480	31.47	59.88
575p	768x575	31.25	50.00
575i	768x576	15.625	50.00 (Interlace)
480i	640x480	15.734	60.00 (Interlace)
SVGA1	800x600	35.156	56.25
SVGA2	800x600	37.88	60.32
SVGA3	800x600	46.875	75.00
SVGA4	800x600	53.674	85.06
SVGA5	800x600	48.08	72.19
SVGA6	800x600	37.90	61.03
SVGA7	800x600	34.50	55.38
SVGA8	800x600	38.00	60.51
SVGA9	800x600	38.60	60.31
SVGA10	800x600	32.70	51.09
SVGA11	800x600	38.00	60.51
MAC16	832x624	49.72	74.55
XGA1	1024x768	48.36	60.00
XGA2	1024x768	68.677	84.997
XGA3	1024x768	60.023	75.03
XGA4	1024x768	56.476	70.07
XGA5	1024x768	60.31	74.92
XGA6	1024x768	48.50	60.02
XGA7	1024x768	44.00	54.58
XGA8	1024x768	63.48	79.35
XGA9	1024x768	36.00	87.17 (Interlace)
XGA10	1024x768	62.04	77.07
XGA11	1024x768	61.00	75.70
XGA12	1024x768	35.522	86.96 (Interlace)
XGA13	1024x768	46.90	58.20
XGA14	1024x768	47.00	58.30
XGA15	1024x768	58.03	72.00
MAC19	1024x768	60.24	75.08

ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (kHz)	V-Freq. (Hz)
SXGA1	1152x864	64.20	70.40
SXGA2	1280x1024	62.50	58.60
SXGA3	1280x1024	63.90	60.00
SXGA4	1280x1024	63.34	59.98
SXGA5	1280x1024	63.74	60.01
SXGA6	1280x1024	71.69	67.19
SXGA7	1280x1024	81.13	76.107
SXGA8	1280x1024	63.98	60.02
SXGA9	1280x1024	79.976	75.025
SXGA10	1280x960	60.00	60.00
SXGA11	1152x900	61.20	65.20
SXGA12	1152x900	71.40	75.60
SXGA13	1280x1024	50.00	86.00 (Interlace)
SXGA14	1280x1024	50.00	94.00 (Interlace)
SXGA15	1280x1024	63.37	60.01
SXGA16	1280x1024	76.97	72.00
SXGA17	1152x900	61.85	66.00
SXGA18	1280x1024	46.43	86.70 (Interlace)
SXGA19	1280x1024	63.79	60.18
SXGA20	1280x1024	91.146	85.024
SXGA+ 1	1400x1050	63.979	60.190
SXGA+ 2	1400x1050	65.346	60.116
SXGA+ 3	1400x1050	65.121	59.902
MAC21	1152x870	68.68	75.06
MAC	1280x960	75.00	75.08
MAC	1280x1024	80.00	75.08
WXGA1	1366x768	48.36	60.00
WXGA2	1360x768	47.70	60.00
WXGA3	1376x768	48.36	60.00
WXGA4	1360x768	56.16	72.00
WXGA6	1280x768	47.776	59.870
WXGA7	1280x768	60.289	74.893
WXGA8	1280x768	68.633	84.837
WXGA9	1280x800	49.600	60.050
WXGA10	1280x800	41.20	50.00
WXGA 11	1280x800	49.702	59.810
WUXGA 1	1920 x 1200	74.556	59.885
WUXGA 2	1920 x 1200	74.038	59.950
WSXGA+ 1	1680 x 1050	65.290	59.954
WXGA+ 1	1440 x 900	55.935	59.887
WXGA+ 2	1440 x 900	74.918	60.000

ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (kHz)	V-Freq. (Hz)
UXGA1	1600x1200	75.00	60.00
UXGA2	1600x1200	81.25	65.00
UXGA3	1600x1200	87.5	70.00
UXGA4	1600x1200	93.75	75.00
720p	1280x720	37.50	50.00

ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (kHz)	V-Freq. (Hz)
720p	1280x720	45.00	60.00
1035i	1920x1035	33.75	60.00 (Interlace)
1080i	1920x1080	33.75	60.00 (Interlace)
1080i	1920x1080	28.125	50.00 (Interlace)

Technical Specifications

Mechanical Information

Projector Type	Multi-media Projector
Dimensions (W x H x D)	12.59" x 5.73" x 11.85" (319.9 mm x 145.5 x 300.9 mm) (Not including protrusions)
Net Weight	7.5 lbs (3.4 kg)
Feet Adjustment	0° to 10.0°

Panel Resolution

LCD Panel System	0.59" 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. 15–100 kHz, V-sync. 50–100 Hz

Optical Information

Projection Image Size (Diagonal)	Adjustable from 50" to 110"
Projection Lens	F 1.8 lens with f 6.6 mm with manual focus
Throw Distance	1.77' - 3.94' (0.53 m - 1.20 m)
Projection Lamp	200 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 / Component Input Terminal	Analog RGB (Mini D-sub 15 pin) Terminal x 1
Computer Input 2 / Monitor Output Terminal	Analog RGB (Mini D-sub 15 pin) Terminal x 1 (In/Out switchable)
Computer/ Component Audio Input Jack	Mini Jack (stereo) x 1
Service Port Connector	Mini DIN 8 pin x 1
LAN Connection Terminal	RJ45
Audio Output Jack	Mini Jack (stereo) x 1 (Variable)

Audio

Internal Audio Amp	1.0 W RMS
Built-in Speaker	1 speaker, ø1.1" (28 mm)

Power

Voltage and Power Consumption	AC 100–120 V (3.3 A Max. Ampere), 50/60 Hz (The U.S.A and Canada) AC 200–240 V (1.8 A 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	AA or LR6 1.5V ALKALINE TYPE x 2
Operating Range	16.4' (5 m)±30°
Dimensions	1.9" (W) x 0.87" (H) x 5.7" (D) (49 mm x 22 mm x 145.3 mm)
Net Weight	3.53 oz (100 g) (including batteries)

Accessories

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

- 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

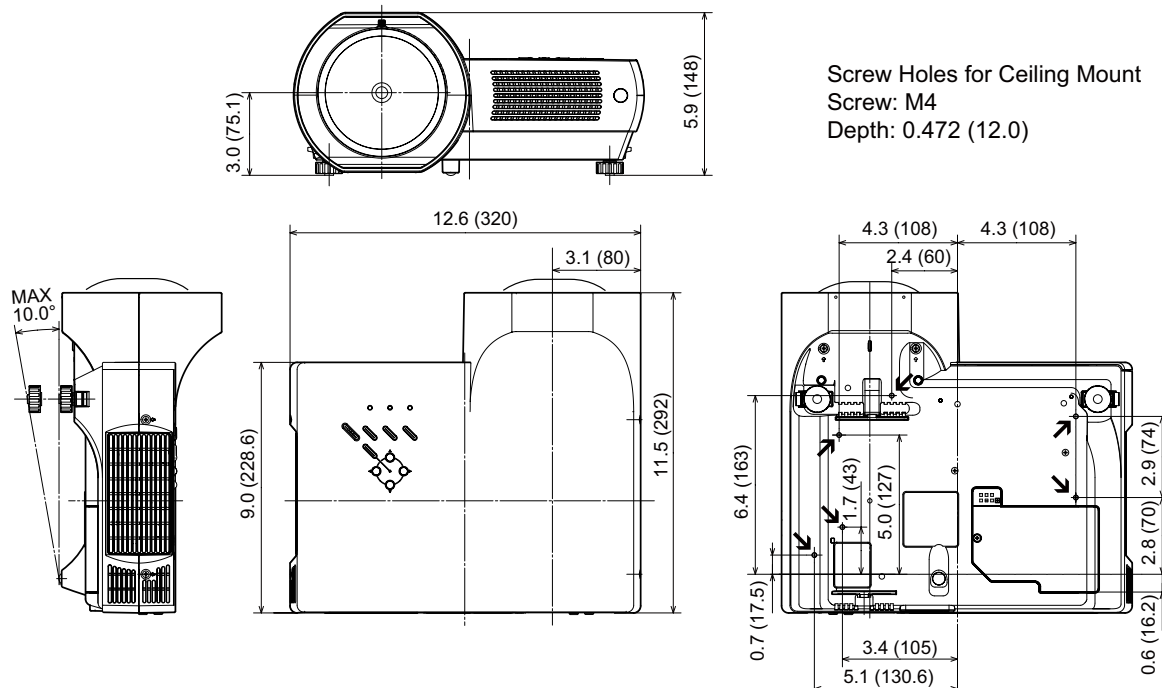
The parts listed below are optionally available. When ordering those parts, specify the item name and Model No. to the sales dealer.

Model No.

COMPONENT~VGA Cable	: POA-CA-COMPVGA
SCART~VGA Cable	: POA-CA-SCART
VGA-Cable (10 m)	: KA-MC-DB10

Dimensions

Unit: inch (mm)



Appendix

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 21 on the owner's manual "Network Set-up and Operation."

Projector Input		PJLink Input	Parameter
Computer1	RGB	RGB 1	11
	Component	RGB 2	12
	RGB (Scart)	RGB 3	13
Computer2	RGB	RGB 4	14
Video	Auto	VIDEO 1	21
	Video	VIDEO 2	22
	S-video	VIDEO 3	23

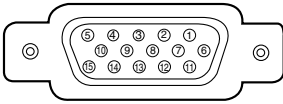
PJLink is a registered trademark of JBMIA and pending trademark in some countries.



Configurations of Terminals

COMPUTER INPUT/COMPONENT INPUT/MONITOR OUTPUT TERMINAL (ANALOG)

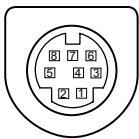
Terminal : Analog RGB (Mini D-sub 15 pin)



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)		

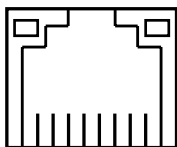
SERVICE PORT CONNECTOR

Terminal : Mini DIN 8-PIN



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

LAN TERMINAL



87654321

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

Appendix

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*

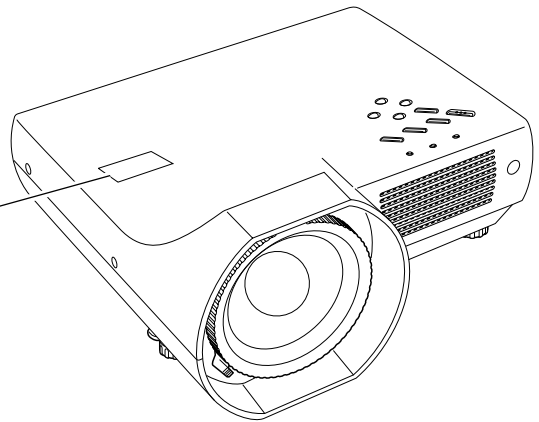
Logo PIN Code Lock No.

--	--	--	--

Factory default set No: 4 3 2 1*

While the projector is locked with the PIN code...

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

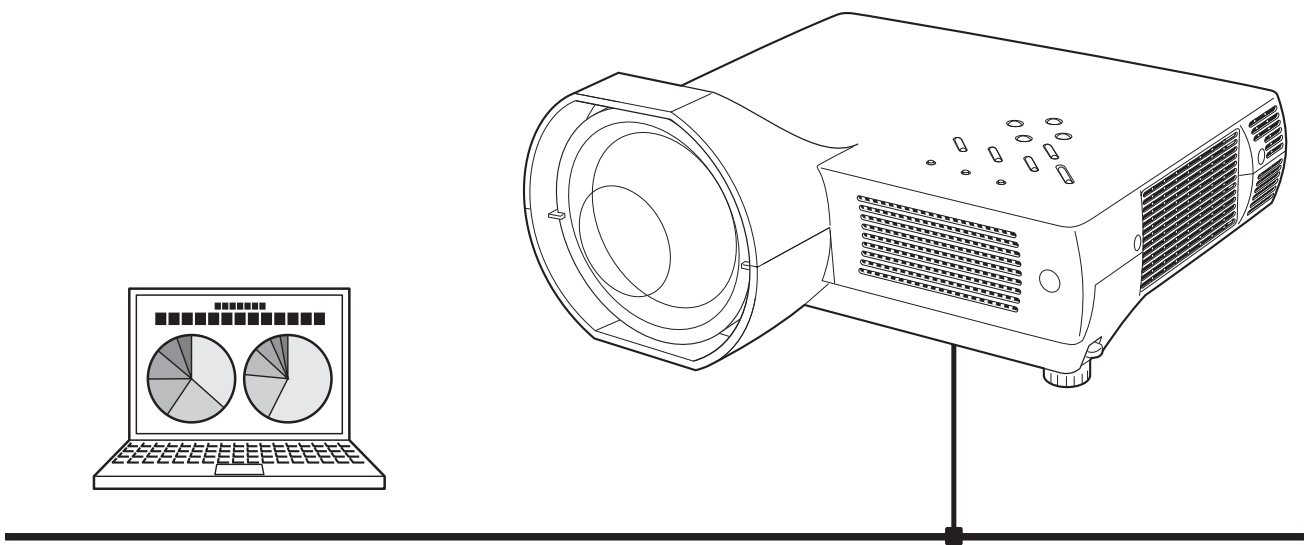


Owner's Manual

Network Set-up and Operation

Wired Setting

Projector Set-up and Operation



This is the manual for the Network function.

Read this manual thoroughly to operate the Network function.

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

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

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

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

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

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

Model Numbers : PLC-WXE46A, PLC-WXL46A
Trade Name : Sanyo
Responsible party : SANYO NORTH AMERICA CORPORATION
Address : 21605 Plummer Street, Chatsworth, California 91311
Telephone No. : (818)998-7322

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.

Table of contents

Compliance	2
Federal Communications Commission Notice	2
Safety instructions	3
Table of contents	4
Chapter 1 Preparation	5
Features.....	6
Required operating environment for computers	7
Network specifications of the projector	7
Flow of installation.....	9
Notice about installing Software CD-ROM.....	9
Chapter 2 Setup Procedures.....	11
Connecting to the LAN line.....	12
Network configuration.....	12
Network PIN code	14
Network information.....	14
Network factory default.....	15
Wired LAN factory default settings.....	15
Chapter 3 Basic Setting and Operation.....	17
Login the setting page of the projector	18
[1] Enter the IP address.....	18
[2] Login	18
[3] Display of main setting page	19
How to use the setting page	20
Initial setting	22
Network PIN code setting	23
PJLink and password setting.....	23
Network configuration.....	24
E-mail setting	25
Examples: Type and contents of alert mail	27
SNMP setting.....	29
Chapter 4 Controlling the Projector	31
Power control and status check.....	32
Control.....	34
Input.....	34
System.....	35
Sound	36
Image adjustment.....	37
PC adjustment.....	38
Setting up the projector	39
Screen setting	39
Setting 1.....	40
Setting 2.....	40
Setting 3.....	41
Information.....	42
Chapter 5 Appendix	43
Examples of connection	44
Use of telnet.....	46
Web browser setting.....	48
Examples: OS/Browsers	49
Q&A	53

Chapter 1

Preparation

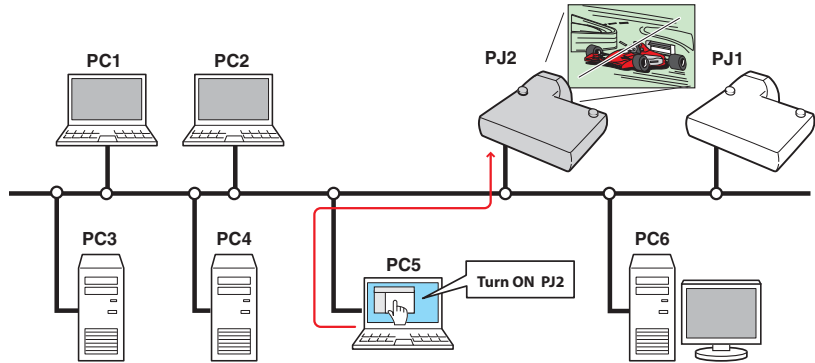
Describes features and operating environment of this projector.

1

Features

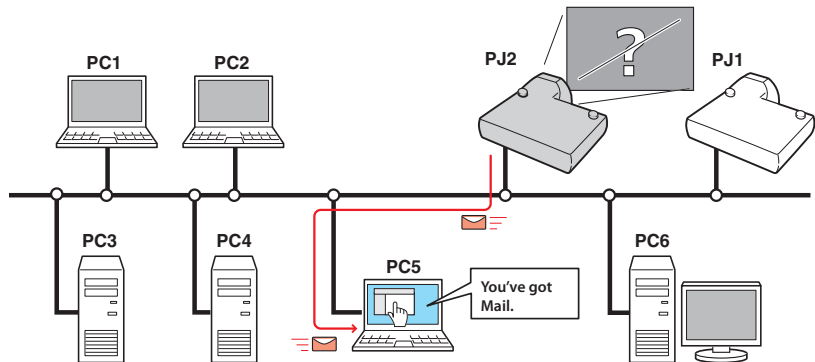
Web Management function (☞ p.31)

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



E-Mail Alert function (☞ p.25)

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

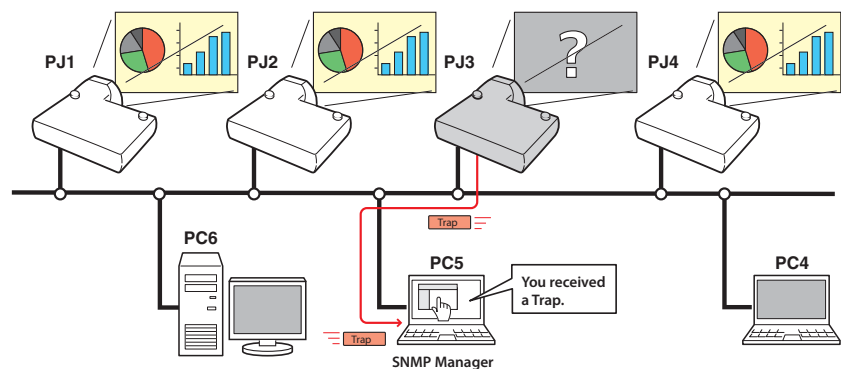


SNMP Agent function (☞ p.29)

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

SNMP Manager function

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



Required operating environment for computers

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

Operating System		Windows 98, Windows Me, Windows NT4.0 Windows 2000, Windows XP, Windows Vista (32bit version) Mac OS X v 10.4 or later
Computer environment	Recommended CPU	Windows: Higher than Pentium III 900MHz Macintosh : 800 MHz PowerPC G4 or faster, or 1.8 GHz Intel Core Processor or faster
	Memory	Windows : 64MB (Minimum)/ 128MB or more (Recommended) 128MB or more for Windows XP 1GB or more for Windows Vista Macintosh : 256MB or more (512MB is recommended)
	HDD free area	100MB or more
	Drive equipment	CD-ROM drive
	Display setting of computer	Support one of following resolutions; VGA (640 x 480), SVGA(800 x 600), XGA(1,024 x 768) Number of colors: Either of 16 bit (65,536 color 24/32 bit (16.77 million colors))
	Network card	The computer must provide a 10Base-T or 100Base-TX network card.
Web Browser*		Internet Explorer version 5.0, 5.5, 6.0 or 7.0 Netscape Navigator version 7.1 or 9.0 Safari 3.0 or later * Used to control and set up the projector. The layout of pages in the browser may slightly differ from each type of application or operating system you use.
Internet Mailer*		- Microsoft Outlook - Microsoft Outlook Express - Netscape Mail * Required the internet e-mail application software to receive an e-mail alert sent from this projector. If you do not use the function E-mail Alert, this application is not required.

Network specifications of the projector

LAN Terminal

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

The limitation*¹ of connection between the projector and hub or computer

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

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

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

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

Notice

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.

Trademarks

Ethernet is a registered trademark of Xerox Corporation. Microsoft, Windows, Windows NT, Windows XP and Windows Vista are registered trademarks of Microsoft Corporation. Internet Explorer is a registered trademark of Microsoft Corporation. Netscape Navigator and Netscape Communicator are trademarks or registered trademarks of Netscape Communications Corporation. JavaScript is a registered trademark of Sun Microsystems, Inc.

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

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

* Unauthorized use of a part or whole of the contents in this manual is prohibited.

* The contents of this manual are subject to change without notice.

Flow of installation

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

STEP 1

Connect the LAN and set the configuration.

- Decide depending on the LAN environment.
- → "2. Setup Procedures" (pp.11–16).
- Detailed LAN configurations need to be done with a browser later.
- First, complete the Wired LAN connection between computers and projectors, then start browser configurations.
- → "3. Basic setting and operation" (pp.17–30).

STEP 2

Network Configuration has completed.

- Follow each chapter to operate the projector.
- ■ Operate and manage the projector → "4. Controlling the projector" (pp.31-42)
- → "Power Control and status check" (p.32)
- → "Control" (p.34)
- → "PC adjustment" (p.38)
- → "Setting up the projector" (p.39)
- → "Projector information" (p.42)

STEP 3

Install the Software on computers.

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

Notice about installing Software CD-ROM

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

Chapter 2

Setup Procedures

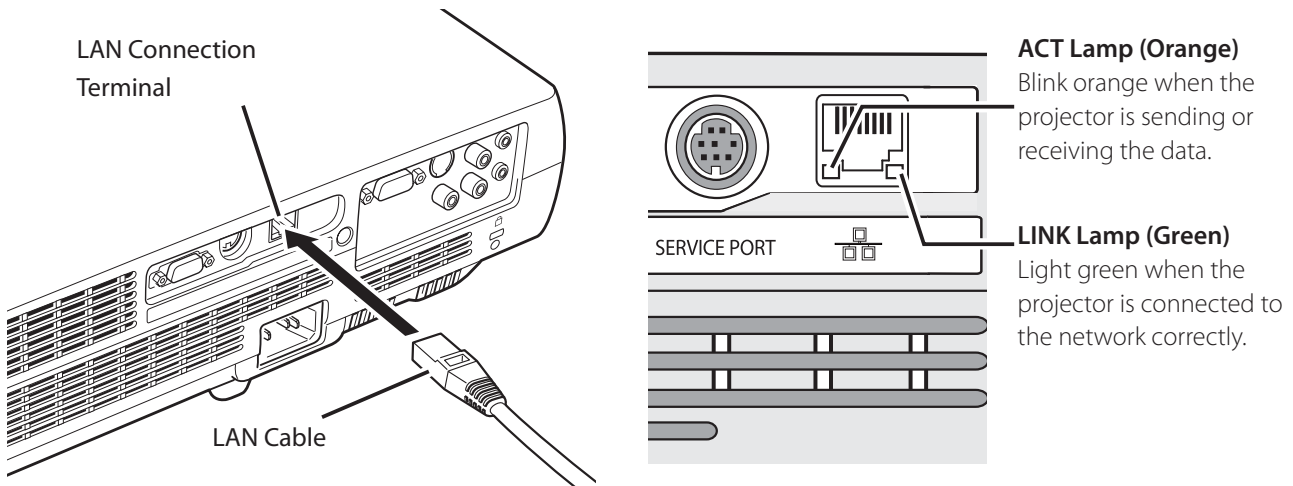
Describes how to configure the network.



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

Connecting to the LAN line

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



Network configuration

Set the Wired LAN network through the projector menu. Detailed network settings will be made with browser. Refer to “3. Basic setting and operation” (p.17-30). First, complete the settings described in this chapter before performing steps in “3. Basic setting and operation.”

Setting Procedure

1. Turn on the projector and select “Wired” from the menu bar of the projector.
The projector’s LINK/ACT Lamp will be on or blink. If the “Wired setting” is “Off”, it will not be on. 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 13.)
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 ◀▶ buttons 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.

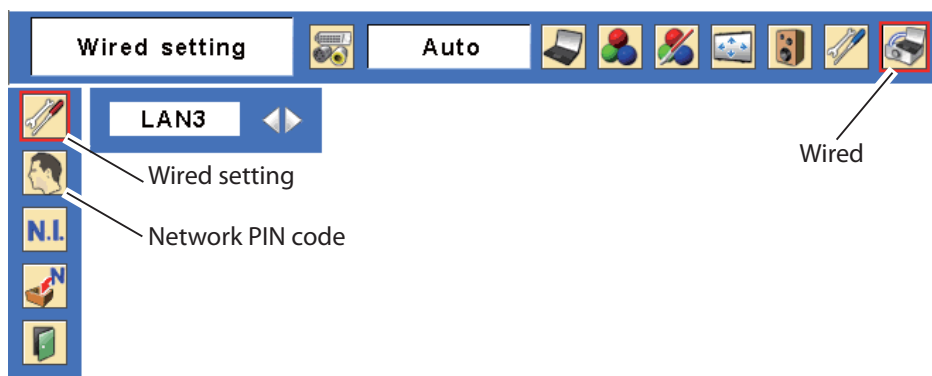
4. Press **SELECT** button.

Wired 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.

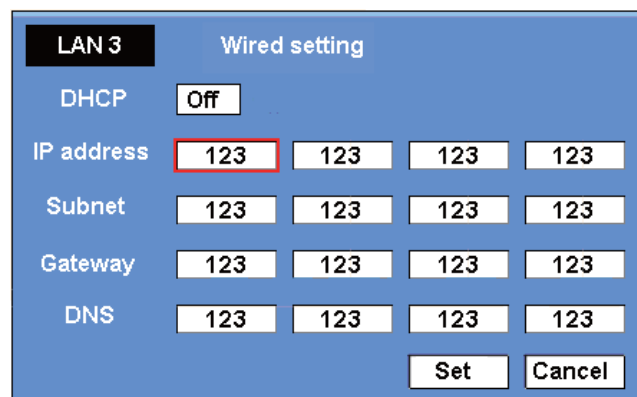
Adjust the figures with the Point ▲▼ buttons and move among the items with the Point ◀▶ buttons.

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.

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



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 is set On, IP address, Subnet, Gateway and DNS are automatically set according to your network environment *1.
IP address	Sets IP address of the projector
Subnet	Sets Subnet mask. Normally sets 255.255.255.0
Gateway*2	Sets IP address of the default gateway (Router)
DNS*3	Sets IP address of the DNS server.

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

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

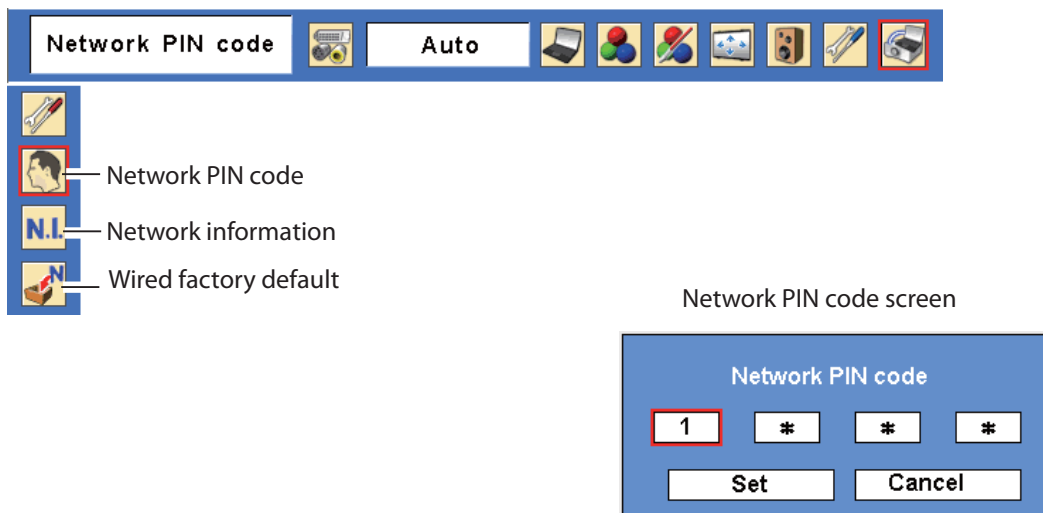
*3 Set [255.255.255.255] if you do not use the function E-mail alert.

Network PIN code

The Network PIN code is to restrict the access 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. The Network PIN code can be set also through the networks. See "3. Basic setting and operation" → "Initial setting" → "Network PIN code setting" (p.23).



Network information

Select "Network information" 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:	172.021.095.202

Network factory default

Select “Wired factory default” from the projector menu and press **SELECT** button. All the wired LAN settings will go back to the factory default settings. For details, refer to “Wired LAN factory default settings” as shown below.

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

3

Chapter 3 ***Basic Setting and Operation***

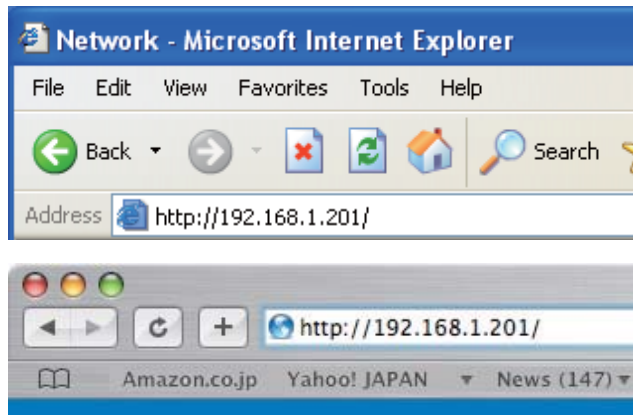
Describes basic operations and settings for controlling the projector by using the web browser. It is required that computer and projector is connected to the network and the network address is properly configured.

Login the setting page of the projector

[1] Enter the IP address

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

Enter the address that you configured in item "Network configuration" (p.12).



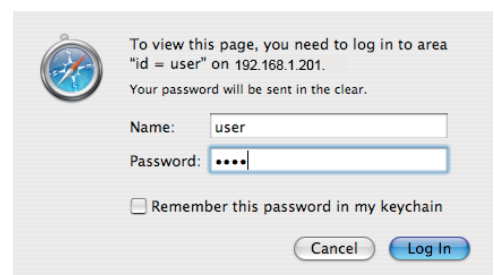
[2] Login

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

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

[Note]

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



[3] Display of main setting page

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

Main setting page in the display

The screenshot shows the projector's main setting page. On the left is a vertical 'Main menu' with icons and labels: Initial setting, Power & Status, PC Adj., Control, Setting, E-mail setting, Network, Information, and SNMP setting. The 'Control' menu item is highlighted. The main area displays the 'Control' sub-menu, titled 'Control' with a subtitle 'Input/ System/ Sound/ Image adj.'. This sub-menu contains various settings: Contrast (32), Brightness (32), Color (32), Tint (32), Color temp. (Mid), White balance (Red 32, Green 32, Blue 32), Sharpness (8), Gamma (8), Noise reduction (L1), Progressive (L1), Reset, Store (Image1), and Load (Standard). Each setting has a 'Set' button and some have '-' and '+' adjustment buttons. A 'Sub menu tab' is located on the right side of the screen, which is a vertical bar that allows switching between different sub-menus.

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.

Sub menu tab
Switches the sub menu tab.

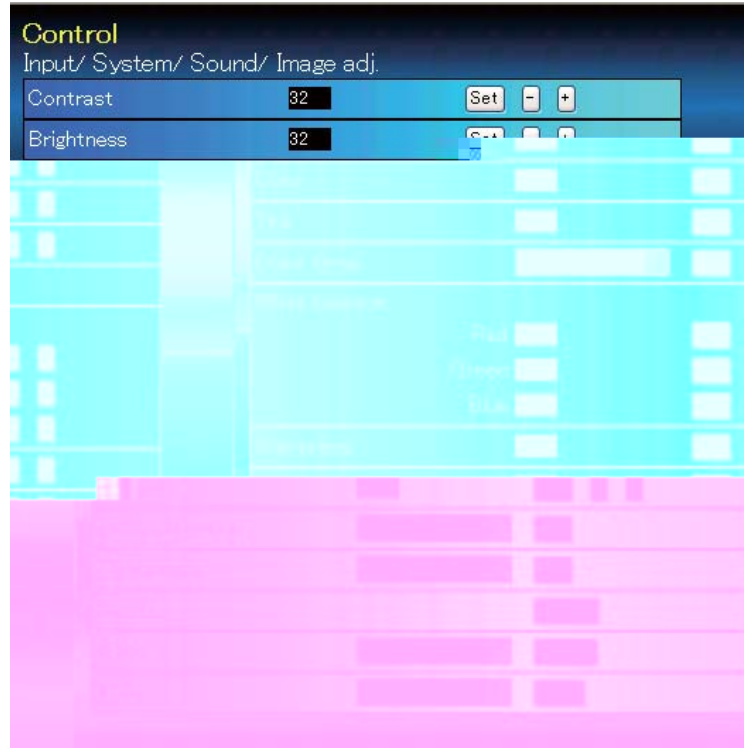
How to use the setting page

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

Example of the setting page

The setting menu appears when clicking the sub menu tab.

* Each item has a valid setting range respectively.



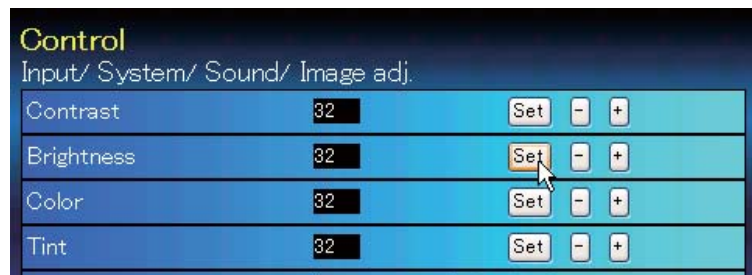
Types of setting

Text box setting

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

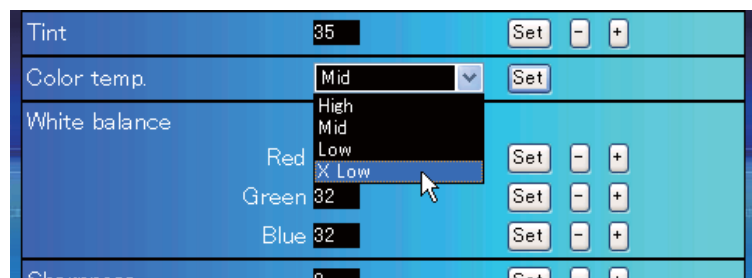
or

Change a value with **-** or **+** button.



Pull-down menu setting

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



✎ The value in the text box indicates current value.

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

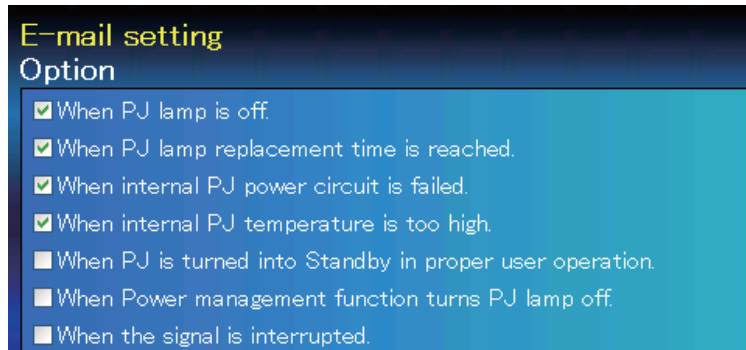
Radio button setting

Select an item by selecting a radio button.



Check box setting

Select items by ticking on check boxes.





Initial setting

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



Item	Description
Language.....	Switches display language on the setting page. English or Japanese.
Model name	Indicates the model name of the projector
Network PIN code	Sets the Network PIN code to login the setting page (p.23)
PJLink.....	Switches PJLink password authentication on or off (p.23)
Password.....	Password for PJLink function (p.23)

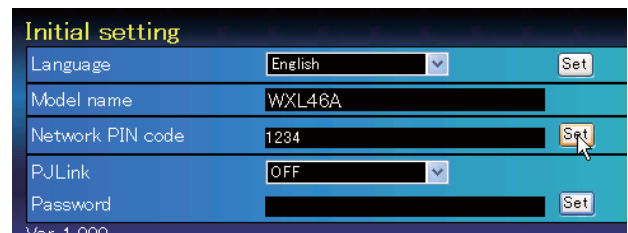
Network PIN code setting

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

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

The projector begins restarting and it takes about 10 seconds. Close (Quit) the web browser and access to the login page again in 10 seconds. This is to perform the login authentication firmly.

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



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

PJLink and password setting

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



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

What's PJLink?

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

PJLink Notice

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

Projector Input		PJLink Input	Parameter
Computer 1	RGB	RGB 1	11
	Component	RGB 3	12
	RGB (Scart)	RGB 4	13
Computer 2	RGB	RGB 2	14
Video	Auto	VIDEO 1	21
	Video	VIDEO 2	22
	S-video	VIDEO 3	23



Network configuration

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

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



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

LAN mode	Displays the selected LAN mode
IP configuration	Sets DHCP or Manual
IP address	Sets IP address of the projector
Subnet mask	Sets Subnet mask. Normally sets 255.255.255.0
Default gateway*1	Sets IP address of the default gateway (Router)
DNS*2	Sets IP address of the DNS server. Must be set when using the e-mail function
Projector name*3	Sets name of the projector. (64 characters maximum)

You must use the number specified by your administrator. The address must be entered as a group with four numbers split by a dot like [192.168.001.101].

*1 Set [0.0.0.0] if the network does not provide the gateway (router).
 *2 Set [0.0.0.0] if you do not use the function E-Mail alert.
 *3 If you use the DNS server, register the host name registered to the DNS server as a projector name. You can access with this projector name from any computers in your network. If you do not use the DNS server, access with the assigned IP address to the projector.
 * All the network setting will reset to the default when setting [0.0.0.0] of the IP Address.
 * If you make incorrect settings, you cannot find out the new network settings. Be careful to set up them correctly, otherwise you cannot connect to the projector. It is recommended to make a note of them.



E-mail setting

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



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

SMTP server*1	Sets server name or IP address of the SMTP server
Administrator address....	Sets e-mail address of administrator
Add address.....	Sets e-mail address of the user to send mail when the projector has an abnormality.

1 Setting SMTP server and administrator address

Set the server name or IP address of the SMTP server*1 and administrator address. The administrator address is set to "Reply-To" address of the message sent from the projector.

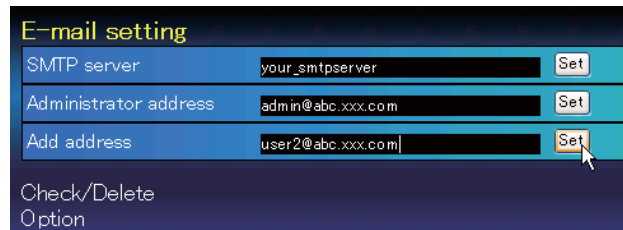
*1 The SMTP server is a server for sending E-Mail. Please contact your network administrator to have this SMTP server address.

- ✎ If the projector sends an alert message due to the abnormality on the projector but the SMTP server is down in some other reason, the message will not be sent. In this case, the message "Unable to connect to server." will be displayed on the setting page. To clear this message, set up SMTP server address again.
- ✎ To use the E-Mail function, it must be set the DNS address on the Network setting page correctly.
- ✎ You cannot use this E-mail function if the DNS server and SMTP server cannot be used in your network environment.
- ✎ The projector does not send message to the address set in "Administrator address" text box. If you want to send e-mails to the administrator address, enter the administrator address into "Add address" text box.

2 Registering and deleting E-mail addresses

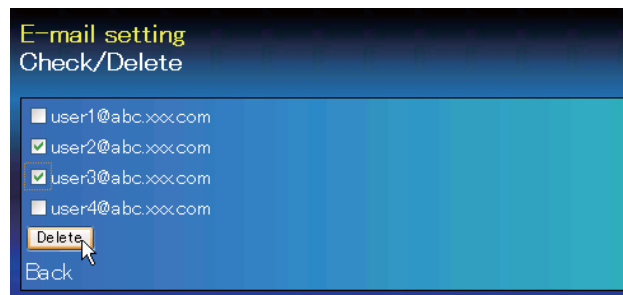
Click "Add address" and type the e-mail address onto the text box and click **Set** button. To check the registered addresses, click **Check/Delete** sub menu tab. The addresses are listed as the figure on the right.

 Up to 10 E-mail addresses can be registered.



Check / Delete

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

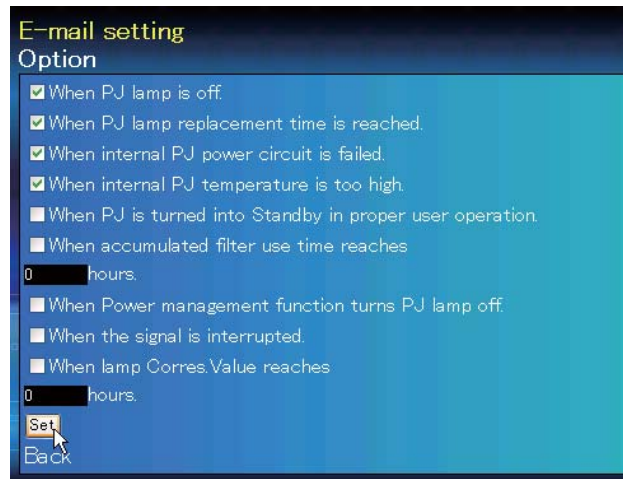



Option

3 Option selection for sending alert mail

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

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



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

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

Examples: Type and contents of alert mail

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

The following are examples of received messages.

● When internal PJ temperature is too high:

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

It sends you following message.

*The Projector lamp is turned off, because internal projector temperature is too high.
 Wait for the completion of the cooling process and make sure the projector has been turned into Standby. Then turn the projector on again.
 If the Indicator continues flashing, check the air filter for dust accumulation.

● When internal PJ power circuit is failed:

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

It sends you following message.

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

MCI 3.3V OK
 MAIN ALL NG

← Error information

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

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

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

It sends you following message.

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

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

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

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

It sends you following message.

*The accumulated lamp use time has reached 2000 hours.



SNMP setting

This projector provides a SNMP (Simple Network Management Protocol) agent function. The SNMP consists of a manager and agents. The group which communicates information each other with SNMP is called "Community". There are two access modes in a community, Refer (read only) and Set (read-write). This projector allows to use Refer (read only) only. The SNMP message informs the projector status called "Trap" to an administrator. Click **SNMP Setting** on the main menu and set up each item.

PJ information

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

Contact	Enter user name of the projector etc. (optional)
----------------------	--

Place	Enter place of the projector (optional)
--------------------	---

Community name(refer)	Enter community name (read only). Default name is "public".
------------------------------------	---

Trap

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

Community name	Enter community name to send "Trap". Default name is "public".
-----------------------------	--

Add address	Enter IP address of the SNMP manager computer to receive "Trap".
--------------------------	--

Trap check/delete

Check and delete the trap address

Checking the registered trap address and deleting the address.

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




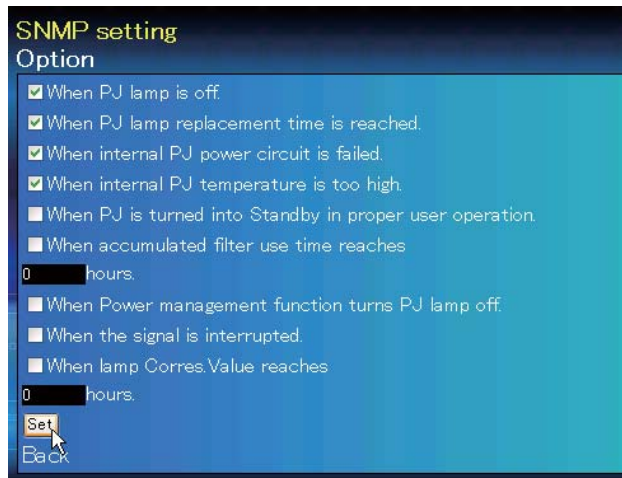
 Up to 10 trap addresses can be registered.


Trap option

Trap option setting

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

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



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

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

4

Chapter 4 *Controlling the Projector*

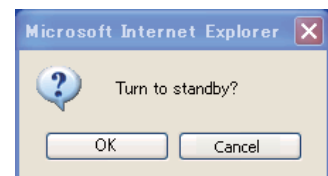
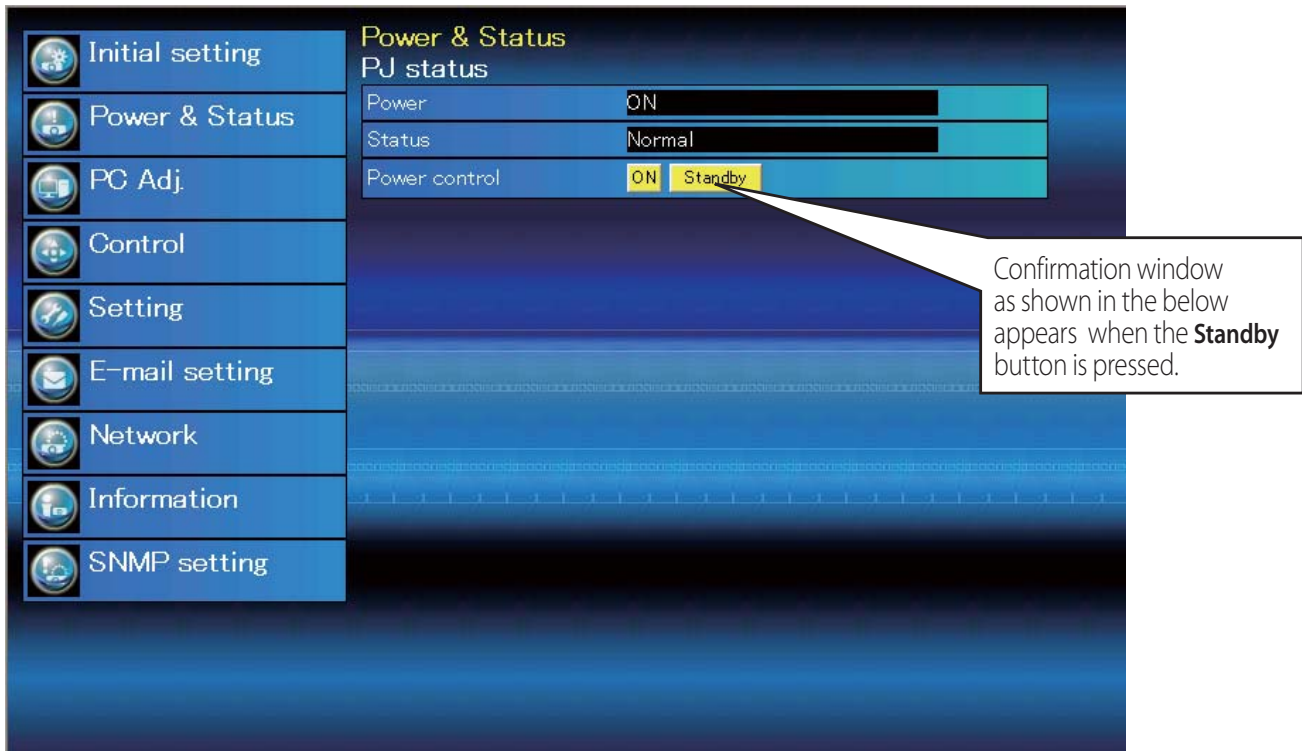
Describes controlling and setting of the projector by using the web browser.



Power control and status check

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

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



Popup confirmation window

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

- ✎ The projector cannot be turned on while the projector is on cooling down.
- ✎ The web browser checks and updates the projector's condition every 30 seconds automatically.

About projector condition

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

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 "Network".

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



Control

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

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



Input

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

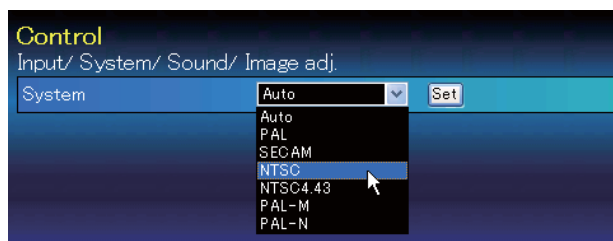
Item	Description
Input.....	Selects input mode of the projector.
Source	Selects signal source of the input.
	Computer1 : RGB Component RGB(Scart)
	Computer2 : RGB
	Video : Auto Video S-video

The control page displays valid control items depending on the selected input mode, signal or functions of the projector you use, therefore, there may be different controls between the described items and actual control items on the page display. For further information, refer to the projector's owner's manual.

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

System

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



Available selection at the RGB 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 are 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 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.

✎ If the mode (Mode1 to Mode5, ExMode6 to ExMode50) which is stored in the item "PC Adjustment" (p.37) is available, they are also listed together with the above mode.

Sound

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



Item	Description
Volume	Adjusts the sound volume from the speaker. (0 ~ 63)
Mute	Suppresses the sound. (ON, OFF)

Image adjustment

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

Item	Description
Contrast.....	Adjusts picture contrast (0~ 63)
Brightness.....	Adjusts picture brightness (0~ 63)
Color.....	Adjusts picture color saturation (0~ 63)
Tint.....	Adjusts picture hue (0~ 63)
Color temp.....	Sets a color temperature mode. (X Low, Low, Mid, High, Adj.)

White Balance

Red, Green, Blue Adjusts each white balance respectively. (0~ 63)

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

Sharpness..... Adjusts picture sharpness. (0~ 15)

Gamma..... Adjusts brightness of darker part of the picture. (0~ 15)

Noise reduction Switches noise reduction mode (OFF, L1, L2)

Progressive..... Switches progressive mode (OFF, L1, L2, Film)

Reset..... Resets the Image adjustment to previous levels.

Store..... Stores the Image adjustment values. Select an item [Image1 - Image4] 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	✓	✓
Cinema	✓	*
Real	*	✓
Blackboard(Green)	✓	✓
Colorboard	✓	✓
Image1 - 4	✓	✓

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



PC adjustment

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



Item	Description
Current mode	Displays a current mode like VGA, SVGA, XGA, SXGA, UXGA, WXGA, etc. or Mode1 - Mode5 which are the customized mode created by using the "Mode Store" function described below.
Auto PC adj.	Performs automatic adjustment.
Fine sync	Performs Fine Sync adjustment. (0 ~ 31)
Total dots	Adjust the number of total dots in the horizontal period.
Clamp	Adjusts the phase of the clamp. (1 ~ 127)
Display area	
Horizontal	Adjusts the image area horizontally.
Vertical	Adjusts the image area vertically.
Position	
Horizontal	Adjusts the horizontal position of the screen.
Vertical	Adjusts the vertical position of the screen.
Reset	Resets the PC adjustments to the previous levels.
Mode Store	Stores the PC adjustment values. Select a mode no. [Mode1 - Mode5] from the pull-down menu.
Mode Free	Clear the PC adjustment values. Select a mode no. [Mode1 - Mode5] from the pull-down menu.



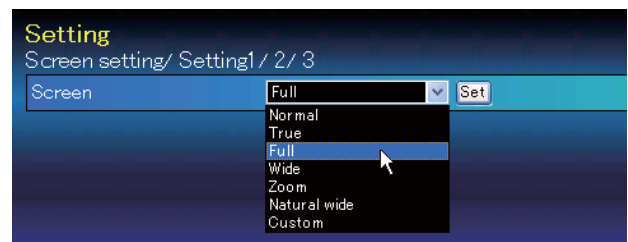
Setting up the projector

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



Screen setting

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



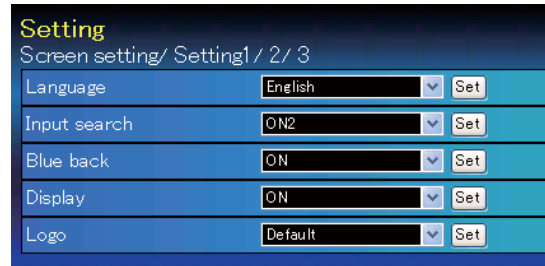
Item	Description
Screen	Switches the screen mode. (Normal, True, Full, Wide, Zoom, Natural wide, Custom) There may not be available mode depending on the input mode as shown in the table below.

Screen mode	Input source	
	Video	Computer
Normal	✓	✓
True	*	✓
Full	✓	✓
Zoom	✓	*
Wide	✓	*
Natural wide	✓	*
Custom	✓	✓

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

Setting 1

Item	Description
Language.....	Sets the language display of projector's on-screen display menu.
Input search.....	Sets the auto-input signal detection mode. (ON1, ON2, OFF)
Blue back.....	Sets the blue screen background when no signal input. (OFF, ON)
Display	Switches on or off the on-screen menu display on the screen. (OFF, Countdown Off, ON)
Countdown off	Displays image during the starting up.
Logo	Sets on or off the logo display on the screen during the startup. (User, Default, OFF)



Setting 2

Item	Description
Ceiling.....	Sets the image top/bottom and left/right reversed. (ON, OFF)
Rear.....	Sets the image left/right reversed. (ON, OFF)
Screen aspect	Sets the aspect to 4:3, 16:9 or 16:10.
Terminal.....	Sets the COMPUTER IN 2/MONITOR OUT terminal to COMPUTER 2 or Monitor Out.
Power management	Sets into the selected power management mode (OFF, Ready, Shutdown) 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. (Normal, Eco)



Setting 3

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

Key lock.....	Sets the prohibition of controls either Projector or Remote control. (OFF, Projector keys, Remote control)
---------------	--

Fan control.....	Sets the fan control speed. OFF Normal mode ON1 Highland mode 1 ON2 Highland mode 2
------------------	--

Lamp Corres. Value(h).....	Displays the lamp use time (Corresponding value) . Reset the time after lamp replacement. Click "Reset", a confirmation display appears, and then click "OK", the time will be reset.
----------------------------	---

Filter counter.....	Displays the filter counter. Reset the time after filter clean-up. Click "Reset", a confirmation display appears, and then click "OK", the time will be reset.
---------------------	--

Filter warning.....	Sets the time to indicate the filter warning message on the screen. (OFF, 100H, 200H, 300H)
---------------------	---

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

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

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

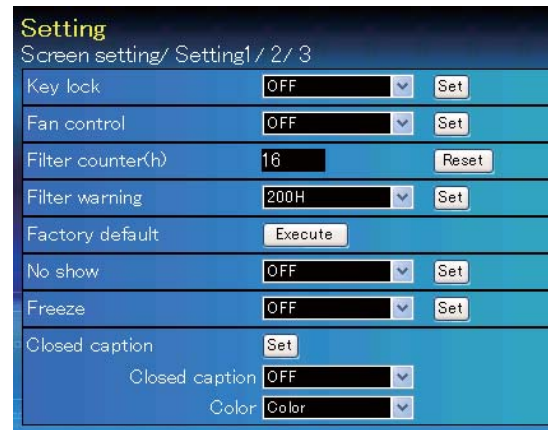
No show.....	Sets the black out image temporarily. (ON, OFF)
--------------	---

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

Closed caption...	Sets the closed caption function.
-------------------	-----------------------------------

Closed caption...	Sets the closed caption mode. (OFF, CC1, CC2, CC3, CC4)
-------------------	---

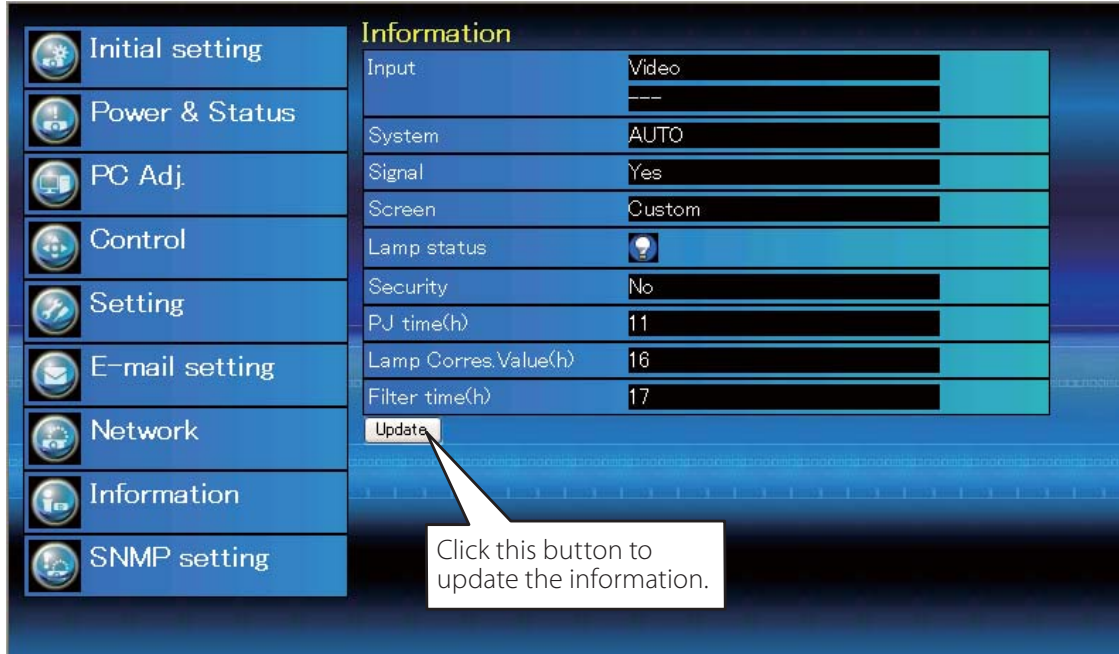
Color	Sets the color of the contents. (Color, White)
-------------	--





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 (Yes, No)
Screen	Displays screen mode.
Lamp status	Displays lamp status with an icon. Refer to the table as shown below.
Security	Displays the security (PIN code lock) status (Yes, No)
PJ time(h)	Displays the accumulated use time of the projector.
Lamp Corres. Value(h)	Displays the use time (Corresponding value) of the lamp.
Filter time(h)	Displays the accumulated use time of the filter.

Indication of the lamp status

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

5

Chapter 5 *Appendix*

Connection examples

Use of telnet

Web browser setting

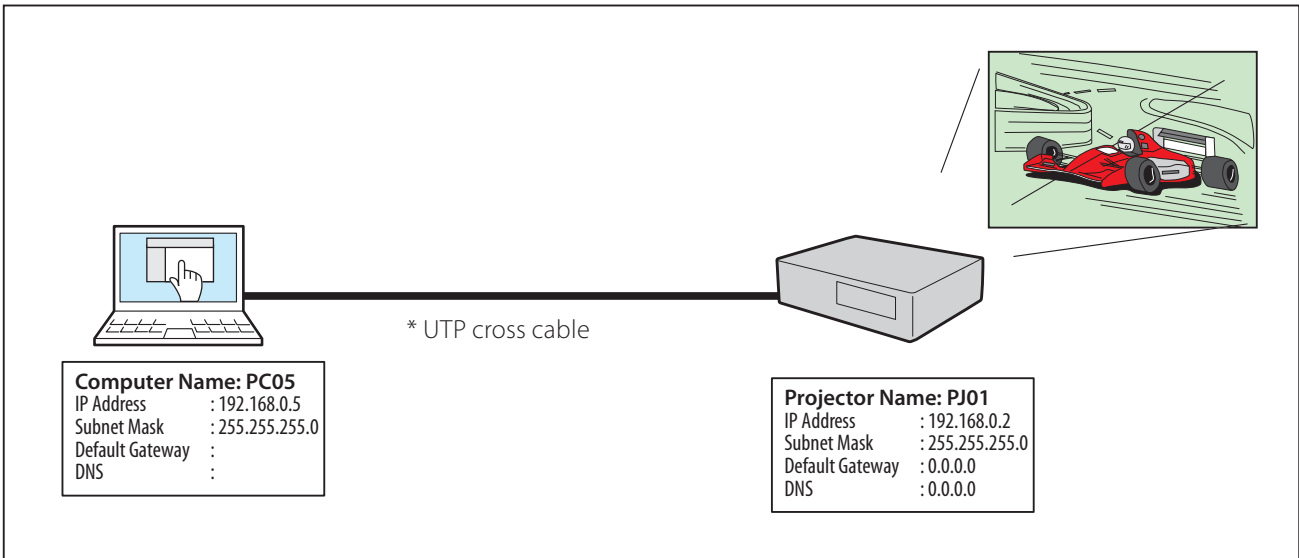
Technical data

Q & A

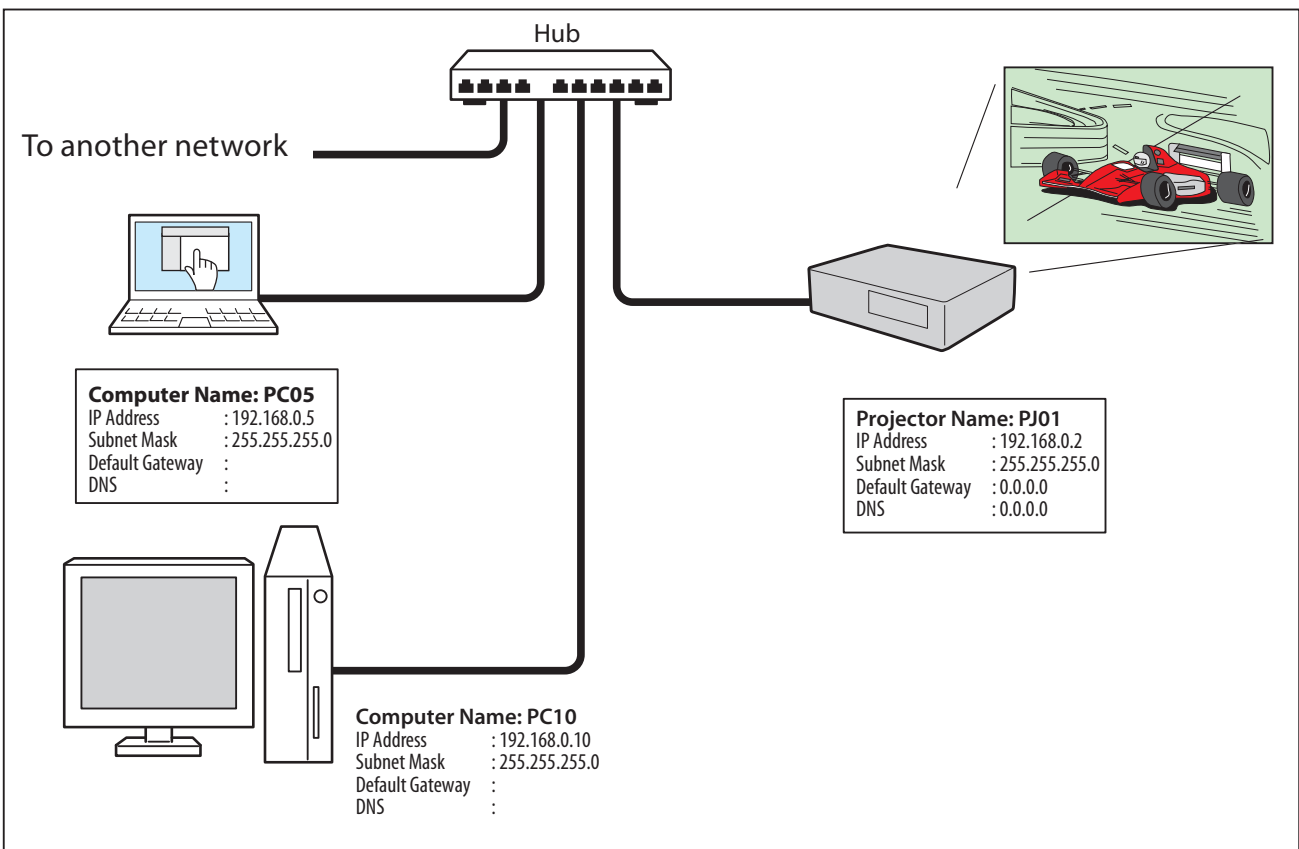
Examples of connection

Peer-To-Peer connection

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



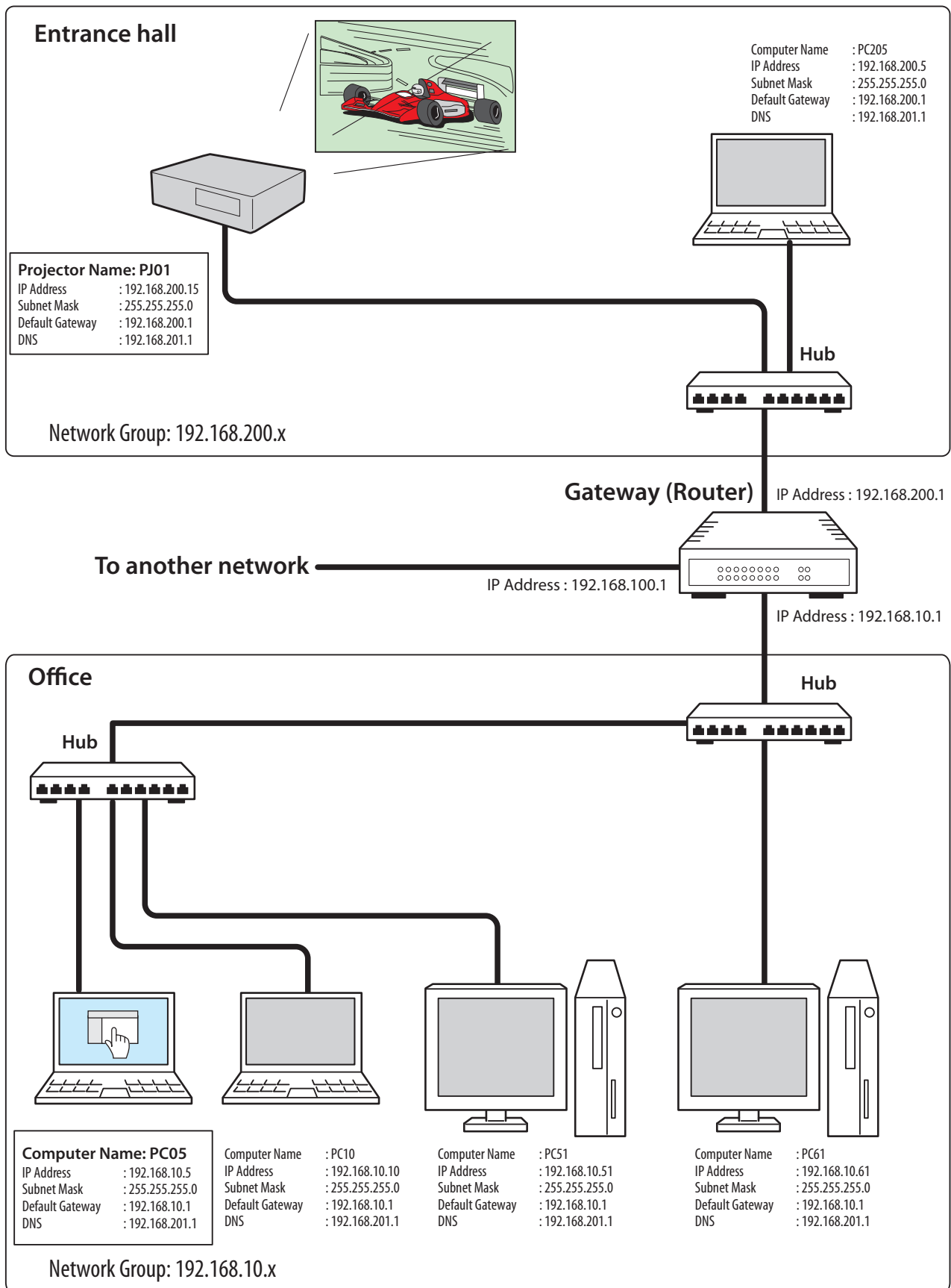
Connecting the projector (PJ01) to the control computer (PC05) via the hub.



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

The gateway (Router) installed in the network

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



Use of telnet

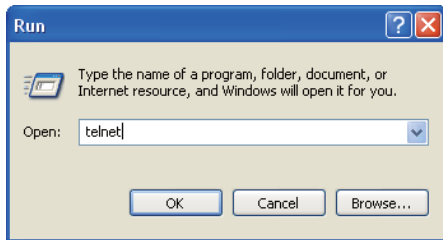
You can control the projector by using the telnet application*1 installed on your computer. Normally, the telnet application is available on your computer.

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

Control

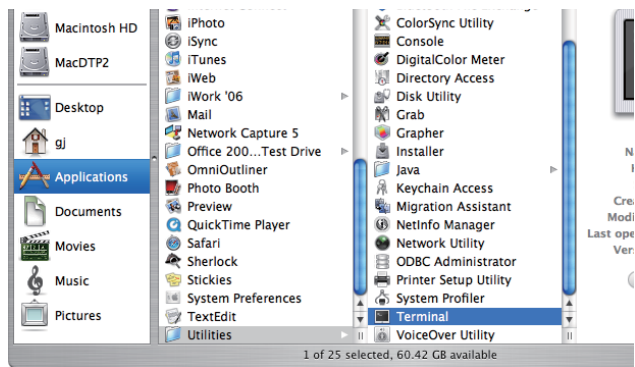
(For example, in case of using the telnet application of **Windows XP Professional**.)

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.

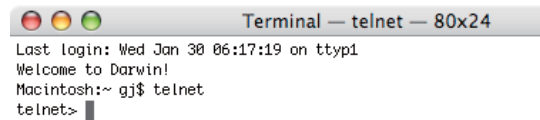


(For example, in case of using the telnet application of **Mac OS X v 10.4**)

1. Select **Terminal** from **Applications --> Utilities**.

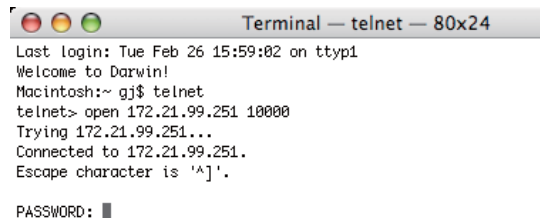
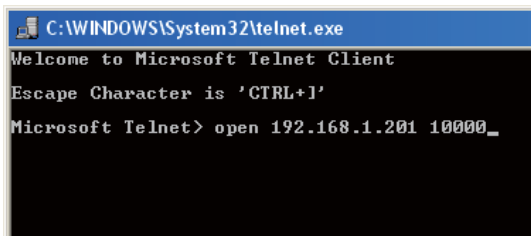


Type as below on the displayed window.
> telnet [return]



2. The telnet application will start and the following window will be displayed. Type as below to connect the projector.

> open 192.168.1.201 10000 [return]



* Use the IP address assigned to the projector.

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

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

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

```
Telnet 192.168.1.201
PASSWORD: 1*2*3*4*
Hello
_
```

```
Terminal - telnet - 80x24
Last login: Tue Feb 26 16:03:39 on ttty1
Welcome to Darwin!
Macintosh:~ gj$ telnet
telnet> open 172.21.99.251 10000
Trying 172.21.99.251...
Connected to 172.21.99.251.
Escape character is '^['.
PASSWORD: 1234
Hello
_
```

4. Type the commands, refer to below table, to control the projector and then press "Enter" key for termination. For example, type "C00" which is a command to turn on the projector, and press "Enter" key. Confirm the projector is turning on.

* Enter with ASCII 64-byte capital characters and one-byte characters.

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

> close [return]

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

Command list table

Command	Function
C00	Power on
C02	Power off
C09	Volume up
C0A	Volume down
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" (see pp.14, 23). If the authentication of the entered password is failed 4 times continuously, the communication will be disconnected automatically. Please try again for the connection.

☞ If the password or any command is not entered for more than 30 seconds, the communication will be disconnected automatically. Please try again for the connection.

Web browser setting


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

Active Script/JavaScript enable

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

Proxy setting

In some cases, your web browser is set up to use the proxy server for the internet or intranet connection. In this case, when you install this projector into the local network, you should set up the proxy setting of web browser preference correctly. Especially when connecting the projector and computer with a 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 for example and also refer to on-line help of your web browser.

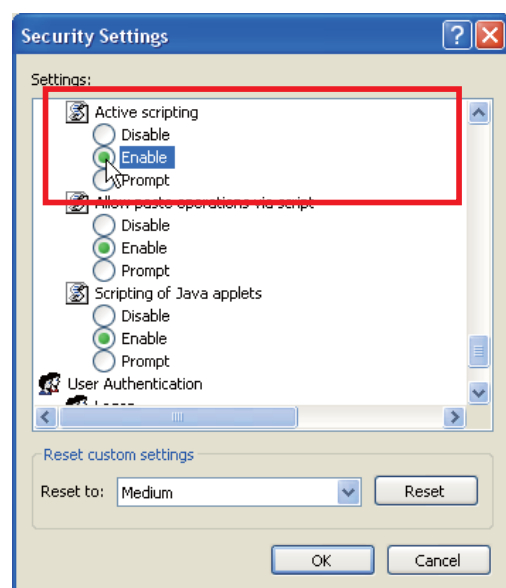
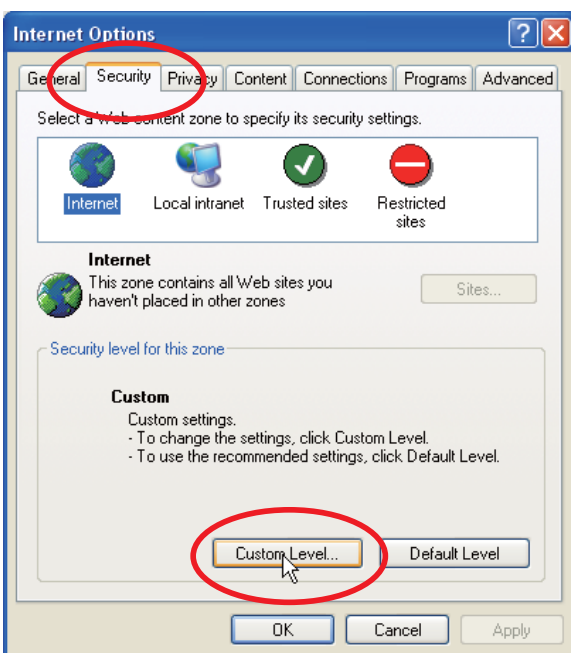
Examples: OS/Browsers

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**.



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.

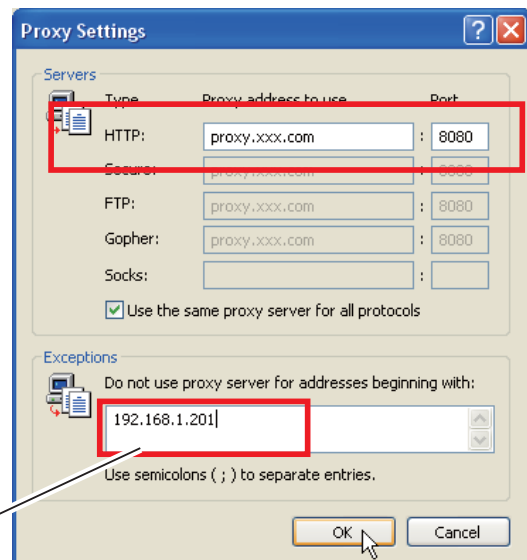
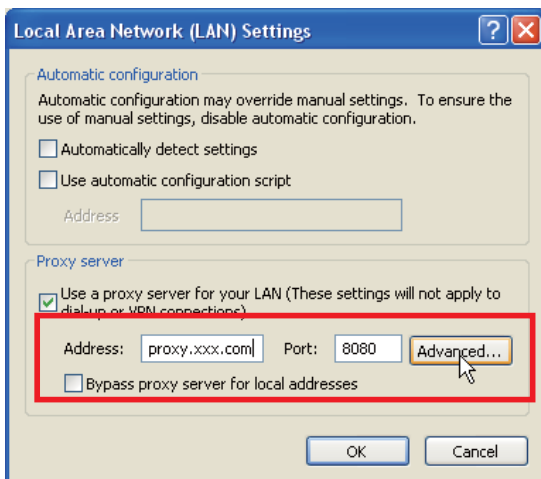
- Using proxy server

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, this must be unchecked.

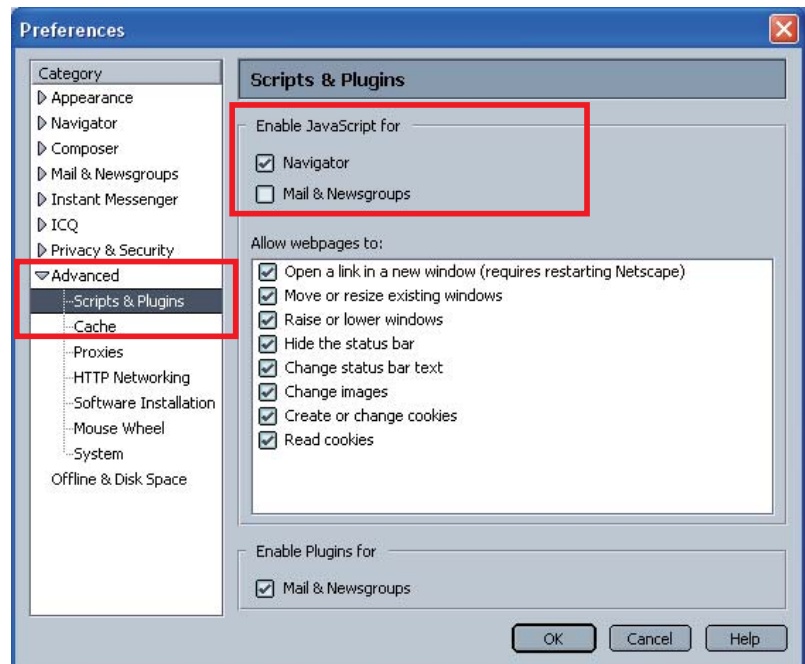


To designate proxy settings that will not use the proxy server when accessing the projector installed in the local area network, enter the IP address or domain name here.

Netscape Navigator v.7.1

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.



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.

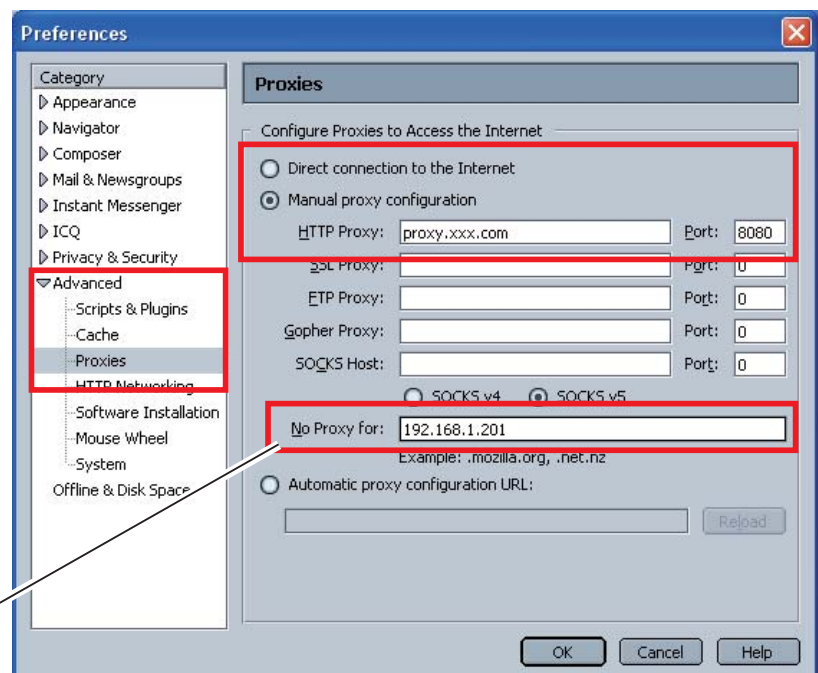
- Using proxy server

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.

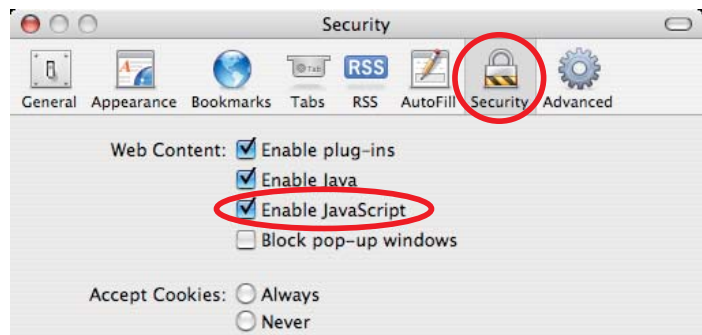


MAC OS X v 10.4

Safari v.3.2.1

JavaScript enable setting

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



Proxy setting

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

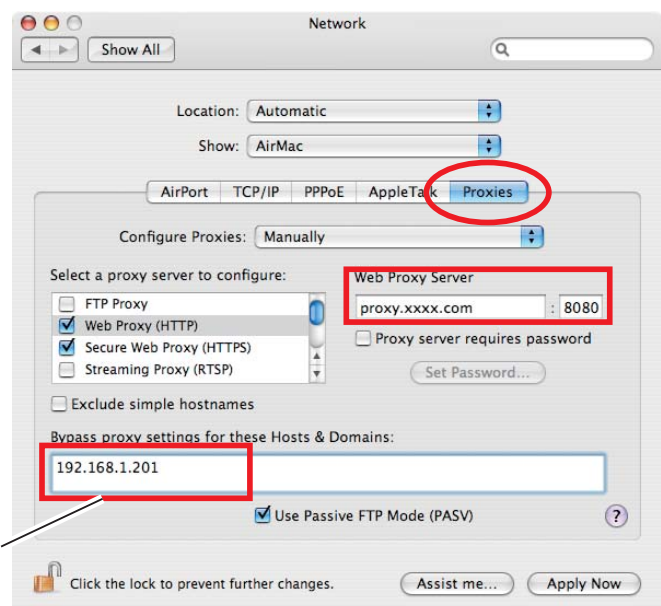
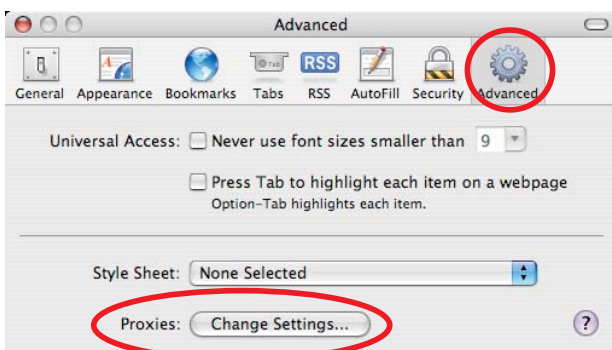
- Using proxy server

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

- Not using proxy server

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

If you connect the projector to the computer directly with UTP cross cable, they 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.

Q&A

Installation/Access

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

A Following causes are possible. Please check them.

1. The projector does not connect to the network.
Check LED indicators status (☞ p.12).
 - Check the connection of LAN cable if the LINK Lamp does not light green.
 - Check the network configuration of the projector if the ACT Lamp does not blink orange.
2. Wrong network configuration of the computer.
Check the network configuration of the computer.
3. The proxy setting of the web browser is not set correctly (☞ p.50).
4. The computer does not provide TCP/IP protocol.

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

A

1. Please use the password authentication function on the login page (☞ p.23).
2. Please use the IP filtering function provided with the gateway (router) to restrict the accessing from the computer. For further information please consult your network administrator.

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

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

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

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

A Possible. This projector supports the DHCP/BOOTP server. To use this projector in this network environment, set it up so that the DHCP/BOOTP server does not assign the IP address configured to this projector for another device on the network. Please consult your network administrator (☞ pp.13, 24).

Q *How can I install several projectors?*

A Install and configure network one by one to avoid the IP address collision each other. To configure the IP address please see item "Network configuration" (☞ pp.12-13, 24).

Password/Login

Q *What should I do when I forget the IP address of the projector?*

A You can check the IP address in the "Network information" menu.

Q *What should I do when I forget the password (Network PIN code)?*

A Please set the new network PIN code in the "Network PIN code" menu.

Q *Can I register the setting page as a web browser "Favorites" or "Bookmarks"?*

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

Operation

Q *Why can't be turned on/off with web browser?*

A Please make sure the settings of the projector are correct to use the projector. Please set the **Standby mode** of the projector's **Setting menu** to "Network". Refer to "4. Controlling the Projector" → "Power control and status check" (📖 pp.32 - 33).

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

A Please make sure the projector is turned on. If it is in the standby mode, the setting is not effective to the projector. To control the projector with a web browser, the projector must be in the powered-on condition.

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

A The display speed of the page depends on the network environment in which both the projector and computer are placed. It may take much time to complete the page display if network traffic is heavy. Please consult your network administrator.

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

A You can register up to 10 addresses.

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

A Make sure that the registered E-mail address and SMTP server address are correct. If the SMTP server is located in your LAN (Local Area Network), the address should be set to the SMTP server in your LAN. The SMTP server located outside of your LAN may not be available for security reason. For further information please contact your network administrator (📖 p.25).

It may be required for the authentication depending on the SMTP server. This projector does not support this kind of SMTP server.

Others

Q *What are the rules for IP address assignment?*

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

Rule1

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

If the IP address is set [192.168.x.x], the Subnet Mask should be set [255.255.255.0] for example.

Rule2

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

Rule3

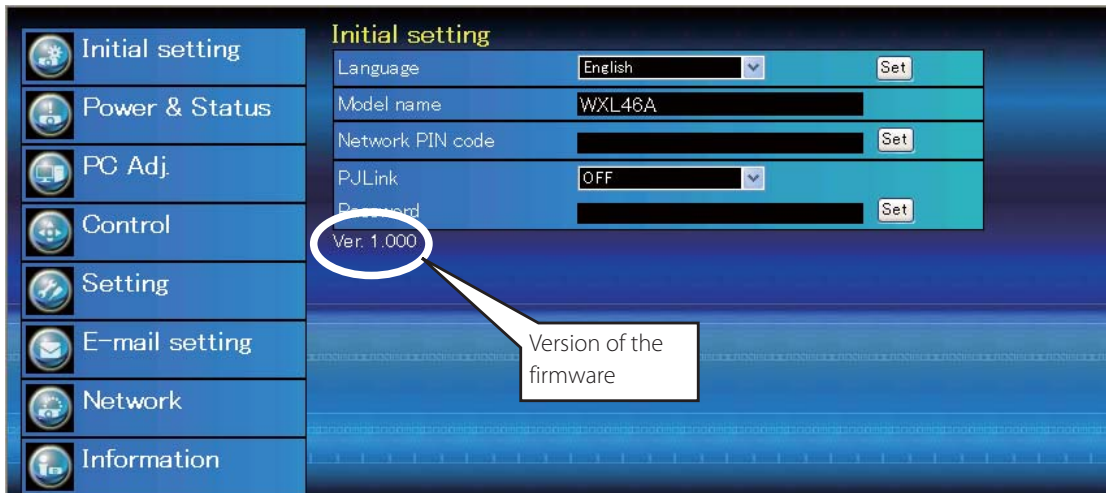
The IP address must correlate to a network number. If network numbers are different between the equipment, they cannot establish communications each other. In this case, the router is placed in the networks to make the routing.

Q *Can I control the projector by using the telnet application?*

A Possible. Please refer to the item "Use of telnet" (📖 p.46 - 47).

Q *What is the MAC address assigned to the projector?*

A The MAC address is displayed in "Network information" menu (📖 p.14).

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



PJ Network Manager for Windows

This is the manual for the PJ Network Manager software.
This software is Windows-compliant, but non-Mac-compliant.
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.

Contents

Chapter 1 Introducing	3
Introducing	3
SNMP	3
Trademarks.....	3
Operating Environment.....	4
Chapter 2 Set up	5
PJ Network Manager installation.....	6
PJ Network Manager un-installation.....	6
Chapter 3 Basic Operation	7
Launching and quitting PJ Network Manager.....	8
Name of status window.....	8
Quitting PJ Network Manager.....	9
Menu tree	9
What's Target	9
Name of the button on the tool bar	10
Icon display for the target.....	10
Addition of the target	11
Editing the target.....	11
Deletion of the target.....	11
Setting up the warning value	12
Starting target monitoring.....	12
When happens the alert on the target	13
When happens the trap event on the target.....	13
What's Trap.....	13
Stopping monitoring the target.....	14
Displaying all the status information of the target	14
Setting the target group	14
Setting up the password of Telnet	15
Setting commands batch processing for multiple targets.....	15
Setting timer for targets.....	16
Setting up default setting.....	17
Customizing the status list.....	19
Viewing the alert information.....	22
Viewing the event log.....	23
Description of Event, Type, Warning column, Warning value	24
About event treatment	26
Viewing the command history.....	27
Storing the management file	28
Information saved to the registry	28
Registering the target information from the defined file at once.....	29
Format of the defined file	30
Example of the defined file.....	30
Login to the target equipment	31

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.

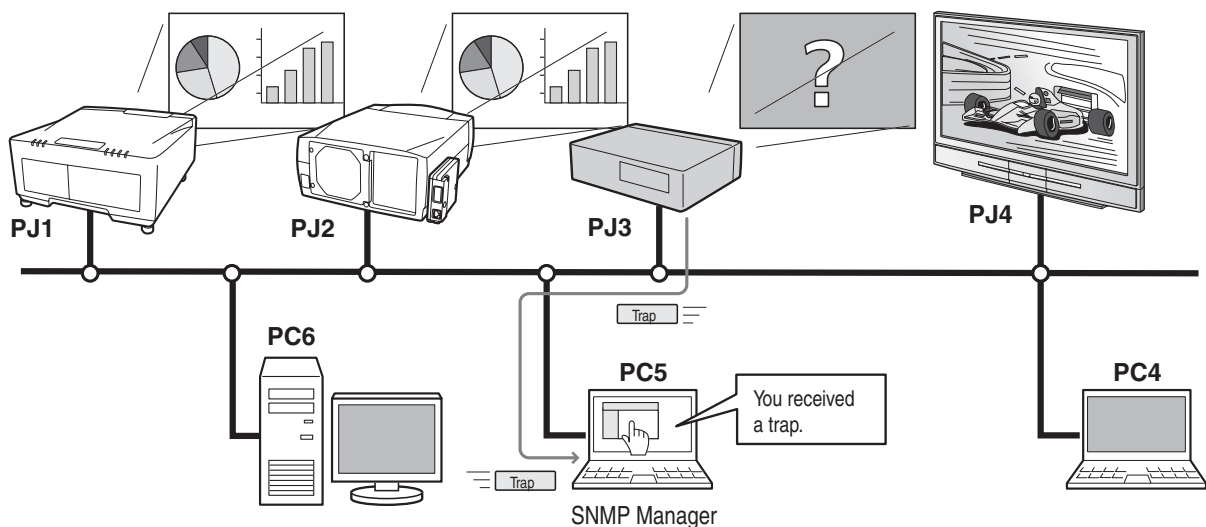
* The PJ Network Manager can handle our products which has a SNMP agent function.

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

Microsoft, Windows, Windows 2000, Windows XP, Windows Vista are registered trademarks of Microsoft Corporation. Macintosh is a registered trademark of Apple, Inc. in the USA and other countries. Other products or brand names in this manual are registered trademarks or trademarks of their respective owners.

* Unauthorized use of a part or whole of the contents in this manual is prohibited.

* The contents of this manual are subject to change without notice.

Operating Environment

Item	Minimum	Recommended
CPU	Pentium III 400MHz or higher	Pentium 4 2.0GHz or higher for Windows XP Pentium 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 Windows Vista (32bit version)

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 manual.

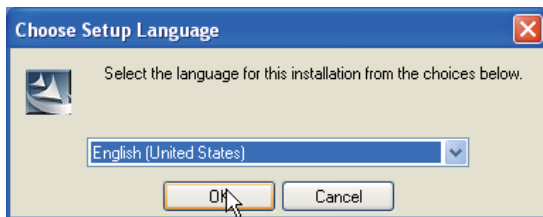
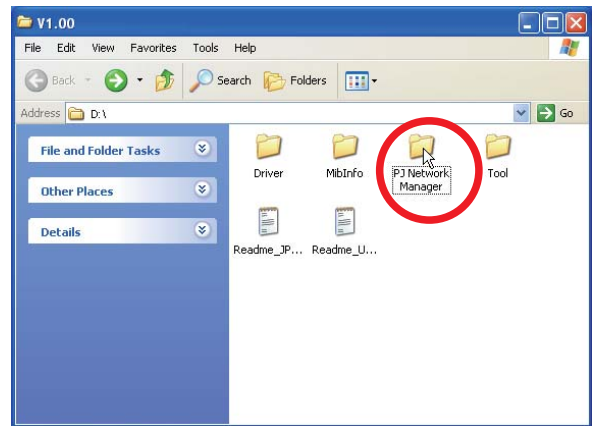
Chapter 2

Set up

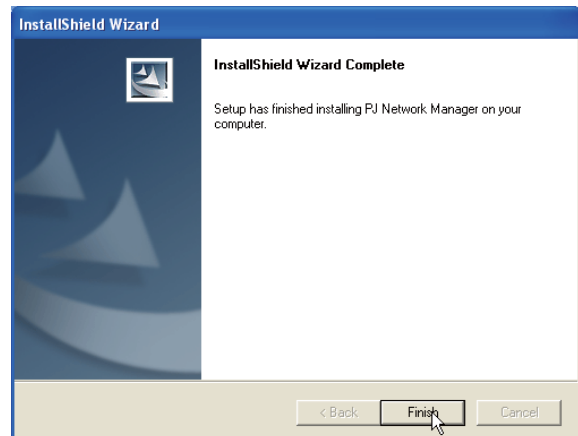
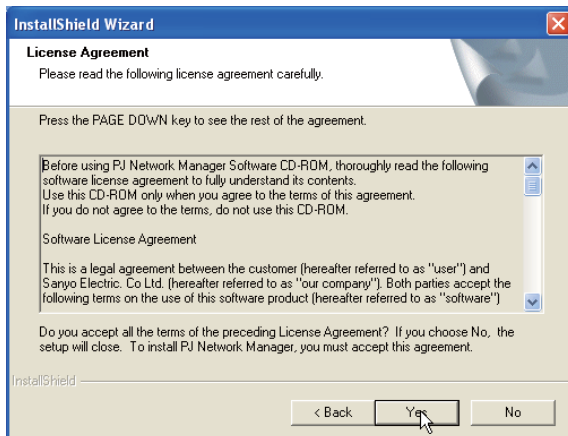
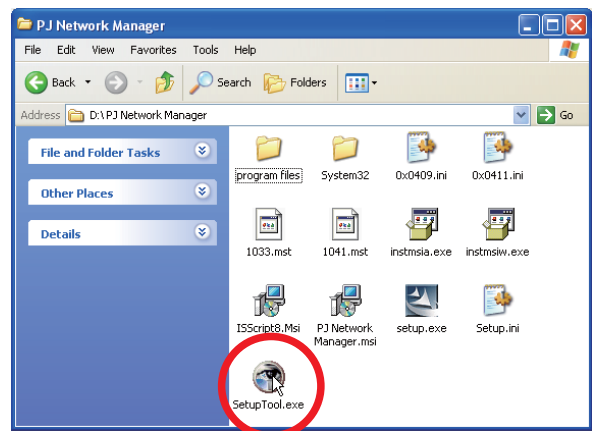


PJ Network Manager installation

- 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

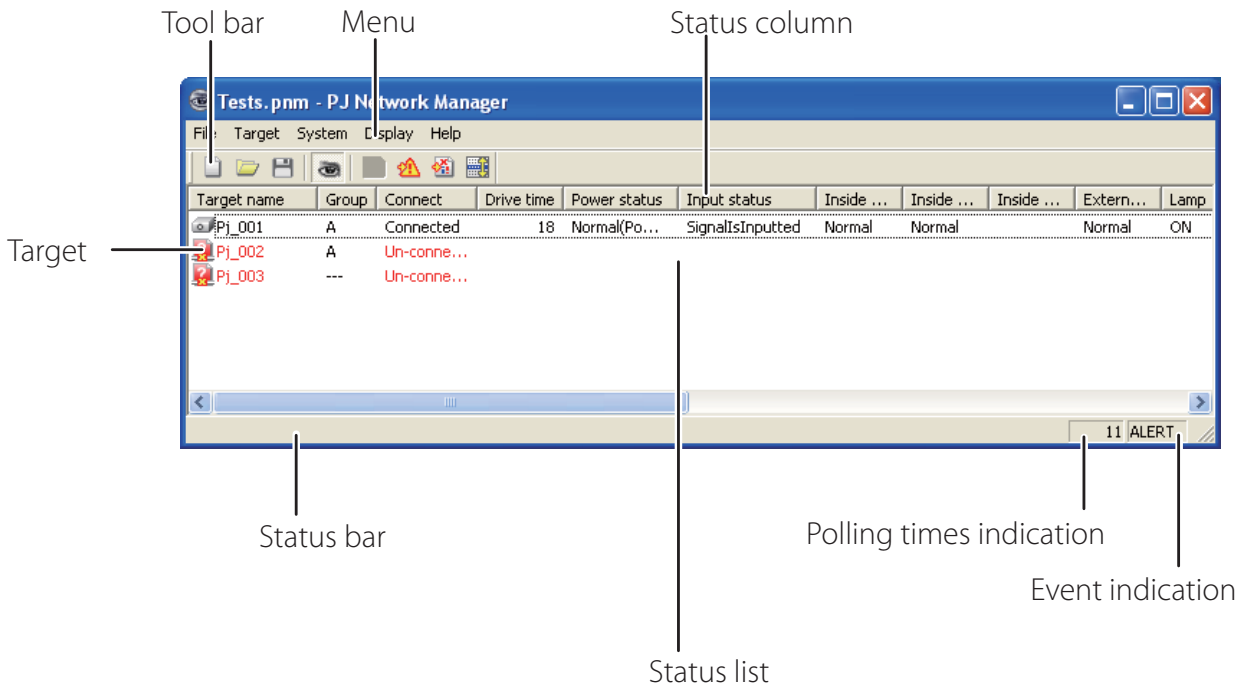


Launching and quitting PJ Network Manager

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 window of the target. (p.31)

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.28) 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

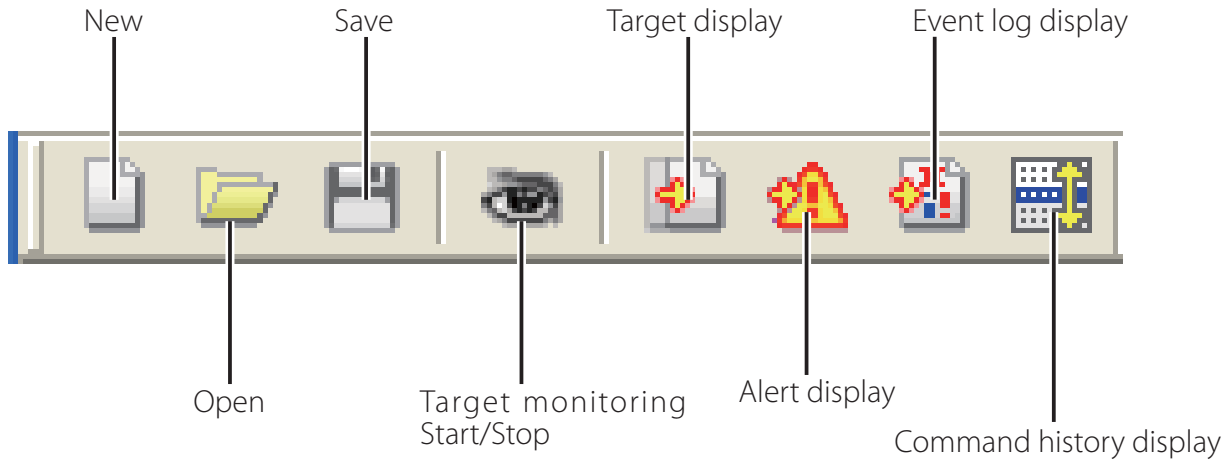
Menu	Sub menu	Operation
File	New	Creates a new management file.
	Open	Opens an existing management file.
	Save	Saves the active management file.
	Save As	Saves the active management file with a new file name.
	Exit	Quits the application.
Target	Target monitoring	Starts or stops target monitoring.
	Target addition	Adds a new target. Target information window will appear.
	Target editing	Edits selected target information.
	Target deletion	Deletes the selected target.
	Group setting	Groups the selected targets.
	Warning value setting	Sets up the warning value of the selected target.
	Telnet setting	Sets up the password of telnet.
	Commands batch processing	Sets commands batch processing for multiple selected targets.
	Timer setting	Sets up the timer for 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.
	Command history display	Displays all of command history.
	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.
Command history display ..	Displays all of the command history.

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	
Proj_05	Proj_05	Normal
Proj_01	Proj_05	Abnormal condition (One of the abnormalities, Alert, Trap or System error is happening on the target.)
Proj_01	Proj_100	Connection error (Target has been disconnected from the network)
Proj_100		Acquisition error (Target has been disconnected from the network, or does not provide SNMP function.)
Proj_100		Unknown (Target monitoring is not operating)

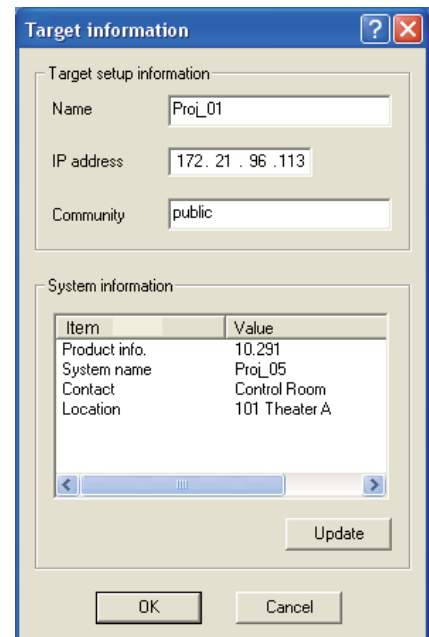
Addition of the target

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.

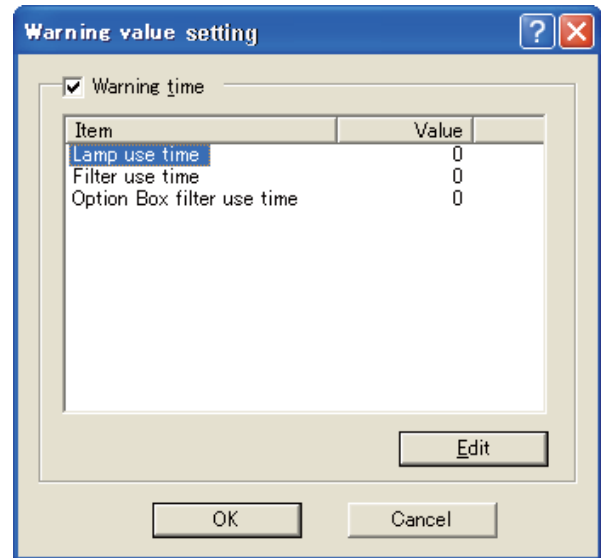
 Up to 200 targets can be registered.

 Up to 255 characters can be used for target name and community.

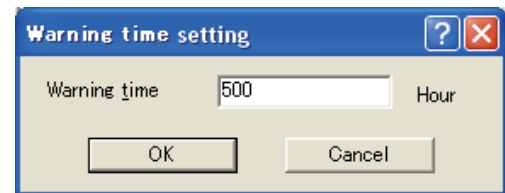
Setting up the warning value

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.

- 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.




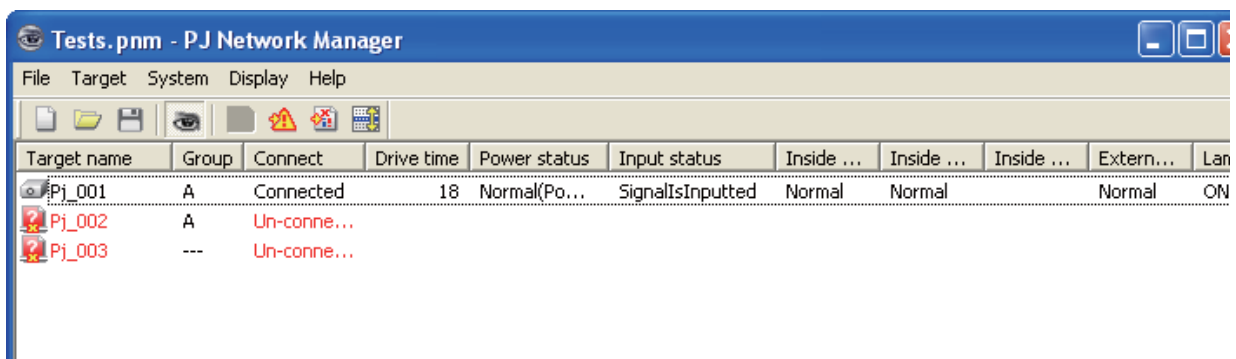
(Example of the set up window)



✎ 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

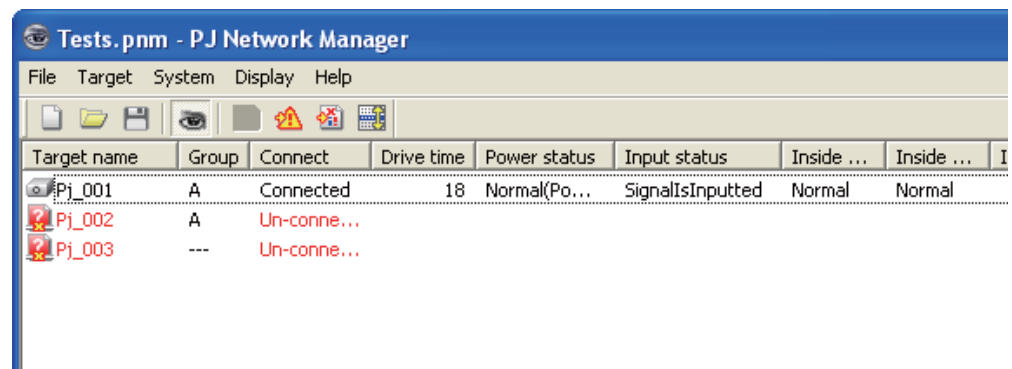
- 1 Click  button on the tool bar to start monitoring the target.
- 2 PJ Network Manager starts polling the target in a sequential from the top of the status list and displays the results on the status list.



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.

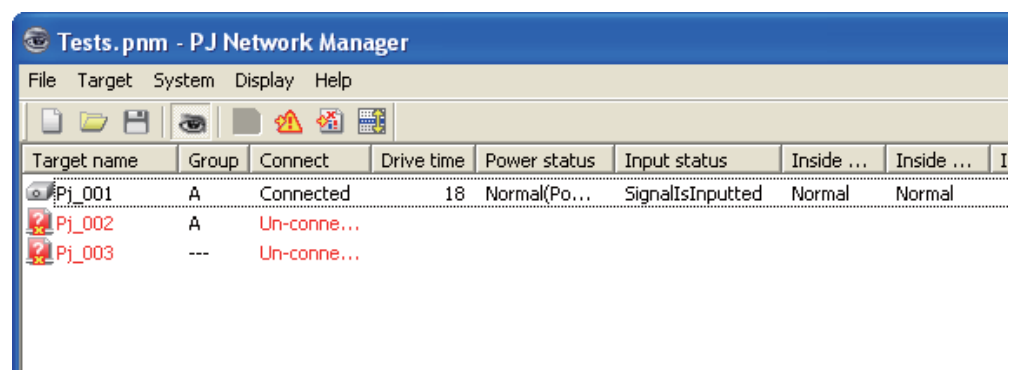
- ✎ When PJ Network Manager cannot acquire the MIB information of the target equipment, it indicates as Connection Error.
- ✎ The interval of target monitoring is according to the setting of **Monitoring interval** on **System default setting** from **System** menu. (p.17)



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 notification 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 network owner's manual.




What's Trap

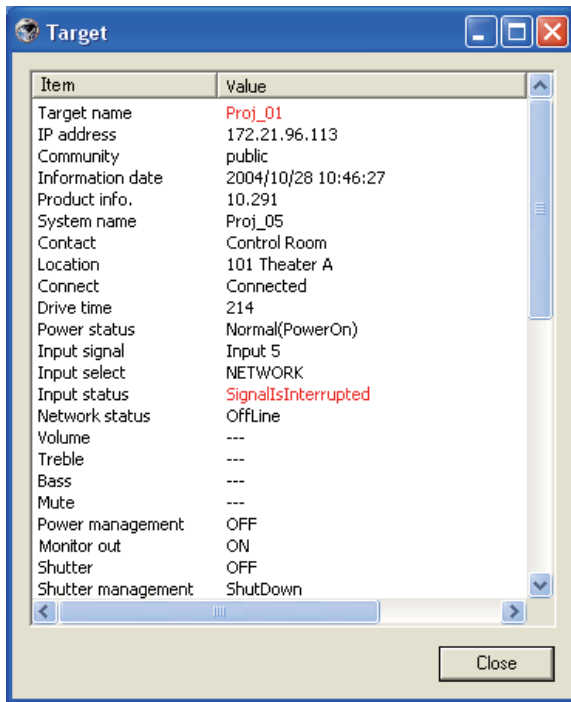
Trap is the event predefined by the SNMP agent. If the predefined event ("When PJ lamp is off", "When internal PJ power circuit is failed" etc.) happens, target sends trap information to the SNMP manager.

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.



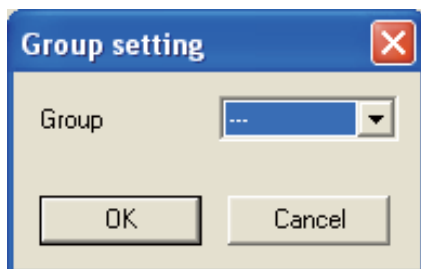
- ✎ The target name and item which have an abnormality or connection error happening are indicated with red.
- ✎ When PJ Network Manager cannot acquire the value of column information, "---" is displayed.

✎ The above procedure can perform by selecting **Target display** from **Display** menu.

Setting the target group

The target group can be set up by the procedure below. When you set a command in the same group, you set it.

- 1 Select targets which you want to set from the status list. Select **Group setting** from **Target** menu, the dialog box will appear as the below figure.
- 2 Select a group, and then click **OK** button.



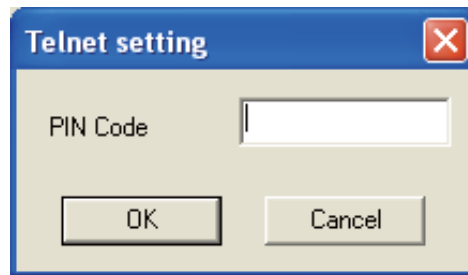
✎ "---" will not set the group.

✎ The projectors setting different network passwords cannot be set to the same group. It is necessary for the projectors in the same group to set to the same password.

Setting up the password of Telnet

The password of telnet can be set up by the procedure below. It is necessary to make a password, same as the network password.

- 1 Select a target which you want to set up the password of telnet from the status list. You can select multiple targets.
- 2 Select **Telnet setting** from **Target** menu, **Telnet setting** dialog box will appear as the below figure. Set a password and click **OK** button. When multiple targets are selected, all the selected targets are set as the same password.

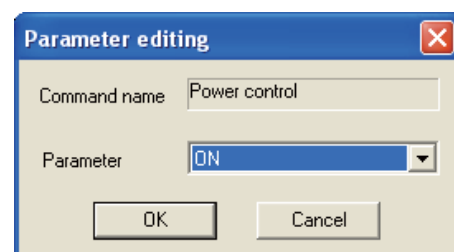
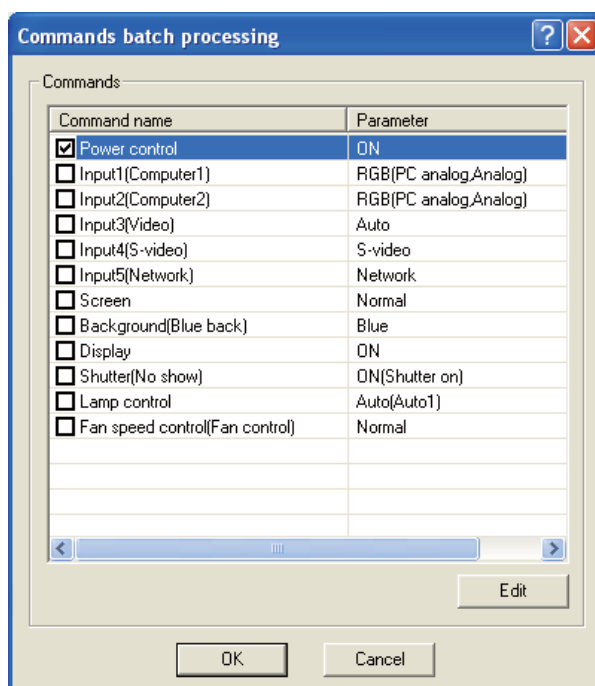


The initial setting is "0000".

Setting commands batch processing for multiple targets

The commands batch processing for multiple targets can be set up by the procedure below.

- 1 Select a target belonging to the batch processing group which you want to set, and select **Commands batch processing** from **Target** menu. **Commands batch processing** dialog box will appear as the below figure.
- 2 Select a command which you want to set, click **Edit** button. **Parameter editing** dialog box will appear. Select a parameter, and then click **OK** button. The check box of **Commands batch processing** dialog box will be checked.
- 3 Click **OK** button. The commands are carried out to all the targets of the same group.



The commands also work for the target which is not set to a group.

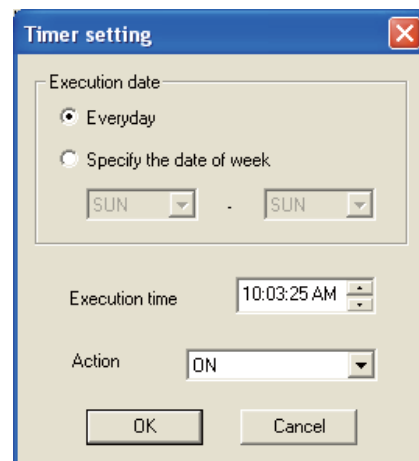
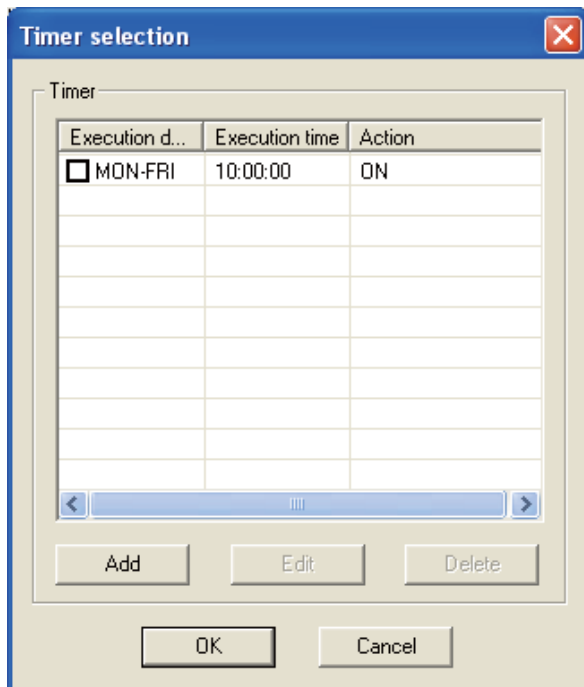
Commands batch processing : Available Command

Items	Description
Power ON/OFF	Sets up the Power ON or Power OFF.
Input,Source	Sets up the Input and Source. Selects Input and Source.
Screen	Sets up the screen size. Resizes the picture screen.
Background	Sets up the background. Selects the background screen for when no input signal is detected.
Display	Sets up the Display. Decides whether to display On-Screen Displays or not.
Shutter(No show)	Sets up the Shutter (No show). Sets black out the image.
Lamp control	Sets up the Lamp control. Changes brightness of the screen.
Fan control	Sets up the Fan control. Chooses the running speed of cooling fans.

Setting timer for targets

The timer information for targets can be set up by the procedure below.

- 1 Choose a target which you want to set the timer.
- 2 Select **Timer setting** from **Target** menu. **Timer selection** dialog box will appear as the below figure. Check in a check box of an event to carry out.
- 3 When you want to add events, click **Add** button. Input timer informations in **Timer setting** dialog box, and click **OK** button.
- 4 Click **OK** button of **Timer selection** dialog box, timers are set to the selected target. When selecting multiple targets, timers are set to all the selected targets.



Timer

Items	Description
Execution date.....	Sets up the Timer execution date. (everyday or a day)
Execution time.....	Sets up the Timer execution time. (hh:mm:ss)
Action	Sets up the events.

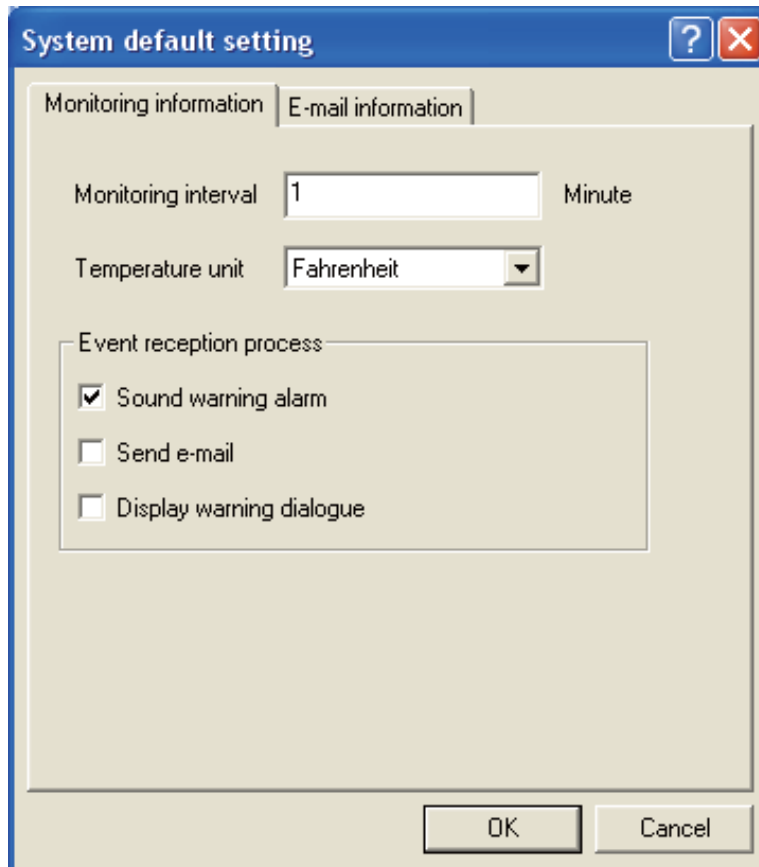
Setting up default setting

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.

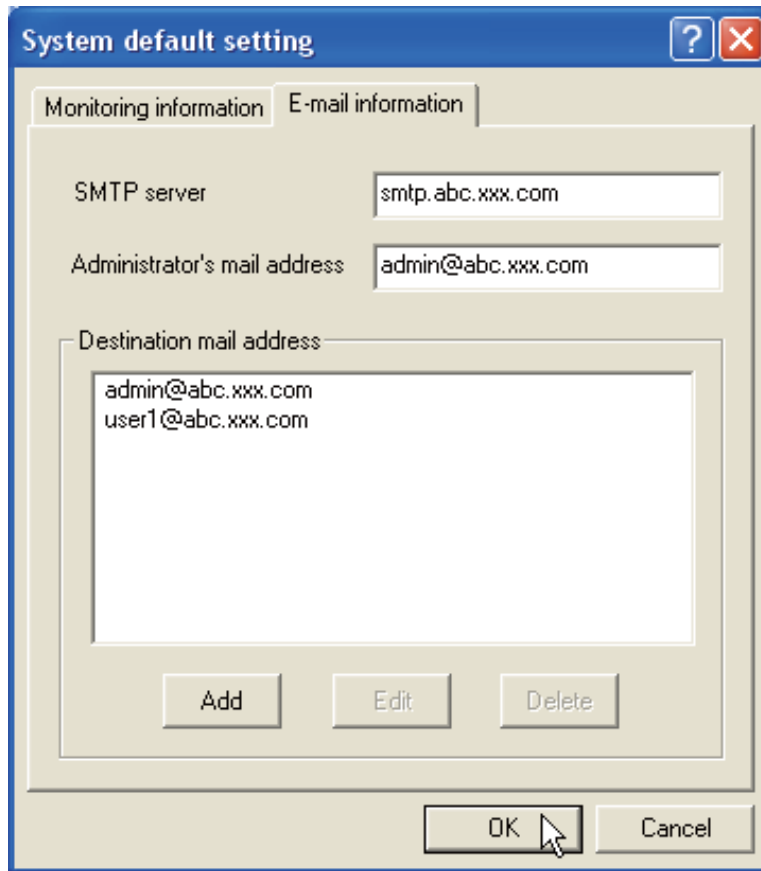
Monitoring information



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.26).
	<input type="checkbox"/> Sound warning alarm
	<input type="checkbox"/> Send e-mail
	<input type="checkbox"/> Display warning dialog

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.

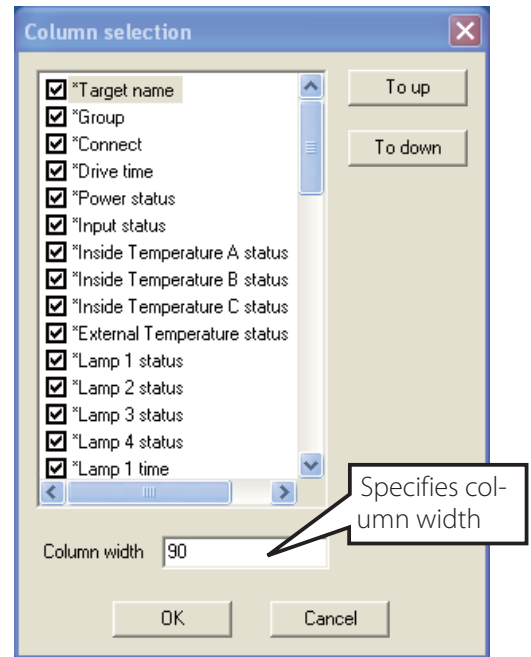
- ✎ If **Send e-mail** check box of **Event reception process** on **Monitoring information** is un-checked, the alert e-mail will not be sent even if you set up the e-mail address.
- ✎ Up to 10 addresses can be set up for the destination mail address.
- ✎ For the contents of the mail, refer to item "About event treatment" (p.26).

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
*Group	Group name
*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

☞ The values in parentheses are typical value and they differ depending on the connected equipment.

☞ The [*] next to the column name indicates alert items.

Column	Description
*Error info.....	Error information (Not available for the projector)
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
Timer.....	Timer information
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
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)
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, OFF, On1, etc.)
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

*1 Set up the installed date when the PJ Network Manager is newly introduced.

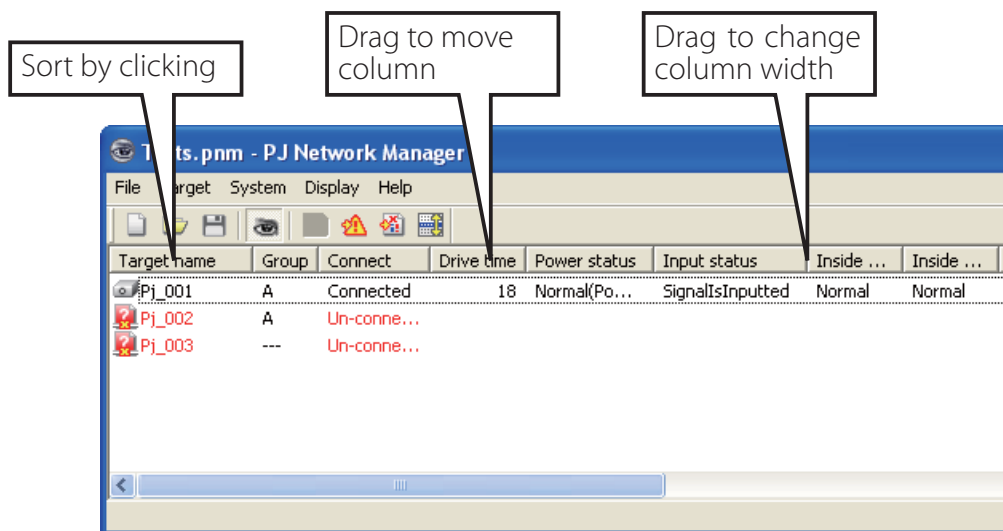
 There are some un-available columns depending on the products. The value of un-available column is displayed in blank or with "---".

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.

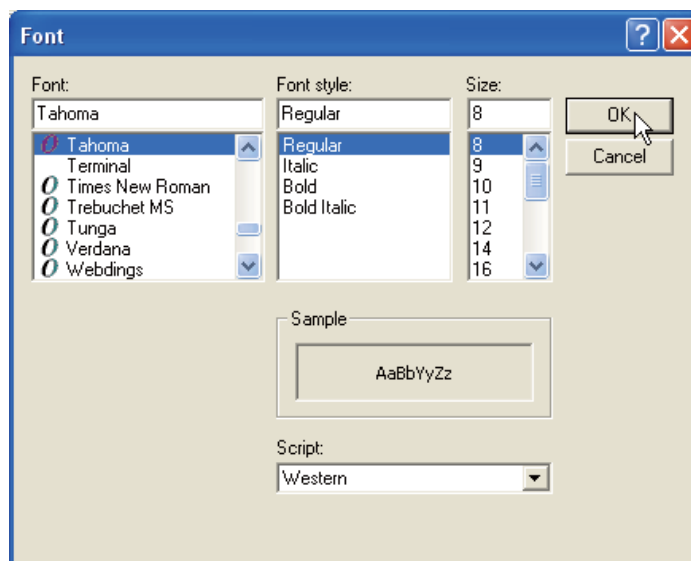
Sorting the status list

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

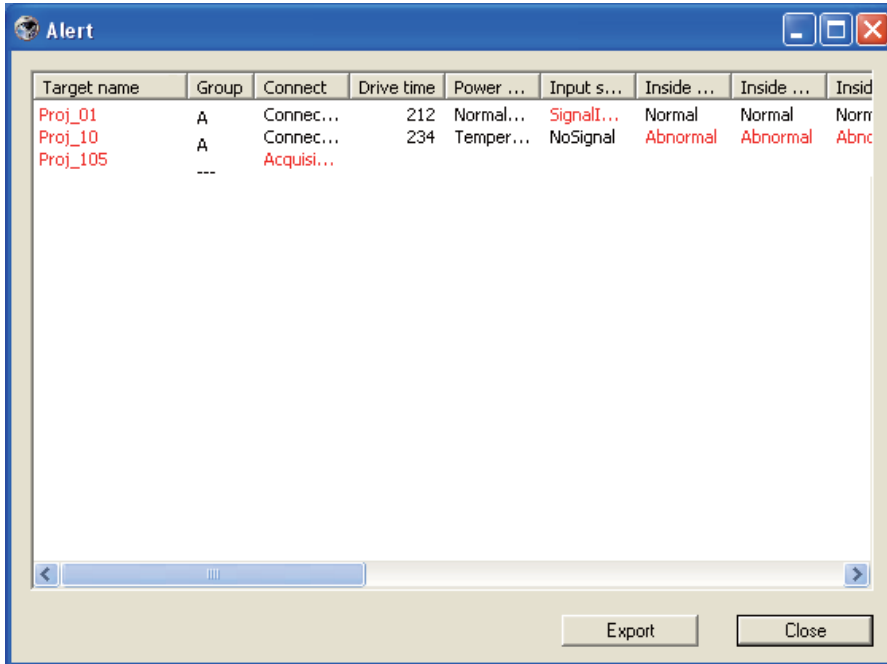
Select **Font setting** from **System** menu. The font setup window will appear. Select your desired type face, style and size on the window.



Customized font property is applied to all the windows of the setting.

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.

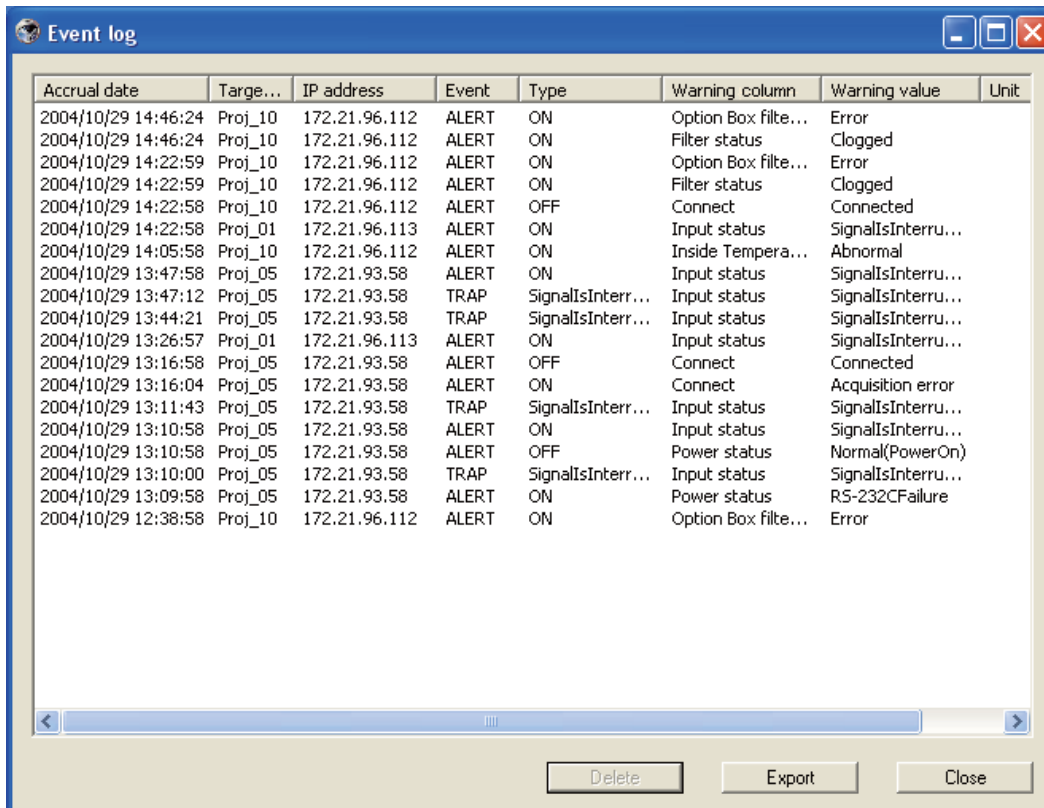


Target name	Group	Connect	Drive time	Power ...	Input s...	Inside ...	Inside ...	Insid
Proj_01	A	Conne...	212	Normal...	SignalI...	Normal	Normal	Norm
Proj_10	A	Conne...	234	Temper...	NoSignal	Abnormal	Abnormal	Abnc
Proj_105	---	Acquisi...						

 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 dialog, click **Yes** to execute deletion.



Accrual date	Target name	IP address	Event	Type	Warning column	Warning value	Unit
2004/10/29 14:46:24	Proj_10	172.21.96.112	ALERT	ON	Option Box filte...	Error	
2004/10/29 14:46:24	Proj_10	172.21.96.112	ALERT	ON	Filter status	Clogged	
2004/10/29 14:22:59	Proj_10	172.21.96.112	ALERT	ON	Option Box filte...	Error	
2004/10/29 14:22:59	Proj_10	172.21.96.112	ALERT	ON	Filter status	Clogged	
2004/10/29 14:22:58	Proj_10	172.21.96.112	ALERT	OFF	Connect	Connected	
2004/10/29 14:22:58	Proj_01	172.21.96.113	ALERT	ON	Input status	SignalIsInterru...	
2004/10/29 14:05:58	Proj_10	172.21.96.112	ALERT	ON	Inside Tempera...	Abnormal	
2004/10/29 13:47:58	Proj_05	172.21.93.58	ALERT	ON	Input status	SignalIsInterru...	
2004/10/29 13:47:12	Proj_05	172.21.93.58	TRAP	SignalIsInterr...	Input status	SignalIsInterru...	
2004/10/29 13:44:21	Proj_05	172.21.93.58	TRAP	SignalIsInterr...	Input status	SignalIsInterru...	
2004/10/29 13:26:57	Proj_01	172.21.96.113	ALERT	ON	Input status	SignalIsInterru...	
2004/10/29 13:16:58	Proj_05	172.21.93.58	ALERT	OFF	Connect	Connected	
2004/10/29 13:16:04	Proj_05	172.21.93.58	ALERT	ON	Connect	Acquisition error	
2004/10/29 13:11:43	Proj_05	172.21.93.58	TRAP	SignalIsInterr...	Input status	SignalIsInterru...	
2004/10/29 13:10:58	Proj_05	172.21.93.58	ALERT	ON	Input status	SignalIsInterru...	
2004/10/29 13:10:58	Proj_05	172.21.93.58	ALERT	OFF	Power status	Normal(PowerOn)	
2004/10/29 13:10:00	Proj_05	172.21.93.58	TRAP	SignalIsInterr...	Input status	SignalIsInterru...	
2004/10/29 13:09:58	Proj_05	172.21.93.58	ALERT	ON	Power status	RS-232CFailure	
2004/10/29 12:38:58	Proj_10	172.21.96.112	ALERT	ON	Option Box filte...	Error	

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	PowerFailure TemperatureError Normal (AfterTempError) RS232CFailure Power management Shutter management LampFailure	
		Input status	SignalsInterrupted SignalsInputted	
		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 time	(setting time)	
		TRAP	LampFailure	
LampReplace	Replace			
PowerOFF PowreFailure PowerManagement	Power status		Normal(Standby) Normal(OnCoolingDown) PowerFailure Power management	
TemperatureError	Inside Temperature status (A to C) External Temperature status		Abnormal	
SignalsInterrupted	Input status		SignalsInterrupted	
LampReplacementTime	Lamp time (1-4)		(lamp time)	
FilterReplacementTime	Filter time		(filter time)	
AutoPlayError	n/a		Error	
SYSERR	*Mail Transfer *MemoryError	n/a *1	n/a *1	




*1 When PJ Network Manager could not send mail or acquire the memory, no message is displayed in "Warning column" and "Warning value".

 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 failure	Projector turned off due to the power failure of the projector
	TemperatureError	The projector turned off due to temperature error occurred
	Normal (AfterTempError)	Normal after temperature error occurred
	RS232CFailure	The RS-232C communication error occurred
	Power management	The power management function turned projector lamp off
	LampFailure	The lamp failure occurred
	Normal(Standby) *	Projector turned into standby normally
Input signal status	Normal(OnCoolingDown) *	On cooling down normally due to projector turned off
	SignalsInterrupted SignalsInputted *	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 time	(filter time)	It reached user setting filter time
(Auto play error)	Error	The error occurred during the auto image display

 The warning value with "*" in the above table shows the event when the alert has cleared, alert type is "OFF".

-  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.
-  This Warning column is not available for some projector's model types.

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 dialog

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> (management
file name)
Date : 2004/10/29 21:30
To : user@abc.xxx.com
Subject : Alert message
```

```
-----
Alert has occurred
* Accrual 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.23).

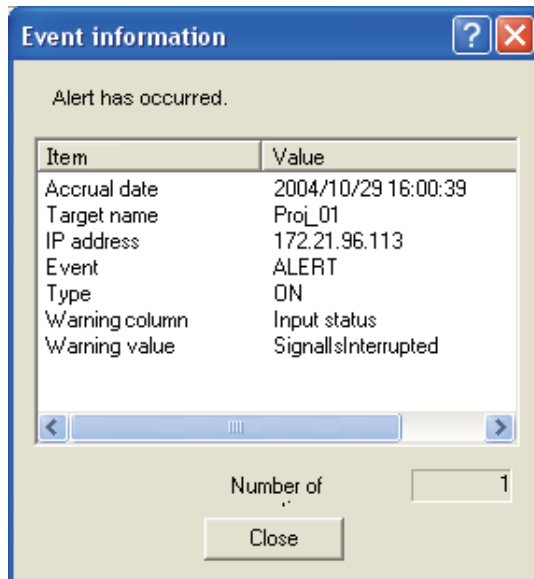
 The setting of event treatment, refer to item "Setting up default setting" (p.17).

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.

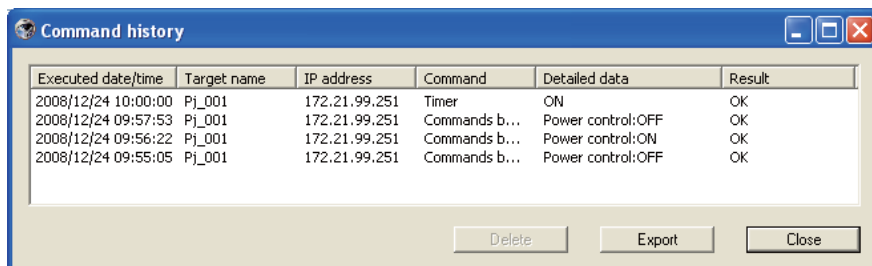
Display warning dialog

Following dialog window appears on the screen if event occurs.



Viewing the command history

- 1 Click  button on the tool bar. **Command history** window appears and the command history is listed on the window as shown below.
- 2 To export the command history as text file (CSV file), click **Export** button.
- 3 To delete the command history, select the item of **Executed date/time** which you want to delete, and then click **Delete** button. On the confirmation dialog box, click **Yes** button to execute deletion.



Command history

Items	Description
-------	-------------

Executed date/time Exrcuted date and time of the command

Target name Name of the network equipment

IP address IP address of the network equipment


Command Type of the Command

Detailed data Contents of the Command

Result Results of the Command

 The listed items are fixed.

 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.

 Up to 1000 of events can be stored. If it exceeds 1000 events, the oldest event is deleted and the latest event is added.


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 <ul style="list-style-type: none">- Monitoring interval- Event reception process- Temperature unit- E-mail information
Target information	Information of the registered target <ul style="list-style-type: none">- 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

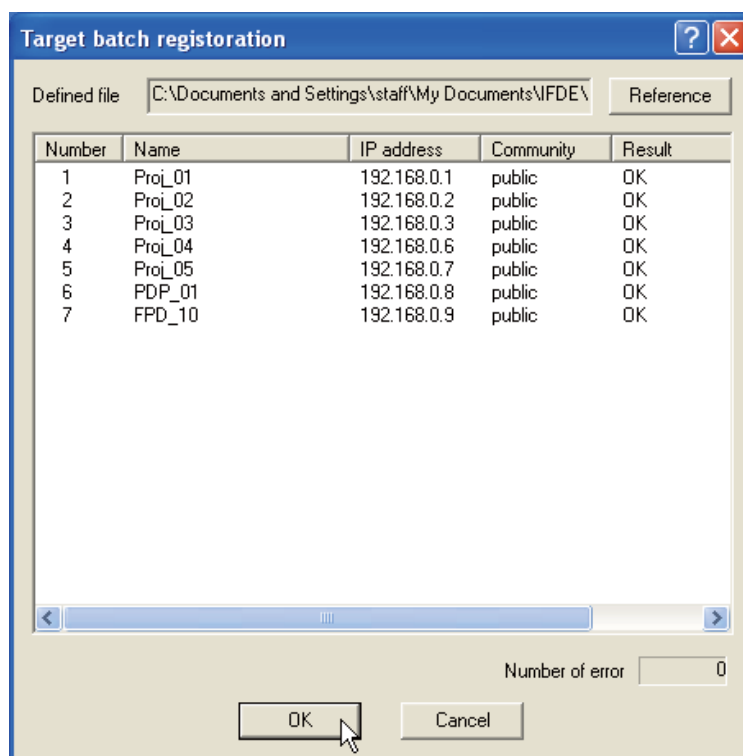
Following application setting information is saved to the registry of your computer. So the setting condition is memorized even after quitting the application.

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.

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.

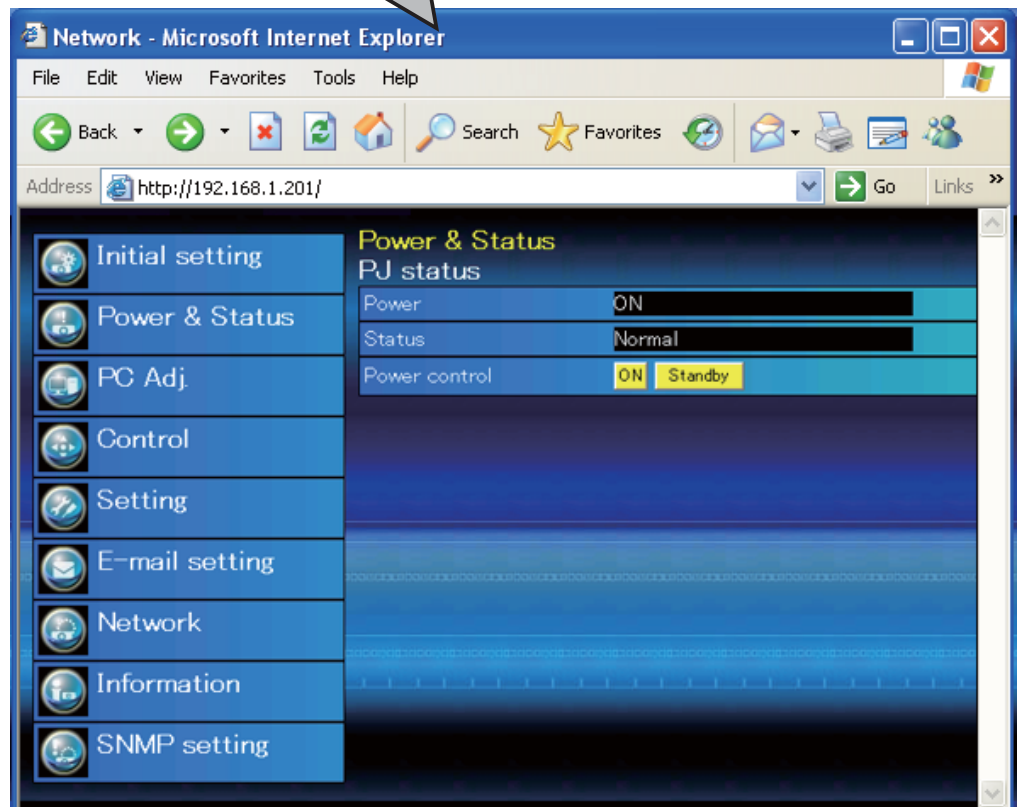
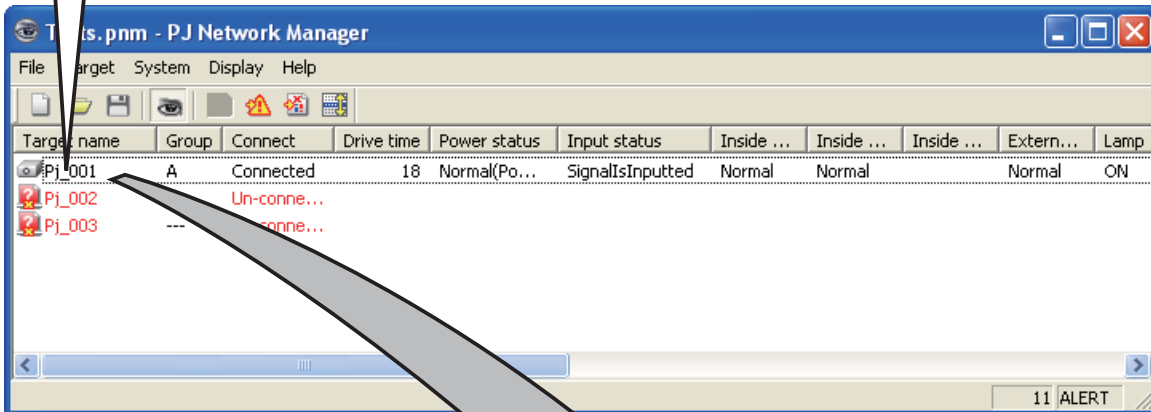
Target name	IP address	Community
Proj_01	192.168.0.1	public
Proj_02	192.168.0.2	public
Proj_03	192.168.0.3	public
Proj_04	192.168.0.6	public
Proj_05	192.168.0.7	public
PDP_01	192.168.0.8	public
FPD_10	192.168.0.9	public

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 network owner's manual.

Login by double clicking



An example of the login page.

PM-KF5AC
PJ NETWORK MANAGER OWNER'S MANUAL
FOR WINDOWS



SANYO Electric Co., Ltd.