INFOCUS QUANTUM LASER USER GUIDE

REGULATORY MODEL	PRODUCT NAME	LENS TYPE	RESOLUTION
P15	QUANTUM LASER IN5009	LENS-LESS	WUXGA

V1.0 09/2025

Table of content 2
Features and design.....4
Safety operation guideline 5
Safety instruction 5
Disposing of your used product 6
Notes 7
Laser safety caution 10
Light Module 10
Radiation Zone (HD: Hazard Distance) ...12
Laser radiation range 14
Air ventilation.....16
360° projection 16
Protective cover module 17
Protective cover module installation.....18

Compliance 21

Accessory 22
Front/Top 23
Side 23
bottom 23
Terminal 24
Remote control 26
Remote control operation range 27
Install battery of remote control 28

Installation 29
Lens installation 29
Remove the lens 30
Optional lens specifications 31
Screen size 32
Adjustment pad 40
Lens shift adjustment 41
Connect to pc (Digital and Analog RGB) .42
Connect to Video equipment 43
Connect to Audio equipment 44
Connect to USB and wireless card (USB-A and USB-B) 45
Connect to network(LAN or HDBaseT) ...46
Connect the AC power cord 47

Basic operation 48
Power on your projector 48
Power off your projector 49
How to operate the OSD 50
Menu item overview 51
Zoom function 52
Focus function 52
Lens shift function 53
Auto setting function 54
Keystone adjustment 54
Remote control operation 56
Input selection 57

Display 59
Auto pc adj. 59
Fine sync 59
H position 59
V position 60
H size 60
Aspect 60
Project way 61
Menu position 61
Background display 62
System 62

Color adjust 64
Image mode 64
Color adjust(for PC.) 65

Setting 66
Direct on start 66
Standby mode 66
Elevated Altitude.....67
Cooling fast 67
Key lock 68
Contrast optimization 68
Laser control 68
Remote control 69
HDMI setup 70

Expand..... 71
Language 71
Auto setup 72
Keystone 72
Logo 77
Security 78
Power management 80
Lens adjustment.....81
Test pattern 81
Network 82
Factory default 83

Memory Viewer 84
Set slide 84
Slide transition effect 84
Sort order 84
Rotate 85
Best fit 85
Repeat 85
Apply 85

Info. 86

Table of content

Network control 87
Network control operation.....87
Wi-fi display(For PC.) 88
pwPresentersoftware 93

Useful function 96
Memory viewer function 96
USB display function 98
When using Mac os 100
Status light indicator 101
Clean casing of your projector 102
Clean the lens 102
Troubleshooting 103
Menu tree 105
Light indicator status 109
Compatible computer screen 110
Terminal configuration 112
Dimensions 113
Technical Specifications 114
RS232 control mode 115

Features and design

Thank you for purchasing this projector. This product is a laser LCD engineering projector, which adopts a new generation of LCD light source technology.The maximum brightness can reach 9500lm brightness and a long life of up to 20,000 hours, so that it maintains a bright display throughout its life.It avoids the radiation of light to the human body, and can completely solve the interference of shadows on the screen.It adopts liquid crystal display (LCD) technology with a color depth of 1.07 billion colors.

Model name	Brightness	Resolution	Aspect ratio
IN5009	10,000 lm	WUXGA (1920 x 1200 pixels)	16:10

Main features

- 20000Hhours of real time with the new light source of Laser;
- Using WUXGA (1920x1200) display technology;
- 4 optional lenses, for your choice.
- Flexible installation; Focus/Zoom/Lens shift function;
- 3G-SDI functions are optional to realize long distance transmission of HIGH-DEFINITION signals and meet diversified needs of users
- Perfect combination of high brightness and color;
- Multi-interface, dual HDMI input and HDMI OUT output;
- Blank design.Tap the button, the projector will switch into blank screen status immediately for prevention of information leakage;
- Various projection mode;
- On and Off instantly;
- 0.55W ultra low power consumption on standby mode;
- Industrial design. ESD filter (static) - dustproof design and filter check function automatically;
- Support wired remote control input and output.

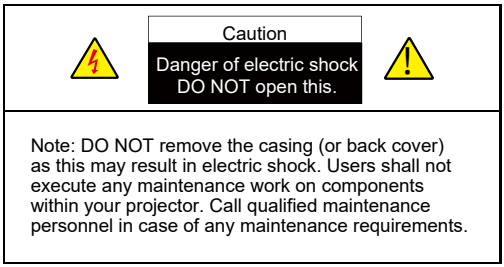
Note:

- The screen menu and images in the manual may slightly differ from the real product.
- The manual is subject to change without prior notice.
- All optical data in this manual are based on standard lenses as a reference.

Safety instruction

This document and your projector uses 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 or deaths due to human errors.
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 items in front of the projector lens while in use as the item may overheat, burn or even catch fire. Press the Blank button through the remote controller for temporarily pause the projection.



High voltage inside with risks of electric shock.

Operation and maintenance tips about these components.

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 RG3 product. The projector is for professional use and must be installed in a location where safety is assured. Please 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 waste 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 the EU directive 2006/66/EC, the battery can't be disposed improperly. The battery shall be separated to collect by local service.

Warning:
Operation of this equipment in a residential environment could cause radio inter ference.

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 end of this manual. If the problem persists, call your dealer or our service center.

Notes

Caution

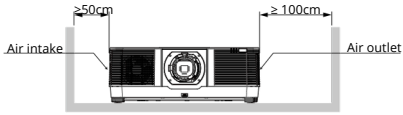
Safety precautions:

- GROUND your projector.
- Lens of your projector projects strong light. DO NOT look at the light beam directly. You may hurt your eyesight. This is especially in 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 not recommended by the manufacturer as it may result in potential risks.

Caution

Precautions on air outlet:

- Keep adequate clear area 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 onto 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 of 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 caused your projector and the cart to topple together.

Note:

Precautions on using your projector:

- DO NOT display a static image for long durations, as it may leave residual patterns on the LCD panel. This is an inherent characteristic of LCD technology.
- Use power as indicated in tags attached to your projector. If you have doubts about 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 the projector fails to work as expected, try the prescribed steps in this guide. Improper operation may cause damage and require additional servicing time before it can be restored 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. It will also disqualify the product warranty.
- 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 a domestic environment.

Directive 2009/125/EC.

Laser safety caution

WARNING

CLASS1 LASER PRODUCT [IEC 60825-1:2014, EN 60825-1:2014+A11:2011]

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

- This product is classified as Class 1 laser product of IEC 60825-1:2014, EN 60825-1:2014+A11:2011.Regarding the installation and management of this equipment, please comply with the relevant laws and regulations of your country.
- Outline of laser emitted from the built-in light module:
  Wavelength: 455 nm
  Maximum power: 257W(EL-M906U); 229W(EL-M756U/EL-M806U)
- Radiation pattern from the protective housing:
  Wavelength: 455 nm
  Maximum laser output:333mW

Light Module

- Alight 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.
- End user is not allowed to replace the light module.
- Contact qualified distributor for light module replacement and further information.

Risk groups

This projector is classified as IEC/EN 62471-5:2015 risk group 3 for professional use and must be installed by professional installer to ensure safety.

WARNING

RG3 PRODUCT OF IEC/EN 62471-5:2015

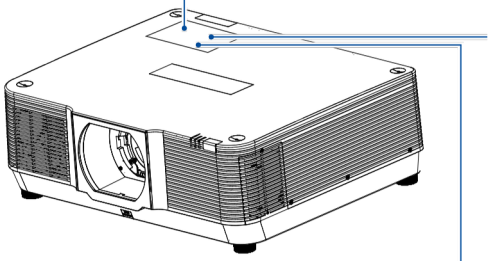
- When classified as RG3, this projector is for professional use and must be installed in a location where safety is assured. For this reason, be sure to consult your dealer as installation must be performed by a professional installer. Never try to install the projector by yourself. This may result in visual impairment etc.
- No direct exposure to the beam shall be permitted, RG3 IEC/EN 62471-5:2015.
- Do not look into the projector's lens. Serious damage to your eyes could result.
- Operators shall control access to the beam within the hazard distance or install the product at the height that will prevent exposures of spectators'eyes within the hazard distance.
- When turning on the power, operate from the side or rear of the projector (outside the hazard zone). Also, when turning on the power, make sure no one within the projection range is looking at the lens.

- This product is listed as Class 1 in IEC 60825-1:2014,EN 60825-1:2014+ A11:2011Third Edition (2014-05).
- In addition, this product is listed as risk group 3 in IEC/EN 62471-5:2015 also.

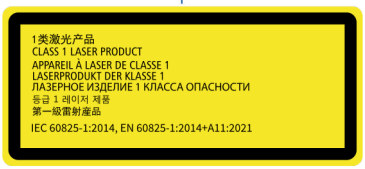
Notes and descriptions for laser products are attached as shown below.

Label 1

Label 2



Label 3



Radiation Zone (HD: Hazard Distance)

- The below table describes the radiation zone of emitted light by the projector that is classified as Risk Group 3 (RG3) of IEC/EN 62471-5 First edition 2015.
- Please keep within bounds for installing the projector.
  Ensure a barrier is in place to prevent direct eye exposure within the RG3 zone. For the barrier installation position, keep horizontal security zone over 1 m from the RG3 zone. In case to install the projector over head, keep over 3 m distance at least between the floor surface and the RG3 zone. This projector must be installed at a height that will prevent your eyes from being exposed within the RG3 zone. The equipment administrator (operator) must control the entry of individuals into the RG3 zone.

IN5009

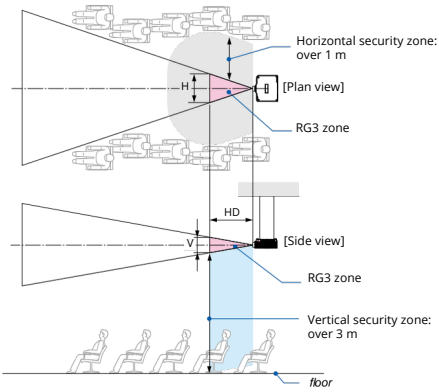
Lens		RG3 HD(m)	Radiation zone(m)	
			H	V
LENS-111	Tele	0	-	-
	Wide	0.1	0.09	0.07
LENS-113	Tele	0	-	-
	Wide	0.9	0.18	0.13
LENS-112	Tele	0	-	-
	Wide	0.1	0.15	0.1
LENS114	Tele	0	-	-
	Wide	0.7	0.18	0.13

-

The drawings below are example of typical installation methods. Besides these, when installing the projector at an angle, a security zone is required in the same way.

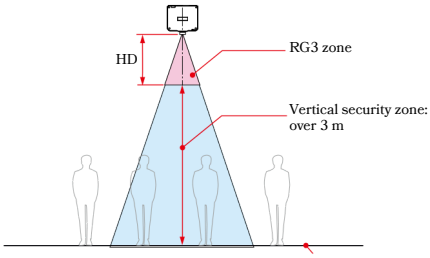
When installed on a floor or a desktop

When installed on a ceiling



- When mounting the projector on the ceiling to project an image downward

* If lens shift is utilized, please consider the shift of projected image according to the range of lens shift.



* If the distance between the floor face and the RG3 zone is less than 3m, entering the projected area should be restricted.

High Altitude Operation

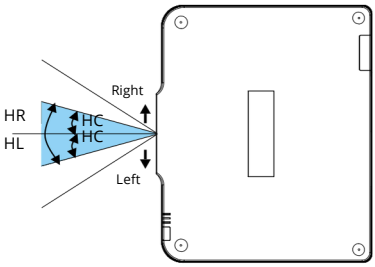
- When using this projector at an altitude of about 1700 meters or higher, the "High Land" setting is automatically turned on.
- If the projector is set to [On] when used at an altitude of less than about 1700 meters, it may cause the lighting module to be too cold, causing the image to flash. Set ”High Land“ in "Settings" to [Off].
- Using this projector at an altitude of about 1700 meters or higher may shorten the service life of optical components such as lighting modules.

Laser radiation range

The figure below shows the maximum range of laser radiation.

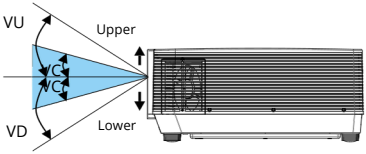
Horizontal Angle (Unit: degree)

Lens unit	Zoom	Lens position		
		Right most	Center (Reference value)	Left most
		HR	HC	HL
LENS-111	Tele	15.1	9.6	15.1
	Wide	28.3	18.6	28.3
LENS-113	Tele	6.4	4	6.4
	Wide	9.7	6.1	9.7
LENS-112	Tele	31.7	23.8	31.7
	Wide	41	31.8	41
LENS-114	Tele	6.8	4.9	6.8
	Wide	13.4	9.7	13.4



Vertical Angle (Unit: degree)

Lens unit	Zoom	**Lens position**		
		Upper most	Center (Reference value)	Lower most
		VU	VC	VD
LENS-111	Tele	13	6	7.2
	Wide	24.8	11.9	14.1
LENS-113	Tele	5.5	2.5	3
	Wide	8.4	3.8	4.6
LENS-112	Tele	11.6	5.9	7
	Wide	25.3	13.3	15.8
LENS-114	Tele	6.1	3	3.7
	Wide	12	6.1	7.3



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 taken security measures if appropriate safety zone based on the installed lens is secured. Check the validity periodically 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.

Air ventilation

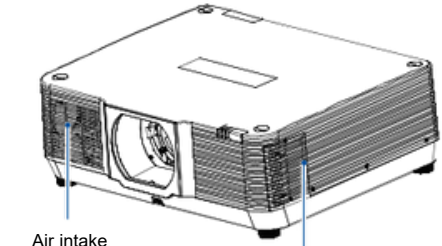
Openings in the casing are designed for ventilation and overheating prevention. DO NOT block or cover these openings to keep your projector in normal operation and from overheating.

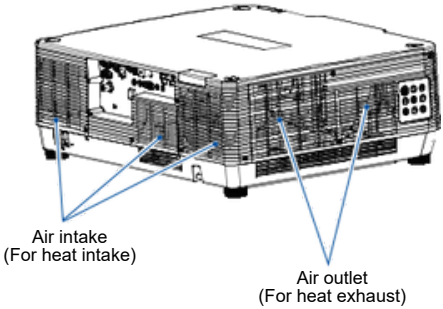
Note:

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.





Place your projector correctly

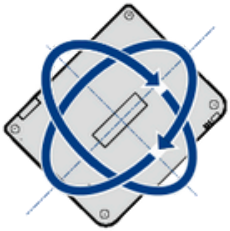
Use your projector at specified location in correct way. Invalid projector location may shorten light source 's life-cycle or even lead to severe incidents or fire.

360° projection

Projector support 360° projection.

Vertical 360°

Horizontal 360°



Vertical & Horizontal 360°

Protective cover module

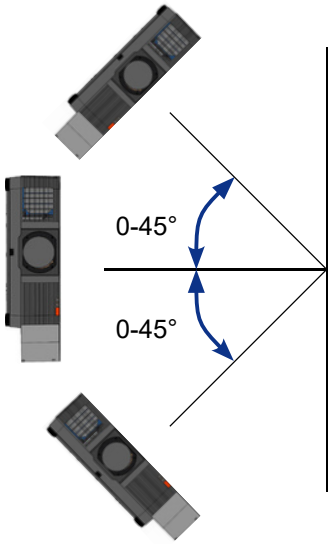
When users use the 360° projection function during front and side projection, The mandatory safety requirements, the protective cover structure is added to avoid the occurrence of hazards.
Users must be equipped with a power shield to avoid unnecessary damage.

Please contact the authorized dealer to purchase the protective cover module. Schematic diagram of protective cover module
(right)

A B

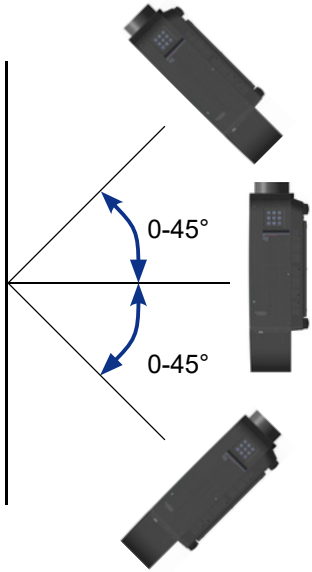
Application scenarios

Situation 1:
When user operate the projector with front projection, the projection direction is within the range of the following Angle (0-45°)



Front projection

Situation 1:
When user operate the projector with side projection, the projection direction is within the range of the following Angle (0-45°)



Side projection

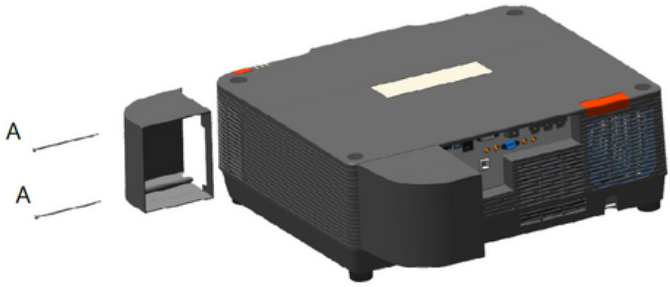
Protective cover module installation

The installation of the power box protective cover module consists of two parts: the suction hood and the exhaust hood.

Installation of exhaust hood:

1) Align the exhaust hood with the projector
2) Loosen 2 screws A (M3*110) and tighten the corresponding holes.

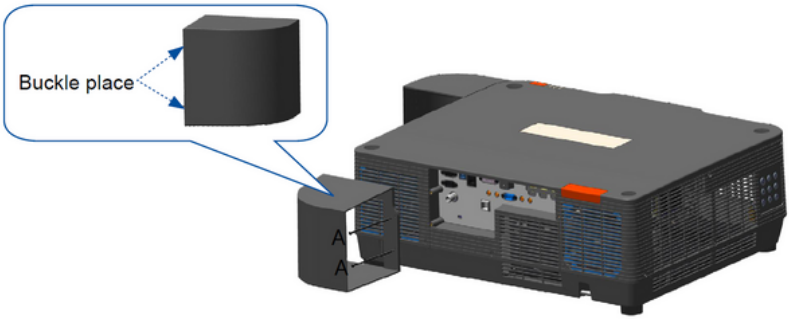
Please refer to the following figure for details:



Intake hood installation:

1) Align the two clips on the left side of the intake hood with the machine
2) Loosen 2 screws (M3*110) and tighten them at the corresponding hole position.

Please refer to the following figure for details:



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 ceiling mount rackets provided by unauthorized dealers.
- Remove the ceiling mount racket when it is not in use.
- Apply torque driver instead of impact driver in your projector.

Moving your projector

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

Note:

Precautions on moving or shipping your projector:

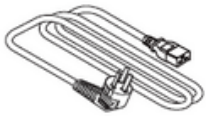
- DO NOT drop or impact your projector as it may get damaged or failed in operation.
- Please employ proper containment when moving the projector.
- Prohibit express or other shipping service provider personnel from shipping your projector with improper boxes. Your projector may become damaged. Please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

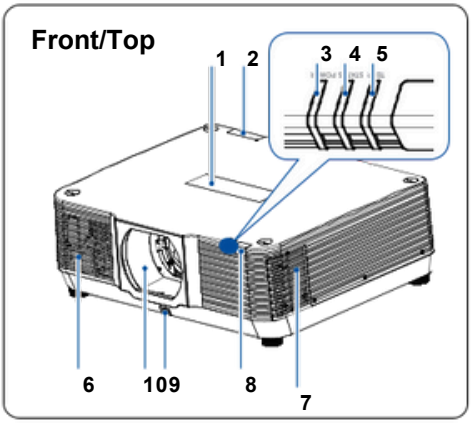
FCC Caution NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.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

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.

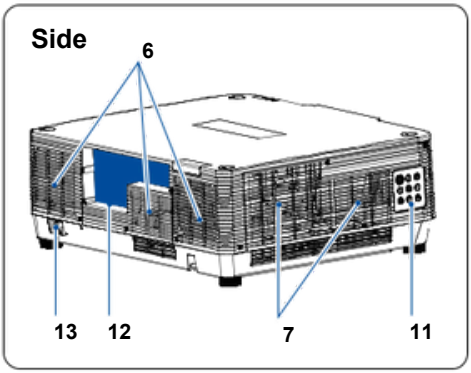
Accessory as follows:

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

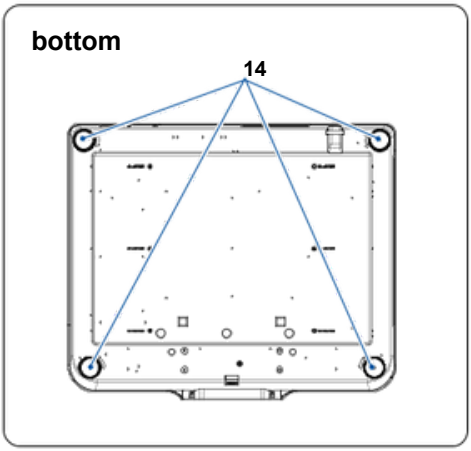
Power cord buckle	Power cord	Remote Control (AA*2)
		
6 Screws(M4)	Quick Start Guide	



1 Model logo position
2 Remote Receiver (BACK)
3 POWER indicator
4 STATUS indicator
5 TEMP indicator
6 Air intake grille
7 Air outlet grille
8 Remote Receiver (FRONT)
9 LENS release
10 Projection lens



11 Control panel
12 Terminal
13 AC power cord port



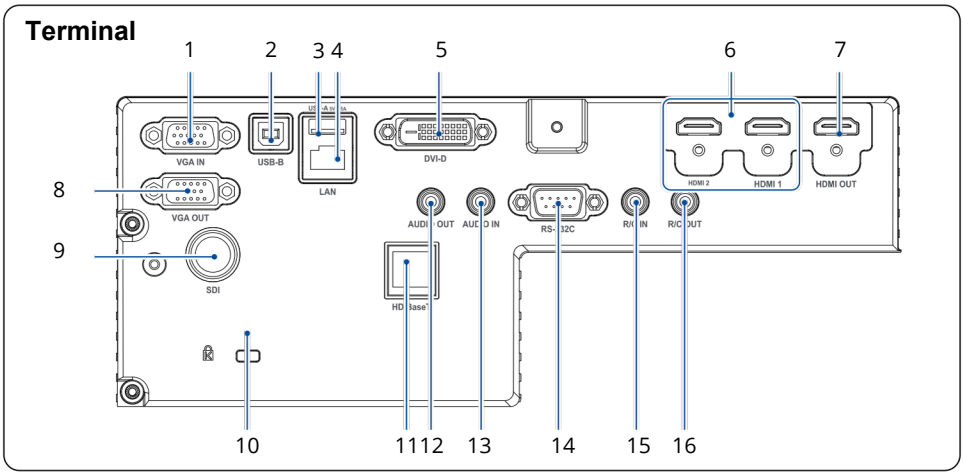
14 Adjustment feet

Note:

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

- Vent will emit 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 VGA IN

Connect the output signal from the computer to this terminal.

2 USB-B connector

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

3 USB-A connector

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

- USB power supply 5V/1.5A.

4 LAN terminal

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

5 DVI-D terminal

The DV signal is connected to this terminal.

6 HDMI1/HDMI2 connector

Connect the HDMI signal to this terminal.

7 HDMI OUT connector

Output the HDMI signal through this terminal.

8 VGA OUT terminal

When output as a display, the signal from VGA is output to other displays.

9 SDI (Optional)

Connect theVideo output signal to this interface.

10 Anti-theft slot

An anti-theft wire cable (not included) can be connected to help users to deter theft of the projector.

11 HD BaseT

Connect the LAN cable to the HDBaseT HD transmitter to realise HDBaseT function.

12 AUDIO OUT terminal

Connect external audio devices to this terminal.

13 AUDIO IN terminal

Connect audio signal of the PC to this terminal.

14 RS-232C

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

15 R/C IN terminal

Connect wired remote controller to this terminal. Connection of a wired remote controller will disable the wireless one.

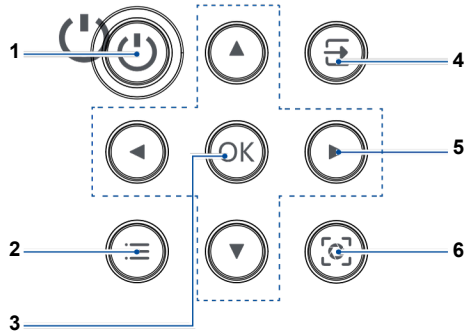
16 R/C OUT terminal

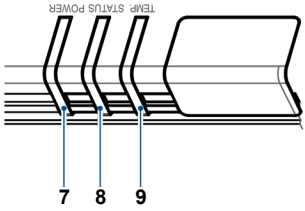
Transmit wired remote controller signals to another projector when a wired remote controller is used.

✓ **Note:**

- SDI is optional. If the purchased model does not have the SDI function, this terminal is unavailable.

Top control panel and indicators





1 POWER

Openorclose the proector.

2 MENU

Openor close the OSD menu.

3 OK

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

4 INPUT

Openor close the INPUT menu.

5 Arrow▲▼ ◄◄ /UP/DOWN

-Select itemsor adjustthedata in the OSD menu.
-It uses to enter password.

6 LENS

Perform lens function Setup, including "FOCUS" ,"ZOOM"and "LENS SHIFT" .

7 POWER indicator

– Thepower indicator turns steady red when your projector is in standby mode.
– It turns steady green when your projector is in normal operation.
– It flashes green when your projector is in power control mode(standby) mode.

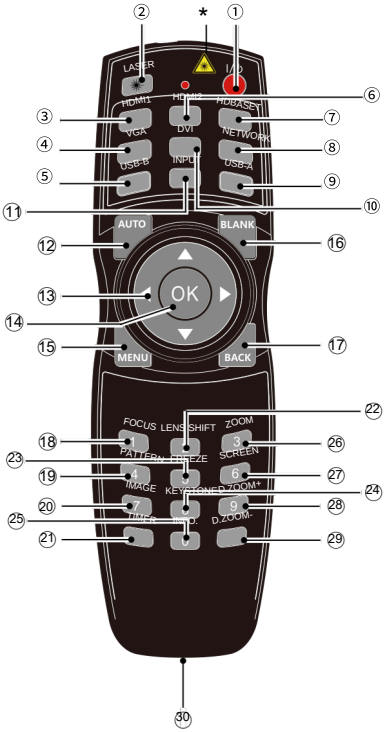
8 STATUS indicator

Itflashesredwhen internal temperature of your projector is under abnormal condition.

9 TEMP. indicator

Itflashesredwhen the intermal temperature of your projector exceeds the operating range.

Remote control



* Laser Transmitting Window:
Laser beam will emit from this window while pressing LASER button during the projection to use the remote controller as a laser pointer.

Do not stare directly at the laser transmitting window or aim the window at human body, to avoid any physical injury.

① POWER
Power on or off your projector.

② LASER
Press the LASER button during presentation to use the remote controller as laser pointer.

③ HDMI1
Select HDMI 1 input source.

④ VGA
Select VGAinput source.

⑤ USB-B
Select USB Memory input source.

⑥ HDMI2
Select HDMI 2 input source.

⑦ HDBASET
Select HDBaseT input source.

⑧ NETWORK
Select Network input source.

⑨ USB-A
Select Memory Viewer input source.

⑩ DVI
Select DVI input source.

⑪ INPUT
Open or close the INPUT menu.

⑫ AUTO
Enter auto adjustment mode

⑬ Arrow ▲▼◀▶
– Select items or adjust values in the OSD menu.
– Select display area in digital zoom+ mode.

⑭ OK
Enter the OSD menu or select options in it.

⑮ MENU
Open or close the OSD menu.

⑯ BLANK
Dark out screen images temporarily.

⑰ BACK
Return to the previous menu .

⑱ FOCUS
Enter the focus adjustment mode.

⑲ PATTERN
Select built-in test pattern of your projector.

⑳ IMAGE
Select image mode.

Note:

●the test pattern is not available under Network, Memory Viewer and USB DISPLAY channel.then a warning icon display when pressing PATTERN button.

㉑ TIMER
Enable the timer function.

㉒ LENS SHIFT
Enter the lens shift mode.

㉓ FREEZE
Freeze projected images.

㉔ KEYSTONE
Keystone calibration.

㉕ INFO.
Display current status information of your projector.

㉖ ZOOM
Lens focusing.

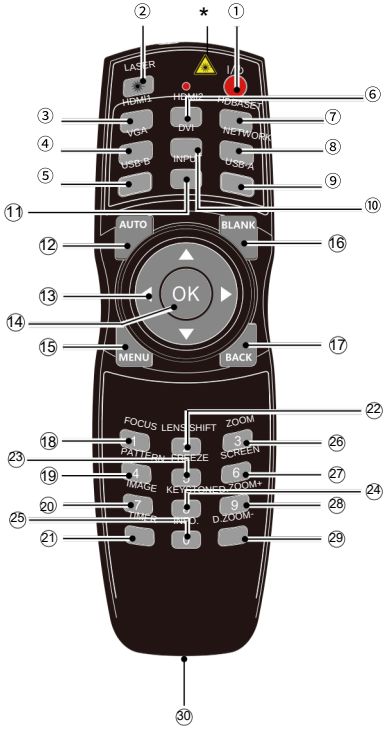
㉗ SCREEN
Selectscreen size.

㉘ D.ZOOM+
Zoominprojected image.

㉙ D.ZOOM-

Zoomoutprojected image.

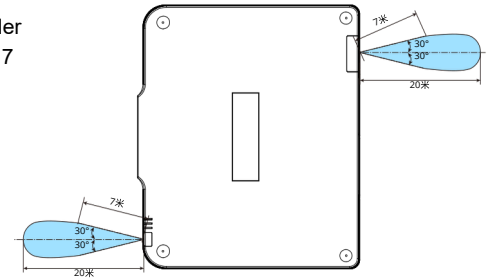
㉚ Wired remote controller output terminal
Connect cable ofwired remotecontroller to this port while operating the projector by wired remote control.



Remote control operation range

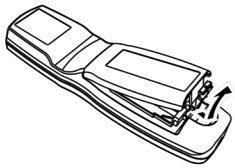
Point your remote controller to the IR receiver of your projector.

Maximum operation range of your remote controller is about arc 30° and with about an area of radius 7 meters or about 20 meters in straight line.

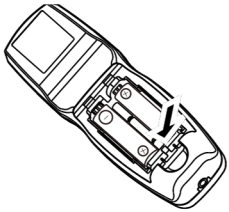


Install battery of remote control

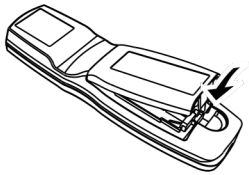
❶Open the battery cover.



❷Insert a new battery in it.
Two AA batteries
Place your batteries with its anode and cathode (+ and -) in correct direction. Keep both poles in good connection to the contacts within the compartment.



❸Put the cover back.



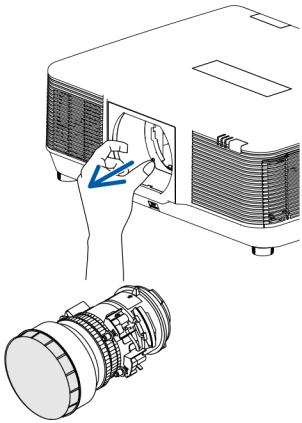
Please follow the following rules for safety operation:

- Use two of AA batteries.
- Replace both batteries at the same time.
- Do not mix new and old batteries as one pair.
- Keep your remote controller away from water or other liquids.
- Do not expose your remote controller to environments with high humidity or temperature.
- Do not drop your remote controller.
- 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.

Lens installation

Please follow steps given below to install lens after its replacement or when optional ones are employed. Please consult your dealers for details on optional lenses.

1. Remove the dust cover from the projector.



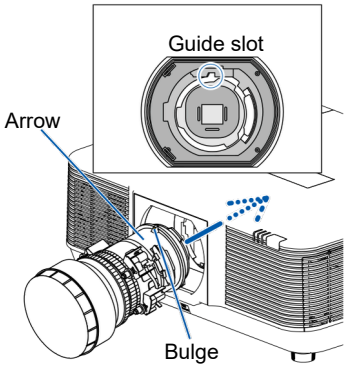
2. Prepare the projector lens.

Note:

Be sure to remove the lens cap on the back of the device.If the lens component with the lens cover is mounted on the projector at all times, it may cause a malfunction.

3. Insert the lens into the projector with the arrow on the lens label facing up.

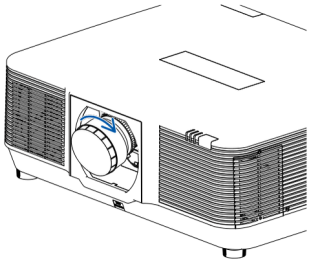
- Insert the lens slowly and thoroughly into the projector.



4. Turn the lens clockwise.

Turn until youhearaclick.

The lens is now attached to the projector.



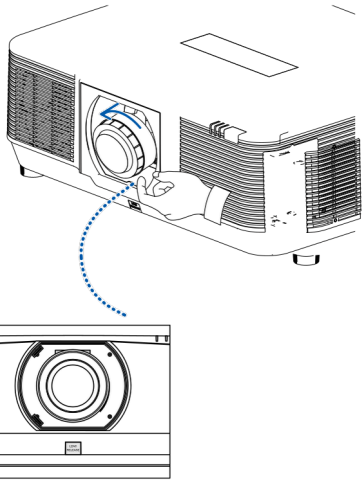
Remove the lens

Preparation:

1. Turn on the projector to display the image. 2. Press the Lens shift button on the remote control for 4 seconds or above, or press the menu
   button to select the Expand to act on Lens adjust.,then select Lens center option. Then then lens will be moved to the original position.
3. Turn off the main power switch and unplug the power cord.
4. Wait until the projector is cooled enough to handle.

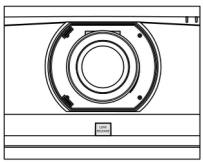
1. When the release button at the bottom of the lens mount on the front panel of the projector is fully pressed, turn the lens counterclock-wise.

- Lens release.



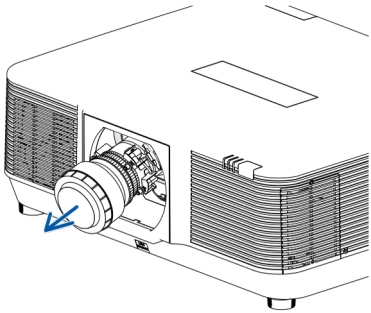
Note:

- If you cannot remove lens components even when you press the lens release button, please confirm the following:
  1. Sometimes the lens release key may be locked.In that case, rotate the lens completely to the right.The lens release lock will be released.



2. Slowly pull down the lens from the projector.

- After removing the lens,installthelenscover (front and back) that comes with the lens before storing the lens.
- If no lens is about to be installed on the projector, please install the dust cover attached to the projector.



- Do not touch or remove any other component except the lens and parts related to it. Otherwise, you may experience product failure, electric shock, fire, or other incidents.
- Make sure model of the lens is compatible with your projector before installing it.
- When replacing the optional lenses, it must be done by a professional.During the replacement process, pay attention to mechanical damage and thermal burns of the lens.
- For details on lens and its installation, please call local dealers.
- Be careful in removing the lens. Do not drop it.
- When replacing the optional lens, just for safety reasons, please be sure to cut off power to avoid electric shock fire and other safety accidents.

Optional lens specifications

For some common operations, it is recommended to use the remote control to complete.

Model#	LENS-111	LENS-112	LENS-113	LENS-114
Image				
Lens Type	Zoom Lens	Zoom Lens	Zoom Lens	Zoom Lens
Zoom/Focus	Manual	Motorized	Manual	Motorized
F#(Wide-Tele)	1.7-2.37	2.0-2.5	2.2-2.7	2.2-2.6
f(mm)	24.4-48.6	13.3-18.6	76.6-116.5	49.7-99.8
Throw ratio (16:10)	1.46-2.95	0.79-1.11	4.59-7.02	2.99-5.93
Zoom Ratio	2	1.4	1.52	2.0
Screen Size	40-500 inch	50-500 inch	60-500 inch	50-500 inch
(Optimal Performance Range)	(40-200 inch)	(80-200 inch)	(80-200 inch)	(80-200 inch)
Weight	approx.0.8kg	approx.1.63kg	approx.1.0kg	approx.1.8kg
Standard or Optional	Standard -Manual	Optional	Optional	Optional

WUXGA			LENS-111	LENS-112	LENS-113	LENS-114
10000lm	Boost	Wide	10000	8500	7900	8000
		Tele	7500	6700	6000	6300
	Normal	Wide	9000	7600	7100	7200
		Tele	6700	6000	5400	5600

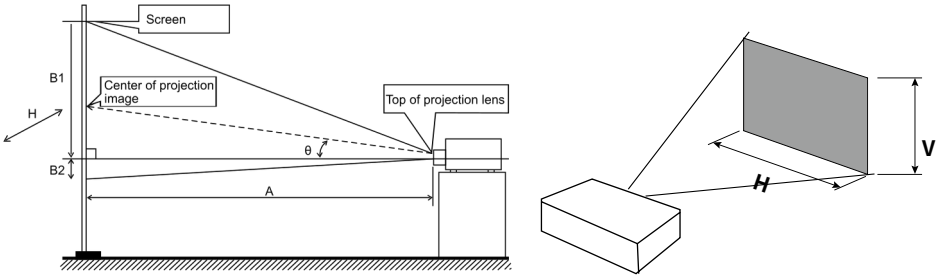
WUXGA			LENS-111	LENS-112	LENS-113	LENS-114
8000lm	Boost	Wide	8300	6900	6400	6500
		Tele	6100	5400	4900	5100
	Normal	Wide	7500	6300	5900	6000
		Tele	5600	5000	4500	4700

✓ **Note:**

- Projection lens non-standard accessories, if needed, please contact the distributor to purchase independently.

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.



LENS-111

16:10 perspective				
Screen size(Inch)	**H/m**	**V/m**	**Wide/ m**	**Tele/m**
40	0.862	0.538	1.232	2.509
50	1.077	0.673	1.552	3.148
60	1.292	0.808	1.873	3.788
70	1.508	0.942	2.193	4.428
80	1.723	1.077	2.514	5.068
90	1.939	1.212	2.834	5.707
100	2.154	1.346	3.155	6.347
120	2.585	1.615	3.796	7.626
150	3.231	2.019	4.757	9.546
200	4.308	2.692	6.359	12.744
250	5.385	3.365	7.962	15.943
300	6.462	4.039	9.564	19.141
350	7.539	4.712	11.167	22.340
400	8.616	5.385	12.769	25.538
450	9.693	6.058	14.371	28.737
500	10.770	6.731	15.974	31.936

16:9 perspective				
Screen size(Inch)	**H/m**	**V/m**	**Wide/ m**	**Tele/m**
40	0.886	0.498	1.266	2.578
50	1.107	0.623	1.595	3.236
60	1.328	0.747	1.925	3.893
70	1.550	0.872	2.254	4.551
80	1.771	0.996	2.583	5.208
90	1.992	1.121	2.913	5.866
100	2.214	1.245	3.242	6.523
120	2.657	1.494	3.901	7.838
150	3.321	1.868	4.889	9.810
200	4.428	2.491	6.536	13.098
250	5.535	3.113	8.183	16.385
300	6.641	3.736	9.830	19.672
350	7.748	4.358	11.476	22.960
400	8.855	4.981	13.123	26.247
450	9.962	5.604	14.770	29.534
500	11.069	6.226	16.417	32.822

4:3 perspective				
Screen size(Inch)	**H/m**	**V/m**	**Wide/ m**	**Tele/m**
40	0.813	0.610	1.395	2.841
50	1.016	0.762	1.758	3.566
60	1.219	0.914	2.121	4.290
70	1.422	1.067	2.484	5.015
80	1.626	1.219	2.847	5.739
90	1.829	1.372	3.210	6.464
100	2.032	1.524	3.573	7.188
120	2.438	1.829	4.299	8.637
150	3.048	2.286	5.387	10.810
200	4.064	3.048	7.202	14.433
250	5.080	3.810	9.017	18.055
300	6.096	4.572	10.831	21.678
350	7.112	5.334	12.646	25.300
400	8.128	6.096	14.461	28.922
450	9.144	6.858	16.276	32.545
500	10.160	7.620	18.090	36.167

Projection distance formula

WUXGA(16:10)	WIDE	Y	=	0.032	X	+	-0.050
	TELE			0.064			-0.050
16:9	WIDE	Y	=	0.033	X	+	-0.052
	TELE			0.066			-0.052
4:3	WIDE	Y	=	0.036	X	+	-0.057
	TELE			0.072			-0.057

X: Projection Screen Size（Unit: inch） Y: Projection Distance （Unit: m）

LENS-112

16:10 perspective				
Screen size(Inch)	**H/m**	**V/m**	**Wide/ m**	**Tele/m**
50	1.077	0.673	0.830	1.177
60	1.292	0.808	1.003	1.421
70	1.508	0.942	1.177	1.664
80	1.723	1.077	1.351	1.908
90	1.939	1.212	1.525	2.152
100	2.154	1.346	1.698	2.395
120	2.585	1.615	2.046	2.883
150	3.231	2.019	2.567	3.614
200	4.308	2.692	3.435	4.832
250	5.385	3.365	4.304	6.051
300	6.462	4.039	5.173	7.269
350	7.539	4.712	6.041	8.488
400	8.616	5.385	6.910	9.706
450	9.693	6.058	7.779	10.925
500	10.770	6.731	8.647	12.143

16:9 perspective				
Screen size(Inch)	**H/m**	**V/m**	**Wide/ m**	**Tele/m**
50	1.107	0.623	0.853	1.210
60	1.328	0.747	1.031	1.460
70	1.550	0.872	1.210	1.711
80	1.771	0.996	1.388	1.961
90	1.992	1.121	1.567	2.211
100	2.214	1.245	1.745	2.462
120	2.657	1.494	2.103	2.963
150	3.321	1.868	2.638	3.714
200	4.428	2.491	3.531	4.966
250	5.535	3.113	4.424	6.219
300	6.641	3.736	5.316	7.471
350	7.748	4.358	6.209	8.723
400	8.855	4.981	7.102	9.975
450	9.962	5.604	7.994	11.228
500	11.069	6.226	8.887	12.480

4:3 perspective				
Screen size(Inch)	**H/m**	**V/m**	**Wide/ m**	**Tele/m**
50	1.016	0.762	0.940	1.333
60	1.219	0.914	1.136	1.609
70	1.422	1.067	1.333	1.885
80	1.626	1.219	1.530	2.161
90	1.829	1.372	1.727	2.437
100	2.032	1.524	1.923	2.713
120	2.438	1.829	2.317	3.265
150	3.048	2.286	2.907	4.093
200	4.064	3.048	3.891	5.473
250	5.080	3.810	4.874	6.852
300	6.096	4.572	5.858	8.232
350	7.112	5.334	6.842	9.612
400	8.128	6.096	7.825	10.992
450	9.144	6.858	8.809	12.372
500	10.160	7.620	9.793	13.752

Projection distance formula

WUXGA(16:10)	WIDE	Y	=	0.017	X	+	-0.039
	TELE			0.024			-0.041
16:9	WIDE	Y	=	0.018	X	+	-0.040
	TELE			0.025			-0.043
4:3	WIDE	Y	=	0.020	X	+	-0.044
	TELE			0.028			-0.047

X: Projection Screen Size（Unit: inch） Y: Projection Distance （Unit: m）

LENS-113

16:10 perspective				
Screen size(Inch)	**H/m**	**V/m**	**Wide/ m**	**Tele/m**
60	1.292	0.808	5.855	9.001
70	1.508	0.942	6.864	10.534
80	1.723	1.077	7.872	12.066
90	1.939	1.212	8.880	13.599
100	2.154	1.346	9.888	15.131
120	2.585	1.615	11.905	18.196
150	3.231	2.019	14.929	22.794
200	4.308	2.692	19.970	30.456
250	5.385	3.365	25.011	38.119
300	6.462	4.039	30.052	45.781
350	7.539	4.712	35.093	53.444
400	8.616	5.385	40.134	61.106
450	9.693	6.058	45.175	68.769
500	10.770	6.731	50.216	76.431

16:9 perspective				
Screen size(Inch)	**H/m**	**V/m**	**Wide/ m**	**Tele/m**
60	1.328	0.747	6.018	9.251
70	1.550	0.872	7.054	10.826
80	1.771	0.996	8.090	12.401
90	1.992	1.121	9.126	13.976
100	2.214	1.245	10.163	15.551
120	2.657	1.494	12.235	18.701
150	3.321	1.868	15.343	23.426
200	4.428	2.491	20.524	31.301
250	5.535	3.113	25.705	39.176
300	6.641	3.736	30.886	47.051
350	7.748	4.358	36.067	54.927
400	8.855	4.981	41.248	62.802
450	9.962	5.604	46.429	70.677
500	11.069	6.226	51.610	78.552

4:3 perspective				
Screen size(Inch)	**H/m**	**V/m**	**Wide/ m**	**Tele/m**
60	1.219	0.914	6.631	10.194
70	1.422	1.067	7.773	11.929
80	1.626	1.219	8.915	13.665
90	1.829	1.372	10.057	15.401
100	2.032	1.524	11.198	17.136
120	2.438	1.829	13.482	20.607
150	3.048	2.286	16.907	25.814
200	4.064	3.048	22.616	34.492
250	5.080	3.810	28.325	43.169
300	6.096	4.572	34.034	51.847
350	7.112	5.334	39.743	60.525
400	8.128	6.096	45.452	69.203
450	9.144	6.858	51.161	77.881
500	10.160	7.620	56.870	86.558

Projection distance formula

WUXGA(16:10)	WIDE	Y	=	0.101	X	+	-0.194
	TELE			0.153			-0.194
16:9	WIDE	Y	=	0.104	X	+	-0.199
	TELE			0.158			-0.199
4:3	WIDE	Y	=	0.114	X	+	-0.219
	TELE			0.174			-0.220

X: Projection Screen Size（Unit: inch） Y : Projection Distance （Unit: m）

LENS-114

16:10 perspective				
Screen size(Inch)	**H/m**	**V/m**	**Wide/ m**	**Tele/m**
50	1.077	0.673	3.285	6.440
60	1.292	0.808	3.916	7.706
70	1.508	0.942	4.547	8.972
80	1.723	1.077	5.178	10.238
90	1.939	1.212	5.809	11.504
100	2.154	1.346	6.440	12.770
120	2.585	1.615	7.702	15.303
150	3.231	2.019	9.595	19.101
200	4.308	2.692	12.750	25.431
250	5.385	3.365	15.904	31.762
300	6.462	4.039	19.059	38.092
350	7.539	4.712	22.214	44.423
400	8.616	5.385	25.369	50.753
450	9.693	6.058	28.523	57.084
500	10.770	6.731	31.678	63.414

16:9 perspective				
Screen size(Inch)	**H/m**	**V/m**	**Wide/ m**	**Tele/m**
50	1.107	0.623	3.376	6.619
60	1.328	0.747	4.025	7.920
70	1.550	0.872	4.673	9.221
80	1.771	0.996	5.322	10.522
90	1.992	1.121	5.970	11.824
100	2.214	1.245	6.619	13.125
120	2.657	1.494	7.916	15.727
150	3.321	1.868	9.861	19.631
200	4.428	2.491	13.103	26.137
250	5.535	3.113	16.346	32.643
300	6.641	3.736	19.588	39.149
350	7.748	4.358	22.830	45.655
400	8.855	4.981	26.073	52.161
450	9.962	5.604	29.315	58.668
500	11.069	6.226	32.557	65.174

4:3 perspective				
Screen size(Inch)	**H/m**	**V/m**	**Wide/ m**	**Tele/m**
50	1.016	0.762	3.721	7.293
60	1.219	0.914	4.435	8.727
70	1.422	1.067	5.150	10.161
80	1.626	1.219	5.864	11.595
90	1.829	1.372	6.579	13.029
100	2.032	1.524	7.293	14.463
120	2.438	1.829	8.722	17.330
150	3.048	2.286	10.866	21.632
200	4.064	3.048	14.439	28.801
250	5.080	3.810	18.012	35.970
300	6.096	4.572	21.584	43.140
350	7.112	5.334	25.157	50.309
400	8.128	6.096	28.730	57.478
450	9.144	6.858	32.303	64.647
500	10.160	7.620	35.876	71.817

Projection distance formula

WUXGA(16:10)	WIDE	Y	=	0.063	X	+	0.130
	TELE			0.127			0.110
16:9	WIDE	Y	=	0.065	X	+	0.134
	TELE			0.130			0.113
4:3	WIDE	Y	=	0.071	X	+	0.148
	TELE			0.143			0.124

X: Projection Screen Size（Unit: inch） Y : Projection Distance （Unit: m）

Adjustment pad

1. Place the projector perpendicular to the screen.
2. 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 10mm, just show as below Image (2).
3. 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.

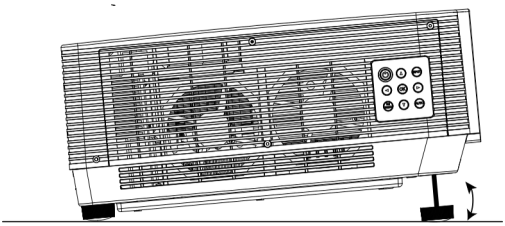


Image (1)

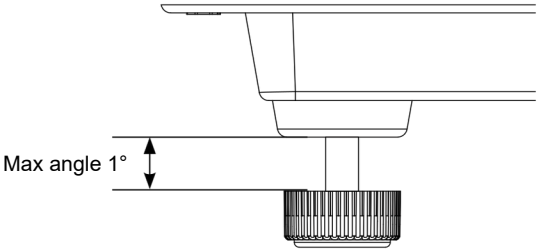


Image (2)

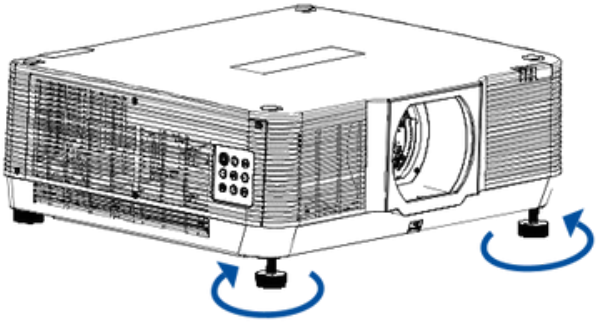
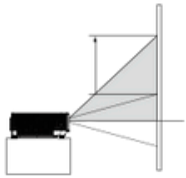
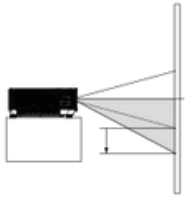
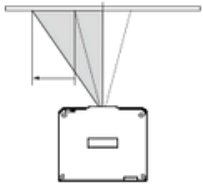
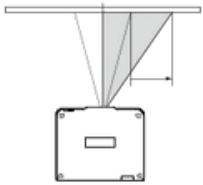
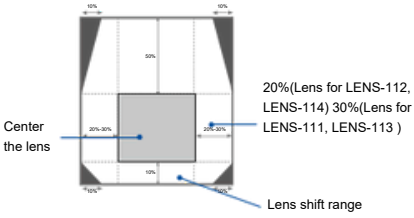


Image (3)

Lens shift adjustment

The electric or manual lens shift function may adjust your lens in all four directions.
This function enables easy image position adjustment.

The projection location of your image may be moved upward a distance up to 50% between the upper and lower range of the image.	Move lens to it top position 
The projection location of your image may be moved downward a distance up to 10% between the upper and lower range of the image.	Move lens to it bottom position 
The projection location of your image may be moved leftward a distance up to 20% (Lens for LENS-112, LENS-114) and 30%(Lens for LENS-111, LENS-113) of the width of the image.	Move lens to it leftmost position 
The projection location of your image may be moved rightward a distance up to 20% (Lens for LENS-112, LENS-114) and 30%(Lens for LENS-111, LENS-113) of the width of the image.	Move lens to it rightmost position 
Scope of lens shift adjustment (when the Llens move to the limit, the screen will be dark or shadow)	

* This table is measured with standard lens.
* When the setting of LENS SHIFT as the maximum position, the corner of projection image might be darker.

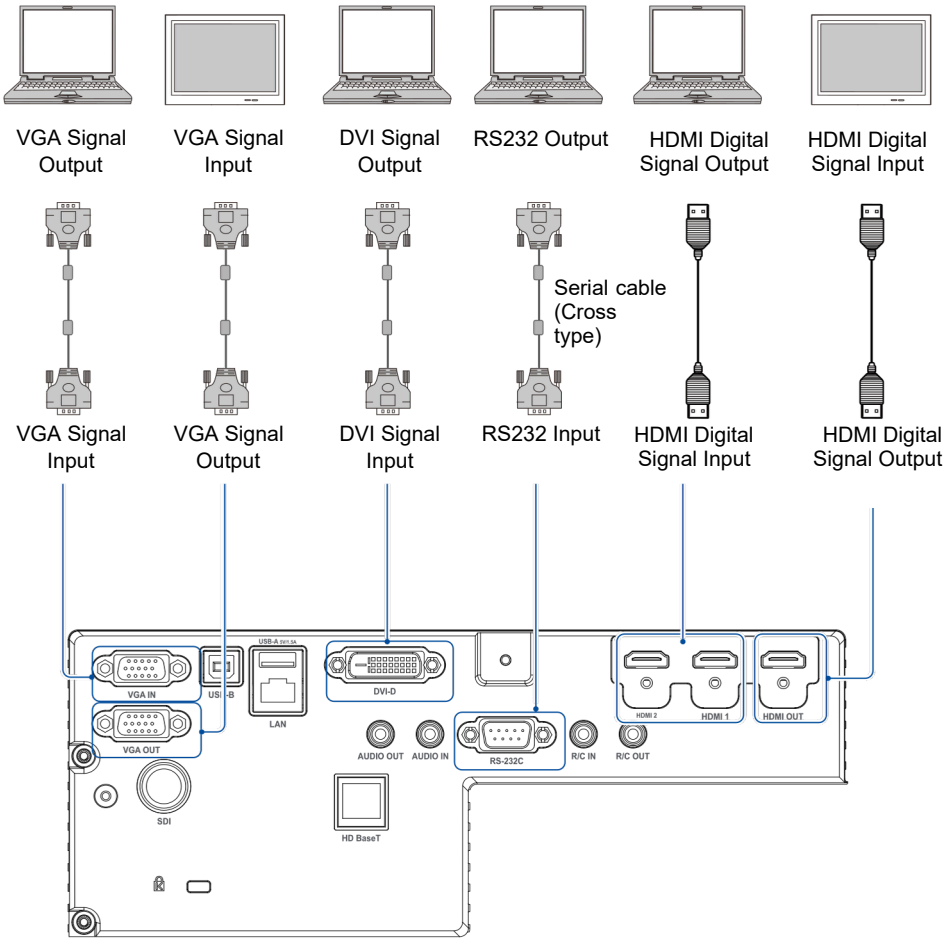
Connect to pc (Digital and Analog RGB)

Cables for connection:

- VGA cable*
- HDMI cable*

(* This cable is not included.)

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



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

Connect to Video equipment

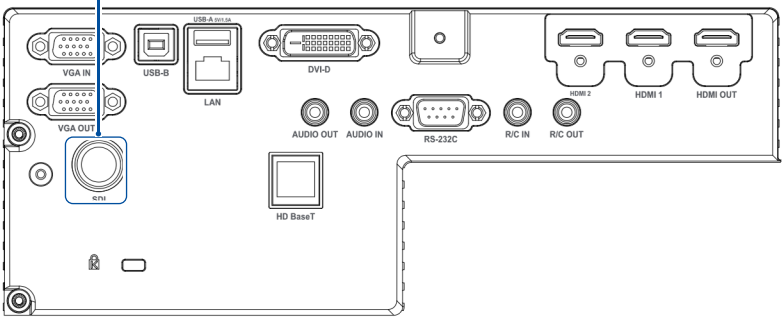
Cables for connection:

- BNC cable*

(* This cable is not included.)

SDI Signal Output

SDI Signal Input



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

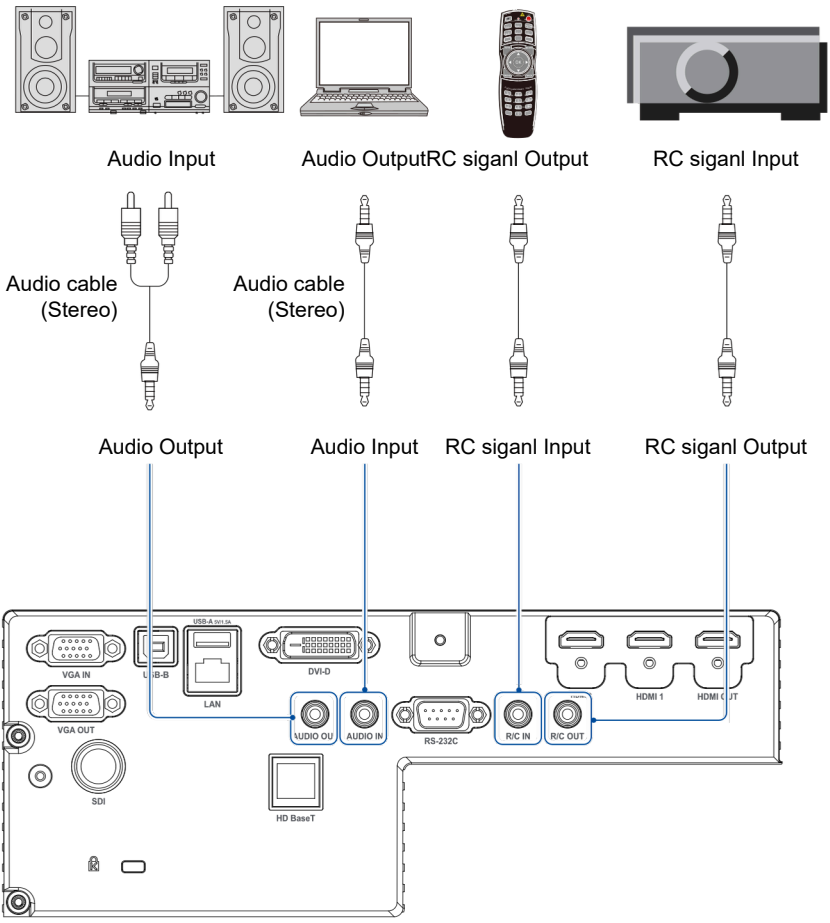
Connect to Audio equipment

Cables forconnection:

- Audio cable*

(* This cable is not included.)

External audio equipment



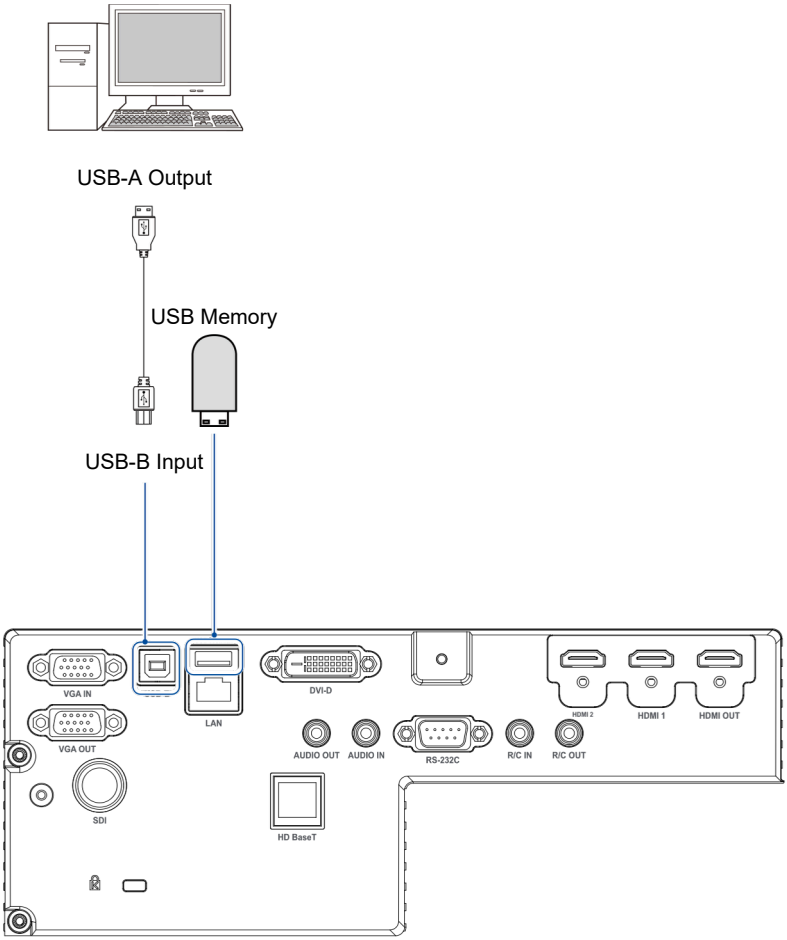
Unplug power cords of your projector and all external equipment before connecting any cable to them.

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

Cables for connection:

● USB-A or USB-B cable*

(* This cable is not included.)



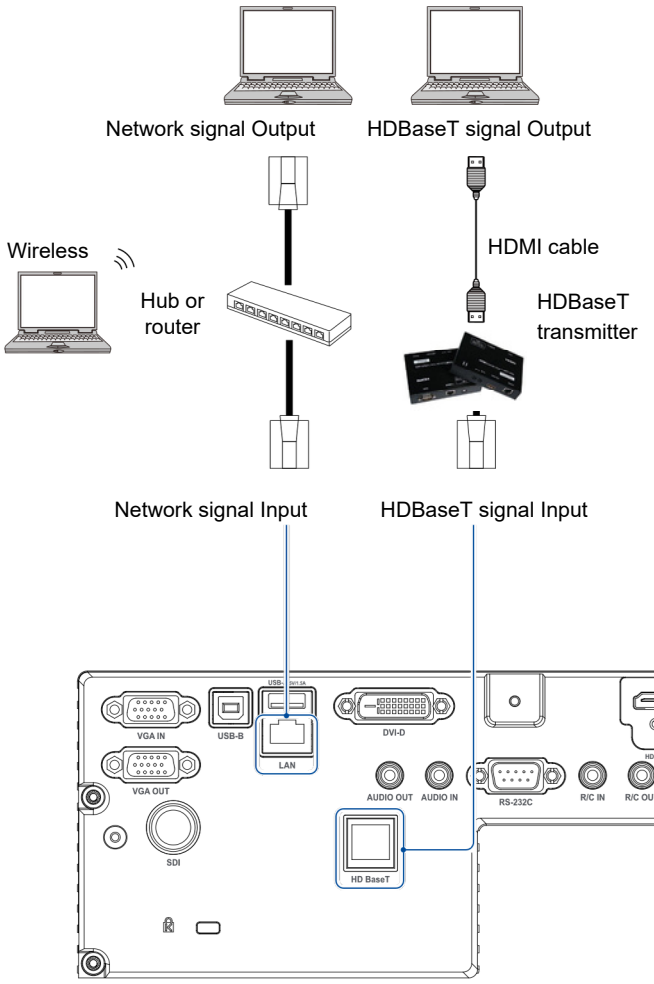
Unplug power cords of your projector and all external equipment before connecting any cable to them.

Connect to network(LAN or HDBaseT)

Cables for connection:

- Network cable*

(* This cable is not included.)



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

Connect the AC power cord

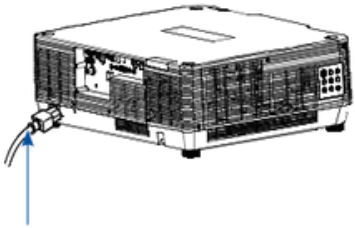
Standard voltage employed by your projector is AC 100-240V. It adapts to different input voltage automatically. Your projector employs single-phase power cord with neutral ground cable.

DO NOT use any other type of power cords or you may face the risks of electric shock. In case 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:

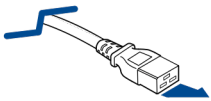
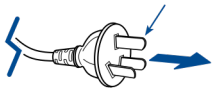
Keep your AC power socket close to your projector for easy plugging and unplugging.

✓ **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 ACgrid power and in standby mode.



Connect included AC power cord to your projector.

Precautions on 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.
In case 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	Grounding end  Connect to AC power socket

✓ **Note:**
- ●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.

Power on your projector

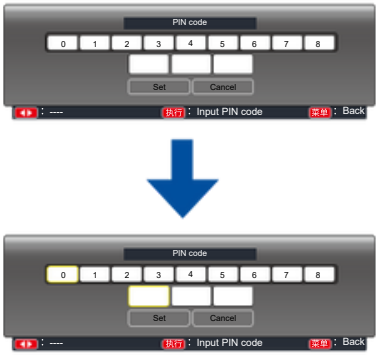
1.Connectallexternal equipment to your projector (e.g. computer or camera) before powering it on.

2. Connect AC power cord of your projector to an AC power socket. The Power indicator turns on in red.

3. Press the Power button on the top control panel or the remote controller.
The Power indicator lights in green and the cooling fan starts running.

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

✓ **Note:**
- In case the “Logo Select” option is set to OFF, then no welcome image will display in screen.
- You can do nothing but powering off your projector during the welcome image is displaying.



Enter password (PIN)
Press ▲▼ button to select a number, press ▶ button to enter it and move the cursor. The number you typed is displayed as “*”. To edit number you have entered, press ◀ to move the cursor to the number you want to change, press ▲▼ button to select the correct one.

Repeat this step to type in a 3-digit number.

Move the cursor to SET after you have typed the 3-digit number. Press the OK button and now you are ready to use your projector.

If the password is invalid, the password displayed as “***” will be in red. Please try again with a valid one.

Move the cursor to Set button,then press the OK button.

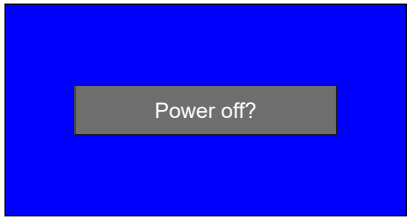
What is a password (PIN)?
Apassword(PIN) is an ID code for identifying people with knowledge about it to operate your projector. A password (PIN) setting may help preventing your projector from unauthorized use.

You 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 79 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 the Power button at the top control panel or the remote controller, the “Power off?” message displays.
2. Press the Power button again in 4 seconds after the “Power off?” message prompted to you. The POWER indicator flashes red while the cooling fan continues running. (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.



“Power off?” message disappears in 4 seconds.

✓ **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 70)
- 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 POWER indicator flashes or turns red, refer to the “Light indicator status ” for instructions. (Refer to page 113)
- 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 red.
- Unplug the power cord after your projector has been turned off. The fan stops running.

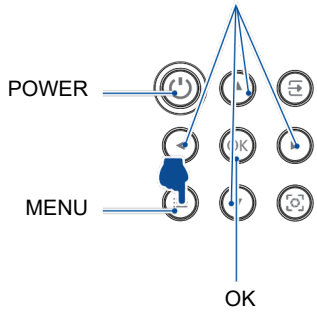
How to operate the OSD

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

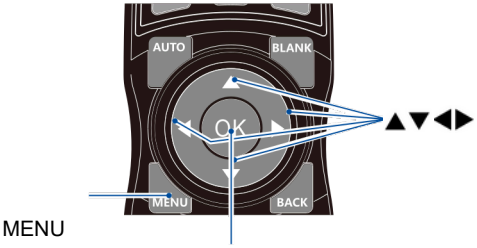
The menu has a multilayer structure. Each main menu is divided into several sub-level menus, then each submenus is divided into several submenus.

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

Top control panel ▲▼◀▶

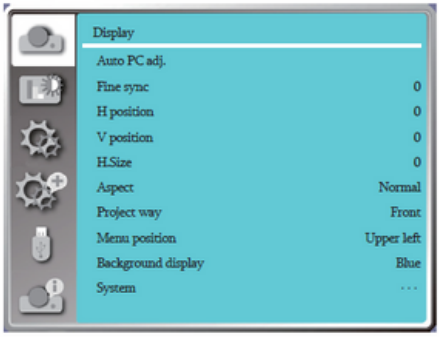


Remote controller

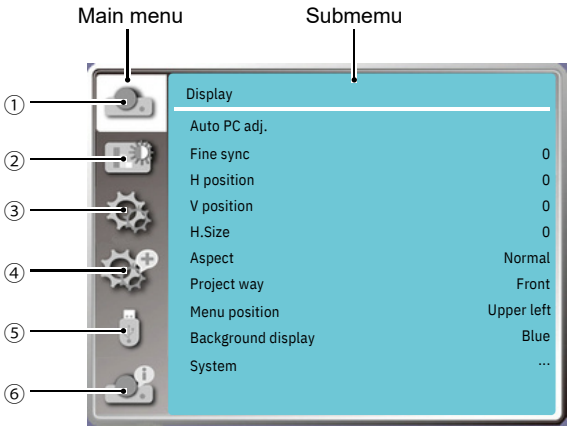


1. Press the MENU button on the top control panel or remote controller and the OSD displays.
2. Press ▲▼ button to act on or select one main menu item. Press ▶ button or OK button to enter a submenu.
3. Press ▲▼ button to select required sub-menu, then press OK button or button to set up or enter an option.
4. Press ▲▼ button to select settings or nav-igate options, then press OK button to act on the item and exit.
5. Press ◀ button or BACK button on remote controller 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, 16:9, 16:10 .
- 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, Colorboard, DICOM, Blackboard (green), User image.

- For VGA,HDMI 1 and HDMI 2 input, the available color adjust options : Contrast, Brightness, Color temp., White balance(Red, Green, Blue) and Sharpness.

3 Setting menu

Configuration of the basic function operation on the projector: On start, Standby mode, High land, Cooling fast , Key lock, Contrast optimization，Laser control，Remote Control and HDMI Setup.

4 Expand menu

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

5 Memory Viewer menu

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

6 Information menu

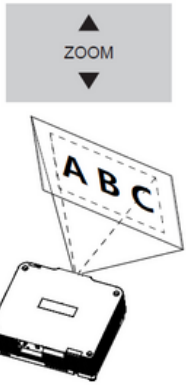
Display information about the projector.

Zoom function

1.Press the ZOOM button on the remote controller to make zoom adjustment. Or press the lens button on the control panel twice to adjust the zoom, and press the ▲▼ button to select "Expand". Then press OK or ▶ button to enter into "Lens adjustment" to select the Zoom function to make zoom adjustment.

2. Press ▲ button to zoom in.
Press ▼ button to zoom out.

Zoom / focus



Focus function

1.Press the FOCUS button on the remote controller to make focus adjustment. Or press the LENS button on the control panel once to adjust the zoom, and press the ◀ ▶ button to select "Expand". Then press OK or ▶ button to enter into "Lens adjust." to select the Focus function to make focus adjustment.

2. When the cursor is in the center of the screen menu, press ▲▼ button to focus on the periphery of the optical axis.(Image 1)

*The image 1 shows an example when the lens moves up. Focus at the bottom of the screen. When the lens is in the center, focus on the center of the screen.

3. Press ▲▼ button to focus on the edge area of the screen. During operation, the focal length around the optical axis will be maintained. (Image 2).

Lens Movement

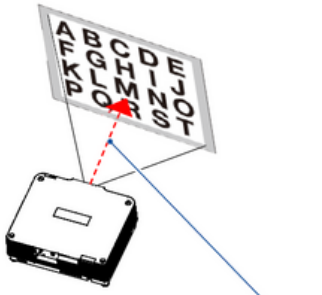


Image 1

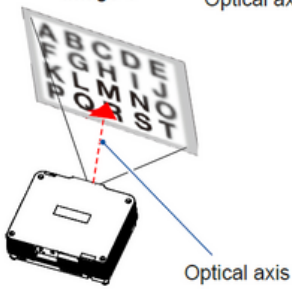


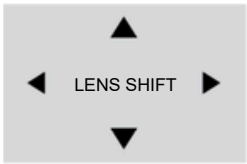
Image 2

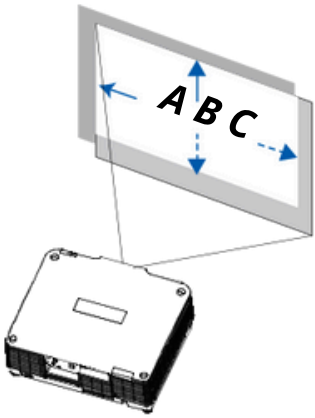
Lens shift function

1.Press the LENS SHIFT button on the remote control to make adjustment. Or press the LENS button on the control panel three times to make adjustment, and press the ▲▼ button to select "Expand". Then press OK or ▶ button to enter into "Lens shift adjustment" to select the Lens shift function to adjustt.

2. The screen will display the lens shift setting.
Press ▲▼◀ ▶ button to adjust the screen to the required position without distortion. The screen can moves up to 50%(Top), 10% (Bottom), or up to 20%.

Lens shift

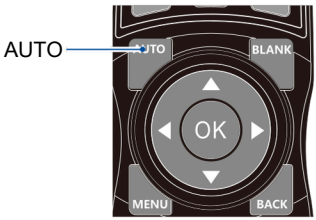




Auto setting function

Press the AUTO button on your remote control to auto execute settings given in the Auto Setup on the Expand menu (Including Auto PC adj.).

Remote control



Keystone adjustment

You may adjust keystone distortion of image in your projector with the V keystone adjustment. Follow steps below to adjust keystone distortion of projected image manually.

Press the KEYSTONE button on your remote controller. The keystone adjustment dialog box displays (including H/V Keystone, 4-Corner correction, 6-Corner correction, Curved correction, Grid Image Tune, Reset value), press ▲▼◀ ▶ button to adjust keystone distortion.

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 .

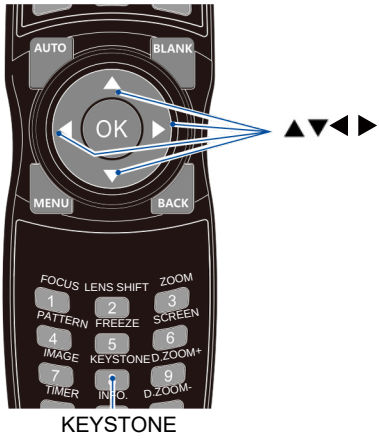
6-Corner correction.....Adjust the projected image when the projector is keystone distortion of four corners.

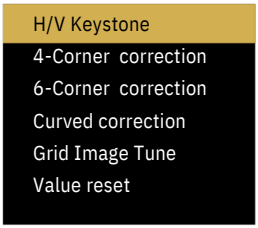
Curved correction.....Adjust the projected image when the projector linearity is uneven or the projected images bent vertically and horizontally.

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

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

Remote control





✓ **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 74-77.

Remote control operation

Use your remote control for common operations.

Screen size selection (SCREEN)
Press the SCREEN button on remote controller to select required screen size mode.

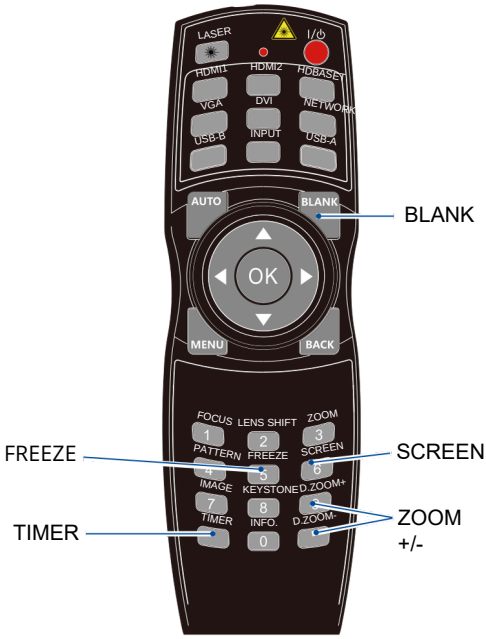
Digital Zoom (D.ZOOM+/-)
Press the D.ZOOM+/- button on remote controller to enter the Digital Zoom mode.
*Only for input as VGA, RGBHV, and the screen size setting as Normal or Wide.

Press ▲▼◀ ▶ button to move image.

Only when the image size is larger than the screen size in digital zoom mode, the image shift function can be effective. Timer (TIMER)
Press the TIMER button on remote controller. A timer animation (00:00) displays and starts timing in format of (00:00-59:59).
Press the TIMER button again to stop timing.
Press the TIMER button again to disable the timing function.

Timer display

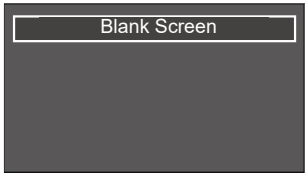
Remote controller



Freeze (FREEZE)
Press the FREEZE button on remote controller to freeze image on the screen. Press the FREEZE button or any button to cancel the freeze function.

Blank (BLANK)
Press the BLANK button on remote controller; a blank screen displays to replace existing image. Press the BLANK button or any other button to restore the image.
Press the BLANK to toggle switch your screen as shown below:

Normal → BLANK → .....

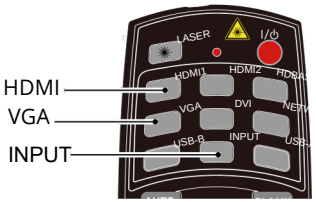


Input selection

Basic operation

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

Remote controller



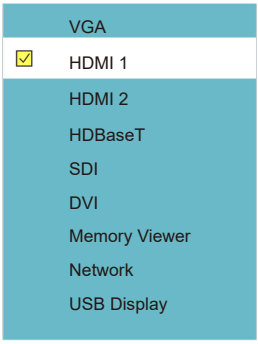
Menu operation

1 Press the INPUT button on remote controller to enter the Input menu.

2 Press ▲▼ button to select one of the following input: VGA, HDMI 1, HDMI 2, HDBaseT, SDI,DVI, Network, Memory viewer and USB Display, then press the OK button to select the input signal.

Top control Panel

Input menu



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.

HDBaseT

Select input HDBaseT if a device is connected to the HDBaseT terminal.

SDI

Select input SDI if a device is connected to the SDI terminal.

DVI

Select input DVI if a device is connected to the DVI-D terminal.

✓ **Note:**

- SDI is an optional function. When the projector does not have SDI function, the SDI option is not optional.

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.

✓ **Note:**

- ●If the ”Input source search“ option in the ”Automatic setting“ function is set to ”on", the VGA1, 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 ”Automatic computer adjustment“ option is set to ”on", press the AUTO button and the projector performs the automatic computer adjustment function.
- ● Whenthe signal source is “USB monitor”, "Memory Viewer“ and ”Network", the screen freezes, the aspect ratio, automatic setting, and the test diagram function are invalid.
- ● For further details about Memory Viewer function, please turn to page 100 - 102 .
- ● For further details about USB Display function, please turn to page 102 - 104 .

Auto pc adj.

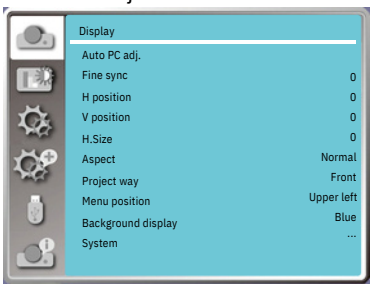
Select Auto PC Adj. function can adjusts Fine sync, H position, V position , H size to be compatible with the computer automatically.

Menu operation AUTO PC adj.
Press < MENU > button on the remote control or 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 [Auto PC adj.] menu.

2) Press <OK> button.

AUTO PC adj. menu



Fine sync

(Only for PC signal input)
Adjusting for optimal image
When the image flickers, 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.

✓ **Note:**
- ●The projector will perform Auto PC Adjustment function automatically,when its signal is input for the first time.
- ● Auto PC Adjustment function may fail to work if computer models is not compatible with the input signal .
- ● The user performs automatic computer adjustments on the screen with higher brightness.

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.

✓ **Note:**
- ●When using the digital zoom function to zoom in on the image, this function is not avaiable.

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.

Note:

- When using the digital zoom function to zoom in on the image, this function is not avaiable.

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 controller or on the top control panel to display the OSD menu. Press ▲▼ button to select the Display menu ,then
Press <OK> or ▶ button.

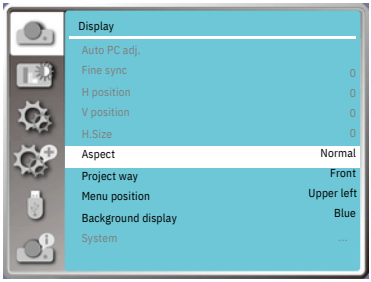
1) Press ▲▼ button to select [Aspect] menu.
2) press <OK> button.
3) Press ▲▼ button to select the required item.
Normal....Use the maximum size to roject while keeping the aspect of input signal's unchanged.

16:9.....Project images at the aspect of 16: 9.

16:10.....Project images to the maximum.

- Only for VGA and HDMI as signal input.

Aspect menu



✓ Note:

- When the projector is in digital focusing state, the aspect ratio is displayed as DZOOM IN.

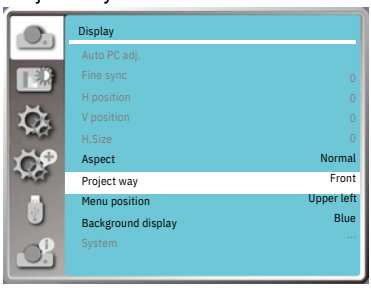
Project way

Select this function to set the projection mode. Please change the projection way, if the OSD display is inversed or reversed.
Press < MENU > button on the remote control or 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



Menu position

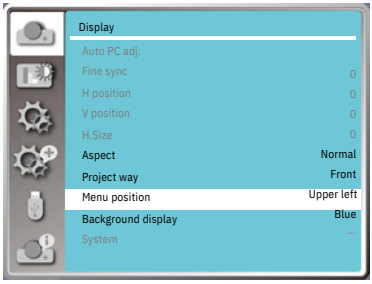
Select this function to set the Menu position . Press < MENU > button on the remote control or on the top control panel to display the OSD menu.

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 left .....The 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

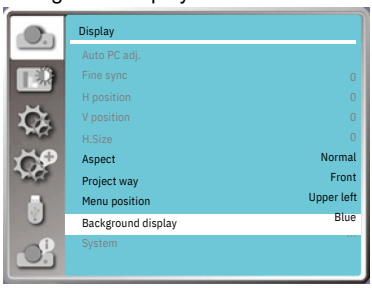


Background display

Select this function can adjusts background color. Press < MENU > button on the remote contro or 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 reqiured 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 input signal as Wifi Display, USB Display, Memory viewer and Network.

System

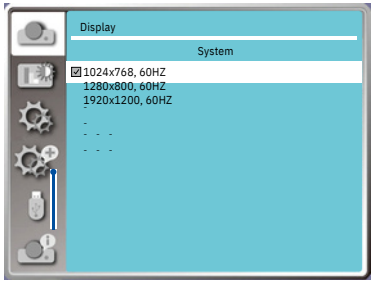
System selection

The scanning system and auto computer adjustment function may detect scores of signal format. If a PC is selected as the input signal source, your projector will detect and adapt to its signal format automatically. Correct image can be displayed without any setup operation.

Your projector will display one of the following:

(Display example) 1024 x768, 60Hz	Displays the name of the corresponding input signal. For details, please refer to See "Compatible computer screen".
Auto	If your projector failed to identify signals not shown in the signals format table, the “Auto” message will display in the System Signal Format menu. The Auto PC Adjusting function will make necessary adjustment to your projector to project valid images. If images are displayed incorrectly, adjust it manually.
-----	No PC signals detected. Check the connection between PC and your projector.

Computer system menu



The selected system displays in the PC system menu.

Note:
The computer system menu will be disabled once HDMI 1, HDMI 2, Memory Viewer, Network, USB Display has been selected.

Select the computer system manually

1 Press the MENU button on remote controller or on the top control panel and the OSD displays. Press ◀▶ button to point to the Input icon, press ▲▼ button or OK button and the Input menu displays.

2 Press ▲▼ button to select System Signal Format, then press OK button.

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

✓ **Note:**
- Your projector may save data generated by the Auto PC Adjust.function.

RGB input signal

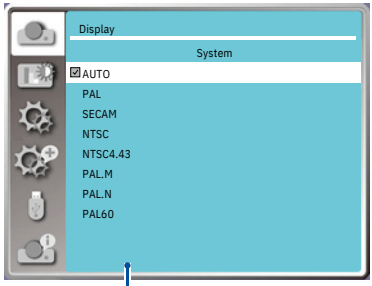
1024x768 60HZ, etc:display the compatible name input signal name.
Auto: When projector has no compatible input signal with one from connected PC ,the PC can adjust automatically to run and Auto appear on the system. If the image is not projected out correctly, please adjust it to match your computer manually.
- - - -: No signal input come from PC. Please check the connections.

Video input signal

Auto: When projector select the input signal color system automatically. Set [PAL-M] or [PAL-N] manually .

[PAL]/[SECAM]/[NTSC]/[NTSC4.43]/[PAL-M]/[PAL-N]/[PAL60]:When projector can not display images correctly in [Auto], please set input signal color system manually.

Computer system menu



Video displays in the PC system menu.

Select Color Adjust to set the image mode and adjust the quality of the projected image

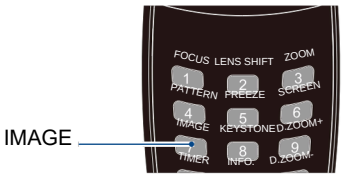
Image mode

▲▼

Direct operation

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

Remote control



Menu operation

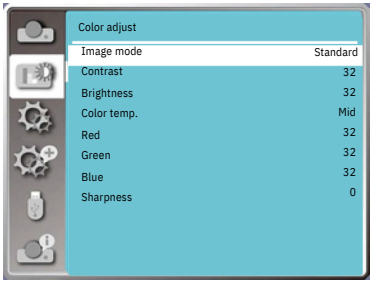
Press < MENU > button on the remote control or on the top control panel to display the OSD menu. Press ▲▼ button to select the Color adjust menu ,then press <OK> or ▶ button.

1) Press ▲▼button to select [Iamge mode] menu.

2) Press <OK> button.

3) Press ▲▼ button to select required item.

Image mode (For PC)



Dynamic
An image mode suitable for viewing in bright room.

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

DICOM
A highly clear X-ray image is reproduced. Digital radiographs with excellent detail and clarity for medical training, presentations and conferences.
* For DICOM SIM mode, this product is not a medical device and cannot be used in daily medical diagnosis.

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
Default image mode set by users in the Image Adjust menu.

Color adjust(for PC.)

Press < MENU > button on the remote control or 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 reqiured item .

2) Press <OK> button.

3) Press ▲▼ button to adjust setpoint .

Contrast

Press ▼ button to decrease contrast, range from 0 - +63.
press ▲ button to increase contrast, range from 0 - +63.

Brightness

Press▼ button to decrease brightness, range from 0 - +63.
press ▲ button to increase brightness, range from 0 - +63.

Color temp.
Press ▲▼button to select required color temperature (Low, Mid. and High)

High temp: Become blue gradually.
Mid temp: Suitable natural color.
Low temp: Become red gradually.

Red

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

Green

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

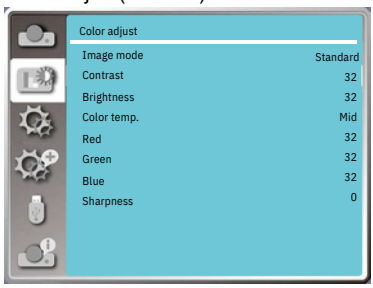
Blue

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

Sharpness

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

Color adjust(For PC)



✓ **Note:**
- After adjusting [red], [green], or [blue], [color temperature] will change to [user].

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

Menu operation

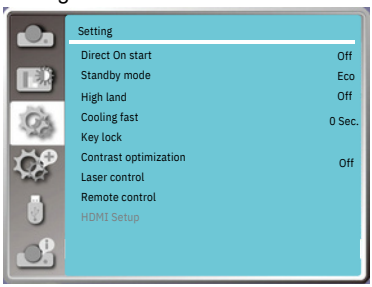
Press < MENU>button on the remote control or on the top control panel to display the OSD menu. Press ▲▼ button to select the Setting menu, then press <OK> or ▶ button.

1) Press ▲▼ button to select reqiured item.

2) Press <OK> button.

3) Press ▲▼ button to set options.

Setting menu



Direct on start

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

1) Press ▲▼ button to select [On start] menu.

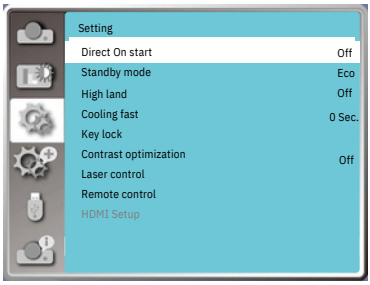
2) Press <OK> button.

3) Press ▲▼ button to select reqiured item.

Off..... Get into Standby mode.

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

Direct On start



Standby mode

Set power consumption in standby mode,no matter whenever your projector is operated through network

1) Press ▲▼ button to select [Standby mode] menu.

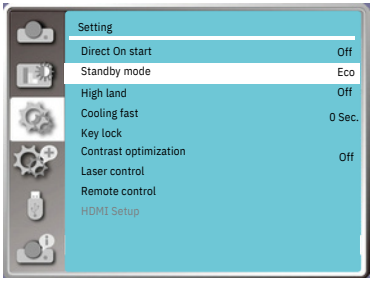
2) Press <OK> button.

3) Press ▲▼ button to adjust levels.

ECO mode.....Some function will be disabled once your projector is in ECO. standby mode to reduce power consumption. Under network standby, Network and RS-232C serial communication will be unavailable except the POWER ON command during that mode.

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

Standby mode



Elevated Altitude

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.

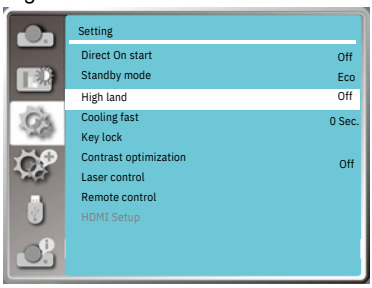
2) Press <OK> button.

3) Press ▲▼ button to select required menu.

Off..... When using a projector below 1700 m above sea level.

On.....When using the projector between 1700 m ~3650m above sea level.

High land



✓ **Note:**

- When using the projector below 1700 m above sea level, set it to [off]. When using the projector between 1700 m and 3650 m above sea level, set it to [on]. Otherwise, it will shorten the life of the internal components and cause failure.
- Do not use the projector at an altitude of 3650m and above, otherwise it will shorten the life of the internal components and cause failure.
- When set to [on], the fan noise will become louder and the fan speed will increase.

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.

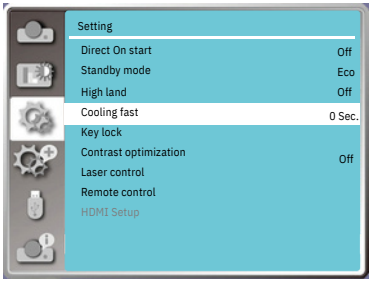
3) Press ▲▼ button to switch required menu.

Normal.....Running in normalway.

30 seconds.....Running faster than in normal mode with shorter time but aloudersound.

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

Cooling fast



Key lock

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

1) Press ▲▼ button toselect [Key lock] menu.

2) Press <OK> button.

3) Press ▲▼ button toswitch required menu.

Off.....The control panel or remote control keypad are effective.

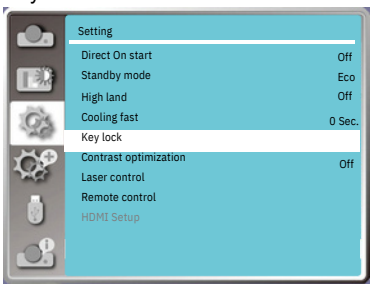
Projector.....Control panel keypad is invalid.

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

✓ **Note:**

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

Key lock



Contrast optimization

Select this function to optimize and compensate signal Contrast optimization automatically on the basis of the image, to get the best contrast image.

1) Press button to select [Contrast optimization] menu.

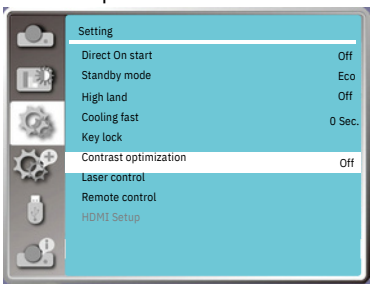
2) press <OK> button.

3) Press button to adjust leves.

Off.....No optimization.

on.....Optimize contrast.

Contrast optimization



Laser control

Change light source brightness according to the environment and aim your projector is operating.

1) Press ▲▼ button to select [Laser control] menu.

2) Press <OK> button.

3) Press ▲▼ button to switch required menu.

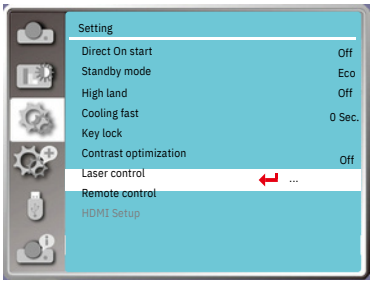
Light source mode:

Adjust the energy-saving settings and brightness of the projector in the screen projection.

Normal.....Normal brightness.

ECO.1/ECO.2.....Lower the brightness and reduce

Laser control



energy consumption, thus prolonging the light source service life.
Boost.....Enhance brightness.

Laser adjust: Mainly used to fine-tune the brightness of the projector.The adjustable range is 50%-100%. When set to 100%, it is equivalent to the brightness value of normal mode.

✓ **Note:**
- The laser adjust function is only available when the laser mode is in the normal mode state, and the ashing is not available in other states.

Remote control

Select this function to prevent the interference from the remote control, when multiple projectors or video devices are operated at the same time.

Press < MENU > button on the remote controller 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 [Remote Control] menu.

2) Press <OK> button.

3) Press ▲▼ button to switch required item.
- The projector provides ten different remote control code: Code 0 ~ Code 9.
- Code 0: when users use the unspecified ID number to control the projector.
- Code 1 ~ Code 9: when using the specified ID number to control the individual projectors.

4) Press <OK> button.

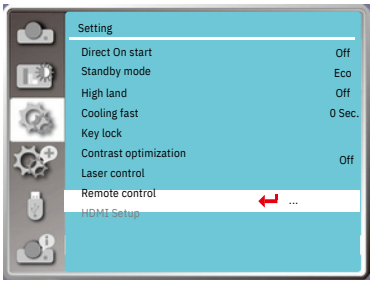
Select this function to prevent one remote controller from interfering multiple projectors or Video equipment.

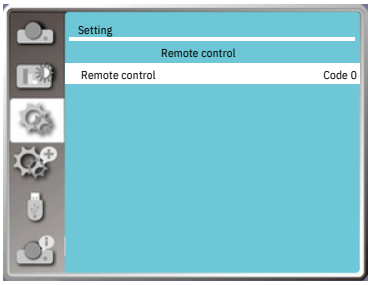
Your projector comes with 10 remote control code (0-9) with default code at “0”and the other code at "1"-"9".

Your projector and the remote control must be paired with the same code. For example: For a projector set to be operated by code 7, then the remote controller for controlling it needs be set to code 7 as well.

Change the code on the remote control: press and hold the OK key and one of the number keys (0-9) on the remote control for more than 5 seconds to switch the code. When the light on the remote control starts to flash, the code is set successfully.

Remote control





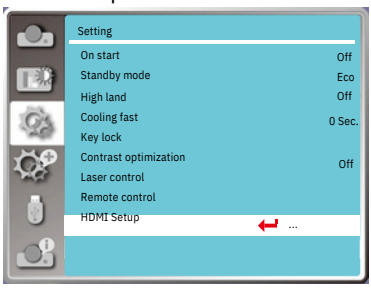
HDMI setup

When the external device is connected to the HDMI terminal of the projector, and the images can not be projected normally, please switch on the Image setting. If the sound can not be output normally, please switch on 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



Image

[64-940]/ [0-1023]	Under non-standard signals, if the image is abnormal, please switch manually until the image is normal .

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

Sound

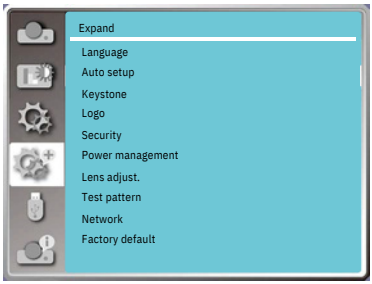
[HDMI]	When connect to the HDMI cable to transmit images and audio, users do not need connect to audio signal separately.
[Computer]	When the output of an external device (such as a computer) is connected to the HDMI terminal using a conversion or similar cable, the audio signal will be output based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

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

Menu operation
Press < MENU> button on the remote control or 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 reqiured item.
2) Press <OK> button.
3) Press ▲▼ button to set options.
4) Press <OK> button.

Expand menu



Language

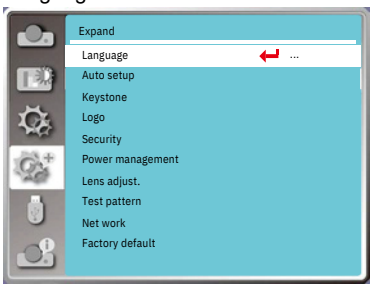
Users can selected the language displayed on the screen .

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

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

Your projector comes with multiple language support. You may select required one from them,such as:English, German, French, Italian, Spanish, Polish, Swedish, Dutch, Portuguese, Japanese, Simplified Chinese, traditional Chinese, Korean, Russian,Arabic, Turkey, Finland, Norway, Denmark, Indonesia, Hungary, Czech Republic, Kazakhstan, Vietnamese, Thai, Farsi, Romanian.

Language



Auto setup

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.

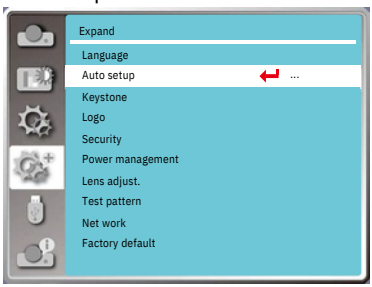
2) Press <OK> button.

3) Press ▲▼ button to select required items.

Input search : Select this function to detect the signal, then project images and input signals automatically .

Auto PC adj. : Select this function to adjust [Fine sync], [H Position], [V Position] and [H Size] automatically, when projector input analog signals.

Auto setup



✓ **Note:**

- When “Input source search” is set to “on” in the automatic settings, the projector will perform an automatic search function when it is turned on.
- When the automatic computer body is adjusted to “off”, the AUTO button of the remote control is not available.
- When automatic search is selected for input source search, the "USB-A“, ”Network“ and ”USB display" signal channels cannot perform automatic search functions.
- The input search function does not support signal input from BNC to VGA.

Keystone

Select this function to store or reset the Keystone or some related setting after unpluging the AC power. Press < MENU > button on the remote controller or on the top control panel to display the OSD menu. Press ▲▼ button to select the Expand menu, then press <OK> or ▶ button to enter.

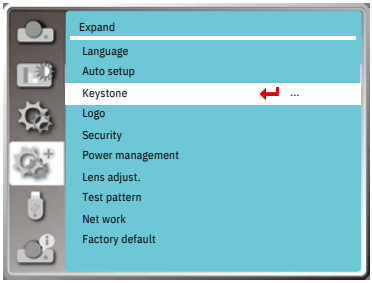
1) Press ▲▼ button to select [Keystone] menu.

2) Press <OK> button.

3) Press ▲▼ button to select required item.

4) Press <OK> button.

Keystone



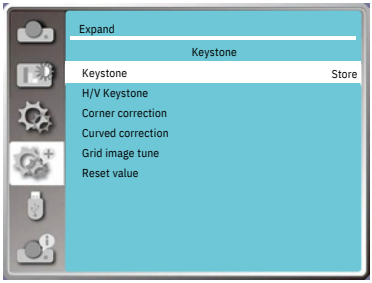
Keystone

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

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

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

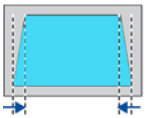
Keystone sub-menu



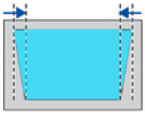
H/V Keystone

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

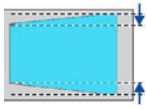
Press ▲ button to reduce upper width



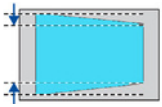
Press ▼ button to reduce bottom width



Press ◀ button to reduce left width



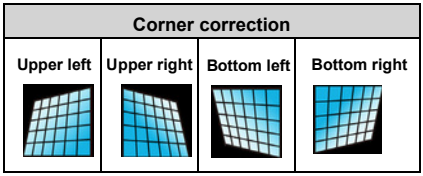
Press ▶ button to reduce right width



4-Corner correction

Select thisfunctionto 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:



✓ **Note:**

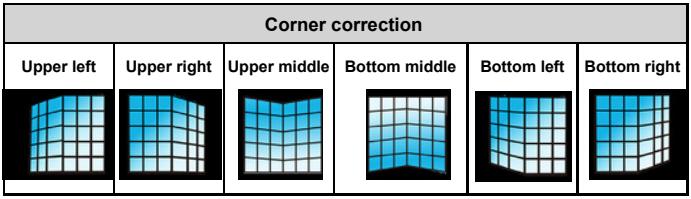
- White arrow indicates no correction.
- Red arrow indicates Keystone direction .
- The arrow disappears when the correction come to the maximum.

6-Corner correction

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

Press ▲▼◀▶ button to keystone at six corners of the screen.

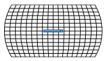
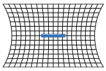
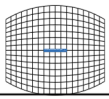
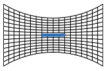
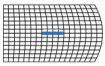
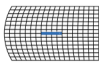
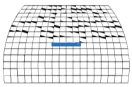
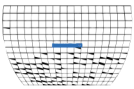
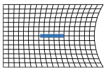
The four corners are looped in sequence shown below:

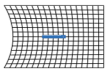
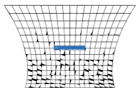
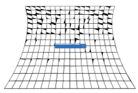
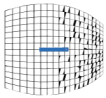
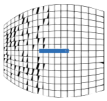
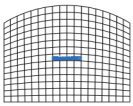
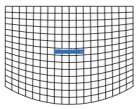
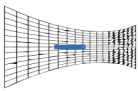
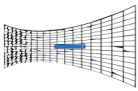


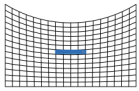
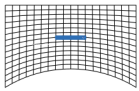
Curved correction

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 lins on the left. Expand the top an and bottom while maintaining the central area	
	Press ▶	Correct the vertical lins on the right. Expand the top an 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 cen- tral and upper regions.	
	Press ▲	Correct vertical lines on both sides. Expand the upper corner while keeping the central and lower regions unchanged.	

✓ **Note:**

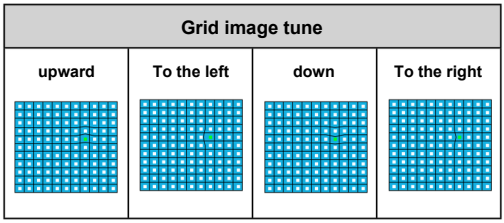
- After adjusting values about H/V Keystone , if users adjust Conner correction, values about H/V Keystone will be reset . And after adjusting values about Conner correction, if users adjust about H/V Keystone, values about Conner correction will be reset also.
- Curved correction X compensation and Curved correction Y compensation can not be adjusted individually. Adjust Curved correction X compensation and Curved correction Y compensation after adjusting the X/Y Curved correction.
- Maximum Keystone range up to ±30° vertically and ±30° horizontally. However, the image quality will deteriorate, and becoe more difficult to focus. Install the projector with the minimal correction value.
- The screen size will be changed with various H/V Keystone adjustments .
- Keystone may influence image aspect .
- The Aspect of the image size may vary just for lens shift.

Grid image tune

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.



Reset value

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

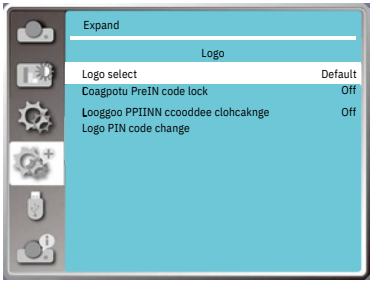
1) Press ▲▼ button to select [Reset value] option.

2) Press <OK> button.

- Release Keystone mode.

Logo

Logo menu



Logo (including Logo and Logo PIN Code lock setup)
You may use this function to select Logo screen, Logo PIN Code lock, change power on password, and set up default logo screen.

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

Logo Select

Select this to set up the logo screen when power on your projector:
Normal....Display factory default logo screen.
Off.....Display countdown logo screen.
User..... ..Display capture logo screen.

Capture

Capture the projected image for use as a startup screen or during presentation interval.. Upon capturing the projected image, press ok button, then a confirmation box appears, Select Yes to capture it . After capturing the projected images,go to "select a logo" , and set it to ”User”. Then, the captured image is displayed when the projector is turned on next time.

✓ **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.

Logo PIN code lock

This function helps preventing unauthorized personnel from changing the Logo screen.
Off.....The 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 Passcode protection, press OK key, and the Logo Passcode change popup dialog box prompts. Follow stepsbelow to enter a logo screen password.

- Press arrow ◀▶ button to select a number, then press OK button to enter it and move the cursor.The number you typed is displayed as “ * ”. To edit number you have entered, press MENU button to move the cursor to the number you want to change, press ▲▼ button to select the correct one.
- Repeat this step to type in a 3-digit number.Move the cursor to SET after you have typed the 3-digit number. Press OK button.
- If the password is invalid, the password displayed as “ *** ” will be in red. Please try again with a valid one.
- After you have entered valid logo screen Passcode, you may press ◀▶ button to toggle switch Off and On.

Logo PN code change

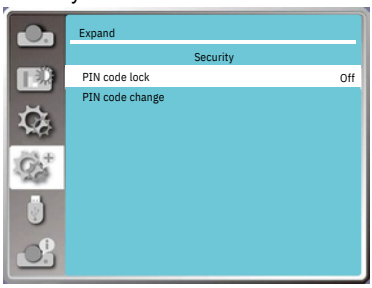
You may change the Logo Passcode to any 3-digit number you like. Press OK key to select Logo Passcode change. The Logo Passcode change dialog box prompts, press arrow ◀▶button to give a valid new code. The New Logo Passcode dialog box prompts. Set up a new Logo Passcode, check contentscontained in the dialog box, select Yes and the new password is set now. Please remember your new password and keep it safe.

Security

Set a password to lock the control panel or remote controller keypad to prevent unauthorized personnel from operating your projector. Once the projector is on, the [Enter Logo Password] screen will be displayed.

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

Security menu



Logo PIN Code lock

LOGO PIN Code lock This function helps preventing unauthorized personnel from changing the Logo screen.
Off.....The Logo screen may be changed with the Logo menu.
On.....The [Logo Password] screen will appear when the projector is on.If you want to change the PIN Code Lock or password (for three digits), you must enter the password. The factory default password is "111."

Reset password

- You can change the Passcode. Click the [OK] button and select [Change Passcode]. When the [Passcode] dialog box is displayed, press the [◀▶] button to enter a valid Passcode, and select [Set] to display the [New Passcode] dialog box. Set a new Passcode, confirm the contents in the dialog box, and select Set to set a new Passcode.
- The number you typed is displayed as " * ". To edit number you have entered, press MENU button to move the cursor to the number you want to change, press ◀▶ button to select the correct one.
- Repeat this step to type in a 3-digit number.
- Enter a three-digit number, move the cursor to "set" . Press the OK button, you can start to operate the projector.
- If the Passcode is invalid, the Passcode displayed as " *** " will be in red. Please try again with a valid one.
- Please remember your new password and keep it safe.

Logo PIN Code Change

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

Press OK key to select Logo PIN Code change.
The Logo PIN Code change dialog box prompts, press arrow button to give a valid new code.
The New Logo PIN Code dialog box prompts. Set up a new Logo PIN Code, check contents contained in the dialog box, select Set and the new password is set now.

Please remember your new password and keep it safe. You cannot change the Logo PIN Code again if you forgot the password you have set.

To Cancel the Passcode

(1)While simultaneously pressing the [POWER] button and [OK] button on the main unit, plug the power cord into the main unit.After a while keep pressing the button, the pass code input screen appears. Enter "111".
(2) Select OSD menu security >> passcode >> "on". As the input screen appears again, enter the default value (111) and set the passcode to "off" or set a new pass code.

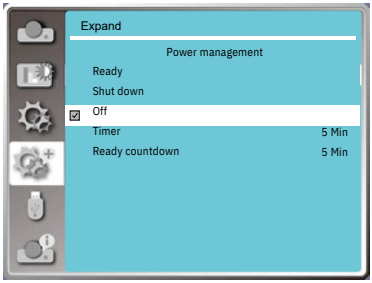
✓ **Note:**
- After changing the Logo PIN Code to a new number, please remember it and keep it safe. The Logo PIN Code cannot be changed again if the new password is lost or forgotten.

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.

Power management menu



Ready.....The POWER light indicator flashes green when the lamp is fully cooled down. The light source turns on again if an input signal is connected or any key (except the power button) on the side panel and remote controller is pressed during this period of time.

Power Off.....The projector shut down after the light source is fully cooled down.

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

Timer.....Once the input signal is interrupted and no keys has been pressed for 30 seconds afterwards, the “No signal” message displays in the timer. The timer counts down until the light source turns off. Press arrow key to set up the timer in range of 1~30 minutes.

Ready Countdown...Set the interval from ready mode change to standby mode (0 to 30 minutes) automatically. When it is set it to zero, the projector will never change automatically. Press the Power key to change your projector into standby mode and any other key to power on.

Power management

Remaining time before the light source powers off.

✓ **Note:**
- Factory default for standby time: 5 minutes. Count down for ready mode: 5 minutes.

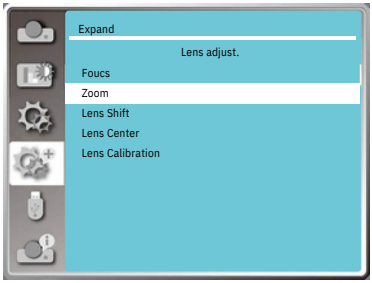
Lens adjustment

Set this function to adjust the lens, so as to adjust its size and clarity of the projected image to achieve the best projection effect..

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

Zoom.....Zoom in or zoom out on the projected image.
Focus.....Adjust the focal length of the projected image to make it clear or blurred.
Lens shift .....You can move the projection image to the left, right, up and down through the electric or manual lens movement. This feature allows users to easily reposition projected images.
Lens center..... Adjust the lens to the default center position.
Lens calibration..... Calibrate projection lens.

Lens adjust. menu



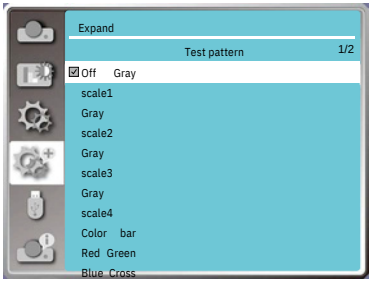
Test pattern

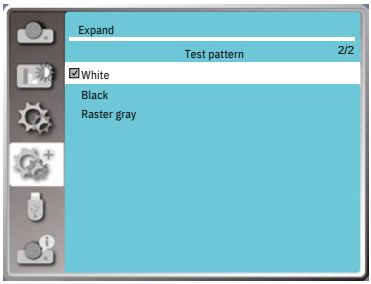
Select this function todisplay the projector's built-in test pattern. Location, size, and other factors cannot be reflected in the test pattern. Please make sure to display the input signal before performing various adjustments.

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

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

Preparation

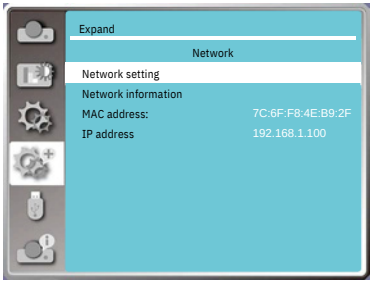
1) Required equipment: Projector, computer, network cable
2) Connection:
   Connect your projector to a router or switch in the LAN with normal or jumper network cable. In case a normal network cable failed to connect successfully, use a jumper cable instead.
3) Turn on the computer. The LAN port on computer and projector are flashing after power on the projector.

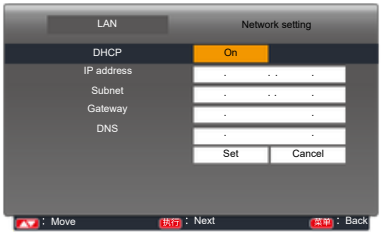
Operation steps

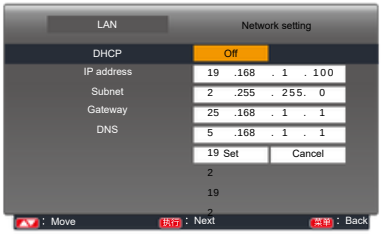
1) Power on your projector.
2) Acquire the IP address, with DHCP set to on and auto IP allocation set to On. (You may set DHCP to Off and set up IP address manually if you are somehow familiar with networking.)
3) Enter the network setup menu
   (1) Press MENU button on remote controller or top of the control panel, press ▲▼ button to select network icon.
   (2) Press ▲▼ button select network settings and press OK button to enter.
   MAC address.....Display the MAC address of wired network.
   IP address.....Display the IP address of wired network.
   (3) 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 performing "factory settings", except for the user's boot screen selection, boot screen password lock, boot screen password lock, and light source usage time, all setting values will be returned to the factory settings.
- When the confirmation screen is displayed, pressing the MENU key will cancel the “factory settings”.

Memory Viewer

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.
4) Press <OK> button.

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 or ▶ > 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.

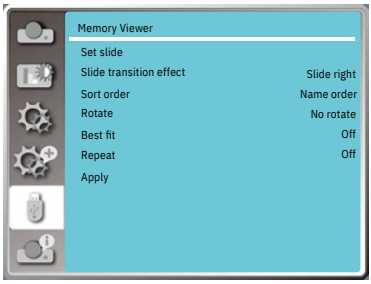
Expand order.....Sort by expand names of file or folder.

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 rotate .....Rotation 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

Used only when playing slides.

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

Info.

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

Menu operation

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

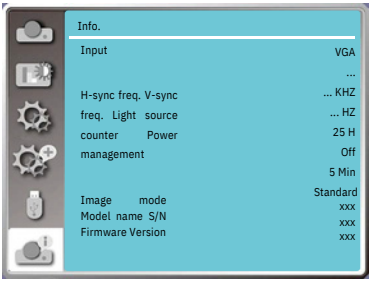
Light source usage time.....Displays the usage time of the light source.

Model.....Displays the model name.

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

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

Info. menu



Network control operation

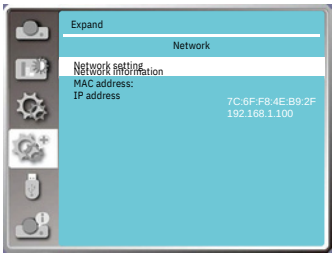
Function: This function is designed to remote controller computer in the same LAN.

Preparation

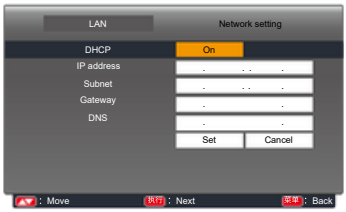
1. Required equipment: Projector, computer, network cable
2. Connection:
   Connect your projector to a router or switch in the LAN with normal or jumper network cable. In case a normal network cable failed to connect successfully, use a jumper cable instead.
3. Turn on the computer. The LAN port on 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

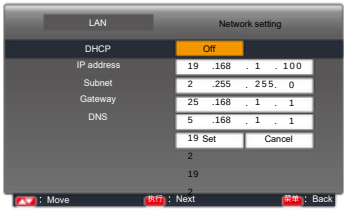


(1) Press MENU button on remote controller or top of the control panel, press ▲▼ button to select network icon.



(2) Press ENTER button or ▶ button and the network menu displays.

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



(4) Press ▲▼ button to set DHCP On and press OK button to confirm.

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

✓ Note:

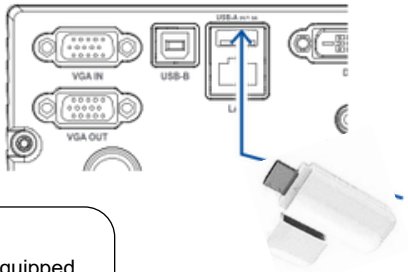
- If you are using the wireless network connection, please check the SSID / ESSID and wireless IP address in the Network Setting status , and write down the information.

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. Inset the supplied WIFI dongle into the USB-A port.
   ● For this function, users need to purchase the WIFI dongle separately.



✓ **Note:**
● This projector is not equipped with a wifi dongle, users need to purchase it separately.

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

Enter through a Web browser

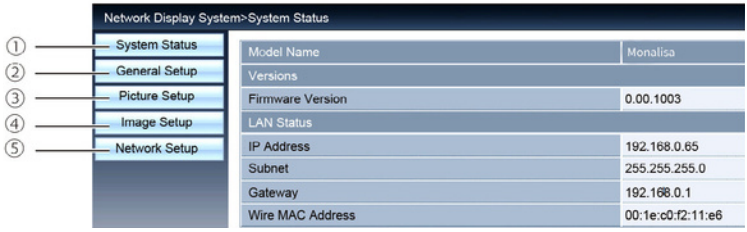
1) Start the computer's Web browser.
2) Enter the IP address on the projector set in the URL input field of the Web browser.
3) Enter the password in the [Password]，then click [Login].

"* "the factory default setting is the user name: "admin" (administrator privileges), password: "admin".

4) Click the [Login]

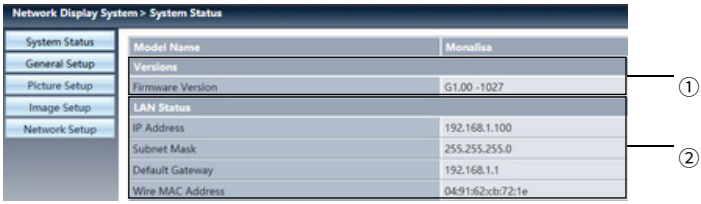
NOTE: Users can click on the top right corner of the Web browser screen to select the display language.
Do not start multiple Web browser settings or control. Do not use more than one computer set or control the projector.
Please change your password.
If the network does not appear on screen controls,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

Description of each option



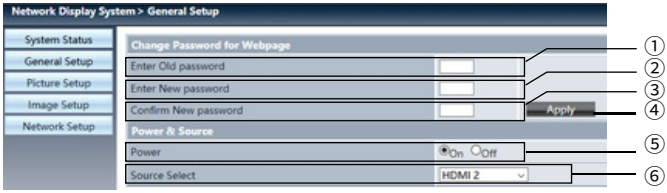
① System Status: Click this option to display the [System status] page.
②General Setup: Click this option to display the [General Setup] page.
③ Picture Setup: Click this option to display the [Picture Setup] page.
④ Image Setup: Click this option to display the [Image Setup] page.
⑤ Network Setup: Click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

[System Status] page



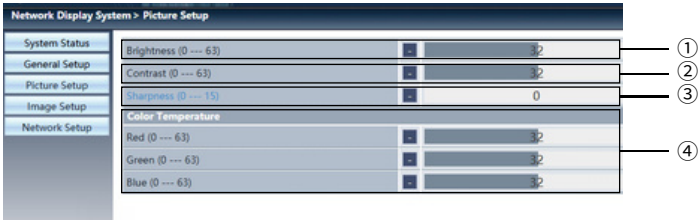
① Versions: Displays the firmware version of the projector.
② LAN Status: Displays the LAN. connection status .

[General Setup] page



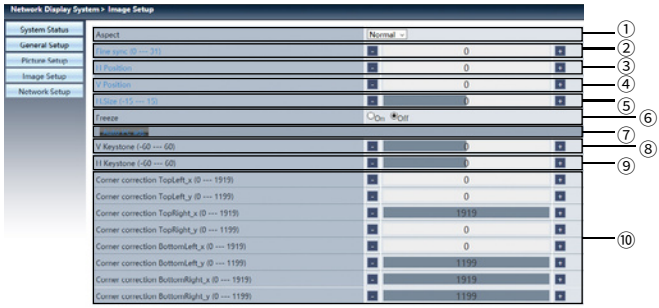
① Enter old password: Enter the password for the configuration.
② Enter new password: Enter a new password.
③ Confirm new password: Re-enter the new password to confirm.
④ Power & Source: Update settings.
⑤ Power: Switch on the power of the projector on / off.
⑥ Source select: Switch the input source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

[Picture Setup] page



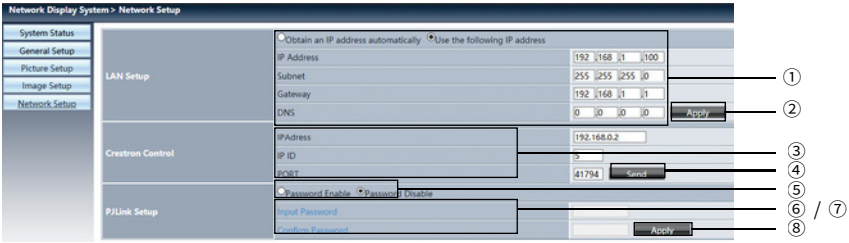
① Brightness: Adjust the brightness of the projected image.
② Contrast: Adjust the contrast of the projected image.
③ Sharpness: Adjust the sharpness of the projected image.
④ Color Temperature: Adjust the color temperature of the projected image.

[Image Setup] page



① Aspect: Switch the aspect ratio of the projected image.
② Fine 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: Correct 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)

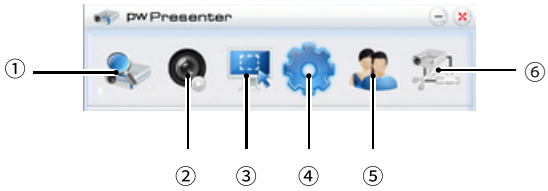
Details for each setting, please contact your network administrator.

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 ennable 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 PJLink password.

pwPresenter software

1) when the input signal source is chosen as the network, the network will be used to project computer image. After entering the IP address of the projector in the web page to the main interface, click"Down- load", and download the corresponding PwPresenter software with your projector.

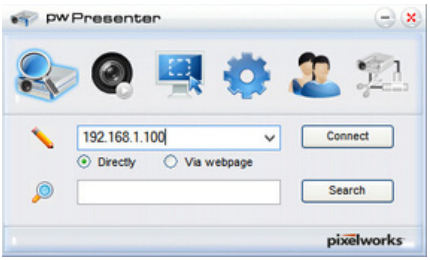
2) Click the icon to enter into pwPresenter software.

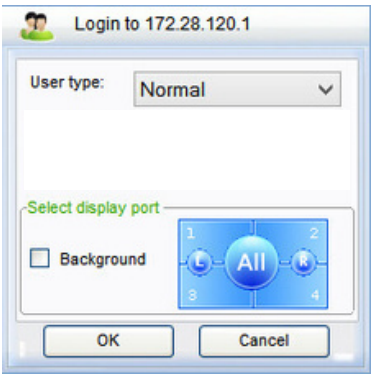


① Search network projector Click to enter to search, select the needed projector and connect it . Set the same IP address (for ex- ample: 192.168.1.100) as the projector in pwPresenter software ,and set user type as "average user", and the password is "admin".

✓**NOTE**

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

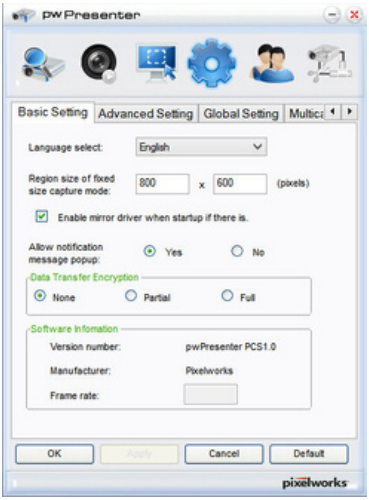




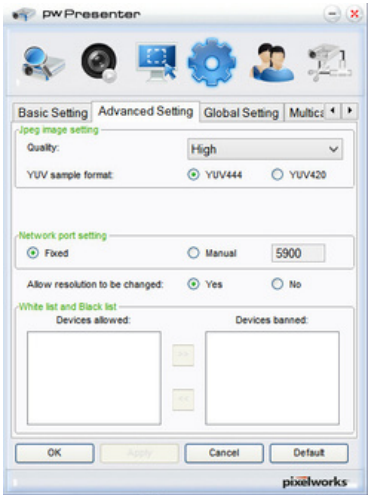
② Screenshot start or pause
Start or pause the selected pictures.

③ Select screenshot mode .
Select screenshot mode from the "full range", "fixed size" or "variable size" and

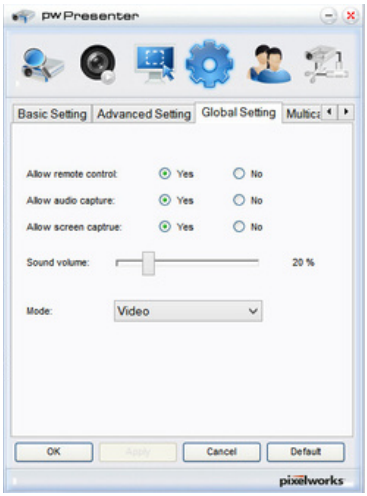
④ Parameter Setting
Basic setting: Language, Capture region size etc.



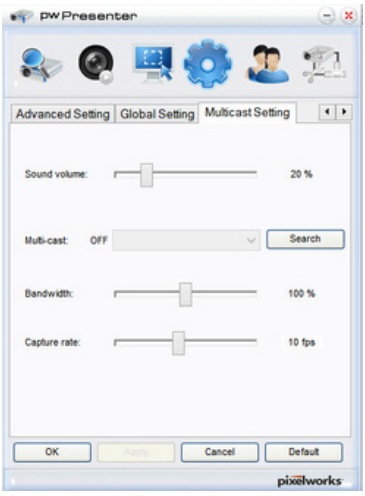
Advanced setting: JPEG image setting, Network port setting, White list and Black list etc.



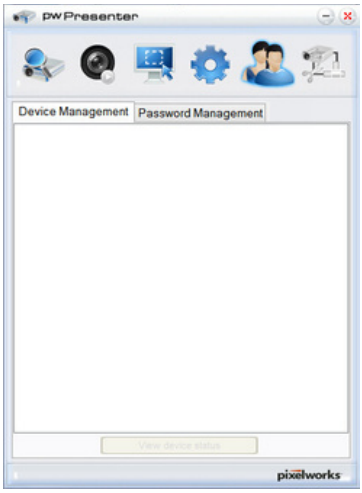
Global setting: Remote control setting, Sound capture and Screen capture, etc.



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 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.

	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 videos 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 instanly , while the USB memory icon display 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 show 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 controller to operate the controller 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.

Terminating the 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 instanly.

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 insertion 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.

Precautions on processing and storage of USB memory

- Please DO NOT place the USB memory or the lid where children can reach. Swallowing the USB memory or the lid may cause choking.
- If smoke or an abnormal smell is detected, turn off the external device immediately and contact your dealer.
- DO NOT let water, chemicals or oil get 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 the USB memory to be inserted or removed when the projector is in any power state.

USB display function

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

When using Windows:

Windows operating environment

Operating System	Vista Windows32, 32/64 Windows 7, Windows 8 32/64
CPU	Intel Core2 Duo 2.0 GHZ or faster compatible processors
Memory Capacity	256MB or above (512MB or above)
Disk Space Available	20MB or above
Monitor	Resolution 640x480 or above, 1600x1200 or above

Normal operation CANNOT be guaranteed, even if the PC meets the above conditions.

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 control and 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]	Grey means not optional

NOTE

- Resolution of the computer screen will change.
- If the drive is not installed on the computer, the driver will be removed when the USB cable is disconnected .
- You need to wait a moment before projecting the computer screen
- Connect the USB cable directly to the computer's USB port. Using a USB hub may cause abnormal operation.

The termination of USB display

1) Remove the USB cable directly,when terminate USB monitor.
   ● You do not need follow "Remove Hardware Safely", 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

Normal operation CANNOT be guaranteed, even if the PC meets the above conditions.

Project USB display

1) Using USB-B cable to connect the projector to the USB display terminals.
   ● Items in grey are not available.
2) Press the information source menu on the remote control the INPUT button on the control panel, then select [USB Monitor] in the input source menu.
3) Double-click "Monitor.app" button installed on the virtual disk.
   ● Projected image on the computer screen.
4) 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 Chinese.

[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 change.
● If the drive is not installed on the computer, the driver will be removed when the USB cable is disconnected .
● You need to wait a moment before projecting the computer screen
● Connect the USB cable directly to the computer's USB port. Using a USB hub may cause abnormal operation.

The termination of USB display

1) Remove the USB cable directly, when terminating USB display.

Status light indicator

The status light indicator shows the status of the projector's safety function. For proper maintenance, check both the Status and POWER indicators.

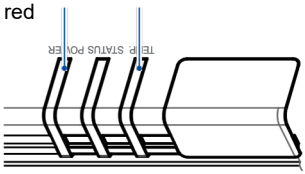
Note:
Unplug the AC power cord in case of any abnormality as it may lead to fire or electric shock.

The projector turns off and the status light indicator flashes red.

Your projector powers off automatically to protect components within it when it is overheated. The WARNING indicator flashes when your projector is cooling down. Press the POWER button to power your projector on again when it is cooled down to normal operation temperature.

The POWER indicator flashing red

The TEMP. indicator flashing red



✓ **Note:**
The POWER indicator stops flashing when your projector's internal temperature cooled down to normal and it is powered on again.

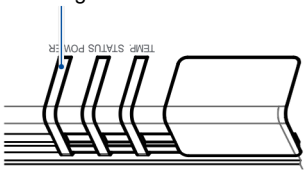
Check the following:

– 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.

Your projector powers off and the status light indicator turns orange.

The WARING indicator turns orange and your projector powers off to protect its internal components whenever an abnormality is detected. Unplug the AC power cord and connect again. Restart your projector and run checkup routine. If the problem persists, unplug the AC power cord and call your service center for checkup and maintenance.

The POWER indicator turns orange

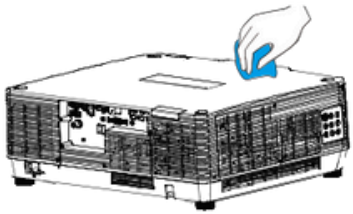


Clean the projector if it becomes contaminated by foreign matter or if the display quality deteriorates.

Note:
Unplug the AC power cord before any cleaning operation.

Clean the casing of your projector

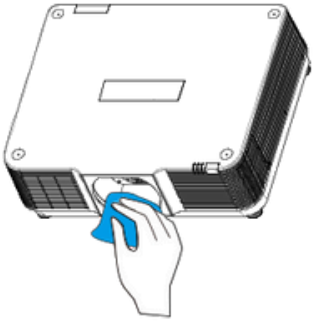
Gently wipe the casing with clean and soft cloth dampened with small amount of neutral detergent to remove heavy dirt. Do not over apply cleaner to the casing. Abrasive cleaner, solution, or other rough chemical may scratch the casing surface.
Place your projector in proper container after use to protect it from dirt and dust and being scratched.



Cleaning 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.



Note:
Do not operate your projector after its filter is removed. Dust may attach to the lens assembly and deteriorate image quality.
Do not insert any objects into the air outlet. Doing so may damage the projector or cause it to malfunction.

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. – Ensure 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	– 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 controller.
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 in 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 is 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 controller. – Make sure the remote controller is not too far away from your projector. The maximum operation range is 8m. – Make sure the remote controller and your projector are paired with the same remote control codes. – Disable the key lock of the remote controller in the Setup menu.
Light indicator turns on or flashes	– Check the status of the projector according to "Light indicator status" on page 113 .
"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 properly 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.

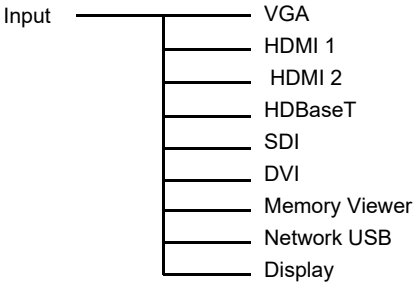
Menu tree

Main menu	Sub-menu	Setting	Remarks
Display	Auto PC adj.		
	Fine sync H	0-31	
	Position V	-5 - +5	
	Position	-5 - +5	
	H Size	-15 - +15	The range of H Size differs from signals.
	Aspect	Normal 16:9 16:10	
	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	Auto, PAL SECAM NTSC NTSC4.43 PAL-M PAL-N PAL-60	Video Input
Color adj.	Image mode	Standard Dynamic Cinema Colorboard DICOM Blackboard(green) User image	
	Contrast	0-63	Computer/HDMI Input
	Brightness	0-63	
	Color temp	High/Mid/Low	
	Red	0-63	
	Green	0-63	
	Blue	0-63	
	Sharpness	0-15	

Main menu	Sub-menu	Setting		Remarks
Setting	On start	On/Off		
	Standby Mode	Normal/ECO mode		
	High land	On/Off		
	Cooling fast	Normal/30s /0s		
	Closed caption	Off/CC1/CC2/CC3/CC4		
	Key lock	Off/Projector/Remote control		
	Contrast optimization	On/Off		
	Laser control	Normal/Boost/ECO1/ECO2		
	Remote control	Code 0-9		
	HDMI Setup	Image	64-940	
			0-1023	
		Volume	HDMI	
			PC	
Expand	Language	Projector provides multiple language support	On/Off	
	Auto Setup	Input Search	On/Off	
		Auto PC Adj.	Store / Reset	
	Keystone	Keystone		
		H/V Keystone		
		4-Corner correction		
		6-Corner correction		
		Curved correction		
		Grid image tune		
		Reset value		
	Security	PIN code lock	On/Off	
		PIN code change		

Main menu	Sub-menu	Setting		Remarks
Expand	Logo	Logo select	Default/User/Off	
		Capture		
		Logo PIN Code Lock	On/Off	
		Logo PIN Code Change		
	Power management	Ready Power Off Off Timer Ready Countdown		
	Lens adjust	Focus Zoom Lens shift Lens center Lens calibration		
	Text pattern	Off，Gray scale（1-4），Color bar，Red， Green， Blue，Cross hatch，White， Black， Raster gray		
	Network	Network setting	DHCP(On/Off) IP address Subnet Gateway DNS	
		Network status	MAC address IP address	
	Factory default			
Memory Viewer	Set slide			
	Slide transition effect	Slide down Slide right		
	Sort order	Expand name order Magnitude order Time order Name order		
	Sort order	No rotate 270° rotate 180° rotate 90°rotate		
	Best fit			
	Repeat	On/Off		
	Apply	On/Off		

Main menu	Sub-menu	Setting	Remarks
Info.	Input		
	H- sync. Freq.		
	V- sync. Freq.		
	Light source counter		
	Power management		
	Image mode		
	Model name		
	S/N		
	Firmware Version		



Light indicator status

Check the light indicator to learn status of your projector.

LED	STATUS	LED	STATUS	LED	STATUS
	Red		Green		Flashing Orange
	Flashing Red		Flashing Green		
	Orange		Turn off		

Projector status	Details	POWER	STATUS	TEMP.	Content (condition, sequence, check item, etc.)
Normal	AC Off				AC is not connected to the projector state
	Standby				AC is connected to the projector and is in standby state
	Power on				Power on state
	Shutdown cooling				The machine is in a cooling state
	Sleep cooling				When the power control is set to sleep, it goes from turning on to cooling.
	Sleep standby				When Power Management is set to Ready, the projector will enter standby mode after cooling down.
Abnormal	Abnormal temperature				Automatic shutdown after abnormal temperature and enter the standby state after Warning Cooling
	Temperature abnomaly cooling				When the temperature is abnormal, it will enter the warning cooling state
	Laser error standby				Automatic shutdown after Laser error and enter the standby state after Warning Cooling
	Laser error cooling				When Laser status is error, it will enter the warning cooling state
	Fan error				After the fan is abnormal, the power is automatically turned off and the state after cooling is warned

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			
	VGA	HDMI	DVI	HDBaseT	SDI	Resolution	H-freq (KHz)	V-freq (Hz)	Pixel clock (MHz)
720x480 60Hz	○	–	○	–	–	720x480i	15.734	59.940	13.500
720x480 60Hz	–	○	–	○	–	720(1440)x480i	15.734	59.940	27.000
720x576 50Hz	○	–	○	–	–	720x576i	15.625	50.000	13.500
720x576 50Hz	–	○	–	○	–	720(1440)x576i	15.625	50.000	27.000
720x480p 60Hz	○	○	○	○	–	720x480(480P)	31.469	59.940	27.000
720x576 50Hz	○	○	○	○	–	720x576(576P)	31.250	50.000	27.000
1280x720p 60Hz	○	○	○	○	○	1280x720p	45.000	60.000	74.250
1280x720p 60Hz	○	○	○	○	○		44.955	59.940	74.176
1280x720p 50Hz	○	○	○	○	○		37.500	50.000	74.250
1920x1080 60Hz	○	○	○	○	○	1920x1080i	33.750	60.000	74.250
1920x1080 60Hz	○	○	○	○	○		33.716	59.940	74.176
1920x1080 50Hz	○	○	○	○	○		28.125	50.000	74.250
1920x1080p 24Hz	–	○	○	○	○	1920x1080p	27.000	24.000	74.250
1920x1080p 24Hz	–	○	○	○	○		26.970	23.980	74.176
1920x1080p 25Hz	–	○	○	○	○		28.125	25.000	74.250
1920x1080p 30Hz	–	○	○	○	○		33.750	30.000	74.250
1920x1080p 30Hz	–	○	○	○	○		33.716	29.970	74.176
1920x1080p 60Hz	○	○	○	○	○		67.500	60.000	148.500
1920x1080p 60Hz	○	○	○	○	○		67.433	59.940	148.352
1920x1080p 50Hz	○	○	○	○	○		56.250	50.000	148.500
640x480,60Hz	○	○	○	○	–	640x480	31.469	59.940	25.175
640x480,67Hz	○	○	○	○	–		35.000	66.667	30.240
640x480,72Hz	○	○	○	○	–		37.861	72.809	31.500
640x480,75Hz	○	○	○	○	–		37.500	75.000	31.500
640x480,85Hz	○	○	○	○	–		43.269	85.008	36.000
800x600,56Hz	○	○	○	○	–	800x600	35.156	56.250	36.000
800x600,60Hz	○	○	○	○	–		37.879	60.317	40.000
800x600,72Hz	○	○	○	○	–		48.077	72.188	50.000
800x600,75Hz	○	○	○	○	–		46.875	75.000	49.500
800x600,85Hz	○	○	○	○	–		53.674	85.061	56.250
832x624,75Hz	○	○	○	○	–	832x624	49.725	74.550	57.283

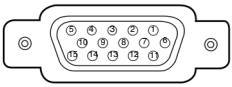
1024x768,60Hz	○	○	○	○	–	1024x768	48.363	60.004	65.000
1024x768,70Hz	○	○	○	○	–		56.476	70.069	75.000
1024x768,75Hz	○	○	○	○	–		60.023	75.029	78.750
1024x768,85Hz	○	○	○	○	–		68.678	84.997	94.500
1152x864,70Hz	○	○	○	○	–	1152x864	63.995	70.020	94.200
1152x864,75Hz	○	○	○	○	–		67.500	75.000	108.000
1280x768,60Hz	○	○	○	○	–	1280x768	47.776	59.870	79.500
1280x768,75Hz	○	○	○	○	–		60.289	74.893	102.250
1280x768,85Hz	○	○	○	○	–		68.630	84.840	117.500
1280x800,60Hz	○	○	○	○	–	1280x800	49.702	59.810	83.500
1280x800,75Hz	○	○	○	○	–		62.795	74.934	106.500
1280x800,85Hz	○	○	○	○	–		71.554	84.880	122.500
1280x960,60Hz	○	○	○	○	–	1280x960	60.000	60.000	108.000
1280x1024,60Hz	○	○	○	○	–	1280x1024	63.981	60.020	108.000
1280x1024,72Hz	○	○	○	○	–		78.16	71.97	135.060
1280x1024,75Hz	○	○	○	○	–		79.976	75.025	135.000
1280x1024,85Hz	○	○	○	○	–		91.146	85.024	157.500
1366x768,60Hz	○	○	○	○	–	1366x768	47.720	59.799	84.750
1400x1050,60Hz	○	○	○	○	–	1400x1050	65.317	59.978	121.750
1400x1050,75Hz	○	○	○	○	–		82.278	74.867	156.000
1440x900,60Hz	○	○	○	○	–	1440x900	55.935	59.887	106.500
1600x900,60Hz	○	○	○	○	–	1600x900	55.920	60.000	118.998
1600x1200,60Hz	○	○	○	○	–	1600x1200	75.000	60.000	162.000
1680x1050,60Hz	○	○	○	○	–	1600x1050	65.290	59.954	146.250
1920x1200,60Hz	○	○	○	○	–	1920x1200	74.038	59.950	154.000
3840x2160,30Hz	-	○	○	○	–	3840x2160	67.500	30.000	297.000

“○”shows input signal source support this format ; “ —” shows input signal source DO NOT support.

✓ **Note:**
Changes to this manual may be made without notice.

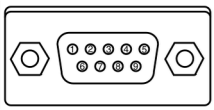
Terminal configuration

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)

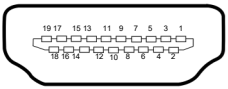


1	-----	6	-----
2	RXD	7	-----
3	TXD	8	-----
4	-----	9	-----
5	GND		

LAN Terminal

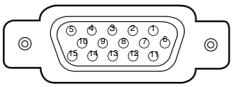
1	TX +	5	-----
2	TX -	6	RX -
3	RX +	7	-----
4	-----	8	-----

HDMI Terminal (HDMI Type A 19)



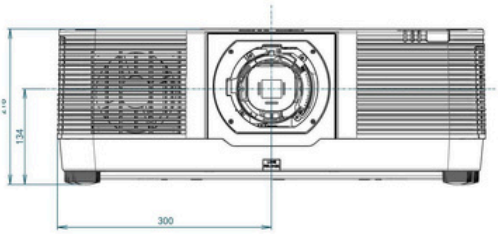
1	TMDS Data2+	11	TMDS Clock Shield
2	TMDS Date2 Shield	12	TMDS Clock-
3	TMDS Date2-	13	CEC
4	TMDS Date1+	14	Reserved(N.C. on device)
5	TMDS Datel Shield	15	SCL
6	TMDS Datel-	16	SDA
7	TMDS Date0+	17	DDC/CEC Ground
8	TMDS Date0 Shield	18	+5V Power
9	TMDS Date0-	19	Hot Plug Detect
10	TMDS Clock+		

VGA in Terminal

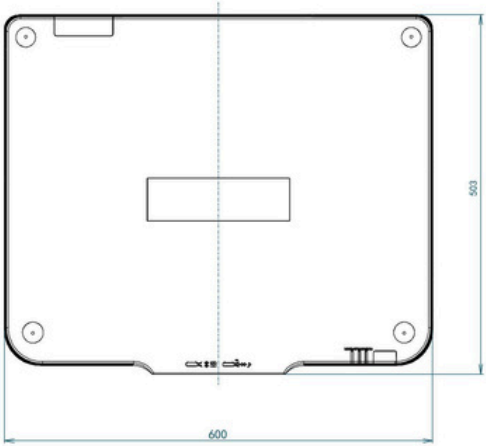


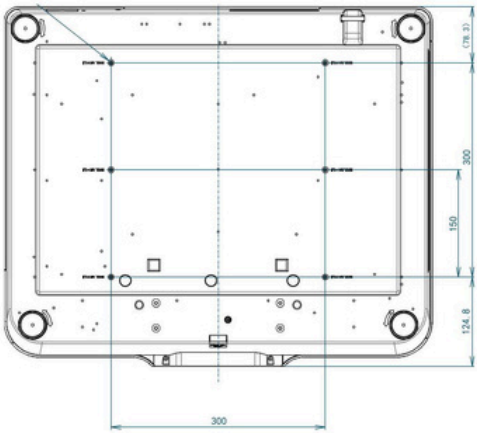
1	Red input	9	-----
2	Green input	10	Grounding(field synchronizing)
3	B input	11	Grounding
4	-----	12	DDC data
5	Grounding(line synchronizing)	13	Horizontal synchronizing(compound sync.)input
6	Grounding(red)	14	Vertical synchronizing input
7	Grounding(green)	15	DDC clock
8	Grounding(blue)		

Dimensions



Unit: mm
Screw Holes for Ceiling Mount(6 pcs)
Screw: M4
Depth: 10.0





Technical Specifications

Mechanical properties	
Dimensions (W×H×D):	600mm x 218mm x 503mm
Net Weight	24Kg
Adjustable foot	1˚
LCD resolution	
LCD system	0.763"TFT, active matrix
LCD resolution	1920x1200
Color standard	PAL, SECAM, NTSC, NTSC4.43, PAL-M and 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
Terminal	
VGA IN	Mini D-sub 15pin x1
VGA OUT	Mini D-sub 15pin x1
DVI-D	DVI-D connector * 1
HDMI 1	HDMI A type 19 pin
HDMI 2	HDMI A type 19 pin
HDMI OUT	HDMI A type 19 pin
LAN	100 Base-TX (100Mbps)/10 Base-T (10Mbps), RJ45
R/C IN	Mini Jack, 3.5mm x1
R/C OUT	Mini Jack, 3.5mm x1
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
SDI(optional)	SDI connector * 1
Power	
Voltage and power consumption	8.5A 50/60 Hz
Fuse	20A/250V
Projector power	850W (Boost) 750W (Normal) 650W (ECO. 1) 450W (ECO. 2)
Operating Environment	
Operating temperature	5℃~40℃
Operating humidity	20% ~ 85%
Storage Temperature	-10℃ ~50℃
Storage humidity	10% ~ 80%
High land	3650 m
Remote control	
Battery	AA lkaline type x 2
Operating Range	±30˚ About 7 meters, straight line about 20 meters
Dimensions	48mm (W) x 26mm (H) x 160mm (D)
Net Weight	67g

Accessories

Remote control and batteries, AC power cord, Quick Start Guide, 6 Srews & Power cord buckle

- The specification is subject to change without prior 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

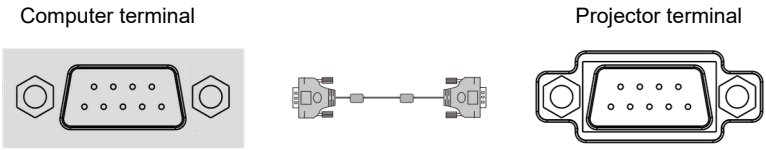
Serial connection

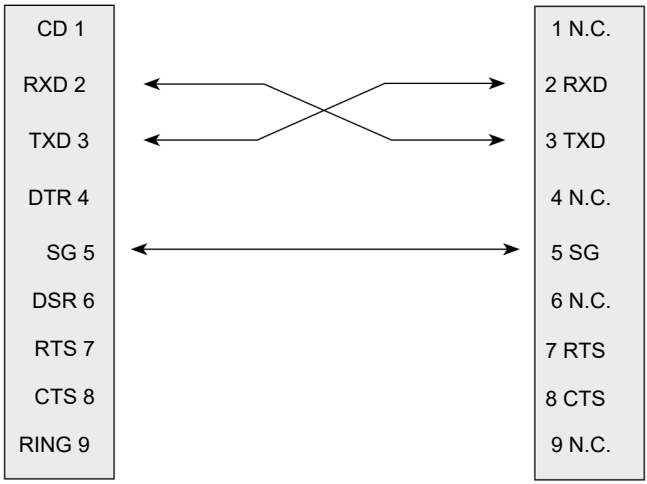
1.1 Port setting

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
C38	HDBaseT	**C35**	SDI
C32	DVI	**C16**	Memory Viewer
C15	Network	**C17**	USB Display

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（Namely Power Off immediately)

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

2.3 POWER OFFcommand

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 countdown the 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 HDBaseT command

Command	“C38”[CR]	
Details	SelectHDBaseT Input.	
Return Value	Receive Successfully	[ACK] [CR]
	Receive Unsuccessfully	" ? " [CR]

2.8 SDI command

Command	“C35”[CR]	
Details	Select SDI Input.	
Return Value	Receive Successfully	[ACK] [CR]
	Receive Unsuccessfully	" ? " [CR]

2.9 DVI command

Command	“C32”[CR]	
Details	Select DVI Input .	
Return Value	Receive Successfully	[ACK] ［CR］
	Receive Unsuccessfully	“？ ” [CR]

2.10 Network command

Command	“C15”[CR]	
Details	Select Network Input .	
Return Value	Receive Successfully	[ACK] ［CR］
	Receive Unsuccessfully	“？ ” [CR]

2.11 Memory Viewer command

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

2.12 USB Display command

Command	“C17”[CR]	
Details	Select USB Display Input .	
Return Value	Receive Successfully	[ACK] [CR]
	Receive Unsuccessfully	“ ? ” [CR]

ENGLISH

2025.08