



INFOCUS QUANTUM LASER USER GUIDE

REGULATORY MODEL	PRODUCT NAME	LENS TYPE	RESOLUTION
P150	QUANTUM LASER IN2006UT	ULTRA SHORT THROW	WXGA
P153	QUANTUM LASER IN2009UT	ULTRA SHORT THROW	WUXGA

InFocus

Introduction to the Projector

This section introduces you to your new projector and describes the features and controls.

- **Support High Resolution Signal**

The projector has the Multi-scan system to conform to many output signals. Up to WUXGA (COMPUTER), 4K@30Hz (HDMI).

- **Useful Functions for Presentations**

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

- **Light source**

- **Brightness**

- A long-life laser diode is equipped in the light module.

The total cost of ownership is low because the laser light source can be used for a long time without replacement or maintenance.

- Brightness can be adjusted Unlike with ordinary light source, the brightness can be adjusted from 50 to 100% when Normal mode.

- **Multi-language Menu Display**

The screen menu of the projector is available in 27 languages: English, German, French, Italian, Spanish, Polish, Swedish, Dutch, Portuguese, Japanese, Simplified Chinese, Traditional Chinese, Korean, Russian, Arabic, Turkish, Finnish, Norwegian, Danish, Indonesian, Hungarian, Czech, Kazakh, Vietnamese, Thai, Farsi, Romania.

- **Convenient Maintenance Functions**

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 control panel. PIN code lock function prevents unauthorized use of the projector.

- **Color Board Function**

When projecting onto a colored wall, you can achieve an image that closely matches the color accuracy of a white screen by selecting the wall's closest shade from the four preset color options.

- **Energy-saving**

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

- Lot6, Lot26 supported with energy saving technology.
Select [Standby mode] supports Lot6, Select [Network Standby] supports Lot26.
- [ECO MODE] for low power consumption and [CARBON METER] display.
The projector has ECO MODE to restraint power consumption. Furthermore, the power-saving effect when the [ECO MODE] is set is converted into the amount of reductions of CO2 emissions and this is indicated on the confirmation message displayed on-screen menu [CARBON METER].

- **Network**

- CRESTRON ROOMVIEW compatibility
- Support the "MultiPresenter" Function.

About this user's manual

The fastest way to get started is to take your time and do everything right the first time. Take a few minutes now to review the user's manual. This may save you time later on. At the beginning of each section of the manual you'll find an overview. If the section doesn't apply, you can skip it.

Model name	Brightness (TYP.)	Resolution	Aspect ratio
IN2006UT	3,240 lm	WXGA (1280×800 pixels)	16:10 (standard) / 4:3 (compatible)
IN2009UT	3,420 lm	WUXGA (1920×1200 pixels)	16:10 (standard) / 4:3 (compatible)

Note:

- OSD options and pictures shown in this document may differ slightly from your product.
- InFocus reserves the right to make changes to this manual without prior notice. For the latest information, please contact your dealer or InFocus representative.

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Safety instruction

This document and your projector employ certain symbols to illustrate how to use your projector safely. Please get yourself familiar with them before going through this document.

	Caution	Ignoring messages indicated by this symbol may lead to personal injuries
	Note	Ignoring messages indicated by this symbol may lead to personal injuries or property damage.
		High voltage inside with risks of electric shock.
		When turning on the projector, make sure no one is facing the lens within laser range. Do not peep at the lens when the projector is activated to avoid serious injury to the eyes.
		Never place goods in the projection window while working as it may overheat, burn or even catch fire. Press the Blank button through the remote control for temporarily pause the projection.

	Caution Danger of electric shock DO NOT open this.	
Note: DO NOT remove the casing (or back cover) as this may result in electric shock. Users shall not execute any maintenance work on components within your projector. Call qualified maintenance personnel in case of any maintenance requirements.		



High voltage inside with risks of electric shock.



Operation and maintenance tips about these components.

Examples of symbols

	This symbol indicates you should be careful of electric shocks.
	This symbol indicates you should be careful of high temperatures.
	This symbol indicates something that must be prohibited.
	This symbol indicates something that must not be got wet.

	This symbol indicates you should not touch with wet hands.
	This symbol indicates something that must not be disassembled.
	This symbol indicates things you must do.
	This symbol indicates that the power cord should be unplugged from the power outlet.

Warning:

DO NOT leave the projector in the rain or expose it to moisture environment to prevent fire or electric shock. The proposed plug should not be used in an extension cord outlet or other outlet unless the pin is fully plugged in.



Warning: Installing the projector

This projector is an RG2 product. The projector is for professional use and must be installed in location where safety is assured. For this reason, be sure to consult your dealer as installation and attachment/detachment of the lens unit must be performed by a professional service personnel. Never try to install the projector by yourself. This may result in visual impairment etc.



CAUTION:

Avoid displaying stationary images for a prolonged period of time. Doing so can result in these images being temporarily sustained on the surface of the LCD panel. If this should happen, continue to use your projector. The static background from previous images will disappear.

Disposing of your used product



In the European Union

EU-wide legislation as implemented in each Member State requires that used electrical and electronic products carrying the mark (left) must be disposed of separately from normal household waste. This includes projectors and their electrical accessories. When you dispose of such products, please follow the guidance of your local authority and/or ask the shop where you purchased the product. After collecting the used products, they are reused and recycled in a proper way. This effort will help us reduce the wastes as well as the negative impact to the human health and the environment at the minimum level. The mark on the electrical and electronic products only applies to the current European Union Member States.

Outside the European Union

If you wish to dispose of used electrical and electronic products outside the European union, please contact your local authority and ask for the correct method of disposal.



For EU:

The crossed-out wheeled bin implies that used batteries should not be put to the general household waste! There is a separate collection system for used batteries, to allow proper treatment and recycling in accordance with legislation.

According to the EU directive 2006/66/EC, the battery can't be disposed of improperly. The battery shall be separated to be collected by local service.

Warning:

This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.

Please read this manual carefully before installing and operating your projector.

Your projector comes with a lot of convenient features and functions. You may make the most of these features and keep your projector in good working conditions by using it correctly. Invalid operation of your projector may not only shorten its life cycle but also may lead to product failure, fire, or other incidents.

In case of any operation abnormality, refer to this manual to check your operation and connections and try solutions given in the "Troubleshooting" section at the end of this manual. If the problem persists, call your dealer or our service center.

Notes



Caution

Safety Precautions

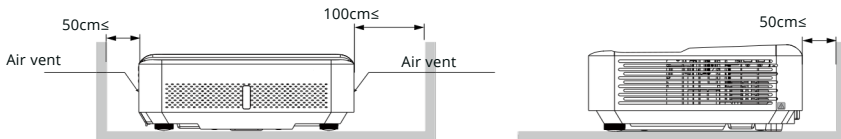
- GROUND your projector.
- Lens of your projector projects strong light. DO NOT look at the light beam directly. You may get your eyesight hurt. This is especially the case with children.
- Unplug the AC power plug if your projector will not be used for long time.
- DO NOT overload the socket of power cord as it may lead to fire or electric shock. DO NOT subject the power cord to any object. DO NOT place your projector in locations where its power cord may become damaged by treading by passersby.
- Disconnect the power plug before cleaning your projector. DO NOT apply liquid or sprays to your projector. DO NOT wipe your projector with wet cloth.
- Please follow warnings and instructions given in labels attached to your projector. Unplug your projector when your projector is exposed to thunderstorm weather, is unmanned, or not in use for long periods to prevent damage caused by lightning and power surges.
- DO NOT use accessories without recommendation by the manufacturer as it may result in potential risks.



Caution

Precautions on air outlet

- Keep adequate clearance around your projector for its ventilation and cooling. See figure below for the least clearance requirements. The least clearance is a MUST when your projector is placed within a cabinet or other closed environment.



- DO NOT cover the air outlet of your projector. Poor ventilation not only shorten life cycle of your projector but also may lead to risks.
- Slots and openings at rear and bottom of your projector are designed for ventilation. Keep your projector from overheated to ensure its steady operation.
- DO NOT cover the air outlet with cloth or other objects. DO NOT place your projector on the surface of bed, sofa, carpets, or similar object as this may block the air outlets at its bottom.
- DO NOT place your projector in closed environment, e.g. a bookcase, unless it is well ventilated.
- Keep any matter from falling in your projector through the air outlets as they may touch high voltage parts and lead to fire or electric shock by short circuits. DO NOT splash liquid to your projector.

**Note:**

Precautions on location of your projector:

- Place your projector in a proper location or it may result in fire.
- DO NOT expose your projector in rain or high humidity environments or it may result in fire or electric shock. DO NOT your projector near water or splashing water. DO NOT place any water container, e.g. flower vase atop your projector.
- DO NOT place your projector in environments of soot, moisture or smoke, e.g. your kitchen, or it may lead to product failure or accidents. Your projector may be damaged by contact with oil or chemicals.
- DO NOT place your projector near exhaust pipe or air conditioning equipment.
- DO NOT place your projector near radiator or heating pipes.
- DO NOT place your projector atop unstable truck, rack, or table. It may fall off the surface and lead to personal injuries and property damages. Please use cart or rack recommended by the manufacturer or included with your product. Please follow steps given in installation guideline included with the wall and ceiling mount racks for installation. Use installation components approved by the manufacturer.
- Be careful when moving your projector with cart. Abrupt stops, pushing too hard and rugged surfaces may topple your projector and the cart together.



Note:

Precautions on using your projector:

- DO NOT project the same image for long time as residual images may be left in the panel. This is a property of LCD panel.
- Use power as indicated in tags attached to your projector. If you have doubts over available power type, consult your dealer or local power company first.
- DO NOT open or remove the casing for maintenance as this may lead to electric shock or other damages. Call qualified maintenance personnel in case of any maintenance requirements.
 - In case of the following, unplug the power cord and call qualified maintenance personnel for service immediately:
 - a. Damaged or broken power cord or plug
 - b. Liquid splashed in your projector
 - c. Your projector exposed to rain or water
 - d. If your projector fails to work as expected by following operation instructions, adjust it according to given instructions. Other invalid operations may damage your projector, which requires the technician to spend more time before returning it back to normal.
 - e. The projector falls off to ground or its casing is damaged.
 - f. In case of any abnormal change in your projector during its use, then maintenance services would be required.
- In case components replacement is required, make sure the replacements have been approved by the manufacturer and features the same with the one being replaced. Use of unauthorized parts may lead to fire, electric shock or personal injury.
- After the completion of maintenance or repair work, get the maintenance personnel to run routine safety check to ensure your projector's safety operation status.

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 adomestic environment.

Directive 2009/125/EC.

**Note:**

Please heed all precaution for safety

To install the projector

- This projector is an RG3 product. The projector is for professional use and must be installed in location where safety is assured. For this reason, be sure to consult your dealer as installation and attachment/detachment of the lens unit must be performed by a professional service personnel. Never try to install the projector by yourself. This may result in visual impairment etc.
- For planning the layout of the projector, make sure to take safety measures instructed on the installation manual.
- In order to refuse danger, install either a wall outlet within easy reach for pulling out the power plug in emergency or a device as a breaker to shut down the power supply to the projector.
- Take safety measures preventing human eyes from entering the RG3 zone.
- Considering the installation place, select an appropriate lens and secure safety zone that is determined for each lens. For operation on the powered projector as light adjustment, make sure appropriate safety measures have been taken.
- Check the validity of established security measures of the appropriate safety zone based on the installed lens. Periodically check the validity and keep these results.
- Educate the administrator of the projector (operators) about safety before starting to operate the projector.

To use the projector

- Instruct the administrator of the projector (operators) to perform inspections before powering on the projector. (Including the safety check against emitted light by the projector)
- Instruct the administrator of the projector (operators) to be in circumstances able to control the projector whenever the projector is powered on for an emergency.
- Instruct the administrator of the projector (operators) to keep the installation manual, user's manual and inspection records to a place where they can take these documents out easily.
- Instruct them to clarify if the projector is conformed to standards of each country and region.

Laser Safety Caution



WARNING-CLASS 3R OF IEC 60825-1 SECOND EDITION LASER PRODUCT

LASER RADIATION - DO NOT STARE INTO BEAM.

- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

For USA

This product is classified as Class 3R of IEC 60825-1 Second edition 2007-03. Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.

For other regions



WARNING

CLASS 1 LASER PRODUCT OF IEC 60825-1 THIRD EDITION

- The laser module is equipped in this product. Use of controls or adjustments of procedures other than those specified herein may result in hazardous radiation exposure.



WARNING

RG2 PRODUCT OF IEC/EN 62471-5 FIRST EDITION

- No direct exposure to the beam shall be permitted, RG3 IEC/EN 62471-5:2015.
- Operators shall control access to the beam within the hazard distance and install the product at the height that will prevent exposures of spectators' eyes within the hazard distance.

- This product is classified as Class 1 of IEC 60825-1 Second edition (2007)/IEC 60825-1 Third edition (2014) and RG2 of IEC/EN62471-5 First edition.
- Obey the laws and regulations of your country in relation to the installation and management of the device.

Light Module

- A light module containing multiple laser diodes is equipped in the product as the light source.
- These laser diodes are sealed in the light module. No maintenance or service is required for the performance of the light module.
- Enduser is not allowed to replace the light module.
- Contact qualified distributor for light module replacement and further information.

Outline of laser emitted from the built-in light module:

- Wave length: 455nm
- Maximum power: 88W

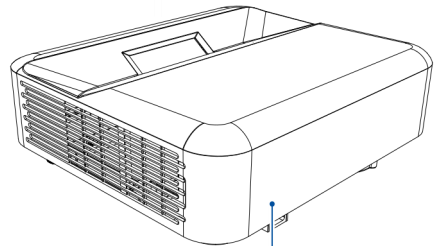
Radiation pattern from the protective housing:

- Wave length: 455nm
- Maximum laser radiation output: 333mW

Label Information

The caution and the explanatory labels are stuck on the below indicated positions.

Label



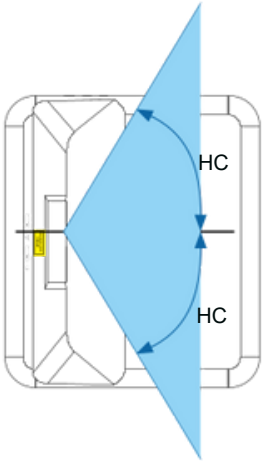
Label

Laser light radiation range

The figure below shows the maximum radiation range of the laser light.

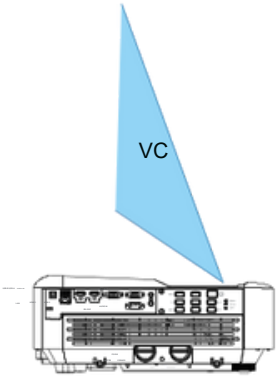
Vertical angle (unit: degree)

Model	
WXGA	WUXGA
Center (Reference value)	Center (Reference value)
HC	HC
63.5	65



Horizontal angle (unit: degree)

Model	
WXGA	WUXGA
Upper most	Upper most
VC	VC
72.2	71.8



Air ventilation

Openings in the casing are designed for ventilation and overheating prevention. DO NOT block or cover these openings to keep your projector in normal operation and from overheating.

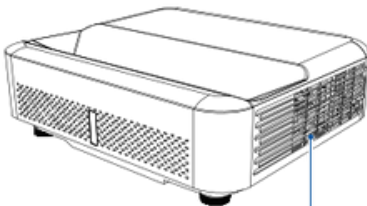


Note:

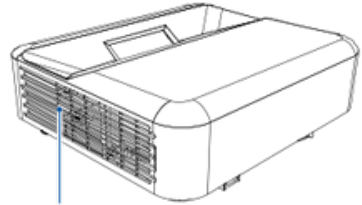
Heat exhaust at the air outlet Keep the following in mind when using or installing your projector:

- DO NOT place flammable materials or sprayers near your projector.
- Keep the air outlet one meter away from other objects.
- DO NOT touch the area close to the air outlet especially the metal components, e.g. screws. This area and parts will get very hot once your projector starts operating.
- DO NOT place any object atop your projector. They may not only be damaged but also lead to fire after being overheated.

Cooling fans are designed for cooling your projector. Fan speed is auto adjusted subject to internal temperature of your projector.



Air outlet
(For heat exhaust)



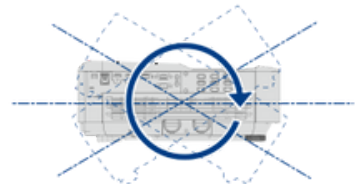
Air intake
(For heat intake)

Place your projector correctly

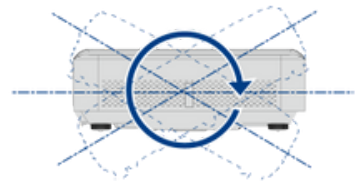
Use your projector at specified location in correct way. Improper projector location may shorten light source's life-cycle or even lead to severe incidents or fire.

360° projection

Our projector support 360° projection.



Vertical 360°



Horizontal 360°



Vertical & Horizontal 360°



Note:

Precautions on ceiling mount racket installation:

- Get qualified technician to install the ceiling mount racket.
- Warranty of your projector does not cover hazards and damage caused by using ceilingmount rackets provided by unauthorized dealers.
- Remove the ceiling mount racket when it is not in use.
- Use torque driver instead of impact driver on your projector.

Moving your projector

When moving your projector, close its adjustment legs as they may damage the lens and casing. Keep your projector in suitable box when it is not to be used for a long time.



Note:

Precautions on moving or shipping your projector:

- DO NOT drop or impact your projector as it may get damaged or failed in operation.
- Please employ proper container for movement.
- Prohibit express or other shipping service provider personnel from shipping your projector with improper boxes. Your projector may become damaged. Please consult your dealers for shipping your projector by express or other shipping service providers.
- Place your projector in box only after it has been fully cooled down.

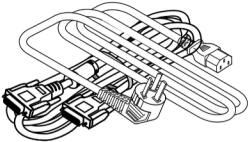
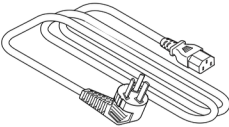
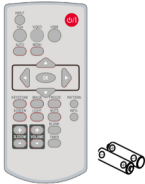
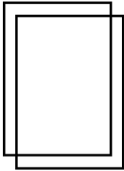
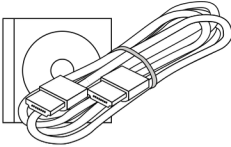
FCC Caution NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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 own expense.

✓ **Note:**

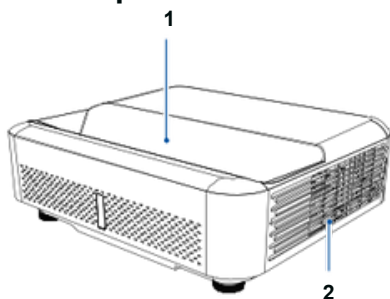
- Connect the equipment to a socket-outlet with earthing connection by means of a power cord.
- The socket-outlet shall be installed near the equipment and shall be easily accessible.

Accessory for IN2006UT/2009UT as follows:

The projector includes such following accessories. Please check all the packaging. If any items are missing, please contact your dealer immediately.

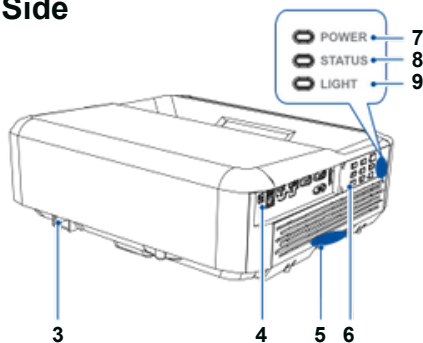
Power cord	Power cord	Remote Control (AAA/R03 battery x2)
 1.8m European standard	 1.8m American standard	
Quick Start Guide	HDMI cable	
		

Front/Top



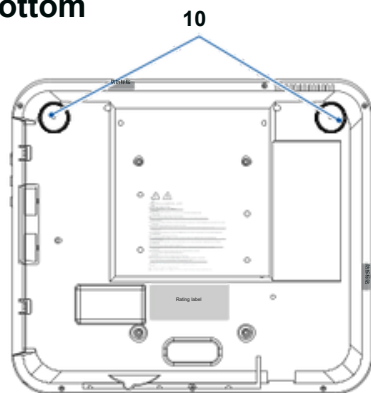
1. Projection lens
2. Air outlet grille

Side



3. AC power cord port
4. Terminal
5. Lens shift/Focus Ring
6. Keypad
7. POWER indicator
8. STATUS indicator
9. LIGHT indicator

Bottom



10. Adjustment feet

✓ **Note:**

Security and anti-theft locks are compatible with Kensington security cables/devices. For related products, visit the Kensington website.

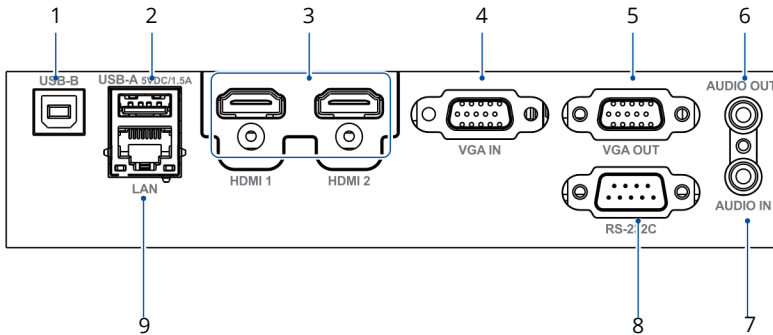


Note:

Do not place your hands or other objects near the vent:

- Vent will shed heat. Do not put your hands or face, or thermolabile objects placed near the outlet. You need keep at least a distance of 3" (1m) away, or it may cause it burning or damage.

Terminal



1 USB-B connector

When using the "USB display" function, connect your computer to this terminal via the USB cable.

USB power for 5VDC/1.5A

2 USB-A connector

When using the Memory Viewer function, insert the USB memory directly to this terminal.

3 HDMI1/HDMI2 connector

Connect HDMI digital output signals or HDMI2 digital output signals to this terminal.

4 VGA IN

Connect the output signal from the computer to this terminal.

5 VGA OUT terminal

For monitor output, output the signal from VGA other monitors interface.

6 AUDIO OUT terminal

Connect external audio devices to this terminal.

7 AUDIO IN terminal

Connect audio signal of the PC to this terminal.

8 RS-232C

Select the RS232 function to operate the projector, connect the serial communication to this terminal.

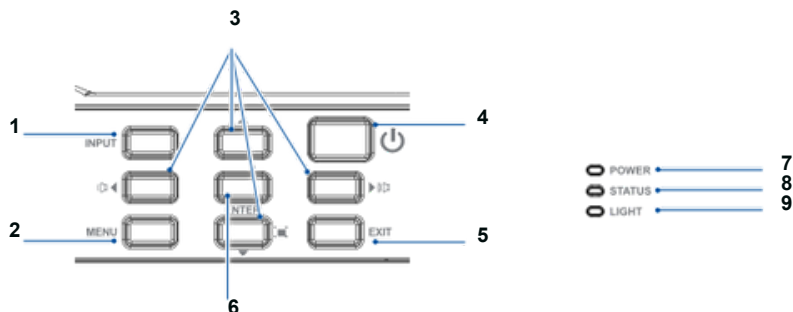
9 LAN terminal)

Connect mesh cable to this terminal when using network control and operate your projector.



It is required that both ends of the 9th PIN of the VGA cables are connected, ensure not connected to the GND PIN as well. Meanwhile the 9th PIN of the source device is required to be VCC.

Top control panel and indicators



1 INPUT

Open or close the INPUT menu.

2 MENU

Open or close the OSD menu.

3 Arrow ▲ ▼ ◀ ▶ /Volume +/- /Keystone ▼

- Select items or adjust the data in the OSD menu.
- It uses to adjust volume or make keystone adjustment.
- It uses to enter password.

4 POWER

Open or close the projector.

5 EXIT

Esc or return to the previous menu.

6 ENTER

- Enter the OSD menu
- Select options in the OSD menu .

7 POWER indicator

This indicator informs the power status of the projector

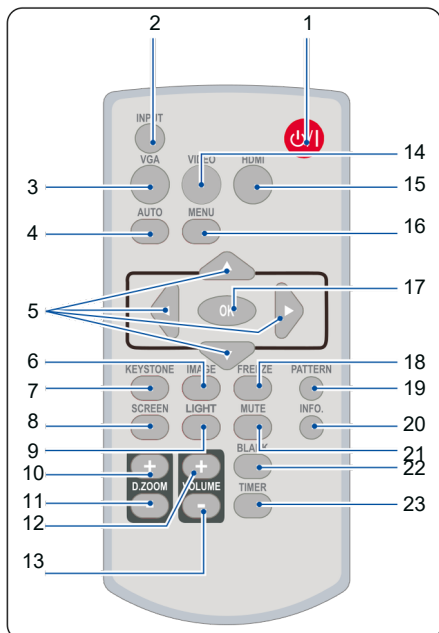
8 STATUS indicator

Lights up/flashes when a button is pressed with the [CONTROL PANEL LOCK] enabled, or when an error occurs in the projector.

9 LIGHT indicator

This indicator informs the state of light source, used time of the light source.

Remote control



1 POWER

Power on or off your projector .

2 INPUT

Open or close the INPUT menu .

3 VGA

Select VGA input source

4 AUTO

Enter auto adjustment mode .

5 Arrow▲▼◀▶

- Select items or adjust data in the OSD menu.
- Select display area in digital zoom+ mode.

6 IMAGE

Select image mode.

7 KEYSTONE

Keystone calibration.

8 SCREEN

Enter the screen size adjustment menu.

9 LIGHT

Select LIGHT mode.

10 D.ZOOM +

Zoom in projected image .

11 D.ZOOM -

Zoom out projected image .

12 VOLUME +

Increase volume.

13 VOLUME -

Decrease volume .

14 VIDEO

(This button does not work on this series of projectors)

15 HDMI

Select HDMI 1/HDMI 2 input source.

16 MENU

Open or close the OSD menu .

17 OK

Enter the OSD menu or select options in it .

18 FREEZE

Freeze projected images.

19 PATTERN

Select built-in test pattern of your projector.

20 INFO.

Display current status info. of your projector .

21 MUTE

Turn off the sound Temporarily.

22 BLANK

Dark out screen images temporarily.

23 TIMER

Enable the timer function .



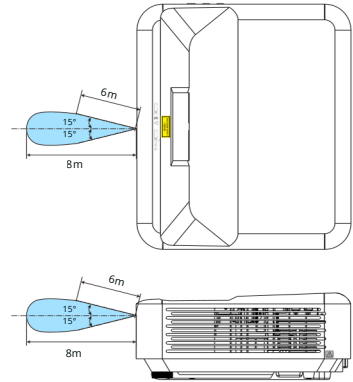
- PATTERN button on the remote control is invalid when you choose USB Display, Memory Viewer and Network as input signal.

Remote control operation range

Point your remote control to the IR receiver of your projector.

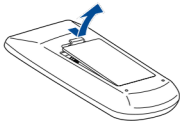
The maximum operating range of the remote control is approximately 8 meters in front of the projector's sensing remote control window, and approximately 6 meters at a $\pm 15^\circ$ angle.

The projector will not respond if there are objects between the remote control and the sensor, or if strong light falls on the sensor. Weak batteries will also prevent the remote control from properly operating the projector.

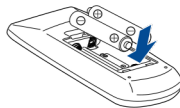


Install battery of remote control

① Open the battery cover.

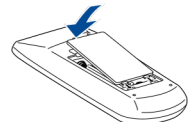


② Insert a new battery in it.



Two AAA batteries.
Place batteries with its anode and cathode (+ and -) in correct direction. Keep both poles in good connection to the contacts within the compartment.

③ Put the cover back.



Please follow the following rules for safety operation:

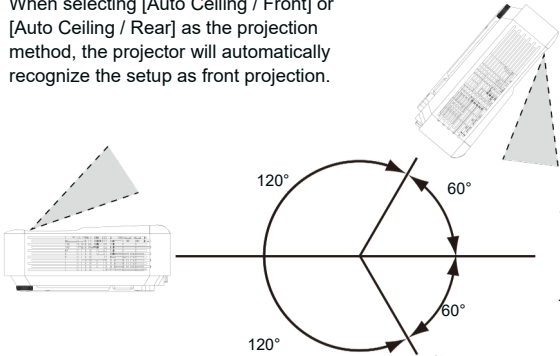


- Use two of AAA batteries.
- Replace both batteries at the same time.
- Do not mix new and old batteries as one pair.
- Keep your remote control away from water or other liquids.
- Do not expose your remote control to environments with high humidity or temperature.
- Do not drop your remote control.
- In case of any battery solution leaking in the compartment, clear it thoroughly before placing new batteries in it.
- Using battery of other types than what specified on this manual may lead to risks of explosion.
- Please dispose your old battery by following instructions given in tag of the battery or local regulations.

Angle sensor

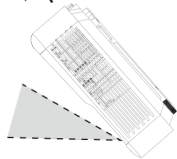
The installation angle range that the built-in angle sensor of the projector can detect is shown in the figure below.

When selecting [Auto Ceiling / Front] or [Auto Ceiling / Rear] as the projection method, the projector will automatically recognize the setup as front projection.



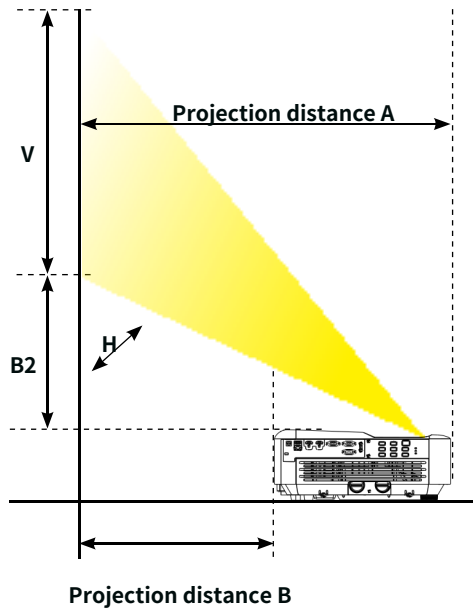
When selecting [Auto ceiling / Front] or [Auto ceiling / Rear] as projection method, the projector will automatically recognize the setup as ceiling projection.

When selecting [Auto Ceiling / Front] or [Auto Ceiling / Rear] as the projection method, the projector will automatically recognize the setup as front projection.



Screen size

- Ambient brightness may affect your projection image quality. For the optimal image effect, it is recommended to control brightness in your environment.
- Values shown in figure below are approximates only. They may differ from the actual ones.
- The further the projector is away from the screen, the larger the projection size will be.
- Use the following table to install the projector in the best position from the screen. The values provided are for reference only.



IN2006UT

16:10 Perspective					
Screen Size	Width(H)	Height(V)	Height B2	Projection Distance A	Projection Distance B
80	1.723	1.077	0.261	0.443	0.051
85	1.831	1.144	0.281	0.468	0.075
90	1.939	1.212	0.300	0.492	0.100
95	2.046	1.279	0.320	0.517	0.124
100	2.154	1.346	0.339	0.541	0.149
110	2.369	1.481	0.379	0.590	0.197
120	2.585	1.615	0.418	0.639	0.246

16: 9 Perspective					
Screen Size	Width(H)	Height(V)	Height B2	Projection Distance A	Projection Distance B
80	1.771	0.996	0.325	0.456	0.063
85	1.882	1.058	0.349	0.481	0.088
90	1.992	1.121	0.372	0.506	0.113
95	2.103	1.183	0.396	0.531	0.139
100	2.214	1.245	0.419	0.556	0.164
110	2.435	1.370	0.467	0.606	0.214
120	2.657	1.494	0.514	0.657	0.264

Projection distance formula

16:10	Y	=	0.004887	X	+	0.052403
16:9	Y	=	0.005023	X	+	0.053860

X: Projection Screen Size (Unit: inch)

Y: Projection Distance (Unit: m)

IN2009UT

16:10 Perspective					
Screen Size	Width(H)	Height(V)	Height B2	Projection Distance A	Projection Distance B
80	1.723	1.077	0.139	0.410	0.018
85	1.831	1.144	0.151	0.433	0.041
90	1.939	1.212	0.163	0.456	0.063
95	2.046	1.279	0.175	0.478	0.086
100	2.154	1.346	0.186	0.501	0.108
110	2.369	1.481	0.210	0.546	0.154
120	2.585	1.615	0.234	0.592	0.199

16: 9 Perspective					
Screen Size	Width(H)	Height(V)	Height B2	Projection Distance A	Projection Distance B
80	1.771	0.996	0.199	0.422	0.029
85	1.882	1.058	0.215	0.445	0.053
90	1.992	1.121	0.230	0.468	0.076
95	2.103	1.183	0.246	0.492	0.099
100	2.214	1.245	0.262	0.515	0.122
110	2.435	1.370	0.293	0.561	0.169
120	2.657	1.494	0.324	0.608	0.215

Projection distance formula

16:10	Y	=	0.004525	X	+	0.048482
16:9	Y	=	0.004651	X	+	0.049830

X: Projection Screen Size (Unit: inch)

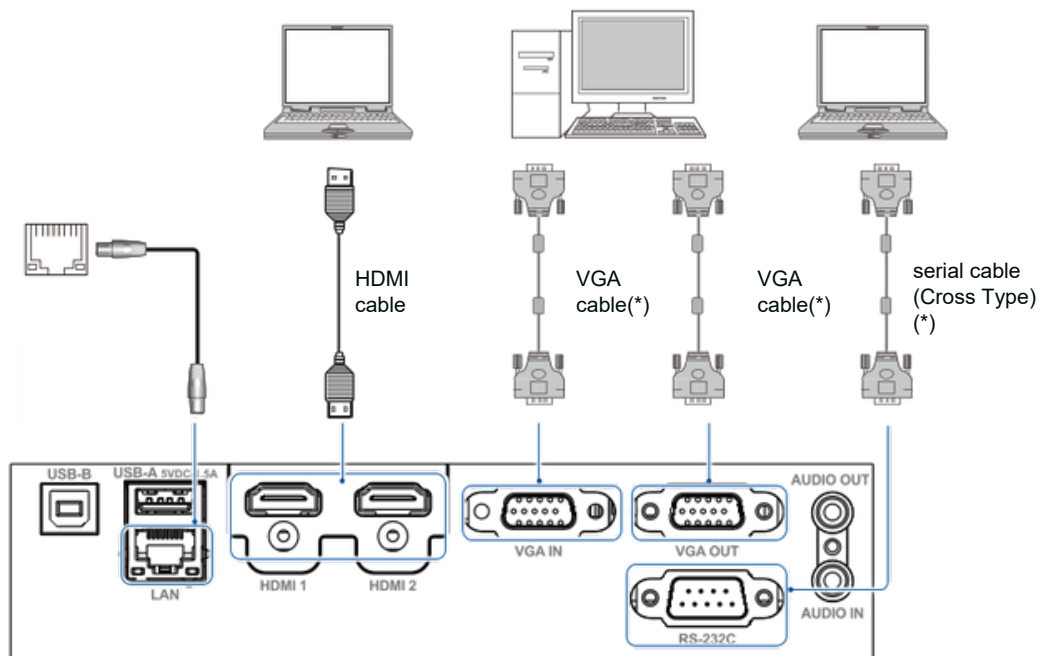
Y: Projection Distance (Unit: m)

Connect to pc (Digital and Analog RGB)

Cables for connection:

- VGA cable
- Serial cable (Cross type)*
- HDMI cable*

(* This cable is not included.)



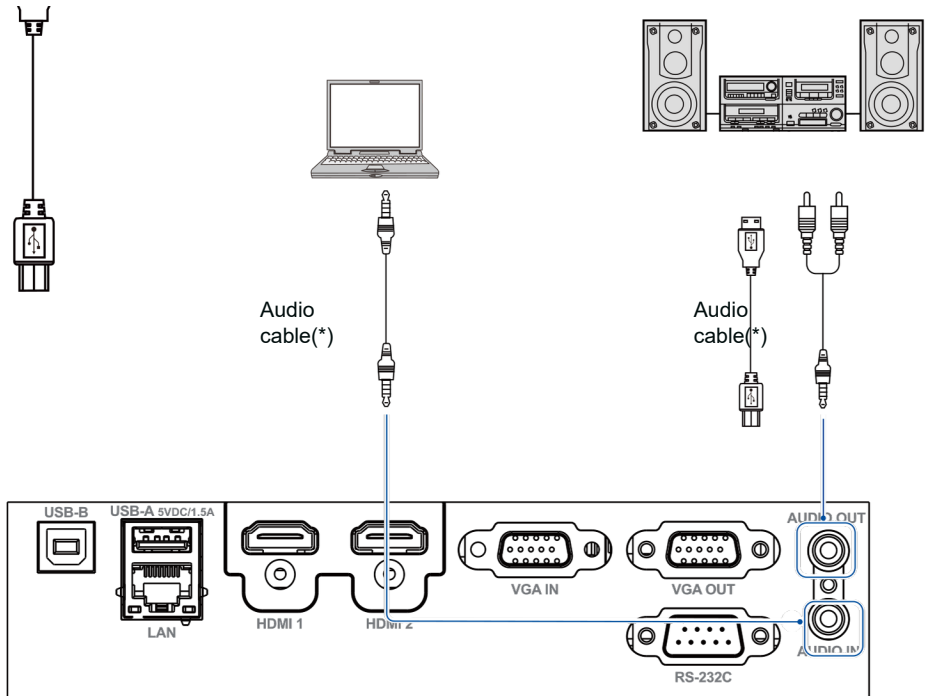
- Unplug power cords of your projector and all external equipment before connecting any cable to them.

Connect to Audio equipment

Cables for connection:

- Audio cable*

(* This cable is not included.)



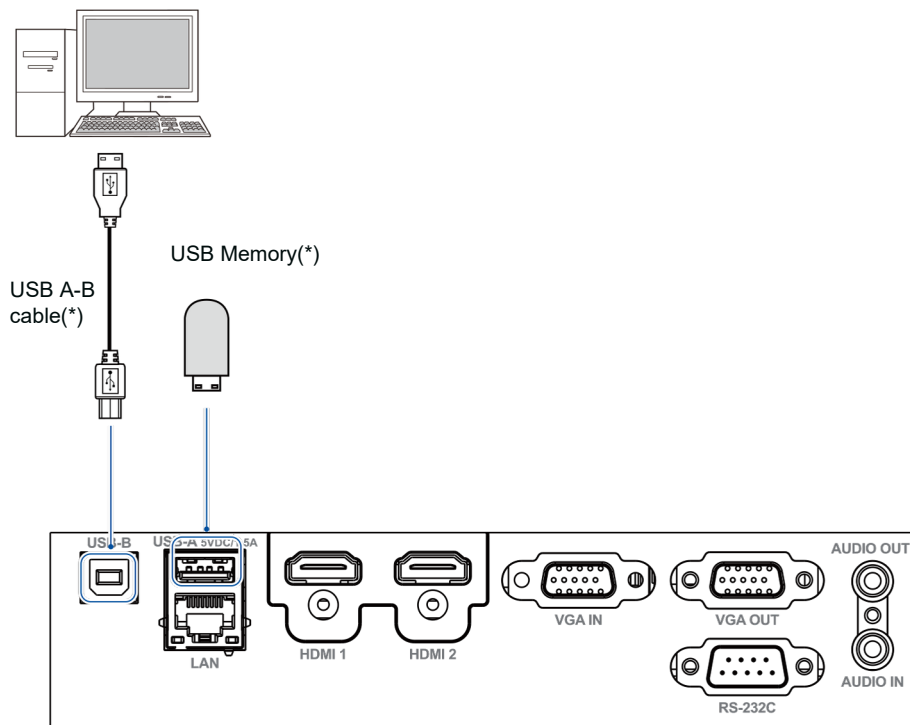
• Unplug power cords of your projector and all external equipment before connecting any cable to them.

Connect to USB and Wireless card (USB-A and USB-B)

Cables for connection:

- USB-A *, USB-B cable*, Ethernet cable*

(* This cable is not included.)



- Unplug power cord of your projector and all external equipment before connecting any cable to them.

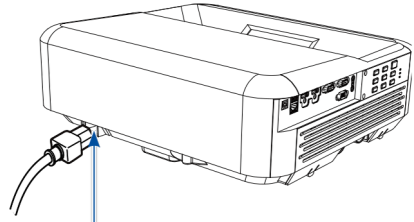
Connect the AC power cord

Standard voltage employed by your projector is AC 100-240V. It adapts to different input voltage automatically. Your projector employs single-phase power cord with neutral ground cable. Do not use any other type of power cord or you may face the risks of electric shock. If you have any doubt on type of power cord you are using, please call authorized dealer or service center for help. Before powering on your projector, get all external equipment connected in advance.



Note:

Keep the AC power outlet near your projector to make plugging and unplugging easy and convenient.

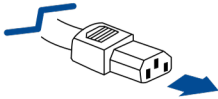
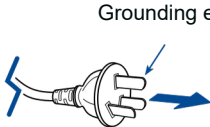


Connect the provided AC power cord to your projector.

Precautions for power cord

Your AC power cord should meet regulations of the country/district where your projector is used.

Please make sure the type of the power plug is compliant with those given in figure below. Make sure you are using a valid AC power cord. If the included AC power cord does not comply with the AC power socket in your location, call your dealer for replacement.

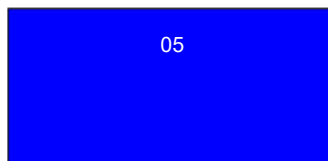
The projector side	Connect to the AC power socket
 Connect to power cord connector of your projector	 Connect to AC power socket

✓ Note:

- For safety reasons, unplug the AC power cord when your projector is not in use. Your projector will consume a small amount of power when it is connected to AC grid power and in standby mode.
- Use of invalid power cord may hamper product performance or even lead to electric shock, fire, and other incidents. Please use power cord compliant with the included one to ensure product performance and operation safety.
- The frequently used cables are: AC power cord, VGA cable, audio cable, video cable, and serial control cable.

Turning on the Projector

1. Before turning on the projector, please complete the connection of external devices first. (Such as computers, VCRs, etc.).



or



2. Connect the projector's AC power cord to an AC power outlet. The power indicator will be steady orange on Normal standby mode, and flashes orange on network standby or ECO standby mode.

Standby



3. Press the  key on the control panel or  on the remote control. The POWER indicator flashes orange, and a blue background appears on the screen. Then the countdown begins until the POWER indicator and LIGHT indicator turn green. The cooling fan is starting working.

Turn on the projector



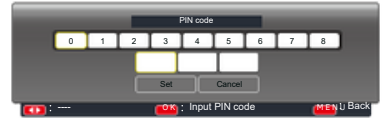
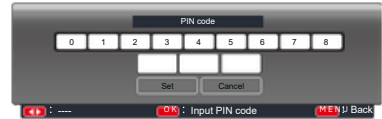
✓ Note:

- If the "Splash Screen Select" function is set to "Off", the splash screen will not be displayed on the screen.
- During the countdown, all operations other than shutdown are disabled.
- Whether the LIGHT indicator is always on or flashes depends on different laser modes. For details, please refer to "Light indicator status" on page 102.

4. If your projector is setting as password protected, the password dialog box displays. Enter your password as instructed below.

Enter password (PIN)

1. Press the ◀ ▶ keys to select a number from 0 - 9.
2. Press OK.
3. Repeat the above steps to enter a three-digit number.
After setting a three-digit number, move the cursor to [OK].
4. Press OK.



What is a password (PIN)?

A password (PIN) is an ID code for identifying people with knowledge about it to operate your projector. A password (PIN) setting may help preventing your projector from unauthorized use.

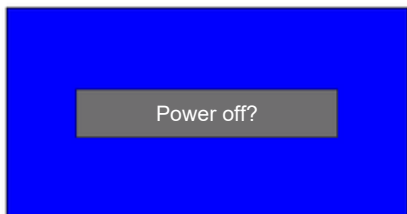


Your password (PIN) code is a 3-digit number. To find out more about protecting your projector with a password (PIN), please refer to the PIN Code Lock function in the Setup menu on Page 71 for details.

Precautions on password (PIN) operation: You cannot operate a password (PIN) protected projector without correct password (PIN). Please set up a new password (PIN) and keep your operation manual in safe place. In case the password (PIN) is lost or forgotten, call your dealer or service center.

Power off your projector

1. Press  on the control panel or  on the remote control, and the message "Shutdown?" appears on the screen.



"Power off?" message disappears after 4 seconds.

2. Press the Power button again in 4 seconds. after the "Power off?" message prompted to you. The POWER light keeps flashing red, and the cooling fans continue to work (You may set up noise level and speed of the fan when it is cooling down.) Unplug the power cord until the fan stops running. Failure to do so may shorten life cycle of your projector or lead to power on failures or operation abnormalities.



Or



Turn off the projector



Standby



✓ Note:

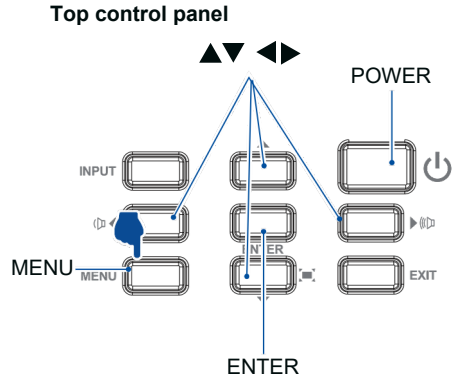
- If the "Direct on start" function is set to "On", your projector will power on once it is connected to an AC power socket. (Refer to page 58)
- Speed of the cooling fan varies with internal temperature of your projector.
- Do not place your projector in any box before it is fully cooled down.
- In case the STATUS or LIGHT indicator flashes or turns red, refer to the "Light indicator status" for instructions. (Refer to page 102)
- The POWER indicator flashes when the light source is cooling down. Do not power on your projector at this time. Power on your projector only after the POWER indicator turns orange.
- Unplug the power cord after your projector has been turned off. The fan stops running.

How to operate the OSD

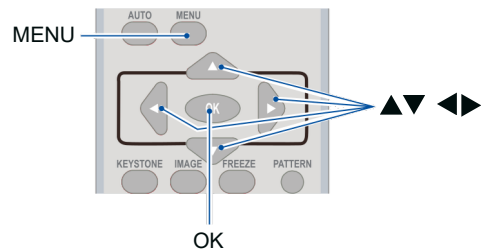
You can adjust or set up the projector on the on-screen menu .

The menu has a multilayer structure. Each main menu is divided into several sub-level menus, then each sub-menus is divided into several sub-menus.

Please refer to the appropriate section of this manual for the procedure for the adjustment and settings.

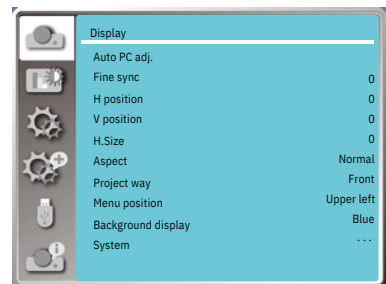


Remote control

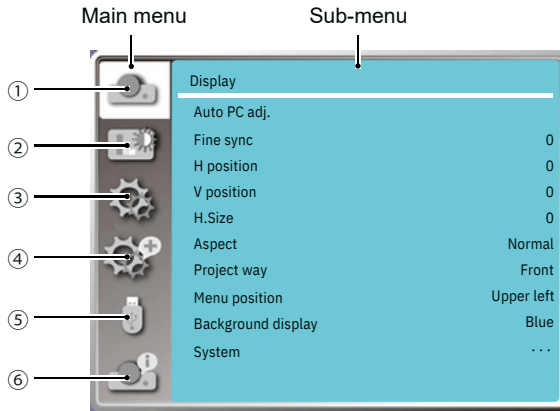


1. Press the MENU button on the top control panel or remote control and the OSD displays.
2. Press ▲▼ button to act on or select one main menu item. Press ► button or OK button to enter a sub-menu.
3. Press ▲▼ button to select required sub-menu, then press OK button or ► button to set up or enter an option.
4. Press ▲▼ button to select settings or navigate options, then press OK button to act on the item and exit.
5. Press ◀ button or BACK button on remote control and control panel to return to main menu. Press the MENU button to exit the OSD.

OSD Menu



Menu item overview



1 Display menu

- Select Auto PC adj., Fine sync, H Position, V Position, H. size to adjust the parameters to match the VGA format.
- Aspect : Normal, Wide, Full, 4:3 and Advanced.
- Project way: Choose Front, Rear, Ceiling / Front, Ceiling / Rear, Auto ceiling/Front and Auto ceiling/Rear.
- Menu position: Set screen menu display position on the screen.
- Background display: Sets the background color of the projection screen.
- System: Select the compatible system signal format with input source.

2 Color adjust menu

Available options in the Image Select menu are Dynamic, Standard, Cinema, Blackboard (green), Colorboard and User image.

- For VGA input, the available Color adjust options: Image mode, Dynamic mode, Contrast, Brightness, Color, Tint, Red, Green, Blue and Sharpness.

3 Setting menu

Configuration of the basic function operation on the projector: Direct power on, Standby mode, High land, Cooling fast, Key lock, Laser control, Sound and HDMI setup.

4 Expand menu

Available adjust options are Language, Auto Setup, Keystone, Logo, Security, Power management, Filter counter, Test pattern, Network and Factory default.

5 Memory Viewer menu

Select parameter Of Set slide, Slide transition effect, Sort order, Rotate, Best fit, Repeat and Apply.

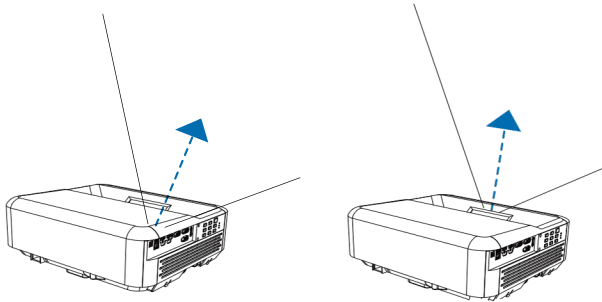
6 Information menu

Display information about the projector.

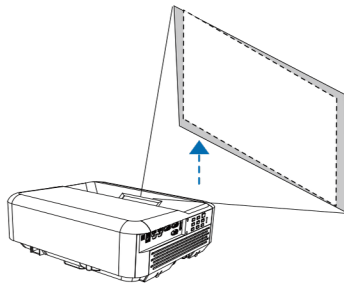
Adjust the size and position of the picture

Use adjustable feet, zoom buttons, and keystone correction to adjust the size and position of the picture. For clarity, drawings and cables are omitted in this chapter.

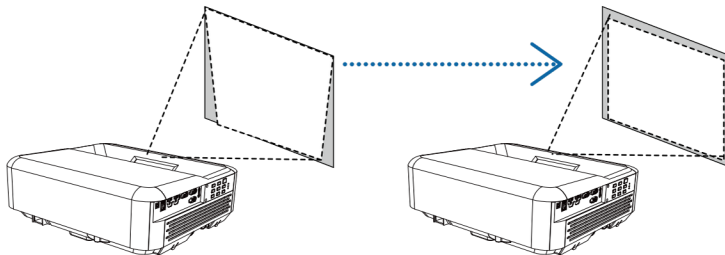
Adjust the focal length [focus button]



Adjust the height and horizontal inclination of the projected image [adjustable angle]



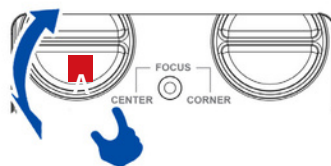
Corrected keystone distortion [Keystone correction]



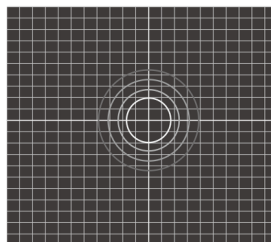
Focus adjustment

1) Select the test chart function.

- Press the PATTERN button on the remote control to enter the test pattern function and switch to the "Grid" option.

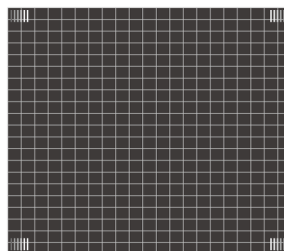
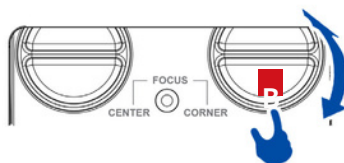


- Press the MENU button on the remote control to display the on-screen menu, select the "Expand" menu option, press the OK button or ► button to confirm the selection of the "Test pattern" option, then press the OK button or ► button to confirm and enter the "Grid" option, and press the OK button to confirm.



2) Turn the button A clockwise or counterclockwise to adjust the focal length at the center position;

3) Turn the B button clockwise or counterclockwise to adjust the focal length of the four corners of the screen.



✓ **Note:**

- If any area is poorly focused, you can use the focus button to adjust it until the focal length of the four corners is the same.

Adjustment pad

Adjusting the left and right tilt.

1. Place the projector perpendicular to the screen.

2. Turn the left and right tilt feet to adjust

- You may use the adjustment pad to raise your projector up to 1.0 degree, just show as below Image (1).
- Rotate the adjustable pad and tilt the projector to the required height whose max height is up to 18mm, just show as below Image (2).
- Turn the pad to tilt your projector to required height, just show as below Image (3). Turn both pads clockwise to raise your projector, while turn both pads counterclockwise to lower down your projector or close the pad.

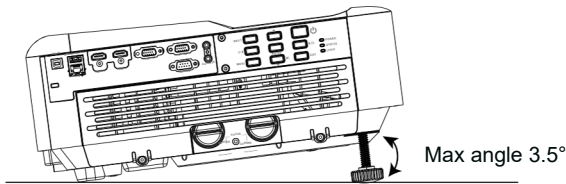


Image (1)

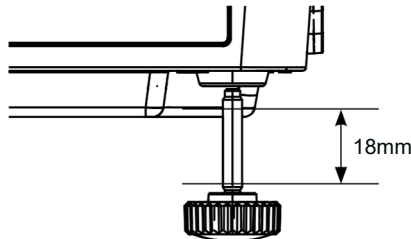


Image (2)

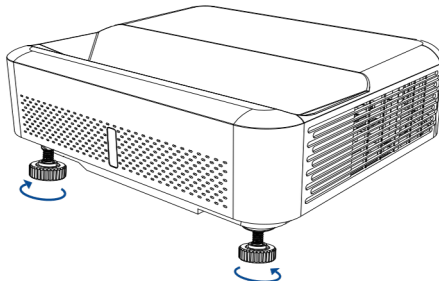


Image (3)

Keystone adjustment

When the projector is not exactly perpendicular to the screen, keystone distortion occurs. For correcting this distortion, you can use the “Keystone” function, a digital technology that can adjust for keystone-type distortion, resulting in a crisp, square image.

- Only WUXGA resolution supports 6-corner correction, curved correction and Grid Image Tune.

Follow the steps below to manually correct the trapezoid image.

Before performing KEYSTONE correction

The keystone function has five features, including H/V keystone, 4-corner correction, 6-corner correction, curved correction, Grid Image Tune, reset value. Press **▼▲◀▶** button to adjust keystone distortion, and press the OK button on the remote control or press ENTER button to select. You may save your settings for keystone adjustment.

H/V Keystone.....Adjust the projected image when the projector is on the horizontal or vertical keystone distortion.

4-Corner correction.....Adjust the projected image when the projector is keystone distortion of four corners .

6-Corner correction.....Adjust the projected image when the projector is keystone distortion of four corners.

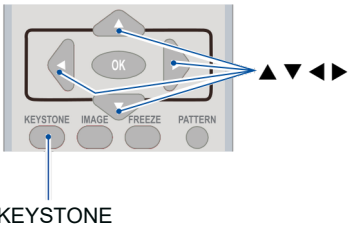
Curved correction.....Adjust the projected image when the projector linearity is uneven or the projected images bent vertically and horizontally.

Grid Image Tune..... Adjust the local points of the projected image.

Reset value.....The correction values will be restored to the factory defaults.

- 1. Press the ▼ button on the projector cabinet.**
The H/V keystone screen will be displayed on the screen.
- Press the KEYSTONE button when using the remote control.

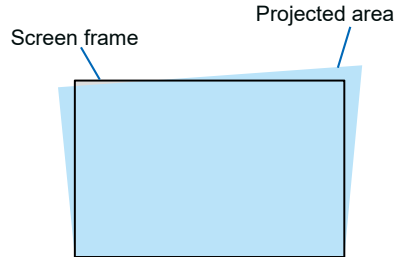
Remote control



H/V Keystone
4-Corner correction
6-Corner correction
Curved correction
Grid Image Tune
Value reset

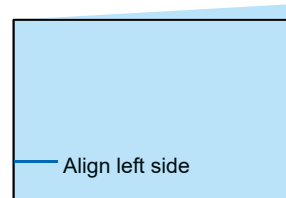
2. Press the ▼ button to select H/V keystone, then press the ENTER button to select the V keystone. And press ◀▶ button to so that the left and right sides of the projected image are parallel.

- Adjust the vertical keystone distortion.



3. Align the left (or right) side of the screen with the left (or right) side of the projected image.

- Use the shorter side of the projected image as the base.
- In the right example, use the left side as the base.



4. Press the ▲ button to select H KEYSTONE and then use the ◀▶ button so that the top and bottom sides of the projected image are parallel.

- Adjust the vertical keystone distortion.



5. Repeat steps 2 and 4 to correct keystone distortion.

6. After completing Keystone correction, press the EXIT button to turn off the menu.

✓ **Note:**

- The arrow mark looks white when there is no keystone adjustment in existence.
- The arrow mark indicating the adjustment direction turns red.
- The arrow mark disappears when the maximum adjustment limit reaches.
- The keystone prompt box will disappear if you press the KEYSTONE button again when it is displaying. Press the OK button again to switch the four correction items.
- The adjustable range is subject to source of signal input.

- For further details about Keystone function, please turn to page 65-75.

To return the keystone adjustments to default:

1. The Keystone screen will be displayed on the screen.
2. Press ▼ button to select Reset. 3. Press the ◀▶ button to select "Yes", then to press the OK button.

- The adjustments will be reset.

✓ Note:

- All adjusted values set in the [KEYSTONE] adjustment are reset to initial values

Auto setting function

Turn on the automatic setting function and select the VGA input source. Press the remote control <Auto> button to automatically perform computer adjustments.

Remote control



Volume adjustment

You'd better use the remote controller to complete directly.

VOLUME

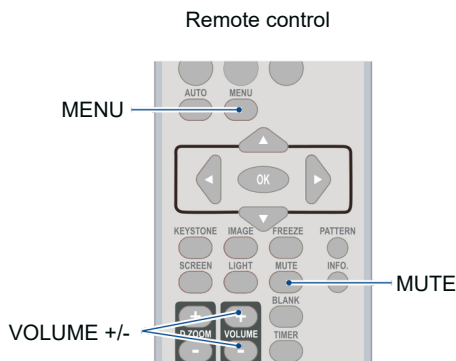
Press the remote controller VOL +/- buttons to adjust the volume.

MUTE

Press the MUTE key to temporarily mute the sound. Press it again to restore the sound.

Note:

- You can turn off the sound output from the audio output jack (stereo mini).



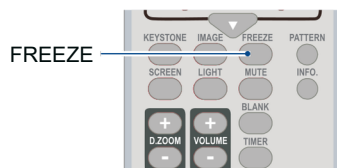
FREEZE

Press the FREEZE key to freeze the picture. Press it again and the picture returns to motion.

- When LAN, USB-A and USB-B are selected as input terminal, this function unavailable.

Note:

- The image freezes, but the original video is still playing.

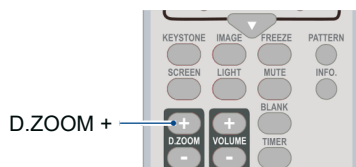


ZOOM

You can magnify the picture up to four times.

Note:

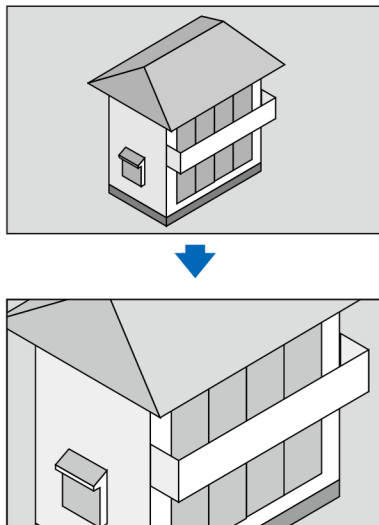
- Depending on the signal, the maximum magnification may be lower than four times.
- When LAN, USB-A and USB-B are selected as input terminal, this function unavailable.



Methods as below:

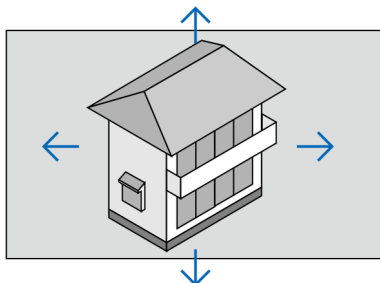
- Press the D.ZOOM (+) key to zoom in on the picture.

To move the magnified image, use the ▲, ▼, ◀, ▶ keys



2. Press the ▲▼◀▶ key.

The area of the enlarged image will move.



3. Press the D,ZOOM (-) keys to zoom out.

Each time the local zoom (-) button is pressed, the image is zoomed out.

✓ Note:

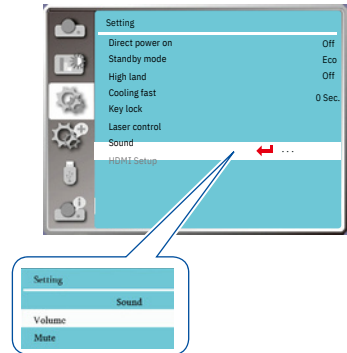
- The image will be zoomed in or out centered on the center of the screen.
- Press the aspect ratio key on the remote control or select the aspect ratio function on the display menu to cancel the current magnification.



Menu operation

1. Press the MENU button on the top control panel or remote control and the OSD displays. Press ▲▼ button to enter setting menu, then press OK or ► button.
2. Press ▲▼ button to select sound, press OK or ► button to enter.
3. Press ▲▼ button to select volume or mute.
 Volume.....Press ▲ button to increase volume.
 Press ▼ button to decrease volume.
 Mute.....Press ▲▼ button to switch to On or Off .
4. Press OK button to select.

Sound menu



Remote control operation

Use your remote control for common operations.

FREEZE

Press the FREEZE button on remote control to freeze image and mute the audio. Freeze icon appears on the screen. Press the FREEZE button or any button to cancel the freeze function, then the image replay and the sound is restored.

MUTE

Press the MUTE button on the remote control to turn off the sound. To remove the mute function, please press the mute button or volume +/- button to cancel the mute function.

VOLUME +/-

Press the VOLUME +/- on remote control to increase or decrease volume.

IMAGE

Press the IMAGE button on remote control to select required image mode.

INFO.

Press the INFO. button on the remote control to display the information of the projected image and the projector's operating status.

LIGHT

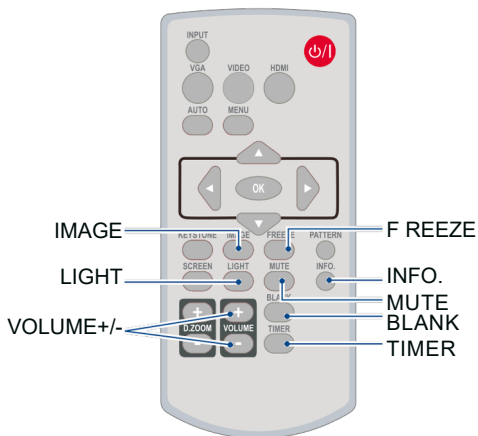
Press the light source mode key to select the light source mode to change the screen brightness.

TIMER

Press the TIMER button on remote control. A timer animation (00:00) displays on the upper right corner and starts timing in format of (00:00-59:59).

Press the TIMER button to stop timing. Press the TIMER button again to disable the timing function.

Remote control



02: 02

Timer display

✓ **Note:**

- For more buttons' description, please refer to the next page.

BLANK

Press the BLANK button on remote control; a blank screen displays to replace existing image. Press the BLANK button or any other button to restore the image.

Press BLANK to toggle switch your screen as shown below:

BLANK → Normal → BLANK → Normal →



If there is no other key operation, the "blank screen" will disappear after 2 seconds of display.

Digital Zoom - (D.ZOOM+)

Press the D.ZOOM+ button on remote control to enter the Digital Zoom mode. When OSD menu disappear, the screen display digital zoom + information. *Only for input as VGA, VGA2, and the screen size setting as Normal or Wide.

Digital Zoom - (D.ZOOM-)

Press the D.ZOOM- button on remote control to enter the Digital Zoom mode. When OSD menu disappear, the screen display digital zoom - information.

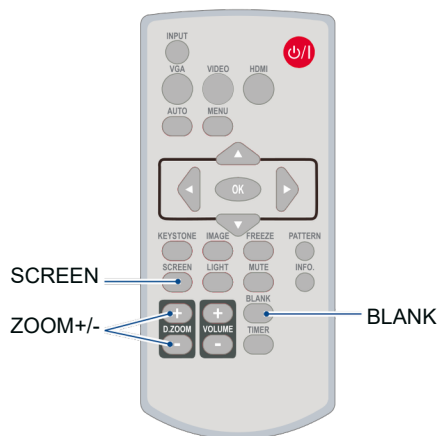
Press + / - mode to exit the Digital Zoom.

Screen size selection (SCREEN)

Press the SCREEN button on remote control to select required screen size mode.

Press the SCREEN button on the remote control to select the size of the screen to return to the normal screen size.

Remote control



Input selection

Basic operation

Press the INPUT button on the top control panel or on the remote control to select one of the following input: VGA, HDMI 1, HDMI 2, Network, Memory viewer and USB Display as input signal.

Menu operation

- 1 Press the INPUT button on remote control to enter the Input menu.
- 2 Press button to select one of the following input: VGA, HDMI 1, HDMI 2, Network, Memory viewer and USB Display, then press the OK button to select the input signal.

VGA

Select input VGA if a PC is connected to the VGA IN terminal.

HDMI 1

Select input HDMI 1 if a device is connected to the HDMI 1 terminal.

HDMI 2

Select input HDMI 2 if a device is connected to the HDMI 2 terminal.

Memory Viewer

Select input Memory Viewer if a device is connected to the USB-A terminal.

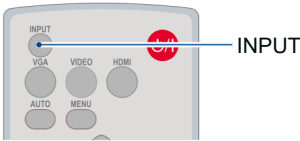
Network

Select input Network if a device is connected to the LAN terminal.

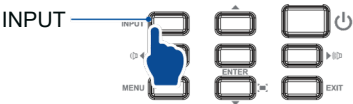
USB Display

Select input USB Display if a device is connected to the USB-B terminal.

Remote control



Top control Panel



Input menu

VGA HDMI 1	
☒	HDMI 2
Memory	
Viewer	
Network	
USB Display	

✓ **Note:**

- If the "Input Source Search" option in the "Auto Setting" function is set to "On", the VGA, HDMI 1, and HDMI 2 input sources support the automatic search function. When a signal line is connected, the projector will automatically switch the corresponding signal source. In VGA signal mode, when the "Auto PC adj." option is set to "On", press the AUTO key, the projector will perform the "Auto PC adj." function.
- When selecting "USB Display", "Memory Viewer" and "Network" as the input source, the
- "Freeze", "Aspect", "Auto setup", and "Test pattern" functions are invalid.
- For further details about Memory Viewer function, please turn to page 77-84/89-91.
- For further details about USB Display function, please turn to page 91-97.

Auto PC adj.

When the computer RGB signal, the image may shake up and down, left and right, use the "Auto Computer Adjustment" function to automatically adjust the phase, horizontal position, vertical position and horizontal size to the best state, so that the image is best to suit the audiovisual used by the projector surroundings.

Fine sync

(Only for PC signal input) Adjust image to the best state When the image jitters, or the image outline dims.

- 1) Press ▲▼ button to select [Fine sync] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to adjust Fine sync.

Adjustment range is from 0 to +31. Please adjust to the least interference state.

H position

(Only for PC signal input) On the premise that the relative position of both projector and the screen is set up right, you can move the image horizontal position, if the position of the projected image on the screen is deviated.

- 1) Press ▲▼ button to select [H position] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to adjust image H position.

Adjustment range is from -5 to +5.

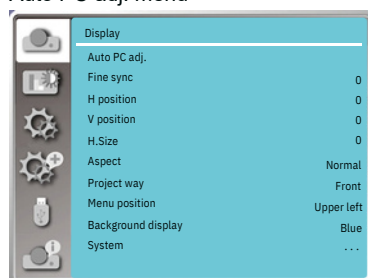
V position

(Only for PC signal input) On the premise that the relative position of both projector and the screen is set up right, you can move the image vertical position, if the position of the projected image on the screen is deviated.

- 1) Press ▲▼ button to select [V position] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to adjust image V position.

Adjustment range is from -5 to +5.

Auto PC adj. menu



✓ Note:

- The projector will perform Auto PC adj. function and search for the input signal automatically, when it inputs the VGA (RGB) signal for the first time.
- Auto PC adj. function may fail to work if computer models is not compatible with the input signal. It is better for users to perform
- Auto PC adj. function in brighter screen.

H size

(Only for PC signal input) You can adjust and reduce the interference caused by patterns of the projected vertical stripes. The following projected patterns may cause a circular pattern (Noise).

Adjust the amount of interference to the minimum.

Users can point the clock to adjust images.

- 1) Press ▲▼ button to select [H size] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to adjust H size level .

Adjustment range is from -15 to +15.

Aspect

Adjust the image to fit the screen size, while keeping aspect of input signal's unchanged. Press < MENU > button on the remote control or < -□ > button on the top control panel to display the OSD menu. Press button to select the Display menu , then Press <OK> or ► button.

- 1) Press ▲▼ button to select [Aspect] menu.
- 2) press <OK> button.
- 3) Press ▲▼ button to select the required item.

Normal... Projects the image at maximum size while maintaining the aspect ratio of the input signal.

Wide.....Projects images at the aspect of 16: 9.

4:3.....Projects images at the aspect of 4:3.

Full.....Projects images to the maximum.

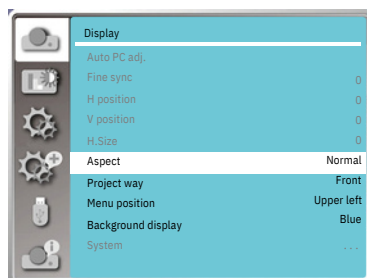
Advanced..Image splicing function

- Only for VGA and HDMI as signal input.

- 1) Press ▲▼ button to select [Aspect] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to select [Advanced] .
- 4) Press <OK> button.
- 5) Press ▲▼ button to select the required item.

H Total Set the total number of units in the horizontal position, and the image will be divided vertically according to the set value.
Adjustment range: From 1 to 5 (Wide: 1 - 5).

Aspect menu



✓Note:

- When the projector is in digital focusing state, the aspect ratio is displayed as DZOOM IN.
- For the details about the edge blending function, please refer to the attached introduction of edge blending function in the appendix.

V Total Sets the total number of vertical position, and the image will be divided horizontally according to the set value.

Adjustment range: From 1 to 5 (Wide: 1 - 5)

Postition H Sets the position of the projector in the horizontal direction.

Adjustment range: The minimum value is 1, and the maximum value is the current H Total value.

Postition V Sets the position of the projector in the vertical direction.

Adjustment range: The minimum value is 1, and the maximum value is the current V Total value.

Project way

Select this function to set the project way. Please change the projection way,if the OSD displays inversely or reversedly.

Press < MENU > button on the remote control or <  > button on the top control panel to display the OSD menu. Press   button to select the Display menu ,then press <OK> or  button.

- 1) Press   button to select [Project way] menu.
- 2) Press <OK> button.
- 3) Press   button to switch .

Front : When the projector is installed on the table and projected in front of the screen.

Rear : When the projector is installed on the table and projected in rear of the screen (using translucent screen)

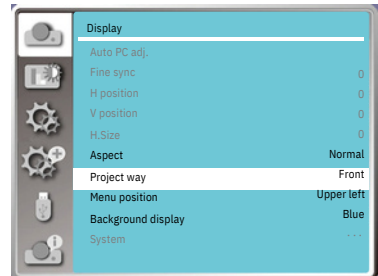
Ceiling / Front : When use the bracket to lift the projector (optional) in front of the screen.

Ceiling / rear : When use the bracket to lift the projector (optional) in rear of the screen(using translucent screen).

Auto ceiling / Front : When the projector is projected in front of the screen.

Auto ceiling / Rear : When the projector is projected in rear of the screen.

Project way menu



✓ Note:

For special works, such as hanging a projector from the ceiling, please consult your dealer first. Do not install the projector without permission, in case the projector falls and causes injury.

Menu position

Select this function to set the Menu position .
Press < MENU > button on the remote control or
<  > button on the top control panel to display
the OSD menu. Press   button to select the
Display menu ,then press <OK> or  button.

- 1) Press   button to select [Menu position] menu.
- 2) Press <OK> button.
- 3) Press   button to change menu position.

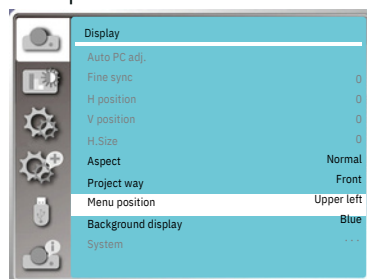
Upper leftThe Menu display on the Upper left
corner of the screen.

Center.....The OSD display in the Center of the
screen.

Lower left The Menu display on the lower left
corner of the screen.

Lower right ... The Menu display on the lower right
corner of the screen.

Menu position menu



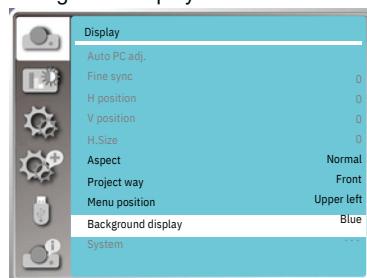
Background display

Select this function can adjusts background color.
Press < MENU > button on the remote control or
<  > button on the top control panel to display
the OSD menu.Press   button to select the
Display menu ,then press <OK> or  button.

- 1) Press   button to select [Background
display] menu.
- 2) Press <OK> button.
- 3) Press   button to select required item .

Blue..... The entire projection area display blue.
Black.....The entire projection area display black.

Background display menu



✓ Note:

This function will be invalid once you
select USB Display, Memory Viewer
and Network as input signal.

System

System selection

Sets the menu to match the resolution of the
computer input signal.

Press the < MENU > button on the remote control or
the "  " button on the control panel to show the
display on-screen menu. Use the Point   buttons to
select Display Icons, then press Indicate the  key or
the OK key to enter the display menu.

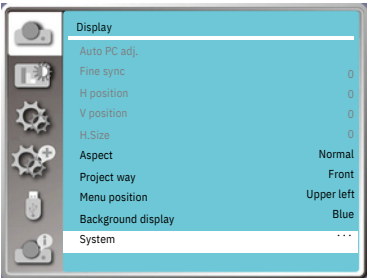
- 1) Press   button to select [System], then
press OK button.

- 2) Press ▲▼ button to select required system signal format, then press OK button to confirm your selection.
- 3) Press ▲▼ button to select required item .

✓ **Note:**

The system (signal format) is available only when the input signal is "VGA". And the function will be unavailable for other input signals and the menu is gray.

System menu



VGA Signal Input

Your projector will display one of the following:

(Display example)
1024x768
60 Hz

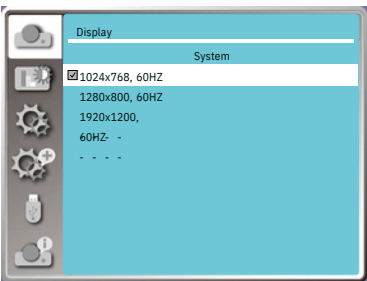
Displays the corresponding input signal. For details, please refer to "List of Compatible Signals"

Auto

If the projector could not recognize signals beyond the list of the compatible, the System option will switch to "Auto". The projector can adjust and project the appropriate image automatically. If the image can not display correctly, you need to adjust it manually.

No VGA signals detected. Check the connection between the computer and your projector.

System menu (VGA)



Selects Color adjust function to set the image mode and adjust the quality of the projected image.

Image mode

Direct operation

Press the Image Select button on remote control to select required image mode.

Menu operation

Press < MENU > button on the remote control or <  > button on the top control panel to display the OSD menu. Press   button to select the Color adjust menu ,then press <OK> or  button.

- 1) Press   button to select [Image mode] menu.
- 2) Press <OK> button.
- 3) Press   button to select required item.

Dynamic

An image mode suitable for viewing in bright room.

Standard

The default mode of your projector ,can come to national color.

Cinema

Enriched grayscale for viewing movies.

Blackboard (Green)

An image mode designed for displaying on a blackboard (Green). It boosts quality of image projected on blackboard (Green). This is designed for a board in green rather than black as indicated by its name.

Colorboard

A image mode suitable for image projecting on surface of wall in red, blue, yellow or green. Press <OK>button to enter colorboard menu,then press   button to select red ,blue, yellow or green, and press <OK> button.

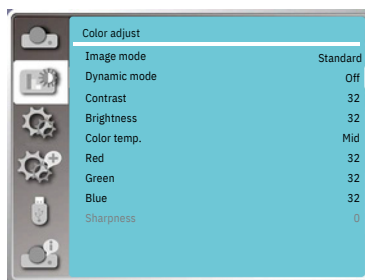
User image

Image mode preset by the user in the Image adjustment menu.

Remote control



Color adjust menu (For VGA and HDMI)



Dynamic mode

Automatically perform light source adjustment and signal compensation from the image to produce the best contrast image.

- 1) Press ▲▼ button to select [Dynamic mode] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to switch required menu.
- 4) Press <OK> button.

Off	The dynamic contrast function is disabled.
Mode 1	Adjusts the light source to a lesser degree.
Mode 2	Adjusts the light source to a moderate degree.
Mode 3	Adjusts the light source to a greater degree.

✓ **Note:**

The projector light source will automatically turn off if the input image is all black during the Mode 2 and Mode 3 options are selected. While the projector light source will automatically turn on if the projection image appears.

Contrast

Press ▼ button to decrease contrast, ranging from 0 - +63.

Press ▲ button to increase contrast, ranging from 0 - +63.

Brightness

Press ▼ button to decrease brightness, ranging from 0 - +63.

Press ▲ button to increase brightness, ranging from 0 - +63.

Color temp.

(Only for VGA and HDMI signal)

Press ▲▼ button to select required color temp.

High: The color temp. becomes cold.

Mid: The color temp. is normal.

Low: The color temp. becomes warm.

Red

Press ▼ button to decrease red tint and ▲ button to increase it.

Green

Press ▼ button to decrease green tint and ▲ button to increase it.

Blue

Press ▼ button to decrease blue tint and ▲ button to increase it.

Sharpness

Press ▼ button to soften image and ▲ button to sharpen, ranging from 0 - +15.

✓ **Note:**

- When you adjust "Red, "Green" or "Blue" option, the "Image mode" menu will switch to "User image" automatically.

The projector has Setting function, you can select other functions as described below.

Menu operation

Press < MENU > button on the remote control or <  > button on the top control panel to display the OSD menu. Press   button to select the Setting menu, then press < OK > or  button.

- 1) Press   button to select required item.
- 2) Press < OK > button.
- 3) Press   button to set options.

Direct power on

Set the power mode ON , when the power cord is connected to a power outlet.

- 1) Press   button to select [Direct power on] menu.
- 2) Press < OK > button.
- 3) Press   button to select required item.

Off..... Get into Standby mode.

On.....After entering the standby mode, press the power button to power on.

✓ Note:

- After the power is turned off, please wait about 20s after unplugging the power cord, then you can turn on the power. If the power is turned on immediately, it may not work properly.

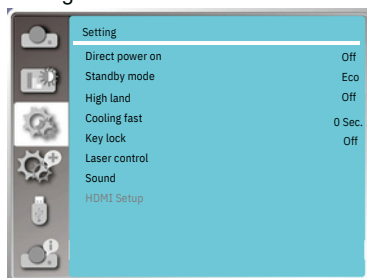
Standby mode

Set different power consumption during standby, no matter whenever your projector is operated through network.

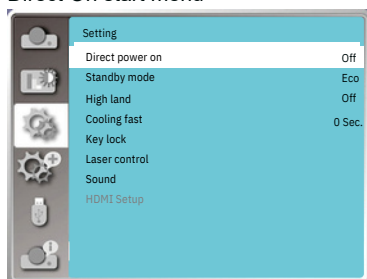
- 1) Press   button to select [Standby mode] menu.
- 2) Press < OK > button.
- 3) Press   button to adjust levels.

ECO mode..... In order to reduce the power consumption, some functions are disabled in standby mode. In ECO standby mode, the network and RS-232C serial communication (except the POWER ON command) functions are unavailable.

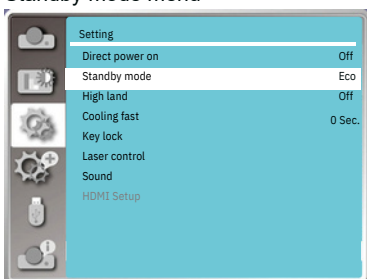
Setting menu



Direct On start menu



Standby mode menu



Network..... In order to reduce power consumption, some functions will be limited in standby mode. In network standby, the network and RS-232C serial communication (except boot command) functions are not available.

Normal Even in standby mode, there are no restraint on network function and serial communication function.

High land

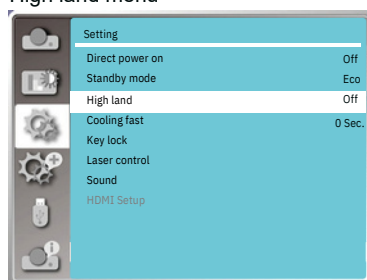
This projector provides Fan control function in the settings menu. You can change the setting about speed of cooling fan according to the altitude your projector is operating at.

- 1) Press ▲▼ button to select [High land] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to select required menu.

Off: Normal speed. Sets the option "Off " when operating the operator, if the altitude is not too high.

On: Faster than when in off mode. Sets the option "On" when operating the operator in high land.

High land menu



✓ Note:

- The air pressure sensor will sense the altitude automatically. When the altitude is about 1700 meters or higher, the projector will turn on the high land function automatically, so the High land screen menu will change to "On".
- If the air pressure sensor is damaged, the OSD menu will turn red for reminding that the automatic transfer to high land function is invalid. User could set High land to "On" manually .
- When setting condition is over approximately 2600 meters, the projector will automatically reduce the brightness to protect the product.
- The projector can be used at approximately 3000 meters, once over that altitude, projector powers down to protect the product automatically.

Cooling fast

After your projector is powered off, select cooling fan speed to shorten the cooling time .

- 1) Press ▲▼ button to select [Cooling fast] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to switch required menu.

Normal..... Running in normal way.

30 seconds.....Running faster than innormal modewith shorter time but a loudersound.

0 seconds..... Select this function allowyou to unplug the AC power directly afterthe shutdown, without waiting for the projector cooling off.

✓ Note:

- Cooling fast function depends on whether user needs to move the projector immediately. If the user needs to unplug the power to move the projector immediately, you can choose "0 Sec" option.

Cooling fast menu



Key lock

Select this function to lock and unlock the control panel or remote control keypad.

- 1) Press ▲▼ button to select [Key lock] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to switch required menu.

 Off..... Both the control panel and remote control keypad are effective.

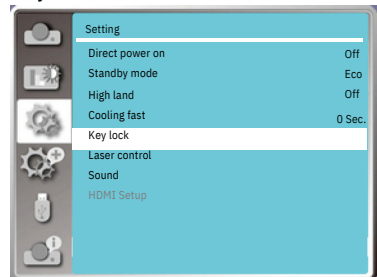
 Remote control.....Remote control keypad is invalid.

 Projector.....Control panel keypad is invalid.

✓ Note:

- If you lock the top of the control panel, but without a remote control or something wrong with the remote control, please contact your dealer or service center.

Key lock menu



Laser control

Changes light source brightness according to the projector's operating environment and aim.

- 1) Press ▲▼ button to select [Laser control] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to switch required menu.

Light source mode

Adjusts the projector's energy saving settings and brightness during the projection.

Normal..... Normal brightness, the screen brightens. Alternatively, you can adjust from 50% to 100%. Default is 100%.

Full normal..... Normal brightness. You cannot manually adjust the brightness.

ECO.1/ECO.2..... The brightness will reduce and cooling fans will correspondingly reduce energy consumption to extend the service life of the light source. The brightness of ECO. 1 mode is 60% of normal mode, and ECO. 2 mode is 50% of normal mode.

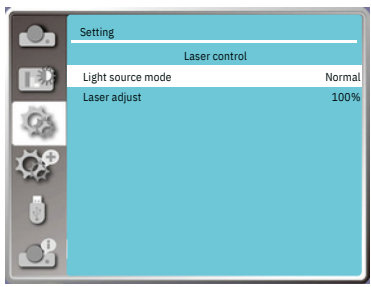
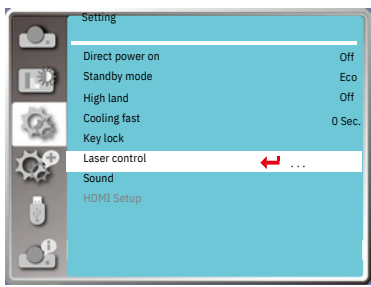
Laser adjust

This function is mainly used to fine-tune projector's brightness. The adjustable range is from 50% to 100%. When the value is set to "100%", the brightness is equivalent to the normal mode.

✓ **Note:**

- Laser adjust option can be chosen only in Normal mode.

Laser control menu



Sound

Select this function to adjust the sound.

- 1) Press ▲▼ button to select [Sound] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to switch required menu.

Volume.....Press ▼ button to increase volume, range from 0~+25.

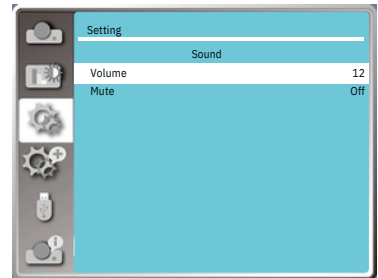
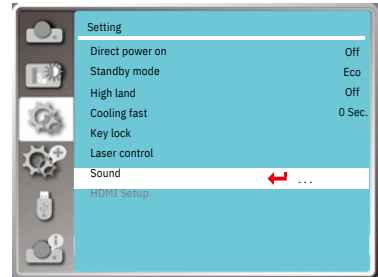
Press ▲ button to decrease volume, range from 0~+25.

Mute.....Press ▲▼ button to switch on or off Mute function.

On: No audio output.

Off: Audio output.

Sound menu



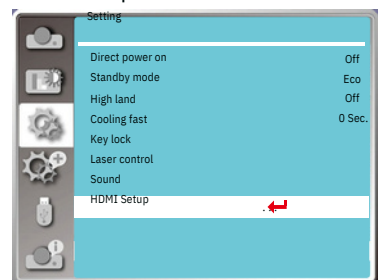
HDMI setup

When the external device is connected to the HDMI terminal of the projector, and the images cannot be projected normally, please enable the Image setting. If there is no sound output, please enable the Audio input setting.

Press < MENU > button on the remote control or on the top control panel to display the OSD menu. Press ▲▼ button to select the Setting menu, then press <OK> or ► button to enter the sub-menu.

- 1) Press ▲▼ button to select [HDMI setup] menu.
- 2) Press <OK> button.
 - Display [HDMI Setup] instantly.
- 3) Press ▲▼ button to select [Image] or [Sound] .
- 4) Press <OK> button.

HDMI Setup menu



✓ **Note:**

- HDMI setup option can be chosen only in HDMI1 and HDMI 2 channel.



Image

Auto	Set automatically in the standard signal.
[64-940]/ [0-1023]	Under non-standard signal, if the image is abnormal, please manually switch until the image is normal

✓ **Note:**

- The best settings about projectors may differ slightly from your external output device .
- For external output, please refer to the instructions for use of the external device.

Sound

[HDMI]	When connect to the HDMI cable to transmit images and audio, users do not need connect to audio signal separately.
[Computer]	When the output of an external device (such as a computer), via a conversion cable or a similar cable ,is connected to the HDMI terminal. The audio signal would be output according the connection of AUDIO IN terminal.

HDMI EQ settings

Adjust the HDMI input signal level according to the device connected to the HDMI port. If there is a lot of noise in the image, or problems such as the inability to project the image occur, the settings must be changed.

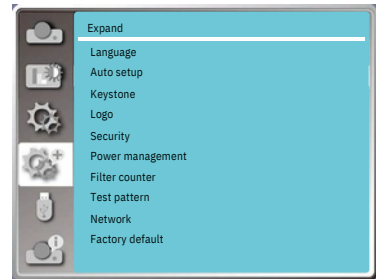
The projector has Expand function, you can select other functions as described below.

Menu operation

Press < MENU > button on the remote control or <  > button on the top control panel to display the OSD menu. Press  button to select the Expand menu, then press < OK > or  button.

- 1) Press  button to select required item.
- 2) Press < OK > button.
- 3) Press  button to set options.
- 4) Press < OK > button.

Expand menu

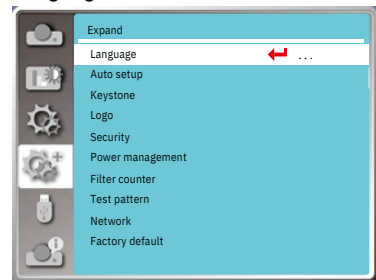


Language

Users can select the language displayed on the screen.

- 1) Press  button to select [Language] menu.
- 2) Press < OK > button.
- 3) Press  button to select required language.
- 4) Press < OK > button.

Language menu



The name of menus, setting, the OSD, button etc., can be displayed by the selected language.

Your projector comes with multiple language support. You may select required language, such as: English, German, French, Italian, Spanish, Polish, Swedish, Dutch, Portuguese, Japanese, Simplified Chinese, Traditional Chinese, Korean, Russian, Arabic, Turkey, Finland, Norwegian, Danish, Indonesian, Hungarian, Czech, Kazakh, Vietnamese, Thai, Farsi.

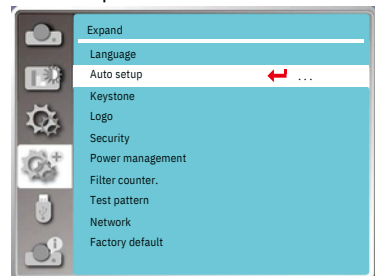
Auto setup

Select this function to store or reset the keystone or some related setting after unplugging the AC power. Press the AUTO button on your remote control to execute the following functions: Input search and Auto PC adj. .

- 1) Press  button to select [Auto setup] menu.
- 2) Press < OK > button.
- 3) Press  button to select required items.

Input search: Selects this function to detect the signal, then project images automatically.

Auto setup menu

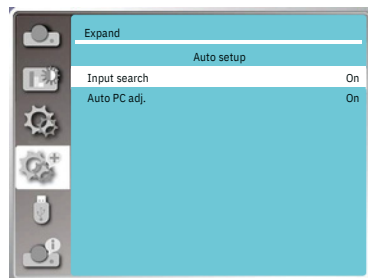


Auto PC adj. : When Auto PC adj. is set to "On", the projector inputs an analog signal, then press the "AUTO" button on the remote control to adjust [Fine sync], [H.Position], [V position] and [H. size] automatically. When Auto PC adjust is set to "Off", the "AUTO." button on the remote control is invalid.

✓ **Note:**

- When "Input Source Search" is set to "On", the projector will perform automatic search function during starting up.
- When the Auto PC adj. is set to "Off", the AUTO button on the remote controller is not available.
- When you set "Auto search" to "On", this function is still invalid if "USB-A", "Network" or "USB display" is selected as signals.
- The input search function does not support BNC to VGA signal input.

Auto setup sub-menu



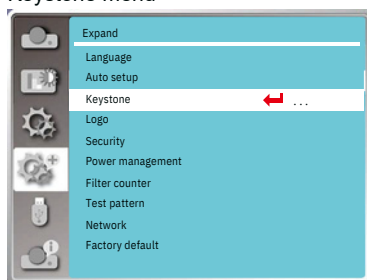
Keystone

Select this function to store or reset the Keystone or some related setting after unplugging the AC power.

Press < MENU > button on the remote control or <  > button on the top control panel to display the OSD menu. Press ▲▼ button to select the Expand menu, then press <OK> or ► button to enter.

- 1) Press ▲▼ button to select [Keystone] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to select required item.
- 4) Press <OK> button.

Keystone menu



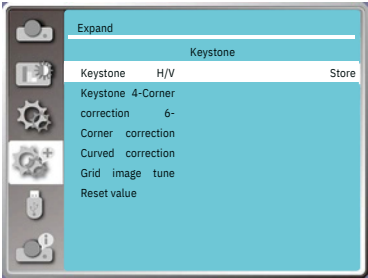
Keystone

Select this function to store and reset Keystone after closing the projector or unplugging the AC power .

Store.....Store Keystone after closing the projector or unplugging the AC power cord .

Reset value..... Keystone function will be canceled after closing the projector or unplugging the AC power.

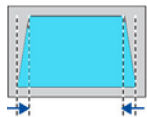
Keystone sub-menu



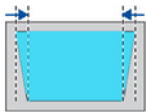
H/V Keystone

Select this function to correct the projected images horizontally or vertically.

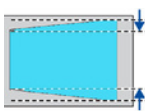
Press ▲ button to reduce upper width



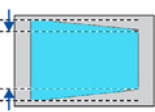
Press ▼ button to reduce bottom width



Press ◀ button to reduce left width



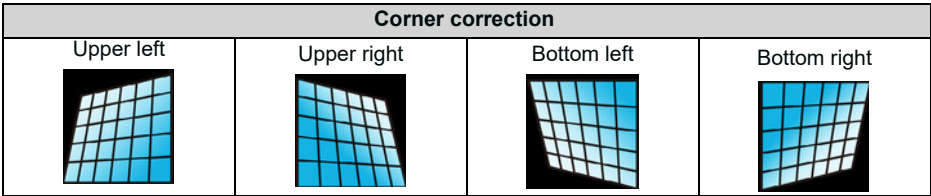
Press ▶ button to reduce right width



4-Corner correction (For WUXGA series).

Select this function to correct the projected images of four corners distorted.

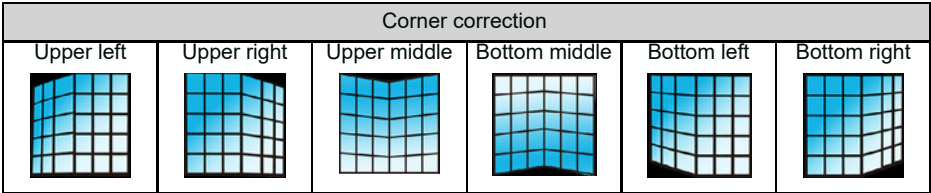
Press ▲▼◀▶ button to keystone at four corners of the screen. The four corners are looped in sequence shown below:



6-Corner correction (For WUXGA series).

Select this function to correct the projected images of four corners distorted.

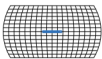
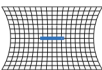
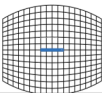
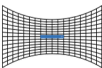
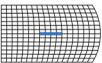
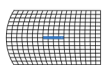
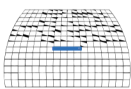
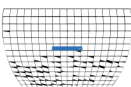
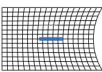
Press ▲▼◀▶ button to keystone at six corners of the screen. The four corners are looped in sequence shown below:

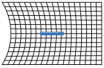
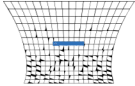
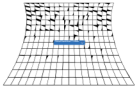
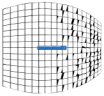
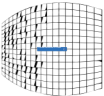
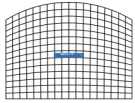
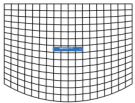
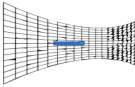
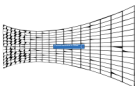


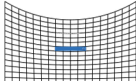
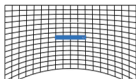
Curved correction (For WUXGA series)

Select this function to correct the projected images with linearity uneven or vertical and horizontal bending deformation.

Press ▲▼◀▶ button to adjust options.

Item	Operation	Adjustment	
Curved correction X/Y gain	Press ◀	Extend left and right vertically.	
	Press ▶	Sag left and right vertically.	
	Press ▼	Reach up and down horizontally.	
	Press ▲	Sag up and down horizontally.	
Curved correction X offset	Press ◀	Correct the vertical lines on the left. Expand the top and bottom while maintaining the central area.	
	Press ▶	Correct the vertical lines on the right. Expand the top and bottom while maintaining the central area.	
	Press ▼	Correct vertical lines on both sides. Expand the lower corners while maintaining the central and upper regions.	
	Press ▲	Correct vertical lines on both sides. Expand the top corners while maintaining the central and upper regions.	
	Press ◀	Correct the horizontal line on the left. Expand the top and bottom while maintaining the central area.	

Curved correction	Press ►	Correct the horizontal line on the right. Expand the top and bottom while maintaining the central area.	
	X offset	Correct vertical lines on both sides. Expand the lower corners while maintaining the central and upper regions.	
	Press ▼	Correct vertical lines on both sides. Expand the lower corners while maintaining the central and upper regions.	
Curved correction Y offset	Press ◀	Correct the horizontal line on the left. Expand the top and bottom while maintaining the central area..	
	Press ►	Correct the horizontal line to the right. Expand the top and bottom while maintaining the central area.	
	Press ▼	Correct the horizontal lines at the bottom. Extend the bottom horizontal line down while maintaining the top area.	
	Press ▲	Correct the horizontal lines at the top. Extend the top horizontal line upwards while maintaining the bottom area.	
	Press ◀	Correct the horizontal line on the left. Expand the top and bottom while maintaining the central area.	
	Press ►	Correct the horizontal line to the right. Expand the top and bottom while maintaining the central area.	

Curved correction Y offset	Press ▼	Correct vertical lines on both sides. Expand the lower corners while maintaining the central and upper regions.	
	Press ▲	Correct vertical lines on both sides. Expand the upper corner while keeping the central and lower regions unchanged.	

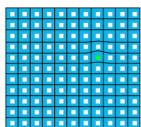
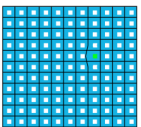
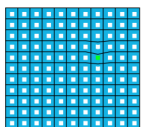
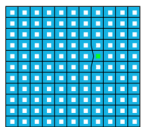
✓ **Note:**

- After adjusting values about H/V Keystone, if users adjust Conner correction, values about H/V Keystone will be reset. And after adjusting values about Conner correction, if users adjust about H/V Keystone, values about Conner correction will be reset also.
- Curved correction X offset and Curved correction Y offset can not be adjusted individually. Adjust Curved correction X offset and Curved correction Y offset after adjusting the X/Y Curved correction.
- Maximum keystone range up to $\pm 30^\circ$ (Long focal series)/ $\pm 15^\circ$ (Short focal series) vertically and horizontally. However, the image quality will deteriorate, and become more difficult to focus. Please install the projector with the minimal correction value.
- The screen size will be changed with various keystone adjustments.
- Keystone may influence the image's aspect.

Grid image tune (For WUXGA series)

Select this function to adjust the local points of the projected image.

- 1) Press ▲▼◀▶ button to select [Grid image tune] option.
- 2) Press <OK> button.

Grid image tune			
Upper	Left	Bottom	Right
			

Reset value

Select this function to make adjustment value back to the factory default .

- 1) Press ▲▼◀▶ button to select [Reset value] option.
- 2) Press <OK> button.
 - Release Keystone mode.

Expand

Logo

You may use this function to preset the Logo by Logo select, Capture, Logo PIN code lock and Logo PIN code change.

- 1) Press ▲▼ button to select [Logo] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to select required items.

Logo Select

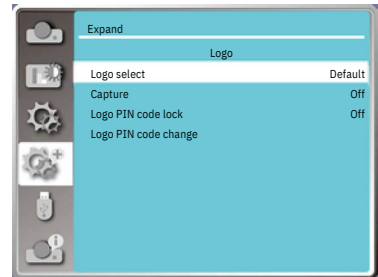
Select this function to set the startup logo when powering on your projector:

Default.....Display factory default logo screen.

Off..... ..Display countdown logo screen.

User..... ..Display capture logo screen.

Logo menu



Note:

- After changing the Logo PIN Code to a new number, please remember it and keep it safe. The Logo PIN Code cannot be changed again if the new password is lost or forgotten.

Capture

Capture the images being projected and use it for a startup display or presentations intervals. Upon capturing the projected image, press the OK button, then a confirmation box appears. Select "Yes" to capture it. After capturing the projected images, go to "Logo select", and set it to "User". Then, the captured image is displayed when the projector is turned on next time.

Logo PIN code lock

This function helps preventing unauthorized personnel from changing the logo screen.

Off.....The startup logo screen may be changed with the Logo menu.

On.....You may not alter the logo screen without the logo passcode.

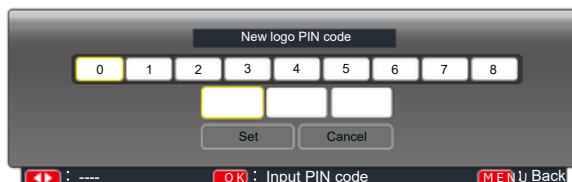
To change the Logo PIN code lock, press the the OK button, and the "Logo PIN code" popup dialog box prompts. Follow steps below to enter a logo screen password.

- Press ◀▶ button to select a number, then press the OK button to enter and move the cursor. The cursor will automatically move to the next number box. To edit number you have entered, press the MENU button to move the cursor to the number you want to change, press ◀▶ button to select the correct one. The number you typed is displayed as " * ".
- Repeat this step to type in a 3-digit number. Then the cursor move to "Set" automatically and press OK button.
- If the password is invalid, the password will display as " *** " in red. Please try again with valid one.



Logo PIN code change

You may change the password to any 3-digit number you like. Press OK button to select Logo PIN code change. The "PIN code" dialog box prompts, press ◀▶ button to enter the correct password used. Later, the "New PIN code" dialog box prompts. Enter a new 3-digit number password in the dialog box and press OK to confirm, and your new password is OK. Please remember your new password and keep it safe.

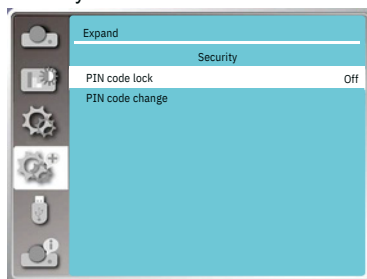


Security

Set a password to lock the control panel or remote control keypad to prevent unauthorized personnel from operating your projector. Once the PIN code lock is On, the screen popup the [PIN code] dialog box.

- 1) Press ▲▼ button to select [Security] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to switch required item.

Security menu

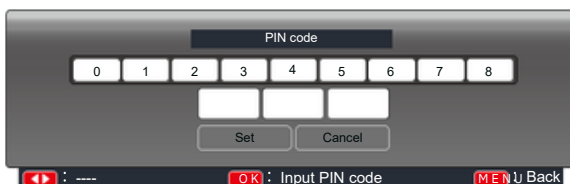


PIN Code lock

This function helps preventing unauthorized personnel from operating the projector.

Off..... The projector can be operated without lock and password.

On.....The [PIN code] screen will appear when the projector is on. If you want to change the PIN code lock (for three digits), you must enter the used right PIN code. The factory default PIN code is "111".



PIN code change

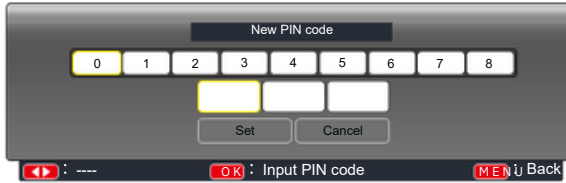
You may change the PIN Code to any 3-digit number you like.

Press OK button to select PIN code change.

The "PIN code" dialog box prompts, press ◀▶ button to give a valid new code.

Set a new PIN Code, the cursor will automatically move to "Set" and press OK to confirm. Then new password is OK now.

Please remember your new password and keep it safe.



To Cancel the Passcode

- 1) While simultaneously pressing and holding the [POWER] and [OK] buttons on the projector, connect the power cord to the power port. The "PIN Code" screen will appear — enter "111".
- 2) Select Security >> PIN code lock >> "On". As the "PIN code" screen appears again, enter the default password (111) and set the PIN code lock to "Off" or set a new pass code.

Power management

To reduce power consumption and maintain life cycle of light source, the power management function will turn off the projection light source if your projector has no signals for a period of time.

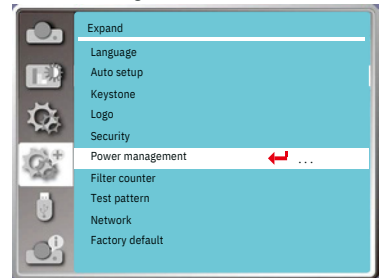
- 1) Press ▲▼ button to select [Power management] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to switch required item.

Ready..... The countdown will be displayed after 30 seconds without signal input. When the set time is reached, the projector light source turns off and cools down. At that time, the projector will enter into Ready mode. During this period, if reconnecting input signal or any key (except the  power button) on the remote control or control panel is pressed, the light source will relit.

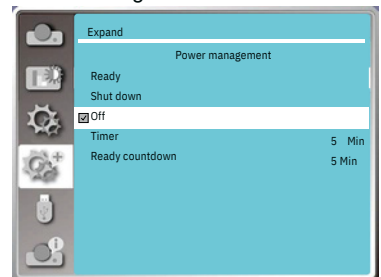
Shut down.... The countdown will be displayed after 30 seconds without signal input. When the set time is reached, the projector light source turns off and cools down. At that time, the projector will enter into Shut down mode.

Off.....Disable the power management function.

Power management menu

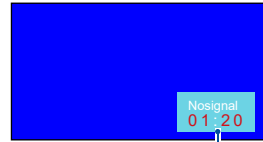


Power management-sub menu



Timer.....If the input signal is interrupted and no keys has been pressed for 30 seconds afterwards, the "No signal" message displays in the timer. The countdown starts until the light source is turned off. Press ▲▼ button to set the timer (from 1 to 30 minutes).

Ready countdown... When the Power management is set to "Ready", the transition time from Ready mode to stand-by mode is 0 to 30 minutes.
If set to 0, the projector can not switch automatically. In Ready mode, press the power button to switch the projector from Ready mode to Standby mode and press any other key to power on the projector.



Remaining time before power off the light source.

✓ **Note:**

- Factory default time for Timer and Ready countdown: 5 minutes.
- When setting the power management to "Off" the "Timer" and "Ready countdown" function is unavailable.
- When setting the power management to "Shut down", the "Timer" function is unavailable.

Filter counter

Set this function to reset the filter usage time and set up warning display.

- 1) Press **▲▼** button to select [Filter counter] menu.
- 2) Press **<OK>** button.
- 3) Press **▲▼** button to switch required item.

When the projector reaches the user-set cleaning time, filter warning icon will appear on the screen to notify the user to clean the projector filter. Please make sure to select the initial state and set the timer after cleaning it. After resetting filter counter, filter warning icon will closed.

Filter counter.....Displays the filter usage time.

Timer.....Set the filter cleaning time.

Filter counter resetReset filter counter.

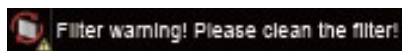
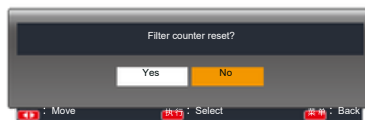
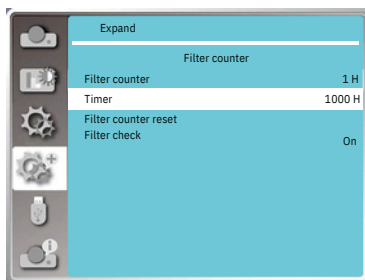
Filter check..... Check the filter time of projector and alert

ON: Detects filter clogging.

- If the filter is detected to be clogged, the projector screen will immediately pop up a warning sign of "Filter is blocked! Please clean the filter!".

OFF: Does not detect filter clogging.

Filter counter menu



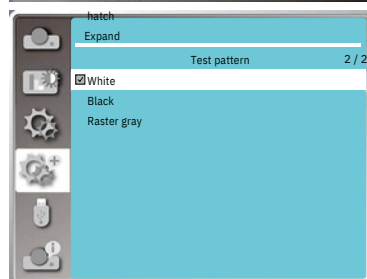
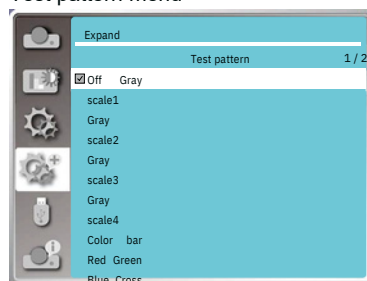
Test pattern

Select this function to display the projector's built-in test pattern. Location, size, and other factors cannot be reflected in the test pattern. Please make sure to display the input signal before performing various adjustments.

- 1) Press **▲▼** button to select [Test pattern] menu.
- 2) Press **<OK>** button.
- 3) Press **▲▼** button to switch required item.
- 4) Press **<OK>** button.

Gray scale 1 / Gray scale 2 / Gray scale 3 / Gray scale 4 / Color bar / Red / Green / Blue / Cross hatch / White / Black / Raster gray: Use The OSD menu to display the test pattern. Choose the test mode can help you making a series of adjustments easily.

Test pattern menu



Network

This function is designed to allow the computer control the projector remotely via intranet.

1 Required equipment: Projector, computer, network cable

2 Connection:

Connect your projector to a router or switch in the LAN with normal or jumper network cable. If a normal network cable failed to connect successfully, use a jumper cable instead.

3 Turn on the computer. The LAN port on computer and projector are flashing after power on the projector.

✓ **Note:**

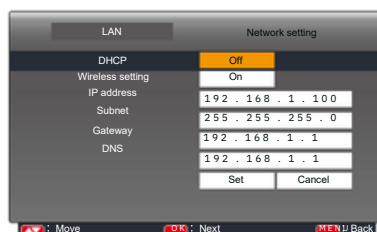
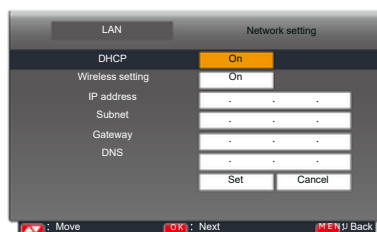
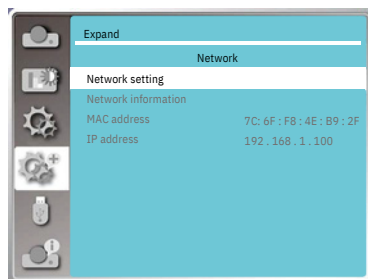
It is recommended that users use a Category 5 or higher LAN cable.

Operation steps

- 1 Power on your projector.
- 2 Acquire the IP address, with DHCP set to on and auto IP allocation set to On. (You may set DHCP to Off and set up IP address manually if you are somehow familiar with networking.)
- 3 Enter the network setup menu
 - (1) Press the MENU button on remote control or the top control panel, press button to select [Expand] icon. Press the ENTER or button.
 - (2) Press ▲▼ button select [Network settings] and press OK button to enter.
 MAC address.....Display the MAC address of wired LAN.
 IP address.....Display the IP address of wired LAN.
 - (3) Press button select [Network setting] and press the ENTER button to enter.
 - (4) Press ▲▼ button to set DHCP On to obtain an IP address, subnet, Gateway and DNS automatically, and press OK button to confirm.

Press ▲▼ button to set DHCP Off, then press OK button to enter an IP address, then press ▼ button to select subnet, Gateway and DNS automatically. And press OK button to confirm.

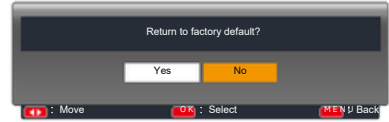
Network menu



Factory default

This function resets all your settings to factory default .

- 1) Press ▲▼ button to select [Factory default] menu.
- 2) Press <OK or ► > button.
- 3) Press button to select Yes, then press OK button.



✓ **Note:**

- When the "Factory default" is executed, in addition to the user logo selection, logo password lock, logo password lock, Outside of the light source usage time, all settings will return to the factory settings.
- When the confirmation screen is displayed, pressing the MENU key cancels the "Factory Set".

Select Memory Viewer function can project images stored in USB memory, when you insert the USB memory into the projector.

Press < MENU > button on the remote control to display the OSD menu. Press ▲▼ button to select the Memory Viewer menu ,then press <OK> or ► button.

- 1) Press ▲▼ button to select required item.
- 2) Press <OK> button.
- 3) Press ▲▼ button to set options.

Set slide

Select this function to play slides.

- 1) Press ◀▶ button to select a file.
- 2) Press ▲▼ button to select [Set slide] menu.
- 3) Press <OK > button.
 - Full screen display
 - Press <OK> to return the thumbnail.

Slide transition effect

Select this function to set the slide's playback when switching slides.

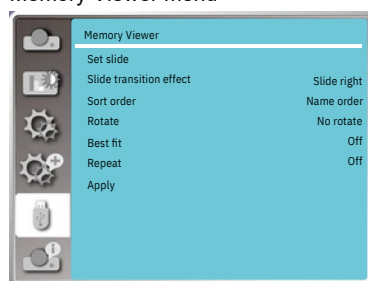
- 1) Press ▲▼ button to select [Slide Transition effect] menu.
- 2) Press <OK or ► > button.
- 3) Press ▲▼ button to switch required item.
 - Slide down.....Switch slides from the upper to the lower .
 - Slide right.....Switch slides from left to the right.

Sort order

Select this function to set the slide's order.

- 1) Press ▲▼ button to select [Sort order] menu.
- 2) Press < OK > button.
- 3) Press ▲▼ button to switch required item.
 - Expand order.....Sort by expand names of file or folder.
 - Size order.....Sort by size of file or folder.
 - Time order.....Sort by the time of file or folder.
 - Name order..... Sort by names of file or folder.

Memory Viewer menu



Note:

- When selecting [Memory Viewer] as input signal, the "Memory Viewer" menu is available.
- In addition to "Set slide" menu, even change the settings, If you do not implement the [Apply], the setting value of the change is invalid.

Rotate

Set the rotation direction of images.

- 1) Press ▲▼ button to select [Rotate] menu.
- 2) Press < OK > button.
- 3) Press ▲▼ button to switch required item.

No rotateRotation is invalid.

270 degree rotate.....Rotate counterclockwise by 270 degrees.

180 degree rotate.....Rotate clockwise by 180 degrees.

90 degree rotate Rotate clockwise by 90 degrees.

Best fit

Set the image to be compatible with projection screen.

- 1) Press ▲▼ button to select [Best fit] menu.
 - 2) Press < OK > button.
 - 3) Press ▲▼ button to switch required item.
- On.....Display images by the aspect ratio of the screen.
Off.....Display image by the normal pixels.

Repeat

Select this function to play slides repeatedly.

- 1) Press ▲▼ button to select [Repeat] menu.
 - 2) Press <OK or ► > button.
 - 3) Press ▲▼ button to switch required item.
- On.....Replay the first document,after playing the last one.
Off.....Return to the thumbnail display screen,after playing the last one.

Apply

Only be used in playing slides.

- 1) Press ▲▼ button to select [Apply] menu.
- 2) Press <OK > button.

✓ Note:

- Project Settings applications other than "Start from Scratch" will take effect.

Select Info. function to detect the projected image signal and the projector operating status.

Menu operation

Press <Info. > button on the remote control or

Press <—□—> button on the top control panel to display the OSD menu. Press ▲▼ button to select the Info. menu.

See the information displayed below:

Input Source.....Displays the selected input source.

Horizontal Frequency.....Displays the horizontal frequency of the input signal in KHz.
[---KHz] is displayed when no signal is detected.

Vertical Frequency..... Displays the vertical frequency of the input signal in Hz.
[---Hz] is displayed when no signal is detected.

Light source usage time.....Displays the usage time of the light source.

Model.....Displays the model name.

Serial Number.....Displays the machine serial number.

Firmware Version.....Displays the software version number.

SUBCPU.....Displays the projector SUBCPU version.

Info. menu



Network control operation

Function: This function is designed to remote control computer in the same LAN.

Preparation

1 Required equipment: Projector, computer, network cable

2 Connection:

Connect your projector to a router or switch in the LAN with normal or jumper network cable. In case a normal network cable failed to connect successfully, use a jumper cable instead.

3 Turn on the computer. The LAN port on computer and projector are flashing after power on the projector.

Operation steps

1 Power on your projector.

2 Acquire the IP address, with DHCP set to on and auto IP allocation set to On. (You may set DHCP to Off and set up IP address manually if you are somehow familiar with networking.)

3 Enter the network setup menu

1) Press MENU button on remote control or top of the control panel, press ▲▼ button to select network icon.

2) Press OK button or ► button and the network menu displays.

MAC address.....Display the MAC address of wired LAN.

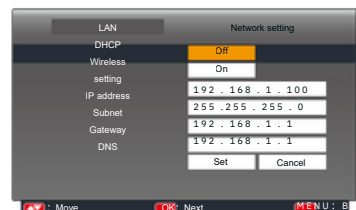
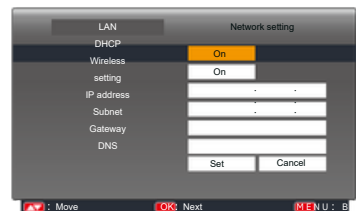
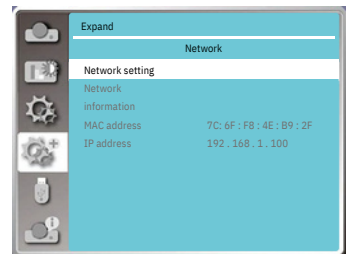
1) IP address.....Display the IP address of wired LAN.

3) Press ▲▼ button select network settings and press ENTER to confirm.

4) Press ▲▼ button to set DHCP "On" to obtain an IP address, Subnet, Gateway and DNS automatically, and press the OK button to confirm.

Press the ▲▼ button to set DHCP "Off", then press the ENTER button to enter an IP address, then press ▼ button to enter Subnet, Gateway and DNS manually. And press the ENTER button to confirm.

5) Press ▲▼ button to select Set, press OK button to wait until the "Please wait.." message disappears.



✓ Note:

- If you are using the wireless LAN connection, please check the SSID / ESSID and wireless IP address in the network setting status, and write down the information.

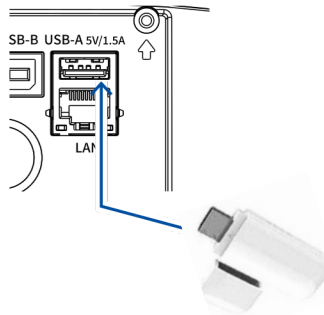
Wi-fi display (For PC.)

Wi-Fi display enable to connect PC with the projector wirelessly to realize high-speed transmission between devices, allowing users to enjoy high-definition video display without the need for cables circumstances.



■ Wireless network setup

1. Insert the WIFI dongle into the USB-A port.
 - For this function, users need to purchase the WIFI dongle separately .



2. Please find "NetworkDisplay" in the Open Network and Sharing Center and click "Connect" to connect the WIFI.



Enter through a Web browser

- 1) Start the computer's Web browser.
- 2) Enter the IP address on the projector set in the URL input field of the Web browser.
- 3) Enter the password in the [Password], then click [Login].
** "the factory default setting is the user name: "admin" (administrator privileges), password: "admin".

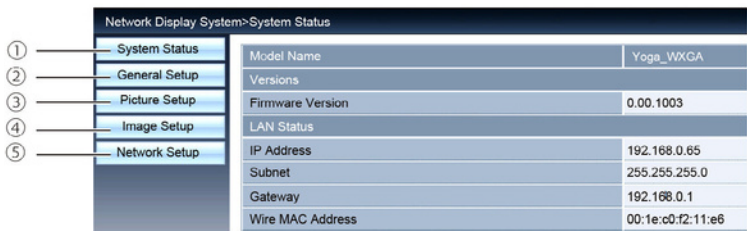


- 4) Click the [Login]

NOTE:

Users can click on the top right corner of the Web browser screen to select the display language.
Do not start multiple Web browser settings or control. Do not use more than one computer set or control the projector.
Please change your password.
If the network does not appear on screen controls, please consult your network administrator.

Description of each option



- ① System Status: Click this option to display the [System status] page.
- ② General Setup: Click this option to display the [General Setup] page.
- ③ Picture Setup: Click this option to display the [Picture Setup] page.
- ④ Image Setup: Click this option to display the [Image Setup] page.
- ⑤ Network Setup: Click this option to display [Network Setup] page.

[System status] page

Network Display System > System Status	
System Status	Model Name: Yoga_WXGA
General Setup	Versions
Picture Setup	Firmware Version: G1.00 -1027
Image Setup	LAN Status
Network Setup	IP Address: 192.168.1.100
	Subnet Mask: 255.255.255.0
	Default Gateway: 192.168.1.1
	Wire MAC Address: 04:91:62:cb:72:1e

- ① Versions: Displays the firmware version of the projector.
- ② LAN Status: Displays the LAN connection status.

[General setup] page

Network Display System > General Setup	
System Status	Change Password for Webpage
General Setup	Enter Old password
Picture Setup	Enter New password
Image Setup	Confirm New password
Network Setup	Power & Source
	Power: ☒ On ☐ Off
	Source Select: HDMI 2

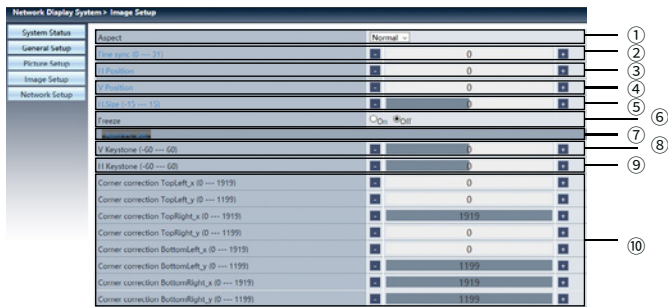
- ① Enter old password: Enter the password for the configuration.
- ② Enter new password: Enter a new password.
- ③ Confirm new password: Re-enter the new password to confirm.
- ④ Power & Source: Update settings.
- ⑤ Power: Switch on the power of the projector on / off.
- ⑥ Source select: Switch the input source of the projector.

[Picture setup] page

Network Display System > Picture Setup	
System Status	Brightness (0 --- 63)
General Setup	Contrast (0 --- 63)
Picture Setup	Sharpness (0 --- 15)
Image Setup	Color Temperature
Network Setup	Red (0 --- 63)
	Green (0 --- 63)
	Blue (0 --- 63)

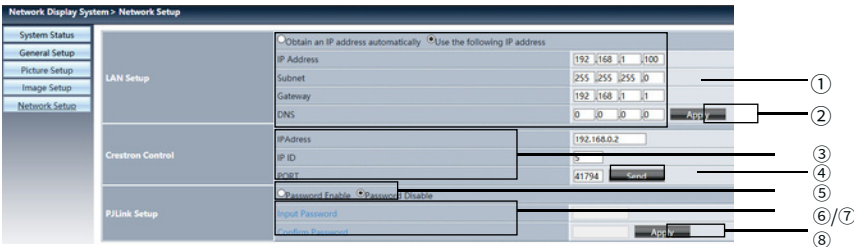
- ① Brightness: Adjust the brightness of the projected image.
- ② Contrast: Adjust the contrast of the projected image.
- ③ Sharpness: Adjust the sharpness of the projected image.
- ④ Color Temperature: Adjust the color temperature of the projected image.

[Image Setup] page



- ① Aspect: Switch the aspect ratio of the projected image.
- ②Fine sync: Adjust the fine sync of the projected image.
- ③ H position: Adjust the horizontal position of the projected image.
- ④ V position: Adjust the vertical position of the projected image.
- ⑤ H size: Adjust the horizontal size of the projected image.
- ⑥ Freeze: Switch the screen freeze function on and off.
- ⑦ Auto PC adj.: Implement the automatic PC adjustment function.
- ⑧ V Keystone: Correct trapezoidal distortion of the projected image in vertical direction.
- ⑨ H Keystone: Correc trapezoidal distortion of the projected image in horizontal direction.
- ⑩ Corner correction:Correct the four corners of the projected image.

[Network setup] page



① Network Setup

If you want to enable the DHCP client, select the IP address automatically. IP address: Please enter the IP address when you do not use the DHCP server. Subnet : Please enter a subnet shield,when you do not use the DHCP server . Gateway: Please enter the gateway, when you do not use the DHCP server. DNS: Please enter the DNS address, when you do not use the DHCP server.

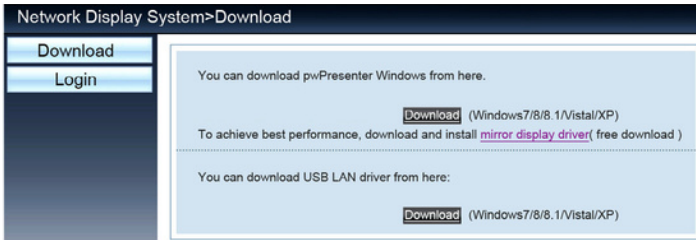
Available characters : digital (0 - 9), a period (.) (For example: 192.168.0.253)

Details for each setting, please contact your network administrator.

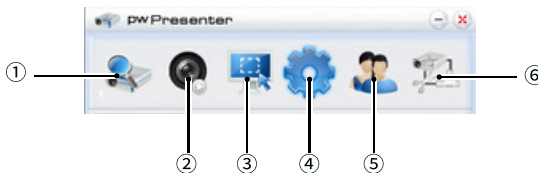
- ② Apply: Update settings.
- ③ Crestron control
 - IP address: Set IP address.
 - IP ID: Set IP ID.
 - PORT: Set the port number
- ④ Send: Update Crestron setup.
- ⑤ If users want to enable PJLink settings, please set Password Enable option on and input the password.
- ⑥ Input password: Input the PJLink password.
- ⑦ Confirm password: Input the PJLink password once again and confirm.
- ⑧ Apply Update PJ Link password.

pwPresenter software

- 1) Enter the projector's wireless ssid/essid address in the address bar of your Web browser: 172.28.120.1(Find the ssid/essid address for the network information in the menu.).
- 2) After entering the IP address of the projector in the web page to the main interface, click "Download", and download the corresponding PwPresebter software with your projector.



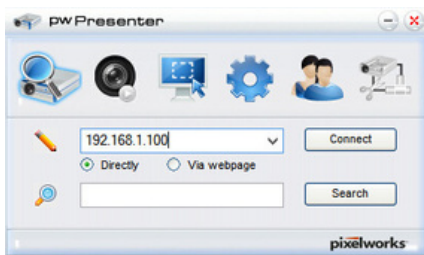
- 3) Click  the icon to enter into pwPresenter software.



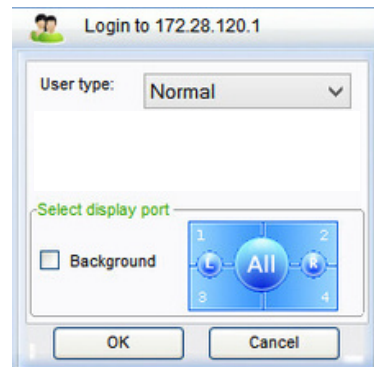
- ① Search network projector Click to enter to search, select the needed projector and connect it. Set the same IP address (for ex- ample: 192.168.1.100) as the projector in pwPresenter software ,and set user type as "average user", and the password is "admin".

✓ NOTE

Before using the pwPresenter search, please switch to network signal source.



- ② Screenshot start or pause Start or pause the selected pictures.

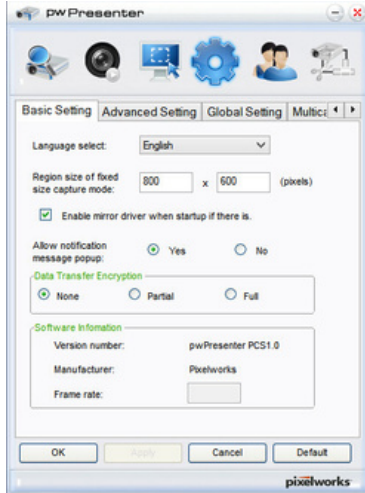


③ Select screenshot mode .

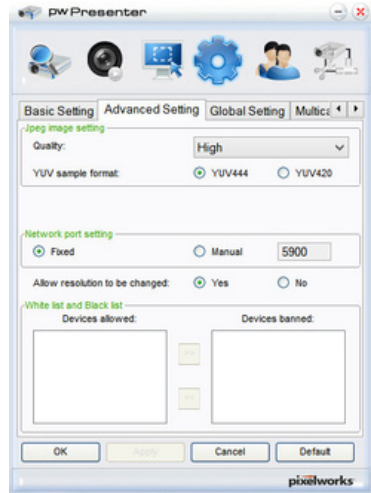
Select screenshot mode from the "full range", "fixed size" or "variable size".

④ Parameter Setting

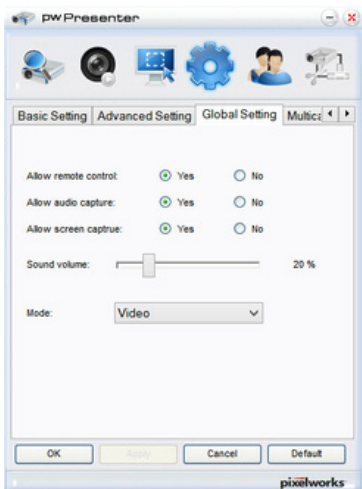
Basic setting: Language, Capture region size etc.



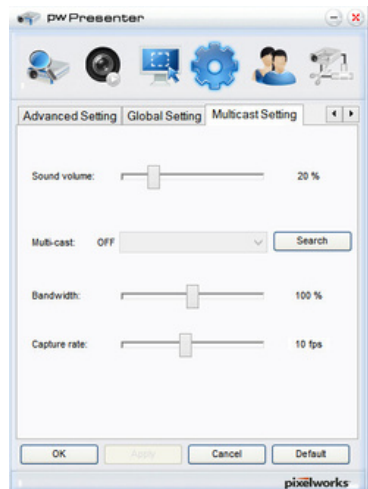
Advanced setting: JPEG image setting, Network port setting, White list and Black list etc.



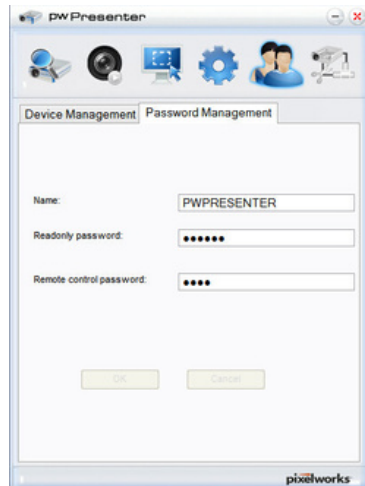
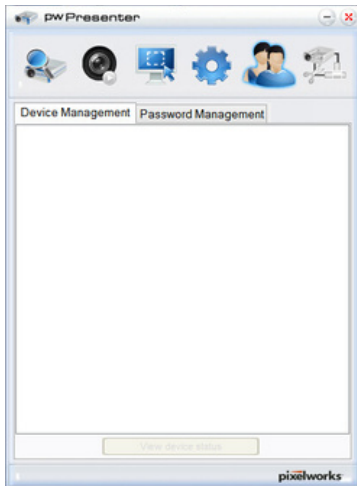
Global setting: Remote control setting, Sound capture and Screen capture, etc.



Multicast setting: Volume setting, Bandwidth, Sampling frequency, etc.



- ⑤ Network Projector Management Set pwPresenter network user name and password etc.



- ⑥ Cut off projector connection.

Memory Viewer function

When the USB memory is inserted into the projector, the viewer memory function can project the video and pictures stored in the USB memory.

■ The projected content of Memory Viewer function

Memory Viewer function supports the following picture files.

Video	Extension name	Video Codec	Audio Codec	Video Format
	avi	MotionJPEG	ADPCM	Maximum 1280x720,30fps

	Extension name	Format	Description
Maps	jpg/jpeg	Baseline encoder 24 Progressive RGB24 bit	Max resolution: 10000x10000 Max resolution: Panel Resolution
	bmp	1.4.8 bit palette-based RGB24,32 bit	Max resolution: 1280x800
	png	24, 48-bit True Color	-24-Bit color palette space Max resolution: 1024x768
	gif	1,4,8-bit palette-based	Max resolution: 800x600
	tiff		Max resolution: 800x600

Display Memory Viewer screen

When the USB memory is inserted into the projector, the Memory Viewer function can project the video and pictures stored in the USB memory.

- 1) Press INPUT button on the control panel or "" button on the top control panel and select the input source of [Memory Viewer].
- 2) Insert the USB memory into the <USB-A > terminal directly.
 - Press RC enter to display standby screen instantly, while the USB memory icon displays in the left corner of the screen.
 - When the USB memory is independent of the partition, it will display more than one USB icon.
- 3) Press ▲▼ button to switch required items.
 - The root directory of the USB memory is displayed in a thumbnail.

Play image

Only one image shows on the screen when you play it.

- 1) Press ◀▶ button to select a file.
- 2) Press <OK or ▶ > button.
 - Full screen display
- 3) Press <OK > button.
 - Press <OK> to return the thumbnail.

Play slide

The Slide Show Mode in the Memory Viewer menu is set to "Slide down" or "Slide right", all images in the same folder can play automatically.

- 1) Press ▲▼ button to select a file.
- 2) Press ◀▶ button to select [Memory Viewer] menu, then select [From Scratch] menu.
- 3) Press <OK> button.
 - Full screen display
 - Press <OK> button to return the thumbnail.

Play video

Play video files.

- 1) Press ◀▶ button to select a file.
- 2) Press <OK> button.
 - Full screen display
 - Use the remote control to operate the control that appears at the bottom of the screen.



	Stop playing the video and return to the thumbnail
	Play / pause the video
	Video fast backward / forward
	Video fast backward / forward at the twice speed
	Each time press the icon, the box switches. When the box appears, the video can playback.

The termination of Memory Viewer

The Slide Show Mode in the Memory Viewer menu is set to a special setting, all images in the same folder can play automatically.

- 1) Press ◀▶ button to select , displayed in the left corner of the screen.
- 2) Press <OK> button.
 - Please Press RC ENTER to display standby screen instantly.
- 3) Unplug the USB memory directly.

**Caution**

- When you insert a USB memory, please make sure insertion direction to avoid damaging the port i.
- Please note the following points when inserting and removing USB memory:
 - a. The indicator flashes,when the USB memory insert into the projector or the projector is reading data.DO NOT remove the USB memory When the light is flashing.
 - b. Do not install and remove USB memory frequently. Then remove it after the installation of at least 5 seconds. After removing at least five seconds and then reinstall it. The projector is on switch mode during the operation,when installing or removing the USB memory.
 - c. When the USB memory is installed or removed, the projector is in the switching phase of the operation.

Precautions on processing and storage of USB memory.

- Please DO NOT place the USB memory or the lid where children can reach. Swallow USB memory or the lid may cause choking.
- If smoke or produce abnormal smell, close the external device and contact the dealer.
- DO NOT let the water, chemicals or oil into the USB memory, or it may cause a short circuit or fire.
- DO NOT put foreign matter or metal items in the USB port. Static electricity may cause data loss or data damage.
- When USB memory is read or written, DO NOT remove USB memory from the computer or projector , otherwise it may result in data loss or corruption of data.
- Please do not put the USB memory in high temperature, damp or dusty place, or next to magnetic materials.

Note:

- Allows USB memory to be inserted or removed while the projector is in any power state.

USB display function

Select this function to project the image and audio from the computer through the USB converter cable.

When using Windows:

■ Windows operating environment

Operating System	Vista Windows 32, 32/64 Windows7, Windows 8 32/64
CPU Memory	Intel Core 2 Duo 2.0 GHZ or faster compatible processors
Capacity	256MB or above (512MB or above)
Disk Space Available	20MB or above
Monitor	Resolution 640x480 or above, 1600x1200 or above

Note: It is NOT guarantee that the PC meeting the above conditions can operate normally .

Project USB display.

1. Using USB-B cable to connect the projector to the USB-B terminals.
 - Items in grey are not available.
2. Press the information source menu on the remote controlor the INPUT button on the control panel, then select [USB display] in the input source menu.
3. Press the driver icon in the computer drive in the computer's task bar  ,the select one item in the pop-up menu bar.
 - Pop-up menu only display in English.

[Active audio] / [Disable audio]	Sets up the output from the computer's audio.
[Play video] / [Pause video]	Switch on playing and pausing images. Sets
[Start / Stop]	up the output from the computer's image.
[Exit]	Gray means not optional



NOTE

- Resolution of the computer screen will be switched.
- If the drive is not installed on the computer, the driver will be removed when the USB cable is disconnected .
- You need wait for a moment,if you want project computer screen.
- Connect the USB cable directly to the computer's USB connector. When connecting the USB hub, it may be abnormal.

The termination of USB display.

- 1) Remove the USB cable directly, when terminating USB monitor.
 - You do not need follow "Remove Hardware Safely" instructions, when USB cable is not connected.

When using Mac OS

■ Mac OS operating environment

Operating System	Mac os x 10.5,10.6,10.7
CPU	Power PC G4 1GHz or faster compatible processors
Memory Capacity	512MB or above
Disk Space Available	20MB or above
Monitor	Resolution 640x480 or above, 1600x1200 or above

Note: It is NOT guarantee that the PC meeting the above conditions can operate normally .

Project USB display

- Using USB-B cable to connect the projector to the USB display terminals.
 - Items in grey are not available.
- Press the information source menu on the remote controlor the INPUT button on the control panel, then select [USB Monitor] in the input source menu.
- Double-click "Monitor.app" button installed on the virtual disk.
 - Projected image on the computer screen.
- Press the driver icon in the computer drive in the computer's task bar  , the select one item in the pop-up menu bar.
 - When using Mac OS other than Chinese, the pop-up menu is displayed in English.

[Active audio] / [Disable audio]	Sets up the output from the computer's audio.
[Play video] / [Pause video]	Switch on playing and pausing images.
[Start / Stop]	Sets up the output from the computer's image.
[Exit]	Terminate USB Monitor



NOTE

- Resolution of the computer screen will be switched.
- You need wait for a moment,if you want project computer screen.
- Connect the USB cable directly to the computer's USB connector. When connecting the USB hub, it may be abnormal.

The termination of USB display

- Remove the USB cable directly,when terminate USB display.

Status light indicator

The status light indicator shows status of projector protection function. Check status and POWER light indicator for proper maintenance and operation.

**Note:**
Unplug the AC power cord in case of any abnormality as it may lead to fire or electric shock.

The projector is turned off, the power indicator light is always on in red, and the status indicator light flashes in red.

When the internal temperature of the projector exceeds the normal temperature, the projector will automatically shut down to protect the internal components. When the projector is in the cooling state, the power indicator shows steady red and the status indicator is blinking red. When the projector has cooled sufficiently (returning to normal operating temperature), press the power button to turn on the projector.

 **POWER** — POWER indicator red

 **STATUS** — STATUS indicator flashing red

 **LIGHT**

✓ **Note:**
After the internal temperature of the projector is restored to normal, the status indicator continues to flash. If the projector is turned on again, the status indicator stops flashing.

Check the following:

- Is adequate clearance provided for your projector’s ventilation? Check the installation status and any air outlet block.
- Is your projector installed at location close to outlet of air conditioning equipment? Keep your projector away from air outlet of air conditioning equipment.
- Is the filter in clean condition? Please clean the filter regularly.

Clean the projector when contaminated by foreign matter or its display effects are getting worse.



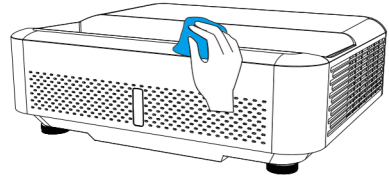
Note:

Unplug the AC power cord before any cleaning operation.

Clean the lens

Wipe the lens with clean cloth dampened with non-abrasive camera lens cleaner or clean it with lens cleaning paper or air blower.

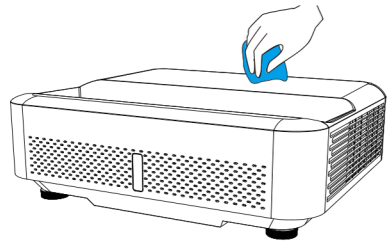
Do not over apply cleaner to the lens. Abrasive cleaner, solution, or other rough chemical may scratch the lens.



Clean casing of your projector

Gently wipe the casing with clean and soft cloth dampened with small amount of neutral detergent to remove heavy dirt. Do not over apply cleaner to the casing. Abrasive cleaner, solution, or other rough chemical may scratch the casing surface.

Place your projector in proper container after use to protect it from dirt and dust and being scratched.

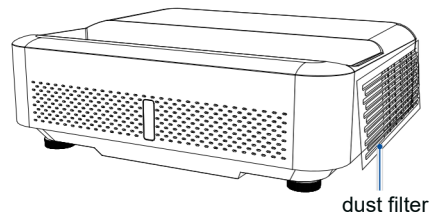


Clear the filter

The filter is designed to keep dust from entering in your projector, which may lead to dusts accumulated on surface of internal components. Clogged filter may reduce cooling fan effects, which, in turn, will overheat your projector and shorten its life cycle.

Clean the filter immediately whenever the Filter Warning icon displays. Please follow these steps to clean your filter:

1. Power off your projector and unplug from AC power source.
2. Remove the filter.
3. Gently clean it with a brush.
4. Replace the filter. Make sure it has been fully inserted.



Note:

Do not operate the projector after removing the filter. Otherwise, dust will adhere to the lens assembly, compromising image quality.

Troubleshooting

Check the following before calling your dealer or service center:

Troubleshooting	Solution
Power on failure	• Plug the power cord of your projector in an AC socket. • Make sure the POWER light indicator turns red. • Restart your projector until the POWER light indicator turns red. It indicates your projector is ready for power on again. • Disable the Key Lock function of your projector.
Logo screen display failure .	• Make sure the Off and Countdown Off is selected in the Display function.
The Logo screen differs from the standard settings.	• Make sure you did not select User or Off in the Logo Screen.
Input signal switch (or do not switch) automatically.	• Make sure you have correctly set up the Input Search function.
Image looks fuzzy	• Adjust focus of your projector. • Provide proper projection distance. • The projection lens requires cleaning. • Moving your projector from a colder environment to a hotter one may result in condensing on the lens. If this is the case, wait until the condensing water evaporated before powering on your projector.
Image mirror reflected Image turns upside down	• Check the "Ceiling" and "Ceiling / Rear" settings. • Check the "Ceiling/Front"and"Ceiling/ Rear" settings
Image looks dim	• Check for contrast and brightness settings. • Check for correct image mode settings
No image displays	• Check for the connection between your projector and computer or image equipment. • Check for correct input signal from computer. Connection with certain notebook computer may mandate changes to its display output settings. See the user manual included with the computer for details on settings. • It takes about 5 seconds for your projector to show the first image. • Check for mode of signal, color system, image system, or computer system. • Make sure the ambient temperature is within given range [0°C–40°C(35-ECO)]. • Image does not display in BLANK mode. The BLANK button or other buttons on the remote control.
Abnormal color	• Check for mode of signal, color system, image system, or computer system. • Make sure Blackboard mode is not selected in Image Select.

Some operations are invisible	Check the display function.
Auto PC Adjusting function failure	Check input signal. Auto PC Adjusting function is unavailable in 480p, 576p, 720p, 480i, 576i or 1080i mode.
Settings do not save after power off	Make sure you have selected Store after settings adjustment. Certain settings do not keep without selecting Store.
Power management failure	In case of Freeze or Blank operation, the power management function does not work
Auto Setting does not work	• Make sure it is not set to "Off" in each setup menu. • Make sure "On" is not set in Ceiling function.
Image distorted or disappeared	Check and revise the PC Adj. menu or Screen menu.
A password prompt displays after power on	You have set up the Logo PIN Code lock function.
Remote control does not work	• Check the battery. • Make sure there is no obstacles stand in between your projector and the remote control. • Make sure the remote control is not too far away from your projector. The maximum operation range is 8 m. • Make sure the remote control and your projector are paired with the same remote control codes. • Disable the key lock of the remote control in the Setup menu.
Light indicator turns on or flashes	Check status of your projector according to "Light indicator status" on page 102.
"X " mark displays	Invalid operation, please operate your projector correctly.
Control panel does not function	Disable the key lock on control panel function in the Safety option of the Setup menu.
Cannot remove the Logo Select password, Key Lock, and PIN Code lock	Please call your dealer or service center.

- Make sure your projector is correctly connected to external equipment.
- Make sure all devices have plugged in an AC power source and have been powered on.
- If your projector fails to project image of the connected computer, restart the computer.



Note:

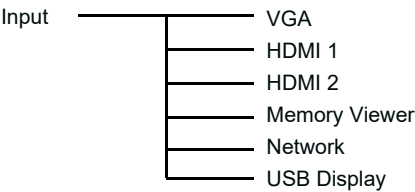
Your projector employs high voltage power for operation. Do not open its casing. If the problem persists, call your dealer or service center. Along with model number of your projector and a description to your problem. You will be advised on getting our services.

Menu tree

Main menu	Sub-menu	Setting	Remarks
Display	Auto PC adj.		
	Fine sync H	0-31(0*)	
	Position V	-5 - +5(0*)	
	Position	-5 - +5(0*)	
	H Size	-15 - +15(0*)	The range of H Size differs from signals.
	Aspect	Normal* 4:3 Full Wide Advanced	
	Project way	Front * Rear Ceiling / Front Ceiling / Rear Auto ceiling / Front Auto ceiling / Rear	
	Menu position	Upper Left* Upper Right Center Lower Left Lower Right	
	Background display	Black Blue*	
	System	---	
Color adj.	Image mode	Standard* Dynamic Cinema Colorboard Blackboard(green) User image	
	Dynamic mode	Off mode 1 mode 2* mode 3	Computer/HDMI Input
	Contrast	0-63(32*)	
	Brightness	0-63(32*)	
	Color temp	High/Mid*/Low/User	
	Red	0-63(32*)	
	Green	0-63(32*)	
	Blue	0-63(32*)	
	Sharpness	0-15(8*)	

Main menu	Sub-menu	Setting		Remarks
Setting	On start	On/Off*		
	Standby Mode	Normal*/ECO mode/Network		
	High land	On/Off*		
	Cooling fast	Normal/30s /0s*		
	Key lock	Off*/Projector/Remote control		
	Laser control	Normal/Full normal*/ECO1/ECO2		
	Sound	Volume	0-25(12*)	
		Mute	On/Off*	
	HDMI Setup	Image	64-940	
			AUTO*	
			0-1023	
		Volume	HDMI*	
PC				
HDMI EQ Settings		0-3(0*)		
Expand	Language	Projector provides multiple language support (English*)		
	Auto Setup	Input Search	On*/Off	
		Auto PC Adj.	On*/Off	
	Keystone	HDMI EQ Settings	Store* / Reset	
		H/V Keystone		
		4-Corner correction		
		6-Corner correction		Only supported by WUXGA series
		Curved correction		
		Grid image tune		
		Reset value		
	Logo	Logo select	Default*/User/Off	
		Capture		
		Logo PIN Code Lock	On/Off*	
		Logo PIN Code Change		
	Security	PIN code lock	On/Off*	
		PIN code change		
	Power management	Ready*		
		Power Off		
		Off		
		Timer	1~30min	
		Ready Countdown	0~30min	

Main menu	Sub-menu	Setting		Remarks
	Filter counter	Filter counter*		
		Timer	Off /500H/1000H*/ 2000H/	
		Filter counter reset		
		Filter Check	On*/Off	
	Text pattern	Off, Gray scale (1-4), Color bar, Red, Green, Blue, Cross hatch, White, Black, Raster gray		
	Network	Network setting	DHCP(On/Off*) Wireless setting (On/Off*) IP address Subnet Gateway DNS	
		Network status	MAC address IPaddress	
	Factory default			
Memory Viewer	Set slide			
	Slide transition effect	Slide down Slide right*		
	Sort order	Expand name orde Magnitude order Time orde Name order*		
	Sort order	No rotate* 270° rotate 180° rotate 90°rotate		
	Best fit	On/Off*		
	Repeat	On/Off*		
	Apply			
Info.	Input			
	H- sync. Freq.			
	V- sync. Freq.			
	Light source counter			
	Model name			
	S/N			
	Firmware Version			
	SUBCPU			



Light indicator status

Check light indicator to learn status of your projector.

POWER	STATUS	LIGHT	Projector status
 Off	 Off	 Off	Power is off
 Orange	 Off	 Off	Standby (Normal)
 Orange (Blink*1)	 Off	 Off	Standby (Network)
 Orange (Blink*2)	 Off	 Off	Standby (ECO)
 Orange (Blink*0)	 Off	 Off	Warm up
 Off	 Orange	 Off	Keylock/RC ID mismatch
 Green	 Off	 Green (Blink*1)	Light source on (ECO ON)
 Green	 Off	 Green	Light source on (ECO OFF)
 Green	 Off	 Orange (Blink*1)	Light source timer Waring
 Green	 Off	 Orange (Blink*2)	Light source timer error
 Green	 Red (Blink*1)	 Off	Filter timer waring

POWER	STATUS	LIGHT	Projector status
 Green	 Red (Blink*2)	 Off	Filter check waring
 Green (Blink*0)	 Off	 Off	Power save standby mode
 Red (Blink*0)	 Off	 Off	Cooling status
 Red (Blink*2)	 Off	 Off	Cooling status (Standby mode without signal)
 Red	 Red (Blink*1)	 Off	P sensor abnormality (poor contact)
 Red	 Red (Blink*2)	 Off	Temp error
 Red	 Orange (Blink*1)	 Off	Fan1 error
 Red	 Orange (Blink*2)	 Off	Fan2 error
 Red	 Orange (Blink*3)	 Off	Fan3 error
 Red	 Orange (Blink*4)	 Off	Fan4 error

POWER	STATUS	LIGHT	Projector status
 Red	 Orange (Blink*5)	 Off	Fan5 error
 Red	 Red (Blink*1)	 Orange	Color wheel IO exception
 Red	 Red (Blink*2)	 Orange	FG ERR (Failed to detect FG)
 Red	 Red (Blink*3)	 Orange	Color wheel speed is too high
 Red	 Red (Blink*4)	 Orange	Color wheel speed is too low
 Red	 Red (Blink*1)	 Red	LD overcurrent protection
 Red	 Red (Blink*2)	 Red	LD overvoltage protection
 Red	 Red (Blink*3)	 Red	Communication abnormality (tx, rx abnormality, poor switch contact after lighting)
 Red	 Red (Blink*4)	 Red	Main RX ACK ERR
 Red	 Red	 Red	Cover switch abnormal

POWER	STATUS	LIGHT	Projector status
 Red	 Red	 Off	High altitude Error
 Orange	 Orange	 Orange	Initialization

*0 light on for 0.5seconds / off for 0.5 seconds

*1 1 flash 1 off 2 seconds

*2 2 flash 2 off 2 seconds

*3 3 flash 3 off 2 seconds

*4 4 flash 4 off 2 seconds

Compatible computer screen

Your projector is designed to accept every computer signal below Dot Clock 160MHz. See table below for details on resolution and relevant frequency.

-	OSD Display	Source			Specification			
		RGB	HDMI	HDBT	Resolution	H-freq (KHz)	V-freq (Hz)	Pixel clock (MHz)
1	720x480, 60Hz	○	—	—	720x480i	15.734	59.940	13.500
2	720x480, 60Hz	—	○	○	720(1440)x480i	15.734	59.940	27.000
3	720x576, 50Hz	○	—	—	720x576i	15.625	50.000	13.500
4	720x576, 50Hz	—	○	○	720(1440)x576i	15.625	50.000	27.000
5	720x483 60Hz	○	○	○	720x483(480P)	31.469	59.940	27.000
6	720x576 50Hz	○	○	○	720x576(576P)	31.250	50.000	27.000
7	1280x720p 60Hz	○	○	○	1280x720p	45.000	60.000	74.250
8	1280x720p 50Hz	○	○	○		44.955	59.940	74.176
9	1920x1080, 60Hz	○	○	○	1920x1080i	37.500	50.000	74.250
10	1920x1080, 50Hz	○	○	○		33.750	60.000	74.250
11	1920x1080p 24Hz	○	○	○	1920x1080p	33.716	59.940	74.176
12	1920x1080p 60Hz	○	○	○		28.125	50.000	74.250
13	1920x1080p 50Hz	○	○	○		27.000	24.000	74.250
14	640x480, 60Hz	○	○	○		26.970	23.980	74.176
15	640x480,67Hz	○	○	○		67.500	60.000	148.500
16	640x480,72Hz	○	○	○	640x480	67.433	59.940	148.352
17	640x480,75Hz	○	○	○		56.250	50.000	148.500
18	640x480,85Hz	○	○	○		31.469	59.940	25.175
19	800x600,56Hz	○	○	○		35.000	66.667	30.240
20	800x600,60Hz	○	○	○		37.861	72.809	31.500
21	800x600,72Hz	○	○	○	800x600	37.500	75.000	31.500
22	800x600,75Hz	○	○	○		43.269	85.008	36.000
23	800x600,85Hz	○	○	○		35.156	56.250	36.000
24	832x624,75Hz	○	○	○		37.879	60.317	40.000
25	1024x768,60Hz	○	○	○		48.077	72.188	50.000
26	1024x768,70Hz	○	○	○	1024x768	46.875	75.000	49.500
27	1024x768,75Hz	○	○	○		53.674	85.061	56.250
28	1024x768,85Hz	○	○	○		49.725	74.550	57.283
29	1152x864,70Hz	○	○	○		48.363	60.004	65.000
30	1152x864,75Hz	○	○	○	1152x864	56.476	70.069	75.000
31	1280x720,60Hz	○	○	○		60.023	75.029	78.750
						68.678	84.997	94.500
						63.995	70.020	94.200
						67.500	75.000	108.000
					1280x720	44.772	59.855	74.500

-	OSD Display				Specification			
		RGB	Source HDMI	HDBT	Resolution	H-freq (KHz)	V-freq (Hz)	Pixel clock (MHz)
32	1280x768,60Hz	○	○	○	1280x768	47.776	59.870	79.500
33	1280x768,75Hz	○	○	○		60.289	74.893	102.250
34	1280x768,85Hz	○	○	○		68.630	84.840	117.500
35	1280x800,60Hz	○	○	○	1280x800	49.702	59.810	83.500
36	1280x800,75Hz	○	○	○		62.795	74.934	106.500
37	1280x800,85Hz	○	○	○		71.554	84.880	122.500
38	1280x960,60Hz	○	○	○	1280x960	60.000	60.000	108.000
39	1280x1024,60Hz	○	○	○	1280x1024	63.981	60.020	108.000
40	1280x1024,72Hz	○	○	○		78.16	71.97	135.060
41	1280x1024,75Hz	○	○	○		79.976	75.025	135.000
42	1280x1024,85Hz	○	○	○		91.146	85.024	157.500
43	1366x768,60Hz	○	○	○	1366x768	47.720	59.799	84.750
44	1400x1050,60Hz	○	○	○	1400x1050	65.317	59.978	121.750
45	1400x1050,75Hz	○	○	○		82.278	74.867	156.000
46	1440x900,60Hz	○	○	○	1440x900	55.935	59.887	106.500
47	1600x900,60Hz	○	○	○	1600x900	55.920	60.000	118.998
48	1600x1200,60Hz	○	○	○	1600x1200	75.000	60.000	162.000
49	1680x1050,60Hz	○	○	○	1680x1050	65.290	59.954	146.250
50	1920x1080,60Hz	○	○	○	1920x1080	66.587	59.934	138.500
51	1920x1200,60Hz	○	○	○	1920x1200	74.038	59.950	154.000
52	3840x2160,30Hz	○	---	○	3840x2160	67.500	30.000	297.000

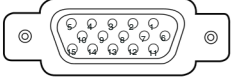
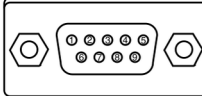
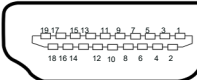
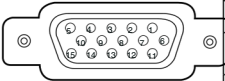
"○" Shows input signal source support this format.

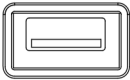
"—" Shows input signal source DO NOT support.

✓ **Note:**

This specification is subject to change without prior notice.

Terminal configuration

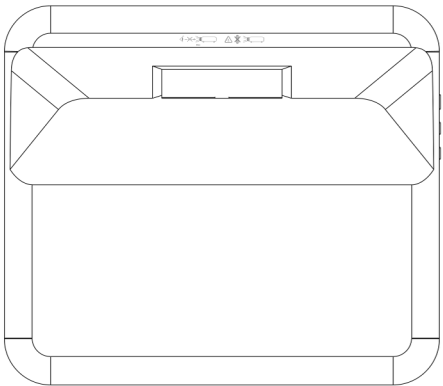
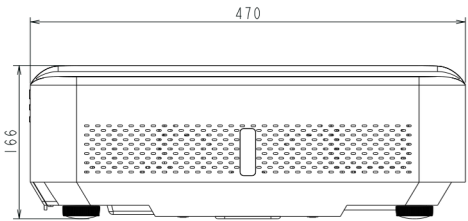
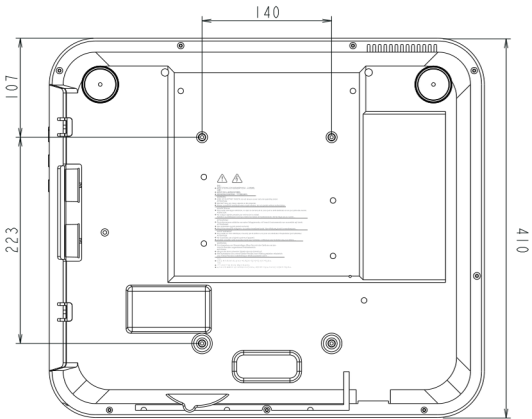
VGA OUT Terminal RGB(D-sub 15)				
	1	Red (Input/output)	9	-----
	2	Green(Input/output)	10	Grounding(field synchronizing)
	3	Blue(Input/output)	11	Grounding
	4	-----	12	DDC data
	5	Grounding(line synchronizing)	13	Horizontal synchronizing (compound sync.) input/output
	6	Grounding(red)	14	Vertical synchronizing input/output
	7	Grounding(green)	15	DDC Clock
	8	Grounding(blue)		
SERIAL Terminal (D-SUB-9)				
	1	-----	6	-----
	2	RXD	7	-----
	3	TXD	8	-----
	4	-----	9	-----
	5	GND		
LAN Terminal				
 87654321	1	TX +	5	-----
	2	TX -	6	RX -
	3	RX +	7	-----
	4	-----	8	-----
HDMI Terminal (HDMI Type A 19)				
	1	TMDS Data2+	11	TMDS Clock Shield
	2	TMDS Data2 Shield	12	TMDS Clock-
	3	TMDS Data2-	13	CEC
	4	TMDS Data1+	14	Reserved(N.C. on device)
	5	TMDS Data1 Shield	15	SCL
	6	TMDS Data1-	16	SDA
	7	TMDS Data0+	17	DDC/CEC Ground
	8	TMDS Data0 Shield	18	+5V Power
	9	TMDS Data0-	19	Hot Plug Detect
	10	TMDS Clock+		
VGA in Terminal				
	1	Red input	9	-----
	2	Green input	10	Grounding(field synchronizing)
	3	B input	11	Grounding
	4	-----	12	DDC data
	5	Grounding(line synchronizing)	13	Horizontal synchronizing(compound sync.)input
	6	Grounding(red)	14	Vertical synchronizing input
	7	Grounding(green)	15	DDC clock
	8	Grounding(blue)		

USB-A Terminal(USB connector(Type A X1))				
	1	VBUS	5	----
	2	D-	6	- ---
	3	D+	7	-- --
	4	GND	8	--- -
USB-BTerminal(USB connector(Type B X1))				
	1	VBUS	6	----
	2	D-	7	- ---
	3	D+	8	-- --
	4	ID	9	--- -
	5	GND	10	----

-

Dimensions

- Unit: mm
- Screw Holes for Ceiling Mount(4 pcs)
- Screw: M4
- Depth: 8.0



Technical Specifications

Mechanical properties

Dimensions (W×D×H):	470mm x410mm x 166mm
Net Weight	8.5Kg
Gross weight	11Kg
Adjustable foot	3.5°

LCD resolution

LCD system	0.59"x3(IN2006UT) 0.64"x3(IN2009UT)TFT, active matrix
LCD resolution	IN2006UT(1280 x 800), IN2009UT(1920 x 1200)
Color standard	PAL, SECAM, NTSC, NTSC4.43, PAL-M, PAL-N, PAL-60
HDTV signal	PAL, SECAM, NTSC 4.43, PAL-M, PAL-N, PAL-60, 480i, 480p, 576i, 576p, 720p, 1080p, 1080i
Scanning frequency	Horizontal frequency: 15 kHz–100 KHz; Vertical frequency: 24–85 Hz

Optical elements

Contrast ratio	50000000:1(When [Image mode] is set to [Dynamic] and [Dynamic mode] is set to [Mode 2] or [Mode 3])
Image size (diagonal lines)	80"-120", adjustable
Throw Ratio	IN2006UT: 0.443m~0.639m IN2009UT: 0.410m-0.592m
Projection distance	F=1.7 ,f=2.94mm
Light source power	88W

Terminal

VGA IN	Mini D-sub 15pin x1
VGA OUT	Mini D-sub 15pin x1
HDMI 1	HDMI A type 19 pin
HDMI 2	HDMI A type 19 pin
LAN	100 Base-TX (100Mbps)/10 Base-T (10Mbps), RJ45
USB-B	USB connector (B type x1)
USB-A	USB connector (A type x1)
RS-232	D-sub 9 pin x1
AUDIO IN	Mini Stereo 3.5mm x1
AUDIO OUT	Mini Stereo 3.5mm x1

Power

Voltage and power consumption	IN2006UT:2.9A MAX 50/60 Hz IN2009UT:3.0A MAX 50/60 Hz 20A/250V
Fuse	

Operating Environment

Operating temperature	0°~40°
Operating humidity	20% ~ 80%
Storage Temperature	-10°~50°
Storage humidity	10% ~ 85%
High land	3000 m

Remote control

Battery	AAA alkaline type x 2(Without battery)
Operating Range	±15° About 6 meters, straight line about 8 meters
Dimensions	110mm (L) x 50mm (W) x 20mm (H)
Net Weight	38g

Accessories

Remote control and batteries(Overseas does not have a battery)&AC power cord&Quick Start Guide&Wireless Dongle (optional)&VGA cable

- All specifications in the manual are subject to change without notice.
- Liquid crystal panel is made on the basis of high standard, where 99.99% of the pixels are effective. Due to the nature of the liquid crystal panel, a fraction of the pixels (0.01% or less) may be ineffective.

RS232 control mode

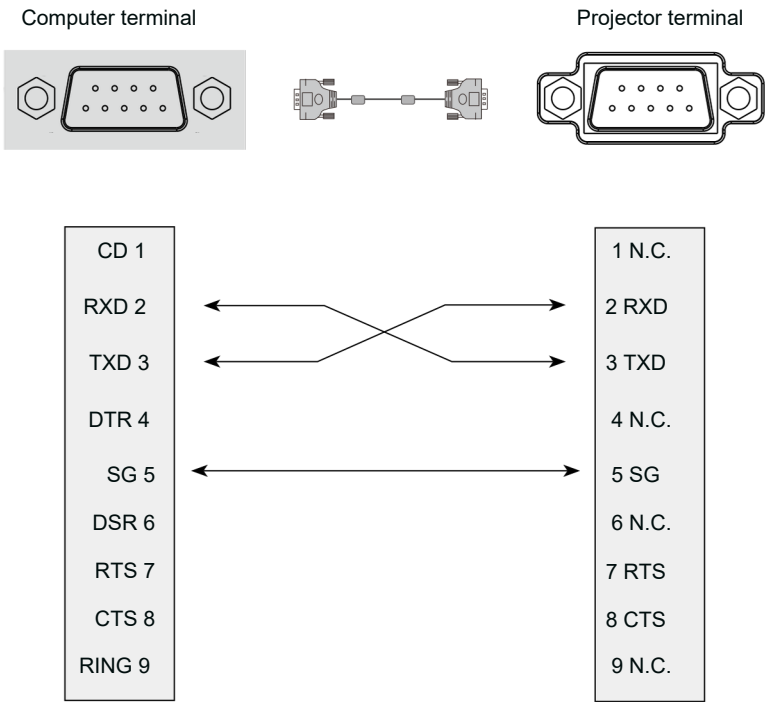
Serial connection

1.1 Port setting

Project	Setpoint
Communication method	Asynchronous communication
Communication rate	19200
Length	8-bit
Parity check	NO
Stop position	1
Flow control	NO

1.2 Connection mode

Can only use RS232 serial cross connect PC and projector.



2. Basic commands

Distinguish the letter case.and enter Each command ends with [CR] (enter) .

Command	Option	Command	Option
C00	POWER ON	C02	POWER OFF
C01	POWER OFF (Immediately)	C05	VGA
C36	HDMI 1	C37	HDMI 2
C16	Memory Viewer	C17	USB Display
C15	Network		

2.1 POWER ON command

Command	"C00"[CR]		
Details	Power ON action. Do nothing,when you are in Power ON state . Send this command can force the end of the countdown in the countdown state.		
Return Value	Receive Successfully	[ACK] [CR]	
	Receive Unsuccessfully	"? " [CR]	

2.2 POWER OFF command (immediately)

Command	"C01"[CR]		
Details	Power OFF action. Send this command can force your projector to power off during in power on state.		
Return Value	Receive Successfully	[ACK] [CR]	
	Receive Unsuccessfully	"? " [CR]	

2.3 POWER OFF command

Command	"C02"[CR]		
Details	Power OFF action. A "POWER OFF " dialog box pops up when sending the POWER OFF command ,and do once again can force your projector to power off. Send this command can force the end of the countdownthe in the countdown state.		
Return Value	Receive Successfully	[ACK] [CR]	
	Receive Unsuccessfully	"? " [CR]	

2.4 VGA command

Command	"C05"[CR]	
Details	Select VGA IN Input	
Return Value	Receive Successfully	[ACK] [CR]
	Receive Unsuccessfully	"? " [CR]

2.5 HDMI 1 command

Command	"C36"[CR]	
Details	Select HDMI1 Input.	
Return Value	Receive Successfully	[ACK] [CR]
	Receive Unsuccessfully	"? " [CR]

2.6 HDMI 2 command

Command	"C37"[CR]	
Details	Select HDMI2 Input.	
Return Value	Receive Successfully	[ACK] [CR]
	Receive Unsuccessfully	"? " [CR]

2.7 Memory Viewer command

Command	"C16"[CR]	
Details	Select Memory Viewer Input .	
Return Value	Receive Successfully	Return value
	Receive Unsuccessfully	"? " [CR]

2.8 Network command

Command	"C15"[CR]	
Details	Select Network Input .	
Return Value	Receive Successfully	Return value
	Receive Unsuccessfully	"? " [CR]

2.9 USB Display command

Command	"C17"[CR]	
Details	Select USB Display Input .	
Return Value	Receive Successfully	Return value
	Receive Unsuccessfully	"? " [CR]

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