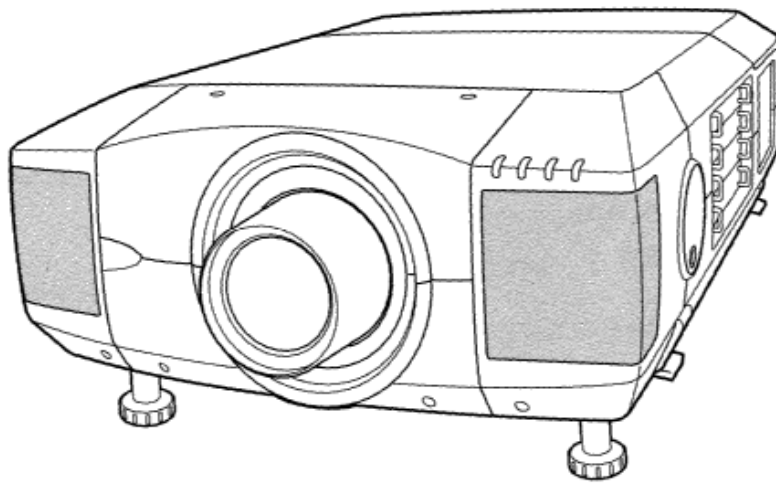


# EIKI

MULTIMEDIA PROJECTOR

## MODEL LC-XT1



\* Projection lens is optional.

## OWNER'S INSTRUCTION MANUAL

## TO THE OWNER

Before operating this projector, read this manual thoroughly and operate the projector properly. This projector provides many convenient features and functions. Operating the projector properly enables you to manage those features and maintains it in better condition for a considerable time.

Improper operation may result in not only shortening the product-life, but also malfunctions, fire hazard, or other accidents.

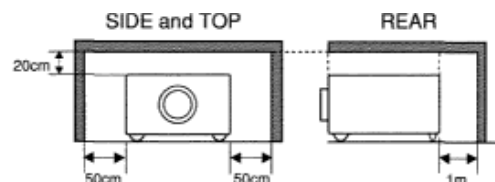
If your projector seems to operate improperly, read this manual again, check operations and cable connections and try the solutions in the "Trouble-shooting" section of the end of this booklet. If the problem still persists, contact the sales dealer where you purchased the projector or the service center.



## SAFETY PRECAUTIONS

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

- This projector produces intense light from the projection lens. Do not stare directly into the lens as possible. Eye damage could result. Be especially careful that children do not stare directly into the beam.
- This projector should be set in the way indicated, If not, it may result in a fire hazard.
- Take appropriate space on the top, sides and rear of the projector cabinet for allowing air circulation and cooling the projector. Minimum distance should be taken. If the projector is to be built into a compartment or similarly enclosed, the 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.
- Do not put any flammable object or spray can near the projector, hot air is exhausted from the ventilation holes.
- The Remote Control Unit, supplied to this projector, emits the laser beam as the Laser Pointer function from the Laser Light Window while pressing the LASER button (for 1 minute). Do not look into the Laser Light Window or shine the laser beam on yourself or other people. Eye damage may result.
- If the projector is not to be used for an extended time, unplug the projector from the power outlet.



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

	<b>CAUTION</b> <b>RISK OF ELECTRIC SHOCK</b> <b>DO NOT OPEN</b>	
<b>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.</b>		
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.	

## SAFETY PRECAUTIONS

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 insure 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.

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.

# COMPLIANCES

## Federal Communication Commission Notice

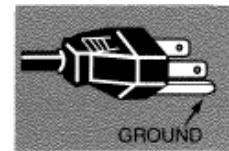
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates,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

## 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.



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

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# FEATURES AND DESIGN

LC-XTI

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

## • **Compatibility**

This projector widely accepts various video and computer input signals including;

- **Computers**  
IBM-compatible and Macintosh computers up to 1280 x 1024 resolution.
- **6 Color Systems**  
NTSC, PAL, SECAM, NTSC 4.43, PAL-M or PAL-N color system can be connected.
- **Component Video**  
Component video signals, such as a DVD player output, high definition TV signals including 480i, 480p, 575i, 575p, 720p, 1035i, 1080i-50 or 1080i-60, can be connected.
- **S-Video**  
S-Video signals, such as a S-VHS VCR output signals, can be connected.

## • **High Resolution Image**

This projector provides 1024 x 768 dots resolution for computer input and 800 horizontal TV lines. The resolution from the computer between XGA (1024 x 768) and SXGA (1280 x 1024) is compressed into 1024 x 768 dots. This projector cannot display image of over 1280 x 1024 dots. When the resolution of your computer is over than 1280 x 1024, reset the computer output for lower resolution.

## • **Multi-Scan System**

This projector has Multi-Scan System to conform to almost all computer output signals quickly. There is no need for troublesome manual adjustment of frequency and other settings.

## • **One-Touch Auto Imaging**

Incoming computer video signals are recognized and the best setting is automatically selected by the Auto Image function. No complicated setup is necessary and projection is always precise.

## • **Progressive Scan Function**

This function converts interlace video signals into progressive scan signals and provide fine picture quality.

## • **Multilanguage Menu Display**

Operation menu is displayed in; English, Deutsch, Français, Italiano, Espanol, or Japanese

## • **Digital Zoom (Computer Mode only)**

The Digital Zoom magnifies the image up to 49 times, allowing you to focus on crucial information at a presentation.

## • **Motor-driven Lens Shift**

The projection lens can be moved up, down, left and right with the motor-driven lens shift function. This function makes it easy to provide the projected image where you want.

The zoom and focus can be also adjusted with motor-driven operation.

## • **Keystone Correction**

Positioning height of the projector may result in distorted images being displayed in a trapezoid shape. Keystone Correction maintains this problem by digitally altering the projection to produce undistorted images.

## • **Power Management**

Power Management function is provided to reduce power consumption while the projector is not in use.

This Power Management function operates to turn the Projection Lamp off when the projector detects signal interruption and any button is not pressed over 5 minutes. The Projection Lamp is automatically turned on again when the projector detects the signal or any operation button is pressed.

This projector is shipped with this function ON.

## • **Digital Visual Interface**

This projector is equipped with the DVI terminal for connecting DVI (conforming VESA standard) output of the computer.

## • **Multi Versatile Platform**

This projector applies various input/output terminals and 4 terminal slots for expansion to tune to diversity of signals from computers and video equipment.

## • **Selectable Terminal Slots**

4-built-in Terminal Slots enable you to arrange any combinations of input sources just by changing Terminal Boards. For Terminal Boards, contact the sales dealer where you purchased the projector.

## • **Laser Pointer Function**

The Remote Control Unit supplied with this projector includes the Laser Pointer function. This function helps you to make a smart presentation on a projected.screen.

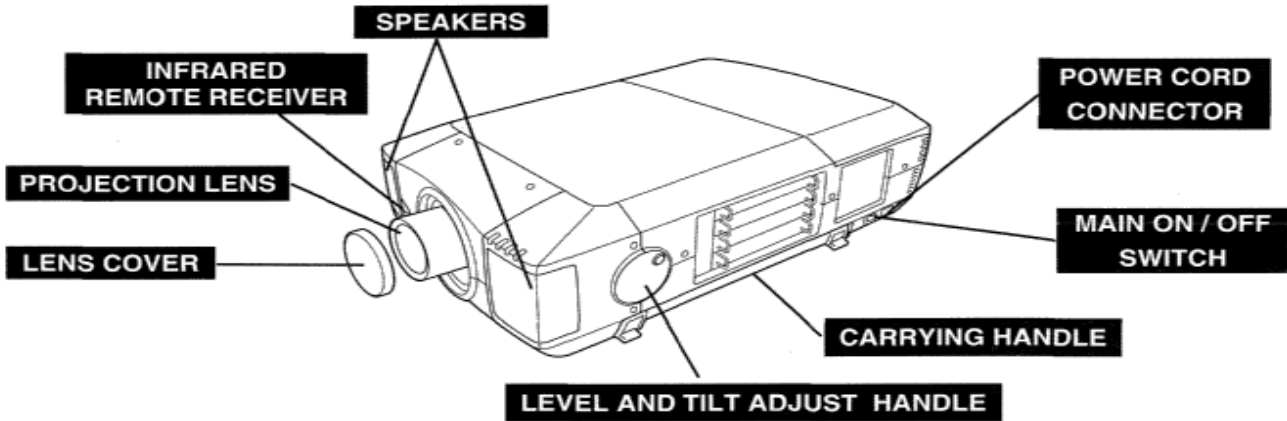
## • **Wireless Mouse**

The Remote Control Unit supplied with this projector has Wireless Mouse function for the connected computer. This function enables you to operate both projector and computer with this Remote Control Unit only.

# PREPARATION

## NAME OF EACH PART OF THE PROJECTOR

### FRONT OF THE CABINET



### BACK OF THE CABINET

#### EXHAUST VENT



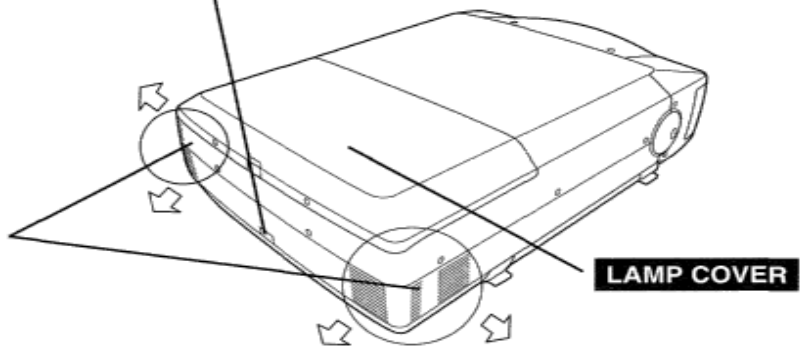
**HOT AIR EXHAUSTED !**

Air blown from the exhaust vent is hot. When using or installing the projector, the following precautions should be taken.

- Do not put a flammable object near this vent.
- Keep the rear grills at least 3' (1m) away from any object, especially heat-sensitive object.
- Do not touch this area, especially screws and metallic parts. This area will become hot while the projector is used.

This projector detects the internal temperature and automatically controls the operating power of the Cooling Fans.

#### INFRARED REMOTE RECEIVER



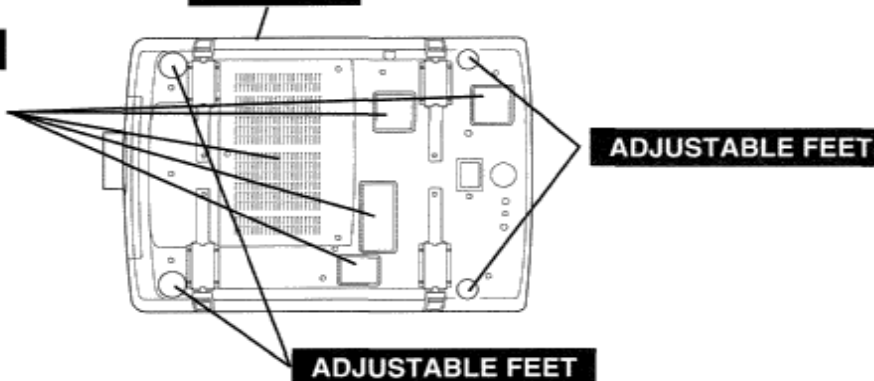
### BOTTOM OF THE CABINET

#### AIR INTAKE VENTS

This projector is equipped with cooling fans for protection from overheating. Pay attention to the following to ensure proper ventilation and avoid a possible risk of fire and malfunction.

- Do not cover the vent slots.
- Keep bottom clear of any objects. Obstructions may block cooling air.

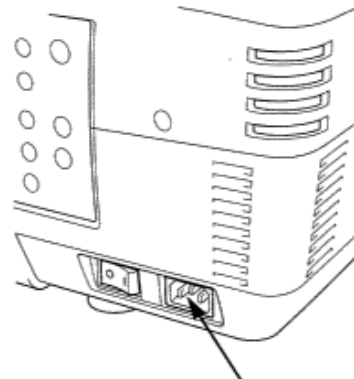
#### AIR FILTER



# SETTING-UP THE PROJECTOR

## CONNECTING THE AC POWER CORD

This projector uses nominal input voltages of 100-120 V or 200-240 V AC. The projector 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. Consult your authorized dealer or service station if you are not sure of the type of power supply being in use. Connect the projector with the peripheral equipment before turning the projector on. (Refer to pages 12 15 for connection.)



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

NOTE ON THE POWER CORD					
<p>The AC Power Cord must meet the requirement of the country where you use the projector. Confirm the AC plug type with the chart below and the proper AC power cord must be used. If the supplied AC Power Cord does not match the AC outlet, contact your sales dealer.</p>					
Projector side	AC Outlet side				
<p>To the POWER CORD CONNECTOR on the projector.</p>	<table border="1"> <thead> <tr> <th>For the U.S.A. and Canada</th> <th>For Continental Europe</th> </tr> </thead> <tbody> <tr> <td> <p>To the AC Outlet. (120 V AC)</p> </td> <td> <p>To the AC Outlet. (200 - 240 V AC)</p> </td> </tr> </tbody> </table>	For the U.S.A. and Canada	For Continental Europe	<p>To the AC Outlet. (120 V AC)</p>	<p>To the AC Outlet. (200 - 240 V AC)</p>
For the U.S.A. and Canada	For Continental Europe				
<p>To the AC Outlet. (120 V AC)</p>	<p>To the AC Outlet. (200 - 240 V AC)</p>				



## LENS INSTALLATION

Before setting up the projector, install the Projection Lens on the Projector.

1. Before installation, check where the projector is used and prepare suitable lens. For specifications of the Projection Lens, refer to the manual separately attached or contact the sales dealer where you purchased the projector.
2. For installation, refer to the installation manual supplied to the Projector.



When moving or setting up the projector, be sure to replace the Lens Cover to protect the surface. And be careful not to hold or subject the lens to strong forces. It may damage the lens, cabinet, or mechanical parts.

## POSITIONING THE PROJECTOR

This projector is designed to project on a flat projection surface.

### ROOM LIGHT

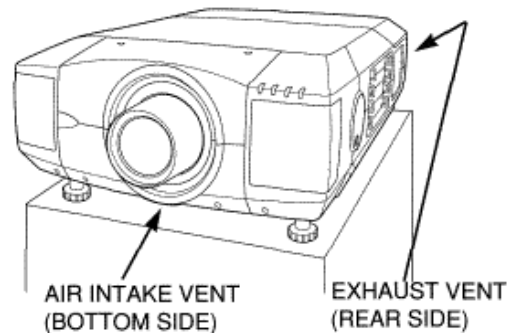
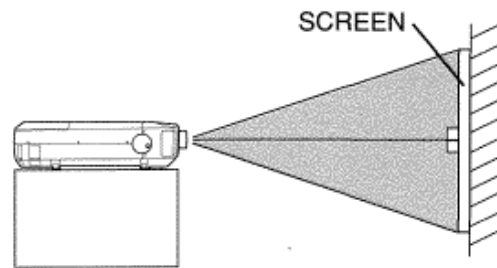
The brightness in the room has a great influence on the picture quality. It is recommended to limit ambient lighting in order to provide the best image.

### VENTILATION

This projector is equipped with cooling fan to protect it from overheating. Pay attention to the following to ensure proper ventilation and avoid a possible risk of fire and malfunction.



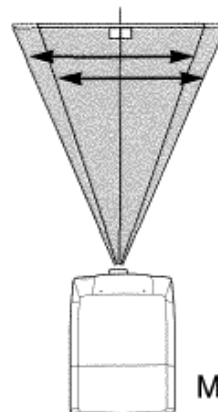
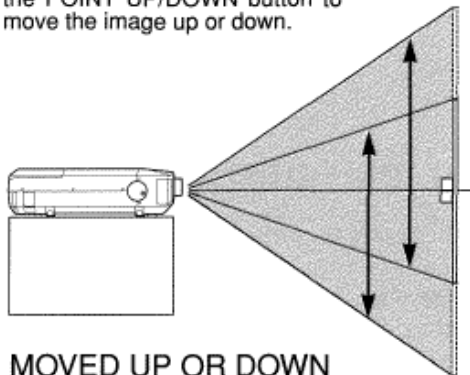
- Do not cover the vents with papers or other materials.
- Keep the rear grill at least 3 feet (1 m) away from any object.
- Make sure that there are no objects under the projector. An object under the projector may prevent the projector from taking the cooling air through the bottom vent.



## LENS SHIFT ADJUSTMENT

The projection lens can be moved up, down, left and right with the motor-driven lens shift function. This function makes it easy to provide the projected image where you want.

Use the LENS SHIFT button and the POINT UP/DOWN button to move the image up or down.



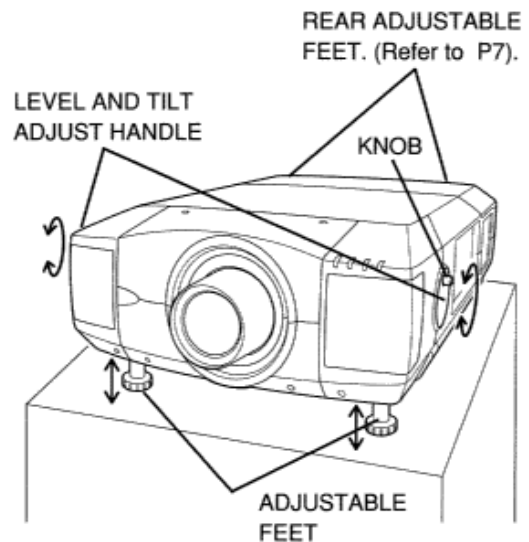
Use the LENS SHIFT button and the POINT LEFT/RIGHT button to move the image left or right.

## PREPARATION

### PICTURE LEVEL AND TILT ADJUSTMENT

Picture tilt and projection angle can be adjusted with handles on both sides of the projector. Projection angle can be adjusted to 5.7 degrees upper way.

- 1 Press the knob on the handle. The handle pop out.
- 2 Turn the handles (right and left) until the picture is projected on proper position. Adjust height of rear adjustable feet by rotating them until projector properly stabled on the table.
- 3 Press knob and retract the handle.



The height of front feet can be adjusted by turning the handles.

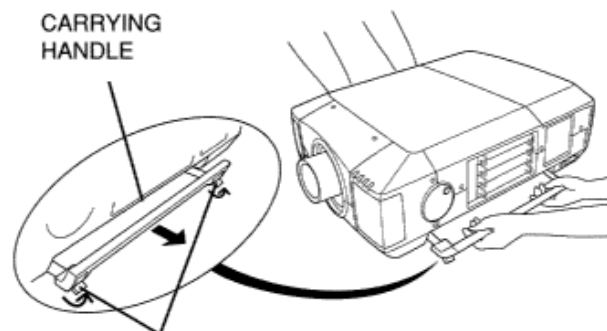
### MOVING THE PROJECTOR



For safety, be sure to hold Carrying Handles on both sides by 2 or more people when moving the projector. Moving it improperly may result in damage of cabinet or person's injury.

Replace the lens cover and retract the feet to prevent damage to the lens and cabinet.

- 1 Pull up the lock buttons on each side of carrying handles and release the locks.
- 2 Pull carrying handles out fully until it's locked (with a click). Move the projector by holding two handles by 2 or more people.
- 3 To retract carrying handles, pull up the lock buttons and release the lock of handles and press the handles fully in until it's locked.



Pull up the lock buttons to release the lock.



### 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 using a courier or transport service in an unsuitable transport case. This may cause damage to the projector. To transport the projector through a courier or transport service, consult your dealer and best case should be applied.



# CONNECTING THE PROJECTOR

## INPUT/OUTPUT TERMINALS AND JACKS

### INPUT 2

#### 5 BNC INPUT JACKS

Connect the component video output (Cr, Y, Cb or Pr, Y, Pb) from the video equipment to the R/Pr, G/Y and B/Pb jacks or connect the computer output [5 BNC Type (Red, Green, Blue, Horiz. Sync and Vert. Sync.)] from the computer to the R/Pr, G/Y, B/Pb, H/HV and V jacks. (Refer to P14, 15)

### INPUT 1

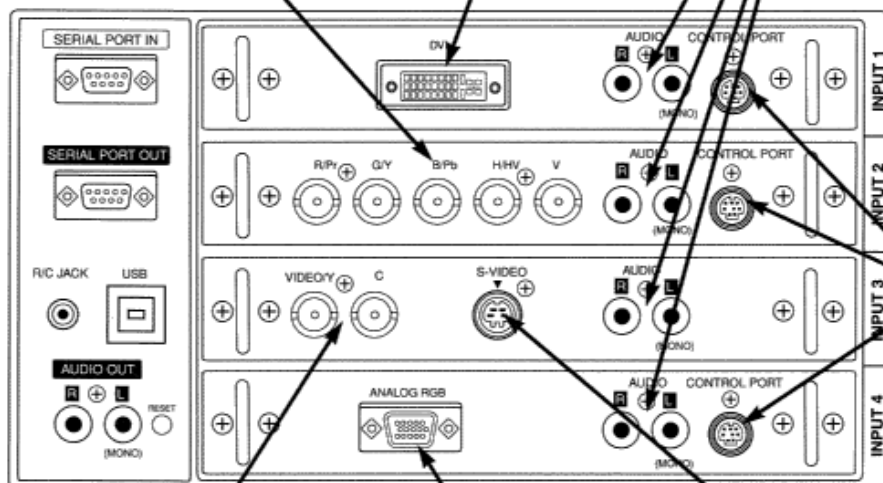
#### DVI INPUT TERMINAL

Connect the computer output (Digital/Analog DVI-I type) to this terminal. (Refer to P14.)

### INPUT 1/2/3/4

#### AUDIO INPUT JACKS

Connect the audio output from the computer or video equipment to these jacks. (Refer to P14, 15.)



### INPUT 1/2/4

#### CONTROL PORT CONNECTORS

When controlling the computer with the Remote Control of this projector, connect the mouse port of your personal computer to these connectors. (Refer to P14.)

### INPUT 3

#### AV INPUT (VIDEO/Y, C) JACKS

Connect the composite video output from the video equipment to the VIDEO/Y jack or connect the Separate Y/C video outputs to the VIDEO/Y and C jacks. (Refer to P15.)

### INPUT 4

#### HDB 15-PIN INPUT TERMINAL

Connect the computer output (Analog HDB 15-pin type) to this terminal. (Refer to P14.)

### INPUT 3

#### S-VIDEO INPUT JACK

Connect the S-VIDEO output from the video equipment to this jack. (Refer to P15.)

# CONNECTING THE PROJECTOR

## SERIAL PORT IN TERMINAL

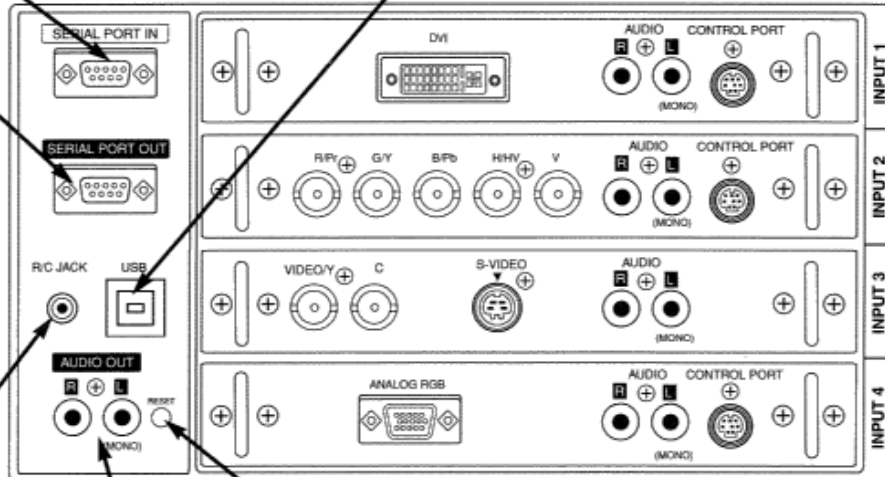
If you control the projector by computer, you must connect a cable (not provided) from your computer to this terminal.

## SERIAL PORT OUT TERMINAL

This terminal outputs the signal from SERIAL PORT IN. More than two projectors can be controlled with one computer by connecting SERIAL PORT IN. of another projector to this terminal.

## USB PORT

This port is used to control the projector with the computer. It is also used to control the computer with the Remote Control of this projector. (Refer to P40, 42.) Connect the USB port of the computer to this port.



## R/C JACK

When using the Wired / Wireless Remote Control Unit as the Wired Remote Control, Connect the Wired Remote Control Unit to this jack with the Remote Control Cable (supplied). (Refer to page 19.)

## RESET BUTTON

This projector uses a micro processor to control the unit. Occasionally, the micro processor may malfunction and need to be reset. This can be done by pressing the RESET button with a pen, which will shut down and restart the unit. Do not use the RESET function excessively.

## AUDIO OUTPUT JACKS

Connect an external audio amplifier to these jacks. (Refer to P14, 15.)

# CONNECTING THE PROJECTOR

## CONNECTING TO THE COMPUTER

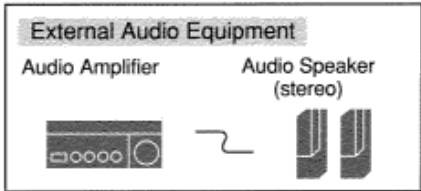
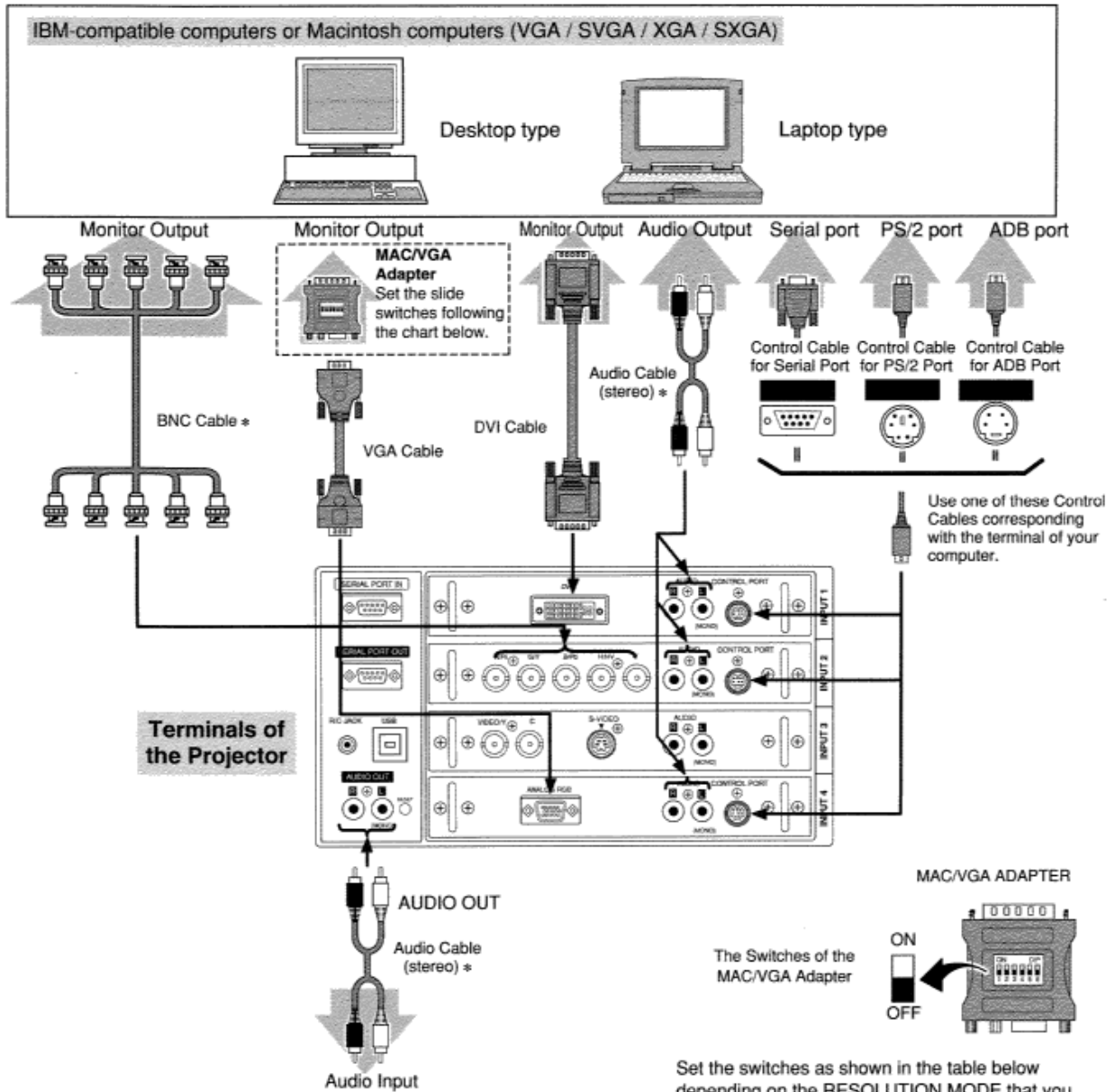
**Cables used for connection** (\* = Cables are not supplied with this projector.)

- VGA Cable (HDB 15 pin)
- Control Cable for PS/2 port, Serial port, or ADB port
- MAC/VGA Adapter
- DVI Cable
- BNC Cable (BNC x 5) \*
- Audio Cables (RCA x 2) \*



**NOTE :**

When connecting the cable, the power cords of both the projector and the external equipment should be disconnected from AC outlet. Turn the projector and peripheral equipment on before the computer is switched on.



Set the switches as shown in the table below depending on the RESOLUTION MODE that you want to use before your turn on the projector and computer

MODE	SWITCHES					
	1	2	3	4	5	6
13"MODE (640 x 480)	ON	ON	OFF	OFF	OFF	OFF
16"MODE (832 x 624)	OFF	ON	OFF	ON	OFF	OFF
19"MODE (1024 x 768)	OFF	ON	ON	OFF	OFF	OFF
21"MODE (1152 x 870)	ON	ON	ON	ON	OFF	OFF

CONNECTING THE PROJECTOR

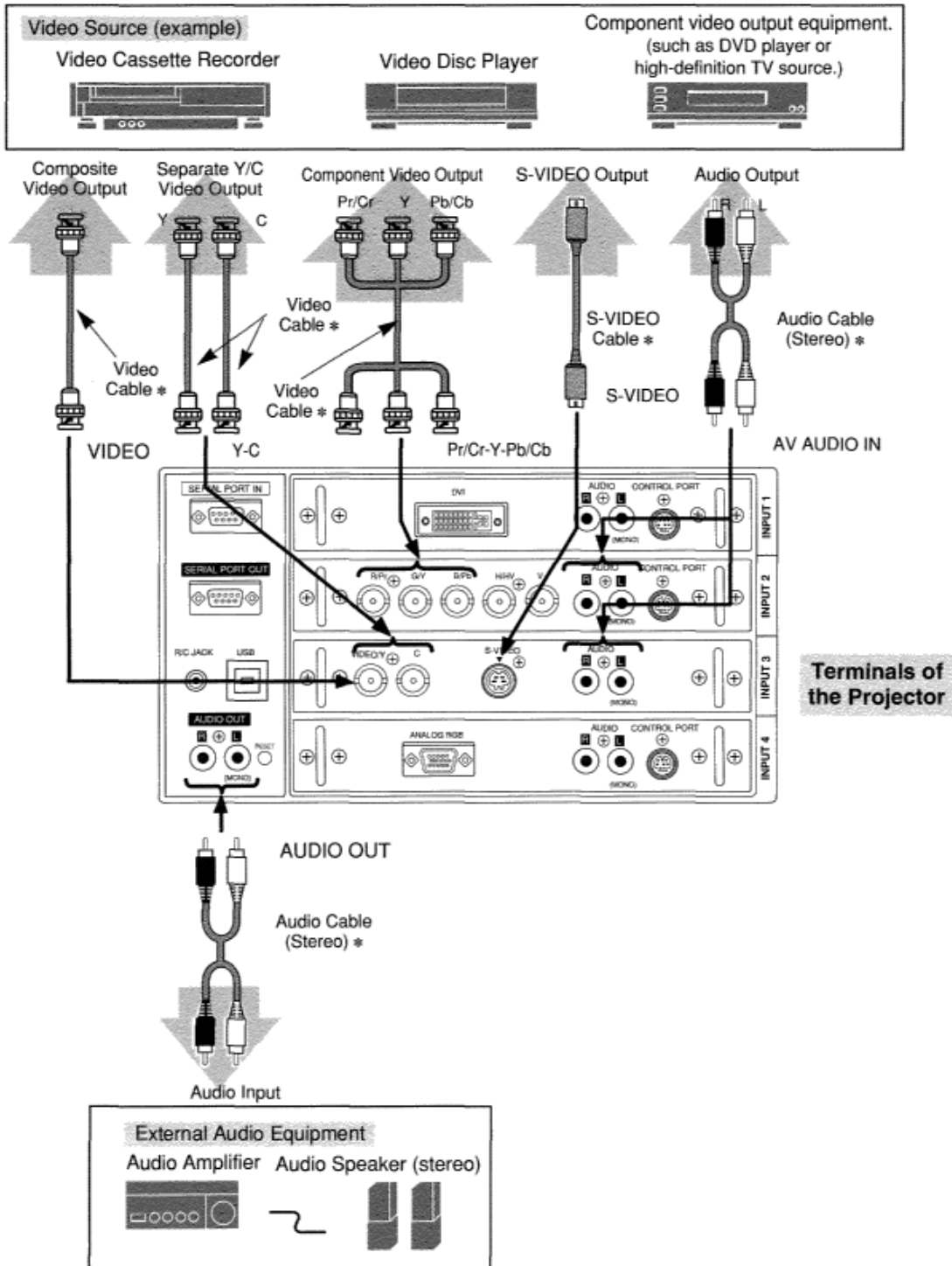
**CONNECTING TO THE VIDEO EQUIPMENT**

**Cables used for connection**

- Video Cable (BNC x 1, BNC x 2 or BNC x 3) \*
  - S-VIDEO Cable \*
  - Audio Cable (RCA x 2) \*
- (\* = Cables are not supplied with this projector.)

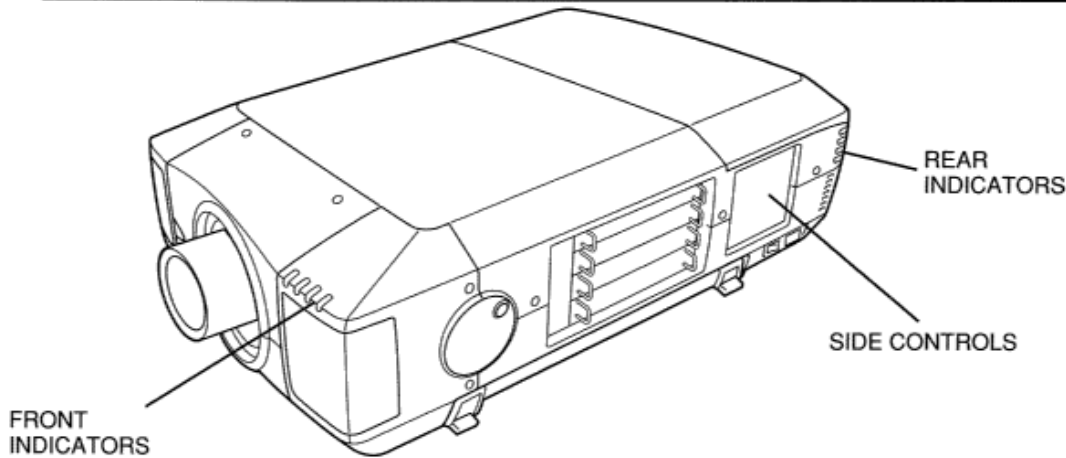


**NOTE :**  
When connecting the cable, the power cords of both the projector and the external equipment should be disconnected from AC outlet. Turn the projector and peripheral equipment on before the computer is switched on.



# BEFORE OPERATION

## SIDE CONTROLS AND INDICATORS



### SIDE CONTROLS

<p><b>ZOOM BUTTONS</b> Used to adjust zoom. (P24)</p>	<p><b>FOCUS BUTTONS</b> Used to adjust focus. (P24)</p>	<p><b>VOLUME BUTTONS</b> Used to adjust volume. (P26)</p>	<p><b>POWER ON-OFF BUTTON</b> Used to turn the projector on or off. (P23)</p>
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**MENU BUTTONS**  
Used to open or close the MENU operation. (P20, 21, 22)

**LENS SHIFT BUTTONS**  
Used to select LENS SHIFT function. (P24)

**SELECT BUTTON**  
Used to execute the item selected. It is also used to expand the image in DIGITAL ZOOM mode. (P34)

**INPUT 1/2 BUTTON**  
Used to select input source either INPUT 1 or INPUT 2. (P26)

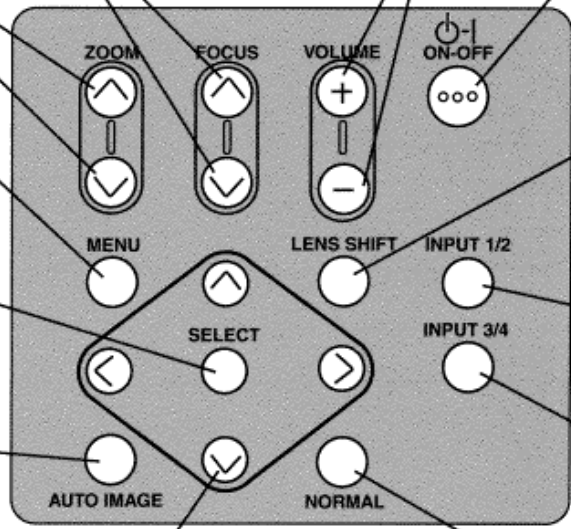
**AUTO IMAGE BUTTON**  
Used to operate AUTO IMAGE function. (P33)

**INPUT 3/4 BUTTON**  
Used to select input source either INPUT 3 or INPUT 4. (P26)

**POINT BUTTONS**  
Used to select an item or adjust the value in the MENU. It is also used to pan the image in DIGITAL ZOOM mode. (P34)

**NORMAL BUTTON**  
Used to reset to normal picture adjustment preset by factory. (P33, 38)

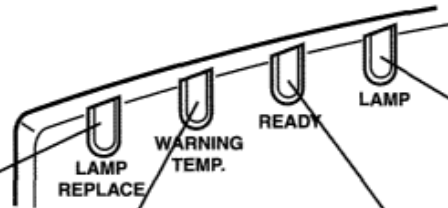




**BEFORE OPERATION**

**INDICATORS**

**FRONT INDICATORS**



**LAMP REPLACE INDICATOR**

This LAMP REPLACE indicator lights yellow when any of Projection Lamps is nearing its end, and flashes when any of them becomes out. Check which lamp needs to be replaced on Lamp Status Display. (P44)

**WARNING TEMP. INDICATOR**

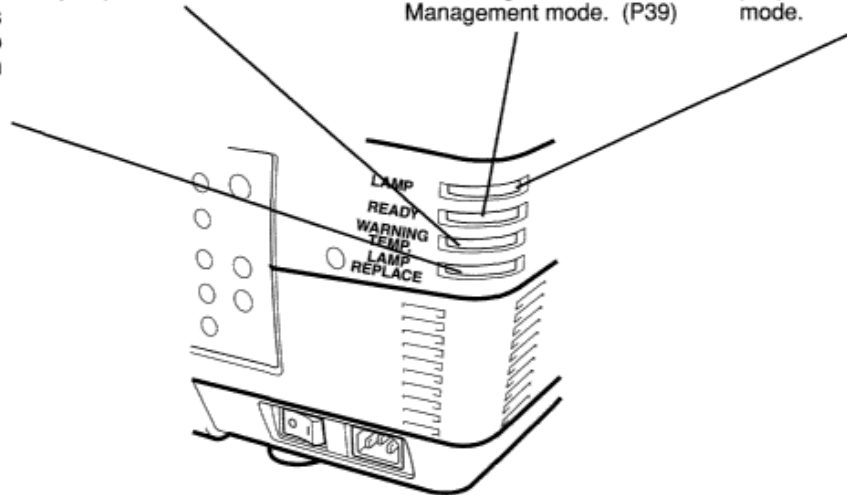
This indicator flashes red when internal projector temperature is too high. (P43)

**READY INDICATOR**

This indicator lights green when the projector is ready to be turned on. And it flashes green in Power Management mode. (P39)

**LAMP INDICATOR**

This indicator is dim when the projector is turned on. And bright when the projector is in stand-by mode.

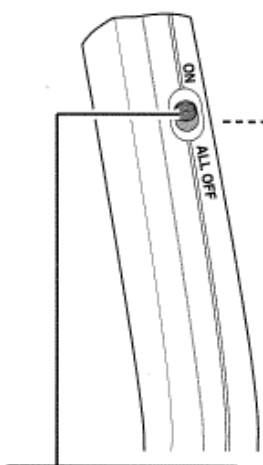


**REAR INDICATORS**

BEFORE OPERATION

OPERATION OF THE REMOTE CONTROL

LEFT SIDE



**ALL-OFF SWITCH**  
When using the Remote Control Unit, turn this switch to "ON." And turn it to "ALL OFF" when it is not used.

**INPUT 1/2 BUTTON**

Used to select input source either INPUT 1 or INPUT 2. (P26)

**POWER ON-OFF BUTTON**

Used to turn the projector on or off. (P23)

**INPUT 3/4 BUTTON**

Used to select input source either INPUT 3 or INPUT 4. (P26)

**MENU BUTTON**

Used to select MENU operation. (P20, 21, 22)

**POINT BUTTON**

Used to move the pointer on the MENU, to adjust the item, or to pan the image in DIGITAL ZOOM mode. (P34)  
It is also used as a PC mouse in Wireless Mouse Operation. (P42)  
\* When pressing the center of this button, it works as the SELECT button.

**SELECT BUTTON**

Used to execute the item selected or to expand the image in DIGITAL ZOOM mode. (P34)  
It is also used as a PC mouse in Wireless Mouse Operation. (P42)

**RIGHT CLICK BUTTON**

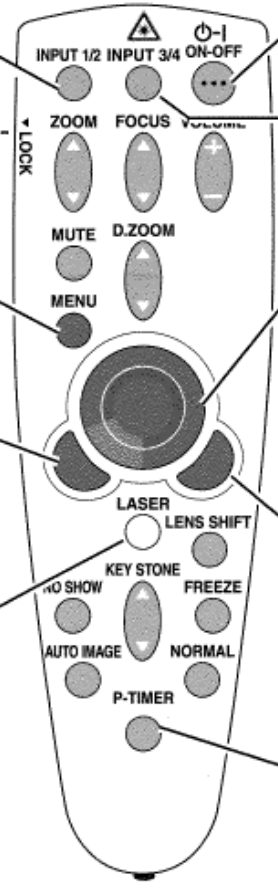
Used to compress the image in DIGITAL ZOOM mode. (P34)  
It is also used as a PC mouse in Wireless Mouse Operation. (P42)

**LASER BUTTON**

Used to operate the laser pointer function. The laser beam is emitted while pressing this button within 1 minute. When using the laser pointer for more than 1 minute, release the button and press it again.

**P-TIMER BUTTON**

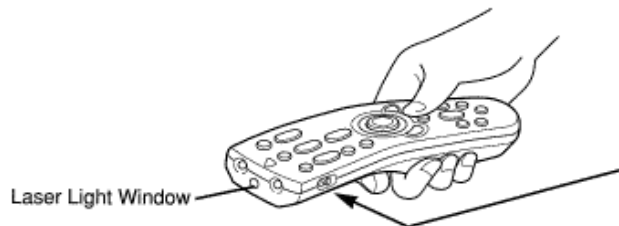
Used to operate P-TIMER function. (P25)



LASER POINTER FUNCTION

This remote control emits a laser beam as the Laser Pointer from the Laser Light Window. When the LASER button is pressed, the laser light goes on. And when the button is pressed more than 1 minute or the button is released, light goes off. Laser light is emitted with the RED light which tells the laser beam being emitted. The laser emitted is a class II laser; therefore, do not look into the Laser Light Window or shine the laser beam on yourself or other people. The three marks bellow are the caution labels for the laser beam.

**CAUTION :** Use of controls or adjustments or performance of procedures other than those specified herein may result hazardous radiation exposure.



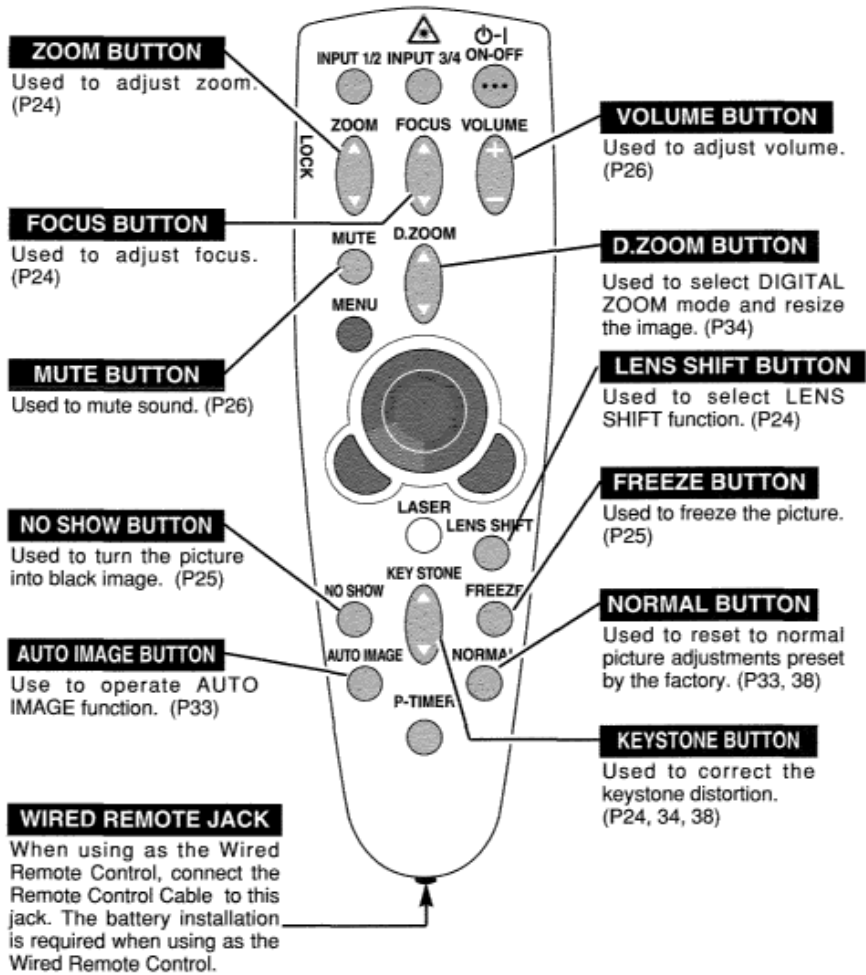
These caution labels are put on the remote control.

<p><b>CAUTION</b> LASER RADIATION - DO NOT STARE INTO BEAM</p> <p>MAX OUTPUT : 1mW WAVELENGTH : 650-670nm CLASS II LASER PRODUCT</p> <p>This product is complied with 21 CFR part 1040.10</p>	<p>LASER RADIATION DO NOT STARE INTO BEAM CLASS II LASER PRODUCT LASERSTRALUNG NICHT IN DEN STRAHL BLICKEN LASERKLASSE 2 レーザー放射 クラス2 レーザ製品 ビームをのぞき込まないこと ©2008S-1, Ver.1.1987 MAX OUTPUT (最大出力) : 1mW WAVELENGTH (波長) : 650-670nm</p>
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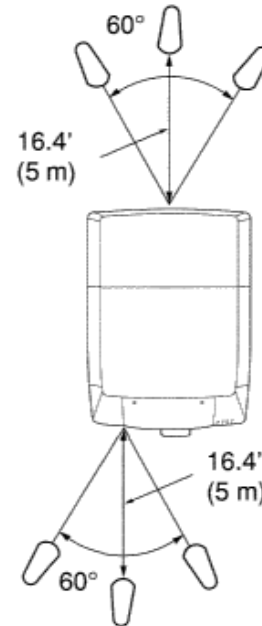
AVOID EXPOSURE-LASER RADIATION IS EMITTED FROM THIS APERTURE  
レーザー光の出口  
ビームをのぞき込まないこと

**BEFORE OPERATION**



**Operating Range**

Point the remote control toward the projector (Receiver Window) whenever pressing the buttons. Maximum operating range for the remote control is about 16.4' (5m) and 60° in front and rear of the projector.

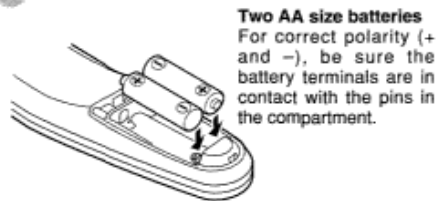


**REMOTE CONTROL BATTERIES INSTALLATION**

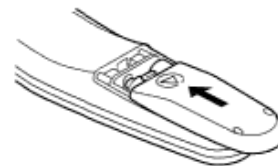
**1** Remove the battery compartment lid.



**2** Slide the batteries into the compartment.



**3** Replace the compartment lid.



To insure safe operation, please observe the following precautions :

- Use (2) AA, UM3 or R06 type alkaline batteries.
- Replace two batteries at the same time.
- Do not use a new battery with a used battery.
- Avoid contact with water or liquid.
- Do not expose the Remote Control Unit to moisture, or heat.
- Do not drop the remote control unit.
- If batteries have leaked on the remote control, carefully wipe the case clean and load new batteries.

**BEFORE OPERATION**

**OPERATING ON-SCREEN MENU**

**HOW TO OPERATE THE ON-SCREEN MENU**

You can control and adjust this projector through the ON-SCREEN MENU. Refer to the following pages to operate each adjustment in the ON-SCREEN MENU.

**1 MOVING THE POINTER**

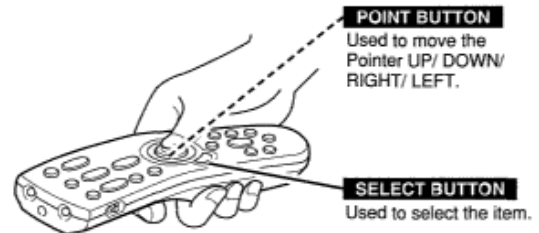
Move the pointer (see the NOTE below) by pressing POINT button(s) on the SIDE CONTROL or the REMOTE CONTROL.

**2 SELECT THE ITEM**

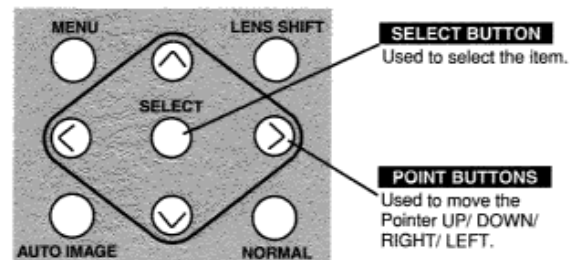
Select the item by pressing SELECT button.

**NOTE :** Pointer is the icon on the ON-SCREEN Menu to select the item. See the figures on the section "FLOW OF ON-SCREEN MENU" below.

**WIRELESS REMOTE CONTROL**



**SIDE CONTROL**



**FLOW OF ON-SCREEN MENU**

**Display ON-SCREEN MENU**

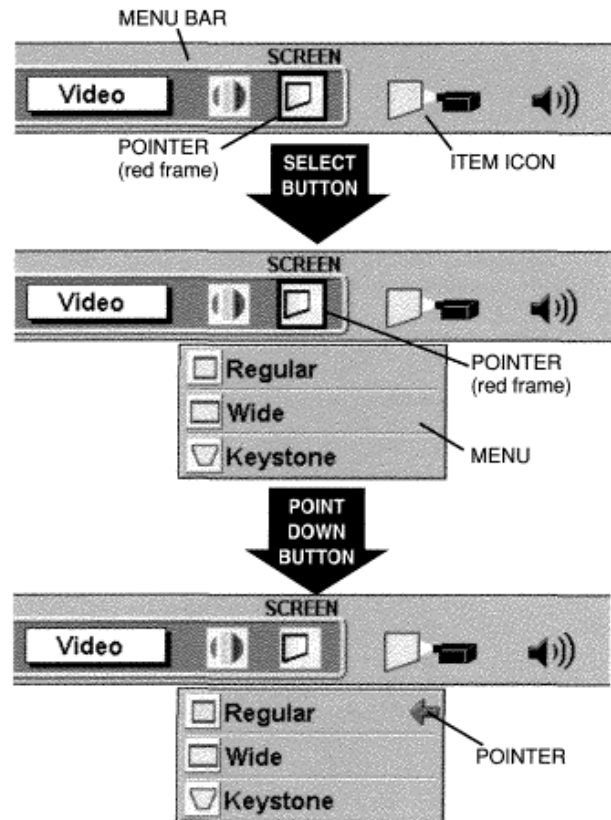
**1** Press MENU button to display the ON-SCREEN MENU (MENU BAR). The red frame is the POINTER.

**Select the Item**

- 2** Move the POINTER (red frame) to the ITEM ICON that you want to select by pressing POINT RIGHT / LEFT buttons.
- 3** Select the ITEM by pressing SELECT button. The dialog box of the ITEM appears.

**Control and adjust through ON-SCREEN MENU**

- 4** Move the POINTER downward by pressing POINT DOWN button. (The shape of the POINTER becomes an arrow.)
- 5** Move the POINTER to the ITEM that you want to adjust and adjust the ITEM by pressing SELECT button. Refer to the following pages for details of respective adjustments.

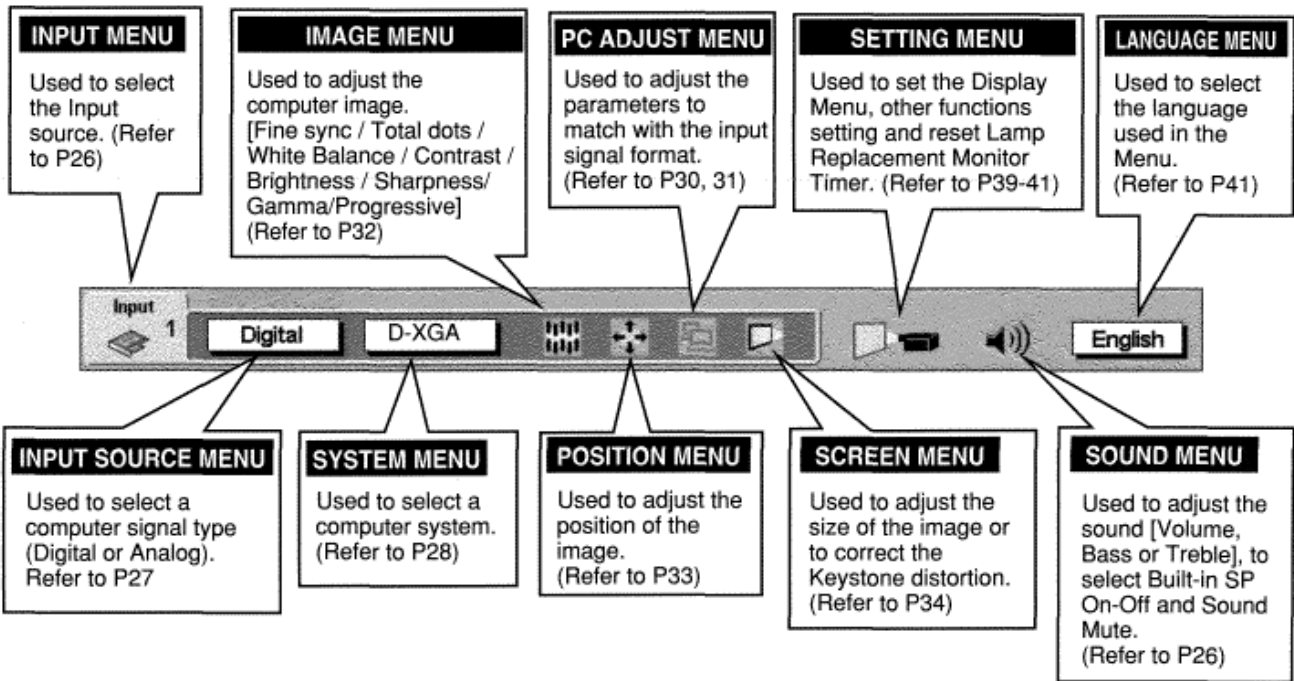


**BEFORE OPERATION**

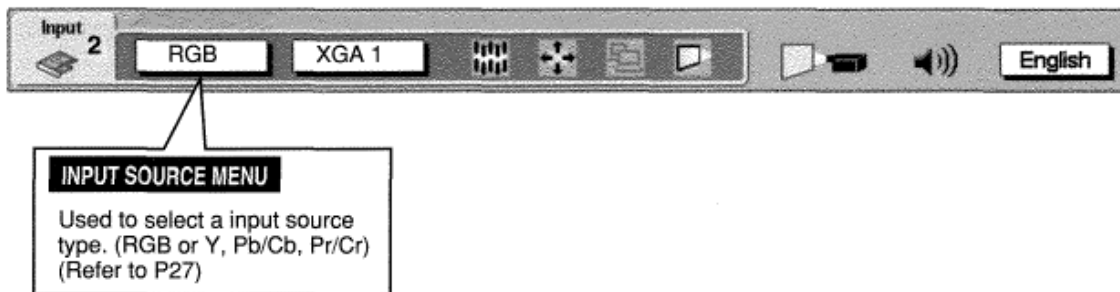
**MENU BAR**

**MENU BAR IN COMPUTER MODE**

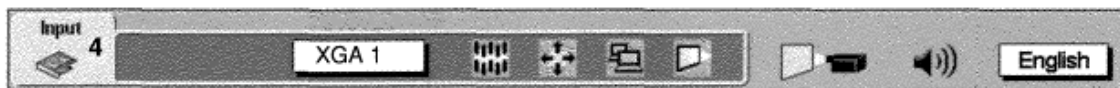
**WHEN SELECT THE DVI TERMINAL**



**WHEN SELECT THE 5 BNC TERMINAL AND RGB INPUT SELECT**



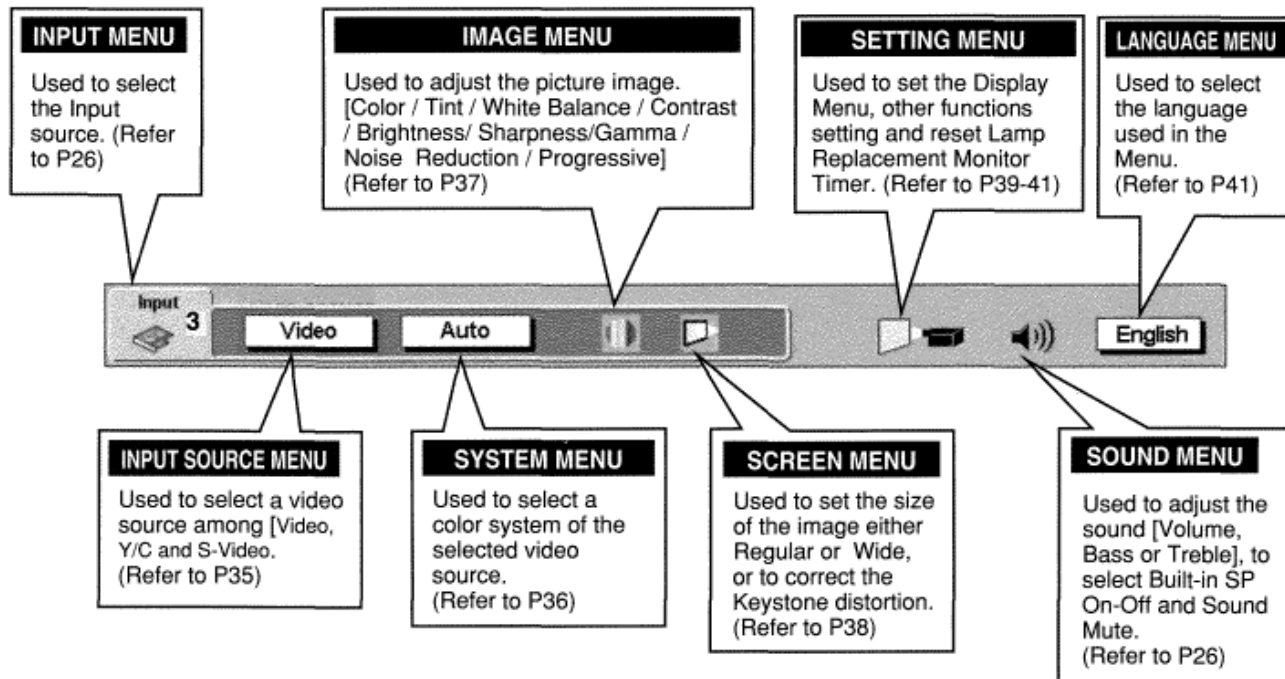
**WHEN SELECT THE HDB 15-PIN TERMINAL**



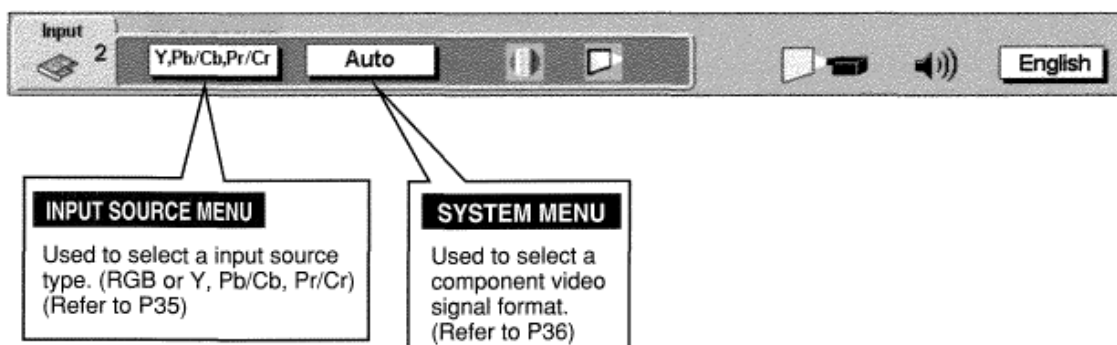
**BEFORE OPERATION**

**MENU BAR IN VIDEO MODE**

**WHEN SELECT THE AV TERMINAL**



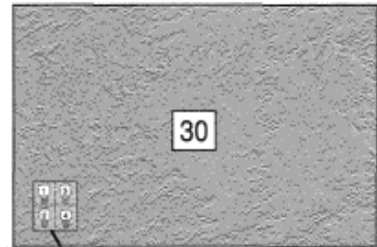
**WHEN SELECT THE 5 BNC TERMINAL AND Y, Pb/Cb, Pr/Cr INPUT SELECT**



# TURNING ON / OFF THE PROJECTOR

## TURNING ON THE PROJECTOR

1. Complete the peripheral connections (with Computer, VCR, etc.) before turning on the projector. (Refer to "CONNECTING TO THE PROJECTOR" on Pages 12-15 for connecting that equipment.)
- 2 Connect the projector's AC Power Cord into a wall outlet and turn the MAIN ON / OFF SWITCH to ON. The LAMP indicator lights RED, and the READY indicator lights GREEN .
- 3 Press the POWER ON-OFF button on the Remote Control Unit or on the Side Control to ON. The LAMP indicator dims, and the Cooling Fans start to operate. The Preparation Display appears on the screen and the count-down starts. The signal from the source appears after 30 seconds. Lamp status is also displayed on screen for 10 seconds. (Refer to "LAMP MANAGEMENT" on page 44.)

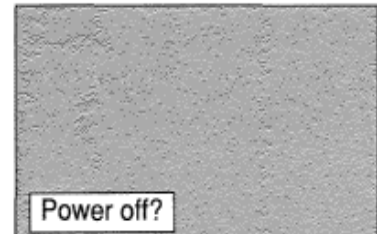


LAMP STATUS

The Preparation Display disappears after 30 seconds.

## TURNING OFF THE PROJECTOR

1. Press the power ON-OFF button on the Remote Control Unit or on the Side Control, and the message "Power off?" appears on the screen.
- 2 Press the power ON-OFF button again to turn off the projector. The LAMP indicator lights bright and the READY indicator turns off. After approximate 90 seconds, the READY indicator will light green again and the projector may be turned on by pressing the power ON-OFF button.
- 3 The cooling fans will operate for approximate 2 minutes after the projector is turned off. To power down completely, turn the MAIN ON/OFF SWITCH to OFF and disconnect the AC power cord.



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

When the Power Management function is ON, the Projector detects the signal interruption and turns the Projection Lamp off automatically. Refer to "Power Management" on page 39.

When the TEMPERATURE WARNING indicator flashes red, the projector is automatically turned off. Wait at least 5 minutes before turning the projector on again.

When the TEMPERATURE WARNING indicator continues to flash, follow procedures below:

1. Turn the MAIN ON / OFF SWITCH to OFF and disconnect the AC power cord from the AC outlet.
2. Check the air filters for dust accumulation.
3. Clean the Air Filter. (See "AIR FILTER CARE AND CLEANING" section on page 43.)
4. Turn the Projector on again.

If the TEMPERATURE WARNING indicator should still continue to flash, contact the sales dealer where you purchased this projector or service center.

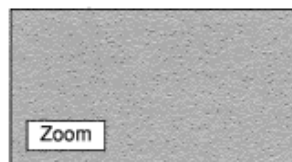
**NOTE: The Cooling Fan may work for cooling while the projector is turned off. When the Cooling Fan is working, TEMPERATURE WARNING INDICATOR flashes red.**

## BASIC OPERATION

## ADJUSTING THE IMAGE

## ZOOM ADJUSTMENT

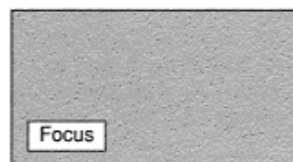
- 1 Press the ZOOM ▲/▼ button(s) on the Side Control or on the Remote Control Unit. The message "Zoom" is displayed.
- 2 Press the ZOOM ▲ button to make the image larger, and press the ZOOM ▼ button to make the image smaller.



The message disappears after 4 seconds.

## FOCUS ADJUSTMENT

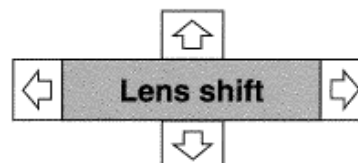
- 1 Press the FOCUS ▲/▼ button(s) on the Side Control or on the Remote Control Unit. The message "Focus" is displayed.
- 2 Adjust the focus of the image by pressing the FOCUS ▲/▼ button(s).



The message disappears after 4 seconds.

## LENS SHIFT ADJUSTMENT

- 1 Press the LENS SHIFT button on the Side Control or on the Remote Control Unit. The message "Lens shift" is displayed.
- 2 Press the POINT UP button to move the image up, press the POINT DOWN button to move the image down, press the POINT LEFT to move the image left and press the POINT RIGHT to move the image right.

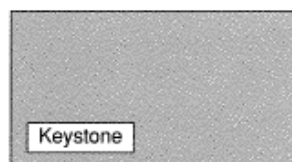


The message disappears after 4 seconds.

## KEYSTONE ADJUSTMENT

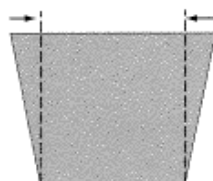
If the picture has keystone distortion, correct image with KEYSTONE adjustment.

- 1 Press the KEYSTONE ▲/▼ button on the Remote Control Unit or select the Keystone on the SCREEN menu. (Refer to page 34, 38.) The message "Keystone" is displayed.
- 2 Correct the Keystone distortion by pressing the KEYSTONE ▲/▼ button or the POINT UP/DOWN button(s). Press the KEYSTONE ▲ button or the POINT UP button to reduce the upper part of the image, and press the KEYSTONE ▼ button or the POINT DOWN button to reduce the lower part.

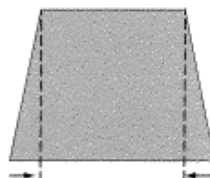


The message disappears after 4 seconds.

Reduce the upper width with the KEY STONE ▲ button or the POINT UP button.



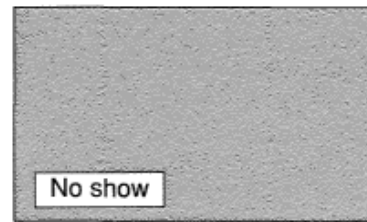
Reduce the lower width with the KEY STONE ▼ button or the POINT DOWN button.





### NO SHOW FUNCTION

Press the NO SHOW button on the Remote Control Unit to black out the image. This function is cancelled when the NO SHOW button is pressed again or any other function button is pressed.



The message disappears after 4 seconds.

### PICTURE FREEZE FUNCTION

Press the FREEZE button on the Remote Control Unit to freeze the picture on-screen. This function is cancelled when the FREEZE button is pressed again or any other function button is pressed.

### P-TIMER FUNCTION

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

To stop the P-TIMER, press the P-TIMER button. And then, press the P-TIMER button again to cancel the P-TIMER function.



## SOUND ADJUSTMENT

### DIRECT OPERATION

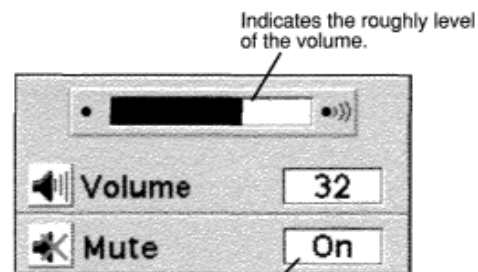
#### Sound Volume Adjustment

Press the VOLUME (+/-) button(s) on the Side Control or on the Remote Control Unit to adjust the volume. The Volume dialog box appears on the screen for a few seconds.

(+) button to increase the volume, and (-) button decreasing.

#### Sound Mute Setting

Press the MUTE button on the Remote Control Unit to cut off the sound. To restore the sound to its previous level, press the MUTE button again or press Volume (+/-) button(s).



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

The display disappears after 4 seconds.

## MENU OPERATION

- 1 Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select SOUND and press the SELECT button. Another dialog box SOUND ADJUST Menu will appear.
- 2 Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to the item that you want to select by pressing the POINT UP/DOWN buttons.

### Volume

Move the arrow to ▲ or ▼ of "Volume" by pressing the POINT UP/DOWN buttons. To increase the volume, point the arrow to ▲ and then press the SELECT button. To decrease the volume point the arrow to ▼ and then press the SELECT button.

### Treble

To adjust the Treble sound, point the arrow to ▲ or ▼ of "Treble" and then press the SELECT button.

### Bass

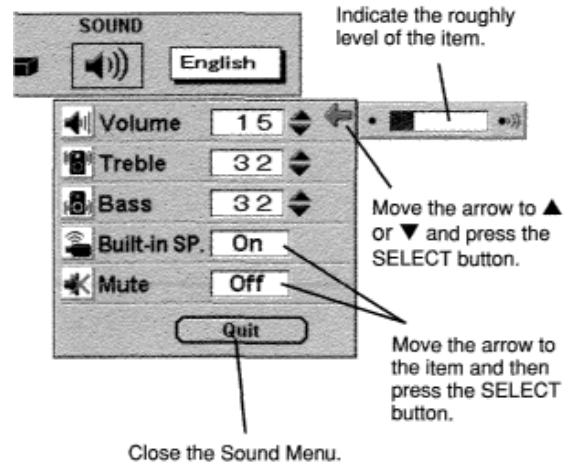
To adjust the Bass sound, point the arrow to ▲ or ▼ of "Bass" and then press the SELECT button.

### Built-in SP.

To disconnect the built-in speaker, point the arrow to Built-in SP. and then press the SELECT button. The Built-in SP. display is changed Off from On and Internal speaker is disconnected.

### Mute

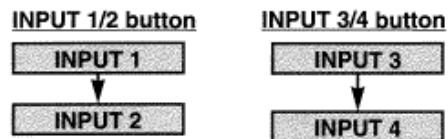
To cut off the audio sound, point the arrow to "Mute" and then press the SELECT button. The Mute display is changed On from Off and the sound is cut off. To restore the sound to its previous volume level, set the Mute to Off.



## SELECTING INPUT SOURCE

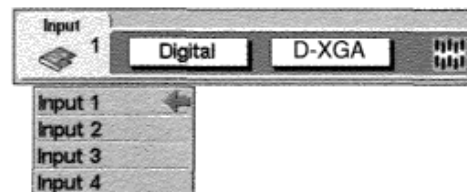
### DIRECT OPERATION

Select INPUT source by pressing the INPUT 1/2 and INPUT 3/4 button on the side Control or on the Remote Control Unit.



### MENU OPERATION

- 1 Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select Input and press the SELECT button. Another dialog box INPUT SELECT Menu will appear.
- 2 Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to the INPUT source that you want to select, and then press the SELECT button.

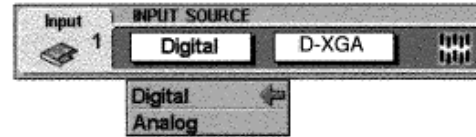


## SELECTING COMPUTER SYSTEM

### WHEN SELECT THE INPUT 1 (DVI SLOT )

When connecting to the computer, select a computer signal type (Digital or Analog) in INPUT SOURCE Menu.

- 1 Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select INPUT SOURCE and press the SELECT button. Another dialog box INPUT SOURCE Menu will appear.

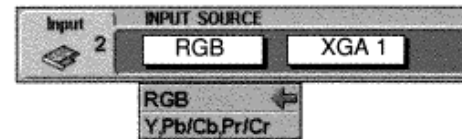


- 2 Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to the INPUT source that you want to select, and then press the SELECT button.

### WHEN SELECT THE INPUT 2 (5 BNC SLOT )

When connecting to those equipment, select the type of Input source in INPUT SOURCE Menu.

- 1 Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select INPUT SOURCE and press the SELECT button. Another dialog box INPUT SOURCE Menu will appear.



- 2 Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to "RGB", and then press the SELECT button.

### RGB

When connect the computer output Type (Red, Green, Blue, Horiz. Sync and Vert. Sync.)) from the computer to the A/Pr, G/Y, B/Pb, H/HV and V jacks.

## AUTOMATIC MULTI-SCAN SYSTEM

This projector automatically tunes to most different types of computers based on VGA, SVGA, XGA or SXGA (refer to "COMPATIBLE COMPUTER SPECIFICATION" on page 29). When selecting Computer, this projector automatically tunes to the incoming signal and projects the proper image without any special settings. (Setting of the Computer System may be required when connecting some computers.)

Note : The projector may display one of the following messages.

**Go to PC adj.** The projector cannot discriminate or detect the input signal from the computer. Adjust and set the computer system manually.

**No signal** There is no signal input from the computer. Make sure the connection of the computer and the projector is set correctly.

### D-VGA, D-SVGA, D-XGA, D-SXGA 1, D-SXGA 2 or D-SXGA 3

The input signal is digital from the DVI terminal.

### CURRENT MODE DISPLAY

The Current Mode display appears to show the information of the computer being selected.

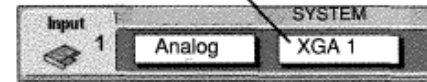
## SELECT COMPUTER SYSTEM MANUALLY

To set the Computer system manually, select the mode on the ON-SCREEN MENU.

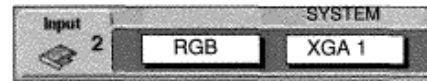
- 1 Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select SYSTEM and press the SELECT button. Another dialog box COMPUTER SYSTEM Menu will appear.
- 2 Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to the system that you want to set, and then press SELECT button.

### SYSTEM BOX

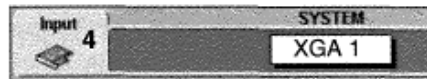
Display the SYSTEM being selected.



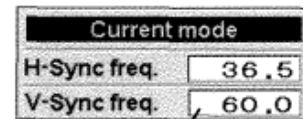
When select the DVI terminal.



When select the 5 BNC terminal.



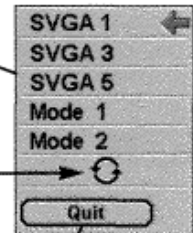
When select the HDB 15-PIN terminal.



Providing the information of the computer detected by the projector.

The systems on this dialog box can be selected.

When this mark is displayed as black, more computer system modes will be available. Move the arrow to this mark and then press the SELECT button, and the other modes will be displayed.



Close the SYSTEM Menu.

**COMPATIBLE COMPUTER SPECIFICATIONS**

Basically this projector can accept the signal from all computers with the V, H-Frequency mentioned below and less than 202 MHz of Dot Clock.

ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (kHz)	V-Freq. (Hz)	ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (kHz)	V-Freq. (Hz)
VGA 1	640 x 480	31.47	59.88	XGA 10	1024 x 768	62.04	77.07
VGA 2	720 x 400	31.47	70.09	XGA 11	1024 x 768	61.00	75.70
VGA 3	640 x 400	31.47	70.09	XGA 12	1024 x 768 (Interlace)	35.522	43.48
VGA 4	640 x 480	37.86	74.38	XGA 13	1024 x 768	46.90	58.20
VGA 5	640 x 480	37.86	72.81	XGA 14	1024 x 768	47.00	58.30
VGA 6	640 x 480	37.50	75.00	XGA15	1024 x 768	58.03	72.0
VGA 7	640 x 480	43.269	85.00	MAC 19	1024 x 768	60.24	75.08
MAC LC13	640 x 480	34.97	66.60	MAC 21	1152 x 870	68.68	75.06
MAC 13	640 x 480	35.00	66.67	SXGA 1	1152 x 864	64.20	70.40
RGB	(Interlace)	15.734	30	SXGA 2	1280 x 1024	62.50	58.60
RGB	(Interlace)	15.625	25	SXGA 3	1280 x 1024	63.90	60.00
480P	(Progressive)	31.47	60	SXGA 4	1280 x 1024	63.34	59.98
575P	(Progressive)	31.25	50	SXGA 5	1280 x 1024	63.74	60.01
SVGA 1	800 x 600	35.156	56.25	SXGA 6	1280 x 1024	71.69	67.19
SVGA 2	800 x 600	37.88	60.32	SXGA 7	1280 x 1024	81.13	76.107
SVGA 3	800 x 600	46.875	75.00	SXGA 8	1280 x 1024	63.98	60.02
SVGA 4	800 x 600	53.674	85.06	SXGA 9	1280 x 1024	79.976	75.025
SVGA 5	800 x 600	48.08	72.19	SXGA 10	1280 x 960	60.00	60.00
SVGA 6	800 x 600	37.90	61.03	SXGA 11	1152 x 900	61.20	65.20
SVGA 7	800 x 600	34.50	55.38	SXGA 12	1152 x 900	71.40	75.60
SVGA 8	800 x 600	38.00	60.51	SXGA 13	1280 x 1024 (Interlace)	50.00	43.00
SVGA 9	800 x 600	38.60	60.31	SXGA 14	1280 x 1024 (Interlace)	50.00	47.00
SVGA 10	800 x 600	32.70	51.09	SXGA 15	1280 x 1024	63.37	60.01
SVGA 11	800 x 600	38.00	60.51	SXGA 16	1280 x 1024	76.97	72.00
MAC 16	832 x 624	49.72	74.55	SXGA 17	1152 x 900	61.85	66.00
XGA 1	1024 x 768	48.36	60.00	SXGA 18	1280 x 1024 (Interlace)	46.43	43.35
XGA 2	1024 x 768	68.677	84.997	SXGA 19	1280 x 1024	63.79	60.18
XGA 3	1024 x 768	60.023	75.03	SXGA 20	1280 x 1024	91.146	85.024
XGA 4	1024 x 768	56.47	70.07	MAC	1280 x 960	75.00	75.08
XGA 5	1024 x 768	60.31	74.92	MAC	1280 x 1024	80.00	75.08
XGA 6	1024 x 768	48.50	60.02	HDTV720p	(Progressive)	45.00	60.00
XGA 7	1024 x 768	44.00	54.58	HDTV1035i	(Interlace)	33.75	30.00
XGA 8	1024 x 768	63.48	79.35	HDTV1080i	(Interlace)	33.75	30.00
XGA 9	1024 x 768 (Interlace)	36.00	43.59	HDTV1080i	(Interlace)	31.25	25.00

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

ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (kHz)	V-Freq. (Hz)	ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (kHz)	V-Freq. (Hz)
D-VGA	640 x 480	31.469	59.940	D-SXGA 1	1280 x 1024	63.981	60.020
D-SVGA	800 x 600	37.879	60.317	D-SXGA 2	1280 x 1024	60.276	58.069
D-XGA	1024 x 768	48.363	60.004	D-SXGA 3	1280 x 1024	31.65	29.8

**NOTE :** Specifications are subject to change without notice.

## PC ADJUSTMENT

This Projector can automatically tune to the display signals from most personal computers currently distributed. However, some computers employ special signal formats which are different from the standard ones and may not be tuned by the Multi-Scan system of this projector. If this happens, the projector cannot reproduce a proper image and the image may be recognized as a flickering picture, a non-synchronized picture, a non-centered picture or a skewed picture.

This projector has a PC ADJUSTMENT function to enable you to precisely adjust several parameters to match with those special signal formats. This projector has 8 independent memory areas to memorize those parameters manually adjusted. This enables you to recall the setting for a specific computer whenever you use it.

**NOTE:** This PC ADJUSTMENT function cannot be operated when the input signal is digital from the DVI terminal or "RGB" is selected on the SYSTEM MENU (P28 and 29).

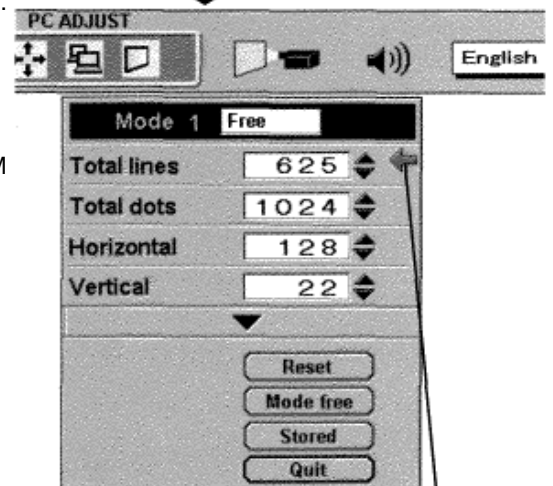
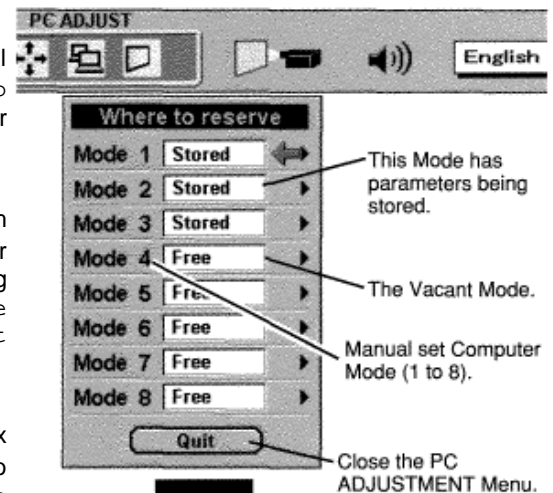
**1** Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT RIGHT/LEFT button to select PC ADJUST and press the SELECT button. Another dialog box "Where to reserve" Menu will appear.

**2** In this dialog box, you can store the parameter into the area from "Mode 1" to "Mode 8." When memorizing the new computer parameter, select the Mode with the message "Free" by pressing the POINT UP/DOWN button and the SELECT button. To change the parameters of the Mode previously set, select the Mode with "Stored."

**3** When the Mode is selected, Parameter adjustment dialog box appears. Move the arrow to the item that you want to change by pressing the POINT UP/DOWN button, and adjust each item by pressing the SELECT button to match with your computer.

**4** Move the arrow to "Stored" and press the SELECT button. The parameter is memorized in the selected Mode.

**5** To activate the Mode manually adjusted in this PC ADJUSTMENT Menu, select the Mode at the SYSTEM SELECT Menu. (Refer to page 28.)



Move the arrow to ▲ or ▼ and press SELECT button.

**Total lines**

The number of the total vertical lines. Adjust the number to match the image of your personal computer.

**Total dots**

The number of the total dots in one horizontal period. Adjust the number to match the image of your computer.

**Horizontal / Vertical**

Adjustment of the horizontal or vertical picture position. When the image is not centered on the screen, adjust each of those items.

**Clamp**

Adjustment of the clamp level. When the image has a dark bar(s), try this adjustment.

**Fine sync**

Adjust the picture as necessary to eliminate flicker from the display.

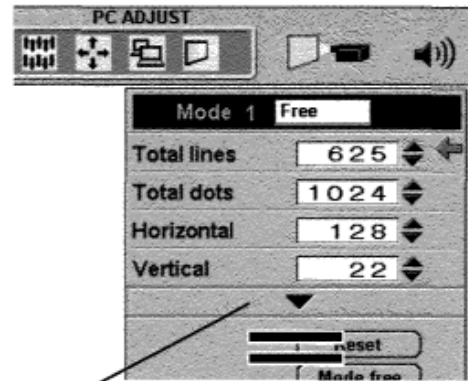
**Display area**

Adjustment of the area displayed with this projector. Select the resolution at the Display area dialog box, or adjust the number at the column of "H" or "V" to match the resolution of the image.

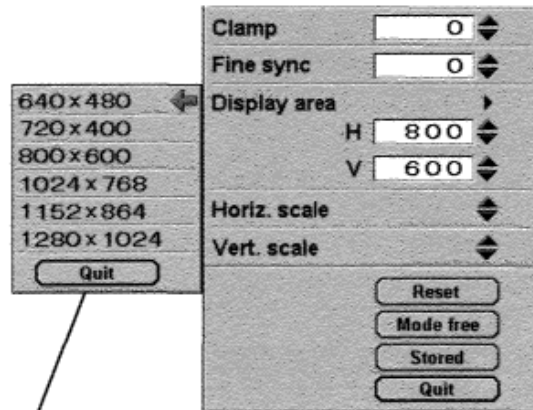
**Horizontal Scale / Vertical Scale**

Adjustment of the horizontal height or vertical width of the image.

NOTE: The Display area, the Horiz. scale and the Vert. scale cannot be adjusted when "480p", "S7Sp", "HDTV720p", "HDTV1035i" or "HDTV1080i" is selected on the SYSTEM MENU (P28 and 29).



Press the SELECT button at this column to adjust "Clamp", "Fine sync," "Display area", "Horiz. scale" or "Vert. scale".



Point the arrow at the Display area and press the SELECT button. The Display area dialog box appears.

Each of the keys operates as follow.

- Reset** .... Recalls the parameter data that was previously adjusted.
- Mode free** .... Clears the parameter data previously set.
- Stored** .... Stores the parameters in the memory.
- Quit** .... Closes the PC ADJUST Menu.

## PICTURE IMAGE ADJUSTMENTS

- 1 Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select IMAGE and press the SELECT button. Another dialog box PICTURE IMAGE ADJUSTMENT Menu will appear.
- 2 Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to the function that you want to select and then press SELECT button.

### Standard

Normal picture level preset on this projector. This picture level can be set by pressing the NORMAL button.

### Real

Picture level adjusted for the picture with fine tone.

### Custom

Picture level adjusted manually in the custom setting dialog box.

When selecting "▼" the custom setting dialog box will appear. Move the arrow to the item that you want to change by pressing the POINT UP/DOWN button, and adjust each value by pressing the SELECT button to match with the image.

### Fine sync

Adjust the picture as necessary to eliminate flicker from the display. (From 0 to 255.)

### Total dots

The number of the total dots in one horizontal period. Adjust the number to match your PC image.

### White balance (Red / Green / Blue)

Move the arrow to the color that you want to adjust. Point to ▼ to lighten the color and select ▲ to deepen the color. (From 0 to 63.)

### Contrast

Point to ▼ to decrease contrast, and select ▲ to increase contrast. (From 0 to 63.)

### Brightness

Point to ▼ to adjust the image darker, and select ▲ to adjust brighter. (From 0 to 63.)

### Sharpness

Point to ▼ to soften the image, and select ▲ to sharpen the image. (From 0 to 15.)

### Gamma

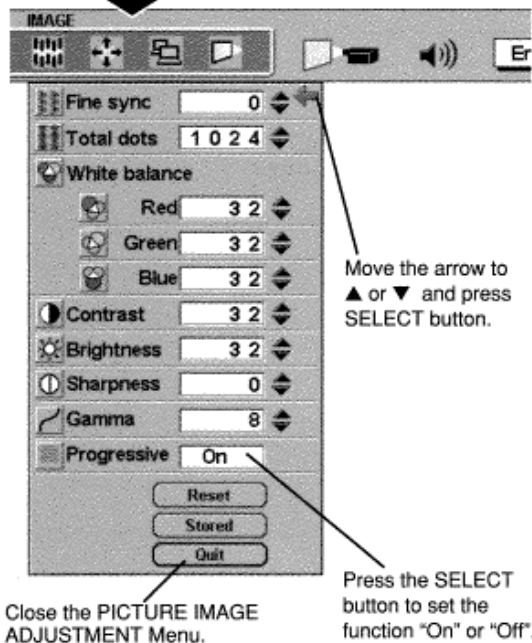
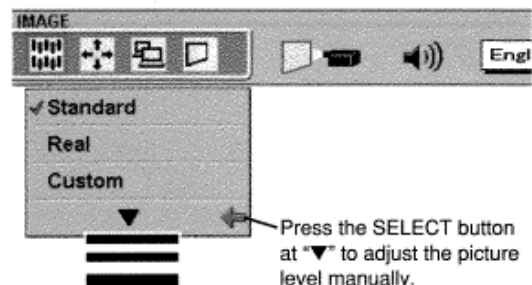
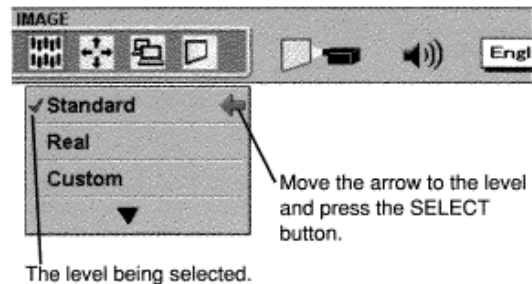
Point to ▼ or ▲ to obtain better balance of contrast. (From 0 to 16.)

### Progressive

Set "On" to provide progressive scan mode.

Each of the keys operates as follow.

- Reset** .... Recalls the data previously adjusted.
- Stored** .... Stores the adjusted data in the memory.
- Quit** .... Closes the PICTURE IMAGE ADJUSTMENT Menu.

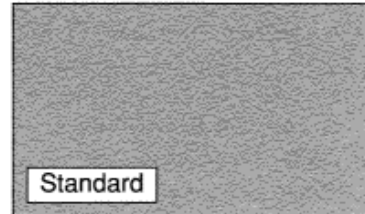


**NOTE:** The Fine sync and the Total dots cannot be operated when the input signal is digital from DVI terminal or "RGB" is selected on the SYSTEM MENU (P28 and 29). The Progressive cannot be selected when the input signal is digital from DVI terminal or "480p", "S7Sp" or "HDTV720p" is selected on the SYSTEM MENU (P28 and



## NORMAL FUNCTION

The normal picture level is preset on this projector at the factory and can be restored anytime you press the NORMAL button (located on the Side Control or on the Remote Control Unit). The "Standard" display will be displayed on the screen for a few seconds.



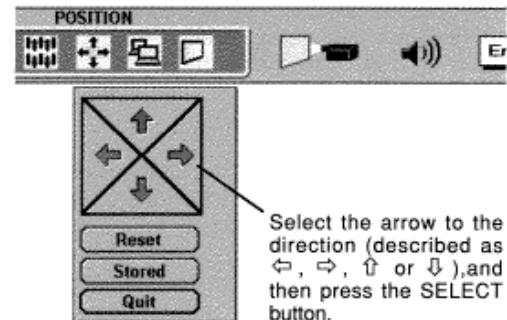
## PICTURE POSITION ADJUSTMENT

The position of the image can be adjusted vertically and horizontally through PICTURE POSITION ADJUSTMENT.

- 1 Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select POSITION and press the SELECT button. The PICTURE POSITION dialog box will appear.
- 2 Select the arrow to the direction (described as  $\leftarrow$ ,  $\rightarrow$ ,  $\uparrow$  or  $\downarrow$ ) that you want to adjust by pressing the POINT UP/DOWN/LEFT/RIGHT buttons, and then press the SELECT button.

Each of the keys operates as follow.

- Reset** ..... Recalls the setting data previously set.
- Stored** ..... Stores the setting data in the memory.
- Quit** ..... Closes the PICTURE POSITION Menu.



## AUTO IMAGE FUNCTION

The AUTO IMAGE function cannot be operated when the input signal is digital from DVI terminal or "RGB", "480p", "575p", "HDTV720p", "HDTV1035i" or "HDTV1080i" is selected on the SYSTEM SELECT menu.

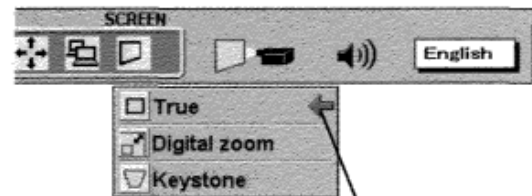
Press the AUTO IMAGE button on the Side Control or on the Remote Control Unit to automatically adjust Fine sync., Total dots and Screen position for most computers. It will take about 10 seconds.

**NOTE:** Some computers may not be fully adjusted with the "Auto Image Function". In that case, use the "Picture Image" and/or "Picture Position" adjustments (P32, 33) to make fine-adjust then after the "Auto Image Function" is executed.

## PICTURE SCREEN ADJUSTMENT

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

- 1 Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select SCREEN and press the SELECT button. Another dialog box PICTURE SCREEN Menu will appear.
- 2 Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to the function that you want to select and then press SELECT button.



Move the arrow to the function and press the SELECT button.

### True

To make the image into its original size, select True in the dialog box. When the original image size is larger than the screen size (1024 x 768), the image can be panned by pressing the POINT UP/DOWN/LEFT/RIGHT buttons.

### Keystone

When the image is distorted vertically, select Keystone in the dialog box. The ON-SCREEN menu and SCREEN ADJUST menu disappears and the message "Keystone" is displayed. Correct the Keystone distortion by pressing the KEYSTONE ▲/▼ button or the POINT UP/DOWN button(s). Refer to KEYSTONE ADJUSTMENT on page 24.

### Digital Zoom

To adjust the image size or pan the image, select Digital zoom in the dialog box. The ON-SCREEN menu and SCREEN ADJUST menu disappears, and the magnifying glass icon and the message "D. Zoom" is displayed.

This projector also enters Digital Zoom mode by pressing the D.ZOOM ▲/▼ button on the Remote Control Unit.

Refer to the following for operation.

#### Expand function

To expand the image size, press the D.ZOOM ▲ button or the SELECT button. The image is magnified by degrees.

#### Compress function

To compress the image size, press the D.ZOOM ▼ button or the RIGHT CLICK button. The size of image is reduced by degrees.

#### Panning function

To pan the image, press the POINT UP/DOWN/LEFT/RIGHT buttons. Panning function can work only when the image is larger than the screen size.

To cancel Digital Zoom mode, press any button except D.ZOOM ▲/▼, SELECT, RIGHT CLICK, or POINT button. To adjust the image to 1024 x 768, press NORMAL button.

### NOTE

- The True and the Digital Zoom cannot be operated when "RGB", "480p", "575p", "HDTV720p", "HDTV1035i" or "HDTV1080i" is selected on the SYSTEM MENU (P28 and 29).
- This projector cannot display any resolution higher than 1280 X 1024. If your computer's screen resolution is higher than 1280 X 1024, reset the resolution to the lower before connection the projector.
- The image data in other than XGA (1024 X 768) is modified to fit the screen size in the initial mode.
- The normal "Panning Operation" may not function properly if the computer system prepared with the "PC Adjust" is used.

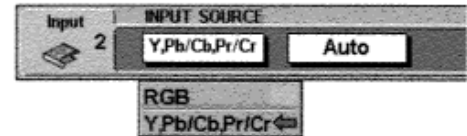
# VIDEO MODE

## SELECTING VIDEO SOURCE

### WHEN SELECT THE INPUT 2 (5 BNC TERMINAL )

When connecting to those equipment, select the type of Input source in INPUT SOURCE Menu.

- 1 Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select INPUT SOURCE and press the SELECT button. Another dialog box INPUT SOURCE Menu will appear.
- 2 Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to "Y, Pb/Cb, Pr/Cr" and then press the SELECT button.



### Video

When connect the composite video output from the video equipment to the VIDEO/Y jack, select "Video" in VIDEO SOURCE Menu.

### Y/C

When connect the separate Y/C video output from the video equipment to the VIDEO/Y and C jacks, select "Y/C" in VIDEO SOURCE Menu.

### S-Video

When connect the S-Video output from the video equipment to the S-Video jack, select "S-Video" in VIDEO SOURCE Menu.

## SELECTING COLOR SYSTEM

**1** Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select SYSTEM and press the SELECT button. Another dialog box VIDEO SYSTEM Menu will appear.

**2** Press the POINT DOWN button and a red-arrow icon will

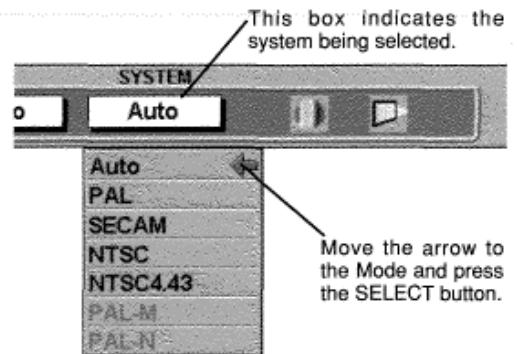
### WHEN SELECT THE INPUT 3 (AV TERMINAL )

#### Auto

The projector automatically detects the incoming Video system, and adjusts itself to optimize its performance. When the 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 the proper video image, it is necessary to select a specific broadcast signal format among PAL, SECAM, NTSC, NTSC 4.43, PAL-M, and PAL-N.



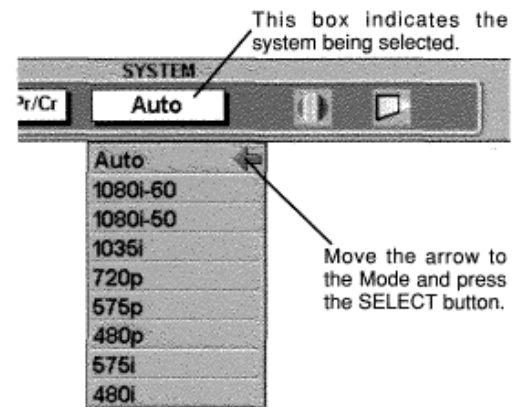
### WHEN SELECT THE INPUT 2 (5 BNC TERMINAL )

#### Auto

The projector automatically detects the incoming Video signal, and adjusts itself to optimize its performance.

#### COMPONENT VIDEO SIGNAL FORMAT

If the projector cannot reproduce the proper video image, it is necessary to select a specific component video signal format among 480i, 575i, 480p, 575p, 720p, 1035i, 1080i-50 and 1080i-60.



## PICTURE IMAGE ADJUSTMENT

- 1 Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select IMAGE and press the SELECT button. Another dialog box PICTURE IMAGE ADJUSTMENT Menu will appear.
- 2 Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to the function that you want to select and then press SELECT button.

### Standard

Normal picture level preset on this projector. This picture level can be set by pressing the NORMAL button.

### Cinema

Picture level adjusted for the picture with fine tone.

### Custom

Picture level adjusted manually in the custom setting dialog box.

When selecting "▼" the custom setting dialog box will appear. Move the arrow to the item that you want to change by pressing the POINT UP/DOWN button, and adjust each value or change the setting On or Off by pressing the SELECT button to match with the image.

### Color

Point to ▼ button to lighten the image, and select ▲ to deepen the image. (From 0 to 63.)

### Tint

Point to ▼ button to increase purple, and select ▲ to increase green. (From 0 to 63.)

### White balance (Red / Green / Blue)

Move the arrow to the color that you want to adjust. Point to ▼ to lighten the color and select ▲ to deepen the color. (From 0 to 63.)

### Contrast

Point to ▼ button to decrease contrast, and select ▲ to increase contrast. (From 0 to 63.)

### Brightness

Point to ▼ button to darken the image, and select ▲ to brighten the image. (From 0 to 63.)

### Sharpness

Point to ▼ button to soften the image, and select ▲ to sharpen the image. (From 0 to 31.)

### Gamma

Point to ▼ or ▲ to obtain better balance of contrast. (From 0 to 16.)

### Noise reduction

Set "On" to reduce the noise (rough parts) of the image.

### Progressive

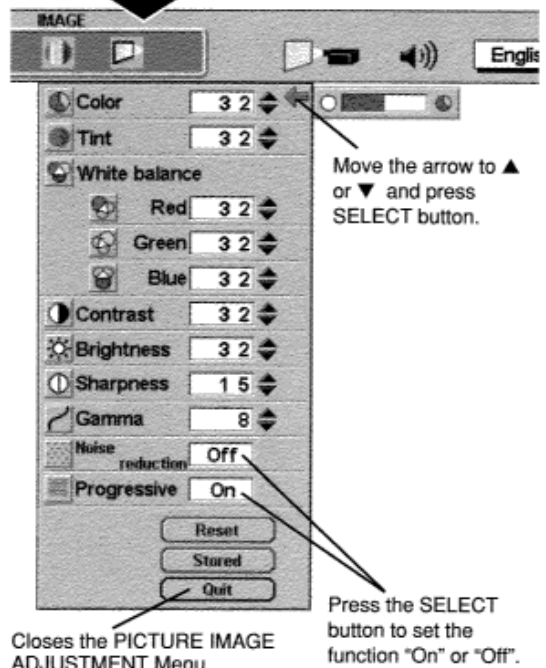
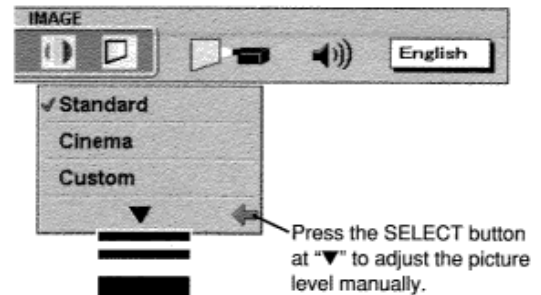
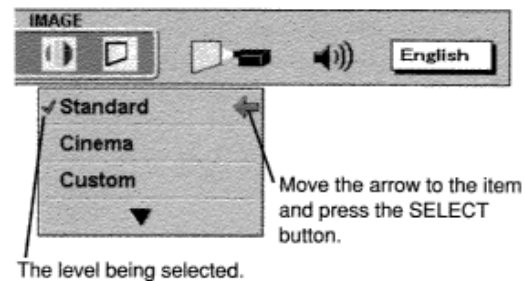
Set "On" to provide progressive scan mode.

Each of the keys operates as follow.

**Reset** .... Recalls the data previously adjusted.

**Stored** .... Stores the data in the memory.

**Quit** .... Closes the PICTURE IMAGE ADJUSTMENT Menu.



### NOTE :

The Noise Reduction cannot be operated when the video signal types and systems as follow.

- Composite video signal (SECAM, NTSC4.43, PAL-M and PAL-N systems).
- Y/C separate video and S-video signal (SECAM, PAL-M and PAL-N systems).
- Component video signal.

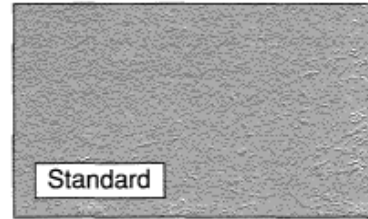
The Progressive cannot be operated when "480p", "575p" or "720p" is selected on the SYSTEM MENU (P36).

## VIDEO MODE

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### NORMAL FUNCTION

The normal picture level is preset on this projector at the factory and can be restored anytime you press the NORMAL button (located on the Side Control or on the Remote Control Unit). The "Standard" display will be displayed on the screen for a few seconds.

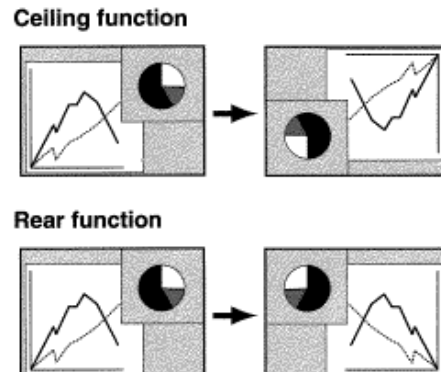


# SETTING

## SETTING MENU

- 1** Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select SETTING and press the SELECT button. Another dialog box SETTING Menu will appear.
- 2** Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to the item that you want to set, and then press the SELECT button to set it (For example "On" or

"Off").



### Power management

This function turns the Projection Lamp off when the projector detects signal interruption and the projector is not used for a certain period in order to reduce power consumption and maintain the Lamp-life. (This projector is shipped with this function ON.) Power Management function operates to turn the Projection Lamp off when the input signal is interrupted and the projector is not operated over 5 minutes. This function operates as follows;

1. When the signal is interrupted, "No signal" and the counting down (5 minutes) display appears.
2. When the Projection Lamp turned off, the READY indicator turns off.
3. After 90 seconds, the READY indicator flashes and the Lamp can be turned on again (Power Management mode).

In this Power Management mode, the Projection Lamp is automatically turned on when the input signal connected or the projector is operated with any button on the Side Control or the Remote Control.

### **On start**

When this function is "On" the projector is automatically turned on just by switching the MAIN ON / OFF SWITCH on. NOTE: Be sure to turn the projector off properly (refer to the section "TURNING OFF THE PROJECTOR" on page 23). If

the projector is turned off in the wrong steps, the On Start function does not operate properly.

### **Lamp Mode**

This Projector is equipped with 4 Projection Lamps and the number of using lamps can be switched to 4 lamps or 2 lamps. Using 2 lamps maintains the life of the Projection Lamps.

To change over Lamp Mode

1. Press the MENU button the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select SETTING and press the SELECT button. Another dialog box SETTING MENU will appear.
2. Press the POINT DOWN button and move a red-arrow icon to Lamp Mode. Set "4 lamps mode" or "2 lamps mode" by pressing the SELECT button. When Lamp Mode is set from "4 lamps mode" to "2 lamps mode," the image becomes little darker. When

Lamp Mode is set from "2 lamps mode" to "4 lamps mode," the image become brighter gradually.

**NOTE :** After changing Lamp Mode, it cannot be switched again for 90 seconds.

### **Remote control**

This projector has two different remote transmit codes; the factory-set normal code (Mode 1) and the secondary code (Mode 2). This switching function prevents the remote control operation mixture (jam) when operating several projectors or video equipment together.

When operating the projector in "Mode 2" both projector and Remote Control must be switched to "Mode 2".

#### **To change the code of the projector**

Set the Remote control in the SETTING menu to "Mode 2".

#### **To change the code of the Remote Control**

Press both the MENU and the NORMAL buttons on the Remote Control together for over 10 seconds.

After changing the code, make sure the Remote Control operates properly.

To return to the normal code (Mode 1), operate both projector and Remote Control in the ways above again.

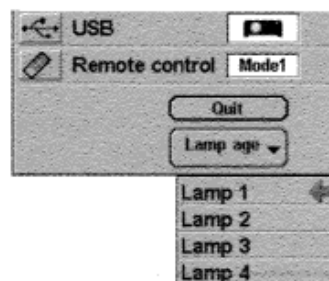
NOTE: When the ALL-OFF switch on the Remote Control Unit is turned to "ALL-OFF" the remote transmit code automatically returns to the normal code (Mode 1).



**Lamp replacement monitor timer**

Be sure to reset the Lamp Replacement Monitor Timer when the Lamp Assembly is replaced. When the Lamp Replacement Monitor Timer is reset, the LAMP REPLACEMENT indicator stops lighting.

- 1** Turn the projector on, and press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select SETTING and press the SELECT button. Another dialog box SETTING MENU will appear.
- 2** Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to "Lamp age" and then press the SELECT button.
- 3** Move the arrow to replaced lamp number and then press the SELECT button. The message "Lamp replace monitor Reset?" is displayed.



NOTE: Be sure to reset correct lamp number otherwise LAMP REPLACEMENT indicator continues lighting.

- 4** Select to reset the Timer.

## SELECTING LANGUAGE

Do not reset the Lamp Replacement Monitor Timer, except after the lamp is replaced.

The language used in the ON-SCREEN MENU is selectable from among English, German, French, Italian, Spanish and Japanese.

- 1** Press the MENU button and the ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT buttons to select LANGUAGE and press the SELECT button. Another dialog box LANGUAGE Menu will appear.
- 2** Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to the language that you want to set, and then press the SELECT button.



Move the Pointer to the language that you want to set, and then press the SELECT button.

## OPERATING WIRELESS MOUSE

The Wireless Remote Control Unit is not only able to operate the projector but also usable as a wireless mouse for most Personal Computers. The POINT buttons and the two CLICK buttons are used for the wireless mouse operation.

The wireless mouse is available only when PC mouse pointer is displayed on the screen. When the menu or the indicator of the projector is displayed on the screen instead of the PC mouse pointer, the wireless mouse cannot be used.

### INSTALLATION

To use the Wireless Remote Control Unit as the Wireless Mouse for a Personal Computer, installation of the mouse driver (not supplied) is required. Make sure that the mouse driver is properly installed in your computer. And make sure that the mouse port of the computer connected to Control Port is activated.

- 1 Connect the mouse port of your computer to the Control Port of the projector with the Control Cable. (Refer to page 12 to 15 for connection.)
- 2 Turn the projector on first, and then turn on your computer. When the

NOTE: When the computer has no mouse port, connect the Serial Port of the computer to Control Port of the projector with the Control Cable for Serial Port

### USING USB TERMINAL

USB Terminal can be also used as control port for wireless mouse operation. Connect the USB terminal of the computer to USB terminal of this projector with the USB cable (not supplied). In this operation, selecting Wireless Mouse Mode on SETTING Menu is required. (Refer to P40).

## OPERATING WIRELESS MOUSE

When controlling the pointer of the computer, operate the Wireless Mouse with POINT button, SELECT button, and RIGHT CLICK button on the Wireless Remote Control Unit.

### POINT button

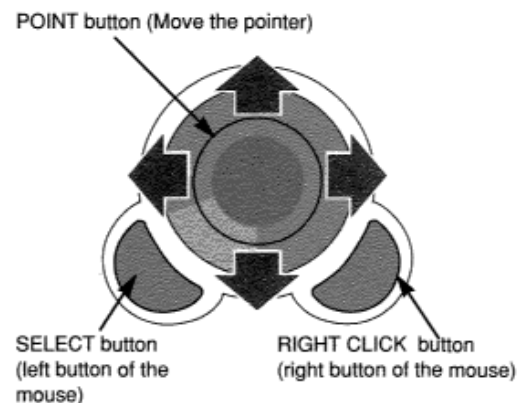
Used to move the pointer. The pointer is moved corresponding with the direction you are pressing.

### SELECT (LEFT CLICK) button

This button has the same function as the left button in a PC mouse.

### RIGHT CLICK button

This button has the same function as the right button in a PC mouse. Pressing this button does not affect any operation when in Menu mode.



## MAINTENANCE

### TEMPERATURE WARNING INDICATOR

computer is switched on first, the Wireless Mouse may not work properly.

The TEMPERATURE WARNING Indicator flashes red when the internal temperature of the projector exceeds the normal temperature. The Indicator stops flashing when the temperature of the projector returns to normal. When the TEMPERATURE WARNING Indicator continues to flash, check the items listed below.

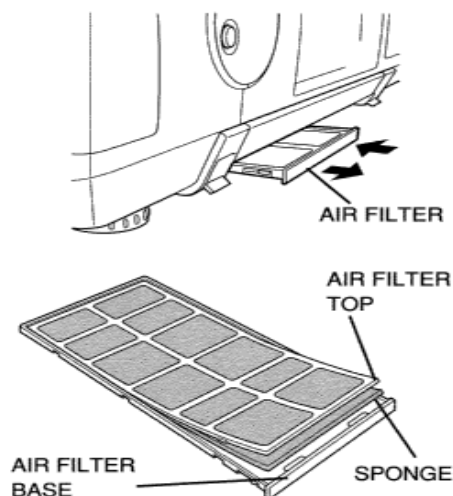
- 1** The Ventilation slots of the projector may be blocked. In such an event, reposition the appliance so that the ventilation slots are not obstructed.
- 2** Air filters may be clogged with dust particles. Clean the air filters by following the section AIR FILTER CARE AND CLEANING below.
- 3** If the TEMPERATURE WARNING Indicator remains on after performing the above checks, the Cooling Fans or the Internal Circuits may be malfunctioning. Contact service a personnel from an authorized dealer or service station.

### AIR FILTER CARE AND CLEANING

The Removable Air Filter prevents dust from accumulating on the surface of the Projection Lens and the Projection Mirror. Should the Air Filter become clogged with dust particles, it will reduce the Cooling Fans' effectiveness and may result in internal heat build up and adversely affect the life of the projector.

Clean the Air Filter following the steps below:

- 1** Turn the power off, and disconnect the AC power cord from the AC outlet.
- 2** Pull out the air filter from the projector.
- 3** Pulling up the center frame of the air filter top, separate the air filter top and sponge from the air filter base.
- 4** Clean the each parts with brush or wash out the dust and particles. Be sure to dry them out.
- 5** Assemble the sponge and the air filter and replace the air filter to the projector.



#### **CAUTION**

Do not operate the projector with the Air Filter removed. Dust may accumulate on the LCD Panel and the Mirror degrading picture quality. Do not put small parts into the Air Intake Vents. It may result in malfunction of the projector.

#### **RECOMMENDATION**

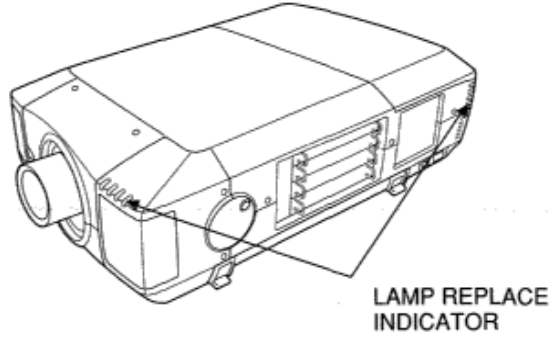
**We recommend avoiding dusty/smoky environments when operating the projector. Usage in these environments may cause poor image quality.**

When using under dusty or smoky conditions, dust may accumulate on the liquid crystal panel, lens, or optical elements inside it. This condition may degrade the quality of the projected image.

When the above symptoms are noticed, contact your authorized dealer or service station for proper cleaning.

**LAMP MANAGEMENT**

This Projector is equipped with 4 Projection Lamps to ensure brighter image and those lamps are controlled by Lamp Management Function. Lamp Management Function detects the status of all lamps and shows the status on screen or on the LAMP REPLACE indicator. This function also automatically controls the Lamp Mode when any of lamps is out for the end of life or malfunctions.

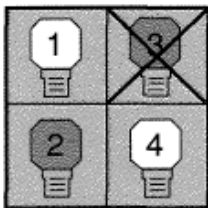


**Lamp Replace Indicator**

This LAMP REPLACE indicator lights yellow when any of Projection Lamps is nearing its end, and flashes when any of them becomes out. Check the number of the lamp on Lamp Status Display and replace the lamp.

**Lamp Status Display**

Lamp Status Display appears on the screen when power switch is on or Menu Bar is displayed. This shows the status of each



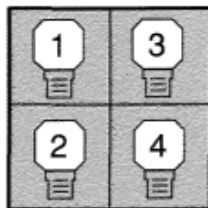
LAMP STATUS DISPLAY

- Yellow Lamp** ----- The Projection Lamp lights normally.
- Dim Lamp** ----- The Projection Lamp is turned off.
- Red Lamp** ----- The Projection Lamp is nearing its end. When the image becomes darker or the color becomes unnatural, replace the lamp. (The LAMP REPLACE indicator lights yellow.)
- X Mark on Lamp** ----- The Projection Lamp is out and needs to be replaced. (The LAMP REPLACE indicator flashes yellow.)

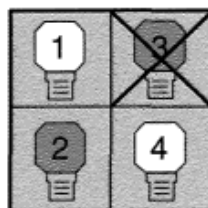
lamp as: ON, OFF, NEAR END, or OUT. Refer to the following for each status.

**Lamp Mode Changeover**

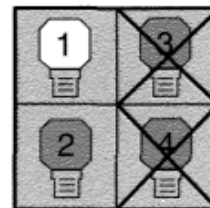
Lamp Management Function automatically changes the combination of lighting lamp (Lamp Mode) by detecting the status of lamp. When any of 4 lamps becomes out, the Lamp Mode is changed over from 4 lamps to 2 lamps. And when any of 2 lamps are out, the projector operates with 1 lamp. Lamp Mode can be switched to 4 lamps or 2 lamps manually. Refer to SETTING section on page 39, 40.



4 LAMP MODE



2 LAMP MODE (Example)



1 LAMP MODE (Example)

## LAMP REPLACEMENT



### CAUTION

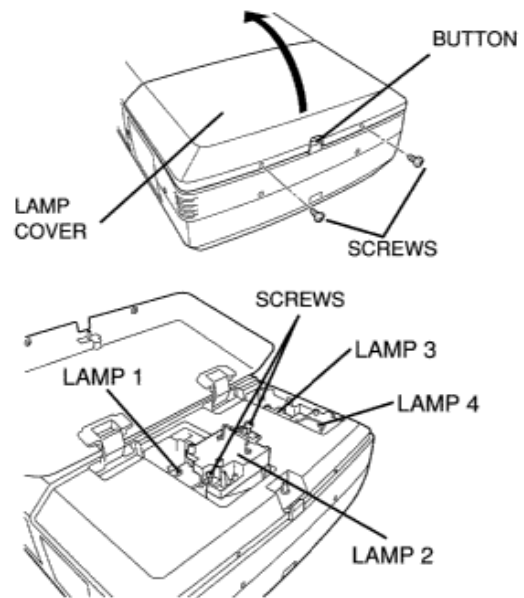
- For continued safety, replace with a lamp assembly of the same type.
- Allow the projector to cool for at least 45 minutes before you open the lamp cover. The inside of the projector can become very hot.
- Do not drop the lamp assembly or touch the glass bulb! The glass can shatter and may cause injury.

Follow these steps to replace the lamp assembly.

- 1** Check the number of lamp to be replaced on Lamp Status Display.
- 2** Turn off the projector and disconnect the AC Power Cord. Allow the projector to cool down for at least 45 minutes.
- 3** Remove the two screws on the Lamp Cover and press the button to open the Lamp Cover. (See right figure.)
- 4** Loosen the two screws and pull out the Lamp Assembly to be replaced by grasping the handle.
- 5** Replace the Lamp Assembly with a new one and tighten the two screws. Make sure the Lamp is set properly
- 6** Replace the Lamp Cover and tighten the two screws.
- 7** Connect the AC Power Cord to the projector and turn the projector on.
- 8** Reset the Lamp Replacement Monitor Timer. (Refer to the section "Lamp Replacement Monitor Timer" on page 41.)

**NOTE:** Do not reset the LAMP REPLACEMENT MONITOR TIMER when the lamp is not replaced.

**CAUTION :** Do not operate the projector while any of lamps is removed. It may result in malfunctions, fire hazard, or other accidents.



Make sure which number of lamp needs to be replaced on Lamp Status Display. Figure shows the case of replacing the LAMP 2.

### ORDER REPLACEMENT LAMP

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

- Model No. of your projector : LC-XT1
- Replacement Lamp Type No. : POA-LMP29  
(Service Parts No. 610 284 4627)

## CLEANING THE PROJECTION LENS

Follow these steps to clean the projection lens:

- 1** Apply a non-abrasive camera lens cleaner to a soft, dry cleaning cloth. Avoid using an excessive amount of cleaner. Abrasive cleaners, solvents or other harsh chemicals might scratch the lens.
- 2** Lightly wipe the cleaning cloth over the lens.
- 3** When the projector is not in use, replace the lens cover.

# TROUBLESHOOTING

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

1. Make sure you have connected the projector to your equipment as described in section "CONNECTING THE PROJECTOR" on pages 12 ' ' 15.
2. Check cable connections. Verify that all computer, video and power cords are properly connected.
3. Verify that power is switched on.
4. If the projector still does not display an image, re-start the computer.
5. If the image still does not display, unplug the projector from the computer and check the computer monitor's display. The problem may be with your graphics controller rather than with the projector. (When you reconnect the projector, remember to turn the computer and monitor off before you power up the projector. Power the equipment back up in order of: Projector and computer)
6. If the problem still exists, check the following chart.

Problem:	Try these Solutions:
<b>No power.</b>	<ul style="list-style-type: none"> <li>● Plug the projector into an AC outlet.</li> <li>● Turn the MAIN ON/OFF switch to ON.</li> <li>● Press the POWER ON/OFF switch to ON.</li> <li>● Be sure the READY INDICATOR light is ON.</li> <li>● Wait 90 seconds after the projector is turned OFF before turning the projector back on.</li> </ul> <p>NOTE: After pressing the POWER ON/OFF button to OFF. The projector functions as indicated.</p> <ol style="list-style-type: none"> <li>1. The LAMP POWER indicator will light and the READY indicator will turn off.</li> <li>2. After 90 seconds, the READY indicator will light green again and the projector may be turned on by pressing the POWER ON/OFF button.</li> </ol> <ul style="list-style-type: none"> <li>● Check temperature warning indicator. If the indicator flashes red, the projector cannot be turned on. (See "BASIC OPERATION" section on page 23).</li> <li>● Check the projection lamp.</li> <li>● Replace the lamp cover. (Check the interlock switch inside of the lamp cover.)</li> </ul>
<b>Image is out of focus.</b>	<ul style="list-style-type: none"> <li>● Adjust the focus.</li> <li>● Check the projection lens to see if it needs cleaning.</li> </ul> <p>NOTE: Moving the projector from a cool temperature location to a warm temperature location may result in moisture condensation on the lens. In such an event, leave the projector OFF and wait until condensation disappears.</p>

Problem:	Try these Solutions:
<b>Picture is L/R Reversed.</b>	Check Ceiling/Rear feature. (See "SETTING" section on page 39).
<b>Picture is T/B inverted.</b>	Check Ceiling feature. (See "SETTING" section on page 39).
<b>Some displays are not seen during the operation.</b>	Check Display feature. (See "SETTING" section on page 39).
<b>No sound.</b>	<ul style="list-style-type: none"> <li>● Check audio cable connection from audio input source.</li> <li>● Adjust audio source.</li> <li>● Press the VOLUME (+) button.</li> <li>● Press the MUTE button.</li> </ul>
<b>Remote control unit does not work.</b>	<ul style="list-style-type: none"> <li>● Check the batteries.</li> <li>● Make sure nothing is blocking between the remote control sensor and remote control unit.</li> <li>● Make sure you are not too far from the projector when using the remote control unit. Maximum operate range 16.4 ' (5 m).</li> <li>● Check the ALL-OFF switch on the Remote Control Unit is set to "ON".</li> <li>● Check the transmitted signal mode from the remote control unit. (See "SETTING" section on page 39, 40).</li> </ul>
<b>Wireless mouse function does not work.</b>	<ul style="list-style-type: none"> <li>● Check the cable connection between the projector and the computer.</li> <li>● Check the mouse setting on your computer.</li> <li>● Turn on the projector before you turn on the computer.</li> </ul>



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.



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

## APPENDIX

## TECHNICAL SPECIFICATIONS

<b>Projector Type</b>	Multi-media Projector
<b>Dimensions (W x H x D)</b>	22.9" (581 mm) x 10" (252 mm) x 30.9" (783 mm)
<b>Net Weight</b>	78.4 lbs (35.5 kg)
<b>LCD Panel System</b>	1.8" TFT Active Matrix type x 3 panels
<b>Number of Pixels</b>	2,359,296 (786,432 (1,024 x 768) x 3)
<b>Color System</b>	6 color system (PAL, SECAM, NTSC, NTSC4.43, PAL-M and PAL-N)
<b>TV Signal</b>	480i, 480p, 575i, 575p, 720p, 1035i, 1080i-50 and 1080i-60
<b>Scanning Frequency</b>	H-sync. 15 ~ 120 KHz, V-sync. 50 ~ 120 Hz
<b>Motorized Lens Shift</b>	Up, Down, Left and Right
<b>Projection Lamp</b>	150 watt type x 4
<b>Input 1 Jack</b>	DVI-I Terminal (Digital/Analog), RCA Type (Audio R and L) and DIN 8-pin (Control port)
<b>Input 2 Jack</b>	BNC Type x 5 (R/Pr, G/Y, B/Pb, H/HV, and V), RCA Type (Audio R and L) and DIN 8-pin (Control port)
<b>Input 3 Jack</b>	BNC Type x 2 (VIDEO/Y, C), RCA Type (Audio R and L) and DIN 4 pin (S-Video)
<b>Input 4 Jack</b>	HDB 15-pin Terminal (Analog), RCA Type (Audio R and L) and DIN 8-pin (Control port)
<b>Other Jack</b>	Serial port in (DB 9), Serial port out (DB 9), USB port, Audio Monitor out (RCA Type R and L) and Wired Remote Jack
<b>Built-in Speaker</b>	INT. SP. Stereo (R and L), 3 watt RMS (T.H.D.10%)
<b>Image Elevation Adjustment</b>	Up to 5.7°
<b>Voltage and Power Consumption</b>	AC 100 ~120 V (10A Max. Ampere), 50/60 Hz (The U.S.A and Canada) AC 200 ~240 V (5A Max. Ampere), 50/60 Hz (Continental Europe)
<b>Operating Temperature</b>	41°F ~ 95°F (5°C ~ 35°C)
<b>Storage Temperature</b>	14°F ~ 140°F (-10°C ~ 60°C)
<b>Remote Control Transmitters</b>	Power Source :AA, UM3 or R06 Type x 2 Operating Range :16.4' (5m)/±30° Dimensions :2.2" x 1.3" x 7.6" (55mm x 34mm x 192mm) Net Weight :0.36 lbs (165 g) (including batteries) Laser Pointer :Class II Laser (Max. Output: 1mW/Wave length : 650±20nm)
<b>Accessories</b>	Owner's Manual AC Power Cord Wireless/Wired Remote Control Transmitter and Batteries Remote Control Cable VGA Cable and DVI Cable MAC/VGA Adapter and DVI/VGA Adapter 3 Types Control Cable (For PS/2, Serial and ADB port) 6 Types Light-Block Sheet Lens Mounting Adapter Protective Dust Cover

● The specifications are subject to change without notice.

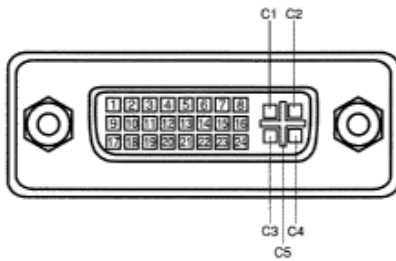


## CONFIGURATIONS OF THE TERMINALS

### DVI-I TERMINAL (DIGITAL/ANALOG)

This terminal accepts only Digital (TMDS) or Analog (RGB) output signal. Connect the display output terminal of the computer to this terminal with the DVI cable (supplied).

#### Pin Configuration



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

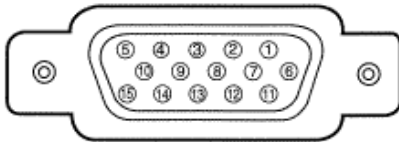
<b>1</b>	T.M.D.S. Data2-	<b>9</b>	T.M.D.S. Data1-	<b>17</b>	T.M.D.S. Data0-
<b>2</b>	T.M.D.S. Data2+	<b>10</b>	T.M.D.S. Data1+	<b>18</b>	T.M.D.S. Data0+
<b>3</b>	T.M.D.S. Data2 Shield	<b>11</b>	T.M.D.S. Data1 Shield	<b>19</b>	T.M.D.S. Data0 Shield
<b>4</b>	No Connect	<b>12</b>	No Connect	<b>20</b>	No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

### HDB 15-PIN TERMINAL (ANALOG)

Connect the display output terminal of the computer to this terminal with the VGA Cable (supplied).

- When connecting the Macintosh computer, use MAC/VGA Adapter (supplied).
- When connecting the Analog signal from DVI terminal of the computer to this terminal, use DVI/VGA Adapter (supplied).

#### Pin Configuration



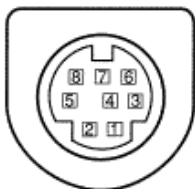
<b>1</b>	Red Input	<b>9</b>	No Connect
<b>2</b>	Green Input	<b>10</b>	Ground (Vert.sync.)
<b>3</b>	Blue Input	<b>11</b>	Sense 0
<b>4</b>	Sense 2	<b>12</b>	Sense 1
<b>5</b>	Ground (Horiz.sync.)	<b>13</b>	Horiz. sync.
<b>6</b>	Ground (Red)	<b>14</b>	Vert. sync.
<b>7</b>	Ground (Green)	<b>15</b>	Reserved
<b>8</b>	Ground (Blue)		

### CONTROL PORT CONNECTOR

#### Terminal : Mini DIN 8-PIN

Connect control port (PS/2, Serial or ADB port) on your computer to this terminal with the Control Cable (supplied).

#### Pin Configuration

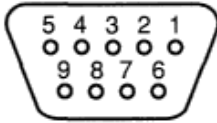


	PS/2	Serial	ADB
<b>1</b>	----	R X D	----
<b>2</b>	CLK	----	ADB
<b>3</b>	DATA	----	----
<b>4</b>	GND	GND	GND
<b>5</b>	----	RTS	----
<b>6</b>	----	T X D	----
<b>7</b>	GND	GND	----
<b>8</b>	----	GND	GND

### SERIAL PORT IN/OUT TERMINAL

#### Pin Configuration

Connect the serial port output terminal of the computer to this terminal with the Serial Cable (not supplied).

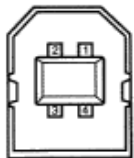


1	----
2	RxD
3	TxD
4	----
5	Ground
6	----
7	----
8	----
9	----

### USB PORT TERMINAL

#### Pin Configuration

Connect the USB port output terminal of the computer or peripheral equipment to this terminal with the USB port Cable (not supplied).



1	Vcc
2	- Data
3	+ Data
4	Ground



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