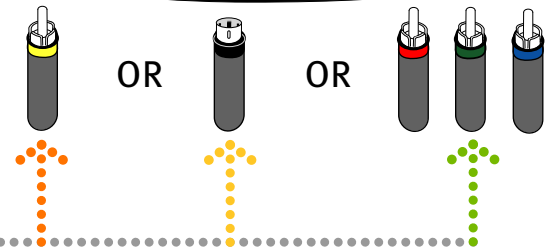


Microsoft® Xbox 360™

INFOCUS HOW-TO GUIDE



Composite

S-video

Component

TABLE OF CONTENTS

This guide uses a Good, Better and Best rating system to help you improve your overall gaming and projection experience.



Basic setup, cables included with the Xbox 360.



May need to buy additional cables, better audio/video quality



May need to buy additional cables and AV equipment, best audio/video quality.

NOTE: Microsoft released two versions of the Xbox 360: Core and Premium. One significant difference is the cable that is included in the box. The Core version includes the Xbox 360 Composite AV cable. The Premium version includes the Xbox 360 Component AV cable.

Video Connection Options

Page

 Good	Xbox 360 Composite AV cable	 3
 Better	Xbox 360 S-video AV cable	 5
 Best	Xbox 360 Component HD AV cable	 6

Audio Connection Options

 Good	Stereo Sound	 7
 Best	Digital Surround Sound	 8

Troubleshooting

 Tips	 9
 Troubleshooting	 10
 Frequently Asked Questions	 11
 Cable Guide	 12
 Glossary	 13



Setup Requirements

- Microsoft Xbox 360 Core (for Premium, see [page 4](#))
- InFocus projector with RCA composite video-in port
- Microsoft Xbox 360 AV cable with RCA composite connectors

1

Plug the Xbox 360 AV connector to the AV port on the Xbox 360. If you are using the HD AV cable, see [page 4](#).

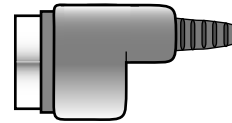
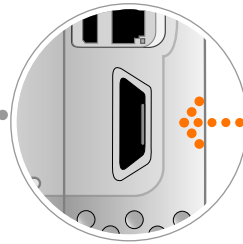
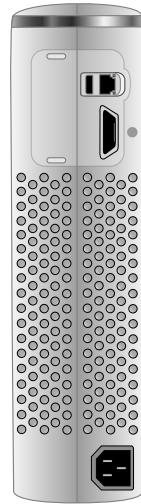
2

Connect the other end of the cable to the composite port on the projector. Connect audio connectors to external speakers.*

3

Power on the projector first, then the Xbox 360. Press Source button on projector keypad or remote to see Xbox 360 game.

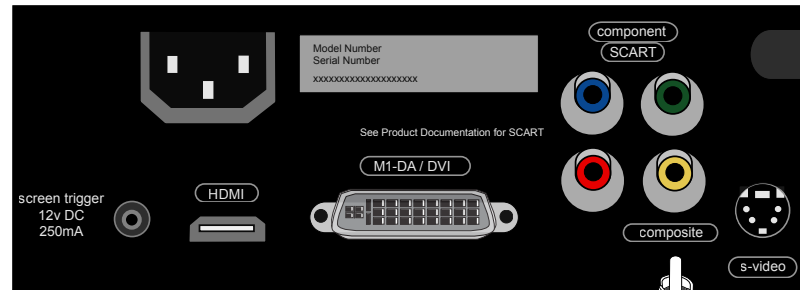
Microsoft Xbox 360 Rear Connector Panel



Xbox 360 AV cable (Microsoft accessory)

InFocus Projector Connector Panel

connector panel may vary from actual product



RCA video connector (yellow)

RCA audio connectors* (red and white)

ADVANTAGES

- Cable included in Xbox 360 Core package

DISADVANTAGES

- Lower detail and color quality than S-video or Component

* Connect to external sound system for the best gaming experience. See [pages 7-8](#) for more details.



Setup Requirements

- › Microsoft Xbox 360 Premium (for Core, see [page 3](#))
- › InFocus projector with RCA composite video-in port
- › Microsoft Xbox 360 HD AV cable with RCA composite connectors

1

Plug the Xbox 360 AV connector to the AV port on the Xbox 360. Move switch on the connector to the SD position. If you are using the Composite AV cable, see [page 3](#).

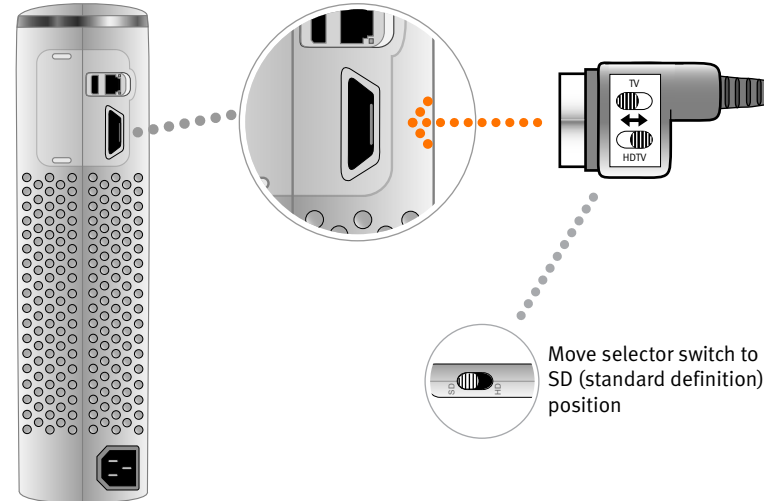
2

Connect the other end of the cable to the composite port on the projector. Connect audio connectors to external speakers.*

3

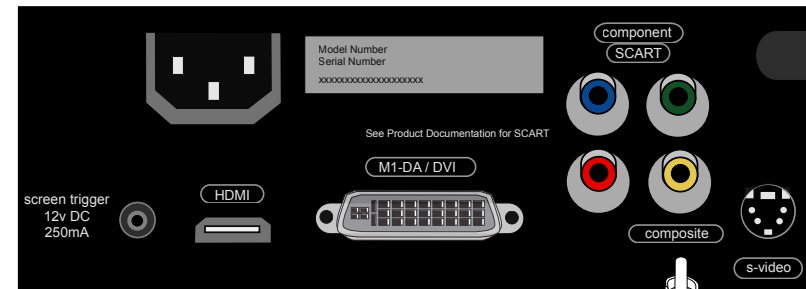
Power on the projector first, then the Xbox 360. Press Source button on projector keypad or remote to see Xbox 360 game.

Microsoft Xbox 360 Rear Connector Panel



InFocus Projector Connector Panel

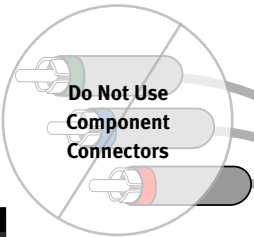
connector panel may vary from actual product



RCA video connector (yellow)

RCA audio connectors* (red and white)

- ADVANTAGES**
- Cable included with Xbox 360 Premium package
- DISADVANTAGES**
- Lower detail and color quality than S-video and Component



* Connect to external sound system for the best gaming experience. See [pages 7-8](#) for more details.



Setup Requirements

- › Microsoft Xbox 360 Core or Premium
- › InFocus projector with an S-video port
- › Microsoft Xbox 360 S-video AV cable

1

Plug the Xbox 360 AV connector to the AV port on the Xbox 360.

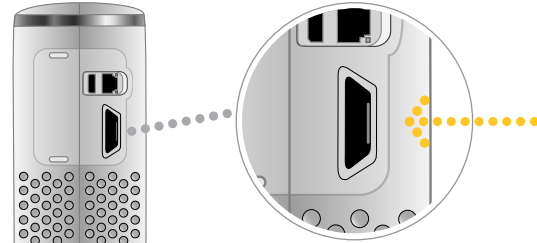
2

Connect the other end of the cable to the S-video port on the projector. Connect audio connectors to external speakers.*

3

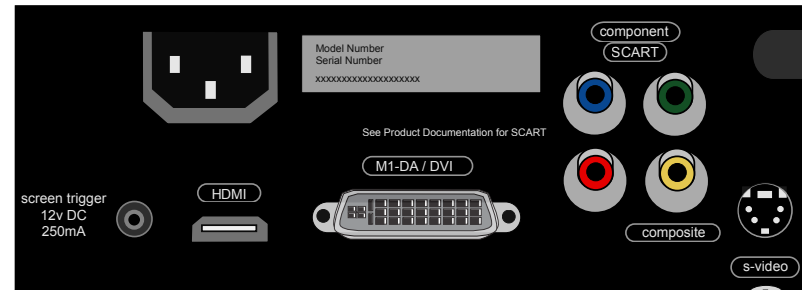
Power on the projector first, then the Xbox 360. Press Source button on projector keypad or remote to see Xbox 360 game.

Microsoft Xbox 360 Rear Connector Panel



InFocus Projector Connector Panel

connector panel may vary from actual product



S-video connector (black)

Do not use yellow connector

RCA audio connectors* (red and white)

- ADVANTAGES**
- Brighter and sharper image than composite
- DISADVANTAGES**
- Does not support high definition (720p, 1080i)
 - Lower detail and color quality than component

Xbox 360 S-video AV cable (Microsoft accessory)

* Connect to external sound system for the best gaming experience. See pages 7-8 for more details.



Setup Requirements

- › Microsoft Xbox 360 Core or Premium
- › InFocus projector with RCA component video ports
- › Microsoft Xbox 360 HD AV cable with RCA component connectors

1

Plug the Xbox 360 AV connector to the AV port on the Xbox 360. Make sure the switch on the connector is in the HD position.

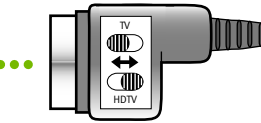
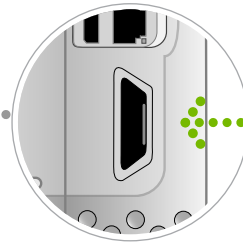
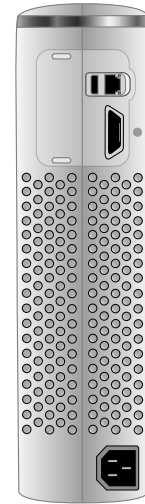
2

Connect the other end of the cable to the component ports on the projector. Connect audio connectors to external speakers.*

3

Power on the projector first, then the Xbox 360. Press Source button on projector keypad or remote to see Xbox 360 game.

Microsoft Xbox 360 Rear Connector Panel

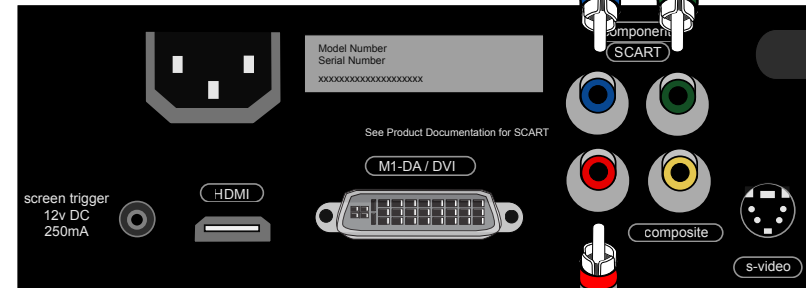


Move selector switch to HD (high definition) position

Xbox 360 HD AV cable (Microsoft Accessory)

InFocus Projector Connector Panel

connector panel may vary from actual product



RCA component connector (blue)

RCA component connector (green)

Do not use (yellow)

RCA audio connectors* (red and white)

RCA component connector (red)

ADVANTAGES

- Vibrant and accurate colors
- Clear and detailed image
- High definition supported

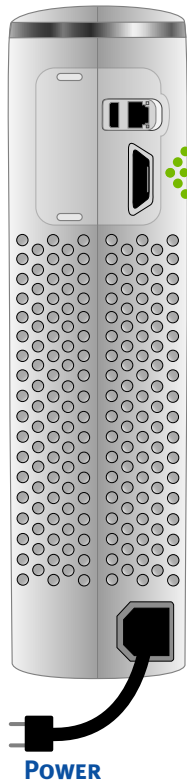
* Connect to external sound system for the best gaming experience. See pages 7-8 for more details.



Setup Requirements

- › Microsoft Xbox 360 Core or Premium
- › InFocus projector
- › Any Microsoft Xbox 360 AV cable
- › Stereo sound system

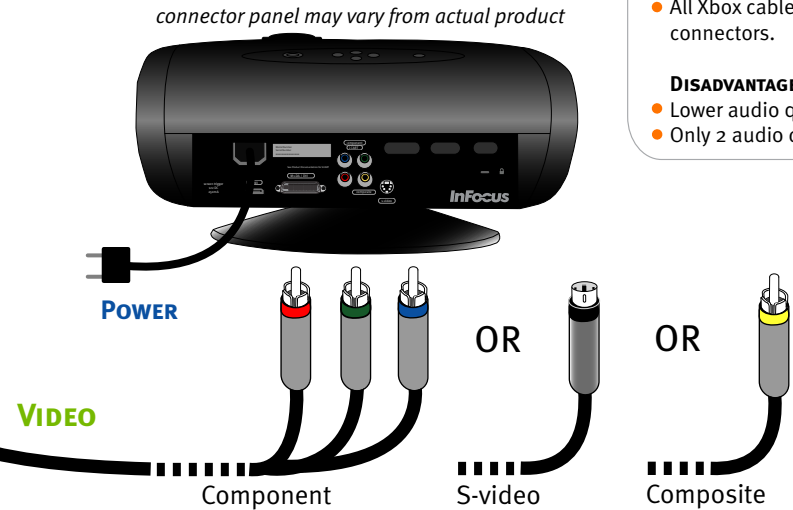
1 Connect Xbox 360 HD AV cable to Xbox 360.



Xbox 360 AV cable

POWER

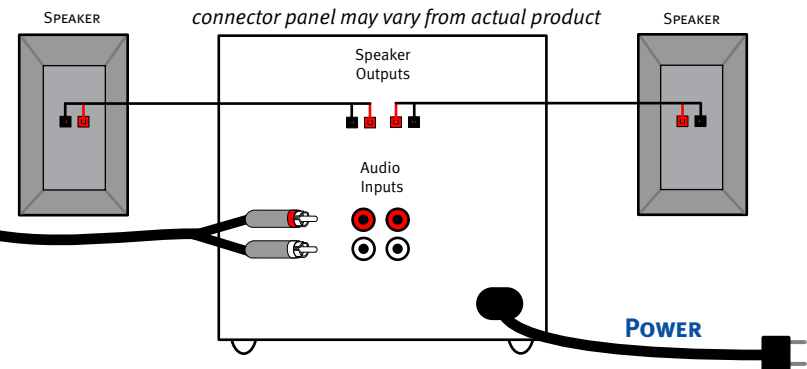
2 Connect video connector(s) to InFocus projector.



- ADVANTAGES**
- Common audio connection on stereo systems.
 - All Xbox cables have stereo connectors.
- DISADVANTAGES**
- Lower audio quality
 - Only 2 audio channels

3 Connect Composite RCA audio connectors to stereo system.

AUDIO



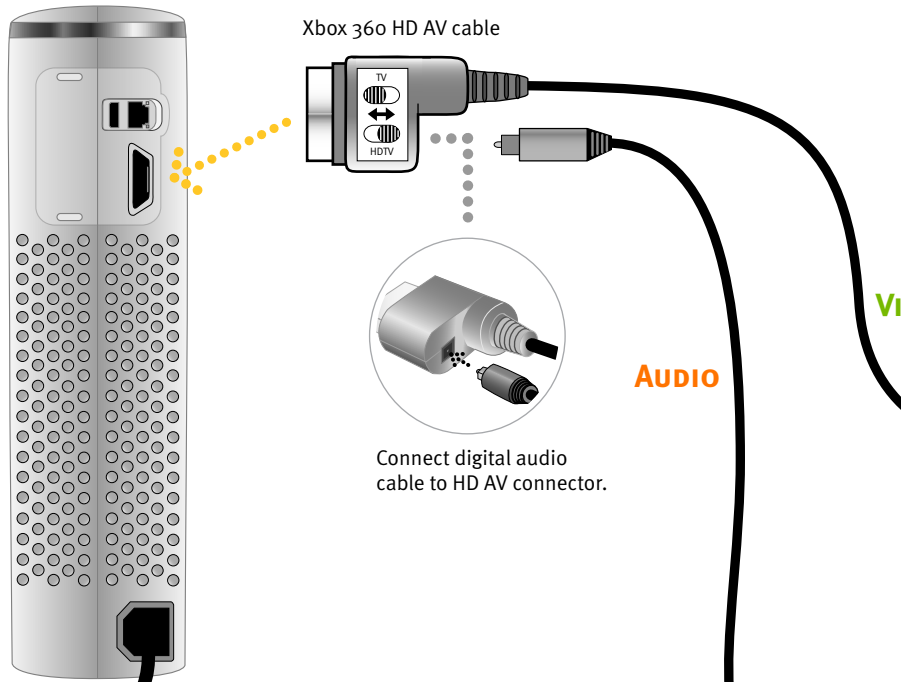
NOTE: If the audio cable is too short, cable extensions can be purchased at a local electronics store.



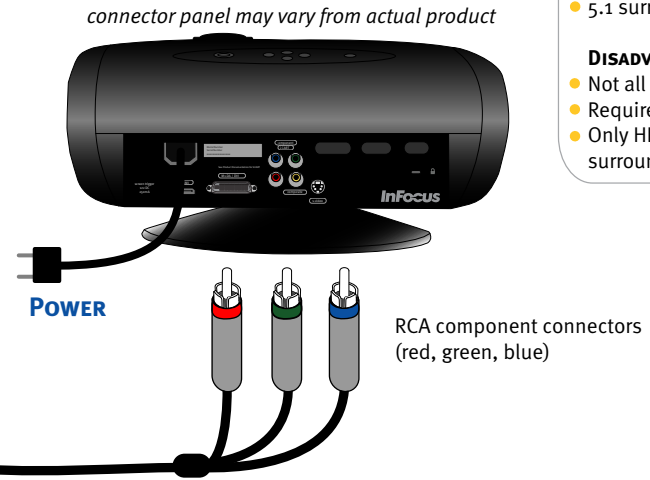
Setup Requirements

- Microsoft Xbox 360 game console
- InFocus projector
- Microsoft Xbox 360 HD AV cable
- Optical (Toslink) digital audio cable
- Surround sound AV receiver

1 Connect Xbox 360 HD AV cable to Xbox 360.

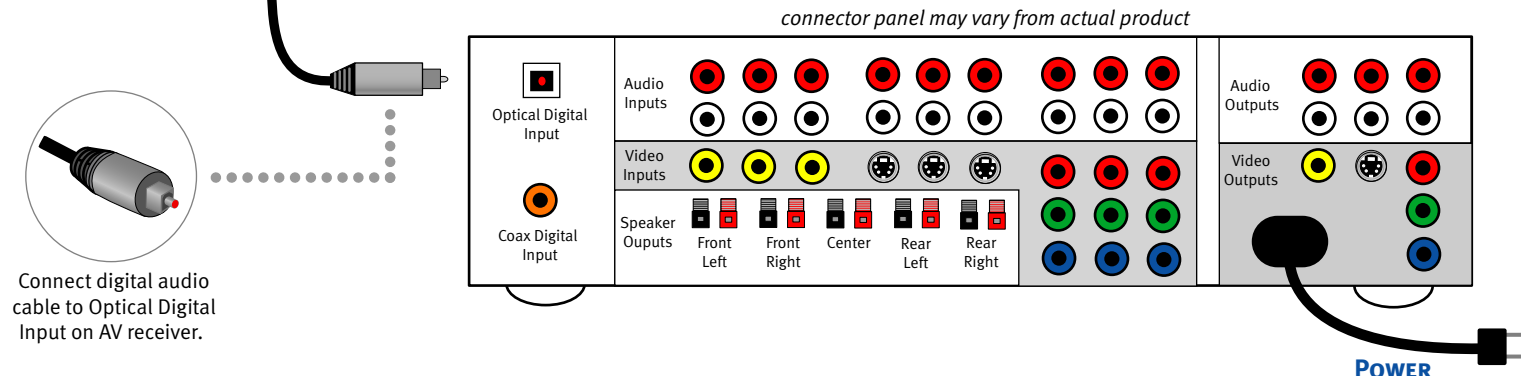


2 Connect component connectors to InFocus projector.



- ADVANTAGES**
- Digital audio
 - High quality audio
 - 5.1 surround sound
- DISADVANTAGES**
- Not all receivers support Toslink
 - Requires special audio cable
 - Only HD AV cable supports surround sound

3 Connect Toslink connector to AV receiver.



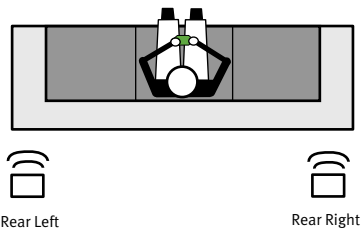


VIDEO TIPS

- Component and VGA are the only two Xbox 360 cables that will support high definition (720p or 1080i). High definition means detailed and realistic image.
- If you are using the component HD AV cable and displaying 720p or 1080i, make sure the switch on the AV connector is set to "HD".
- If you buy a projection screen, you will see a brighter image with better colors. Go to InFocus.com to see our InFocus projection screen line.
- If you use a power conditioner instead of a power strip, you will see a cleaner and sharper image. It will also protect your investment in the case of lightning, power spikes or surges.
- You can adjust aspect ratio and video resolution in the Xbox 360 dashboard. Consult your Xbox 360 manual for more details.

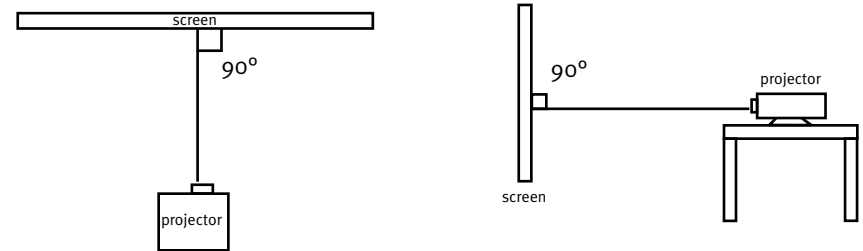
AUDIO TIPS

- InFocus recommends connecting the Xbox 360 to a surround sound system for a realistic gaming experience. Optical or coaxial audio cables are required to receive 5.1 surround sound. The red and white RCA cables only support stereo (2.1 channels).
- In a 5.1 surround speaker setup, your speakers should be positioned as illustrated:



SETUP TIPS

- InFocus recommends positioning the projector 2 times the image width from the wall. For example, if the projected image is 5 feet wide, the sitting distance should be 10 feet from the screen.
- Make sure the projector is aligned perpendicular to the screen or wall. If the projector is not, this will result in a skewed non-rectangular image. Refer to the Image Offset How To Guide for more information.



- Use an InFocus-approved ceiling mount to ensure that you will have a secure and sturdy installation.
- For permanent installations, InFocus recommends using a power conditioner or surge protector to protect your projector and other video equipment from lightning, power spikes and power surges.
- Install the projector and screen where ambient light and other light sources can be controlled. Light will cause your projected image to fade and affect brightness and color.

PROJECTOR TIPS

- Always run the projector on its top or bottom. Never run the projector on its back or side. This will affect the operation of the projector and may damage moving parts inside.
- Do not block the intake and outtake vents. This will cause the projector to overheat and may damage internal components.
- Do not run the projector in an enclosed box. This will cause the projector to overheat and may damage internal components.
- Always turn your projector off when not in use. This will prolong your lamp life.
- Store your projector in a dry area, such as a case or cabinet.



VIDEO TROUBLESHOOTING

There is no image on the projector. I only see the logo or blank screen.

- 1) Reseat all the video connectors on the Xbox 360 and the InFocus projector.
- 2) Make sure the projector is searching the correct video source or input mode.
- 3) Try a different video cable. The cable may be damaged or defective.

I cannot get my Xbox 360 to display 720p or 1080i on my InFocus projector. What's wrong?

- 1) Make sure you are using the HD AV cable.
- 2) Set the HDTV switch on the AV connector to HDTV.
- 3) Connect the red, green, and blue RCA connectors to the corresponding component input ports on the projector. Do not use the yellow video and red/white audio connectors.
- 4) The game needs to support 720p or 1080i.
- 5) Make sure 720p or 1080i resolutions are active in the System menu on the Xbox 360 Dashboard. Select Console Settings in the System menu, and then select Display to find all your resolution options.

I see a rolling line or bar moving from bottom to top. How do get rid of it?

This is known as a ground loop. It is an electrical noise or hum caused by two or more devices connecting to a common ground through different paths. This results in a hum in your audio or rolling bar in your video.

If you have your video devices and projector connected to different power outlets, try to connect all your electronics into the same power center or outlet. If this does not work, you can purchase a ground loop isolator or power conditioner. You can purchase this at your local electronic store.

Why is my image dim or has dull colors?

There can be many causes to this issue. Try the following:

- 1) Try turning the lights off. Ambient light or other light sources can fade your image.
- 2) Try different cables. Bad or damaged cables can affect image quality.
- 3) Some InFocus projectors have two power modes. Make sure it is set to high or normal power mode, where low power or whisper mode would be dimmer.
- 4) Try to decrease the image size. Image brightness will decrease as the image increases. Most projectors can display between 3-10 ft. diagonal.
- 5) Reseat or replace the lamp. Lamps will fade over time. At the end of a lamp's life, the lamp can be 50% as bright as a new lamp.

Why does my image look grainy and fuzzy?

There are several possible causes. The most common cause is low quality cabling. If you are using composite or s-video, you are going to get a low grade image. If you use component, you are going to get a sharper image with vivid colors.

The other causes are long or low quality cabling. You want to keep your cables as short as possible. The signal degrades and loses quality the farther it has to travel.

Why are the colors in my image wrong?

- 1) Reseat all the connectors to ensure a secure connection.
- 2) If you are using Composite or Component connectors, make sure you are using corresponding colored connectors. (i.e. yellow to yellow, blue to blue)
- 3) If you have an extra cable, try it. You may have a bad or damaged cable.

AUDIO TROUBLESHOOTING

There is no sound in my video game.

There needs to be an audio connection between the Xbox 360 and a sound system. Most InFocus projectors do not have built-in speakers. For the best audio experience, it is recommended to connect your Xbox 360 to a surround sound system. You will experience higher quality, more volume and surround sound. See [pages 7-8](#) for more details.

Why is the sound too soft from the projector speakers?

InFocus recommends connecting the audio to an audio receiver or surround sound system to receive a more robust and quality audio experience. The speakers on the projector are meant for very small spaces. Many InFocus projectors do not come with built-in speakers.

SETUP TROUBLESHOOTING

Why does my video game look too tall and skinny?

Most likely you have to set your Xbox 360 display mode to "widescreen", but the InFocus projector is not configured to support the widescreen image. Make sure the Xbox 360 and InFocus projector aspect ratios are the same.

Why is my image not rectangular? The tops or sides are slanted.

This is known as keystoneing. This is due to the projector and screen/wall not being aligned properly. If the sides are not straight, then you will need to tilt the front of the projector up or down to square up the image. If the top and bottom are not straight, then you will need to rotate the front of the projector left or right to square up the image. Also, you can use digital keystone correction via the projector menu or keypad. This will allow you to correct keystoneing without moving the projector.



CONNECTIVITY FAQs

How do I connect HDMI or DVI to my Xbox 360?

Xbox 360 currently does not support a digital output. The best video output is VGA or component video from the Xbox 360. All InFocus projectors will support both of these formats. You may need to purchase additional adapters or cables for your projector.

What video cables come with the Xbox 360?

There are two different versions: Core and Premium. The Core version includes the Composite AV Cable, which has composite audio and video connectors. The Premium version includes the Component HD AV Cable, which has component and composite audio and video connectors.

At what cable length does the video quality start to degrade?

It depends on the quality of the cabling you use. Some cables begin to lose noticeable quality beyond 10 feet. Higher quality cables can maintain a clean signal beyond 25 feet. To guarantee the best video quality, we recommend using heavy duty shielded cabling (for example, InFocus, Monster Cable, or Belkin). Use as short a cable as your setup allows.

What cables will give me the best quality?

Cable Type	Signal Type	Video Format	Quality
Composite	Analog	SDTV (NTSC, SECAM, PAL)	Good ●
S-video	Analog	SDTV (NTSC, SECAM, PAL)	Better ●●
Component	Analog	EDTV (480p), HDTV (720p, 1080i)	Best ●●●
VGA	Analog	EDTV (480p), HDTV (720p, 1080i)	Best ●●●

SETUP FAQs

Can I project on the wall or do I need to buy a screen?

The projector will work on any flat white surface, such as a wall, screen or fabric. For the best quality image, a projection screen is the best projection surface. A projection screen will deliver an image with accurate colors, virtually 180 degree viewing angle and sharp image. Other surfaces may deliver a dull or washed out image. Check out our InFocus projection screen line at www.infocus.com.

VIDEO FAQs

What aspect ratios does the Xbox 360 support?

The Xbox 360 supports 4:3 and 16:9 aspect ratios. You can change the aspect ratio output in the Xbox 360 menu. We recommend setting the aspect ratio according to the native aspect ratio of the InFocus projector to obtain the largest projected image. All InFocus Play Big home projectors have a native aspect ratio of 16:9. All InFocus Work Big business projectors have a native aspect ratio of 4:3.

Is there a difference between HD and widescreen?

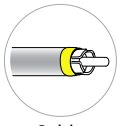
Yes. HD means high definition. High definition refers to the video resolution such as 720p, 1080i or 1080p. Widescreen refers to 16:9 aspect ratio. The other format being regular 4:3. While HD is typically widescreen, it is not always. HD can be full screen 4:3 format as well.

Which one is better 720p or 1080i?

720p and 1080i are both considered high definition. 720 and 1080 represents the resolution. “p” stands for progressive. “i” stands for interlaced. Progressive will always produce a smoother image than interlaced. Higher resolution will always produce a more detailed image. Since 720p is progressive and 1080i has higher resolution, typically both video modes will produce equally high quality images. Let your eyes be the judge!

Why don't I have an image on my screen or wall? No logo or no light.

1. Make sure that you have connected the appropriate audio/video cable.
 - a. Component HD AV Cable
 - b. Composite AV Cable
 - c. S-Video AV Cable
 - d. VGA HD AV Cable
2. Verify that the projector lamp is on.
3. Verify that the connections are securely seated on the Xbox 360 and projector.
4. Press the source button on the projector keypad or remote.



Cable

Composite Video

Cost: \$
Video Quality: ●

Cable Connector Type: RCA
Source Type: VCR, DVD, gaming consoles, satellite, cable, DVR, computers



Port

Optimal Cable Length: Less than 25 feet.
Video Support: NTSC, SECAM, PAL
Not Supported: EDTV (480p, 576p), HDTV (720p, 1080i, 1080p), HDCP



Cable

S-Video

Cost: \$
Video Quality: ●●

Cable Connector Type: 4-pin (typical) or 7-pin mini-DIN
Source Type: VCR, DVD, game consoles, satellite, cable, DVR, computers



Port

Optimal Cable Length: Less than 25 feet.
Video Support: NTSC, SECAM, PAL
Not Supported: EDTV (480p, 576p), HDTV (720p, 1080i, 1080p), HDCP



Cable

Component Video

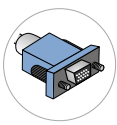
Cost: \$\$
Video Quality: ●●●

Cable Connector Type: RCA
Source Type: DVD, game consoles, satellite, cable, DVR



Port

Optimal Cable Length: Less than 15 feet.
Video Support: SDTV (480i, 576i), EDTV (480p, 576p), HDTV (720p, 1080i)
Not Supported: HDCP



Cable

VGA or VESA

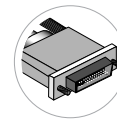
Cost: \$\$
Video Quality: ●●●●

Cable Connector Type: 15-pin mini-sub
Source Type: computers, game consoles



Port

Optimal Cable Length: Less than 15 feet.
Video Support: EDTV (480p, 576p), HDTV (720p, 1080i, 1080p)
Not Supported: digital, HDCP

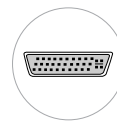


Cable

M1-A

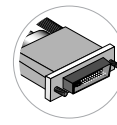
Cost: \$\$
Video Quality: ●●●●

Cable Connector Type: 30-pin
Source Type: Projectors



Port

Optimal Cable Length: Less than 15 feet.
Video Support: EDTV (480p, 576p), HDTV (720p, 1080i, 1080p)
Not Supported: digital, HDCP

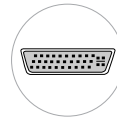


Cable

M1-D

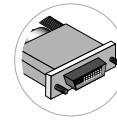
Cost: \$\$\$
Video Quality: ●●●●●

Cable Connector Type: 30-pin
Source Type: Projectors



Port

Optimal Cable Length: Less than 10 feet.
Video Support: EDTV (480p, 576p), HDTV (720p, 1080i, 1080p), HDCP
Not Supported: analog, 480i, 576i

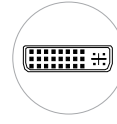


Cable

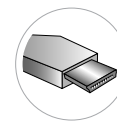
DVI

Cost: \$\$\$\$
Video Quality: ●●●●●

Cable Connector Type: 24-pin
Source Type: satellite, cable, DVD, DVR, computers, game consoles
Optimal Cable Length: Less than 10 feet.
Video Support: EDTV (480p, 576p), HDTV (720p, 1080i, 1080p), HDCP
Not Supported: analog, 480i, 576i



Port

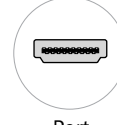


Cable

HDMI

Cost: \$\$\$\$\$
Video Quality: ●●●●●●

Cable Connector Type: Type A HDMI (typical), Type B HDMI 29-pin (1080p)
Source Type: satellite, cable, DVD, DVR, computers, game consoles
Optimal Cable Length: Less than 10 feet.
Video Support: EDTV (480p, 576p), HDTV (720p, 1080i, 1080p), HDCP
Not Supported: analog, 480i, 576i



Port



480i - shorthand for 480 horizontal lines interlaced. This term is used to describe the resolution of a video signal or display. This video mode can be in full screen (4:3) or widescreen (16:9) format. All projectors support this format. 480p will provide a smoother image than 480i, while 720p or higher resolution will deliver a superior image in definition and color. Commonly used in North America and Central America.

480p - shorthand for 480 horizontal lines progressive. This term is used to describe the resolution of a video signal or display. This video mode can be in full screen (4:3) or widescreen (16:9) format. Most projectors support this format. 480p will provide a smoother image than 480i, while 720p or higher resolution will deliver a superior image in definition and color. Commonly used in North America and Central America.

5.1 Surround Sound - delivers six discrete audio channels (3 front, 2 rear and 1 subwoofer). It provides a realistic movie experience by surrounding the audience with sound in front, left and right and behind them. A true 5.1 surround sound system will have an audio receiver, 5 speakers and 1 subwoofer. All movies are recorded in stereo (2.1) and/or surround (5.1) audio format. *Also known as DTS, Dolby 5.1 Surround.*

576i - shorthand for 576 horizontal lines interlaced. This term is used to describe the resolution of a video signal or display. This video mode can be in full screen (4:3) or widescreen (16:9) format. All projectors support this format. 576p will provide a smoother image than 576i, while 720p or higher resolution will deliver a superior image in definition and color. Commonly used in South America, Europe, Africa and Asia.

576p - shorthand for 576 horizontal lines progressive. This term is used to describe the resolution of a video signal or display. This video mode can be in full screen (4:3) or widescreen (16:9) format. Most projectors support this format. 576p will provide a smoother image than 576i, while 720p or higher resolution will deliver a superior image in definition and color. Commonly used in South America, Europe, Africa and Asia.

720p - shorthand for 720 horizontal lines progressive. This term is used to describe the resolution of a video signal or display. This video mode is commonly broadcast in widescreen (16:9) format. Most projectors support this format. It is the most common high definition format.

1080i - shorthand for 1,080 horizontal lines interlaced. This term is used to describe the resolution of a video signal or display. This video mode is commonly broadcast in widescreen (16:9) format. Most projectors support this format. It is one of three HDTV formats. The others being 720p and 1080p.

1080p - shorthand for 1,080 horizontal lines progressive. This term is used to describe the resolution of a video signal or display. This video mode is commonly broadcast in widescreen (16:9) format. Most projectors and televisions do not support this format. It is the latest and highest resolution video signal. It is one of three HDTV formats. The others being 720p and 1080i.

Aspect Ratio - the ratio of the width to the height of an image. There are two common aspect ratios; 4:3 and 16:9. 4:3 (square format or full screen) is the standard for analog television broadcasts. 16:9 (rectangular or widescreen) is the standard for HDTV broadcasts. Most DVD movies are available in 16:9 format. Some movies are available in both 4:3 and 16:9 formats. 16:9 format is gaining popularity as widescreen televisions and projectors are becoming more mainstream.

AV - abbreviation for Audio-Video. A term that is used to describe a cable, connector or device that supports audio and video. An AV cable would be a cable that would transmit audio and video signals. An AV port would be a port that would send and/or receive audio and video signals.

Component video - transmits the video signal components (brightness and color) on 2 or more separate signals. The most common format is one cable transmitting 3 signals, typically represented as a thick cable with red, blue, green male connectors. It is commonly seen on more expensive electronics, such as a progressive scan DVD player, HDTV receiver or gaming consoles. This cable format provides the best analog video signal possible. *Also known as YCbCr, YPbPr or RGB.*

Composite Video - transmits the video signal components (brightness and color) through one signal on a single cable, typically represented as a thin black cable with a yellow male connector. It is the most common video format found on current consumer devices, such as VCRs, DVD players, televisions. It does provide a low quality signal, which can be seen as static, fuzzy picture and dull colors. *Also known as RCA.*

DLP - abbreviation for Digital Light Processing. This technology was developed by Texas Instruments. It is one of the most common display technologies in the projection and television industry. By combining a color wheel, light source, mirrors and optics, a large, fluid and sharp image can be projected. The benefits compared to other display technologies are the good color depth and contrast, no burn-in, no screen-door effect and more compact than older technologies. DLP technology works great for movies and gaming.

DVD - abbreviation for Digital Versatile Disc or Digital Video Disc. DVD is an optical disc storage media format that can be used for data storage, including movies, games or large storage backup. DVD is the same size as a compact disc (CD), but can store up to 8.5 gigabytes of data compared to 700 megabytes of a compact disc. That is 12 times more storage.

DVI - abbreviation for Digital Visual Interface. A digital cable standard to transfer uncompressed digital content for video and computer devices. Higher quality and more signal bandwidth than the standard VESA cable standard.



DVR - abbreviation for Digital Video Recorder. A video recording device with the similar playback/recording features of a VCR, but stores it digitally onto a hard drive and has a higher storage capacity than a VCR. DVRs can store 100+ hours of standard tv programming, depending on the size of the internal hard drive. *Also known as a personal video recorder (PVR).*

Enhanced Definition (EDTV)- 480p or 576p video mode. It can be in full screen (4:3) or widescreen (16:9) format. HDTV, satellite, gaming consoles and progressive DVD players will output in this video mode. Enhanced definition will have a smoother image than standard definition.

High Definition (HDTV) - a higher resolution than standard definition and enhanced definition. Typically, High Definition refers to high definition television (HDTV) video, which is 720p, 1080i or 1080p and in widescreen (16:9) format. In contrast, standard definition (SDTV) is 480p and in fullscreen (4:3) format. The benefits are realistic colors, more detail, smoother picture and increased clarity. *Also known as HD.*

HDCP - abbreviation for High-bandwidth Digital Content Protection. HDCP is used with digital content over DVI and HDMI cables to prevent unauthorized duplication of copyrighted material.

HDMI - digital cable standard that transfers uncompressed digital content with HDCP copy protection and up to 8 audio streams. As far as video quality and resolution, it is the same as DVI. Two major benefits of HDMI over DVI are that the cable/connector are significantly smaller and HDMI has longer cable lengths.

Interlaced - one method of improving the quality of images in video. Interlace would draw a video frame in two passes; even lines followed with odd lines. Even though it has less flicker than progressive video, it does result in a lower video quality by having jagged edges. Lower end equipment will output in this format, such as a DVR, DVD player, VCR and standard cable boxes. Composite and s-video cable formats only support interlaced signals.

NTSC - abbreviation for National Television System Committee. In 1953, the NTSC created the NTSC television broadcast system. The NTSC standard has 525 horizontal lines stacked on top of each other. There are 59.94 fields displayed per a second. A field is a set of even or odd lines. One full frame is made up of these odd and even lines. *(Also known as 480i)*

Progressive - second method of improving the quality of images in a video. It will draw a video frame in one pass; all lines from top to bottom. This method was created to give a smoother and higher video quality. Progressive-scan DVD players, gaming consoles and HDTV receivers will output a progressive signal. Component, DVI and HDMI support progressive.

S-Video - abbreviation for Separate Video. The S-Video transmits the video signal components (brightness and color) on two separate signals on a single cable, typically represented as a thin black cable with a black 4-pin male connector. It is commonly seen on DVD players, cable boxes and digital recorders. It does provide a marginally higher quality image than composite video with better colors and sharper image. *Also known as Y/C video or svideo.*

Standard Definition (SDTV)- has 480 or 576 horizontal lines and is in full screen (4:3) format. It is the most common video format in TV broadcasts. It has lower quality video and sound compared to EDTV and HDTV. If you have a common CRT tube TV, it will only support standard definition. Projectors support SDTV, EDTV and HDTV video formats. *Also known as SD or SDTV.*

Stereo sound - audio stream that has 2 discrete audio channels (left and right). This is the most popular standard for music and movies.

Surround Sound - audio stream that can be broadcast through more than 2 discrete channels. This is to provide a more realistic audio environment for home theater, gaming and music listening. 5.1 DTS and Dolby Surround Sound are the most common formats. Most movies are recorded in 5.1 surround sound. Some music albums can be found in surround sound, but they are more commonly found in stereo. In order to receive surround sound, you must have an audio receiver and speaker system that supports it.

VESA - abbreviation for Video Electronics Standards Association. A consortium of video and monitor manufacturers to standardize video protocols. It is commonly used to describe the 15-pin analog VGA connector, which is popular on computers, monitors and projectors.

VGA - abbreviation for Video Graphics Array. It is commonly used to describe the 15-pin analog monitor connector, which is popular on computers, monitors and projectors. In resolution terms, it is another way to represent 640 x 480 resolution.