

IN1110, IN1112

# In1112



**InFocus**

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**InFocus**

## Declaration of Conformity

Manufacturer: InFocus Corporation 13190 SW 68th Parkway, Portland, Oregon 97223-8368 USA

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: 2005

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## FCC Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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 instruction, 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.

## EN 55022 Warning

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

## 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, cUL

Other specific Country Approvals may apply. Please see product certification label.

This document applies to regulatory models IN1110 and IN1112.

Input ratings: 100-240Vac, 2.3-0.9A, 50-60Hz

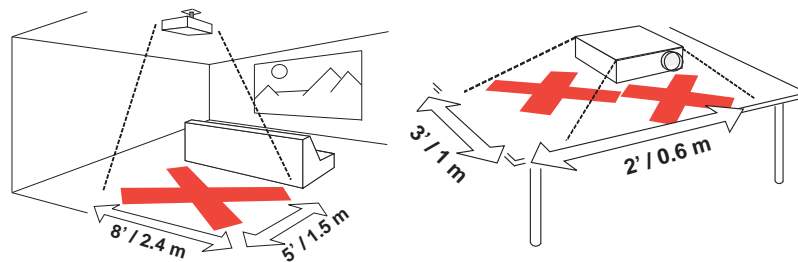
InFocus reserves the right to alter product offerings and specifications at any time without notice.

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## 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 a tablecloth or other soft covering that may block the vents.
- Locate the projector at least 4' (1.2 m) away from any heating or cooling vents.
- 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](http://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.



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.

# Introduction

Your new digital projector is simple to connect, easy to use, and straightforward to maintain. The IN1110 has native XGA 1024x768 resolution, and the IN1112 has WXGA 1280x800 resolution. This guide applies to all products. They are compatible with a wide variety of computers and video devices.

## Product specifications

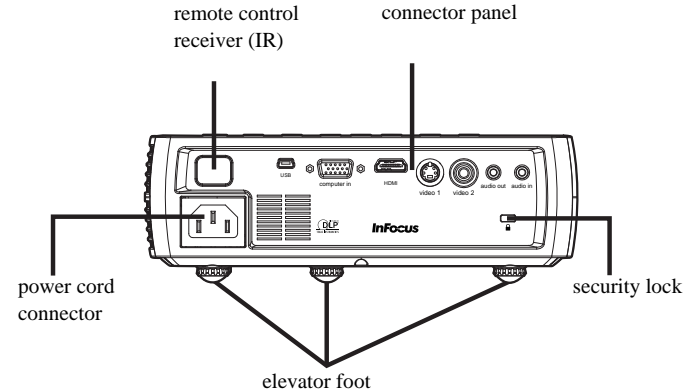
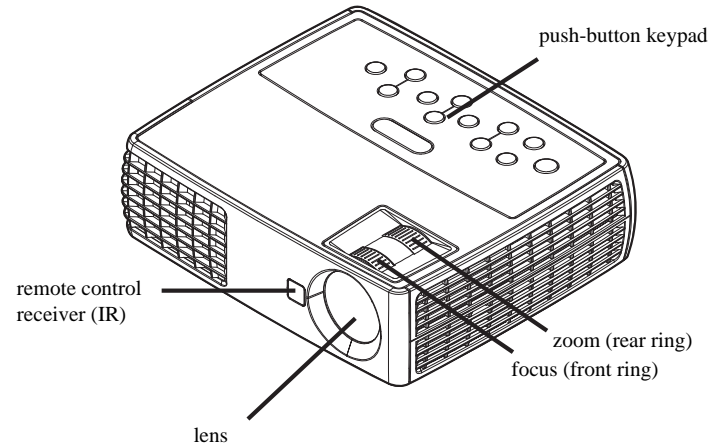
To read the latest specifications on your multimedia projector, be sure to visit our website at [www.infocus.com](http://www.infocus.com), as specifications are subject to change.

## Accessories

The standard accessories that came with your projector are listed in the included Quick Start Booklet. Optional accessories can be found on our website at [www.infocus.com](http://www.infocus.com) or at your retailer or dealer.

## Online registration

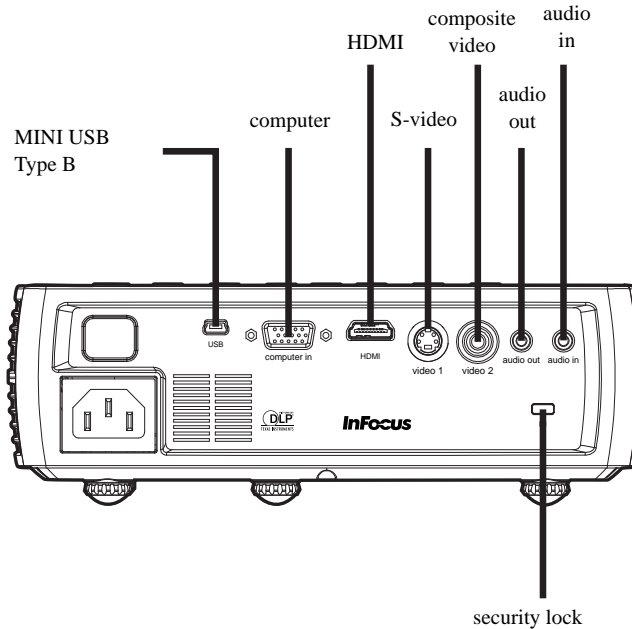
Register your projector on our website at [www.infocus.com/register](http://www.infocus.com/register) to activate your warranty and receive product updates, announcements, and registration incentives.



## Connector panel

The projector provides the following connectors:

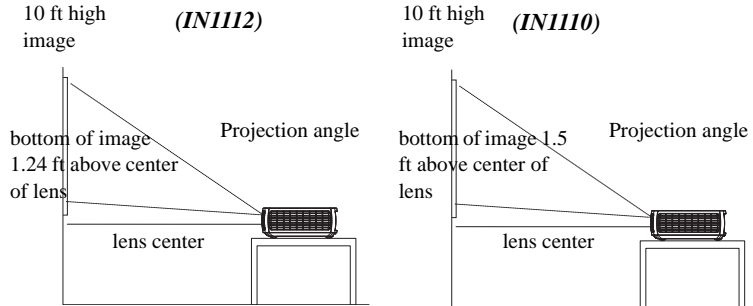
- MINI USB Type B connector: Used for advancing slides and firmware upgrades.
- VESA computer
- S-video
- Composite video
- HDMI
- Audio out
- Audio in



# 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 4.9 feet (1.5m) 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.
- 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 determine the size of the projected image.
- The image exits the projector at a given angle. IN1110 image offset is 115%; IN1112 image offset is 112.4%. This means that if you have an image 10' high, the bottom of the image will be 1.5' (IN1110) and 1.24' (IN1112) above the center of the lens.



**Table 1: (IN1110)**

*Range of distance to the screen for a given screen size*

Diagonal Screen Size (inches/m)	Distance to screen	
	Maximum distance (feet/m)	Minimum Distance (feet/m)
60/1.5	8'7"/2.6	7'10"/2.4
80/2.0	11'6"/3.5	10'5"/3.2
90/2.3	12'11"/3.9	11'8"/3.6
150/3.8	21'6"/6.6	19'6"/5.9

**Table 2: (IN1112)**

*Range of distance to the screen for a given screen size*

Diagonal Screen Size (inches/m)	Distance to screen	
	Maximum distance (feet/m)	Minimum Distance (feet/m)
60/1.5	7'2"/2.2	6'7"/2.0
80/2.0	9'7"/2.9	8'9"/2.7
90/2.3	10'10"/3.3	9'10"/3.0
150/3.8	18'0"/5.5	16'5"/5.0

# Connecting a computer source

## VESA connection

Connect one end of the provided computer cable to the **Computer** connector on the projector and the other to the VESA connector on your computer. If you are using a desktop computer, you will need to disconnect the monitor cable from the computer's video port first.

## HDMI connection

HDMI is a standard, uncompressed, all-digital audio/video interface. HDMI provides an interface between sources, such as set-top boxes, DVD players, and receivers and your projector. Plug a HDMI cable into the video out connector on the video device and into the **HDMI** connector on the projector.

To take advantage of HDMI 1.3 Deep Color (30 bit) you must have an 1.3-compatible source.

## Power connection

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 (page 10) turns amber.

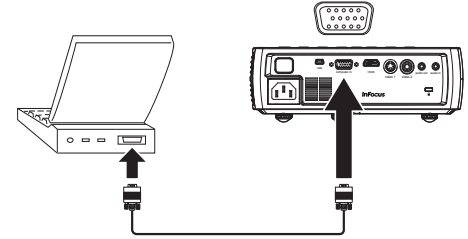
**NOTE:** Always use the power cord that shipped with the projector.

## Optional computer connections

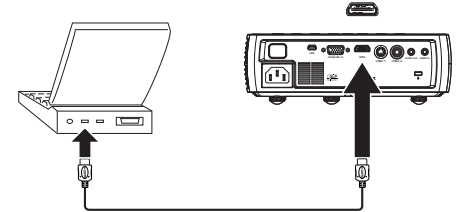
To get sound from the projector, connect an audio cable (optional cable, not included) to your computer and to the **Audio In** connector on the projector. You may also need an adapter.

To advance slides in a 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.

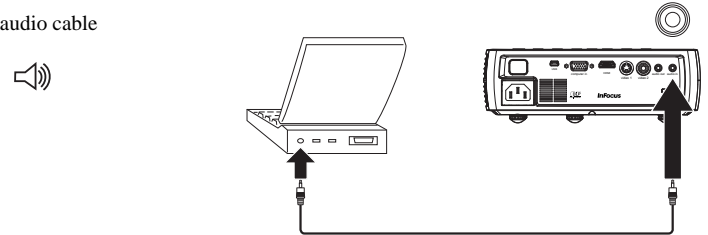
connect computer cable



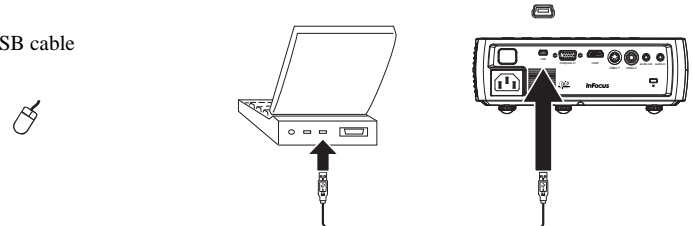
connect HDMI cable



connect audio cable



connect USB cable



# Displaying an image

Touch the **Power** button.

The Power indicator blinks green and the fans start to run. When the lamp comes on, the start up screen displays and the Power indicator is steady green. It can take a minute for the image to achieve full brightness.

**? No start up screen?** Get help on page 11.

Turn on your 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. Then navigate to the desired source icon and press the Select button.

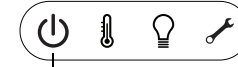
## If you are using a VESA cable to connect your computer to the projector

If using a laptop, make sure its external video port is active.

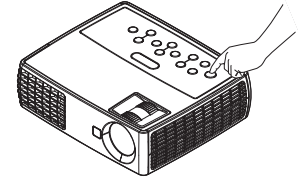
Many laptops do not automatically turn on their external video port when a projector is connected. Usually a key combination like FN + F8 or CRT/LCD key turns the external display on and off. Locate a function key labeled CRT/LCD or a function key with a monitor symbol. Press FN and the labeled function 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 keypad. Get help on page 11.

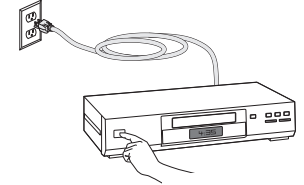
press Power button



Power indicator



turn on computer or video device



activate laptop's external port



monitor key or  
LCD/CRT key



FN key



# 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 screen sizes and distances.

Adjust the zoom or focus, as needed.

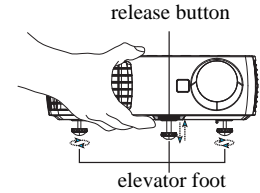
If the image is not square, first make sure that the projector is perpendicular to the screen. If the image is larger or smaller on the top or bottom edge of the screen, press the top **Keystone** button to reduce the upper part of the image, and press the bottom **Keystone** button to reduce the lower part.

If the left or right side of the screen is larger or smaller the other, you can turn the projector to the left or to the right a few degrees to square the image.

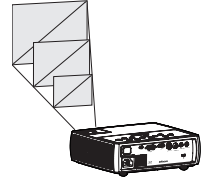
Adjust the Contrast or Brightness in the Basic menu. See page 24 for help with these menu adjustments.

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 24.

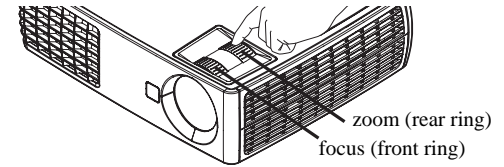
adjust height



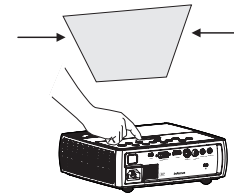
adjust distance



adjust zoom or focus

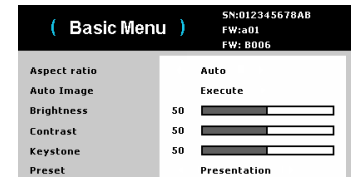


adjust keystone



adjust Basic menu

menu



## Video device connections

**No video cables are provided with the projector.** You can order cables from InFocus or provide your own.

### Composite video connection

Plug a 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** connector on the projector.

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

### HDMI 1.3 connection

HDMI is a standard, uncompressed, all-digital audio/video interface. HDMI provides an interface between sources, such as set-top boxes, DVD players, and receivers and your projector. Plug a HDMI cable into the video out connector on the video device and into the **HDMI** connector on the projector.

To take advantage of HDMI 1.3 Deep Color (30 bit) you must have an 1.3-compatible source.

### 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.

## 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** connector on the projector.

### 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** connector. Component offers the highest quality video output.

## 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.

### Auto Off Time

The projector also has an Auto Off Time feature that automatically turns the projector 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 29.

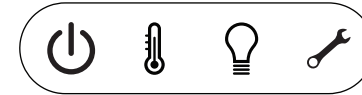
### Turning off the projector

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

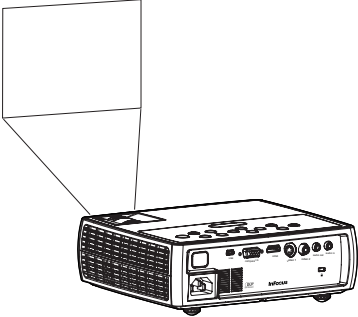
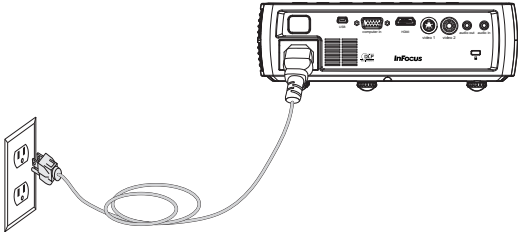
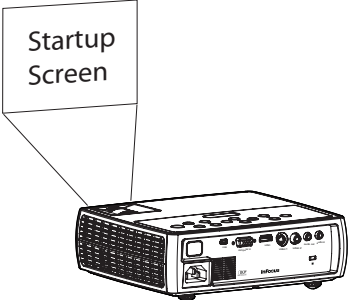
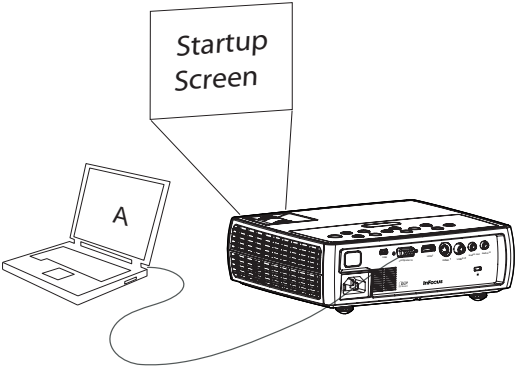

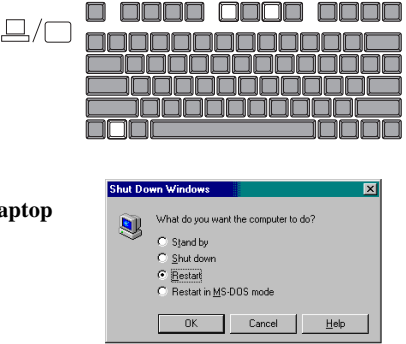
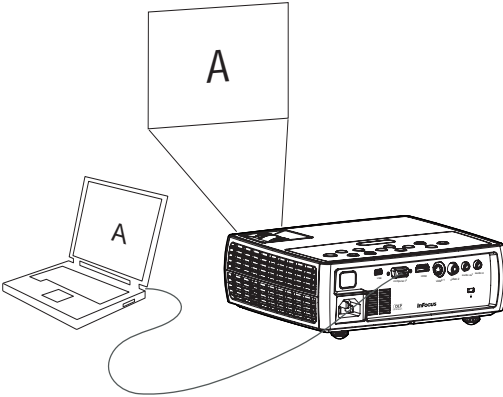
If your image appears correctly on the screen, skip to the next section. If it does not, troubleshoot the setup.

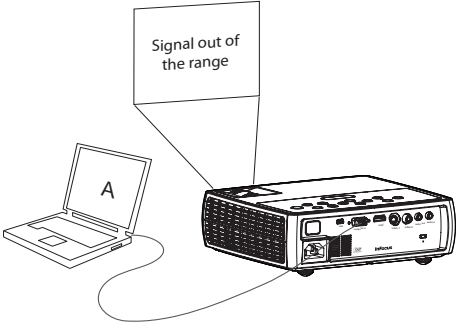
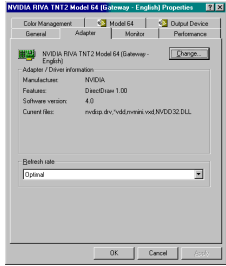
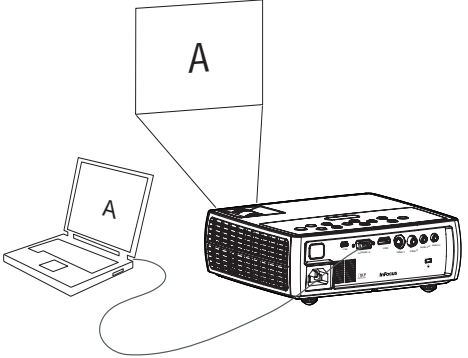
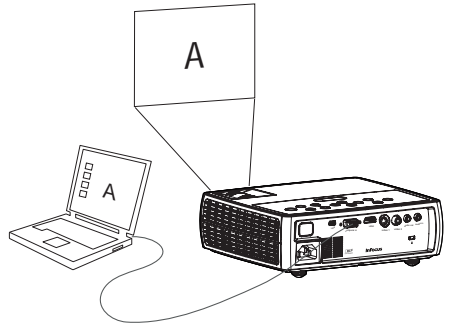

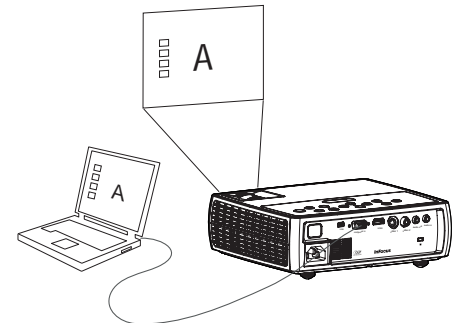
The Status Indicator Panel on top of the projector indicates the state of the projector and can help you troubleshoot.




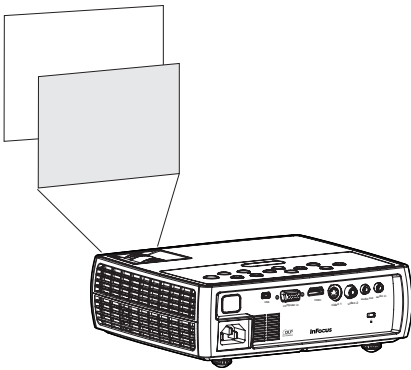
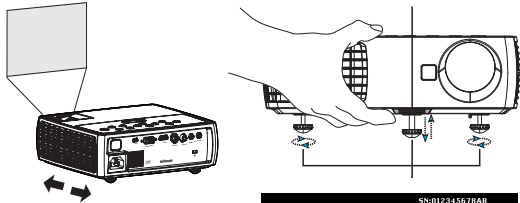
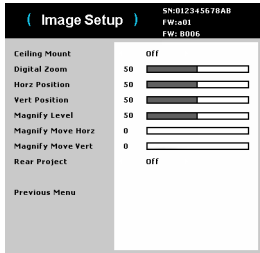
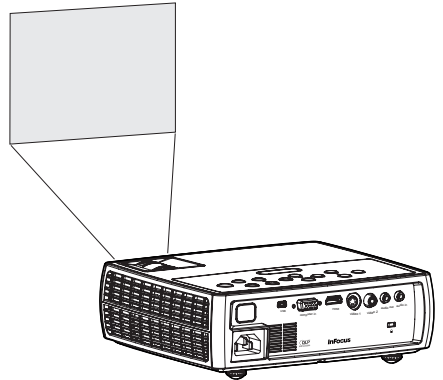


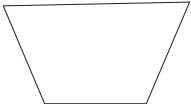
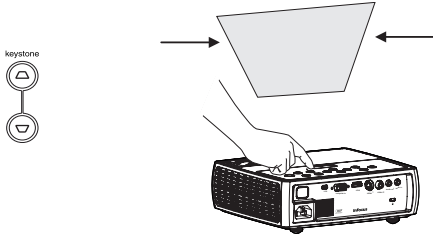


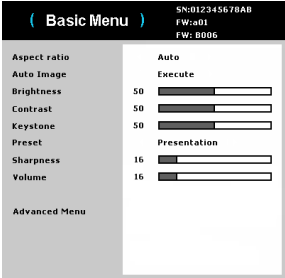

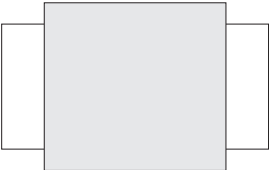
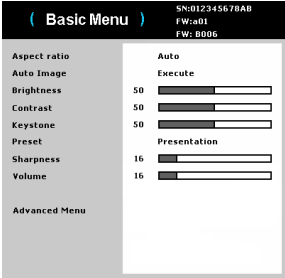
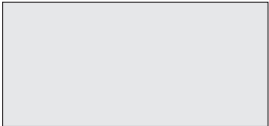
**Table 3: Status indicator light behavior and meaning**


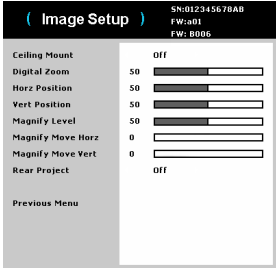


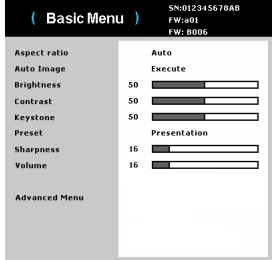

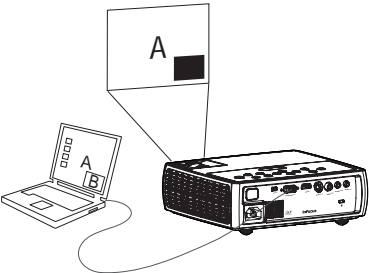
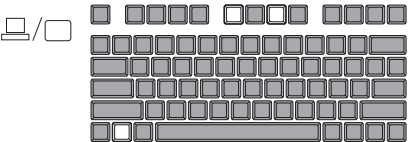
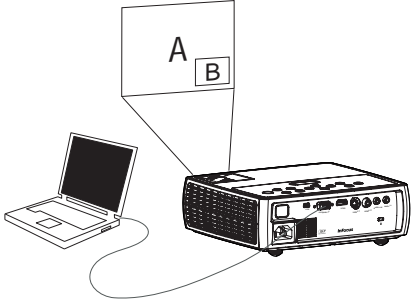
Status Indicator Panel icons	Meaning
Power, solid amber	The projector is plugged in.
Power, blinking green	The power button has been pressed and the software is initializing.
Power, solid green	The projector is on and initialized.
Power, blinking amber	The power button has been pressed to turn the projector 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 16). Turn off the projector and wait one minute, then turn the projector on again. Visit <a href="http://www.infocus.com/support">www.infocus.com/support</a> to contact service.
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 <a href="http://www.infocus.com/support">www.infocus.com/support</a> to contact the service department.

Problem	Solution	Result
<p data-bbox="53 128 244 150">No start up screen</p> 	<p data-bbox="656 128 1156 179">Plug power cord into the projector and press the power button</p> 	<p data-bbox="1183 128 1333 150">Correct image</p> 
<p data-bbox="53 487 354 509">Only start up screen appears</p> 	<p data-bbox="656 514 965 564">Press the Source button  activate laptop's external port</p> <p data-bbox="670 870 812 891">Restart laptop</p> 	<p data-bbox="1183 487 1459 509">Computer image projected</p> 

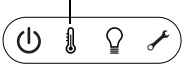
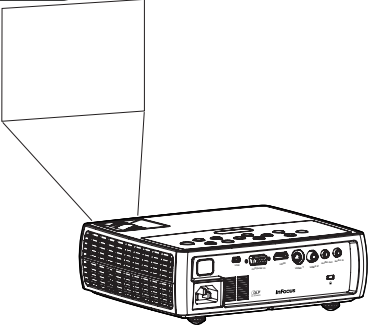

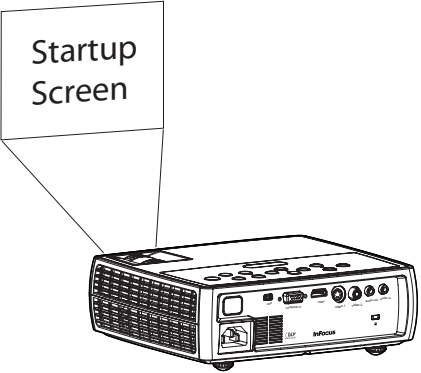

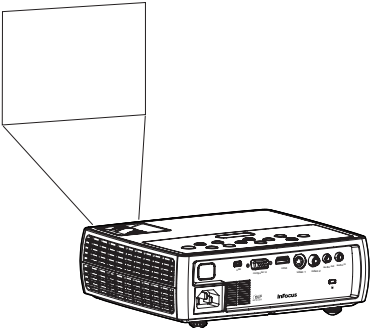
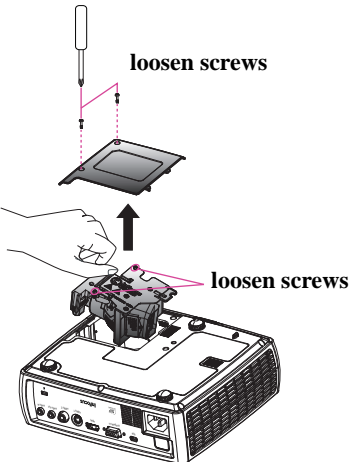
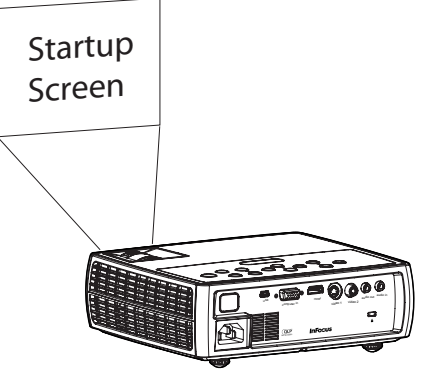
Problem	Solution	Result
<p data-bbox="36 129 527 187"><b>No computer image, just the words “Signal out of range”</b></p> 	<p data-bbox="527 129 1177 215"><b>Press the Auto Image button on the keypad. Adjust the computer refresh rate in Control Panel &gt; Display &gt; Settings &gt; Advanced &gt; Adapter (location varies by operating system)</b></p>  <p data-bbox="527 497 1177 577"><b>You may also need to set a different resolution on your computer, as shown in the following problem, “image fuzzy or cropped”</b></p>	<p data-bbox="1177 129 1699 158"><b>Computer image projected</b></p> 
<p data-bbox="36 588 527 646"><b>Only my laptop’s background appears, not the Desktop icons</b></p> 	<p data-bbox="527 588 1177 732"><b>Disable “Extend my Windows Desktop” in Control Panel &gt; Display &gt; Settings &gt; Display 2 (location varies by operating system)</b></p>  <p data-bbox="638 852 777 927"><b>Uncheck this option, then click Apply</b></p>	<p data-bbox="1177 588 1699 617"><b>Background and Desktop projected</b></p> 

Problem	Solution	Result																										
<p data-bbox="36 86 291 112">Image fuzzy or cropped</p> <div data-bbox="118 200 447 298">  </div>	<p data-bbox="526 86 1177 169">Set your computer's display resolution to the native resolution of the projector (Start &gt; Settings &gt; Control Panel &gt; Display &gt; Settings tab)</p> <p data-bbox="694 235 868 373">For a laptop, disable laptop monitor or turn-on dual-display mode</p> <div data-bbox="906 189 1131 436">  </div>	<p data-bbox="1177 86 1484 112">Image clear and not cropped</p> <div data-bbox="1362 200 1510 298">  </div>																										
<p data-bbox="36 464 347 491">Image not centered on screen</p> <div data-bbox="65 533 477 901">  </div>	<p data-bbox="526 464 980 491">Move projector, adjust zoom, adjust height</p> <div data-bbox="590 499 1111 700">  </div> <p data-bbox="616 774 824 878">Adjust horizontal or vertical position in Advanced &gt; Setup &gt; Image Setup menu</p> <div data-bbox="847 688 1107 939">  <table border="1" data-bbox="847 688 1107 939"> <thead> <tr> <th colspan="2">Image Setup</th> </tr> </thead> <tbody> <tr> <td>SN: 012345678AB</td> <td></td> </tr> <tr> <td>FW: A01</td> <td></td> </tr> <tr> <td>FW: 0006</td> <td></td> </tr> <tr> <td>Ceiling Mount</td> <td>Off</td> </tr> <tr> <td>Digital Zoom</td> <td>50</td> </tr> <tr> <td>Horz Position</td> <td>50</td> </tr> <tr> <td>Vert Position</td> <td>50</td> </tr> <tr> <td>Magnify Level</td> <td>50</td> </tr> <tr> <td>Magnify Move Horz</td> <td>0</td> </tr> <tr> <td>Magnify Move Vert</td> <td>0</td> </tr> <tr> <td>Rear Project</td> <td>Off</td> </tr> <tr> <td>Previous Menu</td> <td></td> </tr> </tbody> </table> </div>	Image Setup		SN: 012345678AB		FW: A01		FW: 0006		Ceiling Mount	Off	Digital Zoom	50	Horz Position	50	Vert Position	50	Magnify Level	50	Magnify Move Horz	0	Magnify Move Vert	0	Rear Project	Off	Previous Menu		<p data-bbox="1177 464 1336 491">Correct image</p> <div data-bbox="1197 505 1640 883">  </div>
Image Setup																												
SN: 012345678AB																												
FW: A01																												
FW: 0006																												
Ceiling Mount	Off																											
Digital Zoom	50																											
Horz Position	50																											
Vert Position	50																											
Magnify Level	50																											
Magnify Move Horz	0																											
Magnify Move Vert	0																											
Rear Project	Off																											
Previous Menu																												

Problem	Solution	Result
<p data-bbox="38 83 227 112"><b>Image not square</b></p> 	<p data-bbox="527 83 817 112"><b>Adjust Keystone on keypad</b></p> 	<p data-bbox="1177 83 1326 112"><b>Square image</b></p> 
<p data-bbox="38 361 215 390"><b>Image not sharp</b></p> 	<p data-bbox="527 361 904 390"><b>Adjust Sharpness in the Basic menu</b></p> 	<p data-bbox="1177 361 1333 390"><b>Correct image</b></p> 
<p data-bbox="38 685 418 714"><b>Image does not fit 4:3 or 16:9 screen</b></p> 	<p data-bbox="527 685 1072 714"><b>Change aspect ratio to 4:3 or 16:9 in the Basic menu</b></p> 	<p data-bbox="1177 685 1333 714"><b>Correct image</b></p> 

Problem	Solution	Result
<p>Image reversed left to right</p> 	<p>Turn off Rear Project in Advanced &gt; Setup &gt; Image Setup menu</p> 	<p>Correct image</p> 
<p>Projected colors don't match source</p> 	<p>Adjust color, tint, brightness, contrast in the Basic menu</p> 	<p>Correct image</p> 
<p>The video embedded in my PowerPoint presentation does not play on the screen</p> 	<p>Turn off the internal LCD display on your laptop</p> 	<p>Embedded video plays correctly</p> 



Problem	Solution	Result
<p>Lamp won't turn on, Temperature light is on</p> <p>Temperature light</p>  	<p>Make sure vents aren't blocked, turn off the projector and allow it to cool for one minute</p> 	<p>Lamp turns on</p> 
<p>“Replace lamp” message appears at startup, lamp won't turn on, Lamp light is turned on</p> <p>Lamp light</p>  	<p>Lamp must be replaced (see page 32)</p> 	<p>Lamp turns on</p> 

**Still need assistance?**

If you need assistance, visit our website at [www.infocus.com/service](http://www.infocus.com/service) or call us. Check out our HOW TO section there for additional information. See the Quick Start Booklet for support contact information.

This product is backed by a limited warranty. An extended warranty plan may be purchased from 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) 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 disposing of the batteries, be sure to do so in an environmentally proper manner.
- If the remote control gets wet, wipe it dry immediately.
- Avoid excessive heat and humidity.
- Ensure the batteries' polarity (+/-) is aligned correctly.
- Do not mix new and old batteries together, or different types of batteries together.
- Replace the batteries as soon as they run out.
- Remove batteries from the remote control when storing or not in use for a prolonged period.

To operate, point the remote at the front of the projector (not at the computer). The range of optimum operation is about 30 feet (9 m).

Press the remote's **Power** button to turn the projector on and off (see page 10 for shutdown info).

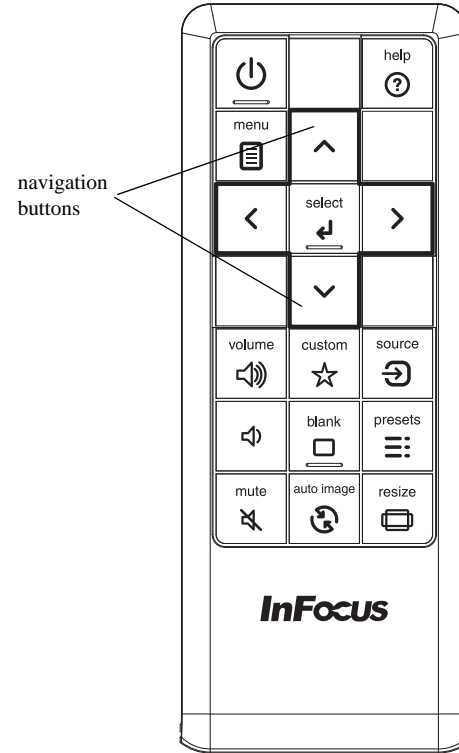
Press the remote's **Menu** button to open the projector's menu system. Use the arrow buttons to navigate, and the **Select** button to select features and adjust values in the menus. See page 23 for more info on the menus.

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 25).
- **Source** button to switch between sources.
- **Blank** button to blank the screen.
- **Presets** button to select stored settings (see page 24).
- **Mute** button to silence the audio.
- **Auto Image** button to resynchronize the projector to the source.
- **Resize** button to switch among aspect ratios (see page 29).
- **Help** button to provide interactive help for solving common, picture, sound, and cabling problems.

## 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 30 feet (9 m). For best results, point the remote at the projector.



# Using the audio

## Using the projector's speaker

To use the projector's speaker, connect the audio source to the projector's **Audio In** connector.

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

## Troubleshooting Audio

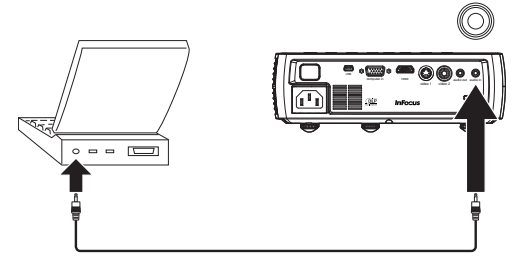
If you aren't hearing the audio, check the following:

- Make sure the 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.

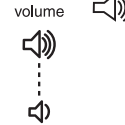
## Connecting external speakers

The projector can be attached to external amplified speakers by connecting a 3.5 mm 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.

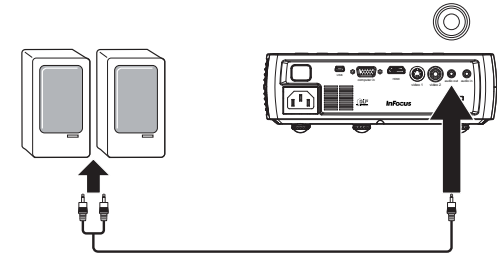
connect audio cable



adjust volume



connect external speakers



# Using the keypad buttons

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

**Power**—turns the projector on and off (page 7).

**Auto Image**—resynchronizes the projector to the source (page 25).

**Presets**—cycles through the available preset settings (page 29).

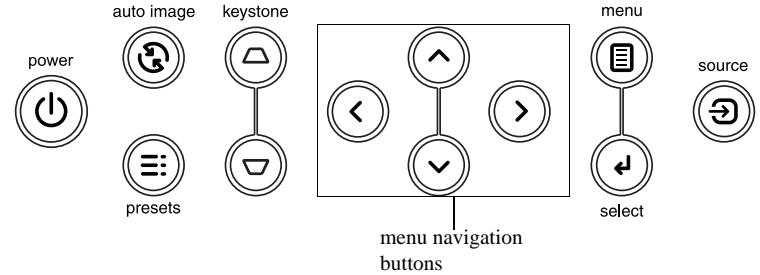
**Keystone**—adjusts squareness of the image (page 8).

**Up/Down/Left/Right arrows**—navigates to and adjusts settings in the menus (page 23).

**Menu**—opens the onscreen menus (page 23).

**Select**—confirms choices made in the menus (page 23).

**Source**—changes the active source (page 7).



## 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 23.

- Adjust the Keystone, Contrast, or Brightness in the Basic menu (page 24).
- Change the Aspect Ratio. Choose the option that best fits your input source (page 24).
- Adjust the Color Temperature in the Advanced > Image > Color Menu (page 24).
- Adjust the Phase, Tracking in the Advanced > Image > PC menu (page 25).
- Adjust the Horizontal or Vertical position in the Advanced > Setup > Image Setup menu.
- 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 24).

## 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 26 for details.
- The Search Screen option lets you change the appearance of the blank screen and start up screen (page 29).
- Auto Off is provided to automatically shut down the projector after several minutes of inactivity or display a black screen. This helps preserve lamp life (page 26).

## 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 23.

- Adjust the Keystone, Contrast, Brightness, Color, or Tint in the Basic menu (page 24).
- Change the Aspect Ratio. Choose the option that best fits your input source (page 24).
- Select a Sharpness setting in the Basic menu (page 24).
- Adjust the Color Temperature in the Advanced > Image > Color Menu. Select a listed warmth value (page 25).
- Turn on Overscan in the Advanced > Image > Video Menu to remove noise on the edges of the image (page 25).

## Customizing the projector

You can customize the projector for your specific setup and needs. See page 26 to page 27 for details on these features.

- For rear projection, turn Rear Project on in the Advanced > Setup > Image 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 appearance of blank screen and startup screen.
- Specify the language viewed on the menus.
- Save settings for the active source as a preset.

# Using the menus

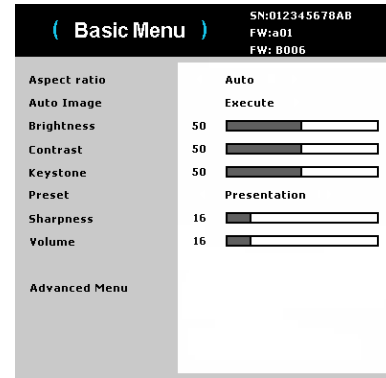
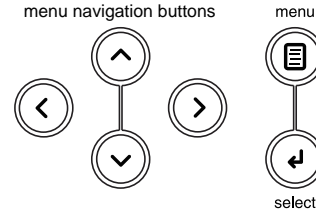
To open the menus, press the **Menu** button on the keypad or remote. (The menu automatically closes after 60 seconds if no buttons are pressed.) Use the up and down arrow buttons to highlight the desired menu option and then press the **Select** or right arrow button.

To change the menu settings (or enter another submenu), highlight the desired menu option and press the **Select** or right arrow button. Use the left and right arrow buttons to scroll through the options and make adjustments. To save your adjustments, press **Select**.

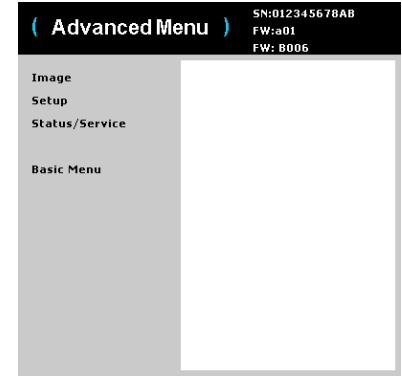
Press the **Menu** button again to exit the menu system.

The menus are grouped by usage:

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



Basic menu



Advanced menu



## Basic menu

To change the following menu settings (or enter the Advanced menu), highlight the desired menu option and press the **Select** or right arrow button. Use the left and right arrow buttons to scroll through the options and make adjustments. To save your adjustments, press **Select**.

**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.

**Auto Image:** forces the projector to reacquire and lock to the input signal. This is useful when signal quality is marginal.

**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.

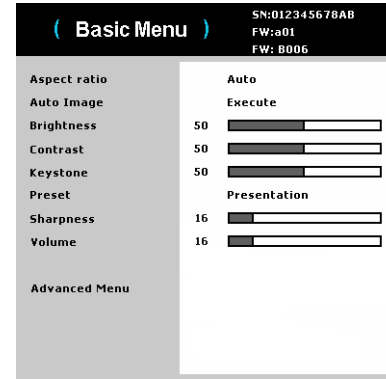
**Keystone:** adjusts the image vertically and makes a squarer image. You can also adjust keystone from the keypad.

**Preset:** Presets are provided that optimize the projector for displaying computer presentations and video images under certain conditions.

There is also an user-definable preset. To set this preset, adjust the image and select Save User in the Presets menu. You can recall these settings in the future by selecting the User preset.

**Sharpness:** changes the clarity of the edges of a video image. Select a sharpness setting.

**Volume:** adjusts the sound level.



Basic menu

## Advanced > Image menu

### 3D Control:

- **3D:** toggles between on and off. Turn it on to display the image in 3D.
- **3D Sync Invert:** toggles between on and off. Turn it on when the image is discrete or overlapping.

### Color:

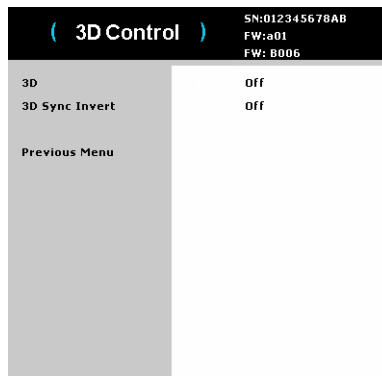
- **Color Space:** This option applies to computer and component video sources. It allows you to select a color space that has been specifically tuned for the input signal. When Auto is selected, the projector automatically determines the standard. To choose a different setting, turn off Auto, then choose RGB for computer sources or choose either REC709 or REC601 for component video sources.
- **Color Temp:** changes the intensity of the colors. Select a listed relative warmth value.
- **White Peaking:** (video sources only) increases the brightness of whites that are near 100%.
- **Tint:** adjusts the red-green color balance in the image of NTSC video images. The tint setting applies to NTSC video sources only.
- **Color:** adjusts the image from black and white to fully saturated color.
- **Red Gain:** adjusts the gain of the red channel of the image.
- **Green Gain:** adjusts the gain of the green channel of the image.
- **Blue Gain:** adjusts the gain of the blue channel of the image.
- **Gamma:** selects the appropriate gamma from Video, Film, Bright, and CRT.

### PC:

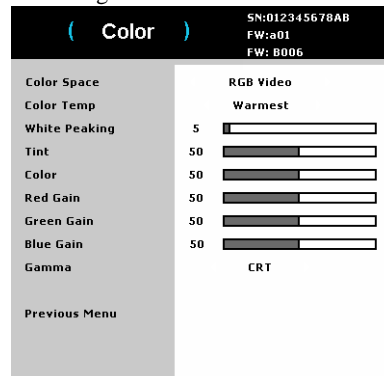
- **Force Wide:** This feature is to help with image-locking problems when the correct mode cannot be determined. If this feature is off and the exact resolution mode cannot be determined, the analog locking algorithms will use a 4:3 mode for the image. If this feature is on and the exact mode cannot be determined, the analog locking algorithms choose the best-matched wide mode (either 16:9 or 16:10) for the image.
- **Phase:** adjusts the horizontal phase of a computer source.
- **Tracking:** adjusts the vertical scan of a computer source.
- **PC Screen Saver:** allows your computer to go into Screen Save mode. The projector must be connected to the PC via a USB cable for this feature to work.

### Video:

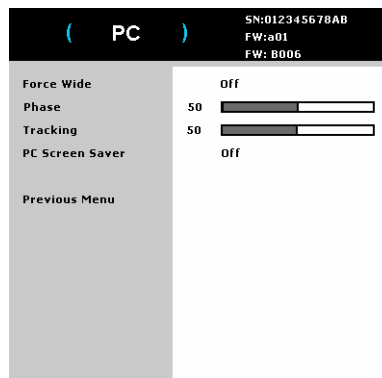
- **Closed Captions:** controls closed caption display while audio is not muted.
- **Overscan:** removes noise around the video image.



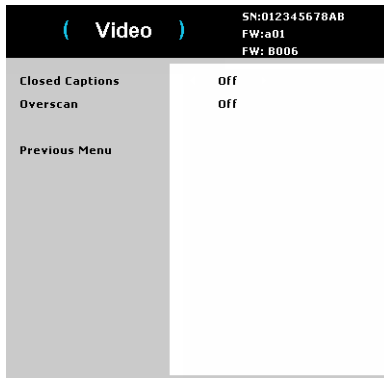
Advanced > Image > 3D Control Menu



Advanced > Image > Color Menu



Advanced > Image > PC Menu



Advanced > Image > Video Menu

## Advanced > Setup menu

### Audio Setup:

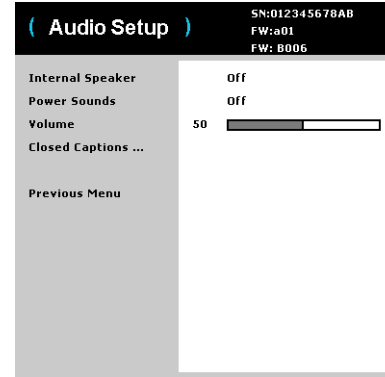
- **Internal Speaker:** allows the user to turn on and off the internal speaker.
- **Power Sound:** controls whether the projector makes a sound when powered on and off.
- **Volume:** adjusts the volume level.
- **Closed Captions:** controls closed caption display while audio is not muted.

### Closed Captions:

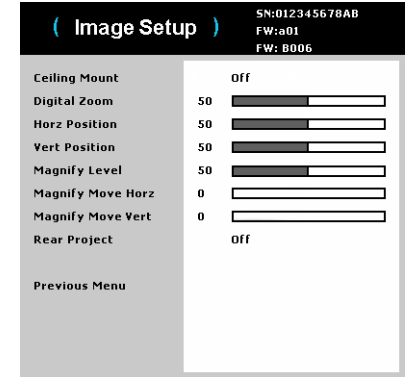
- **Closed Captions:** controls closed caption display while audio is not muted. If this setting is not off, and audio is not muted, and the source is NTSC and contains captions on the selected channel, then the projector must display caption text overlaid on the image.

### Image Setup:

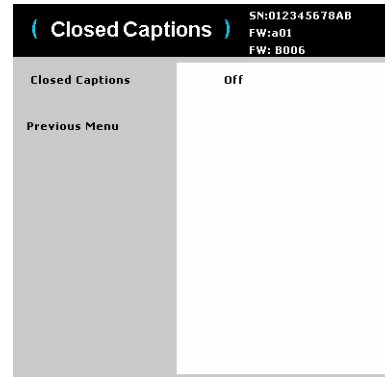
- **Ceiling Mount:** turns the image upside down for ceiling-mounted projection.
- **Digital Zoom:** changes the size of projector's display area.
- **Horz Position:** adjusts the position horizontally of a computer source.
- **Vert Position:** adjusts the position vertically of a computer source.
- **Magnify Level:** adjusts the magnify level setting of the image.
- **Magnify Move Horz:** adjusts the magnify setting in horizontal direction.
- **Magnify Move Vert:** adjusts the magnify setting in vertical direction.
- **Rear Project:** reverses the image so you can project from behind a translucent screen.



Advanced > Setup > Audio Setup menu



Advanced > Setup > Image Setup menu



Advanced > Setup > Closed Captions menu

## Keypad/Remote:

- **Blank Key:** selects what to display when the **Blank Key** on the remote is pressed: your custom snapshot, a solid color screen (blue, black or white), the factory logo screen, a timer, or test patterns. The timer option is useful for classroom tests or break times during meetings.
- **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.
- **Keypad:** enables or disables keypad.
- **Source Key 1~4:** allows you to assign a different input source for Source Key.

## Keystone:

- **Auto Keystone:** toggles between on and off. Turn it on to automatically adjust the image distortion.
- **Keystone:** adjusts the image vertically and makes a squarer image. You can also adjust keystone from the keypad.

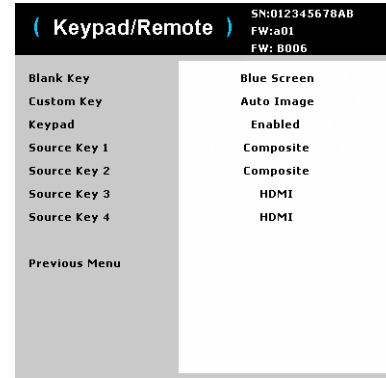
**NOTE:** The manual Keystone function is disabled when Auto Keystone is on.

## Lamp:

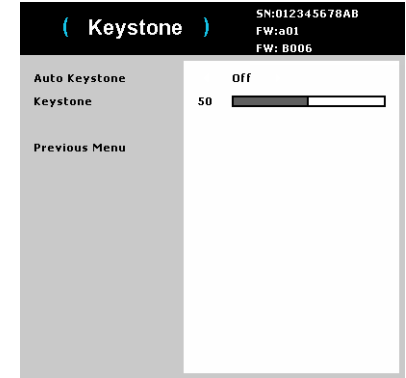
- **Lamp Low Power:** toggles between on and off. Turn it on to lower the light output of the lamp. This also lowers the fan speed, making the projector quieter.

## OSD Setup:

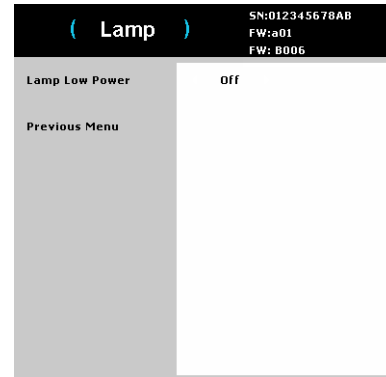
- **Language:** allows you to select a language for the onscreen display.
- **Menu Position:** allows you to change the position of the onscreen display.
- **Menu Transparency:** allows you to change how much of the projected image behind the menu you can see. As the value increases, more of the image behind the menu is visible.
- **Show Messages:** displays status messages (such as "Searching") in the lower-left corner of the screen.



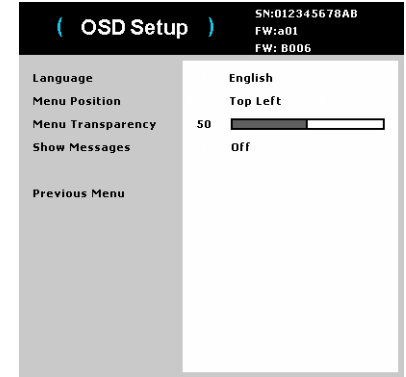
Advanced > Setup > Keypad/Remote menu



Advanced > Setup > Keystone menu



Advanced > Setup > Lamp menu



Advanced > Setup > OSD Setup menu

## Pin Settings:

- **Change PIN:**

*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 left and right arrow keys. Press the **Select** button (or up/down arrow keys) to select the highlighted option. Verify the new PIN.

*If you lose or forget your custom PIN:*

Contact InFocus support. Go to [www.infocus.com/support](http://www.infocus.com/support)

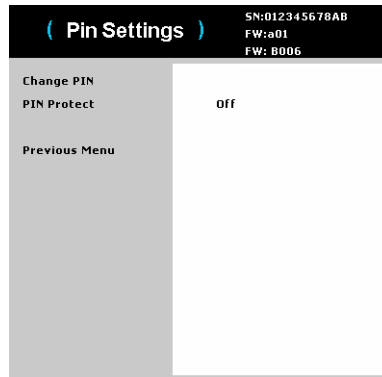
- **PIN Protect:** the PIN (personal identification number) feature allows you to password protect your projector. Once you enable the PIN feature, you must enter the PIN before you can project an image. The default PIN on this projector is Menu-Up-Down-Select-Source. Use the navigation buttons on the 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.

## Power:

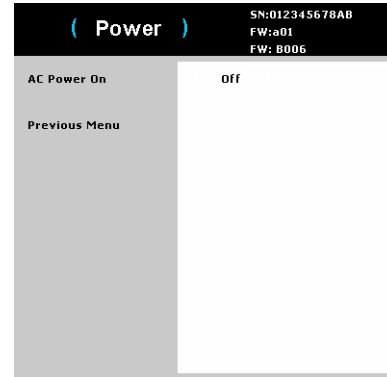
- **AC Power On:** when this feature is on, the projector automatically turns on when electrical power is connected.

## Snapshot:

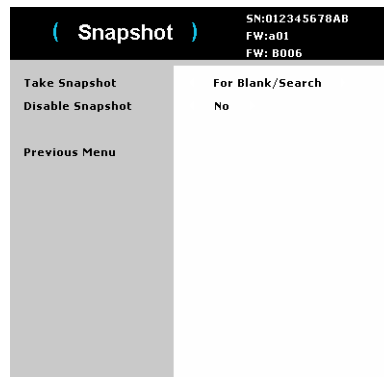
- **Take Snapshot:** captures the current image and allows it to be used as the search screen image.
- **Disable Snapshot:** removes the Snapshot function from the menu. A Factory Reset is needed to add the Snapshot function back to the menu.



Advanced > Setup > Pin Settings menu



Advanced > Setup > Power menu



Advanced > Setup > Snapshot menu

## Source:

- **Power-up Source:** determines which source the projector checks first for active video during power-up.
- **Search Screen:** allows you to display a blank screen instead of the default screen at startup when no source is detected. Options include the factory logo screen, a custom Snapshot, or a blue, black or white screen.
- **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. Then navigate to the desired source icon and press the Select button.

- **VGA:** toggles between on and off. It allows you to manually change source to VGA when this feature is on.
- **HDMI:** toggles between on and off. It allows you to manually change source to HDMI when this feature is on.
- **S-Video:** toggles between on and off. It allows you to manually change source to S-Video when this feature is on.
- **Composite:** toggles between on and off. It allows you to manually change source to Composite when this feature is on.

## Timer:

- **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.

( Source )		SN:012345678AB FW:a01 FW: 8006
Power-Up Source	VGA	
Search Screen	Factory Logo	
Auto Source	On	
VGA	On	
HDMI	On	
S-Video	On	
Composite	On	
Previous Menu		

Advanced > Setup > Source menu

( Timer )		SN:012345678AB FW:a01 FW: 8006
Auto Off Time	Never	
Previous Menu		

Advanced > Setup > Timer menu

## Advanced > Status/Service menu

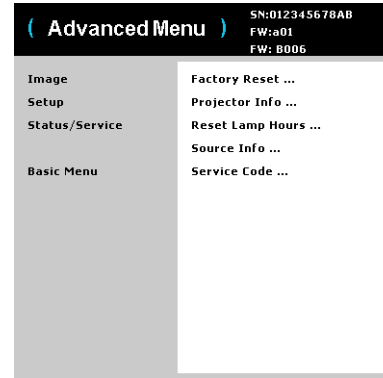
**Factory Reset:** restores all settings to their default.

**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.

**Source Info:** a read-only display of current source settings.

**Service Code:** only used by authorized service personnel.

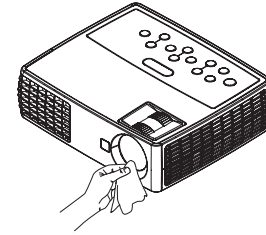


Advanced > Status/Service menu

# Maintenance

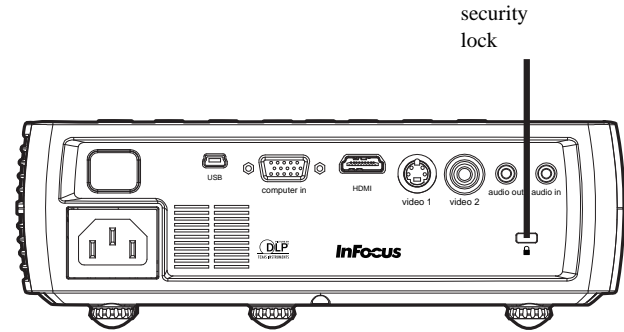
## Cleaning the lens

- 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 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.

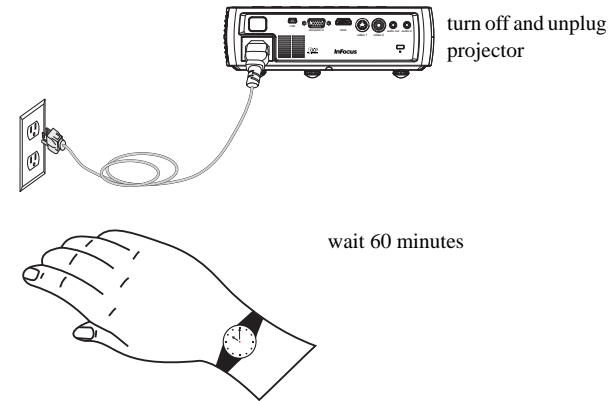
- **NOTE:** You can order new lamps from [www.infocus.com](http://www.infocus.com) (in select areas), your retailer or your dealer. Only genuine InFocus lamps are tested for use in this projector. InFocus is not liable for the performance, safety or certification of any other lamps. The use of other lamps violates the projector warranty and voids all certification marks on this projector.

### WARNINGS:

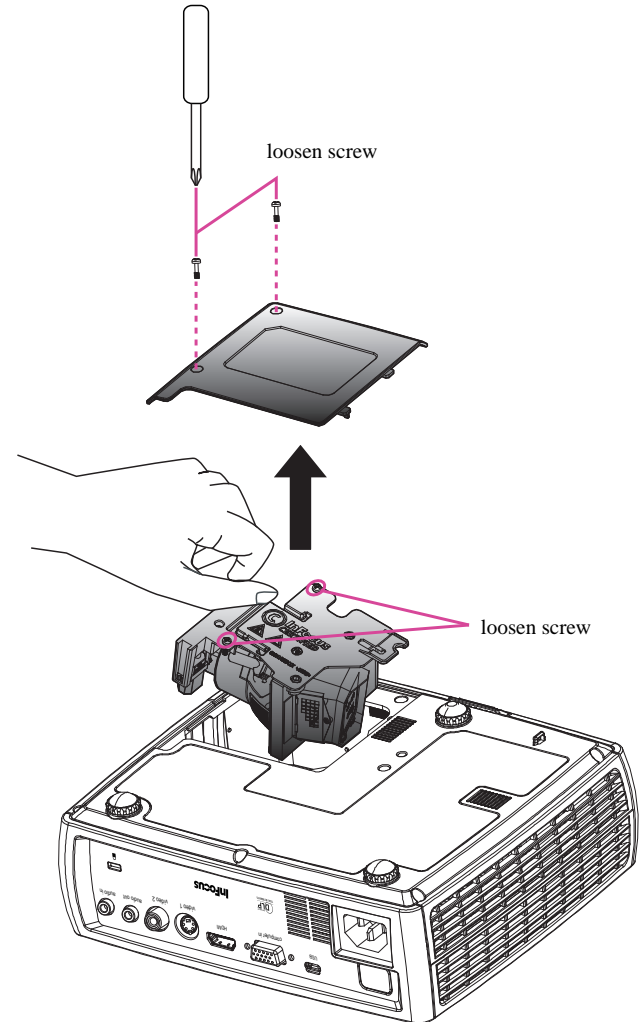
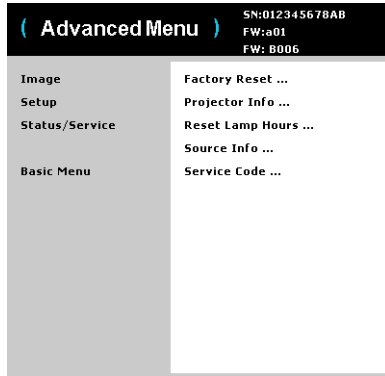
- To avoid burns, allow the projector to cool for at least 60 minutes before you replace the lamp.
  - Only genuine InFocus lamps are tested with this projector. Use of other lamps may cause electrical shock and fire.
  - Unplug the power cord before replacing the lamp.
  - Do not drop the lamp module. 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 housing. 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.
- Hg – Lamp contains mercury. Manage in accordance with local disposal laws. See [www.lamprecycle.org](http://www.lamprecycle.org).

( Projector Info )	
	SN:012345678AB
	FW:a01
	FW: B006
Model Name	IN1110
Serial Number	012345678AB
Native Resolution	1280X800
Firmware	a01
Lamp Hours	20
Normal	10
Low Power	10
Total Lamp hours	20
Lamp Resets	20
Previous Menu	

Lamp hours



- 1 Turn off the projector and unplug the power cord.
- 2 Wait 60 minutes to allow the projector to cool thoroughly.
- 3 Turn the projector upside down on a soft cloth so that the lamp door is facing you.
- 4 Loosen the two captive screws on the lamp door and lift the door off.
- 5 Loosen the two captive screws that attach the lamp housing to the projector.
- 6 Carefully remove the lamp housing. Dispose of the lamp in an environmentally proper manner.
- 7 Install the new lamp housing and tighten the screws.
- 8 Replace the lamp door.
- 9 Plug in the power cord and press the Power button to turn the projector back on.
- 10 To reset the lamp hour timer, navigate to the **Advanced > Status/Service** menu and select **Reset Lamp Hours**. See page 30 for details.



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