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### **Trademark Recognition**

All product names used in this manual are the properties of their respective owners and are acknowledged.

#### **Important Safety Information**

Congratulations on purchasing the DLP projector!

#### Important:

It is strongly recommended that you read this section carefully before using the projector. These safety and usage instructions will ensure that you enjoy many years safe use of the projector. Keep this manual for future reference.

#### Symbols Used

Warning symbols are used on the unit and in this manual to alert you of hazardous situations.

The following boxes are used in this manual to alert you to important information.

#### Note:

Provides additional information on the topic at hand.

#### Important:

Provides additional information that should not be overlooked.

#### Caution:

Alerts you to situations that may damage the unit.

#### Warning:

Alerts you to situations that may damage the unit, create a hazardous environment, or cause personal injury.

Throughout this manual, component parts and items in the OSD menus are denoted in bold font as in this example:

"Push the Menu button on the remote control to open the Main menu."

#### Main Features

- Lightweight unit, easy to pack away and transport
- Compatible with all major video standards inc luding NTSC, PAL, and SECAM
- A high brightness rating allows for presentations in daylight or in lit rooms
- Supports resolutions up to SXGA at 16.7 million colors to deliver crisp, clear images
- Flexible setup allows for front rear and ceiling projection
- Line-of-vision projections remain square, with advanced keystone correction for angled projections
- Input source automatically detected

#### Remote Control

The remote control has a laser for pointing out items on a screen.

DANGER: Do not point the laser in the eyes. Doing so can damage the eyes permanently.

#### General Safety Information

- > Do not open the unit case. Aside from the projection lamp, there are no user-serviceable parts in the unit. For servicing, contact qualified service personnel.
- > Follow all warnings and cautions in this manual and on the unit case.
- > The projection lamp is extremely bright by design. To avoid damage to eyes, do not look into the lens when the lamp is on.
- > Do not place the unit on an unstable surface, cart, or stand.
- > Avoid using the system near water, in direct sunlight, or near a heating device.
- > Do not place heavy objects such as books or bags on the unit.

#### Power Safety

- Only use the supplied power cord.
- Do not place anything on the power cord. Place the power cord where it will not be in the way of foot traffic.
- > Remove the batteries from the remote control when storing or not in use for a prolonged period.

#### Replacing the Lamp

- Replacing the lamp can be hazardous if done incorrectly. Refer to "Replacing the Projection Lamp" on page 27 for clear and safe instructions for this procedure.
- > Unplug the power cord.
- > Allow the lamp sufficient time to cool.

#### Cleaning the Projector

- Unplug the power cord before cleaning. Refer to "Cleaning the Projector" on page 29.
- > Allow the lamp sufficient time to cool.

#### Regulatory Warnings

Before installing and using the projector, read the regulatory notices in the "Regulatory Compliance" section on page 40.

### About this manual

This manual is intended for end users and describes how to install and operate the DLP projector. Wherever possible, relevant information —such as an illustration and its description—has been kept on one page. This printer-friendly format is both for your convenience and to help save paper and thereby protect the environment. It is suggested that you only print sections that are relevant to your needs.

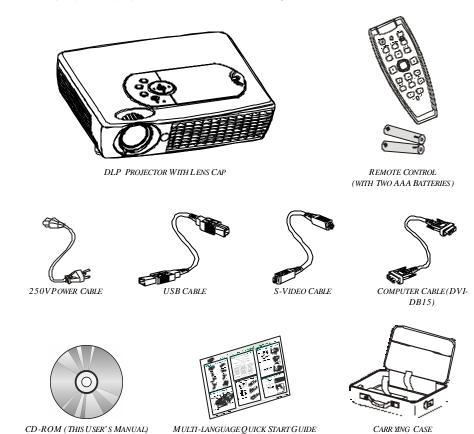
## DLP Projector —User Manual

## **Table of contents**

GETTING STARTED	1
PACKING CHECKLIST	1
VIEWS OF PROJECTOR PARTS	2
Front-left view	
Top view—OSD buttons and LEDs	
Rear view-connectors	
Bottom view	
REMOTE CONTROL P ARTS	
REMOTE CONTROL OPERATING RANGE	
PROJECTOR AND REMOTE CONTROL BUTTONS	10
SETUP AND OPERATION	
INSERTING THE REMOTE CONTROL BATTERIES	11
CONNECTING INPUT /OUTPUT DEVICES	
STARTING AND SHUTTING DOWN THE PROJECTOR	
ADJUSTING THE PROJECTOR LEVEL	
ADJUST THE ZOOM, FOCUS AND KEYSTONE	
ADJUSTING THE VOLUME	
ON-SCREEN DISPLAY MENUSETTINGS	17
ON-SCREEN D ISPLAY MENU CONTROLS	17
Navigating the OSD	
Setting the OSD Language	18
Main Menu	
Setup Menu	21
Config Menu	23
Utility Menu	
Language Menu	
Status Menu	
MAINTENANCE AND SECURITY	
REPLACING THE PROJECTION LAMP	27
Resetting the Lamp	
CLEANING THE PROJECTOR	
Cleaning the Lens	
Cleaning the Case	
USING THE KENSINGTON LOCK	
TROUBLESHOOTING	
COMMON PROBLEMS AND SOLUTIONS	
TIPS FOR TROUBLESHOOTING	
LED ERROR MESSAGES	
MAGE PROBLEMS	
LAMP PROBLEMSREMOTE CONTROL PROBLEMS	
AUDIO PROBLEMS	
HAVING THE PROJECTOR SERVICED	
SPECIFICATIONS	
SPECIFICATIONS	
Input/output connectors	
PROJECTION DISTANCE VERSUS PROJECTION SIZE	
TIMING MODE TABLE	
DIMENSIONS	
REGULATORY COMPLIANCE	
FCCW ARNING	
FCC W ARNINGCANADA	
SAFETY CERTIFICATIONS	
EN 55022 W ADMING	40

## **Packing Checklist**

Carefully unpack the projector and check that the following items are included:



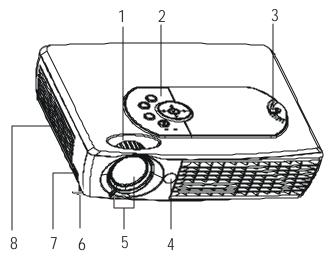
Contact your dealer immediately if any items are missing, appear damaged, or if the unit does not work.

#### Caution:

- 1. Avoid using the projector in dusty environments.
- 2. Leave the power cable plugged in (for 5-10 minutes) until the projector returns to room temperature before placing the projector inside the soft case. Placing the projector into the case soon after switching off the power could cause the projector to break down. Be sure to attach the lens cap and place the projector into the soft case

## **Views of Projector Parts**

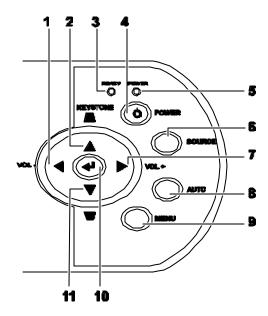
## Front-left view



Ітем	LABEL	DESCRIPTION	SEE PAGE:
1.	Zoom	Enlarges or Shrinks the projected image	15
2.	See	OSD buttons and LEDs next page	3
3.	Projection lamp cover	Remove when changing lamp	27
4.	IR receiver	Receiver for IR signal from remote control	9
5.	Lens/focus	Remove cover, turn the lens to focus	15
6.	Height adjuster	Adjusters drop down when adjuster button is pushed	14
7.	Height adjuster button	Push to release height adjuster	
8.	Speaker	Built-in mono speaker	

Important:
Grill openings on the projector allow for good air circulation, which keeps the projector lamp cool.
Do not obstruct any of the grill openings.

# Top view —OSD buttons and LEDs

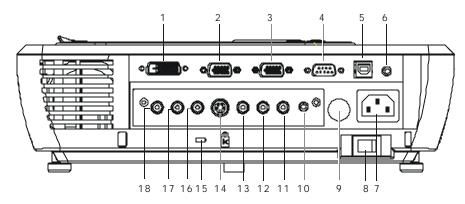


<b>I</b> TEM	Label		DESCRIPTION	
1.	Volume/ left cursor	Decreases vo Navigates ar	olume and changes settings in the OSD	16
2.	Keystone/ Up cursor		age-trapezoid (narrower top) effect ad changes settings in the OSD	15
3.	Ready (LED)	Orange	Lamp ready —you can safely turn on or o	ff the projector
		Flashing	Flashing Lamp not ready —do not press the power button	
4.	Power	Turns the projector on or off (main power switch must be turned on first, see item 8 on page 5)  13		13
5.	Power (LED)	Green Unit is powered on and working correctly		
		Off Unit is powered off		
		Flashing Operational error code (refer to "LED Error Messages" on page 32)		32)
6.	Source	Detects the input device 13		13
7.	Volume/ right cursor	Increases volume Navigates and changes settings in the OSD  16		16

## DLP Projector —User Manual

Ітем	LABEL	DESCRIPTION	SEE PAGE:
8.	Auto	Optimizes image size, position, and resolution	
9.	Menu	Opens/exits the On-Screen Display (OSD)	17
10.	Enter	Changes settings in the OSD	
11.	Keystone/ Down cur sor	Corrects image-trapezoid (narrower bottom) effect Navigates and changes settings in the OSD	15

## Rear view —connectors



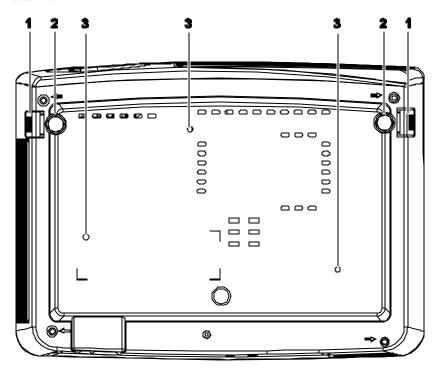
Ітем	LABEL	DESCRIPTION	SEE PAGE:
1.	DVI-I	Connect the DVI cable (supplied) from a computer	
2.	RGB IN	Connect a VGA cable (not supplied) from a computer	
3.	RGB OUT	Connect to a monitor	
4.	RS-232	Installation control and firmware upgrades	12
5.	USB	Connect the USB cable (supplied) from a computer	12
6.	Audio-in	Connect the audio cable (supplied) from the input device	
7.	Power connector	Connect the supplied power cord	
8.	Main power	Turns the main power on or off	
9.	IR receiver	Receiver for IR signal from remote control	9
10.	Audio-out	Audio loop-thru	
11.	Audio-in-R	Connect an RCA audio cable (not supplied) from the input device right channel	
12.	Audio-in-L	Connect an RCA audio cable (not supplied) from the input device left channel	12
13.	Video	Connect a composite video cable (not supplied)from a video device	
14.	S-video	Connect the supplied S-video cable from a video device	

## DLP Projector —User Manual

Ітем	LABEL		DESCRIPTION	SEE PAGE:
15.	Kensii	ngton Lock	Secure to permanent object with a Kensington Lock system	30
16.	Pr/Cr			
17.	Pb/Cb	Component video in	Connect a component video enabled device	12
18.	Y			

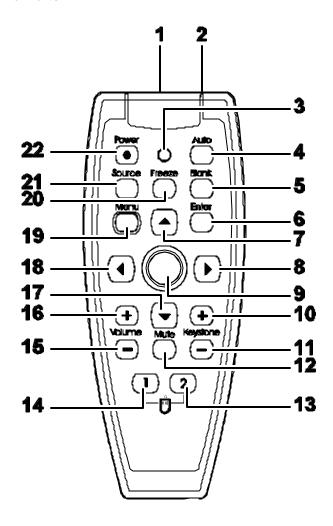
Note:
If your video equipment has both S-video and RCA jacks (composite video) connect to the S-video connector.
S-video provides a better quality signal.

## Bottom view



<b>I</b> TEM	LABEL	DESCRIPTION	SEE PAGE:	
1.	Height adjuster buttons	Push to release height adjusters	14	
2.	Height adjusters	Adjusters drop down when adjuster buttons are pushed		
3.	Ceiling support holes	Contact your dealer for information on mounting the projector on a ceiling.		

## **Remote Control Parts**



- Important:

  1. Avoid using the projector with bright fluorescent lighting turned on. Certain high-frequency fluorescent lights can disrupt remote control operation.
- 2. Be sure nothing obstructs the path between the remote control and the projector. If the path between remote and projector is obstructed, you can bounce the remote signal off certain reflective surfaces such as projector screens.

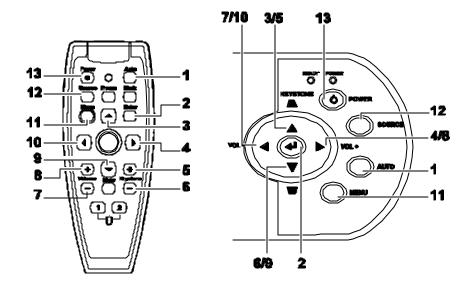
Ітем	Label	DESCRIPTION	SEE PAGE:		
1.	Laser	Use as on-screen pointer. DO NOT POINT IN EYES.			
2.	IR transmitter	Transmits signals to projector			
3.	Status LED	Lights when the remot e control is used			
4.	Auto	Optimizes image size, position, and resolution			
5.	Blank	Makes the screen blank	23		
6.	Enter	Changes settings in the OSD			
7.	Up cursor	Navigates and changes settings in the OSD	17		
8.	Right cursor	ivavigates and changes settings in the OSD			
9.	Cursor pad	Moves the on-screen cursor when connected to a PC			
10.	Keystone top	Corrects image-trapezoid (narrower top/bottom) effect	15		
11.	Keystone bottom	Corrects mage dupozota (marrower top, contoin) effect	13		
12.	Mute	Mutes the built -in speaker			
13.	Right mouse	Functions as right mouse button when connected to a PC			
14.	Left mouse	Functions as left mouse button when connected to a PC			
15.	Volume down	Adjusts volume	16		
16.	Volume up	1 Adjusts volume	10		
17.	Down cursor	Navigates and changes settings in the OSD			
18.	Left cursor	Autigates and changes settings in the ODE	17		
19.	Menu	Opens the On-Screen Display (OSD)			
20.	Freeze	Freeze/unfreezes the on-screen picture			
21.	Source	Detects the input device 13			
22.	Power	Turns the projector on or off	13		

## **Remote Control Operating Range**

The remote control uses infrared transmission to control the projector. It is not necessary to point the remote directly at the projector. Provided you are not holding the remote perpendicular to the sides or the rear of the projector, the remote functions within a radius of about (7) meters (23 feet) and 30 degrees above or below the projector level. If the projector does not respond to the remote control, move a little closer.

## **Projector and Remote Control Buttons**

The projector can be operated using the remote control or the buttons on the top of the projector. All operations can be carried out with the remote control; however the buttons on the projector are limited in use. The following illustration shows the corresponding buttons on the remote control and on the projector.

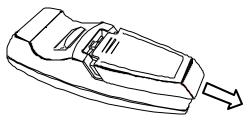


Some buttons on the projector have two functions. For example, item 7/10 on the projector functions both as the volume down button and as the left cursor key in OSD menus.

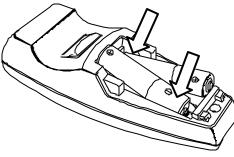
# SETUP AND OPERATION

## **Inserting the Remote Control Batteries**

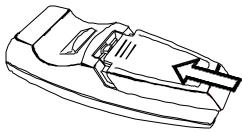
1. Remove the battery compartment cover by sliding the cover in the direction of the arrow.



2. Insert the supplied batteries taking note of the polarity (+/-) as shown here.



**3.** Replace the cover.

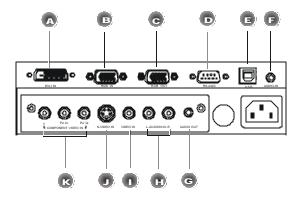


## Cauti on:

- 1. Only use AAA alkaline batteries.
- 2. Dispose of used batteries according to local ordinance regulations.
- 3. Remove the batteries when not using the projector for prolonged periods.

## **Connecting Input/Output Devices**

A PC or notebook computer as well as video devices can be connected to the projector at the same time. Video devices include DVD, VCD, and VHS players, as well as movie camcorders and digital still cameras. Check the user manual of the connecting device to confirm it has the appropriate input/output connector.



<b>I</b> TEM	LABEL	DESCRIPTION
A	DVI-I	Connect the supplied DVI cable from a computer.
B	RGB in	Connect a VGA cable (not supplied) from a computer.
G	RGB out	Connect a VGA cable (not supplied) to a monitor.
D	RS-232	Reserved for installation control and firmware upgrades.
<b>3</b>	USB	Connect the supplied USB cable from a computer.
6	Audio-in	Connect an audio cable (not supplied) from the computer's audio-out connector.
<b>G</b>	Audio-out	Audio loop-thru
<b>(1)</b>	L-Audio in-R	Connect the audio cable (not supplied) from an audio input device.
0	Video	Connect a composite video cable (not supplied) from a video device.
0	S-video	Connect the supplied S-video cable from a video device.
K	Component video in	Connect a component video cable (not supplied) from a video device.

### Warning:

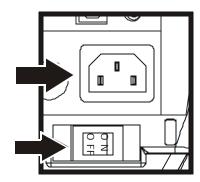
As a safety precaution, disconnect all power to the projector and connecting devices before making connections.

#### Starting and Shutting down the Projector

- 1. Connect the power cord to the projector. Connect the other end to a wall outlet. (A)
  Turn on the power switch. (B)
  The Power LED and Lamp-ready LED turn on.
- **?** Remove the lens cover.
- **3.** Turn on the connected devices.
- **4.** Ensure the Lamp-ready LED is on a steady (not flashing) orange and then press the **Power** button to turn on the projector.

The projector splash screen displays and connected devices are detected. If the connected device is a PC, press the appropriate Fn hot keys on the computer keyboard to switch the display output to the projector. (Check the PC user manual to determine the appropriate Fn hot keys to change display output.)

- 5. If more than one input device is connected, press the **Source** button repeatedly to switch among devices.
- 6. To turn off the projector, press the Power button. The projector prepares for shutdown and a "Wait a moment please.." message appears.
- 7. When the "Power Off?/Press Power again" message appears, press the **Power** button. The projector turns off.









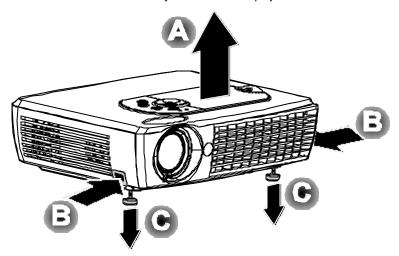
Attention: Power off the projector normally and unplug the power cord before moving the projector

Warning: please keep power cord be connected, after the LED indicator of READY is not blinking, then you may unplug the power line.

#### **Adjusting the Projector Level**

Take note of the following when setting up the projector:

- The projector table or stand should be level and sturdy.
- Position the projector so that it is perpendicular to the screen.
- Be sure cables are not in the way or can cause the projector to be knocked over.



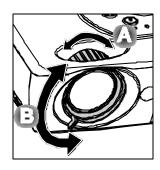
1. To raise the level of the projector, lift the projector [A] and press the height-adjuster buttons [B].

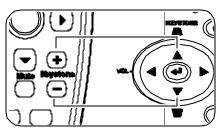
The height-adjusters drop down [C].

2. To lower the level of the projector, press the height-adjuster buttons and push down on the top of the projector.

## Adjust the Zoom, Focus and Keystone

- 1. Use the Image -zoom control (on the projector only) to resize the projected image and screen size A.
- 2. Use the Image -focus control (on the projector only) to sharpen the projected image
- 3. Use the Keystone buttons (on the projector or the remote control) to correct image-trapezoid (wider top or bottom) effect.





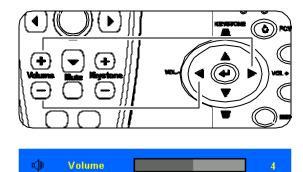
The keystone control appears on the display.



## **Adjusting the Volume**

- 1. Press the Volume +/- buttons on the projector or the remote control.

  The volume control appears on the display.
- 2. Use the Volume +/- buttons to adjust the level.



- **3.** Press the **Mute** button (on the remote control only) to turn off the volume.
- 4. Press Volume +/- or Mute on the remote control to turn off mute.

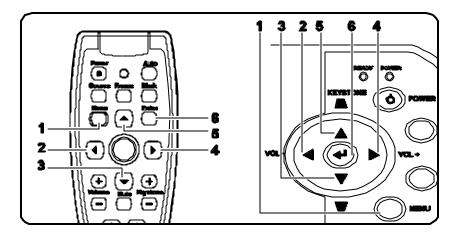
# ON-SCREEN DISPLAY MENU SETTINGS

## **On-Screen Display Menu Controls**

The projector has an On-Screen Display (OSD) that lets you make image adjustments and change various settings.

## Navigating the OSD

You can use the remote control or the buttons on the top of the projector to navigate and make changes to the OSD. The following illustration shows the corresponding buttons on the remote control and on the projector.



## Setting the OSD Language

You may want to reference the OSD on your projector while reading this section. Set the OSD language to your preference before continuing. (The default language is English.)

1. Press the Menu button. The Main menu appears.



2. Press **◄▶** until **Language** is highlighted.



- 4. Press the **Enter** button to select the language.
- 5. Press the **Menu** button twice to close the OSD.

#### Main Menu

Press the **Menu** button to open the **OSD** menu. If necessary, press ◀▶ to move to the **Main** menu. Press **▲▼** to move up and down in the **Main** menu. Press **◀▶** to change values for settings, and then press **Enter** to confirm the new setting.



<b>I</b> TEM	<b>D</b> ESCRIPTION	DEFAULT
Brightness	Press <b>◄</b> ▶to adjust the brightness. (Range: 0 —100)	50
Contrast	Press ◀▶ to adjust the contrast. (Range: 0 → 100)	50
Sharpness	Press ◀▶ to adjust the display sharpness (Range: 1-5)	3
Color Temperature	Press ◀▶ to adjust the video tint/hue. (Range: Cool/Normal/Warm)	Normal
Color Satur ation	Press ◀▶ to adjust the video saturation. (Range: 0—100)	50
Color Tint	Press ◀▶to adjust the video tint/hue. (Range: 0 —100)	50
Gamma	Press <b>♦</b> to adjust the gamma correction of the display.  Input Gamma Brightness	
	PC 2.2 High MAC 1.8 High Video 2.4 Low Chart 2.2 Low B&W 2.4 High	PC
Color Space	Press ◀▶ to adjust the color space. (Range: Auto —RGB —YPbPr—YCbCr)	Auto
Reset	Resets all Main items settings except Color Saturation to default values	-

## Main Menu Items Supported for Each Input Source

Depending on the video source not all items in the OSD are available. Items that are available for each input source are marked with "X". Items that are not available can not be selected in the OSD.

Function	RGB	DVI	Component Video	Composite Video	S-Video
Brightness	X	Х	X	X	X
Contrast	Х	Х	Х	Х	Х
Sharpness	Х	Х	Х	Х	Х
Color Temperature	Х	Х	Х	Х	Х
Color Saturation			Х	Х	Х
Color Tint			X	X	X
Gamma	Х	Х	X	X	X

## Setup Menu

Press the **Menu** button to open the **OSD** menu. Press ◀▶ to move to the **Setup** menu. Press ▲▼ to move up and down in the **Setup** menu. Press ◀▶ to change values for settings, and then press **Enter** to confirm the new setting.





<b>I</b> TEM	DESCRIPTION	DEFAULT
Horizontal Position	Press ◀▶ to move the image left or right. (Range: 0 –100)	50
Vertical Position	Press ◀▶ to move the image up or down. (Range: 0 —100)	50

## DLP Projector —User Manual

ITEM	DESCRIPTION	DEFAULT
Keystone	Press <b>♦</b> to correct distortion of the projected image. (Range: -50 –50)	0
Aspect Ratio	Press ◀▶ to toggle between the 4:3 standard format and 16:9 High Definition TV (HDTV) format.	4:3
Advance Feature		
Reset	Resets Keystone and Aspect Ratio to default values	

## Setup Menu Items Supported for Each Input Source

Depending on the video source not all items in the OSD are available. Items that are available for each input source are marked with "X". Items that are not available can not be selected in the OSD.

Function	RGB	DVI	Component Video	Composite Video	S-Video
Horizontal Position	Х				
Vertical Position	Х				
Keystone	Х	Х	Х	Х	Х

## Config Menu

Press the **Menu** button to open the **OSD** menu. Press ◀▶ to move to the **Config** menu. Press ▲▼ to move up and down in the **Config** menu. Press ◀▶ to change values for settings, and then press **Enter** to confirm the new setting.



Ітем	DESCRIPTION	DEFAULT
Blank Screen	Press ◀▶ to select a background color for blank screen (Range: Black – Red—Green —Blue —White)	Blue
Auto Source	Press <b>♦</b> to enable or disable automatic source detection (Range: On —Off)	On
Auto Power Off	Press ◀▶ to enable or disable automatic shut-down of lamp after 10 minutes of inactivity (Range: On −Off)	Off
Volume	Press ◀▶ to adjust the audio volume level (Range: 0 - 10)	5
Menu Position	Press ◀▶ to position the OSD on screen (Range: Left –Right –Center –Down –Up)	Center
Menu Display	Press ◀▶ to determine the timeout delay of the OSD (Range: 10 - 20 sec.)	15
Translucent Menu	Press ▲▼ to set menu screen translucency (Range: On —Off)	Off
Reset	Resets all Config screen items to default values	

## Utility Menu

Press the **Menu** button to open the **OSD** menu. Press ◀▶ to move to the **Utility** menu. Press ▲▼ to move up and down in the **Utility** menu. Press ◀▶ to change values for settings, and then press **Enter** to confirm the new setting.



<b>I</b> TEM	DESCRIPTION	DEFAULT
Video Type	Press ◀▶ to select the video standard. (Range: Auto –NTSC –PAL –SECAM)	Auto
Video AGC	Press ◀▶ to enable or disable aut omatic gain control for the video source. (Range: On —Off)	On
Projection	Press ◀▶ to choose from four projection methods:  Desktop mount, front of screen  Desktop mount, rear of screen	Desktop front
	Ceiling mount, front of screen  Ceiling mount, rear of screen	
Frequency	Press ◀▶ to adjust the A/D sampling clock. (Range: 0 —180)	Auto detected
Tracking	Press ◀▶ to adjust the A/D sampling number. (Range: 0 —100)	Auto detected
Reset	Resets Video Type, Video AGC, and Projection to defaul	lt values

## Language Menu

Press the **Menu** button to open the **OSD** menu. Press ◀▶ to move to the **Language** menu. Press ▲ ▼ to move up and down in the **Language** menu.



<b>I</b> TEM	DESCRIPTION	DEFAULT
English		
French		
German		
Italian	Press the cursor ▲▼ button to move up and down in the	
Spanish	menu.	English
Swedish		Eligiisii
Chinese Simplified	Press the <b>Enter</b> button to select the language.	
Chinese Traditional		
Japanese		
Korean		

#### Status Menu

Press the **Menu** button to open the **OSD** menu. Press ◀▶ to move to the **Status** menu. Press ▲▼ to move up and down in the **Status** menu. Press ◀▶ to change values for settings, and then press **Enter** to confirm the new setting.



<b>I</b> TEM	DESCRIPTION	DEFAULT
Video Information	Displays the resolution and refresh rate of the connected video device.	
Active Source	Displays the active source.	These items are
Software Version	Information about the firmware version.	
Lamp Hours	Number of hours lamp has been in Normal use and number of hours lamp has been in Eco use.	
Lamp Mode	Toggles between Normal and ECO lamp modes. ECO mode uses less power but decreases the lamp brightness.	Normal
Lamp Hour Reset	After replacing the lamp, this item should be reset. Refer to "Replacing the Projection Lamp" on page 27.	_

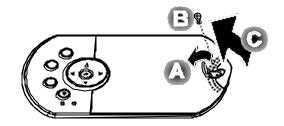
## Maintenance and Security

## **Replacing the Projection Lamp**

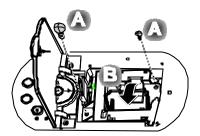
The projection lamp should be replaced when it burns out. It should only be replaced with a certified replacement part, which you can order from your local dealer.

- 1. The lamp contains a certain amount of mercury and should be disposed of according to local ordinance regulations.
- 2. Avoid touching the glass surface of the new lamp: Doing so may shorten its operation life.

- **Warning:**1. Be sure to turn off and unplug the projector at least an hour before replacing the lamp. Failure to do so could result in a severe burn.
- 2. It is recommended that you do not attempt to replace the lamp while the projector is installed on a ceiling. If you do attempt this, wear protective goggles to prevent glass from a ruptured lamp getting into your eyes.
- Lift the screw cover (A). Remove the screw on the lamp compartment cover (B) and then lift the lamp compartment  $cover(\bar{\mathbf{C}}).$



Remove the two screws from the lamp module (A) and then lift the module handle up (B).



Pull up firmly to remove the lamp module.

4. Reverse Steps 1 to 4 to install the new lamp module.

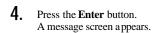
Note: The lamp module should be oriented as shown here when replac-

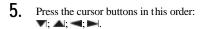


## Resetting the Lamp

After replacing the lamp, reset the lamp hour counter to zero. Refer to the following:

- 1. Press the **Menu** button to open the Main menu.
- 2. Press the cursor ◆▶ button to move to the **Status** menu.
- 3. Press the cursor ▲ ▼ button to move to Lamp Hour Reset.





The "Lamp Hour Reset OK!!" message appears. Then the **Status** menu appears again showing the **Lamp Hours** reset to zero.





Menu = Exit

#### **Cleaning the Projector**

Cleaning the projector to remove dust and grime will help ensure trouble-free operation.

## Warning:

- 1. Be sure to turn off and unplug the projector at least an hour before cleaning. Failure to do so could result in a severe burn.
- 2. Use only a dampened cloth when cleaning. Do not allow water to enter the ventilation openings on the projector.
- 3. If a little water gets into the projector interior while cleaning, leave unplugged in a well-ventilated room for several hours before using.
- 4. If a lot of water gets into the projector interior when cleaning, have the projector serviced.

#### Cleaning the Lens

You can purchase optic lens cleaner from most camera stores. Refer to the following to clean the projector lens.

- 1. Apply a little optic lens cleaner to a clean soft cloth. (Do not apply the cleaner directly to the lens.)
- 2. Lightly wipe the lens in a circular motion.

#### Caution:

- 1. Do not use abrasive cleaners or solvents.
- 2. To prevent discoloration or fading, avoid getting cleaner on the projector case.

## Cleaning the Case

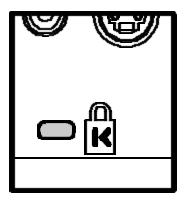
Refer to the following to clean the projector case.

- 1. Wipe off dust with a clean dampened cloth.
- 2. Moisten the cloth with warm water and mild detergent (such as used to wash dishes), and wipe the
- 3. Rinse all detergent from the cloth and wipe the projector again.

**Caution:**To prevent discoloration or fading of the case, do not use abrasive alcohol-based cleaners.

### **Using the Kensington Lock**

If you are concerned about security, attach the projector to a permanent object with the Kensington slot and a security cable.



**Note:**Contact your vendor for details on purchasing a suitable Kensington security cable.

## **TROUBLESHOOTING**

## **Common problems and solutions**

These guidelines provide tips to deal with problems you may encounter while using the projector. If the problem remains unsolved, contact your dealer for assistance.

Often after time spent troubleshooting, the problem is traced to something as simple as a loose connection. Check the following before proceeding to the problem-specific solutions.

- Use some other electrical device to confirm that the electrical outlet is working.
- Ensure the projector is turned on.
- Ensure all connections are securely attached.
- Ensure the attached device is turned on.
- Ensure a connected PC is not in suspend mode.
- Ensure a connected notebook computer is configured for an external display. (This is usually done by pressing an Fn-key combination on the notebook.)

#### **Tips for Troubleshooting**

In each problem -specific section, try the steps in the order suggested. This may help you to solve the problem more quickly.

Try to pin point the problem and thus avoid replacing non-defective parts.

For example, if you replace batteries and the problem remains, put the original batteries back and go to the next step.

Keep a record of the steps you take when troubleshooting: The information may be useful when calling for technical support or for passing on to service personnel.

#### **LED Error Messages**

LED	STATUS NUMBER OF FLASHES	DESCRIPTION	REMEDY
Power	Flashing	Lamp not ready	Do not press the power button.
	3	System overheated	Allow the projector to cool down.
	4 System interface err or		Contact your dealer for assistance.
	5	Lamp error	Replace the lamp module.
	6	Fan error	Refer to <b>Ready</b> LED status in this table to determine which fan.
	7	Lamp cover open	Close the lamp cover.
	8	DLP driver error	Contest your dealer for essistance
	9	Color wheel error	Contact your dealer for assistance.
Ready	Flashing	Valid only when fan error indicated	d by <b>Power</b> LED flashing 6 times.
	1	Blower fan	
	2	Optical engine fan	Contact your dealer for assistance.
	3	Lamp fan or Optical fan	

## **Image Problems**

#### Problem: No image appears on the screen

- 1. Verify the settings on your notebook or desktop PC.
- 2. Turn off all equipment and power up again in the correct order.

#### Problem: The image is blurred

- 1. Adjust the Focus on the projector.
- ${\bf 2.}~~{\bf Press\,the}~~{\bf Auto}$  button on the remote control or projector.
- 3. Ensure the projector-to-screen distance is within the 8-meter (26-feet) specified range.
- 4. Check that the projector lens is clean.
- Make sure the output resolution from the PC is 800 x 600 (SVGA model) or 1024 x 768 (XGA model), the native resolution of the projector.

## Problem: The image is wider at the top or bottom (trapezoid effect)

- 1. Position the projector so it is as perpendicular to the screen as possible.
- ${\bf 2.}\;\;$  Use the Keystone button on the remote control or projector to correct the problem.

## Problem: The image is reversed or upside down

1. Check the **Projection** setting on the **Utility** menu of the OSD.

Problem: The image is streaked

- Set the Frequency and Tracking settings on the Utility menu of the OSD to the default settings.
- To ensure the problem is not caused by a connected PC's video card, connect to another computer.

#### Problem: The image is flat with no contrast

1. Adjust the Contrast setting on the Main menu of the OSD.

#### Problem: The color of the projected image does not match the source image.

1. Adjust the Color Temperature and Gamma settings on the Main menu of the OSD.

### **Lamp Problems**

#### Problem: There is no light from the projector

- 1. Check that the power cable is securely connected.
- 2. Ensure the power source is good by testing with another electrical device.
- 3. Restart the projector in the correct order and check that the Power LED is green.
- 4. If you have replaced the lamp recently, try resetting the lamp connections.
- 5. Replace the lamp module.
- 6. Put the old lamp back in the projector and have the projector serviced.

#### Problem: The lamp goes off

- Power surges can cause the lamp to turn off. Press the power button twice to turn off the projector. When the Lamp Ready LED is on, press the power button.
- 2. Replace the lamp module.
- 3. Put the old lamp back in the projector and have the projector serviced.

#### **Remote Control Problems**

#### Problem: The projector does not respond to the remote control

- 1. Direct the remote control towards the remote sensor on the projector.
- 2. Ensure the path between remote and sensor is not obstructed.
- 3. Turn off any fluorescent lights in the room.
- 4. Check the battery polarity of the remote control.
- 5. Replace the batteries.
- 6. Turn off other Infrared-enabled devices in the vicinity.
- 7. Have the remote control serviced.

#### **Audio Problems**

#### Problem: There is no sound

- 1. Adjust the projector volume.
- 2. Adjust the volume of the audio source.
- 3. Check the audio cable connection.
- 4. Test the source audio output with other speakers.
- 5. Have the projector serviced.

#### Problem: The sound is distorted

- 1. Check the audio cable connection.
- 2. Test the source audio output with other speakers.
- 3. Have the projector serviced.

## **Having the Projector Serviced**

If you are unable to solve the problem, you should have the projector serviced. Pack the projector in the original carton. Include a description of the problem and a checklist of the steps you took when trying to fix the problem. The information may be useful to the service personnel. Return the projector to the place you purchased it.

# **S**PECIFICATIONS

## **Specifications**

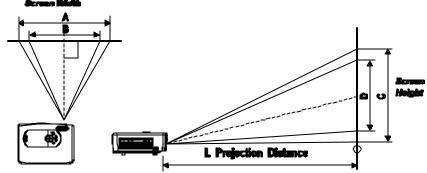
	XGA		SVGA		
Power consumption	< 350 watts	< 280 watts	< 350 watts	< 280 watts	
Lamp	250W (ECO mode 200W)	200W (ECO mode 160W)	250W (ECO mode 200W)	200W (ECO mode 160W)	
Display type	TI DMD 0.7- inch, 1	12 deg. DDR	TI DMD 0.55-inch, 12 deg. DDR		
Resolution	XGA 1024 x 768 na	ntive	SVGA 800 x 600 native		
Bandwidth	Up to SXGA 1280 x	x 1024 @ 60 Hz	Up to XGA 1024x 768 @ 60 Hz		
Color	16.7 Million (24-bit	ts/pixel)	•		
Weight	3.55 kg (7.8 lbs)				
Projection distance	1.5 to 8 meter (4.9 t	to 26 feet)			
Projection screen size	0.94 to 6.1 meter (37	7 inches to 240 inc	ches)		
Projection lens	Manual zoom and fo	ocus			
Zoom ratio	1.22:1				
Vertical keystone correction	+/-15				
Projection methods	Desktop front/rear;	ceiling front/rear			
Data Compatibility	IBM PC or compati	bles (VGA, SVG	A), Mac		
HDTV	Video				
Video compatibility	NTSC/NTSC 4.43,	PAL (B/G/H/I/M/	N 60), SECAM		
H-Sync	15,31 - 70 kHz				
V-Sync	50 - 85 Hz				
Safety certification	FCC Class B, UL, C	CUL, CE, CB, TU	V-GS, CCC		
Operation temperature	10° ~ 35°				
Dimensions	32.8 x 23.8 x 8.8 cm (12.9 x 9.4 x 3.5 inches)				
Standby	< 20 watts				
Noise	36 dB typical				
Audio speaker	2W mono speaker				
Uniformity	80 %				

## DLP Projector —User Manual

# Input/output connectors

PC	DVI-I
	RGB in
	RGB out
	USB
Video	Composite video (RCAx1)
	S-Video (Mini-DIN)
	Component video Y,Pb/Cb,Pr/Cr (RCAx3)
Audio	Mini-jack in
	Mini-jack out
	Right and left in (RCAx2)
Service/upgrades	RS-232
Security	Kensington slot

# **Projection Distance versus Projection Size**



		,			-	
Projection	M	ax. Screen Siz	е	N	lin. Screen Siz	е
Distance	Diagonal	Width	Height	Diagonal	Width	Height
L		Α	С		В	D
1.5m	1.14m	0.91m	0.68m	0.94m	0.75m	0.56m
4.92'	45"	36"	27"	36.88"	29.5"	22.1"
2m	1.52m	1.22m	0.91m	1.25m	1m	0.75m
6.56'	60"	48"	36"	49.18"	39.34"	29.51"
2.4m	1.83m	1.46m	1.1m	1.5m	1.20m	0.90m
7.87'	72"	57.6"	43.2"	59"	47.2"	35.4"
2.8m	2.13m	1.71m	1.28m	1.75m	1.4m	1.05m
9.18'	84"	67.2"	50.4"	68.85"	55.08"	41.31"
3.2m	2.44m	1.95m	1.46m	2m	1.6m	1.20m
10.5'	86"	68.8"	51.6"	70.49"	56.39"	42.29"
3.6m	2.74m	2.19m	1.65m	2.25m	1.80m	1.35m
11.81'	108"	86.4"	64.8"	88.52"	70.82"	53.11"
4m	3.05m	2.44m	1.83m	2.5m	2.00m	1.50m
13.12'	120"	96"	72"	98.36"	78.69"	59.02"
4.4m	3.35m	2.68m	2.01m	2.75m	2.2m	1.65m
14.43'	132"	105.6"	79.2"	108.19"	86.55"	64.91"
4.8m	3.66m	2.93m	2.19m	3.00m	2.40m	1.80m
15.74'	144"	115.2"	86.4"	118.03"	94.42"	70.82"
5.2m	3.96m	3.17m	2.38m	3.25m	2.60m	1.95m
17.06'	156"	124.8"	93.6"	127.86"	102.29"	76.72"
5.6m	4.27m	3.41m	2.56m	3.50m	2.80m	2.10m
18.37'	168"	134.4"	100.8"	137.7"	110.16"	82.62"
6m	4.57m	3.66m	2.74m	3.75m	3.00m	2.25m
19.68'	180"	144"	108"	147.54"	118.03"	88.52"
8m	6.10m	4.88m	3.66m	5.00m	4.00m	3.00m
26.24'	240"	192"	144"	196.72"	157.38"	118.03"

## **Timing Mode Table**

The native resolution is 800 x 600 for the SVGA series and 1024 x 768 for the XGA series. Resolution other than native mode may display with uneven size of text or lines.

The following table shows the supported timing modes.

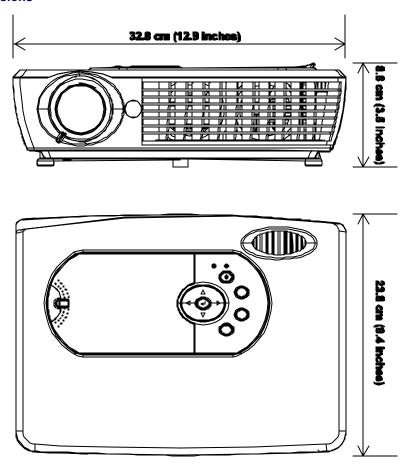
Signal	Resolution	Frequency H.	Frequency V.	Video	Digital	Analog
Signal	Resolution	(KHz)	( Hz )	video	Digital	Allalog
NTSC		15.734	60.0			
PAL / SECAM		15.625	50.0			
VESA	640 x 350	37.9	85.1			
	720 x 400	31.5	70.0			
	720 x 400	37.9	85.0	1		
	640 x 480	31.5	60.0			
	640 x 480	37.9	72.8	1		
	640 x 480	37.5	75.0			
	640 x 480	43.3	85.0	-		
	800 x 600	37.9	60.3			
	800 x 600	46.9	75.0			
	800 x 600	48.1	72.2	-		
	800 x 600	53.7	85.1	-		
	1024 x 768	48.4	60.0	1		
	1024 x 768	56.5	70.1	-		
	1024 x 768	60.0	75.0			
	1024 x 768	68.7	85.0	-		
	1280 x 1024	64.0	60.0	-		
Apple Macintosh	640 x 480	35.0	66.7	-		
	832 x 624	49.7	74.5			
	1024 x 768	60.2	74.9	1		
	1152 x 870	68.7	75.1	-		
HDTV	1920 x 1080	33.8	60.0			
	1920 x 1080	28.1	50.0			
	1280 x 720	45.0	60.0			
SDTV	720 x 576	31.3	50.0			
	720 x 480	31.5	60.0			

Frequency supported

Frequency not supported

For XGA series only

## **Dimensions**



## REGULATORY COMPLIANCE

## **FCC Warning**

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 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.

Changes or modifications not expressly approved by the parties responsible for compliance could void the user's authority to operate the equipment.

#### Canada

This class B digital apparatus complies with Canadian ICES-003.

#### **Safety Certifications**

UL, CUL, CB, TUV-GS, CCC

#### EN 55022 Warning

This is a Class B product. In a domestic environment, it may cause radio interference, in which case the user may be required to take adequate measures. The typical use is in a conference room, meeting room, or auditorium.

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