myprojectorlamps.com

The most trusted, dependable name in projector lamp sales.

http://www.myprojectorlamps.com

http://www.myprojectorlamps.ca

http://www.myprojectorlamps.eu

The following projector manual has not been modified or altered in any way.

User Manual

DepthQ® -WXGA

HIGH DEFINITION 3D VIDEO PROJECTOR

A product of Lightspeed Design, Inc. co-developed with InFocus® Corp.

DepthQ® STEREOSCOPIC

DepthQ®-WXGA

HIGH DEFINITION 3D VIDEO PROJECTOR

Declaration of Conformity

Manufactured for Lightspeed Design, Inc. by:
InFocus Corporation, 27500 SW Parkway Ave, Wilsonville, Oregon 97070 USA

European Office: Louis Armstrongweg 110, 1311 RL Almere, The Netherlands

We declare under our sole responsibility that this projector conforms to the following directives and norms:

EMC Directive 2004/108/EC
EMC: EN 55022
EN 55024
EN 61000-3-2
EN 61000-3-3
Low Voltage Directive 2006/95/EC
Safety: IEC 60950-1: 1st Edition

Trademarks

DepthQ is a registered trademark of Lightspeed Design, Inc. InFocus, In Focus, and INFOCUS (stylized) are either registered trademarks or trademarks of InFocus Corporation in the United States and other countries. DLP® and the DLP logo are registered trademarks of Texas Instruments and BrilliantColor™ is a trademark of Texas Instruments. Adobe and Acrobat are trademarks or registered trademarks of Adobe Systems Incorporated. Apple, Macintosh, and PowerBook are trademarks or registered trademarks of Apple Computer, Inc. IBM is a trademark or registered trademark of International Business Machines, Inc. Microsoft, PowerPoint, and Windows are trademarks or registered trademarks of Microsoft Corporation. NVIDIA is a registered trademark of NVIDIA Corporation.

FCC Warning

Note: 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 in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

--Reorient or relocate the receiving antenna.
--Increase the separation between the equipment and receiver.
--Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
--Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by InFocus Corporation may void authority to operate the equipment.

Canada

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Agency Approvals

UL and c-UL (US/Canada), FCC-A (US/Canada), CE (CE member countries), GOST (Russia), TUV GS (Germany), CCC (China), IRAM (Argentina), NOM (Mexico), C-Tick (Australia), MIC & eK (South Korea), PSB (Singapore).

RoHS Compliant

Input ratings: 100-240Vac, 3.0A, 50-60Hz

Lightspeed Design and InFocus reserve the right to alter product offerings and specifications at any time without notice.

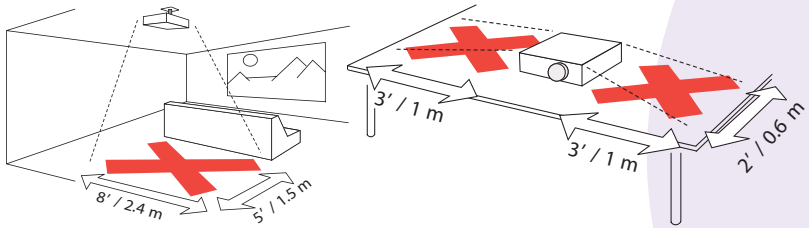
Table of Contents

Introduction	3
Positioning the Projector	5
Projector and Device Connector Guide	6
Connecting a Computer Source	9
Required Computer Connections	9
Optional Computer Connections	9
Displaying an Image	10
Adjusting the Image	12
Connecting a Video Device	13
Composite Video Connection	14
S-video Connection	14
Component Video Connection	14
VESA Connection	14
Shutting Down the Projector	15
Troubleshooting Your Setup	15
Using the Remote Control	24
Using the Audio	25
Using the Keypad Buttons	26
Optimizing Computer Images	27
Presentation Features	27
Optimizing Video Images	28
Customizing the Projector	28
Using the Menus	29
Basic Picture Menu	30
Advanced Picture Menu	31
Setup Menu	32
Status and Service Menu	34
Maintenance	35
Cleaning the Lens	35
Using the Security Lock	35
Replacing the Projection Lamp	36
Stereoscopic 3D Concerns	38

Follow these instructions to help ensure image quality and lamp life over the life of the projector. Failure to follow these instructions may affect the warranty. For complete details of the warranty, see the Warranty booklet.

Important Operating Considerations for Safety

- Place the projector in a horizontal position no greater than 15 degrees off axis.
- Locate the projector in a well-ventilated area without any obstructions to intake or exhaust vents. Do not place the projector on any soft covering that may block the vents.
- Locate the projector at least 4' (1.2m) away from any heating or cooling vents.
- Use only Lightspeed Design and InFocus-approved ceiling mounts. Warning: To prevent eye injury if the projector is ceiling mounted, wear protective eyewear before opening lamp door. A warning sticker is included with the user documentation. Place this sticker on the lamp door if the projector is mounted on the ceiling.
- Only genuine InFocus lamps are tested for use in this projector. InFocus is not liable for the performance, safety or certification of any other lamps. The use of other lamps violates the projector warranty and voids all certification marks on this projector.
- Use only the power cord provided. A surge-protected power strip is recommended.
- Refer to this guide for proper startup and shutdown procedures.
- Hg – Lamp contains mercury. Manage in accordance with local disposal laws. See www.lamprecycle.org
- In the unlikely event of a lamp rupture, particles may exit through the projector side vents. When the projector is turned on, keep people, food, and drinks out of the "keep out" area under and around the projector, as indicated by the "X" areas below.



Introduction

Your new DepthQ® HD 3D projector is simple to connect, easy to use, and straightforward to maintain. It is a versatile projector that is flexible enough for both professional work as well as home entertainment.

The DepthQ® -WXGA has 1280x720 native resolution and is compatible with a wide variety of computers and video devices, both in 3D and 2D.

Product Specifications

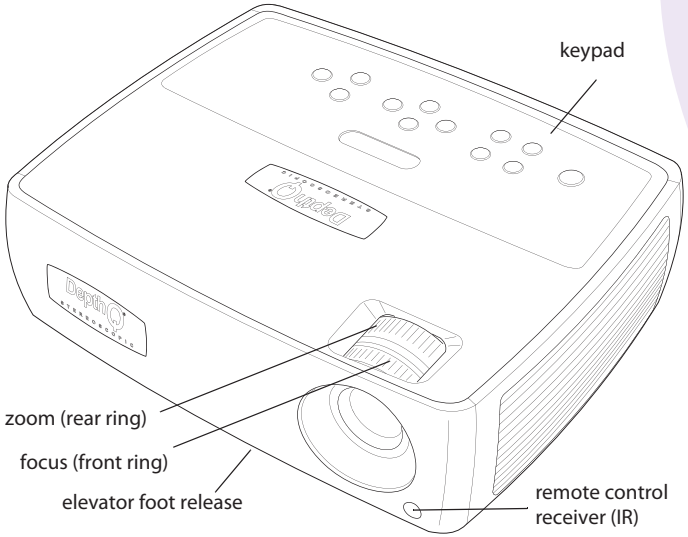
To read the latest specifications on your projector, be sure to visit our website at www.depthq.com/specifications.html, as specifications are subject to change.

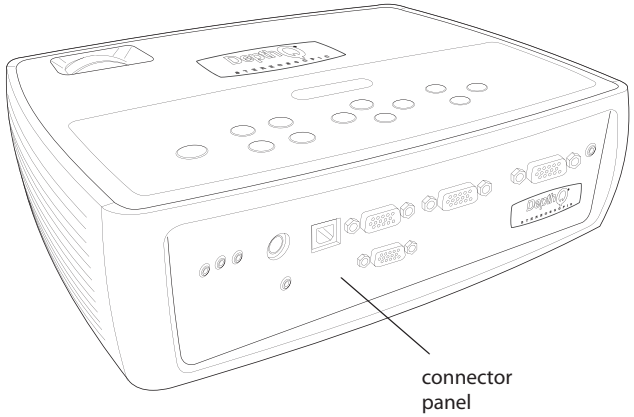
Accessories

The standard accessories that came with your projector are listed in the included Quick Start guide. Optional accessories can be found both on our website at www.depthq.com/accessories.html as well as at the InFocus store at http://store.infocus.com/stores or from your dealer.

Reliability

DepthQ® HD 3D Projectors are dust-free systems. There aren't any fan filters or lamp screens to change, which makes for 24x7 certified operation, providing around the clock, maintenance free projection.

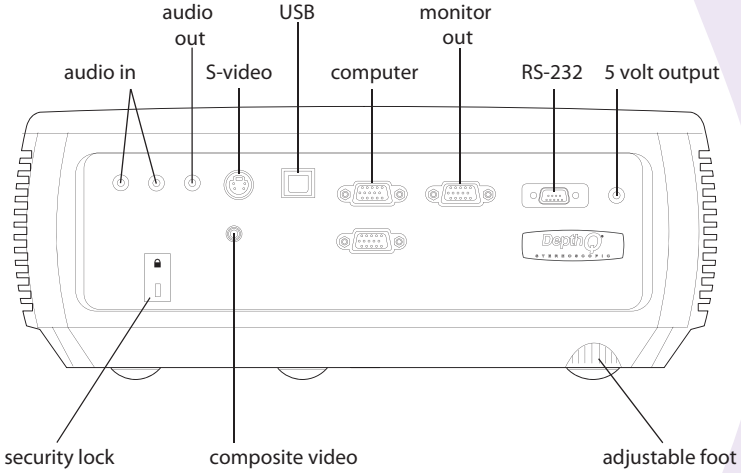




Connector Panel

The projector provides both computer (3D or 2D) and video (2D) connection options, including:

- VESA VGA computer (2)
  Note that these are two separate inputs that you may switch between. They are not separate left and right inputs. Either input can be 3D or 2D, but the two do not combine to create the stereoscopic effect, nor can you display signals from both inputs at the same time.
- S-video
- Composite video
- Separate audio inputs for video and computer



The projector also provides the following connectors:

- Monitor out, to provide an image on your desktop computer as well as on the projection screen
- Audio out, to provide sound for external speakers
- USB, to provide mouse control (used with an optional remote control only)
- A 5 volt DC output (see below)
- It also has an RS-232 connector for serial control. The Command Line Interface (CLI) specifications and commands are on our website: www.depthq.com/support.html.
- Kensington security lock and PIN code feature will keep the projector in the proper location and under authorized use.

5 volt DC output

The 3.5mm mini-jack triggers provide a constant 5 volt, 2 amp DC output while the projector is on. It is designed to provide power for an InFocus LiteShow II wireless device, which allows wireless 2D projection. More information can be found on the InFocus website at www.infocus.com.

Positioning the Projector

To determine where to position the projector, consider the size and shape of your screen, the location of your power outlets, and the distance between the projector and the rest of your equipment.

Here are some general guidelines:

- Position the projector on a flat surface at a right angle to the screen. The projector must be at least 2.5 feet (46.2 cm) from the projection screen.
- Position the projector within 10 feet (3m) of your power source and within 6 feet (1.8m) of your video device (unless you purchase extension cables). To ensure adequate cable access, do not place the projector within 6 inches (.15m) of a wall or other object.
- If you are installing the projector on the ceiling, refer to the installation guide that comes with the Ceiling Mount Kit for more information. To turn the image upside down, see "Ceiling" on page 33. We recommend using the ceiling mounts described at www.depthq.com/accessories.html.
- Position the projector the desired distance from the screen. The distance from the lens of the projector to the screen, the zoom setting, and the video format (as well as the focus to a small extent) determine the size of the projected image. The native aspect ratio of the projector is 16:9.
- The image exits the projector at a given angle. This vertical image offset is 115%. This means that if you have an image 10' high, the bottom of the image will be 1.15' above the center of the lens.

Calculating Distance to Screen

You can calculate the approximate minimum and maximum throw distance for any horizontal or 16:9 diagonal screen size using the following equations:

Minimum Throw Distance = Horizontal Screen Size * 1.49
Maximum Throw Distance = Horizontal Screen Size * 1.83
Minimum Throw Distance = Diagonal Screen Size * 1.30
Maximum Throw Distance = Diagonal Screen Size * 1.59

Projector Location

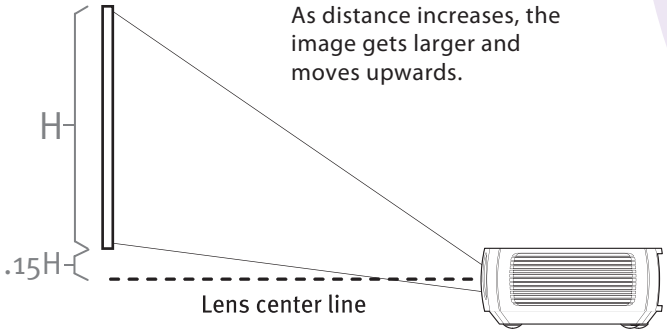


Table 1

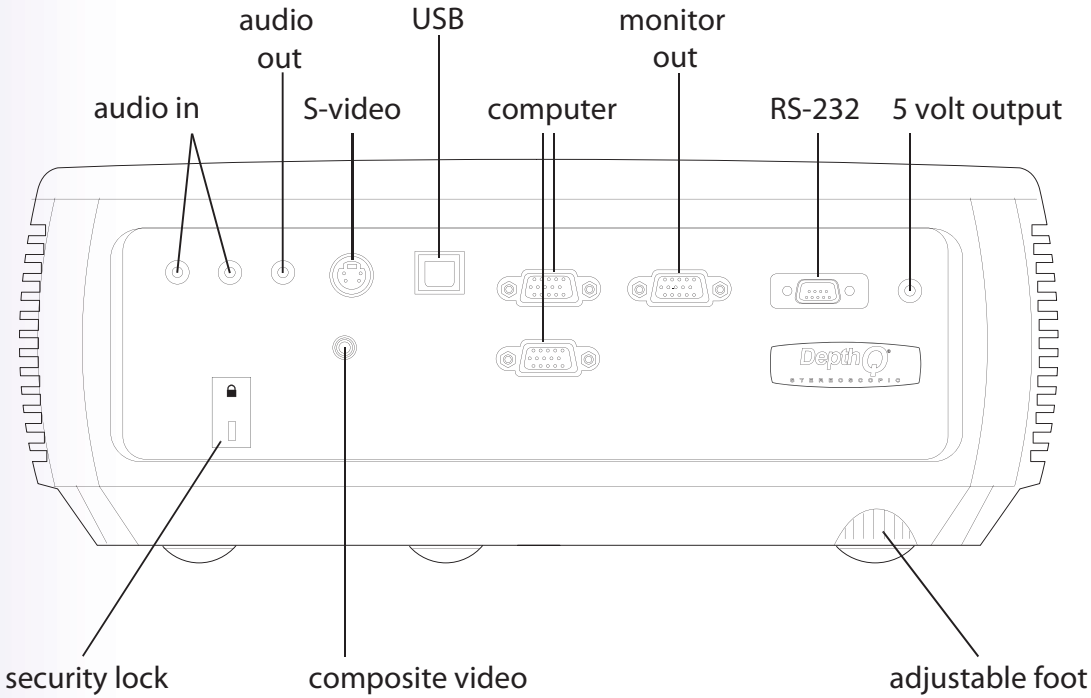
Range of distance to the screen for a given screen size

16:9 Diagonal Screen Size*	Distance to Screen* Minimum	Maximum
40" / 1m	4'4" / 1.3m	5'4" / 1.6m
60" / 1.5m	6'6" / 2m	8' / 2.4m
80" / 2m	8'8" / 2.6m	10'7" / 3.2m
100" / 2.5m	10'10" / 3.3m	13'3" / 4m
120" / 3m	13' / 4m	15'11" / 4.9m
140" / 3.6m	15'2" / 4.6m	18'7" / 5.7m
160" / 4.1m	17'4" / 5.3m	21'3" / 6.5m
180" / 4.6m	19'6" / 6m	23'11" / 7.3m

*approximate values

Projector and Device Connector Guide

The following illustration and table should help you find the connectors to use and obtain the best resolution possible from your input devices, such as computers, standard VCRs, DVD players (progressive and interlaced), HDTV sources (1080i and 720p HDTV formats), TV and satellite tuners, camcorders, video games (progressive and interlaced), and laser disc players.



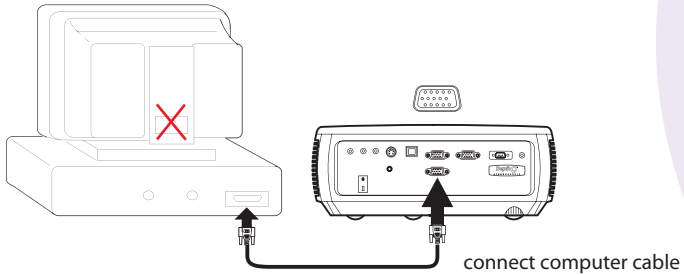
Video Device	Video Compatibility	If Your Device Connector Is	Attach to Adapter or Labeled Connector on Projector	For Setup Instructions, see	Comments
HD 3D via Computer (Stereoscopically-enabled applications and video games)	1280x720 1024x768 800x600 120 Hz Progressive Page-Flip	VGA	Computer 1 or Computer 2	VESA connection on page 14	For progressive 120 Hz sources only.
Standard 2D Broadcast TV (not HDTV) via: cable, digital cable, satellite TV, DVD, or VCR	NTSC, PAL, and SECAM formats	Composite video or S-video	Video 2 or Video 1	Composite video connection on page 14. S-video connection on page 14	Not for progressive (i.e. HDTV) sources. See page 8.
Standard 2D Video Camera	NTSC, PAL, and SECAM formats	Composite video or S-video	Video 2 or Video 1	Composite video connection on page 14. S-video connection on page 14	Not for progressive (i.e. HDTV) sources. See page 8.
Standard 2D Video Game	NTSC, PAL, and SECAM formats	Composite video or S-video	Video 2 or Video 1	Composite video connection on page 14. S-video connection on page 14	Not for progressive (i.e. HDTV) sources. See page 8.

Video Device	Video Compatibility	If Your Device Connector Is	Attach to Adapter or Labeled Connector on Projector	For Setup Instructions, see	Comments
2D HDTV (High Definition TV)	1080i, 720P Component 480i	VGA Component video	Computer 1 or Computer 2 Computer 1 or Computer 2 via optional VESA to Component adapter	VESA connection on page 14 Component video connection on page 14	Standard 60 Hz Refresh
2D Progressive DVD	1080i, 720P Component 480P and 480i	VGA Component video	Computer 1 or Computer 2 Computer 1 or Computer 2 via optional VESA to Component adapter	VESA connection on page 14 Component video connection on page 14	Standard 60 Hz Refresh
2D Progressive Video Game	1080i, 720P Component 480P and 480i	VGA Component video	Computer 1 or Computer 2 Computer 1 or Computer 2 via optional VESA to Component adapter	VESA connection on page 14 Component video connection on page 14	Standard 60 Hz Refresh
High Refresh 2D Progressive Video Game via Computer	1280x720P 120 Hz Refresh	VGA	Computer 1 or Computer 2	VESA connection on page 14	Set Desktop to 120 Hz Refresh

Connecting a Computer Source

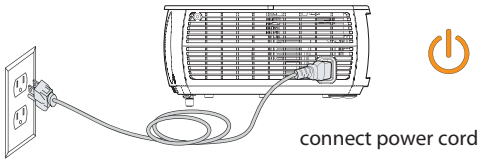
Required Computer Connections

Connect one end of the provided VGA computer cable to the Computer 1 or Computer 2 connector on the projector and the other to the VESA connector on your computer's graphics card. If you are using a desktop computer (currently your only option for viewing stereo 3D on the DepthQ projector), you will need to disconnect the monitor cable from the computer's video port first (you can connect this monitor cable to the Monitor Out connector on the projector, see below).



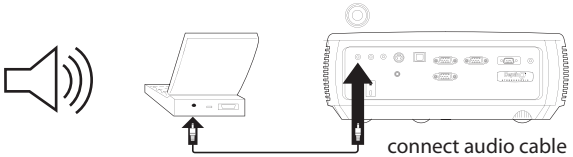
Connect the black power cord to the Power connector on the side of the projector and to your electrical outlet. The Power light on the Status Indicator Panel (page15) turns amber.

NOTE: Always use the power cord that shipped with the projector.

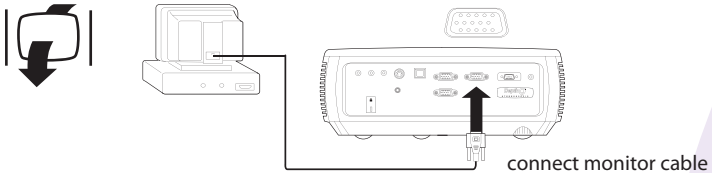


Optional Computer Connections

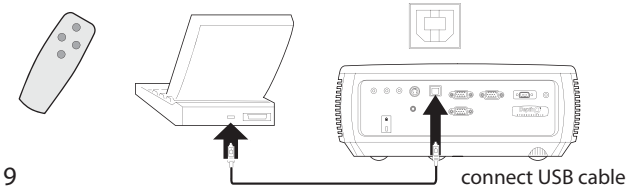
To get sound from the projector, connect an audio cable (optional cable, not included) to your computer and to the Audio In Computer connector on the projector. You may also need an adapter.



If you are using a desktop computer and want to see the image on your computer screen as well as on the projection screen, connect the computer's monitor cable to the Monitor Out connector on the projector.
NOTE: The projector must be plugged in for this feature to work.



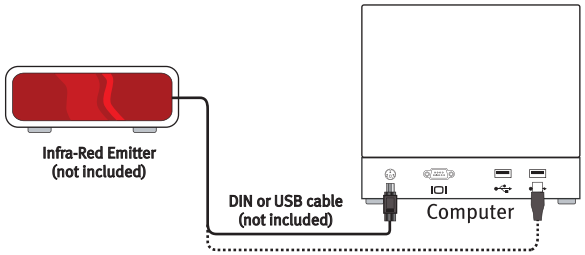
To advance slides in a 2D PowerPoint presentation using an optional remote control, plug the USB cable into the USB mouse connector on your computer and the USB connector on the projector.



Displaying an Image

- For 3D, Connect your Infra-Red (IR) emitter (not included) to your computer.

  A) If your graphics card has an onboard DIN3 connector (FX3700, FX4600, etc.) connect your IR emitter directly to the onboard DIN3 connector.
  B) If your graphics card does not have an onboard DIN3 connector (FX1500) you will need to use a stereoscopic breakout cable (VGA to VGA + DIN3) (see www.depthq.com/accessories.html).
  C) Some IR emitters may connect to a USB port instead of using a DIN3.

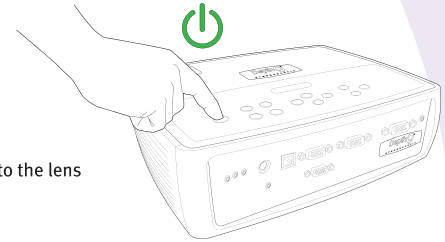


- Press the Power button on the DepthQ® projector.

  The Power light on the Status Indicator Panel (page 15) blinks green and the fans start to run. When the lamp comes on, the start up screen displays and the Power light is steady green. It can take a minute for the image to achieve full brightness.

  ? No start up screen ? Get help on page 16.

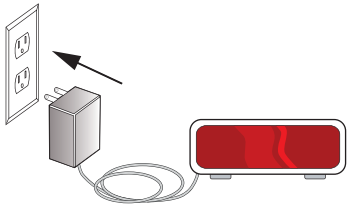
press Power button



Warning: Do not look directly into the lens when the projector is turned on.

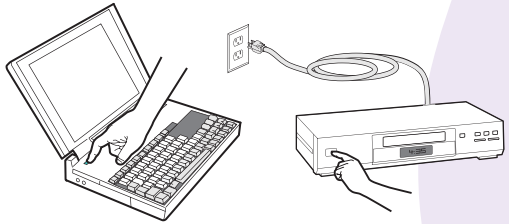
- For 3D, supply power to your IR emitter and aim. **(USB-connected emitters may not require external power.)**

  Either aim your emitter at your screen (for front-projection), through the screen (for rear-projection), or point it directly towards the viewer from below or above the screen. Use whichever method works best.



- Turn on your computer (for 3D or 2D) or video device (for 2D).
- For 3D, ensure the computer desktop is set to either 1280x720, 1024x768 or 800x600 at a refresh rate of 120 Hz.

turn on computer
or video device



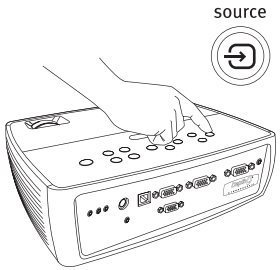
- The image should appear on the projection screen. If it doesn't, press the Source button on the projector's keypad or remote. You may have to press it more than once.

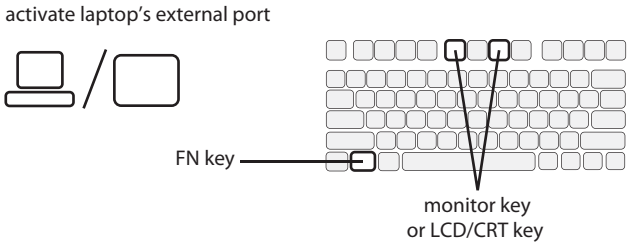
  Important: If there is still no video, restart your computer (ensure it's connected to the projector and the projector is turned on).

  If using a laptop (for 2D display), make sure its external video port is active. (Note - there is currently no 3D solution for using laptops with the DepthQ®)

  Many laptops do not automatically turn on their external video port when a projector is connected. Usually a key combination like FN + F8 or CRT/LCD key turns the external display on and off. Locate a function key labeled CRT/LCD or a function key with a monitor symbol. Press FN and the labeled function key simultaneously. Refer to your laptop's documentation to learn your laptop's key combination.

  ? No laptop image ? Try pressing the Auto Image button on the key-pad. Get help on page 17.





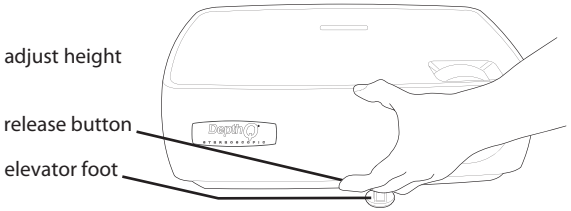
- For 3D, turn on your active eyewear liquid crystal (LC) shutter glasses.

  Folding glasses typically turn on when the ear-pieces are opened. Others may have a pressure-sensitive switch or a physical button.

Adjusting the Image

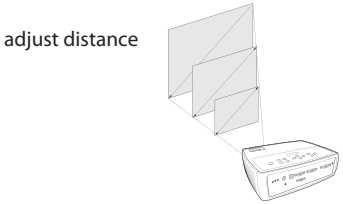
- If necessary, adjust the height of the projector by pressing the elevator foot release button to extend the foot.
- If necessary, rotate the leveling foot located at the rear of the projector.

  Avoid placing your hands near the hot exhaust vent at the side of the projector.



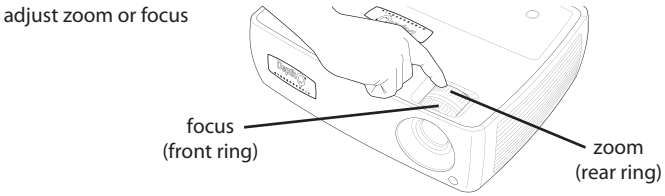
- Position the projector the desired distance from the screen at a 90 degree angle to the screen.

  See page 5 for a table listing a sampling of diagonal screen sizes and the minimum and maximum distances required to fill that screen size.
  For even greater detail visit our FAQ page at wwwdepthq.com/faq.html.



- Adjust the zoom or focus.

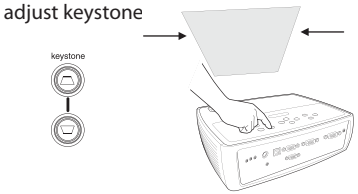
  The front ring is for focus; the rear ring is for zoom.



- If the image is not square, first make sure that the projector is as perpendicular to the screen as possible.

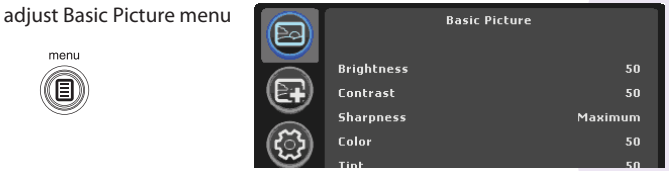
  If the left or right edge of the image is taller or shorter than the other, you can turn the projector to the left or to the right a few degrees to square the image.

  If the image is still wider or narrower on the top or bottom edge of the screen, press the top Keystone button to reduce the upper part of the image, or press the bottom Keystone button to reduce the lower part. See page 30.



- Adjust the Contrast or Brightness in the Basic Picture menu. See page 30 for help with these menu adjustments.

  For Aspect Ratio, keep in mind that DVD players must be configured for 16:9 in order to view the highest quality image. For more information regarding Aspect Ratio, see page 13.



Connecting a Video Device

For 3D use, you will need to use a computer running stereoscopically-enabled software as your source. For 2D use, you can connect video devices such as VCRs, DVD players, camcorders, digital cameras, video game consoles, HDTV receivers, and TV tuners to the projector. You can connect the audio directly to the projector to get sound from the built-in speaker, or you can bypass the projector's audio system and connect the audio directly from your source to a stereo or home theater system.

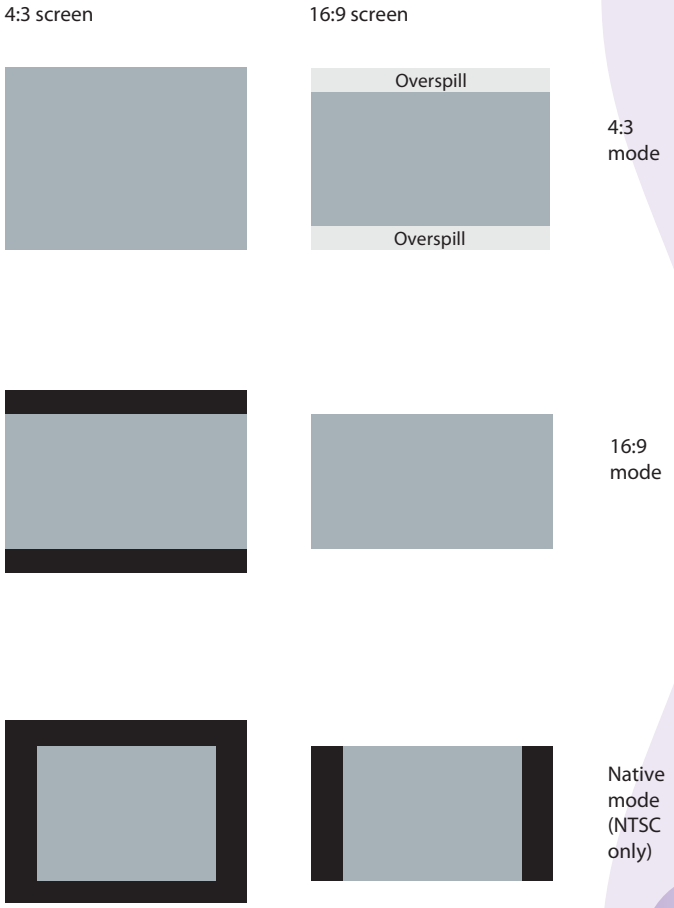
You can connect the projector to most video devices that can output video. You cannot directly connect the coaxial cable that enters your house from a cable or satellite company, the signal must pass through a tuner first. Examples of tuners are digital cable boxes, VCRs, digital video recorders, and satellite TV boxes. Basically, any device that can change channels is considered a tuner.

Before connecting your projector, you should decide which aspect ratio you want to use. The projector's Aspect Ratio setting is accessed through the Resize button on the remote or through the projector's Basic Picture Menu. See page 30 for more information.

What is Aspect Ratio?

Aspect ratio is the ratio of the image width to image height. TV screens are usually 4:3, which is the default for this projector. HDTV and most DVDs are 16:9. If you're projecting onto a screen, the size/shape of the screen may determine which aspect ratio to use. If you are projecting onto a blank wall, you don't have the screen size restriction. What you plan to project will also help you choose between 4:3 and 16:9. Most TV shows are 4:3, while most movies are 16:9.

If you have a 16:9 screen then you should select an aspect ratio of 16:9 for anamorphic movies or HDTV, and Native for 4:3 content. If you have a 4:3 screen you should still use 16:9 for anamorphic movies or HDTV, but you also have the option of using either 4:3 (to fill the screen) or Native (for direct pixel mapping) for 4:3 content. Keep in mind that anamorphic movies only appear correctly if the DVD player is set to output to a 16:9 television.



Video Device Connections

No video cables are provided with the projector. You can order cables from the DepthQ® accessories page http://www.depthq.com/accessories.html, the InFocus store http://store.infocus.com/stores/ or provide your own.

Composite Video Connection

Plug the composite video cable's yellow connector into the video-out connector on the video device. Plug the other yellow connector into the yellow Video 2 connector on the projector.

Plug the white connector of a Mini-plug audio Y-cable into the left audio out connector on the video device and plug the red connector into the right audio out connector on the video device. Plug the other end of the cable into the Audio In Video connector on the projector.

Keep in mind that video output from composite connections is not as high quality as S-video.

VESA Connection

If your video device has a 15-pin VGA output, plug one end of the included computer cable into the VGA connector on your video source. This connector may be labeled "To Monitor" on the video source. Plug the computer cable into the Computer 1 or Computer 2 connector on the projector.

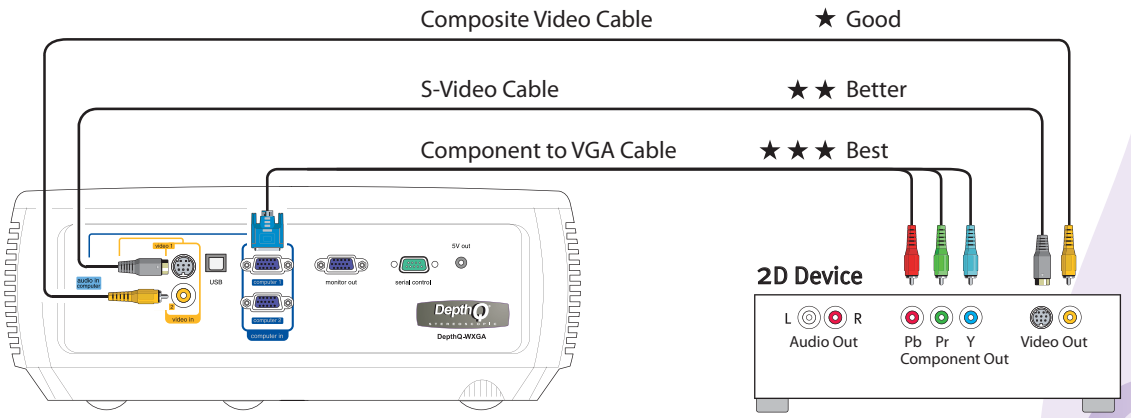
S-Video Connection

If your video device uses a round, four-prong S-video connector, plug an S-video cable into the S-video connector on your video device and into the Video 1 connector on the projector. Use the audio cable as described above.

Keep in mind that S-video delivers higher quality video output than composite.

Component Video Connection

If your HD video device has component connectors, an optional Component to VESA adapter can be used. Plug the component cable into the video device. Plug the other end of the component cable into the adapter and plug the adapter into the Computer 1 or Computer 2 connector. Component offers the highest quality video output.



DVD, VCR, Cable Box, Game Console, etc.

Shutting Down the Projector

The projector automatically displays a black screen after no active source is detected for 30 minutes. This black screen helps preserve the life of the projector. The image returns when an active source is detected or a remote or keypad button is pressed.

Screen Save Time

You can make the black screen appear after a preset number of minutes by turning on the Screen Save Time feature in the Setup menu. See page 32.

Auto Off Time

The projector also has an Auto Off Time feature that automatically turns the lamp off after no active sources are detected and no user interaction with the projector is performed for 30 minutes. By default, this feature is off. You can change the length of time, see page 32.

Turning off the projector

To turn the projector off, press the Power button on the remote or keypad. The lamp turns off and the LED blinks amber for 1 minute while the fans continue to run to cool the lamp. When the lamp has cooled, the LED lights amber and the fans stop. Unplug the power cable to completely power off the projector.

Troubleshooting Your Setup

If your image appears correctly on the screen, skip to the next section. If it does not, troubleshoot the setup.

The Status Indicator Panel on top of the projector indicates the state of the projector and can help you troubleshoot.

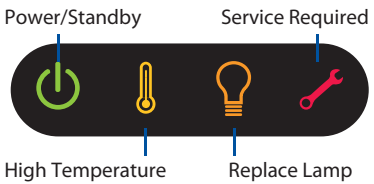


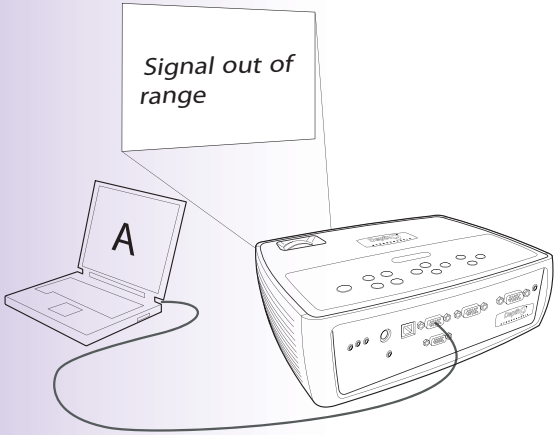
Table 2: Status indicator light behavior and meaning

Status Indicator Panel icons	Meaning
Power, solid amber	The projector is plugged in.
Power, blinking green	The power button has been pressed and the software is initializing.
Power, solid green	The projector is on and initialized.
Power, blinking amber	The power button has been pressed to turn the projector off and the fans are running to cool the projector.
Thermometer	The projector is too hot. Make sure the vents aren't blocked (see page 22). Turn then turn the projector on again. Contact Technical Support if the problem persists
Lamp	Turn off the projector and wait one minute, then turn the projector on again. If the lamp light turns on again, replace the lamp and reset the lamp timer.
Wrench/Service	Turn off the projector and wait one minute, then turn the projector on again. If the service lamp turns on again, service is required. Visit www.infocus.com/service to contact Service.

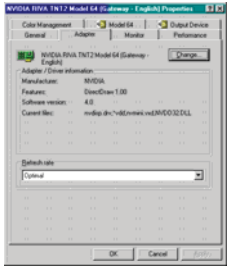
Troubleshooting Your Setup

Problem	Solution	Result
no start up screen	plug power cord into the projector press power button	correct image
only start up screen appears	press the Source button activate laptop's external port FN key monitor key or LCD/CRT key restart laptop, if necessary	computer image projected

no computer image, just the words “Signal out of range”

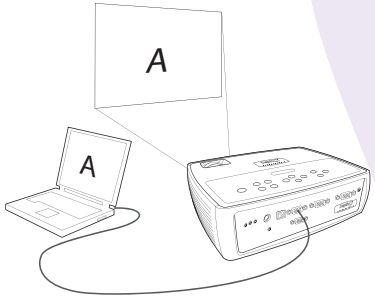


press the Auto Image button on keypad to re-sync
adjust computer refresh rate in Control Panel>Display>Settings>Advanced>Adapter (location varies by operating system)

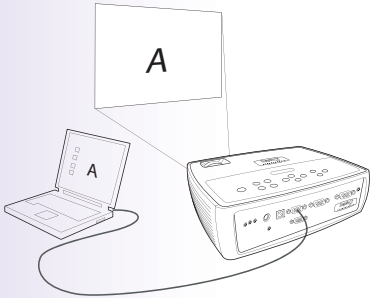


you may also need to set a different resolution on your computer, as shown in the following problem, “image fuzzy or cropped”

computer image projected

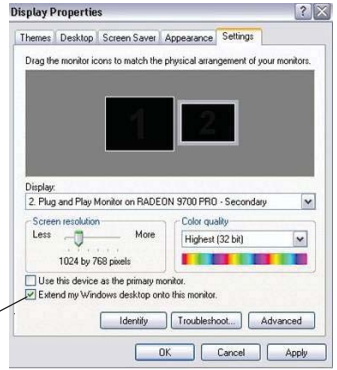


Only my laptop’s background appears, not the Desktop icons

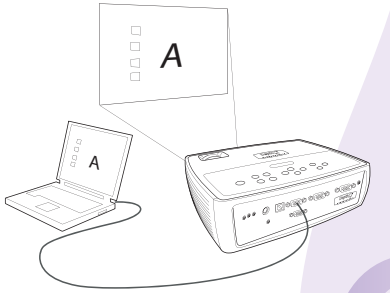


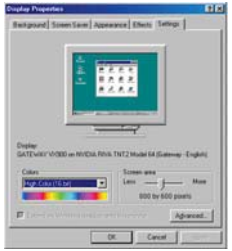
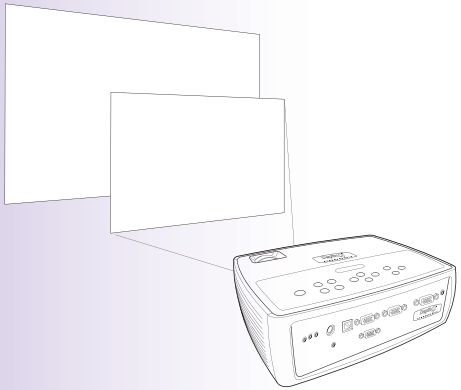
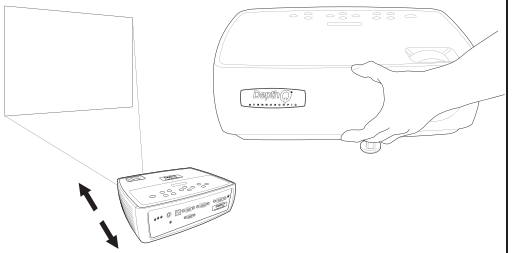
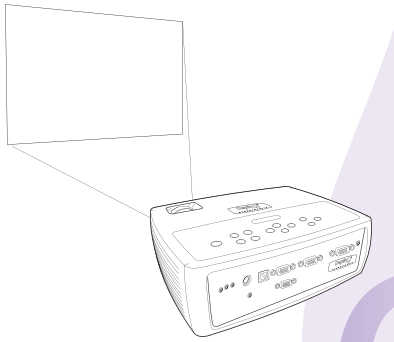
Disable “Extend my Windows Desktop” in Control Panel>Display>Settings>Display 2 (location varies by operating system)

Uncheck the “Extend my Windows Desktop” option, then click Apply

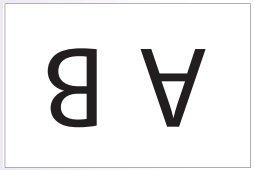
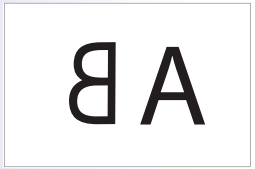
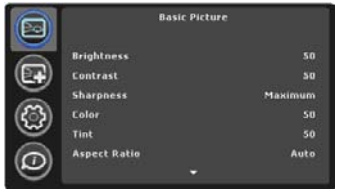


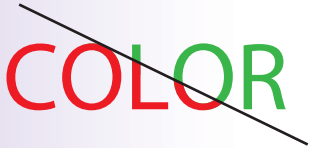
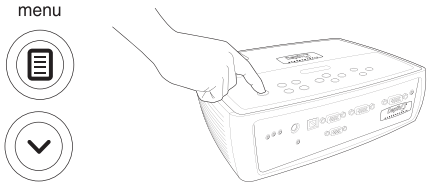
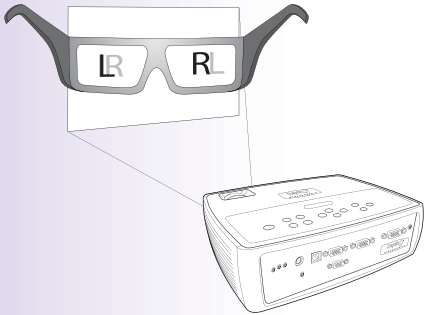
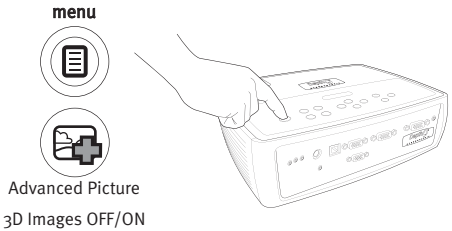
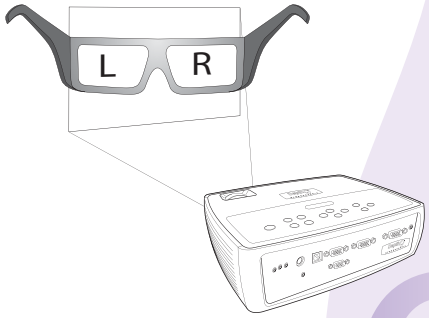
Background and Desktop projected

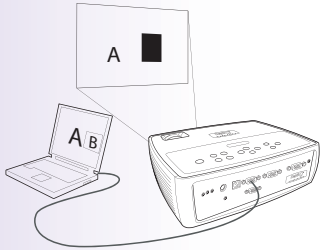
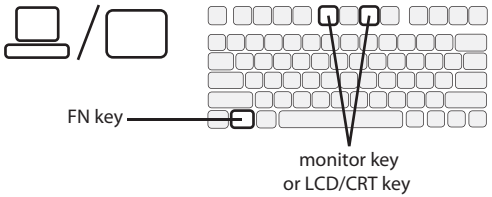
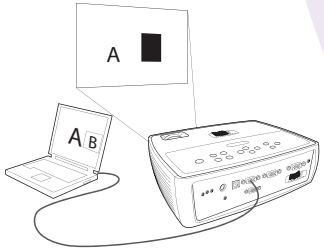
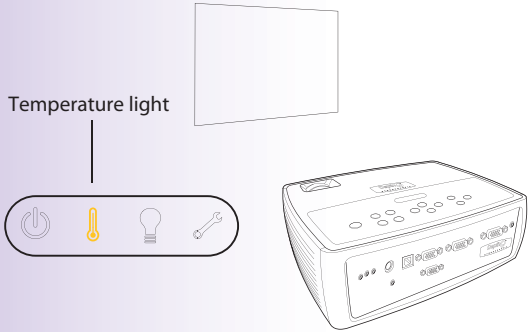
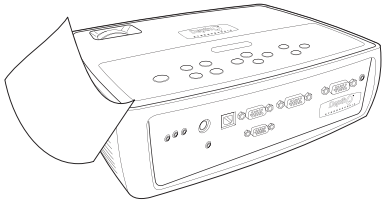
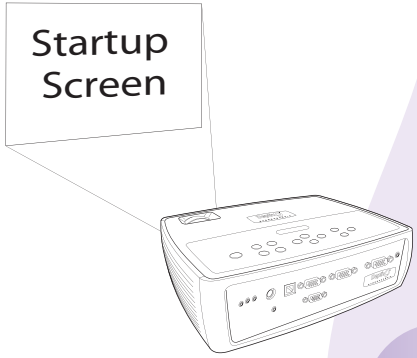


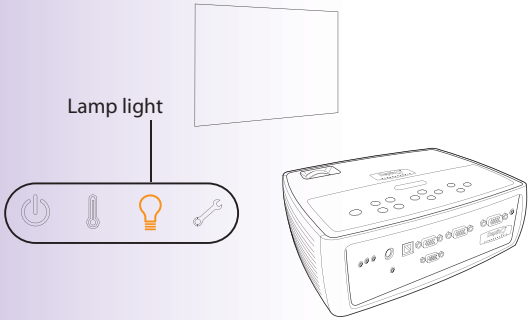
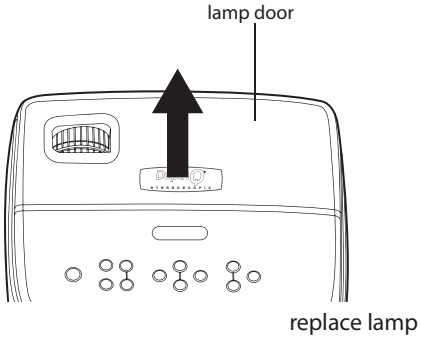
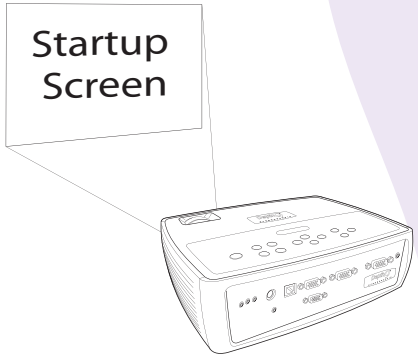
Problem	Solution	Result
image fuzzy or cropped	set your computer's display resolution to 1280x720 (the native resolution of the projector) (Start>Settings>Control Panel>Display>Settings tab) For a laptop, disable laptop monitor or turn on dual-display mode 	image clear and not cropped
image not centered on screen 	move projector, adjust zoom, adjust height  adjust horizontal or vertical position in Advanced Picture menu	correct image 

Problem	Solution	Result
image not square	adjust Keystone on keypad	square image
image not sharp	adjust Sharpness in the Basic Picture menu	correct image
image does not fit 4:3 or 16:9 screen	change aspect ratio to 4:3 or 16:9 in Basic Picture>Aspect ratio menu	correct image

Problem	Solution	Result
image upside down  	turn off Ceiling Mount in Setup menu 	correct image
image reversed left to right  	turn off Rear Project in Setup menu 	correct image
projected colors don't match source 	adjust color, tint, brightness, contrast in the Basic Picture menu  	correct image

Problem	Solution	Result
3D projected colors don't match source  	Press the Menu button. If the colors are still wrong, press the arrow button one or more times until the color shift is corrected.  (Please note that this is a work-around for a known bug, and future firmware upgrades will address this issue.)	correct image
3D stereo-sync malfunctioning: (the projected image jumps between "only left eye" and "only right eye" every few seconds (while viewing through LC shutter glasses)  	turn OFF, and then ON the "3D Images" setting using Menu | Advanced Picture.  (Please note that this is a work-around for a known bug, and future firmware upgrades will address this issue.)	correct 3D stereo-sync 

Problem	Solution	Result
The video embedded in my PowerPoint presentation does not play on the screen 	turn off the internal LCD display on your laptop 	Embedded video plays correctly 
lamp won't turn on, Temperature light is on 	make sure vents aren't blocked, turn off the projector and allow it to cool for one minute 	lamp turns on 

Problem	Solution	Result
"Replace lamp" message appears at startup, lamp won't turn on, Lamp light is turned on. 	lamp must be replaced (see page 36) 	lamp turns on 

Still need assistance?

If you need assistance, visit our website at www.depthq.com/support.html or call us. Check out our FAQ section there for additional information or support contact information.

This product is backed by a limited warranty. An extended warranty plan may be purchased from Lightspeed Design, Inc. or your dealer. When sending the projector in for repair, we recommend shipping the unit in its original packing material, or having a professional packaging company pack the unit. Please insure your shipment for its full value.

Using the Remote Control

The remote uses two (2) provided AA batteries. They are easily installed by removing the cover from the remote's back, aligning the + and - ends of the batteries, sliding them into place, and then replacing the cover.

Caution: When replacing the batteries, be aware that using batteries other than the type provided with the projector may risk severe damage to the remote. When disposing of the batteries, be sure to do so in an environmentally proper manner.

To operate, point the remote at the front of the projector (not at the computer). The range of optimum operation is about 15 feet (4.5m).

Press the remote's Power button to turn the projector on and off (see page 15 for shutdown info).

Press the remote's Menu button to open the projector's menu system. Use the arrow buttons to navigate, and the Select button to select features and adjust values in the menus. See page 29 for more info on the menus.

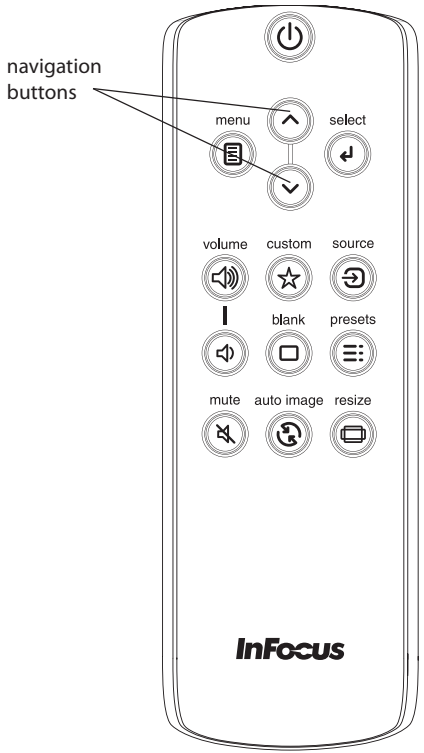
The remote also has a Source button to switch between sources.

The remote also has:

- Volume buttons to adjust the sound.
- Custom button that can be assigned to a special function, like Blank Screen or Freeze (see page 32).
- Source button to switch between sources.
- Blank button to blank the screen.
- Presets button to select stored settings (see page 30).
- Mute button to silence the audio.
- Auto Image button to resynch the projector to the source (page 17).
- Resize button to switch among aspect ratios (see page 30).

Troubleshooting the Remote

- Make sure the batteries are installed in the proper orientation and are not dead.
- Make sure you're pointing the remote at the projector or the screen, not the computer, and are within the remote range of 15 feet (4.5m). For best results, point the remote at the projector.

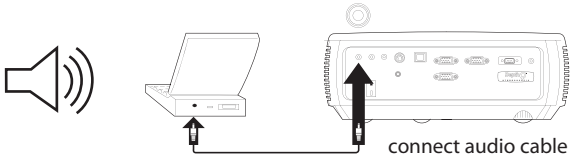


Using the Audio

Using the Projector's Speaker

To use the projector's speaker, connect your source to the Audio In Computer or Video connectors.

To adjust the volume, press the Volume buttons on the keypad or remote.



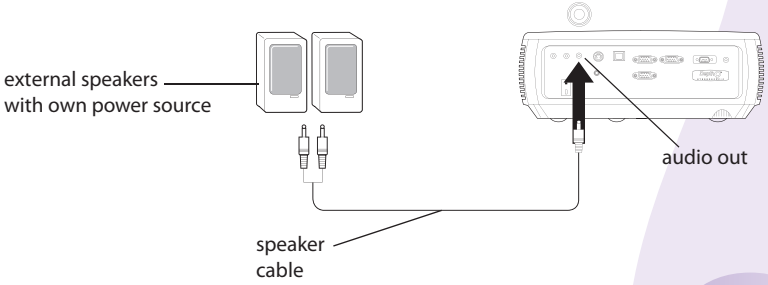
Troubleshooting Audio

If you aren't hearing the audio, check the following:

- Make sure the audio cable is connected to the correct Audio In connector, Computer or Video.
- Make sure the volume is turned up enough. Press the Volume button on the keypad or remote.
- Make sure the correct source is active.
- Make sure that you are connected to an "audio out" connector on the source as opposed to a "line-in" or "microphone" connector.
- Adjust the audio source.
- If playing a video, make sure the playback has not been paused.

Connecting External Speakers

The projector can be attached to external amplified speakers by connecting a 3.5mm stereo audio cable from the Audio Out connector on the projector to the amplified speakers. Alternatively, you can bypass the projector's audio system and connect the audio directly from your source to a stereo or home theater system.



Using the Keypad Buttons

Most buttons are described in detail in other sections, but here is an over view of their functions:

Power –turns the projector on and off (page 10).

Auto Image –resets the projector to the source (page 17).

Presets –cycles through the available preset settings (page 30).

Keystone –adjusts squareness of the image (page 12).

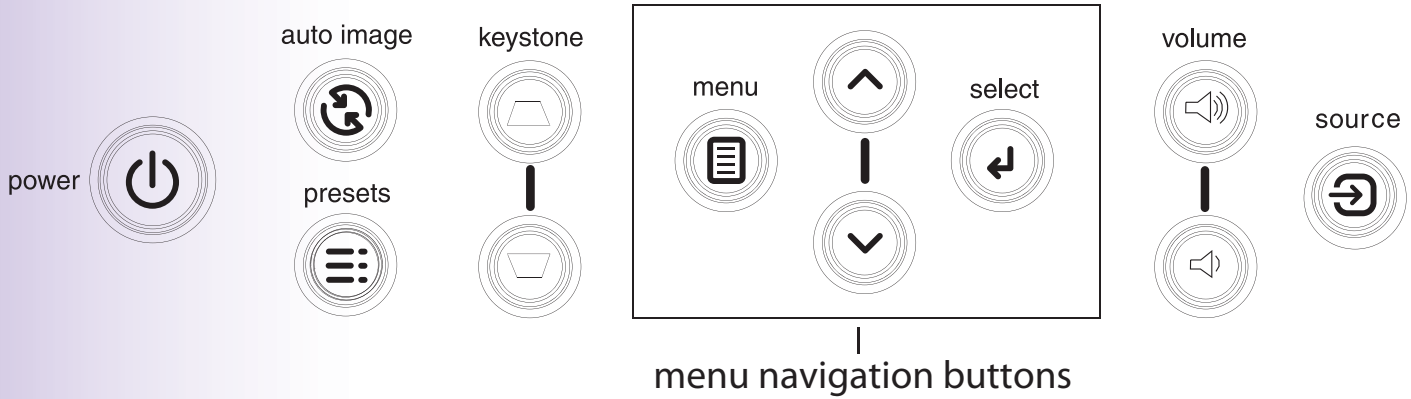
Menu –opens the on-screen menus (page 29).

Select –confirms choices made in the menus (page 29).

Up/Down arrows –navigates to and adjusts settings in the menus (page 29).

Volume –adjusts sound (page 25).

Source –changes the active source.



Optimizing Computer Images

After your computer is connected properly and the computer's image is on the screen, you can optimize the image using the onscreen menus.
For general information on using the menus, see page 29.

- Adjust the Keystone, Contrast, or Brightness in the Basic Picture menu (page 30).
- Change the Aspect Ratio. Choose the option that best fits your input source (page 30).
- Adjust the Color Temperature in the Advanced Picture menu (page 31).
- Adjust the Phase, Tracking, or Horizontal or Vertical position in the Advanced Picture menu (page 31).
- Once you have optimized the image for a particular source, you can save the settings using Presets. This allows you to quickly recall these settings later (page 30).

Presentation Features

Several features are provided to make giving presentations easier. Here is an overview; details are found in the menu section.

- The Custom key allows you to assign various features to the button. The default effect is Source Info, which displays information about the projector and current source. See page 32 for details.
- The Startup Screen option lets you change the default start up screen to a blank or default screen (page 33).
- Two options, Auto Off and Screen Save Time, are provided to automatically shut down the projector after several minutes of inactivity or display a black screen.

  This helps preserve lamp life (page 32).

Optimizing Video Images

After your video device is connected properly and the image is on the screen, you can optimize the image using the onscreen menus. For general information on using the menus, see page 29.

- Adjust the Keystone, Contrast, Brightness, Color, or Tint in the Basic Picture menu (page 30).
- Change the Aspect Ratio. Choose the option that best fits your input source (page 30).
- Select a Sharpness setting (page 30).
- Adjust the Color Temperature. Select a listed warmth value (page 31).
- Turn on Overscan to remove noise on the edges of the image (page 31).

Customizing the Projector

You can customize the projector for your specific setup and needs. See page 32 to page 33 for details on these features.

- For ceiling mounted projection, turn on Ceiling Mount in the Setup menu.
- For rear projection, turn Rear Project on in the Setup menu.
- Specify which source the projector checks first for active video during power-up.
- Specify the function of the Custom key on the remote.
- Turn the projector's display messages on and off.
- Turn on power saving features.
- Specify blank screen colors and start up logos.
- Specify the language viewed on the menus.
- Save settings for the active source as a preset.

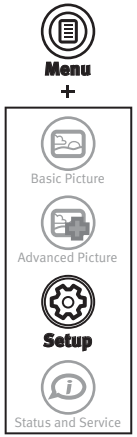
? Ceiling Mount ?

To flip the image vertically turn on the Ceiling Mount setting using Menu | Setup.

? Rear Projection ?

To flip the image horizontally turn on the Rear Project setting using Menu | Setup.

Note: For 3D this will also require that you swap eyes. See Stereoscopic 38 Concerns, page 38.



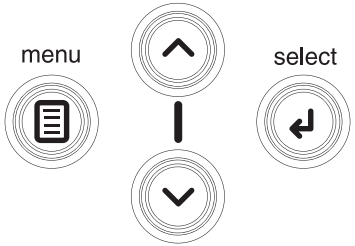
Using the Menus

To open the menus, press the Menu button on the keypad or remote. (The menus automatically close after 60 seconds if no buttons are pressed.) Use the arrow buttons to move up and down to highlight the desired menu, then press the Select button.

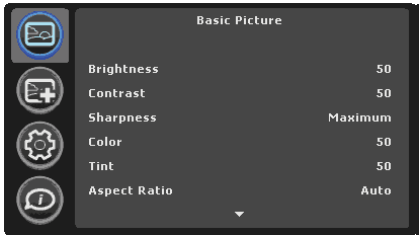
To change a menu setting, highlight it, press Select, then use the up and down arrow buttons to adjust the value or select an option or turn the feature on or off. Press Select to confirm your changes. Use the arrows to navigate to another setting. When your adjustments are complete, press Menu to access a different menu; press the Menu button at any time to navigate to the higher-level menu and ultimately close the menus.

The menus are grouped by usage:

- The Basic Picture menu provides common image adjustments.
- The Advanced Picture menu provides more complex image adjustments.
- The Setup menu provides set-up type adjustments that are not changed often.
- The Status and Service menu provides information about the projector and source.



keypad navigation buttons



Basic Picture menu

Advanced Picture menu

Setup menu

Status and Service menu

Basic Picture Menu

To adjust the following settings, highlight the setting, press Select, use the up and down arrows to adjust the values, then press Select to confirm the changes.

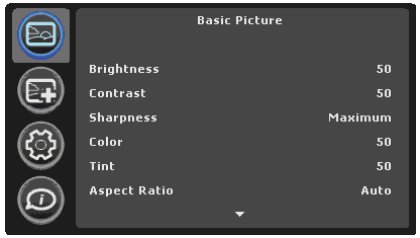
- Brightness: changes the intensity of the image.
- Contrast: controls the degree of difference between the lightest and darkest parts of the picture and changes the amount of black and white in the image.
- Sharpness: (video sources only) changes the clarity of the edges of a video image. Select a sharpness setting.
- Color: (video sources only) adjusts a video image from black and white to fully saturated color.
- Tint: adjusts the red-green color balance in the image of NTSC video images. The tint setting applies to NTSC video sources only.
- Aspect Ratio: Aspect ratio is the ratio of the image width to image height. TV screens are usually 4:3. HDTV and most DVDs are 16:9.

  Select Auto to have the projector choose the ratio. Choose Native to see the unmodified input with no resizing by the projector.

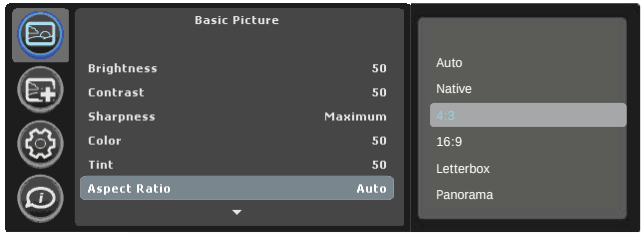
  Select 16:9 to watch enhanced widescreen DVDs.

  For more information regarding Aspect Ratio, see page 13.
- Apply Preset: Presets are provided that optimize the projector for displaying computer presentations and video images under certain conditions.

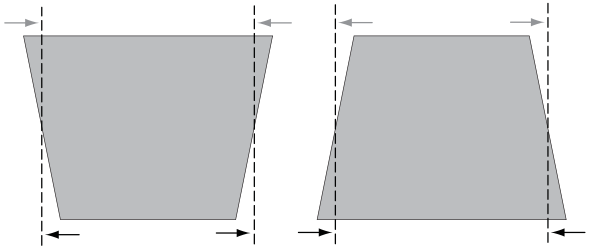
  There are also user-definable presets. To set a preset, adjust the image, select Save User in the Presets menu. You can recall these settings in the future by selecting the User preset.
- Keystone: adjusts the image vertically and makes a squarer image. You can also adjust keystone from the keypad.



Basic Picture menu



Aspect ratio



increasing keystone decreasing keystone

Advanced Picture Menu

- BrilliantColor™ : produces an expanded on-screen color spectrum that delivers enhanced color saturation for bright, true-to-life images. Choose Normal Look for most video sources and Bright Look for most computer sources.
- White Peaking: increases the brightness of whites that are near 100%. Note - with the 3D Images setting ON (see below), White Peaking has no effect.
- Color Temperature: changes the intensity of the colors. Select a listed rela tive warmth value.
- Overscan: removes noise around the video image.
- Phase: adjusts the horizontal phase of a computer source.
- Sync Threshold: (progressive signals only) If a hardware device, such as a DVD player, is not syncing properly with the projector, select this option to help it to sync when connected to the projector.
- Tracking: adjusts the vertical scan of a computer source.
- Color Space: This option applies to computer and component video sources. It allows you to select a color space that has been specifically tuned for the input signal. When Auto is selected, the projector automatically determines the standard. To choose a different setting, turn off Auto, then choose RGB for computer sources, choose either REC709 or REC601 for component video sources.
- Gamma: select the appropriate gamma from among Video, Film, Bright, and CRT.
- Horizontal/Vertical Position: adjusts the position of a computer source.
- 3D Images (ON/OFF): With 3D images on, the projector syncs output to input for stereo operation. With 3D images off, the output is asynchronous from the input, and White Peaking works as usual. If you are looking for more brightness with no sync, drop down to 60Hz to utilize White Peaking.

Advanced Picture menu

Setup Menu

- Language: allows you to select a language for the onscreen display.
- Custom Key: allows you to assign a different function to the Custom button, allowing you to quickly and easily use the effect. Highlight an effect and press Select to choose a different one.

  Blank Screen: displays an empty screen.

  Mute: turns off all sound.

  Aspect Ratio: toggles among 4:3, 16:9, and Native (see page13 and page 30).

  Source: cycles through available sources.

  Auto Image: resets the projector to the source (page 17).

  Freeze Screen: pauses the projected image.

  Source Info: the default effect. It opens a window with projector and source information.

  Projector Info: opens a window with projector information.

  Overscan: removes noise around the image.

  Closed Captions: cycles through caption options.
- AC Power On: When this feature is on, the projector automatically turns on when electrical power is connected. This allows control of ceiling mounted projectors with a wall power switch.
- Auto Off Time: automatically turns the projector off after no signals are detected for a preset number of minutes. If an active signal is received before the projector powers down, the image will be displayed.
- Screen Save Time: automatically blanks the screen with a black color after no signals are detected for a preset number of minutes. The image returns when an active source is detected or a remote or keypad button is pressed.
- Lamp Low Power: toggles between on and off. Turn it on to lower the light output of the lamp. This also lowers the fan speed, making the projector quieter.
- Power Sounds: Controls whether the projector makes a sound when powered on and off.
- Auto Source: When this feature is On, the projector automatically finds the active source, checking the selected Power-up Source first. When this feature is Off, the projector defaults to the source selected in Power-up Source. To display another source, you must manually select one by pressing the Source button on the remote or keypad.

Setup menu

- Power-up Source: determines which source the projector checks first for active video during power-up.
- Video Standard: when it is set to Auto, the projector attempts to pick the video standard automatically based on the input signal it receives. (The video standard options may vary depending on your region of the world.) If the projector is unable to detect the correct standard, the colors may not look right or the image may appear “torn.” If this happens, manually select a video standard by selecting NTSC, PAL, or SECAM from the Video Standard menu.
- Closed Captions: (S-video and composite NTSC sources only) turns closed captions on and off (if your source includes closed captions). By default, when you mute the projector, captions are displayed. You can control which captions (if any) should appear when muted or not muted by turning mute on or off, then choosing this menu and selecting CC1 (closed caption 1, the most common channel), CC2, or Off.

- Ceiling Mount: turns the image upside down for ceiling-mounted projection.
- Rear Project: reverses the image so you can project from behind a translucent screen.
- Prevent PC Screen Saver: prevents your computer from going into Screen Save mode. The projector must be connected to the PC via a USB cable for this feature to work.
- Startup Screen: allows you to display a blank screen instead of the default screen at startup, and when no source is detected.
- Take Snapshot: captures the current image and allows it to be used as the startup screen image.
- Blank Screen Color: determines what color is displayed when you press the Blank button on the remote.
- Blank Screen Style: Select Solid, Timer, or Test Patterns. The Timer option is useful for classroom tests or break times during meetings.
- Show Messages: displays status messages (such as “Searching”) in the lower-left corner of the screen.
- Menu Offset: allows you to change the position of the On Screen Display items.
- Menu Transparency: allows you to change how much of the projected image behind the menu you can see. As the value increases, more of the image behind the menu is visible.
- Magnify Controls: allows you to change the function of the arrow buttons when the menu is not shown. By default, the arrow buttons allow you to advance slides while in PowerPoint’s SlideShow mode. To make the arrow buttons also adjust magnify settings, choose Magnify Controls to turn magnify controls on. Now when the menu is not shown, you can press the Select button to switch between the magnification settings (Magnify Level, Magnify Horizontal Position and Magnify Vertical Position), then press Select again to turn off magnify controls and use the arrow buttons to advance slides.

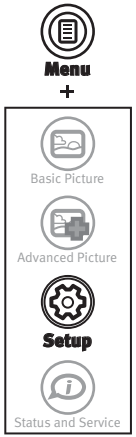
? Ceiling Mount ?

To flip the image vertically turn on the Ceiling Mount setting using Menu | Setup.

? Rear Projection ?

To flip the image horizontally turn on the Rear Project setting using Menu | Setup.

Note: For 3D this will also require that you swap eyes. See Stereoscopic 3D Concerns, page 38.



- PIN Protect: The PIN (personal identification number) feature allows you to password protect your projector. Once you enable the PIN feature, you must enter the PIN before you can project an image.

  The default PIN on this projector is:
  Menu >Arrow Up >Arrow Down >Select >Source.

  Use the navigation buttons on the remote or keypad to enter the correct 5-button press sequence. When all 5 numbers are entered correctly, press the Select button on the remote or keypad to select OK. If the message "Wrong PIN" appears, verify the code and re-enter it. If you mis-enter a number, you must enter 5 numbers and press the Select button in order to access the "Wrong PIN" message and re-enter the code.

  To enter the PIN at projector startup:

  Power up the projector. The "Enter PIN" dialog box appears after the startup screen. Enter the PIN. Use the navigation buttons on the remote or keypad to enter the correct button-press sequence. See the description above for instructions.

  To change the PIN:

  Select "Change PIN..." in the Setup menu. Enter the existing PIN. Enter the new PIN. You can navigate between OK and Cancel by pressing the up and down buttons on the keypad. Select OK or Cancel by pressing the Select button. Verify the new PIN.

  If you lose or forget your custom PIN call InFocus Technical Support.

- Serial Port, Baud Rate: Selects the serial port and baud rate.
- Serial Port Echo: Controls whether the serial port echoes characters.

Status and Service Menu

- Source Info: a read-only display of current source settings.
- Projector Info: a read-only display of current projector settings.
- Reset Lamp Hours: resets the lamp hours used counter in the Projector Info menu to zero. Do this only after changing the lamp.
- Factory Reset: restores all settings to their default.
- Service Code: only used by authorized service personnel.

Status and Service menu

Maintenance

Cleaning the Lens

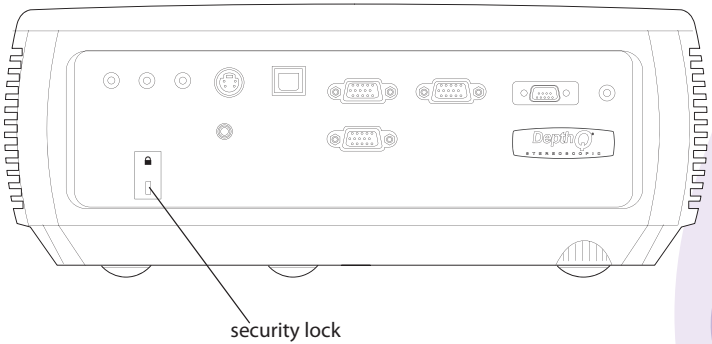
1 Apply a non-abrasive camera lens cleaner to a soft, dry cloth.

   Avoid using an excessive amount of cleaner, and don't apply the cleaner directly to the lens. Abrasive cleaners, solvents or other harsh chemicals might scratch the lens.

2 Lightly wipe the cleaning cloth over the lens in a circular motion.

Using the Security Lock

The projector has a security lock for use with a PC Guardian Cable Lock System. Refer to the information that came with the lock for instructions on how to use it.



Replacing the Projection Lamp

The lamp hours used timer in the Projector Info menu counts the number of hours the lamp has been in use. Twenty hours before the lamp life expires, the message “Change lamp” appears on the screen at startup.

- NOTE: You can order new lamps from www.depthq,com/accessories.html, your retailer or your dealer. Only genuine InFocus lamps are tested for use in this projector. Neither Lightspeed Design nor InFocus is liable for the performance, safety or certification of any other lamps. The use of other lamps violates the projector warranty and voids all certification marks on this projector.

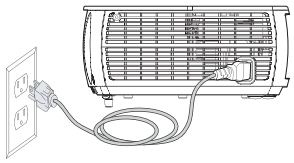
1 Turn off the projector and unplug the power cord.

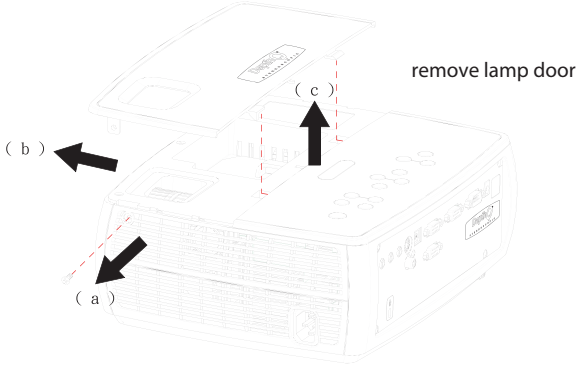
2 Wait 60 minutes to allow the projector to cool thoroughly.

3 Remove the lamp door by (a) removing the screw on the side of the lamp door, (b) sliding the door forward, and (c) lifting the door off.

WARNINGS

- To avoid burns, allow the projector to cool for at least 60 minutes before you replace the lamp.
- Only genuine InFocus lamps are tested with this projector. Use of other lamps may cause electrical shock and fire.
- Unplug the power cord before replacing the lamp.
- Do not drop the lamp module. The glass may shatter and cause injury.
- Do not touch the glass lamp screen. Fingerprints can obscure projection sharpness.





- Be extremely careful when removing the lamp module. In the unlikely event that the lamp ruptures, small glass fragments may be generated. The lamp module is designed to contain most of these fragments, but use caution when removing it. Before replacing a ruptured lamp, clean the lamp compartment and dispose of cleaning materials. Wash hands after lamp replacement. If replacing the lamp while the projector is ceiling-mounted, wear protective eyewear.

  Hg – Lamp contains mercury. Manage in accordance with local disposal laws. See www.lamprecycle.org

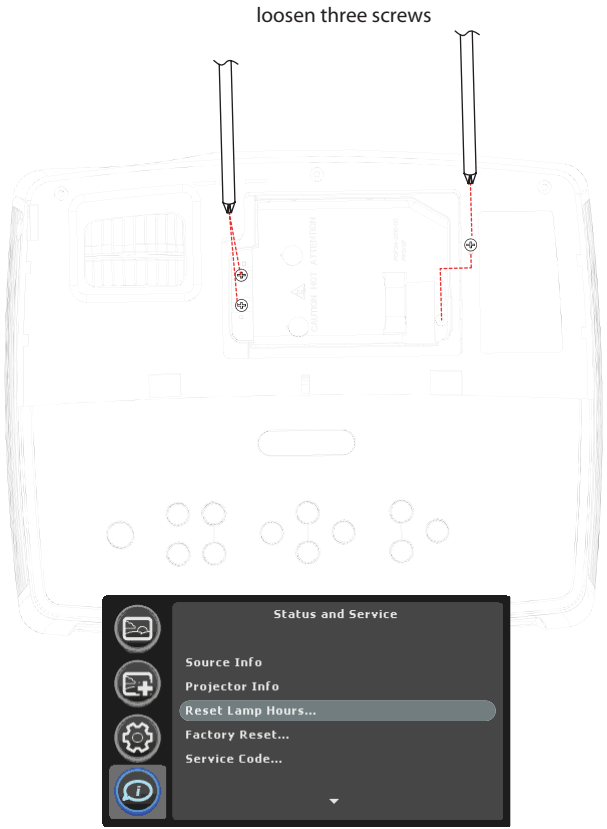
4 A clear plastic lamp shield covers the base of the lamp module. To remove the lamp module, you must access 3 screws underneath this shield. Use a screwdriver to punch through the perforated holes in the shield that cover the screws. Then loosen the two captive screws on one side of the module. Next, remove the 3rd screw on the other side of the module. If there is not a perforated hole above the 3rd screw, use a flat blade screwdriver to lift the shield enough to gain access to the screw and carefully remove it. Carefully lift out the lamp module. Dispose of the lamp in an environmentally proper manner.

5 Install the new lamp module and tighten the screws.

6 Replace the lamp door by sliding it into place and replacing the screw.

7 Plug in the power cord and press the Power button to turn the projector back on.

8 To reset the lamp hour timer, navigate to the Status and Service menu and select Reset Lamp Hours. See page 34 for details.



Stereoscopic 3D Concerns

- **DepthQ-WXGA HD 3D projectors support the highest quality stereoscopic display technique available, frame-sequential progressive "page flip", at a very high frequency of 120 Hz (60 fps per eye). This provides flickerless, fatigue-free 3D viewing even under high ambient light conditions.** In order to be compatible with this projector, your stereoscopically-enabled display system must deliver 120 Hz, 1280 x 720 resolution* data using this frame-sequential L-R-L-R method.

- **If you are using nVidia Quadro® graphics cards, be aware that by default, Open-GL stereo operation is turned OFF in the associated nVidia driver. You must navigate to the "stereo enable" option and set it to ON in order to view realtime stereoscopic displays using this hardware.**

- **If your 3D is "inverted" (pseudo-stereo), you usually have a range of options. Some IR emitters have a hardware switch to reverse the eyes. Additionally, your stereo-enabled software may include an option to accomplish this. Lastly, your video driver may allow you to "swap eyes". Use whichever is easiest.**

*DepthQ® also supports 1024 x 768 and 800 x 600 input at 120 Hz.

INDEX

120 Hz 7, 8, 10, 38
16x9 vs 4x3 13
3D
- 3D Images Setting 31
- connections 4, 7
- displaying 10, 11
- concerns 9, 11, 28, 38
- requirements 13
- sync 21, 31
- troubleshooting 21

5 volt output 4

A
Active Eyewear 11, 21
Advanced menu 31
Aspect Ratio 13, 30, 32
Audio in 9,25

B
Blank Screen 32,33
Brightness 30
BrilliantColor 31

C
cable box 13
cleaning the lens 35
Closed Captions 32
Color 30
Color Space 31
Color Temperature 31
Component video connection 14
Computer connector 9
connecting
- computer 9
- computer monitor 9
- external speakers 25
- video device 13

connector panel 4
connectors on projector 6,7, 8,9
contacting Lightspeed Design 23
Contrast 30
Custom key 27, 32
customer service contact information 23
customizing the projector 28

D
DVDs 30

F
Factory Reset 34
focus 12
frame-sequential (Page-Flip) 3D 38

G
Gamma 31

H
HDTV 6, 8
Horizontal/Vertical Position 31

I
image
- optimization 27
- size 5

infra-red (IR) 3, 10, 38

K
keypad buttons 26
Keystone 30
keystone, adjusting 12

L
lamp hours 34,36
Language 32
laptop video port activation 11
LEDs 15
liquid crystal (LC) shutter glasses 11, 21

M
Magnify Controls 33
maintaining the projector 35
Menu button 29
Menu Offset 33
Menu Transparency 33
menu usage 29
Monitor Out connector 9

O
Open-GL 38
optimizing images 27
optimizing video 28

Overscan 31
P Page-Flip (frame-sequential) 38
PC Screen Saver Off 33
Phase 31
Picture menu 30
PIN 34
positioning the projector 5
Power connector 9
power cord 9
Power Save (Auto Off) 32
Power-up Source 32
presentation features 27
Preset 30
projection distance 5
projector
- connecting computers 9
- connecting video devices 13
- connector panel 4
- customization 28
- image size 5
- keypad buttons 26
- language 32
- maintenance 35
- menus 29
- offset 5
- positioning 5
- reset 34
- safety considerations 2
- security lock 35
- setting up 5
- shutting down 15
- Status Indicator Panel 15
- troubleshooting problems 15-23

pseudo-stereo, 38
R rear projection 33
reliability 3
remote control 24
Replacing the projection lamp 36,37
resetting the projector 34
RS-232 4
S Screen Aspect 13
Screen Save 15, 32
security lock 35
Service 34
Service Code 34
Setup menu 32
sharpness 30
shutting down the projector 15
Sources 7,8,9,14,32
speakers, connecting external 25
Startup Screen 33
Status Indicator Panel 15
S-video connector 7,14
Sync (3D) 17, 21, 31
Sync Threshold 31
T Take Snapshot 33
Tint 30
Tracking 31
troubleshooting 15-23
TV tuner 13
U USB 4, 9

V Vertical 31
VESA connection 7, 8, 9,14
video devices, connecting 7, 8, 9,14
video optimizing 28
Video Standard 32
Volume button 25
W warranty 23
White Peaking 31
Z zoom 12

Lightspeed Design, Inc.
1611 116th Ave NE, Suite 112
Bellevue, WA 98004 USA
206.784.1385
www.depthq.com