

This user manual is provided as a free service by FixYourDLP.com. FixYourDLP is in no way responsible for the content of this manual, nor do we guarantee its accuracy. FixYourDLP does not make any claim of copyright and all copyrights remain the property of their respective owners.

About FixYourDLP.com

FixYourDLP.com (http://www.fixyourdlp.com) is the World's #1 resource for media product news, reviews, do-it-yourself guides, and manuals.

Informational Blog: http://www.fixyourdlp.com Video Guides: http://www.fixyourdlp.com/guides User Forums: http://www.fixyourdlp.com/forum

FixYourDLP's Fight Against Counterfeit Lamps: http://www.fixyourdlp.com/counterfeits

Sponsors:

RecycleYourLamp.org – Free lamp recycling services for used lamps: http://www.recycleyourlamp.org

Lamp Research - The trusted 3rd party lamp research company: http://www.lampresearch.com

Discount-Merchant.com – The worlds largest lamp distributor: http://www.discount-merchant.com





D10 Multimedia DLP[®] Projector







SIM2 Multimedia S.p.a. • Viale Lino Zanussi, 11 • 33170 Pordenone - ITALY Phone +39.0434.383.256 • Fax +39.0434.383.260 www.sim2.com • e-mail: info@sim2.it

SIM2 USA Inc. • 10108 USA Today Way • 33028 Miramar FL - USA Phone +1.954.4422999 • Fax +1.954.4422998 www.sim2usa.com • e-mail: sales@sim2usa.com

SIM2 Deutschland GmbH • ArndStr. 34-36, D-60325 Frankfurt Am Main Phone 0800.800.7462 • Fax 0800.900.7462 www.sim2.de • e-mail: info.de@sim2.it

> SIM2 UK LTD • Steinway House Worth Farm, Little Horsted Nr. Uckfield, East Sussex TN22 5TT Phone +44.01825.750850 • Fax +44.01825.750851 www.sim2.co.uk • e-mail: info@sim2.co.uk



• In accordance with the manufacturer's constant product programme, product specifications and subject to changes without notice.

Copyright

This publication, including all photographs, illustrations and software, is protected under international copyright laws, with all rights reserved. Neither this manual, nor any of the material contained herein, may be reproduced without written consent of the author.

© Copyright March, 2007

Disclaimer

The information in this document is subject to change without notice. The manufacturer makes no representations or warranties with respect to the contents hereof and specifically disclaims any implied warranties of merchantability or fitness for any particular purpose. The manufacturer reserves the right to revise this publication and to make changes from time to time in the content hereof without obligation of the manufacturer to notify any person of such revision or changes.

Trademark Recognition

All other 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 of 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 styles are used in this manual to alert you to important information.



Provides additional information on the topic at hand.

Important!

Provides additional information that should not be overlooked.



Alerts you to situations that may damage the unit.

FixYourDLP.com

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."

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 technician.
- 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 31 for clear and safe instructions for this procedure. Before replacing the lamp:

- Unplug the power cord.
- Allow the lamp to cool for about one hour.

Important Recycle Instructions:



Lamp(s) inside this product contain mercury. This product may contain other electronic waste that can be hazardous if not disposed of properly. Recycle or dispose in accordance with local, state, or federal Laws. For more information, contact the Electronic Industries Alliance at <u>WWW.EIAE.ORG</u>.

For lamp specific disposal information check <u>WWW.LAMPRECYCLE.ORG</u>. Disposal of old Electrical & Electronic Equipment (Applicable throughout the European Union and other European countries with separate collection programs)



This symbol found on your product or on its packaging, indicates that this product should not be treated as household waste when you wish to dispose of it. Instead, it should be handed over to an applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences to the environment and human health, which could otherwise be caused by inappropriate disposal of this product. The recycling of materials will help to conserve natural resources. This symbol is only valid in the European Union. If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

leaning the Projector

• Unplug the power cord before cleaning. Refer to "Cleaning the Projector" on page 33.

Allow the lamp to cool for about one hour. COM (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

Regulatory Warnings

Before installing and using the projector, read the regulatory notices in the "Regulatory Compliance" section 8 on page 42.

Main Features

- Theater image right at home
- Compatible with all major video standards including NTSC, PAL, and SECAM
- High definition resolution and 16:9 wide-screen resolution from any HD source.
- Supports resolutions up to WXGA at 16.7 million colors to deliver crisp, clear images
- Flexible setup allows for front and rear projections
- Line-of-vision projections remain square, with advanced keystone correction for angled projections
- Input source can be set for automatic detection

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, thereby protecting the environment. It is suggested that you only print sections that are relevant to your needs.





Table of Contents

1. GETTING STARTED

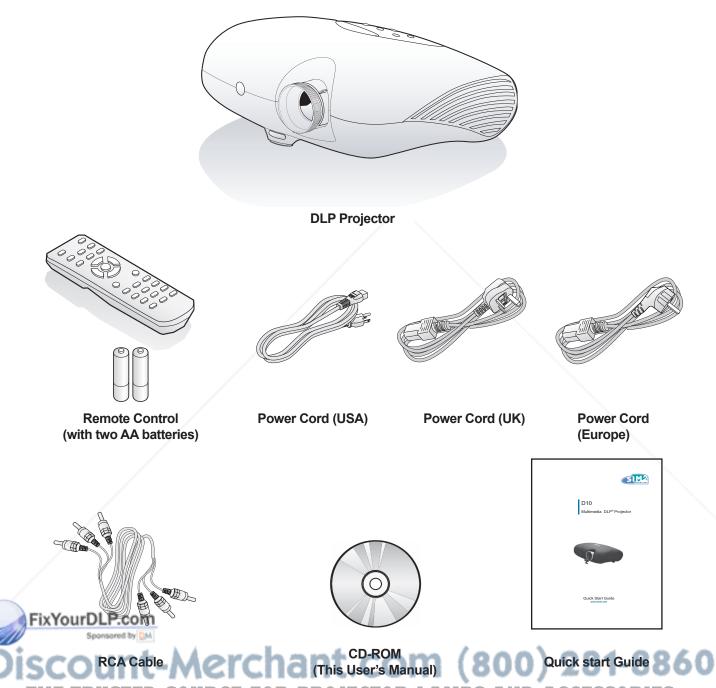
Packing Checklist	7
A Tour of the Projector	8
Remote Control Functions	12
Remote Control Operating Range	13
Projector and Remote Control Buttons	13
2. SETUP AND OPERATION	
Inserting the Remote Control Batteries	14
Connecting Input Devices	15
Starting and Shutting down the Projector	16
Adjusting the Projector Level	17
Adjusting the Focus and Zoom	18
3. ON-SCREEN DISPLAY (OSD) MENU SETTINGS	
OSD Menu Controls	19
Setting the OSD Language	20
OSD Menu Overview	21
Image Menu	22
Options	25
Settings Menu	27
Language Menu	28
User Color Menu	29
Info Menu	30
4. MAINTENANCE AND SECURITY	
Replacing the Projection Lamp	31
Resetting the Lamp	33
Cleaning the Projector	33
5. TROUBLESHOOTING	
Tips for Troubleshooting	34
LED Error Messages	35
Common Problems and Solutions	36
6. Specifications	
Hardware Specifications	38
Input/output Connectors	38
7. TIMING MODE TABLE	
Projector Dimensions	41
REGULATORP. COMPLIANCE	
FCC Warningsored by [IM]	42
D Canada	.42
Electromagnetic Compatibility and EN 35022 WarningCTOR. LAMPS AND ACCESSORIES	42



1. GETTING STARTED

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.



Fix Young tan

A Tour of the Projector

Front-right View

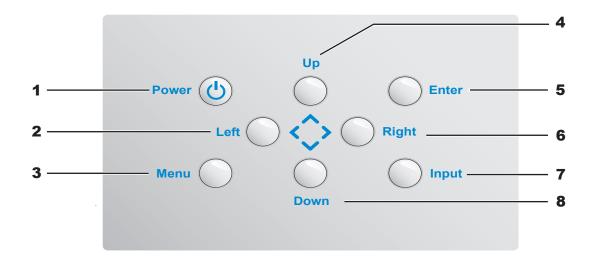
Ітем	LABEL	DESCRIPTION
1	Control panel	Operates the onscreen display. Refer to the next page for a description of the buttons
2	Lens zoom	Enlarges the projected image
3	Focus	Focuses the projected image
4	Front IR receiver	Receiver for IR signal from remote control
5	Height adjuster button	Press button to adjust height

Ventilation openings on the projector allow for good air circulation, which keeps the projector lamp cool. Do not obstruct any of the ventilation openings.

Discount-Merchant.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES

D10

On-screen Display (OSD) Buttons

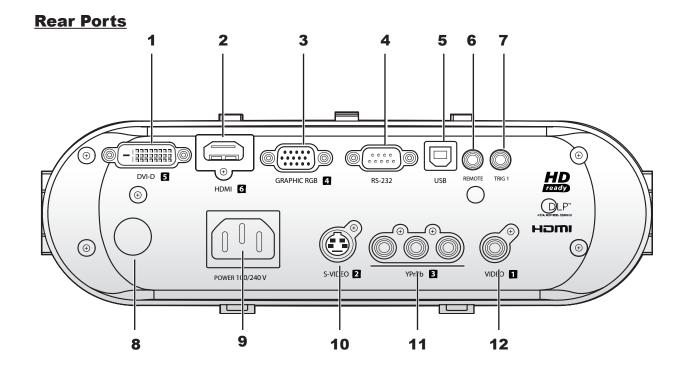


Ітем	LABEL	DESCRIPTION
1	Power	Turns the projector on or off
2	Left	Navigates and changes settings in the OSD
3	Menu	Opens and exits the OSD
4	Up	Navigates and changes settings in the OSD
5	Enter	Changes settings in the OSD
6	Right	Navigates and changes settings in the OSD
7	Input	Detects the input device
8	Down	Navigates and changes settings in the OSD

FixYourDLP.com Spontored by M Discount-Merchant.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES



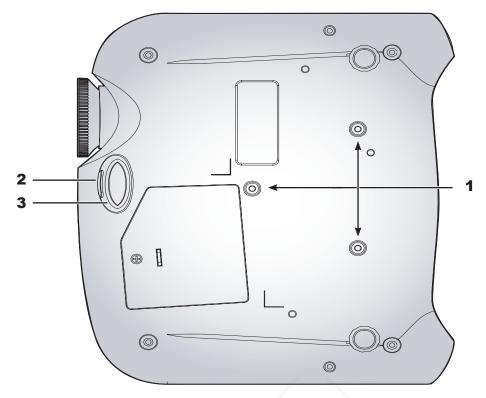
Ì



Ітем	LABEL	DESCRIPTION
1	DVI-D	Connect the computer cable from a computer or video source
2	HDMI	Connect a High-Definition Multimedia Interface cable from home theater and consumer electronics equipment
3	Graphic RGB	Connect a VGA cable from a computer or a video device (YPrPb)
4	RS-232	Installation control
5	USB	Connect the USB cable from a computer
6	Remote	Connect a wired remote control device
7	Trig 1	3.5mm mini-jack trigger provides a 12 volt, 0.25 amp DC output
8	Rear IR receiver	Receiver for IR signal from remote control
9	Power	Connect the supplied power cord
10	S-Video	Connect S-Video cable from a video device to the S-Video jack
11	YPrPb (component)	Connect component video cables (supplied) from a video device to the Y, Pb/Cb, and Pr/Cr RCA jacks
12	Videored by DM	Connect a composite video cable from a video device to the yellow RCA jack
ISC	:OUNT-Me	21CU911.COM (800) 781-880
THE	TRUSTED SOUF	RCE FOR PROJECTOR LAMPS AND ACCESSORIES



Bottom View



Ітем	LABEL	DESCRIPTION
1	Ceiling support holes	Contact your dealer for information on mounting the projector on a ceiling
2	Height adjuster button	Push to release height adjuster
3	Height adjuster	Adjuster drops down when adjuster button is pushed





Remote Control Functions

LABEL	DESCRIPTION
On 🚺	Turns projector power on
Off 🕑	Turns projector power off
1	Composite video source
2	S-Video video source
3	Component video source
4	RGB video source
5	DVI video source
6	HDMI video source
Up cursor Left cursor	Navigates and changes settings in the OSD
Enter	Changes settings in the OSD
Right cursor Down cursor	Navigates and changes settings in the OSD
Menu	Opens the OSD
Exit	Exits OSD menus or menu selection fields
M1	User memory setting 1
M2	User memory setting 2
M3	User memory setting 3
Contrast 0	Adjusts screen contrast
Brightness 🔅	Adjusts screen brightness
Aspect	Toggles aspect ratio: $4:3 \rightarrow 16:9 \rightarrow Letterbox \rightarrow Native$
Gamma	Toggles gamma: Film \rightarrow Video \rightarrow Cinema \rightarrow Photo \rightarrow PC
Color temp	$9300 \text{K} \rightarrow 7500 \text{K} \rightarrow 6500 \text{K} \rightarrow 5000 \text{K} \rightarrow \text{USER}$
Power mode	$ECO \rightarrow NORMAL \rightarrow BOOST$
Auto	Automatically synchronizes display settings in RGB mode
Blank	Makes the screen blank
Light FixYourDLP.com	Turns back LED light on and off



Sponsored by DM

Discount-Merchant.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES



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 control perpendicular to the sides, the remote control functions within a radius of about 10 meters (33 feet) and 30 degrees above or below the projector level. If the projector does not respond to the remote control, move a little closer.

1. Avoid using the remote control with bright fluorescent lighting turned on. Certain high-frequency fluorescent lights can disrupt remote control operation.

Important!

- 2. Be sure nothing obstructs the path between the remote control and the projector. If the path between the remote control and the projector is obstructed, you can bounce the signal off certain reflective surfaces such as projector screens.
- 3. The buttons and keys on the projector have the same functions as the corresponding buttons on the remote control. This user's manual describes the functions based on the remote control.

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.





2. SETUP AND OPERATION

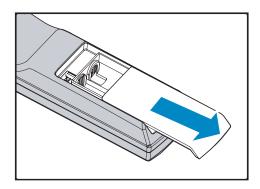
Inserting the Remote Control Batteries

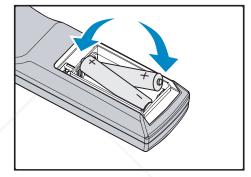
1. Remove the battery compartment cover by sliding the cover in the direction of the arrow.

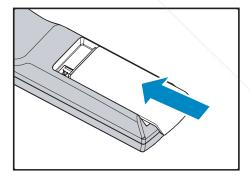
2. Insert the supplied batteries taking note of the polarity (+/-) as shown here.

3. Replace the cover.

com







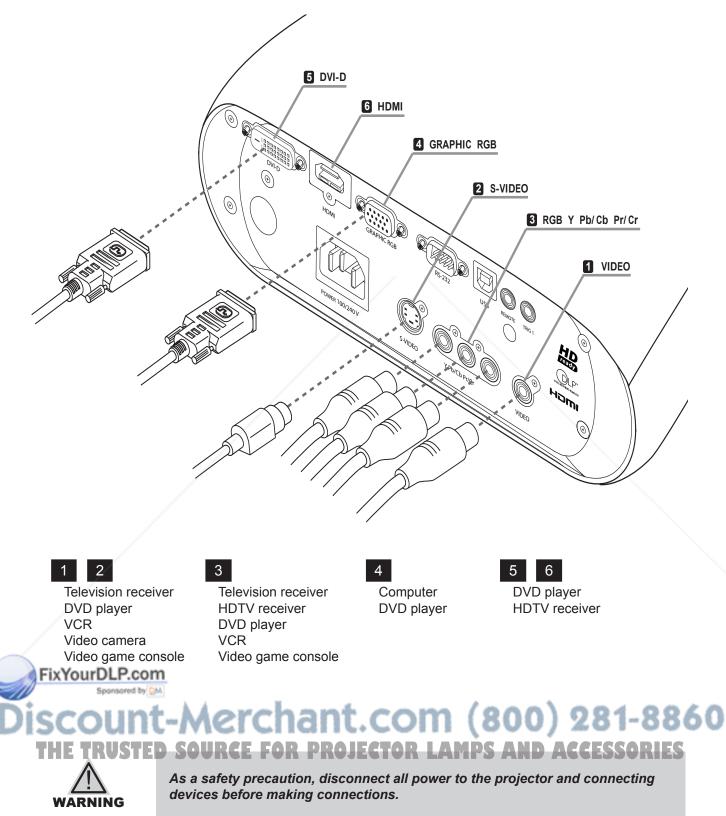
- 1. Only use AA alkaline batteries.
- 2. Dispose used batteries according to local ordinance regulations.
- 3. Remove the batteries when not using the projector for prolonged periods.

Discount-Merchant.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES



Connecting Input 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, digital still cameras and high definition sources. Check the user manual of the connecting device to confirm it has the appropriate output connector.



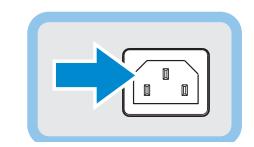


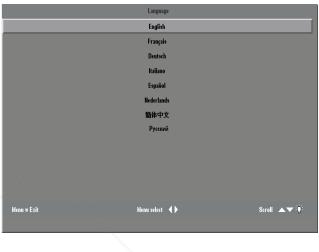
Starting and Shutting down the Projector

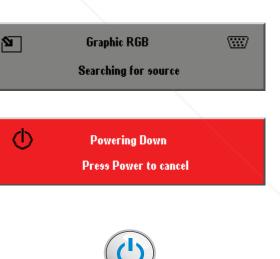
- **1.** Remove the lens cover.
- **2.** Connect the power cord to the projector. Connect the other end to a wall outlet.
- **3.** Press the **Power** button. The Power LED on the projector turns on. Turn on the connected devices.
- **4.** The language selection screen appears (Initial setup only). Select the desired language.
 - Press the cursor ▲ ▼ button until Language is highlighted.
 - Press the cursor < ▶ or Menu button to confirm the language, and close the OSD.
- **5.** If more than one input device is connected, press the source button to search.
- **6.** Press the **Power** button to turn off the projector. The Powering Down screen appears.

Note: Pressing the Power button again within five (5) seconds cancels powering down the projector.

7. When the **Power** LED stops flashing, the projector goes on standby mode.









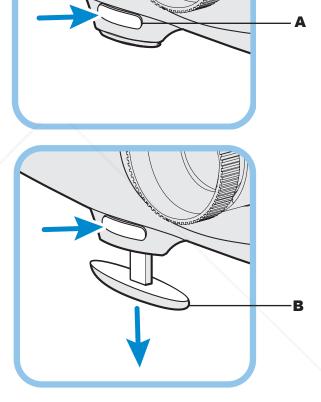


Adjusting the Projector Level

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 and press the height-adjuster button **[A]**.

The height adjuster drops down [B].



- **2.** To lower the level of the projector, press the height-adjuster button and push down on the top of the projector.
- **3.** To adjust the angle of the picture, turn the tilt adjuster right or left until the desired angle has been achieved.

-Merch

SOURCE FOR PR

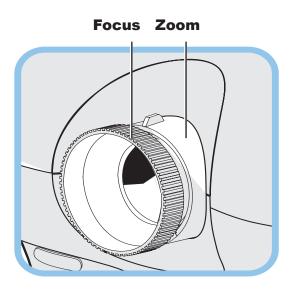
FixYourDLP.com Sponsored by DM

THE TRUSTED

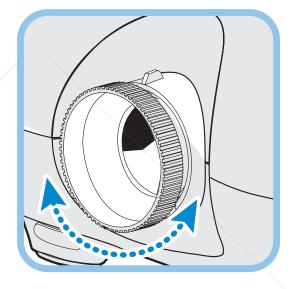


Adjusting the Focus and Zoom

1. Locate the image zoom and focus adjustment rings on the projector.

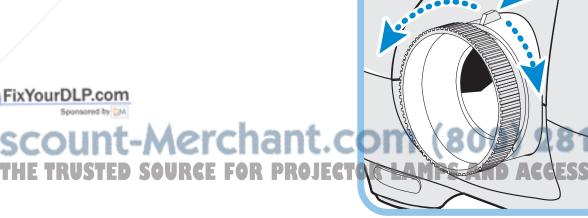


2. Use the image zoom control to resize the projected image and screen size.



60

3. Rotate the image focus control to sharpen the projected image.





3. ON-SCREEN DISPLAY (OSD) MENU SETTINGS

OSD Menu Controls

The projector has an OSD that lets you make image adjustments and change various settings. When the projector is turned on, any connected devices are detected. If the connected device is a PC, press the appropriate keys on the computer keyboard to switch the display output to the projector. (Check the user manual of the PC to determine the appropriate Fn key combination to change display output.)

Navigating the OSD

You can use the remote control cursor buttons 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.

- 1. To open the OSD, press the **Menu** button.
- There are five menus. Press the cursor < ► button to move through the menus.
- Press the cursor ▲ ▼ button to move up and down in a menu.
- Press ◄ ► to change values for settings, and then press Enter to confirm the new setting.
- 5. Press **Menu** to close the OSD or leave a submenu.

	Picture	Options	Settings	Langu	age	Info
☆	Brightness	- S.		50		
0	Contrast			50		
A	Sharpness	0	25	50	75	100
i ka	Color Temperature	9300K	7500K	6500K	5000K	USER
	Saturation			50		
/1	Tint			50		
r	Gamma	Film	Video	Cinema	Photo	PC
- 🐡	Color Space	Auto	RGB	REC709	REC610	
- 6 4	Video Standard	Auto	NTSC	PAL	SECAM	
1	Auto Source Selection		ON	OFF		
1	Source Select			↔ !∕▶		
1	Source Switch			≁!∕ ►		



ixYourDLP.com

Depending on the video source not all items in the OSD are available. For example, the Horizontal/Vertical Position items in the Setup menu can only be modified when connected to a PC. Items that are not available cannot be accessed and are grayed out.

Discount-Merchant.com (800) 281-8860 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES



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 **Image** menu appears.

0 9300K	25 7500K	50 50 50 6500K	75	100
		50		100
				100
9300K	7500K	6500K	500011	
		000011	5000K	USER
		50		
		50		
Film	Video	Cinema	Photo	PC
Auto	RGB	REC709	REC610	
Auto	NTSC	PAL	SECAM	
	ON	OFF		
		↔!∕ ⊁		
		↔ //>		
		Auto NTSC	Auto NTSC PAL ON OFF	Auto NTSC PAL SECAM ON OFF

2. Press the cursor **◄** ► button until **Language** is highlighted.

Picture	Options	Settings	Language	Info
		Engli∌h		
		French		
		German		
		Italian		
		Spanish		
		Dutch		
		Chinese-Simplified		
		Russian		

3. Press the cursor ▲ ▼ button until the desired Language is highlighted. FixYourDLP.com

4. Press the Menu button to confirm the language, and close the OSD.



OSD Menu Overview

Use the following illustration to quickly find a setting or determine the range for a setting.

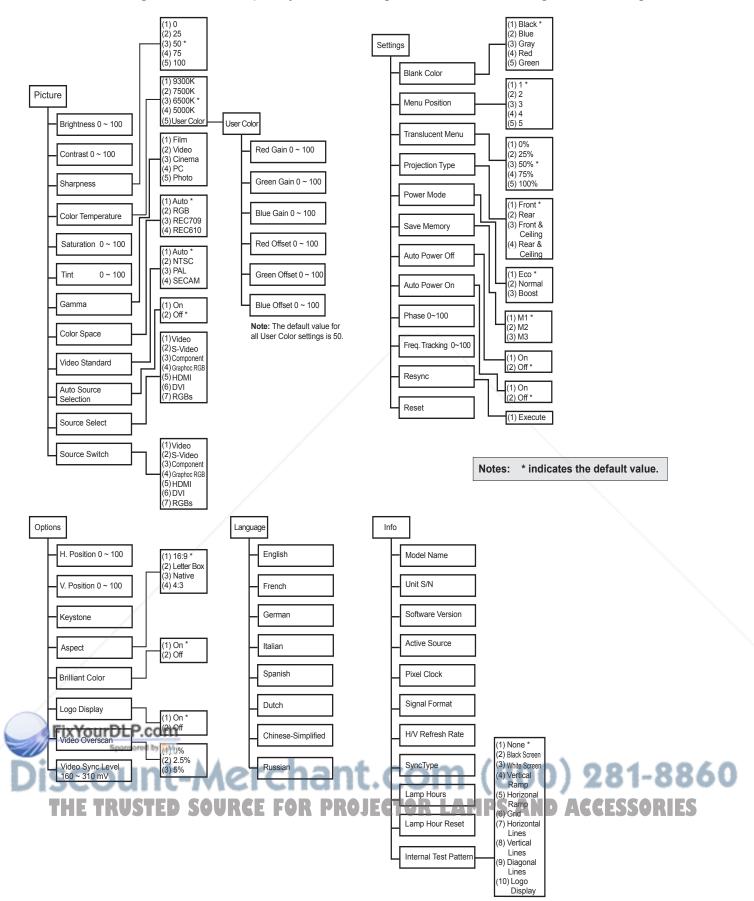




Image Menu

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

	Picture	Options	Setting9	Lang	uage	Info
☆	Brightness			50		
•	Contrast			50		
A	Sharpness	0	25	50	75	100
i Ka	Color Temperature	9300K	7500K	6500K	5000K	USER
10	Saturation			50		
	Tint			50		
r	Gamma	Film	Video	Cinema	Photo	PC
-	Color Space	Auto	RGB	REC709	REC610	
ся́	Video Standard	Auto	NTSC	PAL	SECAM	
1	Auto Source Selection		ON	OFF		
1	Source Select			↔ />		
1	Source Switch			+ /∕ +/∕		

Ітем	DESCRIPTION	DEFAULT
Brightness	Press the cursor ◀ ► button to adjust the brightness. (Range: 0 – 100)	50
Contrast	Press the cursor ◀ ► button to adjust the contrast. (Range: 0 – 100)	50
Sharpness	Press the cursor ◀ ► button to adjust the display sharpness (Range: 0-100)	50
Color temperature	Press the cursor ◀ ► button to adjust the video tint/hue. (Options: 9300K, 7500K, 6500K, 5000K, USER) See "User Color Menu" on page 29	6500K
Saturation	Press the cursor ◀ ► button to adjust the video saturation. (Range: 0 – 100)	50
	Note: Color saturation is available for Video and S-Video modes only. Press the cursor ◀ ► button to adjust the video tint.	
Tint	(Range: 0 – 100) Note: Color tint is available for Video and S-Video modes only.	50
ixYoGADUP.com	Press the cursor ◀ ► button to adjust the gamma correction of the display. (Options: Film, Video, Cinema, Photo, PC) Press the cursor ◀ ► button to adjust the color space.	PC [VGA] Video [DVI, HDMI, Component, Video, S-Video, and RGBs]
Color space	(Options: Auto – RGB – REC709 (YPbPr) – REC610 (YCbCr)) – SS Note: Color space is available for component, PC, HDMI, and DVI modes only.	ORUES
Video standard	Press the cursor ◀ ► button to adjust the Video Standard. (Options: Auto, NTSC, PAL, SECAM) Note: Video standard is available for Video and S-Video modes only.	Auto



	Ітем	DESCRIPTION	DEFAULT
	Auto source selection	Press the cursor ◀ ► button to enable auto source selection.	OFF
		Press the cursor button ◀ ► to manually select the source. The following screen appears.	
		I Video 4//> I Video 4// I S. DVI 4// I S. DVI 4// I S. B. B. B. B. B. B. A.	
		Menu = Exit Item Adjust ◀► Scroll 🔺 ▼	
		Press the cursor button $\blacktriangle \blacksquare$ to move up and down the menu. Press the cursor button to select an input source:	
	Source select	 Video: select composite video as the input source. Composite video combines all three YUV video signals into one channel. NTSC, PAL and SECAM television are examples of composite video sources. S-Video and component video provide a sharper image than composite video. S-Video: select Super Video as the input source. S-Video combines the three YUV video signals into two channels. S-Video provides a sharper image than composite video, but is not as good as component video. Component: select component video as the input source. Component video maintains the three YUV video signals in three separate channels and provides a sharper image than composite video signals in three video and S-Video. 	
		 Graphic RGB: select RGB input to display images from a computer. DVI: select Digital Video Input for digital display quality. HDMI: select High-Definition Multimedia Interface. HDMI is a digital, point-to-point interface for video signals designed as a single-cable solution for home theater and consumer electronics equipment. RGBs: RGB connectors are prevalent in Europe. RGBs are used 	
FixYo	urDLP.com	to hook up VCRs and DVD players to TV sets. When the RGB input option is selected, the Composite Video (CVBS) and Component Video (YpRpB) inputs are automatically switched off. CVBS and YpRpB must be manually re-activated if required.	
) ISC THE	OUNT	The RGB device should be connected using the component RCA input for RGB signals and the Sync(s) connected to the Composite Video Input. Source: For Projector LAMPS AND ACCESS Warning: The color temperature can be changed by modify- ing the red, blue, green, red offset, blue offset, and green offset gains.	-886 Ories
;	Source switch	Press Enter to enable selection of the source (Auto source selec- tion must be enabled).	Full



OSD menu Functions Available for Connected Source

FUNCTION	RGB	DVI	НДМІ	Component Video	Composite Video	S-VIDEO	RGBs
Brightness	х	х	х	х	х	х	Х
Contrast	х	х	х	х	х	х	Х
Sharpness	х	х	х	х	х	х	Х
Color Temp	х	х	х	х	х	х	Х
Color Saturation				х	х	х	
Color Tint				х	х	х	
Gamma	х	х	х	х	х	х	Х
Color Space	х	х	х	х			
Video Standard					х	х	

x = available to video source





Options

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

Options	Setting9	Langu	age	Info
n		50		
n		50		
		↓ /▶		
	16:9	Letter Box	Native	4:3
blor	ON	OFF		
lay	ON	OFF		
rscan	0%	2.5%	5%	
ic Level		50 m¥		
	n	n 16:9 olor ON day ON erscan 0%	n 50 n 50 +/-> 16:9 Letter Box olor ON OFF alay ON OFF	n 50 n 50 +/-> 16:9 Letter Box Native olor ON OFF streean 0% 2.5% 5%

Ітем	DESCRIPTION	DEFAULT
Horizontal position	Press the cursor ◀ ► button to move the image left or right. (Range: 0 – 100)	50
Vertical position	Press the cursor ◀ ► button to move the image up or down. (Range: 0 – 100)	50
Keystone	Press the cursor ◀ ► button to enter the Keystone screen. Press cursor ◀ ► button to correct the left and right distortion of the pro- jected image. Press cursor ▲ ▼ button to up and down distortion of the image. Press the Enter button to enable and disable Key- stone correction. (Range: -50 – +50)	0
	Menu = Exit ON/OFF = Enter Item Adjust =	-886
THE TRUSTED Aspect	Source For Projector Lamps And Access Press the cursor ◀ ► button to toggle between the 4:3 standard format, Letter Box, Native, and the 16:9 High Definition TV (HDTV) format	DRIES 16:9



Ітем	DESCRIPTION				
	Press the cursor ◀ ► button to set brilliant color On or Off.				
Brilliant color	(Range: ON – OFF) Brilliant Color Technology allows for more vivid, rich color while in- creasing mid-tones and superior black levels.	ON			
Logo	Press ◀ ▶ to enable or disable if the logo displays when the pro- jector starts, and when no source is detected.	ON			
display	(Options: ON – OFF)				
Video overscan					
Video Sync Level	Press the cursor ◀ ► button to set video sync level when video signal is not detected (component input use only). (Range:160 – 300 mv).	280mV			





Settings Menu

Press the **Menu** button to open the **OSD** menu. Press the cursor $\blacktriangleleft \triangleright$ button to move to the **Settings** menu. Press the cursor $\blacktriangle \checkmark$ button to move up and down in the menu. Press $\blacktriangleleft \triangleright$ to change values for settings, and then press **Enter** to confirm the new setting.

	Picture	Options	Settings	Langu	age	Info
	Blank Screen	Black	Red	Green	Blue	White
D	Menu Position	5		D	D	
	Translucent Menu	0%	25%	50%	75%	100%
Ρ	Projection Type	Р	٩	٩	Ь	
÷Q.	Power Mode	E	:co	Normal		Boost
™©	Save Memory	M1	M2	M3		
Ð	Auto Power Off		ON	OFF		
Ø	Auto Power On		ON	OFF		
	Phase		50			
	Frequency		50			
*	Resync		4 1∕ ▶ 4 1∕ ▶			
G	Reset		4!/)			

Ітем	DESCRIPTION	DEFAULT		
Blank screen	Press the cursor ◀ ► button to select a background color for the blank screen. (Options: Black – Red – Green – Blue – White)	Black		
Menu position	Press the cursor ◀ ► button to position the OSD on screen. (Options: Left top, Right top, Center, Left bottom, Right bottom)	Left top		
Translucent menu	Press the cursor ◀ ► button to set menu screen translucency. (Options: 0, 25, 50, 75, 100%)			
Projection type	Press the cursor ◀ ► button to choose from four projection methods: P Desktop mount, front of screen ¶ Desktop mount, rear of screen 【 Ceiling mount, front of screen L Ceiling mount, rear of screen	Desktop front P		
Fix YourDLP.com	Press the cursor button to set power mode options. (Options: Eco (180W), Normal (200W), Boost (230W)) Eco mode uses less power and extends lamp life, but decreases lamp bright- ness.	-886		
Save memory	TRUSTED Serves the current configuration to memory Three memory spaces			
Auto power off	Press the cursor button to enable or disable automatic shut-down of lamp after 10 minutes of inactivity. (Options: ON – OFF)	OFF		
Auto power on	Press the cursor button to enable or disable automatic start-up of lamp. (Options: ON – OFF)	OFF		



Ітем	DESCRIPTION			
Phase	Press the cursor ◀ ► button to adjust the A/D sampling clock. (Range: 0 - 100)			
Frequency	Press the cursor ◀ ► button to adjust the A/D sampling number.			
	(Range: 0 - 100)			
Resync	Press the cursor ◀ ► button to automatically synchronize the projector to the input source.	15		
	(Range: 10 – 20 sec.)			
Reset	Resets all settings to default values.	_		



The Config menu functions are available to all video sources.

Language Menu

Press the **Menu** button to open the **OSD** menu. Press the cursor **◄** ► button to move to the **Language** menu. Press the cursor **▲** ▼ button to move up and down in the **Language** menu. Select the value, and then press **Enter** to confirm the new setting.



Ітем	DESCRIPTION	DEFAULT
Language Fix YourDLP.c	Dutch Chinaga Simplified Duccien	English
Discoult THE NOTEST	The Language menu functions are available to all video sources.	-8860 Iories



User Color Menu

Press the **Menu** button to open the **OSD menu**. Press the cursor $\blacktriangleleft \triangleright$ button to move to the **Picture** menu. Press the cursor $\blacktriangle \checkmark$ button to move up and down to **Color Temperature** menu. Press the cursor $\blacktriangle \checkmark$ button to move up and down to **User Color** menu. Press the cursor $\blacktriangle \checkmark$ button to move up and down to **User Color** menu. Press the cursor $\blacktriangle \checkmark$ button to make the selection and press the cursor $\blacktriangleleft \triangleright$ button to adjust the setting. Press **Enter** to confirm. See the example below:



-	Red Gain	50
•	Green Gain	50
	Blue Gain	50
	Red Offset	50
	Green Offset	50
	Blue Offset	50

	Ітем	DESCRIPTION	DEFAULT	
	Red gain	Press the cursor ◀ ► button to adjust the red color level. (Range: 0 - 100)	50	
Disc TH	Green gain	Press the cursor ◀ ► button to adjust the green color level. (Range: 0 - 100)	50	
	Blue gain	Press the cursor ◀ ► button to adjust the blue color level. (Range: 0 - 100)	50	
	YRAD219.tom	Press the cursor ◀ ► button to adjust the red offset level. (Range: 0 - 100)	50	
	Green offset	Press the cursor ◀ ► button to adjust the green offset level. (Range: 0 - 100)	50-88	60
	Blue offset	Press the cursor ◀ ► button to adjust the blue offset level. (Range: 0 - 100)	50	



The color temperature can be changed by modifying the red, blue, green, red offset, blue offset, and green offset gains.



Info Menu

Press the **Menu** button to open the **OSD menu**. Press the cursor **< >** button to move to the **Info** menu. Press the cursor ▲ ▼ button to move up and down in the Info menu.

	Picture	Options	Settings	Language	Info
8	Model Name			D10	
8	Unit S/N			9999999	
B s∨	Software Version			DPE01	
5	Active Source			HDTV	
- MA	Pixel Clock			74.5MHz	
S/F	Signal Format			1280X720	
	HIV Refresh Rate			45K / 60HZ	
SYNC	SyncType			Sync On Green	
-`@ʻ-	Lamp Hours			0	
ų,	Lamp Hour Reset			↓ />	
- 533	Test Pattern			None	

Ітем	DESCRIPTION	DEFAULT
Model name	Displays the model name of the device (D10)	
Unit S/N	Displays the serial number of the device.	
Software version	Displays information about the software version	
Active source	Displays the active source.	
Pixel clock	Displays information about the sampling rate.	These
Signal format	Signal format Displays information about the type of signal format.	
H/V refresh rate Displays the refresh horizontal and vertical refresh rates.		display only.
Sync type	Sync type Displays information about the sync type signal.	
Lamp hours	Shows the number of hours lamp has been in use for Eco and Normal modes.	
Lamp hour ResetAfter replacing the lamp, this item should be reset. Refer to placing the Projection Lamp" on page 31.		
	Displays information about the type of test pattern (Range: None, Black Screen, White Screen, Vertical Ramp, Horizontal Ramp, Grid, Horizontal Lines, Vertical Lines, Diagonal Lines, Logo Dis- play).	None

t.com (800) 11011 THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES



4. MAINTENANCE AND SECURITY

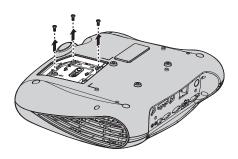
Replacing the Projection Lamp

Sim2 recommends changing the projection lamp after a warning message displays **Warning: Lamp life time Over**. It should only be replaced with a certified replacement part, which you can order from your local dealer.

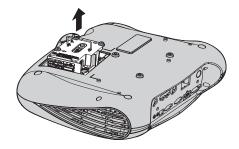
	Warning: Lamp Life Time Over Please contact your local dealer for replacing lamp
Important!	 The lamp contains a certain amount of mercury and should be disposed of according to local ordinance regulations. Avoid touching the glass surface of the new lamp: Doing so may shorten its operation life.
	Be 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.
	he screw on the lamp nent cover.
2. Open the cover.	lamp compartment



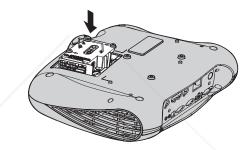
- **3.** Remove the three screws from the lamp module.
- **4.** Lift the module handle up.



5. Pull firmly on the module handle to remove the lamp module.



6. Reverse steps 1 to 5 to install the new lamp module.







Resetting the Lamp

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

- **1.** Press the Menu button to open the OSD menu.
- 2. Press the cursor ◄ ► button to move to the Info menu.

8			Language	Info
	Model Name		D10	
`8™	Unit S/N		9999999	
and and a second	Software Version		DPE01	
5	Active Source		HDTV	
蘆	Pixel Clock		74.5MHz	
	Signal Format		1280X720	
	HIV Refresh Rate		45K / 60HZ	
STM:	SyncType		Sync On Green	
-6-	Lamp Hours		0	
<i>ф</i>	Lamp Hour Reset		4!∕ ⊁	
88	Test Pattern		None	

- **3.** Press the cursor ▲ ▼ button to move down to Lamp Hour Reset.
- **4.** Press the cursor **◄ ►** or Enter button. A message screen appears.
- 5. Press the cursor buttons in this order:
 ▼ ▲ < ►.
 The Status menu appears again showing the Lamp Hours reset to zero.

Lamp Hour Reset	
	Please See User Manual
	Menu = Exit

Cleaning the Projector

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

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 ojector lens.

FixYourDLP.com

1. Apply a little optic lens cleaner to a clean soft cloth.

(Do not apply the cleaner directly to the lens.) (200) 281-8860 2. Lightly wipe the lens in a circular motion cror LAMPS AND ACCESSORIES



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



5. TROUBLESHOOTING

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 pinpoint 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

If there is an error status, the LED remains lit until the AC power cord is removed. An LED message is defined by its blinking sequence. A long blink is defined as 1 second. A short blink is defined as 0.3 seconds. The LED messages are listed below:

ERROR CODE MESSAGE	LED FLASH
Environment Over Temperature	1 long blink / 1 short blink
DMD Over Temperature	1 long blink / 2 short blinks
Lamp Over Temperature	1 long blink / 3 short blinks
Fan1 Locked	1 long blink / 4 short blinks
Fan2 Locked	2 long blinks / 2 short blinks
Fan3 Locked	2 long blinks / 3 short blinks
Fan4 Locked	2 long blinks / 4 short blinks
DMD Initial Fail	3 long blinks / 1 short blink
Lamp Initial Fail	3 long blinks / 2 short blinks
Ballast UART Error	3 long blinks / 3 short blinks
Temperature Sensor Fail	3 long blinks / 4 short blinks
Inter Lock Open	4 long blinks / 1 short blink



LED displays in blue only.





Common Problems and Solutions

This section describes some common problems and their solutions.

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.
- 2. Press the Auto button on the remote control or projector.
- **3.** Ensure the projector-to-screen distance is within the 7-meter (23-feet) specified range.
- 4. Check that the projector lens is clean.

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.
- 2. Use the Keystone button on the remote control or projector to correct the problem.

Problem: The image is reversed or upside down

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

Problem: The image is streaked

- 1. Set the **Frequency** and **Tracking** settings on the **Utility** menu of the OSD to the default settings.
- 2. 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

Adjust the **Contrast** setting on the **Image** menu of the OSD.

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

Adjust the Color Temperature and Gamma settings on the Image 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

1. Power surges can cause the lamp to turn off. Press the power button twice to turn off the

THE TRoposector. When the PowerLED is on, press the power outton D ACCESSORIES

- 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 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.
- **5.** Replace the batteries.
- 6. Turn off other Infrared-enabled devices in the vicinity.
- 7. Have the remote control serviced.





6. SPECIFICATIONS

Hardware Specifications

Model	D10
Display type	TI DMD 0.65-inch x 1, 12 degrees, LVDS DMD with DDP3020
Resolution	WXGA (1280x768)
Color	16.7 Million (24-bits/pixel)
Weight	4kg / 8.8lbs
Projection distance	1.5 to 7 meters (59 to 275 inches)
Projection screen size	0.98 to 5.25 meters (38 to 206 inches)
Projection lens	Manual zoom; manual focus
Zoom ratio	1.15:1
Horizontal keystone correction	+/- 40 degrees
Vertical keystone correction	+/- 15 degrees
Projection methods	Desktop front/rear; ceiling front/rear
Data compatibility	IBM PC or compatibles (VGA, SVGA, XGA, SXGA), Mac
SDTV/EDTV/HDTV	480i, 576i/480p, 576p/720p, 1080i, 1080p
Video compatibility	NTSC/NTSC 4.43, PAL (B/G/H/I/M/N 60), SECAM
H-Sync	15,31 - 90 kHz
V-Sync	50 - 85 Hz
Safety certification	FCC Class B, UL, c-UL, CE, CCC, EN 60950-1 2004, Low voltage Directive <i>2006/95EC</i> , UL 60950-1
Operation temperature	10° C ~ 35° C
Dimensions	See "Projector Dimensions" on page 41
	110Vac: Typical 253W (normal mode); Typical 228W (Eco mode)
Power consumption	220Vac: Typical 246W (normal mode); Typical 222W (Eco mode) (AC input: 100 - 240Vac 3.0A - 1.2A 50/60Hz)
Stand By	< 1 watt
Lamp	Boost mode: 230W; normal mode: 200W; Eco mode: 180W

put/output Connectors

Sponsored by DM		
MODEL	D10	0040
UPSCOUNT	RGBIETCHAIL.COIII (800) 281	
THE TRUSTEE	Composite video (RCAx1) JECTOR LAMPS AND ACCESS	RIES
	Mini-jack to S-Video (Mini-DIN)	
Video	Component (RCA x3)	
	DVI-D (HDCP)	
	HDMI (HDCP)	



D10 Pro	jection	distance	and	size	table

	1.53:1								
	MAX. SCREEN SIZE (WIDE)								
Diag	onal	Width		He	eight	Projection Distance			
m	in.	m	in.	m	in.	m	in.		
1.27	50"	1.11	43.58"	0.62	24.51"	1.69	66.68"		
1.52	60"	1.33	52.29"	0.75	29.42"	2.03	80.01"		
1.78	70"	1.55	61.01"	0.87	34.32"	2.37	93.35"		
2.03	80"	1.77	69.73"	1.00	39.22"	2.71	106.68"		
2.29	90"	1.99	78.44"	1.12	44.12"	3.05	120.02"		
2.54	100"	2.21	87.16"	1.25	49.03"	3.39	133.35"		
2.79	110"	2.44	95.87"	1.37	53.93"	3.73	146.69"		
3.05	120"	2.66	104.59"	1.49	58.83"	4.06	160.02"		
3.81	150"	3.32	130.74"	1.87	73.54"	5.08	200.03"		
4.57	180"	3.98	156.88"	2.24	88.25"	6.10	240.03"		
5.08	200"	4.43	174.32"	2.49	98.05"	6.77	266.70"		
6.35	250"	5.53	217.89"	3.11	122.57"	8.47	333.38"		
7.62	300"	6.64	261.47"	3.74	147.08"	10.16	400.05"		

	1.76:1									
Dia	agonal	Width		Height		Projection Distance				
m	in.	m	in.	m	in.	m	in.			
1.27	50"	1.11	43.58"	0.62	24.51"	1.95	76.70"			
1.52	60"	1.33	52.29"	0.75	29.42"	2.34	92.04"			
1.78	70"	1.55	61.01"	0.87	34.32"	2.73	107.38"			
2.03	80"	1.77	69.73"	1.00	39.22"	3.12	122.72"			
2.29	90"	1.99	78.44"	1.12	44.12"	3.51	138.06"			
2.54	100"	2.21	87.16"	1.25	49.03"	3.90	153.40"			
2.79	sponsored 1,0%	2.44	95.87"	1.37	53.93"	4.29	168.74"			
3.05	120"	2.66	104.59"	1.49	58.83"	4.68	184.08"			
3.81	150"	3.32	130.74"	1.87	73,54"	5,84	230.10"			
4.57	180"	3.98	156.88"	2.24	88.25"	7.01	276.12"			
5.08	200"	4.43	174.32"	2.49	98.05"	7.79	306.79"			
6.35	250"	5.53	217.89"	3.11	122.57"	9.74	383.49"			
7.62	300"	6.64	261.47"	3.74	147.08"	11.69	460.19"			



7. TIMING MODE TABLE

The projector can display several resolutions. The following table outlines the resolutions that can be displayed by the projector.

Signal	RESOLUTION	Freq. V	Freq. H	Video	S-VIDEO	RGBs	COMPONENT	RGB	DVI-D	HDMI
	640x480	59.94	31.47	_			_	0	0	0
	640x480	72.81	37.86	_	_	_	_	0	0	0
	640x480	74.99	37.49	_	_	_	_	0	0	0
	640x480	85	43.27	_	_	_	_	0	0	0
	800x600	56.25	35.15	_	_	_	_	0	0	0
	800x600	60.32	37.88	-	_	_	_	0	0	0
	800x600	72.19	48.08	Ι	_	_	_	0	0	0
VESA	800x600	75	46.87	-	_	_	_	0	0	0
	800x600	85.06	53.67	_	_	_	_	0	0	0
	1024x768	60	48.36	_	_	_	_	0	0	0
	1024x768	70.07	56.47	_			_	0	0	0
	1024x768	75.03	60.02	- /		<u>_</u>	_	0	0	0
	1024x768	85.03	68.28	-	_	_	_	0	0	0
	1280x1024	60.02	63.98	/-	_	_	<u> </u>	0	0	0
Apple Ma-	640x480	66.59	34.99	_	_	_		0	0	0
cintosh	832x624	74.54	49.72	_	_	_		0	0	0
NTSC	NTSC-J	59.94	15.73	0	0	0	0	-	_	_
PAL/SECAM	PAL, SECAM	50	15.63	0	0	0	0	_	_	_
	4801	59.94	15.73	_	_	_	0	_	<u> </u>	_
	5761	50	15.63	_	_	_	0	_	_	_
SDTV	480P	59.94	31.47	_	_	_	0	_	_	0
	576P	50	31.25	_	_	_	0	_	_	0
/	10351	60	33.75	_	_	_	0	_	_	0
	10801	50	28.12	_	_	_	0	_	_	0
	10801	60	33.75	_	_	_	0	_	_	0
HDTV	720P	50	37.5	_	_	_	0	_	_	0
FixYourD	1220pom	60	45	_	_	_	0	_	_	0
S¢	1080P	60	67.5	_	_		0	_		0
O : Frequen	cy supported	ver	cna	INT.	COI	m (800)	28	1-8	80

- : Frequency Not supported CE FOR PROJECTOR LAMPS AND ACCESSORIES

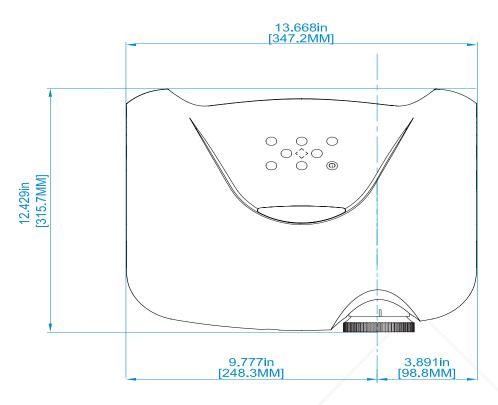
The native resolution for the D10 is 1280 x 768.

Resolution other than native mode may be displayed with uneven size of text or lines.

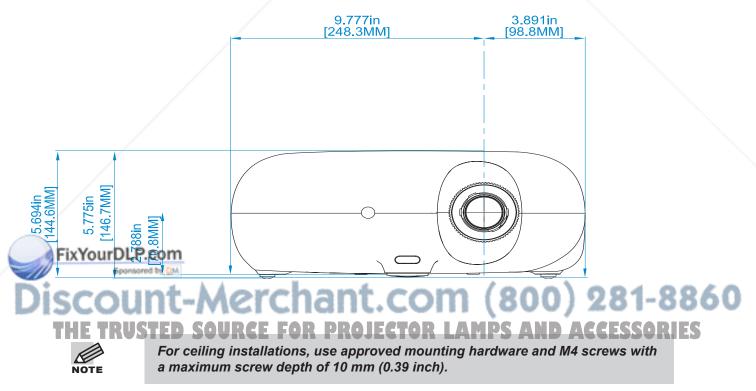


Projector Dimensions

Top View



Front View





8. 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

FCC Class B, UL, c-UL, CE, CCC, EN 60950-1 2004, Low voltage Directive 2006/95EC, UL 60950-1

Electromagnetic Compatibility and 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.

EN 55022 Class B 1998

EN 55024 1998

EN 61000-3-2 2000

EN 61000-3-3 1995









SIM2 Multimedia S.p.a. • Viale Lino Zanussi, 11 • 33170 Pordenone - ITALY Phone +39.0434.383.256 • Fax +39.0434.383.260 www.sim2.com • e-mail: info@sim2.it

SIM2 USA Inc. • 10108 USA Today Way • 33028 Miramar FL - USA Phone +1.954.4422999 • Fax +1.954.4422998 www.sim2usa.com • e-mail: sales@sim2usa.com

SIM2 Deutschland GmbH • ArndStr. 34-36, D-60325 Frankfurt Am Main Phone 0800.800.7462 • Fax 0800.900.7462 www.sim2.de • e-mail: info.de@sim2.it

> SIM2 UK LTD • Steinway House Worth Farm, Little Horsted Nr. Uckfield, East Sussex TN22 5TT Phone +44.01825.750850 • Fax +44.01825.750851 www.sim2.co.uk • e-mail: info@sim2.co.uk



• In accordance with the manufacturer's constant product programme, product specifications and subject to changes without notice.



This user manual is provided as a free service by FixYourDLP.com. FixYourDLP is in no way responsible for the content of this manual, nor do we guarantee its accuracy. FixYourDLP does not make any claim of copyright and all copyrights remain the property of their respective owners.

About FixYourDLP.com

FixYourDLP.com (http://www.fixyourdlp.com) is the World's #1 resource for media product news, reviews, do-it-yourself guides, and manuals.

Informational Blog: http://www.fixyourdlp.com Video Guides: http://www.fixyourdlp.com/guides User Forums: http://www.fixyourdlp.com/forum

FixYourDLP's Fight Against Counterfeit Lamps: http://www.fixyourdlp.com/counterfeits

Sponsors:

FixYourDLP.com

Sponsored by DM

RecycleYourLamp.org – Free lamp recycling services for used lamps: http://www.recycleyourlamp.org

Lamp Research - The trusted 3rd party lamp research company: http://www.lampresearch.com

Discount-Merchant.com – The worlds largest lamp distributor: http://www.discount-merchant.com