

IN3138HD

User's Guide
Mode d'emploi
Benutzeranleitung
Guía del usuario

Guia do Usuário
用戶指南
用戶指南
Руководство по пользователю



Regulatory Model: IN3138HD
3534324300
DISPERINDAG No. 0287/1.824.51/09.03

InFocus
The New Way to Collaborate

Copyright

This publication, including all photographs, illustrations and software, is protected under international copyright laws, with all rights reserved. Neither this manual, nor any of the material contained herein, may be reproduced without written consent of the author.

© Copyright 2013

Disclaimer

The information in this document is subject to change without notice. The manufacturer makes no representations or warranties with respect to the contents hereof and specifically disclaims any implied warranties of merchantability or fitness for any particular purpose. The manufacturer reserves the right to revise this publication and to make changes from time to time in the content hereof without obligation of the manufacturer to notify any person of such revision or changes.

Trademark Recognition



Kensington is a U.S. registered trademark of ACCO Brand Corporation with issued registrations and pending applications in other countries throughout the world.



HDMI, the HDMI Logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

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

All other product names used in this manual are the properties of their respective owners and are acknowledged.

Important Safety Information

Important:

It is strongly recommended that you read this section carefully before using the projector. These safety and usage instructions will ensure that you enjoy many years of safe use of the projector. Keep this manual for future reference.

Symbols Used

Warning symbols are used on the unit and in this manual to alert you of hazardous situations.

The following styles are used in this manual to alert you to important information.

Note:

Provides additional information on the topic at hand.

Important:

Provides additional information that should not be overlooked.

Caution:

Alerts you to situations that may damage the unit.

Warning:

Alerts you to situations that may damage the unit, create a hazardous environment, or cause personal injury.

Throughout this manual, component parts and items in the OSD menus are denoted in bold font as in this example:

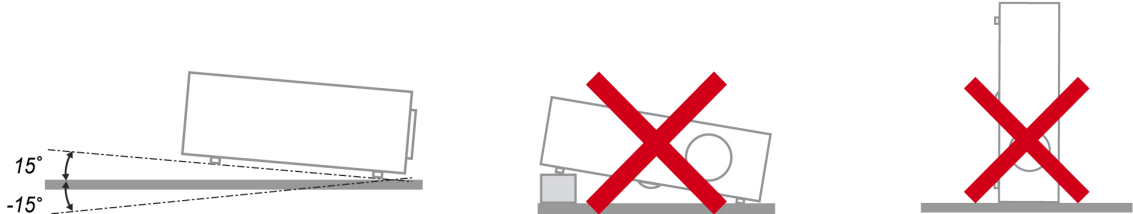
“Push the **Menu** button on the remote control to open the **Main** menu.”

General Safety Information

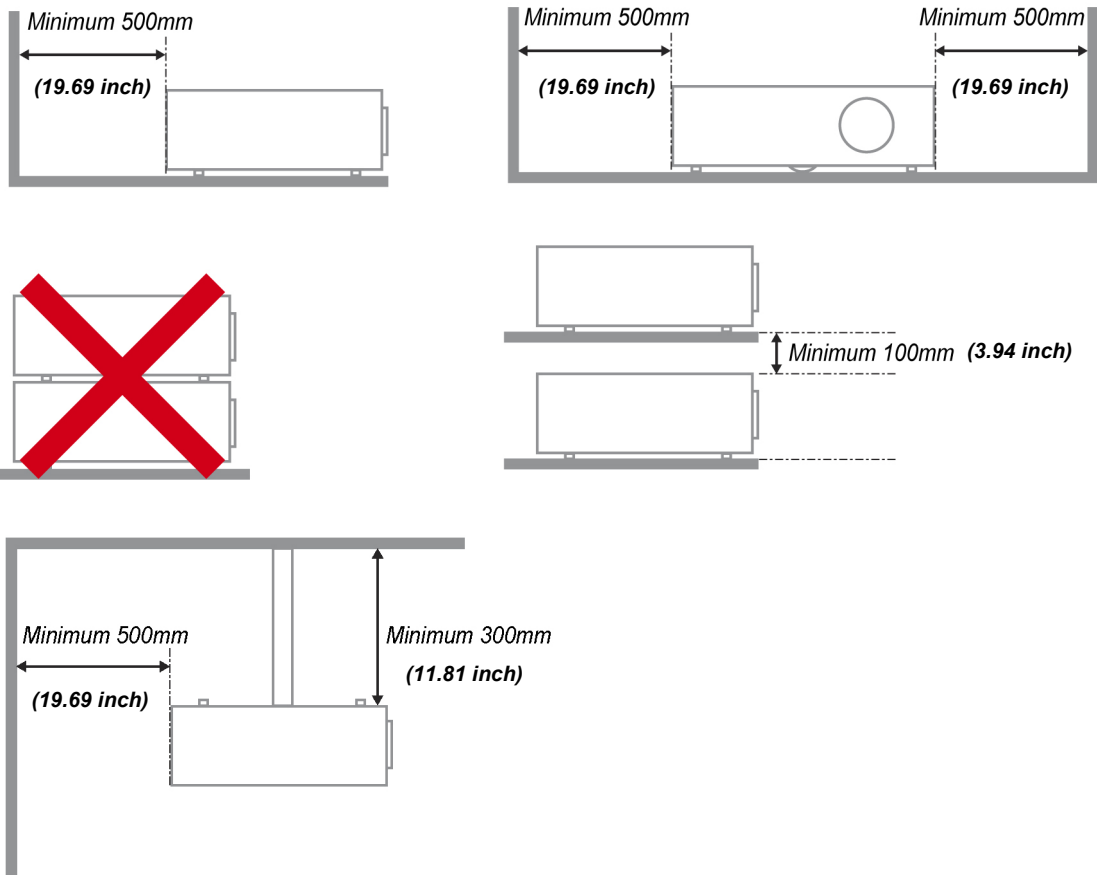
- Do not open the unit case. Aside from the projection lamp, there are no user-serviceable parts in the unit. For servicing, contact qualified service personnel.
- Follow all warnings and cautions in this manual and on the unit case.
- The projection lamp is extremely bright by design. To avoid damage to eyes, do not look into the lens when the lamp is on.
- Do not place the unit on an unstable surface, cart, or stand.
- Avoid using the system near water, in direct sunlight, or near a heating device.
- Do not place heavy objects such as books or bags on the unit.

Projector Installation Notice

- Place the projector in a horizontal position
The tilt angle of the projector should not exceed 15 degrees. In addition, the projector should not be installed in any other way except desktop and ceiling mount positions. Otherwise lamp life could decrease dramatically, and may lead to other **unpredictable damage**.



- Allow at least 50 cm (16.69 inch) clearance around the exhaust vent.



- Ensure that the intake vents do not recycle hot air from the exhaust vent.
- When operating the projector in an enclosed space, ensure that the surrounding air temperature within the enclosure does not exceed operation temperature while the projector is running, and the air intake and exhaust vents are unobstructed.
- All enclosures should pass a certified thermal evaluation to ensure that the projector does not recycle exhaust air, as this may cause the device to shutdown even if the enclosure temperature is within the acceptable operation temperature range.

Power Safety

- Only use the supplied power cord.
- Do not place anything on the power cord. Place the power cord where it will not be in the way of foot traffic.
- Remove the batteries from the remote control when storing or not in use for a prolonged period.

Replacing the Lamp

Replacing the lamp can be hazardous if done incorrectly. See *Replacing the Projection Lamp* on page 41 for clear and safe instructions for this procedure. Before replacing the lamp:

- Unplug the power cord.
- Allow the lamp to cool for about one hour.

Cleaning the Projector

- Unplug the power cord before cleaning. See *Cleaning the Projector* page 44.
- Allow the lamp to cool for about one hour.

Regulatory Warnings

Before installing and using the projector, read the regulatory notices in the *Regulatory Compliance* on page 56.

Important Recycle Instructions:



Lamp(s) inside this product contain mercury. This product may contain other electronic waste that can be hazardous if not disposed of properly. Recycle or dispose in accordance with local, state, or federal Laws. For more information, contact the Electronic Industries Alliance at WWW.EIAE.ORG. For lamp specific disposal information check WWW.LAMPRECYCLE.ORG.

Symbol Explanations



DISPOSAL: Do not use household or municipal waste collection services for disposal of electrical and electronic equipment. EU countries require the use of separate recycling collection services.



About this Manual

This manual is intended for end users and describes how to install and operate the DLP projector. Wherever possible, relevant information—such as an illustration and its description—has been kept on one page. This printer-friendly format is both for your convenience and to help save paper, thereby protecting the environment. It is suggested that you only print sections that are relevant to your needs.

Table of Contents

GETTING STARTED.....	1
PACKING CHECKLIST	1
VIEWS OF PROJECTOR PARTS.....	2
<i>Front-right View</i>	2
<i>Top view—On-screen Display (OSD) buttons and LEDs</i>	3
<i>Rear view</i>	4
<i>Bottom view</i>	6
REMOTE CONTROL PARTS	7
REMOTE CONTROL OPERATING RANGE.....	8
PROJECTOR AND REMOTE CONTROL BUTTONS.....	8
SETUP AND OPERATION.....	9
INSERTING THE REMOTE CONTROL BATTERIES	9
TURNING THE PROJECTOR ON AND OFF	10
SETTING AN ACCESS PASSWORD (SECURITY LOCK)	12
ADJUSTING THE PROJECTOR LEVEL.....	14
ADJUSTING THE ZOOM, FOCUS AND KEYSTONE	15
ADJUSTING THE VOLUME	15
ON-SCREEN DISPLAY (OSD) MENU SETTINGS	16
OSD MENU CONTROLS	16
<i>Navigating the OSD</i>	16
SETTING THE OSD LANGUAGE	17
OSD MENU OVERVIEW	18
IMAGE MENU.....	19
<i>Computer Menu</i>	20
<i>Advanced Features</i>	21
<i>Color Manager</i>	22
SETTINGS 1 MENU	23
<i>Audio</i>	24
<i>Advanced 1 Features</i>	25
<i>Advanced 2 Features</i>	27
SETTINGS 2 MENU	28
<i>Status</i>	29
<i>Advanced 1 Features</i>	30
<i>Advanced 2 Features</i>	39
MAINTENANCE AND SECURITY	41
REPLACING THE PROJECTION LAMP.....	41
<i>Resetting the Lamp Timer</i>	43
CLEANING THE PROJECTOR.....	44
<i>Cleaning the Lens</i>	44
<i>Cleaning the Case</i>	44
USING THE CABLE LOCK SYSTEM AND SECURITY BAR	45
<i>Using the Cable Lock</i>	45
<i>Using the Security Bar</i>	45
TROUBLESHOOTING	46
COMMON PROBLEMS AND SOLUTIONS	46
TIPS FOR TROUBLESHOOTING	46
LED ERROR MESSAGES.....	47
IMAGE PROBLEMS.....	48
LAMP PROBLEMS	48
REMOTE CONTROL PROBLEMS	49
AUDIO PROBLEMS	49
HAVING THE PROJECTOR SERVICED	49
HDMI Q & A	50

SPECIFICATIONS..... 51

 SPECIFICATIONS..... 51

 PROJECTION DISTANCE VS. PROJECTION SIZE..... 52

Projection Distance and Size Table..... 52

 TIMING MODE TABLE..... 53

 PROJECTOR DIMENSIONS..... 55

REGULATORY COMPLIANCE..... 56

 FCC WARNING..... 56

 CANADA..... 56

 SAFETY CERTIFICATIONS..... 56

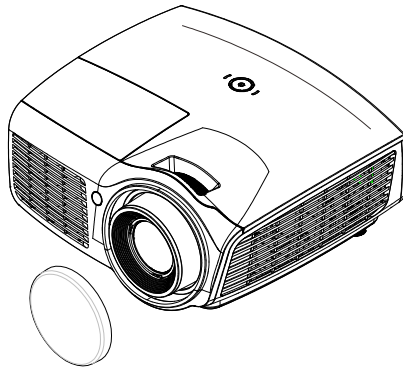
APPENDIX I..... 57

 SERIAL COMMUNICATION..... 57

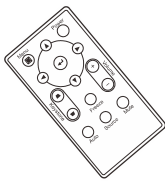
GETTING STARTED

Packing Checklist

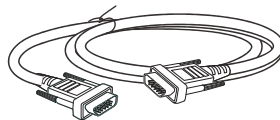
Carefully unpack the projector and check that the following items are included:



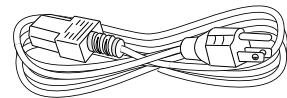
DLP PROJECTOR WITH LENS CAP



*REMOTE CONTROL
(BATTERIES NOT INCLUDED)*



VGA CABLE



POWER CORD



*CD-ROM
(THIS USER'S MANUAL)*



QUICK START GUIDE



WARRANTY CARD

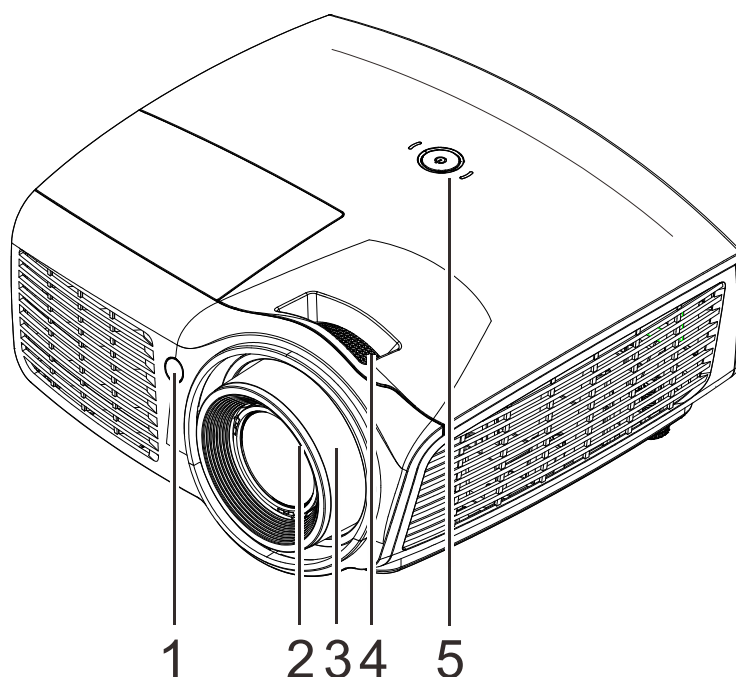
Contact your dealer immediately if any items are missing, appear damaged, or if the unit does not work. It is recommended that you keep the original packing material in case you ever need to return the equipment for warranty service.

Caution:

Do not place the project in direct sunlight, humid, greasy or dusty places or in places where the projector may come into contact with smoke or steam.

Views of Projector Parts

Front-right View

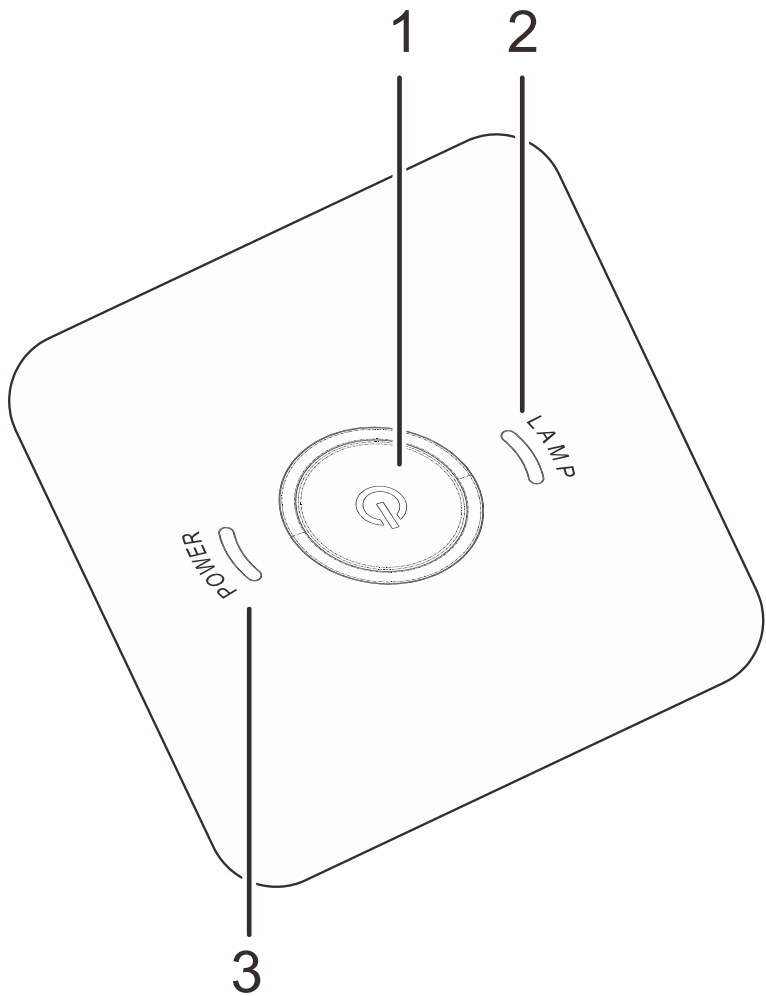



ITEM	LABEL	DESCRIPTION	SEE PAGE
1.	IR receiver	Receive IR signal from remote control	
2.	Lens	Projection Lens	
3.	Focus ring	Focuses the projected image	15
4.	Zoom ring	Enlarges the projected image	
5.	Function keys	See Top view—On-screen Display (OSD) buttons and LEDs.	3

Important:

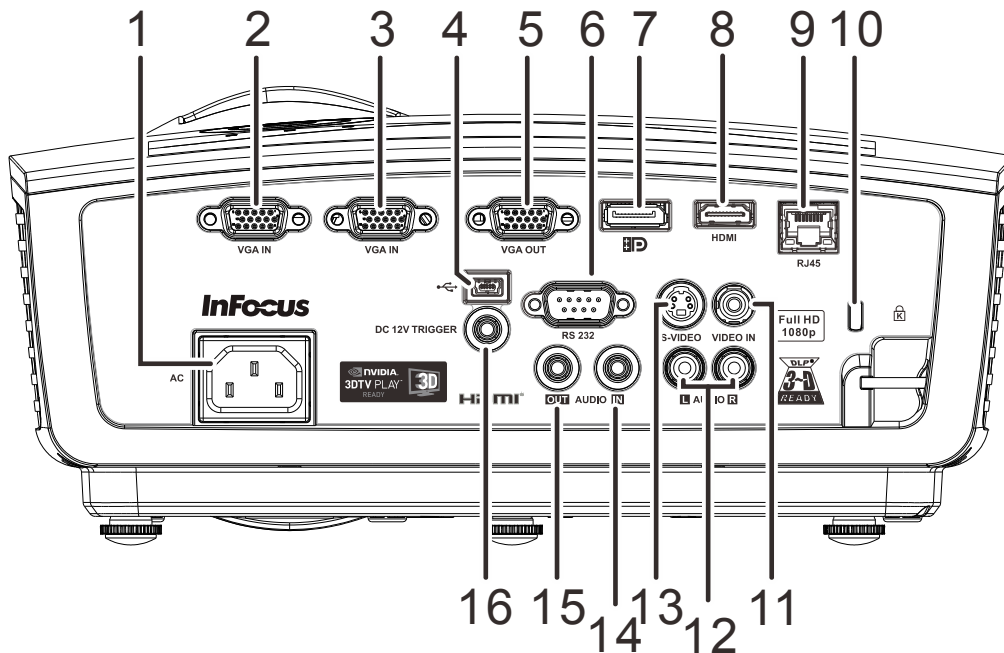
Do not block ventilation openings. Locate the projector in a well-ventilated area without obstructions to intake or exhaust vents. Do not place the projector on a tablecloth or other soft covering that may block the vents. Ventilation openings on the projector allow for good air circulation.


Top view—On-screen Display (OSD) buttons and LEDs



ITEM	LABEL	DESCRIPTION		SEE PAGE
1.		Turns the projector On and Off		
2.	LAMP LED	Blinking Red	Error code	47
3.	POWER LED	Blue	Lamp On	
		Blinking Blue	Powering up, powering down or error code	

Rear view



ITEM	LABEL	DESCRIPTION	SEE PAGE
1.	AC IN	Connect a POWER cable	10
2.	VGA IN	Connect a RGB cable from a computer	
3.	VGA IN	Connect a RGB cable from a computer	
4.	 (USB)	Service use only.	
5.	VGA OUT	Connect a RGB cable to an external monitor/display	
6.	RS-232C	Connect a RS-232 serial port cable for remote control	
7.	DP	Connect a DISPLAYPORT CABLE to a DISPLAYPORT device	
8.	HDMI	Connect an HDMI cable from a HDMI device	
9.	RJ45	Connect a LAN cable from Ethernet	
10.	Kensington Lock	Secure to a permanent object with a Kensington® Lock system	45
11.	VIDEO IN	Connect a COMPOSITE cable from a video device	
12.	AUDIO IN (L and R)	Connect an AUDIO cable from an audio device	
13.	S-VIDEO	Connect a S-VIDEO cable from a video device	
14.	AUDIO IN	Connect an AUDIO cable from an audio device	
15.	AUDIO OUT	Connect an AUDIO cable to an audio amplifier	
16.	DC 12V TRIGGER	When connected to the screen through a commercially available cable, the screen deploys automatically on start up of the projector. The screen retracts when the projector is powered off (see notes on next page).	

DC12V Trigger Note:

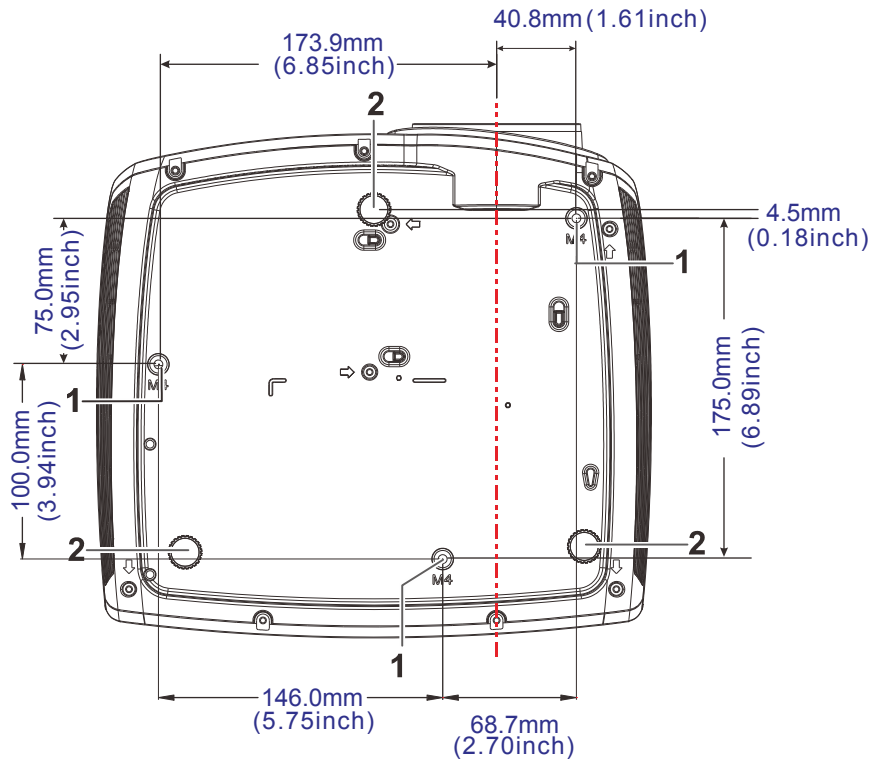
- *To use this feature, you must plug in the connector before turn on/off the projector.*
- *Screen controllers are supplied and supported by screen manufacturers.*
- *Do not use this jack for anything other than intended use.*

Connectivity Note:

If your video equipment has multiple connection options, please note that HDMI provides the highest quality image, followed by Component and then S-video. Composite provides the least quality image.

Warning:

As a safety precaution, disconnect all power to the projector and connecting devices before making connections.

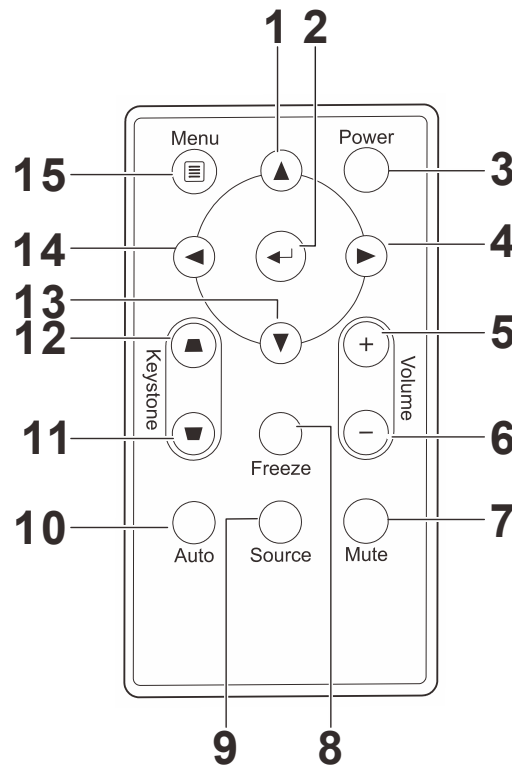
Bottom view

ITEM	LABEL	DESCRIPTION	SEE PAGE
1.	Ceiling support holes	Contact your dealer for information on mounting the projector on a ceiling	
2.	Tilt adjuster	Rotate adjuster lever to adjust angle position.	14

Note:

If you are installing the projector on the ceiling, we strongly recommend using InFocus approved ceiling mounts for proper fitting, ventilation and installation. Refer to the installation guide that comes with the InFocus Ceiling Mount kit for more information. The warranty does not cover any damage caused by use of non-approved ceiling mount kits or by installing in an improper location.

Remote Control Parts



Important:

1. Avoid using the projector with bright fluorescent lighting turned on. Certain high-frequency fluorescent lights can disrupt remote control operation.

2. Be sure nothing obstructs the path between the remote control and the projector. If the path between the remote control and the projector is obstructed, you can bounce the signal off certain reflective surfaces such as projector screens.

3. The buttons and keys on the projector have the same functions as the corresponding buttons on the remote control. This user's manual describes the functions based on the remote control.

ITEM	LABEL	DESCRIPTION	SEE PAGE:
1.	Up	Navigates up and changes settings in the OSD	16
2.	Enter	Changes settings in the OSD	
3.	Power	Turns the projector on or off	10
4.	Right	Navigates to the right and changes settings in the OSD	
5.	Volume +	Increases volume	15
6.	Volume -	Decreases volume	
7.	Mute	Mutes the built-in speaker	
8.	Freeze	Freeze/unfreezes the on-screen picture	
9.	Source	Selects the input device	
10.	Auto	Auto adjustment for frequency, tracking, size, position (RGB only)	
11.	Keystone top	Corrects keystone of the image (when it is wider on top)	15
12.	Keystone bottom	Corrects keystone of the image (when it is wider on the bottom)	
13.	Down	Navigates down and changes settings in the OSD	16
14.	Left	Navigates to the left and changes settings in the OSD	
15.	Menu	Opens and exits the OSD	

Remote Control Operating Range

The remote control uses infrared transmission to control the projector. It is not necessary to point the remote directly at the projector. Provided you are not holding the remote perpendicular to the sides or the rear of the projector, the remote will function well within a radius of about 7 meters (23 feet) and 15 degrees above or below the projector level. If the projector does not respond to the remote control, move a little closer.

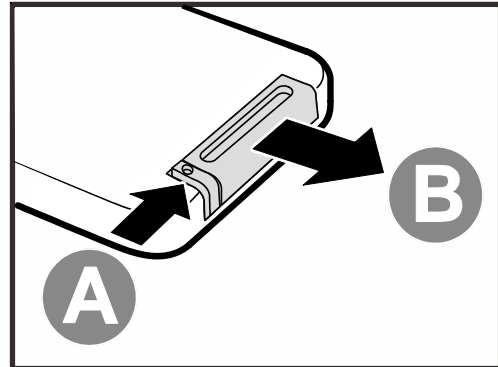
Projector and Remote Control Buttons

The projector can be operated using the remote control. All operations can be carried out with the remote control.

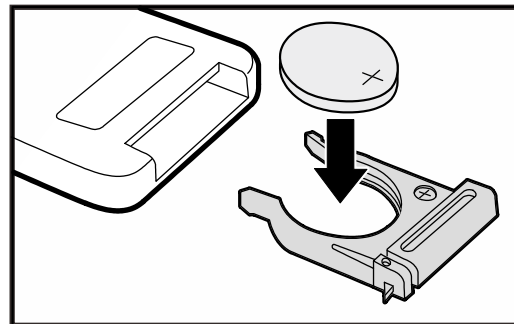
SETUP AND OPERATION

Inserting the Remote Control Batteries

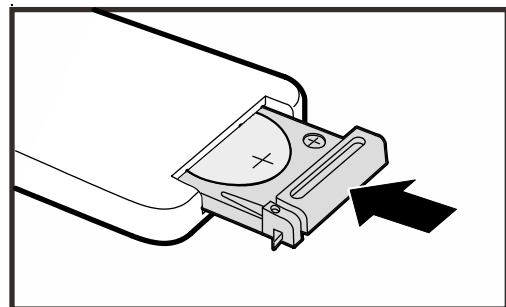
1. Remove the battery compartment cover by sliding the cover in the direction of the arrow (A). Pull out the cover (B).



2. Insert the battery with the positive side facing up.



3. Replace the cover.

**Caution:**

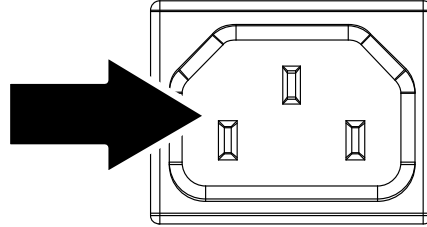
1. Only use a 3V lithium battery (CR2025).
2. Dispose of used batteries according to local ordinance regulations.
3. Remove the batteries when not using the projector for prolonged periods.

Note:

Batteries are not normally included with InFocus projectors.

Turning the projector on and off

1. Connect the power cord to the projector. Connect the other end to a wall outlet.
The **POWER** LED on the projector light.



2. Turn on the connected devices.

3. Ensure the **POWER** LED is not flashing. Then press the **POWER** button to turn on the projector.

The projector splash screen displays and connected devices are detected.

See *Setting an Access Password (Security Lock)* on page 12 if the security lock is enabled.

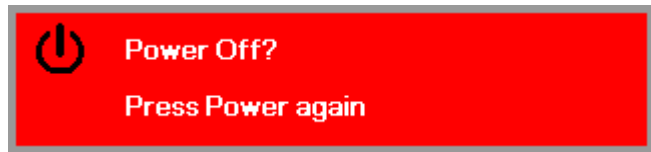


4. If more than one input device is connected, press the **SOURCE** button and use **▲▼** to scroll among the devices.
(Component is supported using a RGB to COMPONENT ADAPTER.)



- HDMI: High-Definition Multimedia Interface
- DP: DisplayPort
- VGA1 / VGA2: Analog RGB1 / RGB2
- S-Video: Super video (Y/C separated)
- Composite Video: Traditional composite video

- 5.** To turn the projector off, press the POWER button. When the “Power Off? Press **Power** again” message appears, press the **POWER** button. The projector turns off.



Caution:

- 1. Be sure to remove the lens cap before starting projector.*
- 2. Do not unplug the power cord until the POWER LED stops flashing—indicating the projector has cooled down.*

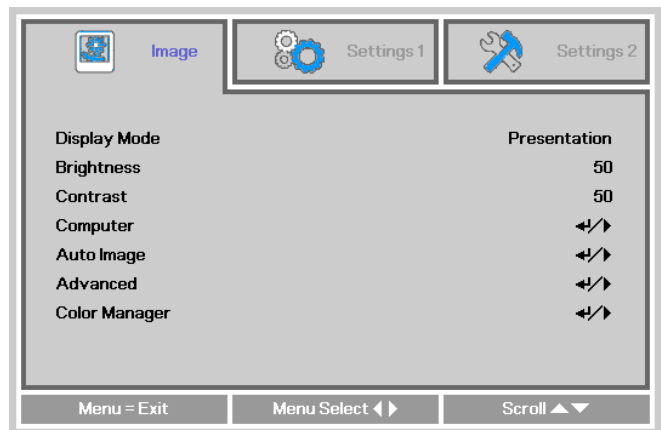
Setting an Access Password (Security Lock)

You can use the four arrow buttons on the remote to set a password and prevent unauthorized use of the projector. When enabled, the password must be entered after you power on the projector. (See *Navigating the OSD* on page 16 and *Setting the OSD Language* on page 17 for help on using OSD menus.)

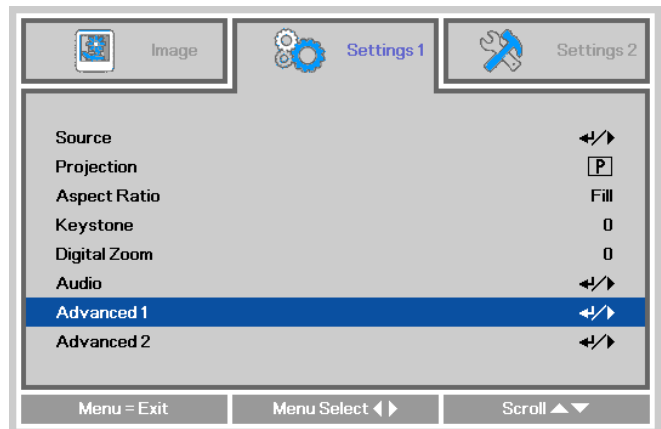
Important:

Keep the password in a safe place. Without the password, you will not be able to use the projector. If you lose the password, contact InFocus Support for information on clearing the password.

1. Press the **MENU** button to open the OSD menu.

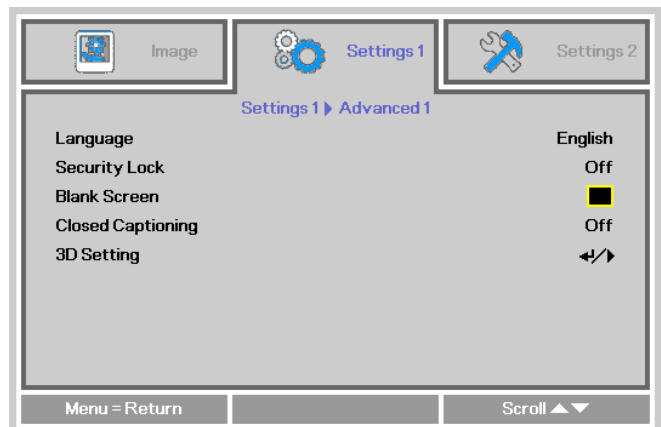


2. Press the <> buttons to move to the **Settings 1** menu. Press the <> buttons to select **Advanced 1**.



3. Press < (Enter) or > to enter the **Advanced 1** sub menu. Press the <> buttons to select **Security Lock**.
4. Press the <> buttons to enter and enable or disable security lock function.

A password dialog box automatically appears.



5. You can use the arrow buttons
▲▼◀▶
either on keypad or IR remote control
for password entry. You can use any
combination including the same arrow
five times, but five characters must be
used..

Press the arrow buttons in any order to
set the password. Push the **MENU**
button to exit the dialog box.

The screenshot shows a dialog box titled "Password". It contains two rows of input fields: "Register Password" and "Confirm Password". Each row has five empty square boxes for character entry. At the bottom, there is a button labeled "Menu = Exit".

The screenshot shows the same "Password" dialog box, but now the input fields are filled with asterisks (*). The "Register Password" row has five asterisks, and the "Confirm Password" row has five asterisks. The "Menu = Exit" button remains at the bottom.

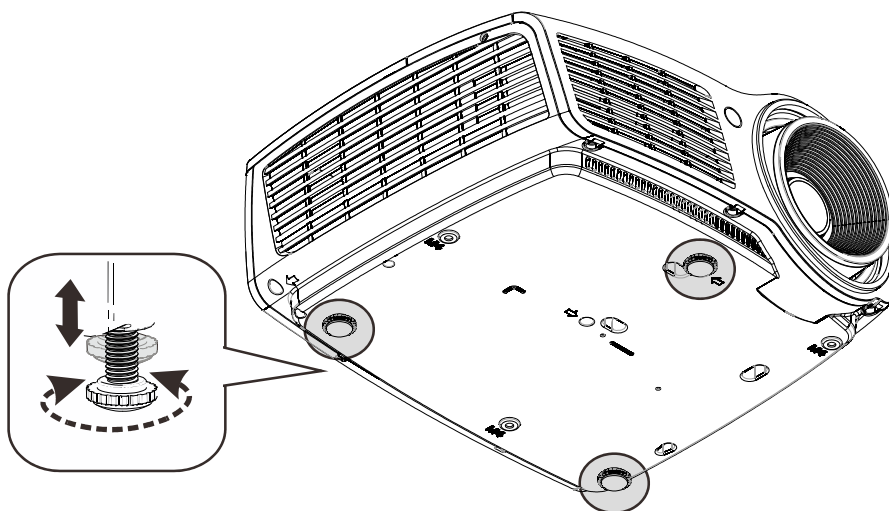
6. If the **Security Lock** is enabled, the
user will be prompted to enter a
password when the projector's power
button is pressed.
Enter the password in the order you
set it on step 5. If you forget the
password, please contact InFocus.
Visit our website at
www.infocus.com/support or call us.

The screenshot shows a dialog box titled "Password". It contains a single row of five input fields, each with an asterisk (*). At the bottom, there is a button labeled "Menu = Cancel".

Adjusting the Projector Level

Take note of the following when setting up the projector:

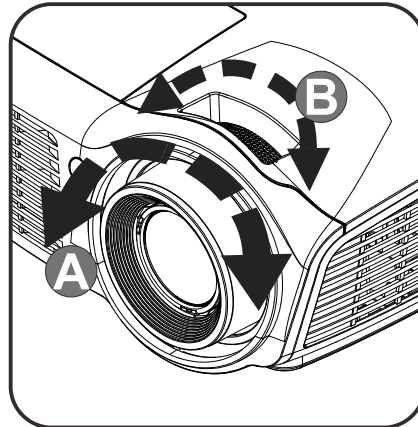
- *The projector table or stand should be level and sturdy.*
- *Position the projector so that it is perpendicular to the screen.*
- *Ensure the cables are in a safe location. You could trip over them.*



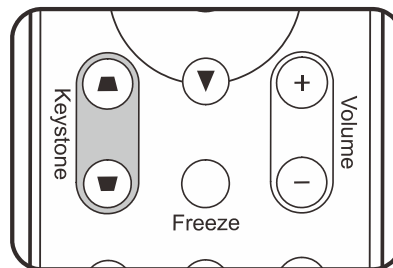
To adjust the angle of the picture, turn the tilt-adjuster right or left until the desired angle has been achieved.

Adjusting the Zoom, Focus and Keystone

1. Use the **Image-zoom** control (on the projector only) to resize the projected image and screen size **B**.
2. Use the **Image-focus** control (on the projector only) to sharpen the projected image **A**.



3. Use the **KEYSTONE** buttons on the remote control to correct trapezoid image issues (wider top or bottom).

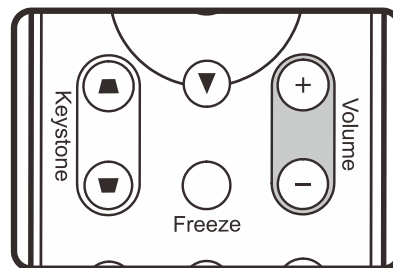


4. The keystone control appears on the display.



Adjusting the Volume

1. Press the **Volume +/-** buttons on the remote control. The volume control appears on the display.



2. Press the **MUTE** button on the remote control to turn off the volume.



ON-SCREEN DISPLAY (OSD) MENU SETTINGS

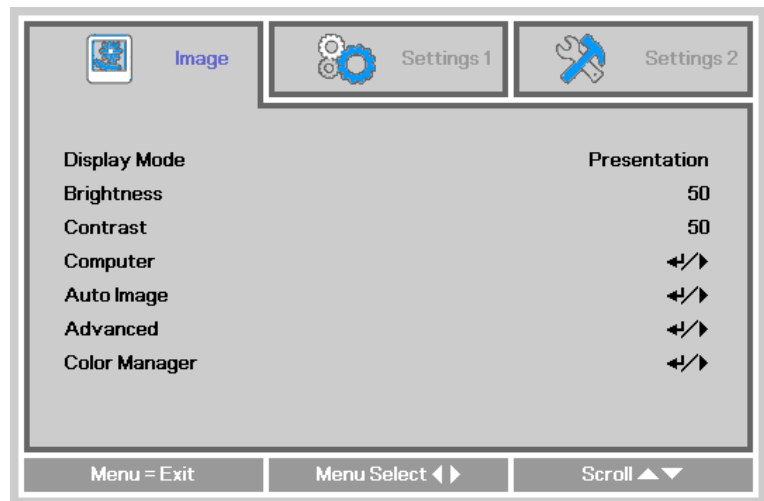
OSD Menu Controls

The projector has an OSD that lets you make image adjustments and change various settings.

Navigating the OSD

You can use the remote control arrow buttons to navigate and make changes to the OSD.

1. To enter the OSD, press the **MENU** button.
2. There are three menus. Press the ◀▶ buttons to move through the menus.
3. Press the ▲▼ buttons to move up and down in a menu.
4. Press the ◀▶ buttons to change setting values.
5. Press the **MENU** button to close the OSD or leave a submenu.



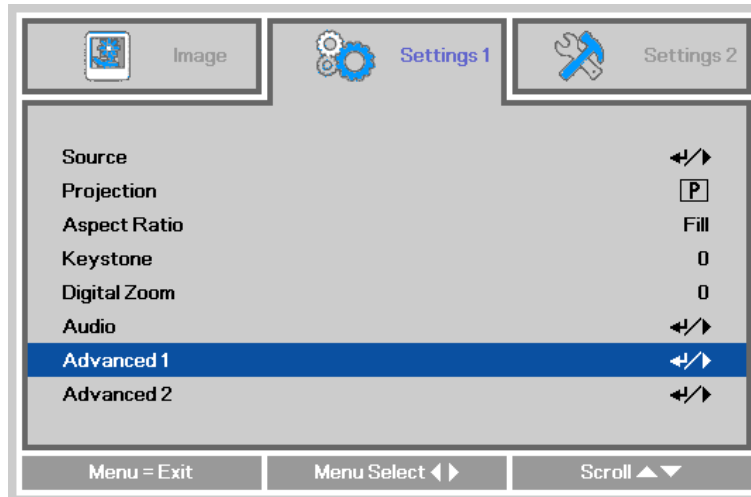
Note:

Depending on the video source, not all items in the OSD are available. For example, the **Horizontal/Vertical Position** items in the **Computer** menu can only be modified when connected to a PC. Items that are not available cannot be accessed and are grayed out.

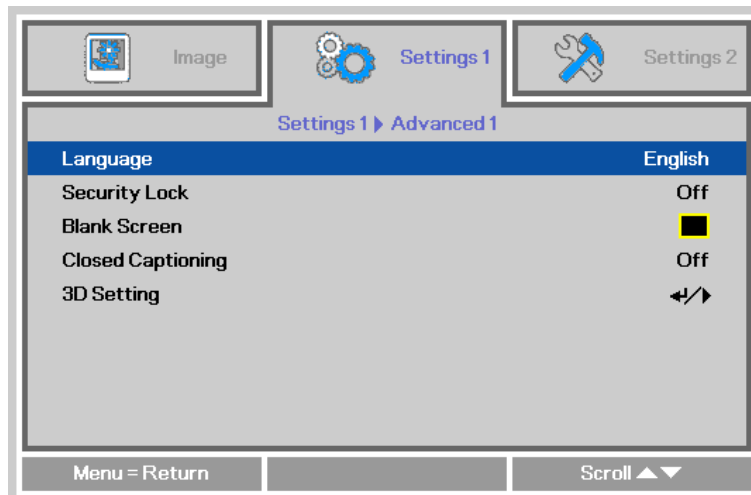
Setting the OSD Language

Set the OSD language to your preference before continuing.

1. Press the **MENU** button. Press the ◀▶ buttons to navigate to **Settings 1**. Press the ▲▼ buttons to move to the **Advanced 1** menu.



2. Press ◀ (Enter) or ▶ to enter the **Advanced 1** sub menu. Press the ▲▼ buttons until **Language** is highlighted.



3. Press the arrow buttons until the language you want is highlighted.
4. Press the **MENU** button four times to close the OSD.

OSD Menu Overview

Use the following illustration to quickly find a setting or determine the range for a setting.

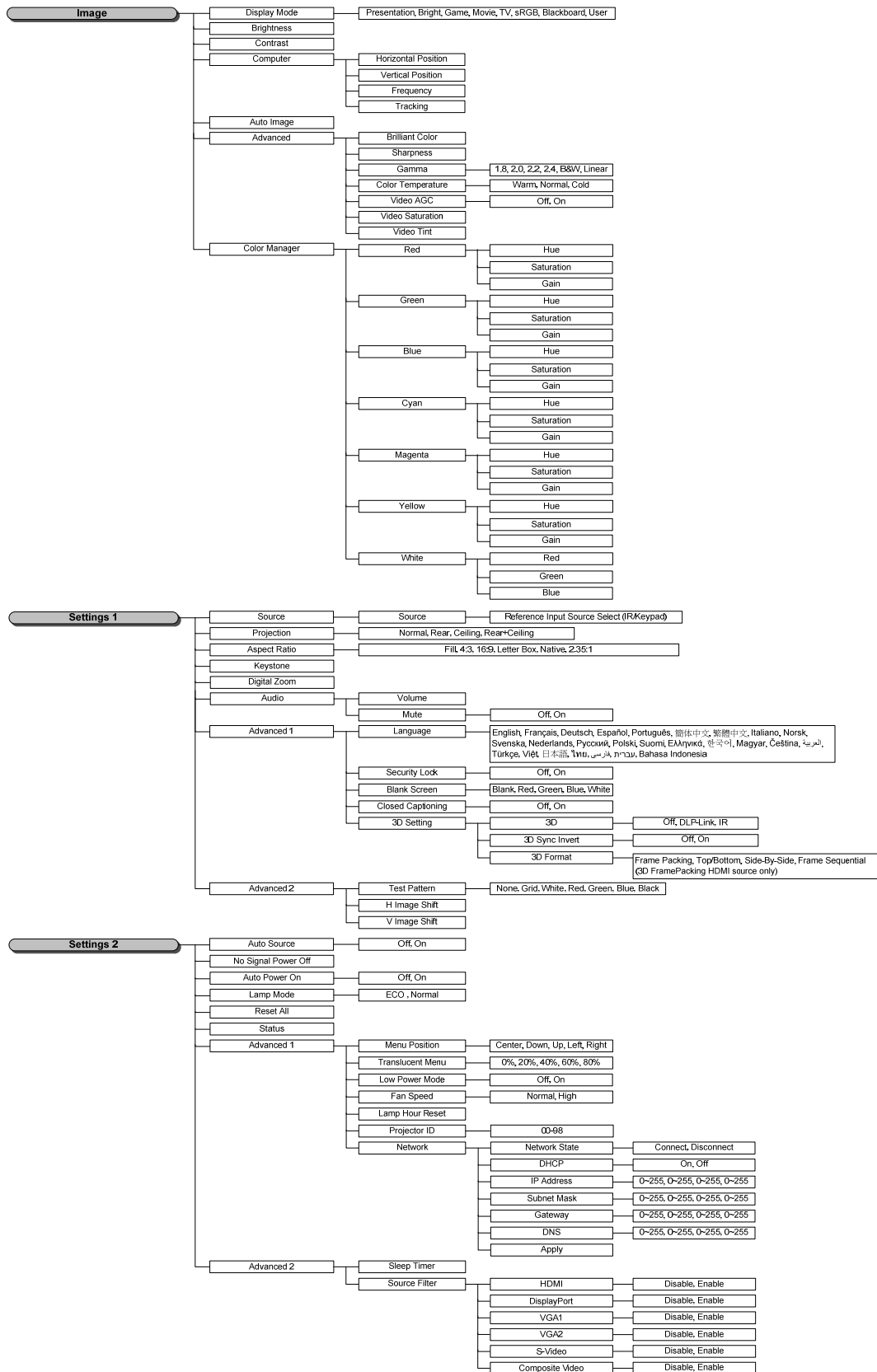
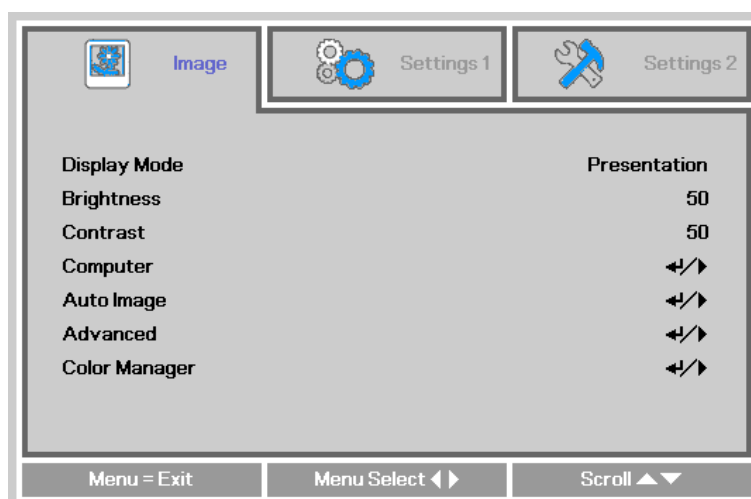


Image Menu

Attention !

When image options are changed, the Display Mode changes to User.

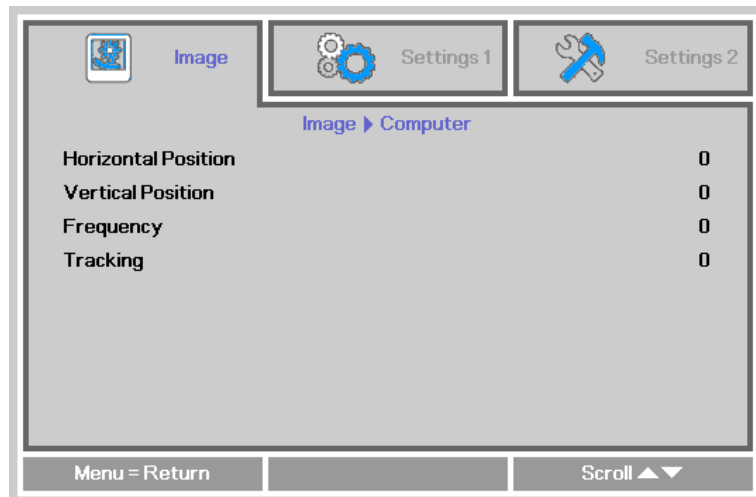
Press the **MENU** button to open the **OSD** menu. Press the ◀▶ buttons to move to the **Image Menu**. Press the ▲▼ buttons to move up and down in the **Image** menu. Press the ◀▶ buttons to enter and change setting values.



ITEM	DESCRIPTION
Display Mode	Press the ◀▶ buttons to enter and set the Display Mode. Note: Display Mode must be set to User in order to access the other Image menu items.
Brightness	Press the ◀▶ buttons to enter and adjust the display brightness.
Contrast	Press the ◀▶ buttons to enter and adjust the display contrast.
Computer	Press ◀ (Enter) or ▶ to enter the Computer menu. See <i>Computer Menu</i> on page 20.
Auto Image	Press ◀ (Enter) or ▶ to automatically adjustment for phase, tracking, size and position.
Advanced	Press ◀ (Enter) or ▶ to enter the Advanced menu. See <i>Advanced Feature</i> on page 21.
Color Manager	Press ◀ (Enter) or ▶ to enter the color manager menu. See page 22 for more information on <i>Color Manager</i> .

Computer Menu

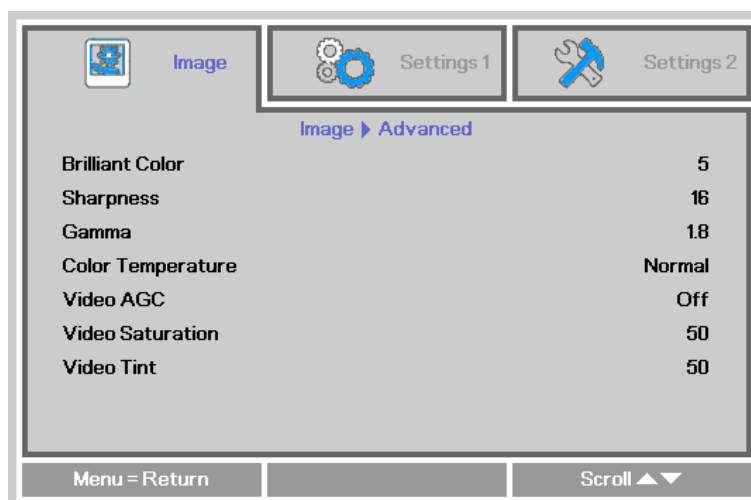
Press the **MENU** button to open the **OSD** menu. Press the ◀▶ buttons to move to the **Image** menu. Press the ▲▼ buttons to move to the **Computer** menu and then press ⏏ (Enter) or ▶. Press the ▲▼ buttons to move up and down in the **Computer** menu.



ITEM	DESCRIPTION
Horizontal Position	Press the ◀▶ buttons to enter and adjust the display position to left or right.
Vertical Position	Press the ◀▶ buttons to enter and adjust the display position to up or down.
Frequency	Press the ◀▶ buttons to enter and adjust the A/D sampling clock.
Tracking	Press the ◀▶ buttons to enter and adjust the A/D sampling dot.

Advanced Features

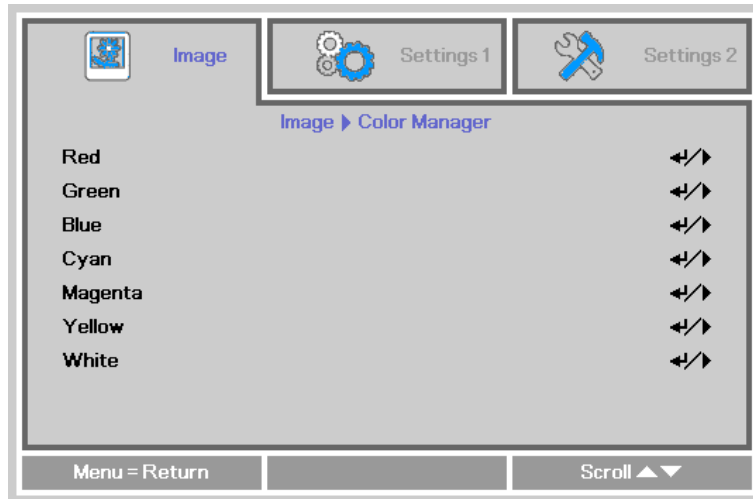
Press the **Menu** button to open the **OSD** menu. Press the ◀▶ buttons to move to the **Image** menu. Press the ▼▲ buttons to move to the **Advanced** menu and then press ◀ (Enter) or ▶. Press the ▼▲ buttons to move up and down in the **Advanced** menu.



ITEM	DESCRIPTION
Brilliant Color	Press the ◀▶ buttons to enter and adjust the Brilliant Color value.
Sharpness	Press the ◀▶ buttons to enter and adjust the display sharpness.
Gamma	Press the ◀▶ buttons to enter and adjust the gamma correction of the display.
Color Temperature	Press the ◀▶ buttons to enter and adjust the color temperature.
Video AGC	Press the ◀▶ buttons to enter and enable or disable the Automatic Gain Control for video source.
Video Saturation	Press the ◀▶ buttons to enter and adjust the video saturation.
Video Tint	Press the ◀▶ buttons to enter and adjust the video tint/hue.

Color Manager

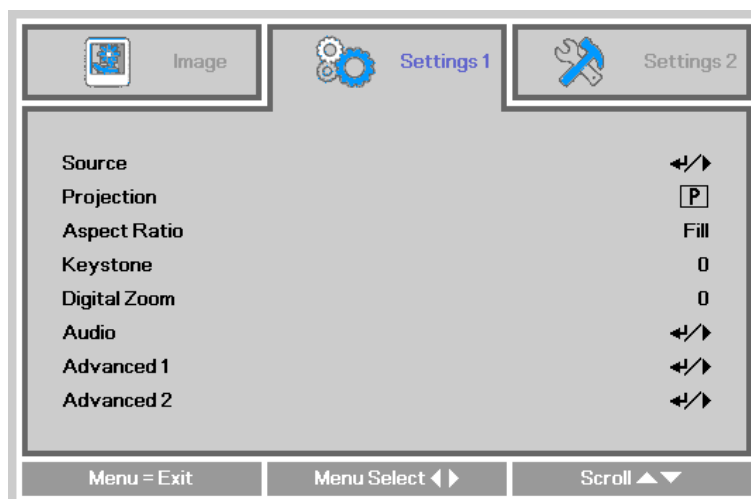
Press the **Menu** button to open the **OSD** menu. Press the ◀▶ buttons to move to the **Image** menu. Press the ▼▲ buttons to move to the **Color Manager** menu and then press ◀ (Enter) or ▶. Press the ▼▲ buttons to move up and down in the **Color Manager** menu.



ITEM	DESCRIPTION
Red	Select to enter the Red Color Manager. Press the ◀▶ buttons to adjust the Hue, Saturation, and Gain.
Green	Select to enter the Green Color Manager. Press the ◀▶ buttons to adjust the Hue, Saturation, and Gain.
Blue	Select to enter the Blue Color Manager. Press the ◀▶ buttons to adjust the Hue, Saturation, and Gain.
Cyan	Select to enter the Cyan Color Manager. Press the ◀▶ buttons to adjust the Hue, Saturation, and Gain.
Magenta	Select to enter the Magenta Color Manager. Press the ◀▶ buttons to adjust the Hue, Saturation, and Gain.
Yellow	Select to enter the Yellow Color Manager. Press the ◀▶ buttons to adjust the Hue, Saturation, and Gain.
White	Select to enter the White Color Manager. Press the ◀▶ buttons to adjust the Red, Green, and Blue.

Settings 1 Menu

Press the **MENU** button to open the **OSD** menu. Press the ◀▶ buttons to move to the **Settings 1** menu. Press the ▲▼ buttons to move up and down in the **Settings 1** menu. Press the ◀▶ buttons to enter and change setting values.



ITEM	DESCRIPTION
Source	Press the ◀▶ buttons to enter the Source and select a source.
Projection	Press the ◀▶ buttons to enter and choose from four projection methods.
Aspect Ratio	Press the ◀▶ buttons to enter and adjust the video aspect ratio.
Keystone	Press the ◀▶ buttons to enter and adjust the display keystone.
Digital Zoom	Press the ◀▶ buttons to enter and adjust the Digital Zoom menu.
Audio	Press ◀ (Enter) or ▶ to enter the Audio menu. See <i>Audio</i> on page 24.
Advanced 1	Press ◀ (Enter) or ▶ to enter the Advanced 1 menu. See <i>Advanced 1 Features</i> on page 25.
Advanced 2	Press ◀ (Enter) or ▶ to enter the Advanced 2 menu. See <i>Advanced 2 Features</i> on page 27.

Audio

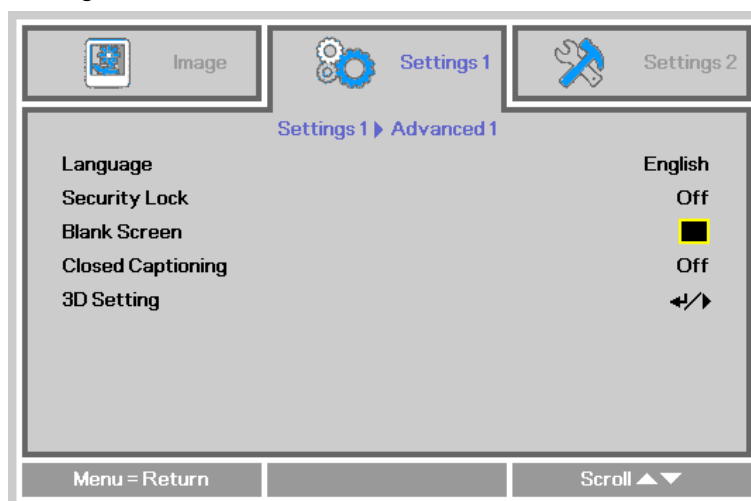
Press the **Menu** button to open the **OSD** menu. Press the ◀▶ buttons to move to the **Settings 1** menu. Press the ▼▲ buttons to move to the **Audio** menu and then press ⬅ (Enter) or ➡. Press the ▼▲ buttons to move up and down in the **Audio** menu.



ITEM	DESCRIPTION
Volume	Press the ◀▶ buttons to enter and adjust the audio volume.
Mute	Press the ◀▶ buttons to enter and turn on or off the speaker.

Advanced 1 Features

Press the **Menu** button to open the **OSD** menu. Press the ◀▶ buttons to move to the **Settings 1** menu. Press the ▲▼ buttons to move to the **Advanced 1** menu and then press ◀ (Enter) or ▶. Press the ▲▼ buttons to move up and down in the **Advanced 1** menu. Press the ◀▶ buttons to enter and change setting values.

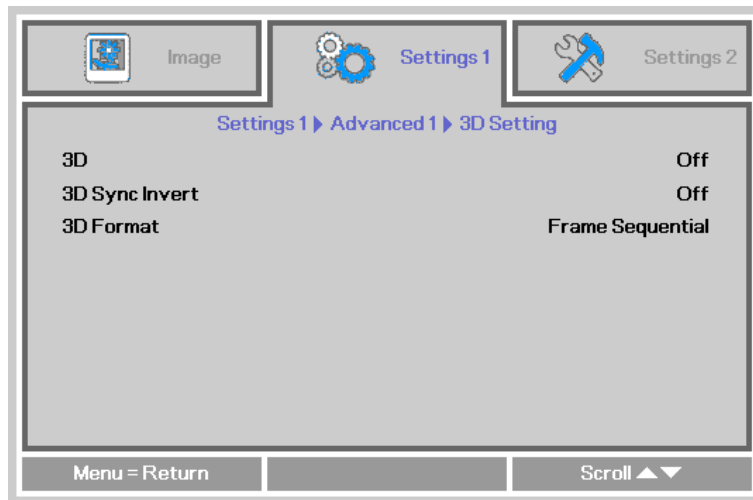


ITEM	DESCRIPTION
Language	Press the ◀▶ buttons to enter and select a different localization Menu.
Security Lock	Press the ◀▶ buttons to enter and enable or disable security lock function.
Blank Screen	Press the ◀▶ buttons to enter and select different color to blank the screen.
Closed Captioning	Press the ◀▶ buttons to enter and enable or disable Closed Captioning
3D Setting	Press ◀ (Enter) or ▶ to enter the 3D menu. See page 26 for more information on the 3D Setting.

Note:

To enjoy the 3D function, first enable the Play Movie in 3D setting found in your DVD device under the 3D Disc Menu.

3D Setting



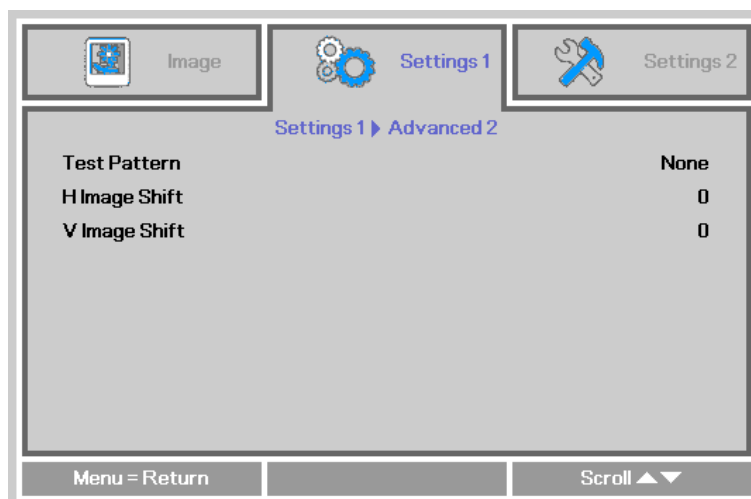
ITEM	DESCRIPTION
3D	Press the ◀▶ buttons to enter and select different 3D modes.
3D Sync Invert	Press the ◀▶ buttons to enter and enable or disable 3D Sync Invert.
3D Format	Press the ◀▶ buttons to enter and enable or disable different 3D Format.

Note:

1. By default, if no 3D source is detected, the 3D OSD menu items will not be available.
2. When the projector is connected to an appropriate 3D source, the 3D OSD menu items are available for selection.
3. Use 3D glasses to view a 3D image.
4. You need 3D content from a 3D DVD or 3D media file.
5. You need to enable the 3D source (some 3D DVD content may have a 3D on-off selection feature).
6. You need DLP link 3D glasses.
7. The OSD 3D mode needs to match the type of glasses (DLP link).
8. Power on the glasses. Glasses normally have a power on -off switch. Each type of glasses has their own configuration instructions. Please follow the configuration instructions that come with your glasses to finish the setup process.

Advanced 2 Features

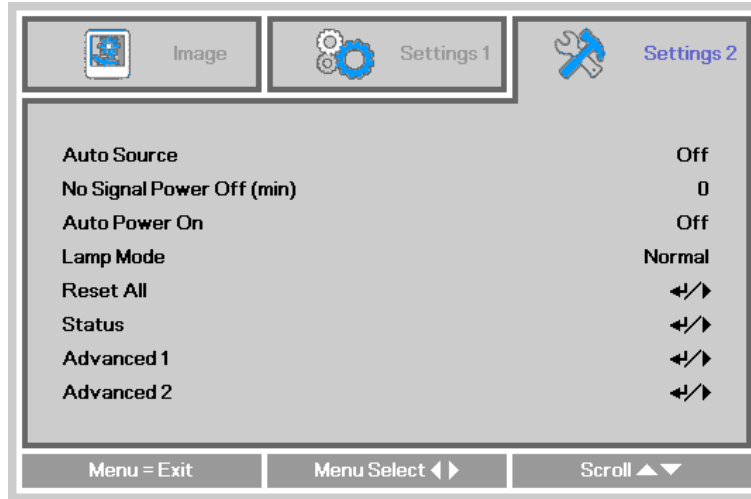
Press the **Menu** button to open the **OSD** menu. Press the ◀▶ buttons to move to the **Settings 1** menu. Press the ▲▼ buttons to move to the **Advanced 2** menu and then press ◀ (Enter) or ▶. Press the ▲▼ buttons to move up and down in the **Advanced 2** menu. Press the ◀▶ buttons to enter and change setting values.



ITEM	DESCRIPTION
Test Pattern	Press the ◀▶ buttons to enter and select internal test pattern.
H Image Shift	Press the ◀▶ buttons to enter and select H Image Shift.
V Image Shift	Press the ◀▶ buttons to enter and select V Image Shift.

Settings 2 Menu

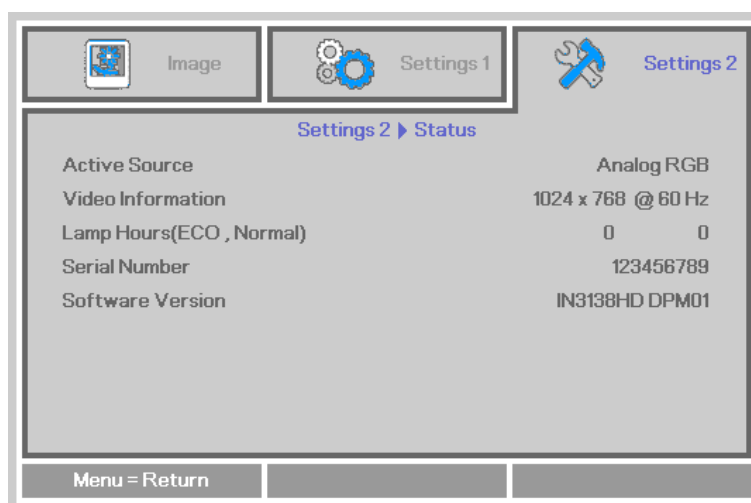
Press the **MENU** button to open the **OSD** menu. Press the ◀▶ buttons to move to the **Settings 2** menu. Press the ▲▼ buttons to move up and down in the **Settings 2** menu.



ITEM	DESCRIPTION
Auto Source	Press the ◀▶ buttons to enter and enable or disable automatic source detection.
No Signal Power Off (min.)	Press the ◀▶ buttons to enter and enable or disable automatic shutdown of lamp when no signal is detected.
Auto Power On	Press the ◀▶ buttons to enter and enable or disable automatic power On when AC power is supplied.
Lamp Mode	Press the ◀▶ buttons to enter and select the lamp mode for higher brightness or lower brightness to save lamp life.
Reset All	Press ◀ (Enter) or ▶ to reset all settings to default values.
Status	Press ◀ (Enter) or ▶ to enter the Status menu. See page 29 for more information on <i>Status</i> .
Advanced 1	Press ◀ (Enter) or ▶ to enter the Advanced 1 menu. See <i>Advanced 1 Features</i> on page 30.
Advanced 2	Press ◀ (Enter) or ▶ to enter the Advanced 2 menu. See <i>Advanced 2 Features</i> on page 39.

Status

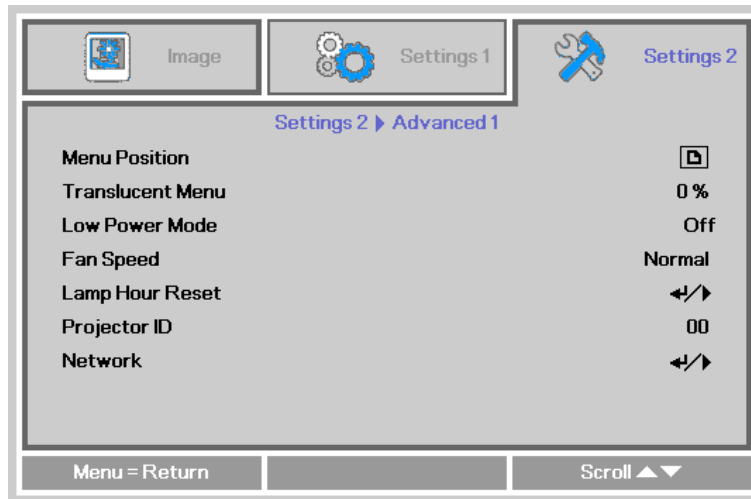
Press the ▲▼ buttons to move up and down in the **Settings 2** menu. Select the **Status** menu and press ↵ (Enter) or ► to enter.



ITEM	DESCRIPTION
Active Source	Displays the current active source type.
Video Information	Displays resolution/video information for RGB sources and color standard for Video sources.
Lamp Hours	Lamp hour usage information is displayed. (ECO. and Normal)
Serial Number	Showing serial number of product.
Software version	Showing system software version.

Advanced 1 Features

Press the **Menu** button to open the **OSD** menu. Press the ◀▶ buttons to move to the **Settings 2** menu. Press the ▲▼ buttons to move to the **Advanced 1** menu and then press ◀ (Enter) or ▶. Press the ▲▼ buttons to move up and down in the **Advanced 1** menu. Press the ◀▶ buttons to enter and change setting values.



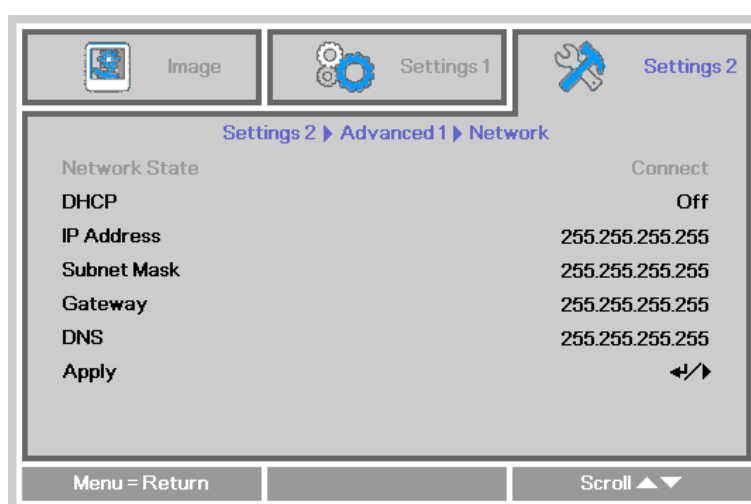
ITEM	DESCRIPTION
Menu Position	Press the ◀▶ buttons to enter and select different OSD location.
Translucent Menu	Press the ◀▶ buttons to enter and select OSD background translucent level.
Low Power Mode	Press the ◀▶ buttons to enter and turn Low Power Mode on or off.
Fan Speed	Press the ◀▶ buttons to enter and toggle between Normal and High fan speeds. Note: We recommend selecting high speed in high temperatures, high humidity, or high altitude (higher than 1500m/4921ft) areas.
Lamp Hour Reset	After replacing the lamp, this item should be reset. See page 31 for more information on <i>Lamp Hour Reset</i> .
Projector ID	Press the ◀▶ buttons to enter and adjust the two digit projector ID from 00 through 98.
Network	Press ◀ (Enter) or ▶ to enter the Network menu. See page 31 for more information on <i>Network</i> .

Lamp Hour Reset



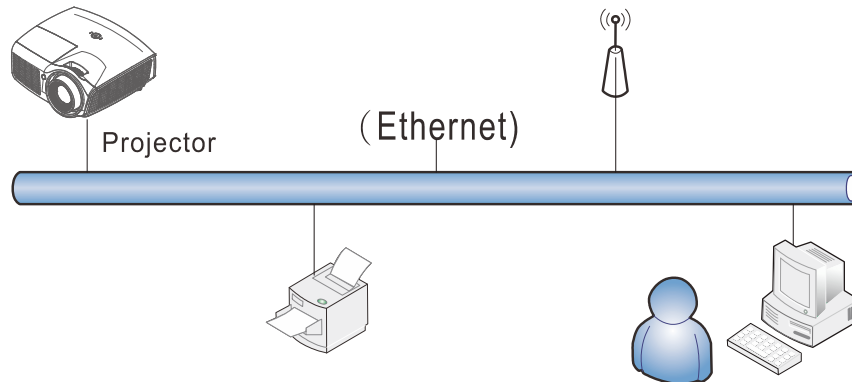
Please refer to *Resetting the Lamp Timer* on page 43 to reset the lamp hour counter.

Network



ITEM	DESCRIPTION
Network State	Displays the network connection status.
DHCP	Press ◀▶ to turn DHCP On or Off. Note: If DHCP is turned Off, complete the IP Address, Subnet Mask, Gateway, and DNS fields.
IP Address	Enter a valid IP address when DHCP is turned off.
Subnet Mask	Enter a valid Subnet Mask when DHCP is turned off.
Gateway	Enter a valid Gateway address when DHCP is turned off.
DNS	Enter a valid DNS name when DHCP is turned off.
Apply	Press ◀ (Enter) or ▶ to confirm settings.

LAN_RJ45



Wired LAN Terminal functionalities

Remote control and monitoring of a projector from a PC (or laptop) via wired LAN is also possible. Compatibility with Crestron / AMX (Device Discovery) / Extron control boxes enables not only collective projector management on a network but also management from a control panel on a PC (or laptop) browser screen.

- ★ Crestron is a registered trademark of Crestron Electronics, Inc. of the United States.
- ★ Extron is a registered trademark of Extron Electronics, Inc. of the United States.
- ★ AMX is a registered trademark of AMX LLC of the United States.
- ★ PJLink applied for trademark and logo registration in Japan, the United States of America, and other countries by JBMIA.

Supported External Devices

This projector supports specified Crestron Electronics controller commands and related software (ex, RoomView ®).

<http://www.crestron.com/>

This projector supports AMX (Device Discovery).

<http://www.amx.com/>

This projector supports Extron device(s).

<http://www.extron.com/>

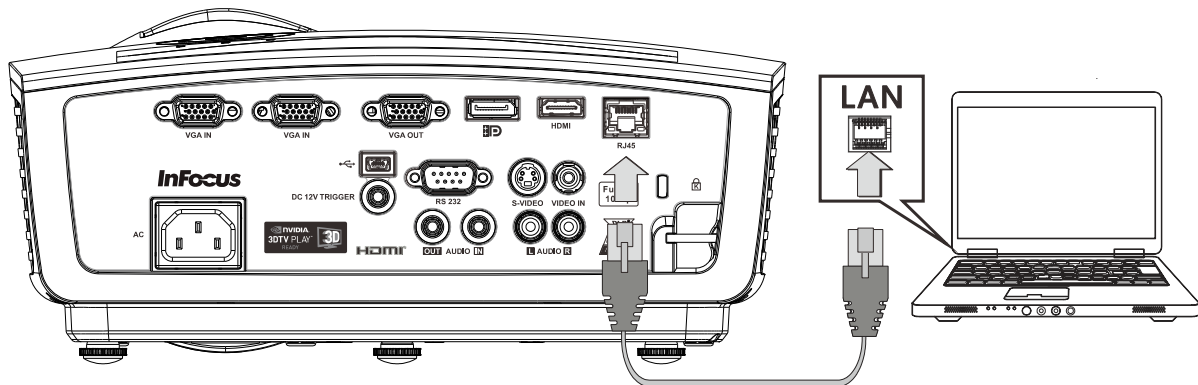
This projector supports all commands of PJLink Class1 (Version 1.00).

<http://pjlink.jbmia.or.jp/english/>

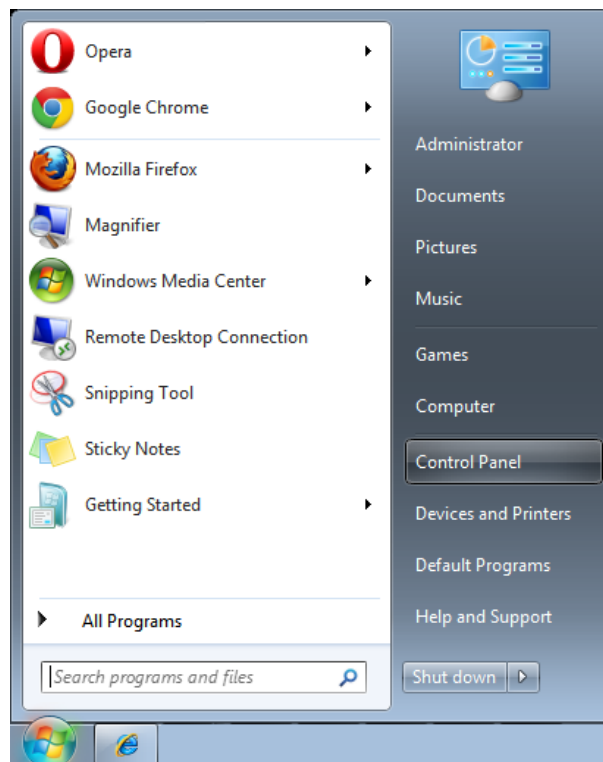
For detailed information about the diverse types of external devices which can be connected to the LAN/RJ45 port to control the projector, as well as related control commands, go to www.infocus.com/support.

LAN RJ45

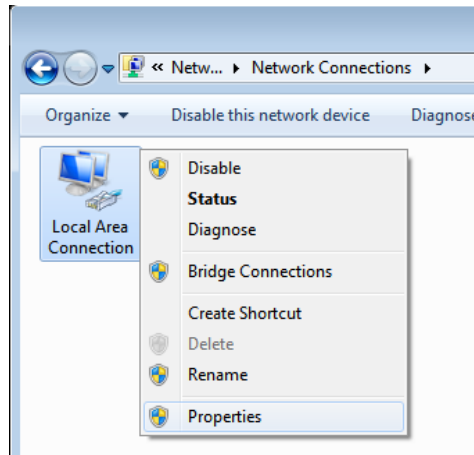
1. Connect an RJ45 cable to RJ45 ports on the projector and the PC (laptop).



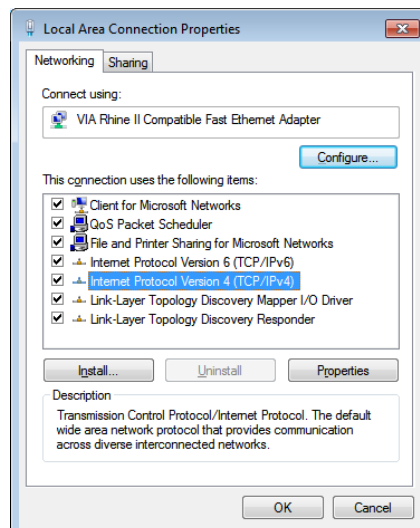
2. On the PC (laptop), select **Start** → **Control Panel** → **Network Connections**.



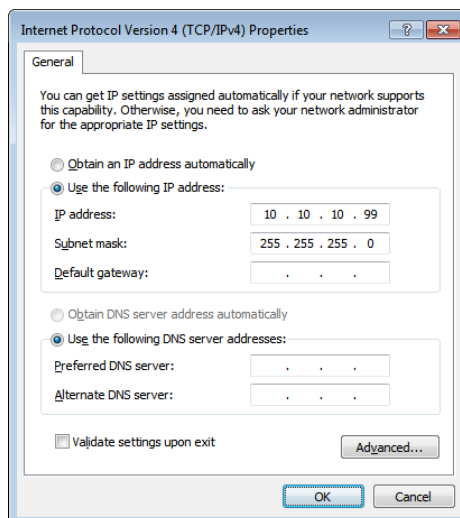
3. Right-click on **Local Area Connection**, and select **Properties**.



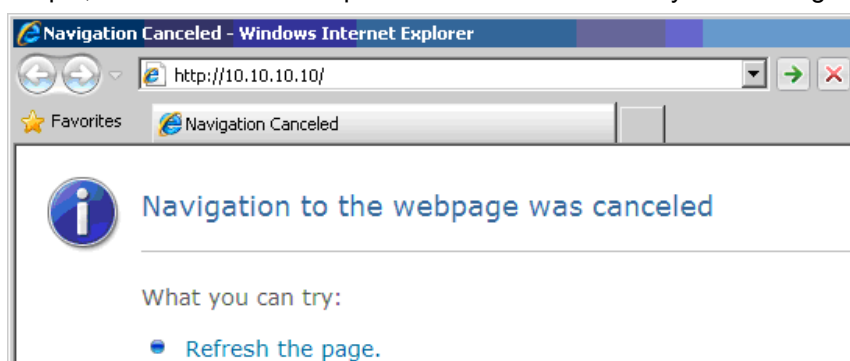
4. In the **Properties** window, select the **General** tab, and select **Internet Protocol (TCP/IP)**.
5. Click **Properties**.



6. Click **Use the following IP address** and fill in the IP address and Subnet mask, then click **OK**.



7. Press the **Menu** button on the projector.
8. Select **Settings2** → **Advanced1** → **Network**
9. After getting into **Network**, input the following:
 - ▶ DHCP: Off
 - ▶ IP Address: 10.10.10.10
 - ▶ Subnet Mask: 255.255.255.0
 - ▶ Gateway: 0.0.0.0
 - ▶ DNS Server: 0.0.0.0
10. Press **↵** (Enter) / **▶** to confirm settings.
 Open a web browser
 (for example, Microsoft Internet Explorer with Adobe Flash Player 9.0 or higher).



11. In the Address bar, input the IP address: 10.10.10.10.
12. Press **↵** (Enter) / **▶**.

The projector is setup for remote management. The LAN/RJ45 function displays as follows.

InFocus

Bright Ideas Made Brilliant

Projector Info

Model Name	
System	
System Status	Power On
Display Source	No Source
Lamp Hours	9
Display Mode	Presentation
Error Status	No Error
LAN Status	
IP address	10.10.10.10
Subnet mask	255.255.255.0
Default gateway	0.0.0.0
DNS Server	0.0.0.0
MAC address	00:18:23:25:55:03
Version	
LAN Version	
F/W Version	DPP05

RS232 by Telnet Function

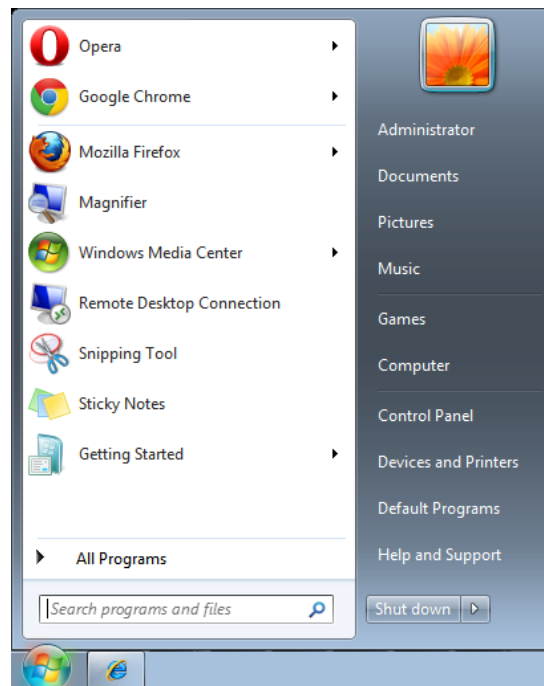
Besides projector connected to RS232 interface with “Hyper-Terminal” communication by dedicated RS232 command control, there is alternative RS232 command control way, so called “RS232 by TELNET” for LAN/RJ45 interface.

Quick Start-Guide for “RS232 by TELNET”

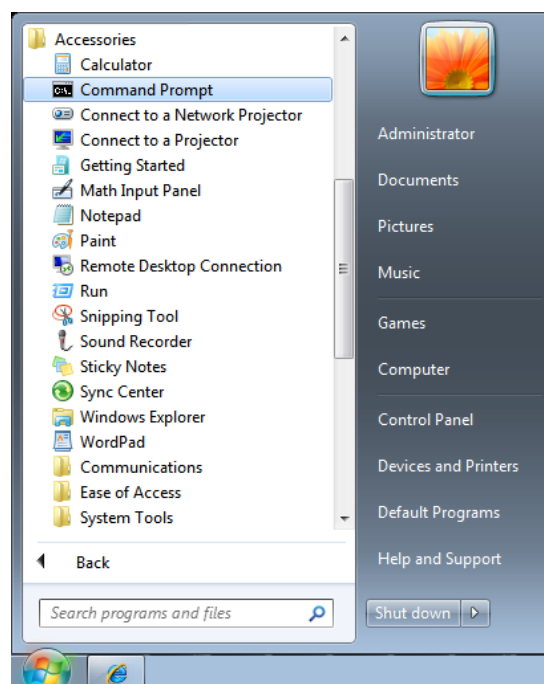
Check and get the IP-Address on OSD of the projector.

Make sure that laptop/PC can access the web-page of the projector.

Make sure that “Windows Firewall” setting to be disabled in case of “TELNET” function filtering out by laptop/PC.



Start => All Programs => Accessories => Command Prompt



Input the command format like the below:

telnet ttt.xxx.yyy.zzz 23 ("Enter" key pressed)

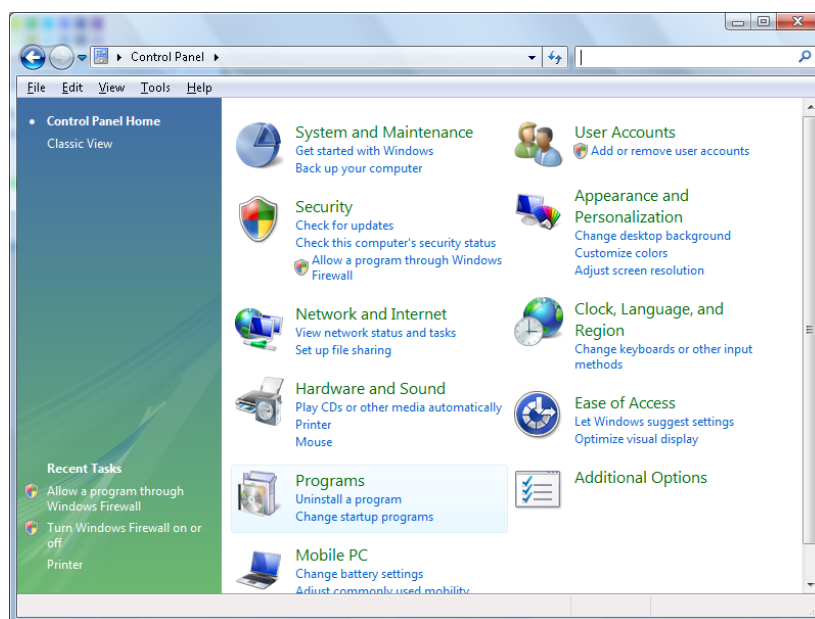
(**ttt.xxx.yyy.zzz**: IP-Address of the projector)

If Telnet-Connection ready, and user can have RS232 command input, then "Enter" key pressed, the RS232 command will be workable.

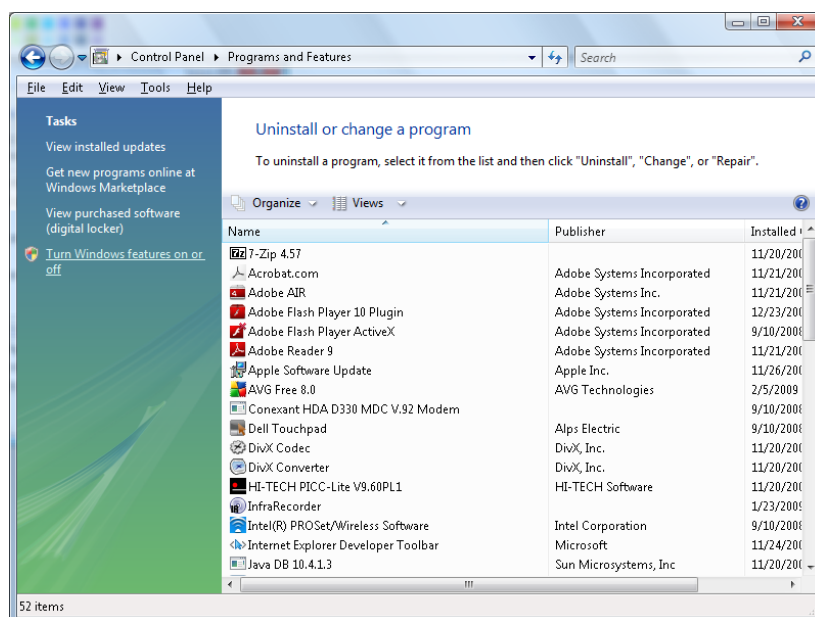
How to have TELNET enabled in Windows VISTA / 7

By default installation for Windows VISTA, "TELNET" function is not included. But end-user can have it by way of "Turn Windows features On or Off" to be enabled.

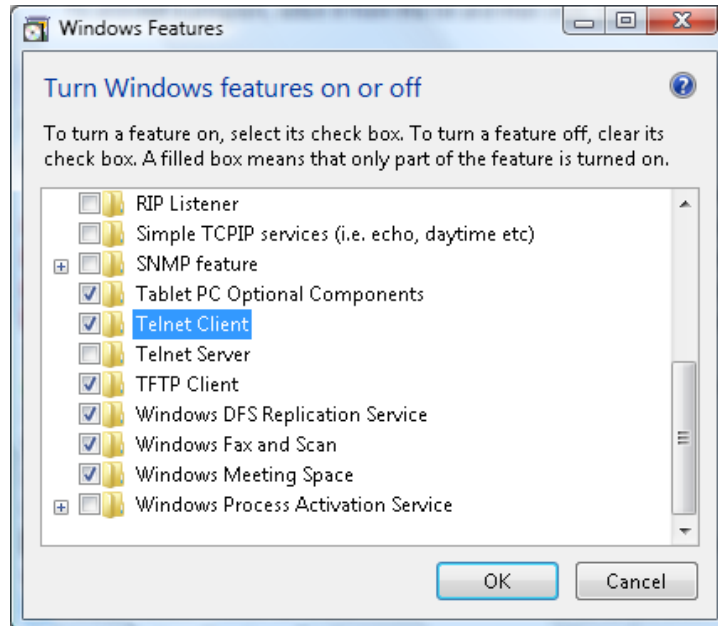
Open "Control Panel" in Windows VISTA



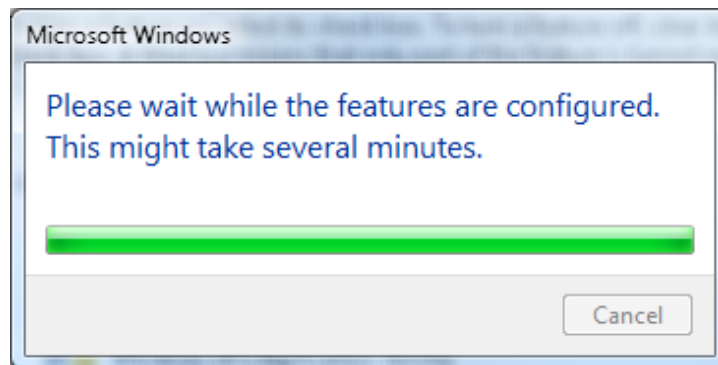
Open "Programs"



Select “Turn Windows features on or off” to open



Have “Telnet Client” option checked, then press “OK” button.

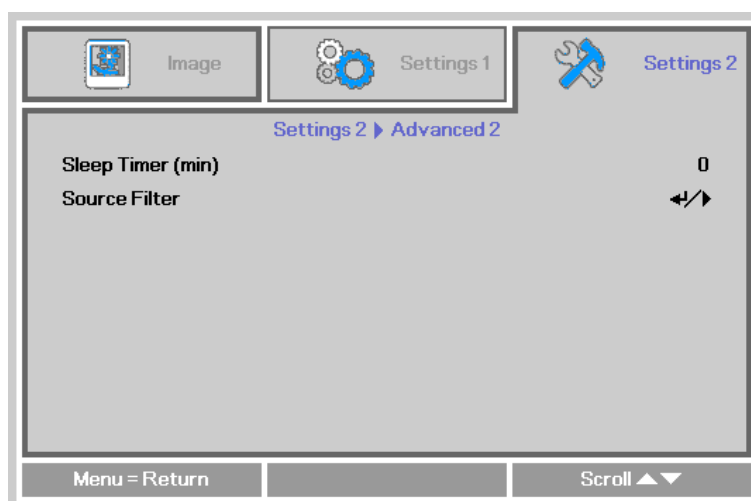


Specsheet for “RS232 by TELNET” :

1. Telnet: TCP
2. Telnet port: 23
(for more detail, kindly please get contact with the service agent or team)
3. Telnet utility: Windows “TELNET.exe” (console mode)
4. Disconnection for RS232-by-Telnet control normally: Close Windows Telnet utility directly after TELNET connection ready
5. Limitation 1 for Telnet-Control: there is less than 50 bytes for successive network payload for Telnet-Control application.
Limitation 2 for Telnet-Control: there is less than 26 bytes for one complete RS232 command for Telnet-Control.
Limitation 3 for Telnet-Control: Minimum delay for next RS232 command must be more than 200 (ms).
(*, In Windows XP built-in “TELNET.exe” utility, “Enter” key pressed will have “Carriage-Return” and “New-Line” code.)

Advanced 2 Features

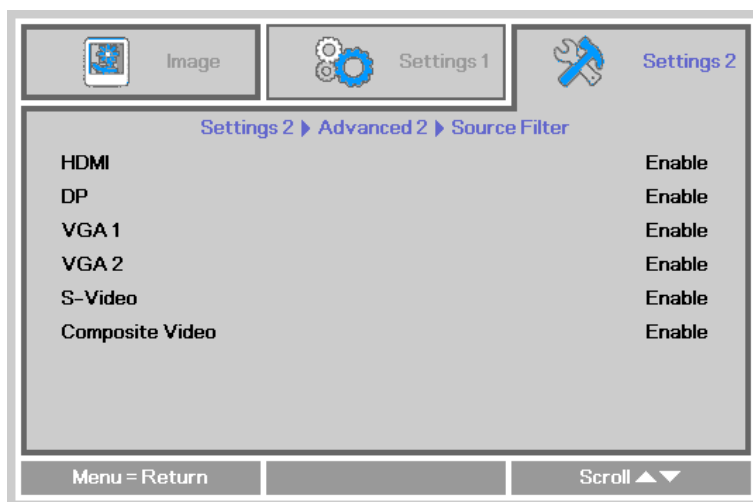
Press the **Menu** button to open the **OSD** menu. Press the ◀▶ buttons to move to the **Settings 2** menu. Press the ▲▼ buttons to move to the **Advanced 2** menu and then press ◀ (Enter) or ▶. Press the ▲▼ buttons to move up and down in the **Advanced 2** menu. Press the ◀▶ buttons to enter and change setting values.



ITEM	DESCRIPTION
Sleep Timer	Press the ◀▶ buttons to enter and set the Sleep timer. The projector automatically turns off after the preset period of time.
Source Filter	Press ◀ (Enter) or ▶ to enter the Source Filter menu. See page 40 for more information on <i>Source Filter</i> .

Source Filter

Press the **ENTER** button to enter the **Source Filter** sub menu. This sub menu allows you to enable and disable source inputs.



ITEM	DESCRIPTION
HDMI	Press the ◀▶ buttons to enter and enable or disable the HDMI source.
DP	Press the ◀▶ buttons to enter and enable or disable the DisplayPort source.
VGA 1	Press the ◀▶ buttons to enter and enable or disable the VGA1 source.
VGA 2	Press the ◀▶ buttons to enter and enable or disable the VGA2 source.
S-Video	Press the ◀▶ buttons to enter and enable or disable the S-Video source.
Composite Video	Press the ◀▶ buttons to enter and enable or disable the Composite Video source.

MAINTENANCE AND SECURITY

Replacing the Projection Lamp

The projection lamp should be replaced when it burns out. It should only be replaced with a certified replacement part, which you can order from your local dealer.

Important:

- a. The projection lamp used in this product contains a small amount of mercury.*
- b. Do not dispose this product with general household waste.*
- c. Disposal of this product must be carried out in accordance with the regulations of your local authority.*

Warning:

Be sure to turn off and unplug the projector at least 60 minutes before replacing the lamp. Failure to do so could result in a severe burn.

Caution:

In rare cases the lamp bulb may burn out during normal operation and cause glass dust or shards to be discharged outward from the rear exhaust vent.

Do not inhale or touch glass dust or shards. Doing so could result in injury.

Always keep your face away from the exhaust vent so that you do not suffer from the gas and broken shards of the lamp.

When removing the lamp from a ceiling-mounted projector, make sure that no one is under the projector. Glass fragments could fall if the lamp has burned out.

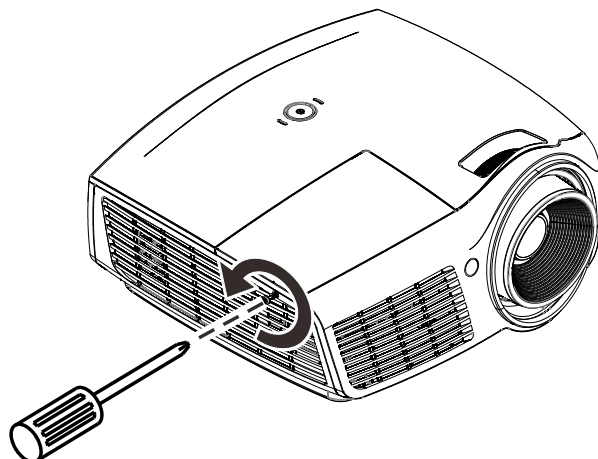
**IF A LAMP RUPTURES**

If a lamp ruptures, the gas and broken shards may scatter inside the projector and may come out of the exhaust vent. The gas contains toxic mercury.

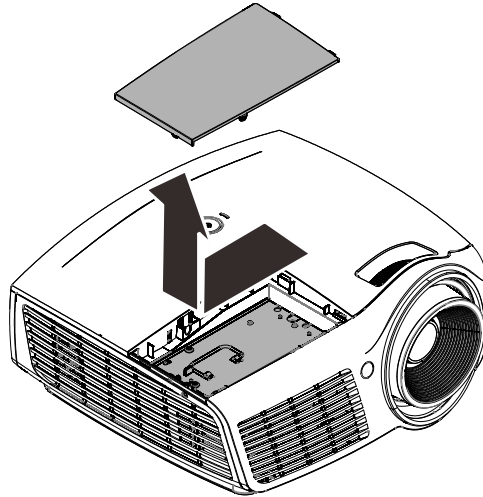
Open windows and doors for ventilation.

If you inhale the gas or the shards of the broken lamp enter your eyes or mouth, consult a doctor immediately.

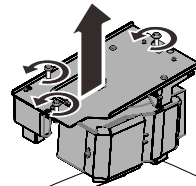
- 1.** Loosen the single screw on the lamp compartment cover.



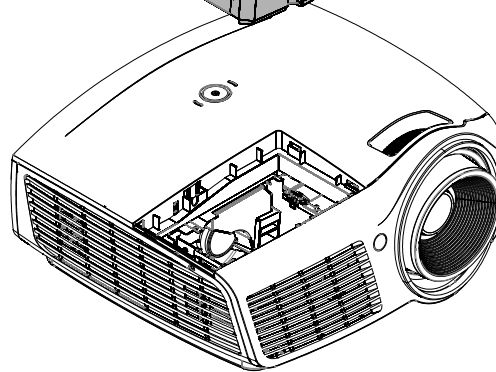
2. Remove the lamp compartment cover.



3. Remove the three screws from the lamp module.

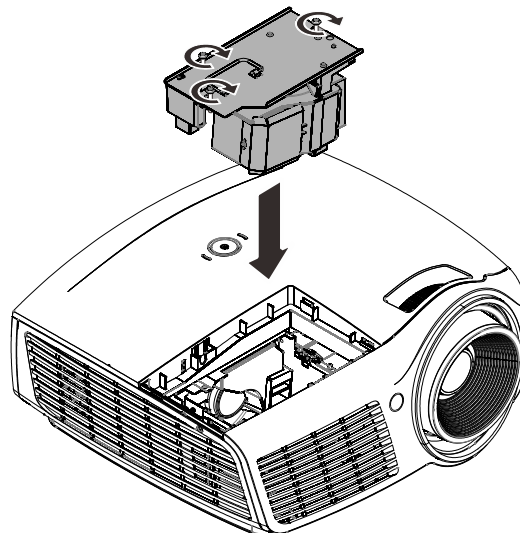


4. Lift the module handle up.



5. Pull firmly on the module handle to remove the lamp module.

6. Reverse steps 1 to 5 to install the new lamp module.
While installing, align the lamp module with the connector and ensure it is level to avoid damage.



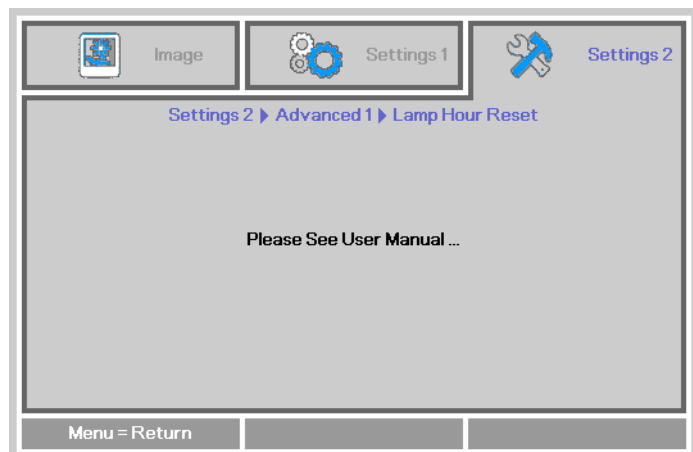
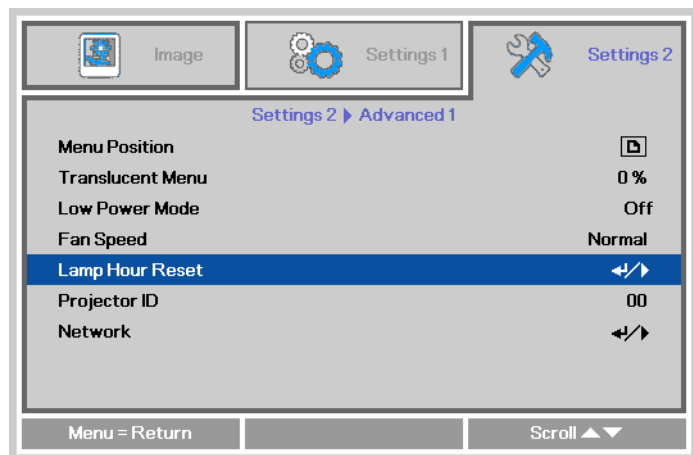
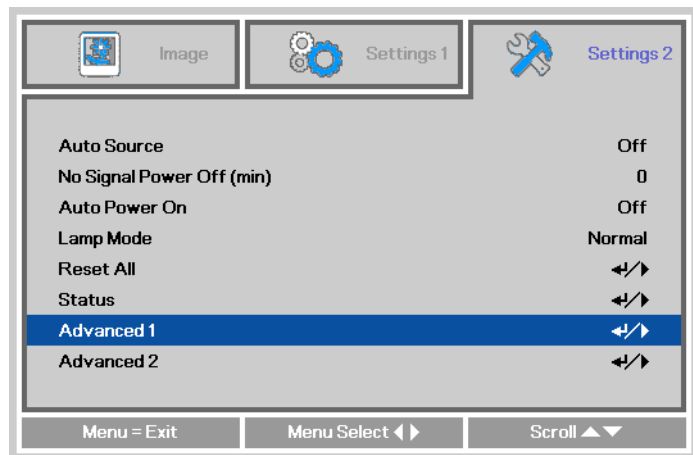
Note:

The lamp module must sit securely in place and the lamp connector must be connected properly before tightening the screws.

Resetting the Lamp Timer

After replacing the lamp, you should reset the lamp hour timer to zero. Refer to the following:

1. Press the **MENU** button to open the OSD menu.
2. Press the ◀▶ buttons to move to the **Settings 2** menu. Press the ▼ button to move down to **Advanced 1** and press enter.
3. Press the ▼▲ buttons to move down to **Lamp Hour Reset**.
4. Press the ◀ (Enter) or ▶ button.
A message screen appears.
5. Press the ▼▲◀▶ buttons in sequence to reset the lamp timer.
6. Press the **MENU** button to return to **Settings 2**.



Cleaning the Projector

Cleaning the projector to remove dust and grime will help ensure trouble-free operation.

Warning:

- 1. Be sure to turn off and unplug the projector at least 30 minutes before cleaning. Failure to do so could result in a severe burn.*
- 2. Only use a dampened cloth when cleaning. Do not allow water to enter the ventilation openings on the projector.*
- 3. If a little water gets into the projector interior while cleaning, leave the projector unplugged in a well-ventilated room for several hours before using.*
- 4. If a lot of water gets into the projector interior when cleaning, have the projector serviced.*

Cleaning the Lens

You can purchase optic lens cleaner from most camera stores. Refer to the following to clean the projector lens.

1. Apply a little optic lens cleaner to a clean soft cloth. (Do not apply the cleaner directly to the lens.)
2. Lightly wipe the lens in a circular motion.

Caution:

- 1. Do not use abrasive cleaners or solvents.*
- 2. To prevent discoloration or fading, avoid getting cleaner on the projector case.*

Cleaning the Case

Refer to the following to clean the projector case.

1. Wipe off dust with a clean dampened cloth.
2. Moisten the cloth with warm water and mild detergent (such as used to wash dishes), and then wipe the case.
3. Rinse all detergent from the cloth and wipe the projector again.

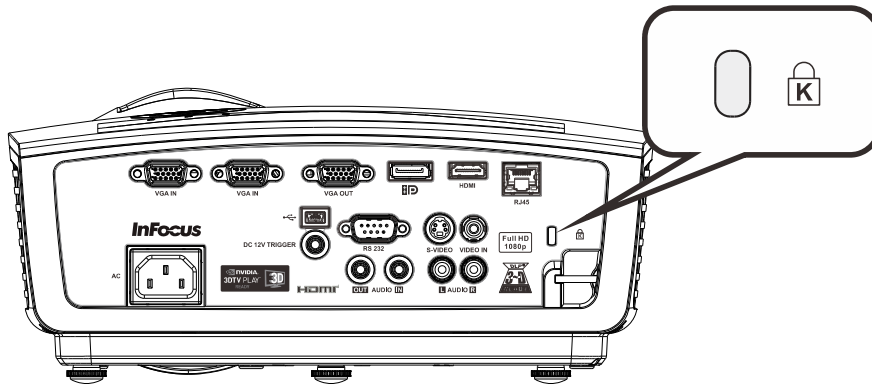
Caution:

To prevent discoloration or fading of the case, do not use abrasive alcohol-based cleaners.

Using the Cable Lock System and Security Bar

Using the Cable Lock

If you are concerned about security, attach the projector to a permanent object with the Kensington slot and a security cable.



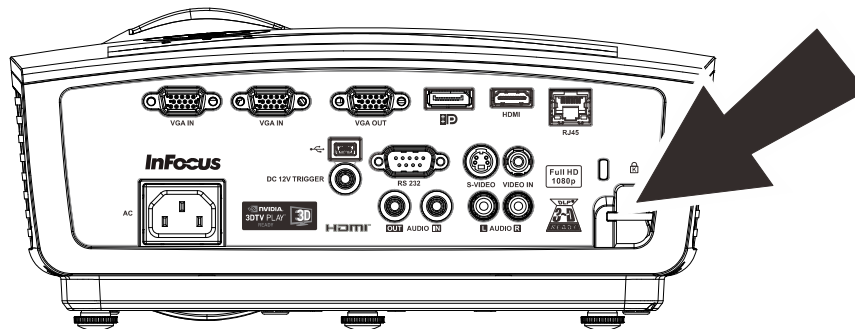
Note:

A Cable Lock System can be purchased from InFocus or your dealer. Refer to the information that comes with the lock for instructions on how to use it.

The security lock slot corresponds to Kensington's MicroSaver Security System. If you have any comment, contact: Kensington, 2853 Campus Drive, San Mateo, CA 94403, U.S.A. Tel: 800-535-4242, <http://www.Kensington.com>.

Using the Security Bar

In addition to the password protection function and the Kensington lock, the Security Bar helps protect the projector from unauthorized removal. See the following picture.



Common problems and solutions

These guidelines provide tips to deal with problems you may encounter while using the projector. If the problem remains unsolved, contact your dealer for assistance.

After spending time troubleshooting, the problem can often be traced to something as simple as a loose connection. Check the following before proceeding to the problem-specific solutions.

- *Use some other electrical device to confirm that the electrical outlet is working.*
- *Ensure the projector is turned on.*
- *Ensure all connections are securely attached.*
- *Ensure the attached device is turned on.*
- *Ensure a connected PC is not in a suspended mode.*
- *Ensure a connected notebook computer is configured for an external display.
(This is usually done by pressing an Fn-key combination on the notebook.)*

Tips for Troubleshooting

In each problem-specific section, try the steps in the order suggested. This may help you to solve the problem more quickly.

Try to pin point the problem and thus avoid replacing non-defective parts.

For example, if you replace batteries and the problem remains, put the original batteries back and go to the next step.

Keep a record of the steps you take when troubleshooting. The information may be useful when calling for technical support or for passing on to service personnel.

LED Error Messages

ERROR CODE MESSAGES	POWER LED BLUE	LAMP LED RED
Lamp On	ON	OFF
Powering up	Flashing	OFF
Powering/Cooling down	Flashing	OFF
Overheating	OFF	OFF
T1 error	3 blinks	1 blinks
Thermal break sensor error	4 blinks	OFF
G794 error	4 blinks	4 blinks
Lamp failure	5 blinks	OFF
Ballast overheating	5 blinks	1 blinks
Ballast circuit short	5 blinks	2 blinks
Lamp end of life detected	5 blinks	3 blinks
Lamp did not ignite	5 blinks	4 blinks
Lamp extinguished during normal operation	5 blinks	5 blinks
Lamp extinguished during power-up phase	5 blinks	6 blinks
Lamp voltage too low	5 blinks	7 blinks
Ballast failure	5 blinks	8 blinks
Ballast communication failure	5 blinks	10 blinks
Ballast overheating	5 blinks	11 blinks
Restrike lamp failure 1	5 blinks	12 blinks
Restrike lamp failure 2	5 blinks	13 blinks
Lamp failure1	5 blinks	14 blinks
Lamp failure2	5 blinks	15 blinks
Fan 1 error	6 blinks	1 blinks
Fan 2 error	6 blinks	2 blinks
Fan 3 error	6 blinks	3 blinks
Fan 4 error	6 blinks	4 blinks
The projector case is open	7 blinks	OFF
DMD error	8 blinks	OFF
Color wheel error	9 blinks	OFF

In the event of an error, please disconnect the AC power cord and wait for one (1) minute before restarting the projector. If the Power or Lamp LEDs are still blinking or any other situation that isn't listed in the chart above, please contact InFocus Support.

Image Problems

Problem: No image appears on the screen

1. Verify the settings on your notebook or desktop PC.
2. Turn off all the equipment and power everything up again. The projector should be turned on last.

Problem: The image is blurred

1. Adjust the **Focus** on the projector.
2. Press the **Auto** button on the remote control.
3. Ensure the projector-to-screen distance is within the specified range.
4. Check that the projector lens is clean.

Problem: The image is wider at the top or bottom (trapezoid effect)

1. Position the projector so it is as perpendicular to the screen as possible.
2. Use the **Keystone** button on the remote control to correct the problem.

Problem: The image is reversed

Check the **Projection** setting on the **Settings 1** menu of the OSD.

Problem: The image is streaked

1. Set the **Frequency** and **Tracking** settings on the **Image->Computer** menu of the OSD to the default settings.
2. To ensure the problem is not caused by a connected PC's video card, connect to another computer.

Problem: The image is flat with no contrast

Adjust the **Contrast** setting on the **Image** menu of the OSD.

Problem: The color of the projected image does not match the source image.

Adjust the **Color Temperature** and **Gamma** settings on the **Image->Advanced** menu of the OSD.

Lamp Problems

Problem: There is no light from the projector

1. Check that the power cable is securely connected.
2. Ensure the power source is good by testing with another electrical device.
3. Restart the projector in the correct order and check that the Power LED is on.
4. If you have replaced the lamp recently, try resetting the lamp connections.
5. Replace the lamp module.
6. Put the old lamp back in the projector and have the projector serviced.

Problem: The lamp goes off

1. Power surges can cause the lamp to turn off. Re-plug power cord. When the Power LED is on, press the power button.
2. Replace the lamp module.
3. Put the old lamp back in the projector and have the projector serviced.

Remote Control Problems

Problem: The projector does not respond to the remote control

1. Direct the remote control towards remote sensor on the front of the projector.
2. Ensure the path between remote and sensor is not obstructed.
3. Turn off any fluorescent lights in the room.
4. Check the battery polarity.
5. Replace the battery.
6. Turn off other infrared-enabled devices in the vicinity.
7. Replace the remote control.

Audio Problems

Problem: There is no sound

1. Adjust the volume on the remote control.
2. Adjust the volume of the audio source.
3. Check the audio cable connection.
4. Test the source audio output with other speakers.
5. Have the projector serviced.

Problem: The sound is distorted

1. Check the audio cable connection.
2. Test the source audio output with other speakers.
3. Have the projector serviced.

Having the Projector Serviced

If you are unable to solve the problem, you should have the projector serviced. Pack the projector in the original carton and contact InFocus Support at www.infocus.com/support or call us.

HDMI Q & A

Q. What is the difference between a “Standard” HDMI cable and a “High-Speed” HDMI cable?

Recently, HDMI Licensing, LLC announced that cables would be tested as Standard or High-Speed cables.

• Standard (or “category 1”) HDMI cables have been tested to perform at speeds of 75Mhz or up to 2.25Gbps, which is the equivalent of a 720p/1080i signal.

• High Speed (or “category 2”) HDMI cables have been tested to perform at speeds of 340Mhz or up to 10.2Gbps, which is the highest bandwidth currently available over an HDMI cable and can successfully handle 1080p signals including those at increased color depths and/or increased refresh rates from the Source. High-Speed cables are also able to accommodate higher resolution displays, such as WQXGA cinema monitors (resolution of 2560 x 1600).

Q. How do I run HDMI cables longer than 10 meters(32.81ft)?

There are many HDMI Adopters working on HDMI solutions that extend a cable's effective distance from the typical 10 meter(32.81ft) range to much longer lengths. These companies manufacture a variety of solutions that include active cables (active electronics built into cables that boost and extend the cable's signal), repeaters, amplifiers as well as CAT5/6 and fiber solutions.

Q. How can I tell if a cable is an HDMI certified cable?

All HDMI products are required to be certified by the manufacturer as part of the HDMI Compliance Test Specification. However, there may be instances where cables bearing the HDMI logo are available but have not been properly tested. HDMI Licensing, LLC actively investigates these instances to ensure that the HDMI trademark is properly used in the market. We recommend that consumers buy their cables from a reputable source and a company that is trusted.

For more details, go to the HDMI website at: <http://www.hdmi.org/learningcenter/faq.aspx#49>

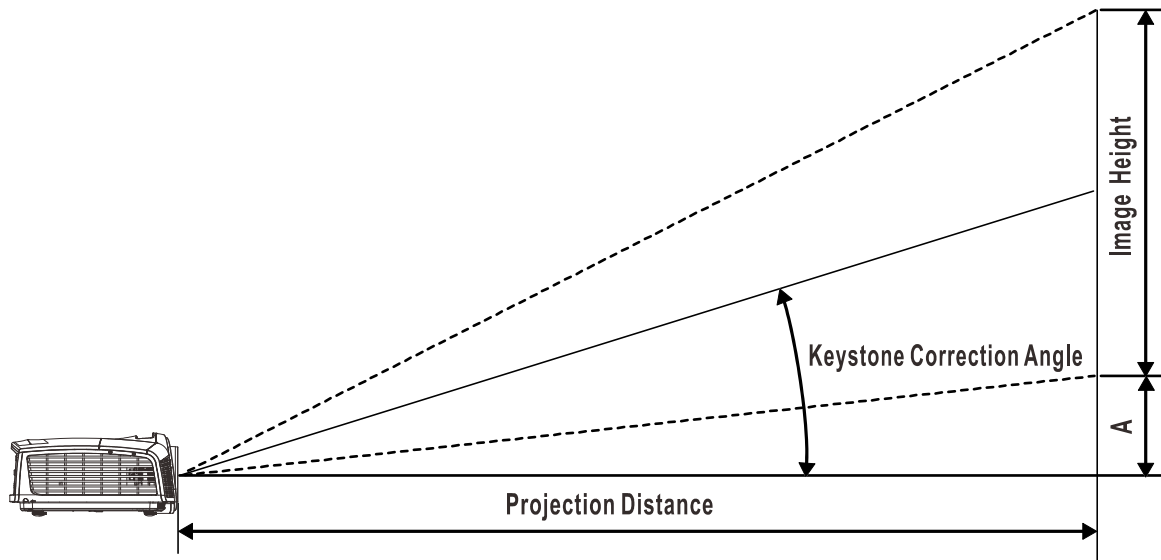
SPECIFICATIONS

Specifications

Model	IN3138HD
Display type	0.65 DMD 1080P, DC3,S600 with DDP4422 ASIC
Resolution	1080p 1920x1080
Projection distance	1.0 ~ 10 m (3.28ft ~ 32.8ft)
Projection screen size	23.5" ~ 300" (59.7cm ~ 762cm)
Projection lens	Manual Focus/Manual Zoom
Zoom ratio	1.2x
Vertical keystone	+/- 40 degrees
Projection methods	Front, Rear, Desktop/Ceiling (Rear, Front)
Data compatibility	VGA, SVGA, XGA, WXGA, SXGA, SXGA+, UXGA, WUXGA, Mac
SDTV/EDTV/ HDTV	480i, 480p, 576i, 576p, 720p, 1080i, 1080p
Video compatibility	NTSC, PAL, SECAM
H-Sync	15, 31~91.4KHz
V-Sync	24~30Hz, 47~120Hz
Safety certification	FCC-B, cUL, UL, CB, CE, C-tick, CCC, PSB, CU, TUV-GS
Operation temperature	5° ~ 35°C (41° ~ 95°F)
Dimensions	285.1 mm (W) x 264.1 mm (D) x 130.4 mm (H) (11.22" x 10.40" x 5.13")
AC Input	AC Universal 100-240V
Power consumption	Normal : 340W, <0.5W(Standby) / ECO : 290W, <0.5W(Standby)
Lamp	280W (Normal) / 230W (Eco)
Audio speaker	10W mono speaker
Input Terminals	VGA x 2
	DisplayPort x 1
	Composite x 1
	S-Video x 1
	HDMI x 1
	RJ45 x 1
	PC Audio jack(3.5mm) x 1
	RCA Stereo Audio LR x 1
Output Terminals	VGA x 1
	PC Audio jack(3.5mm) x 1
Control Terminals	RS-232C
	Screen trigger: DC Jack x 1 (DC12V 200mA output function)
	USB (Type mini B) - service only
Security	Kensington lock / Security Bar

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

Projection Distance vs. Projection Size



Projection Distance and Size Table

IN3138HD					
IMAGE DIAGONAL (MM/INCH)	IMAGE WIDTH (MM/INCH)	IMAGE HEIGHT (MM/INCH)	PROJECTION DISTANCE (MM/INCH) FROM	PROJECTION DISTANCE (MM/INCH) TO	OFFSET-A (MM/INCH)
1524 / 60	1328.3 / 52.29	747.2 / 29.42	2098.7 / 82.6	2550.3 / 100.4	112.1 / 4.4
1778 / 70	1549.7 / 61.01	871.7 / 34.32	2448.5 / 96.4	2975.3 / 117.1	130.8 / 5.1
1828.8 / 72	1593.9 / 62.75	896.6 / 35.30	2518.4 / 99.2	3060.4 / 120.5	134.5 / 5.3
2032 / 80	1771.0 / 69.73	996.2 / 39.22	2798.2 / 110.2	3400.4 / 133.9	149.4 / 5.9
2133.6 / 84	1859.6 / 73.21	1046.0 / 41.18	2938.2 / 115.7	3570.4 / 140.6	156.9 / 6.2
2286 / 90	1992.4 / 78.44	1120.7 / 44.12	3148.0 / 123.9	3825.4 / 150.6	168.1 / 6.6
2438.4 / 96	2125.2 / 83.67	1195.5 / 47.07	3357.9 / 132.2	4080.5 / 160.6	179.3 / 7.1
2540 / 100	2213.8 / 87.16	1245.3 / 49.03	3497.8 / 137.7	4250.5 / 167.3	186.8 / 7.4
3048 / 120	2656.6 / 104.59	1494.3 / 58.83	4197.4 / 165.3	5100.6 / 200.8	224.1 / 8.8
3429 / 135	2988.6 / 117.66	1681.1 / 66.19	4722.0 / 185.9	5738.2 / 225.9	252.2 / 9.9
3810 / 150	3320.7 / 130.74	1867.9 / 73.54	5246.7 / 206.6	6375.7 / 251.0	280.2 / 11.0
5080 / 200	4427.6 / 174.32	2490.5 / 98.05	6995.6 / 275.4	8501.0 / 334.7	373.6 / 14.7

Timing Mode Table

SIGNAL	RESOLUTION	H-SYNC (KHz)	V-SYNC (Hz)	COMPOSITE S_VIDEO	COMPONENT	RGB (ANALOG)	HDMI (DIGITAL)
NTSC	—	15.734	60	○	—	—	—
PAL/SECAM	—	15.625	50	○	—	—	—
VESA	720 x 400	31.5	70.1	—	—	○	○
	720 x 400	37.9	85.04	—	—	○	○
	640 x 480	31.5	60	—	—	○	○
	640 x 480	37.9	72.8	—	—	○	○
	640 x 480	37.5	75	—	—	○	○
	640 x 480	43.3	85	—	—	○	○
	800 x 600	35.2	56.3	—	—	○	○
	800 x 600	37.9	60.3	—	—	○	○
	800 x 600	46.9	75	—	—	○	○
	800 x 600	48.1	72.2	—	—	○	○
	800 x 600	53.7	85.1	—	—	○	○
	800 x 600	76.3	120	—	—	○	○
	1024 x 768	48.4	60	—	—	○	○
	1024 x 768	56.5	70.1	—	—	○	○
	1024 x 768	60	75	—	—	○	○
	1024 x 768	68.7	85	—	—	○	○
	1024 x 768	97.6	120	—	—	○	○
	1152 x 864	67.5	75	—	—	○	○
	1280 x 720	45	60	—	—	○	○
	1280 x 720	90	120	—	—	○	○
	1280 x 768	47.4	60	—	—	○	○
	1280 x 768	47.8	59.9	—	—	○	○
	1280 x 800	49.7	59.8	—	—	○	○
	1280 x 800	62.8	74.9	—	—	○	○
	1280 x 800	71.6	84.9	—	—	○	○
	1280 x 800	101.6	119.9	—	—	○	○
	1280 x 1024	64	60	—	—	○	○
	1280 x 1024	80	75	—	—	○	○
	1280 x 1024	91.1	85	—	—	○	○
	1280 x 960	60	60	—	—	○	○
	1280 x 960	85.9	85	—	—	○	○
	1366 x 768	47.7	60	—	—	○	○
	1400 x 1050	65.3	60	—	—	○	○

SIGNAL	RESOLUTION	H-SYNC (KHz)	V-SYNC (Hz)	COMPOSITE S_VIDEO	COMPONENT	RGB (ANALOG)	HDMI (DIGITAL)
	1440 x 900	55.9	60	—	—	○	○
	1440 x 900	70.6	75	—	—	○	○
	1600 x 1200	75	60	—	—	○	○
	1680 x 1050	64.7	59.9	—	—	○	○
	1680 x 1050	65.3	60	—	—	○	○
	1920 x 1200	74	60	—	—	○	○
	1920 x 1080	67.5	60	—	—	○	○
Apple Macintosh	640 x 480	35	66.7	—	—	○	○
	832 x 624	49.7	74.5	—	—	○	○
	1024 x 768	60.2	74.9	—	—	○	○
	1152 x 870	68.7	75.1	—	—	○	○
SDTV	480i	15.734	60	—	○	—	○
	576i	15.625	50	—	○	—	○
EDTV	576p	31.3	50	—	○	—	○
	480p	31.5	60	—	○	—	○
HDTV	720p	37.5	50	—	○	—	○
	720p	45	60	—	○	—	○
	1080i	33.8	60	—	○	—	○
	1080i	28.1	50	—	○	—	○
	1080p	27	24	—	○	—	○
	1080p	28	25	—	○	—	○
	1080p	33.7	30	—	○	—	○
	1080p	56.3	50	—	○	—	○
	1080p	67.5	60	—	○	—	○

○ : Frequency supported

— : Frequency not supported

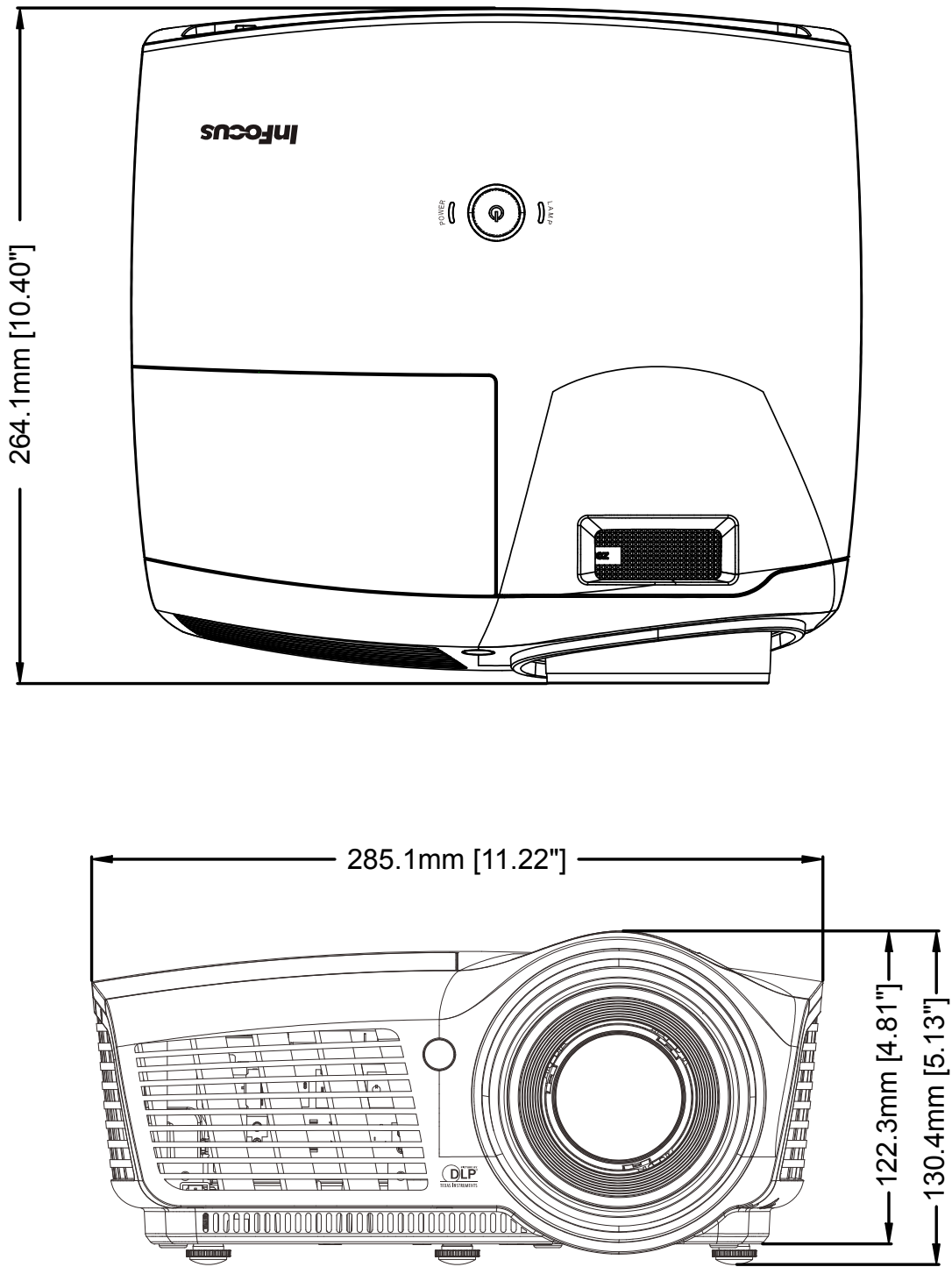
★The native resolution of the panel is 1920x1080

Resolutions listed above other than 1920 x 1080 (the native resolution of the projector) will be resized and displayed, however they may contain lines or uneven looking text. This is normal.

★A yellow background means that the resolution will be displayed in a 4:3 aspect ratio.

★A blue background means that these resolutions may display some video noise. This is normal.

Projector Dimensions



REGULATORY COMPLIANCE

FCC Warning

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 when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense.

Changes or modifications not expressly approved by the parties responsible for compliance could void the user's authority to operate the equipment.

Canada

This class B digital apparatus complies with Canadian ICES-003.

Safety Certifications

FCC-B, cUL, UL, CB, CE, C-tick, CCC, PSB, CU, TUV-GS

APPENDIX I

Serial Communication

The following table describes the serial communication configuration that should be used when interfacing to CLI via the serial port.

Windows HyperTerminal or ProComm are two tools that can be used to send CLI commands across the serial port.

Setting	Value
Bits per second	19200
Data bits	8
Parity	None
Stop bits	1
Flow control	None
Emulation	VT100

No	Function	Command	RW	Min	Max	Default	Step	Parameter
1V	AC Power On (Auto power on)	APO	RW	0	1	0	1	0:Disable; 1:Enable
3V	Aspect Ratio	ARZ	RW	0	5	0	1	0:Fill 1:4:3 2:16:9 3:Letterbox 4:Native 5:2.35:1
4V	Auto Image	AIM	W	n/a	1	1	1	1:Enable
5V	Auto Off Time	AOT	RW	0	36	6	1	0:Never 1~36 * 5 = ? min 1:5min 6:30min (Default) 36:180min
6V	Auto Source	ASC	RW	0	1	1	1	0:Disable; 1:Enable
7V	Blank Screen	BLK	RW	0	1	0	1	0:Disable; 1:Enable
9V	Brightness	BRT	RW	0	100	50	1	Valid only when Display Mode = User
11V	Projection (Ceiling mode)	CEL	RW	0	3	0	1	0:Front 1:Rear 2:Ceiling 3:Ceiling+Rear
12V	Closed Captions: Non-Muted	CLC	RW	0	1	0	1	Off On (CC1)
14V	Color	CLR	RW	0	100	50	1	Video S-Video only = saturation
15 (None)	Color Space	CSM	RW	0	2	0	1	Valid only when Display Mode = User 0:Auto 1:RGB 2:YUV

No	Function	Command	RW	Min	Max	Default	Step	Parameter
16V	Color Temp	TMP	RW	0	2	Source Specific	1	Valid only when Display Mode = User 0:Warm 1:Normal 2:Cold
17V	Contrast	CON	RW	0	100	50	1	Valid only when Display Mode = User
18V	Current Source	SRC	RW	0	13	0	1	0:VGA1 1:VGA2 5:HDMI-1 7:DP 12:Video 13:S-Video
21V	Digital Zoom	DZM	RW	-10	10	0	1	-10~10
27V	Error Condition	ERR	R	n/a	n/a	n/a	n/a	0:No error 1:Lamp not lit after 5 Attempts 3:Lamp went out unexpectedly 4:Fan failure 5: Overheating 7: Case open 8:DMD error 9:Color wheel
28V	Factory Reset	RST	W	n/a	1	1	1	1:reset
32V	Freeze Screen	FRZ	RW	0	1	0	1	0:Disable
34V	Gamma	GTB	RW	0	5	Source Specific	1	Valid only when Display Mode = User 0:1.8 1:2.0 2:2.2 3:2.4 4:B&W 5:Linear
40V	Horz. Position	HPS	RW	-5	5	0	1	RGB source only (HPS?) to get range
45V	Lamp Hours in High Power Mode	LMO	R	0	9999			Displays the number of hours that the current lamp has run in High Power (Normal) mode.
46V	Lamp Hours in Low Power Mode	LME	R	0	9999			Displays the number of hours that the current lamp has run in Low Power (Eco) mode.
47V	Lamp Life	LIF	R	n/a	Note			280W lamp life 3000 on E20.8
49V	Lamp Resets (Total number)	LMR	R	0	9999	0	1	
62V	Lamp Low Power	IPM	RW	0	1	0	1	0=ECO, 1=Normal

No	Function	Command	RW	Min	Max	Default	Step	Parameter
63V	Language	LAN	RW	0	25	0	1	0:English 1:French 2:German 3:Spanish 4:Portuguese 5:Simplified Chinese 6:Traditional Chinese 7:Italian 8:Norwegian 9:Swedish 10:Dutch 11:Russian 12:Polish 13:Finnish 14:Greek 15:Korean 16:Hungarian 17:Czech 18:Arabic 19:Turkish 20:Vietnamese 21:Japanese 22:Thai 23: Farsi(Persian) 24:Hebrew 25:Indonesia
77V	Menu	MNU	RW	0	1	0	1	0:Clear; 1:Display
79V	Menu Navigation	NAV	W	0	5	n/a	1	0:Menu Key 1:Up Key 2:Down Key 3:Select Key 4:Left Key 5:Right Key
81V	Menu Transparency	TOE	RW	0	4	0	5	0:0% 1:20% 2:40% 3:60% 4:80%
91V	Mute	MTE	RW	0	1	0	1	0:disable; 1:enable
104V	Frequency (Phase)	MSS	RW	0	31	x	1	RGB source only
108V	Power	PWR	RW	0	1	0	1	0:Turn Off 1:Turn On
111V	Presets	PST	RW	0	7	source Specific	1	0:Presentation 1:Bright 2:Game 3:Movie 4:TV 5:sRGB 6:Blackboard 7:User
114V	Projector Firmware Ver.	FVS	R	string				DP186-595IFUA-DPP02
115	Projector High Power Hours	LTO	R	0	9999			Displays the numbers of hours that the projector has run in High Power (Normal) mode over its life (including all lamps).

No	Function	Command	RW	Min	Max	Default	Step	Parameter
116V	Projector Info menu	PRI	W		1		1	Display Projector Info menu
117	Projector Low Power Hours	LTE	R	0	9999			Displays the numbers of hours that the projector has run in Low Power (Eco) mode over its life (including all lamps).
118V	Projector Model	MDL	R	string				IN3138HD
119V	Projector Resolution	NRS	R	string				1080p
121V	Projector Total Hours	LMT	R	0	9999		1	
123V	Lamp Hour Reset	LRT	RW	n/a	1	n/a	1	Reset Lamp Hour (OSD:Status)
126V	Search Screen	DSU	RW	0	4	0	1	0:Black 1:Red 2:Black 3:Blue 4:White
130V	Sharpness	SHP	RW	0	31	14	1	
155V	System State	SYS	R	0	18	0	1	0:Standby 2:Start Up 12:Cooling 18:Error
158V	Tint	TNT	RW	0	100	50	1	
160V	Tracking	MTS	RW	-5	5	0	1	RGB source only -5~5
162V	Vert. Keystone	DKV	RW	-40	40	0	1	
164V	Vert. Position	VPS	RW	-5	5	0	1	RGB source only (VPS?) to get range (VPS+) (VPS-)
167V	Volume	VOL	RW	0	10	5	1	0~10