



LG LCD PROJECTOR

Please read this manual carefully before operating your set.

Retain it for future reference.

Record model number and serial number of the set. See the label attached on the bottom of the set and quote this information to your dealer when you require service.

Model number :

Serial number :

LP-XG12 OWNER'S MANUAL





LCD PROJECTOR



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Before operating the unit, please read this manual carefully.


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Safety Instructions



- ▶ Always keep the safety instructions to prevent any potential accident or danger by safe and right use of the projector.

- ▶ Safety Instructions have two kinds of information, and each meaning of it is as below.

 **WARNING** The violation of this instruction may cause serious injuries and even death.

 **NOTES** The violation of this instruction may cause light injuries or damage of the projector.

* The meanings of symbols in the manual and the unit are as below.

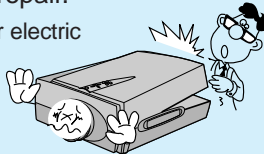
- ▶  Take care of danger that may happen under specific condition.
- ▶  Take care of electric shock that may happen under specific condition.

- ▶ After reading this manual, keep it in the place that the user always can contact easily.

WARNING

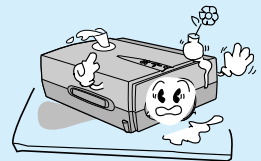
Disassembling or remodeling must not be performed by anyone except the service personnel. Contact your dealer or customer service center for any kind of checking, adjusting and repair.

This may cause fire or electric shock.



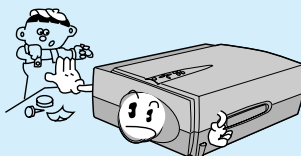
Don't put a vase, a flowerpot, a cup, cosmetics, drugs, or a vessel with liquids on the projector.

This may cause fire or electric shock.



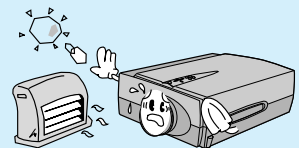
Don't insert or drop any metal or flammable thing into the projector through the exhaust vent.

This may cause fire or electric shock.



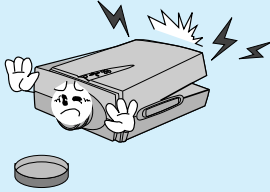
Don't place the projector under a direct sunlight or near some hot things like a heater.

This may cause fire or electric shock.

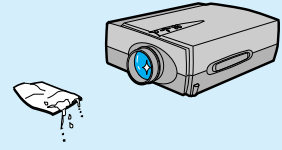


⚠ WARNING

Never open any cover except for the lens cover and dust cover. There is high voltage danger inside the projector.

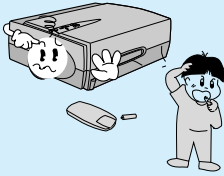


Use an air spray or soft cloth that is wet with a neutral detergent and water for removing dust or stains on the projection lens.

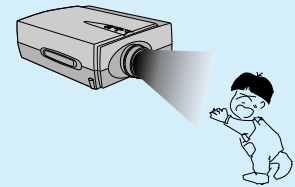


Use the proper batteries for remote control and take care of children not to eat them. Removed batteries must be taken away so that children cannot contact them.

This may cause fire or electric shock.

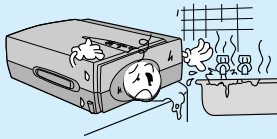


Don't stare the lens directly when the projector is being operated. Radiation of strong beam may hurt eyes.



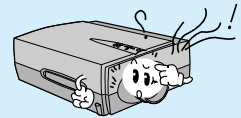
Don't put the projector in damp place like a bathroom or a place exposed to rain and wind or near water.

This may cause fire, electric shock, mechanical trouble or deformation.

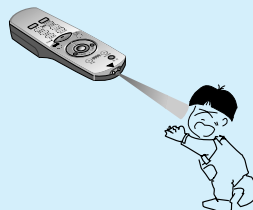


Stop the operation of the projector when it makes smoke or strange smell. In this case, turn the power switch off and unplug immediately and call the service center.

Excessive operation without checking may cause fire or electric shock.



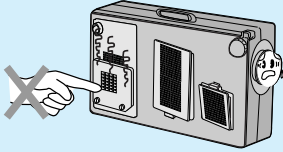
Don't look at laser beam directly as it may cause eye damage.



Safety Instructions

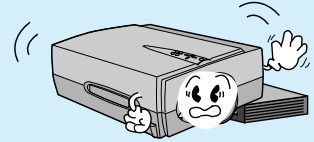
! NOTES

No contact while working, or right after the lamp is off since the exhaust port and the lamp lid generate heat.



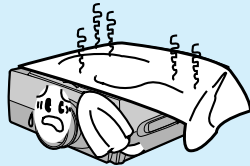
Don't use the projector on the unstable place.

It may fall down or be upset.



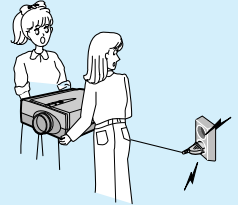
Don't block the exhaust vent with things like a tablecloth.

It makes internal temperature increase and causes danger of fire.



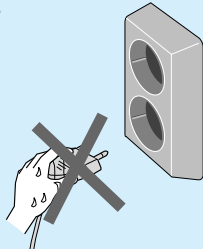
Be sure to turn the power switch off and unplug the power when moving the projector. And check if other external connecting cables are removed.

Damage of cords may cause fire or electric shock.

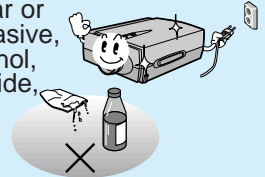


Never touch the power plug with wet hand.

It may cause electric shock.

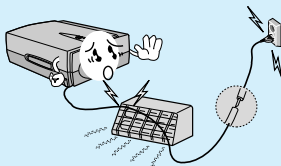


Don't use chemical detergents like alcohol, benzene, or thinners for cleaning plastic parts like the casing of the projector. Particularly, never use chemical detergents like the polisher for car or industrial use, an abrasive, a wax, benzene, alcohol, thinners, a mosquitoicide, an anticorrosive, a lubricant, or a washing cleaner.



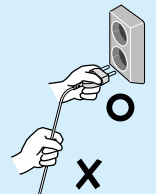
Don't place the power cord near the hot things like a heater.

It may make covering parts melted and cause fire or electric shock.



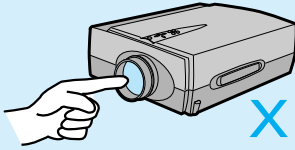
Hold the plug tightly when unplugging.

If you hold the cord when unplugging, the internal line of the cord may be cut. This may cause heating and fire.

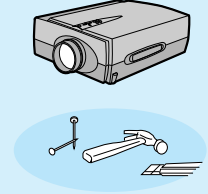


! NOTES

Don't touch the lens of the projector. It may cause damage of it.



Don't touch the projector with the tools like a knife or a hammer those can damage the external shape of the projector.

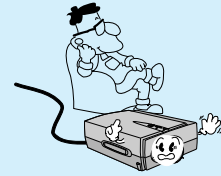


When you clean dust inside the projector, contact your dealer or customer service center first and then clean it.

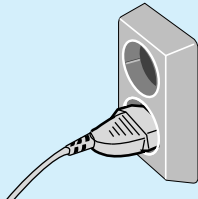
If you don't clean dust inside the project for a long time, it may cause fire, mechanical trouble.



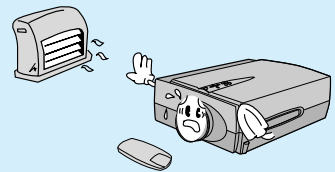
Don't use the projector in the place that people may tread on its cord to prevent damage of the power cord or the plug.



Use the indicated type of power source on the projector. If you are not sure of the type of power available, consult your dealer or customer service center.

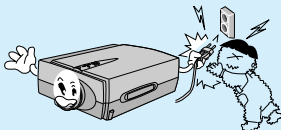


Don't place the projector and the remote control on any heat-producing equipment or in a heated place such as a car.



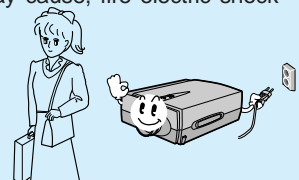
Don't use the projector when the power cord or the plug is damaged or the connecting part of wall socket is loose.

It may cause electric shock or fire.



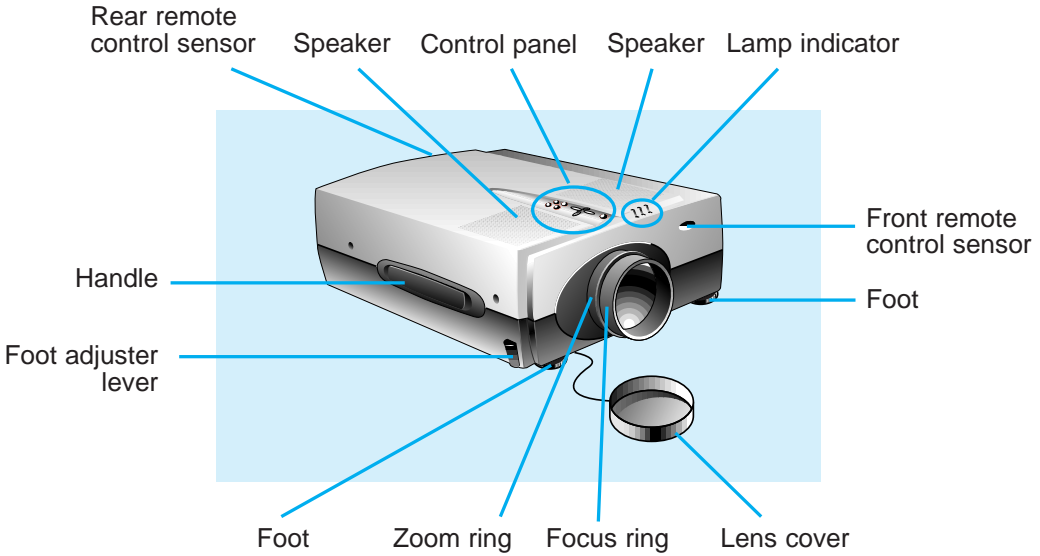
Be sure to unplug when you don't use the projector for a long period or you are absent.

Accumulated dust may cause, fire electric shock from deterioration, or electric leakage.

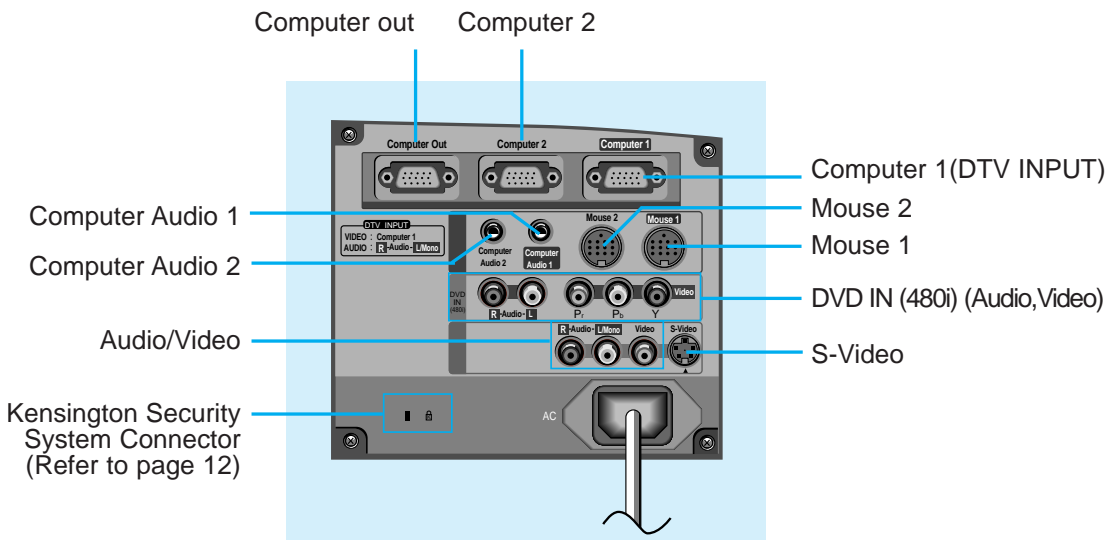


Names of parts

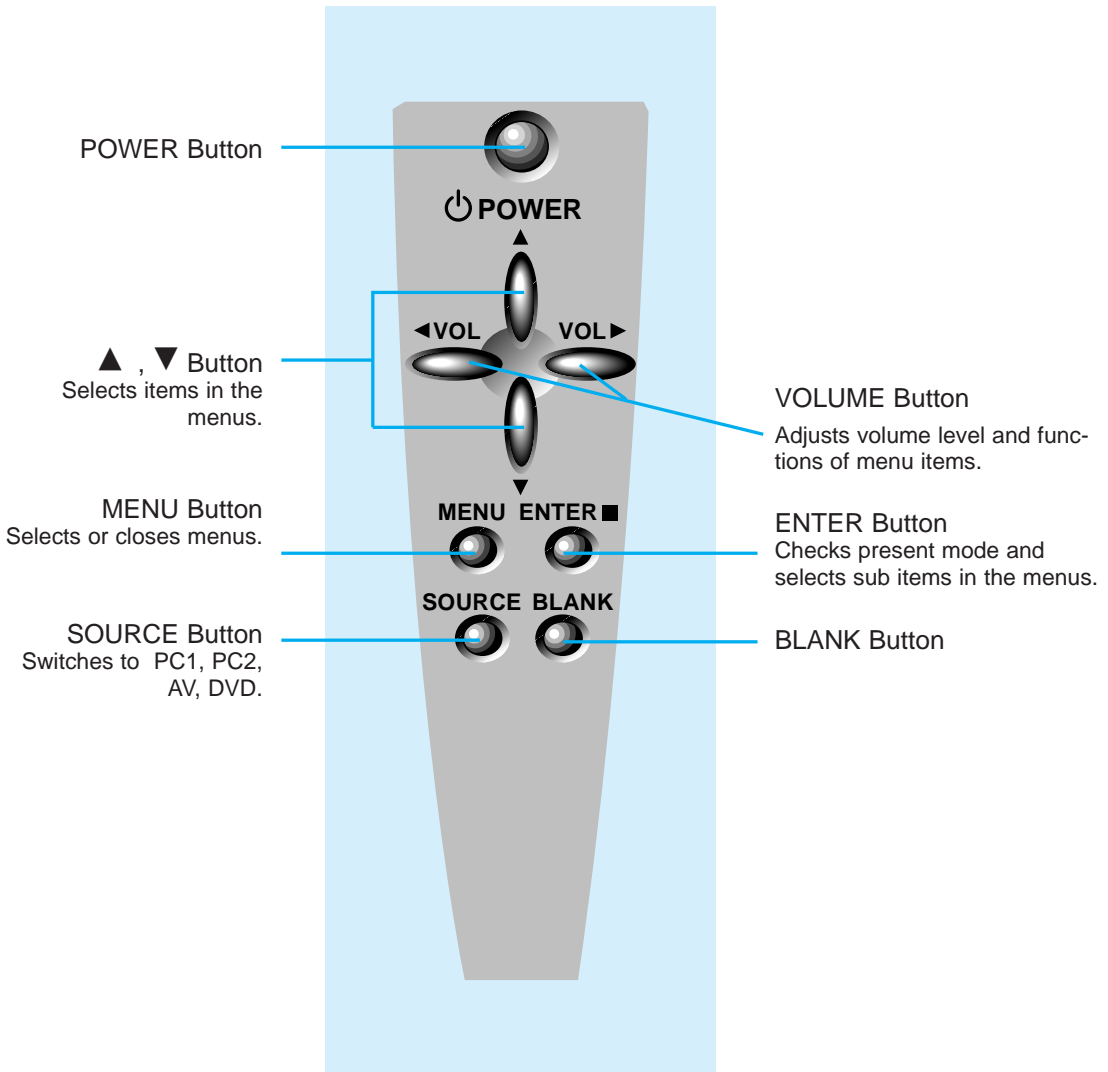
Main Body



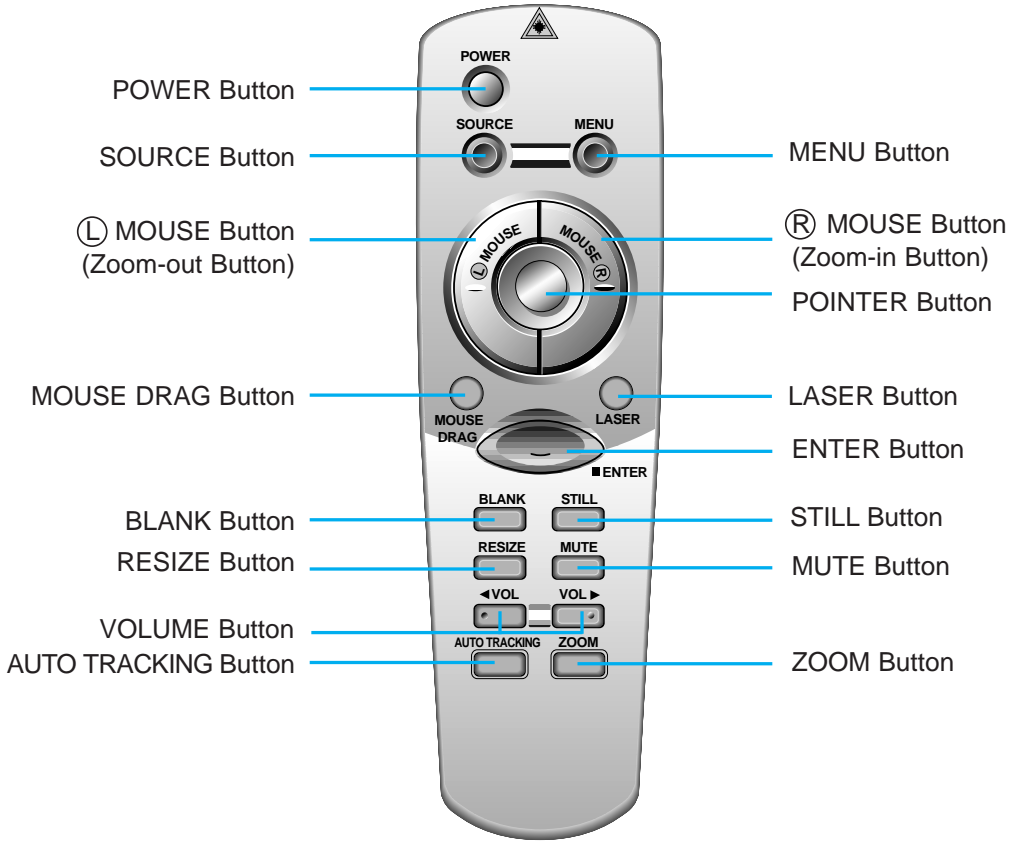
Rear Connecting Part



Control Panel

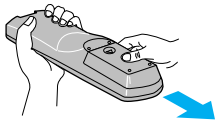


Remote Control

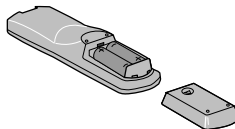


Inserting the batteries

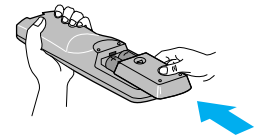
- 1** Slide the battery cover in the direction of the arrow to remove.



- 2** Insert the batteries with correct polarity.



- 3** Replace the battery compartment cover to the arrow direction.



Functions on the Remote Control

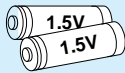
Button	Function
POWER Button	Selects ON/OFF of power.
SOURCE Button	Switches to PC1, PC2, AV, DVD.
MENU Button	Displays or hides the menu.
Ⓛ MOUSE Button (Zoom-out Button)	* Corresponds to the Left - Click of PC Mouse. * Downsizes the screen on the zoom function.
Ⓡ MOUSE Button (Zoom-in Button)	* Corresponds to the Right - Click of PC Mouse. * Enlarges the screen size on zoom function.
POINTER Button	* After selecting menus, controls selecting and adjusting functions with the direction of up, down, left, right. * Moves the screen with the direction of up, down, left, right on zoom function. * Moves and releases the selected icon on PC screen.
MOUSE DRAG Button	Uses to select and drag an icon in PC mode.
ENTER Button	Checks the present mode and selects sub items in the menus.
ZOOM Button	Refer to page 36.
RESIZE Button	Refer to page 32.
AUTO TRACKING Button	Refer to page 41~42.
BLANK Button	Refer to page 33~34.
STILL Button	Refer to page 28.
MUTE Button	Cuts off audio.
VOLUME Button	Adjusts volume level.
LASER Button	Makes a bright red laser point on the screen for attention. (Don't look at laser beam directly as it causes eye damage.)

Installation and Connection

Accessories



Remote Control



Batteries 2 (size AA)



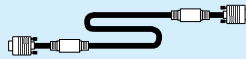
Power Cord



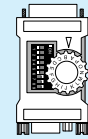
Audio/Video Cable



Audio Cable



Computer Cable



MAC Desktop Adaptor

Mouse Connecting Cables



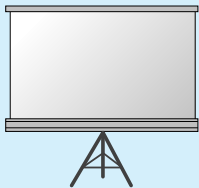
PS/2 Mouse Cable
(IBM PC or Compatible)



MAC Serial Mouse Cable

Optional Extras

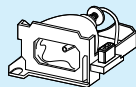
- * Contact your dealer for buying these items.
- * When applying a ceiling installer, use only the ceiling installer for LCD projector.
- * Contact your dealer for replacing a new lamp.



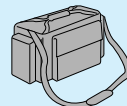
Screen for projecting



S-Video Cable

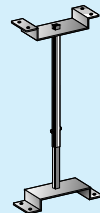
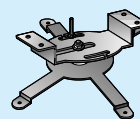


Lamp



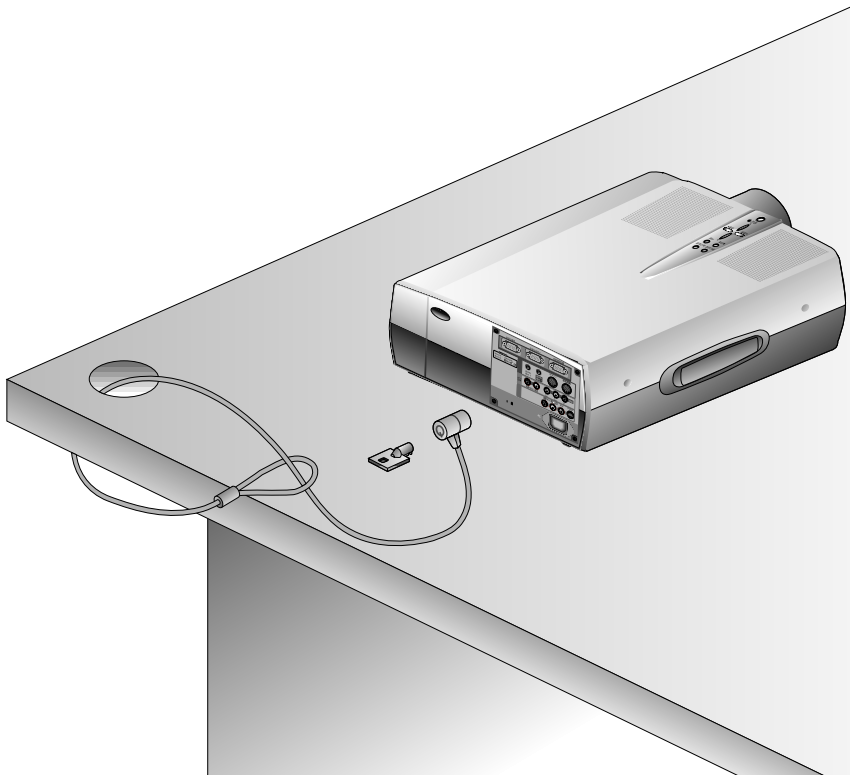
Portable Bag

Ceiling installer for LCD projector



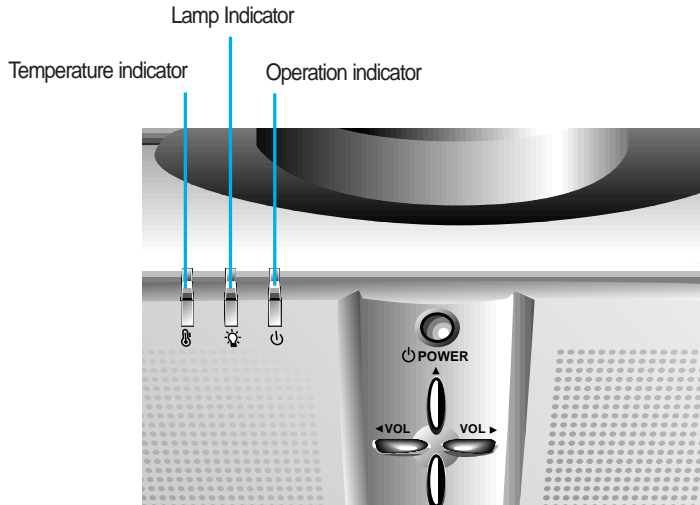
Using Kensington Security System

- The projector has Kensington Security System Connector on the back panel. Connect the Kensington Security system cable as below.
- For the detailed installation and use of the Kensington Security System, refer to the user's guide attached to the Kensington Security System set. And for further information, contact <http://www.kensington.com>, the internet homepage of the Kensington company that deals with expensive electronic equipments such as notebook PCs or LCD projectors.
- Kensington Security System is an optional item.



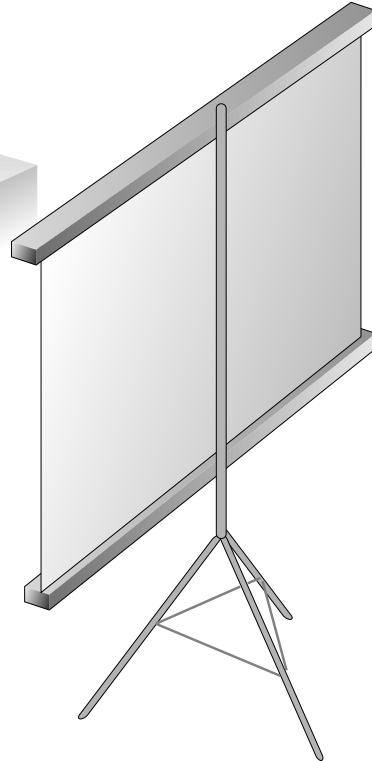
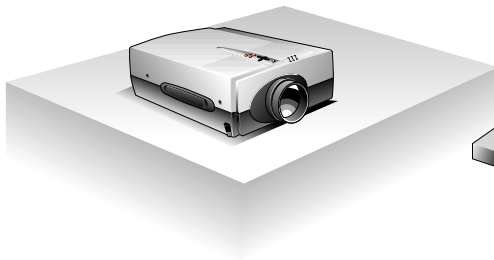
Projector Status Indicators

* Lamp Indicator, operation indicator and temperature indicator at the top of the projector show the user the operating status of the projector.



Operation Indicator	Orange	Standby.
	Green	On operation.
	Off	Power off.
Lamp Indicator	Red	Projection lamp is reaching the end of its life and needs to be replaced with a new lamp.(over 1400 hours)
	Red(flashing)	The projector has trouble in the lamp or around it. Contact the service center.
	Green(flashing)	The lamp cover is not closed.
Temperature Indicator	Orange	This projector is in high temperature. If you don't turn off the projector, it'll be turned off automatically.
	Red	The projector is turned off as its high temperature.
	Red(flashing)	Power is turned off as the trouble of internal cooling fan. Contact your service center.

Basic Operation of the Projector



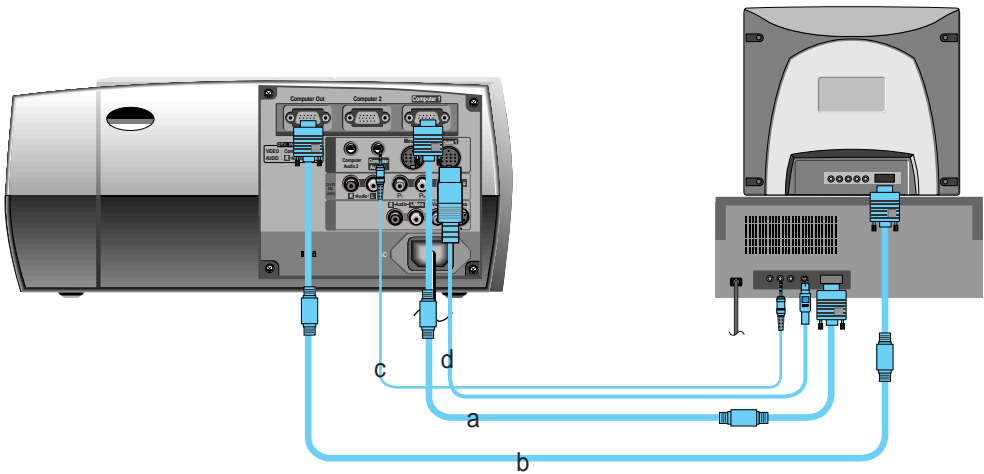
1. Place the projector on a sturdy and horizontal surface with the PC or AV source.
2. Place the projector in the correct distance from the screen. The distance between the projector and the screen determines the actual size of the image.

Screen size	Horizontal distance from projector to screen
610x460cm(300inch)	11.94m~15.6m
410x300cm(200inch)	7.94m~10.4m
200x150cm(100inch)	3.94m~5.2m
160x120cm(80inch)	3.14m~4.2m
120x90cm(60inch)	2.33m~3.1m
81x61cm(40inch)	1.53m~1.9m
61x46cm(30inch)	1.6m(Tele)

3. Turn the projector so that the lens can be at a right angle to the screen. If the projector is not at a right angle, the screen image will be crooked. At this time perform keystone function. (Refer to page 35.)
4. Connect the cables of the projector to a wall power socket and other connected sources.

Connecting to a Desktop PC

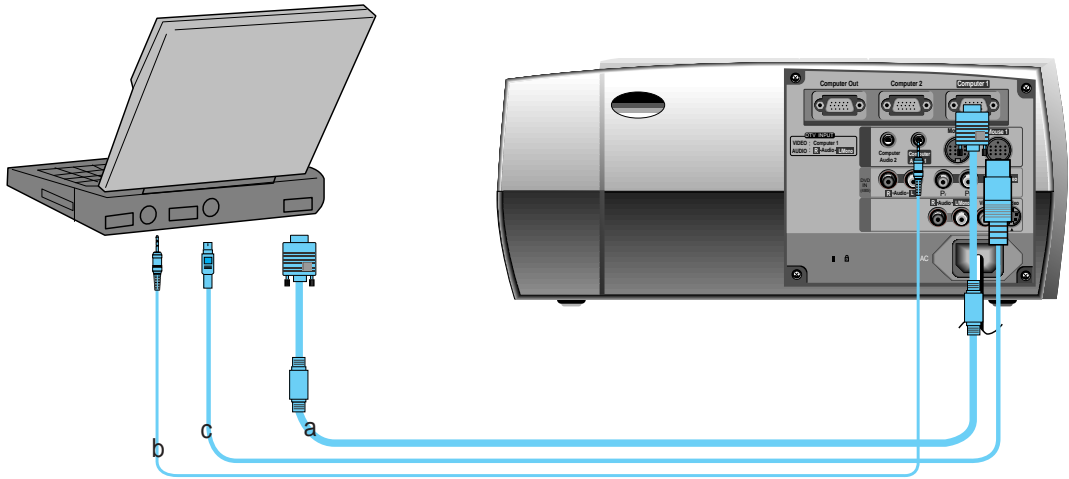
- * You can connect the projector to a computer of VGA, SVGA, XGA and SXGA output.
- * You can use resize function for VGA, SVGA output.
- * Refer to page 44 for the projector supported monitor display.



< How to connect >

- Connect either end of the computer cable to **Computer 1** of the projector.
(The **Computer 2** port is used for connecting a second computer.)
- Connect the monitor cable from the PC monitor to **Computer Out** of the projector if you want to see the projected image on PC monitor.
- Connect either end of the audio cable to **Computer Audio 1** of the projector.
(The **Computer Audio 2** is used for connecting a second computer.)
* If the PC has two audio out ports of SPEAKER OUT and LINE OUT, connect the LINE OUT port to get better sound quality.
- Connect the PS/2 mouse(for IBM PC or compatible) cable(6 pin) to the **Mouse 1** of the projector.
(The **Mouse 2** is used for connecting a second computer.)

Connecting to a Notebook PC

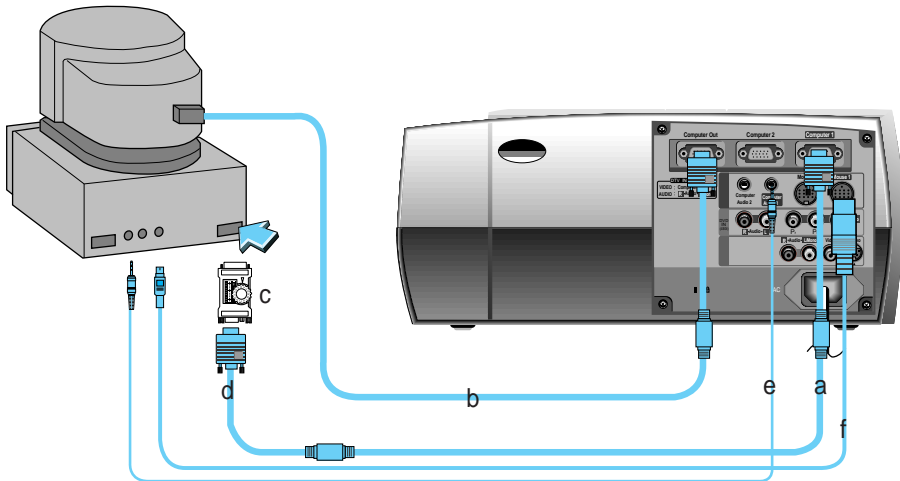


< How to connect >

- a. Connect either end of the computer cable to **Computer 1** of the projector.
(The **Computer 2** port is used for connecting a second computer.)
- b. Connect either end of the audio cable to **Computer Audio 1** of the projector.
(The **Computer Audio 2** is used for connecting a second computer.)
- c. Connect the PS/2 mouse(for IBM PC or compatible) cable(6 pin) to the **Mouse 1** of the projector.
(The **Mouse 2** is used for connecting a second computer.)

Connecting to a Macintosh Desktop PC

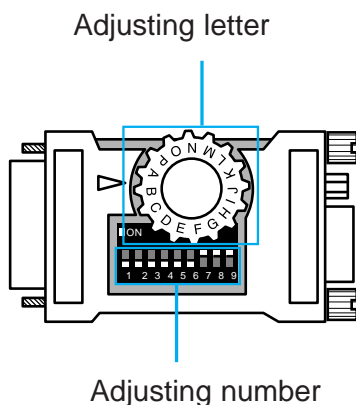
* You must use the Macintosh desktop adaptor to connect the projector to a Macintosh PC.



< How to connect >

- a. Connect either end of the computer cable to **Computer 1** of the projector.
(The **Computer 2** port is used for connecting a second computer.)
- b. Connect the monitor cable from the Macintosh monitor to **Computer Out** of the projector if you want to see the projected image on Macintosh monitor.
- c. Set the adjusting number and letter of the Macintosh desktop adaptor in accordance with the resolution you want to use and connect the adaptor to the Macintosh. (Refer to page 18 ~ 19)
- d. Connect the computer cable to the Macintosh desktop adaptor.
- e. Connect either end of the audio cable to **Computer Audio 1** of the projector.
(The **Computer Audio 2** is used for connecting a second computer.)
- f. Connect the mouse cable from the Macintosh mouse port to the **Mouse 1** of the projector.
(The **Mouse 2** is used for connecting a second computer.)

How to use the Macintosh desktop adaptor



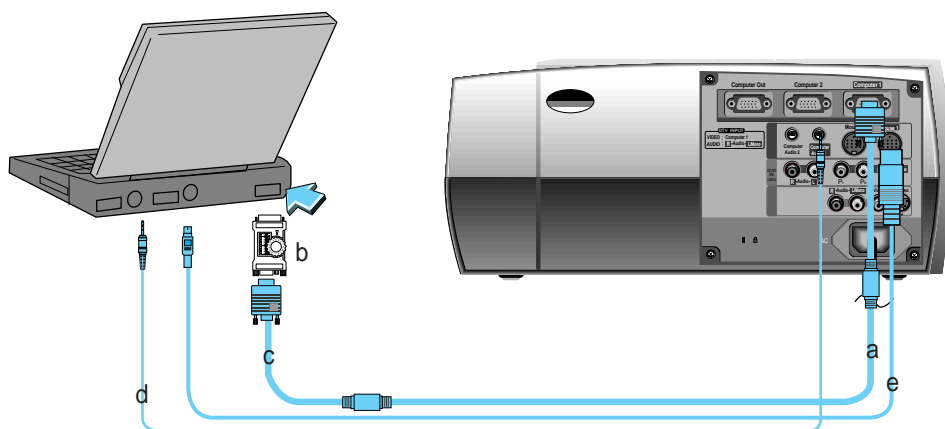
- a. How to use
Usually set 1 ~ 6 to OFF status and 7 ~ 9 to ON status of the adjusting numbers. And select the adjusting letter which is correct to the Macintosh and the monitor. (Refer to page 19.)
- b. Notes for Connecting to the Macintosh PowerBook
If you get problems when connecting it to the projector, set the adjusting number 9 to OFF status and restart the Macintosh PowerBook.

Connecting to a Macintosh Desktop PC

Adjusting letters of MAC desktop adaptor in accordance with kinds of MAC and output spec.

output spec M.A.C.S	output resolution horizontal frequency(KHz) vertical frequency(Hz)	12xRGB 512x384 24.5 60	13x14xRGB 640x480 35 66	15xPortrait 640x870 68.8 75	VGA 640x480 31 60	SVGA 800x600 35 56	SVGA 800x600 56 or 72	16xColor 832x624 50 75	19xColor 1024x768 60 75	19xColor 1024x768 60 or 70	2Page Mono 1150x870 68.7 75	21xColor 1152x870 68.7 75	NTSC 15.7 60	PAL PAL 16 50
	adjusting letter	N	J	O	G	G	G	F	D	G	M	P	L	H
MAC Ixi, Ixi		N	J	O										
MAC Iii, Iix		N	J		G									
LC		N	J		M									
LCII		N	J		G									
LCIII		N	J	O	G			F						
LC 475, LC 550		N	J	O	G	G		F						
LC 575		N	J	O	G	G		F	D		M	P	L	H
Performa														
400,405,410,430,600,600CD		N	J		G									
450		N	J	O	G			F						
Quadra														
700,900		N	J	O	G	G		F			M	P	L	H
605,610,650,800,950		N	J	O	G	G		F	D		M	P	L	H
840AV		N	J	O	G	G	G	F	D	G	M	P	L	H
Centris														
610,650		N	J	O	G	G		F	D		M	P	L	H
660AV		N	J	O	G	G	G	F	D	G	M	P	L	H
PowerBook														
160,165C,180,180C		N	J	O	G	G		F						
DUO DOC, MINI DOC		N	J	O	G	G		F						
8.24 BOARD		N	J	O				F			M	P	L	H

Connecting to a Macintosh PowerBook

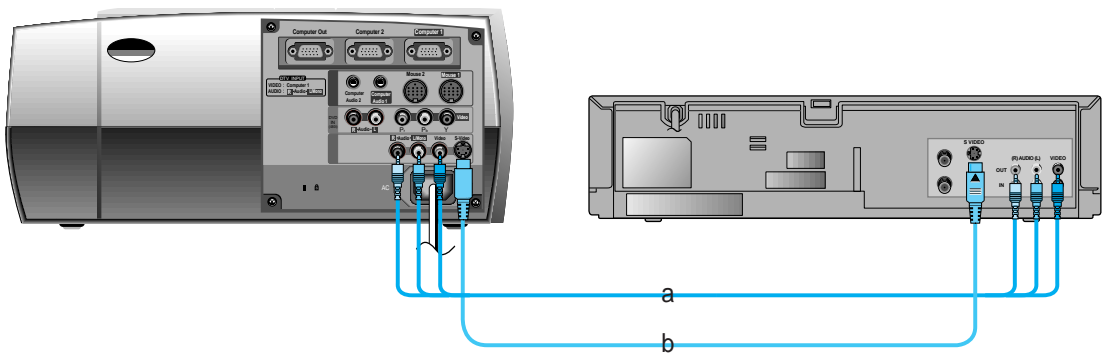


< How to connect >

- a. Connect either end of the computer cable to **Computer 1** of the projector.
(The **Computer 2** port is used for connecting a second computer.)
- b. Set the adjusting number and letter of the Macintosh desktop adaptor in accordance with the resolution you want to use and connect the adaptor to the Macintosh PowerBook.(Refer to page 18 ~ 19)
- c. Connect the other end of the computer cable to the Macintosh desktop adaptor.
- d. Connect either end of the audio cable to **Computer Audio 1** of the projector.
(The **Computer Audio 2** is used for connecting a second computer.)
- e. Connect the mouse cable from the Macintosh mouse port to the **Mouse 1** of the projector.
(The **Mouse 2** is used for connecting a second computer.)

Connecting to a Video Source

- * In AV input mode, if the auto video system recognition fails to detect a correct video system type, please press the **AUTO TRACKING** button on the remote. Then the projector executes the fine auto video system recognition.
- * You can connect a VTR, a camcorder, a LDP or any other compatible video image source to the projector.

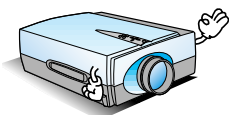


< How to connect 1 >

- When connecting the projector to an A/V source, connect the A/V input ports of the projector to the output ports of the A/V source with A/V cables of the same color. The video cable is yellow and the left audio is white and right audio is red.

< How to connect 2 >

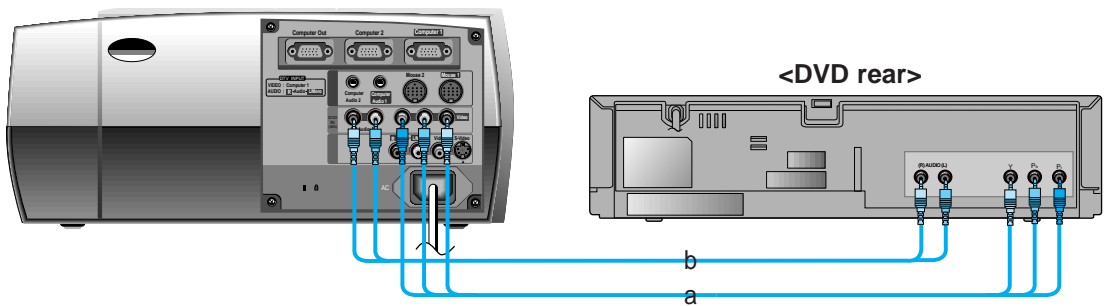
- Connect S-Video input port of the projector to S-Video output port of A/V source with S-Video cable.
* You can get better picture quality when connecting S-Video source to the projector.



- * If the Audio output of other external equipments is mono, do connect Audio cable to the white port(Audio L) of the projector.
- * If you connect S-Video cable and Video cable simultaneously, you will get only the playing image of S- Video source.

Connecting to a DVD

- * The output ports (Y, Pb, Pr) of the DVD might be inscribed as Y, Cb, Cr or Y, B-Y, R-Y according to the equipments.
- * Receiving DVD signal is possible only in 480i mode.

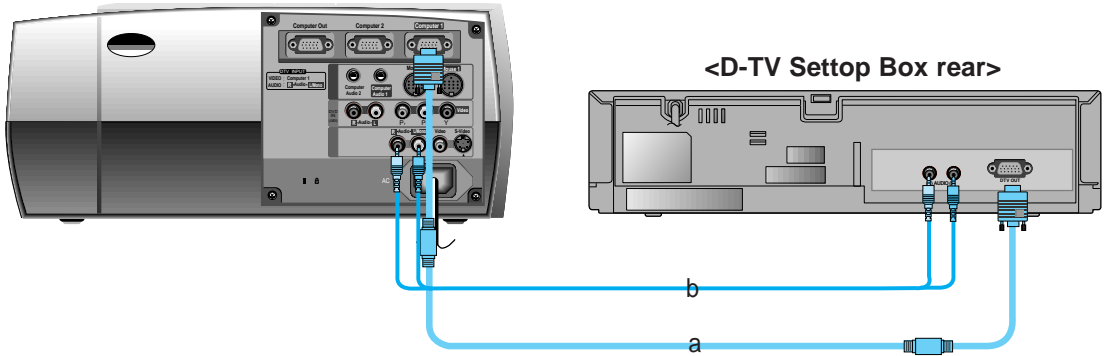


< How to connect >

- Connect the **DVD IN Video** ports (**Y, Pb, Pr**) of the projector to the Video output ports (**Y, Pb, Pr**) of the DVD.
- Connect the **DVD IN Audio** ports (**R, L**) of the projector to the Audio output ports (**R, L**) of the DVD.

Connecting to a D-TV Setup Box

- * To receive the DTV program, it is necessary to purchase DTV receiver (Set-top Box) and connect it to the projector.
- * Please refer to the owner's manual of the DTV Setup Box for the connection between LCD projector and DTV Setup Box.



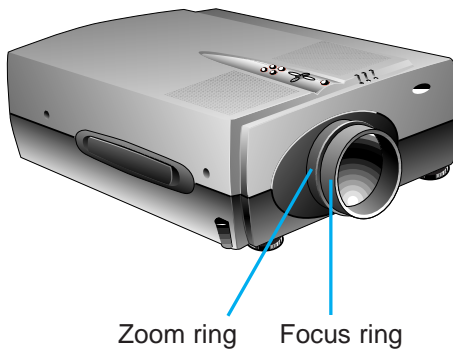
< How to connect >

- Connect the **Computer 1** of the projector to **DTV OUT** of the D-TV Setup Box.
- Connect the Audio input ports (**R**, **L/Mono**) of the projector to the Audio output ports (**R**, **L**) of the D-TV Setup Box.

Operating the Projector

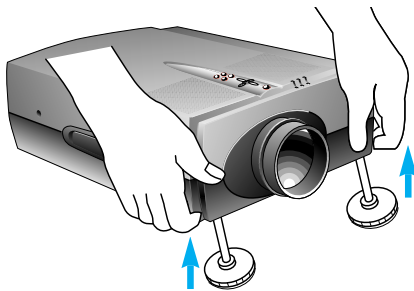
Focusing and Positioning the Screen Image

When an image appears on the screen, check if it is in proper focus and fits well to the screen.



- To adjust the focus of the image, rotate the focus ring which is the outer ring on the lens.
- To adjust the size of the image, rotate the zoom ring which is the inner ring on the lens.

To raise or lower the image on the screen, extend or retract two feet at the bottom of the projector as below.



1. Stand behind the projector and lift the foot adjuster levers while you support the front of the projector. This unlocks the feet and can make them move freely. Take care not to drop the projector.
2. While lifting the foot adjuster levers, raise or lower the projector until the screen image is positioned properly.
3. Release the lever to lock the feet in their new position.
4. To fine-tune the height of the projector, rotate the front feet to raise or lower it. After raising the front feet, don't give impact on the upper side of the projector or press down strongly.

Turning on the Projector

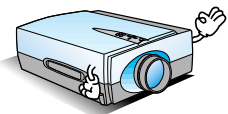
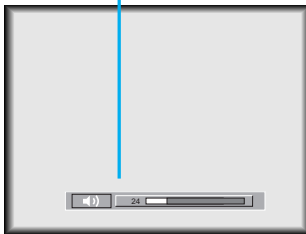
1 Remove the lens cover of the projector.

2 Press the **POWER** button on the remote control or top cover.(Green operation indicator flashes during warming up of the lamp.)

- It will take about 1 minute to display the picture after power on because the lamp of the projector needs preheating.
 - An image appears after the green operation indicator is flashed for some time.
 - Select the source mode with the **SOURCE** button.
-

3 Adjust volume level.

- If you press **VOLUME** ► button, sound and volume level number are increased.
- If you press **VOLUME** ◀ button, sound and volume level number are decreased.



* Don't unplug the power cord while the ventilation pan(inlet/outlet) is working.

Function checking

- * Without PC or Video signal the OSD doesn't appear.
- * This manual mainly explains menus in PC mode.

1 Press the **MENU** button.

2 Move the **POINTER** button up or down to select a menu and press the **ENTER** button. Each time you press the button you can see menus as below.



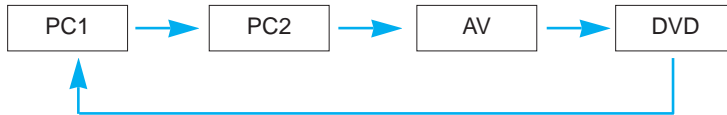
- * In AV and DVD mode, [Horizontal] / [Vertical] item in POSITION menu and TRACKING menu are not displayed.
- * The sub menus of VIDEO menu in AV and DVD mode are different from those in the PC mode. (Refer to page 39).

3 Move the **POINTER** button up or down to select a function that you want to use or adjust.
● To finish the menu display, press the **MENU** button repeatedly.

Selecting source mode

1 Press the **SOURCE** button

2 Each press of the **SOURCE** button changes the display as below.



Using Still function

- 1 Press the **STILL** button.
* You can still the input image.



<Moving Image>

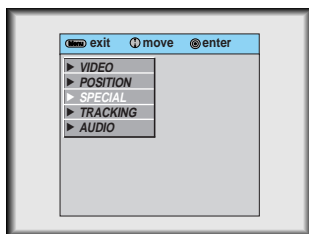


<Still Image>

- 2 To finish this function, press the **STILL** button again.

Selecting language

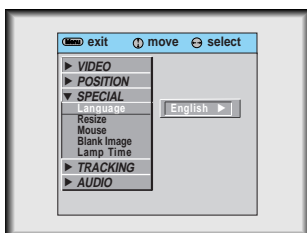
- 1 Press the **MENU** button and move the **POINTER** button up or down to select the SPECIAL menu as below.



- 2 Press the **ENTER** button and move the **POINTER** button up or down to select [Language] item.

- 3 Move the **POINTER** button left or right to select the language you want to use.

- On-Screen-Display(OSD) is marked in the selected language from this point.
- To finish menu display, press the **MENU** button repeatedly.

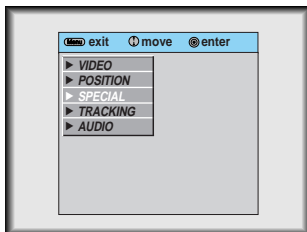


Selecting mouse

* Mouse is automatically selected in accordance with source mode. But if you want to select a different mouse from the selected one, select it as below.

* When using the mouse in Window 95 platform, restart the PC.

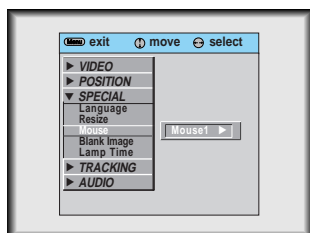
- 1 Press the **MENU** button and move the **POINTER** button up or down to select the **SPECIAL** menu as below.



- 2 Press the **ENTER** button and move the **POINTER** button up or down to select **[Mouse]** item.

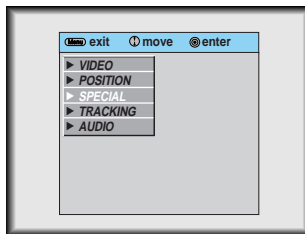
- 3 Move the **POINTER** button left or right to select the mouse you want to use.

- To finish menu display, press the **MENU** button repeatedly.

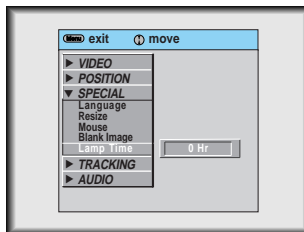


Checking lamp time

- 1 Press the **MENU** button and move the **POINTER** button up or down to select the SPECIAL menu as below.



- 2 Press the **ENTER** button and move the **POINTER** button up or down to select the [Lamp Time] item.



- You can see the used lamp time.
- When the lamp time is reaching 1400 hours, the lamp indicator is turned to red color.

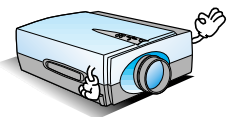
Using Resize function

* You can use this function only under PC resolution SVGA (800x600) mode.

1

Press the **RESIZE** button.

Each press of the button changes the display as below.



* You can also use this function by using the **MENU** button.

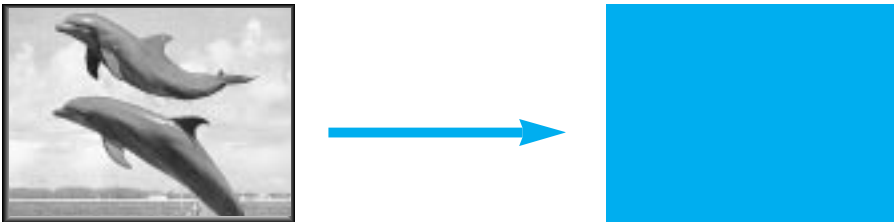
Using Blank function

* This function may be effective if you need to get attention of the attendants in meetings or briefings.

1 Press the **BLANK** button.

* The screen turns to be covered with background color and sound becomes off.

* You can choose the background color. Refer to page 34.



2 To exit the blank status, press the **BLANK** button again.

* If exiting the blank status sound also becomes on.

Selecting Blank Image color

- 1 Press the **MENU** button and move the **POINTER** button up or down to select the SPECIAL menu.



- 2 Press the **ENTER** button and move the **POINTER** button up or down to select the [Blank Image] item.

- 3 Move the **POINTER** button left or right to select the color you want to use.

- Background color will be changed to the selected color from this point.
- To exit menu display, press the **MENU** button repeatedly.

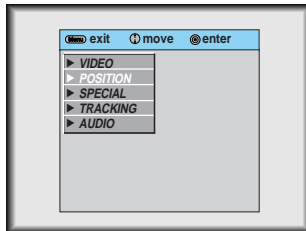


Adjusting screen display

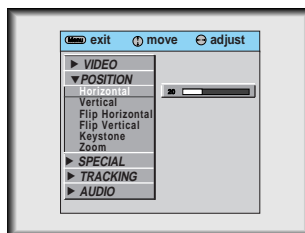
Positioning

- * If the image size does not fit the screen in accordance with the input source, set the position of the image by selecting Horizontal / Vertical position.
- * **Keystone** function adjusts the upper and lower width of the projected image to prevent the image shape from being a trapezoid shape. Use this function when the screen or the projector is slanted and cannot make rectangular projection angle.

- 1 Press the **MENU** button and move the **POINTER** button up or down to select the POSITION menu.



- 2 Press the **ENTER** button and move the **POINTER** button up or down to select [Horizontal], [Vertical] or [Keystone] item.



- 3 Press the **POINTER** button and move the button left or right or press the **VOLUME** (◀, ▶) button to adjust the screen condition as you want.

- [Horizontal], [Vertical], [Keystone] are adjusted from -50 to +50.
- To exit the menu display, press the **MENU** button repeatedly.

Zoom Function

- 1 Press the **ZOOM** button.



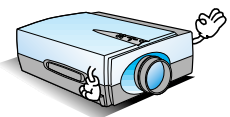
- 2 Move the **POINTER** button to move the rectangular zooming area and press the **ENTER** button to zoom the target area.

- 3 Press the **L MOUSE** or **R MOUSE** button to adjust the zoom level.
 - * **L MOUSE** button makes the image look smaller.
 - * **R MOUSE** button makes the image look larger.



- 4 Move to the position you want to see the enlarged display by moving the **POINTER** button left, right, up, or down.

- 5 Press the **ZOOM** button again to finish the zoom function.



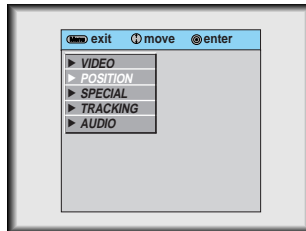
- * You can use this function by using the **MENU** button.
- * In the zoom mode, you can adjust horizontal / vertical position with the **POINTER** button.

Using Flip Horizontal / Vertical function

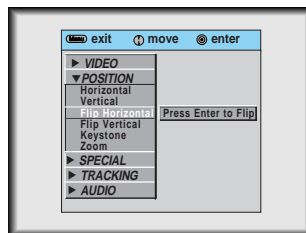
Flip Horizontal Function

* This function reverses the left and the right side of the projected image. Use this function when projecting from behind onto a transparent screen being viewed from the opposite side.

- 1 Press the **MENU** button and move the **POINTER** button up or down to select the POSITION menu.

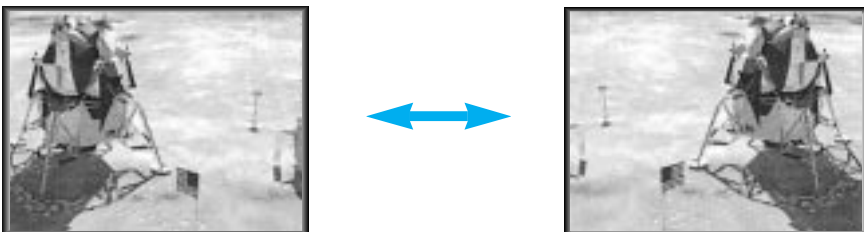


- 2 Press the **ENTER** button and move the **POINTER** button up or down to select [Flip Horizontal] item.



- 3 Press the **ENTER** button to see reversed image.

- Each time you press the button, the image will be reversed.
- To finish menu display, press the **MENU** button repeatedly.

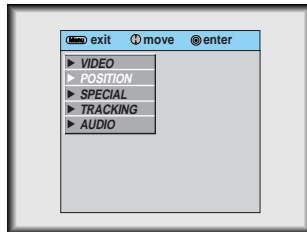


Flip Vertical Function

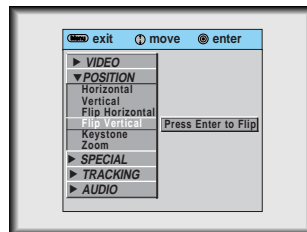
* This function reverses the upper and the lower side of the projected image.

* When you hang the projector upside down from the ceiling for using, you need to reverse all the sides(left, right, upper, lower) of the image.

1 Press the **MENU** button and move the **POINTER** button up or down to select the POSITION menu.

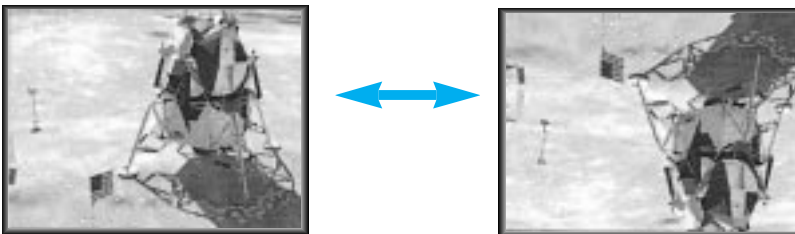


2 Press the **ENTER** button and move the **POINTER** button up or down to select [Flip Vertical] item.



3 Press the **ENTER** button to see reversed image.

- Each time you press the button, the image will be reversed.
- To finish menu display, press the **MENU** button repeatedly.



Adjusting Video

- 1 Press the **MENU** button and move the **POINTER** button up or down to select each VIDEO menu.



- 2 Press the **ENTER** button.



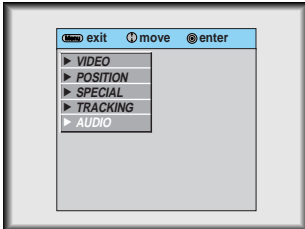
- 3 Move the **POINTER** button up or down to select a video item you want to adjust.

- 4 Move the **POINTER** button left or right or press the **VOLUME** (**◀▶**) button to adjust the selected video condition as you want.

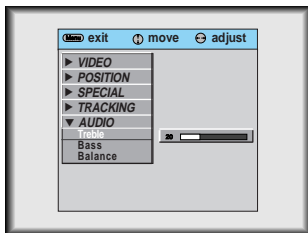
- To restore the original image condition after changing it, press **ENTER** button after selecting (**Reset**) item.
- To finish menu display, press the **MENU** button repeatedly.

Adjusting Audio

- 1 Press the **MENU** button and move the **POINTER** button up or down to select each AUDIO menu.



- 2 Press the **ENTER** button.



- 3 Move the **POINTER** button up or down to select an audio item you want to adjust.

- 4 Move the **POINTER** button left or right or press the **VOLUME** (◀,▶) button to adjust the selected audio condition as you want.

- To finish menu display, press the **MENU** button repeatedly.

Using Tracking function

Auto Tracking Function

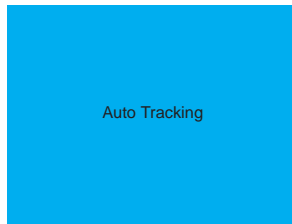
* Auto Tracking Function

This function assures you of getting the best video quality by automatically adjusting the difference of horizontal width and tremor of the image. This difference is caused by disaccord of the internal signal of the projector and diverse graphic signals of PC.

1 Press the **AUTO TRACKING** button.



<Before Auto Tracking>



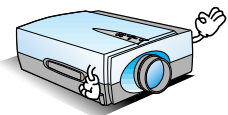
<Auto Tracking>



<After Auto Tracking>

* Image positioning and tremor adjusting are automatically performed.

2 Adjust [**Clock**] or [**Phase**] in TRACKING menu after operation of [**Auto Tracking**] if you want to get better picture quality in accordance with diverse PC input modes. (Refer to page 42.)



- * You can also use this function by using the **MENU** button.(PC mode)
- * Perform this function while on stopped image because you may not get the best video quality on a moving image of PC or DTV mode.

Clock / Phase Function

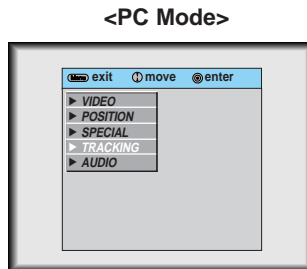
* Clock Function

This function adjusts the horizontal width of the projected image to get the image to fit on the screen size.

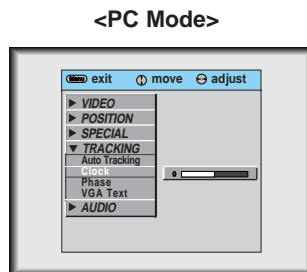
* Phase Function

This function is for the detailed adjustment of the clock function.

- 1 Press the **MENU** button and move the **POINTER** button up or down to select the TRACKING menu.



- 2 Press the **ENTER** button and move the **POINTER** button up or down to select the [Clock] or [Phase] item.



- 3 Move the **POINTER** button left or right or press the **VOLUME** (◀▶) button to adjust the screen condition.

- To exit the menu display, press the **MENU** button repeatedly.

Selecting PC screen size input signal

* When PC input mode, select the appropriate screen size in TRACKING menu as below before turning on the PC to get the image size of PC on DOS mode to be fit on the projected screen.

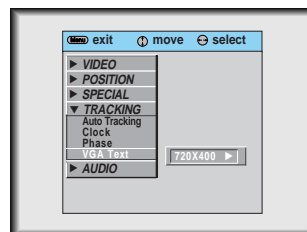
* In other screen size signals except 640X400 70Hz and 720X400 70Hz, the projected screen sizes are adjusted automatically.

- 1 Press the **MENU** button and move the **POINTER** button up or down to select the TRACKING menu.



- 2 Press the **ENTER** button and move the **POINTER** button up or down to select the [VGA Text] item.

- 3 Move the **POINTER** button left or right to select the screen size you want to use.



- a. Selecting 720X400
: When input signals are 720X400 70Hz or 640X400 70Hz , the projected screen size is always adjusted to the format of 720X400 70Hz.
- b. Selecting 640X400
: When input signals are 720X400 70Hz or 640X400 70Hz , the projected screen size is always adjusted to the format of 640X400 70Hz.
- To exit menu display, press the **MENU** button repeatedly.

Supported Monitor Display

* The projector displays images at a resolution of 1024x768 pixels. To display higher resolution images(1152x864mode, 1280x1024mode), the projector compresses it to 1024x768. The following table lists the display formats supported by the projector.

Sources	Format	Vertical Freq. (Hz)	Horizontal Freq. (kHz)	
VGAEGA	640X350	70.090Hz	31.468kHz	
	640X350	85.080Hz	37.861kHz	
PC98 / VGA Text	640X400	85.080Hz	37.861kHz	
	720X400	70.082Hz	31.469kHz	
	720X400	85.039Hz	37.927kHz	
VGA	640X480	59.940Hz	31.469kHz	
	640X480	66.667Hz	35.00kHz	
	640X480	72.800Hz	37.861kHz	
	640X480	75.00Hz	37.500kHz	
	640X480	85.008Hz	43.269kHz	
	640X480	100.040Hz	53.011kHz	
	640X480	120.00Hz	64.062kHz	
SVGA	800X600	56.250Hz	35.156kHz	
	800X600	60.317Hz	37.879kHz	
	800X600	72.188Hz	48.077kHz	
	800X600	75.00Hz	46.875kHz	
	800X600	85.061Hz	53.674kHz	
	800X600	90.00Hz	56.00kHz	
	800X600	100.00Hz	64.016kHz	
XGA	1024X768	43.479Hz	35.522kHz	
	1024X768	60.004Hz	48.363kHz	
	1024X768	70.069Hz	56.476kHz	
	1024X768	75.029Hz	60.023kHz	
	1024X768	84.997Hz	68.677kHz	
SXGA	1152X864	60.053Hz	54.348kHz	
	1152X864	70.016Hz	63.995kHz	
	1152X864	75.00Hz	67.500kHz	
	1152X864	85.057Hz	77.487kHz	
	1280X960	60.00Hz	60.00kHz	
	1280X960	75.00Hz	75.00kHz	
	1280X960	85.002Hz	85.938kHz	
	1280X1024	60.020Hz	63.981kHz	
	1280X1024	75.025Hz	79.976kHz	
	1280X1024	85.024Hz	85.00kHz	
UXGA	1600X1200	60.00Hz	75.00kHz	
MAC	16¥ 832X624	74.550Hz	49.725kHz	
	19¥	1024X768	60.004Hz	48.363kHz
		1024X768	75.029Hz	60.023kHz
20¥	1152X870	75.062Hz	68.681kHz	
HD	1920X1080i	60.00Hz	33.750kHz	
	1280X720p	60.00Hz	45.00kHz	

* If the projector does not support the input signal, "Out of Range" message appears on the screen.

* The projector supports DDC1/2B type as Plug & Play function.(Auto recognition of PC monitor)

Maintenance

- * The projector do need maintenance. You should keep the lens clean because any dirt or stains may appear on the screen. You will also need to clean the air filter attached at the bottom of the projector periodically because a clogged air filter prevents proper ventilation that is necessary to cool the projector and prevents it from overheating. If any parts need to be replaced, contact your dealer. When cleaning any part of the projector, always unplug the projector and turn the power off first.

Cleaning the lens

Clean the lens whenever you notice dirt or dust on the surface of it. Wipe the lens surface gently with an air spray or a soft, dry lint-free cloth.

To remove dirt or stains on the lens, moisten a soft cloth with water and a neutral detergent and wipe the lens surface gently.

Cleaning the Projector Case

To clean the projector case, first unplug the power cable. To remove dirt or dust, wipe the casing with a soft, dry, lint-free cloth. To remove stubborn dirt or stains, moisten a soft cloth with water and a neutral detergent and then wipe the casing.

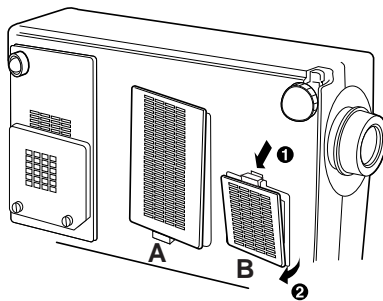
Do not use alcohol, benzene, thinners or other chemical detergents as these can cause the casing to be warped.

Cleaning the Air Filter

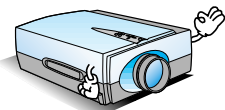
The air filter, which is located at the bottom of the projector, should be cleaned after every 100 hours' use. If it is not cleaned periodically, it can become clogged with dust and prevent the projector from being ventilated properly. This may cause overheating and damage of the projector.

To clean the air filter :

1. Switch the projector off and unplug the power cable from the wall socket.
2. Stand the side of the projector so that the handle can be at the top, and you can easily access the air filter.
3. Pull the stopper A upward and pull the stopper B downward with your fingers.



4. The air filter is attached to the inside of the projector. To clean the filter, you'd better use a small vacuum cleaner designed for computers or other office equipments. If not, you may use a dry, lint-free cloth. If it is difficult to remove dirt or the filter is torn, contact your dealer or the service center to replace it .
5. Close the filter cover after cleaning.
6. Plug the power cable back into the wall socket.



- * Contact your dealer to get screws for the ceiling installer and the detailed explanation to install.

Specifications.

LP-XG12
 33.1mm(1.3inches)
 1024(Horizontal) x 768(Vertical)pixel
 0.76~7.6m(30~300inches)
 1.6~15.6m(5.03~54.08pit)
 12m
 2W + 2W, stereo
 4:3(horizontal:vertical)
 1:1.346
 NTSC/PAL/SECAM/NTSC4.43/PAL-M/PAL-N
 AC 110 - 240V~50/60Hz
 152mm(including front feet)
 312mm
 439mm(including lens)
 8.7kg



Model
 LCD panel size
 resolution
 screen size
 projecting distance
 remote control distance
 speaker system
 horizontal / vertical ratio
 zoom ratio
 Video compatibility
 Power
 height
 breadth
 length
 weight

Operating Condition

temperature

In operation : 32~104°F(0°C~40°C)
 In storage and transit : 14~140°F(-25°C~70°C)

humidity

In operation : 30 ~ 85% relative humidity by dry hygrometer
 Not in operation : 30 ~ 90% relative humidity by dry hygrometer

Projection Lamp

lamp model

AJ-LA10

power consumption

150W



P/NO : 3828VA0212H@(373-026F)

