

Please read this manual carefully before operating your set.

Retain it for future reference.

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

Model number : Serial number :

LG DLP PROJECTOR

DX630 OWNER'S MANUAL



DLP PROJECTOR



Warning - Class A

(a) For a Class A 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 A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



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Disposal of your old appliance



- 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 via designated collection facilities appointed by your government or your local authorities.
- 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.

 \triangle **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 /I\ WARNING Do not place the Projector in direct Do not place flammable materials Do not hang on the installed sunlight or near heat sources such in, on or near the projector projector. as radiators, fires, stove etc. It may cause the projector to fall, This may cause a fire hazard! This may cause a fire hazard! causing injury or death. Do not block the vents of the pro-Do not place the projector close Do not place the projector where jector or restrict air-flow in any way. to sources of steam or oil such it might be exposed to dust. as a humidifier. This would cause the internal tempera-This may cause a fire hazard or ture to increase and could cause a fire This may create a fire hazard or an damage to the unit! hazard or damage to the unit! electric shock hazard! Ensure good ventilation around the Do not use the projector in a Do not place the projector directly projector. The distance between on a carpet, rug or place where damp place such as a bathroom the projector and the wall should ventilation is restricted. where it is likely to get wet. be more than 30cm/12 inches. This may cause a fire or an electric This would cause its internal tempera-An excessive increase in its internal shock hazard! ture to increase and might create a fire temperature may cause a fire hazard or hazard or damage the unit. damage to the unit! NOTES When installing the projector on a Only use the projector on a level Disconnect from the power suptable, be careful not to place it and stable surface. ply and remove all connections near the edge. before moving, or cleaning. It may fall and cause injury and/or The projector could fall causing injury damage to the unit. and damage to the projector. Only use a suitable stand. / WARNING Power The power cord should be inserted Do not place heavy objects on Earth wire should be connected. fully into the power outlet to avoid a the power cord. Ensure that you connect the earth ground fire hazard! wire to prevent possible electric shock (i.e.a This may cause a fire or an electric Projector with a three-prong grounded AC plug must be connected to a three-prong shock hazard! This may cause a fire hazard or damage gronded AC outlet. If grounding methods are not possible, have the unit. 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.

<u>∕i\</u> WARNING					
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!				
^	<u>:</u>				
<u>∕</u> I\ NOT	ES				
Do not use if the power cord or the plug is damaged or any part of the power outlet is loose.	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!	This may cause a fire or an electric shock hazard or damage to the unit!				
Place the projector where people vill not trip or tread on the power ord. 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.					
	Do not plug-in too many items into one power outlet. It may result in overheating of the outlet and create a fire hazard! NOT 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! Do not turn the projector On/Off by plug to the wall outlet. (Allow the unit to cool before remove				

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

CAUTION concerning the Power Cord

It is recommend that most appliances be placed on a dedicated circuit; that is,a single outlet circuit which powers only that appliance and has no additional outlets or branch circuits. Check the specification page of this owner's manual to be certain.

Do not overload wall outlets. 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 an authorized service personnel.

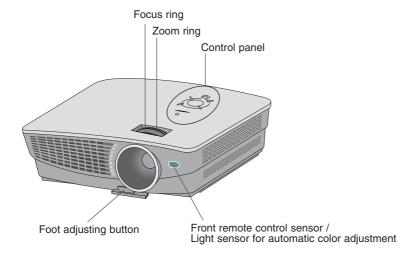
Protect the power cord from physical or mechanical abuse, such as being twisted, kinked, pinched, closed in a door, or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the appliance.

Using						
If the projector is in a room that experiences a gas leak, do not touch the projector.		Don't look at laser beam directly as it can cause eye damage!	Alway open the lens door or remove the lens cap when the projector lamp is on.			
It can cause a fire or a burn by a spark.						
Using		⚠ NOT	ES			
Do not place heavy objects of top of projector. This may cause mechanical failupersonal 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		<u></u> ₩AF	RNING			
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 centre.	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.			
		This may cause a fire or an electric shock hazard or damage to the unit!				
Cleaning		<u> </u>	ES			
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.						
Others		↑ WAF	RNING			
	a proje					
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		<u> </u>	ES			
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.						

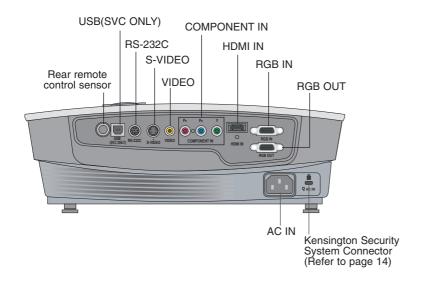
Names of parts

Main Body

* The projector is manufactured using high-precision technology. You may, however, see on the Projector screen tiny black points and/or bright points (red, blue, or green). This can be a normal result of the manufacturing process and does not always indicate a malfunction.



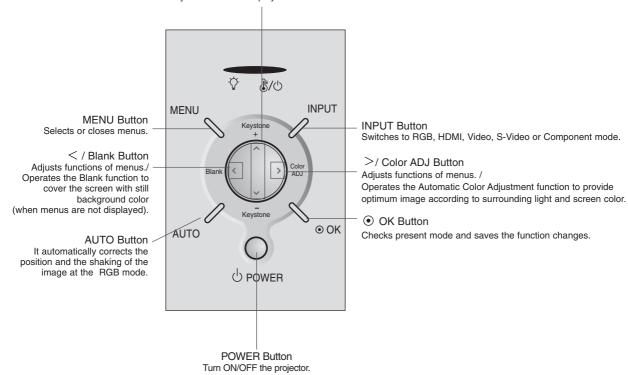
Connecting Part



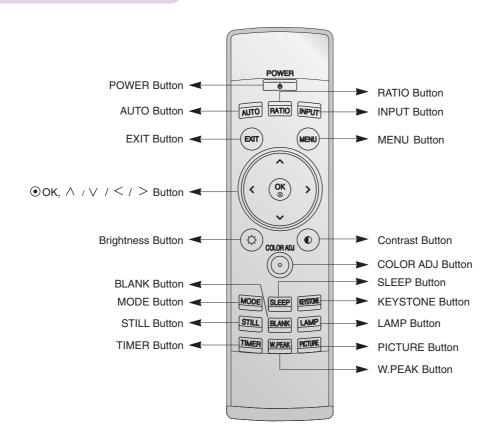
Control Panel

\land / \lor , KEYSTONE+/- Button

Press the \bigwedge/\bigvee button to adjust the Keystone function when the Keystone menu is displayed on the screen.



Remote Control



Installing Batteries

CAUTION

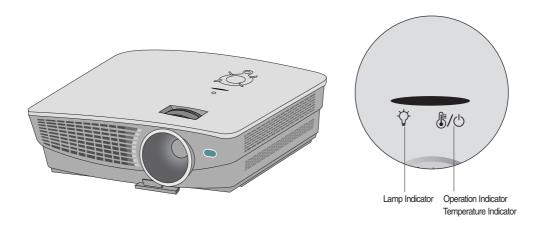
RISK OF EXPLOSION IF BATTERY IS REPLACED WITH AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.



- · 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.



	Red	Standby.
	Green(flashing)	Lamp is starting up.
	Green	Unit is in operation (Lamp is turned on)
		The lamp is cooling (10 seconds).
	Orange(flashing)	The projector has been turned off due to excessive heat
Onevetion Indicator		(1 minute and 30 seconds).
Operation Indicator / Temperature Indicator	Off	Power off.
/ remperature mulcator		Standby-This mode cools the projector naturally for 4
		minutes after it is turned off.
	Orange	This is the warning message of excessive heat when the
		projector is on.
		Turn the projector off and check the ventilator.
	Dod/floobing)	Power has turned off due to problem with the internal
	Red(flashing)	cooling fan. Contact your service center.
	Red	Projector lamp is reaching the end of its life and needs
	neu	to be replaced with a new lamp.
Lamp Indicator		An error has occurred in the projector lamp. Turn the pro-
	Red(flashing)	jector on again after sufficient amount of time. If this indi-
		cator flashes red again, contact your local service center.
	Green (flashing)	The lamp cover is open.

Accessories



Remote Control



2 Batteries



Owner's manual



Power Cord



Computer Cable



Lens cap and Strap

Optional Extras

- * Contact your dealer to purchase these items.
- * The lamp is consumable and needs to be replaced with a new one when it is burned out.

 * Contact your dealer or service center for a replacement lamp.
- * Optional parts can be changed without notice to improve the quality of the product, and new optional parts can be added.



Projection Screen





SCART to RCA jack



S-Video Cable



HDMI Cable



Component Cable





RS-232C Cable / Mini 8 pin Conversion Cable



Video 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.



 Never push projector or spill any kind of liquid into 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.



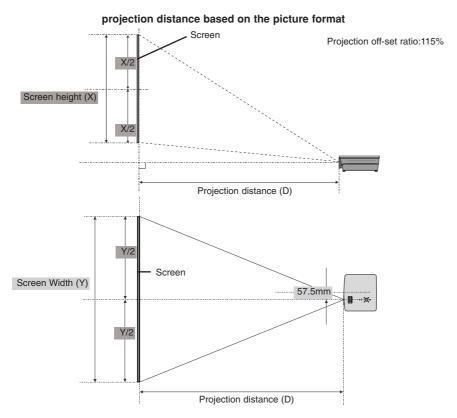
 Leave an adequate distance(30cm/12 inches or more) around the projector.



- Place this projector in adequate temperature and humidity conditions.
- Install this projector only in a location where adequate temperature and humidity is available. (refer p.43)
- 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.
- The 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.

Basic Operation of the Projector

- 1. Place the projector on a sturdy and horizontal surface with the PC or AV source.
- 2. Place the projector with the desired distance from the screen. 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 26.)
- 4. Connect the power cable to the projector and the wall outlet after placing the projector in its desired location.



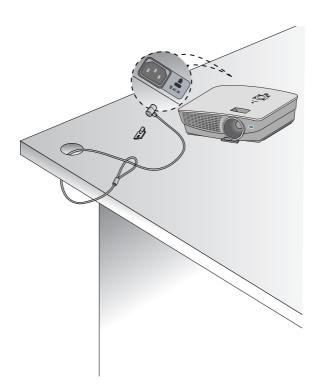
	4 : 3 Scale							
	lma	ge		Projectio	n Distance			
Diagonal Size (inch)	Diagonal Size (mm)	Horizontal Size (mm)	Vertical Size (mm)	Shortest Distance (mm)	Longest Distance(mm)			
40	1016	813	610	1595	1849			
50	1270	1016	762	1999	2317			
60	1524	1219	914	2403	2786			
70	1778	1422	1067	2808	3254			
80	2032	1626	1219	3212	3723			
90	2286	1829	1372	3616	4191			
100	2540	2032	1524	4020	4660			
120	3048	2438	1829	4829	5597			
140	3556	2845	2134	5637	6534			
160	4064	3251	2438	6446	7471			
180	4572	3658	2743	7254	8408			
200	5080	4064	3048	8062	9345			
220	5588	4470	3353	8871	10282			
240	6096	4877	3658	9679	11219			
250	6350	5080	3810	10084	11688			

^{*} The projector Distancd can be adjusted using the Zoom function.

Kensington Security System

- •This projector has a Kensington Security System Connector on the 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.
- Remove the lens cap. If it is left on, it could become deformed due to the heat produced by the projection lamp.
- Press the **POWER** button on the remote control or top cover. (Green operation indicator flashes if lamp is in start-up cycle.)
 - An image will appear after the operation indicator light turns green.
 - Press the INPUT button on the remote control or the INPUT button on the control panel to select the input signal you want.

Notel

* Do not disconnect the power cord while the fan is in operation. It may shorten the life of the fan. It will also take longer to activate the lamp when turning the power back on.

Turning off the Projector

- 1. Press the **POWER** button on the top cover or remote control.
- 2. Press the **POWER** button on the top cover or remote control again to turn off the power.
- 3. If the operation indicator is flashing orange, in other words the fan is working (10 seconds), do not disconnect the projector. When the indicator stays orange, remove the power cord.
 - If the operation indicator LED is orange and blinking, the power button on the top cover or on the remote control will not operate.
 - This projector features the Quick Power On/Off function that allows a user to turn it on and off quickly.

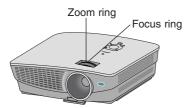


* What is the Quick Power On/Off function?

The projector enters into Stanby mode without waiting until it has cooled. If Stanbby mode continus for a certain amount of time, the projector can operate without cooling when it is turned on.

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.



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

To raise or lower the image on the screen, extend or retract the foot at the bottom of the projector by pushing foot adjusting button as below.



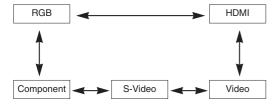
- 1. While pressing the foot adjusting button, raise or lower the projector to place the screen image in the proper position.
- 2. Release the button to lock the foot in its new position.
- Turn the back foots to fine tune the height of the projector.After raising the front foot, do not press down on the projector.

Selecting source mode

1. Press the **INPUT** button.



2. Each press of the < , > button changes the display as below.



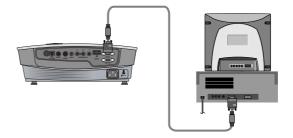
Connection

Connecting to a Desktop PC

- * You can connect the projector to a computer with VGA, SVGA, XGA and SXGA output.
- * Refer to page 37 for the supported monitor displays of the projector.

< How to connect >

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

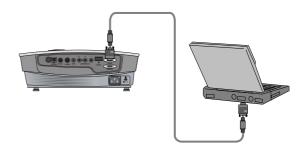


Connecting to a Notebook PC

< How to connect >

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

* If you set your computer to output the signal to both the display of your computer and the external projector, the picture of the external projector may not appear properly. In such cases, set the output mode of your computer to output the signal only to the external projector. For details, refer to the operating instructions supplied with your computer.



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 1 >

 a. Connect the Video input jacks of the projector to the output jacks of the A/V source with a Video cable.

< How to connect 2 >

- b. Connect the S-Video input jack of the projector to the S-Video output jack of an A/V source with an S-Video cable.
 - * S-Video supports better video quality than a standard Video connection.



Connecting to a Player

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

< How to connect >

- a.Connect the DVD component cable to the PR, PB and Y of the COMPONENT IN of the projector.
 - * When connecting the component cable, match the jack colors with the component cable.(Y=green, PB=blue, PR=red)
- b. HDMI mode can be set only when your DVD player has a HDMI port.

Supported Signals								
Signal	Component	RGB/DTV	HDMI/DVI					
480i	Yes	No	No					
480p	Yes	Yes	Yes					
720p	Yes	Yes	Yes					
1080i	Yes	Yes	Yes					
576i	Yes	No	No					
576p	Yes	Yes	Yes					

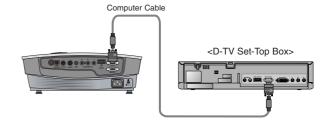


Connecting to a D-TV Set-Top Box

- * 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 projector and D-TV Set-Top Box.

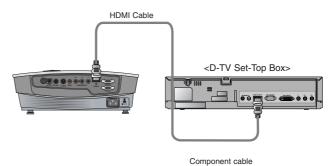
< How to connect an RGB source >

- a. Connect the RCB IN of the projector and the output port of the DTV set-top box with computer cable.
- b. Use a DTV receiver with DTV 480p(576p)/720p/1080i mode.



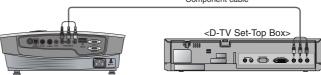
< How to connect a HDMI source >

- a. Connect the HDMI IN of the projector and the HDMI output port of the DTV set-top box with HDMI cable.
- b. Use a DTV receiver with DTV 480p(576p)/720p/1080i mode.



< How to connect a Component source >

- a. Connect the component cable connected to the DTV set-top box to the PR, Pв and Y of the COMPONENT IN of the proiector.
 - * When connecting the component cable, match the jack colors with the component cable.(Y=green, PB=blue, PR=red)



Function

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

Video Menu Options

Adjusting Video

- 1. Press the **MENU** button and then use < , > button to select the \blacksquare menu.
- 2. Press the \land , \lor button to select a video item you want to adjust.
- 3. Press the < , > button to adjust the screen condition as you want.
 - Each adjustment of menu options will only affect the current source input.
 As required, re-adjust menu options for the input sources.
 - To restore the original image condition after changing it, press ⊙ OK button after selecting [Reset] item.
 - Tint is adjustable only with a NTSC signal (60Hz only).
 - You can adjust contrast by pressing the **1** button on the remote control.
 - You can adjust brightness by pressing the 🌣 button on the remote control.
 - Press the **MENU** button twice or the **EXIT** button to exit the menu screen.





Picture mode

- * Use the Picture mode function to set the projector for the best picture appearance.
- * This function does not work in RGB or HDMI mode.
- 1. Press the **MODE** button on the remote control.
- 2. Press the < , > button to toggle through the preset picture settings.
 - Each press of the < , > button changes the screen as shown below.



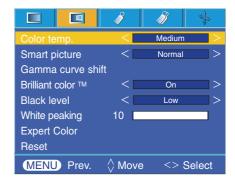
- You can use this function through the MENU button.
- To exit the menu display, press the **EXIT** button.

Color Temperature Control

- To initialize values (reset to default settings), select the **Medium** option.
- 1. Press the **MENU** button and then use < , > button to select the \blacksquare menu.
- 2. Press the \land , \lor button to select **Color temp.** item.
- 3. Press the < , > button to make desired adjustments.
 - Each press of the < , > button changes the screen as shown below.



• Press the **MENU** button twice or the **EXIT** button to exit the menu screen.



Smart picture Function

- 1. Press the **PICTURE** button on the remote control.
- 2. Press the \langle , \rangle button to select the screen condition you want.
 - Each press of the < , > button changes the screen as shown below.



- You can use this function through the **MENU** button.
- To exit the menu display, press the EXIT button.

Gamma curve shift Function

- This function shifts the gamma curves for Red, Green and Blue individually to adjust brightness.
- 1. Press the **MENU** button and then use < , > button to select the \blacksquare menu.
- 2. Press the \land , \lor button to select **Gamma curve shift** item.
- 3. Press the **OK** button.
- 4. When the window below appears, press \land , \lor button to move between the items and the < , > buttons to adjust the screen as you want.
 - Gamma curve shift R, G, B can be adjusted between -20 and 20.
 - Press the MENU button twice or the EXIT button to exit the menu screen.





Brilliant Color ™ Function

- * Brilliant color ™ increases the entire brightness of the screen or decreases it a little to make the rich grayscale color.
- 1. Press the **MENU** button and then use < , > button to select the \blacksquare menu.
- 2. Press the ∧ , ∨ button to select **Brilliant Color ™** item.
- 3. Press the < , > button to select On or Off.
 - Press the **MENU** button twice or the **EXIT** button to exit the menu screen.



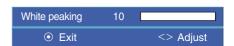
Black level Function

- * When you watch a movie, Black Level allows you to adjust the set to the best picture appearance. Adjusting the contrast and the brightness of the screen using the black level of the screen.
- 1. Press the **MENU** button and then use < , > button to select the \blacksquare menu.
- 2. Press the \wedge , \vee button to select **Black level** item.
- 3. Press the < , > button to select Low or High.
 - This function works in the following mode : HDMI(YCbCr)
 - Press the MENU button twice or the EXIT button to exit the menu screen.



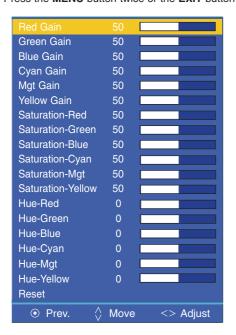
White peaking Function

- 1. Press the W.PEAK button on the remote control.
- 2. Press the < , > button to select the screen condition you want.
 - The default value may change depending on input mode.
 - White peaking can be adjusted from 0 to 10.
 - Adjust to higher setting to achieve brighter picture. Adjust to lower setting for darker picture.
 - You can use this function through the **MENU** button.
 - Press the **MENU** button twice or the **EXIT** button to exit the menu screen.



Expert Control Function

- This function allows a user to adjust the Gain, Saturation and Hue for Red, Green, Blue, Cyan, Magenta and Yellow individually.
- 1. Press the **MENU** button and then use < , > button to select the menu.
- 2. Press the \land , \lor button to select **Expert Color** item.
- 3. Press the **OK** button.
- 4. When the window below appears, press \land , \lor button to move between the items white peaking and the <, > buttons to adjust the screen as you want.
 - R, G, B, C, M and Y Gain can be adjusted between 0 and 100.
 - R, G, B, C, M and Y Saturation can be adjusted between 0 and 100.
 - R, G, B, C, M and Y Hue can be adjusted between -50 and 50.
 - Press the MENU button twice or the EXIT button to exit the menu screen.





Reset (Reset to original factory value)

To return to the factory default settings, select [Reset] with ∧, ∨ buttons and press ⊙ OK button.

Special Menu Options

Selecting Language

- 1. Press the **MENU** button and then use < , > button to select the \emptyset menu.
- 2. Press the \land , \lor button to select **Language** item.
- 3. Press the $\langle \cdot, \cdot \rangle$ button to select the language you want to use.
 - On-Screen-Display (OSD) is displayed in the selected language.
 - Press the MENU button twice or the EXIT button to exit the menu screen.



Using Aspect Ratio Function

Press the RATIO button on the remote control.
 Each press of the button changes the display as below.



Overscan Function

- * overscan adjusts the amount of video that is cropped. Video is cropped by default to remove any artifacts from the edge of the video.
- 1. Press the **MENU** button and then use < , > button to select the $\sqrt[3]{}$ menu.
- 2. Press the \land , \lor button to select **Overscan** item.
- 3. Press the < , > buttons.
 - The Overscan function can be adjusted only in RGB-DTV, HDMI-DTV and Component modes.
 - The Overscan function can be adjusted between Off and 10%.
 - Press the MENU button twice or the EXIT button to exit the menu screen.



Flip horizontal Function

- * This function reverses the projected image horizontally. Use this function when rear projecting an image.
- 1. Press the **MENU** button and then use < , > button to select the $\sqrt[3]{}$ menu.
- 2. Press the \wedge , \vee button to select **Flip horizontal** item.
- 3. Press the **OK** button to see reversed image.
 - Each time you press the ① OK button, the image will be reversed.
 - Press the **MENU** button twice or the **EXIT** button to exit the menu screen.



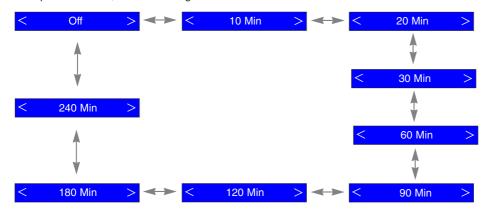
Flip vertical Function

- * This function reverses the projected image vertically.
- * When you hang the projector upside down from the ceiling, you will need to reverse the image vertically and horizontally.
- 1. Press the **MENU** button and then use < , > button to select the $\ensuremath{\mathscr{J}}$ menu.
- 2. Press the \land , \lor button to select **Flip vertical** item.
- 3. Press the **OK** button to see reversed image.
 - Each time you press the **OK** button, the image will be reversed.
 - Press the **MENU** button twice or the **EXIT** button to exit the menu screen.



Sleep time Function

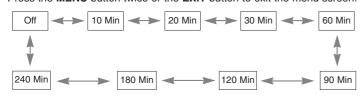
- * The sleep timer turns the projector off at the preset time.
- 1. Press the **SLEEP** button of remote control.
- 2. Press the < , > button to select the desired preset time.
 - Each press of the < , > button changes the screen as shown below.



- You can use this function through the **MENU** button.
- To exit the menu display, press the **EXIT** button.

Auto sleep Function

- * This function turns the projector off automatically after the preset time is passed when there is no signal.
- 1. Press the **MENU** button and then use < , > button to select the $\sqrt[3]{}$ menu.
- 2. Press the \wedge , \vee button to select **Auto sleep** item.
- 3. Press the < , > button to select the desired preset time.
 - Press the **MENU** button twice or the **EXIT** button to exit the menu screen.





Presentation timer Function

- 1. Press the **TIMER** button of remote control.
- 2. Press the \land , \lor button to select **Time alarm** or **Time keeper** item.



- 3. Press the < , > button to select the desired preset time.
- 4. The timer starts to operate if you select specific time.
 - Time alarm function: If you select a specific time, it is displayed in minute units. After 1 minute, the remaining time is displayed at the bottom right of the screen, and then disappears after 5 seconds. When the remaining time is displayed, other OSD windows are closed. When the set time is reached, '0 minute' flickers 10 times at 1 second intervals, and then disappears.
 - Time keeper function: If you select a specific time, it continues to be displayed in minute(') and second(") units. Even though other OSD windows appear, the remaining time is displayed again after the windows are closed. When the set time is reached. 0' 00" flickers 10 times at 1 second intervals, and then disappears.
- 5. If the set time disappears because of the use of other menus, press the Timer button on a remote to display the set time again.
 - The **Time alarm** function and the **Time keeper** function cannot be used at the same time.
 - The **Time alarm** function can be set from 5 to 60 minutes at 5 minute intervals (Off, 5, 10, 15, 20,, 55, 60 minutes).
 - The **Time keeper** function can be set from 1 to 10 minutes at 1 minute intervals, and from 10 to 60 minutes at 5 minute intervals (Off, 1, 2, 3, 4,, 8, 9, 10, 15, 20, 25,, 55, 60 minutes).
 - You can use this function through the **MENU** button.
 - Press the **EXIT** button to exit the menu screen.

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 **KEYSTONE** button of remote control.
- 2. Press the \land , \lor button to adjust the screen condition as you want.
 - Keystone can be adjusted from -20 to 20.
 - You can use the Keystone function on the menu screen by pressing the MENU button, or by pressing the Keystone + and Keystone buttons on the control panel.
 - Press the MENU button twice or the EXIT button to exit the menu screen.



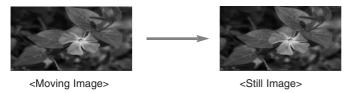
Using Blank Function

- *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 color')
- 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.



Using the Still Function

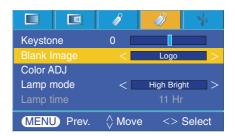
- 1. Press the STILL button on the remote control.
 - * You can freeze the input image.



- 2. To exit STILL, press any button.
 - * The STILL function will release automatically after approximately 10 minutes.

Selecting Blank image color

- 1. Press the **MENU** button and then use < , > button to select the \mathcal{J} menu.
- 2. Press the \wedge , \vee button to select **Blank image** item.
- 3. Press the < , > button to select the color you want to use.
 - Background color will be altered to the selected Blank function color.
 - You can choose blue, black, green or logo for the Blank image color.
 - Press the MENU button twice or the EXIT button to exit the menu screen.



Color ADJ Function

1. Press the **COLOR ADJ** button on the remote control.



- 2. The success message appears as shown above. Then, execute the Automatic Color Adjustment function to see the window below.
- 3. Press the \wedge , \vee button to move between items.
- 4. Press the **OK** button to select the condition you want.



- You can use this function through the **MENU** button.
- Press the **EXIT** button to exit the menu screen.
- * What is Automatic Color Adjustment?

This function adjusts the white balance automatically when it is not properly adjusted because the projector screen is affected by surrounding light or screen color.

- -. Automatic Color Adjustment Modes:
 - a. Brightness mode: Adjust brightness first when using the Automatic Color Adjustment function.
 - b. Color mode: Adjust color first when using the Automatic Color Adjustment function.
 - c. Color ADJ of: Return to the previous screen.
 - d. Color ADJ retry: Execute the Automatic Color Adjustment function again.
- -. Note: This function may not work properly when surrounding light is too bright, or screen color is too dark. When this happens, refer to the warning message on the screen.

Lamp mode Function

- 1. Press the **LAMP** button of remote control.
- 2. Press the < , > button to adjust the screen condition as you want.
 - Each press of the < , > button changes the screen as shown below.



- You can use this function through the **MENU** button.
- To exit the menu display, press the **EXIT** button.

Checking lamp time

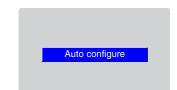
- 1. Press the **MENU** button and then use < , > button to select the \mathcal{J} menu.
- 2. The used lamp time is displayed.
 - •When the projector lamp is reaching the end of its life, the lamp indicator will turn red.
 - •The lamp warning LED illuminates red continuously in the case of excessive lamp time.
 - Press the MENU button twice or the EXIT button to exit the menu screen.



Screen Menu Options

Auto configure

- * 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.
- 1. Press the **AUTO** button of the remote control.
 - Image positioning and synchronization are automatically adjusted.
- If any more manual adjustment is needed according to the various PC mode inputs even after the auto-correction, execute Phase, Clock, Horizontal and Vertical function in menu.



Note!

You can also use this function by using the MENU button. (Only in RGB mode) For best results, perform this function while displaying a still image.

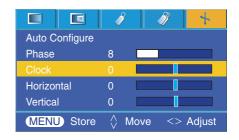
Using Phase Function

- Press the MENU button and then use < , > button to select the menu.
- 2. Press the \land , \lor button to select **Phase** item.
- 3. Press the \langle , \rangle button to make desired adjustments.
 - Phase adjustment range is 0 ~63.
 - The variable range can be different depending on input resolutions.
 - Press the MENU button twice or the EXIT button to exit the menu screen.



Using Clock Function

- Press the MENU button and then use < , > button to select the menu.
- 2. Press the \wedge , \vee button to select **Clock** item.
- 3. Press the < , > button to make desired adjustments.
 - Clock adjustment range is -20 ~ 20.
 - The variable range can be different depending on input resolutions.
 - Press the MENU button twice or the EXIT button to exit the menu screen.



Using Horizontal Function

- Press the MENU button and then use < , > button to select the menu.
- 2. Press the \wedge , \vee button to select **Horizontal** item.
- 3. Press the < , > button to make desired adjustments.
 - Horizontal adjustment range is -25 ~ 25.
 - The variable range can be different depending on input resolutions.
 - Press the MENU button twice or the EXIT button to exit the menu screen.



Using Vertical Function

- Press the MENU button and then use < , > button to select the menu.
- 2. Press the \land , \lor button to select **Vertical** item.
- 3. Press the < , > button to make desired adjustments.
 - **Vertical** adjustment range is -25 ~ 25.
 - The variable range can be different depending on input resolutions.
 - Press the MENU button twice or the EXIT button to exit the menu screen.



External Control Device Setup

* Connect the RS-232C input jack to an external control device (such as a computer) and control the Projector's functions externally.

SET ID

- 1. Press the **MENU** button and then use < , > button to select the ϑ menu.
- 2. Press the \odot **OK** button and then use \land , \lor button to select **Set ID** item.
- 3. Press the < , > button to select your desired number.

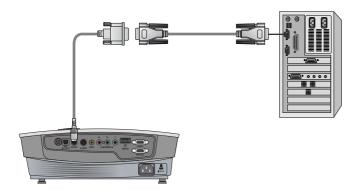
Press the **OK** button to save the selected number.

- The adjustment range of Set ID is 1~99.
- Only the projector with the specified ID number will operate from the remote control.
- To exit the menu display, repeatedly press the **MENU** button.



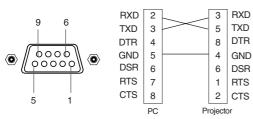
How to connect external control equipment

- Connect the serial port of the PC to the RS-232C jack on the projector back panel.
- An RS-232C cable is not supplied with the projector.



• Use Mini 8 Pin Conversion Cable and RS-232C Cable to control the projector by remote control. (Refer to Fig.1)

<Fig.1, RS-232 Interface Cable>







Communication Parameter Setup

- Baud Rate : 9600 bps(UART)
- Data Length: 8 bit
- Parity : none
- Stop bit : 1 bit
- Flow Control : none
- Communication code : ASCII code



Command Reference List

	Command1	Command2	Data (Hexadecimal)
01. Power	k	а	0 ~ 1
02. Input Select	k	b	*
03. Aspect Ratio	k	С	1 ~ 2
04. Screen Mute	k	d	0 ~ 1
05. Contrast	k	g	0 ~ 64
06. Brightness	k	h	0 ~ 64
07. Color	k	i	0 ~ 64
08. Tint	k	j	0 ~ 64
09. Sharpness	k	k	0 ~ 64
10. OSD Select	k	I	0 ~ 1
11. Remote Control Lock / Key Lock	k	m	0 ~ 1
12. Color Temperature	k	u	0 ~ 2,4
13. Red ADC gain adjustment	j	w	0 ~ 64
14. Green ADC gain adjustment	j	у	0 ~ 64
15. Blue ADC gain adjustment	j	z	0 ~ 64
16. Low Power	j	q	0 ~ 1
17. Auto configuration	j	u	1
18. Input Select	х	b	*
19. Key	m	С	Key code

^{*} Refer to the detailed information for data with [*] mark.

□ Communication Protocol

* Real data mapping 1

Decimal	Hexadecimal								
0	0	Decimal	Hexadecimal	Decimal	Hexadecimal	Decimal	Hexadecimal	Decimal	Hexadecimal
1	1	21	15	41	29	61	3d	81	51
2	2	22	16	42	2a	62	3e	82	52
3	3	23	17	43	2b	63	3f	83	53
4	4	24	18	44	2c	64	40	84	54
5	5	25	19	45	2d	65	41	85	55
6	6	26	1a	46	2e	66	42	86	56
7	7	27	1b	47	2f	67	43	87	57
8	8	28	1c	48	30	68	44	88	58
9	9	29	1d	49	31	69	45	89	59
10	a	30	1e	50	32	70	46	90	5a
- 11	b	31	1f	51	33	71	47	91	5b
12	С	32	20	52	34	72	48	92	5c
13	d	33	21	53	35	73	49	93	5d
14	e	34	22	54	36	74	4a	94	5e
15	f	35	23	55	37	75	4b	95	5f
16	10	36	24	56	38	76	4c	96	60
17	11	37	25	57	39	77	4d	97	61
18	12	38	26	58	3a	78	4e	98	62
19	13	39	27	59	3b	79	4f	99	63
20	14	40	28	60	3с	80	50	100	64

* Real data mapping 2

Decimal	Hexadecimal								
-50	0	Decimal	Hexadecimal	Decimal	Hexadecimal	Decimal	Hexadecimal	Decimal	Hexadecimal
-49	1	-29	15	-9	29	11	3d	31	51
-48	2	-28	16	-8	2a	12	3e	32	52
-47	3	-27	17	-7	2b	13	3f	33	53
-46	4	-26	18	-6	2c	14	40	34	54
-45	5	-25	19	-5	2d	15	41	35	55
-44	6	-24	1a	-4	2e	16	42	36	56
-43	7	-23	1b	-3	2f	17	43	37	57
-42	8	-22	1c	-2	30	18	44	38	58
-41	9	-21	1d	-1	31	19	45	39	59
-40	a	-20	1e	0	32	20	46	40	5a
-39	b	-19	1f	1	33	21	47	41	5b
-38	С	-18	20	2	34	22	48	42	5c
-37	d	-17	21	3	35	23	49	43	5d
-36	e	-16	22	4	36	24	4a	44	5e
-35	f	-15	23	5	37	25	4b	45	5f
-34	10	-14	24	6	38	26	4c	46	60
-33	11	-13	25	7	39	27	4d	47	61
-32	12	-12	26	8	3a	28	4e	48	62
-31	13	-11	27	9	3b	29	4f	49	63
-30	14	-10	28	10	3с	30	50	50	64

External control device setup

1. Transmission

[Command1][Command2][][Set ID][][Data][Cr]

[Command 1] First command to control the set.(k, j, x, ASCII code, 1 Character) [Command 2] Second command to control the set..(ASCII code, 1 Character)

* [Set ID] You can adjust the set ID to choose desired projector ID number in special menu. See previous page. Adjustment range is 1 ~ 99. When selecting Set ID '0', every connected projector set is controlled.

Refer to 'Real data mapping 1'.
To transmit command data. Transmit 2 character when organized ASCII code. * [DATA]

* Transmit 'FF' data to read status of command.

* [Cr] Carriage Return ASCII code '0x0D'

* [] : ASCII code character correspond to "Space Bar" which is in order to classify command, set ID and Data.

2. OK Acknowledgemen

[Command2] [] [Set ID] [] [OK] [Data] [x]

* The Projector transmits ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is data read mode, it indicates present status data. If the data is data write mode, it returns the data of the PC computer.

3. Error Acknowledgemen

[Command2] [] [Set ID] [] [NG] [Data] [x]

The Projector transmits ACK (acknowledgement) based on this format when receiving abnormal data from non-viable functions or communication errors.

Data: [1]: illegal code(This command is not supported.)

[2]: not support function(This function doesn't work.)

[3] : wait more time(Try again a few minute later.)

01. Power (Command:ka)

→ To control Power On/Off of the Projector.

Transmission

[k] [a] [] [Set ID] [] [Data] [Cr]

0 : Power Off Data

1 : Power On

Ack

[a] [] [Set ID] [] [OK] [Data] [x]

0 : Power Off

1 : Power On

→ To show Power On/Off status.

Transmission

[k] [a] [] [Set ID] [] [FF] [Cr]

Ack

[a] [] [Set ID] [] [OK] [Data] [x]

Data 0 : Power Off 1 : Power On

* In like manner, if other functions transmit '0xFF' data based on this format, Acknowledgement data feed back presents status about each function.

02. Input Select (Command:kb)

→ To select input source for the Set.

Transmission

[k] [b] [] [Set ID] [] [Data] [Cr]

Data 2: Video 3: S-Video 4: Component

7 : RGB 9 : DVI

Ack

[b] [] [Set ID] [] [OK] [Data] [x]

Data 2: Video 3: S-Video 4: Component 7: RGB 9 : DVI

03. Aspect Ratio (Command:kc)

→ To adjust the screen format.

Transmission

[k] [c] [] [Set ID] [] [Data] [Cr]

Data 1: 4:3 2:16:9

[c] [] [Set ID] [] [OK] [Data] [x]

Data 1: 4:3 2 . 16.9

04. Screen Mute (Command:kd)

→ To select screen mute on/off.

Transmission

[k] [d] [] [Set ID] [] [Data] [Cr]

Data 0 : Screen Mute Off (Picture On) 1 : Screen Mute On (Picture Off)

<u>Ack</u>

[d] [] [Set ID] [] [OK] [Data] [x]

Data 0 : Screen Mute Off (Picture On) 1 : Screen Mute On (Picture Off)

05. Contrast (Command:kg)

→ To adjust screen contrast.

Transmission

[k] [g] [] [Set ID] [] [Data] [Cr]

Data Min: 0 ~ Max: 64

* Refer to 'Real data mapping 1'.

<u>Ac</u>k

[g] [] [Set ID] [] [OK] [Data] [x]

Data Min: 0 ~ Max: 64

06. Brightness (Command:kh)

→ To adjust screen brightness.

Transmission

[k] [h] [] [Set ID] [] [Data] [Cr]

Data Min: 0 ~ Max: 64

* Refer to 'Real data mapping 1'.

<u>Ack</u>

[h] [] [Set ID] [] [OK] [Data] [x]

Data Min: 0 ~ Max: 64

07. Color (Command:ki)

→ To adjust the screen color.

Transmission

[k] [i] [] [Set ID] [] [Data] [Cr]

Data Min: 0 ~ Max: 64

* Refer to 'Real data mapping 1'.

<u>Ack</u>

[i] [] [Set ID] [] [OK] [Data] [x]

Data Min: 0 ~ Max: 64

08. Tint (Command:kj)

→ To adjust the screen tint.

Transmission

[k] [j] [] [Set ID] [] [Data] [Cr]

Data Red: 0 ~ Green: 64

* Refer to 'Real data mapping2'.

<u>Ack</u>

[j] [] [Set ID] [] [OK] [Data] [x]

Data Red: 0 ~ Green: 64

09. Sharpness (Command:kk)

→ To adjust the screen sharpness.

Transmission

[k] [k] [] [Set ID] [] [Data] [Cr]

Data Min: 0 ~ Max: 64

* Refer to 'Real data mapping 1'.

Ack

[k] [] [Set ID] [] [OK] [Data] [x]

Data Min: 0 ~ Max: 64

10. OSD Select (Command:kl)

→ To select OSD On/Off.

Transmission

[k] [I] [] [Set ID] [] [Data] [Cr]

Data 0 : OSD Select Mode Off

1 : OSD Select Mode On

<u>Ack</u>

[|] [] [Set ID] [] [OK] [Data] [x]

Data 0 : OSD Select Mode Off 1 : OSD Select Mode On

11. Remote Control Lock/Key Lock (Command:km)

→ To lock the front panel controls on the projector and remote control.

Transmission

[k] [m] [] [Set ID] [] [Data] [Cr]

Data 0 : Lock Off 1 : Lock On

I . LOCK O

<u>Ack</u>

[m] [] [Set ID] [] [OK] [Data] [x]

Data 0 : Lock Off

1 : Lock On

* If you're not using the remote control, use this mode. When main power is On/Off, external control lock is released.

12. Color Temperature (ACC) (Command:ku)

→ Adjust the color temperature.

<u>Transmission</u>

[k] [u] [] [Set ID] [] [Data] [Cr] Data 0: Medium 1: Cool

2 : Warm 4 : Natural

<u>Ack</u>

[u] [] [Set ID] [] [OK] [Data] [x]

Data 0 : Medium 1 : Cool 2 : Warm 4 : Natural

External control device setup

Red ADC gain Adjustment (Color R) (Command:jw)

→ Adjust the Red gain of ADC part.(RGB)

Transmission

[j] [w] [] [Set ID] [] [Data] [Cr]

Data Min : 0 ~ Max : 64

* Refer to 'Real data mapping 1'.

<u>Ack</u>

[w] [] [Set ID] [] [OK] [Data] [x]

Data Min: 0 ~ Max: 64

14. Green ADC gain Adjustment (Color G) (Command:jy)

→ Adjust the Green gain of ADC part.(RGB)

Transmission

[j] [y] [] [Set ID] [] [Data] [Cr]

Data Min: 0 ~ Max: 64

* Refer to 'Real data mapping 1'.

<u>Ac</u>k

[y] [] [Set ID] [] [OK] [Data] [x]

Data Min: 0 ~ Max: 64

Blue ADC gain Adjustment (Color B) (Command:jz)

→ Adjust the Blue gain of ADC part.(RGB)

Transmission

[j] [z] [] [Set ID] [] [Data] [Cr]

Data Min: 0 ~ Max: 64

* Refer to 'Real data mapping 1'.

<u>Ack</u>

[z] [] [Set ID] [] [OK] [Data] [x]

Data Min: 0 ~ Max: 64

16. Low Power (Command:jq)

→ To reduce the power consumption of the projector.

Transmission

[j] [q] [] [Set ID] [] [Data] [Cr]

Data 0: Low Power Off

1 : Low Power On

<u>Ack</u>

[q] [] [Set ID] [] [OK] [Data] [x]

Data 0 : Low Power Off 1 : Low Power On

17. Auto Configure (Command:ju)

→ To adjust picture position and minimize image shaking automatically. It works only in RGB mode.

Transmission

[j] [u] [] [Set ID] [] [Data] [Cr]

Data 1: To set

Ack

[u] [] [Set ID] [] [OK] [Data] [x]

Data 1: To set

18. Input Select (Command:xb)

→ To select input source for the Set.

Transmission

[x] [b] [] [Set ID] [] [Data] [Cr]

Data 20: Video 30: S-Video 40: Component

60 : RGB 80 : DVI

<u>Ack</u>

[b] [] [Set ID] [] [OK] [Data] [x]

Data 20 : Video 30 : S-Video 40 : Component

60 : RGB 80 : DVI

19. Key (Command:mc)

→ To send Key code of IR remote control.

Transmission

[m] [c] [] [Set ID] [] [Data] [Cr]

Data Key code

Ack

[b] [] [Set ID] [] [OK] [Data] [x]

Key code

Λ	40	Keystone	A4
V	41	Exit	5B
>	02	≎	4E
<	03	0	4F
Power	AD	Mode	4D
Source	EF	Color ADJ	6A
Menu	43	Lamp	68
OK	44	Timer	26
Still	BC	Sleep	0E
ARC	79	W.Peak	69
Blank	84	Picture	6E
Auto	92		

Supported Monitor Display

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

Sources	Format	Vertical Freq.(Hz)	Horizontal Freq.(kHz)
EGA	640X350	70.09Hz	31.468kHz
EGA	640X350	85.08Hz	37.861kHz
PC98	640X400	85.08Hz	37.861kHz
DOS	720X400	70.08Hz	31.469kHz
	720X400	85.03Hz	37.927kHz
	640X480	59.94Hz	31.469kHz
VGA	640X480	72.80Hz	37.861kHz
	640X480	75.00Hz	37.500kHz
	640X480	85.00Hz	43.269kHz
	800X600	56.25Hz	35.156kHz
	800X600	60.31Hz	37.879kHz
SVGA	800X600	72.18Hz	48.077kHz
	800X600	75.00Hz	46.875kHz
	800X600	85.06Hz	53.674kHz
	1024X768	60.00Hz	48.363kHz
XGA	1024X768	70.06Hz	56.476kHz
	1024X768	75.02Hz	60.023kHz
	1152X864	60.05Hz	54.348kHz
SXGA	1152X864	70.01Hz	63.995kHz
	1152X864	75.00Hz	67.500kHz
	1280X960	60.00Hz	60.000kHz
	1280X1024	60.02Hz	63.981kHz
	1280X1024	75.025Hz	79.976kHz
SXGA+	1400X1050	60.00Hz	65.317kHz

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

<DVD/DTV Input>

Sig	gnal	Component-*1	RGB(DTV)-*2	HDMI(DTV)-*3	
	480i	0	Х	Х	
NTSC(60Hz)	480p	0	0	0	
	720p	0	0	0	
	1080i	0	0	0	
PAL(50Hz)	576i	0	X	X	
	576p	0	0	0	* (
	720p	0	0	0	1- 2-
	1080i	0	0	0	3-

* Cable type

- 1- Component Cable
- 2- Computer Cable
- 3- HDMI Cable

Maintenance

* The projector needs little maintenance. You should keep the lens 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

Clean the lens whenever you notice dirt or dust on the surface of it. Wipe the lens surface gently with an air spray or a soft, dry lint-free cloth. To remove dirt or stains on the lens, moisten a soft cloth with water and a neutral detergent and wipe the lens surface gently.

Cleaning the Projector Case

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

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

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

^{*} The Synchronization input form for horizontal and vertical frequencies are Separate.

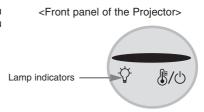
^{*} depending on the PC, the optimum vertical frequency may not be displayed up to the optimum frequency of set in 'Registration information (Display registration information)'. (ex, The optimum vertical frequency may be displayed up to 85Hz or under in the resolution of 640X480 or 800X600.)

Replacing the Lamp

Lamp Replacement

The change interval of the lamp depends on the use environment of Projector. You can see the used lamp time in the CHECKING LAMP TIME section of the Menu (page.29). You must replace the lamp when:

- The projected image gets darker or starts to deteriorate.
- The lamp indicator is red.
- 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 orange and blinking, do not disconnect the main supply until the operation indicator LED is lit up constantly (orange).
- 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 lamp unit glass otherwise image quality may be compromised or lamp life may be reduced.

To obtain a replacement Lamp unit

Lamp model number is on page 43. 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

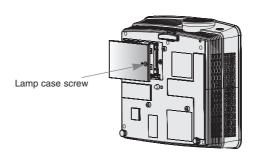
Dispose of the used lamp by returning it to the LG Electronics Service Center.

Replacing the Lamp

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.)

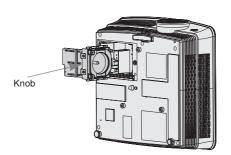
2 Unscrew the screw from the lamp cover using a screwdriver.



After lifting the lamp cover off, remove the two retaining screws on the lamp case with a screw-driver.

4 Lift the lamp up from the projector.





Pull out the handle slowly and remove the lamp case.

Insert the new lamp gently into the correct position.

Make sure it is inserted correctly.

Tighten the screws you removed in step 3.

(Make sure they are fixed firmly.)

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.

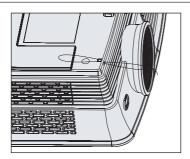
Regarding the projector lamp control

/ WARNING

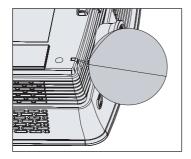
- Don't turn off the projector at least 5 minutes after activating it.
 - The frequent On/Off changes may cause the lamp to deteriorate.
- Don't pull out the power cord while operating the projector or the cooling fan.
 - It will shorten the life of the lamp or damage it.
- The life-span of the projector depends on the user's environment and treatment conditions.
- The projector uses a high pressure mercury lamp. Use caution when handling. The lamp can shatter and cause harm.
- If you continue to use the projector after the lamp timer has recommended replacing the lamp, the lamp could shatter and be difficult and dangerous to remove.
- Do the following if the lamp shatters
 - Unplug the projector immediately.
 - Let some fresh air in immediately (Ventilation).
 - Have service center check the projector for damage and replace the lamp.
 - Don't try to disassemble the projector.

How to attach the lens cap to the projector

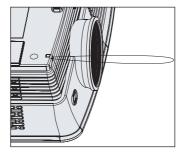
Find the lens cap and the strap that were supplied as accessories.



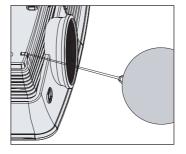
Attach the strap at the hole of the projector into the hole of the lens cap, and then pass the lens cap through the strap lasso.



Insert the non-knot end of the strap into the hole at the bottom of the lens section of the projector.



The strap and cap should like the picture below.



Memo

Memo

Specifications

MODEL	DX630 (DX630-JD)		
Resolution	1024(Horizontal) x 768(Vertical)pixel		
Horizontal / Vertical Ratio	4:3(horizontal:vertical)		
DLP panel size	0.55 inches		
Screen size	Wide: 1.6 ~ 10m(40 ~ 250 inches)		
(Projection distance)	Tele: 1.8 ~ 11.7m(40 ~ 250 inches)		
Projection off-set ratio	115%		
Remote control distance	12m		
Zoom ratio	1:1.17		
Video compatibility	NTSC/PAL/SECAM/NTSC4.43/PAL-M/PAL-N		
Power	AC 100 - 240V~50/60Hz, 3.0A-1.2A		
Height(mm/inches)	94.5/3.7		
Breadth(mm/inches)	302/11.9		
Length(mm/inches)	271/10.7		
Weight(kg/pound)	3.42/7.5		

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Temperature

In operation : $32\sim104^{\circ}F(0^{\circ}C\sim40^{\circ}C)$ In storage and transit : $-4\sim140^{\circ}F(-20^{\circ}C\sim60^{\circ}C)$

Humidity

In operation : $0\sim75\%$ relative humidity by dry hygrometer Not in operation : $0\sim85\%$ relative humidity by dry hygrometer

Projector Lamp

Lamp model

AJ-LDX6

Lamp power consumption

230W



P/NO: MFL42199014 (1001-REV00)