

User's Guide

DIGITAL VIDEO PROJECTOR



Other Problems

[?] *The projector stops responding to all controls*

- ✓ If possible, turn off the projector, then unplug the power cord and wait at least 60 seconds before reconnecting power.

Remote Control Problems

[?] *If the remote control does not work*

- ✓ Check the operating angle of the remote control is within $\pm 15^\circ$ both horizontally and vertically of one of the IR receivers on the projector.
- ✓ Make sure there are not any obstructions between the remote control and the projector. Move to within 5 meters ($\pm 0^\circ$) of the projector.
- ✓ Make sure the battery is inserted correctly.
- ✓ Replace batteries if they are exhausted.



Disposal instructions

Do not throw this electronic device into the trash when discarding. To minimize pollution and ensure utmost protection of the global environment, please recycle it.

- [?] Image is unstable or flickering**
- ✓ Change the monitor color setting on your computer.
- [?] Image has vertical flickering bar**
- ✓ Check and reconfigure the display mode of your graphic card to make it compatible with the projector.
- [?] Image is out of focus**
- ✓ Make sure the lens cap is removed.
 - ✓ Adjust the Focus Ring on the projector lens.
 - ✓ Make sure the projection screen is between the required distances 8.0 to 16.9 feet (2.5 to 5.2 meters) from the projector. See page 14 for more information.
- [?] The image is stretched when displaying 16:9 DVD title**
- ✓ When you play anamorphic DVD or 16:9 DVD, the projector will show the best image in 16:9 format on projector side.
 - ✓ Make sure that the Aspect Ratio menu item in the projector OSD is set to Auto or 16:9.
 - ✓ If you play 4:3 format DVD titles, please change the format to 4:3 in the projector OSD.
 - ✓ If the image is still stretched, please check if the display format is set to 16:9 (wide) aspect ratio type on your DVD player.
- [?] Image is too small or too large**
- ✓ Move the projector further from or closer to the screen.
 - ✓ Press the Zoom button on the remote control.
- [?] Image has slanted sides**
- ✓ If possible, reposition the projector so that it is horizontally centered on the screen and below the bottom of the screen.
 - ✓ Adjust the Keystone knob on the projector control panel until the sides are vertical.
- [?] Image is reversed**
- ✓ Open the OSD menu, navigate to Flip under the Option menu and press OK on the remote control until you get the desired image.

Table Of Contents	1
Usage Notice.....	3
Safety Information	3
Important Safety Instruction	3
Precaution	4
Eye Safety Warnings	5
Product Features	5
Introduction	6
Package Overview	6
Product Overview.....	7
Main Unit.....	7
Control Panel	7
Input / Output Connections	8
Remote Control	9
Installation	10
Projection	10
Connecting the Projector	11
Connect to Computer/Notebook	11
Connect to Video Sources	11
Connect To USB Hard Drive.....	11
Powering the Projector On/Off	12
Powering On the Projector.....	12
Powering Off the Projector.....	13
Adjusting the Projected Image	14
Adjusting the Projector's Height.....	14
Adjusting the Projector's Focus	14
Adjusting Projection Image Size	15
Keystone Correction	15
User Controls	16
Control Panel & Remote Control.....	16
Control Panel	16
Remote Control	17
Play Media Files From USB Hard Drive.....	19
How To Operate.....	19
On-screen Display Menus.....	20
How To Operate.....	20
Picture.....	20
Sound.....	21
Option	22
Appendices	23

Troubleshooting	23
Image Problems.....	23
Other Problems.....	25
Remote Control Problems	25

Troubleshooting

If you experience a problem with your projector, please refer to the following information. If a problem persists, please contact your local reseller or service center.

Image Problems

[?] No image appears on-screen

- ✓ Ensure all the cables and power connections are correctly and securely connected as described in the "Installation" section.
- ✓ Ensure the power switch on the back of the projector is ON.
- ✓ Ensure all the pins of connectors are not bent or broken.
- ✓ Make sure you have removed the lens cap and the projector is turned on.

[?] Partial, scrolling or incorrectly displayed image

- ✓ If you are using a PC:

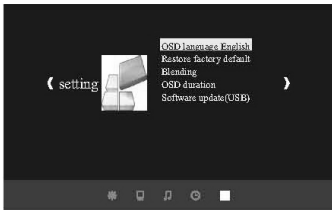
For Windows 95, 98, 2000, XP:

 1. Open the "My Computer" icon, the "Control Panel" folder, and then double click on the "Display" icon.
 2. Select the "Settings" tab.
 3. Verify that your display resolution setting is lower than or equal to XGA (1024 × 768).
 4. Click on the "Advanced Properties" button.

If the projector is still not projecting the whole image, you will also need to change the monitor display you are using. Refer to the following steps.

 5. Verify the resolution setting is lower than or equal to XGA (1024 × 768).
 6. Select the "Change" button under the "Monitor" tab.
 7. Click on "Show all devices". Next, select "Standard monitor types" under the SP box; choose the resolution mode you need under the "Models" box.
 8. Verify that the resolution setting of the monitor display is lower than or equal to XGA (1024 × 768).
- ✓ If you are using a Notebook:
 1. First, follow the steps above to adjust resolution of the computer.
 2. Press the appropriate keys for your notebook to send signal out from notebook to projector.
- ✓ If you experience difficulty changing resolutions or your monitor freezes, restart all equipment including the projector.

Option



- **OSD Language**
Choose your preferred language for the multilingual OSD menu. The language of the OSD menu will change accordingly as you change your selection. Supported languages include English (default), French, Spanish, Portuguese, Arabic and Chinese.
- **Restore Factory Default**
Restore projector settings to factory defaults.
- **Flip**
Switch between Front-Desktop, Front-Ceiling, Rear-Ceiling and Rear-Desktop projection setups. For more information see "Projection" on page 10.
- **Blending**
Change the transparency of the OSD menu.
- **OSD Duration**
Set the interval in seconds after which the OSD menu will automatically close.

Safety Information

	The lightning flash with arrow head within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.
	The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. DANGEROUS HIGH VOLTAGES ARE PRESENT INSIDE THE ENCLOSURE. DO NOT OPEN THE CABINET. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

Important Safety Instruction

1. Do not block any ventilation openings. To ensure reliable operation of the projector and to protect from over heating, it is recommended to install the projector in a location that does not block ventilation. As an example, do not place the projector on a crowded coffee table, sofa bed, etc. Do not put the projector in an enclosure such as a book case or a cabinet that restricts air flow.
2. Do not use the projector near water or moisture. To reduce the risk of fire and/or electric shock, do not expose the projector to rain or moisture.
3. Do not install near heat sources such as radiators, heaters, stoves or any other apparatus such as amplifiers that emits heat.
4. Clean only with dry cloth.
5. Only use attachments/accessories specified by the manufacturer.
6. Do not use the unit if it has been physically damaged or abused. Physical damage/abuse would be (but not limited to):
 - a) Unit has been dropped.
 - b) Power supply cord or plug has been damaged.
 - c) Liquid has been spilled on to the projector.
 - d) Projector has been exposed to rain or moisture.
 - e) Something has fallen in the projector or something is loose inside.Do not attempt to service the unit yourself. Opening or removing covers may expose you to dangerous voltages or other hazards. Please call your local reseller before you send the unit for repair.
7. Do not let objects or liquids enter the projector. They may touch dangerous voltage points and short out parts that could result in fire or electric shock.
8. See projector enclosure for safety related markings.
9. The unit should only be repaired by appropriate service personnel.

Precaution



Please follow all warnings, precautions and maintenance as recommended in this user's guide.

- WARNING- Do not look into the projector's lens when the lamp is on. The bright light may hurt your eyes.
- WARNING- To reduce the risk of fire or electric shock, do not expose this projector to rain or moisture.
- WARNING- Please do not open or disassemble the projector as this may cause electric shock.
- WARNING- When switching the projector off, please ensure the cooling cycle has been completed before disconnecting power.
- WARNING- Do not use lens cap when projector is in operation.

Do:

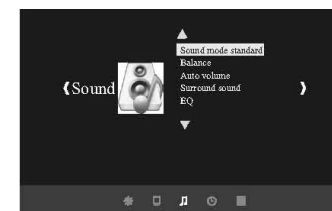
- ◆ Turn off and unplug the power plug from the AC outlet before cleaning the product.
- ◆ Use a soft dry cloth with mild detergent to clean the display housing.
- ◆ Disconnect the power plug from AC outlet if the product is not being used for a long period of time.

Do Not:

- ◆ Unplug the power cord when the projector is in operation or the cooling fan is running.
- ◆ Try to turn the projector off by using the rear power switch directly or unplugging the power cord.
- ◆ Block the slots and openings on the unit provided for ventilation.
- ◆ Use abrasive cleaners, waxes or solvents to clean the unit.
- ◆ Use under the following conditions:
 - In extremely hot, cold or humid environments.
 - ✧ Ensure that the ambient room temperature is within 5 - 35°C.
 - ✧ Relative Humidity is 5 - 35°C, 80% (Max.), non-condensing.
 - In areas susceptible to excessive dust and dirt.
 - Near any appliance generating a strong magnetic field.
 - In direct sunlight.

- Aspect Ratio
Change the screen format of the projected image. Both 4:3 and 16:9 are supported and there are two levels of electronic zoom-in in 4:3 format.
- Noise Reduction
Select the level of noise reduction from low to high.

Sound

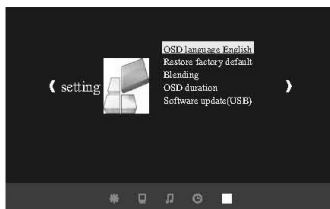


You can use this menu to adjust the sound mode, sound balance, surrounding and the sound equalizer.

- Sound Mode
Adjust the sound by selecting one of the preset settings using ◀▶ (VOL+, VOL-) keys. You can also adjust the treble and bass individually when you select the "User" setting.
- Balance
Adjust the sound balance.
- Auto Volume
Turn on/off automatic volume control.
- Surround Sound
Turn on/off sound surrounding.
- SPDIF Mode
Adjust the SPDIF setting.
- EQ
Sound equalizer.

On-screen Display Menus

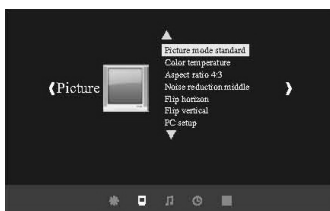
The projector has multilingual On-screen Display menus that allow you to make image adjustments and change a variety of settings.



How To Operate

1. To open the OSD menu, press MENU on the Remote Control or the projector Control Panel.
2. When OSD is displayed, use ◀▶ (VOL+, VOL-) keys to select different main menus, including Picture, Sound and Option.
3. Press ▲▼ (CH+, CH-) keys to select the desired item and press OK to change the setting.
4. For some items, a sub menu will open up. Use ◀▶ (VOL+, VOL-) keys to navigate through all the preset settings. To adjust each specific setting individually, use ▲▼ (CH+, CH-) keys to select the desired item and adjust the settings by using ◀▶ (VOL+, VOL-) keys.
5. Select the next item to be adjusted in the sub menu and adjust as described above.
6. Press MENU to return to the main menu.
7. To exit, press MENU again or press EXIT. The OSD menu will close and the projector will automatically save the new settings.

Picture



You can use this menu to change the picture mode, color temperature, aspect ratio and noise reduction of the image according to your preference.

- **Picture Mode**
Adjust the picture by selecting one of the preset settings using ◀▶ (VOL+, VOL-) keys. You can also adjust the picture's brightness, contrast, color and sharpness individually when you select the "User" setting.
- **Color Temperature**
Adjust the color temperature by selecting one of the preset settings using ◀▶ (VOL+, VOL-) keys. You can also adjust the red, blue and green component individually when you select the "User" setting.

Eye Safety Warnings



- Avoid staring/facing directly into the projector beam at all times. Keep your back to the beam as much as possible.
- When projector is used in a classroom, adequately supervise students when they are asked to point out something on the screen.
- In order to minimize the lamp power, use room blinds to reduce ambient light levels.

Product Features

- WVGA (800 X 480) Native Resolution
- LED Lamp With An Average Life Over 20,000 Hours
- Built-In Speaker With 5 Watt Amplifier
- 720p Compatible
- Keystone Correction
- USB Hard Drive Support

Package Overview

Unpack and inspect the box contents to ensure all parts listed below are in the box. If something is missing, please contact your local reseller.



Projector with Lens Cap



Power Cord



VGA Cable



AV Cable



S-Video Cable



HDMI Cable



IR Remote Control



Due to different applications in each country, some regions may have different accessories.

Play Media Files From USB Hard Drive

The projector can play audio and video files (.mp3, .rmvb, .avi, .wmv, etc.) from an USB hard drive directly.

How To Operate

1. Connect the USB hard drive to the USB port on the projector.
2. Press the USB or SOURCE button to select USB as the input source.
3. A screen for selecting media types will appear. You can choose to view photos, play music, watch movies or display texts on the projected screen. Select the desired media type by using the ◀▶ (VOL+, VOL-) keys and then press OK.
4. The partitions on your USB hard drive will appear. Select the partition that contains the files that you want to play by using the ◀▶ (VOL+, VOL-) keys and then press OK. To go back to the previous screen, press EXIT.
5. The folders and files in the selected partition will appear. Use ◀▶ (VOL+, VOL-) and ▲▼ (CH+, CH-) to navigate through folders and files. Press OK to open the selected folder. Only files of the selected media type will appear. To go back to the previous screen, press EXIT.
6. When you navigate to a supported media file, a small preview of that file will be displayed on the projected screen. You may need to wait for a few seconds before the preview appears depending on the file size. Press OK to select that file and add it to the play list.
7. Once you have selected all the files that you want to play, press ▶|| on the remote control to view the file in full screen.
8. Use ◀◀ and ▶▶ on the remote control to go fast forward and fast backward. Use ◀◀ and ▶▶ to go to the previous or next file in the play list.
9. Press ▶|| to pause/resume playing the selected file(s). Press ■ to stop playing the selected file(s) and go back to the file selection screen.

SV	Selects S-Video as the input source.
HDMI	Selects HDMI as the input source. Press the HDMI button again to switch between HDMI1 and HDMI2.
YPBPR	Selects component video (YPbPr) as the input source.
VGA	Selects VGA as the input source.
ZOOM	Zooms in/out the projected image. Twenty zoom levels are supported.
▶	Plays the selected file(s) in full screen when playing media files from a USB hard drive. Press this button again to pause/resume.
■	Stops playing the selected media file(s).
◀◀	Searches backward when playing media files from a USB hard drive. Press this button again to go backward at 2x, 4x, 8x and 16x speed.
▶▶	Searches forward when playing media files from a USB hard drive. Press this button again to go forward at 2x, 4x, 8x and 16x speed.
◀◀◀	Goes to the previous media file in the selected files list..
▶▶▶	Goes to the next media file in the selected files list.
Numeric, Last, FAV (3)	Reserved, for models with analog TV receiver.
DVB-T Buttons (8)	Reserved, for models with DVB-T TV receiver.

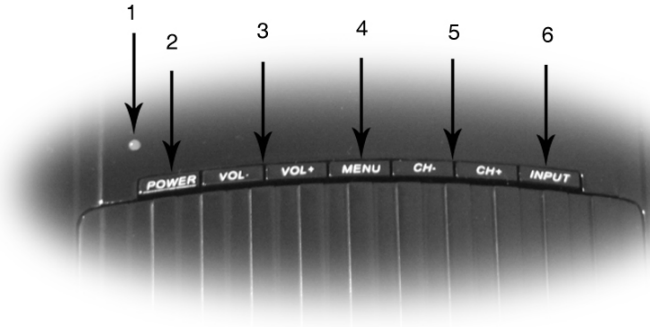
Product Overview

Main Unit



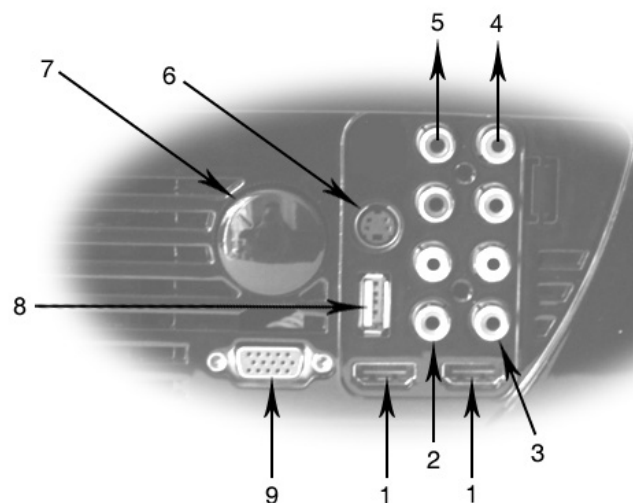
- 1) Focus Ring
- 2) Lens
- 3) IR Receiver
- 4) Ventilation Slots
- 5) Power Socket
- 6) Power Switch
- 7) Control Panel
- 8) Keystone Knob
- 9) Input/Output Connections

Control Panel



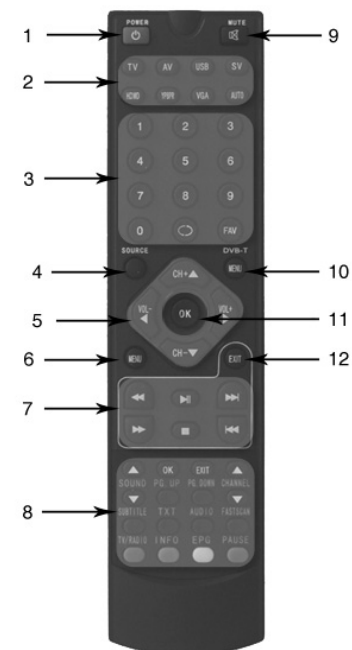
- 1) Status Indicator
- 2) Power Button
- 3) VOL+, VOL-
- 4) Menu Button
- 5) CH+, CH-
- 6) Input Button

Input / Output Connections



- | | |
|----------------------------|-------------------------|
| 1) HDMI | 2) Audio Out |
| 3) Audio In | 4) Composite Video (AV) |
| 5) Component Video (YPbPr) | 6) S-Video |
| 7) Keystone | 8) USB |
| 9) VGA | |

Remote Control



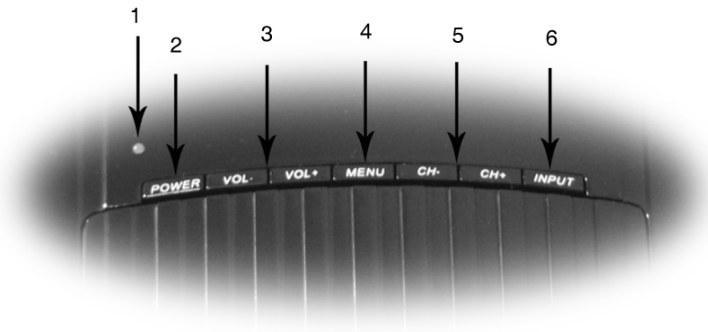
Using the Remote Control

POWER (1)	Refer to the "Power On/Off the Projector" section on page 12.
SOURCE (4)	Press SOURCE to select an input source.
CH+, CH- VOL+, VOL- (5)	Use these keys to select items or make adjustments to your selection in OSD.
VOL+, VOL-	Use VOL+ and VOL- to adjust volume.
MENU (6)	Press MENU to launch the on-screen display (OSD) menu. To exit OSD, press MENU again or press EXIT (12).
MUTE (9)	Mute the projector sound. To turn mute off, press the MUTE button again.
FLIP (10)	Press the Flip button to switch between Front Desktop, Front Ceiling, Rear Desktop and Rear Ceiling projection methods.
OK (11)	Press OK to confirm a selection.
EXIT (12)	Press EXIT to close the OSD menu.
TV	Selects TV as the input source (not available on models without the analog TV connector).
AV	Selects composite video (AV) as the input source.
USB	Selects external USB hard drive as the input source.

Control Panel & Remote Control

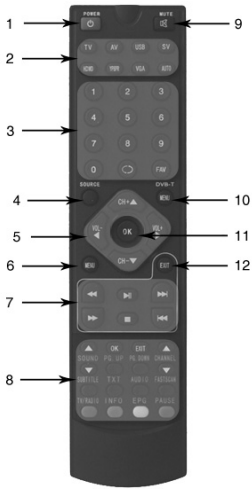
There are two ways for you to control the functions: Control Panel and Remote Control.

Control Panel



Using the Control Panel	
POWER (1)	Refer to the "Power On/Off the Projector" section on page 12.
MENU (4)	Press MENU to launch the on-screen display (OSD) menu. To exit OSD, Press MENU again.
INPUT (6)	Press INPUT to select an input source.
CH+, CH- (5) VOL+, VOL- (3)	Use these keys to select items or make adjustments to your selection in OSD.
VOL+, VOL- (3)	Use VOL+ and VOL- to adjust volume.

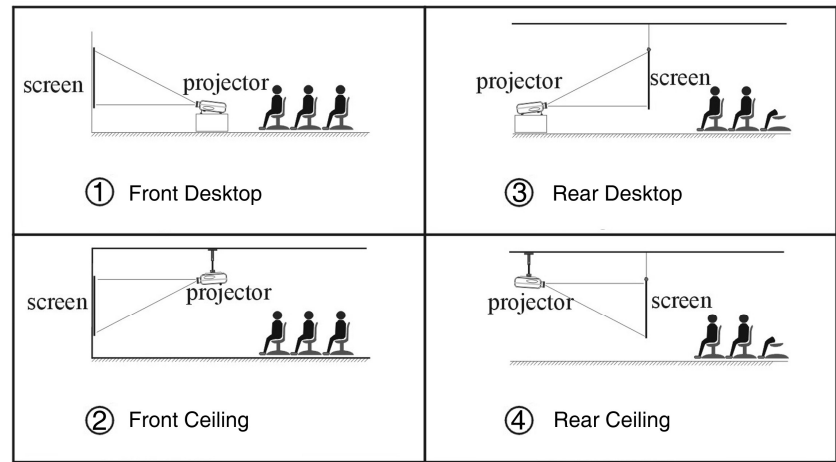
Remote Control



- 1) Power Button
- 2) Direct Input Source Selection Buttons
- 3) Reserved, For Analog TV
- 4) Input Source Selection Button
- 5) VOL+, VOL-, CH+, CH- Buttons
- 6) Opens the OSD Menu
- 7) Play/Pause, Search Forward, Search Backward, Next File, Previous File Buttons For Playing Media Files From External USB hard drive
- 8) Reserved, For DVB-T TV
- 9) Mute Button
- 10) Flips The Projected Image
- 11) OK button To Confirm A Selection
- 12) Exits The OSD Menu

Projection

This projector can be used in the following 4 projection scenarios:



You can use the Flip menu item in the Option menu or the Flip button on the remote control to switch between the above four projection methods.

Note ✓ Rear-Desktop and Rear-Ceiling are to be used with a translucent screen.

Adjusting Projection Image Size

Screen (Diagonal)	50"		72"		100"	
	4:3	16:9	4:3	16:9	4:3	16:9
Distance To Screen	8 ft (2.45 m)	8.7 ft (2.65 m)	11.3 ft (3.45 m)	12.3 ft (3.75 m)	15.5 ft (4.73 m)	16.9 ft (5.15 m)

Keystone Correction

When the projector is tilted, the projected image may become distorted and have slanted sides. You can use the Keystone Correction knob located on the control panel to adjust the image distortion (±20 degrees).



- Note** ✓
- Use of Keystone is not recommended.
 - Using the Keystone Correction may cause the upper or lower part of the image to blur.
 - If the distortion can not be corrected by using the Keystone knob, try moving the projector closer to the screen.

Adjusting the Projected Image

Adjusting the Projector's Height

The projector is equipped with elevator feet for adjusting the image height.

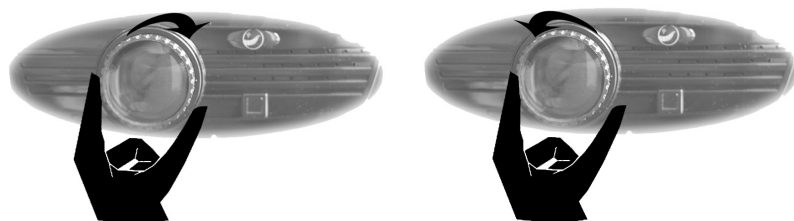
1. Locate the adjustable foot you wish to modify on the underside of the projector.



2. Rotate the adjustable ring counter clockwise to raise the projector or clockwise to lower it. Repeat with the remaining feet as needed.

Adjusting the Projector's Focus

To focus the image, rotate the focus ring until the image is clear. The projector will focus at distances from approximately 8.0 to 16.9 feet (2.5 to 5.2 meters).

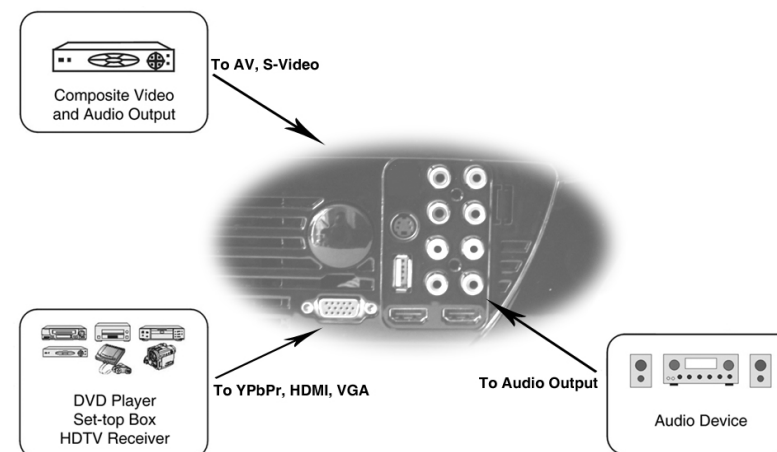


Connecting the Projector

Connect to Computer/Notebook

The projector can be connected to computers/notebooks using either a VGA cable, or an HDMI cable if your notebook has an HDMI port.

Connect to Video Sources



You can also use VGA or HDMI cable to connect the projector to your digital video devices such as DVD players and HDTV receivers if they have such connectors.

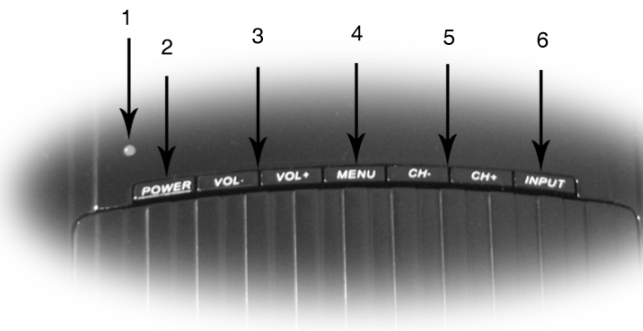
Connect To USB Hard Drive

You can connect an USB hard drive that contains audio and video files (mp3, rmvb, avi, wmv, etc.) to the USB port on the projector and play these files directly. For more information, please refer to "Play Media Files From USB Hard Drive" on page 19.

Powering the Projector On/Off

Powering On the Projector

1. Remove the lens cap.
2. Securely connect the power cord and signal cable. Turn the power switch at the back of the projector ON. The LED Status Indicator (1) will turn red.
3. Turn on the lamp by pressing POWER button (2) either on the top of the projector or on the remote. The LED Status Indicator will now turn green. The lamp will light up and a blue screen will appear.
4. Turn on and connect the source that you want to display on the screen (computer, notebook, video player, etc).
5. Press the INPUT button (6) on the control panel and an input sources menu will appear on the screen. Use the CH+ and CH- keys (5) to select the source and press the VOL+ or VOL- key (3) to confirm your selection. You can also use the corresponding keys on the remote control to select the signal source.



Turn on the projector first and then select the signal sources.

Powering Off the Projector

1. Press the POWER button to turn off the projector lamp. A Power Off prompt will appear on the screen.
2. Press the POWER button again to confirm and the LED Status Indicator will turn red and the projector will enter standby mode.
3. Turn the power switch at the back of the projector OFF, and disconnect the power cord from the electrical outlet and the projector.
4. Do not turn on the projector immediately following a power off procedure. If you wish to turn the projector back on, please wait for at least 60 seconds.



- Do NOT turn the rear power switch off directly or unplug the power cord when the projector is in operation or the cooling fan is running.
- Do NOT try to turn the projector off by using the rear power switch directly or unplugging the power cord.