

Contents

Important Safety Notice.....	01
Accessories.....	02
Parts of the Projector.....	03
Installation.....	04
Connections.....	05
Basic Operation.....	07
Using the Remote Control.....	10
Menu Operation (OSD).....	11
Troubleshooting (Indicators).....	14
Cleaning and Replacing the Air Filter.....	14
Replacing the Lamp Unit.....	15

IMPORTANT SAFETY NOTICE

PRECAUTIONS

Please read this manual carefully before using the projector and keep this manual handy for future reference.

WARNING



- Do not expose this unit to rain or moisture to prevent fire or shock.
- Do not open the cabinet to avoid electrical shock. Refer all servicing to qualified service personnel.
- Handle the power cable carefully and avoid excessive bending. A damaged cable may cause electric shock or fire.

CAUTION

- Do not look into the lens while the unit is operating. Strong light may cause harm to your eyes.
- Do not block ventilation openings to prevent inside components from overheating.
- Do not put your hand or any object near the ventilation slots because the air is hot.

IMPORTANT SAFEGUARDS

INSTALLATION

- Do not place the unit in direct sunlight, near heaters or heat radiating applications.
- Do not expose this unit to dust, smoke or steam which may harm internal components.
- Handle the unit carefully. Dropping or jarring may damage internal components.
- Do not place heavy objects or liquids on the top of the unit. Spilled liquids may cause damage.
- Do not push objects of any kind through openings of this projector as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.
- Do not use this projector near water or in contact with water.
- Do not use the unit while the temperature is high or varies greatly. The unit must be used at environment temperature between 5°C (41°F) and 35°C (95°F).

INSTALLATION ON THE CEILING

- The ceiling must be strong enough to support the unit and the installation must be in accordance with any local building codes. The unit must be installed by qualified service personnel.

POWER SUPPLY

- This unit is designed to operate on a power supply of 100~240VAC, 50 - 60 Hz.
- Be sure that your power supply fits the above requirement before attempting to use the unit.
- If you are not sure of the type of power, please consult your appliance dealer or local power company.
- Before disconnecting the power cable, make sure you have followed the shut-off procedure.
- Disconnect the power cable from the power outlet after using the unit.

CLEANING

- Make sure to unplug the power cable before cleaning.
- Do not use water, liquid aerosol cleaners, strong detergents or solvents such as alcohol. Please use damp cloth and wipe on the cabinet gently.
- Use a blower or lens paper to clean the lens. Be careful not to scratch or mar the lens.
- Use a vacuum cleaner to clean periodically the ventilation slots and speaker grills or change the air filter (see p15). Accumulated dust on the ventilation slots may cause the unit over-heated and lead to malfunction.

LAMP REPLACEMENT

- Under normal usage, the life time of lamp is about 1500 hours. The output luminance will drop as lamp life diminishes. User can check the lamp life status in the MENU of projector.
- Change the lamp cartridge when the brightness is no more acceptable (see p16 for instruction).

CARRYING AROUND

- Please use the carrying case to carry this unit and make sure the lens is protected with lens cap.
- Do not subject this unit to strong mechanical shock.

ACCESSORIES



+

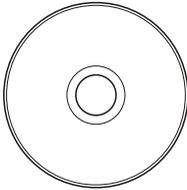


AAA battery x 2

Remote control and batteries



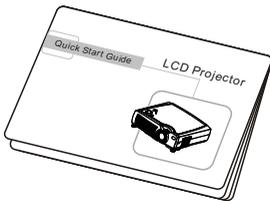
AC power cable
(1.8m / 6.0ft)



User's manual CD



VGA cable
(1.8 m / 6.0ft)



Quick Start Guide



Video cable
(1.8m / 6.0ft)



Carrying bag



USB mouse cable
(1.8m / 6.0ft)

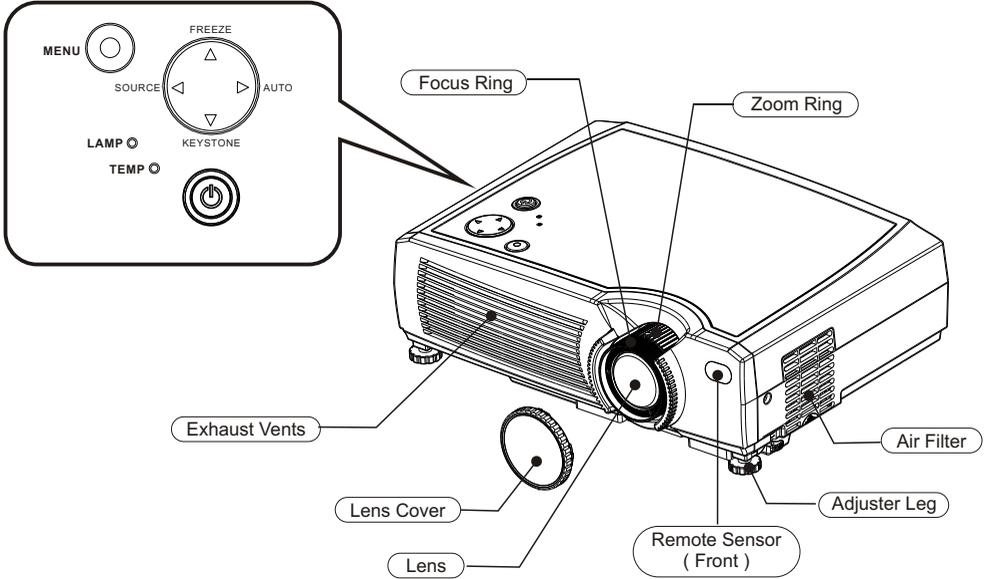


Audio cable
(1.8m / 6.0ft)

PARTS OF THE PROJECTOR

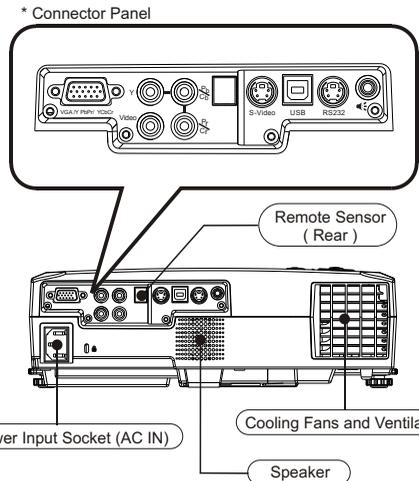
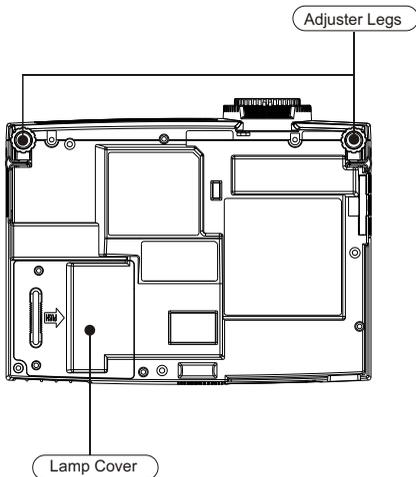
Front, Side, and Top

* Control Panel and Indicators



Bottom

Rear

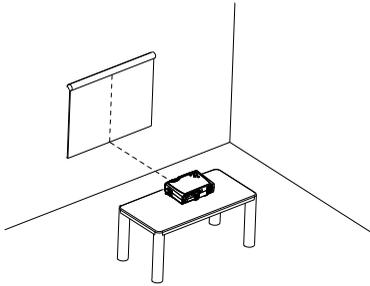


INSTALLATION

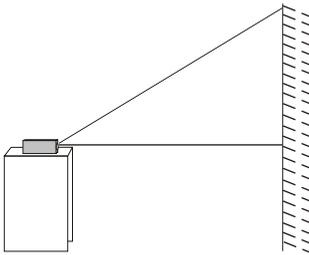
<NOTE!> Please read the important safety notice (p1) carefully before installation.

Positioning

Please place the unit on a solid flat level surface.



Projection distance and image size



The distance from projector lens to the screen will determine the size of the projected image. The maximum image size is about 415 ~ 498 inches diagonally at a distance of 15 meter.

Please refer to the table below for the image size projected.

Projection Distance (M)	Image Size (Diagonal)	
	Wide (inch)	Tele (inch)
1	34	29
2	67	56
3	100	84
4	134	111
5	167	139
6	200	166
7	233	194
8	266	221
9	299	249
10	332	277
11	365	304
12	398	332
13	431	360
14	465	387
15	498	415

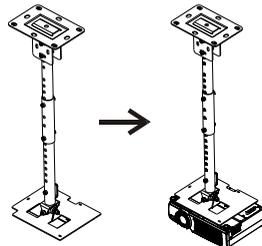
* "Wide" and "Tele" means the maximum and minimum image size diagonally at the same distance by adjusting lens to zoom.

Ventilation

- * Please do not place any object near the ventilation slots of the projector within 30cm distance.
- * Please prevent any scraps or lint suck into ventilation slots or use the projector in the dusty environment.
- * Please do not operate the projector while the ambient temperature or the humidity is too high.
- * Please use the projector at plate level and use the adjuster legs to adjust the height. Do not operate the projector upside down or at an inclined level. This may damage the projector.

Ceiling installation

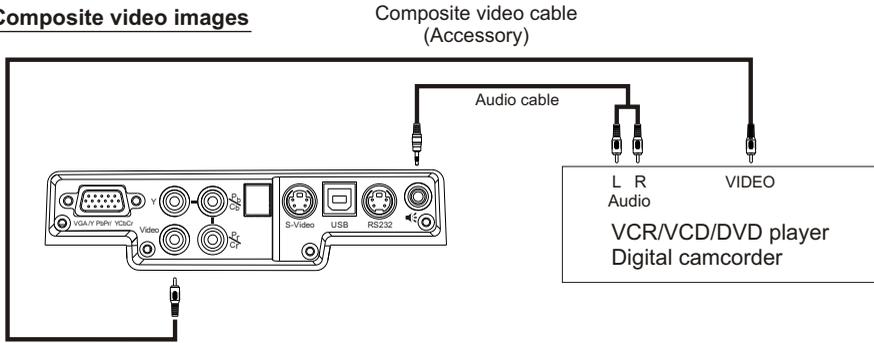
- * The projector can be installed on the ceiling for education, conference and home entertainment applications.
- * The ceiling mount is an optional accessory. Please contact qualified service personnel or agent for further information or service.



CONNECTIONS

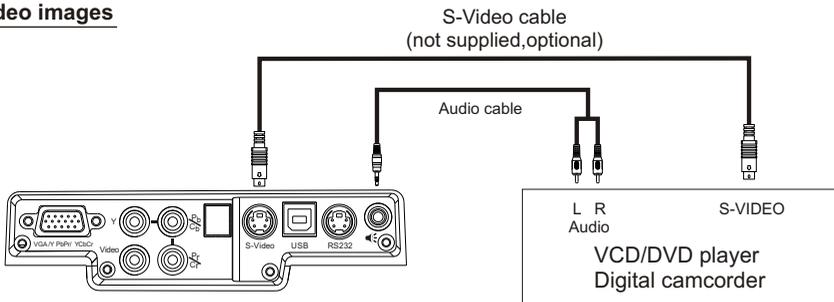
Connecting video equipments

Composite video images



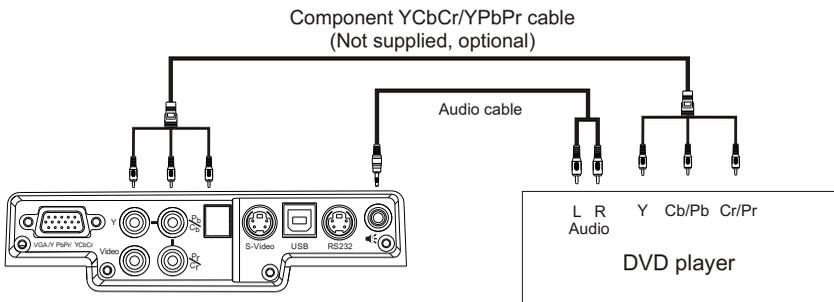
* Connecting a VCR/VCD/DVD player, digital camcorder by using a composite video cable

S-Video images



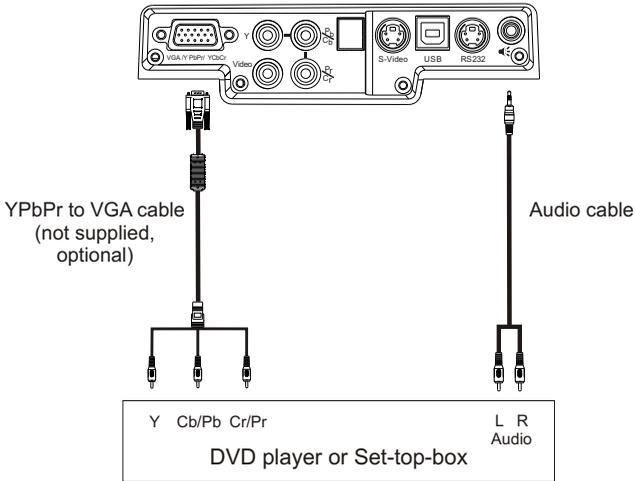
* Connecting a VCD/DVD player, digital camcorder by using a S-Video cable

Component images 1: YCbCr/YPbPr



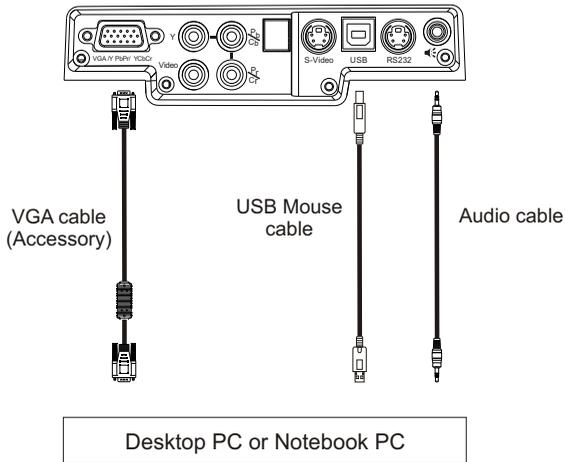
* Connecting a DVD player by using a component video cable (YCbCr/YPbPr)

Component images 2: YCbCr/YPbPr



* Connecting a DVD player or set-top-box by using a YPbPr to VGA converting cable (If your DVD player does not support Macrovision(video copy protection)-encoded function, please use YCbCr video input as your component video source.)

Connecting a computer or a notebook PC

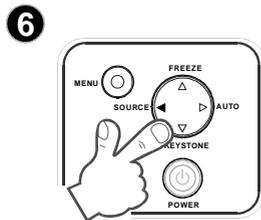
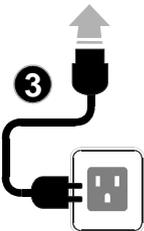
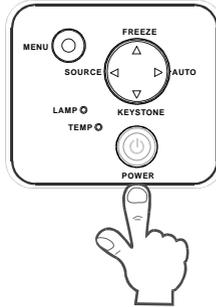
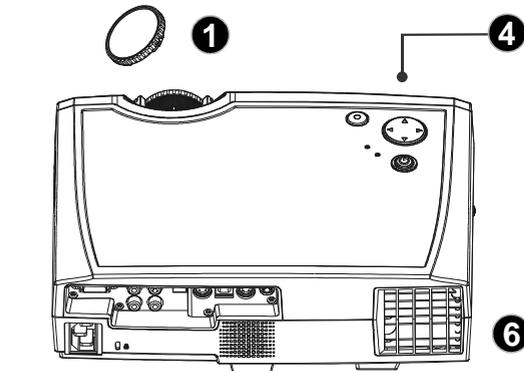
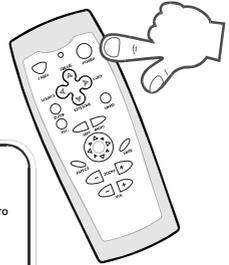


* You can use the remote control as the PC mouse.

BASIC OPERATION

Power On

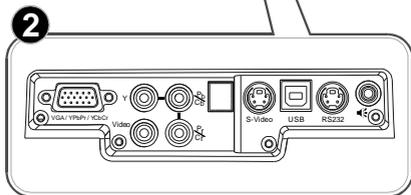
- 1 Remove the lens cover.
- 2 Connect a computer or video equipment to the projector.
- 3 Connect the power cord.
The three indicators will flash once together, and the POWER indicator will light ORANGE.
- 4 Press the POWER button.
The POWER indicator will flash GREEN for a while, and then light steadily.
- 5 Turn on the connected input source.
- 6 Press the SOURCE button to select the input signal.



--Source select--

<input type="checkbox"/>	VGA
<input type="checkbox"/>	YPbPr/YCbCr
<input type="checkbox"/>	YPbPr
<input type="checkbox"/>	YCbCr
<input type="checkbox"/>	S-VIDEO
<input type="checkbox"/>	VIDEO

▲ ▼ : Select
▶ ◀ or Enter : Confirm



Video Equipment	Input Source
Computer	RGB (VGA)
VCR/VCD/DVD Player	Video (Composite video images)
Digital Camcorder	S-Video (S-Video images)
DVD Player	YCbCr (Component images)
Set-top-box	YPbPr (Component images)

Adjustment

Projection Angle

Lift the projector and press the adjuster buttons to adjust the projection angle. Then, release the buttons to lock the extended adjuster legs. You can turn the bases of the adjuster legs to adjust the angle slightly.

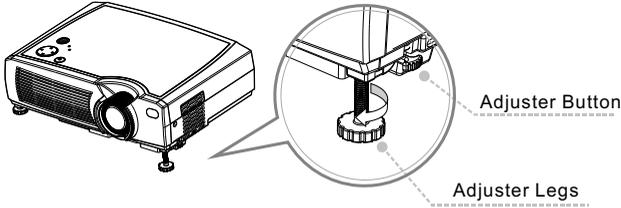
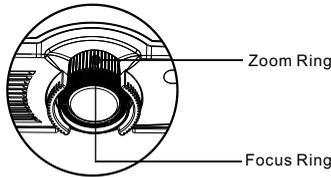


Image Size & Focus

Turn the focus/zoom ring to adjust the image focus and size.

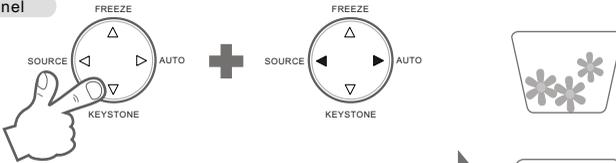


Other Functions

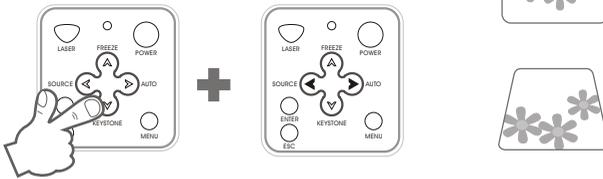
The hot keys on the control panel or remote control

1 Keystone

Control Panel

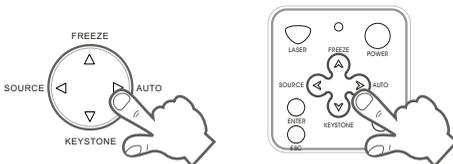


Remote Control



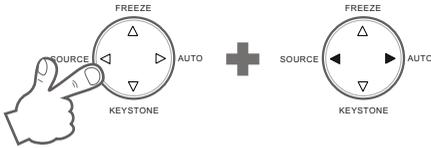
2 Auto

When the AUTO button is pressed, the image will be adjusted automatically in accordance with the signal being input.

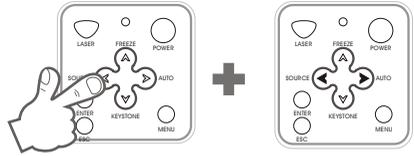


3 Source

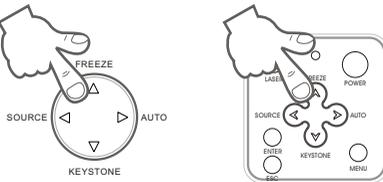
Control Panel



Remote Control



4 Freeze

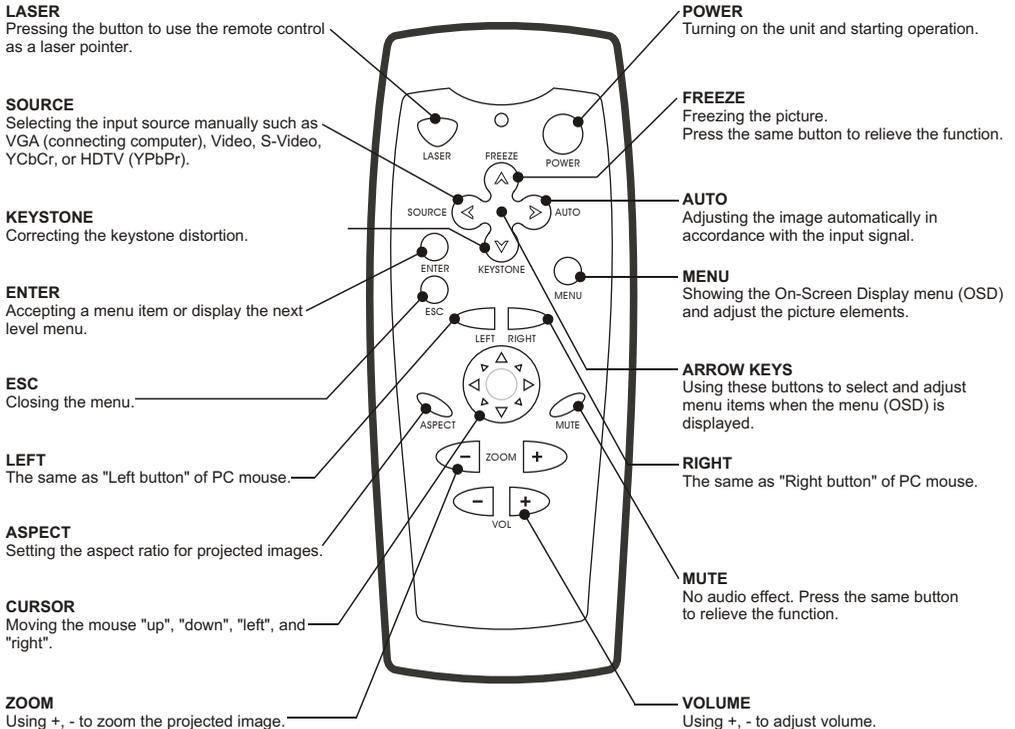


A still image is displayed. Press the button again to restore the image.

Power Off

- 1** Press the **POWER** button twice to turn off the power.
To prevent mis-operation, a confirmation message appears when **POWER** is pressed once.
The power turns off when you press the button once more.
The lamp will turn off and the cooling fan will keep running.
The **POWER** indicator will flash **ORANGE** for 90 sec.
- 2** Wait until the **POWER** indicator lights **ORANGE** steadily (until the cooling fan stops).
Be careful not to disconnect the power cord while the cooling fan is still running.
- 3** Disconnect the power cord.

USING THE REMOTE CONTROL



Caution! Do not point LASER pointer to anyone's eyes or stare into beam.

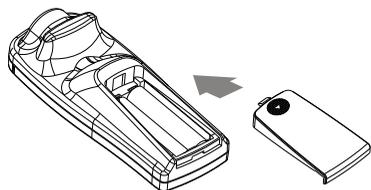
Laser Beam: Laser type: Class 2
Wavelength: 650nm
Output: 0.45-0.80 mW

INSERTING BATTERIES BEFORE OPERATION

The projector attaches two AAA batteries as accessories. If the electricity is used up, please purchase and replace new ones of the same type.

<NOTE!>

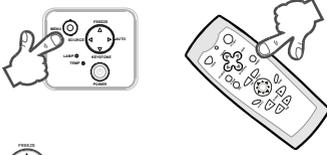
1. If the remote control gets wet, please wipe it dry immediately.
2. If you will not use the remote control for a long time, remove the batteries.
3. Do not mix new and old or different types of batteries.



MENU OPERATION (OSD)

You can use the ON-SCREEN MENU to make various adjustments and settings.

- 1 Press the MENU button to display the On-screen Menu.



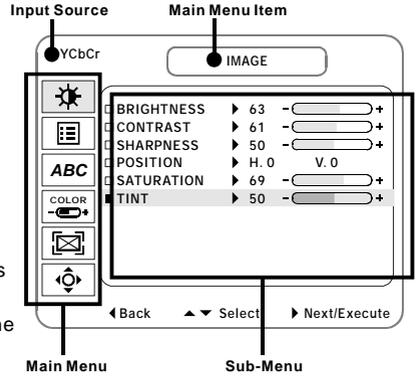
- 2 Use the directional keys to select a main menu item, and then press the ENTER key to enter the selected sub-menu.

- 3 Use the directional keys to select a sub-menu item, and then press the ENTER key to enter an individual adjustment screen or the next menu level.

- 4 Use the left and right directional keys to adjust the setting, and the up and down directional keys to select an item.

- 5 Press MENU to return to the previous screen. Press the ENTER key to accept the setting. Press the MENU button to return to the previous menu level.

- 6 To close the menu, press ESC.



List of Functions

IMAGE

Sub-menu	Function
BRIGHTNESS	Adjust the image brightness.
CONTRAST	Adjust the difference between light and shade in the image.
SHARPNESS	Adjust the image sharpness.
POSITION	Move the image display position vertically and horizontally.
SATURATION	Adjust the color intensity for the image.
TINT	Adjust the image tint.
PHASE	Adjust clock phase if any banding noise.
FREQUENCY	Adjust clock frequency if any vertical banding noise.



SETTING

Sub-menu	Function
SOURCE	Select the input source.
PIP MODE	Display the images in the picture-in-picture mode. * PIP SIZE: Open or close the sub-screen and select its size. * PIP SOURCE: Select the input source of the sub-screen. * PIP POSITION: Select the position of the sub-screen.
AUDIO	* VOLUME: Adjust the volume. * MUTE OFF: Mute the second temporarily. Every source has its own sound intensity.
FREEZE	Freeze animated image.



LANGUAGE

Sub-menu	Function
LANGUAGE	Set the language for OSD.



ADVANCED

Sub-menu	Function
COLOR MODE	Select a gamma color-curve mode to get better image quality.
COLOR TEMP.	If the color temperature is lower, colors appear reddish and color tone appears softer. If the color temperature is higher, colors appear bluish and color tone appears sharper.
RGB GAIN	Adjust the image contrast for each RGB color.
RGB LEVEL	Adjust the image brightness for each RGB color.



INSTALLATION

Sub-menu	Function
IMAGE ASPECT	Set the aspect ratio for projected images.
AUTO-KEystone	Enable or disable the auto-keystone function.
KEystone	Correct the vertical keystone distortion.
ORIENTATION	Make the projected images reverse vertically or horizontally according to the installation mode of the projector.
USER'S LOGO	Enable or disable the user's logo function.
LOGO CAPTURE	<ul style="list-style-type: none"> * LOGO BACKGROUND: Change the fill color behind the logo. * LOGO SCALING: Adjust the scale of the logo screen. * LOGO POSITION: Adjust the position of the logo within its area. * LOGO DELETE: Delete the capture logo. * START LOGO CAPTURE: Start the logo capture process.
SHOW LOGO	Show the logo chosen by user.

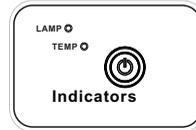


MANAGEMENT

Sub-menu	Function
OSD SETTING	<ul style="list-style-type: none"> * POSITION: Adjust the position of OSD. * TIMEOUT: Set the staying time of OSD. * MODE: Select the background of OSD to be opaque or translucent.
LAMP COUNTER	Display the cumulative lamp operating time.
INFORMATION	Display the input resolution and scanning frequency.
POWER SAVING	Set the time to power off automatically.
BACKGROUND	Set the background color when no video signal is being input.
RESET LAMP	Reset the cumulative lamp operating time.
RESET ALL	Reset all items to their default settings.

TROUBLESHOOTING (INDICATORS)

You can check the status of the projector using the indicators on the projector's control panel. Refer to the table below for the cause of problems.



● : Lighting ● : Flashing

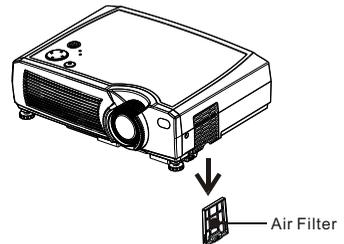
Status	Cause & Remedy
Power ● ORANGE	Standby condition
Power ● GREEN	Warm-up (40 sec)
Power ● GREEN	Projection
Power ● ORANGE	Cool-down (90 sec)
Lamp ● RED	Lamp fatal error
Lamp ● RED	The lamp is overheated or the lamp fan operates abnormally. Contact the qualified service personnel.
Temp ● RED	Power malfunction Contact the qualified service personnel.
Temp ● RED	The internal temperature is unusually high or some fan is broken. Wait until the projector cools down, and turn on the power again.

CLEANING AND REPLACING THE AIR FILTER

The air filter must be cleaned about every 300 hours. If dust accumulates too much and becomes difficult to remove by using vacuum cleaner, please replace the air filter to keep the ventilation of LCD panel module in good condition. The projector attaches one spare air filter for replacement. If more is required, please contact the agent for purchasing or consultation.

User can clean or replace the air filter by following the steps below:

- 1 Power off the projector and disconnect the power cord.
- 2 Turn the unit bottom up and pull out the air filter.
- 3 Remove the air filter, and use a vacuum cleaner to clean away the dust, or replace a new one directly.
- 4 Attach the air filter.



REPLACING THE LAMP UNIT

Under normal usage, the lamp life time of the projector is about 1500 hours. The output luminance will drop as lamp life diminishes. User can check the "lamp counter" in the MANAGEMENT MENU of OSD.

Change the lamp cartridge when the brightness is no more acceptable. User can consult qualified agent or manufacturer for model of lamp cartridge and purchase new ones for replacement.

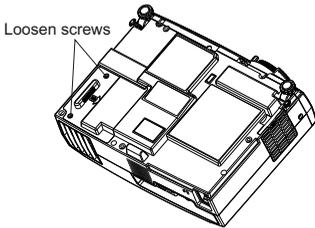
User can follow the steps below and replace the lamp cartridge.

WARNING

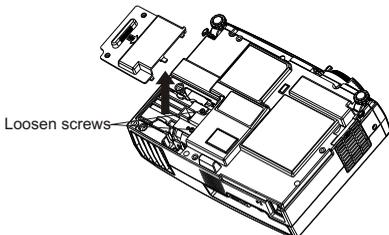


- * THE POWER CORD MUST BE DISCONNECTED to prevent the danger of electric shock while user replacing the lamp cartridge.
- * DO NOT TOUCH THE LAMP immediately after it is used. It will be extremely hot and might cause harm.
- * DO NOT RELEASE ANY SCREWS except those in the instruction below. This is to prevent user from the danger of electric shock.
- * Replacing ONLY THE SAME OR EQUIVALENT TYPE recommended by the manufacturer or agent.

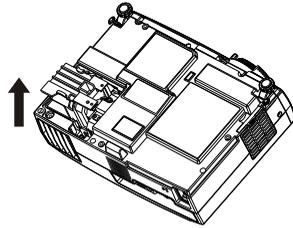
- 1 Turn off the power and disconnect the power cord. Wait at least one hour for the lamp to cool down.
- 2 Turn the unit bottom up carefully and loosen the two fixing screws on the lamp cover.



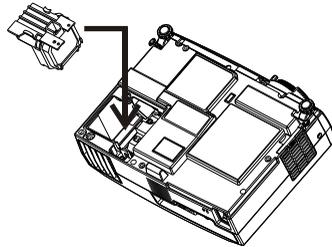
- 3 Remove the lamp cover and loosen the two fixing screws on the lamp cartridge.



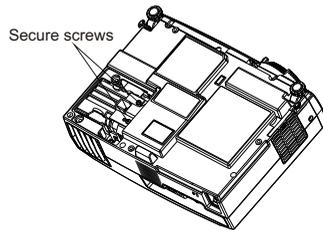
- 4 Pull the lamp cartridge up carefully to remove it.



- 5 Install the new lamp cartridge.



- 6 Secure the new lamp cartridge with screws.



- 7 Secure the lamp cover with screws. Return the unit to normal position and restart the unit. User can reset the lamp counter (RESET LAMP) in the management menu of OSD manually.