LG

Life's Good

OWNER'S MANUAL
LCOS PROJECTOR

Please read this manual carefully before operating
your set and retain it for future reference.

CF3D

www.lg.com

LCOS PROJECTOR

WARNING / CAUTION
AVERTISSEMENT

RISK OF ELECTRIC SHOCK, DO NOT OPEN.
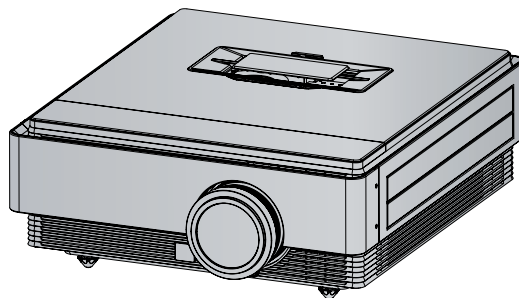**RISQUE DE CHOC** ÉLECTRIQUE, NE PAS OUVRIR.

Warning - Class B

(b) For a Class B Digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

NOTE: 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.

Contents

Disposal of your old appliance

1. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream through designated collection facilities appointed by your government or your local authorities.
3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.
5. The fluorescent lamp used in this product contains a small amount of mercury. Do not dispose of this product with general household waste. Disposal of this product must be carried out in accordance to the regulations of your local authority.

Safety Instructions

Please take note of the safety instructions to prevent any potential accident or misuse of the projector.

- Safety Instructions are given in two forms as detailed below.

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

⚠ **NOTES** : The violation of this instruction may cause injuries or damage to the projector.

- After reading this manual, keep it in the place that you can access easily.

Indoor Installation ⚠ WARNING

Do not place the Projector in direct sunlight or near heat sources such as radiators, fires, stove etc. This may cause a fire hazard!	Do not place flammable materials in, on or near the projector. This may cause a fire hazard!	Do not hang on the installed projector. It may cause the projector to fall, causing injury or death.
Do not block the vents of the projector or restrict air-flow in any way. This would cause the internal temperature to increase and could cause a fire hazard or damage to the unit!	Do not place the projector close to sources of steam or oil such as a humidifier. This may create a fire hazard or an electric shock hazard!	Do not place the projector where it might be exposed to dust. This may cause a fire hazard or damage to the unit!
Do not use the projector in a damp place such as a bathroom where it is likely to get wet. This may cause a fire or an electric shock hazard!	Do not place the projector directly on a carpet, rug or place where ventilation is restricted. This would cause its internal temperature to increase and might create a fire hazard or damage the unit.	Ensure good ventilation around the projector. The distance between the projector and the wall should be more than 30 cm. An excessive increase in its internal temperature may cause a fire hazard or damage to the unit!

Indoor Installation ⚠ NOTES

When installing the projector on a table, be careful not to place it near the edge. The projector could fall causing injury and damage to the projector. **Only use a suitable stand.**	Disconnect from the power supply and remove all connections before moving, or cleaning.	Only use the projector on a level and stable surface. It may fall and cause injury and/or damage to the unit.

Power ⚠ WARNING

Earth wire should be connected. Ensure that you connect the earth ground wire to prevent possible electric shock (That is a Projector with a three-prong grounded AC plug must be connected to a three-prong grounded AC outlet). If grounding methods are not possible, have a qualified electrician install a separate circuit breaker. Do not try to ground the unit by connecting it to telephone wires, lightening rods, or gas pipes.	The power cord should be inserted fully into the power outlet to avoid a fire hazard! This may cause a fire hazard or damage the unit.	Do not place heavy objects on the power cord. This may cause a fire or an electric shock hazard!

Power	⚠ WARNING	
Never touch the power plug with a wet hand. This may cause an electric shock hazard!	Do not plug-in too many items into one power outlet. It may result in overheating of the outlet and create a fire hazard!	Prevent dust from collecting on the power plug pins or outlet. This may cause a fire hazard!

Power	⚠ NOTES	
Hold the plug firmly when unplugging. If you pull the cord, it may be damaged. This may cause a fire hazard!	Do not use if the power cord or the plug is damaged or any part of the power outlet is loose. This may cause a fire or an electric shock hazard or damage to the unit!	Ensure the power cord does not come into contact with sharp or hot objects. This may cause a fire or an electric shock hazard or damage to the unit!
Place the projector where people will not trip or tread on the power cord. This may cause a fire or an electric shock hazard or damage to the unit!	Do not turn the projector On/Off by plugging-in or unplugging the power plug to the wall outlet. (Allow the unit to cool before removing power.) It may cause mechanical failure or could cause an electric shock.	

Using	⚠ WARNING	
Do not place anything containing liquid on top of the projector such as flowerpot, cup, cosmetics or candle. This may cause a fire hazard or damage to the unit!	In case of impact shock or damage to the projector switch it off and unplug it from the power outlet and contact an authorized service center. This may cause a fire or an electric shock hazard or damage to the unit!	Do not allow any objects to fall into the projector. This may cause an electric shock hazard or damage to the unit!
If water is spilt into the projector unplug it from the power supply immediately and consult your Service Agent. This may cause an electric shock hazard or damage to the unit!		Dispose of used batteries carefully and safely. In the case of a battery being swallowed by a child please consult a doctor immediately.
Do not remove any covers. High risk of Electric Shock!	Don't look directly into the lens when the projector is in use. Eye damage may occur!	Do not touch metal parts during or soon after operation since the vents will remain very hot!

CAUTION concerning the Power Cord

Do not overload wall outlets or circuit breakers. Overloaded wall outlets, loose or damaged wall outlets, extension cords, frayed power cords, or damaged or cracked wire insulation are dangerous.Any of these conditions could result in electric shock or fire. Periodically examine the cord of your appliance, and if its appearance indicates damage or deterioration, unplug it, discontinue use of the appliance, and have the cord replaced with an exact replacement part by authorized service personnel.

Protect the power cord from physical or mechanical abuse, such as being twisted, kinked, pinched, closed in a door, or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the appliance.

Using ⚠ WARNING

If the projector is in a room that experiences a gas leak, do not touch the projector.

It can cause a fire or a burn by a spark.

Always open the lens door or remove the lens cap when the projector lamp is on.

Using ⚠ NOTES

Do not place heavy objects on top of projector.

This may cause mechanical failure or personal injury!

Take care not to impact the lens particularly when moving the projector.

Do not touch the lens of the projector. It is delicate and easily damaged.

Do not use any sharp tools on the projector as this will damage the casing.

In the event that an image does not appear on the screen please switch it off and unplug it from the power outlet and contact your Service Agent.

This may cause a fire or an electric shock hazard or damage to the unit!

Do not drop the projector or allow impact shock.

This may cause mechanical failure or personal injury!

Cleaning ⚠ WARNING

Do not use water while cleaning the projector.

This may cause damage to the projector or an electric shock hazard.

In the unlikely event of smoke or a strange smell from the projector, switch it off, unplug it from the wall outlet and contact your dealer or service center.

This may cause a fire or an electric shock hazard or damage to the unit!

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

Cleaning ⚠ NOTES

Contact the Service Center once a year to clean the internal parts of the projector.

Accumulated dust can cause mechanical failure.

When cleaning the plastic parts such as projector case, unplug the power and wipe it with a soft cloth. Do not use cleanser, spray water or wipe with a wet cloth. Especially, never use cleanser (glass cleaner), automobile or industrial shiner, abrasive or wax, benzene, alcohol etc., which can damage the product. Use an air spray or soft cloth that is moist with a neutral detergent and water for removing dust or stains on the projection lens.

It can cause fire, electric shock or product damage (deformation, corrosion and damage).

Others ⚠ WARNING

Do not attempt to service the projector yourself. Contact your dealer or service center.

This may cause damage to the projector and could give an electric Shock as well as invalidating the warranty!

Others ⚠ NOTES

Do not mix new batteries with old batteries.

This may cause the batteries to overheat and leak.

Be sure to unplug if the projector is not to be used for a long period.

Accumulated dust may cause a fire hazard or damage to the unit!

Only use the specified type of battery.

This could cause damage to the remote control.

Names of parts

Main Body

Filter Cover
* Do not block this filter when using the projector.

Zoom Ring

Focus Ring

Air Vent Door
* Do not close the air vent door when using the projector. There is chance that projector may be turned off.

Lens and Lens Cap
* Do not touch the lens and opening the lens cap when using the projector.

Remote Control Sensor
Camera Sensor
* It is used to operate **Camera Calibration** function.

Control Panel

AUTO Button
Automatically formats the video when using RGB (VGA).

Slide the Door.

MENU Button
Displays or closes menus.

∧/∨/</> Button
Adjusts functions of menus.

OPEN

LENS SHIFT   AUTO   INPUT   MENU   ∧   ∨   <   >   ●OK

INPUT Button
Switches to input modes.

◉OK Button
Checks present mode and saves the change of functions.

LENS SHIFT Dial
Move the screen image up or down.

Connecting Part

USB (SVC ONLY)

HDMI IN 1, 2, 3

RGB IN

RGB OUT

LAN

Kensington Security System Connector

HDMI IN1 HDMI IN2 HDMI IN3   RGB IN   RGB OUT   LAN

USB(SVC ONLY)   COMPONENT IN VIDEO

AC IN

AC IN

VIDEO IN

COMPONENT IN

IR (Remote control sensor)
* Do not block the IR port for normal operation
  of remote control.

Remote Control

INPUT Button

POWER Button

KEYSTONE Button
L/R Button

3D Button
BLANK Button
RATIO Button

PATTERN Button

LIGHTING Button
(Illuminates the remote control buttons.)

SLEEP Button

AUTO Button

MENU Button

Q.MENU Button

OK◉, ∧/∨/</> Button

PICTURE Button

BACK Button

STILL Button

Select Direct Input Buttons

INPUT
KEY.S
L/R   RATIO
BLANK
PATTERN   SLEEP
LIGHTING
MENU   AUTO   Q.MENU
OK
PICTURE   STILL   BACK
VIDEO   COMP   RGB
HDMI1   HDMI2   HDMI3

Installing Batteries

CAUTION
RISK OF EXPLOSION IF BATTERY IS REPLACED WITH AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

• Open the battery compartment cover on the back of the remote control.

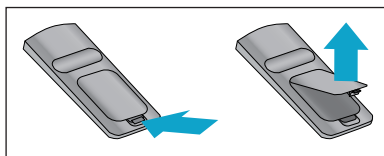• Insert the specified type of batteries with correct polarity, match "+" with "+", and match "-" with "-".

• Install two 1.5V AAA batteries. Don't mix used batteries with new batteries.

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.

Power Button
Turns ON/OFF the projector.

Operation Indicator
Temperature Indicator
Lamp Indicator

☼/🔋/⏻

◀ OPEN

Top Filter Cover Lock
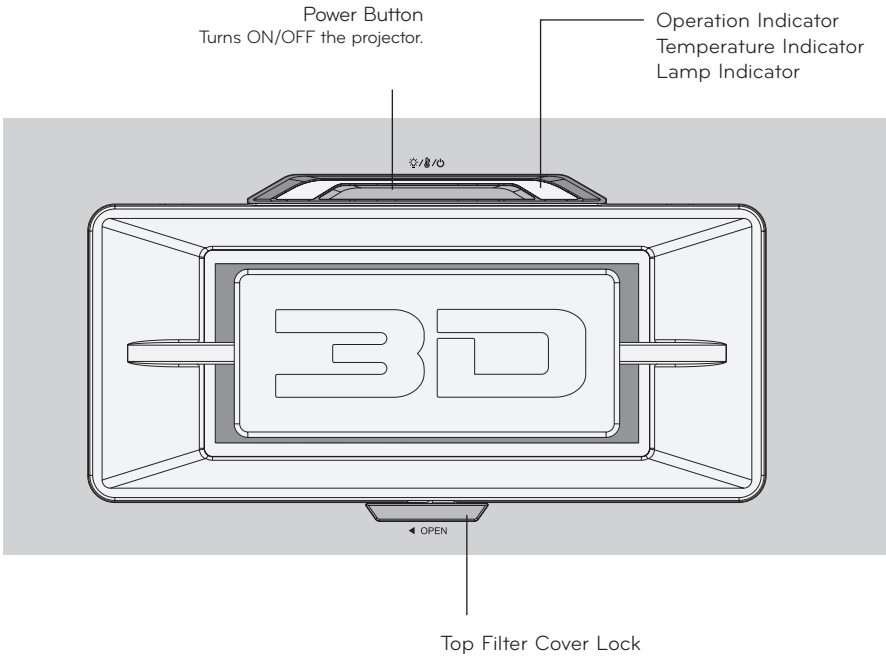
	Blue	Standby.
Operation	Green (Blinking)	Power on.
	Green	Using the Projector.
	Cyan (Blinking)	Power off (lamp is cooling for 90 seconds).
Temperature	Red (Blinking)	An error has occurred in the internal cooling fan.
	Yellow	High temperature warning.
	Yellow (Blinking)	Turned off due to excessive heat.
Lamp	Magenta	The lamp is reaching the end of its life and needs to be replaced with a new lamp.
	Magenta (Blinking)	An error has occurred in the lamp.
	Red	The lamp cover is opened.
Air Vent Door	Cyan	An error has occurred in the air vent.
Filter	Blue (Blinking)	The filter cover is opened.

Accessories

Remote Control

AAA Battery
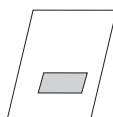
Owner's manual
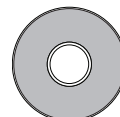
CD Owner's manual

Power Cord

Polishing Cloth
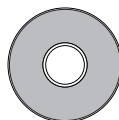
eZ-Net Manager CD

3D Glasses

Top Filter

Bottom Filter
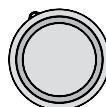
Lens Cap

Optional Extras

* Contact your dealer to purchase these items.
* Optional parts can be changed without notice to improve the quality of the product, and new optional parts can be added.

Projection Screen
for 3D

Lamp

Computer Cable

HDMI Cable

Ceiling mount for projector

Video Cable

Component Cable

LAN Cable

Installing and Composition

Installation Precautions

Provide proper ventilation for this projector.

• The projector is equipped with ventilation holes(intake) on the bottom and ventilation holes(exhaust) on the front. Do not block or place anything near these holes. Internal heat build-up may occur, causing picture degradation or damage to the projector.
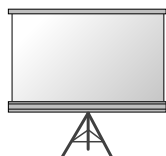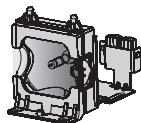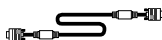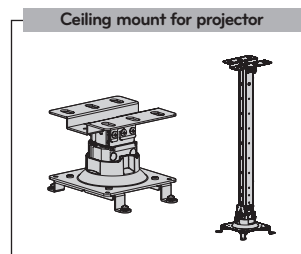
• Do not place the projector on a carpet, rug or other similar surface. It may prevent a adequate ventilation of the projector bottom. This product should be mounted to a wall or ceiling only.
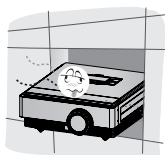
• Never push projector or spill any kind of liquid into the projector.

• Leave an adequate distance (30 cm or more) around the projector.

Place this projector in adequate temperature and humidity conditions.

• Install this projector only in a location where adequate temperature and humidity is available. (Refer to page 38)

Don't place the projector where it can be covered with dust.

• This may cause overheating of the projector.

Do not obstruct the slots and openings of the projector. This may cause overheating and create a fire hazard.

This projector is manufactured using high-precision technology. You may, however, see tiny black points and/or bright points (red, blue or green) that continuously appear on the projector Screen. This is a normal result of the manufacturing process and does not indicate a malfunction.

To display DTV programs, it is necessary to purchase a DTV receiver (Set-top Box) and connect it to the projector.

The remote control may not work when a lamp equipped with electronic ballast or a three-wavelength lamp is installed. Replace those lamps with international standard products to use the remote control normally.

Positioning the Projector

1. Place the projector on a sturdy and horizontal surface with the PC or AV source.
2. The distance between the projector and the screen determines the actual size of the image.
3. Position the projector so that the lens is set at a right angle to the screen. If the projector is not set at a right angle, the screen image will be crooked. Although, slight angles can be counteracted using the Keystone adjustement. (Refer to page 25.)
4. Connect the power cable to the projector and the wall outlet after placing the projector in its desired location.

< Projection Distance Based on the Picture Format >
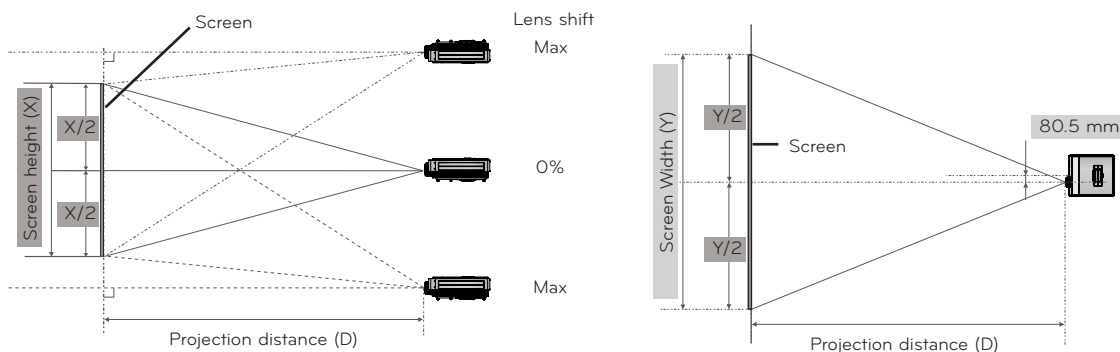
16 : 9 Scale				
Screen			Projection Distance	
Diagonal Size (mm)	Screen Width (Y) (mm)	Screen height (X) (mm)	Minimum Projection Distance (D1) (m)	Maximum Projection Distance (D2) (m)
762	664	374	0.87	1.15
1016	886	498	1.17	1.54
1270	1107	623	1.48	1.94
1524	1328	747	1.78	2.33
1778	1550	872	2.09	2.73
2032	1771	996	2.39	3.13
2286	1992	1121	2.70	3.52
2540	2214	1245	3.00	3.92
2794	2435	1370	3.31	4.32
3048	2657	1494	3.61	4.72
3302	2878	1619	3.92	5.11
3556	3099	1743	4.22	5.51
3810	3321	1868	4.53	5.91
4064	3542	1992	4.83	6.30
4318	3763	2117	5.13	6.70
4572	3985	2241	5.44	7.10
4826	4206	2366	5.74	7.49
5080	4428	2491	6.04	7.89
5334	4649	2615	6.35	8.29
5588	4870	2740	6.66	8.68
5842	5092	2864	6.96	9.08
6096	5313	2989	7.27	9.48
6350	5535	3113	7.57	9.87
6604	5756	3238	7.88	10.27
6858	5977	3362	8.18	10.67
7112	6199	3487	8.49	11.06
7366	6420	3611	8.79	11.46
7620	6641	3736	9.10	11.86

Kensington Security System

- This projector has a Kensington Security System Connector on the back or side 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 included with 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 equipment such as notebook PCs or projectors.
- The Kensington Security System is an optional item.
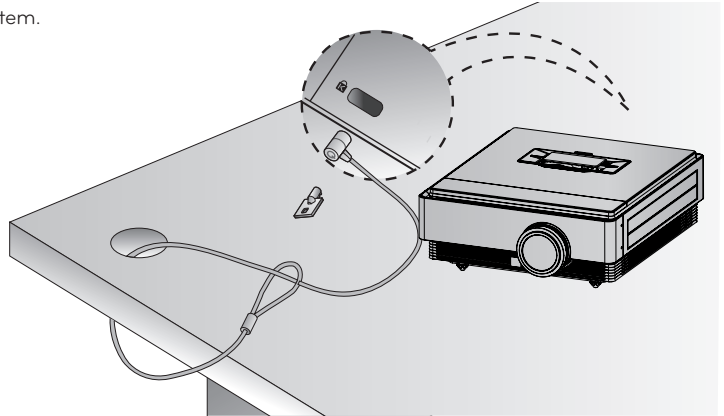
Turning on the Projector

1. Make sure the power cord is connected correctly.

2. Press the **POWER** button. The operation indicator will blink green while the projector is warming up.

- Power on time is long because of the characteristics of 3D Projector.
- Press the **INPUT** button to select the input signal you want.
- There will be short sound when the projector is being turned on.
- Check if the lens cap is open before turning on the power.

Turning off the Projector

1. Press the **POWER** button.

> ℹ Power off?
>
> Please press Power key again.
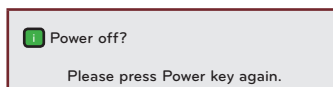
2. The unit will turn off when you press the **POWER** button a second time. The operation indicator LED will blink blue for 90 seconds while the bulb cools. Do not disconnect the projector while the LED (fan) turns off. When the indicator becomes solid blue, you may remove the power cord if needed (Refer to page 10).

Focus and Position of the Screen Image

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

Zoom Ring
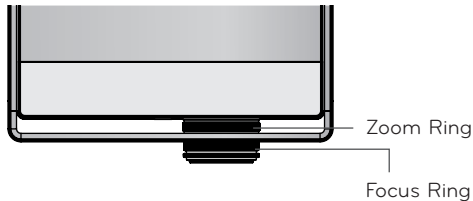
Focus Ring

- To adjust the focus of the image, rotate the focus ring.
- To adjust the size of the image, rotate the zoom ring.

When you need to move the screen image up or down, use the zoom ring on the projector to adjust the height as shown below.
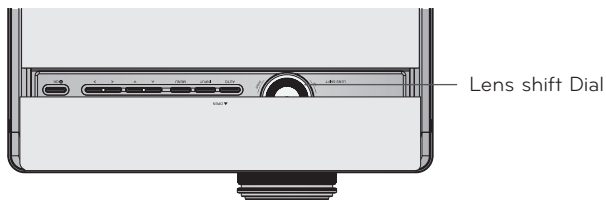
Lens shift Dial

- Turn the Lens shift dial left or right to adjust the projector image up or down.
- Turning the Lens shift dial with excessive power may cause damage to the projector.

Selecting Input Mode

1. Press the **INPUT** button.
2. The menu will cycle between active inputs when you press the **INPUT** button. Use the $<, >$ button to switch between inputs that are not active.

Input

Video	Component	RGB	HDMI 1	HDMI 2	HDMI 3
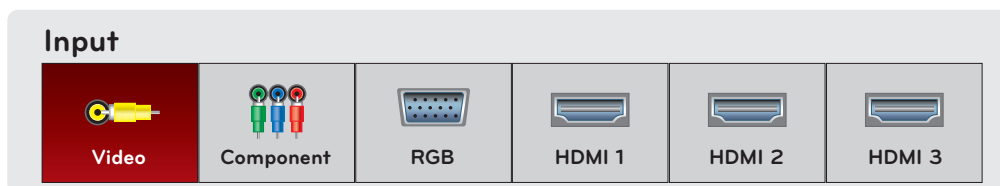
- Selecting an input signal with the **VIDEO**, **COMP**, **RGB**, **HDMI1**, **HDMI2** and **HDMI3** buttons.
- Connected input list is displayed in front.

Connection

Connecting to a Desktop PC

* You can connect the projector to a computer with VGA, SVGA, XGA, SXGA output.
* Refer to page 33 for resolutions the projector supports.

< How to connect >

Connect the **RGB IN** of the projector and the RGB output port of the computer with a computer cable.

> * You may have to change the resolution that your PC exports to one supported by the projector. Refer to page 33. Notebook computers may require a button or button combination to be pressed to activate the external video port.

Computer Cable

Computer Cable
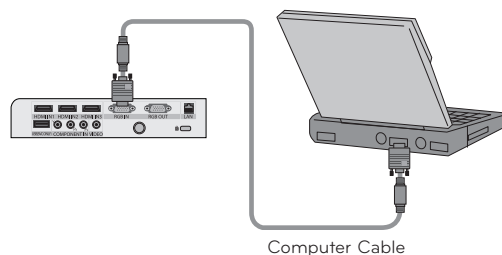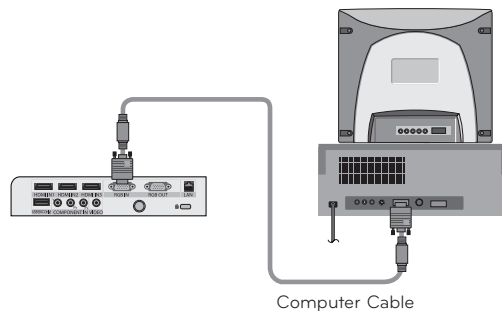
Connecting to a Video Source

* You can connect a VCR, a camcorder or any other compatible video image source to the projector.

< How to connect >

Connect the **VIDEO** input of the projector to the output jack of the video source with a (yellow) video cable.

< VCR >

Video Cable
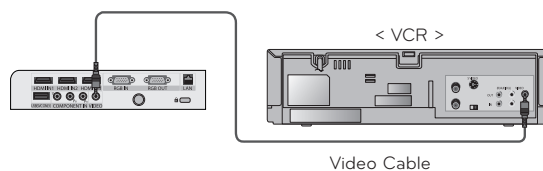
Connecting to a DVD Player

* Depending on the equipment, the component output jacks (Y, P$_B$, P$_R$) of the DVD Player may be labeled as Y, Pb, Pr/Y, B-Y, R-Y/Y, Cb, Cr.

< How to connect a HDMI source >

1. Connect the **HDMI IN 1** (or **HDMI IN 2/3**) of the projector and the HDMI output port of the DVD Player with an HDMI cable.

2. Set the DVD Player's resolution to one of the following: 480p(576p)/720p/1080i/1080p mode.

< How to use a HDMI source >

First, turn on the projector, then turn on the HDMI device.

HDMI Cable

< DVD Player >

< How to connect a Component source >

Connect the **COMPONENT IN** of the projector and the compontnt output port of the DVD Player with a component cable.

> * When connecting the component cable, match the jack colors with the component cable.(Y=green, P$_B$=blue, P$_R$=red)

Component cable

< DVD Player >
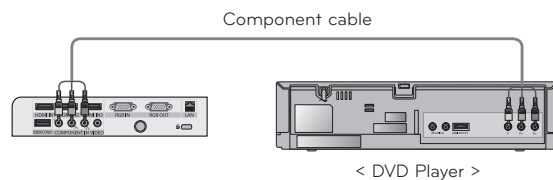
Connecting to a D-TV Set-Top Box

* To receive Digital TV (D-TV) programs, it is necessary to purchase a D-TV receiver (Set-Top Box) and connect it to the projector.
* Please refer to the owner's manual of the D-TV Set-Top Box for the connection between the projector and D-TV Set-Top Box.

< How to connect a HDMI source >

1. Connect the **HDMI IN 1** (or **HDMI IN 2/3**) of the projector and the HDMI output port of the DTV set-top box with an HDMI cable.

2. Set the DTV receiver's resolution to one of the following: 480p(576p)/720p/1080i/1080p mode.

< D-TV Set-Top Box >

HDMI Cable
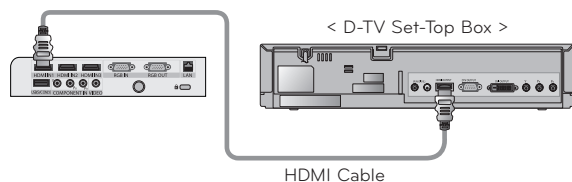
< How to use a HDMI source >

First, turn on the projector, then turn on the HDMI device.

< How to connect a Component source >

Connect the **COMPONENT IN** of the projector and the compontnt output port of the D-TV Set-Top Box with a component cable.

< D-TV Set-Top Box >

> * When connecting the component cable, match the jack colors with the component cable.(Y=green, P$_B$=blue, P$_R$=red)

Component cable

3D Video Function

* 3D video is the technology of using a different video frame for each eye to add depth to the video.
* The following is required is required to view 3D video: 3D TV or projector, 3D glasses, and 3D external input (a BD Player, Sat, or Cable box with a 3D program or movie). It will not "up-convert" 2D to 3D.
* 3D video can be watched only on a silver screen.

Caution When Viewing 3D Video

► When viewing 3D video, watch the projector within the effective viewing angle and distance.
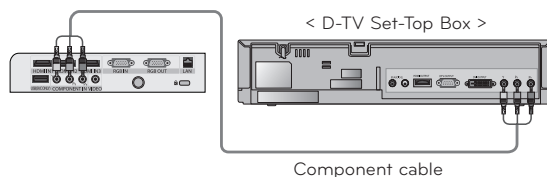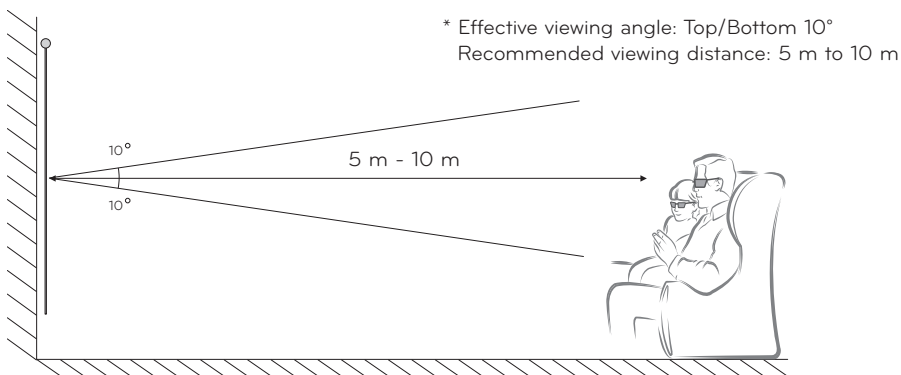 - If you exceed the viewing angle or distance, you may not be able to view 3D video.
► If you watch the 3D video too closely for a long period of time, it may strain your eyes.
► Watching the screen with the 3D video glasses for a long period of time can cause drowsiness or fatigue to your eyes.
  - If you feel headache, fatigue or drowsiness, stop watching the video.
► Pregnant woman, senior, person with heart problem or frequent drowsiness may wish to refrain from watching 3D video.
  - 3D video can cause an elevated heart rate.
► Some 3D video may cause you to duck or dodge the image in the video. Do not watch 3D video near fragile objects or any objects that can be knocked over easily.
► Do not use the 3D glasses as general glasses, sunglasses or protective goggles. It can cause an injury.
► Do not store the 3D glasses in hot or cold location.
► Because the lens (Polarized film) of 3D glasses is sensitive to scratches, only use a soft and clean cloth to wipe the product.
  - Because any alien particle on the cloth can result in scratches, be cautious.
► Do not scratch the surface of the lens (Polarized film) of 3D glasses or wipe the lens with chemicals.
  - The polarized film can be scratched and the video may not look normal when viewing 3D.
► The lens of the 3D glasses is different from those of general glasses, and is very thin. Therefore be careful with the glasses as the lens can be popped out easily.
► Warning for photosensitization seizure: Specific image from the video and light or specific pattern from the video can cause a seizure to some individuals. If you or anybody from your family has a history of epilepsy or seizure, please consult your doctor before watching 3D video. Also the following symptoms can occur in unspecified conditions without any previous history.
  - If you experience dizziness, visual transition, visual or facial instability, unconscious action, convulsion, loss of conscience, confusion, loss of directional sense or nausea during or after watching the 3D video, immediately stop watching the 3D video and consult the doctor. Especially special care is required for children watching the 3D video.
  - Do not watch 3D video when very sleepy, tired or sick, and avoid watching 3D video for a long period of time.

When Viewing 3D Video

* Effective viewing angle: Top/Bottom 10°
Recommended viewing distance: 5 m to 10 m

10°
10°
5 m - 10 m

┌─ **Note!** ───────────────────────────────

- Specific menus may not work while watching 3D video.
- 3D effect can only be seen when 3D Mode is selected appropriately for the 3D input signal supplied to the Projector.
- HDMI-PC/DVI-PC input does not support 3D Mode.

How to Watch 3D Video

1. Input the 3D video from an external 3D compatible device using one of the following formats. The default settings on the playing device should work.

Signal	Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)	Playable 3D video format
HDMI				
720p	1280x720	45.00	60	Top & Bottom, Side by Side HDMI(V1.4 with HDMI 3D) Frame Packing
		37.50	50	
1080i	1920x1080	33.75	60	Top & Bottom, Side by Side
		28.125	50	
1080p		27.00	24	Top & Bottom, Side by Side, Checker Board, Frame Sequential HDMI(V1.4 with HDMI 3D) Frame Packing
		33.75	30	Top & Bottom, Side by Side, Checker Board, Frame Sequential
		67.50	60	
		56.25	50	

- Media content and player need to support HDMI (V. 1.4 with HDMI 3D) Frame Packing to play Frame Packing format stereoscopic.
- Video, which is input as HDMI (V. 1.4 with HDMI 3D) Frame Packing format, is switched into the stereoscopic screen automatically.

2. Press the **3D** button on the remote control.

3. Press the $\wedge, \vee, <, >$ button to selecting the shape as shown in the screen, wear the 3D glasses.

| Top & Bottom | Side by Side | Checker Board | Frame Sequential |
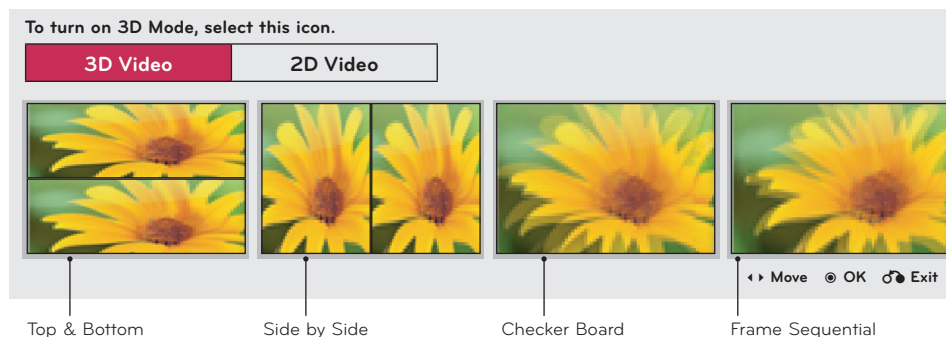
4. Press the **L/R** button to the 3D video with better visibility.

5. Press the **3D** button to exit 3D video mode (or 3D to 2D video mode).
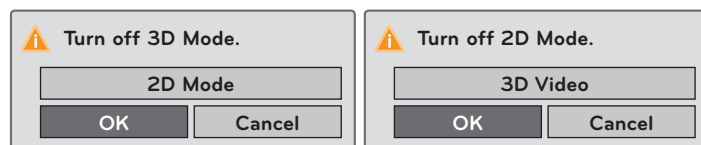
- You can use this function through the **MENU** button.

< Remote Controller Function only operational in 3D mode >

3D Mode	Top & Bottom	Side by Side	Checker Board	Frame Sequential
Resolution	720p, 1080i, 1080p	1080p	720p	1080p
Vertical Frquency	24 Hz, 30 Hz, 50 Hz, 60 Hz	24 Hz, 30 Hz, 50 Hz, 60 Hz	50 Hz, 60 Hz	24 Hz (1080p only)
Power	O	O	O	O
Input	O	O	O	O
3D	O	O	O	O
L/R	O	O	O	O
PATTERN	X	X	X	O
KEY.S	X	X	X	O
BLANK	X	X	X	O
RATIO	X	X	X	O
SLEEP	X	X	X	O
MENU	X	X	X	O
AUTO	X	X	X	X
Q.MENU	X	X	X	O
PICTURE	X	X	X	O
STILL	X	X	X	X
BACK	O	O	O	O
OK	O	O	O	O
VIDEO	O	O	O	O
COMP	O	O	O	O
RGB	O	O	O	O
HDMI1	O	O	O	O
HDMI2	O	O	O	O
HDMI3	O	O	O	O

Function

* The On-Screen Display (OSD) in this manual may be slightly different from your projector.
* This operating guide mostly operation of RGB(PC) mode.

PICTURE Menu Options

Picture Mode

* Use the Picture mode function to set the projector for the best picture appearance.

1. Press the **PICTURE** button on the remote control.

2. Press the ∧, ∨ button to toggle through the preset picture settings..
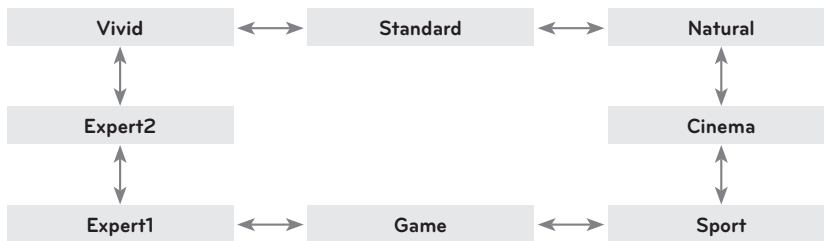
Vivid	⟷	Standard	⟷	Natural

Expert2				Cinema

Expert1	⟷	Game	⟷	Sport

- You can use this function through the **MENU** button or **Q.MENU** button.
- Press the **BACK** button to exit the menu screen.
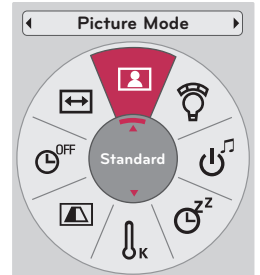
Color Temperature Function

1. Press the **Q.MENU** button on the remote control.

2. Press the <, > buttons to move to **Color Temperature**.

3. Press the ∧, ∨ button to toggle through the preset picture settings.

Medium	⟷	Cool

Warm	⟷	Natural
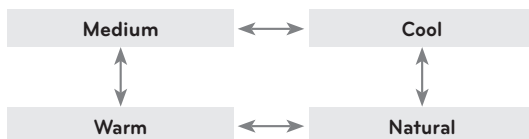
- This function enables **Vivid/Standard/Natural/Cinema/Sport/Game**.
- You can use this function through the **MENU** button.
- Press the **BACK** button to exit the menu screen.

Adjusting Picture Mode

1. Press the **MENU** button. Then, move to **PICTURE** with the ∧, ∨, <, > buttons and press the ◉**OK** button.

2. Press the ∧, ∨ buttons to move to a desired function and press the ◉**OK** button.

3. Press the <, > buttons to make a desired adjustment and then press the ◉**OK** button.

PICTURE		✛Move ◉OK
Picture Mode	: Standard	
	• Contrast	50 ◉
	• Brightness	50
	• Sharpness	5
	• Color	70
	• Tint	0 R�G
	• Advanced Control	
	• Picture Reset	
TruMotion Demo		
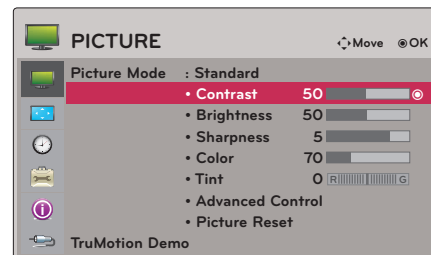
- You can set image values differently for each input and **Picture Mode**.
- Saving after making adjustments will display **(User)** in adjusted **Picture Mode**. (except **Expert 1/2**)
- Execute **Picture Reset** for **Picture Mode** to restore back to default factory settings.
- Press the **BACK** button to exit the menu screen.

Advanced Control Function

1. Press the **MENU** button. Then, move to **PICTURE** with the ∧, ∨, <, > buttons and press the ◉**OK** button.

2. Press the ∧, ∨ buttons to move to **Advanced Control** and press the ◉**OK** button.

3. Move to a desired item with the ∧, ∨ buttons.

4. Press the <, > buttons to make a desired adjustment and then press the ◉**OK** button.

< When **Picture Mode** is **Vivid/Standard/Natural/ Cinema/Sport/Game** >

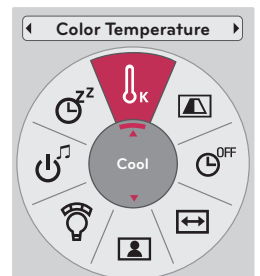| PICTURE		
Picture Mode	Color Temperature	◄ Medium ►
	Noise Reduction	Medium
	Gamma	Medium
	Black Level	High
	Real Cinema	Off
	TruMotion	Low
TruMotion Dem	Close	
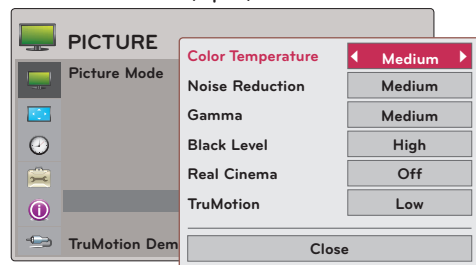
- You can set image values differently for each input and **Picture Mode**.
- Execute **Picture Reset** for **Picture Mode** to restore back to default factory settings.
- Press the **BACK** button to exit the menu screen.

< When **Picture Mode** is **Expert 1/2** >

PICTURE		
Picture Mode	Noise Reduction	◄ High ►
	Gamma	High
	Black Level	High
	Real Cinema	On
	TruMotion	Low
	White Balance	Warm
	• Method	2 Points
	• Pattern	Outer
	• Red Contrast	0
	▼	
	Close	

* The categories that can be set vary according to input signal and video setting.

Color Temperature	- This function enables **Vivid/Standard/Natural/Cinema/Sport/Game**. • Set to warm to enhance hotter colors such as red, or set to cool to make the video more blue.
Noise Reduction	• Reduces screen noise without compromising video quality.
Gamma	**Low** : Make dark and middle gray level area of the picture brighter. **Medium**: Express original picture levels. **High**: Make dark and middle gray level area of the picture darker. • You can adjust brightness of dark area and middle gray level area of the picture.
Black Level	**Low**: The reflection of the screen gets darker. **High**: The reflection of the screen gets brighter. • Set black level of the screen to proper level. • This function disables **RGB** input.
Real Cinema	• Makes video clips recorded in film look more natural by eliminating judder effect. • DVD and Blu-ray movies are filmed at 24 frames per second.
TruMotion	• Advance video technology that provides clearer, smoother images, even during fast action scenes creating a more stable structure for a crisper picture. **Off**: Turn off TruMotion operation. **Low**: Provides smooth picture movement. Use this setting for standard use. **High**: Provides smoother picture movement. • TruMotion works with all inputs except PC mode. • If you enable **TruMotion**, noise may appear on the screen. If this occurs, set to **Off**. • If you select **Picture mode** - **Game** set **TruMotion** to **Off**. • If you adjust **Keystone** set **TruMotion** to **Off**. Execute **Reset** for **Keystone** to be able to adjust **TruMotion**.

White Balance	- This function enables **Expert 1/2**.
	• This is the function adjusts the overall color of the screen.
	  a. **Method** : **2 Points**
	    - **Pattern**: **Inner**, **Outer**
	    - **Red/Green/Blue Contrast, Red/Green/Blue Brightness**: The adjustment range is **-50 - +50**.
	  b. **Method** : **20 Points IRE**
	    - **Pattern**: **Inner**, **Outer**
	    - **IRE** (Institute of Radio Engineers) is the unit to display the size of the video signal and can be set among **5**, **10**, **15** - **95**, **100**. You can adjust **Red**, **Green** or **Blue** according to each setting.
	    - **Red/Green/Blue**: The adjustment range is **-50 - +50**.

Color Management System	- This function enables **Expert 1/2**. • As the tool used by the experts to make adjustments by using the test patterns, this does not affect other colors but can be used to selectively adjust the 6 color areas (Red/Green/Blue/Cyan/Magenta/Yellow). Color difference may not be distinctive even when you make the adjustments for the general video. Adjusts Red/Green/Blue/Yellow/Cyan, Magenta. - **Red/Green/Blue/Yellow/Cyan, Magenta Color**: The adjustment range is **-30 - +30**. - **Red/Green/Blue/Yellow/Cyan, Magenta Tint**: The adjustment range is **-30 - +30**. - This function disables **RGB** input.

Picture Reset Function

* Settings of the selected **PICTURE** function for each input and **Picture Mode** return to the default factory settings.

1. Press the **MENU** button. Then, move to **PICTURE** with the
    ∧, ∨, <, > buttons and press the ◉**OK** button.

2. Press the ∧, ∨ buttons to move to **Picture Reset** and press
    the ◉**OK** button.

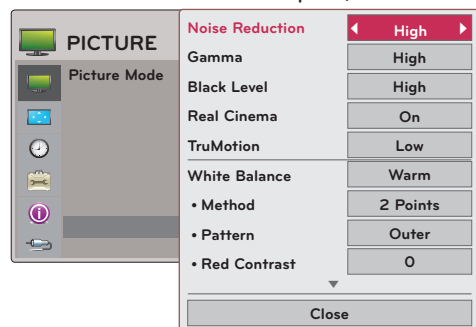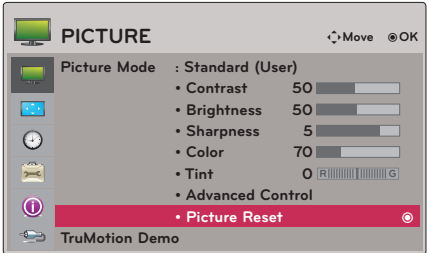3. Press the <, > buttons to move to **Yes** and press the ◉**OK**
    button.

    •   Press the **BACK** button to exit the menu screen.

```
┌──────────────────────────────────────────┐
│ ▭  PICTURE              ⟐Move  ◉OK         │
│ ▭  Picture Mode    : Standard (User)       │
│                      • Contrast     50 ▮▮  │
│ ▦                    • Brightness   50 ▮▮  │
│ ⊙                    • Sharpness     5 ▮   │
│                      • Color        70 ▮▮▮ │
│ ▤                    • Tint          0 R||||||||||||G │
│ ⓘ                    • Advanced Control    │
│                      • Picture Reset      ◉│
│ ⤏  TruMotion Demo                          │
└──────────────────────────────────────────┘
```

TruMotion Demo Function

* Use this feature to see the difference TruMotion makes.

1. Press the **MENU** button. Then, move to **PICTURE** with the
    ∧, ∨, <, > buttons and press the ◉**OK** button.

2. Press the ∧, ∨ buttons to move to **TruMotion Demo** and
    press the ◉**OK** button.

    •   This function disables **RGB** input.
    •   To exit **TruMotion Demo**, press any button.
    •   Press the **BACK** button to exit the menu screen.

```
┌──────────────────────────────────────────┐
│ ▭  PICTURE              ⟐Move  ◉OK         │
│ ▭  Picture Mode    : Standard (User)       │
│                      • Contrast     50 ▮▮  │
│ ▦                    • Brightness   50 ▮▮  │
│ ⊙                    • Sharpness     5 ▮   │
│                      • Color        70 ▮▮▮ │
│ ▤                    • Tint          0 R||||||||||||G │
│ ⓘ                    • Advanced Control    │
│ ⤏  TruMotion Demo                         ◉│
└──────────────────────────────────────────┘
```
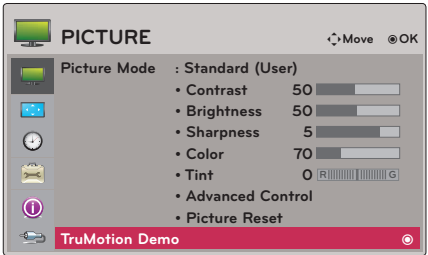
SCREEN Menu Options

Using the Still Function

1. Press the **STILL** button on the remote control.
    * You can freeze the moving image.

    < Moving Image >   < Still Image >
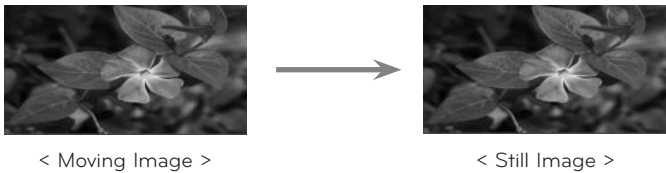
2. To exit still mode, Press the **STILL** button once more.
    * The STILL function will release automatically after approximately 10 minutes.

To Change PJT Mode

* This function turns the projected image upside down or flips horizontal.

1. Press the **Q.MENU** button on the remote control.

2. Press the <, > buttons to move to **PJT Mode**.

3. Press the ∧, ∨ button to select a desired item.

   • Select **Rear** when projecting from the back of the transparent screen purchased separately.
   • Select **Ceiling** when installing the product on the ceiling.
   • You can use this function through the **MENU** button.
   • Press the **BACK** button to exit the menu screen.
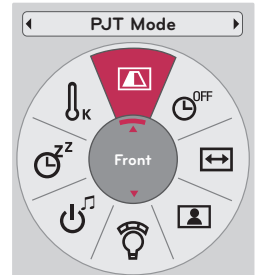
Using Aspect Ratio Function

Press the **RATIO** button to select a desired screen size.

16:9	⟷	Just Scan	⟷	Set By Program
↕				↕
Cinema Zoom1	⟷	Zoom	⟷	4:3

   • Some options may not be available depending on input signals.
   • You can use this function through the **MENU** button or **Q.MENU** button.
   • Press the **BACK** button to exit the menu screen.
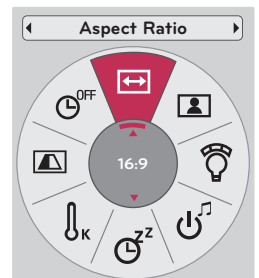
Test Pattern Function

* Execute this function when installing the projector to adjust the screen size and focus.

Press the **PATTERN** button on the remote control.

   • You can use this function through the **MENU** button.
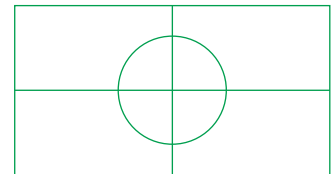
Using Keystone Function

* Use this function when the screen is not at a right angle to the projector and the image is a trapezoid shape.
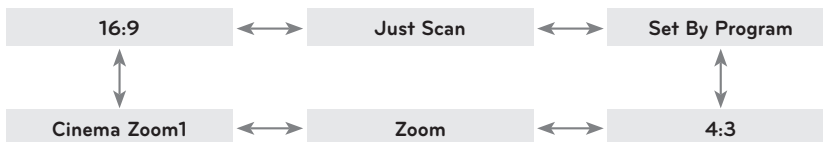* Only use the **Keystone** function when you can't get the best angle of projection.

1. Press the **KEY.S** button of remote control.

2. Move to a desired item with the ∧, ∨ buttons and then press the > button.

3. Press the ∧, ∨, <, > button to adjust the screen condition as you want and then press the ◉**OK** button.

   • **Keystone** can be adjusted from **-100** to **0** or **0** to **100** to depend on the location.
   • Execute **Reset** to restore back to default factory settings.
   • You can use this function through the **MENU** button.
   • Press the **BACK** button to exit the menu screen.
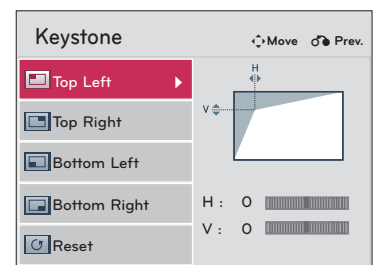
Auto Configure Function

* This function assures you of getting the best video quality by automatically adjusting the horizontal size and synchronization of the image.
* Auto Tracking function works in RGB PC input only.

Press the **AUTO** button of the remote control.

- • If you execute screen adjustment for a video from PC graphic signal, optimal state may not be found. Execute the **Auto Config.** function for a still image.
- • You can use this function through the **MENU** button.

⚠ Auto config.

RGB Config. Function

1. Press the **MENU** button. Then, move to **SCREEN** with the ∧, ∨, <, > buttons and press the ◉**OK** button.

2. Press the ∧, ∨ buttons to move to **RGB Config.** and press the ◉**OK** button.

3. Move to a desired item with the ∧, ∨ buttons and then press the > button.

4. Press the ∧, ∨, <, > button to adjust the screen condition as you want and then press the ◉**OK** button.

RGB Config.	⟨⟩Move ↺ Prev.
⊕ Resolution ▶	✓1024 x 768
⬚ Auto Config.	1280 x 768
⬚ Position	1360 x 768
⬚ Size	
⬚ Phase	
↺ Reset	

- • **Resolution** can be chosen between 768 resolution (1024x768/1280x768/1360x768, 60Hz) and 1050 resolution (1400x1050/1680x1050, 60Hz).
- • Press the **BACK** button to exit the menu screen.
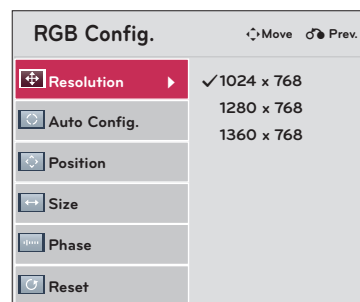
TIME Menu Options

Sleep Time Function

* The sleep timer turns the projector off at the preset time.

1. Press the **SLEEP** button on the remote control.
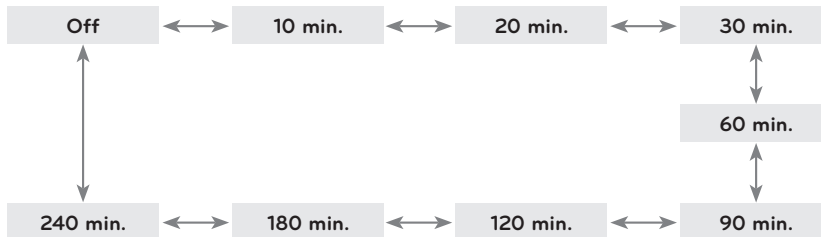
2. Press the ∧, ∨ buttons to select a desired preset time.

Off	⟷	10 min.	⟷	20 min.	⟷	30 min.

						60 min.

240 min.	⟷	180 min.	⟷	120 min.	⟷	90 min.

- You can use this function through the **MENU** button or **Q.MENU** button.
- Press the **BACK** button to exit the menu screen.

Auto Off Function

* This function turns the projector off automatically after the preset time is passed when there is no signal.

1. Press the **Q.MENU** button on the remote control.

2. Press the <, > buttons to move to **Auto Off**.

3. Press the ∧, ∨ buttons to select a desired preset time.
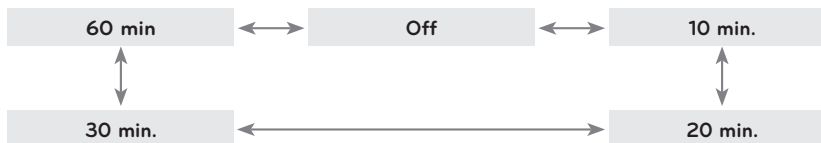
60 min	⟷	Off	⟷	10 min.

30 min.	⟷			20 min.

- You can use this function through the **MENU** button.
- Press the **BACK** button to exit the menu screen.
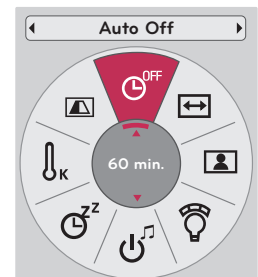
OPTION Menu Options

Selecting Language

1. Press the **MENU** button. Then, move to **OPTION** with the ∧, ∨, <, > buttons and press the ◉**OK** button.

2. Press the ∧, ∨ buttons to move to **Menu Language** and press the ◉**OK** button.

3. Move to a desired item with the ∧, ∨, <, > buttons and then press the ◉**OK** button.

   • On-Screen-Display (OSD) is displayed in the selected language.
   • Press the **BACK** button to exit the menu screen.

```
┌─────────────────────────────────────────┐
│ ⌨  OPTION            ↕Move  ◉OK           │
├─────────────────────────────────────────┤
│ 🖥  Menu Language    : English        ◉  │
│    Blank Image       : Blue              │
│ 🔳 Camera Calibration                    │
│ 🕐 Lamp Mode         : Normal            │
│    High Altitude     : Off               │
│ 📁 Network Setting                       │
│ ⓘ  3D Mode                               │
│    Input Label                           │
│ 🔌 Power Sound       : On                │
└─────────────────────────────────────────┘
```
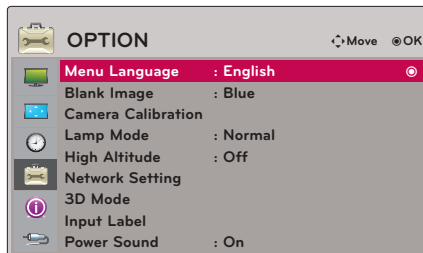
Using Blank Function

* This function may be effective if you need to get the attention of the audience during presentations, meetings or briefings.

1. Press the **BLANK** button on the remote control.
   • The screen turns off to a background color.
   • You can choose the background color. (Refer to **'Selecting Blank image'**)

2. Press any button to cancel the blank function.
   • To temporarily turn off the lamp, press **BLANK** on the remote control. Do not block the projection lens with any objects when the projector is under operation as this could cause the objects to become heated and deformed or even cause a fire.
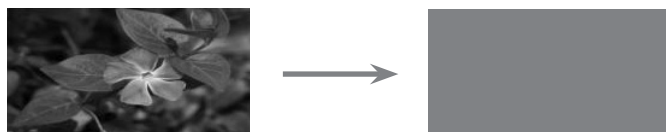
Selecting Blank image

1. Press the **MENU** button. Then, move to **OPTION** with the ∧, ∨, <, > buttons and press the ◉**OK** button.

2. Press the ∧, ∨ buttons to move to **Blank Image** and press the ◉**OK** button.

3. Move to a desired item with the ∧, ∨ buttons and then press the ◉**OK** button.

   • Background image will be altered to the selected Blank function image.
   • Press the **BACK** button to exit the menu screen.

```
┌─────────────────────────────────────────┐
│ ⌨  OPTION            ↕Move  ◉OK           │
├─────────────────────────────────────────┤
│ 🖥  Menu Language    : English           │
│    Blank Image       : Blue          ◉  │
│ 🔳 Camera Calibration                    │
│ 🕐 Lamp Mode         : Normal            │
│    High Altitude     : Off               │
│ 📁 Network Setting                       │
│ ⓘ  3D Mode                               │
│    Input Label                           │
│ 🔌 Power Sound       : On                │
└─────────────────────────────────────────┘
```
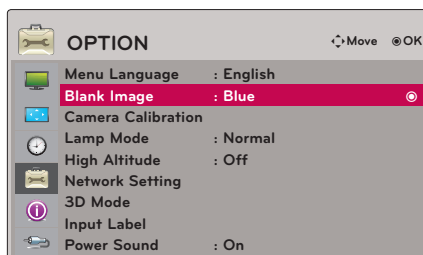
To Calibrate the Camera

* 3D video is video from two separate cameras interwoven together. If the luminance of each frame is not the same, you may notice some flickering. This setting will help equalize the luminance of each frame.

1. Press the **MENU** button. Then, move to **OPTION** with the ∧, ∨, <, > buttons and press the ⦿**OK** button.

2. Press the ∧, ∨ buttons to move to **Camera Calibration** and press the ⦿**OK** button.

3. Press the <, > buttons to move to **On**.

4. Press the ∧, ∨ buttons to move to **Calibration Start** and press the ⦿**OK** button.

	OPTION	⟷Move ⦿OK
	Menu Language	: English
	Blank Image	
	Camera Calibration	
	Lamp Mode	
	High Altitude	
	Network Setting	
	3D Mode	**Camera** ◀ **On** ▶
	Input Label	**Calibration Start**
	Power Sound	**Close**

- The value input on Camera Calibration applies only to 3D video. It doesn't apply to 2D video.
- When the surrounding lighting is too bright the illumination adjustment may not work properly.
- It operates 5 minutes after the power is turned on.
- Press the **BACK** button to exit the menu screen.

To Adjust the Brightness of the Lamp

1. Press the **Q.MENU** button on the remote control.

2. Press the <, > buttons to move to **Lamp Mode**.

3. Move to a desired item with the <, > buttons.

- This function is not available in 3D mode or when the lamp is over 35°C.
- You can use this function through the **MENU** button.
- Press the **BACK** button to exit the menu screen.

◀ **Lamp Mode** ▶

Economic

High Altitude Mode

* High Altitude Mode is used when the environment is higher than 4,000 feet.
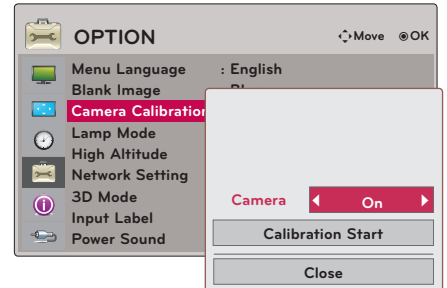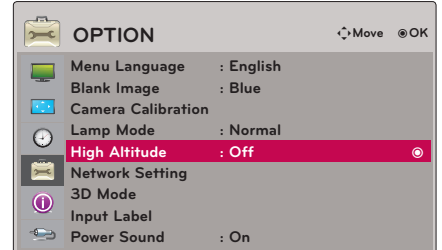
1. Press the **MENU** button. Then, move to **OPTION** with the ∧, ∨, <, > buttons and press the ◉**OK** button.

2. Press the ∧, ∨ buttons to move to **High Altitude** and press the ◉**OK** button.

3. Press the <, > buttons to move to **On** and press the ◉**OK** button.
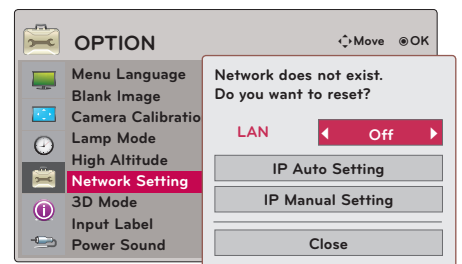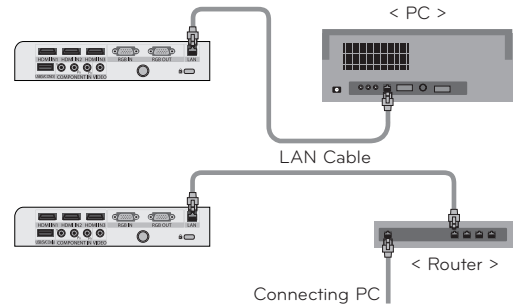
   • Press the **BACK** button to exit the menu screen.

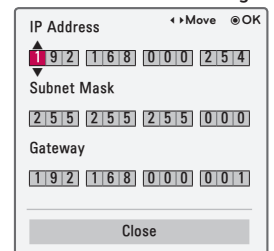| OPTION		✛Move ◉OK
Menu Language	: English	
Blank Image	: Blue	
Camera Calibration		
Lamp Mode	: Normal	
High Altitude	: Off	◉
Network Setting		
3D Mode		
Input Label		
Power Sound	: On	

Network Setup

< NOTICE >

▪ Use a standard LAN cable with this Projector. Cat5 or better with a RJ45 connector.

▪ Many network connection problems during set up can often be fixed by re-setting the router or modem. After connecting the player to the home network, quickly power off and/or disconnect the power cable of the home network router or cable modem. Then power on and/or connect the power cable again.

▪ A 10 Base-T or 100 Base-TX LAN port is required for connection to this Projector. If your internet service does not allow for such a connection, you will not be able to connect the Projector.

▪ To connect to the wireless router, a router that supports wireless connection is necessary, and the wireless connection function of the corresponding router must be activated. Please enquire the manufacturer of the corresponding router about whether the router is possible for wireless connection.

▪ To connect to a wireless router, verify the SSID and security setting of the wireless router. Please refer to the user guide of the corresponding router for SSID and security setting of the wireless router.

▪ Projector may have malfunction because of improper setting of the network device. (wired/wireless router, hub, etc.) After properly installing with reference to the manual of the corresponding device, set the network.

▪ When Ad-hoc is used, it may not be able to connect according to the device (for example : notebook computer) that is connected.

▪ The connection method may vary according to the manufacturer of the wireless router.

< How to connect >

Connect the **LAN** of the projector and the LAN port
of the PC or network with a LAN cable (Cross cable).

< PC >

LAN Cable

< Router >

Connecting PC

OPTION	⊹Move ⊚OK
Menu Language	**Network does not exist.**
Blank Image	**Do you want to reset?**
Camera Calibratio	
Lamp Mode	LAN ◄ **Off** ►
High Altitude	
Network Setting	**IP Auto Setting**
3D Mode	**IP Manual Setting**
Input Label	
Power Sound	**Close**

< When select **IP Manual Setting** >

IP Address   ◄ ►Move ⊚OK

| 1 9 2 | 1 6 8 | 0 0 0 | 2 5 4 |

Subnet Mask

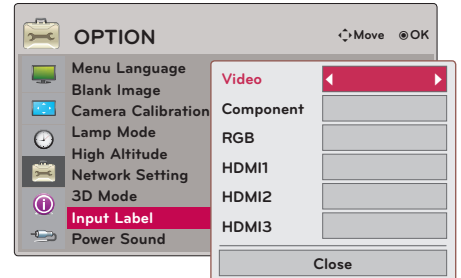| 2 5 5 | 2 5 5 | 2 5 5 | 0 0 0 |

Gateway

| 1 9 2 | 1 6 8 | 0 0 0 | 0 0 1 |

Close

Setting Input Label

* This indicates which device is connected to which input port.

1. Press the **MENU** button. Then, move to **OPTION** with the ∧, ∨, <, > buttons and press the ◉**OK** button.

2. Press the ∧, ∨ buttons to move to **Input Label** and press the ◉**OK** button.

3. Press the ∧, ∨ buttons to move a desired input.

4. Press the <, > buttons to selete a desired input label.

5. Press the ∧, ∨ buttons to move to **Close** and press the ◉**OK** button.

   • Press the **BACK** button to exit the menu screen.

```
┌──────────────────────────────────────────┐
│ 🗀  OPTION            ✛Move  ◉OK           │
├──────────────────────────────────────────┤
│ 🖵  Menu Language   ┌──────────┬────────┐ │
│     Blank Image      │ Video    │◀      ▶│ │
│ 🎬  Camera Calibration│ Component│       │ │
│ 🕓  Lamp Mode        │ RGB      │       │ │
│     High Altitude    │ HDMI1    │       │ │
│ 🗀  Network Setting  │ HDMI2    │       │ │
│ ⓘ  3D Mode          │ HDMI3    │       │ │
│     Input Label      └──────────┴────────┘ │
│ 🖴  Power Sound        │     Close      │   │
└──────────────────────────────────────────┘
```
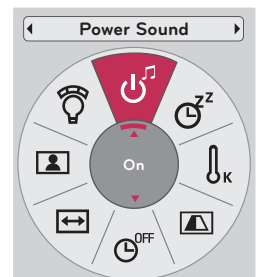
Setting Power Sound

* The opening sound may be turned on or off.

1. Press the **Q.MENU** button on the remote control.

2. Press the <, > buttons to move to **Power Sound**.

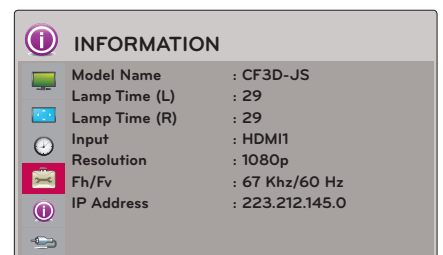3. Move to a desired item with the ∧, ∨ buttons.

   • You can use this function through the **MENU** button.
   • Press the **BACK** button to exit the menu screen.

INFORMATION Menu Options

To See The Projector Information

1. Press the **MENU** button. Then, move to **INFORMATION** with the ∧, ∨, <, > buttons and press the ◉**OK** button.

2. You can see the current information of the projector.

   • Press the **BACK** button to exit the menu screen.

```
┌──────────────────────────────────────────┐
│ ⓘ  INFORMATION                            │
├──────────────────────────────────────────┤
│ 🖵  Model Name      : CF3D-JS             │
│     Lamp Time (L)   : 29                  │
│ 🎬  Lamp Time (R)   : 29                  │
│ 🕓  Input           : HDMI1               │
│     Resolution      : 1080p              │
│ 🗀  Fh/Fv           : 67 Khz/60 Hz        │
│ ⓘ  IP Address      : 223.212.145.0       │
│ 🖴                                         │
└──────────────────────────────────────────┘
```

Information

Supported Monitor Display

* The following table lists the display formats supported by the projector.

Format	Vertical Freq.(Hz)	Horizontal Freq.(kHz)
720X400	70.080	31.469
640X480	59.940	31.469
800X600	60.310	37.879
1024X768	60.000	48.363
1152X864	60.053	54.348
1280X768	59.870	47.776
1360X768	60.015	47.712
1280X960	60.000	60.000
1280X1024	60.020	63.981
1400X1050	59.979	65.317
1680X1050	60.000	65.300
1920X1080	60.000	67.500

* If the projector does not support the input signal, "**Invalid Format**" message appears on the screen.
* The projector supports DDC1/2B type as Plug & Play function. (Auto recognition of PC monitor)
* PC synchronization signal types supported :Separate type synchronization.
* To get the the best picture quality, adjust the PC graphics card to 1920x1080.

< DVD/DTV Input >

Signal		Component-*1	HDMI-*2
NTSC (60 Hz)	480i	O	X
	480p	O	O
	720p	O	O
	1080i	O	O
	1080p	O	O
PAL (50 Hz)	576i	O	X
	576p	O	O
	720p	O	O
	1080i	O	O
	1080p	O	O
24 / 30 Hz	1080p	O	O

* Cable type
1- Component Cable
2- HDMI Cable

Maintenance

* You should keep the lens, case and air vent clean because any dirt or stains may appear on the screen. If any parts need to be replaced, contact your dealer. When cleaning any part of the projector, always turn the power off and unplug the projector first.

Cleaning the lens

If there is any dust or stain on the surface of the lens, you must clean the lens. Use an air spray or cleaning cloth for product exterior, provided with the product, to lightly clean the product. Please use a recommended air spray or lens cleaning product. To clean the lens, spray a small amount of cleaning agent on a swab or a soft cloth and the clean the lens. Please be aware that liquid may flow pass into the lens if the product is sprayed on lens directly.

Cleaning the Projector Case

To clean the projector case, first unplug the power cable. To remove dirt or dust, wipe the casing the provided polishing cloth. Do not use alcohol, benzene, thinners or other chemical detergents as these can cause the casing to be warped or discolored.

Cleaning the Filter

It is recommend to filter cleaning to maintain the performance of the proejector.
When prompted to clean the filter, take the following steps to clean it.

< Cleaning the top filter >

1. Turn off the projector and unplug the power cable. Place it on a table or flat surface.

2. Open the filter cover by pushing the filter cover lock to the direction of the arrow as of the picture.

3. After separating the filter cover, remove the screw.

Filter Cover Lock

Filter Cover
Screw
Filter
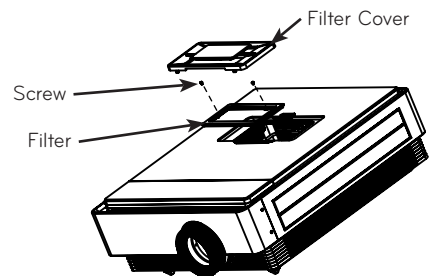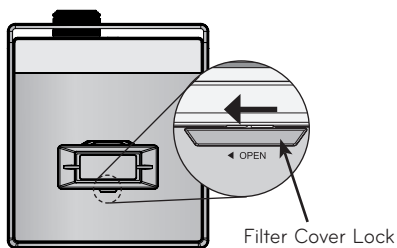
4. Take out the filter and dust off lightly. (When the filter is damaged, use a new filer.)
5. After installing the filter and filter cover, push the filter cover lock to the reverse direction of the arrow until a click sound.

< Cleaning the bottom filter >

1. Turn off the projector and unplug the power cable. Turn it upside down and place it on a table or flat sur-face.

2. Take out the filter by pulling the bottom filter to the direction of the arrow as of the picture.

3. Dust off the filter lightly. (When the filter is damaged, use a new filer.)

4. Install the filter in the reverse order.

Filter
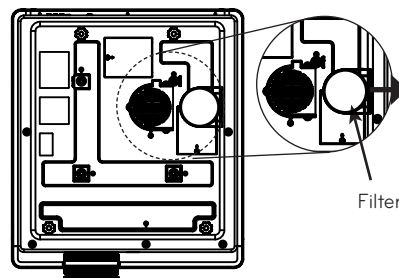
Replacing the Lamp

Lamp Replacement

The lifetime of the lamp depends on how much the projector is used. You can see the used lamp time in the **Lamp Time** of **INFORMATION** section (page.32). You must replace the lamp when:

Lamp indicators

< Top panel of the Projector >

- The projected image gets darker or starts to deteriorate.
- The lamp indicator is magenta.
- The message "Replace the lamp" appears on the screen when turning the projector on.
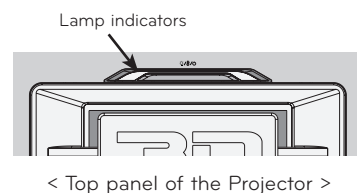
Be careful when replacing lamp

- Press the **POWER** button on the control panel or remote control to turn off power.
- If the operation indicator LED is cyan and blinking, do not disconnect the main supply until the operation indicator LED is lit up constantly (blue).
- Allow the lamp to cool for 1 hour before replacing it.
- Replace only with the same type lamp from an LG Electronics Service Center. Using another manufacturers lamp may cause damage to the projector and lamp.
- Pull out the lamp only when replacing the lamp.
- Keep the lamp unit out of reach of children. Keep the Lamp away from heat sources such as radiators, stoves etc.
- To reduce the risk of fire do not expose the lamp to liquids or foreign materials.
- Do not place the lamp near any heat source.
- Make sure the new lamp is securely tightened with screws. If not, the image may be dark or there could be an increased risk of fire.
- Never touch the glass on the lamp. Image quality may be compromised or lamp life maybe reduced.

To obtain a replacement Lamp unit

Lamp model number is on page 38. Check the lamp model and then purchase it from an LG Electronics Service Center. Using another manufacturers lamp may cause damage to the projector.

Lamp unit disposal

Dispose of the used lamp by returning it to the LG Electronics Service Center.

Regarding the projector lamp control

⚠ WARNING

- Don't turn off the projector for at least in 5 minutes after activating it.
  - The frequent On/Off changes may cause the lamp to deteriorate.
- Don't pull out the power cord while the projector or the cooling fan are running.
  - It may shorten the life of the lamp.
- The life-span of depends on the environment its used in and how well its treated.
- The projector uses a high pressure mercury lamp. Shock or abuse to the projector can cause the lamp to burst.
- Continuing to use a lamp the projector has indicated needs replacement may burst.
- If the lamp burst, perform the following:
  - Remove the power cord immediately.
  - Let some fresh air in immediately (Ventilation).
  - Have a service center check the projector's condition and replace the lamp.
  - Do not disassemble the projector.

Replacing the Lamp

1. Turn off the projector and unplug the power cable. Carefully place on a cushioned surface. (Allow the lamp to cool for 1 hour before removing the used lamp from the projector.)

2. Unscrew the screw from the lamp cover using a screwdriver.
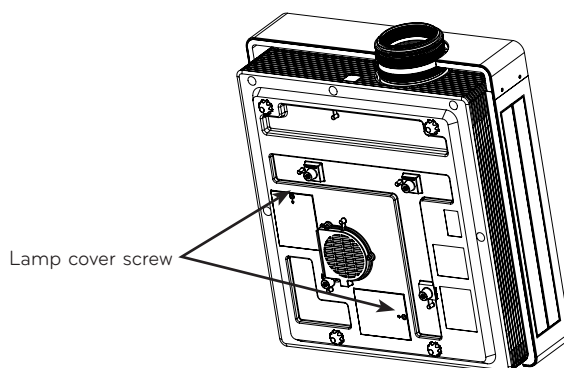
Lamp cover screw

3. After lifting the lamp cover off, remove the two retaining screws on the lamp case with a screwdriver. Lift the lamp up from the projector.

Screws

Lamp bottom

Lamp cover

Lamp Knob
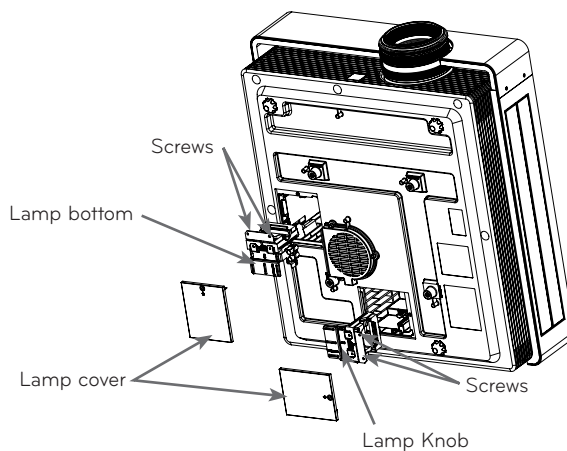
Screws

4. Pull out the handle slowly and remove the lamp case.
5. Insert the new lamp gently into the correct position. Push the lamp bottom to check if it is correctly installed.
6. Tighten the screws you removed in step 3. (Make sure they are fixed firmly.)
7. Close the lamp cover and install the screws from step 2 to install the cover. (If the lamp cover is not installed correctly the unit will not power on.)

─ Note! ─
Using another manufacturers lamp may cause damage to the projector or lamp.
Make sure the lamp cover is securely fastened. If the lamp cover is not installed correctly the unit will not power on.
If this fault persists contact an LG Authorized Service Center.

Specifications

MODEL	CF3D (CF3D-JS)
Resolution	1920 (Horizontal) x 1080 (Vertical) pixel
Horizontal / Vertical Ratio	16:9 (horizontal:vertical)
Panel size (mm)	15.4
Projection distance (Screen size)	Wide: 0.88 m - 9.08 m (76.2 cm - 762.0 cm) Tele: 1.14 m - 11.8 m (76.2 cm - 762.0 cm)
Projection Offset	100 %
Remote control distance	12 m
Video compatibility	NTSC/PAL/SECAM/NTSC4.43/PAL-M/PAL-N/PAL-60
Power	AC 110 V - 240 V~ 50/60 Hz, 5.5 A
Height (mm)	190
Width (mm)	501
Length (mm)	560
Weight (kg)	21.1

Operating Condition

Temperature

In operation : 0°C - 35°C
In storage and transit : -20°C - 60°C

Humidity

In operation : 0 % - 80% relative humidity
Not in operation : 0 % - 85% relative humidity

Elevation

In operation : 0 m - 2,500 m

Projector Lamp

Lamp model

AJ-LCF3

Lamp power consumption

220 W (2 ea)

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uClibc

MPL LIBRARIES:
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LG

Life's Good

The model and serial number of the projector is located on the back or one side of the projector. Record it below should you ever need service.

MODEL _____

SERIAL _____