

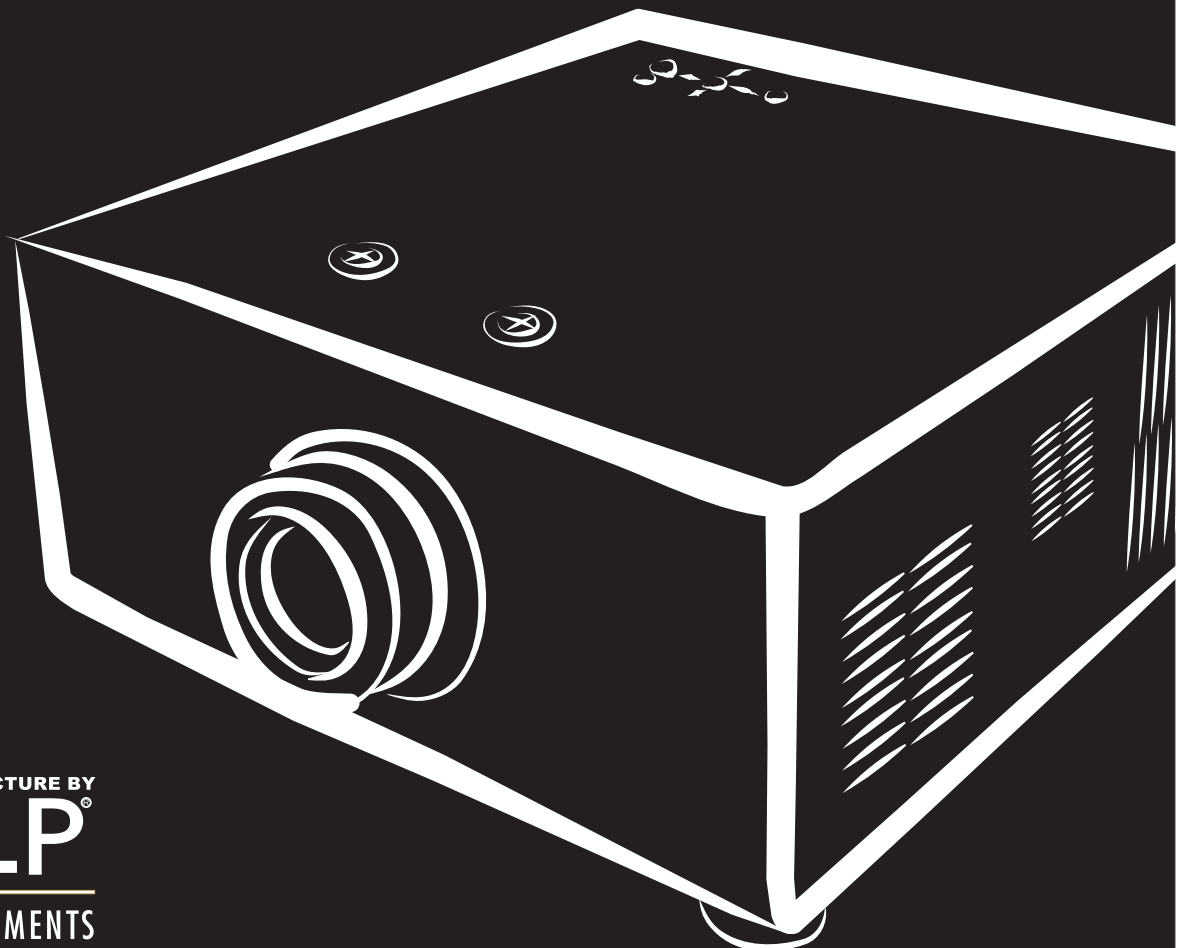
**vivitek**<sup>®</sup>  
Vivid Color, Vivid Life

**User's Manual**

**Touchboards**

205 Westwood Ave, Long Branch, NJ 07740  
Phone: 866-94 BOARDS (26273) / (732)-222-1511  
Fax: (732)-222-7088 | E-mail: sales@touchboards.com

# D8300 Series



PICTURE BY  
**DLP**<sup>®</sup>  
TEXAS INSTRUMENTS

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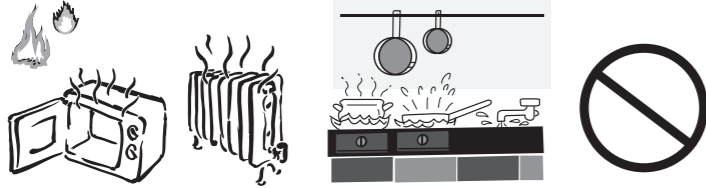
### ***ABOUT THIS MANUAL***

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.

## IMPORTANT SAFETY INSTRUCTIONS

Thank you for your purchase of this quality product! For best performance, please read this manual carefully as it is your guide through the menus and operation.

1. Read and Keep these instructions.
2. Heed all warnings.
3. Follow all instructions.
4. Do not use this apparatus near water, and not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.



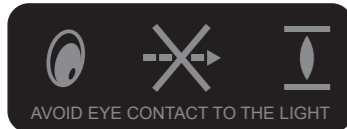
5. Clean only with a dry cloth.
6. Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.
7. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for the replacement of the obsolete outlet.
8. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and the point where they exit from the apparatus.
9. Only use the attachments/accessories specified by the manufacturer.
10. Use only with a cart, stand, tripod, bracket or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus to avoid injury from tip-over.



11. Unplug this apparatus during lightning storms or when unused for long periods of time.



12. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
13. The +12V trigger only outputs 12V DC signal for triggering. Do not connect to any other power input or output. This could cause damage to this unit.
14. Keep the packing material in case the equipment should ever need to be shipped.
15. Never look into the lens when the projector is on.



## DISPOSAL OF OLD ELECTRICAL AND 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.



## 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 [WWW.EIAE.ORG](http://WWW.EIAE.ORG). For lamp specific disposal information check [WWW.LAMPRECYCLE.ORG](http://WWW.LAMPRECYCLE.ORG).



# INTRODUCTION

## ABOUT THIS MANUAL

This User's Manual describes how to install, set up and operate the D8300. Throughout this manual, the Projector is referred to as the "D8300."

**Target Audience** Vivitek has prepared this manual to help installers and end users get the most out of the D8300. Vivitek has made every effort to ensure that this manual is accurate as of the date it was printed. However, because of ongoing product improvements and customer feedback, it may require updating from time to time. You can always find the latest version of this and other Vivitek product manuals on-line, at [www.vivitekcorp.com](http://www.vivitekcorp.com).

## DESCRIPTION, FEATURES AND BENEFITS

The Vivitek D8300 provides state-of-the-art technology for 1080P picture performance, Full HD (1920 x 1080) native resolution for crystal clear, pristine images. The D8300 offers incredibly high definition images at today's highest available resolutions. Equipped with precision optics, the D8300 includes zoom, focus and lens shift controls for a throw range of 1.85:1 to 2.40:1. For a smaller throw distance (1.56:1 to 1.86:1), the D8300 can be fitted with a varying optics package (optional) to meet different requirements. Exceptional scaling and film-to-video (3:2 pull-down) conversion is easily achieved. Combined with Vivitek's sophisticated parameters for white balancing, the D8300's proprietary deinterlacing technology provides the highest level of development for gray-scale and color balancing and artifact-free images. Completing this engineering marvel are discrete infrared (IR) and RS-232 control, power and source selection controls for seamless, flexible operation.

### ■ Key Features and Benefits

The D8300 offers these key features and benefits:

- Native Resolution: 1920 x 1080 (16:9 Native Aspect Ratio)
- DLP system using high-performance Digital Micromirror Device (DMD)
- Two (2), HDMI 1.3 Inputs with High-bandwidth Digital Content Protection (HDCP)
- HDTV Compatible
- Excellent Video Processing on progressive and interlaced video inputs.

### ■ Green Product with:

- Lead free solder used for soldering including circuit and component electronics.
- Lead free glasses and coatings.
- Recycled paper used in the user manuals and packing cartons.
- Energy Saving: High efficiency power switching and less than 1W power consumption in standby mode.

### ■ Additional Features of the D8300

- Horizontal and vertical lens shift
- Keystone adjustment

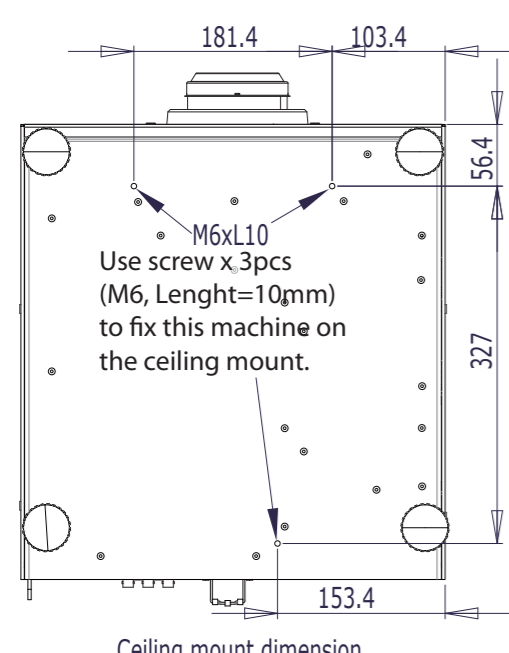
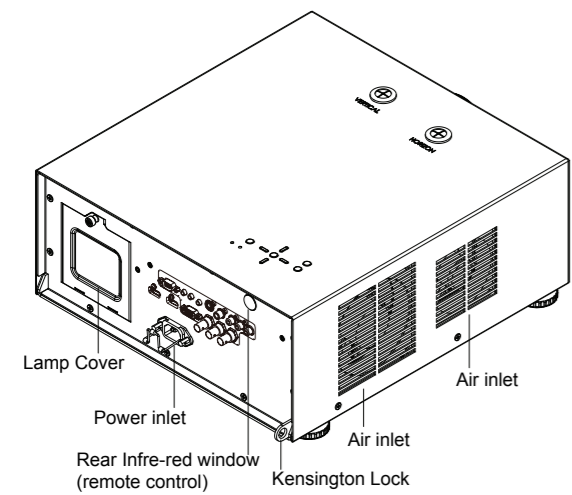
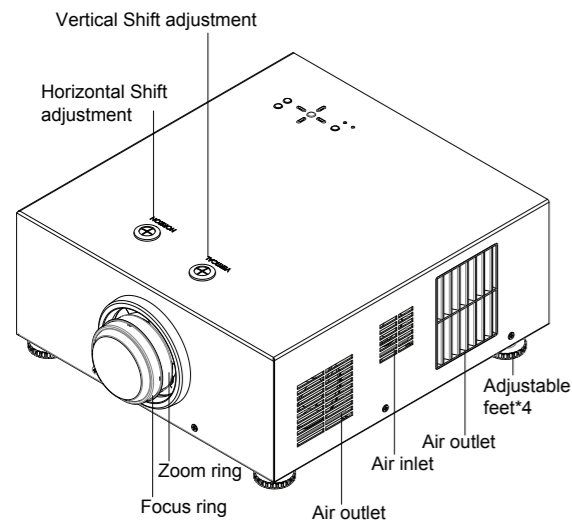
## PARTS LIST

Your D8300 is shipped with the following items, if any items are missing or damaged, please contact your dealer or Vivitek Customer Service.

- DLP Projector x 1
- Wrench x 1
- Power Cable
  - USA x 1
  - China x 1
  - Europe x 1
- Remote Control x1
  - Batteries x 2
- CD x 1
- Warranty Card
  - China x 1
  - USA x 1
  - Europe x 1
  - Taiwan x 1
  - Other x 1
- INSP. Card x 1
- China RoHS Card x 1

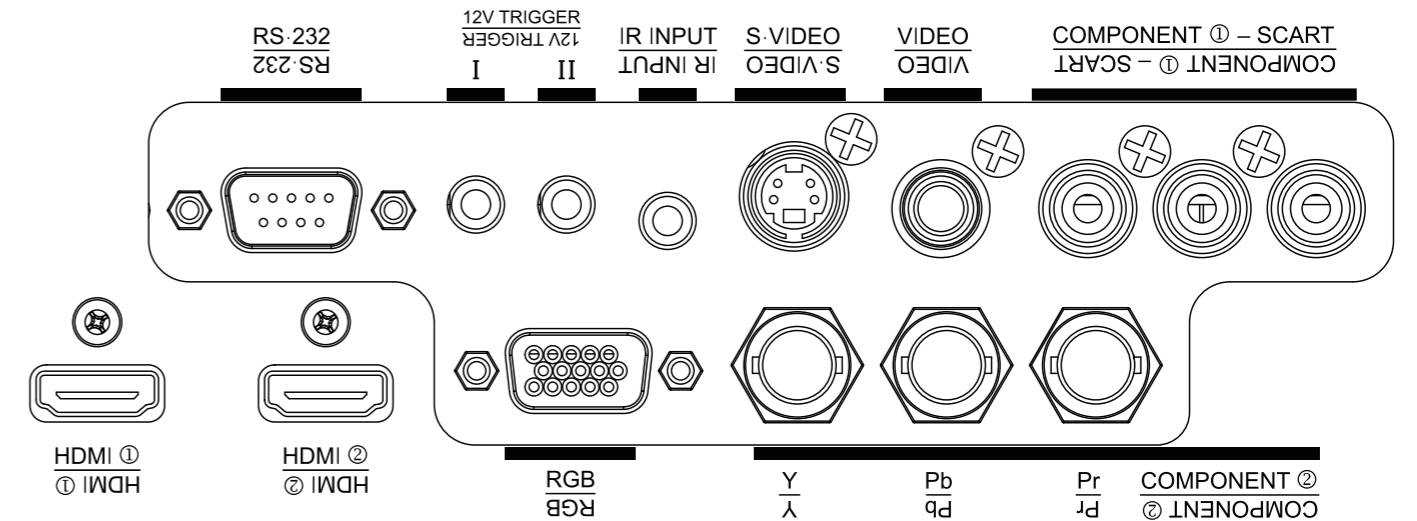
# CONTROLS AND FUNCTIONS

## D8300 AT A GLANCE



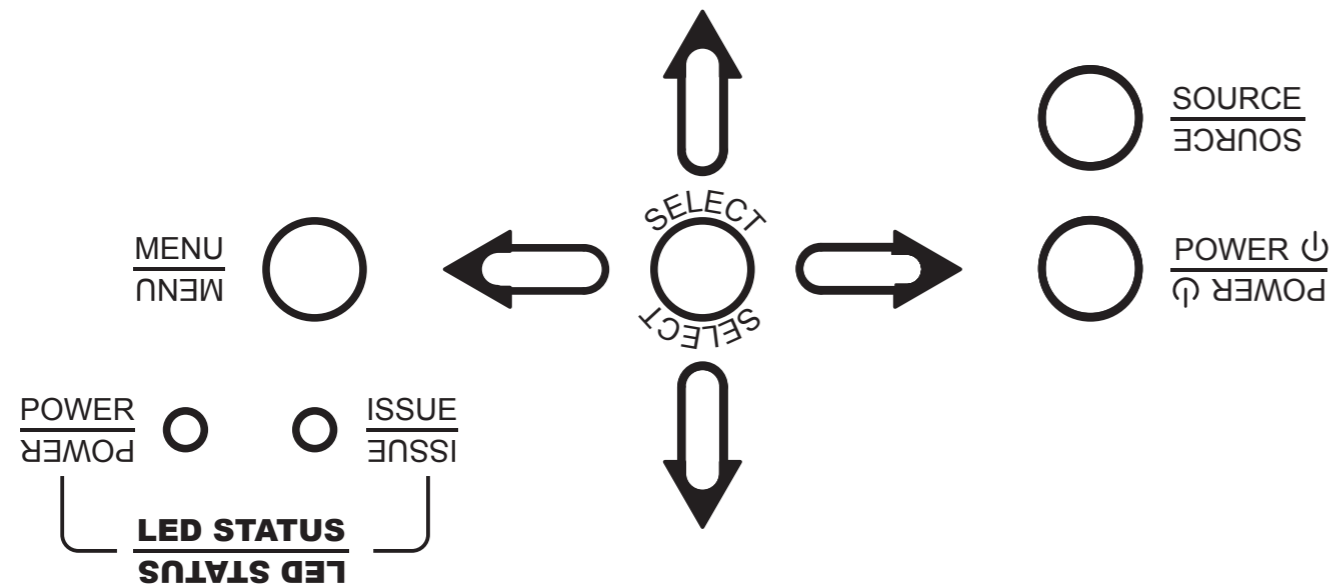
- **Vertical Shift adjustment**  
Refer to [“Vertical Lens Shift” on page 18](#)
- **Horizontal Shift adjustment**  
Refer to [“Horizontal Lens Shift” on page 18](#)
- **Focus ring**  
Rotate this to focus the projected image.
- **Zoom ring**  
Rotate this to change the projected image size.
- **Air outlet**  
Warm air exits the projector through this vent. Ensure that it is not blocked
- **Air inlet**  
Internal fans draw cool air into the projector through this vent.
- **Adjustable feet**  
Use these when the projector is installed in a table-top configuration to level the image and/or adjust the projection angle
- **Lamp Cover**  
Refer to [“To replace the projector lamp” on page 38](#).
- **Power Inlet**  
For input power from wall outlet to projector.
- **Rear Infr-red window**  
For receive the remote controller's message.
- **Kensington Lock**  
If you worry the security problem, attach the projector to a permanent object with the Kensington slot and a security cable.

## I/O PANEL



- **RS-232**  
9-pin D-sub connector for interfacing with a PC or home theater automation/control system.
- **TRIGGER 1, TRIGGER 2**  
(3.5-mm, mini phone jack) Offers 12 (+/- 1.5) V of output for 350mA monitor relay with short circuit protection.
- **IR INPUT**  
Wired input from a Niles- or Xantech-compatible, infrared (IR) repeater system.
- **S-VIDEO**  
A standard S-Video input for connecting a DVD player, satellite receiver or Super VHS (S-VHS) VCR.
- **VIDEO**  
Standard composite video input for connecting a VCR, laser disc player or other composite video source. Also provides composite sync input for RGBS sources.
- **COMPONENT 1/SCART (RCA connectors)**  
Standard or high-definition (480i/480p/576i/576p/720p/1080i/1080p) Component (YPbPr) input for connecting a DVD/HD-DVD/BD player, HD set-top box or other SD/HD source. Also provides RGB input for RGBS sources.
- **COMPONENT 2**  
Three BNCs for connecting component (YPbPr) video sources.
- **RGB**  
Provides a standard, 15-pin VGA-style connection to either an RGB or component high-definition source, or to a personal computer.  
The D8300 automatically detects the input signal resolution.
- **HDMI1, HDMI2**  
For connect the device which have HDMI output connectors.

## KEYPAD



● **MENU**  
Press this button to show or hide the OSD menu.

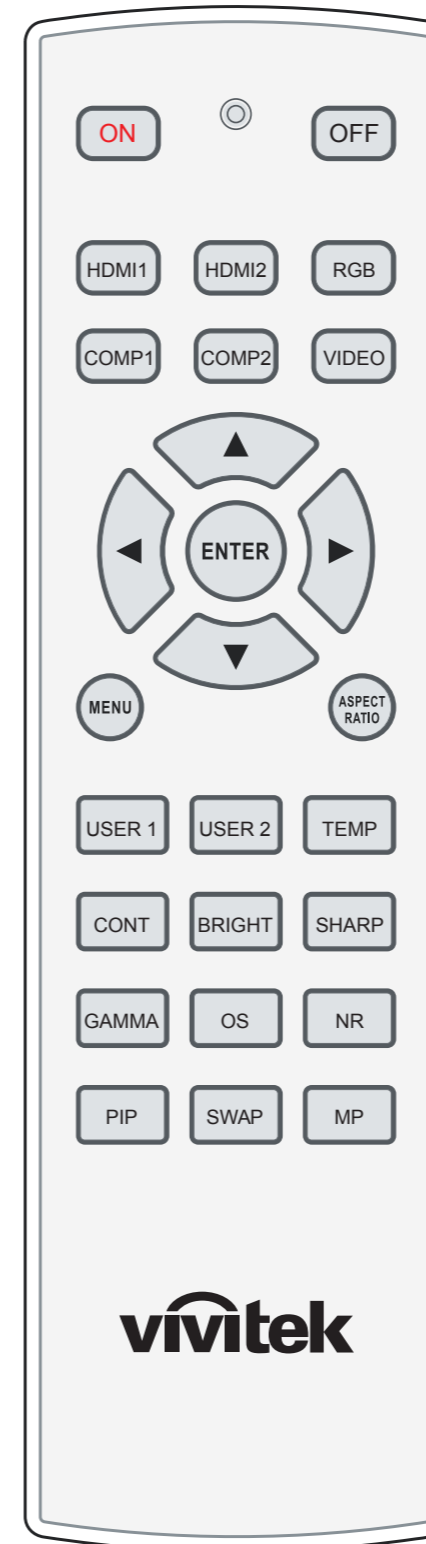
● **SELECT, ▲, ▼, ◀, ▶**  
Use these buttons to select items or settings, adjust settings or switch display patterns.

● **SOURCE**  
Press to select a video source. HDMI1, HDMI2, RGB, COMP1, COMP2, VIDEO or S-VIDEO.

● **Power**  
Use the button to turn on/off the projector.

● **LED STATUS**  
Refer to ["LED Status" on page 40](#)

## Remote control



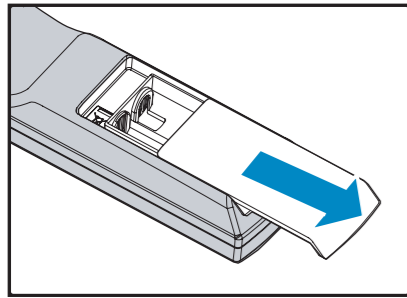
- **ON**  
Use this button to turn the projector on.
- **OFF**  
Use this button to turn the projector off.
- **HDMI1, HDMI2, RGB, COMP1, COMP2, VIDEO**  
Press to select an input source.
- **ENTER, ▲, ▼, ◀, ▶**  
Use these buttons to select items or settings, adjust settings or switch display patterns. ENTER: Press to select a highlighted menu item or confirm a changed setting.
- **Aspect Ratio**  
Selection Button: Press this button repeatedly to select one of the following aspect ratios: • 16:9: For viewing 16:9 DVDs or HDTV programs in their native aspect ratio.
- **MENU**  
Press this button to show or hide the OSD menu.
- **USER1, USER2**  
Press to recall settings for the current input from one of two memory presets. By default, these buttons are assigned as follows: M1 = User Memory 1; M2 = User Memory 2. However, you can assign each button to any memory preset you wish.
- **Temp**  
This function is not available for this model.
- **CONT**  
Adjust the Contrast value using ◀ or ▶ to highlight the differences between light and dark areas of the picture.
- **BRIGHT**  
Adjust the Brightness value using ◀ or ▶ to lighten or darken the picture.
- **SHARP**  
Adjust the Sharpness value using ◀ or ▶ to sharpen or blur the borders between colors and objects.
- **GAMMA**  
adjustment to the light intensity (brightness) of an image in order to match the source more closely.
- **OS**  
Press to select an overscan mode  
Note: When Native aspect is selected, Zoom is not available
- **NR**  
Press to adjust noise reduction level.
- **PIP**  
This function is not available for this model.
- **SWAP**  
This function is not available for this model.
- **MP**  
Refer to ["Menu Position"](#)  
[Choose this function to decide the OSD menu's position." on page 33](#)

## Notes on Remote Control Operation

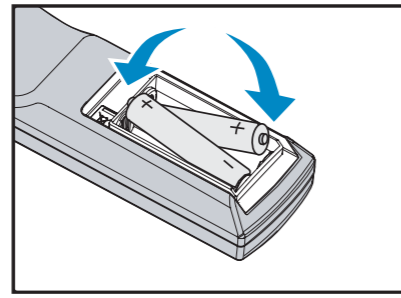
- In most situations, you can simply point the remote control at the screen which will reflect the IR signal from the remote back toward the IR receiver on the projector. In some cases, however, ambient conditions may prevent this. If so, point the remote control at the projector and try again.
- If the effective range of the remote control decreases or it stops working, replace the batteries with new ones.
- The remote control may fail to operate if the infrared remote sensor is exposed to bright sunlight or fluorescent lighting.

## TO INSTALL BATTERIES IN THE REMOTE CONTROL

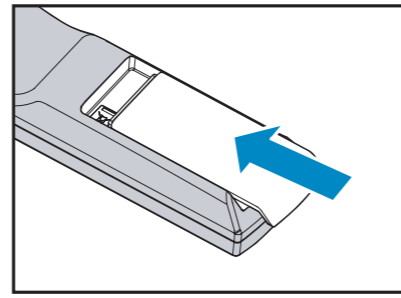
### STEP 1



### STEP 2



### STEP 3

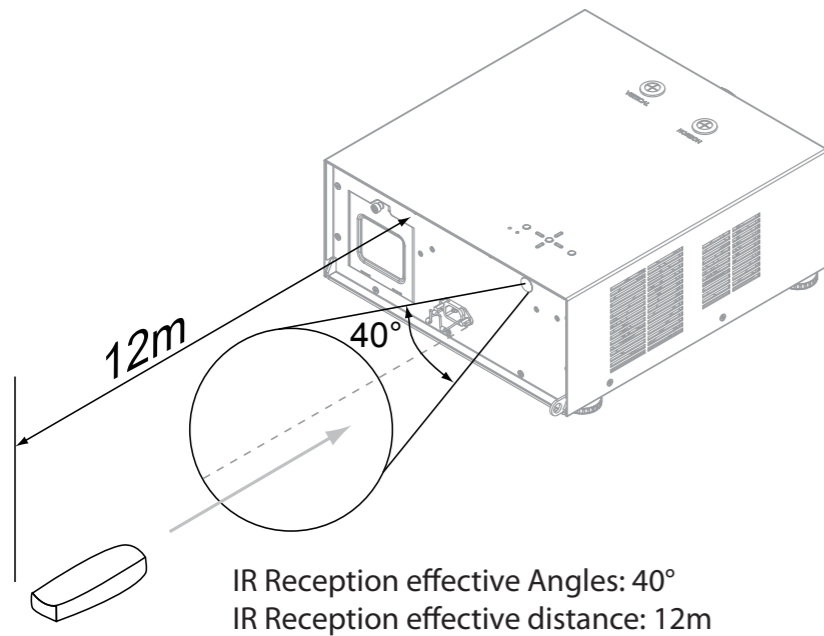


1. Slide the battery compartment cover in the direction of the arrow to remove it.
2. Install two AA batteries with the correct polarity.
3. Replace the cover.

#### Notes on Batteries

- Make sure that the battery polarities are correct when installing the batteries.
- Do not mix an old battery with a new one or different types of batteries.
- If you will not use the remote control for a long time, remove the batteries to avoid damage from battery leakage.

## RANGE OF EFFECTIVE REMOTE CONTROL SIGNAL RECEPTION



#### Note:

Avoid placing the remote control at places of high temperature or humidity as it could cause the remote control to malfunction.

## INSTALLATION CONSIDERATIONS

PROPER INSTALLATION OF YOUR PROJECTOR WILL ENSURE THE QUALITY OF YOUR DISPLAY. WHETHER YOU ARE INSTALLING A PROJECTOR TEMPORARILY OR PERMANENTLY, YOU SHOULD TAKE THE FOLLOWING INTO ACCOUNT TO ENSURE YOUR PROJECTOR PERFORMS OPTIMALLY.

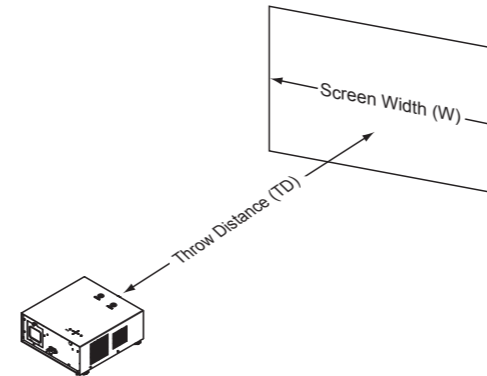
### AMBIENT LIGHT

In general, minimize or eliminate light sources directed at the screen. Contrast ratio in your images will be noticeably reduced if light directly strikes the screen, such as when a shaft of light from a window or floodlight falls on the image. Images may then appear washed out and less vibrant. Requires separate room Installation cost is usually higher

### THROW DISTANCE

Throw distance is the distance measured from the front of the projector to the screen. This is an important calculation in any projector installation as it determines whether or not you have enough room to install your projector with a desired screen size and if your image will be the right size for your screen. You can quickly estimate the throw distance by taking the width of the screen and multiplying it by the lens throw ratio; see Figure 3-2. The result of this calculation tells you roughly how far back the projector should be positioned from the screen in order to project a focused image large enough to fill the screen.

$$\text{Throw Distance (TD)} = \text{Screen Width (W)} \times \text{Throw Ratio (TR)}$$



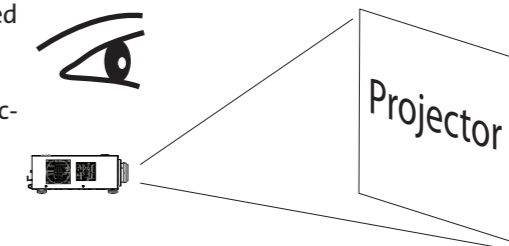
Two models of the D8300 are available, one with 1.56-1.86:1 lens and the other with 1.85-2.40:1 lens With optional zoom adaptors throw ratios of 1.24 – 3.0 can be achieved. The standard D8300 offers throw ratios between 1.85:1 and 2.40:1. With the optional, short-throw lens, the D8300 offers throw ratios between 1.56:1 and 1.86:1.

### MODES OF INSTALLATION

#### ■ Frontal projection - desktop installaion

Advantages: easy to install can be easily moved or adjusted easy to operate.

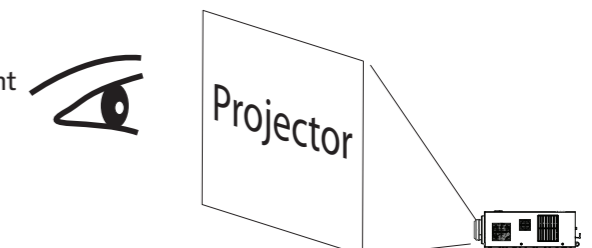
Disadvantage: occupies floor space and limits seating capacity.



#### ■ Rear projection - desktop installaion

Advantage: the projector is completely hidden from plain view the projector can be easily operated this setup usually offers better reduction of ambient noise.

Disadvantage: requires an additional room for installation relatively higher costs for installation.

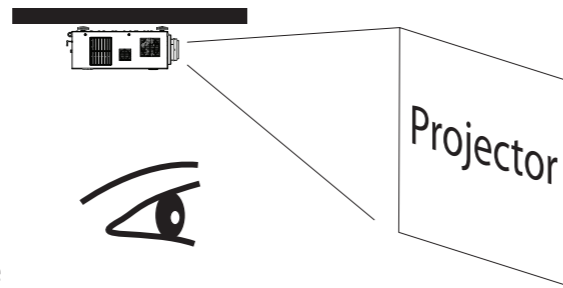




■ **Frontal projection - ceiling mode**

Advantage: does not occupy floor space does not draw attention to it. Eliminates the possibility that someone would accidentally move the projector.

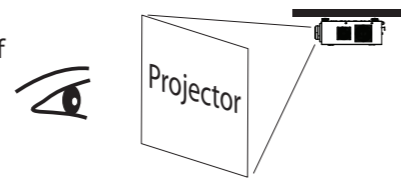
Disadvantage: stricter installation requirements and conditions; care should be taken during the installation to ensure the projector has been securely mounted. operation of the projector becomes inconvenient without the remote control.



■ **Rear projection - ceiling mode**

Advantage: the projector is completely hidden from plain view this setup usually offers better reduction of ambient noise.

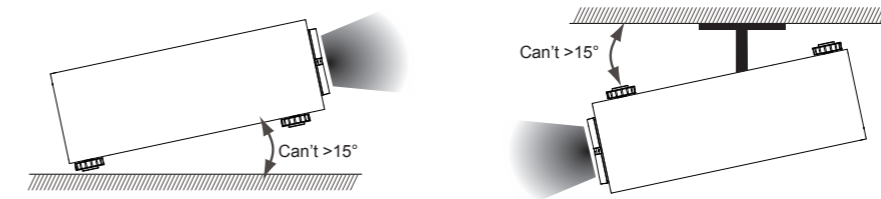
Disadvantage: requires an additional room for installation. Stricter installation requirements and conditions; care should be taken during the installation to ensure the projector has been securely mounted. operation of the projector becomes inconvenient without the remote control.



**DO NOT TILT THE PROJECTOR MORE THAN 15 DEGREES.**

The maximum tilt angle for the projector is 15 degrees.

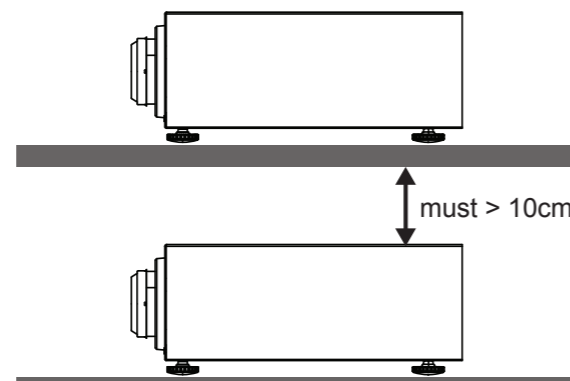
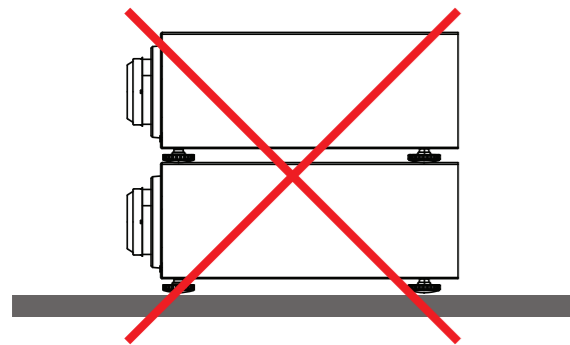
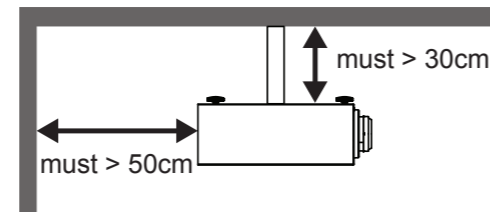
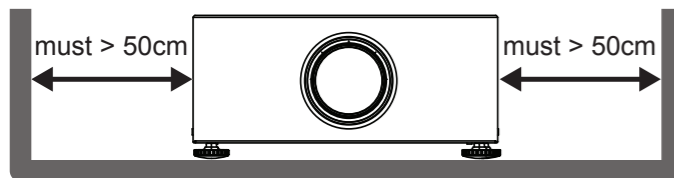
When the projector is tilted more than 15 degrees, it will shorten the life of the projector lamp and may lead to other unpredictable damages.



**OTHER CONSIDERATIONS**

- Install the projector in an environment below 35°C (95°F). The projector should be kept clear from sources of heat and / or ventilation openings of air conditioner.
- The projector should be kept away from devices that emit electromagnetic energy, such as motor and transformer. Common devices that emit electromagnetic energy include slideshow system, speakers, power amplifiers and elevators.
- If you choose to install the projector on the ceiling, be sure to use the ceiling installation components manufactured by manufacturer-certified vendors. For details, please contact your local dealer.
- Ensure that the intake vents do not recycle hot air from the exhaust vent.

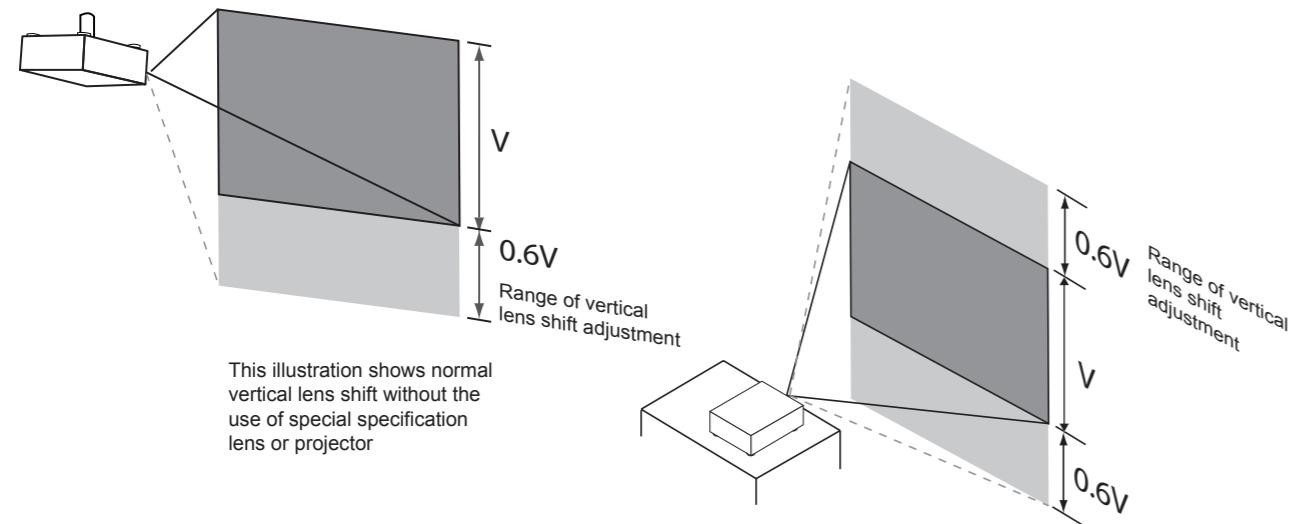
**ALLOW AT LEAST 50 CM CLEARANCE AROUND THE EXHAUST VENT.**



# LENS SHIFT

## VERTICAL LENS SHIFT

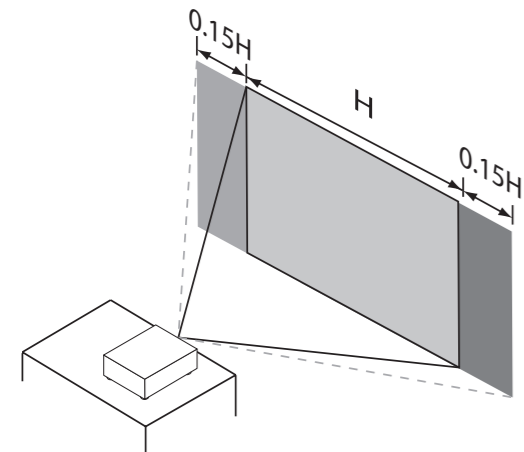
The D8300 has a lens shift capability which allows the vertical movement of the image without moving the projector. Lens shift is generally expressed as a percentage of the screen height. For ceiling mounted projectors, the lens can be moved 120% (0.6V) downward, while the lens can be moved 120% (0.6V) up or down on a desktop mounted projector.



*note:*  
This is a general example of lens shift. Lenses vary in their shift capabilities. No particular lens or projector is used in this example.

## HORIZONTAL LENS SHIFT

The D8300 has a lens shift capability which allows the horizontal movement of the image without moving the projector. The lens can be moved 30% (0.15H) to the right or left within the housing.

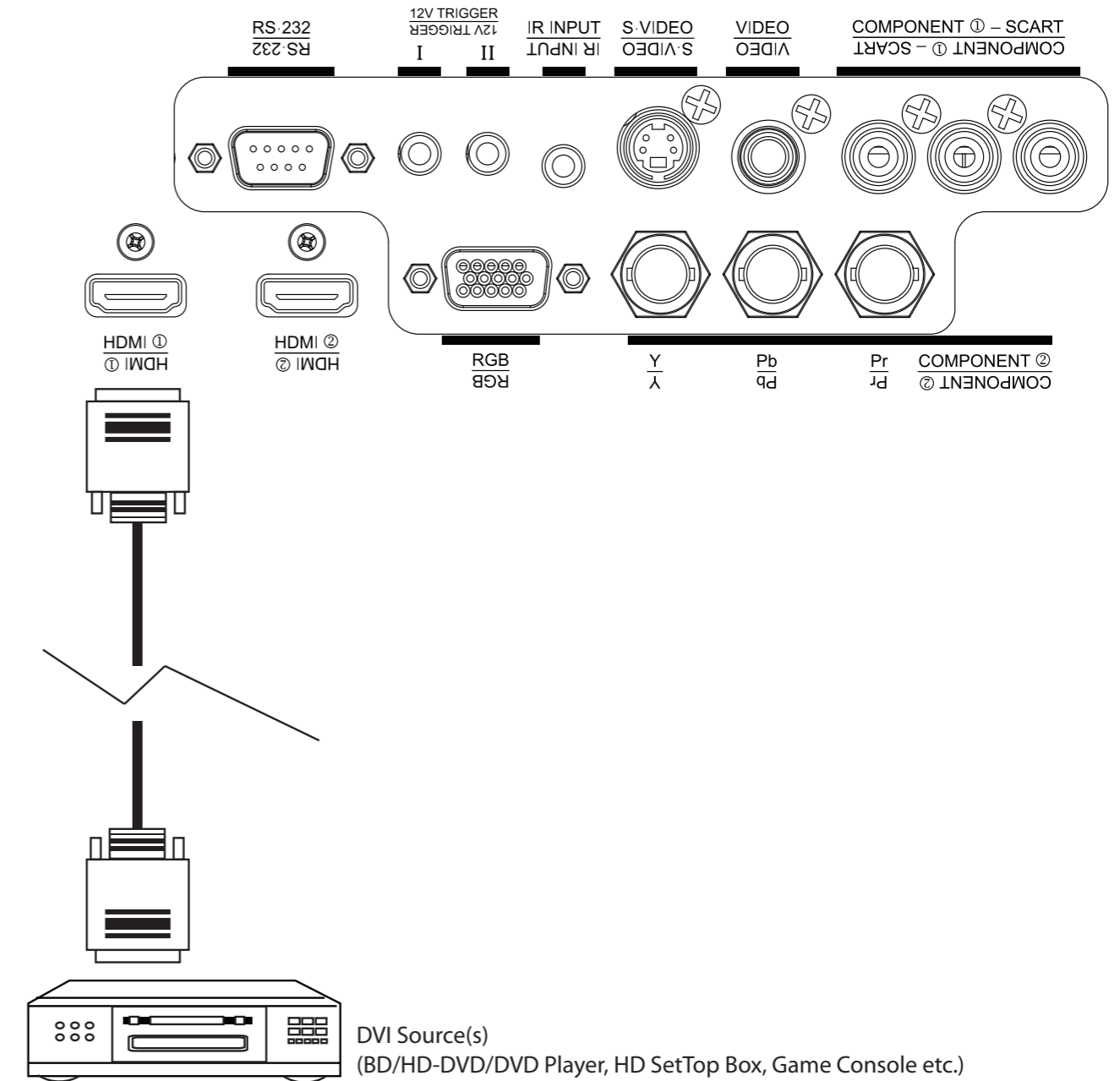


*note:*  
This is a general example of lens shift. Lenses vary in their shift capabilities. No particular lens or projector is used in this example.

# CONNECTING THE PROJECTOR TO OTHER DEVICES.

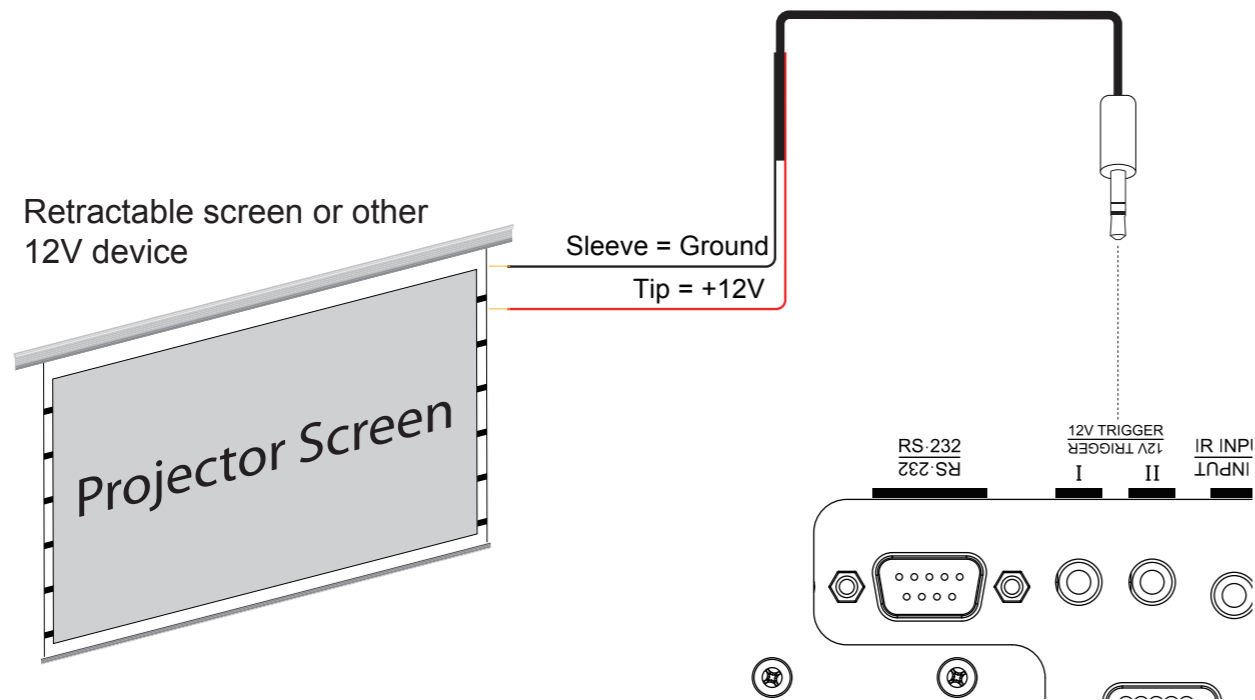
Proceed as follows to connect the D8300 to your video sources, external controller(s) - if present - and AC power. When connecting your equipment: •Use the correct signal cables for each source. •Ensure that the cables are securely connected. Tighten the thumbscrews on connectors that have them. Connecting Source Components to the D8300  
Connect your video sources to the D8300 as shown and described in the sections that follow.

## HDMI CONNECTION



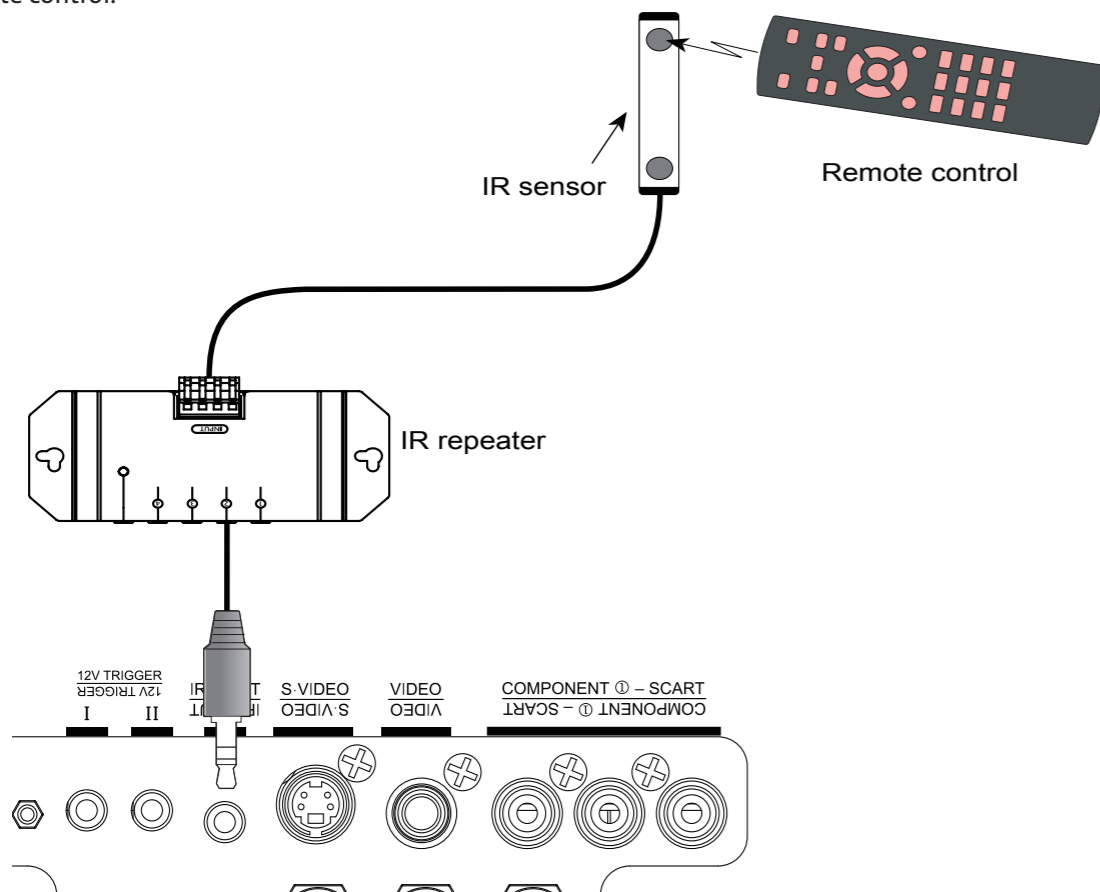
### 12V TRIGGER CONNECTION

If your home theatre system includes a projector screen, screen cover or other 12V Trigger equipment, please connect such device/equipment to the projector's 12V Trigger output as illustrated. After you have done so, Your screen will lower automatically whenever you turn on your projector for your convenience.



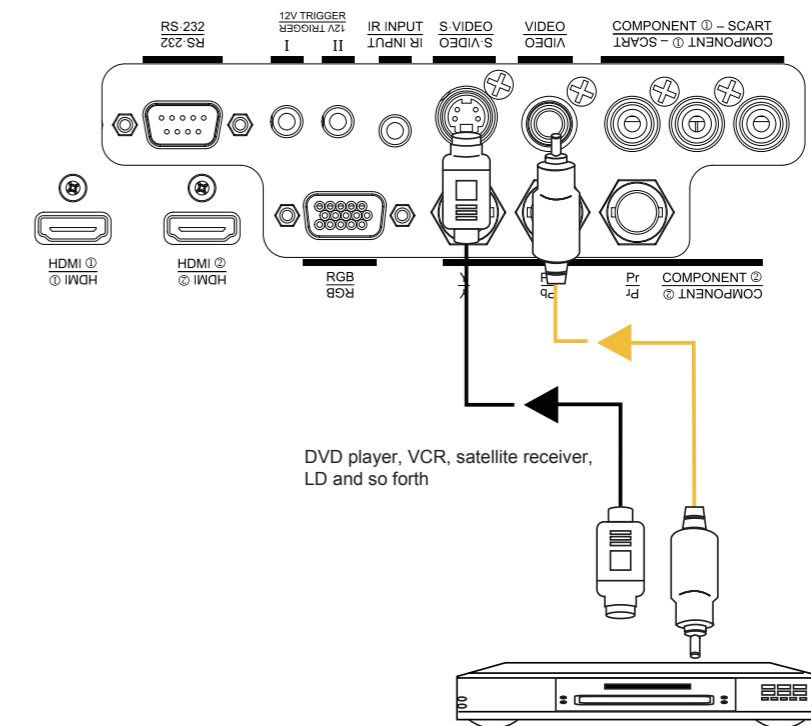
### IR INPUT CONNECTION

If infrared signals from the remote control cannot reach the projector due to excessive distance or obstructions such as walls or cabinet doors, you can connect an external IR repeater system to the IR INPUT on the D8300 to extend the range of the remote control.



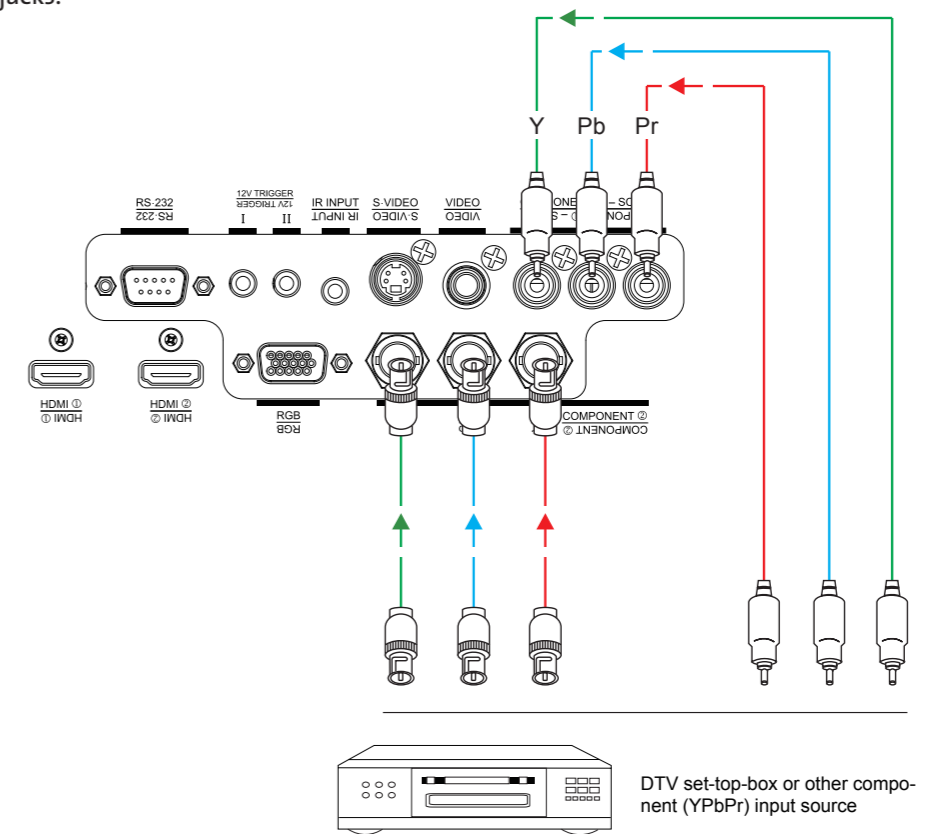
### S-VIDEO, VIDEO CONNECTION

If the image input device offers both S-Video and Video connection, it is recommended that you choose S-Video to obtain better image quality. If both the S-Video and Video inputs are connected to the projector, the projector will prioritize S-Video signal input and image from the Video input will not be played.



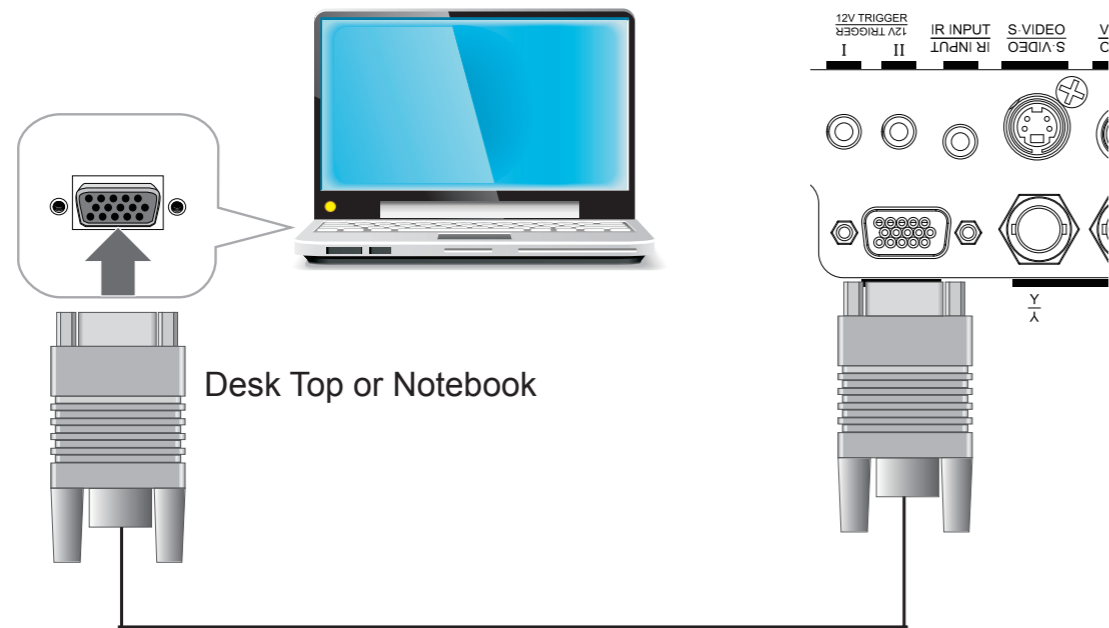
### COMPONENT CONNECTION

Take the 3/5 cabled RGB component video connectors from the source equipment to the projector's COMPONENT1 SCART or COMPONENT2 jacks.



### RS-232 CONTROLLER CONNECTION

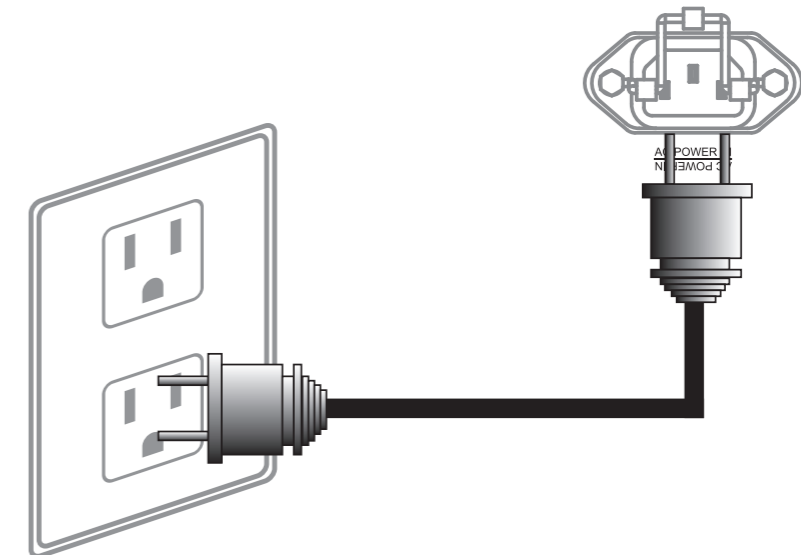
Connect a PC or home theater control/automation system (if present) to the RS-232 port on the D8300. Use a standard, 9-pin serial cable, wired straight-through.



## START USING THE PROJECTOR - ADJUSTMENTS

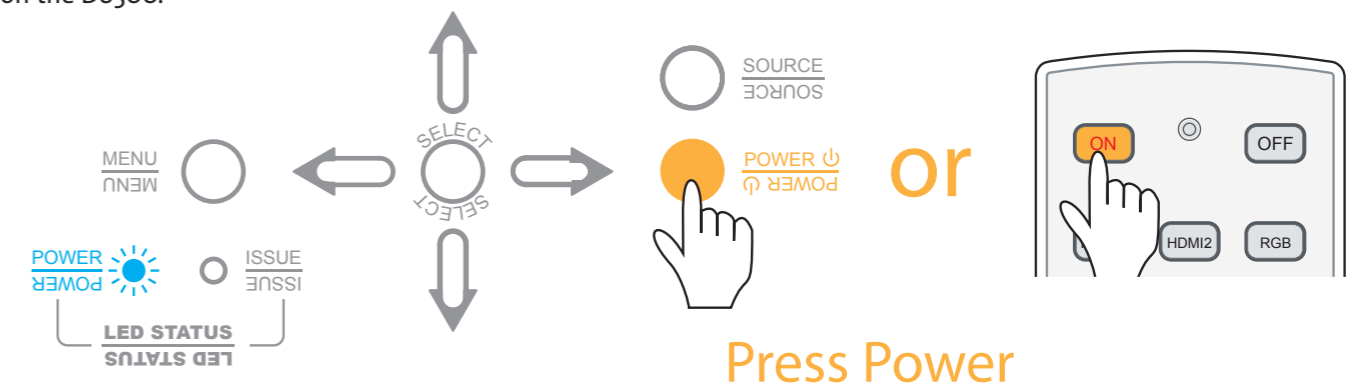
### CONNECTING TO AC POWER

The D8300 ships with various types of AC power cords. Choose the one that is appropriate to your locale. Plug the female end of the power cord into the AC receptacle on the rear of the projector (AC 100V ~ 240V); Then, connect the other end to your AC power source.



### TURNING ON THE POWER

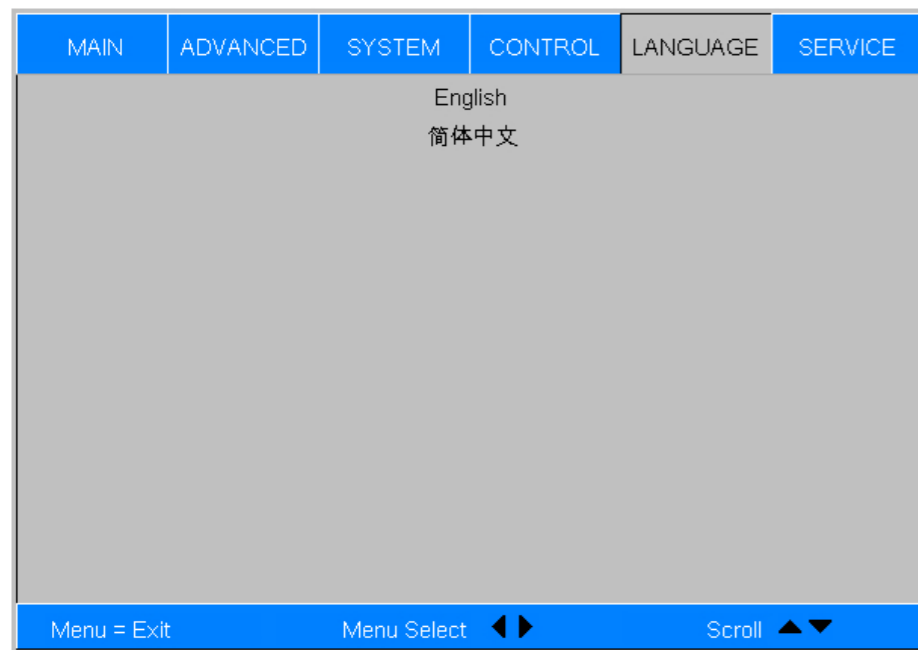
Press the on button on Remote controller. The power LED indicator flashes green to indicate that it is warming up. When the projector is ready for use, the LED indicator turns off, and the projector lights. button on the remote control to turn on the D8300.



**POWER LED**  
Flash Blue color

## CHANGING THE OSD LANGUAGE

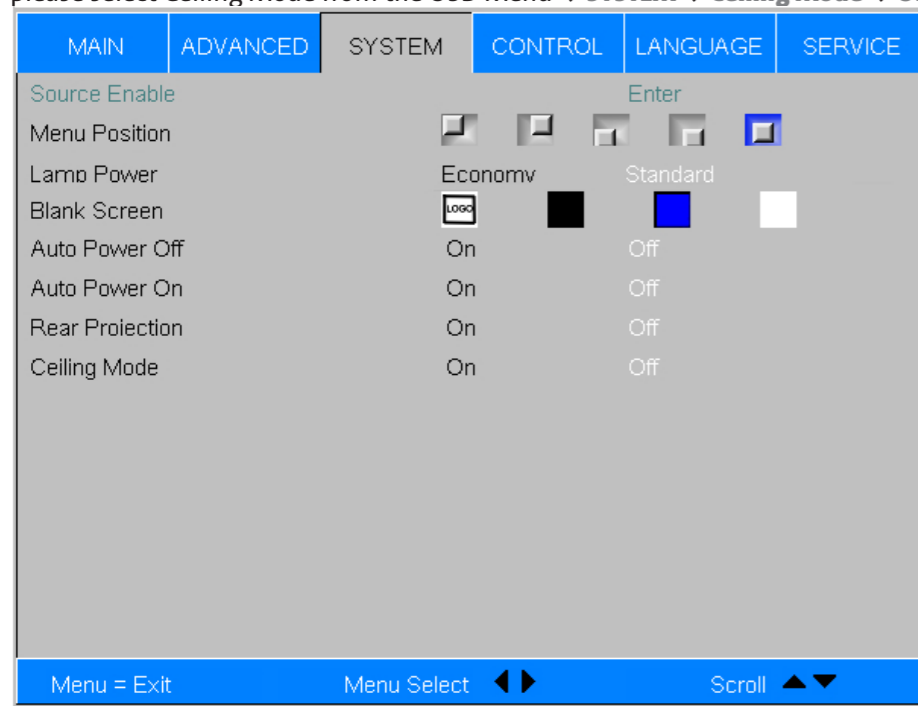
The D8300 can display the menus in English, Simplify Chinese. Press **MENU** to display the OSD, Press ◀▶ to select **LANGUAGE** item, then press ◀▶ to select a language that you wanted. Then press **ENTER** to confirm your selection.



## ADJUSTING THE PICTURE ORIENTATION

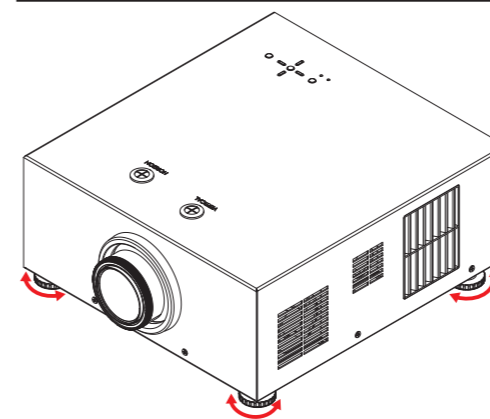
If the D8300 is installed behind the screen, you must change the picture orientation to match the installation method. Refer to [“Modes of installation” on page 15](#). To do this, press **MENU** on the remote control. Then select **SYSTEM -> Rear Projector -> ON**.

If the projector is ceiling-mounted, the D8300 will automatically invert the image. If this automatic inversion is not de-sired, please select Ceiling Mode from the OSD Menu -> **SYSTEM -> Ceiling Mode -> ON**.



## LENS ADJUSTMENTS

The D8300 gives you a great deal of control over the picture size, position and focus. Focus To focus the projected image, grasp the lens by the front ring and rotate it.

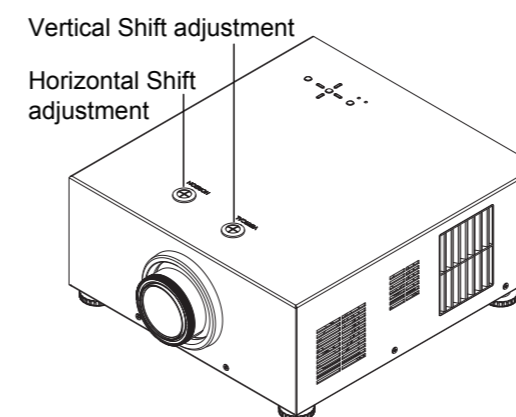


### Adjust foot

Rotate the 4 feet on projector for image position.

#### Note:

Ceiling Mode can't adjust this function.



### Vertical Lens Shift

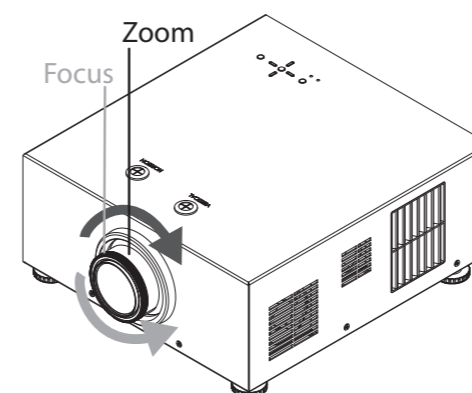
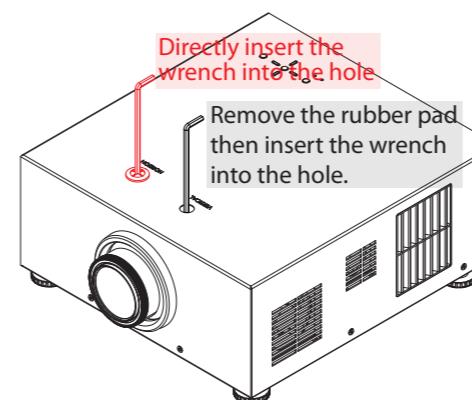
To shift the projected image vertically, insert the provided hex wrench into the hole at the top of the projector (directly above the lens). Then, turn the wrench as shown to shift the lens in the desired direction. Refer to [“Vertical Lens Shift” on page 18](#)

### Horizontal Lens Shift

To shift the projected image horizontally, insert the provided hex wrench into the hole at the top of the projector. Then, turn the wrench as shown to shift the lens in the desired direction. Refer to [“Horizontal Lens Shift” on page 18](#)

### When use hex wrench:

1. you can remove the rubber pad which cover the lens shift hole. then insert the hex wrench into the hole and rotate the wrench to adjust the picture's position. Suggest you do this action.
2. Or you can directly insert the hex wrench into the hole for adjust the picture's position. Of course the rebber pad will break a hole.



### Zoom

To make the picture smaller (zoom out) or larger (zoom in). Rotate the zoom ring in the appropriate direction..

### Focus

To make the picture clear or Fuzzy. Rotate the Focus ring appropriate direction.

# START USING THE PROJECTOR - OPERATION

## SELECTING AN INPUT SOURCE

When you turn on the D8300, it switches to the last selected input and looks for a valid signal. Use the input source buttons on the remote control to select an input source directly.



## SELECTING AN ASPECT RATIO

Press the aspect ratio button to select the appropriate aspect ratio for the type of program material being



## USING THE OSD

1. Press the **MENU** button on the remote control or machine top cover's keypad to display the OSD main menu.
2. Press **◀** or **▶** to select a sub-menu.
3. Press **▲** or **▼** to select a sub-menu item.
4. For each sub-menu item, the currently-selected value is highlighted. Press **▲** or **▼** to choose a setting for that item, and press **ENTER** on the remote controller or **SELECT** on the keypad to adjust the value of that item.
5. If want return to the previous menu, please press **MENU**.
6. In the Main Menu, press **MENU** to turn off the OSD menu. The D8300 OSD menus are arranged

# START USING THE PROJECTOR - OSD INTRODUCTION

## OSD MENU TREE

MAIN	Aspect Ratio	16:9 Letterbox 4:3 4:3 Narrow Native
	Memory	Recall Memory Save setting
	Brightness	0~200
	Contrast	0~200
	Color Saturation	Not availabel for this model
	Color Tint	Not availabel for this model
	Sharpness	0~200
	Noise Reduction	0~200
	Overscan	Off Crop Zoom
	Source Select	HDMI1 HDMI2 RGB COMP1 COMP2 VIDEO
Resync	ENTER	

ADVANCE	Color Space	Auto REC709 REC601 RGB-PC RGB-VIDEO
	Video Standard	Auto NTSC PAL SECAM
	Gamma	CRT Film Video Bright Grahpic
	RGB Adjust	Red Offset Green Offset Blue Offset Red Gain Green Gain Blue Gain
	Fine Sync	V Position H Position Phase Tracking Sync Level
	Color Mode	Bright Mode D65 Mode D65 Color Mode

SYSTEM	Source Enable	HDMI1 HDMI2 RGB COMP1 COMP2 VIDEO
	Menu Position	□
	Lamp Power	Economy Standard
	Blank Screen	Logo Black Blue White
	Auto Power Off	ON OFF
	Auto Power On	
	Rear Projection	OFF
	Celling Mode	

Control	Triggle 1	Lamp 16:9 Letterbox
	Triggle 2	4:3 4:3 Narrow RS232
	Auto Source	ON OFF
	H Keystone	-35 ~ 0 ~ 35
	V Keystone	-20 ~ 0 ~ 20

Language	English	
	簡體中文	

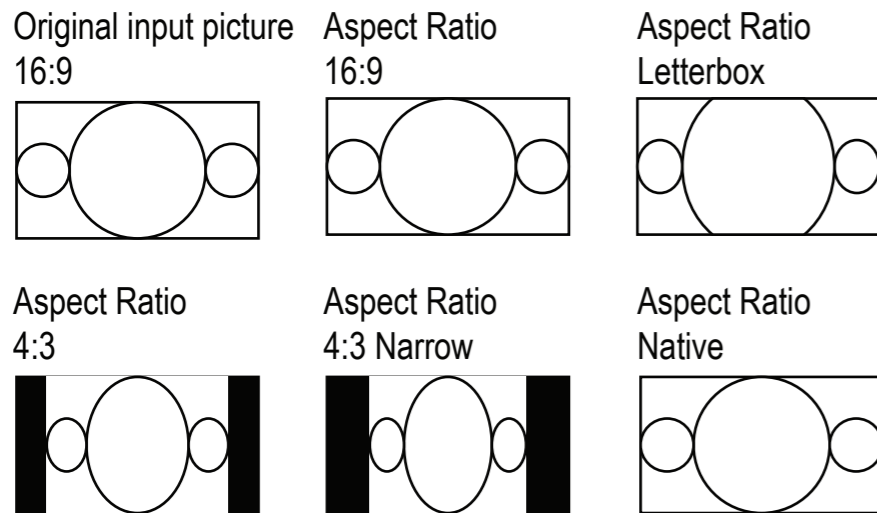
SERVICE	Model Name	
	Serial Number	
	Software Version	
	Active Source	
	Pixel Clock	
	Signal Format	
	H/W Refresh Rate	
	Lamp Hours	Yes No
	Factory Reset	ON OFF
	Blue Only	
Altitude		


## OSD INTRODUCTION - MAIN



### ASPECT Ratio

This function allow user adjust the picture's Aspect ratio. The following figure is an example for your reference.



 The part of the picture can not be projected

### Memory

**Recall Memory:** Select this item to recall the your own setting.

**Saving setting:** You can adjust the OSD's items by yourself then use this function to save your setting.

### Brightness

Use ◀▶ to adjust the level of black in the image to increase or decrease image brightness.

### Contrast

Use ◀▶ to adjust the contrast of the projected image.

#### Note:

Brightness and Contrast controls are interactive. The screen change to one may require a subtle change to the other in order to achieve the optimum setting.

### Sharpness

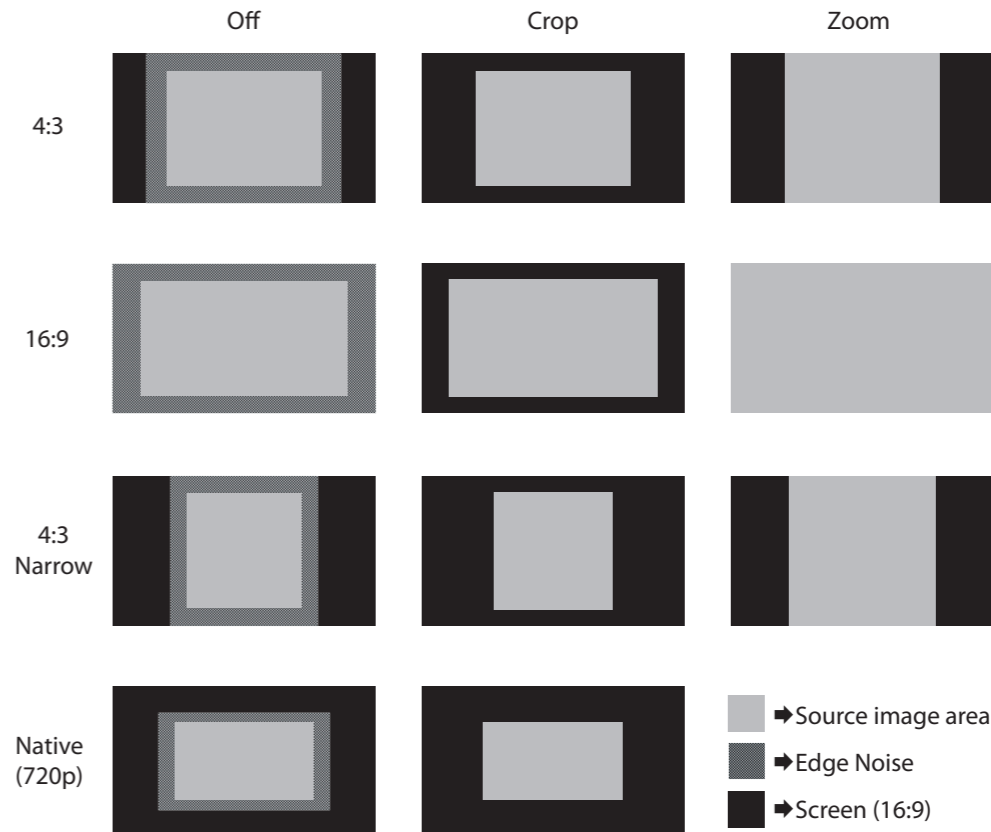
The adjustment of sharpness primarily changes the value of high frequency detail. Use ◀▶ to adjust it.

### Noise Reduction

Use ◀▶ to adjust the noise of the projected image. This function is suitable for the elimination of image noise from interleaving SD input. Generally speaking, reducing image noise will lower the value of high frequency detail and make the image appear more mellow.

### Overscan

Some consumers may use the image that input source is not 16:9, and some programs may not display the edges of the image. Use this function to hide the image edge by choosing one of the following three options:



### Source Select

This function is same as the hotkey which on Remote controller. You can use Remote controller or this function to select the correct input source. Refer to ["Selecting An Input Source" on page 26.](#)

### Resync

If the projected image becomes unstable or degraded. Use this function to adjust it. This causes a re-acquisition of the present active source. It also changes any Fine Sync setting for this timing to the default setting.

## OSD Introduction - ADVANCE

MAIN	ADVANCED	SYSTEM	CONTROL	LANGUAGE	SERVICE
Color Space	Auto	REC709	REC601	RGB-PC	RGB-Video
Video Standard	Auto	NTSC	PAL	SECAM	
Gamma	CRT	Film	Video	Bright	Graphics
Adaptive Contrast	On		Off		
RGB Adjust			Enter		
Fine Sync			Enter		
Color Mode	Bright	D65 Bright	D65 Color		

Menu = Exit      Menu Select ◀▶      Scroll ▲▼

### ● COLOR SPACE

When the source signal for HDMI, RGB and component connections. You can select different color space for different color performance.

- The default setting, Auto, functions as follows:

**HDMI:** If the Auxiliary Video Information (AVI) infoframe contains color space and/or range data, the D8300 uses that information. Otherwise, for RGB sources, the D8300 uses the RGB-Video color space. For component SDTV and EDTV resolutions, REC601s used. For other component video resolutions, REC709 is used.

**RGB:** If Hsync or Vsync signals are present, the D8300 uses the RGB-PC color space. Otherwise, REC601 is used for SDTV and EDTV sources, and REC709 for all other sources.

**Component:** For SDTV and EDTV resolutions, the D8300 uses the REC601 color space. For all other resolutions REC709 is used.

- In most cases, the Auto setting determines the correct color space to use. If it does not, you can force the D8300 to use a specific color space. Choose one of the following:

**REC709** sets the color space matrix to that defined in ITU-R BT.709.

**REC601** sets the color space matrix to that defined in ITU-R BT.601.

**RGB-PC** uses RGB color space and sets black at 0,0,0 RGB and white at 255,255,255 RGB assuming an 8-bit image.

**RGB-Video** uses RGB color space and sets black at 16,16,16 RGB and white at 235,235,235, assuming an 8-bit image, to correspond to the luminance values defined in digital component standards.

### ● Video Standard

Different countries may use different video signal formats. Please choose the video standard in your area.

- **Auto**  
The color systems are automatically identified and the format is set accordingly.
- **NTSC** (National Television Systems Committee)  
This is the standard format used mainly in the United States and Japan.
- **PAL** (Phase Alternation By Line)  
This is the standard used in Europe, Australia and many other parts of the world, typically with a 50Hz frame rate.
- **SECAM** (Sequential Color With Memory)  
This is a standard format used mainly in France and Russia. Gamma: Select Gamma from the ADVANCED menu to choose a DLP de-gamma curve. Used correctly, the Gamma control can improve contrast while maintaining good details for blacks and whites. If excess ambient light washes out the image and it becomes difficult or impossible to see details in dark areas, lower the gamma setting to compensate. This improves contrast while maintaining good details for blacks. Conversely, if the image is washed out and unnatural, with excessive detail in black areas, increase the setting.

#### Note:

Generally speaking, the projector will be able to automatically detect the video standard used in your area. However, there are circumstances where the projector will fail to interpret the video standard used and the user will have to manually configure the video format. If you are unsure of the video standard used in your area, please contact a qualified personnel and inquire about the video standard used in your area.

### ● Gamma

Different Gamma settings will affect viewers' perception of the image. Generally speaking, for images that are darker, it is recommended that Gamma be set higher to yield better image quality in darker regions by sacrificing details in brighter areas. In contrast, when projecting brighter images, you can set the Gamma lower to give up details in the darker areas to make the brighter areas (i.e. clouds) more visible.

- **CRT** sets the gamma to 2.5.
- **Film** sets the gamma to 2.2.
- **Video** is similar to Film gamma but differs in dark areas of the image to correspond to the function that video cameras use to create images.
- **Bright** sets the gamma to 2.0.
- **Graphics** should only be used for computer presentations that require increased brightness at the cost of grayscale accuracy.

### ● RGB Adjust

For remove any trace of color from the white areas of the projected image.

- **Gain**  
Use the Gain controls to correct color imbalances in the bright areas of the image. A good way to do this is to use a test pattern consisting mostly of solid white areas, such as an 80 IRE "window" pattern. If the white areas contain traces of red, green or blue, decrease the Gain for that color.
- **Offset**  
Use the Offset controls in the RGB Adjust sub-menu to correct color imbalances in the dark areas of the image. A good way to do this is to use a test pattern consisting mostly of dark gray areas, such as a 30 IRE "window" pattern. If the gray areas contain traces of red, green or blue, decrease the Offset for that color.

The Gain controls increase or decrease the full-scale input range; the Offset controls shift the entire range, resulting in a change in brightness.

Generally, higher Gain settings reduce the image contrast; higher Offset settings reduce the image brightness.

### ● Fine Sync



To fine-tune the position and other image attributes.

- **V Position:**  
Select this function to adjust the vertical position of the image within the designated image area, up to 25% up or down of the image height.
- **H Position**  
Select this function to adjust the horizontal position of the image within the designated image area, up to 25% right or left of the image width.
- **Phase** (for RGB or Component sources)  
This control adjusts the phase of the pixel sampling clock relative to the incoming signal. Adjust the phase when an RGB or Component image still shows shimmer or “noise” after Tracking has been optimized.

*Note:*

Adjust the Phase after adjusting Tracking (see below). If some shimmer from a video or HDTV source persists, use the Noise Reduction controls to remove high-frequency noise from the signal.

- **Tracking** (for RGB or Component sources)  
Tracking determines the frequency of the pixel sampling clock, indicated by the number of incoming pixels per line, so that all pixels generated by a particular source are sampled.

Steady flickering or several soft vertical stripes or bands across the entire image indicates poor pixel tracking. Proper pixel tracking helps ensure that the image quality is consistent across the screen, that aspect ratio is maintained and that pixel phase can be optimized.

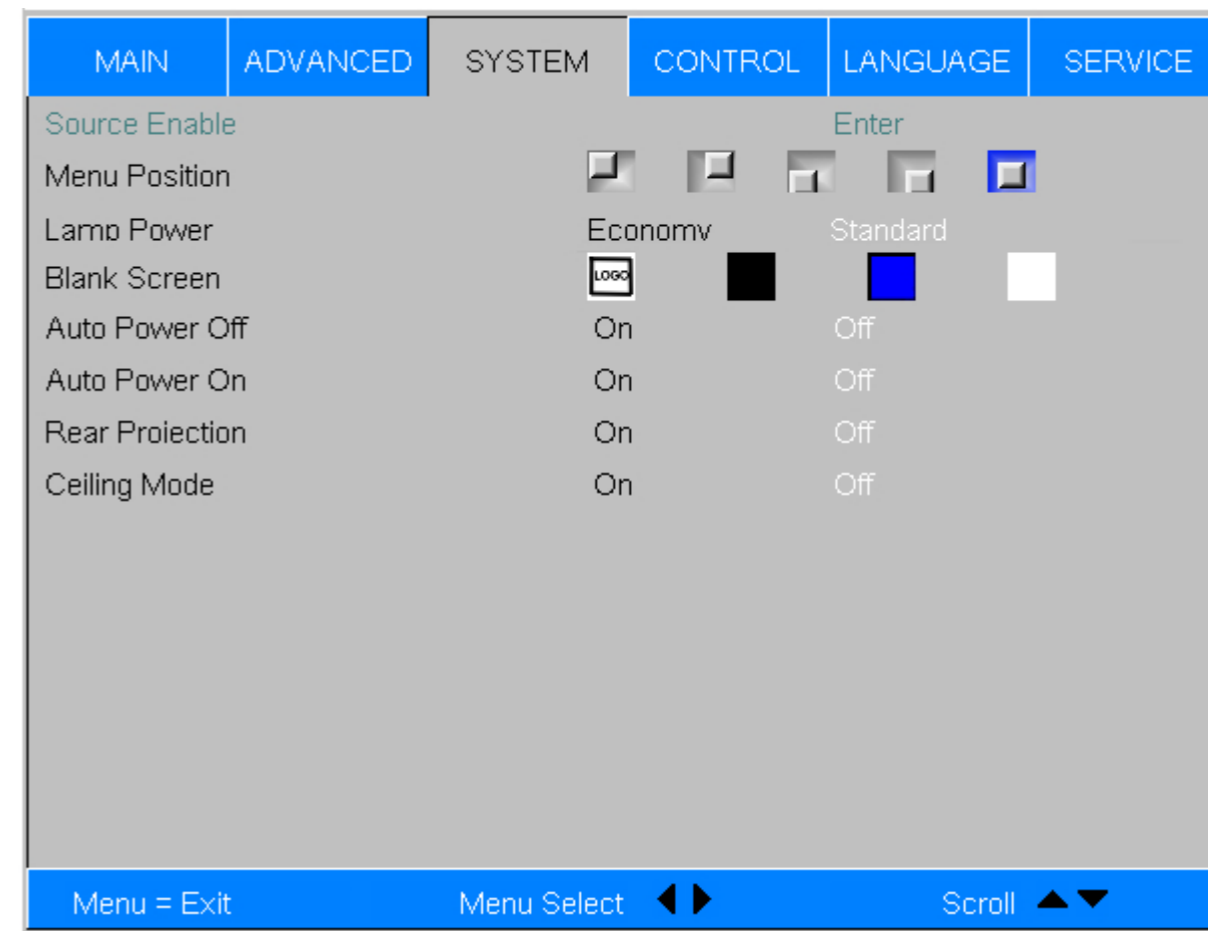
- **Sync Level** (for Component sources only)  
Select Sync Level to adjust the voltage level of the D8300 Sync signal detection circuitry.

Sync Level adjustment is occasionally necessary when a DVD player or HDTV source signal drops “below black” (for example, during scenes with explosions or when subtitles are present) and causes the projector to temporarily lose sync. If the Sync Level from the source is persistently too low, the projector won't sync with the source at all.

The range is from 50 to 256 millivolts (mV) inclusive. The default setting is 240 mV and should rarely require adjustment.

- **Color Mode**
  - **Bright Mode**  
Choose this item to get the Bright color.
  - **D65 Mode**  
Color performance between Bright and D65 Color mode.
  - **D65 Color Mode**  
Choose this mode to get the beautiful(High saturation) color.

## OSD INTRODUCTION - SYSTEM



- **Source Enable**  
To enable or disable selection of a picture's input source.  
*When the source "HDMI" set as off. The input source "HDMI" will become Gray. Can't select.*
- **Menu Position**  
Choose this function to decide the OSD menu's position.
- **Lamp Power**
  - **Economy**  
Power-saving mode. Select this lamp output level will reduce lamp's brightness, but it can prolongs the life of the lamp. This setting is per source, not global, so it can be saved like other user settings.
  - **Standard**  
Choose this item to run the lamp as bright as possible (400W).
- **Blank Screen**  
Use this function to specify the content or color to be displayed on the blank screen when no input signal is available. You can choose from **Logo, Blue, Black, White**. The default value is **Logo**.
- **Auto Power Off**  
The default value is **OFF**. If you set it to **ON**, the projector will automatically shut down after 20 minutes without input signal.

- Auto Power ON**  
 The default value is **Off**. If you set it to ON, the projector will automatically start up when it is connected to AC power. If you plug the projector's power cord into an AC socket with a switch, you can use this function to start up the projector using the socket's switch instead of the remote. If you do not need this function, please set it to **Off**.
- Rear Projection**  
 This control reverses all images and menus, and is necessary when the projector is used in rear-projection applications. The default is Off. Refer to ["Modes of installation" on page 15](#).
- Ceiling Mode**  
 This control flips the image so the projector can be used in ceiling mounted installations. The default setting, Auto, automatically determines the orientation using an internal sensor. Refer to ["Modes of installation" on page 15](#).

**OSD INTRODUCTION - CONTROL**

MAIN	ADVANCED	SYSTEM	CONTROL	LANGUAGE	SERVICE
Trigger-1	Screen 16:9	Letterbox	4:3 4:3 Narrow	RS232	
Trigger-2	Screen 16:9	Letterbox	4:3 4:3 Narrow	RS232	
Auto Source	On	Off			
H Keystone		35			
V Keystone		20			

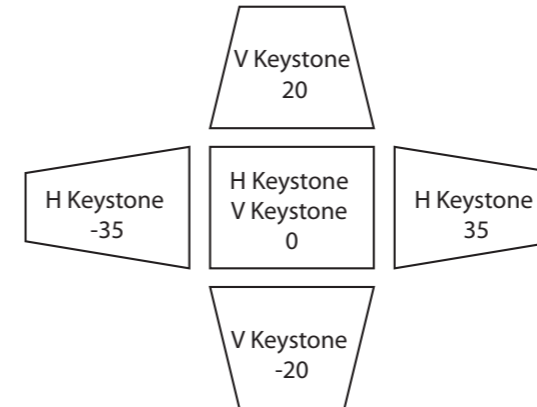
Menu = Exit      Menu Select ◀▶      Scroll ▲▼

- Triggle 1, Triggle 2**  
 The projector comes with two sets of Trigger output. You can configure two different devices connected to the projector via the trigger ports to be automatically turned on when the projector is on. There will be a 2-3 second delay prior to activation to prevent operation of this function when the user is choosing the desired aspect ratio.
  - Lamp** Outputs 12V of power on Trigger1 or 2 when the lamp is on.
  - 16:9** Outputs 12V of power on Trigger1 or 2 when chooses the 16:9 aspect ratio.
  - Letterbox** Outputs 12V of power on Trigger1 or 2 when chooses the Letterbox aspect ratio.
  - 4:3** Outputs 12V of power on Trigger1 or 2 when chooses the 4:3 aspect ratio.
  - 4:3 Narrow** Outputs 12V of power on Trigger1 or 2 when chooses the 4:3 narrow aspect ratio.
  - RS232** Outputs 12V of power on Trigger 1 or 2 when the projector receive the message from RS232.

- Auto Source**  
**Off:** default setting. By enabling this function, the projector will automatically determine the source of input everytime it is turned on so that the user will not have to make the selection on the OSD Menu.

Setting the function off will require the user to specify source of image input on the OSD Menu in order for the projector to display the intended image.

- H Keystone , V Keyston**  
 Use this function to correct keystone caused by projection angle.



**OSD INTRODUCTION - LANGUAGE**

MAIN	ADVANCED	SYSTEM	CONTROL	LANGUAGE	SERVICE
				English 简体中文	

Menu = Exit      Menu Select ◀▶      Scroll ▲▼

Choose the OSD display language that you familiar. English or Simple-Chinese.

## OSD INTRODUCTION - SERVICE

MAIN	ADVANCED	SYSTEM	CONTROL	LANGUAGE	SERVICE
MODEL NAME :					
Serial Number :		SN-12345678900000			
Software Version :					
Active source :		HDMI			
Pixel Clock :		74.18MHZ			
Signal Format :		1080P/60Hz			
H/V Refresh Rate :		H:33.71KHZ, V:60.00HZ			
Lamp Hours :		1000HR			
Factory Reset		Enter			
Blue Only		On	Off		
Test Patterns		On	Off		
Altitude		On	Off		
Menu = Exit      Menu Select ◀▶      Scroll ▲▼					

The functions covered in this unit relate to the display of some basic information about the projector.

*Memory of the custom timing files will be erased in the Factory Reset operation.*

- **Model:** the designated model number of the projector.
- **Serial Number:** the designated serial number of the projector.
- **Software Version:** the version of software installed on the projector.
- **Active Source:** displays the current PIP sources.
- **Pixel Clock:** displays the pixel clock of the current input signal.
- **Signal Format:** displays the format of the current input signal.
- **H/V Refresh Rate:** displays the horizontal and vertical refresh rates for the current image.
- **Lamp Hours**  
Display the lamp usage time. When you change the new lamp. The lamp hours will re-calculate the time.
- **Factory Reset**  
Use this function to restore the configurations in the OSD Menu back to factory default. Note that this function will not apply to items including no signal, network, Projector control, startup Logo, language, High Altitude mode and lamp hours.

*When Factory Reset is executed, all source memories created by the projector (i.e. timings files) will be erased.*

- **Blue Only**  
Enabling this option will make the projector display only blue color to facilitate the process of image inspection for the service personnel. For detailed instructions on how to use this function, consult a qualified service personnel.

- **Altitude**  
Use this function to control the projector's cooling fan. You can set it to **Off** or **On**. The default setting is **Off**.

Under normal circumstances, the projector will operate normally with this function set to Off. By default, the projector will detect the temperature of the surrounding environment to regulate the speed of the cooling fan. When the ambient temperature rises, fan speed will increase (generates louder noise) to make sure the heat inside the projector gets discharged and keep the projector working normally.

However, if you were to operate the projector in environment of excessive heat or in areas of high altitude, the projector may automatically shut down. When this happens, you can enable this function by setting it to On to force the cooling fan to work at a higher speed to regulate the temperature inside the projector.

*High altitude region refers to area with elevation over 5000 feet.*

## Change Lamp

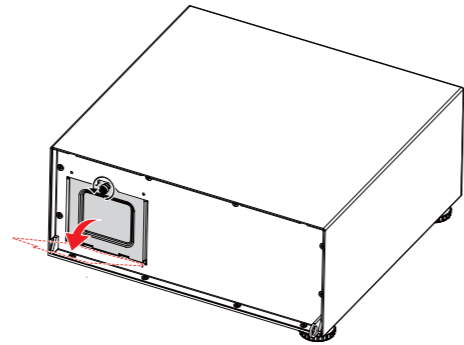
The lifecycle of ordinary projection lamp typically lasts for 1500 hours (Normal mode), 1000 hours (Economy mode) before requiring replacement (different lamp configurations will affect lamp life). From the OSD Menu, you can go to "OSD Introduction - SERVICE" on page 36 to check how long a lamp has been used. You should also replace the lamp when the projected image gets noticeably darker. Contact your local dealer to purchase new certified lamps for your projector.

### To replace the projector lamp

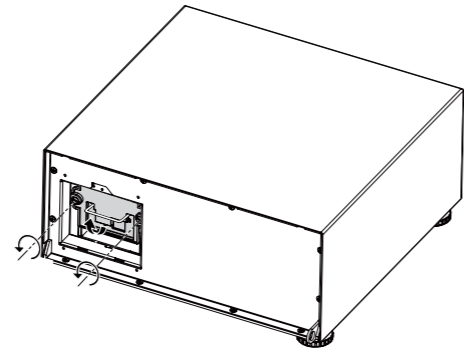
1. Turn off the projector and unplug the power cord. Let the projector cool for approximately 60 minutes before removing the lamp module for replacement.

*When you turn off the projector, the lamp inside the projector will still be very hot (approximately 200 ~ 300°C). If you attempt to replace the lamp without allowing the projector to cool, you could risk scalding yourself. This is why you should wait for no less than 60 minutes for the lamp to cool down in order to perform the replacement safely.*

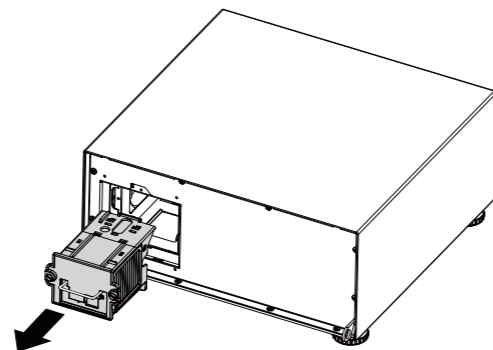
2. Loosen the lamp cover.



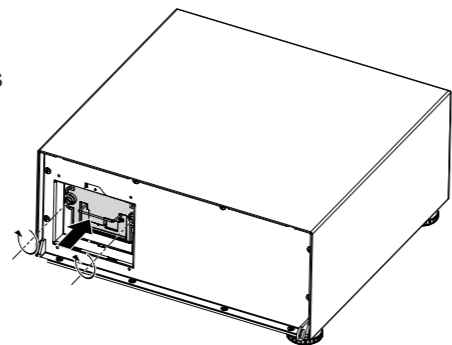
3. Use a screw driver to loosen the screws as shown in the illustration.



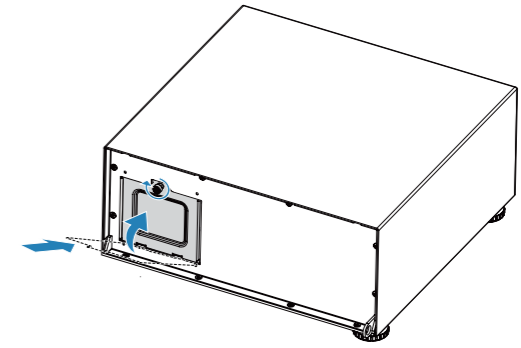
4. Grasp the metal rod on the lamp cover and pull the lamp out.



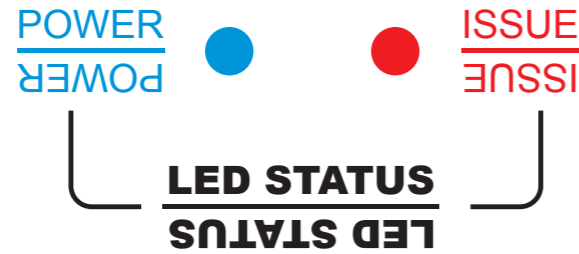
5. Insert the new lamp in the direction shown in the illustration into the lamp assembly; tighten the two screws using a screwdriver and make sure the lamp is firmly secured to prevent the lamp from shaking or poor contact.



6. Replace the lamp cover and firmly secure the two screws on the lamp cover.



# LED Status



## POWER

- **Turns blue**  
Indicate projector is turned on, and can function properly.
- **Flash blue**  
Indicate the projector is in the warming or cooling time. In this situation, the function of keypad is not available.
- **Off**  
This indicates that the projector has either been turned on and is working normally or the projector is not connected to power.

## ISSUE

- **Flashes once in red**  
The projector lamp is faulty; check to see if the lamp is damaged or if it hasn't been properly installed.
- **Flashes twice in red**  
The lamp cover is not properly replaced.
- **Flashes three times in red**  
The cooling fan inside the projector is not working; seek assistance from a qualified service personnel.
- **Flashes four times in red**  
The projector temperature is too high; try cleaning the ventilator slots or unplugging the power cord to resolve the issue.
- **Flashes five times in red**  
The projector filter might not have been inserted properly; check the ventilation slot and make sure the filter has been properly replaced and inserted.
- **Turn Red**  
The projector's system has a problem. Please contact the service center.

	Blue (POWER)	Red (ISSUE)
Standby	Blue	Black
Cooling / Warm up	Blue	Black
Power on / Normal	Blue	Black
Lamp fail	Black	Red (1 flash)
Lamp door open	Black	Red (2 flashes)
Fan fail	Black	Red (3 flashes)
Over Temperature	Black	Red (4 flashes)
Filter fail	Black	Red (5 flashes)
System Error	Black	Red (continuous)

# SPECIFICATIONS

## Optical

- Digital Light Processor 1x 0.95" Texas Instruments DMD™, resolution 1920x 1080 pixels
- Colour wheel 6-segment: (RGBYCW)(3x)
- Contrast Ratio 3000: 1(±10%)
- Colour temperature Native: 7000°K(±1500°K)
- Pixel fill factor 87%
- Lamp power 400W
- Lamp life (typical) 1500 hours
- Brightness 7000 ANSI lumens (±10%)
- Uniformity 85%

## Electrical

- Inputs HDMI x 2, RGB Component x 2, Video, S-Video
- Pixel clock (digital) up to 165MHz
- Bandwidth (analog) 200MHz
- Control inputs 1x RS232 serial: 38400 baud, 8 bits, 1 stop bit, no parity 1x remote control
- Mains voltage 100-240VAC±10%, 47-63Hz (single phase)
- Power consumption  
110V 347W in Running mode, 1.9W in Standby  
240V 331W in Running mode, 2.5W in Standby
- International Regulations Meets FCC Class B requirements  
Meets EMC Directives (EN55022, EN55024)  
Meets Low Voltage Directive (EN60950)
- Indicators Power, Standby, Issue (Fault)

## Physical

- Temperature  
Operating 10 to 35°C  
Storage -20 to 60°C
- Thermal Dissipation 1500 BTU/hr
- Humidity  
Operating 20% to 90% non condensing  
Storage 10% to 90%
- Altitude  
Operating up to 10,000 feet  
Storage up to 40,000 feet
- Weight 15kg (33.07lbs)
- Noise level < 45 dB

# SERIAL INTERFACE SPECIFICATIONS

## Transfer Specifications

item	Specifications
TransmissionSpeed	38400 bps
Data Length	8 bit
Parity	None
Stop Bit	1
Flow Control	None

## RS-232 Commands

There are 2 types of commands:

- Key commands
- Operation commands

All commands start with 2 letters as shown in the following:

- "ky" for key commands.
- "op" for operations commands.
- Key Commands The following example is the syntax for key commands: ky <keyname>[CR]

## IR Codes and Key names

Key	Code	RS232Keyname	Function	KeyWording	Description
1	0x01	pow.on	Power On	ON	Turn power on
2	0x09	pow.off	Power Off	OFF	Turn power off
9	0x1A	cur.up	KeypadDown Arrow.	▲	Keypad up arrow.
10	0x1D	cur.left	KeypadLeft Arrow.	◀	Keypad left arrow.
11	0x17	enter	Enter	ENER	Keypad enter.
12	0x1F	cur.right	KeypadRight Arrow.	▶	Keypad right arrow.
13	0x18	cur.down	KeypadUp Arrow.	▼	Keypad down arrow.
14	0x15	menu	Bring Up or Cancel Menu Display.	MENU	Bring up or cancel menu display

## Operations Commands

The following example is the syntax for operations commands:

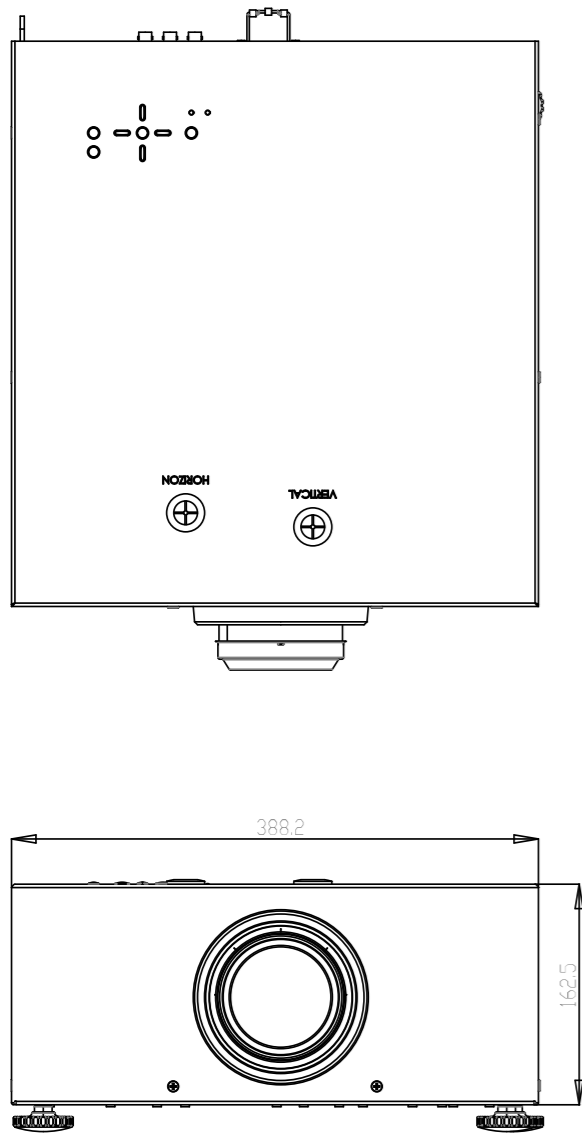
op <operation> <command>[CR]

No.	Function	Command	Action on unit
1	Set	=<value>	Makes the unit take that value.
2	Get	?	Asks what the current value is.
3	Increment	+	Adds 1 to the current value.
4	Decrement	-	Subtracts 1 from the current value.
5	Execute	(none)	Performs an action.

Operation	Command	Values
source.sel	= ?	0 = HDMI 1 1 = HDMI 2 2 = RGB 3 = YPrPb1 4 = YPrPb2 5 = S-video 6 = Video
aspect	= ?	0 = 16:9 1 = Letterbox 2 = 4:3 3 = 4:3 Narrow 4 = Native
bright	= ? + -	0 - 200
contrast	= ? + -	0 - 200
sharp	= ? + -	0 - 200
nr	= ? + -	0 - 200
overscan	= ?	0 = Off 1 = Crop 2 = Zoom
resync	(execute)	
color.space	= ?	0 = Auto 1 = YPbPr 2 = YCbCr 3 = RGB-PC 4 = RGB-Video
gamma	= ?	0 = CRT 1 = Film 2 = Video 3 = Bright 4 = Graphics
red.off	= ? + -	0-200
green.off	= ? + -	0-200
blue.off	= ? + -	0-200
red.gain	= ? + -	0-200
green.gain	= ? + -	0-200

blue.gain	= ? + -	0-200
vert.pos	= ? + -	0-200
horiz.pos	= ? + -	0-200
menu.pos	= ?	0 = Top left 1 = Top right 2 = Bottom left 3 = Bottom right 4 = Center
auto.pow.off	= ?	0 = Off 1 = On
auto.pow.on	= ?	0 = Off 1 = On
rear.proj	= ?	0 = Off 1 = On
ceil.mode	= ?	0 = Off 1 = On
model.name	?	<string>
ser.number	?	<string>
soft.version	?	<string>
act.source	?	0 = HDMI 1 1 = HDMI 2 2 = RGB 3 = YPrPb1 4 = YPrPb2 5 = S-video 6 = Video
h.refresh	?	<number> kHz
v.refresh	?	<number> Hz
pixel.clock	?	<number> MHz
signal	?	<string>
lamp.hours	?	<number>
Lamp.reset	(execute)	
fact.reset	(execute)	
altitude	= ?	0 = off 1 = on
v.keystone	= ?	<number>
h.keystone	= ?	<number>
memory	= ?	0 - recall user memory 1 1 - recall user memory 2

# DIMENSIONS



# SUPPORTED TIMINGS

Signal Type	Resolution	Frame rate	DVI	Video	SCART	S-Video	Y-Pb-Pr	HD15-YUV	HD15-RGB
PC	640x480	59.94	X						X
	640x480	74.99	X						X
	640x480	85	X						X
	800x600	60.32	X						X
	800x600	75	X						X
	800x600	85.06	X						X
	848x480	47.95	X						X
	848x480	59.94	X						X
	1024x768	60	X						X
	1280x1024	60.02	X						X
	1280x1024	75.02	X						X
	1280x1024	85.02	X						X
	1600x1200	60	X						X
1680x1050	59.954	X						X	
1920x1080	47.95	X						X	
Apple Mac	640x480	66.59	X						X
SDTV	RGBs	50			X				
	1440x480i	60	X						
	1440x576i	50	X						
	480i	59.94					X		
EDTV	576i	50					X		
	480p	59.94	X				X	X	X
HDTV	576p	50	X				X	X	X
	1035i	60	X				X	X	X
	1080i	50	X				X	X	X
	1080i (Aus)	50	X				X	X	X
	1080i	59.94	X				X	X	X
	1080i	60	X				X	X	X
	720p	50	X				X	X	X
	720p	59.94	X				X	X	X
	720p	60	X				X	X	X
	1080p	23.98	X				X	X	X
	1080p	24	X				X	X	X
	1080p	25	X				X	X	X
	1080p	29.97	X				X	X	X
	1080p	30	X				X	X	X
	1080p	50	X				X	X	X
	1080p	59.94	X				X	X	X
	1080p	60	X				X	X	X
NTSC	NTSC (M 4.43)	59.94		X		X			
PAL	PAL (B,G,H,I)	50		X		X			
	PAL (N)	50		X		X			
	PAL (M)	59.94		X		X			
SECAM	SECAM (M)	50		X		X			



## PROJECTION DISTANCE AND SCREEN SIZE

Screen Size: This is the size of the screen not the size of the projection

■ In case of display 16:9 picture on the whole 16:9 Screen 16:9 Screen TR: 1.85~2.4TR = PD / SW  
Unit: Inch

Screen Size			Projection Distance	
Diagonal	Width	Height	Min.	Max.
60	52.29	29.41	96.74	125.50
70	61.01	34.32	112.87	146.42
72	62.75	35.3	116.09	150.60
80	69.72	39.22	128.99	167.34
82	71.47	40.20	132.21	171.51
84	73.21	41.18	135.44	175.71
90	78.44	44.12	145.11	188.26
92	80.18	45.10	148.34	192.44
100	80.18	45.10	148.34	192.44
106	92.38	51.97	170.91	221.72
110	95.87	53.93	177.36	230.09
120	104.59	58.83	193.49	251.01
123	107.20	60.30	198.32	257.28
133	115.92	65.20	214.45	278.20
135	117.66	66.18	217.67	282.38
150	130.73	73.54	241.86	313.76
170	148.16	83.34	274.10	355.59
200	174.31	98.05	322.48	418.35
250	217.89	122.56	403.09	522.93
300	261.47	147.07	483.71	627.52

■ In case of display 16:9 picture on the whole 4:3 Screen 4:3 Screen TR: 1.85~2.4TR = PD / SW Unit: Inch

Screen Size			Projection Distance	
Diagonal	Width	Height	Min.	Max.
60	48.00	36.00	88.80	115.20
70	56.00	42.00	103.60	134.40
72	57.60	43.20	106.56	138.24
80	64.00	48.00	118.40	153.60
82	65.60	49.20	121.36	157.44
84	67.20	50.40	124.32	161.28
90	72.00	54.00	133.20	172.80
92	73.60	55.20	136.16	176.64
100	80.00	60.00	148.00	192.00
106	84.80	63.60	156.88	203.52
110	88.00	66.00	162.80	211.20
120	96.00	72.00	177.60	230.40
123	98.40	73.80	182.04	236.16
133	106.40	79.80	196.84	255.36
135	108.00	81.00	199.80	259.20
150	120.00	90.00	222.00	288.00
170	136.00	102.00	251.60	326.40
200	160.00	120.00	296.00	384.00
250	200.00	150.00	370.00	480.00
300	240.00	180.00	444.00	576.00

■ In case of display 16:9 picture on the whole 4:3 Screen 4:3 Screen TR: 1.85~2.4TR = PD / SW Unit: mm

Screen Size	Projection Distance
-------------	---------------------

Diagonal	Width	Height	Min.	Max.
60	1219	914	2256	2926
70	1422	1067	2631	3414
72	1463	1097	2707	3511
80	1626	1219	3007	3901
82	1666	1250	3083	3999
84	1707	1280	3158	4097
90	1829	1372	3383	4389
92	1869	1402	3458	4487
100	2032	1524	3759	4877
106	2154	1615	3985	5169
110	2235	1676	4135	5364
120	2438	1829	4511	5852
123	2499	1875	4624	5998
133	2703	2027	5000	6486
135	2743	2057	5075	6584
150	3048	2286	5639	7315
170	3454	2591	6391	8291
200	4064	3048	7518	9754
250	5080	3810	9398	12192
300	5096	4572	11278	14630



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