# IN8606HD

User's Guide Mode d'emploi Benutzeranleitung Guía del usuario Guia do Usuário 用戶指南 用户指南 Руководство по пользователя





Regulatory Model: IN8606HD 3534318701 DISPERINDAG No. 0287/1.824.51/09.03



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#### 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.

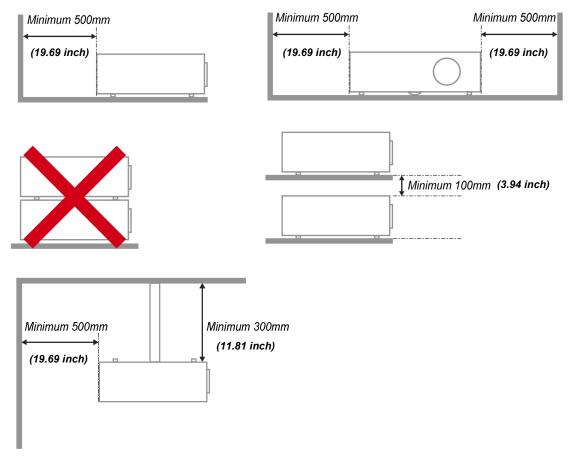
#### **Projector Installation Notice**

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 with 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 36 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 39.
- > 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 51.

#### 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 <u>WWW.EIAE.ORG</u>. For lamp specific disposal information check <u>WWW.LAMPRECYCLE.ORG</u>.

#### 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.

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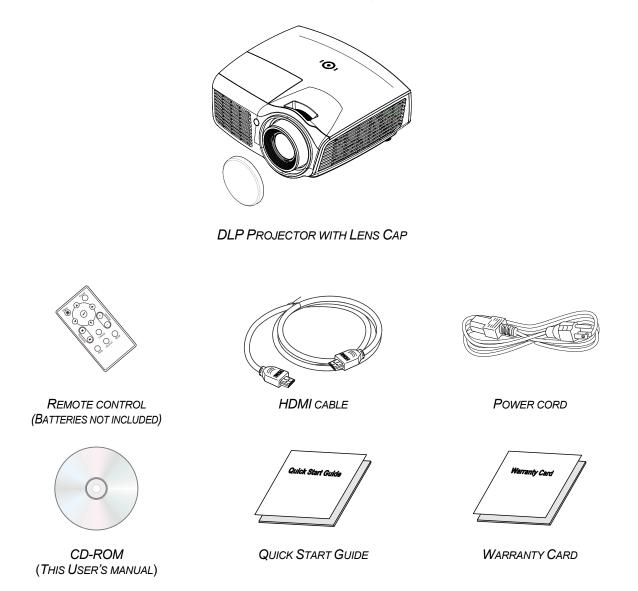
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# **GETTING STARTED**

## **Packing Checklist**

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



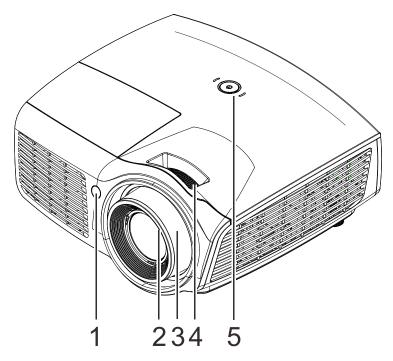
Contact your dealer immediately if any items are missing, appear damaged, or if the unit does not work. It is recommended that you keep the original packing material in case you ever need to return the equipment for warranty service.

#### 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

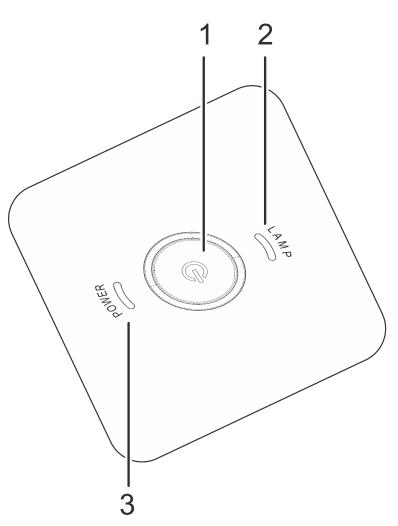


Ітем	LABEL	DESCRIPTION	SEE PAGE
1.	IR receiver	Receive IR signal from remote control	
2.	Lens	Projection Lens	
3.	Focus ring	Focuses the projected image	16
4.	Zoom ring	Enlarges the projected image	10
5.	Function keys	See Top view—On-screen Display (OSD) buttons and LEDs.	3

#### Important:

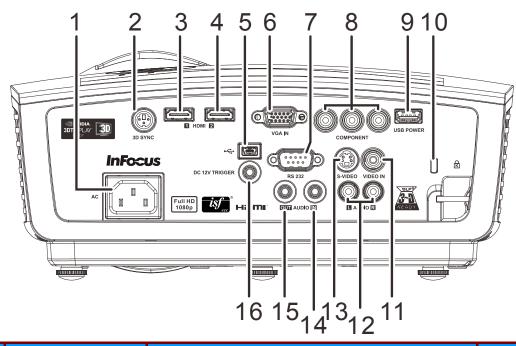
Do not block ventilation openings. Locate the projector in a well-ventilated area without obstructions to intake or exhaust vents. Do not place the projector on a tablecloth or other soft covering that may block the vents. Ventilation openings on the projector allow for good air circulation.

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



Ітем	LABEL	DESCRIPTION SEE P		SEE PAGE
1.	$\bigcirc$	Turns the projector On and Off		
2.	LAMP LED	Red	Lamp Failure	
۷.		Blinking Red	Error code	
		Blue	Projector is in standby or is fully powered on (lamp is lit).	42
3.	POWER LED	Blinking Blue	Projector is initializing or cooling down. It can also indicate an error code when blinking in conjunction with the Lamp LED.	

# Rear view



Ітем	LABEL	DESCRIPTION	SEE PAGE
1.	AC IN	Connect a POWER cable	11
2.	3D SYNC	Connect the 3D IR glasses transmitter (Note: For Specific 3D IR glasses only)	
3.	HDMI 1	Connect an HDMI cable from a HDMI device	
4.	HDMI 2	Connect an HDMI cable from a HDMI device	
5.	(USB)	Service use only.	
6.	VGA IN	Connect a RGB cable from a computer	
7.	RS-232C	Connect a RS-232 serial port cable for remote control	
8.	COMPONENT	Connect a Component cable from a component device	
9.	USB POWER	This USB Type A connector provides 5V DC power sup	oport.
10.	Kensington Lock	Secure to a permanent object with a Kensington® Lock system	40
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.

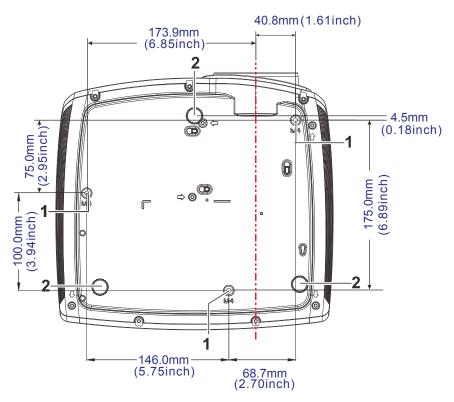
#### Connectivity Note:

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

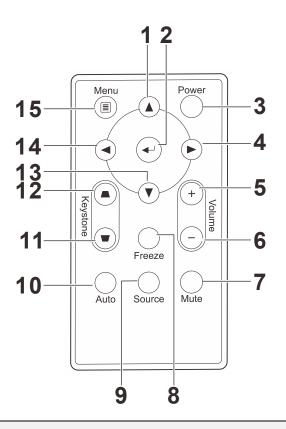


Ітем	LABEL	DESCRIPTION	SEE PAGE
1.	Ceiling support holes	Contact your dealer for information on mounting the projector on a ceiling	
2.	Tilt adjustor	Rotate adjuster lever to adjust angle position.	15

#### 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.

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Ітем	LABEL	DESCRIPTION	SEE PAGE:
1.	Up	Navigates up and changes settings in the OSD 17	
2.	Enter	Changes settings in the OSD	
3.	Power	Turns the projector on or off	11
4.	Right	Navigates to the right and changes settings in the OSD	
5.	Volume +	Increases volume	16
6.	Volume -	Decreases volume	10
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 (RC	GB only)
11.	Keystone top	Corrects keystoning of the image (when it is wider on top)	16
12.	Keystone bottom	Corrects keystoning of the image (when it is wider on the bottom)	
13.	Down	Navigates down and changes settings in the OSD	
14.	Left	Navigates to the left and changes settings in the OSD <b>17</b>	
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.

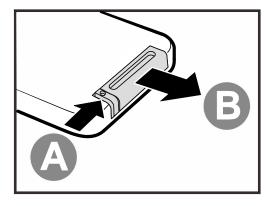
## **Projector and Remote Control Buttons**

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

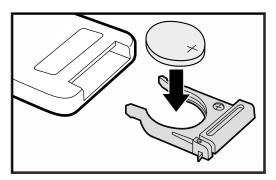
# **SETUP AND OPERATION**

## **Inserting the Remote Control Batteries**

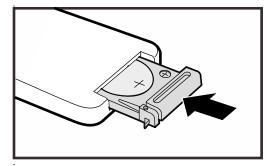
 Remove the battery compartment cover by sliding the cover in the direction of the arrow (A). Pull out the cover (B).



**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.

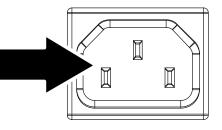
## Turning the projector on and off

- Connect the power cord to the projector. Connect the other end to a wall outlet. The **D** POWER LED on the projector light.
- **2.** Turn on the connected devices.
- **3.** Ensure the **POWER** LED is not flashing. Then press the **O POWER** button to turn on the projector.

The projector splash screen displays and connected devices are detected.

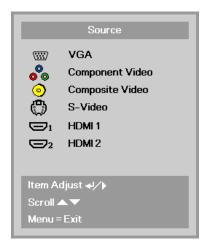
See Setting an Access Password (Security Lock) on page 13 if the security lock is enabled.

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.)



**n**ecus

The New Way to Collaborate



- VGA: Analog RGB
- Component Video: Traditional component video
- Composite Video: Traditional composite video
- S-Video: Super video (Y/C separated)
- HDMI 1 / HDMI 2: High-Definition Multimedia
   Interface

**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.



Power Off?

Press Power again

#### 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 17 and *Setting the OSD Language* on page 18 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.
- 80 5 Settings 2 Display Mode Brightness Contrast Computer **≁/**} Auto Image **≁/**} Advanced **≁/**} Color Manager **≁**/} Menu = Exit Menu Select 4
- Press the < ▶ buttons to move to the Settings 1 menu. Press the ▲ ▼ buttons to select Advanced 1.</li>



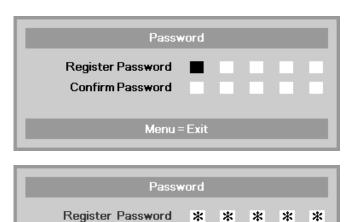
- Press ← (Enter) or ► to enter the
   Advanced 1 sub menu. Press the
   ▲ ▼ buttons to select Security Lock.
- 4. Press the < ► buttons to enter and enable or disable security lock function.</li>

A password dialog box automatically appears.

Image	Settings 1	Settings 2
	Settings 1 ) Advanced 1	
Language		English
Security Lock		Off
Blank Screen		
Splash Logo		Off
Closed Captioning		Off
3D Setting		<b>≪!∕</b> ►
Menu = Return		Scroll 🔺 🔻

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.



\*

\*

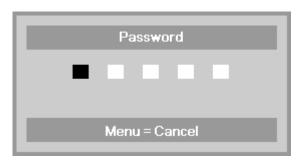
\*

\*

\*

Confirm Password

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.

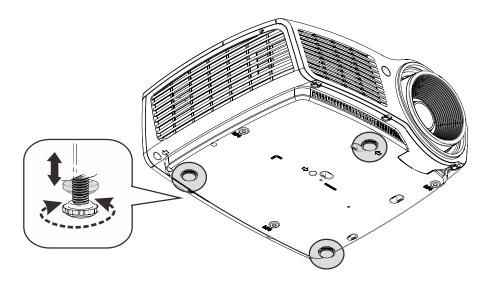


Menu = Exit

## Adjusting the Projector Level

Take note of the following when setting up the projector:

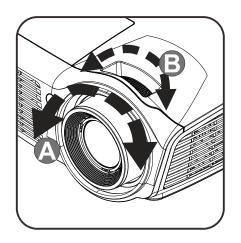
- The projector table or stand should be level and sturdy.
- Position the projector so that it is perpendicular to the screen.
- Ensure the cables are in a safe location. You could trip over them.



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 (3).
- 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).
- Keystone Freeze

0

**4.** The keystone control appears on the display.

Keystone

## Adjusting the Volume

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

Keystone Freeze



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.
- There are three menus. Press the ◀► buttons to move through the menus.
- 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.

image	Settings 1	Settings 2
Display Mode		Presentation
Brightness		50
Contrast		50
Computer		
Auto Image		4//> 4//> 4//>
Advanced		«!/»
Color Manager		«!/»
Menu = Exit	Menu Select 🜗	Scroll 🔺 🔻

#### 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.

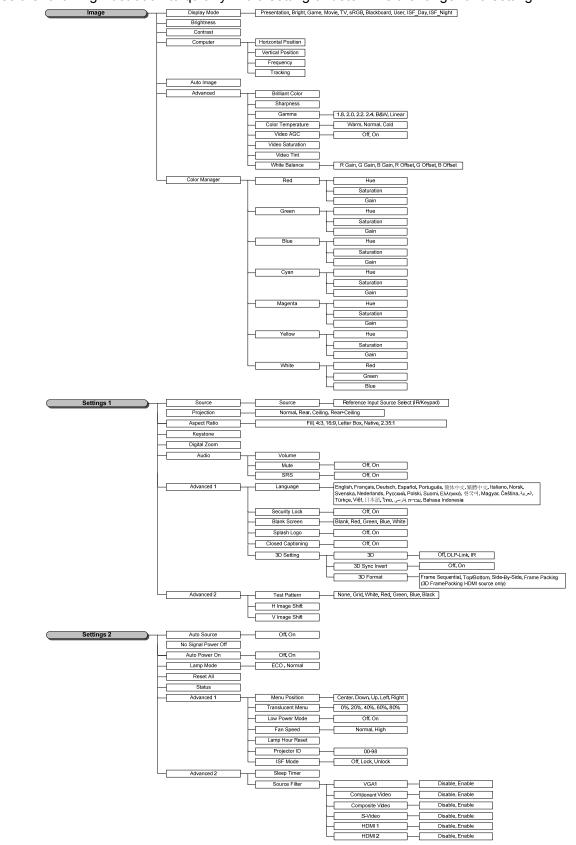
1. Press the **MENU** button. Press the **◄** ► buttons to navigate to **Settings 1**. Press the **▲** ▼ buttons to move to the **Advanced 1** menu.

Image	Settings 1	Settings 2
Source Projection		<b>≪</b> !∕▶ [P]
Aspect Ratio Keystone		Fill
Digital Zoom Audio		0 +//>
Advanced 1 Advanced 2		<b>↓/</b> } ∢//>
Menu = Exit	Menu Select 🜗	Scroll 🔺 🔻

Image	Settings 1	Settings 2
	Settings 1 ) Advanced 1	
Language		English
Security Lock		Off
Blank Screen		
Splash Logo		Off
Closed Captioning		Off
3D Setting		«!/»
Menu = Return		Scroll 🔺 🔻

- 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**



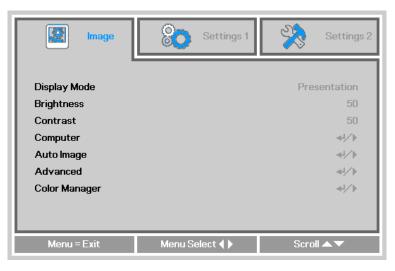
Use the following illustration to quickly find a setting or determine the range for a setting.

## 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  $\triangleleft \triangleright$  buttons to move to the **Image Menu**. Press the  $\triangleleft \lor$  buttons to move up and down in the **Image** menu. Press the  $\triangleleft \triangleright$  buttons to enter and change setting values.



Ітем	DESCRIPTION
Display Mode	<ul> <li>Press the ◄► buttons to enter and set the Display Mode.</li> <li>Note:</li> <li>1. Display Mode must be set to User in order to access the other Image menu items.</li> <li>2. ISF Day and ISF Night items only display when the ISF feature has been activated by your ISF technician.</li> </ul>
Brightness	Press the ◀► buttons to enter and adjust the display brightness.
Contrast	Press the ◀► buttons to enter and adjust the display contrast.
Computer	Press
Auto Image	Press
Advanced	Press
Color Manager	Press

# 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.

Image	Settings 1	Settings 2
	Image 🕨 Computer	
Horizontal Position		0
Vertical Position		0
Frequency		0
Tracking		0
Menu = Return		Scroll 🔺 🔻

Ітем	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.

image	Settings 1	Settings 2
	Image 🕨 Advanced	
Brilliant Color		5
Sharpness		16
Gamma		1.8
Color Temperature		Normal
Video AGC		Off
Video Saturation		50
Video Tint		50
White Balance		<b>≪!∕</b> ⊁
Menu = Return		Scroll 🔺 🔻

Ітем	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.	
White Balance	Press	

## White Balance

Press the  $\blacktriangleleft$  (Enter) or  $\blacktriangleright$  button to enter the **White Balance** sub menu. Press  $\checkmark \blacktriangle$  to move up and down in the White Balance menu.

	Image	80	Settings 1	*	Settings 2
	Imag	je 🕨 Advance	d 🕨 White Bal	ance	
R Gain					100
G Gain					100
B Gain					100
R Offset					0
G Offset					0
B Offset					0
Menu = R	leturn			Scrol	▲▼

Ітем	DESCRIPTION
R Gain	Press the ◀▶ buttons to adjust the Red Gain.
G Gain	Press the ◀► buttons to adjust the Green Gain.
B Gain	Press the ◀▶ buttons to adjust the Blue Gain.
R Offset	Press the ◀► buttons to adjust the Red Offset.
G Offset	Press the ◀► buttons to adjust the Green Offset.
B Offset	Press the ◀► buttons to adjust the Blue Offset.

## 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.

image	Settings 1	Settings 2
	Image 🕨 Color Manager	
Red		«!/»
Green		
Blue		«!/»
Cyan		
Magenta		4//> 4//> 4//> 4//>
Yellow		«!/»
White		<b>≪!∕</b> ►
Menu = Return		Scroll 🔺 🔻

Ітем	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.

image	Settings 1	Settings 2
Source Projection Aspect Ratio	-	
Keystone Digital Zoom Audio		0
Advanced 1 Advanced 2		4/> 4/> 4/>
Menu = Exit	Menu Select 🌗	Scroll 🔺 🔻

Ітем	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	
Advanced 1	Press	
Advanced 2	Press	

## <u>Audio</u>

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.

image	Settings 1	Settings 2
	Settings 1 🕨 Audio	
Volume		5
Mute		Off
SRS		Off
Menu = Return		Scroll 🔺 🔻

Ітем	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.
SRS	Press the ◀► buttons to enter and turn on or off the audio surround.

## Advanced 1 Features

Press the **Menu** button to open the **OSD** menu. Press the  $\triangleleft \triangleright$  buttons to move to the **Settings 1** menu. Press the  $\triangleleft \lor$  buttons to move to the **Advanced 1** menu and then press  $\triangleleft$  (Enter) or  $\triangleright$ . Press the  $\triangleleft \lor$  buttons to move up and down in the **Advanced 1** menu. Press the  $\triangleleft \triangleright$  buttons to enter and change setting values.

image	Settings 1	Settings 2
	Settings 1  Advanced 1	
Language		English
Security Lock		Off
Blank Screen		
Splash Logo		Off
Closed Captioning		Off
3D Setting		<b>≪</b> ↓∕►
Menu = Return		Scroll 🔺 🔻

Ітем	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.	
Splash Logo	Press the ◀► buttons t enter and o select splash logo on or off.	
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 28 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.

## IN8606HD User's Manual

3D Setting



Ітем	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 or IR 3D shutter glasses. With IR 3D shutter glasses, you need to install a driver on your PC and connect a USB emitter.
- 7. The OSD 3D mode needs to match the type of glasses (DLP link or IR 3D).
- 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.

Image	Settings 1	Settings 2
	Settings 1 ) Advanced 2	
Test Pattern		None
H Image Shift		0
V Image Shift		0
Menu = Return		Scroll 🔺 🔻

Ітем	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.

Image Settings 1	Settings 2
Auto Source	Off
No Signal Power Off (min)	0
Auto Power On	Off
Lamp Mode	Normal
Reset All	«!/»
Status	4/> 4/∕ 4/∕
Advanced 1	«!/»
Advanced 2	
Menu = Exit Menu Select 🌗	Scroll 🔺 🔻

Ітем	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
Status	Press
Advanced 1	Press
Advanced 2	Press

# <u>Status</u>

press ← (Enter) or ► to enter.

80 5 Settings 1 Settings 2 Image Settings 2 🕨 Status Active Source Analog RGB Video Information 1080p24 (3D SBS) Lamp Hours(ECO , Normal) 0 0 Software Version D06 Menu = Return

Press the ▲ ▼ buttons to move up and down in the Settings 2 menu. Select the Status menu and

Ітем	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)				
Software version	Showing system software version.				

# Advanced 1 Features

Press the **Menu** button to open the **OSD** menu. Press the  $\triangleleft \triangleright$  buttons to move to the **Settings 2** menu. Press the  $\land \lor$  buttons to move to the **Advanced 1** menu and then press  $\triangleleft \lor$  (Enter) or  $\triangleright$ . Press the  $\land \lor$  buttons to move up and down in the **Advanced 1** menu. Press the  $\triangleleft \triangleright$  buttons to enter and change setting values.

image	Settings 1	Settings 2
	Settings 2 > Advanced 1	
Menu Position		D
Translucent Menu		0 %
Low Power Mode		Off
Fan Speed		Normal
Lamp Hour Reset		<b>≪!∕</b> ⊁
Projector ID		00
ISF Mode		Off
Menu = Return		Scroll 🔺 🔻

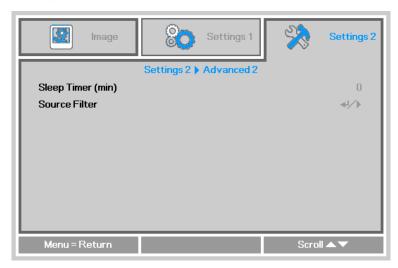
Ітем	DESCRIPTION
Menu Position	Press the ◀► buttons to enter and select different OSD location.
Translucent Menu	Press the ◀► buttons to enter and select OSD background translucent level.
Low Power Mode	Press the ◀► buttons to enter and turn Low Power Mode on or off.
Fan Speed	Press the <b>◄</b> buttons to enter and toggle between Normal and High fan speeds. <b>Note</b> : 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 33 for more information on <i>Lamp Hour Reset</i> .
Projector ID	Press the <b>◄</b> ► buttons to enter and adjust the two digit projector ID from 00 through 98.
ISF Mode	Press the ◀► buttons to enter and adjust ISF parameters. Note: This feature does not display in the menu system unless a IFS technician has enabled this feature.



Please refer to *Resetting the* on page 38 to reset the lamp hour counter.

# Advanced 2 Features

Press the **Menu** button to open the **OSD** menu. Press the  $\triangleleft \triangleright$  buttons to move to the **Settings 2** menu. Press the  $\land \lor$  buttons to move to the **Advanced 2** menu and then press  $\triangleleft \lor$  (Enter) or  $\triangleright$ . Press the  $\land \lor$  buttons to move up and down in the **Advanced 2** menu. Press the  $\triangleleft \triangleright$  buttons to enter and change setting values.



Ітем	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

### Source Filter

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



Ітем	DESCRIPTION				
VGA	Press the ◀► buttons to enter and enable or disable the VGA1 source.				
Component Video	Press the ◀► buttons to enter and enable or disable the Component Video source.				
Composite Video	Press the ◀► buttons to enter and enable or disable the Composite Video source.				
S-Video	Press the ◀► buttons to enter and enable or disable the S-Video source.				
HDMI 1	Press the ◀► buttons to enter and enable or disable the HDMI 1 source.				
HDMI 2	Press the ◀► buttons to enter and enable or disable the HDMI 2 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.

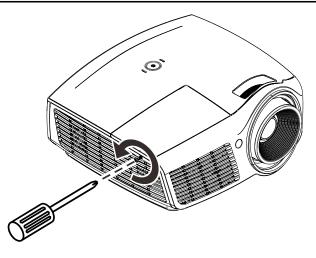
# ✓! IF A LAMP RUPTURES

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.

 Loosen the single screw on the lamp compartment cover.

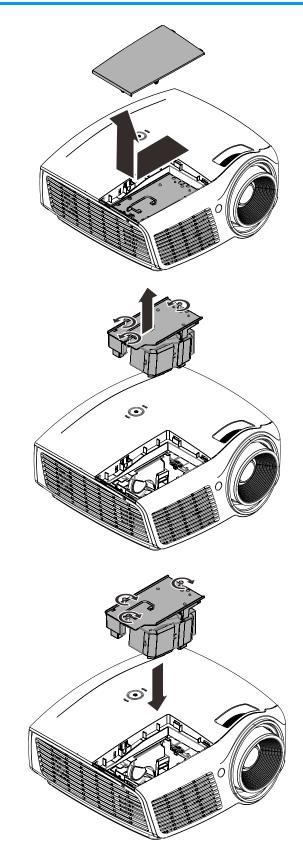


2. Remove the lamp compartment cover.

- **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:

Lamp Hour Reset

Menu = Return

Projector ID

ISF Mode

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



**≁/**}

00

**4** Press the  $\leftarrow$  (Enter) or  $\triangleright$  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.

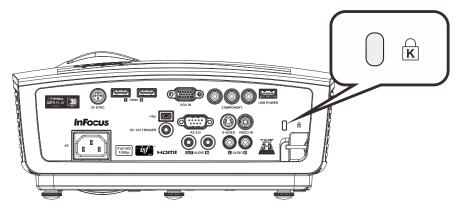
#### Caution:

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.



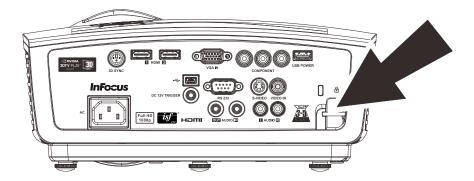
#### Note:

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, <u>http://www.Kensington.com</u>.

### 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.



# **TROUBLESHOOTING**

# **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
System initialization	Flashing	OFF
Ready to power on (Standby)	ON	OFF
System powering up	Flashing	OFF
Lamp lit, normal operation	ON	OFF
Cooling	Flashing	OFF
Overheating	3 blinks	OFF
Thermal break sensor error	4 blinks	OFF
Lamp failure	5 blinks	ON
Lamp temperature shut down	5 blinks	1 blink
Short circuit in lamp output detected	5 blinks	2 blinks
End of lamp 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 error	5 blinks	7 blinks
Lamp ballast error	5 blinks	8 blinks
Ballast watt value is out of range (Lamp Normal & Eco mode)	5 blinks	9 blinks
Lamp ballast communication error	5 blinks	10 blinks
Fan-1 error	6 blinks	1 blink
Fan-2 error	6 blinks	2 blinks
Fan-3 error	6 blinks	3 blinks
The projector case is open	7 blinks	OFF
DAD1000 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.

<sup>•</sup>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

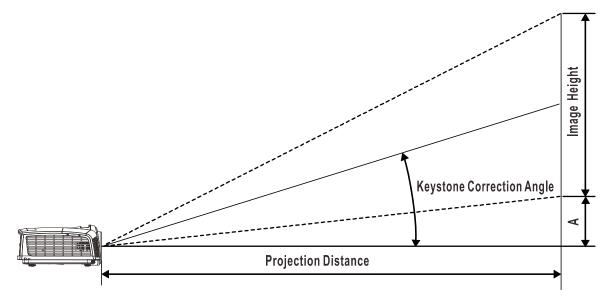
# **SPECIFICATIONS**

# Specifications

Model	IN8606HD						
Display type	0.65 DMD 1080P, DC3,S600 with DDP4422 ASIC						
Resolution	1080p 1920x1080						
Projection distance	1.2 ~ 10 m ( 3.94ft ~ 32.81ft )						
Projection screen size	25.9" ~ 324.9" (65.79cm ~ 825.25cm)						
Projection lens	Manual Focus/Manual Zoom						
Zoom ratio	1.5x						
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, PCT, TUV-GS, UL-S						
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:300W, <0.5W(Stand By) / ECO:250W, <0.5W(Stand By						
Lamp	240W (Boost) / 190W (Std)						
Audio speaker	10W mono speaker						
	VGA x 1						
	Component (YPbPr RCAx3) x 1						
	Composite x 1						
Input Terminals	S-Video x 1						
	HDMI x 2						
	PC Audio jack(3.5mm) x 1						
	RCA Stereo Audio LR x 1						
Output Terminals	PC Audio jack(3.5mm) x 1						
	RS-232C						
	3D sync						
Control Terminals	Screen trigger: DC Jack x 1 (DC12V 200mA output function)						
	USB (Type mini B) - service only						
	USB (type A) support DC 5V						
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

IN8606HD							
IMAGE DIAGONAL (MM/INCH) (MM/INCH)				PROJECTION DISTANCE (MM/INCH) <u>TO</u>	OFFSET-A (MM/INCH)		
1524 / 60	1328.2 / 52.29	747.3 / 29.42	1846.3 / 72.7	2776.1 / 109.3	112.1 / 4.4		
1778 / 70	1549.7 / 61.01	871.7 / 34.32	2154 / 84.8	3238.8 / 127.5	130.8 / 5.1		
1828.8 / 72	1593.9 / 62.75	896.6 / 35.3	2215.6 / 87.2	3331.3 / 131.2	134.5 / 5.3		
2032 / 80	1771.1 / 69.73	996.2 / 39.22	2461.7 / 96.9	3701.5 / 145.7	149.4 / 5.9		
2133.6 / 84	1859.5 / 73.21	1046 / 41.18	2584.8 / 101.8	3886.6 / 153	156.9 / 6.2		
2286 / 90	1992.4 / 78.44	1120.6 / 44.12	2769.5 / 109	4164.2 / 163.9	168.1 / 6.6		
2438.4 / 96	2125.2 / 83.67	1195.6 / 47.07	2954.1 / 116.3	4441.8 / 174.9	179.3 / 7.1		
2540 / 100	2213.9 / 87.16	1245.4 / 49.03	3077.2 / 121.1	4626.8 / 182.2	186.8 / 7.4		
3048 / 120	2656.6 / 104.59	1494.3 / 58.83	3692.6 / 145.4	5552.2 / 218.6	224.1 / 8.8		
3429 / 135	2988.6 / 117.66	1681.2 / 66.19	4154.2 / 163.6	6246.2 / 245.9	252.2 / 9.9		
3810 / 150	3320.8 / 130.74	1867.9 / 73.54	4615.8 / 181.7	6940.3 / 273.2	280.2 / 11		
5080 / 200	4427.7 / 174.32	2490.5 / 98.05	6154.4 / 242.3	9253.7 / 364.3	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	0	_	_	—
PAL/SECAM	_	15.625	50	0	_	_	_
VESA	640 x 400	37.9	85.08	—	—	0	0
	720 x 400	31.5	70.1	—		0	0
	720 x 400	37.9	85.04	—	—	0	0
	640 x 480	31.5	60	—	—	0	0
	640 x 480	37.9	72.8	—	—	0	0
	640 x 480	37.5	75	—	_	0	0
	640 x 480	43.3	85	—	—	0	0
	800 x 600	35.2	56.3	—	—	0	0
	800 x 600	37.9	60.3	—	—	0	0
	800 x 600	46.9	75	—	—	0	0
	800 x 600	48.1	72.2	—	—	0	0
	800 x 600	53.7	85.1	—	—	0	0
	800 x 600	76.3	120	_	_	0	0
	1024 x 576	35.8	60	—	—	0	0
	1024 x 600	37.3	60	—	—	0	0
	1024 x 600	41.5	65	—	—	0	0
	1024 x 768	48.4	60	—	—	0	0
	1024 x 768	56.5	70.1	—	—	0	0
	1024 x 768	60	75	_	_	0	0
	1024 x 768	68.7	85	_	_	0	0
	1024 x 768	97.6	120	—	—	0	0
	1024 x 768	99	120	_		0	0
	1152 x 864	67.5	75	—	—	0	0
	1280 x 720	45	60	—	—	0	0
	1280 x 720	90	120	_		0	0
	1280 x 768	47.4	60	_	_	0	0
	1280 x 768	47.8	59.9	—	_	0	0
	1280 x 800	49.7	59.8	_	_	0	0
	1280 x 800	62.8	74.9	_	_	0	0
	1280 x 800	71.6	84.9	_	_	0	0
	1280 x 800	101.6	119.9	_	_	0	0
	1280 x 1024	64	60	—	—	0	0
	1280 x 1024	80	75	—	_	0	0

SIGNAL	RESOLUTION	H-Sync (KHz)	V-Sync (Hz)	Composite S_video	COMPONENT	RGB (Analog)	HDMI (DIGITAL)
	1280 x 1024	91.1	85	—	—	0	0
	1280 x 960	60	60	—	—	0	0
	1280 x 960	85.9	85	—	—	0	0
	1360 x 768	47.7	60	—	—	0	0
	1400 x 1050	65.3	60	—	_	0	0
	1440 x 900	55.5	59.9	—	_	0	0
	1440 x 900	55.9	59.9	—	—	0	0
	1440 x 900	70.6	75	—	—	0	0
	1600 x1200	75	60	—		0	0
	1680 x 1050	64.7	59.9	—		0	0
	1680 x 1050	65.3	60	—	—	0	0
	1920 x 1200	74	60	—		0	0
	1920 x 1080	67.5	60	—	—	0	0
	640 x 480	35	66.7	—	_	0	0
Apple	832 x 624	49.7	74.5	—	—	0	0
Macintosh	1024 x 768	60.2	74.9	—	—	0	0
	1152 x 870	68.7	75.1	—	—	0	0
SDTV	480i	15.734	60	—	0	—	0
3010	576i	15.625	50		0	_	0
EDTV	576p	31.3	50		0	—	0
EDIV	480p	31.5	60	—	0	—	0
	720p	37.5	50	—	0	—	0
	720p	45	60	—	0	—	0
	1080i	33.8	60		0	—	0
	1080i	28.1	50	—	0	—	0
HDTV	1080p	27	24	—	0	—	0
	1080p	28	25	—	0	—	0
	1080p	33.7	30	—	0	—	0
	1080p	56.3	50	—	0	_	0
	1080p	67.5	60	—	0	—	0

O: Frequency supported

— : Frequency not supported

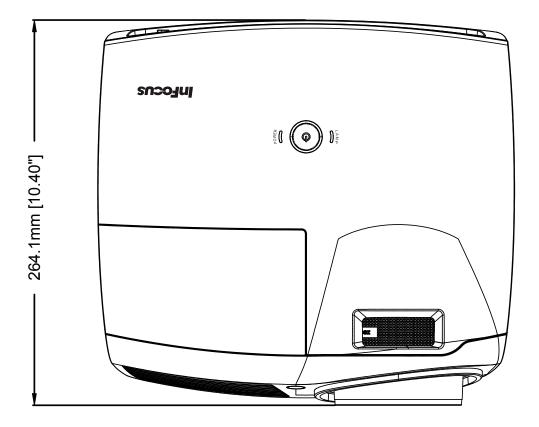
**\star** The native resolution of the panel is 1920x1080

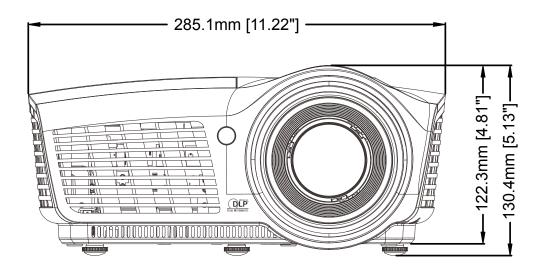
Resolutions listed above other than 1920 x 1080 (the native resolution of the projector) will be resized and displayed, however they may contain lines or uneven looking text. This is normal.

★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**





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# **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, PCT, TUV-GS, UL-S

# **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	ΑΟΤ	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 = satu- ration
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 5:HDMI-1 6:HDMI-2 10:Component 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 At- tempts 3:Lamp went out unexpect- edly 4:Fan failure 5:Over- heating 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	x	x	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	4000			240W lamp life 4000
49V	Lamp Resets (Total number)	LMR	R	0	9999	0	1	
62V	Lamp Low Power	IPM	RW	0	1	0	1	1=ECO, 0=Normal

No	Function	Command	RW	Min	Max	Default	Step	Parameter
63V	Language	LAN	RW	0	20	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:Finnish 13:Korean 14:Arabic 15:Turkish 16:Japanese 17:Brazilian Portuguese 18:Kazakh 19:Vietnamese 20:Danish
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
103 (None)	Overscan	OVS	RW	0	1	0	1	0:disable; 1:enable
104V	Frequency (Phase)	MSS	RW	0	31	х	1	RGB source only
108V	Power	PWR	RW	0	1	0	1	0:Turn Off
111V	Presets	PST	RW	0	7	source Specific	1	1:Turn On 0:Presentation 1:Bright 2:Game 3:Movie 4:TV 5:sRGB 6:Blackboard 7:User
114V	Projector Firmware Ver.	FVS	R	string				HT186-495IF-DPXXX
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).
116V	Projector Info menu	PRI	W		1		1	Display Projector Info menu

No	Function	Command	RW	Min	Max	Default	Step	Parameter
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				IN8606HD
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:Gray 1:Red 2:Black 3:Blue 4:White
130V	Sharpness	SHP	RW	0	100	50	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	x	x	0	1	RGB source only (VPS?) to get range (VPS+) (VPS-)
167V	Volume	VOL	RW	0	30	4	1	0~30