

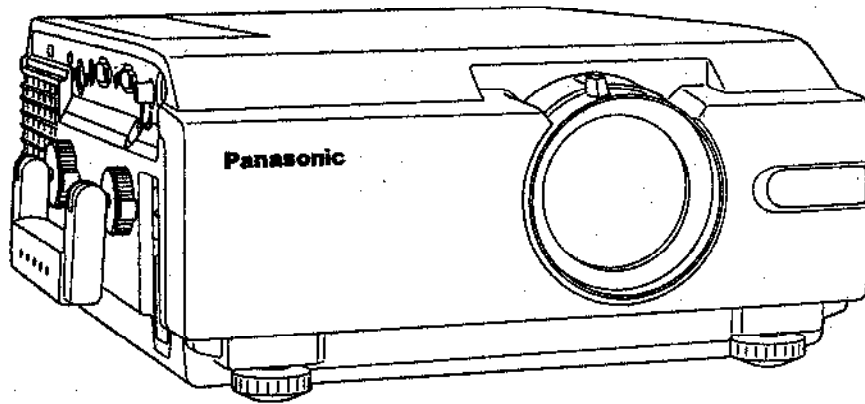
—TENTATIVE—

# Operating Instructions

LCD PROJECTOR

Model No. **PT-L759U**

EXHIBIT # 5  
FIG. NO. \_\_\_\_\_  
FCC ID: ACT927132K  
MODEL NO. PT-L759U  
OUR REF.: MKES00-FO02



## Panasonic®

Please read these instructions completely before operating this LCD Projector.

# 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.

**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:** 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 compliance could void the user's authority to operate this equipment.

## Congratulations

On your purchase of one of the most sophisticated and reliable products on the market today. Used properly, we're sure it will bring you and your family years of service enjoyment. Please take time to fill in the information below. The serial number is on the tag located on the back of your LCD Projector. You'll want to keep this manual handy as your convenient LCD Projector information source. For your own protection and prolonged operation of your LCD Projector, please be sure to read the "Important Safeguards" carefully, before use.

Date of Purchase \_\_\_\_\_

Dealer Purchased From \_\_\_\_\_

Dealer Address \_\_\_\_\_

Dealer Phone No. \_\_\_\_\_

Model No. **PT-L759U** \_\_\_\_\_

Serial No. \_\_\_\_\_

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# 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 back and bottom 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 back of 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.



- 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 lamp on hours.  
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

786432 (1024 X 768) pixels X 3 panels format, 2500 lumen (ANSI) 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-L759U to a computer or video equipment.

## 3 20 to 300 Inch Screen Capability

Project a screen size of 20" to 300" from a distance of **2.79 feet to 44.13 feet (Manual focus.)** (See page 11.)

## 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 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.

## 6 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.

## 7 IR Remote Control

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

## 8 Laser Pointer on the Remote Control

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

## 9 **Wireless mouse and the ▲, ▼, ◀ and ▶ keys on a keyboard**

**This function lets you use the remote control to control a PC (personal computer) in place of the PC's mouse and keyboard ▲, ▼, ◀, ▶. (Only applies for PCs with Windows 98 installed and a USB port.) (See page 33.)**

## 10 Stereo Audio Output

For external audio equipment connection. Audio follows video source.

## 11 Automatic Universal Power Supply

This unit has an operating voltage range of AC 100 - 240 V.

## 12 **Digital Zoom function**

**Pressing the D.ZOOM button allows you to magnify the image up to 25X.**

## 13 3D

### 14 Digital variable compression

You can reduce the projected image up to 0.4.

### 15 Two RGB system input

This projector allows the input of two RGB systems at the same time. To switch between the systems, press the INPUT button.

### 16 Digital keystone

You can perform keystone correction using the menu screen, the remote control, or when starting up the projector.

#### Equipped with a variety of convenient functions

A variety of functions such as the following have been provided.

- A blue screen is projected 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.
- Four direction types are provided.

## Contents of LCD Projector Box

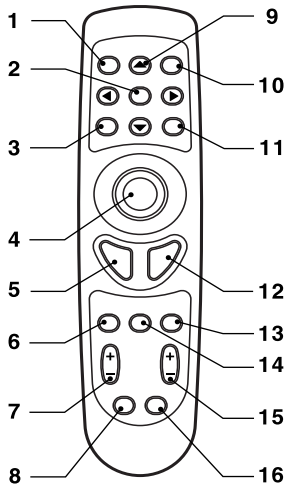
Please confirm that the following items are packed in the LCD Projector box. They are provided to help you use or set up your LCD Projector.

- (1) LCD Projector
- (2) Remote Control unit (LRQ90043)
- (3) 2 "AA" Batteries
- (4) Lens Cap
- (5) Carrying Handle
- (6) 9.8 Foot UL/CSA Power Cord (VJAS0179)
- (7) VGA Cable (LSJA0239)
- (8) PS/2 Mouse Cable (LSJA0212)
- (9) MAC Mouse Cable (LSJA0214)
- (10) USB Cable(LSJA0305)
- (11) VGA MAC Adaptor (LSJA0158)
- (12) Audio Cable (LSJA0240)
- (13) Video Cable (LSJA0074)
- (14) Quick use guide (Please read completely before operating.)
- (15) CD ROM
- (16) Warranty Card
- (17) Service Center List

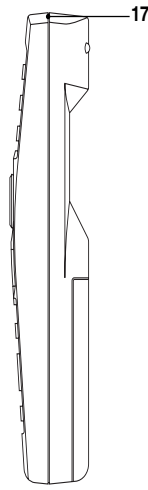
# Product Information

## Remote Control unit

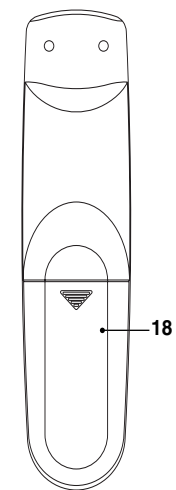
[ Front ]



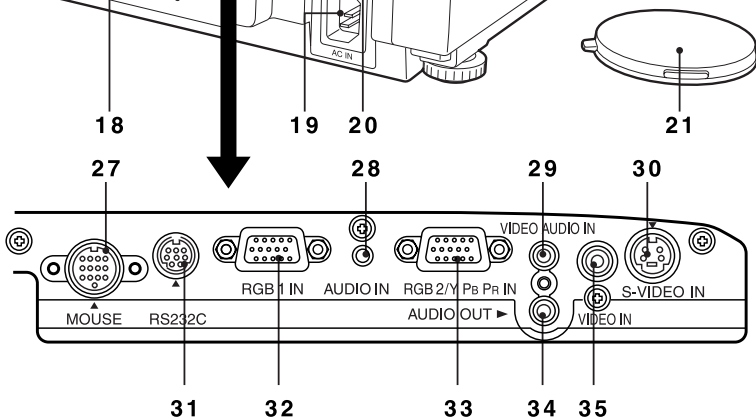
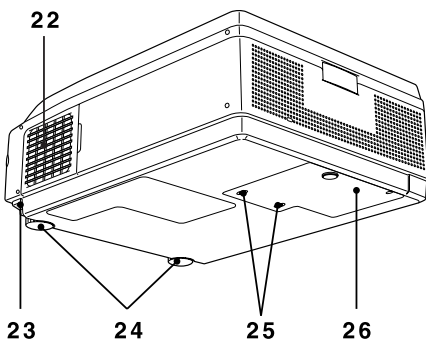
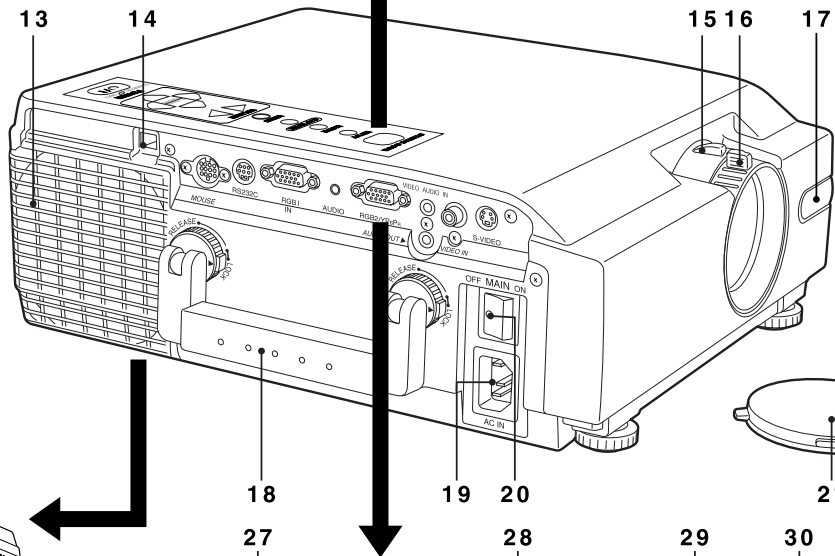
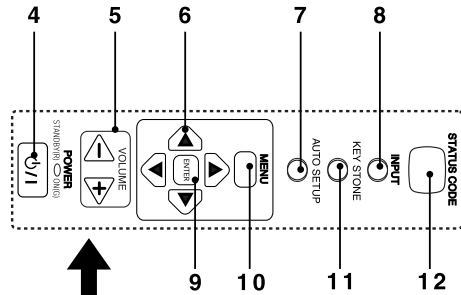
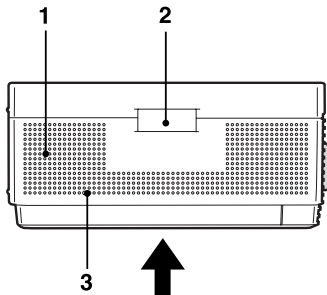
[ Side ]



[ Back ]



## LCD Projector





## Remote Control unit

1	POWER Button .....	See page 9.
2	ENTER Button .....	See page 22.
3	MENU Button .....	See page 16.
4	Mouse Button .....	See pages 14, 19, 23.
5	Click 1 Button .....	See page 13.
6	SHUTTER Button .....	See page 33.
7	D.ZOOM Button .....	See page 21.
8	KEystone Button .....	See page 20.
9	Adjust ▲▼◀▶ Button .....	See page 20.
10	INPUT Button .....	See pages 20, 31, 32, 34, 35.
11	LASER Button .....	See page 7.
12	Click 2 Button .....	See page 33.
13	MUTE Button .....	See page .
14	FREEZE button .....	See page 33.
15	VOLUME + - Button .....	See page .
16	AUTO SETUP Button .....	See page .
17	Transmitter	
18	Battery compartment	

## LCD Projector

1	Speaker	
2	Remote Control Sensor	
3	Security Lock	
4	POWER Button/STANDBY(R) ON(G) Indicator .....	See page 9.
5	VOLUME+ - Buttons .....	See pages 14, 21, 25, 49, 55, 59.
6	Adjust ▲▼◀▶ Buttons .....	See pages 20, 35, 36, 38, 39.
7	AUTO SETUP Button .....	See page 29.
8	INPUT Button .....	See page 16.
9	ENTER Button .....	See page 13.
10	MENU Button .....	See page 22.
11	KEY STONE .....	See page .
12	STATUS CODE .....	See page 45.
13	Air outlet port	
14	USB connector .....	See page 35.
15	Zoom Ring .....	See page 13.
16	FOCUS Ring .....	See page 13.
17	Remote Control Sensor	
18	Carrying Handle .....	See page 46.
19	AC Socket (100 - 240 V) .....	See page 9.
20	Main Power Switch .....	See page 9.
21	Lens Cap	
22	Air Filter .....	See page 47.
23	Adjuster Button .....	See page 12.
24	Adjustable legs .....	See page 12.
25	Lamp Cover Screw .....	See pages 49, 55, 59.
26	Lamp Cover .....	See pages 49, 55, 59.
27	MOUSE Connector .....	See page 30.
28	RGB Audio Input Connector .....	See page 30,32.
29	Video Audio Input Connector .....	See page 31.
30	S-Video Input Connector .....	See page 31.
31	RS232C Connector	
32	RGB Input Connector .....	See page 30.
33	RGB/ YPBPR Input Connector .....	See page 30,32.
34	Audio Output Connector .....	See pages 30- 31.
35	Video Input Connector .....	See page 31.

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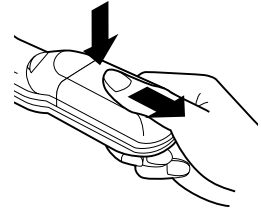
Kensington Technology Group  
2885 Campus Drive  
San Mateo, CA 94403, U.S.A

Phone : (650)572-2700  
Fax : (650)572-9675

# Before using the Remote Control

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

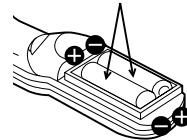
**1** Slide the lid in the direction of the arrow.



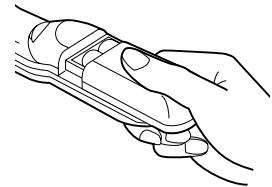
**2** Install 2 “AA” batteries as indicated inside the Battery Compartment.

### Battery replacement caution

- Do not mix old and new batteries.
- Also never mix alkaline with manganese batteries.

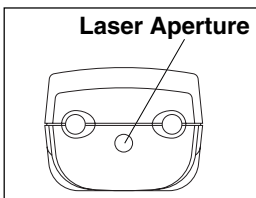


**3** Replace the lid and snap into place.



## ■ Using the Laser Pointer on the Remote Control

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



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.

AVOID EXPOSURE  
LASER RADIATION  
IS EMITTED FROM  
THIS APERTURE



**CAUTION**  
LASER RADIATION  
CLASS II LASER PRODUCT  
WAVELENGTH: 650nm  
MAX OUTPUT: 1mW  
CLASS II LASER PRODUCT  
Manufactured in the United States of America  
© 2008 Philips North America Consumer Electronics  
PHILIPS LASER BEAM  
PHILIPS LASER BEAM  
PHILIPS LASER BEAM

### Note

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

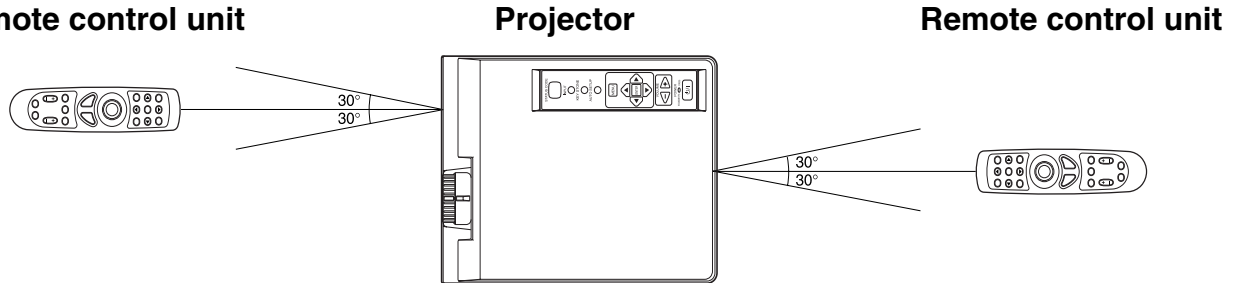
**LASER RADIATION**  
DO NOT STARE INTO BEAM  
CLASS II LASER PRODUCT  
WAVELENGTH: 650nm  
MAX OUTPUT: 1mW  
CLASS II LASER PRODUCT  
Manufactured in the United States of America  
© 2008 Philips North America Consumer Electronics  
PHILIPS LASER BEAM  
PHILIPS LASER BEAM  
PHILIPS LASER BEAM

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

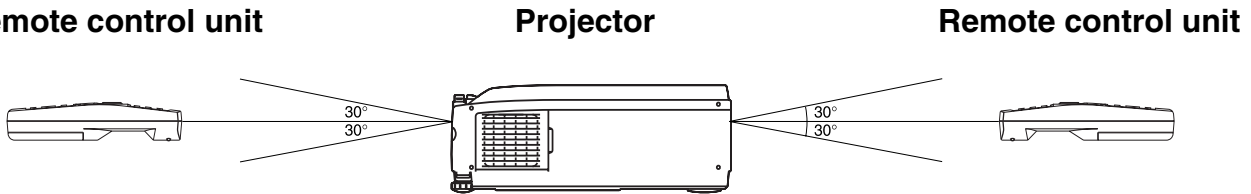
## ■ Operating range of the remote control unit

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>

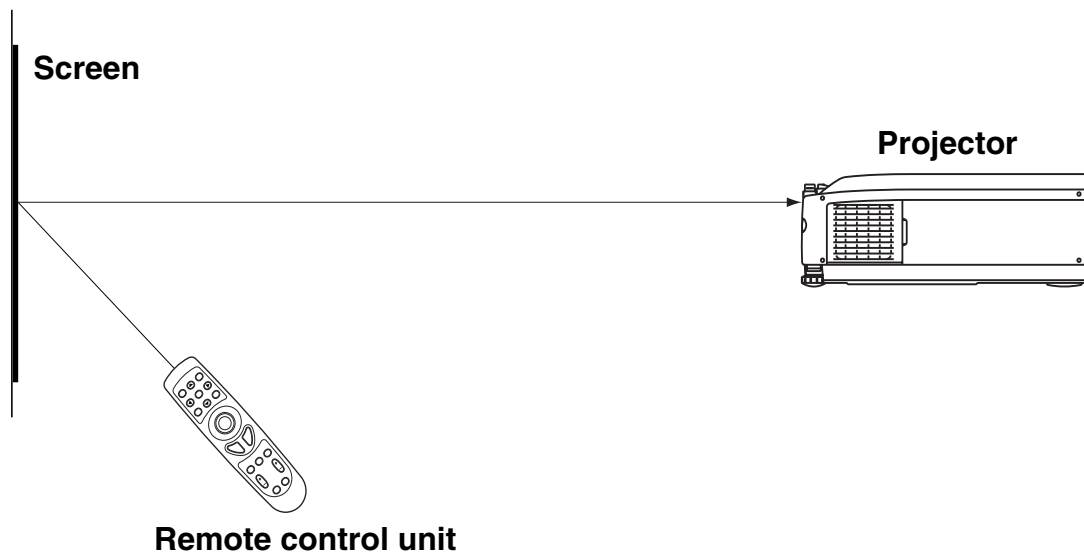


### Note

- The operating distance is within 23.0 feet (approximately 7 meters) 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.



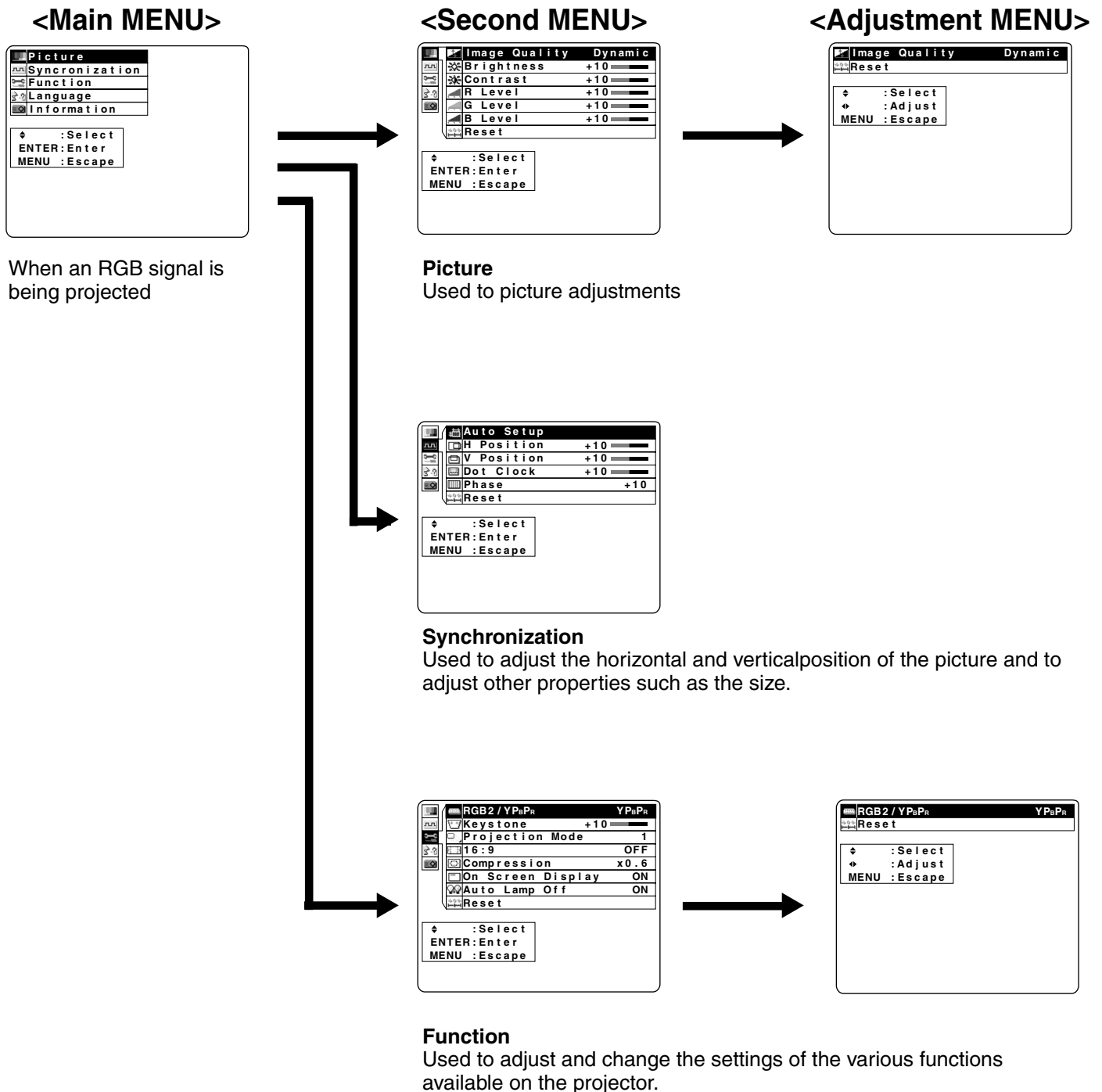
### Note

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.

# 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.

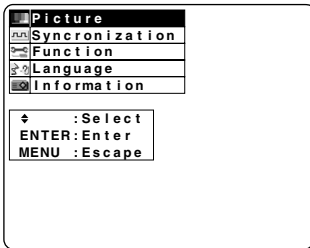
- 1 Press the MENU button.**  
(the Main MENU screen will be displayed.)
- 2 Use the arrow(▲, ▼) buttons to select an item, and then press the ENTER button.**  
(the Second MENU screen will be displayed.)
- 3 Use the arrow(▲, ▼) buttons to select an item, and then press the ENTER button.**  
(the Adjustment MENU screen will be displayed.)



**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.)

**<Main MENU>**

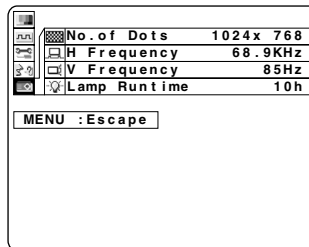


When an RGB signal is being projected

**<Second MENU>**

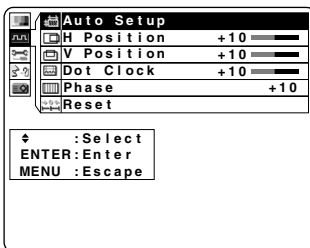


**Language**  
Used to switch the on-screen display language.

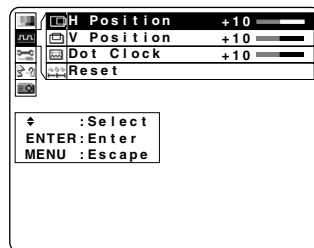


**Information**  
Use to display information about the input signal, lamp run time, etc.

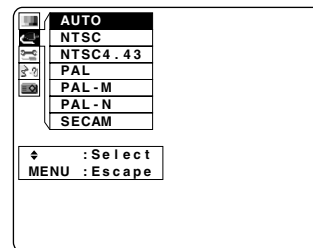
**The displayed items on the screen differ according to the input signal.**



When an RGB signal is being projected



When an YPBPR signal is being projected



When an Video/S-Video signal is being projected

# 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.

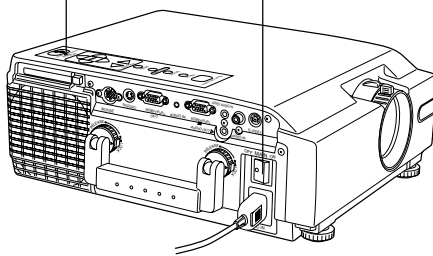
## Note

Insert Power Cord into LCD Projector AC socket and connect to properly grounded wall outlet.

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

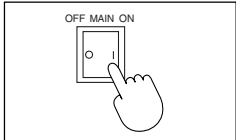
MAIN Power Switch

POWER Button



## Turning on the power

1



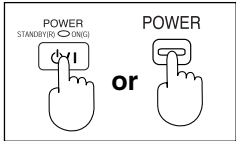
Press the  
**MAIN POWER**  
switch

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 alternate from red to flashing green.



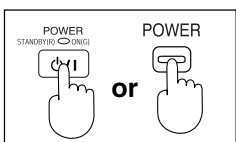
The power indicator will illuminate solid green and a picture will be projected onto the screen after about 20 seconds.

## Note

The LCD Projector cannot be turned on for one minute 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

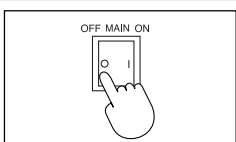


The power indicator will illuminate flashing red and the Projector will switch to standby mode.

2 Wait for the cooling fan to stop.

Wait for a while (approximately 60 seconds) until the cooling fan stops.  
(When the fan stops, 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

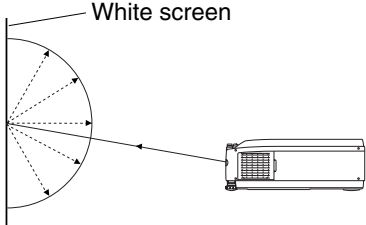
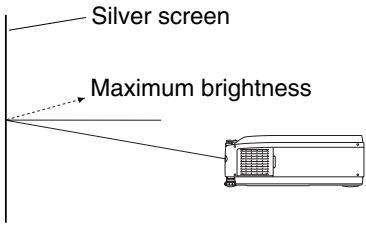
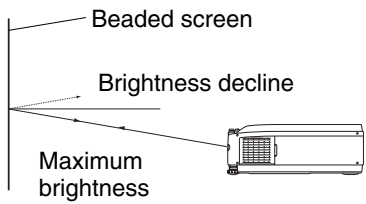
- If the MAIN POWER switch has not been turned off, the Projector will still draw approximately 20 W of power, even when the POWER button has been turned off and the fan has stopped.

# 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	<b>White screen</b>	<p>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 theater, otherwise a clear picture cannot be obtained.</p> 
	<b>Silver screen</b>	<p>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.</p> <p>* 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.</p> <p>* This type of screen is recommended when the Projector is suspended from the ceiling.</p> 
	<b>Beaded screen</b>	<p>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.</p> <p>* This type of screen is recommended when the Projector is placed on the floor.</p> 
Translucent screens	<b>Flexible translucent screen</b>	<p>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.</p>
	<b>Rigid-type translucent screen</b>	<p>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.</p>

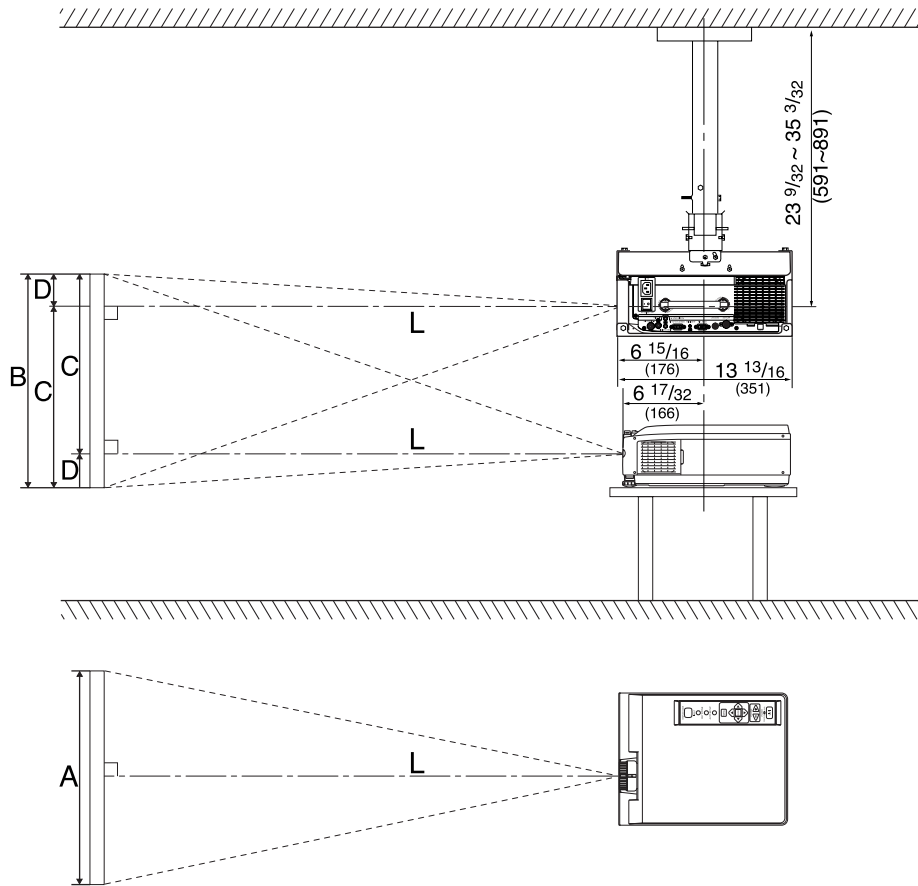
### Note

- 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.

# 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 tele zoom feature, you can increase the throw distance.)



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

Unit : inch (mm)

- Your LCD Projector is equipped with an image reverse feature. (See page 14.)

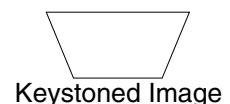
## LCD Projector /Screen Relative Position Chart

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 X1)

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

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



Keystone Image



## ■ Setting the Projector up horizontally

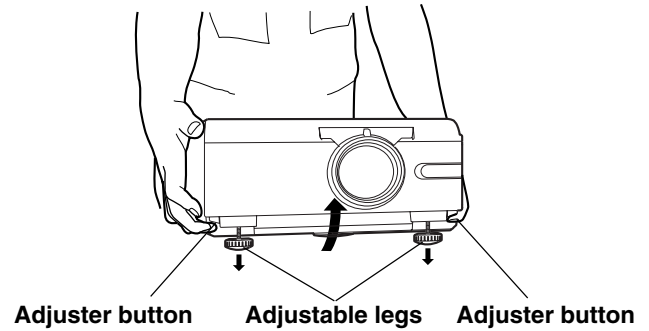
If the Projector is not set up so that it is horizontal, it will not be possible to obtain a distortion-free picture. If placing the Projector on top of a table or similar surface, carry out the following procedure below to ensure that no distortion of the picture occurs.

### • Adjustment procedure

- 1** Lift the front of the Projector until the Projector as a whole is horizontal. While holding it in this position, press the adjuster buttons under the sides of the Projector (1 each at left and right). 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.

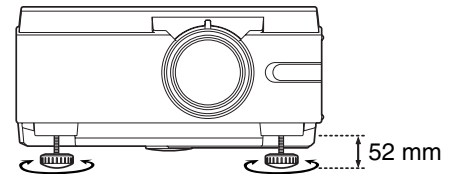


- 2** Release the adjuster buttons. (The adjustable legs will lock as soon as the buttons are released.)

- 3** Turn the adjustable legs by hand in either direction to make fine adjustments to the level of the Projector so that the Projector is perfectly horizontal.

#### **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.

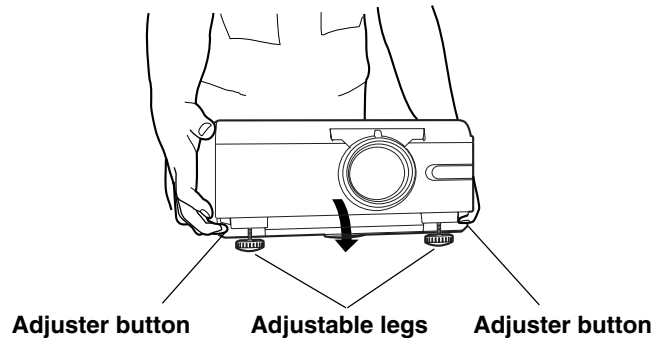


## ■ Retracting the adjustable legs

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.

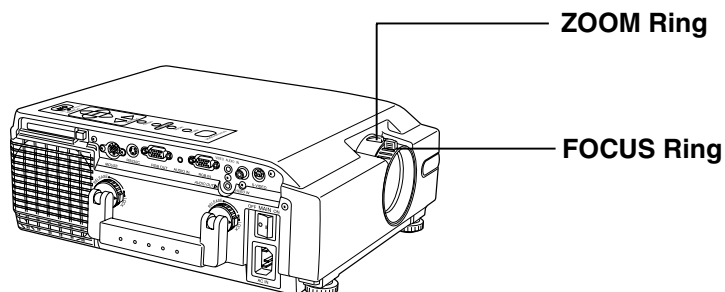


### **Caution: When you set up the LCD Projector**

- 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: 5°C – 40°C (41°F – 104°F)

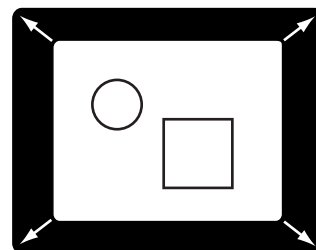
# Adjusting the Lens

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.

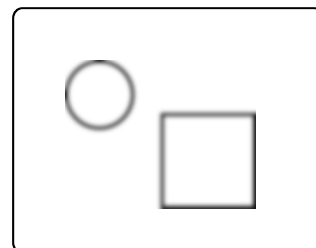


## • Adjustment procedure

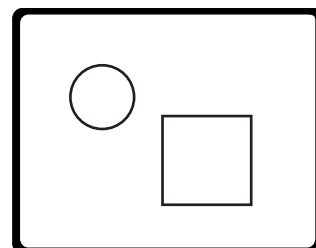
- 1 Turn the ZOOM Ring** to adjust the size of the picture.
  - For a larger picture, turn the ring to the right. For a smaller picture, turn the ring to the left.



- 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.



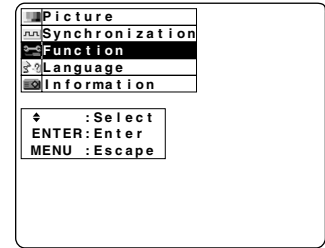
# Setting-up Positions and Changing the Projection Mode

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 "FLOOR/FRONT" projection mode, but this can be changed if required.

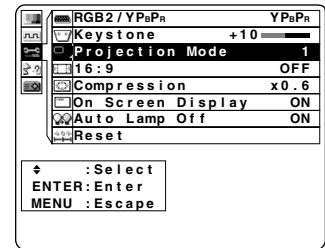
## • Setting procedure

**1 Press MENU** to display the menu.

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

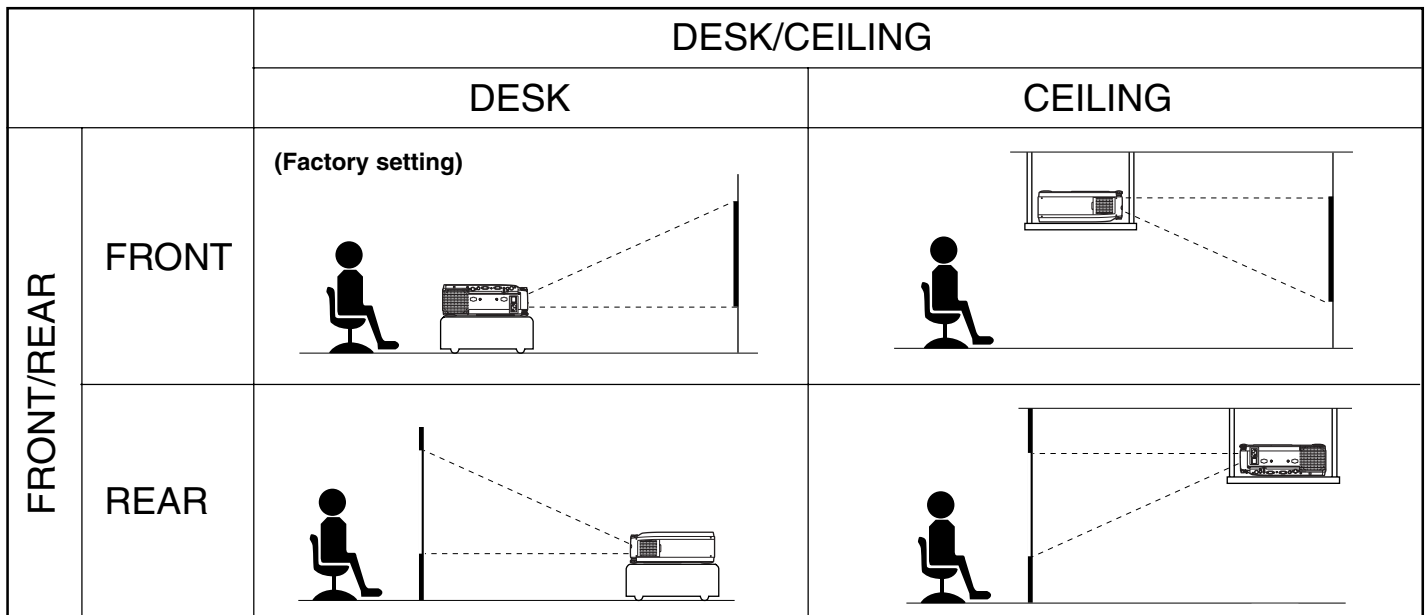
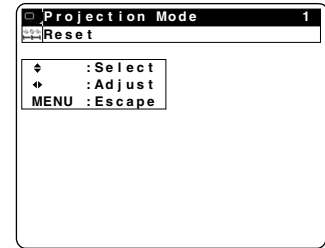


**3 Press ▲ or ▼** to select "Projection mode", and then **ENTER** to display the screen.



**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

- If the lettering on the screen is projected backwards or upside down, it is because the wrong mode have been selected.
- Press MENU to remove the setup screen and menu.

# Setting the Screen Type

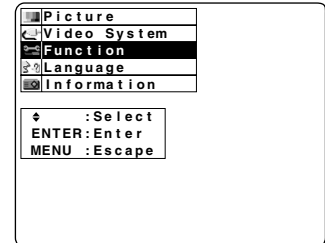
This LCD Projector is compatible with wide screen (16:9 ratio). If a wide screen is used and you set the screen type to 16:9 in order to project a wide (16:9) picture to fill the entire screen, pictures are correctly projected within the screen when projecting older (normal) 4:3 ratio pictures.

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.

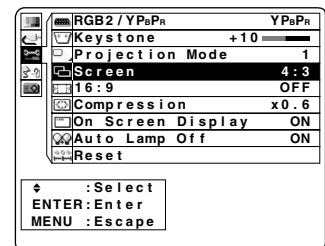
## • Setting procedure

**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.

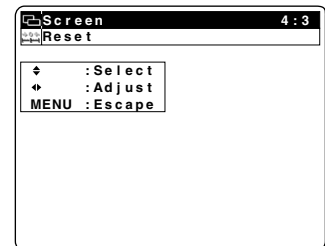


**4 Press ◀ or ▶** to change the screen type.

- The 4:3 type screen is set at the factory.

### Note

- Press MENU to remove the setup screen and menu.



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

### Note

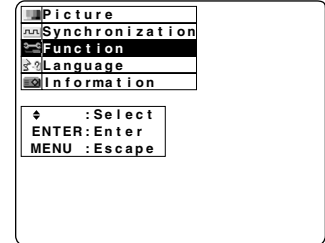
- Please refer to "Changing to 16:9 (wide) screen format" on page 28 if you change to the wide (16:9) screen and project pictures.

# Digital Variable Compression (Tele Zoom)

The projected size of the input image can be reduced to the level you select. This will allow you to increase the throw distance. When projecting a signal within 1024 X 768, you can reduce the image and adjust it to the original image quality. The procedure and on-screen displays below are based on RGB as the input signal.

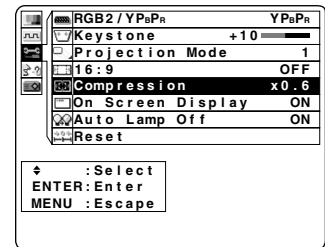
## • Adjustment procedure

**1 Press MENU** to display the menu.



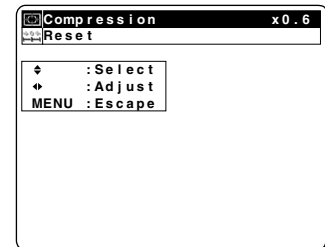
**2 Press ▲ or ▼** to select “Function”, and then **ENTER** to display the screen.

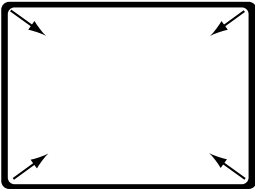
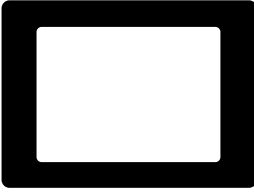
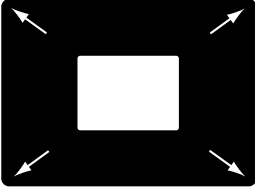
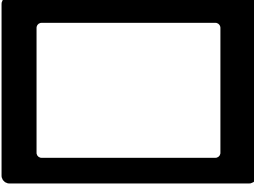
**3 Press ▲ or ▼** to select “Compression”, and then **ENTER** to display the screen.



**4 Press ◀ or ▶** to adjust the compression.

- Image can be reduced up to 0.4.
- 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 blue.



	Before adjusting	After adjusting
When reducing an image	 <p><b>Press ▶ ...</b> The image is reduced without changing the ration.</p>	
When enlarging an image	 <p><b>Press ◀ ...</b> The image is enlarged without changing the ration.</p>	

### Note

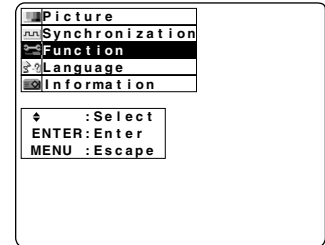
- The maximum optical throw distance can be increased to 1.6.
- Please refer to the throw distance and setting up positions on page 16.

# Digital Keystone (Keystone Correction)

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.

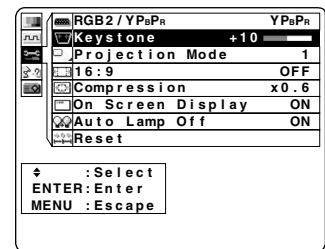
## • Adjustment procedure

**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.



	Keystone Image	Corrected Image
Keystone (top : wide)	<p>Diagram showing a trapezoidal shape representing a wide-top keystone. The top edge is wider than the bottom edge. Arrows point inward from the top corners, and an arrow points upward from the bottom center. Labels: Screen, Projected pictures.</p> <p>Press ▶ ... Top becomes narrow.</p>	<p>Diagram showing a rectangular shape representing the corrected image. Labels: Screen, Projected pictures.</p>
Keystone (under : wide)	<p>Diagram showing a trapezoidal shape representing a wide-bottom keystone. The bottom edge is wider than the top edge. Arrows point inward from the bottom corners, and an arrow points upward from the bottom center. Labels: Screen, Projected pictures.</p> <p>Press ◀ ... Bottom becomes narrow.</p>	<p>Diagram showing a rectangular shape representing the corrected image. Labels: Screen, Projected pictures.</p>

### Note

- You can correct a keystone image one the start up screen or by pressing the KEYSTONE button on the remote control.
- When keystone is corrected, the screen becomes smaller.