myprojectorlamps.com

The most trusted, dependable name in projector lamp sales.

http://www.myprojectorlamps.com

http://www.myprojectorlamps.ca

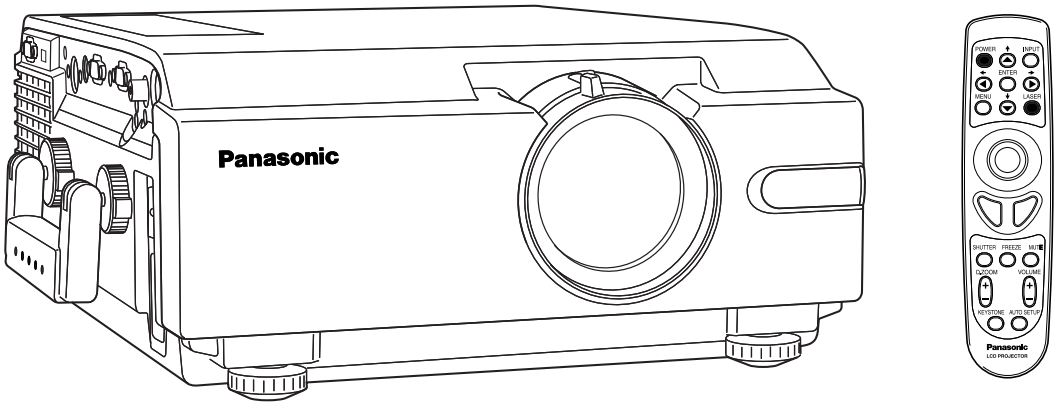
http://www.myprojectorlamps.eu

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

Panasonic

LCD PROJECTOR
Operating Instructions

Model No. PT-L759VU / PT-L759XU



Please read these instructions completely before operating this LCD Projector.

This operating instruction book is designed for use with models PT-L759VU and PT-L759XU. Illustrations in this manual show the PT-L759XU. Features may vary, so please read carefully.

Dear Panasonic Customer:

This instruction manual provides all the necessary operating information that you might require. We hope it will help you to get the most performance out of your new product, that you will be pleased with your Panasonic LCD Projector.
For your own protection and prolonged operation of your LCD Projector, please be sure to read the “Important Safeguards” carefully, before use.

Things You Should Know

Caution:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Declaration of Conformity

Model Number:	PT-L759VU / PT-L759XU
Trade Name:	**Panasonic**
Responsible party:	Matsushita Electric Corporation of America.
Address:	One Panasonic Way Secaucus New Jersey 07094
Telephone number:	1-800-528-8601

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

FCC Warning:
To assure continued FCC compliance, use only the provided grounded power supply cord and prevent undesirable interference, use only the provided shielded VGA cable with 2 ferrite cores while connecting LCD to computer and all other connecting cables should be shielded. Any changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate this equipment.

Warning: (E.U. only)
To assure continued CE Mark compliance, use only the provided earthed power supply cord and prevent undesirable interference, use only the provided shielded VGA cable with 2 ferrite cores while connecting LCD to computer and all other connecting cables should be shielded.
Any changes or modifications not expressly approved by the party responsible for compliance could void the user‘s authority to operate this equipment.

Table of Contents

Getting Started

Dear Panasonic Customer 2
Important Safeguards 4
LCD Projector Features 6
Contents of LCD Projector Box 7
Product Information 8

Basic Operation

Before using the Remote Control Unit 10
Standard Setting-up Positions 12
Screen Requirements 13
Turning the power on and off 14
Adjusting the LCD Projector Projection Angle 15
Adjusting the Lens 16

Changing the input signal 17
Basic LCD Projector Operation 18
Menu operation guide 19

Setting-up Positions and Changing the Projection Mode 22
Setting the Screen Type 23
Digital Variable Compression 24
Keystone Correction function 25
Signals that can be Input 26
Selecting the Image Quality 29
Adjusting the Picture to the Desired Setting 30
Adjusting the White Balance 31
Using the Auto Setup Feature 32
Adjusting the Image Position, Dot Clock and Phase 33

Useful Functions

Using Other Useful Functions 34
Projecting the DTV Format Signal 39

Changing the RGB2 IN/RGB1 OUT Terminal 40
System Configuration Example 41
Video/Personal Computer Cables & Adaptors 44
Using the SERIAL connector (RS-232C) 46

Other Information

Wireless mouse and keyboard 48
Removing and Attaching the Carrying Handle 49
Status Code Display Indications 50
Cleaning the Air Filter 51
Lamp Replacement 52
Specifications 55
Before Requesting Service 57
Cher Client: 58
Notes importantes concernant la sécurité 59
Utilisation de l'indicateur laser sur la télécommande 61
Remplacement de la lampe 61
Lieber Panasonic-Kunde, ... 63
Wichtige Sicherheitshinweise 64
Benutzung des Laserzeigers der Fernbedienung 66
Lampenaustausch 66

Important Safeguards

CAUTION: Please read all of these instructions before you operate your LCD Projector. Save these instructions for future reference.

Electrical energy can perform many useful functions. This LCD Projector has been engineered and manufactured to meet applicable safety standards. But IMPROPER USE CAN RESULT IN POTENTIAL ELECTRICAL SHOCK OR FIRE HAZARDS. In order not to defeat the safeguards incorporated into this LCD Projector, observe the following basic rules for its installation, use and servicing.

1 Unplug the LCD Projector from the wall outlet before cleaning.

2 Do not use liquid cleaners or aerosol cleaners. Use a soft dry cloth to clean the LCD Projector unit. If the unit is very dirty, wet a cloth with neutral detergent, squeeze it tight, wipe the unit with it, and finish by wiping with a dry cloth. Do not use a chemical duster or polisher-cleaner because it can adversely affect the unit and peel the paint coat.

3 Do not use attachments not recommended by Panasonic, as they may cause hazards.

4 Do not use the LCD Projector near water; for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, near a swimming pool, etc. Never spill liquid into the LCD Projector.

5 Do not place the LCD Projector on an unstable cart, stand, or table. The LCD Projector may fall, which may cause serious injury to a child or an adult, and/or serious damage to the unit. Use only with a cart or stand recommended by its manufacturer, as being suitable for use with the LCD Projector.

6 Ceiling, wall or shelf mounting for installation should use a mounting kit approved by the manufacturer for use with the LCD Projector and should follow the manufacturer's instructions.

7 The LCD Projector equipment and cart combinations should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the equipment and cart combination to overturn.

8 Slots and openings in the cabinet are provided for ventilation. To ensure reliable operation of the LCD Projector and to protect it from overheating, these openings must not be blocked or covered. These openings should never be covered with cloth or other material. The bottom opening should not be blocked by placing the LCD Projector on a bed, sofa, rug, or other similar surface. The LCD Projector should not be placed near or over a radiator or heating vent. The LCD Projector should not be placed in a built-in installation such as a bookcase unless proper ventilation is provided.

9 The LCD Projector should be operated only from the type of power source indicated on the LCD Projector or in the specifications. If you are not sure of the type of power supplied to your home, consult your LCD Projector dealer or local power company.

10 Do not allow anything to rest on the power cord. Do not place the LCD Projector where the cord will be walked on.

11 Follow all warnings and instructions marked on the LCD Projector.

Important Safeguards

12 As a safety feature, the LCD Projector is equipped with a 3-prong grounded plug. The 3-prong grounded plug will fit only into a grounding type power outlet. If the plug does not fit, use an adaptor that is properly grounded or have an electrician install a grounded type outlet. Do not attempt to modify this AC plug.

13 For added protection of the LCD Projector during a lightning storm, or when it is left unattended or not in use for long periods of time, unplug it from the wall outlet and disconnect any cable systems. This will prevent damage to the projector due to lightning and power-line surges.

14 Do not overload wall outlets and extension cords with too many products, because this can result in fire or electric shock.

15 Never push objects of any kind into the LCD Projector through cabinet slots as they may touch dangerous voltage points or short out parts, which could result in a fire or electric shock.

16 Do not attempt to service the LCD Projector yourself. Opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

17 Unplug the LCD Projector equipment from the 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 LCD Projector.

C. If the LCD Projector has been exposed to rain or water.

D. If the LCD Projector does not operate normally when you follow the operating instructions. Adjust only those controls that are covered by the operating instructions; improper adjustment of other controls may cause damage and will often require extensive work by a qualified technician to restore the LCD Projector to normal operation.

E. If the LCD Projector has been dropped or the cabinet has been damaged.

F. When the LCD Projector exhibits a distinct change in performance – this indicates a need for service.

18 Upon completion of any service or repairs to the LCD Projector, ask the service technician to perform a routine safety check to determine that the LCD Projector is in safe operating condition.

19 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 parts. Unauthorized substitutions may result in fire, electric shock, or other hazards.

20 Air filter should be cleaned every 100 hours of lamp use.
The LCD Projector may become too hot if filter is not cleaned when required.

21 If lens becomes dirty, or smudged, clean with a clean, dampened cloth. Never touch the lens with your fingers.

22 Do not look directly into the aperture and lens while operating as this may result in damage to your eyes.

23 Do not look into the red Laser Pointer transmitter, or aim the Laser beam at a person. Shining the Laser beam into the eyes could result in eye damage.

LCD Projector Features

1 High Brightness and Resolution
786 432 (1 024 X 768) pixels X 3 panels format, 3 100 lumen (ANSI) [PT-L759XU] / 2 400 lumen (ANSI) [PT-L759VU] offers clear images even when ambient light level is high.

2 Compact and Lightweight
Completely portable, you can give attractive presentations at any location by connecting the PT-L759XU/PT-L759VU to a computer or video equipment.

3 0.508 m (20 inch) to 7.620 m (300 inch) Screen Capability
Project a screen size of 0.508 m (20 inch) to 7.620 m (300 inch) from a distance of 0.85 m (2.79 feet) to 13.45 m (44.13 feet) (Manual focus.) (See page 12.)

4 Compatible with Most Personal Computers
The RGB input accepts signals from VGA, SVGA, XGA, SXGA (Compression), UXGA (Compression), and MAC compatible computers with no additional hardware. Other compatible computers require a separate cable.

5 RGB Input/Output Terminals
RGB2 IN / RGB1 OUT terminal can output the incoming signal of RGB1 by selection, when using another monitor.

6 Equipped with next-generation interface DVI-D input terminal [PT-L759XU only]
The video signal from the PC is input to the LCD Projector as a digital signal, you can enjoy superior picture quality.

7 Accommodates 6 different video signal standards
The LCD Projector accepts the input signal of all major video formats, including PAL, SECAM, NTSC, PAL-M, PAL-N, NTSC4.43, and the higher quality S-Video signals. And, input of DTV Format Signal, such as the Component (YPBPR) signal from a DVD is also possible with this Projector. And, the Projector can also display even higher quality Component signals generated by HDTV equipment.

8 On Screen Display
The LCD Projector's language is set to English at the factory. In addition, you can select Spanish, French, German, Italian, and Japanese. Information screens and menus make setting up and operating the LCD Projector extremely easy.

9 IR Remote Control
Front and rear sensors allow you to control the LCD Projector from almost anywhere in the room.

10 Laser Pointer on the Remote Control
When the Laser beam is aimed at the screen, the Pointer is displayed on the screen.

11 Wireless mouse and the ↑, ↓, ← and → keys on a keyboard
This function lets you use the remote control to control a personal computer in place of the personal computer's mouse and keyboard ↑, ↓, ←, →. (USB cable connection requires that your computer be equipped with a USB port as standard and preinstalled with Windows 98/Me, Windows 2000.) (See page 48.)

12 Stereo Audio Output
For external audio equipment connection. Audio follows video source.

LCD Projector Features

13 Automatic Universal Power Supply
This unit has an operating voltage range of AC 100 V - 240 V.

14 Digital Zoom function
Pressing the D.ZOOM button allows you to magnify the image up to 5 times.

15 Dimensional Noise Reduction [PT-L759XU only]
The video signal noise is reduced, so you can enjoy a beautifully sharp picture.

16 Digital variable compression
Images can be projected with the distance to the screen increased by up to about 1.6 times.

17 Keystone correction function
You can perform keystone correction using the menu screen or the remote control. (Up to 40 degrees up and down.)

18 Wide conversion lens
Using the optional Wide conversion lens (ET-LEC059), the throw distance can be shorten by 0.8 times.

Equipped with a variety of convenient functions
A variety of functions such as the following have been provided.
- A blue screen is projected (at startup only) when no signal is being input.
- Mute or freeze functions for video and audio signals can be toggled on and off.
- The input signal display function can be toggled on and off.
- 16:9 (wide) screen projection is provided.

Contents of LCD Projector Box

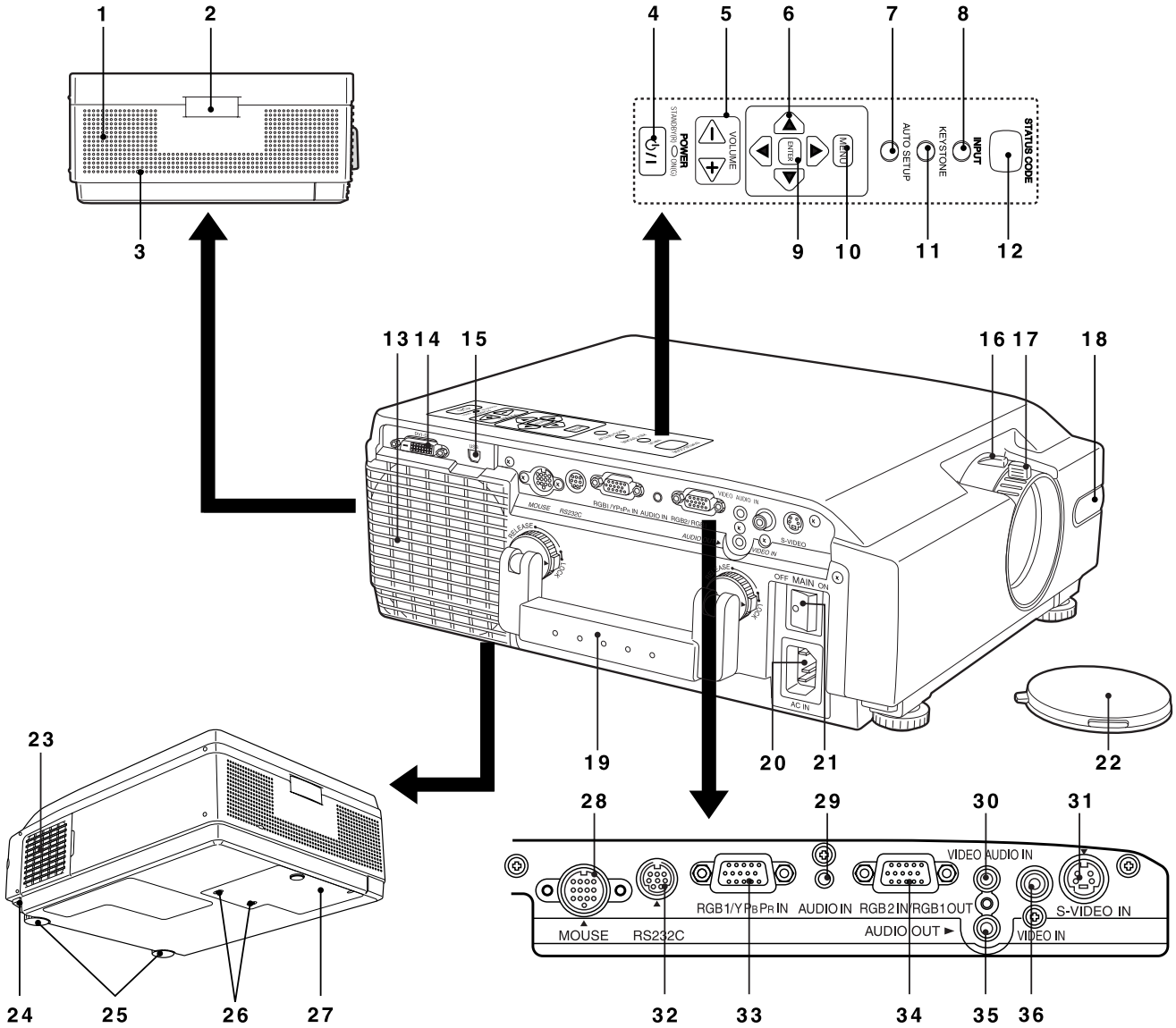
Please confirm that the following items are packed in the LCD Projector box.
They are provided to help you use or set up your LCD Projector.

(1) LCD Projector
(2) Remote Control unit (LRQ90044)
(3) 2 “AA” Batteries
(4) Lens Cap*
(5) Carrying Handle*
(6) 9.8 ft UL/CSA Power Cord (VJAS0308)
(7) VGA Cable (LSJA0239)
(8) DVI Cable (K1HA24DA0003) [PT-L759XU only]
(9) PS/2 Mouse Cable (LSJA0212)
(10) MAC Mouse Cable (LSJA0214)
(11) USB Cable (LSJA0305)
(12) VGA MAC Adaptor (LSJA0307)
(13) Audio Cable (LSJA0240)
(14) Video Cable (LSJA0074)
(15) CD ROM (Operating Instructions)
(16) Warranty Card
(17) Service Center List

*:Included with the projector

Product Information

LCD Projector

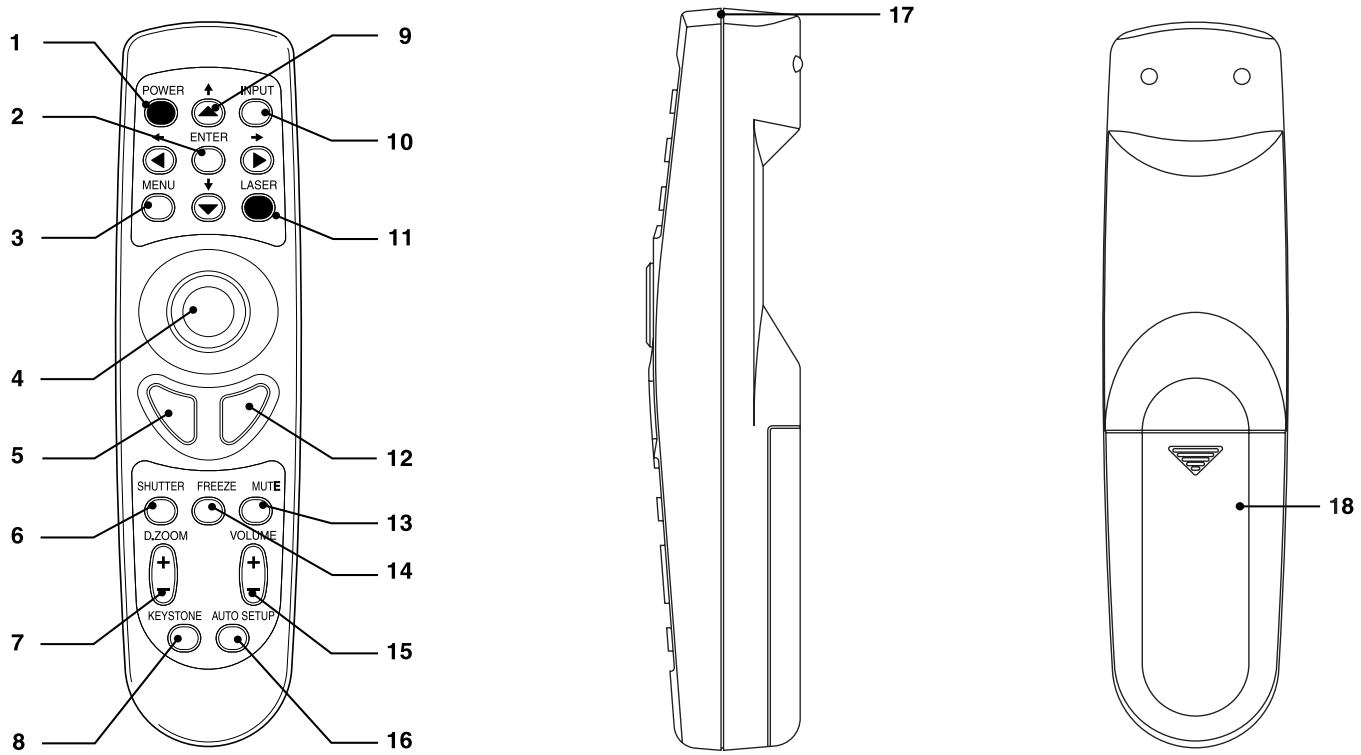


1 **Speaker**
2 **Remote Control Sensor** ..... See page 11.
3 **Security Lock**
4 **POWER Button/ POWER Indicator STANDBY(R) ON(G)** See page 14.
5 **VOLUME+/- Buttons** ..... See page 18.
6 **Adjust ▲▼◀▶ Buttons** ..... See pages 19, 22.
7 **AUTO SETUP Button** ..... See page 32.
8 **INPUT Button** ..... See page 17.
9 **ENTER Button** ..... See page 19.
10 **MENU Button** ..... See page 19.
11 **KEYSTONE Button** ..... See page 25.
12 **STATUS CODE** ..... See page 50.
13 **Air Outlet Port**
14 **DVI-D Input Connector [PT-L759XU only]** ..... See page 42.
15 **USB Connector** ..... See page 48.
16 **Zoom Ring** ..... See page 16.
17 **FOCUS Ring** ..... See page 16.
18 **Remote Control Sensor** ..... See page 11.
19 **Carrying Handle** ..... See page 49.
20 **AC Socket (100 V - 240 V)** ..... See page 14.
21 **Main Power Switch** ..... See page 14.
22 **Lens Cap**
23 **Air Filter** ..... See page 51.
24 **Adjuster Button** ..... See page 15.
25 **Adjustable Legs** ..... See page 15.
26 **Lamp Cover Screws** ..... See pages 53, 54.
27 **Lamp Cover** ..... See pages 53, 54.
28 **MOUSE Connector** ..... See page 48.
29 **RGB Audio Input Connector** ..... See pages 42, 43.
30 **Video Audio Input Connector** ..... See page 41.
31 **S-Video Input Connector** ..... See page 41.
32 **RS232C Connector** ..... See page 46.
33 **RGB1/YPBPR Input Connector** ... See pages 42, 43.
34 **RGB2 Input Connector / RGB1 Output Connector** ..... See pages 42, 43.
35 **Audio Output Connector** ..... See pages 41-43.
36 **Video Input Connector** ..... See page 41.

Product Information

Remote Control Unit

[Front] [Side] [Back]

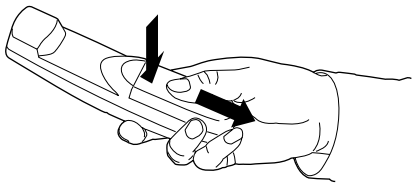


1	**POWER Button**	See page 14.
2	**ENTER Button**	See page 19.
3	**MENU Button**	See page 19.
4	**Mouse Button**	See page 48.
5	**Click 1 Button**	See page 48.
6	**SHUTTER Button**	See page 18.
7	**D.ZOOM +/-Buttons**	See page 38.
8	**KEYSTONE Button**	See page 25.
9	**Adjust ▲▼◀▶ Buttons**	See pages 19, 22.
10	**INPUT Button**	See page 17.
11	**LASER Button**	See page 10.
12	**Click 2 Button**	See page 48.
13	**MUTE Button**	See page 18.
14	**FREEZE Button**	See page 18.
15	**VOLUME +/- Buttons**	See page 18.
16	**AUTO SETUP Button**	See page 32.
17	**Transmitter**	See page 11.
18	**Battery Compartment**	See page 10.

Before using the Remote Control Unit

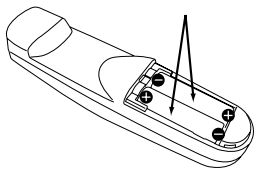
■ Load the 2 “AA” batteries in the Remote Control Unit

1 Slide the lid in the direction of the arrow.



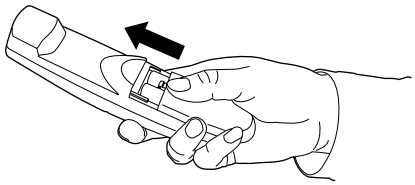
2 Install 2 “AA” batteries as indicated inside the Battery Compartment.

2 “AA” Batteries (included)



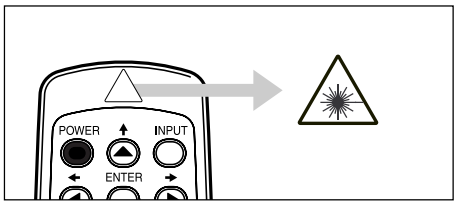
> **Battery replacement caution**
> • Do not mix old and new batteries.
> Also never mix alkaline with manganese batteries.

3 Replace the lid and snap into place.

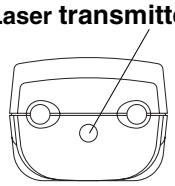


■ Using the Laser Pointer on the Remote Control Unit

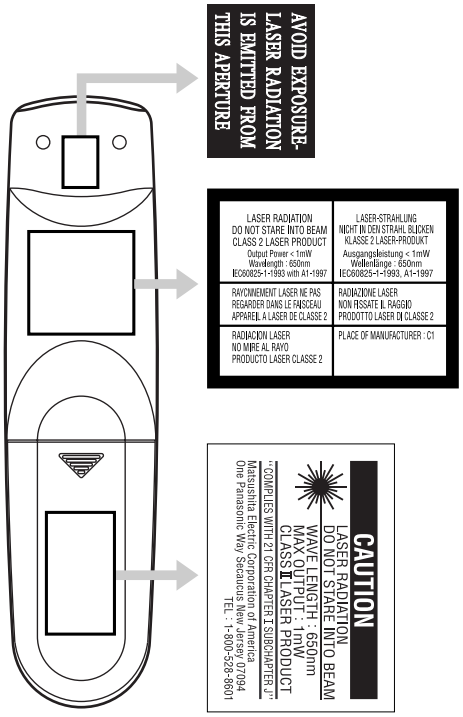
When the Laser beam is aimed at the screen, the Pointer is displayed on the screen.



Laser transmitter



Press LASER on the remote control to activate Laser.



Warning

DO NOT look into the Laser transmitter, or aim the Laser beam at a person. Shining the Laser beam into the eyes could result in eye damage.

Note

• This product has the following laser radiation specifications:
Wavelength - 650 nm, Max. Output - 1 mW, Class Ⅱ (Class 2.)

For U.S.A. only

• Class Ⅱ laser products are normally required to be equipped with an indicator indicating that the laser beam is being emitted. On this product, the red beam emitted from the laser point functions as this indicator.
• Class Ⅱ laser products are normally required to be equipped with an emergency stop device such as a shutter to stop the laser immediately. On this product, instead of such a device, the laser does not stay on unless the laser button is held in continuously.

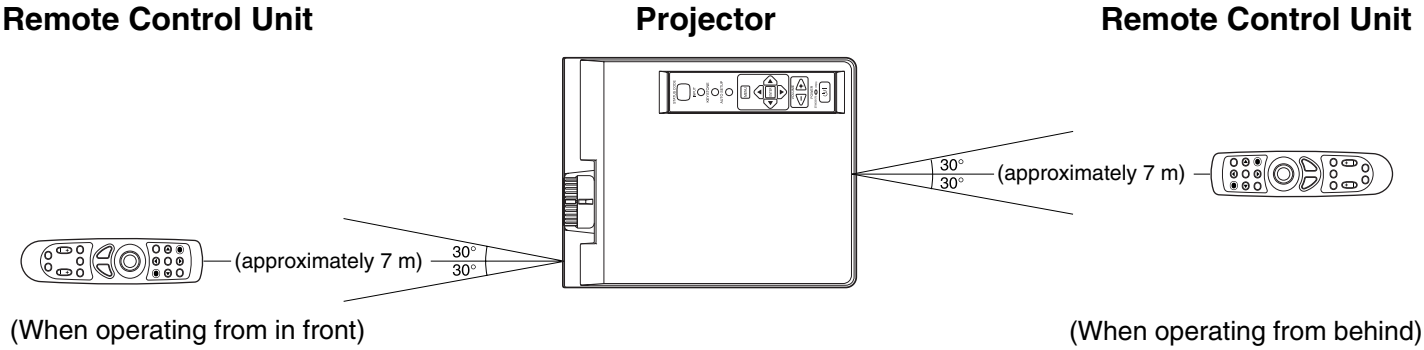
CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Before using the Remote Control Unit

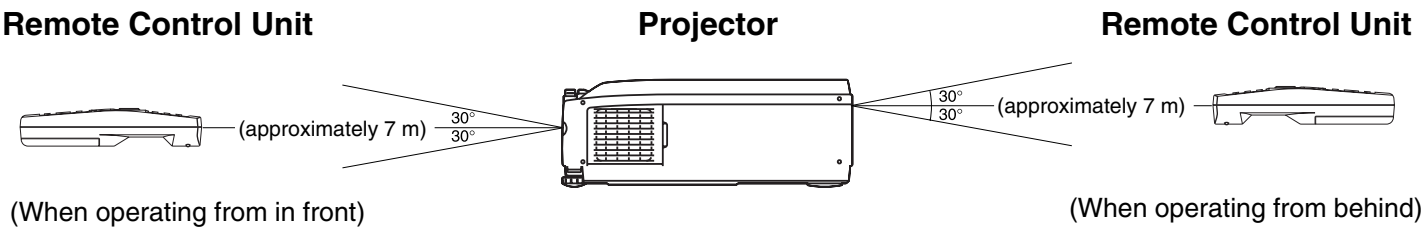
■ Operating range of the remote control unit

Point the remote control unit toward the remote control signal receptor on the front or the rear of the Projector to operate the Projector. Refer to the illustration below for the operating range of the remote control unit.

<Top view>



<Side view>

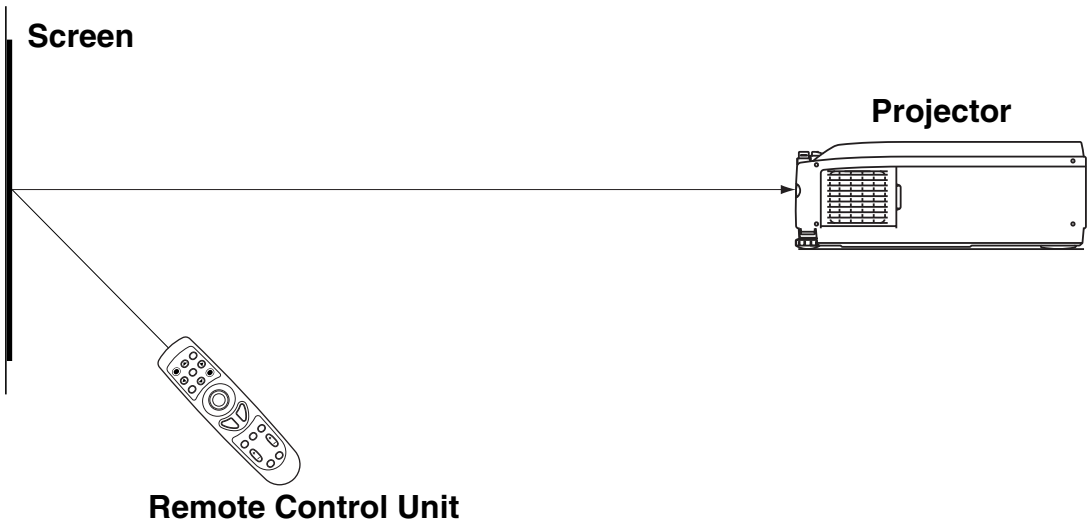


Note

- The operating distance is within 7 meters (approximately 23.0 feet) from directly in front of the front or rear remote control signal receptors.
- If strong light is allowed to shine onto the remote control signal receptor, or if there are any obstacles between the remote control signal receptor and the remote control unit, correct remote control operation may not be possible.

■ If facing the remote control unit toward the screen

The Projector can also be operated by pointing the remote control unit toward the screen as shown in the illustration below.

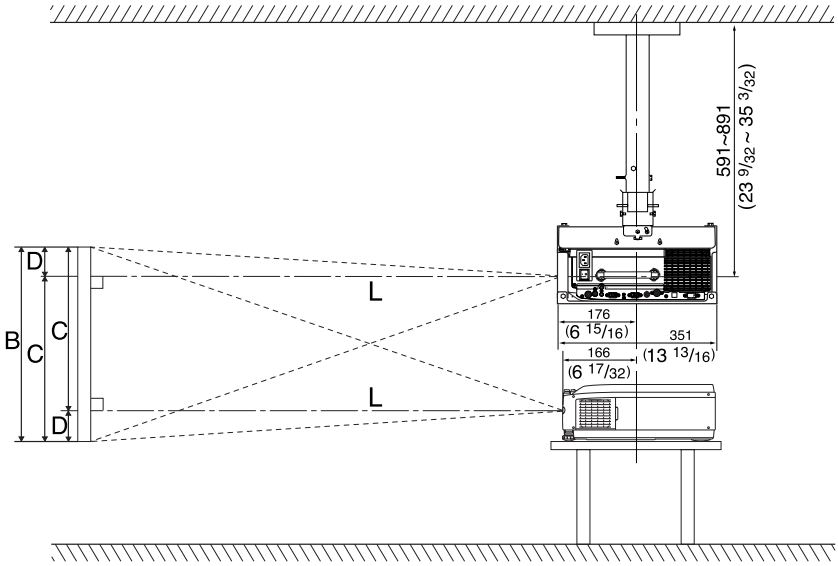


Note

If facing the remote control unit toward the screen to operate the projector, the operating range of the remote control unit will be limited by the amount of light reflection loss caused by the characteristics of the screen used.

Standard Setting-up Positions

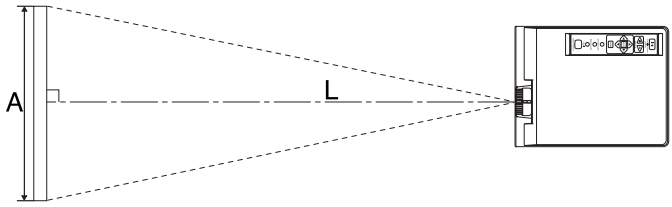
The screen should be positioned so that it is not directly touched by sunlight or room light as this will wash out the colors of the picture making it hard to see. When possible, close all blinds, curtains, etc. and dim the lights. Also, the LCD Projector should be at a 90° angle to the screen for the best picture results. To determine the distance for the desired size, please refer to the LCD Projector/Screen Relationship Chart below.
(By using the digital variable compression feature, you can increase the throw distance. See page 24.)



When installed using the ET-PK057 ceiling mount bracket (sold separately).

Unit : mm (inch)

- Your LCD Projector is equipped with an image reverse feature. (See page 22.)

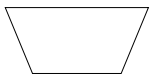


LCD Projector /Screen Relative Position Chart

The picture can be adjusted to the desired size within the range of the zoom lens.
(This chart is based on a reduction ratio of 1 time.) The values in the table are reference values.

Screen size	Throw distance (L)	Measure (A)	Measure (B)	Measure (C)	Measure (D)
20 inches	0.85 m (2.79 ft)	0.41 m (1.33 ft)	0.31 m (1.00 ft)	0.26 m (0.86 ft)	4 cm (1.7 in.)
40 inches	1.33 m - 1.75 m (4.36 ft - 5.74 ft)	0.81 m (2.67 ft)	0.61 m (2.00 ft)	0.52 m (1.71 ft)	9 cm (3.4 in.)
60 inches	2.00 m - 2.65 m (6.66 ft - 8.69 ft)	1.22 m (4.00 ft)	0.91 m (3.00 ft)	0.78 m (2.57 ft)	13 cm (5.1 in.)
80 inches	2.73 m - 3.55 m (8.96 ft - 11.65 ft)	1.63 m (5.33 ft)	1.22 m (4.00 ft)	1.05 m (3.43 ft)	17 cm (6.9 in.)
100 inches	3.43 m - 4.45 m (11.25 ft-14.60 ft)	2.03 m (6.67 ft)	1.52 m (5.00 ft)	1.31 m (4.29 ft)	22 cm (8.6 in.)
120 inches	4.13 m - 5.35 m (13.55 ft-17.55 ft)	2.44 m (8.00 ft)	1.83 m (6.00 ft)	1.57 m (5.14 ft)	26 cm (10.3 in.)
150 inches	5.18 m - 6.70 m (16.99 ft-21.98 ft)	3.05 m (10.00 ft)	2.29 m (7.50 ft)	1.96 m (6.43 ft)	33 cm (12.9 in.)
200 inches	6.93 m - 8.85 m (22.74 ft-29.36 ft)	4.06 m (13.33 ft)	3.05 m (10.00 ft)	2.61 m (8.57 ft)	44 cm (17.1 in.)
250 inches	8.68 m - 11.20 m (28.48 ft-36.75 ft)	5.08 m (16.67 ft)	3.81 m (12.50 ft)	3.27 m (10.71 ft)	54 cm (21.4 in.)
300 inches	10.43 m - 13.45 m (34.22 ft-44.13 ft)	6.10 m (20.00 ft)	4.57 m (15.00 ft)	3.92 m (12.86 ft)	65 cm (25.7 in.)

- If the LCD Projector and the screen are not properly placed, the picture will be distorted producing a keystoned image as shown at right.



Keystoned Image

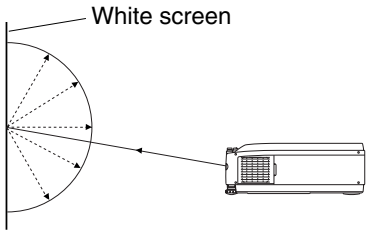
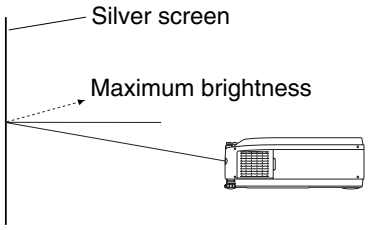
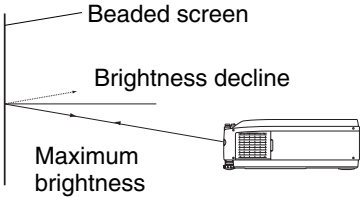
Note

- Using the Optional Wide Conversion lens (ET-LEC059), you can shorten the above throw distances by 0.8 times.

Screen Requirements

This Projector is used to project the image onto flat screens. However, the brightness and viewable range will vary depending on which type of screen is used.
When selecting a screen, check the characteristics of the screen to ensure that it is suitable for the intended place of use.

Screen characteristics (reference)

Screen type		Screen characteristics
Reflective screens	**White screen**	This type of screen can be seen from anywhere, so there are no limits on the viewing position. However, the surrounding walls should be darkened as in a movie theatre, otherwise a clear picture cannot be obtained. 
Reflective screens	**Silver screen**	This type of screen gives a picture which is 2-4 times brighter than a white screen. A variety of types are available from different manufacturers, and each type has different brightness characteristics. Some also have restrictions on the possible range of viewing positions. * Care should be taken with screens that have a high gain, as these types of screen can cause color distortion at the left and right edges. * This type of screen is recommended when the Projector is suspended from the ceiling. 
Reflective screens	**Beaded screen**	This type of screen is similar to the silver screen, except that no color distortion occurs at the left and right edges. Moreover, most of the light is reflected at the same angle as the angle of incidence. * This type of screen is recommended when the Projector is placed on the floor. 
Translucent screens	**Flexible translucent screen**	This type of screen is made of PVC (polyvinyl chloride). It has the same characteristics as silver screens, but sometimes it can have hot spots.
Translucent screens	**Rigid-type translucent screen**	This type of screen is made of acrylic plastic. It is extremely durable and has excellent optical characteristics. It performs in the same way as silver screens.

Note

- A Polarized screen can not be use for this LCD Projector, because its polarizing effect will add to the polarization already designed into the Projector (to increase its efficiency). The resulting image will not appear in its true color.

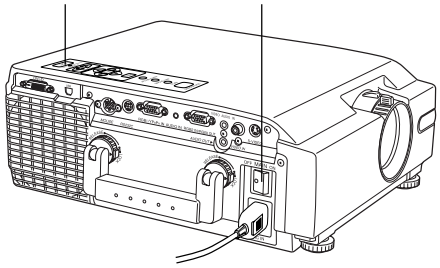
Turning the power on and off

If the MAIN POWER switch on the LCD Projector is turned off while the cooling fan is still operating, the operating life of the projector lamp will be shortened. Be sure to follow the procedures given below when turning the LCD Projector power supply on and off.

POWER Button/ POWER Indicator STANDBY(R) ON(G)

(LCD Projector)

MAIN POWER Switch

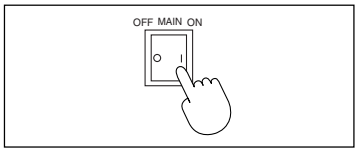


(Remote Control Unit)

POWER Button

• Turning on the power

1



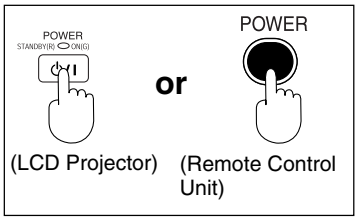
Press the MAIN POWER switch

Press the MAIN POWER switch on the LCD Projector to ON.

↓

The power indicator will illuminate red and the Projector will switch to standby mode.

2



Press the POWER button

Press POWER button on the LCD Projector or remote control.

↓

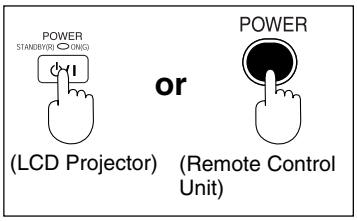
The power indicator will illuminate solid green and a picture will be projected onto the screen.

Note

The LCD Projector cannot be turned on for 60 seconds after turning it off.

• Turning off the power

1



Press the POWER button

Press POWER button on the LCD Projector or remote control. “Please press POWER button again to power off.” is displayed on the screen, and then press POWER button again.

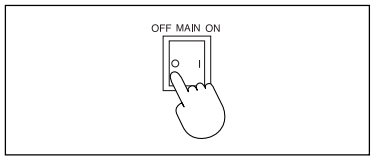
↓

The power indicator will illuminate flashing red and the Projector will switch to standby mode.

2 Wait for the cooling fan to stop.

Wait for a while (approximately 2 minutes) until the power indicator will illuminate solid red.

3



Press the MAIN POWER switch

Press the MAIN POWER switch on the LCD Projector to OFF.

↓

The power indicator will switch off and the power supply will be turned off.

Note

- Insert Power Cord into LCD Projector AC socket and connect to properly grounded wall outlet.
- If the power is turned off using the POWER button, the cooling fan will continue to operate while the inside of the Projector is still at a high temperature. Do not turn the MAIN POWER switch to the OFF position, disconnect the power cord plug from the wall socket or shut off the mains power supply until the cooling fan stops operating.
- If the MAIN POWER switch has not been turned off, the Projector will still draw approximately 20 W of power, even when the POWER button has been turned off and the fan has stopped.
- To prevent the Lamp, when the power is turned off, the Lamp lights for just a moment as the cooling fan stops.

Adjusting the LCD Projector Projection Angle

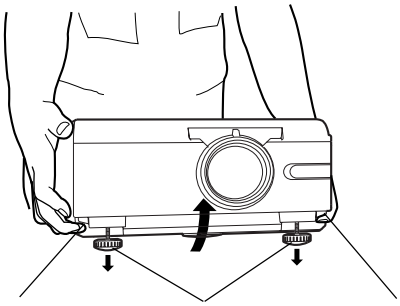
Adjusting the LCD Projection angle of the LCD Projector. When the projector is in the horizontal position, keystone correction is unnecessary and a correct image can be viewed.

• Adjustment procedure

1 Lift the front of the LCD Projector to the desired angle. While holding it in place, press the 2 adjuster buttons located under the right and left sides of the projector. When the buttons are pressed, the left and right adjustable legs will drop down until they reach the setting-up surface.

Note

- Do not release the buttons until both legs have reached the setting-up surface.

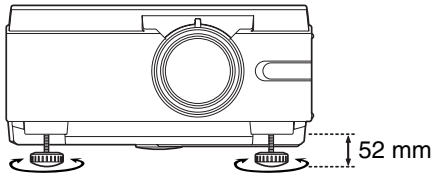


2 Release the adjuster buttons. (The adjustable legs will lock as soon as the buttons are released.)

3 Turn the adjustable legs by hand in either direction to make fine adjustments.

Note

- The legs can be extended by up to 52 mm. If you try to extend them any further than this, they will merely spin freely.

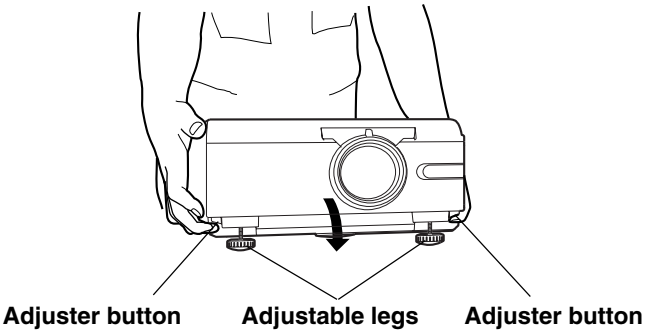


■ Retracting the adjustable legs

After lifting the front of the Projector slightly, press and hold the adjuster buttons and then gently lower the Projector.

Note

- Be sure to support the Projector firmly while pressing the adjuster buttons. If the adjuster buttons are pressed without supporting the Projector, the adjustable legs will suddenly unlock and the Projector will fall down, which could catch your fingers and damage the Projector.

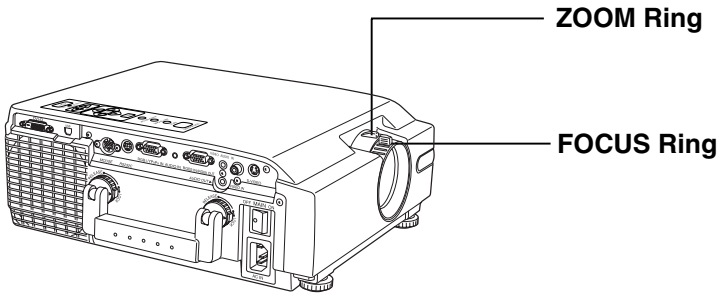


Caution: When you set up the LCD Projector

- Do not place it in humid or dusty places, or places where the air is sooty or full of cigarette smoke. If the lens, mirror, or other optical components become dirty, the picture will blur or darken, making viewing difficult.
- Do not expose to extreme heat or cold. Operating temperature: 0 °C – 40 °C (32 °F – 104 °F)

Adjusting the Lens

If the LCD Projector is not set up so that it is horizontal, it will not be possible to obtain a distortion-free picture. Turn the adjusters in either direction to make fine adjustments to the level of the Projector so that the Projector is perfectly horizontal.



• Adjustment procedure

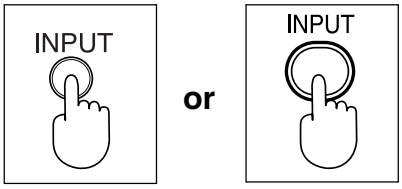
1 Turn the ZOOM Ring to adjust the size of the picture.
- When facing the rear of the projector, turn the ring to the right for a larger picture, or to the left for a smaller picture.

2 Turn the FOCUS Ring to adjust the focus of the picture.
- Turn the ring to the right or left until the picture is at the optimum focus.

3 Turn the ZOOM Ring again to adjust the size of the picture.
- When you turn the FOCUS Ring, the size of the picture changes.

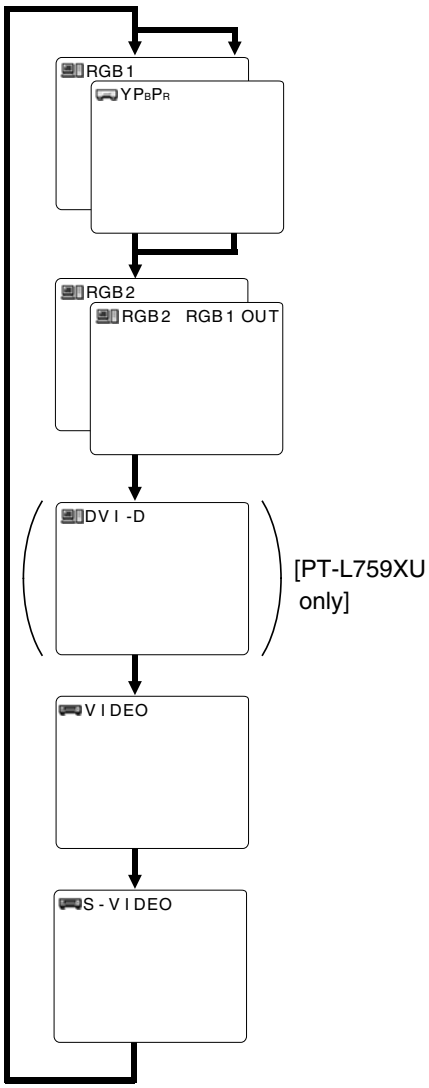
Changing the input signal

(LCD Projector) (Remote Control Unit)



Press the INPUT button

The input source for picture signals and the corresponding audio signals can be changed by pressing the INPUT buttons on the Projector operating panel or on the remote control.



The signal from the source which is connected to the RGB1/YPBPR connector is projected.
This terminal accepts input of RGB input signals from a personal computer and DTV Format signals (RGB, YPBPR) from a DVD or a digital broadcast. No monitor or Projector can automatically decide whether a Component signal is the RGB-type or the YPBPR-type. So, you will have to select either RGB or YPBPR manually.

The signal from the source which is connected to the RGB 2 IN/ RGB 1 OUT terminal is projected.
This terminal accepts an RGB signal from a PC in addition to a DTV format signal (RGB) from a digital broadcast, DVD, etc. And, by setting the terminal to OUT, the signal input to the RGB1/YPBPR connector can be output. At that time, the projected screen will go to blue back. (See page 40.)

The signal input to the DVI-D (Digital Visual Interface)input terminal is projected. The video signal from the PC is input to the LCD Projector as a digital signal, you can enjoy superior picture quality. [PT-L759XU only]

The signal from the source which is connected to the VIDEO IN connector is projected.

The signal from the source which is connected to the S-VIDEO IN connector is projected.

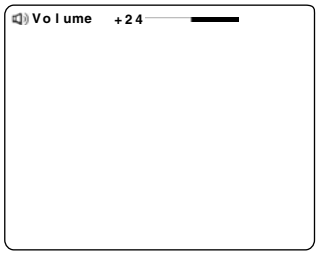
Note

- To turn off the input signal on-screen display, please see “Turning off the input signal display” on page 34.
- There is only one audio system circuit provided for the VIDEO AUDIO IN terminals for S-VIDEO and VIDEO signals. Because of this, if using both S-VIDEO signals and VIDEO signals, it will be necessary to change over the connectors.
- There is only one audio system circuit provided for the AUDIO IN terminals for RGB1/YPBPR, RGB2, DVI-D [PT-L759XU only] signals. Because of this, if using both RGB1/YPBPR,RGB2 signals and DVI-D signals, it will be necessary to change over the connectors.
- The LCD Projector is shipped from the factory with the S-VIDEO/VIDEO signal selection function set to “AUTO.” If the correct picture is not projected when VIDEO signal is input and it is necessary to change the input to match the input signal, refer to “S-VIDEO/VIDEO Signal Format Selection” on page 28.
- Please refer to page 39 to change the setting if you change the signal input to the RGB1/YPBPR connector.
- When RGB signal is input, please input the registered signals found on page 26.
- Please refer to page 40 to change the setting if you change the signal select to the RGB2 IN/RGB1 OUT connector.
- When projecting via the DVI-D input, first connect the LCD Projector to your PC using the DVI cable, and then turn the PC on.

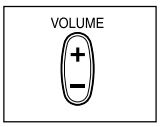
Basic LCD Projector Operation

■ Adjusting the Volume

The volume can be adjusted using the VOLUME +/- buttons on the LCD Projector or remote control.

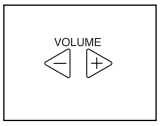


(Remote Control Unit)



or

(LCD Projector)



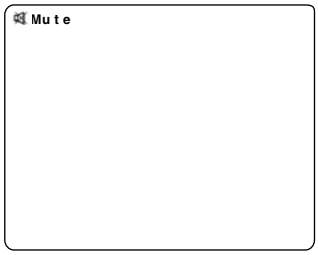
- **Press VOLUME +** button to turn the volume high.
- **Press VOLUME -** button to turn the volume low.

Note

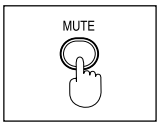
- The "Volume" will remain displayed on the screen for approximately 5 seconds.

■ Turning off the sound

If the MUTE button on the remote control is pressed, "Mute" will be displayed on the screen as shown in the illustration below and the sound will be muted. If the MUTE button is pressed again, the normal sound volume will be restored.



(Remote Control Unit)



Note

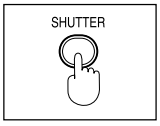
- If the Power supply is turned off or either of the VOLUME +/- buttons is pressed, the mute setting will be cancelled.

■ Turning off the Picture and Sound at the same time

When SHUTTER button is pressed on the remote control the picture and sound turns off and the screen goes black, Press SHUTTER button again to resume picture and sound.

Black screen

(Remote Control Unit)

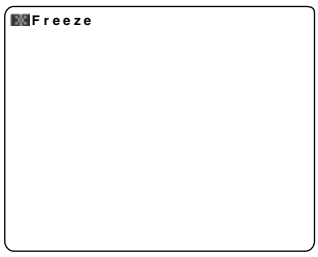


Note

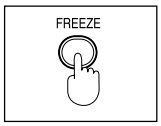
- When the screen goes black, the picture will not be shown on the screen. However, the picture continues to be sent from the Personal Computer or video source.

■ Freezing the picture

Projection can be switched between a frozen (still) picture and a moving picture each time when the FREEZE button on the remote control is pressed. Press FREEZE button again to resume motion.



(Remote Control Unit)



Note

- The sound is muted while the picture frozen.

Menu operation guide

This section explains how to reach the desired selection or setting screens from the MENU screen. Refer to the page indicated for further details on each screen item.

1 **Press the MENU button.**
(The Main MENU screen will be displayed.)

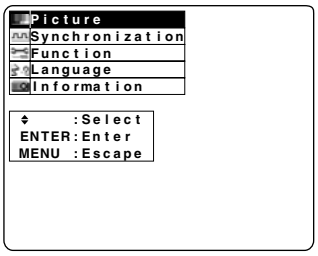
2 **Use the arrow (▲ , ▼) buttons** to select an item, and then **press the ENTER button.**
(The Second MENU screen will be displayed.)

3 **Use the arrow (▲ , ▼) buttons** to select an item, and then **press the ENTER button.**
(The Adjustment MENU screen will be displayed.)

Note

• Press MENU to remove the setup screen and menu.

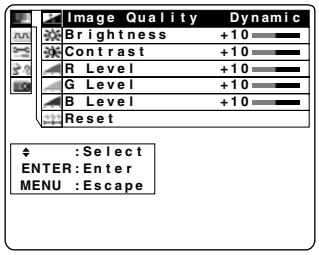
<Main MENU>



When RGB signal is being projected.

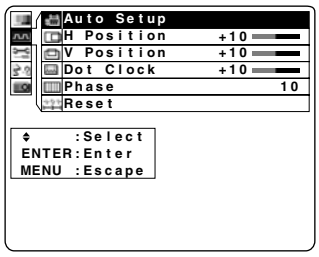
<Second MENU>

Picture



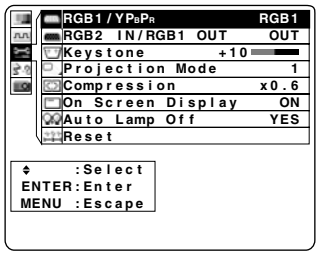
Used to picture adjustments.

Synchronization



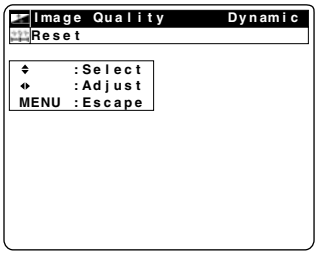
Used to adjust the horizontal and vertical position of the picture and to adjust other properties such as the size.

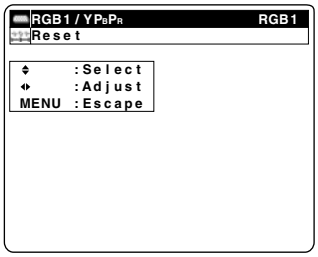
Function



Used to adjust and change the settings of the various functions available on the projector.

<Adjustment MENU>





Menu operation guide

This section explains how to reach the desired selection or setting screens from the MENU screen. Refer to the page indicated for further details on each screen item.

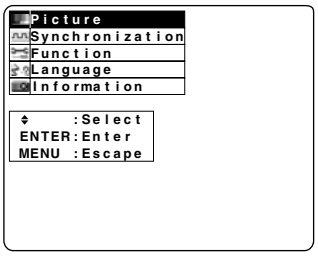
1 **Press the MENU button.**
(The Main MENU screen will be displayed.)

2 **Use the arrow (▲ , ▼) buttons** to select an item, and then **press the ENTER button.**
(The Second MENU screen will be displayed.)

Note

• Press MENU to remove the setup screen and menu.

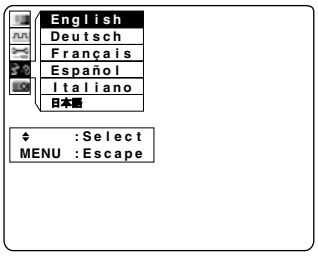
<Main MENU>



When RGB signal is being projected.

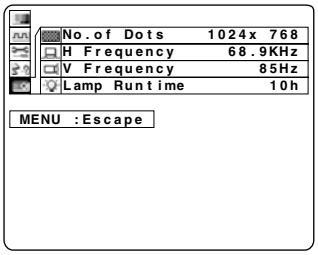
<Second MENU>

Language



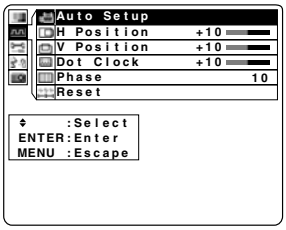
Used to switch the on-screen display language.

Information

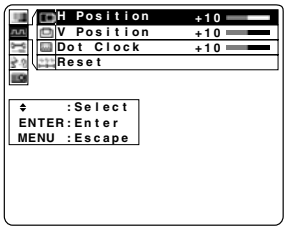


Use to display information about the input signal, lamp run time, etc.

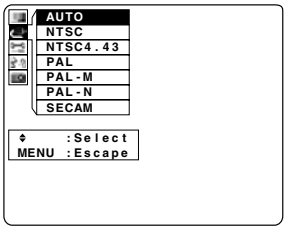
The displayed items on the screen differ according to the input signal.



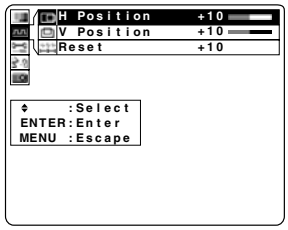
When RGB signal is being projected.



When YPBPR signal is being projected.



When Video/S-Video signal is being projected.



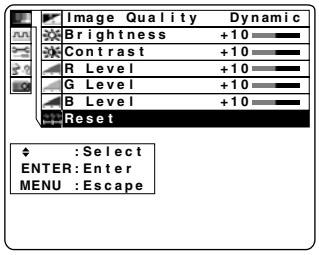
When DVI-D signal is being projected. [PT-L759XU only]

Menu operation guide

■ Returning adjustment values to the factory default settings (standard values)

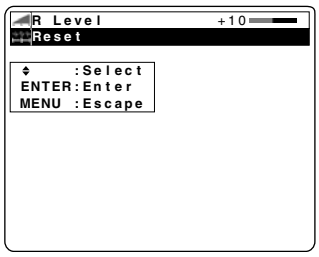
If “Reset” is selected while the “Second MENU” or an “Adjustment MENU” is displayed, the setting can be returned to the factory default setting.

• During a second menu screen is displayed, chose the “Reset” and then press the ENTER button.



All items displayed in the second menu return to the factory settings.

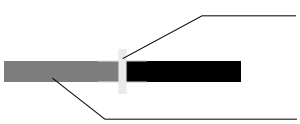
• During an individual adjustment screen is displayed, chose the “Reset” and then press the ENTER button.



Only items selected in the second menu return to the factory settings.

Bar Scale display

The bar scale mark indicates the factory standard value. The mark is only displayed when a factory standard value was assigned.



This bar shows the factory standard value.

This bar shows the current value adjustment.

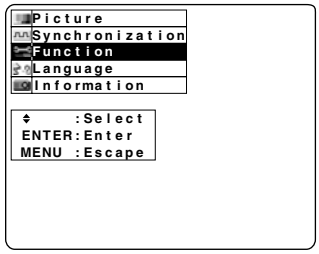
Setting-up Positions and Changing the Projection Mode

The projection mode used by the Projector can be changed in accordance with the setting-up position. Including ceiling mounting, you may select from four direction types. At the time of shipment from the factory, the Projector is set to the No.1 "DESK/FRONT" projection mode, but this can be changed if required.
The procedure and on-screen display as shown below are based on RGB as the input signal from a personal computer. (See page 17.)

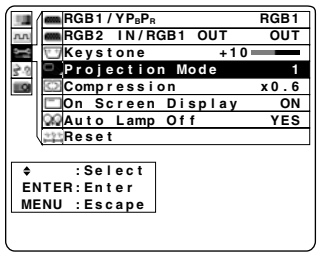
• Setting procedure

1 Press MENU to display the menu.

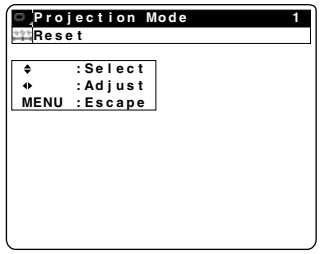
2 Press ▲ or ▼ to select "Function", **and then ENTER** to display the screen.



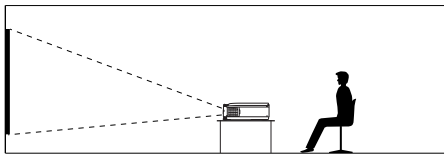
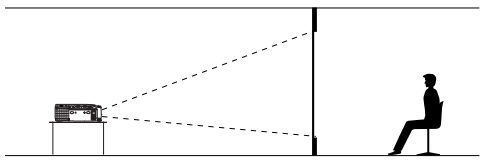
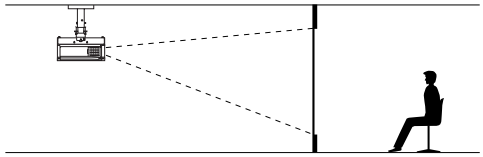
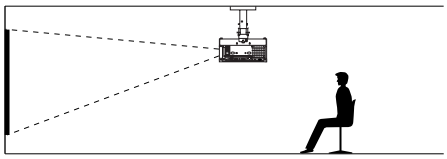
3 Press ▲ or ▼ to select "Projection Mode", **and then ENTER** to display the screen.



4 Press ◀ or ▶ to select projecting mode from 1 to 4.
- Select 1 ..... DESK/FRONT (Factory setting)
- Select 2 ..... DESK/REAR (Right and Left displays in reverse)
- Select 3 ..... CEILING/REAR (Up and Down displays in reverse)
- Select 4 ..... CEILING/FRONT (Up and Down/Right and Left reverse display.)



Note
- Press MENU to remove the setup screen and menu.
- When reset is selected, adjustment values return to their factory default settings.

Select 1 ..... DESK/FRONT	Select 2 ..... DESK/REAR
 (Factory setting)	 (Right and Left displays in reverse)
Select 3 ..... CEILING/REAR	**Select 4 ..... CEILING/FRONT**
 (Up and Down displays in reverse)	 (Up and Down/Right and Left reverse display)

Note
- If the lettering on the screen is projected backwards or upside down, it is because the wrong mode has been selected.

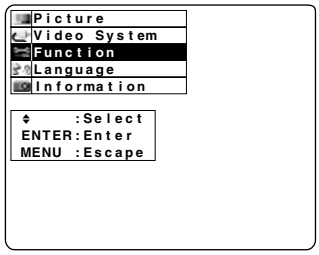
Setting the Screen Type

This LCD Projector is compatible with wide screen (16:9 ratio). If a wide screen is used and you set the screen type to 16:9 in order to project a wide (16:9) picture to fill the entire screen, pictures are correctly projected within the screen when projecting older (normal) 4:3 ratio pictures.
Please follow the instructions below to set the screen type.
The procedure and on-screen displays below are based on S-Video/Video as the input signal. (See page 17.)

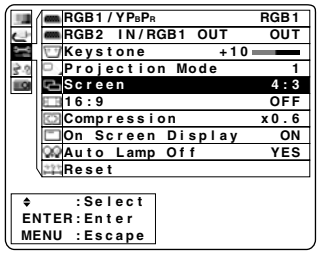
• Setting procedure

1 Press MENU to display the menu.

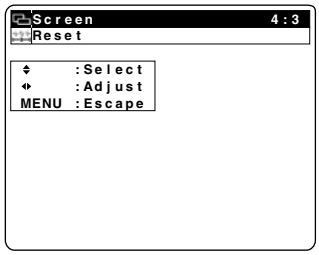
2 Press ▲ or ▼ to select "Function", **and then ENTER** to display the screen.



3 Press ▲ or ▼ to select "Screen", **and then ENTER** to display the screen.



4 Press ◀ or ▶ to change the screen type.
• The 4:3 type screen is set at the factory.



Note
• Press MENU to remove the setup screen and menu.
• When reset is selected, adjustment values return to their factory default settings.

	16:9 (Wide) Function OFF	16:9 (Wide) Function ON
4:3 Type Screen	Screen Projected pictures (4:3)	Screen Projected pictures (16:9)
16:9 Type Screen	Screen Projected pictures (4:3)	Screen Projected pictures (16:9)

Note
• Please refer to "Changing to 16:9 (wide) screen format" on page 35 if you change to the wide 16:9 (wide) screen and project pictures.

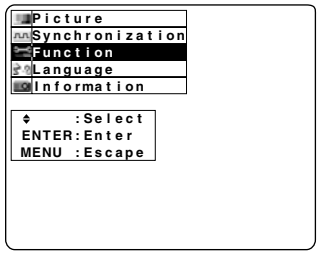
Digital Variable Compression

The projected size of the input image can be reduced to the level you select. With this feature, you can match the input resolution. When projecting a signal within 1 024 X 768, you can reduce the image and adjust it to the original image quality. This will allow you to increase the throw distance.
The procedure and on-screen display as shown below are based on RGB as the input signal from a personal computer. (See page 17.)

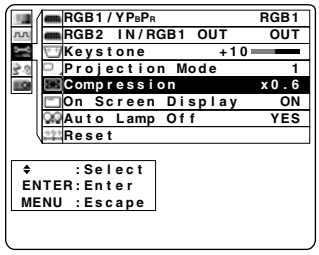
• Adjustment procedure

1 Press MENU to display the menu.

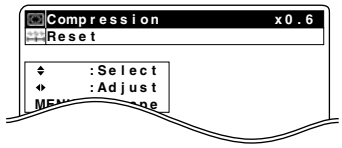
2 Press ▲ or ▼ to select "Function", **and then ENTER** to display the screen.

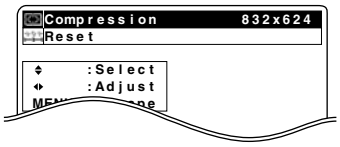


3 Press ▲ or ▼ to select "Compression", **and then ENTER** to display the screen.

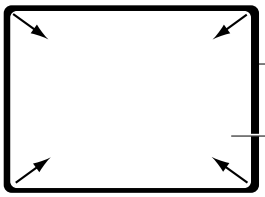
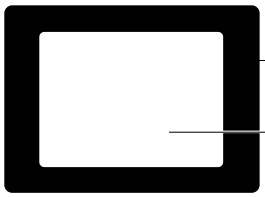
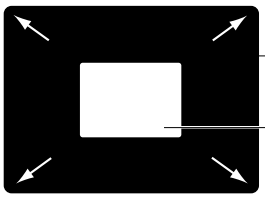
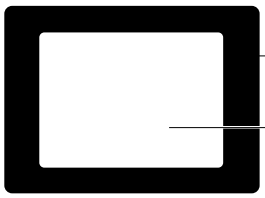


4 Press ◀ or ▶ to adjust the compression.
- Image can be reduced up to 0.6.
- When the number of dots of projected image corresponds with 832 X 624, 800 X 600, or 640 X 480, the image dimensions are displayed.
- When the input signal dot number corresponds with the projected image, the image dimensions are displayed in colored letter.





Note
- Press MENU to remove the setup screen and menu.
- When reset is selected, adjustment values return to their factory default settings.

	Before adjusting	After adjusting
When reducing an image	 Screen Projected pictures **Press ◀ .....** The image is reduced.	 Screen Projected pictures
When enlarging an image	 Screen Projected pictures **Press ▶ .....** The image is enlarged.	 Screen Projected pictures

Note
- The maximum optical throw distance can be increased to 1.6 times.
- Please refer to the throw distance and setting up positions on page 12.

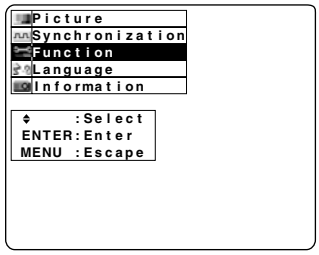
Keystone correction function

When the screen and projector are not level, a keystone (trapezoid) image may occur. This can be corrected by doing the following.
The procedure and on-screen displays below are based on RGB as the input signal. (See page 17.)

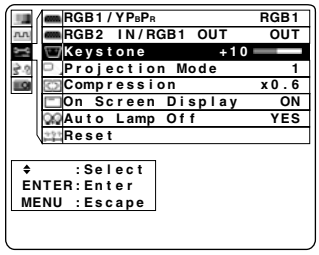
• Adjustment procedure

1 Press MENU to display the menu.

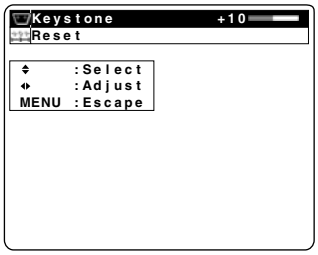
2 Press ▲ or ▼ to select "Function", **and then ENTER** to display the screen.



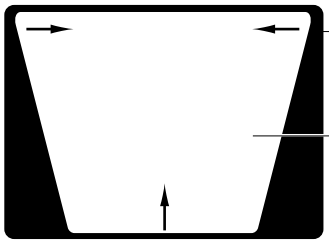
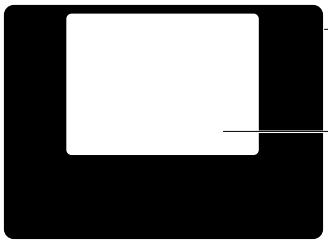
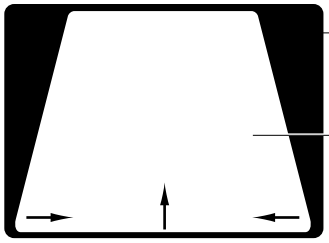
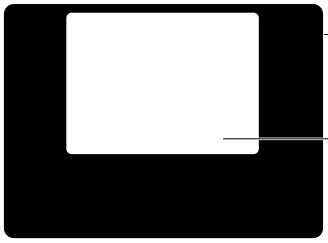
3 Press ▲ or ▼ to select "Keystone", **and then ENTER** to display the screen.



4 Press ◀ or ▶ to adjust the Keystone.



Note
- Press MENU to remove the setup screen and menu.
- When reset is selected, adjustment values return to their factory default settings.

	Keystone Image	Corrected Image
Keystone (top : wide)	 Screen Projected pictures **Press ▶ ...** Top becomes narrow.	 Screen Projected pictures
Keystone (under : wide)	 Screen Projected pictures **Press ◀ ...** Bottom becomes narrow.	 Screen Projected pictures

Note
- The keystone distortion for the picture which is displayed can also be adjusted when the KEYSTONE button is pressed.
- When keystone is corrected, the screen becomes smaller.

Signals that can be Input

The projection mode will be matched automatically to one of the modes which have been pre-set inside the Projector. If a signal which differs greatly from any of the types listed below is input, the picture image may not be displayed correctly, or a blue background may be displayed.

■ RGB Signals that can be Input

Display mode name		Signal data			
		No. of dots	Horizontal frequency (kHz)	Vertical frequency (Hz)	Dot clock frequency (MHz)
Personal Computer Signals	VGA400 (70 Hz)	640 X 400	31.47	70.08	25.175
	VGA480 (60 Hz)	640 X 480	31.47	59.94	25.175
	Macintosh 13″	640 X 480	35.00	66.67	30.241
	VESA400 (85 Hz)	640 X 400	37.86	85.08	31.500
	VESA480 (72 Hz)	640 X 480	37.86	72.81	31.500
	VESA480 (75 Hz)	640 X 480	37.50	75.00	31.500
	VESA480 (85 Hz)	640 X 480	43.27	85.01	36.000
	SVGA (56 Hz)	800 X 600	35.16	56.25	36.000
	SVGA (60 Hz)	800 X 600	37.88	60.32	40.000
	SVGA (72 Hz)	800 X 600	48.08	72.19	50.000
	SVGA (75 Hz)	800 X 600	46.88	75.00	49.500
	SVGA (85 Hz)	800 X 600	53.67	85.06	56.250
	XGA (60 Hz)	1 024 X 768	48.36	60.00	65.000
	XGA (70 Hz)	1 024 X 768	56.48	70.07	75.000
	XGA (75 Hz)	1 024 X 768	60.02	75.03	78.750
	Macintosh 16″	832 X 624	49.73	74.55	57.283
	Macintosh 19″	1 024 X 768	60.24	74.93	80.000
	XGA (85Hz)	1 024 X 768	68.68	85.00	94.500
	*1 152 X 864 (60 Hz)	1 152 X 864	54.05	60.06	80.000
	*1 152 X 864 (70 Hz)	1 152 X 864	63.85	70.01	94.500
	*1 152 X 864 (75 Hz)	1 152 X 864	67.50	75.00	108.000
	*1 152 X 864 (85 Hz)	1 152 X 864	77.09	85.00	121.500
	*Macintosh 21″	1 152 X 870	68.68	75.06	100.000
	*1 280 X 960 (60 Hz)	1 280 X 960	60.00	60.00	108.000
	*1 280 X 960 (75 Hz)	1 280 X 960	75.00	75.00	126.000
	*1 280 X 960 (85 Hz)	1 280 X 960	85.94	85.00	148.500
	*1 280 X 1 024 (60 Hz)	1 280 X 1 024	63.98	60.02	108.000
	*1 280 X 1 024 (75 Hz)	1 280 X 1 024	79.98	75.03	135.000
	*1 280 X 1 024 (85 Hz)	1 280 X 1 024	91.15	85.02	157.500
	*UXGA (60 Hz)	1 600 X 1 200	75.00	60.00	162.000
	*UXGA (65 Hz)	1 600 X 1 200	81.25	65.00	175.500
	*UXGA (70 Hz)	1 600 X 1 200	87.50	70.00	189.000
	*UXGA (75 Hz)	1 600 X 1 200	93.75	75.00	202.500
DTV Format Signals	480 i	664 X 485	15.73	29.97	12.650
	480 p	720 X 483	31.47	59.94	27.000
	* 720 p	1 280 X 720	45.00	60.00	74.250
	*1 080 i	1 920 X 1 080	33.75	30.00	74.250
	625 i	756 X 576	15.63	25.00	14.500

■ DVI-D Signals that can be Input

Display mode name	No. of dots	Vertical frequency (Hz)
VGA	640 x 480	60.00
SVGA	800 x 600	60.00
XGA	1 024 x 768	60.00
*SXGA	1 280 x 1 024	60.00

* Changing the number of dots to be displayed to within 1 024 X 768 may cause a portion of information to be omitted, or the image quality to be degraded.

Note

- DTV Format Signals are picture signals from a DVD or a digital broadcast.
- The Sync. signal of a DTV format signal (RGB) is only supported if the Horizontal and Vertical frequencies are separate.

Signals that can be Input

■ Component Signals (YPBPR) that can be Input

Display mode name		Signal data			
		No. of dots	Horizontal frequency (kHz)	Vertical frequency (Hz)	Dot clock frequency (MHz)
DTV Format Signals	480 i	664 X 485	15.73	29.97	12.650
	480 p	720 X 483	31.47	59.94	27.000
	*720 p	1 280 X 720	45.00	60.00	74.250
	*1 080 i	1 920 X 1 080	33.75	30.00	74.250
	625 i	756 X 576	15.63	25.00	14.500

* Changing the number of dots to be displayed to within 1 024 X 768 may cause a portion of information to be omitted, or the image quality to be degraded.

Note

- DTV Format Signals are picture signals from a DVD or a digital broadcast.

■ S-VIDEO/VIDEO Signal that can be Input

Signal format name	Horizontal scanning frequency (kHz)	Vertical scanning frequency (Hz)	Color sub-carrier frequency (MHz)
AUTO	Selected automatically.		
NTSC	15.75	60.00	3.58
NTSC4.43			4.43
PAL-M			3.58
PAL	15.63	50.00	4.43
PAL-N			3.58
SECAM			4.25 or 4.41

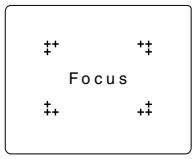
Note

- If the correct signal format is not selected and the picture does not appear as normal when VIDEO or S-VIDEO signal are being input, select the format (See page 28.)

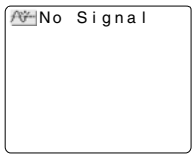
■ Blue (Black) Screen with No Input Signal

The LCD Projector is equipped with an internal Blue (Black) Screen function which turns the screen blue black when the video or personal computer equipment connected to the input jack is turned off, or when there is nothing connected to the input jack.

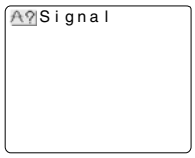
- If the power is turned on when no input signal is input to the LCD Projector, the screen will turn blue.
  The “Focus” overlay appears only until the video or personal computer equipment is connected to the input jack and turned on.



- During operation, if the input signal is terminated, the screen goes black and “No Signal” will be displayed.



- The display at right will appear when the RGB input is within the LCD Projector’s frequency range, but is not one of the LCD Projector’s programmed formats. (See pages 26, 27.)
- Should an RGB signal be input which is out of the LCD Projector’s frequency range, no indication will be present.



Signals that can be Input

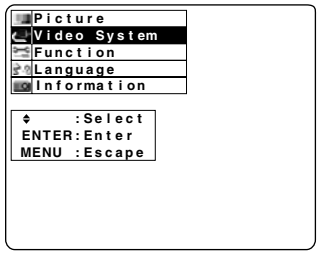
■ S-VIDEO/VIDEO Signal Format Selection

If the correct signal format is not selected and the picture does not appear normal when VIDEO or S-VIDEO signal is being input, select the format by the following procedure. This function is set to “AUTO” at the time of shipment from the factory, so that the Projector can normally be used with this setting.

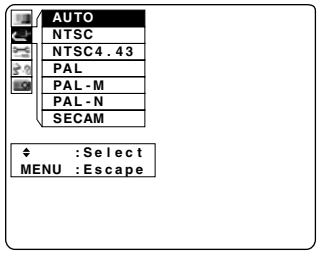
• Setting procedure

1 Press MENU to display the menu.

2 Press ▲ or ▼ to select “Video System”, **and then ENTER** to display the screen.



3 Press ▲ or ▼ to switch the setting to “AUTO”, “NTSC”, “NTSC4.43”, “PAL”, “PAL-M”, “PAL-N” or “SECAM” until a normal picture is obtained.



Note

- Press MENU to remove the setup screen and menu.
- If using a signal source with poor picture quality, such as a dubbed tape, it may not be possible to get the picture to display properly.
- NTSC and PAL-M have the same scanning frequencies and color sub-carrier frequencies, but they have different color modulation methods. Because of this, if the incorrect setting is selected, color pictures may appear in black-and-white.

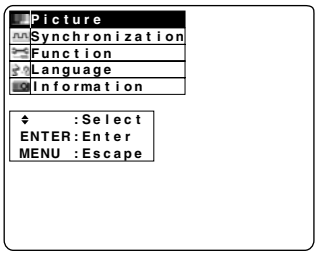
Selecting the Image Quality

This LCD Projector can select NATURAL or DYNAMIC as the special characteristic of image quality. Follow the instructions below to select the image qualities you prefer.
The procedure and on-screen display as shown below are based on RGB as the input signal from a personal computer. (See page 17.)

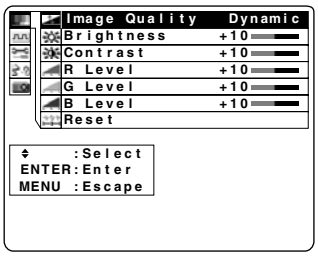
•Selecting procedure

1 Press MENU to display the menu.

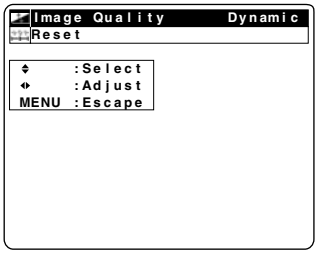
2 Press ▲ or ▼ to select "Picture", **and then ENTER** to display the screen.



3 Press ▲ or ▼ to select "Image Quality", **and then ENTER** to display the Image Quality individual adjustment screen.



4 Press ◀ or ▶ to select the Image Quality.
- Natural is the factory S-VIDEO/VIDEO, YPBPR input signal setting.
- Dynamic is the factory RGB input signal setting.



Note
- Press MENU to remove the setup screen and menu.
- When reset is selected, adjustment values return to their factory default settings.
- Selection of quality of image cannot be performed at the time of DVI-D signal is projected.

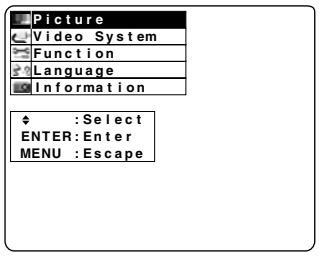
Adjusting the Picture to the Desired Setting

The items which can be adjusted will vary depending on the type of input signal. The adjustment procedure below describes the on-screen displays when the S-VIDEO signal or the VIDEO signal is being projected. (See page 17.)

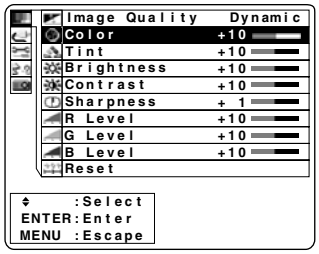
• Adjustment procedure (when adjusting the Color)

1 Press MENU to display the menu.

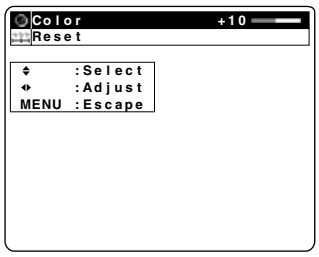
2 Press ▲ or ▼ to select "Picture", **and then ENTER** to display the screen.



3 Press ▲ or ▼ to select "Color", **and then ENTER** to display the Color individual adjustment screen.



4 Press ◀ or ▶ to adjust the color.
- The current setting will be displayed on the screen by numerals and a bar.



Note
- Press MENU to remove the setup screen and menu.
- When reset is selected, adjustment values return to their factory default settings.

Depending on the adjustment item, the adjust procedure and adjustment will vary. Please refer to the chart below.

Adjustment item	Button	Adjustment Details	Adjustment Range	Remarks
Color	Press ▶ button.	The color becomes deeper.	Max. value + 30	YPBPR, S-VIDEO/ VIDEO only
	Press ◀ button.	The color becomes paler.	Min. value - 30	
Tint	Press ▶ button.	Flesh tones become greenish.	Max. value + 30	NTSC/NTSC 4.43 (S-VIDEO/VIDEO) only
	Press ◀ button.	Flesh tones become reddish.	Min. value - 30	
Brightness	Press ▶ button.	The screen becomes brighter.	Max. value + 30	
	Press ◀ button.	The screen becomes darker.	Min. value - 30	
Contrast	Press ▶ button.	Only the Highlights of the image become brighter, adding Contrast.	Max. value + 30	
	Press ◀ button.	The Highlights become less bright, diminishing Contrast.	Min. value - 30	
Sharpness	Press ▶ button.	The picture quality becomes sharper.	Max. value + 3	S-VIDEO/VIDEO only
	Press ◀ button.	The picture quality becomes softer.	Min. value - 4	

Note
- The last adjustment condition is saved and will not be erased even if the power is turned off.
- The different adjustment condition cannot be saved for S-VIDEO and VIDEO.
- The value differs with each input signal.

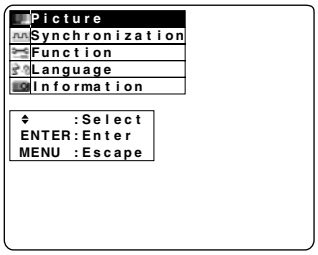
Adjusting the White Balance

The picture may become over-saturated with red or blue color, and the white color may not be at the desired degree of whiteness. In such cases, adjust the white balance by the following procedure.
The procedure and on-screen display as shown below are based on RGB as the input signal from a personal computer. (See page 17.)

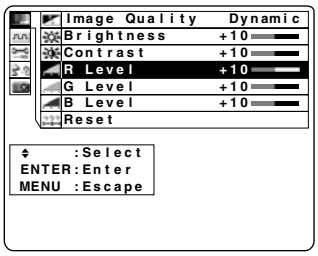
• Adjustment procedure (for white balance adjustment of the red component)

1 Press MENU to display the menu.

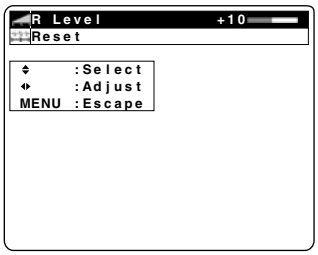
2 Press ▲ or ▼ to select "Picture", **and then ENTER** to display the screen.



3 Press ▲ or ▼ to select "R Level", **and then ENTER** to display the R Level individual adjustment screen.



4 Press ◀ or ▶ to adjust the R Level setting.
- The current setting will be displayed on the screen by numerals and a bar.



Note
- Press MENU to remove the setup screen and menu.
- When reset is selected, adjustment values return to their factory default settings.

Depending on the adjustment item, the adjust procedure and adjustment will vary. Please refer to the chart below.

Adjustment item	Button	Adjustment Details	Adjustment Range
R Level	Press ▶ button.	The red component becomes stronger.	Max. value + 30 Min. value - 30
	Press ◀ button.	The red component becomes weaker.	
G Level	Press ▶ button.	The green component becomes stronger.	
	Press ◀ button.	The green component becomes weaker.	
B Level	Press ▶ button.	The blue component becomes stronger.	
	Press ◀ button.	The blue component becomes weaker.	

Note
- Unless properly adjusted, none of the colors may display normally.

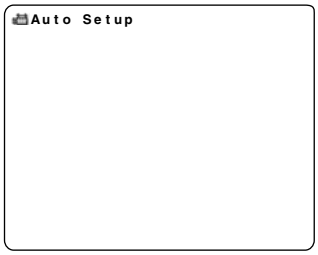
Using the Auto Setup Feature

When RGB input signal picture is projected from a Personal Computer. It is possible to adjust the Vertical position, Horizontal position, Dot clock and Phase automatically (Effective only at the time of image is projected of RGB signal input except DTV format signal).

•Selecting procedure (for direct operation)

1 Input a signal of the full screen projection image from the connected device, and then project it.

2 Press the AUTO SETUP button on the projector or remote control unit.

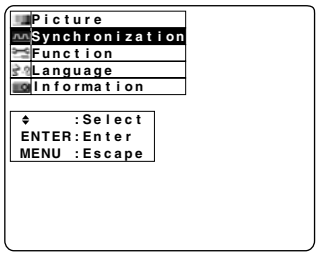


•Selecting procedure (for on-screen display operation)

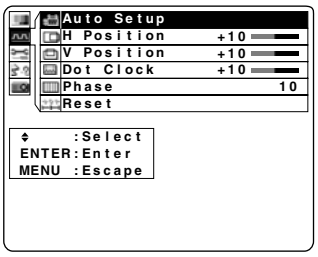
1 Input a signal of the full screen projection image from the connected device, and then project it.

2 Press MENU to display the menu.

3 Press ▲ or ▼ to select "Synchronization", **and then ENTER** to display the screen.



4 Press ▲ or ▼ to select "Auto Setup", **and then ENTER**.
The automatic position correction operation will then start. Auto Setup screen is displayed.
- Auto Setup screen disappears when Auto Setup feature is ended.
- Operating buttons, except the POWER button, become invalid during Auto Setup.



Note
- Press MENU to remove the setup screen and menu.
- When reset is selected, adjustment values return to their factory default settings.
- Adjusted settings are saved as is even if power is turned off.
- Auto Setup may not be possible if the input image is not clearly visible on the side of the screen, dark, or monotonous. In this case, refer to page 33 and adjust the image position, dot clock, and phase.
- If a signal other than the proper RGB input signal described on page 26 is input, "Signal" is displayed on-screen indicating that Auto Setup is not possible.
- Of the possible RGB signal input listed on page 26, the following signals will cause "signal" to be displayed and automatic adjustment will not be performed.
  - •Signal containing less than 480 vertical dots [VGA 400 (70 Hz), VESA400 (85 Hz)]
  - •Signal where the dot clock frequency exceeds 140 MHz [1 280x960 (85 Hz), 1 280x1 024 (85 Hz), UXGA]
- In some cases, Auto Setup may take about 40 seconds.
- Since there is no necessity for automatic adjustment at the time of a DVI-D signal input, this function is not committed.

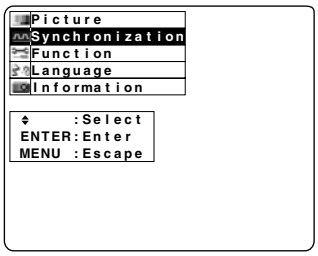
Adjusting the Image Position, Dot Clock and Phase

Confirm the picture position, Dot Clock, and Phase. If the picture is not correctly positioned within the display area of the screen (the edge of the picture does not appear), adjust the picture position. (This only applies for RGB, YPBPR, DVI-D [PT-L759XU only] input signal.) The items which can be adjusted will vary depending on the type of input signal. The procedure and on-screen display as shown below are based on RGB as the input signal from a personal computer. (See page 17.)

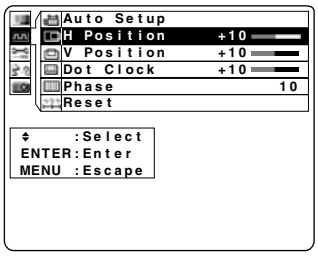
• When adjusting the Horizontal Position (H Position)

1 Press MENU to display the menu.

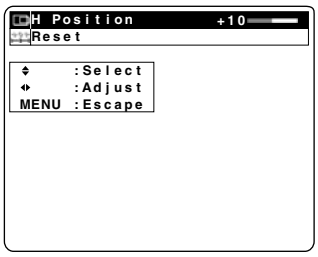
2 Press ▲ or ▼ to select "Synchronization", **and then ENTER** to display the screen.



3 Press ▲ or ▼ to select "H Position", **and then ENTER** to display the H Position individual adjustment screen.
- When adjusting the Vertical Position, Dot Clock, and Phase, move the arrow to the item you want to adjust.



4 Press ◀ or ▶ to adjust the H Position setting.
- The current setting will be displayed on the screen by numerals and a bar.



Note
- Press MENU to remove the setup screen and menu.
- When reset is selected, adjustment values return to their factory default settings.

Depending on the adjustment item, the adjust procedure and adjustment will vary. Please refer to the chart below.

Adjustment item	Button	Adjustment Details	Note
H Position	Press ▶ button.	The image moves to the right. IMAGE	
	Press ◀ button.	The image moves to the left. IMAGE	
V Position	Press ▶ button.	The image moves up. IMAGE	
	Press ◀ button.	The image moves down. IMAGE	
Dot Clock	Adjust the personal computer's dot clock and the projector's dot clock so that no bit interference (vertical stripes) appears on the screen.		RGB,YPBPR only [For UXGA, bit interference (vertical stripes) may still appear even after adjustment.]
Phase	Adjust in order to remove any picture interference or contour blurring which may occur in computer images.		Only RGB signal from a personal computer

Note
- The last adjustment condition is saved and will not be erased even if the power is turned off.
- The value differs with each input signal.

Using Other Useful Functions

You may use buttons on the LCD Projector or remote control for the following operations.

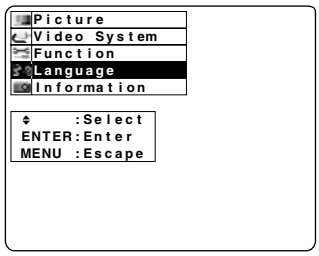
■ Selecting the Language for On-Screen Displays

The language of the LCD Projector is set to English as the factory setting. To select one of six different languages for on-screen displays, follow the instructions below. The procedure below describes the on-screen displays when the S-VIDEO signal or the VIDEO signal is being projected. (See page 17.)

•Selecting procedure (select displays French)

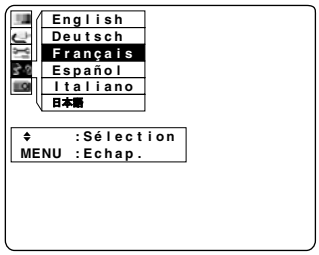
1 Press MENU to display the menu.

2 Press ▲ or ▼ to select "Language", **and then ENTER** to display the screen.



3 Press ▲ or ▼ to select "Français".

- You can select English, German, French, Spanish, Italian, and Japanese.



Note

- Press MENU to remove the setup screen and menu.

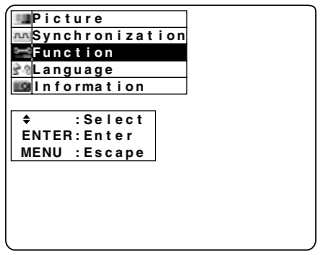
■ Turning off the input signal display

The function which displays the currently selected input signal on the screen can be turned off by the following procedure. Mute and Freeze displays will also be turned off. The procedure and on-screen display as shown below are based on RGB as the input signal from a personal computer. (See page 17.)

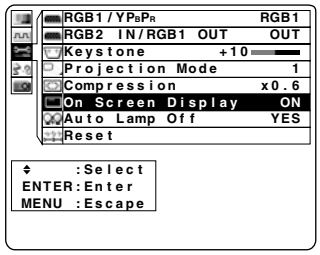
•Selecting procedure

1 Press MENU to display the menu.

2 Press ▲ or ▼ to select "Function", **and then ENTER** to display the screen.

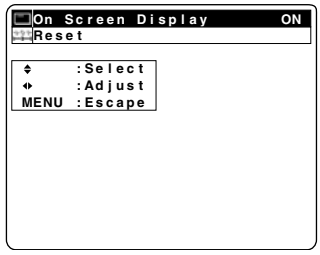


3 Press ▲ or ▼ to select "On Screen Display", **and then ENTER** to display the screen.



4 Press ◀ or ▶ to select "ON" or "OFF".

- Select "OFF" to turn off the input signal display function.
- Select "ON" to turn the input signal display function. The input signal will be displayed each time it is changed. (This is the factory setting.)



Note

- Press MENU to remove the setup screen and menu.
- When reset is selected, adjustment values return to their factory default settings.
- If RGB 2 IN/ RGB 1 OUT is set to OUT, even if the on-screen display function is set to OFF, the input signal of "RGB 2 RGB 1 OUT" will be displayed on-screen.

Using Other Useful Functions

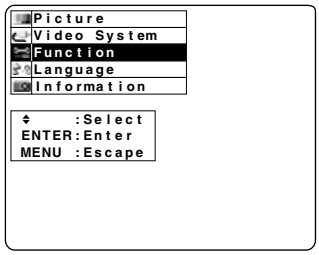
■ Changing to 16:9 (wide) screen format

When a S-VIDEO/VIDEO or DTV Format (RGB, YPBPR) signals is input, the image can be displayed in 16:9 (wide) screen by the following procedure. This only applies for S-VIDEO/VIDEO and DTV Format signal. The procedure below describes the on-screen displays when the S-VIDEO signal or the VIDEO signal is being projected. (See page 17.)

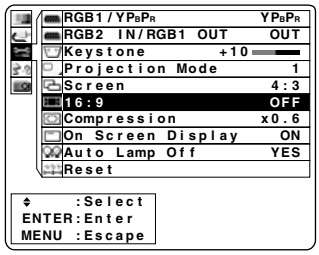
•Selecting procedure

1 Press MENU to display the menu.

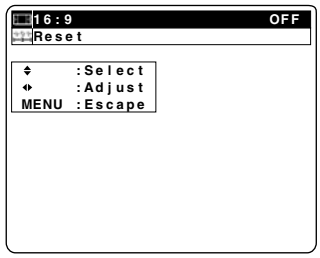
2 Press ▲ or ▼ to select "Function", **and then ENTER** to display the screen.



3 Press ▲ or ▼ to select "16 : 9", **and then ENTER** to display the screen.



4 Press ◀ or ▶ to select "ON" or "OFF".
- Select "OFF" to return the normal screen. (This is the factory setting.)
- Select "ON" to display in 16:9 (wide) screen.



Note
- Press MENU to remove the setup screen and menu.
- When reset is selected, adjustment values return to their factory default settings.
- Even if the 16:9 (wide) screen feature is set to OFF, when an "S1" signal or DTV Format signal (720 p, 1 080 i) is input, the image is automatically displayed in 16:9 (wide) screen.

Using Other Useful Functions

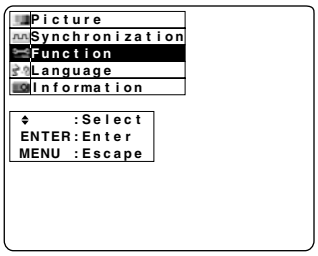
■ Auto Lamp Off

The power save function operates as follows: If the projector continues projecting for 15 minutes or more while there is no input signal to be projected, the light source will shut off automatically to save power. And, the projector will enter standby mode. At the time of shipment from the factory, the Auto Lamp Off function is set YES, so that if you will not use this function, you can turn it off by the following procedure. The procedure and on-screen display as shown below are based on RGB as the input signal from a personal computer. (See page 17.)

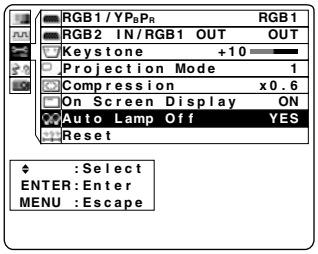
• Selecting procedure

1 Press MENU to display the menu.

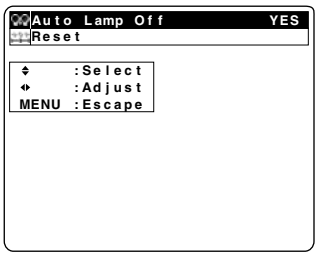
2 Press ▲ or ▼ to select "Function", **and then ENTER** to display the screen.



3 Press ▲ or ▼ to select "Auto Lamp Off", **and then ENTER** to display the screen.



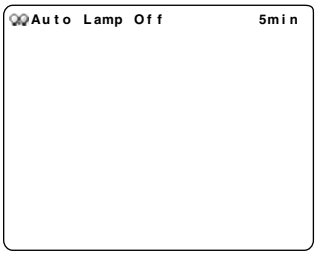
4 Press ◀ or ▶ to select "YES" or "NO".



Note

- Press MENU to remove the setup screen and menu.
- When reset is selected, adjustment values return to their factory default settings.

The minutes remaining is displayed during the last 5 minutes before the power shuts off.



Using Other Useful Functions

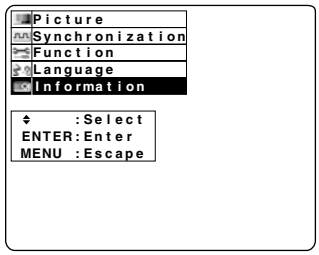
■ Information

You can display the input signal type and lamp run time. Display items differ depending on the input signal. The procedure and on-screen display as shown below are based on RGB as the input signal from a personal computer. (See page 17.)

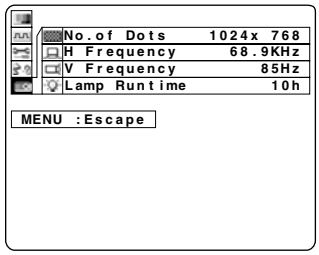
• Procedure

1 Press MENU to display the menu.

2 Press ▲ or ▼ to select "Information".



3 Press ENTER to display the screen.



Note

• Press MENU to remove the setup screen and menu.

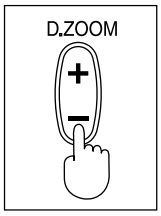
Display Item	Description	Remarks
No. of Dots	Input signal dot number is displayed.	RGB DVI-D only
H Frequency	Horizontal frequency number is displayed.	RGB DVI-D only
V Frequency	Vertical frequency number is displayed.	RGB DVI-D only
Signal	Name of the input signal type is displayed. When AUTO is selected in the Video System screen, the selected format will be displayed.	Except RGB DVI-D
Lamp Runtime	Number of hours the lamp has been used is displayed.	

Using Other Useful Functions

■ Digital Zoom

You can enlarge and project specific portions of the input picture and select the enlargement ratio for this portion using the D.ZOOM +/- buttons on the remote control unit.

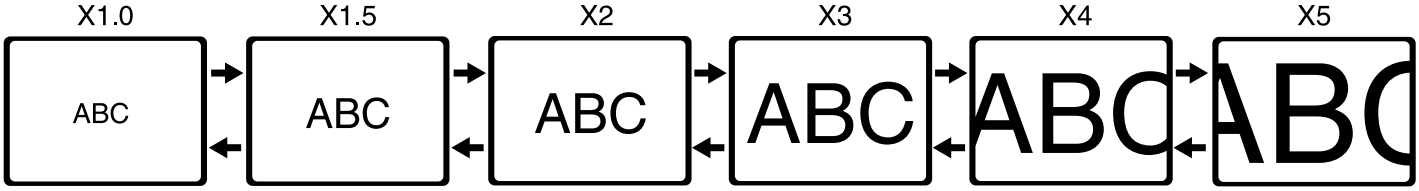
(Remote Control Unit)



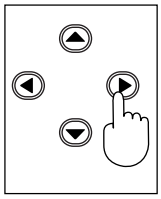
- **Press D.ZOOM +** button the picture will become bigger.
- **Press D.ZOOM -** button the picture will become smaller.

Note

- You can enlarge the center portion of the image to one of 6 magnifications.
- Changing the input signal while digital zoom is in use will cancel digital zoom.



(Remote Control Unit)



- **Use the ▲ and ▼ arrow buttons** to move the position up and down.
- **Use the ◀ and ▶ arrow buttons** to move the position to the left and right.

Projecting the DTV Format Signal

A DTV Format Signal, such as DVD or digital broadcast, etc. can be input and projected with this Projector. When using this function, please refer to page 43 to correctly connect to the output device of the DTV Format Signal and perform the following settings correctly.

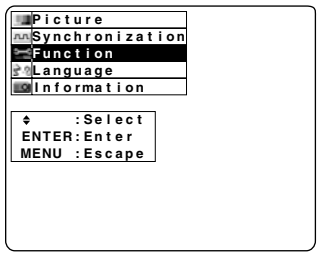
■ Setting of the RGB1/YPBPR Input Signal Selection

This LCD Projector allows input of RGB or YPBPR signal (Component input signal) to the RGB1/YPBPR input terminal, but you will need to change the setting of the input signal selection manually when changing the signal to be input. If the input signal selection is not set correctly, a normal image will not be projected.
The RGB input signal is set at the factory. Please follow the instructions below to change the input signal.

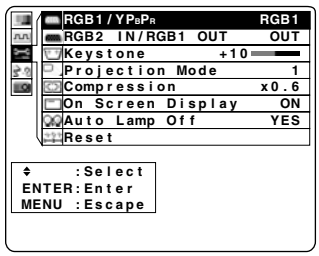
• Setting procedure

1 Press MENU to display the menu.

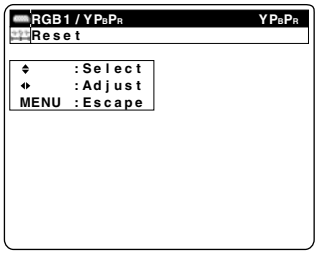
2 Press ▲ or ▼ to select "Function", **and then ENTER** to display the screen.



3 Press ▲ or ▼ to select "RGB1/YPBPR", **and then ENTER** to display the screen.



4 Press ◀ or ▶ to change the input signal.



Note
- Press MENU to remove the setup screen and menu.
- When reset is selected, adjustment values return to their factory default settings.

Changing the RGB2 IN/RGB1 OUT Terminal

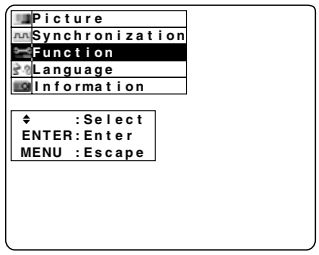
The RGB2 IN/ RGB1 OUT terminal of this projector allows you to easily change the RGB signal input. The procedure and on-screen display as shown below are based on RGB as the input signal from a personal computer. (See page 17.)

Please refer to the connection on page 42 and make the correct input/output setting. Otherwise, unit may cease to function normally.

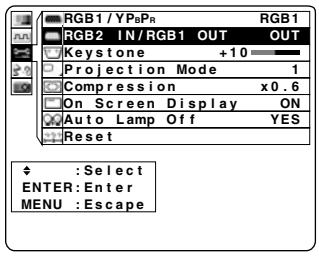
• Setting procedure

1 Press MENU to display the menu.

2 Press ▲ or ▼ to select "Function", **and then ENTER** to display the screen.

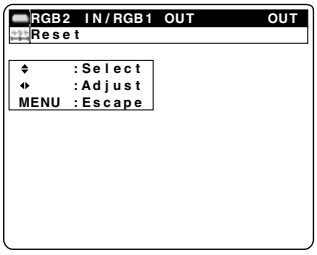


3 Press ▲ or ▼ to select "RGB2 IN/RGB1 OUT", **and then ENTER** to display the screen.



4 Press ◀ or ▶ to select "IN" or "OUT".

- Select "IN" to change terminal to RGB 2 input. (This is the factory setting.)
- Select "OUT" to output the signal that is input to RGB 1.



Note

- Press MENU to remove the setup screen and menu.
- When reset is selected, adjustment values return to their factory default settings.
- If RGB1 OUT is set and RGB2 is selected when changing input, the screen goes to blue back.

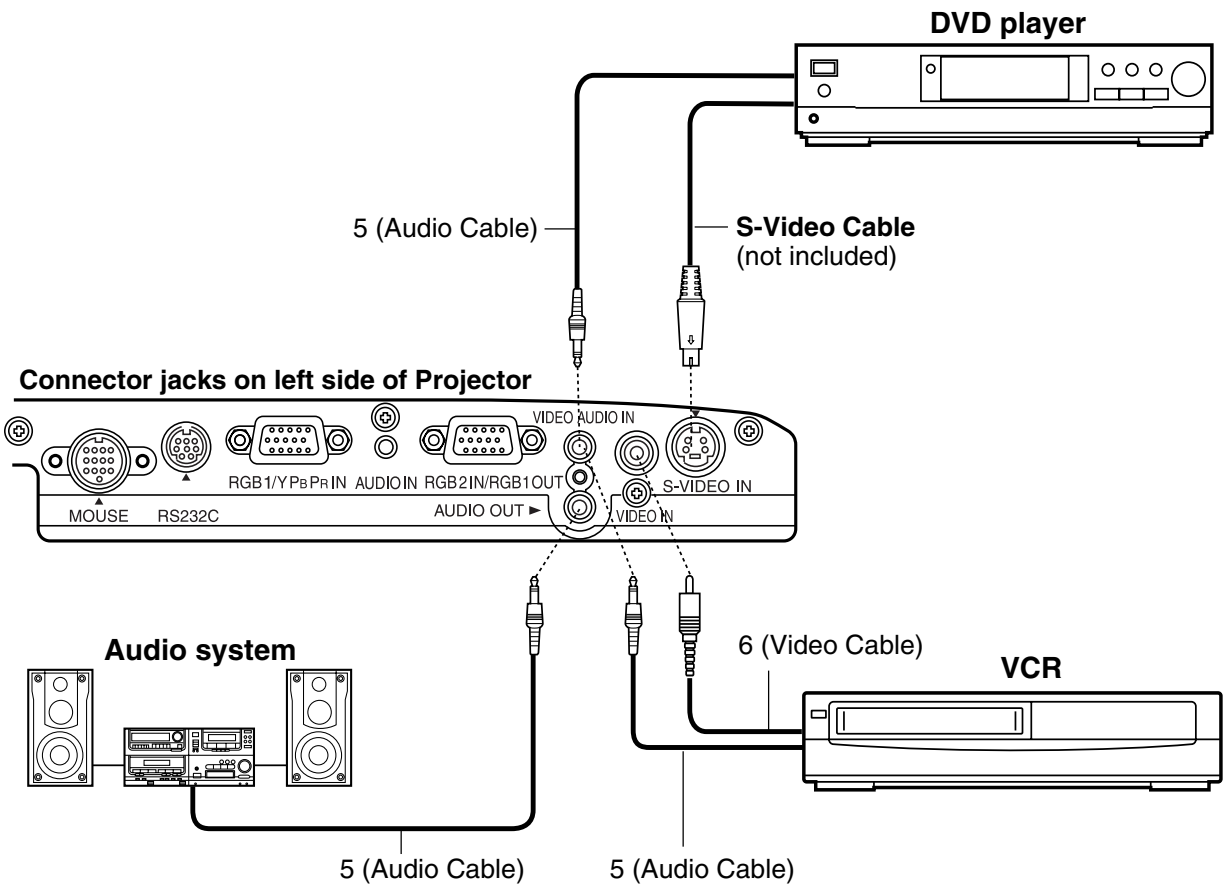
System Configuration Example

Notes on system configuration

- Turn off the power supply of each system component before connecting any of the components.
- Read the instruction manual for each system component before connecting it.
- If the necessary cables for connecting any system components are not supplied with the component or available as an option, you may need to fashion a cable to suit the component concerned.
- If there is a lot of jitter in the video signal input from the video source, the picture on the screen may flicker. In such cases, it will be necessary to connect a TBC (time base corrector).
- The Projector can be connected to video signal sources which out put VIDEO, S-VIDEO, analog RGB signals, DVI-D signals [PT-L759XU] and Component signals (YPBPR signals).
- The Projector has built-in speaker. However, you will need to connect a separate audio system to the AUDIO OUT terminal if your needs specify high sound volumes.
- It may not be possible to connect some types of personal computer.

■ Example of connection to audio-visual equipment

Diagram numbers correspond with numbers (see page 44.)



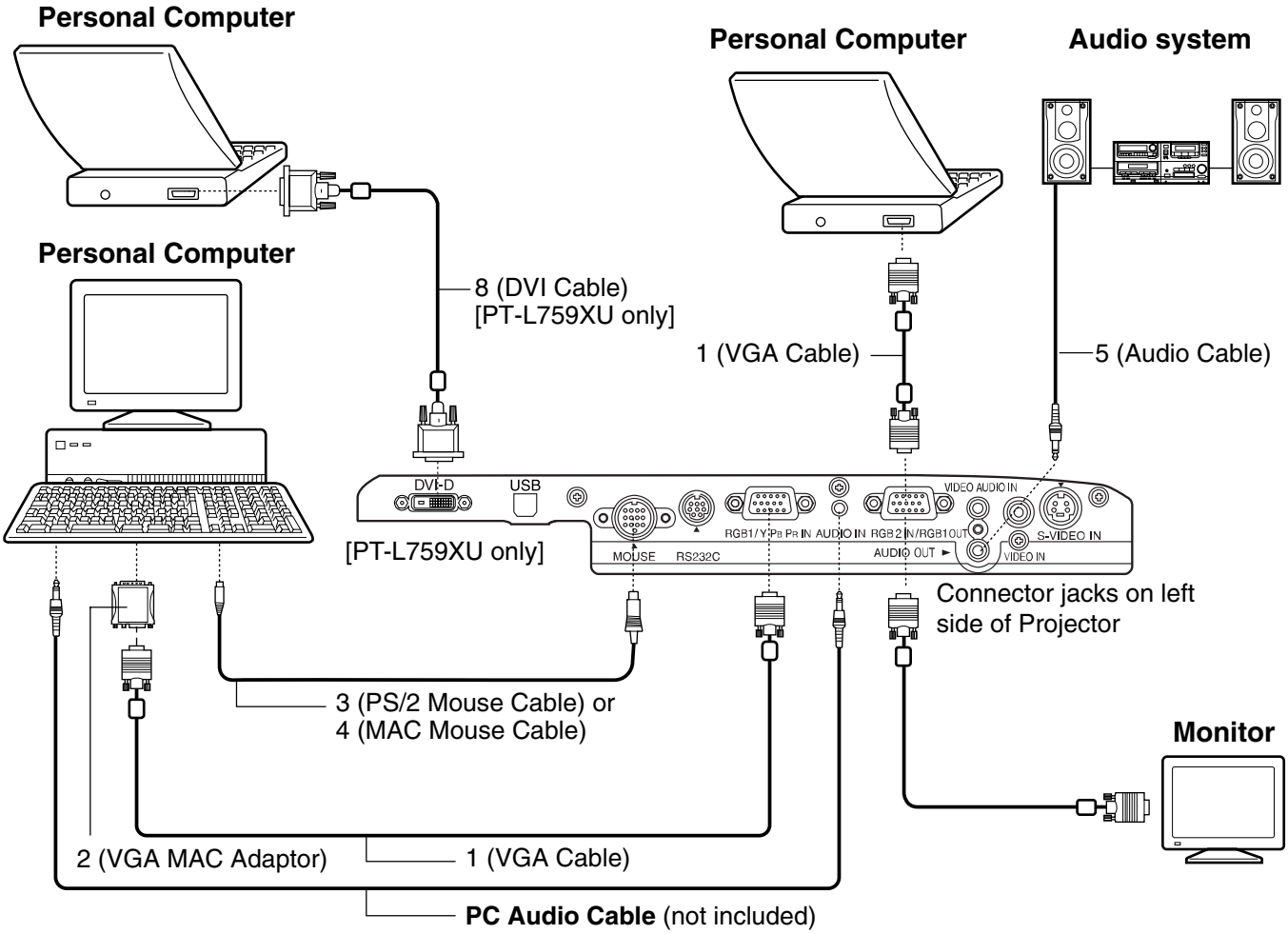
Note

- Only one audio signal input system is available for the VIDEO AUDIO IN terminals for S-VIDEO/VIDEO signals, so if you wish to change the audio input source, you will need to remove and insert the appropriate plugs.
- If an audio system is connected to the AUDIO OUT terminal, muting can be controlled by the remote control which is supplied with the Projector.
- If the video signal source is connected using a cable with a BNC junction plug, use the BNC-RCA Adaptor (not included) to convert the pin jack.

System Configuration Example

■ Example of connection to a Personal computer

Diagram numbers correspond with numbers (see page 44.)



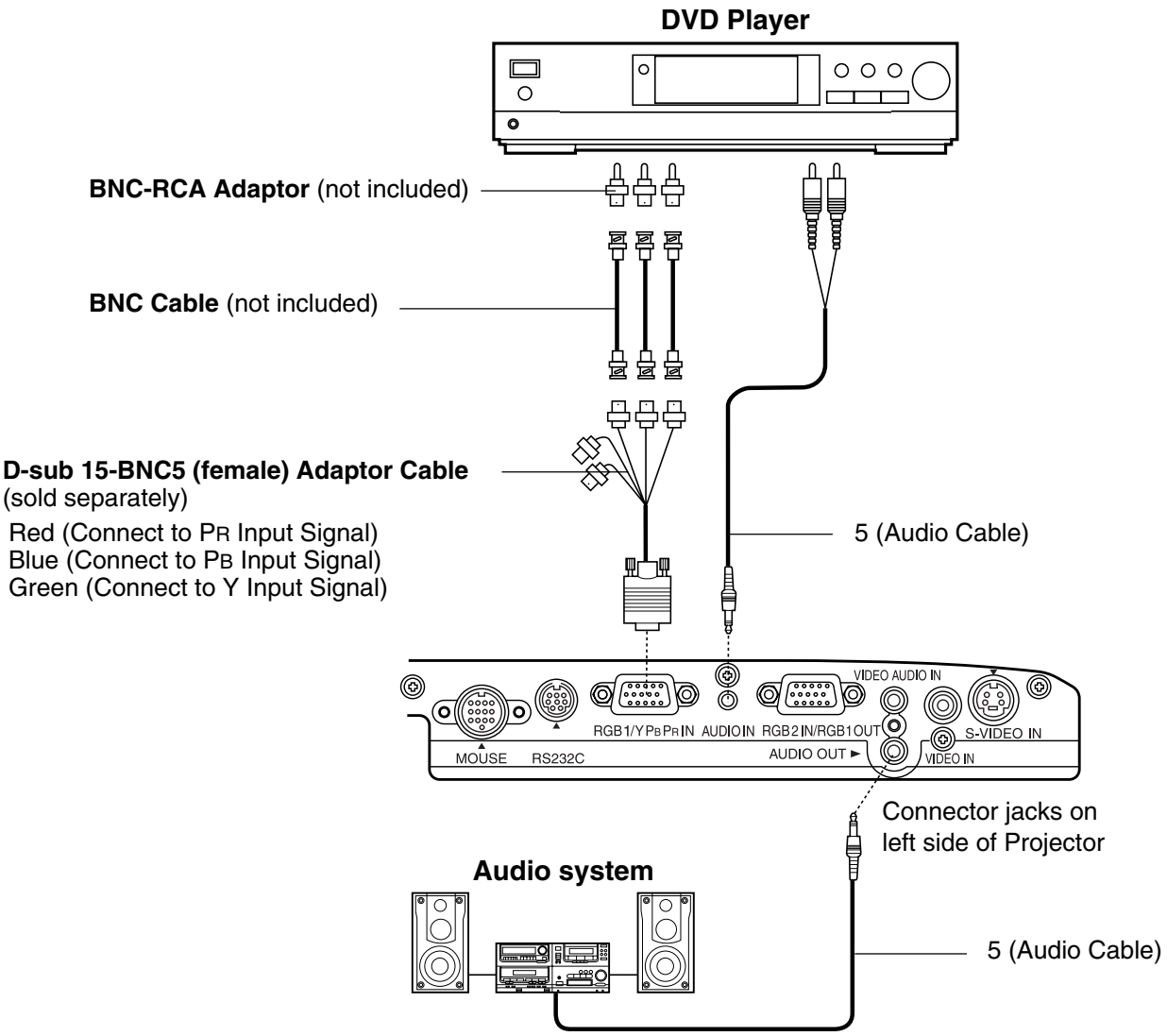
Note

- The RGB input accepts signals from VGA, SVGA, XGA, SXGA (Compression), UXGA (Compression), and Macintosh compatible computers without the need for any additional hardware.
- Plug the VGA signal cable (supplied) correctly into the RGB1/YPBPR IN terminal or RGB2 IN/RGB1 OUT terminal on the LCD Projector and the RGB signal Output terminal on your computer. Secure the plugs by tightening the thumb screws.
  When connecting the LCD Projector to a Macintosh Series computer, first connect the VGA MAC Adaptor (supplied) to the RGB signal Output terminal on your computer. Secure the plugs by tightening the thumb screws. Be sure to set the DIP switch on the VGA MAC adapter to your display type. (See page 45.)
- When confirming the signal connected to RGB1 using a separate monitor, please connect to the RGB2 IN/RGB1 OUT terminal. In this case, set the RGB2 IN/RGB1 OUT terminal to OUT. (See page 40.)
- When the LCD Projector is connected to personal computer, you can use the remote control in place of the personal computer's mouse by attaching the Mouse cable.
- If you wish to use the wireless mouse function, turn on the main power of the Projector before turning on the personal computer.
- When connecting the LCD Projector to a compatible computer other than a VGA, SVGA, XGA, SXGA (Compression), UXGA (Compression), or Macintosh series, a separate cable is needed.
- The wireless mouse feature may not be operable when using a personal computer with the Resume (last memory) feature and the feature is not reset.
- With RGB connection, if you wish to use your PC plug & play function, turn on the LCD Projector MAIN power switch before turning on the PC.
- When projecting via the DVI-D input, first connect the LCD Projector to your PC using the DVI cable, and then turn the PC on.
- There is only one audio system circuit provided for the AUDIO IN terminals for RGB1/YPBPR, RGB2 IN, DVI-D [PT-L759XU] signals. Because of this, if using both RGB,YPBPR and DVI-D signals, it will be necessary to change over the connectors.

System Configuration Example

■ Connecting D-sub 15-BNC5 (female) Adaptor Cable

The Component signal (YPBPR signal) can be input and projected with this LCD Projector.
Please read the operating instructions regarding the output side of the component when connecting.
Diagram numbers correspond with numbers (see page 44.)



Note

- Because each Y, PB, and PR signal is input independently, the Component signal allows for more faithful color reproduction.
- The Component signal output terminal indication will differ according to the output device (PR, PB, Y/R-Y, B-Y, Y/Cr, Cb, Y, etc.).
  Please read the operating instructions included with the output device.
- You need to change the input signal setting on this LCD Projector when inputting the Component signal. In this case, please refer to page 39 to change the setting.
- D-sub 15-BNC5 (female) Adaptor Cable (sold separately) often have BNC connectors, however a DVD output device usually has RCA jacks. In this case, you will need BNC-RCA adaptors (not included).

Video/Personal Computer Cables & Adaptors

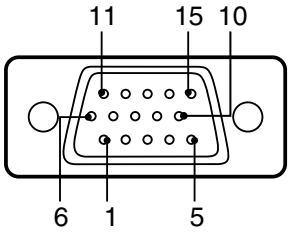
These accessories are supplied in order to connect the LCD Projector to Personal Computer/ AV equipment. The numbers in the left column correspond with the numbers in the connection diagrams on pages 41 - 43, 48.

No.	CABLE/ADAPTOR	PORT		LENGTH
		Projector side	Personal Computer/AV products side	
1	VGA Cable	D-Sub mini 15-pin (male)	D-Sub mini 15-pin (male)	6.56 ft (2.0 m)
2	VGA MAC Adaptor	D-Sub mini 15-pin (female)	MAC D-Sub 15-pin (male)	—
3	DVI Cable [PT-L759XU only]	DVI-D 24-pin (male)	DVI-D 24-pin (male)	6.56 ft (2.0 m)
4	PS/2 Mouse Cable	13-pin round (male)	Din 6-pin (male)	6.56 ft (2.0 m)
5	MAC Mouse Cable	13-pin round (male)	Din 4-pin (male)	6.56 ft (2.0 m)
6	Audio Cable	M3 stereo mini pin (male)	RCA pin (male) X 2	4.92 ft (1.5 m)
7	Video Cable	RCA pin (male)	RCA pin (male)	4.92 ft (1.5 m)
8	USB Cable	Type B	Type A	6.56 ft (2.0 m)

Video/Personal Computer Cables & Adaptors

[RGB connector]

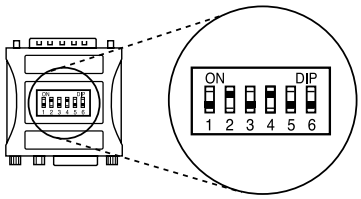
(On Projector)



Pin No.	Signal name
1	R
2	G
3	B
4	NC
5	NC
6	Ground for R
7	Ground for G
8	Ground for B

Pin No.	Signal name
9	NC
10	Ground
11	NC
12	SDA
13	HD/CSYNC
14	VD
15	SCL

[VGA MAC Adaptor]



Example: If your display type is 16″, set DIP switches 2 and 4 on the VGA MAC Adaptor to ON. By doing so, the signal will travel through switches 2 and 4, and Pin No. 4 to 10 as shown in the signal chart above.

[Setting the DIP Switches]

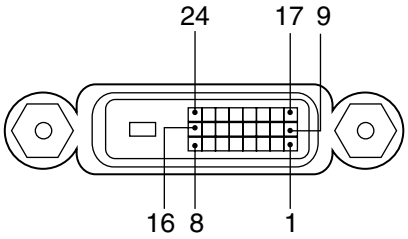
RESOLUTION	DIP SWITCHES					
	1	2	3	4	5	6
*21" MULTIMODE	●	●				●
*17" MULTIMODE	●	●			●	
*13" MULTIMODE	●	●			●	●
VGA/SVGA MODE			●	●		
21" 1152 x 870	●	●	●	●		
19" 1024 x 768		●	●			
16" 832 x 624		●		●		
13" 640 x 480	●	●				

LEGEND:
* = SUPPORTS APPLE MULTIPLE SCAN SOFTWARE
● = ON

Find the resolution of your display type on the table shown left (also on the adaptor). Then, set each DIP switch that is indicated by a "●" mark to ON.

[DVI-D connector]

(On Projector)



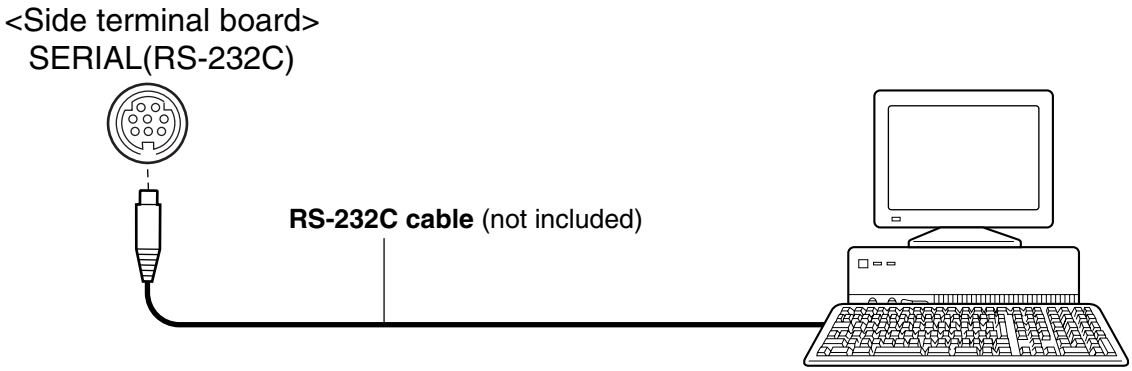
[PT-L759XU only]

Pin No.	Signal name
1	T.M.D.S Data 2-
2	T.M.D.S Data 2+
3	T.M.D.S Data 2 Shield
4	NC
5	NC
6	DDC Clock
7	DDC Data
8	NC
9	T.M.D.S Data 1-
10	T.M.D.S Data 1+
11	T.M.D.S Data 1 Shield
12	NC
13	NC
14	+5 V
15	GND

Pin No.	Signal name
16	Hot Plug Detect
17	T.M.D.S Data 0-
18	T.M.D.S Data 0+
19	T.M.D.S Data 0 Shield
20	NC
21	NC
22	T.M.D.S Clock Shield
23	T.M.D.S Clock +
24	T.M.D.S Clock -

Using the SERIAL connector (RS-232C)

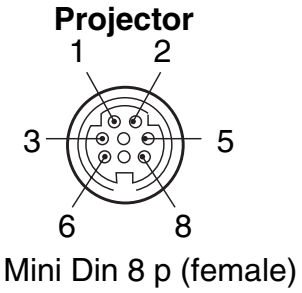
The serial connector which is on the side terminal board of the projector conforms to the RS-232C interface specification, so that the projector can be controlled by a personal computer which is connected to this connector.



Note

Use a proper communication cable which is suitable for the personal computer to connect the serial connector and the personal computer.

Pin layout and signal names for SERIAL connector



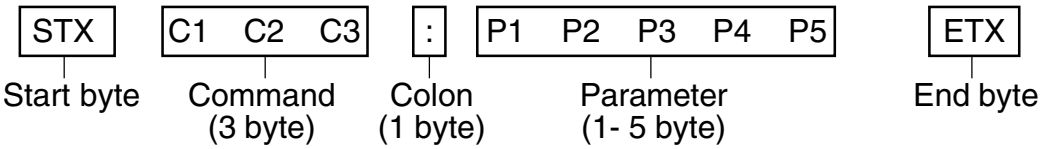
Pin No.	Signal name	Contents
1	CTS	Connected internally
2	RTS	Connected internally
3	RXD	Received data
4	GND	GND
5	TXD	Transmitted data
6		NC
7		NC
8		NC

Communication settings

Signal level	Determined by RS-232C interface
Synchronizing method	Asynchronous
Baud rate	9 600 bps
Parity	None
Character length	8 bit
Stop bit	1 bit
X parameter	None
S parameter	None

Basic format

Each packet which is sent from the personal computer starts with STX. Following this is the command itself and the parameters for that command (if any,) and the packet then ends with ETX. Add parameters when necessary according to the control contents.



Note

- If sending multiple commands, check that a response has been received from the projector for one command before sending the next command. When a command which do not require parameters is sent, the colon (:) is not required.
- If an incorrect command is sent from the personal computer, the “ER401” command will be sent from the projector to the personal computer.
- If an incorrect parameter is sent from the personal computer, the “ER402” command will be sent from the projector to the personal computer.

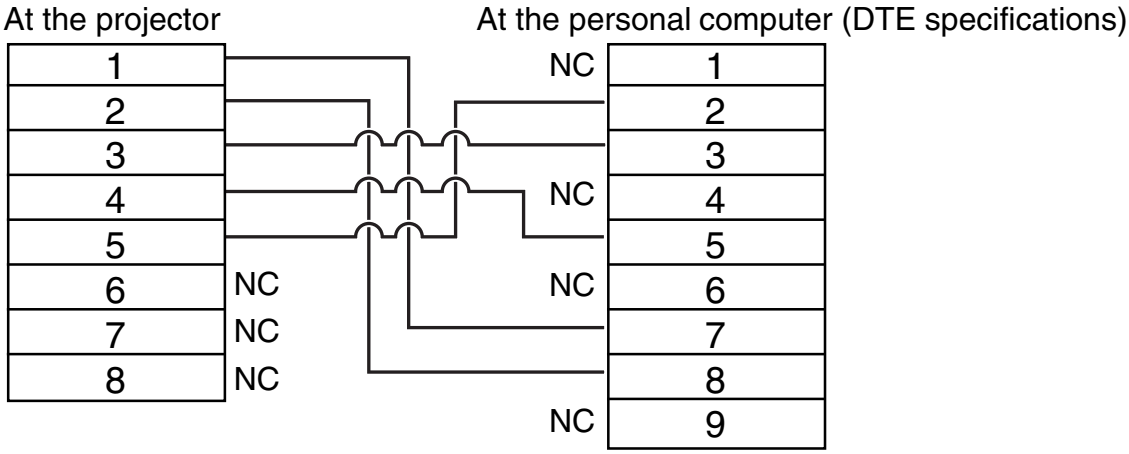
Using the SERIAL connector (RS-232C)

Control commands

The commands which the personal computer can use to control the projector are shown in the following table.

Command	Control Contents	Remarks
PON	Power ON	In standby mode, all commands other than the PON command are ignored. • The PON command is ignored during lamp ON control. • If a PON command is received while the cooling fan is operating after the lamps have switched off, the lamps are not turned back on again until approximately 60 seconds have passed since they turned off, in order to protect the lamps.
POF	Power OFF	
AVL	Volume	Parameter 000 = Adjustment value 0 : = : 063 = Adjustment value 63
AMT	Audio Mute	Parameter 0 = MUTE OFF 1 = MUTE ON
OPM	Video Mute	Parameter 0 = MUTE OFF 1 = MUTE ON
IIS	Input signal selection	Parameter RG1 = RGB1 VID = VIDEO RG2 = RGB2 SVD = S-VIDEO DVI = DVI-D [PT-L759XU only]
ORF	RGB1 format selection	Parameter 0 = RGB 1 = YPBPR
ORS	RGB2 IN/RGB1 OUT selection	Parameter 0 = RGB2 IN 1 = RGB1 OUT
Q$S	Lamp ON condition query	Parameter 0 = Standby mode 1 = Lamp ON control active 2 = Lamp ON 3 = Lamp OFF control active

Cable specifications

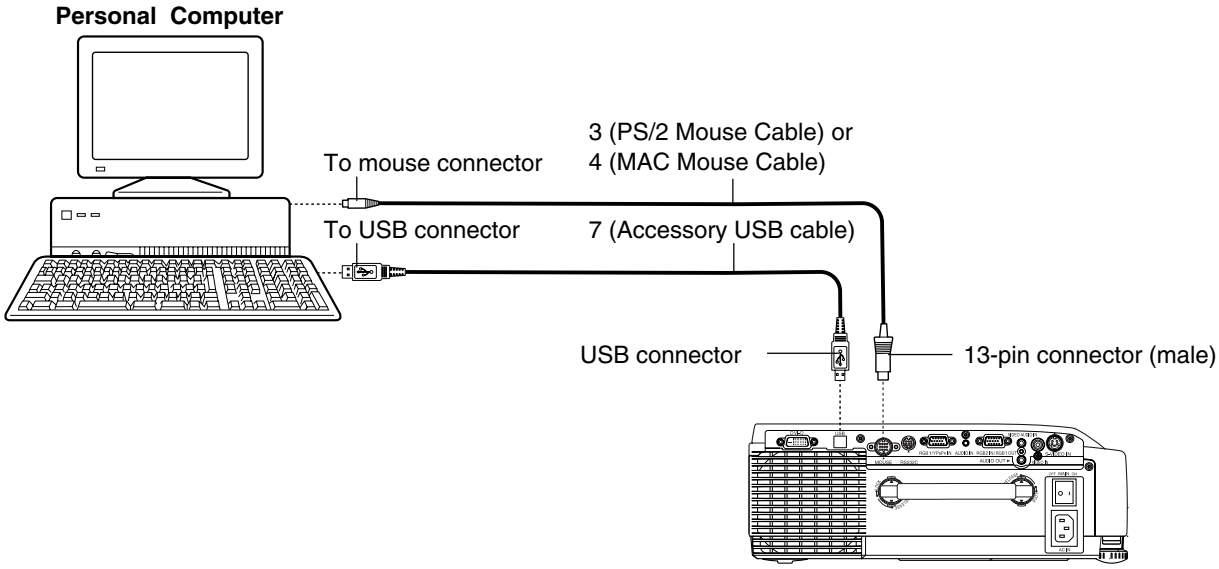


Wireless mouse and keyboard

By connecting the mouse cable (for PS/2) included with the PT-L759XU/PT-L759VE/ to the computer's mouse connector, the PT-L759XU/PT-L759VE's remote control unit can be operated with the mouse. When connected using the USB cable, in addition to the above mouse operations, the keyboard's cursor keys (↑, ↓, ← and →) can be operated with the remote control unit.

■ Example of connection

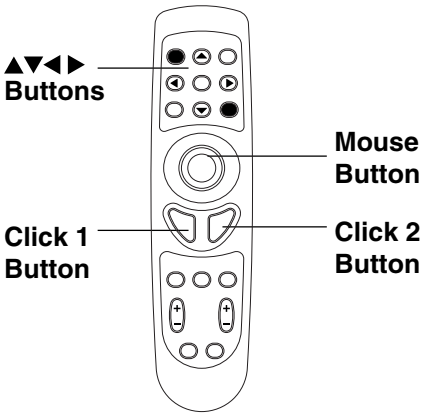
Diagram numbers correspond with numbers (see page 44.)

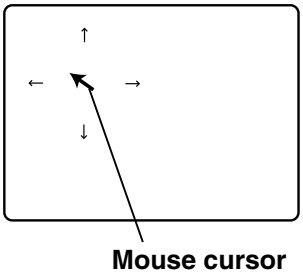


Note

- Do not connect the USB cable and mouse cable at the same time.
- A computer equipped with a USB port as standard and on which Windows 98/Me, Windows 2000, or Mac OS9 or higher is preinstalled is required when connecting the USB cable. To use a mouse connector other than the PS/2 port, purchase a separately sold mouse cable.
- Consult a sales outlet when purchasing a separately sold mouse cable. The PT-L759XU/PT-L759VU is compatible with the following mice: PS/2 mouse, serial mouse, Macintosh, PC-98 series
- Only use mouse cables designed exclusively for the PT-L759XU/PT-L759VU.

■ Operation





▲▼◀▶ Buttons

You can operate the ▲, ▼, ◀, ▶ buttons on the remote control instead of on your PC only if USB connection is used.

Note

- This function can only be used when connected with the USB cable.
- This does not function while the menu screen is displayed and during digital zooming.
- Not Macintosh compatible.

Click 1 Button

This button corresponds to the button on a single-button mouse, or to the left button on a standard mouse with two buttons.

Click 2 Button

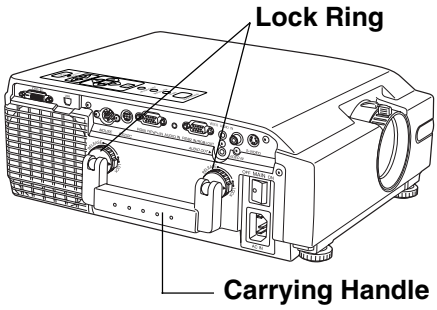
This button corresponds to the right button on a standard mouse with two buttons.

Mouse Button

Press this button lightly with your thumb and move to move the mouse cursor on the screen. Pressing strongly is the same as pressing the click 1 button. Dragging is possible by pressing as such and moving.

Removing and Attaching the Carrying Handle

The LCD Projector Carrying Handle can be removed and attached. When the Projector is set up so that it need not be moved, you can improve the appearance of the Projector by removing the handle.
Please follow the instructions below to remove and attach the carrying handle.

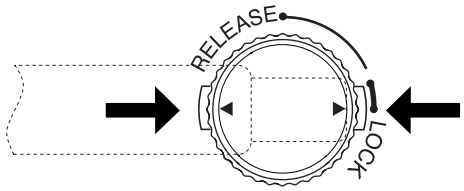


■ When Removing the Carrying Handle

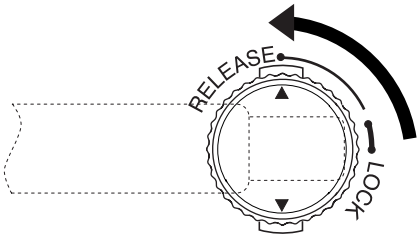
1 Hold in the two lock buttons, located on the Lock Ring at the base of the handle as shown.

Note

- Remove the handle while in the raised position. Removal is difficult if in the lowered position.



2 Turn the Lock Ring to the left so that the ▲ mark points to RELEASE on the LCD Projector.



3 Repeat steps 1 and 2 and remove the other Lock Ring.

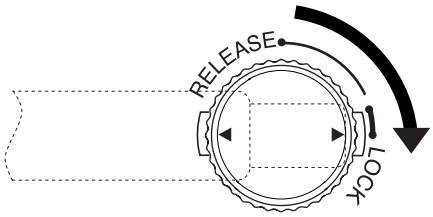
4 Slowly pull the carrying handle straight out from the LCD Projector.

■ When Attaching the Carrying Handle

1 Insert the carrying handle into the LCD Projector so that the ▲ mark on the Lock Ring is aligned with RELEASE on the LCD Projector.

2 Hold in the two lock buttons, located on the Lock Ring at the base of the handle as shown.

3 Turn the Lock Ring to the right so the ▲ mark points to LOCK on the LCD Projector and you hear it click into the locked position. (The Lock Ring is locked.)



4 Repeat steps 1 and 2 and remove the other Lock Ring.

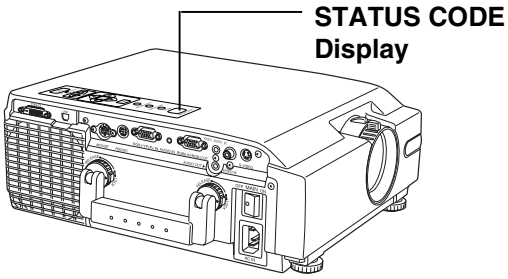
Note

- Attach the carrying handle securely. If you carry the LCD Projector with the carrying handle improperly attached, the handle could come off and you sometimes cause injury.

Status Code Display Indications

■ Warning Indicators

This LCD Projector has a STATUS CODE Display which calls your attention to problem conditions existing inside the LCD Projector. The LCD Projector displays a Status Code Indication each time an internal problem is detected.
If any of the following indications appear in the STATUS CODE Display, immediately turn off the Main Power switch, and then see the chart to determine a course of action.



Example: If the total lamp operating time is over 1 900 hours, the status codes “L”, “-“, and “1” will be displayed in sequence.

STATUS CODE	Symptom	Problem	Possible Solution
F-L	Lamp does not light up.	• Cooling fan malfunction.	• Take the Projector to your nearest Service Center.
F-0		• Misinstalled Air Filter Unit or Lamp cover.	• Properly install Air Filter Unit or Lamp cover. (See pages 51,53-54.)
A-n		• Temperature Sensor malfunction.	• Take the Projector to your nearest Service Center.
A-0		• Clogged air filter. • Blocked air intake. • The surrounding temperature of the place of use may be too high. • Ambient temperature is low.	• Clean the filter. (See page 51.) • Relocate projector to a proper location. • Place Projector so that surrounding temperature is between 0 °C (32 °F) and 40 °C (104 °F) and the humidity is between 20 % and 80 % (with no condensation.)
L-n		• If the Lamp will not light after turning on the main power 2 or 3 times, the Lamp may be damaged.	• Take the Projector to your nearest Service Center.
P-2		• Light failure due to short in Lamp.	•Refer to pages 53, 54 and carefully remove the Lamp unit. Grasp the handle and gently shake the Lamp, then replace the Lamp unit. If problem persists, take the Projector to your nearest Service Center.
P-3		• Abnormal temperature rise.	• Take the Projector to your nearest Service Center.
P-4		• Other causes.	
L-1	Lamp operation time is over 1 900 hours.	• It is nearly time to replace the Lamp Unit.	• Replace the Lamp unit. (See pages 53, 54.)
L-0	Lamp operation time reaches 2 000 hours.	• The Lamp Unit must be replaced.	
C-d	Forced cooling fan operating to expedite lamp replacement. (See page 53.)	———	———

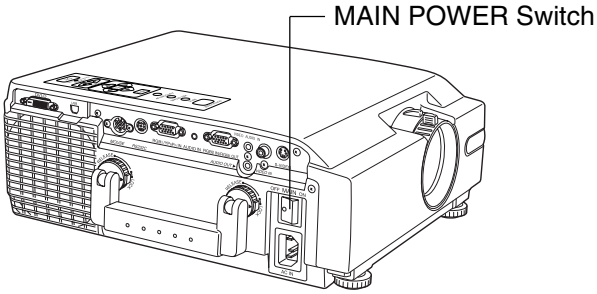
Note

- After taking appropriate action, allow the interior to cool thoroughly before switching on the power. A much longer time may be required if the projector had attained an abnormally high internal temperature.
- The Lamp installed in the LCD Projector contains metallic material. When the Projector is turned off, the vibration of moving it, etc. may cause the metallic material to shift and adhere to the polar terminals. In case the Lamp cannot light up in this abnormal condition, the message, “P-2” will be displayed to alert you.

Cleaning the Air Filter

■ Air Filter

The air filter should be cleaned about every 100 hours. Also, clean the air filter if the “A-0” is indicated in the STATUS CODE display.
Replace the filter when it is clogged or dirty even after cleaning.



■ Cleaning procedure

Tools required: Vacuum Cleaner.

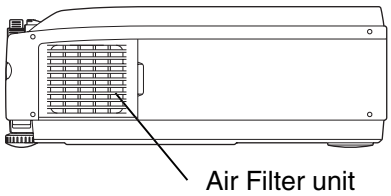
1 Set the MAIN POWER Switch to OFF and unplug the power cord.

- Wait until the cooling fan stops and the STANDBY(R) ON(G) indicator turns solid red.

2 Place the LCD Projector up on its side as illustrated.

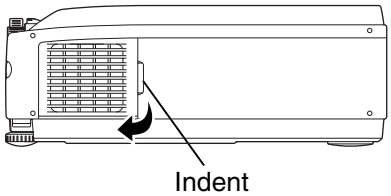
Note

- When transporting the PT-L759XU/PT-L759VU, grasp the carrying handle and place in a flat, stable place.



3 Remove the Air Filter unit

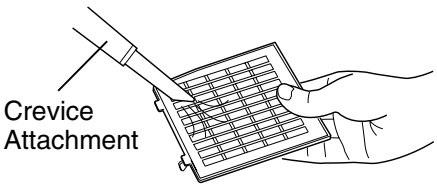
Hold the indent on the Air Filter unit with your hands and pull the Air Filter unit out of the LCD Projector.



4 Clean the Filter.

Gently remove any accumulated dust from Air Filter unit with your vacuum cleaner.

CAUTION: Operating LCD Projector with torn or damaged Filter may cause damage to LCD Projector.

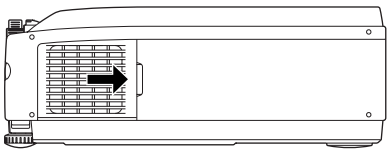


5 Replace the Air Filter unit.

Slide the Air Filter unit into the LCD Projector until hollows in the Air Filter unit are aligned with the hollows in the Projector.

Note

- The LCD Projector power cannot be turned on unless the Air Filter unit is correctly installed.
- Using with the air filter sponge removed will result in dirt and dust being drawn in and lead to malfunction.



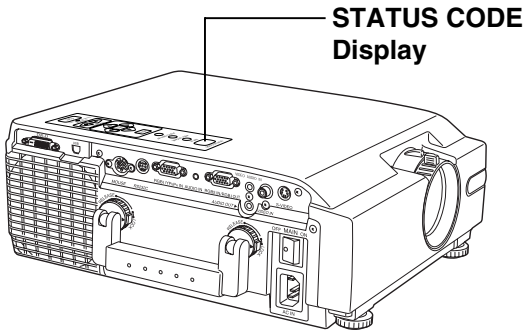
Note

- If the dust cannot be removed by cleaning, it is time to replace the air filter. Consult a sales outlet.

Lamp Replacement

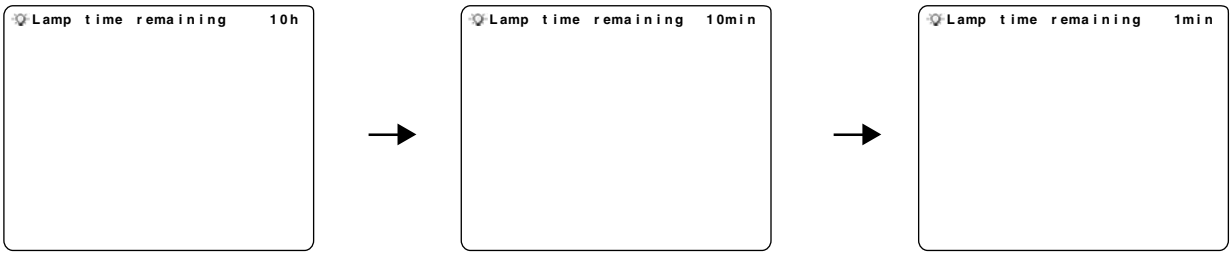
Warning If Status Code “L-n” (see page 50) is displayed on the Status Code Display when lamp is not turned on, take the LCD Projector to your nearest Service Center for repair as there is danger of injury due to lamp fragments.

■ Lamp replacement period



The LCD Projector lamp has a limited operating life of approximately 2 000 hours.
If lamp operation time exceeds 1 900 hours, the operation time is displayed (at startup only) and “L-1” is displayed as the STATUS CODE.
“Lamp time remaining 10h” will be displayed on-screen when operation time reaches 1 990 hours.
Then, each time the power is turned on, the Lamp life remaining will be displayed.

- 15 second warning display (15 seconds when the LCD Projector power is turned on) will appear every 1 hour from 1 990 hours of operation time. And the warning will flash during the last 5 minutes of Lamp life.



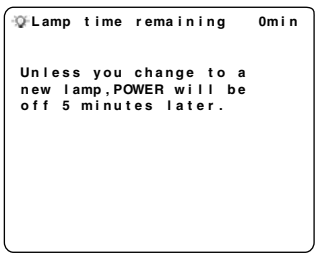
Note

- The lamp used as the light source eventually wears out. The service life of the light source lamp used on the PT-L759XU/PT-L759VU is about 2 000 hours, but depending on the individual lamp’s properties and the usage conditions the lamp may no longer light after less than 2 000 hours (the lamp is affected by the number of times the lamp is lit and the time span until it is relit, and these may shorten the service life). Because of this, we recommend having a replacement lamp on hand.

■ In case lamp use reaches 2 000 hours

The LCD Projector will shut itself OFF and the STATUS CODE indication becomes “L-0”. (See STATUS CODE on page 50.)

- If the Lamp is not replaced, turning POWER on will only cause the screen at right to be displayed for 5 minutes.



Note

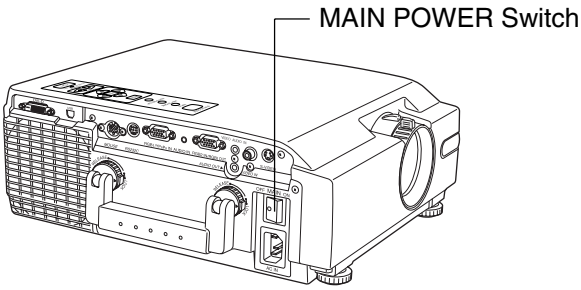
- Replace the Lamps as described in steps 1-7 on pages 53, 54 and, please see the included separate sheet to perform the reset procedure.

Lamp Replacement

■ Lamp replacement procedure

Caution: Because of possibility of injury, strictly follow the replacement procedure below.
Order Lamp ET-LA059X.

1 After the cooling fan has stopped, and STANDBY(R) ON(G) indicator turns solid red. Set the MAIN POWER Switch to OFF and unplug the power cord.



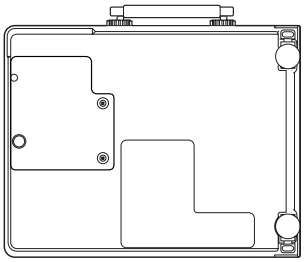
Note

Please wait more than one hour for lamp replacement.

[If you need to replace the lamp more urgently]

- The LCD Projector has a forced cooling feature. After the POWER switch is turned OFF, and sometime during about the 2 minutes of the normal cooling fan operation, press ◀ and ▶ at same time. The cooling fan will change to high speed for about 10 minutes. (The "C-d" STATUS CODE will be displayed.)

2 Grabbing the handle, place the LCD Projector up on its side as illustrated.

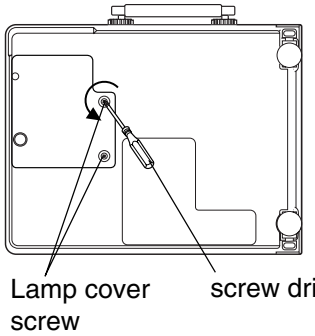


Note

- When transporting the PT-L759XU/PT-L759VU, grasp the carrying handle and place in a flat, stable place.

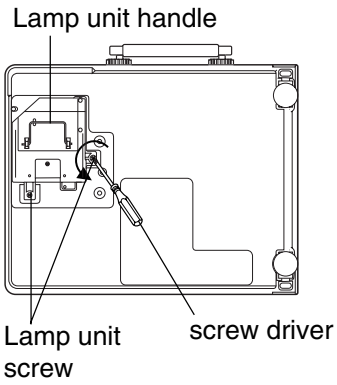
3 Remove the Lamp cover screws.

First read caution and warning labels.
Then, remove the Lamp cover screws (2) by using screw driver, and take off the lamp cover.



4 Remove the Lamp unit screws.

Remove the lamp unit screws (2), then grasp the Lamp unit handle and carefully pull it from the LCD Projector. Keep Lamp housing opening to your right. Do not touch Lamp or point Lamp opening at anyone.

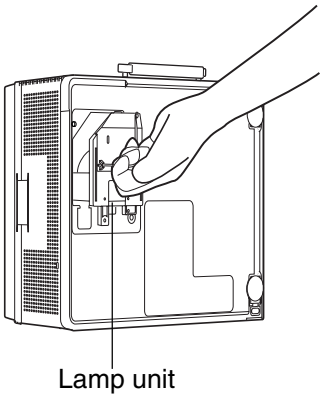


WARNING: The lamp may be hot. Be careful when handling.

CAUTION:
- High-pressure lamp may be explode if improperly handled.
- Danger of injury due to lamp fragments.

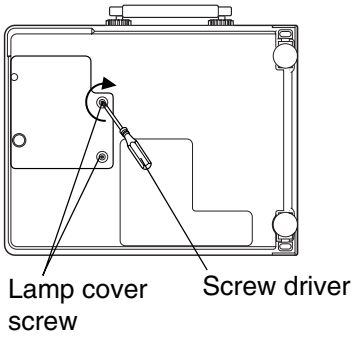
Lamp Replacement

5 Install the new Lamp unit.
Remove the Lamp from the LCD Projector and install a new lamp unit (ET-LA059X.)
- Do not drop, impact of dropping may cause Lamp to explode.



6 Replace the Lamp unit screws.
Replace the Lamp unit screw and the Lamp cover screws using a screwdriver to tighten.
- Properly dispose of old Lamp.

Note
- Attach the lamp unit and lamp unit housing door securely. If the lamp unit and lamp unit housing door are not attached securely, the protective circuit will be activated and the power will not turn on.



7 Plug the LCD Projector back in by inserting the Power cord in LCD Projector AC socket and set the Main Power Switch to ON.

8 For lamp replacement, please see the included separate sheet to perform the reset procedure.

Specifications

		PT-L759XU	PT-L759VU
LCD panels		1.3″ Poly silicon LCD panel (W/MLA) X 3, RGB shutter method, using Translucent TN crystal panels	
Drive method		Active Matrix 4:3 Aspect Ratio panels, TFT (Thin Film Transistor)	
No. of pixels		786 432 (1 024 X 768) stripe pixels X 3 panels	
Lens		1-1.3 zoom lens, F2.0-2.5, f45 mm- 59 mm Manual Focus	1-1.3 zoom lens, F2.5-3.0, f45 mm- 59 mm Manual Focus
Projector lamp		220 W UHM Lamp	
Contrast ratio		250 : 1	
Brightness		3 100 lm (ANSI)	2 400 lm (ANSI)
No. of colors		16 777 216	
Screen size		0.508 m (20″) - 7.620 m (300″) (measured diagonally)	
Projection (throw) distance		0.85 m (2.62′) - 13.45 m (44.29′)	
Lens axis shift		6 : 1 Low position	
Compatible scanning frequency	Video/S-Video signal	H-Frequency 15.74 kHz/15.63 kHz V-Frequency 50 Hz/60 Hz	
	RGB signal	H-Frequency 24 kHz - 110 kHz (TTL Level) ← Refer to page 26. V-Frequency 50 Hz - 101 Hz (TTL Level) ← Refer to page 26. Dot clock-Frequency 135 MHz or lower	
	DVI-D signal	VGA 60 Hz, SVGA 60 Hz, XGA 60 Hz, SXGA 60 Hz	
	YPBPR signal	480 i H-Frequency 15.75 kHz V-Frequency 60 Hz 480 p H-Frequency 31.5 kHz V-Frequency 60 Hz 625 i H-Frequency 15.63 kHz V-Frequency 50 Hz 720 p H-Frequency 45 kHz V-Frequency 60 Hz 1 080 i H-Frequency 33.75 kHz V-Frequency 60 Hz	
Video systems		PAL/SECAM/NTSC/PAL-M/PAL-N/NTSC4.43	
Connectors		RGB1/YPBPR Input: D-Sub mini 15-pin X 1 RGB2 Input/RGB1 Output: D-Sub mini 15-pin X 1 Video signal: RGB Analog 0.7 V [p-p], 1.0 V [p-p] with sync on green, 75 Ω YPBPR Y: 1.0 V [p-p], PB, PR: 0.7 V [p-p], 75 Ω Sync signal: H/V separate, H/V composite, or Sync-on-Green	
		DVI-D Input: DVI-D 24-pin X 1	
		Audio Input (for RGB/YPBPR/DVI-D) : M3 stereo mini pin X 1 0.32 V [rms]	
		Video Input : RCA pin X 1 1 V [p-p], sync negative, 75 Ω terminated	
		S-Video Input: Mini Din 4-pin X 1 Y (luminance signal) : 1 V [p-p], sync negative, 75 Ω terminated C (chrominance signal) : burst 0.286 V [p-p], 75 Ω terminated	

Note

• Specifications and design are subject to change without notice.

Specifications

		PT-L759XU	PT-L759VU
Connectors		Audio Input (for Video/S-Video) : M3 stereo mini pin X 1 0.32 V [rms]	
		Audio output: M3 stereo mini pin X 1 0.32 V [rms]	
		USB 4-pin X 1 (Type B)	
		MOUSE Port: 13-pin round connector X 1	
		Serial Port (RS-232C): Mini Din 8-pin X 1	
Controls	Cabinet Buttons/ Switches	Main Power ON/OFF, Power ON/OFF, Volume +/-, Auto setup, Menu, Input, ▲, ▼, ◀, ▶, Enter, Keystone	
	Remote Control Buttons	Power ON/OFF, Freeze, Shutter, Mute, Volume +/-, Enter, Menu, Input, ▲, ▼, ◀, ▶, Laser, D.Zoom +/-, Keystone, Auto setup, Mouse, Click1, Click2	
Audio output		1.5 W (10 % THD)	
Speaker		70 mm X 40 mm X 1 (2.76″ X 1.58″ X 1)	
Operating Temperature		0 °C to 40 °C (32 °F to 104 °F)	
Operating Humidity		20 % - 80 % (non-condensing)	
Storage Temperature		-20 °C to 40 °C (-4 °F to 104 °F) Humidity (5 % - 85 % (non-condensing))	
		-20 °C to 60 °C (-4 °F to 140 °F) Humidity (Normal humidity)	
Power Supply		100 V - 240 V AC (50 Hz or 60 Hz) Automatic	
Power consumption		370 W	
Dimensions W x H x D		263 mm X 124 mm X 336 mm (10 - 6/16″ X 4 - 14/16″ X 13 - 4/16″)	
Amps		3.7 A - 1.5 A	
Weight		6.3 kg (13.9 lbs.)	
Approvals		FCC, UL, C-UL, CE, VDE, FDA	

Note

• Specifications and design are subject to change without notice.

Before Requesting Service

If the LCD Projector unit fails, check the following before calling your dealer for service.

Problem	Possible Cause
Power does not turn on.	• The power cord may not be connected. • The main power switch on the Projector may be turned off. • The main power supply may not be supplied to the wall outlet. • The Status Codes are indicated on the STATUS CODE Display. (p. 50) • The lamp unit or lamp unit cover may not have been correctly installed. (pp. 53, 54) • The Air Filter Unit may not have been correctly installed. (p. 51)
No picture appears.	• The lens cap may still be attached to the lens. • The signal input source may not be connected properly. (pp. 41 - 43) • The input selection setting may not be correct. (p. 17) • The Brightness adjustment may be lowest setting. (p. 30) • The LCD Projector may be set to the Shutter mode. (p. 18)
The picture is fuzzy.	• The lens focus may not have been set correctly, or the Projector may not be at the correct distance from the screen. (pp.12, 13, 15, 16, 22) • The lens may be dirty. • The LCD Projector may not be set up so that it is perpendicular to the screen. (pp.12, 13, 15, 16, 22) • The VIDEO or R, G, B adjustments may not have been set correctly. (pp. 29 - 31)
“Focus” or “No Signal” appears on screen.	• The signal input source may not be connected properly. (pp. 41 - 43) • The input selection setting may not be correct. (p. 17) • The connected signal source may be turned off. (pp. 26, 27) • If the DVI-D signal is not projected, the DVI cable may not have been connected to the PC and LCD Projector at the time the PC was turned on. (p. 42)
Color is too light or tint is poor.	• Color or Tint adjustment may be incorrect. (p. 30) • The video formats may not match. (p. 28) • The signal cables may be connected incorrectly. For instance, the PB, PR connectors may be reversed. (p. 43)
No sound can be heard.	• The audio signal source may not be connected properly. (pp. 41 - 43) • The volume adjustment may be at the lowest possible setting. (p. 18) • The Mute function or Audio/Video Shutter function may be active. (p. 18)
Remote Control does not operate.	• The batteries may be spent, or they may not be inserted correctly. (p. 10) • There may be an object blocking the infrared signals between remote control unit and the Projector. • The remote control unit may be out of the operating range. (p. 11)
The color is black-and white.	• The Video System may not be correct. (p. 28)

Cher Client:

Ce manuel d'utilisation contient toutes les informations relatives au fonctionnement dont vous aurez besoin. Nous espérons que cela vous aidera à bénéficier pleinement de votre nouveau produit et que vous serez satisfait de votre projecteur à cristaux liquides Panasonic. Pour votre sécurité et pour assurer un fonctionnement durable de votre projecteur à cristaux liquides, veillez à lire attentivement la section intitulée "Notes importantes concernant la sécurité" avant toute utilisation.

Ce qu'il faut savoir

Attention:
Cet équipement a été testé et reconnu conforme aux norme pour le matériel numérique de Classe B, selon les spécifications de la 15ème partie des Réglementations de la Commission Fédérale des Communications (FCC). Ces règles sont conçues pour assurer une protection suffisante contre des interférences nuisibles dans une zone résidentielle. Cet équipement génère et utilise des signaux radio électriques et si ce matériel n'est pas installé et employé en suivant les instructions, il peut provoquer des interférences avec les communications radio. Toutefois, il n'y a pas de garantie que les interférences n'auront pas lieu dans une installation particulière. Si cet équipement provoque effectivement des interférences avec la réception radio et télévision, qui peuvent être déterminées en allumant et éteignant l'équipement, il est conseillé à l'utilisateur d'essayer d'y remédier, au moyen de l'une ou de plusieurs des mesures suivantes:

- Réorienter ou déplacer l'antenne de réception.
- Eloigner l'équipement du poste de radio.
- Brancher l'équipement et le récepteur sur des circuits électriques différents.
- Consulter le revendeur ou un technicien radio/TV confirmé pour de l'assistance technique.

Declaration of Conformity

Model Number:	PT-L759VU / PT-L759XU
Trade Name:	**Panasonic**
Responsible party:	Matsushita Electric Corporation of America.
Address:	One Panasonic Way Secaucus New Jersey 07094
Telephone number:	1-800-528-8601

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

FCC Warning:
To assure continued FCC compliance, use only the provided grounded power supply cord and prevent undesirable interference, use only the provided shielded VGA cable with 2 ferrite cores while connecting LCD to computer and all other connecting cables should be shielded. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Avertissement: (E.U. seulement)
Pour assurer une conformité au marquage CE, utiliser uniquement le cordon d'alimentation fourni avec prise de terre et pour éviter des interférences indésirables, utiliser le câble VGA blindé fourni avec 2 noyaux en ferrite pour connecter le projecteur LCD à un micro-ordinateur et tous les autres câbles de connexion doivent être blindés. Tout changement ou modification non expressément autorisé par le responsable de mise en conformité de cet équipement pourrait annuler la garantie de cet appareil.

Notes importantes concernant la sécurité

ATTENTION:Lire toutes ces instructions avant d'utiliser votre projecteur. Conserver le mode d'emploi en lieu sûr afin de pouvoir le consulter ultérieurement.

Ce projecteur à affichage à cristaux liquides a été conçu et fabriqué pour répondre aux normes de sécurité en vigueur. Mais une UTILISATION INCORRECTE PEUT PROVOQUER UNE DECHARGE ELECTRIQUE OU UN INCENDIE. Afin de ne pas supprimer les protections incorporées dans ce projecteur à affichage à cristaux liquides, respectez les règles de base suivantes pour son installation, utilisation et réparation.

1 Débrancher le projecteur de la prise de courant murale avant d'entreprendre le nettoyage.

2 Ne pas appliquer des produits de nettoyage liquides ou des aérosols. Utiliser un chiffon doux et sec pour nettoyer le projecteur. Si le projecteur est très sale, tremper un chiffon dans un détergent neutre, bien essorer le chiffon, puis essuyer le boîtier et terminer en essuyant avec un chiffon doux. Ne pas utiliser un dépoussiéreur chimique ou un nettoyant lustrant parce qu'il risque de détériorer le boîtier et de décaper le revêtement de peinture.

3 Ne pas utiliser des accessoires non recommandés par Panasonic, car ils risquent de provoquer des dangers.

4 Ne pas utiliser le projecteur près de l'eau; par exemple, près d'une baignoire, un lavabo, un évier, une cuve à lessive, dans un sous-sol mouillé, près d'une piscine, etc. Ne jamais renverser de liquides dans le projecteur.

5 Ne pas placer le projecteur sur un chariot, un support ou une table instable. Le projecteur risque de tomber, ce qui pourrait provoquer des blessures graves à un enfant ou un adulte, et/ou endommager l'appareil. Utiliser uniquement avec un chariot ou un support recommandé par le fabricant et adapté à l'utilisation d'un projecteur à affichage à cristaux liquides.

6 Le montage au plafond, contre un mur ou sur une étagère doit se faire à l'aide d'un kit de montage agréé par le fabricant.

7 Le projecteur à affichage à cristaux liquides et le chariot doivent être déplacés avec soin. Des arrêts brusques, une force excessive et des surfaces inégales risquent de faire basculer l'équipement et le chariot.

8 Les fentes et les ouvertures du boîtier servent à la ventilation. Pour assurer un fonctionnement fiable de la tablette de rétroprojection et pour la protéger de la surchauffe, ces ouvertures ne doivent pas être bloquées ni couvertes. Ne jamais recouvrir ces ouvertures avec un chiffon ou tout autre matériau. Les ouvertures situées en bas de l'appareil ne doivent pas être obstruées en plaçant la tablette de rétroprojection sur un lit, un canapé, un tapis ou sur une surface similaire. La tablette de rétroprojection ne doit pas être placée à proximité ou sur un radiateur ou une bouche d'aération. La tablette de rétroprojection ne doit pas être placée dans une unité telle une étagère à moins que la ventilation appropriée n'ait été prévue.

9 La tablette de rétroprojection ne doit être utilisée qu'en accord avec le type de source d'alimentation indiqué sur la tablette de rétroprojection ou dans les caractéristiques techniques. Si vous n'êtes pas sûr du type d'alimentation alimentant votre domicile, consulter un revendeur de tablette de rétroprojection ou la compagnie d'électricité locale.

10 Ne rien poser sur le cordon d'alimentation. Ne pas placer le projecteur à affichage à cristaux liquides dans un endroit où le cordon sera sur un lieu de passage.

11 Respecter les avertissements et instructions marqués sur le projecteur à affichage à cristaux liquides.

12 Par mesure de sécurité, ce projecteur est équipé d'une prise trois conducteurs avec mise à la terre. S'il n'est pas possible d'insérer la fiche dans la prise, utiliser un adaptateur ou confier l'installation d'une prise de terre à un électricien. Ne pas essayer de modifier cette fiche secteur.

13 Pour améliorer la protection du projecteur à affichage à cristaux liquides pendant un orage ou lorsqu'il est laissé sans surveillance ou inutilisé pendant une longue période, débranchez la fiche de la prise murale et débranchez tous les câbles. Cela évite d'endommager le projecteur par la foudre et les surtensions des lignes d'alimentation.

Notes importantes concernant la sécurité

14 Ne pas surcharger les prises murales et les cordons de rallonge avec trop d'appareils car cela risque de provoquer un incendie ou une décharge électrique.

15 Ne jamais enfoncer d'objets de quelque sorte dans le projecteur à affichage à cristaux liquides par les fentes du boîtier, car ils pourraient toucher des points dangereux sous haute tension ou générer des court-circuits, qui risquent de provoquer un incendie ou une décharge électrique.

16 Ne pas essayer de réparer le projecteur à affichage à cristaux liquides soi-même. Ouvrir ou enlever les des couvercles risque de vous exposer à une tension dangereuse ou à d'autres dangers. Confiez tous travaux de dépannage à un dépanneur qualifié.

17 Débrancher le projecteur à affichage à cristaux liquides de la prise murale et confiez le dépannage à un dépanneur qualifié dans les conditions suivantes:

A. Lorsque le cordon d'alimentation ou la fiche est endommagée ou effilochée.

B. Si du liquide a été renversé dans le projecteur à affichage à cristaux liquides.

C. Si le projecteur à affichage à cristaux liquides a été exposé à la pluie ou à l'humidité.

D. Si le projecteur à affichage à cristaux liquides ne fonctionne pas normalement lorsque les instructions d'utilisation ont été suivies. Réglez uniquement les commandes décrites dans les instructions d'utilisation; un réglage incorrect des autres commandes risque de provoquer des dégâts et nécessiteront souvent un travail approfondi par un technicien qualifié pour remettre le projecteur à affichage à cristaux liquides en état de fonctionnement normal.

E. Si le projecteur à affichage à cristaux liquides a subi une chute ou si le boîtier a été endommagé.

F. Lorsque le projecteur à affichage à cristaux liquides présente un changement distinct dans sa performance - cela signifie une nécessité de réparation.

18 A la fin de tout entretien ou réparation du projecteur à affichage à cristaux liquides, demandez au technicien du service après-vente d'effectuer une vérification de sécurité de routine afin de déterminer si le projecteur à affichage à cristaux liquides est en état de fonctionnement.

19 Lorsque le remplacement des pièces est nécessaire, s'assurer que le technicien du service après-vente a utilisé les pièces de remplacements spécifiées par le fabricant et ayant les mêmes caractéristiques que les pièces d'origine. Des substitutions non autorisées risquent de provoquer un incendie, une décharge électrique ou d'autres dangers.

20 Le filtre à air doit être nettoyé toutes les 100 heures de fonctionnement de la lampe.
Le projecteur à affichage à cristaux liquides risque de devenir trop chaud si le filtre n'est pas nettoyé lorsque cela est nécessaire.

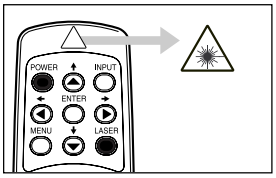
21 Si l'objectif est sale ou encrassé, le nettoyer avec un chiffon propre, mouillé. Ne jamais toucher l'objectif avec les doigts.

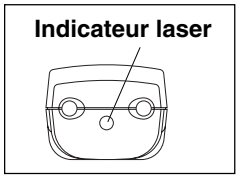
22 Ne pas regarder à travers l'ouverture et l'objectif pendant que le projecteur fonctionne, car cela risque de provoquer des lésions oculaires.

23 Ne regardez pas dans l'émetteur du faisceau laser rauge, ou ne dirigez pas le rayon vers quelqu'un. Braquer la rayon laser dans les yeux entraîner des blessures aux yeux.

Utilisation de l'indicateur laser sur la télécommande

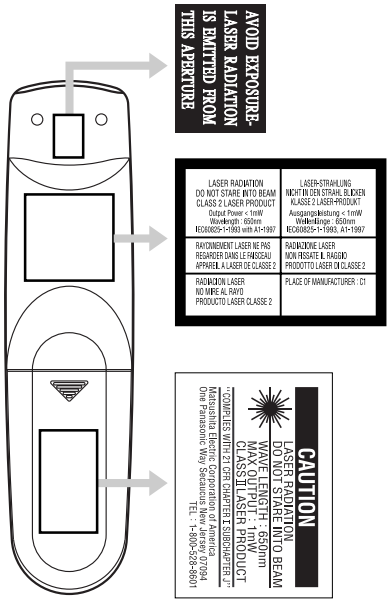
Lorsque le rayon laser est dirigé à l'écran, l'indicateur est affiché sur l'écran.





Appuyer sur LASER sur la télécommande pour activer le laser.

Avertissement NE PAS regarder dans l'émetteur laser ni diriger le rayon laser vers une personne. Braquer le rayon laser dans les yeux peut entraîner des blessures aux yeux.



Remarque

- Les spécifications des radiations laser de ce produit sont les suivantes : Longueur d'onde - 650 nm, Sortie Max. - 1 mW, Classe 2.

Pour les U.S.A. seulement

- Les appareils laser de Classe 2 doivent normalement être équipés d'un indicateur précisant que le laser est émils. Sur cet appareil, le faisceau rouge émis du point de laser rempli la fonction de cet indicateur.
- Les appareils laser de Classe 2 doivent normalement être équipés d'un dispositif d'arrêt d'urgence tel qu'un obturateur pour couper immédiatement le laser. Sur cet appareil, au lieu d'un tel dispositif, le laser ne continue pas sans que le bouton laser soit maintenu enfoncé sans interruption.

ATTENTION: l'utilisation de commandes, de réglages ou l'execution de procfédures autres que celles spécifiées ici peut causer des expositions dangereuses aux radiations.

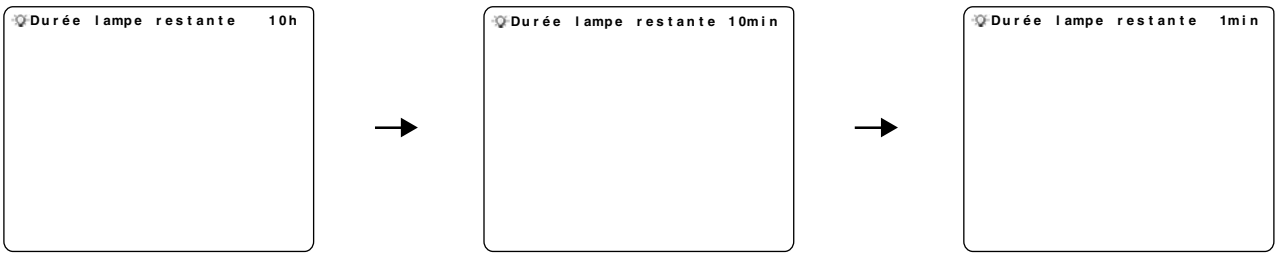
Remplacement de la lampe

Avertissement Si le code de statut "L-n" apparaît sur l'affichage STATUS CODE (code de statut) lorsque la lampe n'est pas allumée, confiez les réparations du projecteur LCD à un centre de service car les fragments de lampe risquent de vous blesser.

■ Période de remplacement de la lampe

La lampe du projecteur LCD a une durée de service limitée de 2 000 heures environ.
"Durée lampe restante 10h" est affiché à l'écran, lorsque la durée de service atteint 1 990 heures.
Ensuite, chaque fois que le projecteur est allumé, la durée de vie restante de la lampe sera affichée.

- Un affichage d'avertissement de 15 secondes (15 secondes lorsque le projecteur LCD est allumé) apparaît toutes les heures à partir de la durée de service de 1 990 heures. Et l'avertissement clignote pendant les dernières 5 minutes de la durée de vie de la lampe.



Remarque

- La lampe utilisée comme source lumineuse s'use éventuellement. La durée de vie de la lampe de source lumineuse utilisée sur le PT-L759XU/PT-L759VU est environ de 2 000 heures, mais selon ses propriétés individuelles et les conditions de son utilisation la lampe peut ne plus éclairer après moins de 2 000 heures (la lampe est affectée par le nombre de fois où elle est allumée et par la période de temps jusqu'à ce qu'elle soit rallumée, et celles-ci peuvent raccourcir la durée de vie). Pour cette raison, nous recommandons d'avoir une lampe de rechange en main.
- Remplacer les lampes comme décrit dans les étapes 1-7 des page 62 et lire la notice séparée fournie pour effectuer la procédure de réinitialisation.

Utilisation de l'indicateur laser sur la télécommande

■ Procédure de remplacement de la lampe

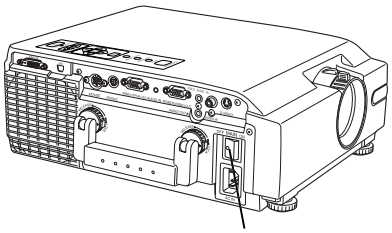
Attention: En raison des risques de blessures, procédez exactement de la manière décrite ci-dessous pour remplacer la lampe.
Commander la lampe ET-LA059X.

1 Lorsque le ventilateur de refroidissement s'est arrêté, et l'indicateur STANDBY(R) ON(G) (attente(R)/mise sous tension) devient rouge, régler l'interrupteur principal sur OFF et débrancher le cordon d'alimentation.

Remarque: Attendre au moins une heure avant de remplacer la lampe.

[Pour un remplacement prématuré de la lampe]

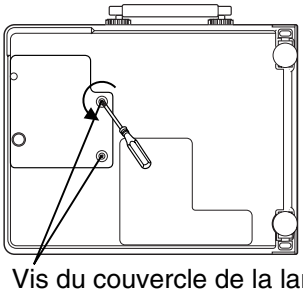
- La tablette de rétroprojection comprend une fonction de refroidissement forcé. Après avoir inactivé le bouton POWER, et quelquefois pendant les 2 minutes de fonctionnement normal du ventilateur de refroidissement, appuyer simultanément sur ◀ et sur ▶. Le ventilateur de refroidissement passera sur la vitesse rapide pour 10 minutes environ.
  (Le STATUS CODE "C-d" est alors affiché.)



2 Tout en saisissant la poignée, placer le projecteur LCD debout sur son côté comme illustré.

Remarque

- En transportant le PT-L759XU/PT-L759VU, saisissez la poignée de transport et déposez-le dans un endroit plat et stable.



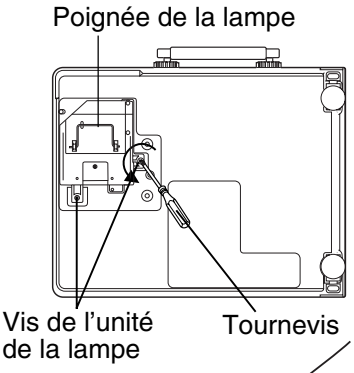
3 Retirer les vis du couvercle de la lampe.

Lire tout d'abord les étiquettes d'avertissement et de danger. Ensuite, retirer les (2) vis du couvercle de la lampe avec une tournevis, et sortir le couvercle de la lampe.

4 Retirer la vis de l'unité de la lampe.

Retirer la vis (2) de l'unité de la lampe, puis saisir la poignée de la lampe et la sortir délicatement du projecteur LCD. Tenir l'ouverture du boîtier de la lampe à droite. Ne pas toucher la lampe et ne pas pointer l'ouverture de la lampe sur quelqu'un.

AVERTISSEMENT:	La lampe risque d'être chaude. Faire attention lors de sa manipulation.
ATTENTION:	• La lampe haute pression risque d'exploser si elle est utilisée incorrectement. • Danger de blessures par les fragments de lampe.



5 Installer l'unité de la lampe neuve.

Retirer la lampe de la tablette de rétroprojection et installer une nouvelle lampe (ET-LA059X.)

- Ne pas faire tomber la lampe, car le choc après une chute risque de faire exploser la lampe.

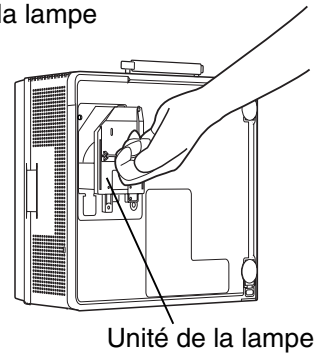
6 Remettre les vis de l'unité de la lampe en place.

Remettre la vis de l'unité de la lampe et les vis du couvercle de la lampe en place à l'aide d'une pièce de monnaie pour les visser.

- Eliminer la lampe usagée selon les prescriptions en vigueur.

Remarque

- Attachez solidement la lampe et la porte de logement de la lampe. Si la lampe et la porte de logement de la lampe ne sont pas jointes solidement, le circuit de protection sera lancé et la puissance ne s'allumera pas.



7 Rebrancher le projecteur LCD en insérant le cordon d'alimentation dans la prise CA du projecteur LCD et mettre l'interrupteur principal sur la position ON (marche.)

8 Pour le remplacement de la lampe, voir la notice séparée fournie pour effectuer la procédure de réinitialisation.

Lieber Panasonic-Kunde,

Dieses Bedienungshandbuch enthält alle für den Betrieb dieses Gerätes erforderlichen Informationen. Wir hoffen, dass Ihnen das Handbuch dabei helfen kann, die Leistungsfähigkeit Ihres neuen Gerätes voll auszunutzen und dass Sie mit Ihrem LCD-Projektor von Panasonic zufrieden sind.
Zu Ihrem eigenen Schutz und zur Sicherstellung einer langen Lebensdauer Ihres LCD-Projektors sollten Sie sich vor der Inbetriebnahme des Gerätes die “Wichtige Sicherheitshinweise” sorgfältig durchlesen.

Wissenswertes

Vorsicht:
Eine Prüfung hat ergeben, daß dieses Gerät gemäß Absatz 15 der FCC-Richtlinien den Anforderungen eines digitalen Gerätes der Klasse B entspricht. Die festgelegten Grenzwerte dienen zum Schutz vor schädlichen Inteferenzen bei der Heiminstallation. Das Gerät erzeugt, verwendet und kann Radiofrequenzenergie ausstrahlen. Eine Installation bzw. Benutzung ohne Beachtung der Bedienungsanleitung kann eine Störung des Radiobetriebes zur Folge haben. Eine Garantie für störungsfreien Betrieb in jeder Installationssituation kann in keinem Fall gegeben werden. Sollte dieses Gerät eine Störung des Radio- bzw. Fernsehempfangs verursachen, sollte zur Abhilfe eine der nachfolgend aufgeführten Maßnahmen ergriffen werden. Schalten Sie dieses Gerät zuvor einmal aus und wieder ein, um festzustellen, ob dieser LCD-Projektor tatsächlich als Störungsquelle in Betracht kommt.

- Richten Sie die Empfangsantenne neu aus bzw. placieren Sie sie an einer anderen Stelle.
- Erhöhen Sie den Abstand zwischen diesem Gerät und dem Receiver.
- Schließen Sie dieses Gerät an eine Steckdose eines anderen Schaltkreises als den Receiver an.
- Konsultieren Sie Ihren Händler oder einen erfahrenen Radio- und Fernsehtechniker.

Declaration of Conformity

Model Number:	PT-L759VU / PT-L759XU
Trade Name:	**Panasonic**
Responsible party:	Matsushita Electric Corporation of America.
Address:	One Panasonic Way Secaucus New Jersey 07094
Telephone number:	1-800-528-8601

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

FCC Warning:
To assure continued FCC compliance, use only the provided grounded power supply cord and prevent undesirable interference, use only the provided shielded VGA cable with 2 ferrite cores while connecting LCD to computer and all other connecting cables should be shielded. Any changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate this equipment.

Warnung: (Nur E.U.)
Um eine andauernde CE-Zeichen-Übereinstimmung sicherzustellen, sollten Sie ausschließlich das mitgelieferte geerdete Netzkabel verwenden und zur Vermeidung von störenden Interferenzen, sollte beim Anschluss des LCDs an den Computer ausschließlich das mitgelieferte abgeschirmte VGA-Kabel mit 2 Ferritkernen zum Einsatz kommen. Darüber hinaus sollten auch alle anderen Anschlusskabel abgeschirmt sein. Sämtliche Änderungen oder Modifikationen,die ohne ausdrückliche Zustimmung der für die Übereinstimmung zuständigen Partei durchgeführt werden, können einen Verlust der Betriebserlaubnis für dieses Gerät zur Folge haben.

Wichtige Sicherheitshinweise

VORSICHT:Bitte lesen Sie sich diese Hinweise vor der Inbetriebnahme Ihres LCD-Projektors sorgfältig durch. Bewahren Sie die Bedienungsanleitung für spätere Referenznahme an einem sicheren Ort auf.

Elektrische Energie kann viele sinnvolle Funktionen ausführen. Dieser LCD-Projektor entspricht in seiner Entwicklung und Herstellung geltenden Sicherheitsstandards. Dennoch KANN EINE UNSACHGEMÄSSE BENUTZUNG EINEN ELEKTRISCHEN SCHLAG ODER BRAND VERURSACHEN. Um die in diesen LCD-Projektor eingebauten Sicherheitseinrichtungen nicht zu unterlaufen, beachten Sie bitte die nachfolgenden Grundregeln für die Installation, Benutzung und Wartung des LCD-Projektors.

1 Trennen Sie den LCD-Projektor vor der Reinigung von der Netzsteckdose ab.

2 Verwenden Sie für die Reinigung keine Flüssig- oder Aerosolreiniger. Wischen Sie den LCD-Projektor mit einem weichen, trockenen Tuch ab. Befeuchten Sie das Tuch im Falle einer hartnäckigen Verschmutzung mit einem neutralen Reiniger, wringen Sie das Tuch fest aus, reinigen Sie das Gerät und wischen Sie mit einem trockenen Tuch nach. Reinigen Sie das Gerät weder mit einem chemischen Tuch noch mit einem Poliermittel, da derartige Reinigungsmittel das Gerät angreifen und ein Abblättern der Farbe verursachen können.

3 Verwenden Sie ausschließlich von Panasonic empfohlene Zubehörteile, da die Benutzung anderer Zubehörteile Gefahren mit sich bringt.

4 Betreiben Sie den LCD-Projektor nicht an Orten, an denen er mit Wasser in Berührung kommen könnte, z.B. in der Nähe einer Badewanne, eines Waschbeckens, einer Spüle, in feuchten Räumen, in der Nähe eines Schwimmbeckens usw.. Schütten Sie niemals Wasser in den LCD-Projektor.

5 Stellen Sie den LCD-Projektor nicht auf einem wackeligen Wagen, Stativ oder Tisch auf. Der LCD-Projektor könnte herunterfallen und sowohl Kinder als auch Erwachsene ernsthaft verletzen und/oder schwerwiegende Beschädigungen des Gerätes verursachen. Benutzen Sie ausschließlich vom Hersteller empfohlene und für diesen LCD-Projektor geeignete Wagen oder Stative.

6 Benutzen Sie für die Decken-, Wand- oder Schrankmontage einen vom Hersteller geprüften und für diesen LCD-Projektor als geeignet befundenen Montagesatz und nehmen Sie den Einbau entsprechend der Herstellerhinweise vor.

7 Der LCD-Projektor, dessen Zubehör und der Wagen müssen mit Vorsicht bewegt werden. Schnelle Stopps, übermäßige Anwendung von Gewalt und unebene Flächen können zu einem Umkippen des Gerätes und des Wagens führen.

8 Schlitze und Öffnungen im Gehäuse sind für die Belüftung bestimmt. Diese Öffnungen dürfen für einen einwandfreien Betrieb des LCD-Projektors und zum Schutz gegen Überhitzung nicht blockiert werden. Diese Öffnungen sollten niemals mit einem Tuch oder anderem Material bedeckt werden. Stellen Sie den LCD-Projektor nicht auf ein Bett, Sofa, Vorleger oder auf eine vergleichbare Unterlage, damit die untere Öffnung nicht blockiert wird. Der LCD-Projektor sollte nicht neben oder über einen Heizkörper oder Heizungsabzug aufgestellt werden. Der LCD-Projektor sollte nicht in ein Bücherregal gestellt werden, wenn keine ausreichende Belüftung gewährleistet ist.

9 Der LCD-Projektor sollte nur mit der auf dem LCD-Projektor oder der in den Technischen Daten angegebenen Stromversorgung betrieben werden. Wenn Sie sich hinsichtlich der Stromversorgung nicht sicher sind, wenden Sie sich an Ihren LCD-Projektor-Händler oder an das örtliche Energieversorgungsunternehmen.

10 Legen Sie keine Gegenstände auf das Netzkabel und verlegen Sie das Kabel so, daß niemand darauf treten kann.

11 Beachten Sie alle auf dem LCD-Projektor aufgeführten Warnungen und führen Sie die Anweisungen aus.

12 Zur Sicherheit ist dieser LCD-Projektor mit einem dreistiftigen Erdungsstecker ausgestattet. Der dreistiftige Erdungsstecker paßt nur in eine für die Erdung ausgelegte Netzsteckdose. Sollte der Stecker nicht passen, benutzen Sie bitte einen Adapter, der ordnungsgemäß geerdet ist oder beauftragen Sie einen Elektriker mit der Installation einer geerdeten Steckdose. Versuchen Sie nicht, diesen Wechselstromstecker in irgendeiner Weise zu verändern.

Wichtige Sicherheitshinweise

13 Trennen Sie sowohl den Netzstecker von der Netzsteckdose ab als auch sämtliche Kabelsysteme für den zusätzlichen Schutz des LCD-Projektors im Falle eines Gewitters, bei Abwesenheit oder bei einer Nichtbenutzung des Gerätes über einen längeren Zeitraum hinweg. Dies verhindert Beschädigungen am LCD-Projektor bei Gewitter und Spannungsschwankungen in der Netzleitung.

14 Überlasten Sie weder Netzsteckdosen noch Verlängerungskabel mit zu vielen Geräten, da dies einen Brand oder elektrischen Schlag verursachen könnte.

15 Schieben Sie keinerlei Gegenstände durch die Gehäuseschlitze in den LCD-Projektor. Die Gegenstände könnten gefährliche Spannungspunkte berühren oder Teile kurzschließen, was wiederum einen Brand oder elektrischen Schlag verursachen könnte.

16 Versuchen Sie nicht, den LCD-Projektor selbst zu warten. Das Öffnen oder Entfernen von Abdeckungen kann Sie gefährlichen Spannungen oder Gefahren aussetzen. Überlassen Sie sämtliche Wartungsarbeiten qualifiziertem Fachpersonal.

17 Trennen Sie die LCD-Projektoreinheit unter nachfolgend aufgeführten Umständen von der Netzsteckdose ab und ziehen Sie qualifiziertes Fachpersonal hinzu:

A. Wenn das Netzkabel oder der Netzstecker beschädigt oder durchgescheuert sind.
B. Wenn Flüssigkeit in den LCD-Projektor eingedrungen ist.
C. Wenn der LCD-Projektor Regen oder Wasser ausgesetzt worden ist.
D. Wenn der LCD-Projektor nicht ordnungsgemäß arbeitet, obwohl die Bedienung entsprechend der Bedienungsanleitung erfolgt. Stellen Sie nur die Bedienungselemente ein, die diese Bedienungsanleitung umfaßt; eine falsche Einstellung anderer Bedienungselemente kann Beschädigungen verursachen, die nur in einem aufwendigen Arbeitsgang von einem qualifiziertem Techniker behoben werden könnten.
E. Wenn der LCD-Projektor heruntergefallen oder das Gehäuse beschädigt ist.
F. Wenn der LCD-Projektor eine deutliche Änderung der Leistungsfähigkeit aufweist - dies ist ein Anzeichen dafür, daß eine Wartung erforderlich ist.

18 Beauftragen Sie nach Durchführung sämtlicher Wartungs- und Reparaturarbeiten einen Kundendiensttechniker mit einer routinemäßigen Sicherheitsprüfung, um die Betriebssicherheit des LCD-Projektors sicherzustellen.

19 Sollten Ersatzteile benötigt werden, achten Sie darauf, daß der Kundendiensttechniker ausschließlich vom Hersteller angegebene Ersatzteile verwendet, die über dieselben Eigenschaften wie die Originalteile verfügen. Nicht zugelassene Ersatzteile können einen Brand oder elektrischen Schlag verursachen und andere Risiken darstellen.

20 Der Luftfilter muß nach jeweils 100-stündigem Lampenbetrieb ausgetauscht werden.
Der LCD-Projektor kann sich überhitzen, wenn der Filter im Falle der Erfordernis nicht ausgetauscht wird.

21 Wenn das Objektiv schmutzig oder schmierig ist, reinigen Sie es mit einem sauberen, feuchten Tuch.
Fassen Sie das Objektiv niemals an.

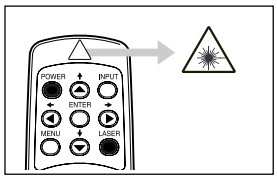
22 Schauen Sie während des Betriebes nicht direkt in das Gerät und in das Objektiv, da dies Augenschäden verursachen kann.

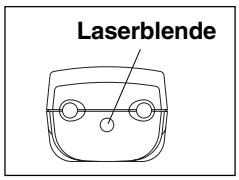
23 Nicht in den Laserzeiger-Sender gucken oder den Laserstrahl auf eine Person richten. Der Laserstrahl könnte sonst Augenschäden verursachen.

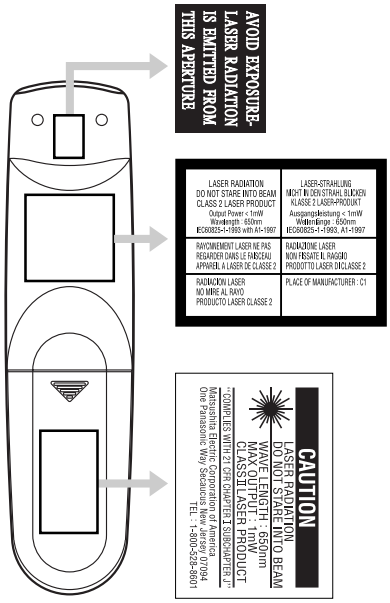
24 Wir sind bemüht Ihre Umwelt sauber und Schadstoffrei zu erhalten. Darum bitten wir Sie das nicht mehr zu reparierende Gerät bei Ihren Händler oder einer Recycling Firma abzugeben. (Diese Vorsichtsmaßnahme gilt nur für Deutschland.)

Benutzung des Laserzeigers der Fernbedienung

Wenn man mit dem Laserstrahl auf die Leinwand zeigt, wird auf der Leinwand der Zeiger abgebildet.







Zur Aktivierung des Lasers die **LASER-Taste** der Fernbedienung drücken.

Achtung

NICHT in den Laser-Sender gucken oder den Laserstrahl auf eine Person richten. Der Laserstrahl könnte sonst Augenschäden verursachen.

Hinweis

- Dieses Produkt besitzt folgende Laserstrahlungs-Spezifikationen: Wellenlänge - 650 nm, max. Ausgang - 1 mW, Klasse 2.

Nur für USA

- Klasse Ⅱ Laserprodukte müssen normaleweise mit einer Anzeigen ausgestattet sein, die anzeigt, daß der Laserstrahl emittiert wird. Bei disiesem Produkt übernimmt der vom, Laserpunkt emittierte rote Laserstrahl die Funktion dieser Anzeige.
- Klasse Ⅱ Laserprodukte müssen normaleweise mit einer Notstopp-Einrichtrung ausgestattet sein, wie einem Verschluß, damit der Lawer sofort gestoppt werden kann. Anstelle solch einer Vorrichtung bleibt bei diesem Produkt der Laser nicht eingeschaltet, es sei denn, die Laser-Taste wird ununterbrochen gedrückt.

Achtung: Die Anwendung von Steuerungen oder Einstellungen oder die Ausführung von Verfahren, die nicht hier spezifiziert sind, können zu einer gefährlichen Strahlungsexposition führen.

Lampenaustausch

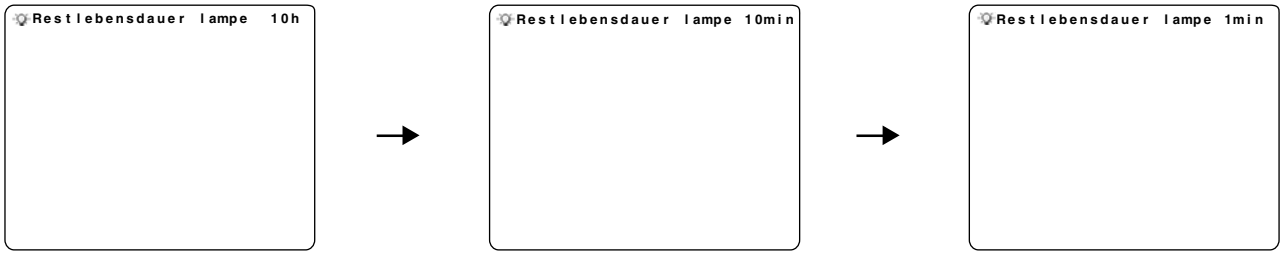
Warnung

Falls bei nicht eingeschalteter Lampe auf dem STATUS CODE-Display der Statuscode “L-n” angezeigt wird, müssen Sie den Projektor zur nächsten kundendienststelle zur reparatur bringen, weil Verletzungsgefahr durch Lampensplitter vorhanden ist.

■ Lampenaustauschperiode

Die Lampe des LCD Projektors hat eine begrenzte Betriebsdauer von ca. 2 000 Stunden.
“Restlebensdauer lampe 10h” wird auf dem Bildschirm erscheinen, wenn die Betriebsdauer 1 990 Stunden erreicht hat. Dann wird, immer wenn der Strom eingeschaltet wird, die verbleibende Betriebsdauer angezeigt.

- Eine 15-sekündige Warnungsanzeige (15 Sekunden, wenn der LCD Projektor eingeschaltet wird) erscheint jede Stunde ab einer Betriebsdauer von 1 990 Stunden. Und die Warnung wird in den letzten 5 Minuten der Betriebsdauer blinken.



Hinweis

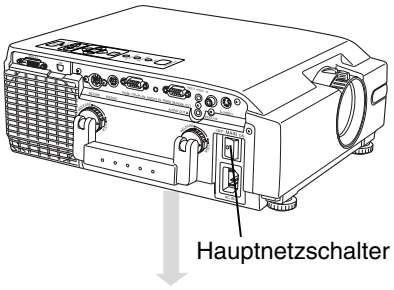
- Die als Lichtquelle verwendete Lampe kann unter Umständen verschleißen. Die Lebensdauer der im PT-L759XU/PT-L759VU verwendeten Lichtquellenlampe beläuft sich auf etwa 2 000 Betriebsstunden. Abhängig von den individuellen Lampenwerten und den Benutzungsbedingungen kann sich die Lebensdauer jedoch auch verkürzen (die Lampe wird von der Leucht-Häufigkeit und der Zeitspanne zwischen den einzelnen Lampenbenutzungen beeinflusst, und kann ebenfalls eine Reduzierung der Lebensdauer zur Folge haben). Daher ist es empfehlenswert, stets eine Austauschlampe zur Hand zu haben.
- Tauschen Sie die Lampen wie in den auf den Seite 67 beschriebenen Schritten 1-7 aus und beziehen Sie sich bitte auf das separat beigefügte Informationsblatt zur Durchführung des Rückstellungsbetriebes.

Benutzung des Laserzeigers der Fernbedienung

■ Lampenaustauschverfahren

Vorsicht: Wegen Verletzungsgefahr müssen die Anweisungen zum Austauschen strikt eingehalten werden.
Bestellen Sie die Lampe ET-LA059X.

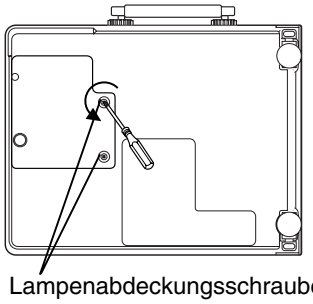
1 Nachdem das Kühlgebläse abgeschaltet ist und die STANDBY(R) ON(G)-Anzeige zu einem intensiven Rot wechselt. Stellen Sie den Netzschalter auf OFF und ziehen Sie das Stromkabel heraus.
Hinweis: Bitte warten Sie länger als eine Stunde für den Lampenaustausch.
[Wenn Sie die Lampe dringend austauschen müssen]
- Der LCD-Projektor ist mit einer gesteuerten Kühlfunktion ausgestattet. Drücken Sie, nachdem der POWER-Schalter auf OFF gedreht wurde und während des normalen 2-minütigen Kühlgebläsebetriebs, ◀ und ▶ gleichzeitig. Das Kühlgebläse läuft für etwa 10 Minuten mit Hochgeschwindigkeit. Das Kühlgebläse arbeitet ca. 10 Minuten mit Hochgeschwindigkeit. (Der “C-d” STATUS CODE wird angezeigt.)



2 Halten Sie den Griff fest und stellen Sie den LCD Projektor, wie dargestellt, auf die Seite.

Hinweis
- Tragen Sie den PT-L759XU/PT-L759VU beim Transport am Tragegriff und legen Sie ihn auf eine ebene, stabile Fläche.

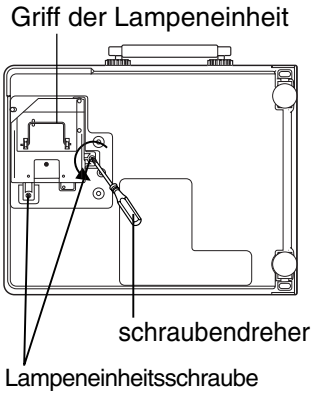
3 Schrauben Sie die Lampenabdeckungsschrauben ab.
Zuerst die Vorsichtsmaßnahmen und die Warnschilder lesen. Entfernen Sie dann mit der schraubendreher die Lampenabdeckungsschrauben (2) und nehmen die Lampenabdeckung ab.



4 Schrauben Sie die Lampeneinheitsschraube ab.
Schrauben Sie die Lampeneinheitsschraube (2) ab, greifen Sie den Lampeneinheitsgriff und ziehen Sie sie vorsichtig aus dem LCD Projektor heraus. Lassen Sie das Lampengehäuse rechts von Ihnen geöffnet. Fassen Sie die Lampe nicht an oder zeigen Sie mit der Lampenöffnung auf niemanden.

WARNUNG: Die Lampe könnte heiß sein. Gehen Sie vorsichtig vor.

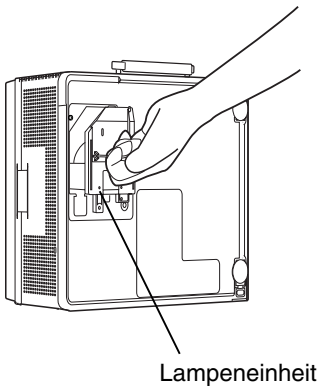
VORSICHT:
- Hochdruck-Lampen könnten bei falschem Umgang explodiere
- Verletzungsgefahr durch Lampensplitter.



5 Lampeneinheitsschraube.
Nehmen Sie die Lampe aus dem LCD-Projektor heraus und installieren Sie eine neue Lampeneinheit (ET-LA059X.)
- Lassen Sie sie nicht fallen, bei einem heftigen Aufprall kann die Lampe explodieren.

6 Schrauben Sie die Lampeneinheitsschrauben wieder an.
Schrauben Sie die Lampeneinheitsschraube und die Lampenabdeckungsschrauben mit der Münze wieder an.
- Richtige Entsorgung der alten Lampe.

Hinweis
- Die Lampeneinheit selbst sowie deren Tür müssen ordnungsgemäß befestigt sein. Wenn dies nicht der Fall ist, wird die Schutzschaltung aktiviert und das Gerät schaltet sich nicht ein.



7 Schließen Sie den LCD Projektor wieder an, indem Sie das Stromkabel in die WS-Buchse (AC-Buchse) des LCD Projektors stecken und den Netzschalter auf ON stellen.

8 Beziehen Sie sich bezüglich des Lampenaustausches bitte auf das separate Informationsblatt zur Durchführung des Rückstellungsbetriebes.

CONTENTS

Panasonic

Professional/Industrial Video

Panasonic Broadcast & Television Systems Company
Division of Matsushita Electric Corporation of America

One Panasonic Way 4E-7 Secaucus, NJ 07094 (201) 392-4443
3330 Cahuenga Blvd West Los Angels, CA 90068 (323) 436-3500

Technical Support:
(800) 524 -1448
(800) 526-6610
FAX: (201) 392-6514
E-Mail: pbtssupport@panasonic.com

Panasonic Canada Inc.
5770 Ambler Drive, Mississauga, Ontario L4W 2T3 (905) 624-5010

© 2001 Matsushita Electric Industrial Co., Ltd.
All rights reserved.