

Owner's Manual



Multimedia Projector

Model EK-800U

Features and Design

This Multimedia Projector is designed with the most advanced technology for portability, durability, and ease of use. This projector utilizes a high luminance and Eco friendly system, a palette of 1.07 billion colors, and digital light processing (DLP) technology.

Compact Design

This projector is designed compact in size and weight. It is easy to carry and installed anywhere you wish to use.

Simple Computer System Setting

The projector has the Multi-scan system to conform to almost all computer output signals quickly. Up to WUXGA resolution can be accepted.

Useful Functions for Presentations

- The digital zoom function allows you to focus on the crucial information during a presentation.

Lamp Control

Brightness of the projection lamp can be manually selected (Constant Power, Constant Luminance, or Eco Mode).

If a Eco Mode is chosen, the system will automatically adjust the lamp power according to the source input. This enhances the picture contrast and reduces the power consumption especially in dark screen.

Logo Function

The Logo function allows you to customize the screen logo. You can capture an image for the screen logo and use it for the starting-up display or between presentations.

Multilanguage Menu Display

Operation menu is available in 13 languages; English, French, Spanish, German, Italian, Russian, Simplified Chinese, Traditional Chinese, Japanese, Korean, Portuguese, Indonesian, and Dutch.

Helpful Maintenance Functions

Lamp and filter maintenance functions provide for better and proper maintenance of the projector.

Security Function

The Security function helps you to ensure security of the projector. With the Key lock function, you can lock the operation on the top control or remote control except the Power button.

LAN Network Function

This projector is loaded with the Wired LAN network function. You can operate and manage the projector via network.

For details, refer to page 35 and pages 39-48.

Auto Setup Function

This function enables auto input search and auto signal adjustment simply by pressing the Auto button on the keypad or remote.

Colorboard Function

At the time of simple projection on the colored wall, you can get the close color image to the color image projected on a white screen by selecting the similar color to the wall color from the preset four colors.

Power Management

The Power management function reduces power consumption and maintains the lamp life.

Note:

The screen menu and pictures in the manual may slightly differ from the real product. The manual is subject to change without prior notice.

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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.
- \succ 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.

Safety Instructions

- Please read this manual completely before installing and operating the projector.
- The projector provides many convenient features and functions. Proper operation may enable you to fully utilize the features and keep it in good condition. Otherwise, it will not only shorten the service life of the unit, but also may cause malfunction, a fire, or other accidents.
- If your projector cannot work properly, please read this manual again, check the operating methods and cable connection, and try the solutions in the part of Troubleshooting. If the problem still exists, contact the dealer or the service center.
- The lamp of the projector is a wearing part. The luminance may decrease after a period of operation and be weaker than that of a new lamp. This is normal. Please strictly follow the steps in turning on the unit and turning off the unit to turn on/off the projector, and the requirements in maintaining and cleaning the projector to service and clean the projector regularly. Or the high temperature residual heat may not radiate, greatly shortening the service life of the projector and lamp, or even damaging them within a short period.

Caution:



Caution:

To reduce the risk of electric shock, do not remove cover (or back), no user serviceable parts inside except lamp replacement. refer servicing to gualified service personnel.



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the user's manual with this unit.

FOR EU USERS

The symbol mark and recycling systems described below apply to EU countries and do not apply to countries in other areas of the world.

Your product is designed and manufactured with high quality materials and components which can be recycled and/or reused.

The symbol mark means that electrical and electronic equipment, batteries and accumulators, at their end-of-life, should be disposed of separately from your household waste.

Note:

If a chemical symbol is printed beneath the symbol mark, this chemical symbol means that the battery or accumulator contains a heavy metal at a certain concentration. This will be indicated as follows: Hg: mercury, Cd: cadmium, Pb: lead In the European Union there are separate collection systems for used electrical and electronic equipment, batteries and accumulators. Please, dispose of them correctly at your local community waste collection/recycling centre. Please help us to conserve the environment we live in!



Safety Precautions

Caution:

- The projector must be grounded.
- Do not expose the projector to raindrops or high humidity to avoid a fire or electric shock.
- This projector produces intense light from the projection lens. Avoid staring directly into the lens, otherwise eye damage could be caused. Be especially careful that children do not stare directly into the beam.
- Place the projector in a proper position. Otherwise it may result in fire hazard.
- Leave an appropriate space from the top, sides, and back of the shell in order to ventilate and cool down the projector. The figures below indicate the minimum distance to be left. It must be satisfied if the projector is placed in sealed environment like a cabinet.



- Do not cover the vent of the projector. Poor radiation may shorten the service life or even cause dangers.
- Remove the AC power plug if the projector is not to be used for a long time.



- Do not set the projector in greasy, wet, or smoky conditions such as in a kitchen, to prevent a malfunction or accident. If the projector comes in contact with oil or chemicals, it may become deteriorated.
- Read and keep this manual for future reference.
- The mains plug/appliance coupler is used as disconnect device, the disconnect device shall remain readily operable.

Safety Guide

- All the safety and operating instructions should be read before the product is operated.
- Read all of the instructions given here and retain them for later use. Unplug this projector from AC power supply before cleaning. Do not use liquid or aerosol cleaners.
- Use a damp cloth for cleaning.
- Follow all warnings and instructions marked on the projector.
- For added protection to the projector during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage due to lightning and power line surges.
- Do not expose this unit to rain or use near water... for example, in a wet basement, near a swimming pool, etc...
- Do not use attachments not recommended by the manufacturer as they may cause hazards.
- Do not place this projector on an unstable cart, stand, or table. The projector may fall, causing serious injury to a child or an adult, and serious damage to the projector.



- Use only with a cart or stand recommended by the manufacturer, or sold with the projector. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturers.
- An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
- Slots and openings in the back and bottom of the cabinet are provided for ventilation, to ensure reliable operation of the equipment and to protect it from overheating.
- The openings should never be covered with cloth or other materials, and the bottom opening should not be blocked by placing the projector on a bed, sofa, rug, or other similar surface. This projector should never be placed near or over a radiator or heat register.
- This projector should not be placed in a build-in installation such as a book case unless proper ventilation is provided.
- Never push objects of any kind into this projector through cabinet slots as they may touch dangerous
 voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind
 on the projector.
- Do not install the projector near the ventilation duct of air-conditioning equipment.
- This projector should be operated only from the type of power source indicated on the marking label.
- If you are not sure of the type of power supplied, consult your authorized dealer or local power company.
- Do not overload wall outlets and extension cords as this can result in fire or electric shock. Do not allow anything to rest on the power cord. Do not locate this projector where the cord may be damaged by persons walking on it.
- Do not attempt to service this projector yourself as opening or removing the covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- Unplug this projector from wall outlet and refer servicing to qualified service personnel under the following conditions:
 - > When the power cord or plug is damaged or frayed.
 - > If liquid has been spilled into the projector.
 - > If the projector has been exposed to rain or water.
 - If the projector does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the projector to normal operation.
 - > If the projector has been dropped or the cabinet has been damaged.

- > When the projector exhibits a distinct change in performance this indicates a need for service.
- When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or injury to persons.
- Upon completion of any service or repairs to this projector, ask the service technician to perform routine safety checks to determine that the projector is in safe operating condition.

Information for users in the European Union

This is a device to project images onto a screen, etc., and is not intended for use as indoor lighting in a domestic environment. Directive 2009/125/EC.

Note for customers in the US



Lamp(s) inside this product contain mercury and must be recycled or disposed of according to local state or federal laws.

Lamp(s) inside this product contain mercury and must be recycled or disposed of according to local state or federal laws.

Air circulation

Vents in the cabinet are provided for ventilation. To ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered.

Caution:

- Hot air is exhausted from the exhaust vent. When using or installing the projector, the following precautions should be taken.
- Do not put any flammable objects, or spray can near the projector. Hot air is exhausted from the air vents.
- Keep the exhaust vent at least 1m away from any objects.
- Do not touch a peripheral part of the exhaust vent, especially screws and metallic part. This area will become hot while the projector is being used.
- Do not put anything on the projector. Objects put on the cabinet will not only get damaged but also may cause fire hazard by heat.
- Cooling fans are provided to cool down the projector.
- The fan's running speed is changed according to the temperature inside the projector.



Contains mercury

- For more information on safe handling procedures, the measures to be taken in case of accidental breakage and safe disposal options visit: <u>ec.gc.ca/mercure-mercury/</u>.
- Dispose of or recycle in accordance with applicable laws.



Moving the projector

When moving the projector, take care of the lens and retract the adjustable foot to prevent damage to the lens and cabinet.

Installing the projector properly

- Please set the projector on nearly-level.
- Be sure to install the projector properly. Improper installation may reduce the lamp lifetime and even cause a fire hazard.



Do not roll the projector over 15 degrees from rear to front.

Do not point the projector up to project an image.

Do not point the projector down to project an image.

Do not put the projector on either side to project an image.

2 Caution in ceiling installation the projector

- Only qualified personal is authorized for ceiling installation.
- We are not responsible for the hurt and damage caused by ceiling brakect that purchased from unauthorized dealer even in warranty period.
- Remove the ceiling bracket immediately while not use.
- While installing, torque screwdriver is suggested, don't use electric or impact-type screwdriver.
- Please read the manual of bracket for details.
- The bracket is subject to change without notice.



L Caution in moving or transporting the projector

- Do not drop or bump the projector, otherwise damages or malfunctions may result.
- When carrying the projector, use a suitable carrying case.
- Do not transport the projector by courier or any other transport service in an unsuitable transport case. This may cause damage to the projector. For information about transporting the projector by courier or any other transport service, consult your dealer.
- Do not put the projector in a case before it is cooled enough.

Compliance

FCC Caution

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Use of shielded cable is required to comply with class B limits in Subpart B of Part 15 of FCC Rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the instructions. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Model Number : EK-800U

Trade Name : EIKI

Responsible party : EIKI International, Inc.

Address : 30251 Esperanza Rancho Santa Margarita CA 92688-2132

Telephone No. : 800-242-3454 (949-457-0200)

AC Power Cord Requirement

The AC Power Cord supplied with this projector meets the requirement for use in the country you purchased it.

AC Power Cord for the United States and Canada:

AC Power Cord used in the United States and Canada is listed by the Underwriters Laboratories (UL) and certified by the Canadian Standard Association (CSA).

AC Power Cord has a grounding-type AC line plug. This is a safety feature to be sure that the plug will fit into the power outlet. Do not try to defeat this safety feature. Should you be unable to insert the plug into the outlet, contact your electrician.

AC Power Cord for the United Kingdom:

This cord is already fitted with a moulded plug incorporating a fuse, the value of which is indicated on the pin face of the plug. Should the fuse need to be replaced, an ASTA approved BS 1362 fuse must be used of the same rating, marked thus . If the fuse cover is detachable, never use the plug with the cover omitted. If a replacement fuse cover is required, ensure it is of the same colour as that visible on the pin face of the plug (i.e. red or orange). Fuse covers are available from the Parts Department indicated in your User Instructions.

If the plug supplied is not suitable for your socket outlet, it should be cut off and destroyed. The end of the flexible cord should be suitably prepared and the correct plug fitted.

Warning:

A plug with bared flexible cord is hazardous if engaged in a live socket outlet.

The Wires in this mains lead are coloured in accordance with the following code:

- Green-and-yellow Earth
- Blue Neutral
- Brown Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

- The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol or coloured green or green-and-yellow.
- The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
- The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Warning:

This apparatus must be earthed.

Note:

The socket-outlet should be installed near the equipment and easily accessible.

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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 recommend that you keep the original packing material should you ever need to return the equipment for warranty service.

Note:

Avoid using the projector in dusty environments.

Views of Projector Parts

Front-right View



Ітем	LABEL	DESCRIPTION	SEE PAGE
1	Projection Lens	Allows automated lens control and adjustment: vertical and horizontal offsets, zoom and focus.	-
2	Lens Release Button	Press to release the lens.	-
3	Front IR Sensor	Receives signals from the IR remote. Keep the signal path to the sensor unobstructed for uninterrupted communication with the projector.	6
4	Cooling Air Vents (Intake)	Keep these vents unobstructed to prevent the projector from overheating.	-
5	Adjustable Feet	Raise or lower the feet to level the projector.	11

Important:

Ventilation openings on the projector allow for good air circulation, which keeps the projector lamp cool. Do not obstruct any of the ventilation openings.

Left View



Ітем	LABEL	DESCRIPTION	SEE PAGE
1	3D Sync OUT	Connect the 3D IR glasses transmitter	-
		(Note: For Specific 3D IR glasses only)	
2	DVI-D	Connect to DVI source.	-
3	VGA IN	Connect the VGA cable from a computer or component device.	-
4	VGA OUT	Connect the VGA cable to a display.	-
5	Component/ RGBHV IN	Connect to RGB or YPbPr/YCbCr output signal with BNC type input terminal.	-
6	Built-in Keypad	Control the projector.	4
7	Remote OUT	Provide serial communications and power for wired remote.	-
8	Remote IN	Provide serial communications and power for wired remote.	-
9	Kensington Lock	Use to secure the projector to countertops, tables, etc.	54
10	HDBaseT	Connect a RJ45 Cat5/Cat6 Ethernet cable to input uncompressed high-definition video control signals.	-
11	Ethernet	Connect a LAN cable from Ethernet.	-
12	Service	Service only.	-
13	USB	Connect the USB cable from a computer.	-
14	HDMI	Connect the HDMI cable from a HDMI device.	-
15	3G-SDI IN	Connect the coaxial cable with BNC connector from a 3G-SDI device.	-
16	Video IN	Connect the COMPOSITE cable from a video device.	-
17	RS-232C	Connect RS-232 serial port cable for remote control.	-
18	AC Input	Connect to the supplied power adapter.	10

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.

Warning:

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

<u>Built-in Keypad</u>



Ітем	LABEL	DESCRIPTION	SEE PAGE
1	Power	Turn the projector on or off.	10
2	Shutter	Display or blank the video image.	-
3	Auto	Automatically optimize image.	-
4	Enter	Select a highlighted menu item.	13
		Change or accept a value.	
5	Source	Select an input for the main or PIP/PBP image.	-
6	Focus	Adjust focus.	12
7	Lens	Adjust the lens vertical or horizontal offset setting.	-
8	Zoom	Adjust zoom.	12
9	Exit	Return to previous level or exit menus if at top level.	13
10	Arrow keys	Adjust a setting UP or DOWN.	13
		Navigate within a menu	
11	Menu	Display menus.	13

Bottom View



Ітем	LABEL		SEE PAGE
1	Adjustable Feet	Raise or lower the feet to level the projector.	11
2	Ceiling support holes	Contact your dealer for information on mounting the projector on a ceiling.	-

Note:

- When installing, ensure that you use only UL Listed ceiling mounts.
- For ceiling installations, use approved mounting hardware and M8 screws with a maximum screw depth of 20 mm (0.78 inch).
- The construction of the ceiling mount must be of a suitable shape and strength. The ceiling mount load capacity must exceed the weight of the installed equipment, and as an additional precaution be capable of withstanding three times the weight of the equipment (not less than 5.15 kg) over a period of 60 seconds.

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.

Note:

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.

Ітем	LABEL		SEE PAGE
1	Power on	Turn projector ON.	10
2	Number Keys	Enter a number (such as PIN code) or source hotkey. Source Hotkey Key: 1: VGA 2: BNC 3: HDMI 4: DVI-D 5: 3D-SDI 6: HDBaseT 7: CVBS 8: Network Display	_
3	Info	Display source image information.	-
4	Auto	Automatically optimize image.	-
5	Enter	Select a highlighted menu item.Change or accept a value.	13
6	Arrow Keys	Adjust a setting UP or DOWN.Navigate within a menu.	13
7	Menu	Display menus.	13
8	Gamma	Adjust mid-range levels.	-
9	Bright	Adjust amount of light in the image.	-
10	Lens H	Adjust the position of the image horizontally.	-
11	Lens V	Adjust the position of the image vertically.	-
12	Keystone H	Adjust the horizontal keystone.	12
13	Keystone V	Adjust the vertical keystone.	12
14	Shutter (AV Mute)	Display or blank the video image.	-
15	Hot Key	Select your preset keys quickly.	-
16	OFF	Turn projector OFF.	10
17	Mode	Select the preset display mode.	-
18	Source	Select an input for the main or PIP/PBP image.	-
19	Exit	Return to previous level or exit menus if at top level.	13
20	PIP	Turn PIP/PBP ON/OFF.	-
21	Cont.	Adjust difference between dark and light.	-
22	Focus	Adjust focus to improve image clarity as desired.	12
23	Zoom	Adjust zoom to achieve a desired image size.	12
24	Pattern	Display a test pattern.	-



Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous laser light exposure.

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 or the buttons on the top of the projector. All operations can be carried out with the remote control; however, the buttons on the projector are limited in use.

Inserting the Remote Control Batteries

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

1. Remove the battery compartment cover by sliding the cover in the direction of the arrow.



3. Replace the cover.



Caution:

- Only use AAA batteries (Alkaline batteries are recommended).
- Dispose of used batteries according to local ordinance regulations.
- Remove the batteries when not using the projector for prolonged periods.

SETUP AND OPERATION

Starting and Shutting down the Projector

Turn the Projector On

- **1.** Connect the power cord to the projector. Connect the other end to a wall outlet. The Power button on the built in keypad is illuminated.
- **2.** Turn on the connected devices.
- 3. Turn on the projector by pressing "⁽¹⁾" on the remote control or press "⁽¹⁾" on the built-in keypad. The Status LED is Green with a long blink.
 The projector splash screen displays and connected devices are detected.
- 4. If more than one input device is connected, press the Source key on the remote control and use ▲ ▼ to select an input source (VGA, BNC, HDMI, HDBaseT, or Component).
- **5.** The projector detects the source you selected and displays the image.

Turn the Projector Off

- 1. Press "**U**" on the built-in keypad or press "**O**" on the remote control to turn off the projector. A warning message will appear on the displayed image
- 2. Press "𝔄" on the built-in keypad or press "ອ[™] on the remote control again to confirm your selection. If you do not press "𝔄" or "ອ[™] again, the warning message will disappear after 3 seconds.

Caution:

• Do not unplug the power cord until all of fans are stop-indicating the projector has cooled down.





EIK

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.



- **1.** To raise the level of the projector, lift the projector **(A)**.
- 2. Locate the adjustable foot you wish to modify on the underside of the projector.
- **3.** Rotate the adjustable foot clockwise to raise the projector or counter-clockwise to lower it. Repeat with the remaining feet as necessary **B**.

Adjusting the Zoom, Focus, and Keystone

- **1.** Use the **Zoom** button to resize the projected image and screen size **B**.
- **2.** Use the **Focus** button to sharpen the projected image **A**.



 Use the Keystone H buttons (on the remote control) to the keystone horizontally and make a squarer image. Use the Keystone V buttons (on the remote control) to adjust keystone vertically and make a squarer image.



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 cursor buttons or the projector keypad to navigate and make changes to the OSD.



- **1.** To enter the OSD, press the **Menu** button **(A)**.
- Use the arrow keys (▲▼◀►) to navigate within the menu and adjust a setting up or down .
- Press the Enter button to enter the submenu or confirm the selection/ setting C.
- **4.** Press the **Exit** button to return to the previous menu or exit menus if at top level **D**.

PICTURE	PICTURE	
FIGTORE	Display Mode	Presentation
	Brightness	50
OUTPUT	Contrast	50
001101	Sharpness	2
	Color	50
SETUP	Tint	50
SETUP	Phase	50
	Frequency	50
	Horz Position	50
OPTION	Vert Position	50

Caution:

Depending on the video source, not all items in the OSD are available. 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.

PICTURE
y Mode Presentation
ness 50
st 50
ness 2
50
50
50
ency 50
osition 50
osition 50

2. Use the arrow keys (▲▼) to select **SETUP** and press the **Enter** button to enter the **SETUP** menu.

PICTURE	SETUP	
PICTURE	Language	English
	Ceiling Mount	Auto
OUTPUT	Rear Projection	Off
001101	Lens Function	
	Menu Preferences	
OFTUD	Keypad LED Settings	On
SETUP	Pin	
	Closed Captioning	Off
OPTION	Communications	

- **3.** Use the arrow keys (▲▼) to select **Language** and press the **Enter** button to enter its submenu.
- **4.** Use the arrow keys (▲▼◀►) to select the desired language and press the **Enter** button to enter its confirm.
- **5.** Press the **Exit** button several times to exit the menu.



OSD Menu Overview

N AIN M ENU	SUB MENU / SE	TTINGS		DEFAULT
		Presentation		
		Video		
		Bright		
		DICOM SIM		
	Display Mode	2D High Speed		By source set
		3D		
		User		
		Save to User		
	Brightness	0 ~ 100		50
	Contrast	0 ~ 100		50
	Sharpness	0~4		2
	Color	0 ~ 100		50
	Tint	0 ~ 100		50
	Phase	0 ~ 100		50
	Frequency	0 ~ 100		50
	Horz Position	0 ~ 100		50
	Vert Position	0 ~ 100		50
	Auto Image			
	3D Display		Auto	
			Frame Packing	
PICTURE		3D Enable	Side by Side	Auto
			Top and Bottom	
			Frame Sequential	
			Off	
		3D Invert	Off	Off
			On	
		Enable	On/Off	Off
		Auto Test Pattern	On/Off	On
		Red Part of Red	0 - 1000	1000
		Green Part of Red	0 - 1000	0
		Blue Part of Red	0 - 1000	0
		Green Part of Green	0 - 1000	1000
		Red Part of Green	0 - 1000	0
	Color Matching	Blue Part of Green	0 - 1000	0
		Blue Part of Blue	0 - 1000	1000
		Red Part of Blue	0 - 1000	0
		Green Part of Blue	0 - 1000	0
		Red Part of White	0 - 1000	1000
		Green Part of White	0 - 1000	1000
		Blue Part of White	0 - 1000	1000
		Reset to Default	Yes/No	

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

Main Menu	SUB MENU / S	ETTINGS			DEFAULT
			Normal Look		
		BrilliantColor™	Bright Look		Bright Look
		White Peaking	0 - 100		By source set
			Vldeo		
			Film		1
		Gamma	Bright		By source set
			CRT		1
			DICOM		1
			Warmest		
			Warm		
		Color Temperature	Cool		By source set
			Bright		1
			RGB	1	1
			REC709		1
		Color Space	REC601		Auto
			RGB Video		1
			Auto		1
PICTURE	Advanced		Red Gain	0 ~ 100	50
FICTORE	Auvanceu	/anced	Green Gain	0 ~ 100	50
			Blue Gain	0 ~ 100	50
		Color Settings	Red Offset	0 ~ 100	50
		Color Settings	Green Offset	0 ~ 100	50
			Blue Offset	0 ~ 100	50
			Reset RGB Gain/ Offset		
		Color Enhancement	0~2		0
			2X		0.7
		Color Wheel Speed	3X		2X
		Durannia Dia ak TM	Off		0"
		DynamicBlack™	On		Off
		Noise Reduction	0 ~ 100		0
		Flesh Tone Correction	0 ~ 100		0
			Off		<u></u>
		Video Black Level	On		Off
		Tiles Maria	Off		
		Film Mode	On		Off
		Auto			
		4:3]
OUTPUT	Aspect Ratio	16:10			Auto
		Native			1
		3D Mode		1	1

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Main Menu	SUB MENU / SE	TTINGS		DEFAULT
		Off		
	Overscan	Zoom		By source set
		Сгор		
	H Digital Zoom	50% ~ 400%		100
	V Digital Zoom	50% ~ 400%		100
	H Digital Shift	0 ~ 100		50
	V Digital Shift	0 ~ 100		50
		PC Mode	Off	Off
			On	
	Image Warping	H Keystone	0 ~ 40	20
		V Keystone	0~40	20
		H Pincushion	0 ~ 100	50
		V Pincushion	0 ~ 100	50
		PIP/PBP Enable	Off	Off
			On	
			VGA	
			BNC	
			HDMI	
		Main Source	DVI-D	VGA
		Main Source	3G-SDI	VGA
			HDBaseT	
OUTPUT			CVBS	
			Network Display	
			VGA	
			BNC	
		Sub Source	HDMI	
	PIP/PBP		DVI-D	
			3G-SDI	
			HDBaseT	
			CVBS	
			Network Display	
		Swap		
			Small	
		Size	Medium	Large
			Large	
			PBP, Main Left	
		Layout	PBP, Main Top	
			PBP, Main Right	
			PBP, Main Bottom	
			PIP-Bottom Right	PBP, Main Left
			PIP-Bottom Left	
			PIP-Top Left	
			PIP-Top Right	

Main Menu	SUB MENU / SET	TTINGS		N	DEFAULT
		English			
		French			1
		Spanish			
		German			-
		Italian			
		Russian			
	Language	Chinese Simpified			English
		Chinese Traditional			
		Japanese			
		Korean			
		Portuguese			
		Indonesian			-
		Dutch			4
		Off			
	Ceiling Mount	On			Auto
	<u> </u>	Auto			
		Off			
	Rear Projection	On			Off
		Focus			
		Zoom			
		Lens Shift			
		Lens Calibration	Yes/No (Dialog box)		
	Lens Function	Lens Lock	No		- No
SETUP			Yes		
		Lens Memory	Apply Position	1~5	
			Save Current Position	1~5	
		Menu Transparency	0~9		0
	Menu Preferences	Show Messages	Off		0
		Silow Messages	On		On
	Keypad LED Settings	Off			
					On
	Settings	On	Off		
	Pin	Pin Protect			Off PIN default : 12345
		Change DIN	On		
		Change PIN Off			0#
	Closed				Off
	Captioning	CC1			
		CC2			
	Communications		DHCP		Off
					On
			IP Address		192.168.000.100
		LAN	Subnet Mask	ļ	255.255.255.000
			Default Gateway	ļ	192.168.000.100
			MAC Address	ļ	XX:XX:XX:XX:XX
			Apply		Off
					On

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Iain Menu	SUB MENU / SE	TTINGS		DEFAULT
			Enable	Off
			Enable	On
			Start IP	192.168.001.100
			End IP	192.168.001.120
		WLAN	Subnet Mask	255.255.255.000
			Default Gateway	192.168.001.100
			MAC Address	XX:XX:XX:XX:XX:XX
			SSID	SSID@XXXXX
			Projector Name	SSID@XXXXX
			Restart Network	Off
		Network	Residit Network	On
SETUP	Communications		Network Factory	Off
OLIOI			Reset	On
			9600	
			14400	
		Serial Port Baud Rate	19200	19200
			38400	
			57600	
			115200	
		Serial Port Echo	Off	Off
		Selial Fort Echo	On	
		Serial Port Path	RS232	RS232
		Senar Fort Fath	HDBaseT	N3232
		Projector Address	0 - 9	0
	Auto Source	Off		On
	Auto oouree	On		
	High Altitude	Off		Off
		On		
		Off		
	Test Pattern	Grid		
		Red		
		Green		
		Blue		Off
		Yellow		
		Magenta		
OPTION		Cyan		
		White		
		Black		
		Logo		
	Background	Blue		Logo
	Color	Black		L090
		White		
		Blank Screen		
	Hot-Key settings	Aspect Ratio		
		Freeze Screen		Blank Screen
		Overscan		
		Closed Captions		

MAIN MENU	SUB MENU / SE	TTINGS			Default
			0.5W mode		
		Standby Power Mode	Communication mode		Communication mod
			Off		-
		Direct Power On	On		Off
			No		
	Power Settings	Auto Power Off	5 Mins		20 Mins
			10 Mins		
			15 Mins		
			20 Mins		
			25 Mins		
			30 Mins		-
			No		
			2 Hours		-
		Sleep Timer	4 Hours		No
			6 Hours		-
		Light Source Mode	Constant Power		
			Constant Luminance		Constant Power
			Eco Mode		
		Constant Power Settings	0 - 10		10
	Light Source Settings	Constant Luminance Settings	0 - 10		7
			Lamp 1		
OPTION		Current Light Source	Lamp 2		Both
			Both		
			On Failure Only		
		Auto Switch	At Power-Up		On Failure Only
			After X Hours		
		Auto Switch Time (Hours)	5 - 3000		100
		Light Source Info	Lamp 1 Hours		
			Lamp 2 Hours		
			Total Projector Hours		
		Reset Light Source Hours	1/2/Both (Dialog box)		
	Light Sensor	Light Sensor Calibration	ļ		
		Calibrated?	(Display Yes/No)		
	Information	Model Name			
		Serial Number	ļ		
		Native Resolution			
		Firmware			
		Main Source			
		- Resolution			
		- Signal Format			
		- Pixel Clock			
		- Horz Refresh			
		- Vert Refresh			

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Iain Menu	SUB MENU / S	Sub Menu / Settings			DEFAULT
		Sub Source			
		- Resolution			
		- Signal Format			
		- Pixel Clock			
		- Horz Refresh			
	Information	- Vert Refresh			
		Light Source Mode			
OPTION		Current Light Source			
		Lamp 1 Hours			
		Lamp 2 Hours			
		Standby Power Mode			
		IP Address			
		DHCP			
		System Temperature	1		
	Factory Reset	Yes/No (Dialog box)			
	Service		Ì		

Picture Menu

Press the **Menu** button to open the OSD menu. Press the arrow keys ($\blacktriangle \lor$) to select **PICTURE** and press the **Enter** button to enter the **PICTURE** menu. Press the arrow keys ($\blacktriangle \lor$) to select the menu option and press the **Enter** button to enter its submenu. Press the arrow keys ($\blacktriangle \lor \blacklozenge \lor$) to select or adjust the desired settings and press the **Enter** button to confirm.

PICTURE	PICTURE	
FIGTORE	Display Mode	Presentation
	Brightness	50
OUTPUT	Contrast	50
	Sharpness	2
	Color	50
SETUP	Tint	50
SETUP	Phase	50
	Frequency	50
OPTION	Horz Position	50
	Vert Position	50

Ітем	Description	
Display Mode	Optimize the projector for displaying images under certain conditions, such as Presentation, Video, Bright, DICOM SIM, and user-definable preset.	
Brightness	Adjust the intensity of the image.	
Contrast	Adjust the degree of difference between the lightest and darkest parts of the picture and change the amount of black and white in the image.	
Sharpness	Select the edge clarity of the image.	
Color	Adjust a video image from black and white to fully saturated color. The color setting applies to video sources only.	
Tint	Adjust the red-green color balance in the image of video images. The tint setting applies to video sources only.	
Phase	Analog signals only. Adjust pixel phase when the image still shows shimmer or noise after pixel tracking is optimized. Pixel phase can adjust the phase of the pixel-sampling clock relative to the incoming signal.	
Frequency	Analog signals only. Steady flickering or several soft vertical stripes or bands across the entire image indicates poor frequency. Proper frequency ensures that the image quality is consistent across the screen, the aspect ratio is maintained, and that the pixel phase can be optimized.	
Horz Position	Move the image right or left within the area of available pixels.	
Vert Position	Move the image up or down within the area of available pixels.	
Auto Image	Force the projector to reacquire and lock to the input signal. This is useful when signal quality is marginal.	
3D Display	Configure the 3D display settings. See "3D Display Menu" on page 23.	
Color Matching	Configure the color matching settings. See "Color Matching Menu" on page 24.	
Advanced	Configure the advanced image settings. See "Advanced Menu" on page 26.	
<u>3D Display Menu</u>

Press the **Menu** button to open the OSD menu. Press the arrow keys ($\blacktriangle \lor$) to select **PICTURE** and press the **Enter** button to enter the **PICTURE** menu. Press the arrow keys ($\blacktriangle \lor$) to select **3D Display** and press the **Enter** button to enter the **3D Display** menu. Press the arrow keys ($\blacktriangle \lor$) to select the menu option and press the **Enter** button to enter its submenu. Press the arrow keys ($\blacktriangle \lor \blacklozenge \lor$) to select or adjust the desired settings and press the **Enter** button to confirm.

PICTURE	3D Display
PICTURE	3D Enable Auto
OUTPUT	3D Invert Off
SETUP	
OPTION	

Ітем	DESCRIPTION	
3D Enable	Set 3D format. Supports Mandatory 3D formats and frame sequential 3D@120Hz.	
3D Invert	Invert 3D sync signal for the application of using single projector.	

Color Matching Menu

Press the **Menu** button to open the OSD menu. Press the arrow keys ($\blacktriangle \lor$) to select **PICTURE** and press the **Enter** button to enter the **PICTURE** menu. Press the arrow keys ($\blacktriangle \lor$) to select **Color Matching** and press the **Enter** button to enter the **Color Matching** menu. Press the arrow keys ($\blacktriangle \lor$) to select the menu option and press the **Enter** button to enter its submenu. Press the arrow keys ($\blacktriangle \lor \lor \lor$) to select or adjust the desired settings and press the **Enter** button to confirm.

PICTURE	Color Matching	
FICTORE	Enable	On
	Auto Test Pattern	On
OUTPUT	Red Part of Red	
001101	Green Part of Red	
	Blue Part of Red	
SETUP	Green Part of Green	
SETUP	Red Part of Green	
	Blue Part of Green	
	Blue Part of Blue	
OPTION	Red Part of Blue	
	$\overline{}$	

You may require a unique color gamut (range) for a single projector or application, or you may need to precisely match colors across multiple adjacent displays. Use Color Matching by Meter Adjustment or by Manual Adjustment to define the precise hue of each primary color component (red, green, blue and white).

The x/y coordinates for each color define its location on the standard CIE chromaticity graph. Changing either or both of these numbers will change the hue of the color, and modify the range of possible colors. For example, changing the x/y coordinates for red may move the color closer to orange or closer to violet, which will in turn affect all displayed colors having a red component. Adjust the slide bars or enter new specific coordinates as desired to define or change the color gamuts needed for your environment and applications.

Enable the selected method (Meter or Manual Adjustment)- this will automatically disable the other method. For both methods, if Auto Test Pattern is enabled, the solid colored test pattern will be displayed according to the menu item on which you are positioned.

Meter Adjustment

- **1.** Using a color meter, enter the current x and y co-ordinates of Red, Green, Blue and White for the projector image into the Measured Data menu. This is the reference point for the projector. The default values in the menu are based on the average for all projectors.
- **2.** After measuring the values for all the projectors to be matched, calculate the target values.
- **3.** Enter the target values for x, y and gain for each color into the Target Data menu.



Manual Adjustment

- **1.** Adjust color slide bars and judge image color by eye or meter. A user-defined color "adjustment" can be applied.
- 2. Use this submenu if you do not have specific color coordinates in mind and will judge color performance by eye or meter. As for Meter Adjustment, each color control actually defines new x/y coordinates for that color and changes its hue. The main colors (red part of red, green part of green and blue part of blue) adjust the intensity of that color component, while the modifying colors (e.g. green part of red and blue part of red) modify the x and y value and change the hue of that color. At the same time the main colors also are used to control the color of the white point.

Advanced Menu

Press the **Menu** button to open the OSD menu. Press the arrow keys ($\blacktriangle \lor$) to select **PICTURE** and press the **Enter** button to enter the **PICTURE** menu. Press the arrow keys ($\blacktriangle \lor$) to select **Advanced** and press the **Enter** button to enter the **Advanced** menu. Press the arrow keys ($\blacktriangle \lor$) to select the menu option and press the **Enter** button to enter its submenu. Press the arrow keys ($\blacktriangle \lor \blacklozenge$) to select or adjust the desired settings and press the **Enter** button to confirm.

PICTURE	Advanced	
	BrilliantColor™	Bright Look
	White Peaking	100
OUTPUT	Gamma	Vldeo
OUTFOT	Color Temperature	Bright
	Color Space	Auto
SETUP	Color Settings	
SETUP	Color Enhancement	0
	Color Wheel Speed	2X
	DynamicBlack™	Off
OPTION	Noise Reduction	

Ітем	DESCRIPTION	
BrilliantColor™	Produce an expanded on-screen color spectrum that delivers enhanced color saturation for bright, true-to-life images	
White Peaking	(Video source only) Increase the brightness of whites that are near 100%.	
Gamma	Select the appropriate gamma from Video, Film, Bright, CRT, and DICOM.	
Color Temperature	Change the intensity of the colors. Select a listed relative warmth value.	
Color Space	Select a color space that has been specifically tuned for the input signal. Use only for analog signals and certain digital sources.	
Color Settings	Adjust the gain of the red, green, or blue channel of the image. It will affect the black and white.	
	Adjust the offset of the red, green, or blue channel of the image. It will affect the black and white.	
	Reset RGB gain/offset to return the factory default settings for color adjustments.	
Color Enhancement	The Color Enhancement control can improve the picture quality of pictures with a high saturation of color.	
Color Wheel Speed	Higher speed will reduce the appearance of color artifacts seen by some people.	
DynamicBlack™	Enable or disable the dynamic black function. Enable this function raises the contrast ratio dynamically.	
Noise Reduction The motion Adaptive Noise Reduction reduces the amount of visit interlaced signals.		
Flesh Tone Correction	Control the amount of flesh tone correction applied to the image.	
Video Black Level	Analyze the current input image and calculate an offset value which is then added to the analog to digital converter black level value. This ensures optimum black level for each analog source.	
Film Mode	Control film mode detection and determine whether the original source of the input video was film or video.	

Output Menu

Press the **Menu** button to open the OSD menu. Press the arrow keys ($\blacktriangle \lor$) to select **OUTPUT** and press the **Enter** button to enter the **OUTPUT** menu. Press the arrow keys ($\blacktriangle \lor$) to select the menu option and press the **Enter** button to enter its submenu. Press the arrow keys ($\blacktriangle \lor \blacklozenge \lor$) to select or adjust the desired settings and press the **Enter** button to confirm.

PICTURE	OUTPUT	
FIGTORE	Information	Auto
	Overscan	Off
OUTPUT	H Digital Zoom	100
COIPOI	V Digital Zoom	100
	H Digital Shift	50
SETUP	V Digital Shift	50
SETUP	Image Warping	
	PIP/PBP	
OPTION		

Ітем	DESCRIPTION
Aspect Ratio	Display an image with the detected size, or resize the image by maximizing either the height, width or both, or resize to the maximum size possible while keeping the original aspect ratio.
Overscan	Remove noise around the image. Overscan Zoom enlarges image 3% from original size. Overscan Crop cuts 3% of active pixels in four edges of original image.
H Digital Zoom	Change the size of projector's display area horizontally. If the display area has been resized by this setting, it can be moved by changing the H Digital Shift and V Digital Shift settings.
V Digital Zoom	Change the size of projector's display area vertically. If the display area has been resized by this setting, it can be moved by changing the H Digital Shift and V Digital Shift settings.
H Digital Shift	Move the display area horizontally if its size has been changed by the Digital Zoom setting.
V Digital Shift	Move the display area vertically if its size has been changed by the Digital Zoom setting.
Image Warping	Configure the image warping settings. See "Image Warping Menu" on page 28
PIP/PBP	Configure the PIP/PBP settings. See "PIP/PBP Menu" on page 29.

Image Warping Menu

Press the **Menu** button to open the OSD menu. Press the arrow keys ($\blacktriangle \lor$) to select **OUTPUT** and press the **Enter** button to enter the **OUTPUT** menu. Press the arrow keys ($\blacktriangle \lor$) to select **3D Display** and press the **Enter** button to enter the **3D Display** menu. Press the arrow keys ($\blacktriangle \lor$) to select the menu option and press the **Enter** button to enter its submenu. Press the arrow keys ($\blacktriangle \lor \blacklozenge \lor$) to select or adjust the desired settings and press the **Enter** button to confirm.

PICTURE	Image Warping
	PC Mode Off
	H Keystone 20
OUTPUT	V Keystone 20
001101	H Pincushion 50
	V Pincushion 50
SETUP	
OPTION	

Ітем	DESCRIPTION			
PC Mode	Enable PC software to control geometry.			
H Keystone	Adjust the keystone horizontally and make a squarer image.			
	Horizontal keystone is used to correct a keystoned image shape in which the left and right borders of the image are unequal in length. This is intended for use with horizontally on-axis applications.			
V Keystone	Adjust the keystone vertically and make a squarer image.			
	Vertical keystone is used to correct a keystoned image shape in which the top and bottom are slanted to one of the sides. This is intended when for use with vertically on-axis applications.			
H Pincushion	Adjust the pincushion horizontally and make a more square image.			
V Pincushion	Adjust the pincushion vertically and make a more square image.			

PIP/PBP Menu

Press the **Menu** button to open the OSD menu. Press the arrow keys ($\blacktriangle \lor$) to select **OUTPUT** and press the **Enter** button to enter the **OUTPUT** menu. Press the arrow keys ($\blacktriangle \lor$) to select **PIP/PBP** and press the **Enter** button to enter the **PIP/PBP** menu. Press the arrow keys ($\blacktriangle \lor$) to select the menu option and press the **Enter** button to enter its submenu. Press the arrow keys ($\blacktriangle \lor \blacklozenge \lor$) to select or adjust the desired settings and press the **Enter** button to confirm.

PICTURE	PIP/PBP
FIGTURE	PIP/PBP Enable On
	Main Source VGA
OUTPUT	Sub Source DVI-D
	Swap
	Size Large
SETUP	Layout PBP, Main Left
SETUP	
OPTION	

Ітем		
PIP/PBP Enable	Toggle between displaying two sources at once (Main and PIP/PBP images) or one source only.	
Main Source	From the list of active inputs, select one to be used as the main image.	
Sub Source	From the list of active inputs, select one to be used as the PIP/PBP.	
Swap	Change the main image to PIP/PBP, and the PIP/PBP to main image. Swapping is available only when PIP/PBP is enabled.	
Size	Select the PIP/PBP size. Available options: Small, Medium, or Large.	
Layout	Set the location of the PIP/PBP image on the screen.	

PIP/PBP layout and size table as described below.

- > P : indicates primary source region (lighter color).
- ➤ * : Both source regions are the same size.

PIP/PBP LAYOUT	PIP/PBP Size		
FIF/FDF LAYOUT	SMALL	Медіим	Large
PBP, Main Left	P	P	Р
PBP, Main Top	P	P	P
PBP, Main Right	Р	P	Р

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	PIP/PBP Size		
PIP/PBP LAYOUT	SMALL	Медіим	Large
PBP, Main Bottom	P	P	P
PIP-Bottom Right	P	P	P
PIP-Bottom Left	P	P	P
PIP-Top Left	P	P	P
PIP-Top Right	•		
	Р	Р	Р

Setup Menu

Press the **Menu** button to open the OSD menu. Press the arrow keys ($\blacktriangle \lor$) to select **SETUP** and press the **Enter** button to enter the **SETUP** menu. Press the arrow keys ($\blacktriangle \lor$) to select the menu option and press the **Enter** button to enter its submenu. Press the arrow keys ($\blacktriangle \lor \blacklozenge \lor$) to select or adjust the desired settings and press the **Enter** button to confirm.

PICTURE	SETUP	
FIGTORE	Language	English
	Ceiling Mount	Auto
OUTPUT	Rear Projection	Off
001101	Lens Function	
	Menu Preferences	
SETUP	Keypad LED Settings	On
SETOP	Pin	
	Closed Captioning	Off
OPTION	Communications	

Ітем	DESCRIPTION	
Language	This item allows you to select an available language for the OSD display.	
Ceiling Mount	Turn the image upside down for ceiling-mounted projection.	
Rear Projection	Reverse the image so you can project from behind a translucent screen.	
Lens Function	Configure the lens function settings. See "Lens Function Menu" on page 32.	
Menu Preferences	Configure the menu preferences settings. See "Menu Preferences Menu" on page 33.	
Keypad LED Settings	Turn the backlight of keypad on/off.	
Pin	Configure the pin settings. See "Pin Menu" on page 34.	
Closed Captioning	The closed captioning broadcasting multiplexes caption signals (character information) in the video signal to allow the displaying of characters on the screen.	
Communications	Configure the communications settings. See "Communications Menu" on page 35.	

Lens Function Menu

Press the **Menu** button to open the OSD menu. Press the arrow keys ($\blacktriangle \lor$) to select **SETUP** and press the **Enter** button to enter the **SETUP** menu. Press the arrow keys ($\blacktriangle \lor$) to select **Lens Function** and press the **Enter** button to enter the **Lens Function** menu. Press the arrow keys ($\blacktriangle \lor$) to select the menu option and press the **Enter** button to enter its submenu. Press the arrow keys ($\blacktriangle \lor \blacklozenge \lor$) to select or adjust the desired settings and press the **Enter** button to confirm.

PICTURE	Lens Function
	Focus
	Zoom
OUTPUT	Lens Shift
	Lens Calibration
	Lens Lock
SETUP	Lens Memory No
OPTION	

Ітем	DESCRIPTION	
Focus	Adjust focus function on the projected image.	
Zoom	Adjust zoom function on the projected image.	
Lens Shift	Shift the projected image.	
Lens Calibration	Perform calibration and return lens to the center position.	
Lens Lock	Select this function to prevent all lens motors from moving.	
	Yes: Lens shift will be locked.	
	No: Lens shift can be used by user.	
Lens Memory	This function records up to three separate lens adjustments for zoom, lens shift and focus that can be easily recalled when needed.	
	 Apply Position: Apply zoom/focus/lens position according to the chosen set of lens memory position. 	
	 Save Current Position: Save current zoom/focus/lens position to the projector memory. 	

Menu Preferences Menu

Press the **Menu** button to open the OSD menu. Press the arrow keys ($\blacktriangle \lor$) to select **SETUP** and press the **Enter** button to enter the **SETUP** menu. Press the arrow keys ($\blacktriangle \lor$) to select **Menu Preferences** and press the **Enter** button to enter the **Menu Preferences** menu. Press the arrow keys ($\blacktriangle \lor$) to select the menu option and press the **Enter** button to enter its submenu. Press the arrow keys ($\blacktriangle \lor \blacklozenge \lor$) to select or adjust the desired settings and press the **Enter** button to confirm.

PICTURE	Menu Preferences Menu Transparency 0
OUTPUT	Show Messages On
SETUP	
OPTION	

Ітем	DESCRIPTION
Menu Transparency	Change OSD menu background to be transparent.
Show Messages	Display status messages on the screen.

<u>Pin Menu</u>

Press the **Menu** button to open the OSD menu. Press the arrow keys ($\blacktriangle \lor$) to select **SETUP** and press the **Enter** button to enter the **SETUP** menu. Press the arrow keys ($\blacktriangle \lor$) to select **Pin** and press the **Enter** button to enter the **Pin** menu. Press the arrow keys ($\blacktriangle \lor$) to select the menu option and press the **Enter** button to enter its submenu. Press the arrow keys ($\blacktriangle \lor \blacklozenge$) to select or adjust the desired settings and press the **Enter** button to confirm.

PICTURE	Pin Pin Protect Off
OUTPUT	Change PIN
SETUP	
OPTION	

Ітем	DESCRIPTION
PIN Protect	The PIN (personal identification number) feature allows you to password protect your projector. Once you enable the PIN feature, you must enter the PIN before you can project an image. (PIN Default : 12345)
Change PIN	Change the PIN.

Communications Menu

Press the **Menu** button to open the OSD menu. Press the arrow keys ($\blacktriangle \lor$) to select **SETUP** and press the **Enter** button to enter the **SETUP** menu. Press the arrow keys ($\blacktriangle \lor$) to select **Communications** and press the **Enter** button to enter the **Communications** menu. Press the arrow keys ($\blacktriangle \lor$) to select the menu option and press the **Enter** button to enter its submenu. Press the arrow keys ($\blacktriangle \lor \blacklozenge \lor$) to select or adjust the desired settings and press the **Enter** button to confirm.

PICTURE	Communications
FIGTORE	LAN
OUTPUT	WLAN Network
	Serial Port Baud Rate 19200
	Serial Port Echo Off
SETUP	Serial Port Path RS232
	Projector Address 0
OPTION	

Ітем	DESCRIPTION	
LAN	Configure the local area network (LAN) settings.	
	DHCP: Turn the DHCP ON/OFF.	
	IP Address: Assign Network IP Address.	
	Subnet Mask: Assign Network Subnet Mask.	
	Default Gateway: Assign Network Default Gateway.	
	MAC Address: Display the network MAC Address value.	
	Apply: Apply Network settings.	
WLAN	Configure the wireless local area network (WLAN) settings.	
	Enable: Enable/Disable WLAN.	
	Start IP: Start of IP Address.	
	End IP: End of IP Address.	
	Subnet Mask: Assign Network Subnet Mask.	
	Default Gateway: Assign Network Default Gateway.	
	MAC Address: Display network MAC Address value.	
	SSID: Assign Network Service Set Identifier.	
Network Configure the general network settings.		
	 Projector Name: Display the projector hostname for Network. 	
	Restart Network: Restart the network.	
	 Network Factory Reset: Perform factory reset on the network settings. The Projector Name, LAN IP, WLAN IP, and SNMP settings will be reset. 	
Serial Port Baud Rate	Select the serial port and baud rate.	
Serial Port Path	Select the serial port path from either RS232 or HDBaseT.	
Projector Address	Set the projector address. The projector will respond to IR remotes set either at the same address as the projector or to IR remotes set to address 0.	

Option Menu

Press the **Menu** button to open the OSD menu. Press the arrow keys ($\blacktriangle \lor$) to select **OPTION** and press the **Enter** button to enter the **OPTION** menu. Press the arrow keys ($\blacktriangle \lor$) to select the menu option and press the **Enter** button to enter its submenu. Press the arrow keys ($\blacktriangle \lor \blacklozenge \lor$) to select or adjust the desired settings and press the **Enter** button to confirm.

PICTURE	OPTION	
FICTORE	Auto Source	On
-	High Altitude	Off
OUTPUT	Test Pattern	Off
001101	Background Color	Logo
<u> </u>	Hot-Key settings	Blank Screen
SETUP	Power Settings	
SETUP	Light Source Settings	
	Light Sensor	
OPTION	Information	
	Factory Reset	

Ітем	DESCRIPTION	
Auto Source	Select "On" to allow the projector to search for other signals if the current input signal is lost. When the setting is disabled, the projector will only search current input connection.	
High Altitude	Set high altitude mode On/Off. When On, the fan will operate at high speed to ensure sufficient air flow for high altitudes.	
Test Pattern	Choose the desired internal test pattern to display. Press the Pattern button to display next test pattern.	
Background Color	Use this feature to display a "Logo", "Blue", "Black" or "White" screen when no signal is available.	
Hot-Key settings	Assign a different function to the hot-key on the remote control by highlighting the function in the list and pressing the Enter button. Choose a function that does not already have a dedicated button, and assign the hot-key to that function, allowing you to quickly and easily use the chosen function.	
Power Settings	Configure the power settings. See "Power Settings Menu" on page 37.	
Light Source Settings	Configure the light source settings. See "Light Source Settings Menu" on page 38.	
Light Sensor	Calibrate the Light Sensor for use with the Constant Luminance lamp mode, which allows the projector to be set for constant brightness. If the Light Sensor has not been calibrated, Constant Luminance mode will be disabled. Light Sensor calibration should be repeated when new lamps are installed.	
Information	Display the projector information for source, resolution, and software version on the screen.	
Factory Reset	Restore all settings to their default value. It will not reset network.	
Service	For service only.	

Power Settings Menu

Press the **Menu** button to open the OSD menu. Press the arrow keys ($\blacktriangle \lor$) to select **OPTION** and press the **Enter** button to enter the **OPTION** menu. Press the arrow keys ($\blacktriangle \lor$) to select **Power Settings** and press the **Enter** button to enter the **Power Settings** menu. Press the arrow keys ($\blacktriangle \lor$) to select the menu option and press the **Enter** button to enter its submenu. Press the arrow keys ($\blacktriangle \lor \lor \lor$) to select or adjust the desired settings and press the **Enter** button to confirm.

PICTURE		Power Settings	
TIOTORE	Standby Power Mode		Communication mode
	Direct Power On Auto Power Off		Off 20 Mins
OUTPUT	Sleep Timer		No
SETUP			
OPTION			

Ітем	DESCRIPTION	
Standby Power Mode	Set the standby power mode.	
	 0.5W mode: The projector is in standby mode when connected to AC power. (<0.5W) 	
	Communication mode: The projector could be controlled via the LAN terminal during power standby.	
Direct Power On	The projector automatically turns on when electrical power is connected.	
Auto Power Off	Automatically turns the projector off after no signals are detected for a preset number of minutes. If an active signal is received before the projector powers down, the image will be displayed.	
Sleep Timer	This item allows the projector to automatically power off after it has been on for a specified amount of time.	

Light Source Settings Menu

Press the **Menu** button to open the OSD menu. Press the arrow keys ($\blacktriangle \lor$) to select **OPTION** and press the **Enter** button to enter the **OPTION** menu. Press the arrow keys ($\blacktriangle \lor$) to select **Light Source Settings** and press the **Enter** button to enter the **Light Source Settings** menu. Press the arrow keys ($\blacktriangle \lor$) to select the menu option and press the **Enter** button to enter its submenu. Press the arrow keys ($\blacktriangle \lor \blacklozenge \lor$) to select or adjust the desired settings and press the **Enter** button to confirm.

PICTURE	Light Source Settings		
TIOTORE	Light Source Mode		
	Constant Power Settings		
OUTPUT	Constant Luminance Settings		
COTFOT	Current Light Source		
	Auto Switch	On Failure Only	
SETUP	Auto Switch Time (Hours)		
SETUP	Light Source Info		
	Reset Light Source Hours		
OPTION			

Ітем	DESCRIPTION	
Light Source Mode	Select Constant Power , Constant Luminance , or Eco Mode . When in Eco Mode , the projector will adjust to the lowest fan speed and switch the light source power to the minimum setting.	
Constant Power Settings	Set the value of the light source power (in Watts).	
Constant Luminance Settings	Set the value for the Constant Luminance to maintain constant brightness. The light sensor will monitor the light level and will apply more power as the light source brightness decays naturally over time. When the light source setting reaches maximum power, it will remain at this setting. Note that the light sensor needs to be calibrated for Constant Luminance mode to work properly.	
Current Light Source	Select which lamp(s) is in use.	
Auto Switch	Control when the projector switches lamps. Options include: on failure only, at power-up, or after a set number of hours.	
Auto Switch Time (Hours)	Set the number of hours for Lamp Auto Switch.	
	For example:	
	1 Lamp conditions: lamp 1 = 50 hours, lamp 2 = 60 hours.	
	2 Set the current lamp to lamp 1 - the lamp with the lower lamp hour usage.	
	3 Set the Lamp Auto Switch to After (N) hours and the Lamp Auto Switch Time to 100 hours.	
	4 When lamp 1 reaches 150 hours, projector will auto switch to lamp 2.	
	5 When lamp 2 reaches 160 hours, projector will auto switch to lamp 1.	
Light Source Info	Display current lamp(s) settings (read-only).	
Reset Light Source Hours	Reset the lamp used hours counter to zero. Do this after changing the lamp.	



Control Your Projector Using Web Browser

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 is supported by the specified commands of the Crestron Electronics controller and related software (ex, RoomView[®]).

http://www.crestron.com/

This projector is supported by AMX (Device Discover).

http://www.amx.com/

This projector is compliant to support Extron device(s) for reference. <u>http://www.extron.com/</u>

This projector supports all commands of PJLink Class1 (Version 1.00). http://pjlink.jbmia.or.jp/english/

For more detail of information about the diverse types of external devices which can be connected to the Ethernet port and remote/control the projector, as well as the related control commands supporting for each external device, kindly please get contact with the Support-Service team directly.

<u>LAN_RJ45</u>

1. Connect an RJ45 cable to Ethernet port on the projector and the PC (Laptop).



2. On the PC (Laptop), select Start \rightarrow Control Panel \rightarrow Network and Internet.



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



4. In the Properties window, select the Networking tab, and select Internet Protocol (TCP/IP).

5. Click Properties.

🖳 Local Area Connection Properties
Networking Sharing
Connect using:
VIA Rhine II Compatible Fast Ethemet Adapter
Configure
This connection uses the following items:
Client for Microsoft Networks
🗹 📮 Qo S Packet Scheduler
File and Printer Sharing for Microsoft Networks
Internet Protocol Version 6 (TCP/IPv6)
Internet Protocol Version 4 (TCP/IPv4)
Link-Layer Topology Discovery Mapper I/O Driver
 Link-Layer Topology Discovery Responder
Install Uninstall Properties
Description
Transmission Control Protocol/Internet Protocol. The default
wide area network protocol that provides communication
across diverse interconnected networks.
OK Cancel

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

Internet Protocol Version 4 (TCP/IPv4)	Properties
General	
You can get IP settings assigned auton this capability. Otherwise, you need to for the appropriate IP settings.	
Obtain an IP address automatical	ly 🔤
Use the following IP address:	
IP address:	10 . 10 . 10 . 99
Subnet mask:	255.255.255.0
Default gateway:	· · ·
Obtain DNS server address autom	natically
• Use the following DNS server add	resses:
Preferred DNS server:	
Alternate DNS server:	· · ·
Validate settings upon exit	Ad <u>v</u> anced
	OK Cancel

- 7. Press the Menu button on the projector.
- $\textbf{8.} \text{ Select SETUP} \rightarrow \textbf{Communications} \rightarrow \textbf{LAN}.$
- **9.** After getting into LAN, input the following:
 - DHCP: Off
 - IP Address: 10.10.10.10
 - Subnet Mask: 255.255.255.0
 - Default Gateway: 0.0.0.0
- **10.** Press the **Enter** / ► button to confirm settings.

Open a web browser (for example, Microsoft Internet Explorer with Adobe Flash Player 9.0 or higher).

Navigation	n Canceled - Windows Internet Explorer	
00-	🔊 http://10.10.10.10/	• > ×
🖕 Favorites	Navigation Canceled	
1	Navigation to the webpage was canceled	
	What you can try:Refresh the page.	

- **11.** In the Address bar, input the IP address: 10.10.10.10.
- **12.** Press the Enter / ► button.

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

EIKI		
Duele standa	Model Name	
Projector Info	moder Marrie	System
Alert Mail Settings	System Status	Power On
Crestron	Display Source	No Source
	Lamp Hours	10
	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	
		Version
	LAN Version	
	F/W Version	

Power Voi -	Mute V	/ol +	
			Interface 2.7.2.4
SourceList			
			Auto
			Enter
		Blank	Source
Freeze Con			
CRESTRON			Expansion Options
Crestron Control	Projector		User Password
IP Address Projector Nam	ne PJ01		Usr Enabled
IP ID Locatio	on RM01	Password	
Control Port Assigned 1	Fo Sir	Confirmed	
Control Set	Set		Usr Set
Network Cont	ig 🔄 DHCP Enabled		
IP Addres	ss 10.10.10.10		Admin Password
Subnet Ma:	sk 255.255.255.0		Adm Enabled
Default Gatew	ay 0.0.0.0	Password	
DNS Serv	er 0.0.0.0	Confirmed	
			Adm Set
	Net Set		
	Tools Exit		

CATEGORY	Ітем	Input-Length
	IP Address	15
Crestron Control	IP ID	3
	Port	5
	Projector Name	10
Projector	Location	10
	Assigned To	10
	DHCP (Enabled)	(N/A)
	IP Address	15
Network Configuration	Subnet Mask	15
	Default Gateway	15
	DNS Server	15
	Enabled	(N/A)
User Password	New Password	10
	Confirm	10
	Enabled	(N/A)
Admin Password	New Password	10
	Confirm	10

For more information, please visit <u>http://www.crestron.com</u>.

Preparing Email Alerts

- **1.** Make sure that user can access the homepage of LAN RJ45 function by web browser (for example, Microsoft Internet Explorer v6.01/v8.0).
- **2.** From the Homepage of LAN/RJ45, click **Alert Settings**.

EIKI		
Projector Info	Model Name	
Alert Mail Settings >		System
Alert Mail Settings	System Status	Power On
Crestron	Display Source	No Source
	Lamp Hours	10
	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	
		Version
	LAN Version	
	F/W Version	

3. By default, these input boxes in **Alert Settings** are blank.

EIKI	
Projector Info Alert Mail Settings Crestron	Send E-Mail Enter the appropriate settings in the fields below: (Your SMTP server may not require a user name or password.)
	SMTP Server: Port: 25 User Name:

4. For Sending alert mail, input the following:

- The **SMTP** field is the mail server for sending out email (SMTP protocol). This is a required field.
- The **To** field is the recipient's email address (for example, the projector administrator). This is a required field.
- The **Cc** field sends a carbon copy of the alert to the specified email address. This is an optional field (for example, the projector administrator's assistant).
- The **From** field is the sender's email address (for example, the projector administrator). This is a required field.
- Select the alert conditions by checking the desired boxes.

EIKI		
Projector Info Alert Mail Settings Crestron	Send E-Mail Enter the appropriate setti (Your SMTP server may no	
	SMTP Server: User Name: Password:	mail.corp.com Port: 25 Sender.US
	From: To: CC:	Mail Server Apply send@mail.corp.com rcvr1@mail.corp.com rcvr2@mail.corp.com
	E-mail Alert Opt Fan lock : Case Open: Lamp Hours Ov Weekly Report:	 ✓ Over_Heat: ✓ Lamp Fail: ✓ ✓ Filter Hours Over: ✓
		Alert Option Apply

Note:

• Fill in all fields as specified. User can click **Send Test Mail** to test what setting is correct. For successful sending an e-mail alert, you must select alert conditions and enter a correct e-mail address.

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.



 $\textbf{Start} \rightarrow \textbf{All Programs} \rightarrow \textbf{Accessories} \rightarrow \textbf{Command Prompt}$



Input the command format like the below:

telnet ttt.xxx.yyy.zzz 23 (the Enter button is pressed)

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

If Telnet-Connection ready, and user can have RS232 command input, then press the **Enter** button, 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.

1. Open "Control Panel" in Windows VISTA.

		x
🚱 🗢 📕 🕨 Control Panel 🕨	▼ [49]	٩
<u>File E</u> dit <u>V</u> iew <u>T</u> ools <u>H</u> elp		
Control Panel Home Classic View	System and Maintenance Get started with Windows Back up your computer	
	Security Check for updates Check this compute's security status Firewall Security Status	
	Network and Internet View network status and tasks Set up file sharing View network status and tasks	ш
	Hardware and Sound Play CDs or other media automatically initer Mouse Hardware and Sound Play CDs or other media automatically Mouse Ease of Access Let Windows suggest settings Optimize visual display	
Recent Tasks Callow a program through Windows Firewall Callow Turn Windows Firewall on or	Programs Uninstall a program Change startup programs	
off Printer	Mobile PC Change battery settings Adjust commonly used mobility	-

2. Open "Programs".



3. Select "Turn Windows features on or off" to open.



4. Have "Telnet Client" option checked, then click **OK**.

Microsoft Windows
Please wait while the features are configured. This might take several minutes.
Cancel

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 built-in "TELNET.exe" utility, pressing the **Enter** button will create a "Carriage-Return" and "New-Line" code.)

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:

- The projection lamp used in this product contains a small amount of mercury.
- Do not dispose this product with general household waste.
- 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 30 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 do not 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 been burned out.

IF A LAMP EXPLODES

- If a lamp explodes, the gas and broken shards may scatter inside the projector and they 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 the doctor immediately.

1. Turn the projector off. Allow the projector to cool down into standby mode.

2. Remove the screws on the lamp door.



3. Remove the lamp door.

4. Remove the screws on the lamp modules.



5. Carefully remove the lamp modules.



6. Install the new lamp modules by reversing the previous steps.



Resetting the Lamp

After replacing the lamp, you should reset the lamp hour counter to zero. Perform the following to reset the lamp hour counter:

1. Press the **Menu** button.

PICTURE	PICTU	RE
FICTURE	Display Mode	Presentation
	Brightness	50
OUTPUT	Contrast	50
COTFOT	Sharpness	2
	Color	50
SETUP	Tint	50
SETUP	Phase	50
	Frequency	50
	Horz Position	50
OPTION	Vert Position	50
	•	

2. Use the arrow keys ($\blacktriangle \lor$) to select **OPTION** and press the **Enter** button to enter the **OPTION** menu.

PICTURE	OPTION	
TIOTORE	Auto Source	On
	High Altitude	Off
OUTPUT	Test Pattern	Off
OUTFOT	Background Color	Logo
	Hot-Key settings	Blank Screen
SETUP	Power Settings	
SETUP	Light Source Settings	
	Light Sensor	
OPTION	Information	
	Factory Reset	

3. Use the arrow keys (▲▼) to select **Light Source Settings** and press the **Enter** button to enter its submenu.

PICTURE	Light Source Settings		
FICTORE	Light Source Mode	Constant Power	
	Constant Power Settings	10	
OUTPUT	Constant Luminance Settings	0	
001101	Current Light Source	Both	
	Auto Switch	On Failure Only	
SETUP	Auto Switch Time (Hours)	100	
SETUP	Light Source Info		
	Reset Light Source Hours		
OPTION			

4. Use the arrow keys (▲▼) to select **Reset Light Source Hours** and press the **Enter** button to enter its submenu.



- **5.** Use the arrow keys (▲▼) to select the desired option and press the **Enter** button to reset the lamp used hours counter to zero.
- **6.** Press the **Exit** button several times to exit the menu.

Cleaning the Projector

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

Warning:

- 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.
- Use only a dampened cloth when cleaning. Do not allow water to enter the ventilation openings on the projector.
- If a little water gets into the projector interior while cleaning, leave unplugged in a well-ventilated room for several hours before using.
- 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:

- Do not use abrasive cleaners or solvents.
- 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 Kensington[®] Lock

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



Note:

Contact your vendor for details on purchasing a suitable Kensington security cable. The security lock 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>.

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.

Often after time spent troubleshooting, the problem is 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 suspending 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

The LED status indicators are located on the rear of the projector. Each LED is defined below.

• Lamp 1 LED

LED STATUS		Projector State	
GREEN	Red	PROJECTOR STATE	
Flashing	Flashing	Color wheel unexpectedly stopped.	
Steady Light	Steady Light	Lamp1 time has expired and lamp should be replaced.	
Steady Light	Off	Lamp1 is on and operating correctly.	
Flashing	Off	Lamp1 is switching on.	
Off	Flashing	Failed to strike lamp1 after 5 attempts (strike attempts will stop).	
Off	Flashing	Lamp1 has unexpectedly shut down (system goes into cooling down state).	

• Lamp 2 LED

LED STATUS		PROJECTOR STATE	
Green	Red		
Steady Light	Steady Light	Lamp2 time has expired and lamp should be replaced.	
Steady Light	Off	Lamp2 is on and operating correctly.	
Flashing	Off	Lamp2 is switching on.	
Off	Flashing	Failed to strike lamp2 after 5 attempts (strike attempts will stop).	
Off	Flashing	Lamp2 has unexpectedly shut down (system goes into cooling down state).	

Status LED

LED STATUS		PROJECTOR STATE
Green	Red	PROJECTOR STATE
Steady Light	Off	Projector is powered up and operating normally.
Flashing	Flashing	Projector is in cooling down mode or startup mode.
Flashing	Steady Light	Projector is in flash update state.
Steady Light	Steady Light	Need to clean/change dust filter.
Off	Steady Light	Over temperature.
Off	Flashing	Fan failure

• Shutter LED

LED STATUS (GREEN)	PROJECTOR STATE
Off	Picture mute is off and Shutter is Off – image is displayed.
Flashing	Picture mute is on and Shutter is On – image is black.

Image Problems

Problem: No image appears on the screen

- **1.** Verify the settings on your notebook or desktop PC.
- **2.** Turn off all equipment and power up again in the correct order.

Problem: The image is blurred

- **1.** Press the **Focus** button to adjust the focus on the projector.
- **2.** Press the **Auto** button to automatically optimize image.
- **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 H or Keystone V button on the remote control to correct the problem.

Problem: The image is reversed

Check the Rear Projection on the Setup menu of the OSD.

Problem: The image is streaked

- **1.** Set the **Phase** and **Frequency** settings on the **Picture** 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 **Picture** 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 Picture > 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 Lamp Status LED is in green.
- **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 Lamp 1/Lamp2 LED is flashing red, press "♣" on the built-in keypad or press "♣" on the remote control to turn off the projector.
- **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 projector.
- **2.** Ensure the path between remote and sensor is not obstructed.
- **3.** Turn off any fluorescent lights in the room.
- 4. Make sure that the batteries are installed with the correct polarity.
- **5.** Replace the batteries.
- 6. Turn off other Infrared-enabled devices in the vicinity.
- 7. Have the remote control serviced.

Audio Problems

Problem: There is no sound

- **1.** Adjust the volume of the audio source.
- **2.** Check the audio cable connection.
- **3.** Test the source audio output with other speakers.
- **4.** Have the projector serviced.
- **5.** Have the remote control 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. Include a description of the problem and a checklist of the steps you took when trying to fix the problem. The information may be useful to service personnel. For servicing, return the projector to the place you purchased it.

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?

There are many HDMI Adopters working on HDMI solutions that extend a cable's effective distance from the typical 10 meter 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 detail information check <u>http://www.hdmi.org/learningcenter/faq.aspx#49</u>.

SPECIFICATIONS

Specifications

Ітем	DESCRIPTION							
Display type	DMD, 0.96" WUXGA, Type A							
Resolution	WUXGA (1920 x 1200)							
Projection distance	<mark>.2 - 10</mark> m							
Projection screen size	<u>27.6" – 344.6"</u>							
Projection lens	Manual Focus / Zoom							
Zoom ratio	1.2x (A18) / 1.33x (A19) / 1.25x (A20) / 1.33x (A21) / 2x (A22) / 1.8x (A23)							
Keystone correction	Vertical: +/- 20 degrees, Horizontal: +/- 20 degrees							
Projection methods	Front, Rear, Desktop/Ceiling (Rear, Front)							
Data compatibility	VGA, SVGA, XGA, WXGA, SXGA, SXGA+, UXGA, WUXGA, Mac							
SDTV/EDTV/ HDTV	480i, 576i, 480p, 576p, 720p, 1080i, 1080p							
Video compatibility	NTSC, PAL, SECAM							
H-Sync	15, 31~91.4KHz							
V-Sync	24~30Hz, 47~120Hz							
Safety Certification	UL/cUL, FCC, CE, CB, CCC, KC/KCC, CU							
Operation temperature	0° ~ 40°C							
Dimensions	520 x 591 x 194 mm (w/o elevator)							
AC Input	100 VAC – 240 VAC, with 15A fuse							
Power consumption	370W (ECO), 465W (Max. Brightness Mode)							
Lamp	1500 hrs typical @ 465W							
	2000 hrs typical @ 370W							
Audio speaker	×W							
Input Terminals	HDMI In x 1							
	Computer In x 1 (DVI)							
	Computer In x 1 (analog RGBHV/Component, HDTV)							
	CVBS In x 1 (Composite Video)							
	BNC x 5 (YPbPr In (Component Video), RGBHV In, BNC Connector)							
	USB x 1 (Type A)							
	3G-SDI x 1 (BNC Connector)							
Output Terminals	Monitor Out x 1							
Control Terminals	RS232 x 1							
	Wired Remote Connector							
	RJ45 x 2 (HDBaseT input, Network display)							
Security	Kensington lock							

Note:

For questions regarding product specifications, please contact your local distributor.

Projection Distance vs. Projection Size



Projection Distance and Size Table

	S						PR	OJECTIO	N LENS					
DIAGONAL	SCREE	IN SIZE	A1	8	A	19	A2	20	A	21	A	22	A	23
LENGTH	WIDTH HEIGHT		WIDE	TELE	WIDE	TELE	WIDE	TELE	WIDE	TELE	WIDE	TELE	WIDE	TELE
(ілсн)	(м)	(м)	(м)	(м)	(м)	(м)	(м)	(м)	(м)	(м)	(м)	(м)	(м)	(м)
50	1.08	0.67	0.9	1.1	1.1	1.5	1.3	1.6	1.6	2.2	2.2	4.3	4.3	7.8
60	1.29	0.81	1.1	1.3	1.3	1.8	1.6	1.9	1.9	2.6	2.6	5.2	5.2	9.3
70	1.51	0.94	1.3	1.5	1.5	2.1	1.8	2.3	2.3	3.0	3.0	6.0	6.0	10.9
80	1.72	1.08	1.4	1.8	1.8	2.3	2.1	2.6	2.6	3.4	3.4	6.9	6.9	12.4
90	1.94	1.21	1.6	2.0	2.0	2.6	2.3	2.9	2.9	3.9	3.9	7.8	7.8	14.0
100	2.15	1.35	1.8	2.2	2.2	2.9	2.6	3.2	3.2	4.3	4.3	8.6	8.6	15.5
110	2.37	1.48	2.0	2.4	2.4	3.2	2.8	3.6	3.6	4.7	4.7	9.5	9.5	17.1
120	2.59	1.62	2.2	2.6	2.6	3.5	3.1	3.9	3.9	5.2	5.2	10.3	10.3	18.6
130	2.80	1.75	2.4	2.9	2.9	3.8	3.4	4.2	4.2	5.6	5.6	11.2	11.2	20.2
140	3.02	1.89	2.5	3.1	3.1	4.1	3.6	4.5	4.5	6.0	6.0	12.1	12.1	21.7
150	3.23	2.02	2.7	3.3	3.3	4.4	3.9	4.8	4.8	6.5	6.5	12.9	12.9	23.3
160	3.45	2.15	2.9	3.5	3.5	4.7	4.1	5.2	5.2	6.9	6.9	13.8	13.8	24.8
170	3.66	2.29	3.1	3.7	3.7	5.0	4.4	5.5	5.5	7.3	7.3	14.7	14.7	26.4
180	3.88	2.42	3.3	4.0	4.0	5.3	4.7	5.8	5.8	7.8	7.8	15.5	15.5	27.9
190	4.09	2.56	3.4	4.2	4.2	5.6	4.9	6.1	6.1	8.2	8.2	16.4	16.4	29.5
200	4.31	2.69	3.6	4.4	4.4	5.9	5.2	6.5	6.5	8.6	8.6	17.2	17.2	31.0
210	4.53	2.83	3.8	4.6	4.6	6.2	5.4	6.8	6.8	9.1	9.1	18.1	18.1	32.6
220	4.74	2.96	4.0	4.8	4.8	6.4	5.7	7.1	7.1	9.5	9.5	19.0	19.0	34.1
230	4.96	3.10	4.2	5.1	5.1	6.7	5.9	7.4	7.4	9.9	9.9	19.8	19.8	35.7
240	5.17	3.23	4.3	5.3	5.3	7.0	6.2	7.8	7.8	10.3	10.3	20.7	20.7	37.2
250	5.39	3.37	4.5	5.5	5.5	7.3	6.5	8.1	8.1	10.8	10.8	21.5	21.5	38.8
260	5.60	3.50	4.7	5.7	5.7	7.6	6.7	8.4	8.4	11.2	11.2	22.4	22.4	40.3
270	5.82	3.64	4.9	5.9	5.9	7.9	7.0	8.7	8.7	11.6	11.6	23.3	23.3	41.9
280	6.03	3.77	5.1	6.2	6.2	8.2	7.2	9.1	9.1	12.1	12.1	24.1	24.1	43.4

_	0	0		•			Pr	ОЈЕСТІО	n Lens					
DIAGONAL	SCREE	N SIZE	A1	8	A	19	A	20	A	21	A	22	A	23
LENGTH	WIDTH	Неіднт	Wide	TELE	WIDE	TELE	WIDE	TELE	WIDE	TELE	WIDE	TELE	WIDE	TELE
(імсн)	(м)	(м)	(м)	(м)	(м)	(м)	(м)	(м)	(м)	(м)	(м)	(м)	(м)	(м)
280	6.03	3.77	5.1	6.2	6.2	8.2	7.2	9.1	9.1	12.1	12.1	24.1	24.1	43.4
290	6.25	3.91	5.2	6.4	6.4	8.5	7.5	9.4	9.4	12.5	12.5	25.0	25.0	45.0
300	6.46	4.04	5.4	6.6	6.6	8.8	7.8	9.7	9.7	12.9	12.9	25.9	25.9	46.5
310	6.68	4.17	5.6	6.8	6.8	9.1	8.0	10.0	10.0	13.4	13.4	26.7	26.7	48.1
320	6.90	4.31	5.8	7.0	7.0	9.4	8.3	10.3	10.3	13.8	13.8	27.6	27.6	49.6
330	7.11	4.44	6.0	7.3	7.3	9.7	8.5	10.7	10.7	14.2	14.2	28.4	28.4	51.2
340	7.33	4.58	6.2	7.5	7.5	10.0	8.8	11.0	11.0	14.7	14.7	29.3	29.3	52.8
350	7.54	4.71	6.3	7.7	7.7	10.3	9.1	11.3	11.3	15.1	15.1	30.2	30.2	54.3
360	7.76	4.85	6.5	7.9	7.9	10.6	9.3	11.6	11.6	15.5	15.5	31.0	31.0	55.9
370	7.97	4.98	6.7	8.1	8.1	10.8	9.6	12.0	12.0	15.9	15.9	31.9	31.9	57.4
380	8.19	5.12	6.9	8.4	8.4	11.1	9.8	12.3	12.3	16.4	16.4	32.8	32.8	59.0
390	8.40	5.25	7.1	8.6	8.6	11.4	10.1	12.6	12.6	16.8	16.8	33.6	33.6	60.5
400	8.62	5.39	7.2	8.8	8.8	11.7	10.3	12.9	12.9	17.2	17.2	34.5	34.5	62.1
410	8.83	5.52	7.4	9.0	9.0	12.0	10.6	13.3	13.3	17.7	17.7	35.3	35.3	63.6
420	9.05	5.66	7.6	9.2	9.2	12.3	10.9	13.6	13.6	18.1	18.1	36.2	36.2	65.2
430	9.27	5.79	7.8	9.5	9.5	12.6	11.1	13.9	13.9	18.5	18.5	37.1	37.1	66.7
440	9.48	5.93	8.0	9.7	9.7	12.9	11.4	14.2	14.2	19.0	19.0	37.9	37.9	68.3
450	9.70	6.06	8.1	9.9	9.9	13.2	11.6	14.5	14.5	19.4	19.4	38.8	38.8	69.8
460	9.91	6.20	8.3	10.1	10.1	13.5	11.9	14.9	14.9	19.8	19.8	39.6	39.6	71.4
470	10.13	6.33	8.5	10.3	10.3	13.8	12.2	15.2	15.2	20.3	20.3	40.5	40.5	72.9
480	10.34	6.46	8.7	10.6	10.6	14.1	12.4	15.5	15.5	20.7	20.7	41.4	41.4	74.5
490	10.56	6.60	8.9	10.8	10.8	14.4	12.7	15.8	15.8	21.1	21.1	42.2	42.2	76.0
500	10.77	6.73	9.1	11.0	11.0	14.7	12.9	16.2	16.2	21.5	21.5	43.1	43.1	77.6
510	10.99	6.87	9.2	11.2	11.2	14.9	13.2	16.5	16.5	22.0	22.0	44.0	44.0	79.1
520	11.21	7.00	9.4	11.4	11.4	15.2	13.4	16.8	16.8	22.4	22.4	44.8	44.8	80.7
530	11.42	7.14	9.6	11.6	11.6	15.5	13.7	17.1	17.1	22.8	22.8	45.7	45.7	82.2
540	11.64	7.27	9.8	11.9	11.9	15.8	14.0	17.5	17.5	23.3	23.3	46.5	46.5	83.8
550	11.85	7.41	10.0	12.1	12.1	16.1	14.2	17.8	17.8	23.7	23.7	47.4	47.4	85.3

Note:

• The values in the tables are approximate and may be slightly different from the actual measurements.

• In case of ceiling mount, it is necessary to match at the spot.

Timing Mode Table

Signal Type	RESOLUTION	Frame rate (Hz)	QD881	VGA	BNC	HDMI	DVI	3G-SDI	HDBASET	CVBS
	640x480	60	DMT0660	V	V	V	V	—	V	—
	640x480	72	DMT0672	V	V	V	V	—	V	—
	640x480	75	DMT0675	V	V	V	V	—	V	—
	640x480	85	DMT0685	V	V	V	V	—	V	—
	640x480	66.6	APP0667	—	—	V	V	—	V	—
	720x400	70	IBM0770H	V	V	V	V	—	V	—
	800x600	60	DMT0860	V	V	V	V	—	V	—
	800x600	72	DMT0872	V	V	V	V	—	V	—
	800x600	75	DMT0875	V	V	V	V	—	V	—
	800x600	85	DMT0885	V	V	V	V	—	V	—
	800x600	120	CVR0812	V	—	V	V	—	V	—
	832x624	75	8362A75	V	V	V	V	—	V	—
	848x480	50	CVT0850H	—	—	V	V	—	V	—
	848x480	60	CVT0860H	—	—	V	V	—	V	—
	848x480	75	CVT0875H	—	—	V	V	—	V	—
	848x480	85	CVT0885H	—	—	V	V	—	V	—
	1024x768	60	DMT1060	V	V	V	V	—	V	—
	1024x768	75	DMT1075	V	V	V	V	—	V	—
	1024x768	85	DMT1085	V	V	V	V	—	V	—
PC	1024x768	120	CVR1012	V	—	V	V	—	V	—
PC	1152x720	50	CVT1150D	—	—	V	V	—	V	—
	1152x720	60	CVT1160D	—	—	V	V	—	V	—
	1152x720	75	CVT1175D	—	—	V	V	—	V	—
	1152x720	85	CVT1185D	—	—	V	V	—	V	—
	1152x864	60	CVT1160	V	V	V	V	—	V	—
	1152x864	70	DMT1170	V	V	V	V	—	V	—
	1152x864	75	DMT1175	V	V	V	V	—	V	—
	1152x864	85	DMT1185	V	V	V	V	—	V	—
	1152x870	75	APP1175	—	—	V	V	—	V	—
	1280x720	50	CVT1250H	—	_	V	V	—	V	—
	1280x720	60	CVT1260H	V	V	V	V	—	V	—
	1280x720	75	CVT1275H	V	V	V	V	—	V	—
	1280x720	85	CVT1285H	V	V	V	V	—	V	—
	1280x720	120		V	—	V	V	—	V	—
	1280x768	60	CVT1260E	V	V	V	V	—	V	—
	1280x768	75	CVT1275E	V	V	V	V	—	V	—
	1280x768	85	CVT1285E	V	V	V	V	—	V	—
	1280x800	50	CVT1250_	V	V	V	V	—	V	—
	1280x800	60	DMT1260D	V	V	V	V	—	V	—
	1280x800	75	CVT1275_	V	V	V	V	_	V	—

Signal Type	RESOLUTION	Frame rate (Hz)	QD881	VGA	BNC	HDMI	DVI	3G-SDI	HDBASET	CVBS
	1280x800	85	CVT1285_	V	V	V	V	—	V	—
	1280x960	50	CVT1250	—	—	v	V	_	v	
	1280x960	60	CVT1260	V	V	V	V	—	V	
	1280x960	75	CVT1275	V	V	V	V	—	V	_
	1280x960	85	CVT1285	V	V	V	V	—	V	
	1280x1024	50	CVT1250G	—	_	V	V	—	V	—
	1280x1024	60	DMT1260G	V	V	V	V	—	V	—
	1280x1024	75	DMT1275G	V	V	V	V	—	V	—
	1280x1024	85	DMT1285G	V	V	V	V	—	V	—
	1360x768	50	CVT1350H	—	—	V	V	—	V	—
	1360x768	60	DMT1360H	—	—	V	V	—	V	—
	1360x768	75	CVT1375H	—	—	V	V	—	V	—
	1360x768	85	CVT1385H	—	—	V	V	—	V	—
PC	1366x768	60	DMR1360H	V	V	V	V	—	V	—
	1400x1050	50	CVT1450	—	—	V	V	—	V	—
	1400x1050	60	CVT1460	—	—	V	V	—	V	—
	1400x1050	75	CVT1475	V	V	V	V	—	V	—
	1440x900	60	CVT1460D	V	V	V	V	—	V	—
	1440x900	75	CVT1475D	—	—	V	V	—	V	—
	1600x900	60	DMR1660H	—	-	V	V	—	V	—
	1600x1200	60	DMT1660	V	V	V	V	—	V	—
	1680x1050	60	CVT1660D	V	V	V	V	—	V	—
	1920X1080	50	CVT1950H	—	—	V	V	—	V	—
	1920X1080	60	CVR1960H	V	V	V	V	—	V	—
	1920X1200RB	60	CVR1960D	V	V	V	V	—	V	—
	1920X1200RB	50	CVT1950D	V	V	V	V	—	V	—
NTSC	NTSC (M, 4.43)	60		—	—	—	—	—	_	V
	PAL (B,G,H,I)	50		—	—	—	—	—	—	V
PAL	PAL (N)	50		_	—	—	—	—	—	V
	PAL (M)	60		—	—	—	—	—	—	V
SECAM	SECAM (M)	50		—	—	—	—	—	—	V
	480i	60		V	V	V	V	—	V	—
SDTV	576i	50		V	V	V	V	—	V	—
	480p	60		V	V	V	V	—	V	—
EDTV	576p	50		V	V	V	V	—	V	—
	1080i	25		V	V	V	V	—	V	—
	1080i	29		V	V	V	V	—	V	—
	1080i	30		V	V	V	V	—	V	—
HDTV	720p	50		V	V	V	V	—	v	—
	720p	59		V	V	V	V	—	V	—
	720p	60		V	V	V	V	—	V	—

Signal Type	RESOLUTION	Frame rate (Hz)	QD881	VGA	BNC	HDMI	DVI	3G-SDI	HDBASET	CVBS
	1080p	23		V	V	V	V	—	V	—
	1080p	24		V	V	V	V	—	V	—
	1080p	25		V	V	V	V	—	V	—
HDTV	1080p	29		V	V	V	V	—	V	—
	1080p	30		V	V	V	V	—	V	—
	1080p	50		V	V	V	V	—	V	—
	1080p	59		V	V	V	V	—	V	—
	1080p	60		V	V	V	V	—	V	—
	Frame Packing 1080p	24		—	—	V	—	—	V	—
	Frame Packing 720p	50		—	—	V	—	—	V	—
	Frame Packing 720p	60		—	—	V	—	—	V	—
Mandatory	Side by Side 1080i	50		—	—	V	—	—	V	—
3D	Side by Side 1080i	60		—	—	V	—	—	V	—
	Top and Bottom 720p	50		—	—	V	—	—	V	—
	Top and Bottom 720p	60		—	—	V	—	—	V	—
	Top and Bottom 1080p	24		—	—	V	—	—	V	—
Frame	800x600	120		—	—	V	—	—	V	—
sequential	1024x768	120		—	—	V	—	—	V	—
3D	1280x720	120		—	—	V	—	—	V	—
SD-SDI	480i YcbCr422 10bit	59.94		—	—	—	—	V	—	—
30-301	576i YcbCr422 10bit	50		—	—	—	—	V	—	—
	720p	50		—	—	—	—	V	—	—
	YcbCr422	59.94		—	—	—	—	V	—	—
	10bit	60		—	—	—	—	V	—	—
	1080i	50		—	—	—	—	V	—	—
	YcbCr422	59.94		—	—	—	—	V	—	—
	10bit	60		—	—	—	—	V	—	—
		23.98		—	—	—	—	V	—	—
HD-SDI	1080p	24		—	—	—	—	V	—	—
	YcbCr422	25		—	—	—	—	V	—	—
	10bit	29.97		—	—	—	—	V	—	—
		30		—	—	—	—	V	—	—
	1080sF	25		—	—	—	—	V	—	—
	YcbCr422	29.97		—	—	—	—	V	—	—
	10bit	30		—	—	—	—	V	—	—

Signal Type	RESOLUTION	Frame rate (Hz)	QD881	VGA	BNC	HDMI	DVI	3G-SDI	HDBASET	CVBS
	1080p	50		—	—	—	—	V	—	—
3GA-SDI	YcbCr422	59.94		—	—	—	—	V	—	—
	10bit	60		—	—	—	—	V	—	—
	1080p	50		—		—		V	—	—
3GB-SDI	YcbCr422 10bit With 352M Payload ID	59.94		—		—		V	—	—
		60		—	—	—	—	V	—	—

V : Frequency supported

— : Frequency not supported

Projector Dimensions



REGULATORY **C**OMPLIANCE

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

UL/cUL, FCC, CE, CB, CCC, KC/KCC, CU



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