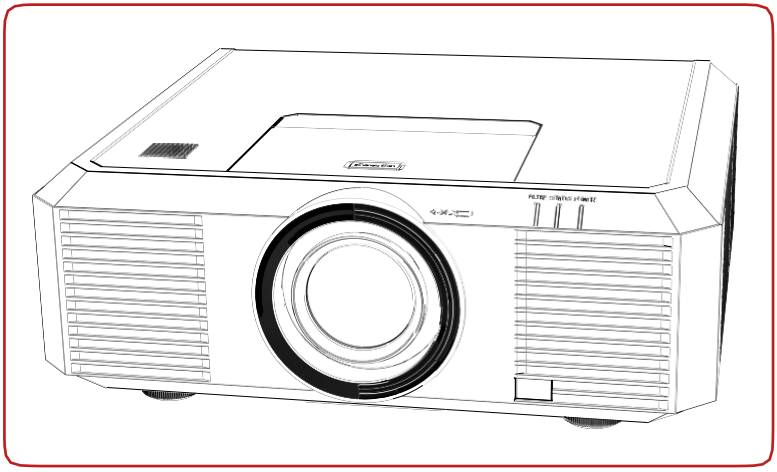
Liquid Crystal Display
Fixed Installation Projector

User Manual



PCL-LT9000 Series
XGA/WXGA/WUXGA

Note:

- Before using the product, please read these instructions carefully, and kept safely for future reference.
- OSD options and pictures shown in this document may differ slightingly from your product.
- Changes to this manual may be made without notice.

Features and design

This Projector is designed with the most advanced technology for portability, durability, and ease of use. This projector has built-in multimedia features, and support the LCD technology by using the color depth of 1.07 billion color.

Simple Computer System Setting

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

Useful Functions for Presentations

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

Lamp Control

Brightness of the projection lamp can be selected.

Logo Function

The Logo function allows you to customize the screen logo. You can capture any imageon the screen.

Multilanguage Menu Display

The screen menu of the projector is available in 26 languages: 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.

Convenient Maintenance Functions

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

Security Function

The Security function helps you to ensure security of the projector. With the Key lock function, you can lock the operation on the control panel or remote control. PIN code lock function prevents unauthorized use of the projector.

Auto Setup Function

This function enables input source search, AUTO PC adjust and AUTO Keystone by simple pressing the AUTO button on the remote control.

Colorboard Function

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

Switchable interface terminals

This projector has switchable interface.You can use them as computer input or as a monitor output.

Power Management

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

Closed Caption

This is a printed version of the program sound or other information displayed on the screen. You can turn on the feature and switch the channels.

✓*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.

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Safety operation guideline

Safety instructions

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

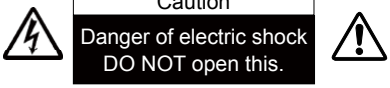
 Caution	Ignoring messages indicated by this symbol may lead to personal injuries or deaths due to human errors.
 Note	Ignoring messages indicated by this symbol may lead to personal injuries or property damage.
	High voltage inside with risks of electric shock.

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.

Your projector’s lamp is a consumable and will get dimmer after long-term use. It’s normal for an older lamp to be dimmer than a newer one. Please power on and off your projector by strictly following steps given in “Power on your projector” and “Power off your projector” section of this manual. Execute regular maintenance and cleaning according to instructions set forth in “Maintaining and cleaning your projector” section of this manual. Fail to do so may shorten life cycle of your projector and its lamps sharply or even damage your projector and its lamps before long.



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

 High voltage inside with risks of electric shock.

 Operation and maintenance tips about these components.

We will persevere in our efforts to keep clean environment. Please return the non - repairable components to the sales department or recycling center.

Chemical Substances table

Component name	Harmful substances					
	Pb	Hg	Cd	Cd(vi)	PBB	PBDE
PCB	×	○	○	○	○	○
Optical components	×	○	○	○	○	○
Projection lens	×	○	○	○	○	○
Projection lamp	×	×	○	○	○	○
Outer casing	×	○	○	○	○	○
Internal mechanical parts	×	○	○	○	○	○
Speaker	×	○	○	○	○	○
Remote control	×	○	○	○	○	○
Annex	×	○	○	○	○	○

This table is made according to SJ/T 11364 specifications.

○ The contents of toxic and hazardous substances in all homogeneous materials of this part is below the limit requirement in GB/T 26572.

× The contents of toxic and hazardous substances in at least one of the homogeneous materials of this part is above the limit requirement in GB/T 26572 .

The date of products compatible with the projection lamp within the environmental protection period is five years

Notes

Caution

Safety precautions:

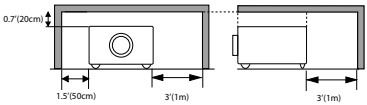
- GROUND your projector.
- Lens of your projector projects strong light. DO NOT look at the light beam directly. You may get your eyesight hurt. This is especially the case with children.
- Unplug the AC power plug if your projector will not be used for long time.
- DO NOT overload the socket of power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

Caution

Precautions on air outlet:

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

Sides and bottom Rear



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

Note:

Precautions on location of your projector:

- Place your projector in a proper location or it may result in fire.
- DO NOT expose your projector in rain or high humidity environments or it may result in fire or electric shock. DO NOT your projector near water or splashing water. DO NOT place any water container, e.g. flower vase, atop your projector.
- DO NOT place your projector in environments of soot, moisture or smoke, e.g. your kitchen, or it may lead to product failure or accidents. Your projector may be damaged by contact with oil or chemicals.
- DO NOT place your projector near exhaust pipe or air conditioning equipment.
- DO NOT place your projector near radiator or heating pipes.
- DO NOT place your projector atop unstable truck, rack, or table. It may fall 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 topple your projector and the cart together.

FOR EU USERS



The symbol mark and recycling systems described below apply to EU countries and do not apply to countries in other areas of the world.
Your product is designed and manufactured with high quality materials and components which can be recycled and/or reused.
The symbol mark means that electrical and electronic equipment, batteries and accumulators, at their end-of-life, should be disposed of separately from your household waste.
Note:
If a chemical symbol is printed beneath the symbol mark, this chemical symbol means that the battery or accumulator contains a heavy metal at a certain concentration.
This will be indicated as follows: Hg: mercury, Cd: cadmium, Pb: lead In the European Union there are separate collection systems for used electrical and electronic equipment, batteries and accumulators.
Please, dispose of them correctly at your local community waste collection/recycling centre.
Please help us to conserve the environment we live in!

Caution:

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

Note:

Precautions on using your projector:

- DO NOT project the same image for long time as residual images may be left in the panel. This is a property of LCD panel.
- Use power as indicated in tags attached to your projector. If you have doubts over available power type, consult your dealer or local power company first.
- DO NOT open or remove the casing for maintenance as this may lead to electric shock or other damages. Call qualified maintenance personnel in case of any maintenance requirements.
  - In case of the following, unplug the power cord and call qualified maintenance personnel for service immediately:

  a. Damaged or broken power cord or plug

  b. Liquid splashed in your projector

  c. Your projector exposed to rain or water

  d. If your projector fails to work as expected by following operation instructions, adjust it according to given instructions. Other invalid operations may damage your projector, which requires the technician to spend more time before returning it back to normal.

  e. The projector falls off to ground or its casing is damaged.

  f. In case of any abnormal change in your projector during its use, then maintenance services would be required.
- In case components replacement is required, make sure the replacements have been approved by the manufacturer and features the same with the one being replaced. Use of unauthorized parts may lead to fire, electric shock or personal injury.
- After the completion of maintenance or repair work, get the maintenance personnel to run routine safety check to ensure your projector's safety operation status.
- This product is only for indoor use.

Information for users in the European Union

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

NOTE FOR CUSTOMERS IN THE US

(Hg) LAMP(S) INSIDE THIS PRODUCT CONTAIN MERCURY AND MUST BE RECYCLED OR DISPOSED OF ACCORDING TO LOCAL STATE OR FEDERAL LAWS.

Air ventilation

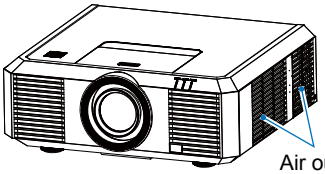
Openings in the casing are designed for ventilation and overheating prevention. DO NOT block or cover these openings to keep your projector in normal operation and from overheating.

Note:

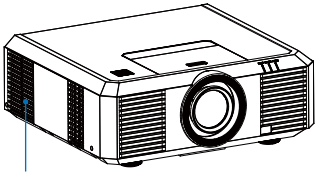
Heat exhaust at the air outlet Keep the following in mind when using or installing your projector:

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

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



Air outlet
(For heat exhaust)

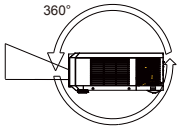


Air intake

Place your projector correctly

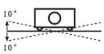
Use your projector at specified location in correct way. Invalid projector location may shorten life-cycle of lamps or even lead to severe incidents or fire.

- Enable the “Ceiling” function if flip over screen is required.The projector supports 360° projection in Vertical.



Note:

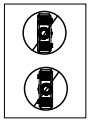
Avoid the following situations illustrated below when installing your projector.



DO NOT tilt your projector more than 10 degrees.



DO NOT tilt your projector more than 10 degrees.

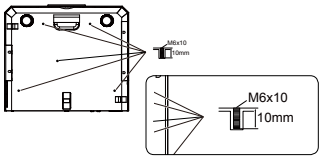


DO NOT tap the projector to make a projection.

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 to rque driver instead of power driver or impact driver in your projector.



Moving your projector

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

Note:

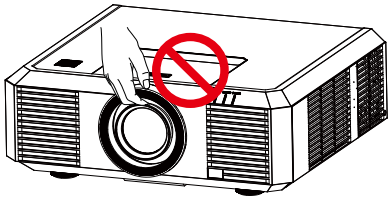
Precautions on moving or shipping your projector:

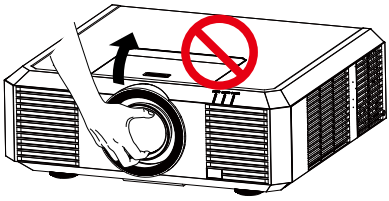
- DO NOT drop or impact your projector as it may get damaged or failed in operation.
- Please employ proper container for movement.
- Prohibit express or other shipping service provider personnel from shipping your projector with improper boxes. Your projector may become damaged. Please consult your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

Precautions on dealing with your projector:

DO NOT lift or move your projector by holding the lens or projecting decoration ring as it may damage the lens and your projector.

Be careful when handling your projector. DO NOT drop it, subject it to external forces, or place objects atop it.



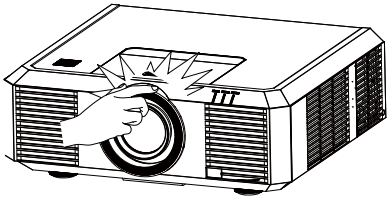


DO NOT hold the lens or area around it.

Note:

Projection lens are manual ones. Precautions on using your projector:

- DO NOT touch the lens when it is working as your fingers may get hurt.
- DO NOT let children touch the lens.



Caution

This is A grade product. Products may cause radio interference in the living environment, in this case, the user may need to take effective measures to interfere.

■ Description of the term of environmental protection

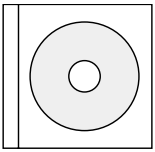
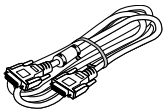
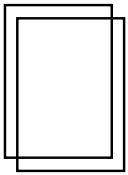


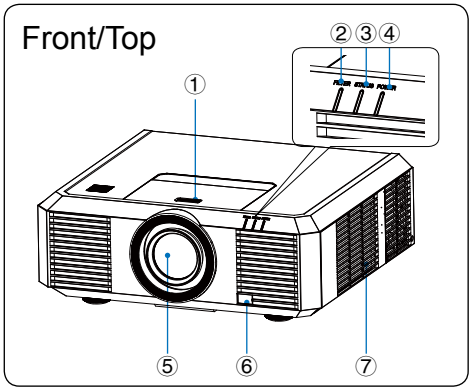
This logo is used for the sale of electronic information products in the PRC, and the number of the central figures for the use of the term of environmental protection. Under the condition that users follow the instructions shown in the provisions of safety operation guideline,it will not cause any environmental pollution or affect people and their property from the date of production within the environmental protection period.

THE SOCKET-OUTLET SHOULD BE INSTALLED NEAR THE EQUIPMENT AND EASILY ACCESSIBLE.

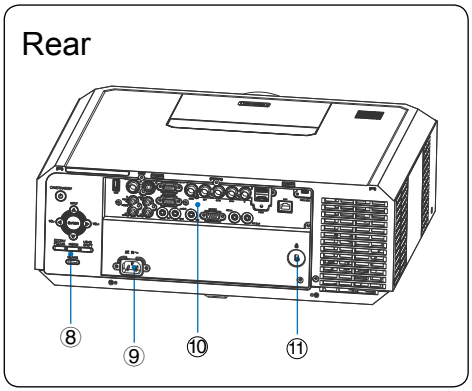
Accessory

Accessory for PCL-LT9000 series XGA / WXGA / WUXGA as follows:

Owner's Manual(CD)	AC Power Cord	Remote Control With Batteries (AAA*2)
	 Note: The AC Power Cord specification depands on the location of your projector.	
VGA Cable	Quick Start Guide	
		



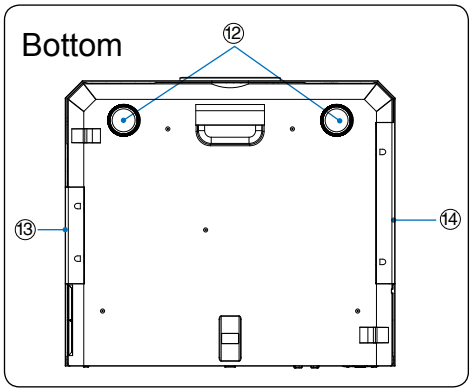
① Lens release button
② FILTER indicator
③ STATUS indicator
④ POWER indicator
⑤ Projection lens
⑥ Remote Receiver (Front)
⑦ Air intake with filter



⑧ Rear control panel
⑨ AC Power Cord port
⑩ Terminal
⑪ Kensington Security Slot

⚠ Note:

- Kensington Security Slot is for a Kensington lock used to deter theft of the projector.
- Kensington is a registered trademark of ACCO Brands Corporation.



⑫ Adjustment pad
⑬ Air exhaust
⑭ Air intake

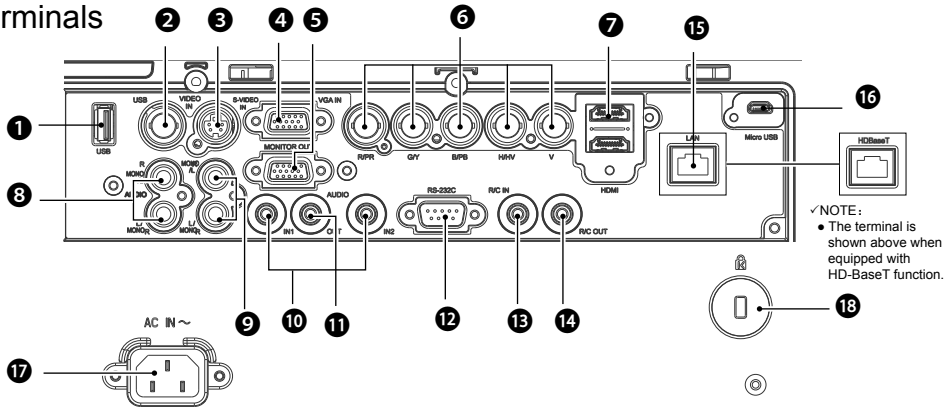
⚠ Note:

Donot place your hands or other objects near the vent:

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

Name and function of your projector

Terminals



❶ USB -A connector
When using the Memory Viewer function, insert the USB memory directly to this terminal.

❷ VIDEO IN
Connect video output signal to this terminal.

❸ S-VIDEO IN
Connect S-VIDEO output signal of video device to this terminal.

❹ VGA IN
Connect output signal from computer to this terminal.

❺ MONITOR OUT
Transmit signals from ❹ or ❻ to other displays when your projector is acting as a display output.

❻ R(PR)/G(Y)/B(PB)/H(HV)/V
– Connect RGBHV format (5-core) signals to R/G/B/HS/VS terminal respectively.
– Connect component signals to Y, Pb, Pr terminal respectively.

❼ HDMIconnector
Connect HDMI digital output signals or MHL digital output signals to this terminal.

❽ AUDIO (Video)
Connect audio signal from ❷ to this terminal.

❾ MONO(L/R) (Video)
Connect audio signal from ❸ to this terminal.

❿ AUDIO IN1/AUDIO IN2
– Connect audio signals for device ❹ to AUDIO IN1.
– Connect audio signals for device ❻ to AUDIO IN2.

⓫ AUDIO OUT
Output audio signals to amplifier or other audio equipment.

⓬ SERIAL
Connect serial cable to this terminal when using network to control and operate your projector.

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

⓮ REMOTE OUT
Transmit wired remote controller signals of ⓭ to another projector when a wired remote controller is used.

⓯ LAN terminal
– Connect mesh cable to this terminal when using network control and operate your projector.
– When the projector is equipped with HD-Base T function, connect to this terminal through a network cable to achieve the function as for it is optional.

⓰ MICRO USB connector
The terminal is to use the USB display function,When connecte the projector to calculator machine with USB cable.

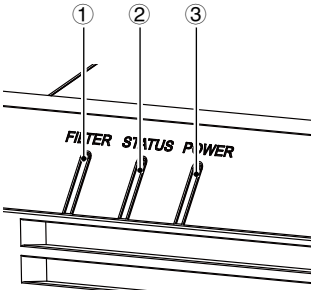
⓱ Power cord connector

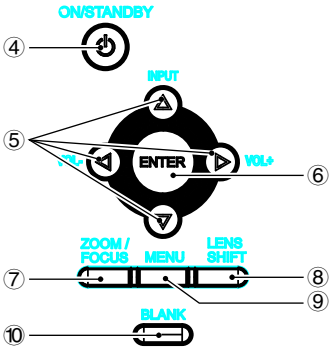
⓲ Anti-theft slot

Note:

● HD-Base T function is optional. Refer to the HD-Base T function in the Additional appendix for details.

Top control panel and indicators





① FILTER indicator
It turns red when the filter needs be replaced.

② STATUS indicator
It flashes red when internal temperature of your projector is out of operation range.

③ POWER indicator
– The power indicator turns steady red when your projector is in standby mode.
– It turns steady green when your projector is in normal operation.

④ ON/STAND-BY
Power on or off your projector.

⑤ Arrow ▲▼◀▶ /UP/DOWN/VOL-/VOL+
– Select items or adjust the data in the OSD menu.
– Shift the image in the "Digital zoom +/-" mode.
– Adjust the volume.

⑥ ENTER
Enter the OSD menu or select options in a menu.

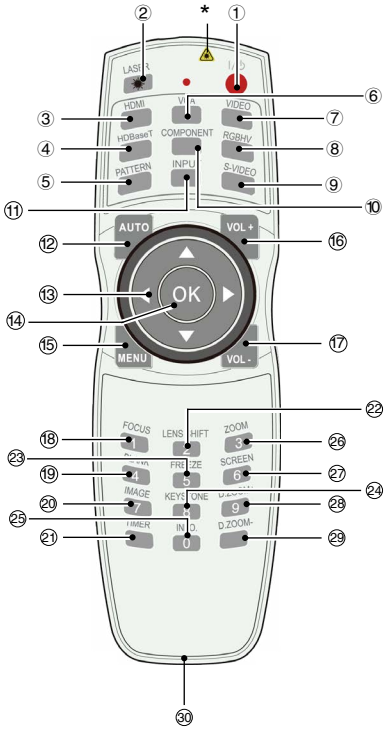
⑦ ZOOM/FOCUS
– Enter the optical zoom adjustment mode.
– Enter the focus adjustment mode.

⑧ LENS SHIFT
Enter the lens moving mode.

⑨ MENU
Open or close the OSD menu.

⑩ BLANK
Dark out screen images temporarily.

Remote controller



* 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 HDMI
Select HDMI input source.

④ HDBaseT
Select HDBaseT input source.

⑤ PATTERN
Select built-in test pattern of your projector.

⑥ VGA
Select VGA input source.

⑦ VIDEO
Select VIDEO input source.

⑧ RGBHV
Select RGBHV input source.

⑨ S-VIDEO
Select S-VIDEO input source.

⑩ COMPONENT
Select Component 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 VOLUME +
Increase volume.

⑰ VOLUME -
Decrease volume.

⑱ FOCUS
Enter the focus adjustment mode.

⑲ BLANK
Dark out screen images temporarily.

⑳ IMAGE
Select image mode.

Note:

- The test pattern is not available under USB DISPLAY channel.Then a warning icon display when pressing PATTERN button.
- DVI button is unavailable.

㉑ TIMER
Enable the timer function.

㉒ LENS SHIFT
Enter the lens moving mode.

㉓ FREEZE
Freeze projected images.

㉔ KEYSTONE
Keystone calibration.

㉕ INFO.
Display current status information of your projector.

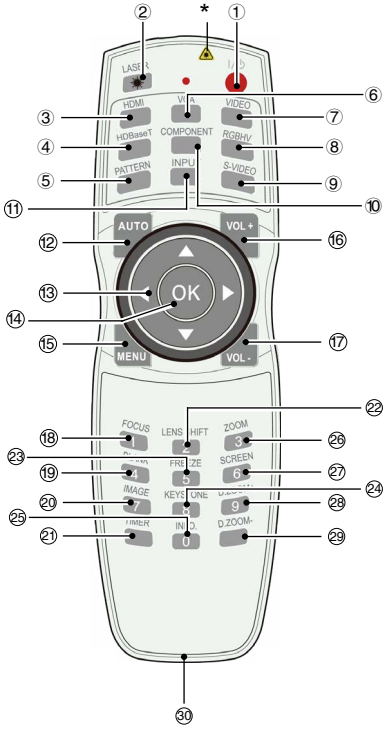
㉖ ZOOM
Enter the zooming mode.

㉗ SCREEN
Select screen size.

㉘ D.ZOOM+
Zoom in projected image.

㉙ D.ZOOM-
Zoom out projected image.

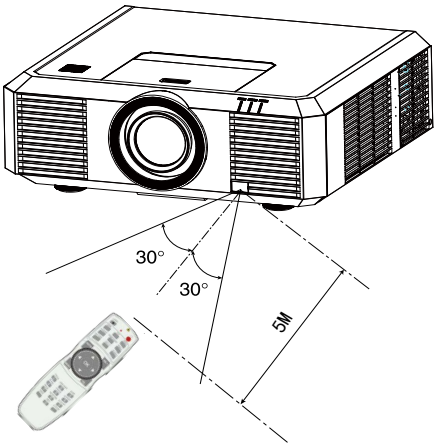
㉚ Wired remote controller output terminal
Connect cable of wired remote controller to this port while operating the projector by wired remote control.



Remote controller operation range

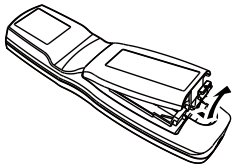
Point your remote controller to the IR receiver of your projector

Maximum operation range of your remote controller is an area of radius 5 meters and arc 60° in front of and behind your projector .

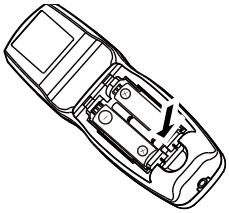


Install battery of remote controller

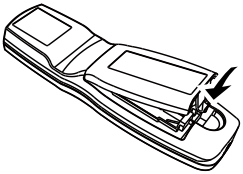
❶ Open the battery cover.



❷ Insert 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.



❸ Put the cover back.

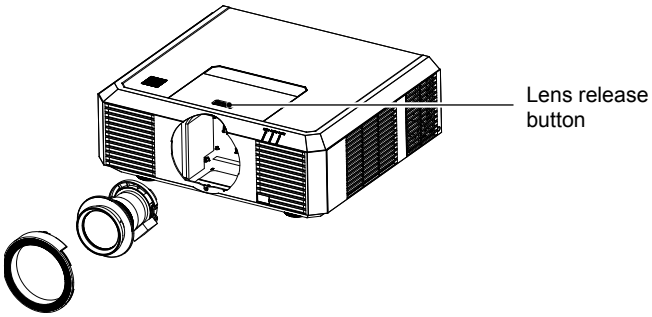


Please follow the following rules for safety operation:

- Use two of AAA batteries.
- Replace both batteries at the same time.
- Do not mix new and old batteries as one pair.
- Keep your remote 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.



Remove the lens

1 Center the lens with its movement function. (Hold 5 sec. on Lens Shift button. Refer to the Page 30).

2 Power off your projector and unplug the AC power cord.

3 Turn the lens counterclockwise and remove its decoration ring.

4 Press and hold the lens release button at top of the casing. Turn it counterclockwise until it sticks, and then pull it out of your projector gently.

Note:

Be careful in removing the lens. Do not drop it.

Installing lens

1 Align the red mark on your lens and your projector and insert the lens in the latter.

2 Turn the lens clockwise slowly until you hear a click. Make sure the lens is fully inserted in your projector.

Note:

Do not press and hold the lens release button when installing it.

Remove the lens ring

1 Hold the upper part of the lens ring on one hand, while hold the lower part of it on the other hand. Then pull out the lens ring gently and rotate the lens ring counterclockwise.

Note:

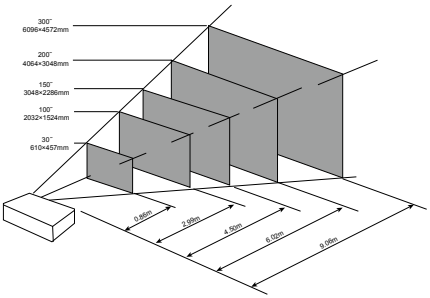
Be careful in removing the lens ring .

- 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.
- For details on lens and its installation, please call local dealers.

Set up your projector

- 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.

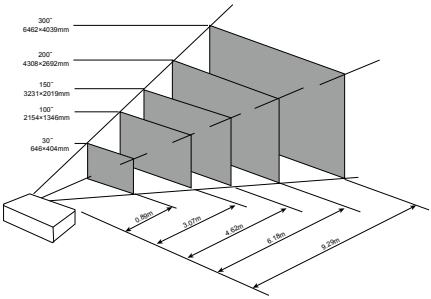
XGA series



✓NOTE：

- Chart above shows about the data of 4: 3.

WXGA / WUXGA series



✓NOTE：

- Chart above shows about the data of 16:10.

PCL-LT9000X XGA

Screen size (WxH)m	30"	100"	150"	200"	300"
	0.610x0.457	2.032x1.524	3.048x2.286	4.064x3.048	6.096x4.572
Wide	0.86m	2.99m	4.50m	6.02m	9.06m
Distance	1.60m	5.44m	8.18m	10.92m	16.40m

PCL-LT9000W / PCL-LT9000U WXGA / WUXGA

Screen size (WxH)m	30"	100"	150"	200"	300"
	0.646x0.404	2.154x1.346	3.231x2.019	4.308x2.692	6.462x4.039
Wide	0.89m	3.07m	4.62m	6.18m	9.29m
Tele	1.64m	5.57m	8.38m	11.19m	16.81m

Adjustment pad

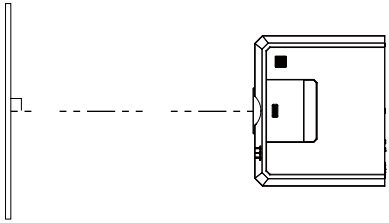
Place the projector properly so that it is vertical to the screen.

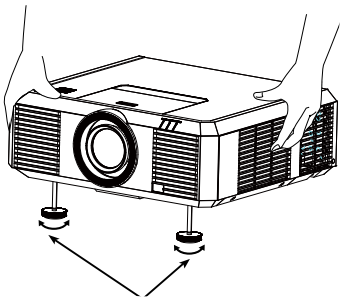
You may use the adjustment leg to raise your projector up to 5.0 degree.

Turn the pad to tilt your projector to required height. To raise your projector, turn both pads clockwise.

To lower down your projector or close the pad, turn both pads counterclockwise.

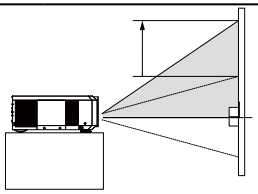
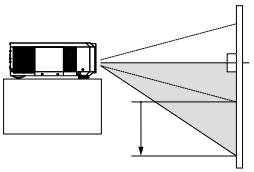
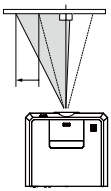
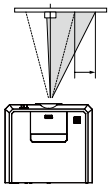
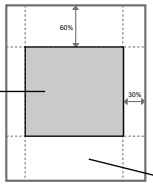
You may use the auto setup function to adjust your projector's keystone distortion automatically or do this with the remote controller or OSD menu manually.





Lens shift adjustment

The electric 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 60% (XGA / WXGA / WUXGA) 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 60% (XGA / WXGA / WUXGA) 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 30% (XGA / WXGA/ WUXGA) 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 30% (XGA / WXGA/ WUXGA) 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)	Center the lens  Lens shift range

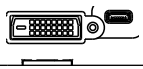
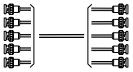
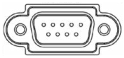
* This table is measured with standard lens.
* When the setting of LENS SHIFT as the maximum position, the corner of projection image might be darker.

Connection to the PC (Digital and Analog RGB)

Cables for connection:

- VGA cable
- BNC cable*
- HDMI cable*

(* This cable is not included.)

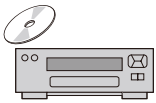
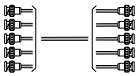
Ports on your projector	Connection cable	Equipment
DVI-D(HDCP) 	DVI cable 	
HDMI 	HDMI cable 	
R(PR) / G(Y) / B(PB) / H(HV) / V 	BNC cable 	
SERIAL 	CROSSOVER cable 	

Connect to video equipment

Cables for connection:

- S-VIDEO cable*
- VIDEO cable*
- BNC cable*

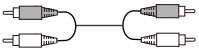
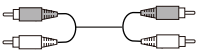
(* This cable is not included.)

Ports on your projector	Connection cable	Equipment
S-VIDEO IN 	S-VIDEO cable 	
VIDEO IN 	VIDEO cable 	
R(PR) / G(Y) / B(PB) / H(HV) / V 	BNC cable 	

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

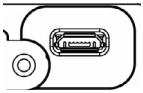
Connection to audio equipment

Cables for connection:
• Audio cable*
(* This cable is not included.)

Ports on your projector	Connection cable	Equipment
MONO L/R 	Audio cable 	
AUDIO IN 	Audio cable 	
AUDIO IN / OUT 	Audio cable 	
RC IN/OUT 	Audio cable 	

Connect to USB equipment

Cables for connection:
• Micro USB cable*
(* This cable is not included. And it only for PCL-LT9000U.)

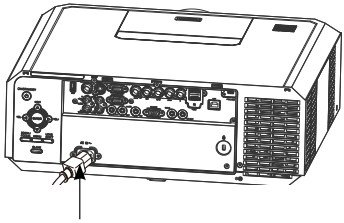
Ports on your projector	Connection cable	Equipment
Micro USB 	Micro USB cable 	
USB-A 	USB cable 	

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.



Connect included AC power cord to your projector.

Note:

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

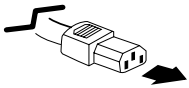
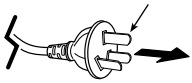
✓ Note:

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 AC grid power and in standby mode.

Precautions on power cord

Your AC power cord should meet regulations of the country/district where the 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.

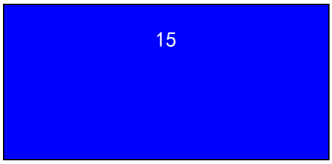
The projector side	Connect to the AC power socket
 Connect to power cord connector of your projector	Grounding end  Connect to AC power socket

✓ Note:

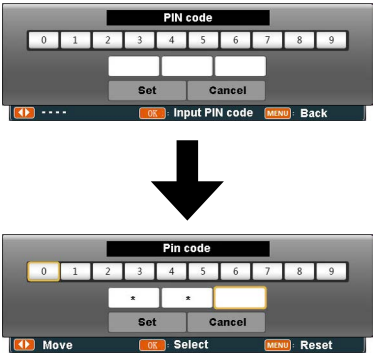
- Use of invalid power cord may hamper product performance or even lead to electric shock, fire, and other incidents. Please use power cord compliant with the included one to ensure product performance and operation safety.
- The frequently used cables are: AC power cord, VGA cable, audio cable, video cable, and serial control cable.

Power on your projector

1. Connect all external 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 ◀ 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 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.

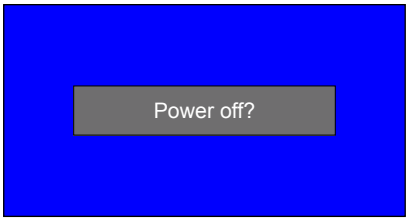
What is a password (PIN)?
A password (PIN) is an ID code for identifying people with knowledge about it to operate your projector. A password (PIN) setting may help preventing your projector from unauthorized use.

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 54 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. (Users can set up the the speed of the cooling fan.) 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.
3. The POWER indicator stops flashing once the projector has been cooled down to ready for power on again.



“Power off?” message disappears in 4 seconds.

To maintain the life cycle of the lamp, power off your projector after it has been turn on for at least five minutes.

Do not use your projector without stop. As it may hurt the life cycle of your lamp. Power off your projector at least once every 24 hours and have it idle for an hour.

✓ Note:

- If the “On Start” function is set to “On”, your projector will power on once it is connected to an AC power socket. (Refer to page 45)
- 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 “Status light indicator ” for instructions. (Refer to page 92)
- The POWER indicator flashes when the lamp 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.
- The POWER indicator turns red when your projector is ready for power on again. It takes less time to restart your projector after it was powered off in the standard power off procedure than that of the non-standard one.

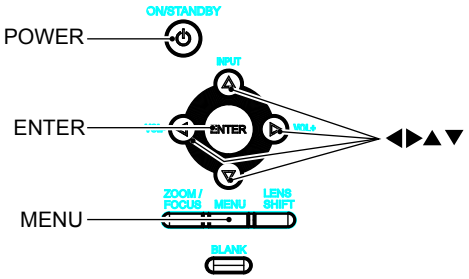
How to operate the OSD

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

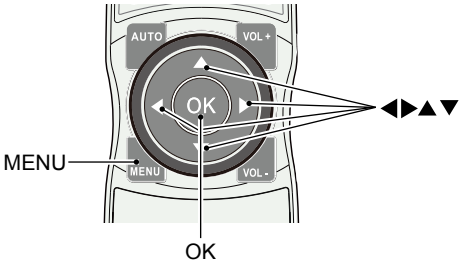
The menu has a multilayer structure. Each main menu is divided into several sub-level menus, then each submenus is divided into several submenus.

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

Rear control panel

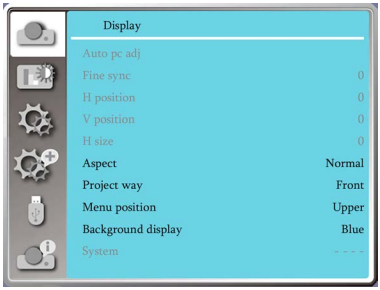


Remote controller

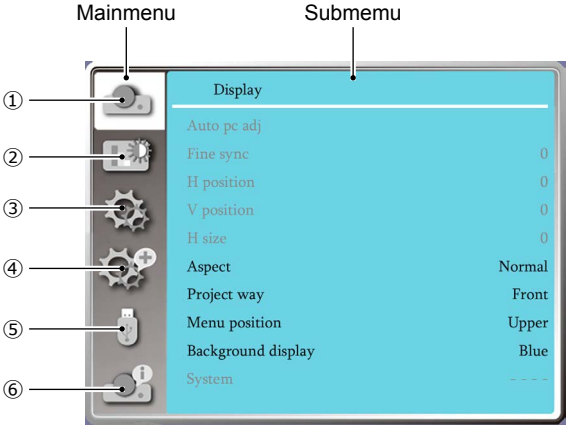


1. Press the MENU button on the back control panel or remote controller and the OSD displays.
2. Press ▲▼ button to act on or select one mainmenu item. Press ▶ button or OK button to enter a submenu.
3. Press ▲▼ button to select required sub-menu, then press OK button or ▶ button to set up or enter an option.
4. Press ▲▼ button to select settings or navigate options, then press OK button to act on the item and exit.
5. Press ◀button to return to mainmenu. Press the MENU button on remote controller or control panel 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, Widescreen, Advanced.
- Project way: Choose Front, Rear, Ceiling / Front, Ceiling / Rear, Auto ceiling/Front and Auto ceiling/Rear .
- Menu position: Set screen menu display position on the screen.
- Background display: Set 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, DICOM, Normal, Cinema, Blackboard (Green), Colorboard, or User Image.
- For AV signal input ,the available color adjust options : Contrast, Brightness, Color, Tint, White balance(Red, Green, Blue) and Sharpness.
- For PC signal 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, Lamp control, Cooling fast , Closed caption, Key lock, Iris, Remote Control, Sound and HDMI Setup.

④ Expand menu
Available adjust options are Language, Auto Setup, Keystone, LOGO , Security, Power management, Filter counter, Test pattern, Network, Factory default and Lamp counter.

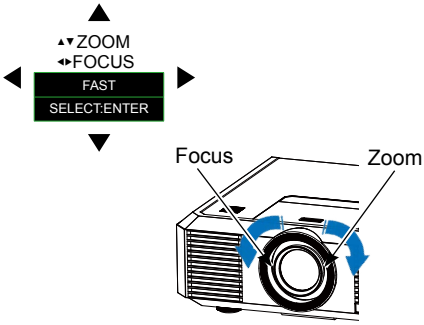
⑤ Memory Viewer menu
Select Parameter Of Set slide, Slide transition effect,Sort order, Rotate, Best fit, Repeat, Apply.

⑥ Information menu
Display information about the projector.

Zoom / focus function

1. Press the ZOOM / FOCUS button on the rear control panel or remote controller for zooming and focusing.
2. Press ▲▼ button to zoom in and out. Press ◀▶ button to change focus of image. Default adjustment speed is set to FAST. You may press the ENTER button, select STEP for speed fine-tuning.

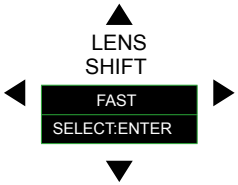
Zoom / focus



Lens movement function

1. Press the LENS SHIFT on the rear control panel or remote controller to adjust position of the lens. Default adjustment speed is set to FAST. You may press the ENTER button, select STEP for speed fine-tuning.
2. Movement of the lens is shown on the screen. Press ▲▼◀▶ button to move the screen to required location without any image distortion. Range of screen movement - Upward or downward from the lens movement axis is 60% (XGA / WUXGA) or 70% for WXGA series . Leftward or rightward: 30%.
3. Press and hold the LENS SHIFT button on the rear control panel or remote controller for 5 seconds to home it to the center position.

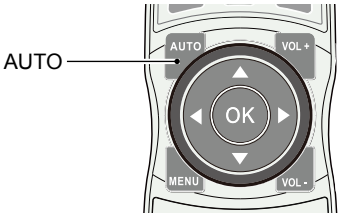
Lens movement



Auto setting function

Press the AUTO button on the top control panel or your remote controller to auto execute settings given in the Auto Setup on the Expand menu (including input search, Auto PC adj. and Auto keystone).

Remote controller



Keystone adjustment

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

●The curved correction function only for PCL-LT9000X, PCL-LT9000W.

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

You may save your settings for keystone adjustment.

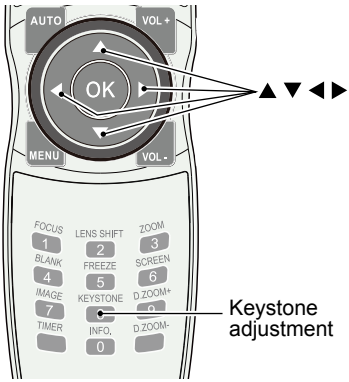
H/V Keystone.....Adjust the projected image when the projector is on the horizontal or vertical keystone distortion.

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.

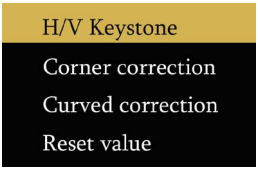
Reset value.....The correction values will be restored to the factory defaults.

Remote controller



H/V Keystone Adjust

- 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.

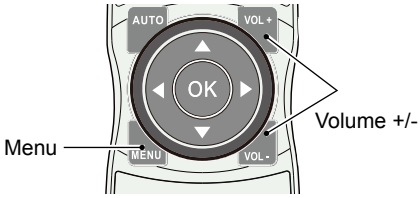


Volume adjustment

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

Volume
Press the remote control Volume +/- buttons to adjust the volume.

Remote controller

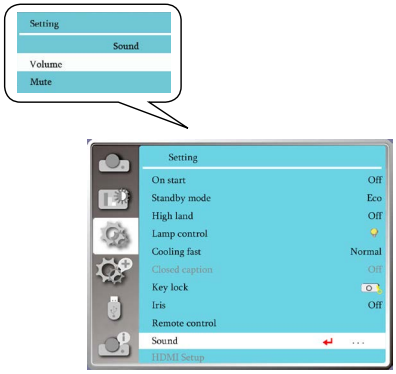


Menu operation

1. Press the MENU button on the top control panel or remote controller and the OSD displays. Press ▲▼ button to enter setting menu, then press OK or ▶ button.
2. Press ▲▼ button to select sound , press OK or ▶ button to enter.
3. Press ▲▼ button to select volume or mute.

   Volume.....Press ▲ button to increase volume.
   Press ▼ button to decrease volume.
   Mute.....Press ▲▼ button to switch to On or Off .
4. Press OK button to select.

Sound menu



Remote controller operation

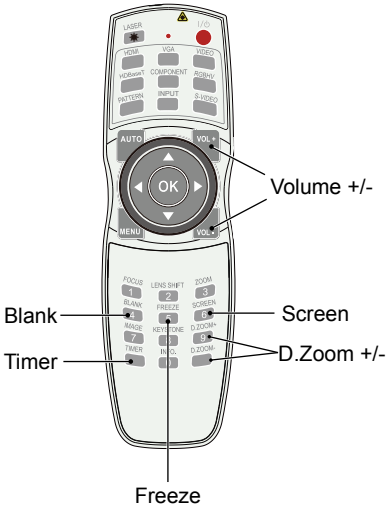
Use your remote controller for common operations.

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.



Volume +/- (VOLUME +/-)
Increase or decrease volume.

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

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:



The BLANK screen disappears if no buttons are pressed in 4 seconds.

BLANK → Normal → BLANK → Normal → .....

✓ Note:
For some other buttons' description,please refer to the next page.

Input selection

Basic operation

Press the INPUT button on the control panel or on the romote control to select one of the following input: VGA 1, RGBHV, Component,Video, S-Video, HDMI 1,HDMI 2(MHL), Memory Viewer, HD-Base T, Network, USB Display. Alternatively, you may press the VGA, HDMI, VIDEO button on remote controller to select VGA 1, RGBHV, Component,Video, S-video, HDMI 1,HDMI 2(MHL), Memory Viewer, HD-Base T, Network and USB Display.

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: VGA1, RGBHV, Component, Video, S-video, HDMI 1,HDMI 2(MHL), HD-Base T, Network, Memory Viewer, USB Display, and then press the OK button to select the input source.

VGA 1

Select input VGA 1 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.

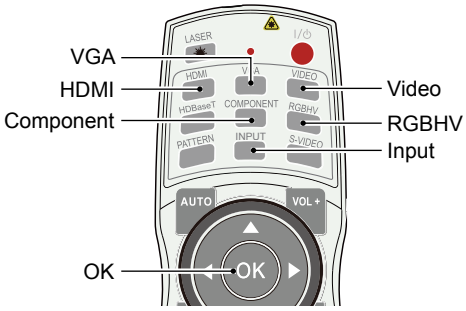
HDMI 2

Select input HDMI 2(MHL) if a device is connected to the HD MI 2(MHL) terminal.

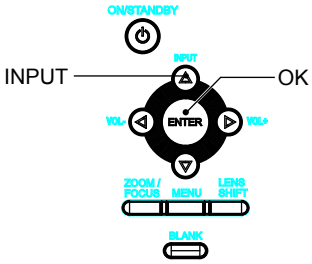
HD-Base T

Select input HD-Base T if a device is connected to the LAN terminal as for it is optional.

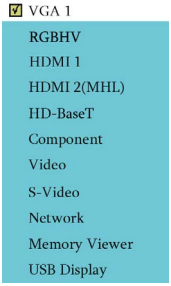
Remote controller



Rear control panel



Input menu



✓ Note:

- If the " Input search" function in the Auto Setup option is set to "On", once you press the AUTO button, the projector will search for input signals automatically.
- HD-Base T function is optional, please refer to the HD-Base T function in the additional appendix for details.

Component

Select input Component if a PC is connected to the YPbPr terminal.

Video

Select input Video if a PC is connected to the Video terminal.

S- video

Select input S- video if a device is connected to the S- video terminal.

Network

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

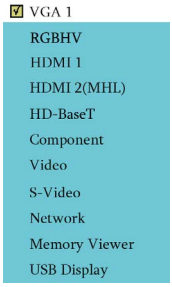
Memory Viewer

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

USB Display

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

Input menu



✓ Note:

- If the " input search" function in the Auto Setup option is set to "On", once you press the AUTO button, the projector will search for input signals automatically. The AUTO searching function maybe invalid for input of "USB display", "Memory viewer" and "Network".
- The following function will be invaild : Freeze, Aspect, Auto setup, and Pattern and Screen, once "USB display", "Memory viewer" and "Network" has been selected as the signal input.
- For further details about Memory Viewer function, please turn to page 76-78.
- For further details about USB display function, please turn to page 78-80.

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.

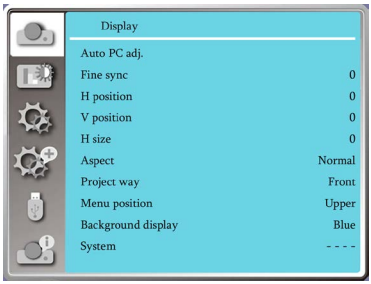
Press < MENU > button on the remote controller or on the top control panel to display the OSD menu.

Press ▲▼button to select the Display menu ,then press <OK> or ▶button.

1) Press ▲▼ button to select [Auto PC adj.] menu.

2) Press <OK> button.

AUTO PC adj. menu



Fine sync

(Only for PC signal input)

Adujust image to the best state When the image jitters, or the image outline dims.

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

2) Press <OK> button.

3) Press ▲▼ button to adjust Fine sync .

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

✓ 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 .
- Auto PC Adjustment function may fail to work if you select the following system signal format: 480i, 576i, 480p, 576p, 720p, 1080i,1080p, or signals from the HDMI terminal.

H Position

(Only for PC signal input)

On the premise that the relative position of both projector and the screen is set up right,you can move the image horizontal position,if the position of the projected image on the screen is deviated.

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

2) Press <OK> button.

3) Press ▲▼ button to adjust image H position.

Adjustment range is from -5 to +5.

V Position

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

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

2) Press <OK> button.

3) Press ▲▼ button to adjust image V position.

Adjustment range is from -5 to +5.

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.

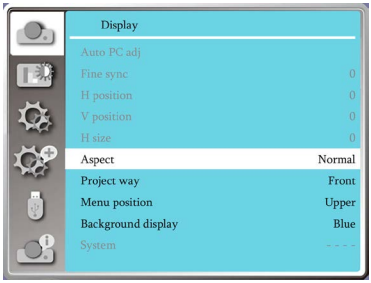
Normal....Use the maximum size to roject while keeping the aspect of input signal's unchanged.

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

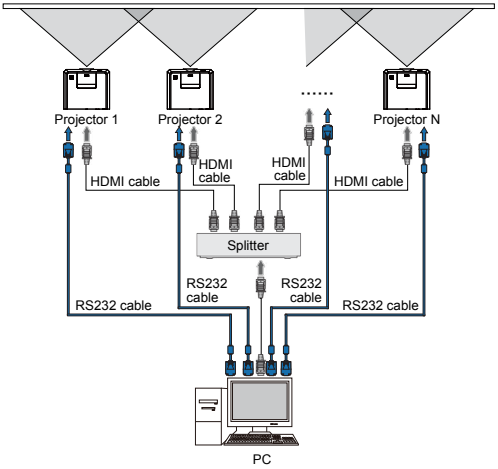
Advanced ..... Splicing screen.

- Executing edge blending function.

Aspect menu



For connection, please refer to the following :



✓ Note:
- For the details about the edge blending function, please refer to the attached introduction of edge blending function in the appendix.

Project way

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

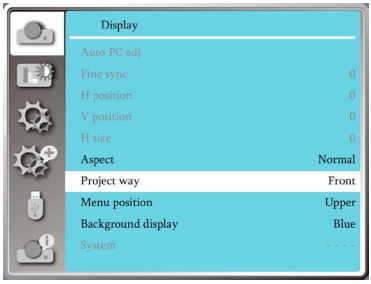
1) Press ▲▼ button to select [Project way] menu.

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

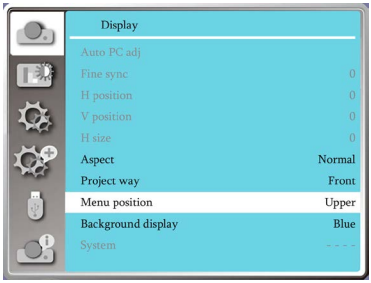
1) Press ▲▼ button to select [Menu position] menu.

2) Press <OK> button.

3) Press ▲▼ button to change menu position.

Upper left ..... The Menu display on the Upper left corner of the screen.
Upper right ... The Menu display on the Upper right 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 controller or on the top control panel to display the OSD menu.Press ▲▼button to select the Display menu ,then press <OK> or ▶button.

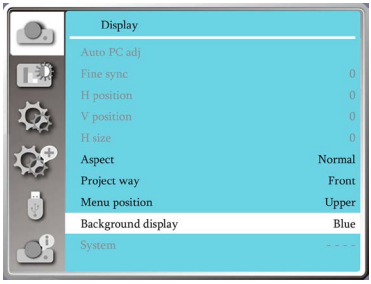
1) Press ▲▼ button to select [Background display] menu.

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 USB Display,Memory viewer and Network.

System

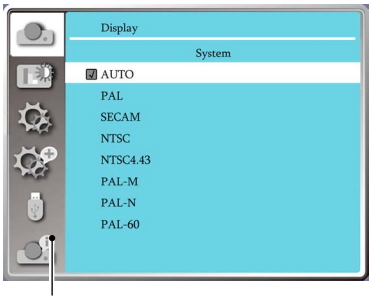
System selection

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:

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:
Your projector may save data generated by the Auto PC Adjusting function.

Select the computer system manually.

1 Press the MENU button on remote controller 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:
The computer system menu will be disabled once HDMI 1,HDMI 2(MHL), Memory Viewer,Network,USB Display has been selected.

Video / S-video

Select this function to set resolution of input signal is compatible with the PC.

Set Video / S-video input signal color system or Component input signal scanning mode.

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

2) Press <OK> button.

3) Press ▲▼ button to select wanted system.

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 / S-video input signal

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

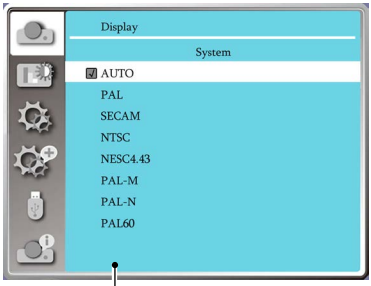
[PAL]/[SECAM]/[NTSC]/[NTSC4.43]/[PAL-M]/ [PAL-N]/[PAL60]:When projector can not display images correctly in [Auto], please set input signal color system manually.

Component input signal

Auto: When projector select input signal scanning mode automatically.

[1080p]/[1080i]/[720p]/[576p]/[480p]/ [576i]/ [480i]:When projector can not display images correctly in [Auto], please set scanning mode on the left manually.

Computer system menu



Video / S-video displays in the PC system menu.

Color adjust

Select color Adjustment to set the image mode and adjust the quality of the projected image

Image mode

Direct operation

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

Menu operation

Press < MENU > button on the remote controller 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 reqiured item.

Dynamic
An image mode suitable for viewing in bright room.

DICOM
A highly clear X-ray image is reproduced. Digital radiographs with excellent detail and clarity for medical training, presentations and conferences.

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

Cinema
Enriched grayscale for viewing movies.

Blackboard (Green)
An image mode designed for displaying on a black-board (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,Press <OK> button.

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

Remote controller

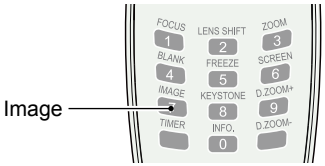
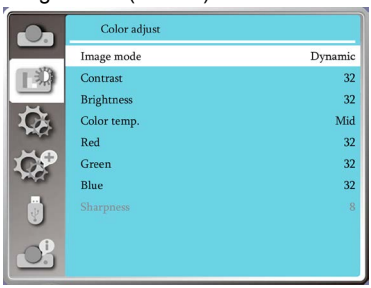
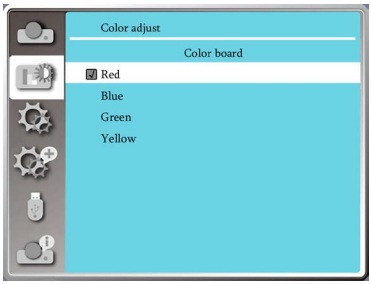


Image mode (For PC)



Colorboard



Color adjust(For PC.)

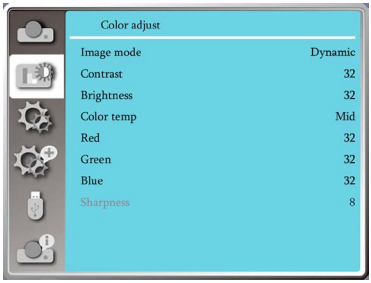
Press < MENU > button on the remote controller or on the top control panel to display the OSD menu.Press ▲▼button to select the Color adjust menu , then press <OK> or ▶button.

1) Press ▲▼ button to select reqiured item .

2) Press <OK> button.

3) Press ▲▼ button to adjust setpoint .

Color adjust(For PC)



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 sharp-en, range from 0 – +15.

✓ Note:

- Tint and color option are available if you chose Video, S - video or Component as signal, while other signals result in two of them invalid.

Color adjust(For Video, S-video or Component)

Press < MENU > button on the remote controller 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
Press▼ button to decrease saturation, press ▲button to increase saturation.

Tint.
Press ▲▼button to select required tint.

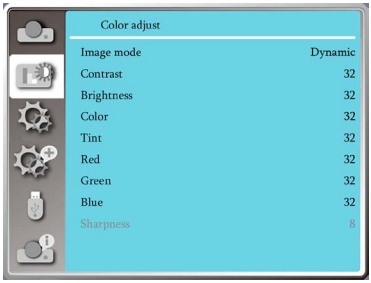
Red
Press ▼button to decrease red tint and ▲ button to increase it.

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 Video, S-video , Component)

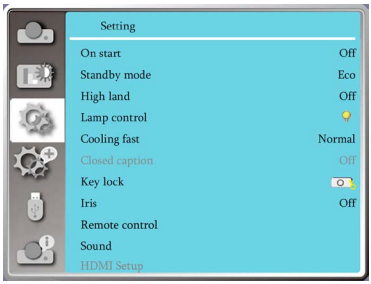


✓ Note:

- Tint and color option are available if you chose Video, S - video or Component as signal, while other signals result in both the two of them invalid.

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

Setting menu



Menu operation

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.

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

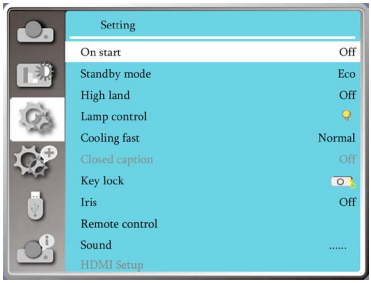
On start

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.....Start up immediately.

On start



Standby mode

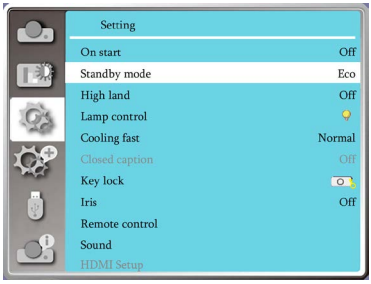
Set power consumption in standby mode,no matter whenever your projector is operated through network

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. 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



High land

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

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

2) Press <OK> button.

3) Press ▲▼ button to select required menu.

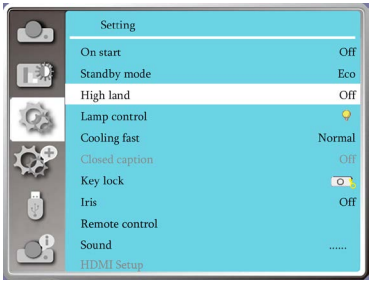
Off: Normal speed. Set the option OFF when operating the operator, if the altitude is not too high .

On:Faster than when in Off mode .Set the option ON when operating the operator in high land .

✓ Note:

- Set high land option ON when you operate the operator at an altitude of 1400-2700 meters.

High land



Lamp control

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

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

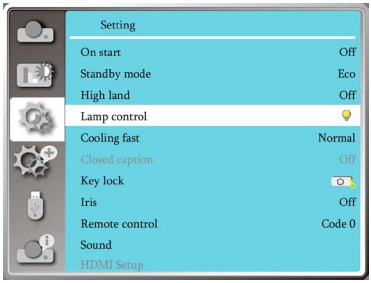
2) Press <OK> button.

3) Press ▲▼ button to switch required menu.

Normal.....Normal brightness.

Economical.....Lower the brightness and reduce energy consumption, thus prolonging the lamp service life .

Lamp control



IRIS

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

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

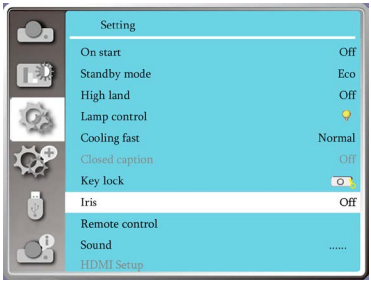
2) Press <OK> button.

3) Press ▲▼ button to adjust leves.

OFF.....NO correction.

ON.....Correct iris.

Iris



Cooling fast

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

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

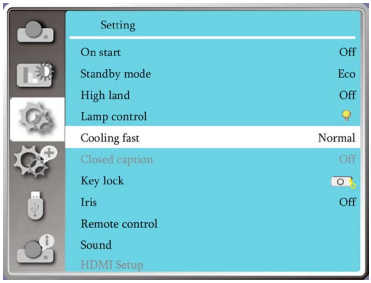
2) Press <OK> button.

3) Press ▲▼ button to switch required menu.

Normal.....Running in normal way.

60 seconds.....Running faster than in normal mode with shorter time but a louder sound.

Cooling fast



Closed caption

Closed Caption is used for displaying the program sound or other information on the screen. Select this function to switch channel with input signal of closed caption .

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

2) Press <OK> button.

3) Press ▲▼ button to switch required menu.

OFF:No closed caption.

CC1.....Display CC1 data.

CC2.....Display CC2 data.

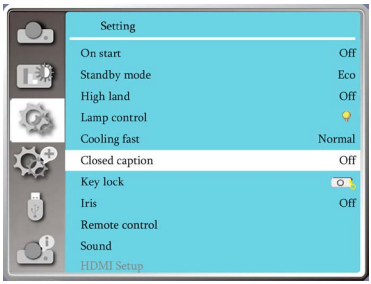
CC3.....Display CC3 data.

CC4.....Display CC4 data.

✓ Note:

- The icon display gray if the Closed caption function is invaild.
- The Closed caption function is invaild when the OSD menu and Timer display on the screen.

Closed caption



Key lock

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

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

2) Press <OK> button.

3) Press ▲▼ button to switch required menu.

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

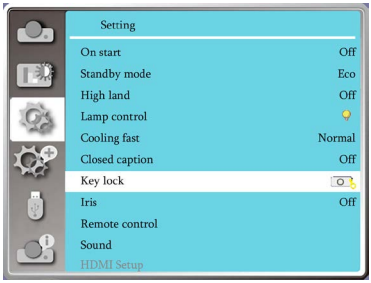
Projector.....Control panel keypad is invalid.

Remote controller.....Remote controller keypad is invalid.

✓ Note:

- If you 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



Sound

Select this function to adjust the sound.

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

2) Press <OK> button.

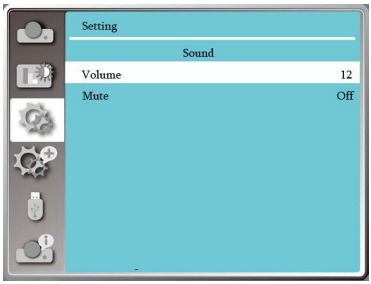
3) Press ▲▼ button to switch required menu.

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

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

On:No audio output.
Off:Audio output.

Sound



Remote control

Select this function to prevent the interference from the remote controller,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 0 ~ 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.

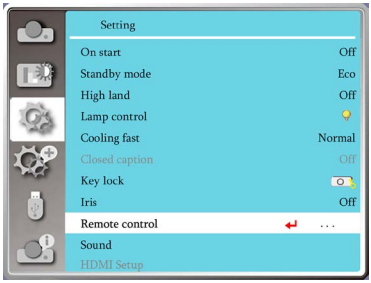
Your projector comes with 10 remote controller code (0-9) with default code at “0”and the other code at "1"-"9".

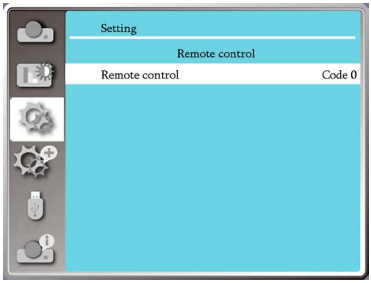
Your projector and the remote controller must be paired with the same code. For example: For a projector set to be operated by code 7, then the remote controller for controlling it needs be set to code 7 as well.

Change code of your projector:
Select [Remote Control] in the Setup menu.

Change code on remote controller:
Press and hold the OK button and one of the number button for 5 seconds to set the code to that number. The code is set successfully when the light indicator on the remote controller flashed.

Remote control





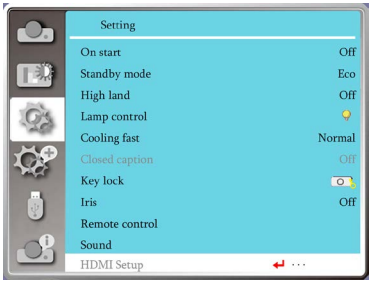
HDMI setup

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 or Sound setting.

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 [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



✓ Note:
- HDMI option can be chosen onlu in HDMI 1 and HDMI 2 (MHL) channel.

Image

[64-940]	When external device (such as:a blu ray disc player) is connected to the HDMI setup terminal .
[0-1023]	When the output of an external device (such as a computer), via a conversion cable or a similar cable ,is connected to the HDMI setup terminal. Select this option when the output of the PC or any other device is connected to the HDMI setup terminal also.

✓ 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 tansmite images and audio while the users donot need connect to audio signal separatly.
[Computer]	When the output of an external device (such as a computer), via a conversion cable or a similar cable ,is connected to the HDMI terminal . The audio signal would be output according the connection of AUDIO IN terminal.

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

Menu operation

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.

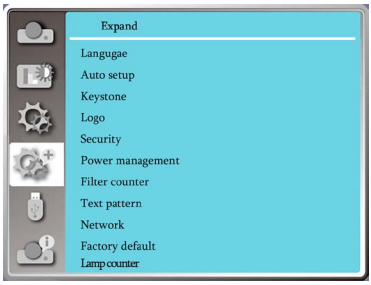
1) Press ▲▼ button to select reqiured item.

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.

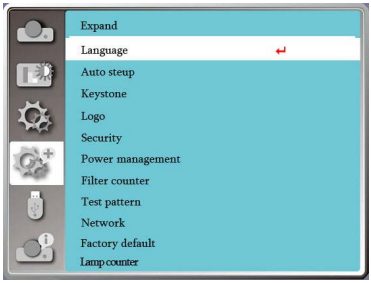
3) Press ▲▼ button to select required language.

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.

Language





.....

Auto setup

Press the AUTO button on your remote controller to execute the following functions : Input search, Auto PC adj. , and Auto keystone.

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 .

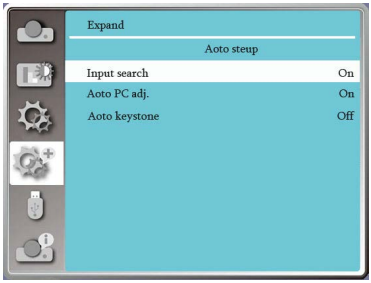
Auto PC adj. : Select this function to adjust [Fine sync], [H Position], [V Position] and [H Size] automatically, when projector input analog signals.

Auto keystone:Select this function to correct vertical distortion of the projected image automatically.

✓ Note:

- One of Input search, Auto PC Adj. and Auto keystone option should be set to On at least .
- Plesse adjust the projector manually ,if the image is displayed abnormal even if you have select Auto keystone function.
- When you set Project way as Ceiling / Front or Ceiling / Rear , Auto keystone function is invaild.
- When you set Project way as Auto ceiling / front or Auto ceiling / rear , and users put their projector in ceiling state, the Auto keystone function will be invaild.

Auto setup



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

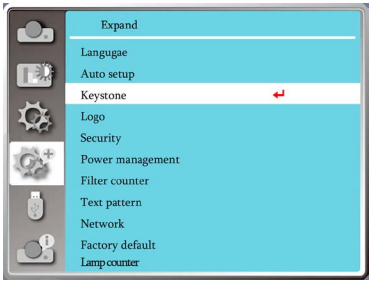
1) Press ▲▼ button to select [Keystone] menu.

2) Press <OK> button.

3) Press ▲▼ button to select required item.

4) Press <OK> button.

Keystone



Keystone

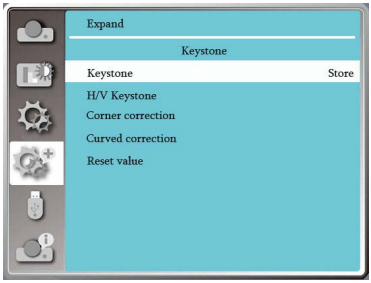
Select this function to store and reset Keystone after closing the projector or unpluging the AC power .

● This function is only when the option about Auto keystone is not set On.

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

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

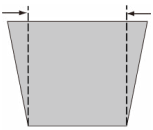
Keystone sub-menu



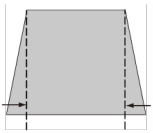
H/V Keystone

Select this function to correct the projected images horizontally or vertically

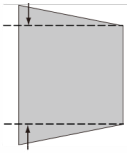
Press ▲button to reduce upper width



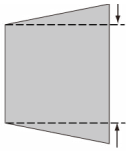
Press ▼button to reduce bottom width



Press ◀button to reduce left width



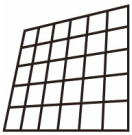
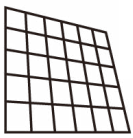
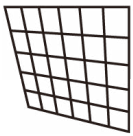
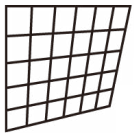
Press ▶button to reduce right width



Conner correction

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

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

Conner correction			
Upper left	Upper right	Bottom left	Bottom right
			

✓ Note:

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

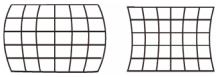
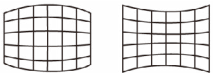
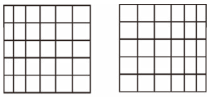
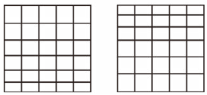
Expand

Curved correction

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

Press ▲▼◀▶ button to adjust options.

● PCL-LT9000U don't have this function.

Item	Operation	Adjustment	
Curved correction X/Y gain	Press ▶	Adjust right width	
	Press ◀	Adjust left width	
	Press ▲	Adjust top width	
	Press ▼	Adjust bottom width	
Curved correction X compensation	Press ▶	Adjust distortion on the right	
	Press ◀	Adjust distortion on the left	
Curved correction Y compensation	Press ▲	Adjust distortion on the top	
	Press ▼	Adjust distortion on the bottom	

✓ Note:

- After adjusting values about H/V Keystone , if users adjust Conner correction and Curved correction, values about H/V Keystone will be reset . And after adjusting values about Conner correction and Curved correction, if users adjust about H/V Keystone, values about Conner correction and Curved 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.
- Press KEYSTONE button on the remote control,then the Keystone OSD menu appears (includes: H / V keystone , Conner correction, Curved correction and Reset value), and press ▲▼ button to switch the four options .
- Maximum Keystone range up to ±30° vertically and ±15° 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 .

Reset value

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

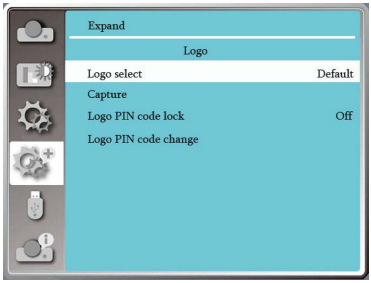
1) Press ▲▼◀▶ button to select [Reset value] option.

2) Press <OK> button.

- Release Keystone mode.

Logo

Logo menu



You may use this function to set up the Logo screen by Logo select, capture, Logo PIN code lock and Logo PIN code lock.

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.
User.....Display capture logo screen.
● PCL-LT9000U don't have this function.
Off.....Display countdown logo screen.

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

Capture

Enable us to capture images beeing projected and use it for a startup display or interval of presentattions.Upon captureing 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.
● PCL-LT9000U don't have this function.

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.....You may not alter the logo screen without the Logo PIN Code.
To change the logo screen password protection, press OK key, and the Logo PIN Code change popup dialog box prompts. Follow stepsbelow to enter a logo screen password.

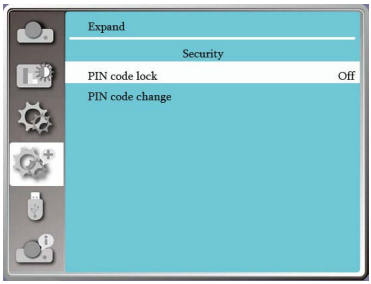
- Press arrow ◀▶button to select a number, then press OK button to enter it and move the cursor.The number you typed is displayed as “ * ”. To edit number you have entered, press MENU button to move the cursor to the number you want to change, press ▲▼ button to select the correct one.
- Repeat this step to type in a 3-digit number.Move the cursor to SET after you have typed the 3-dit 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 PIN code, you may press◀▶button to toggle switch Off and On.

Logo PIN Code Change

You may change the Logo PIN 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 contentscontained in the dialog box, select Yes 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.

Security

Security menu



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.

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

- To change the logo screen password protection, press OK button, and the Logo PIN Code change popup dialog box prompts.
  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.
- Enter a three-digit number, move the cursor to "set" . Press the OK button, you can start to operate the projector.
- If the password is invalid, the password displayed as " *** " will be in red. Please try again with a valid one.

Logo PIN Code Change

You may change the Logo PIN 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.

✓ 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 lamp, the power management function will turn off the projection lamp if your projector has no signals for a period of time.

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

2) Press <OK > button.

3) Press ▲▼ button to switch required item.

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

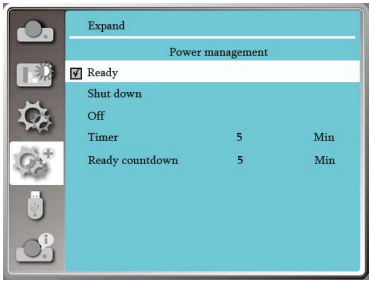
Power Off.....The projector shut down after the lamp is fully cooled down.

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 lamp turns off. Press arrow key to set up the timer in range of 1~30 minutes.

Ready Countdown...• Set up the interval from ready mode change to standby (0 to 30 minutes) automatically. A setting of zero minute keeps your projector from auto transition.Press the Power key to change your projector from ready to standby mode and any other key to power it on. of zero minute keeps your projector from auto transition.
• Press the Power key to change your projector from ready to standby mode and any other key to power it on.

Power management menu



Power management



Remaining time before poweroff the lamp.

✓ Note:

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

Filter counter

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

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

2) Press <OK> button.

3) Press ▲▼ button to switch required item.

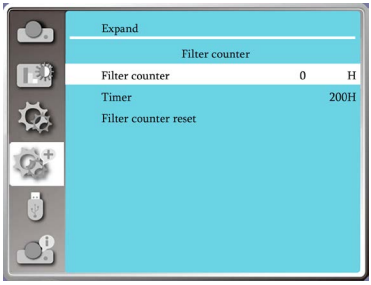
When the projector reaches the user-set cleaning time, filter warning icon will appear on the screen to notify the user needs to clean the projector filter. please make sure to select the initial state and set the timer after cleaning it. once resetting filter counter, filter warning icon will be closed.

Fliter.....Displays the filter usage time.

Timer.....Set the time to display a warning icon.

Filter counter reset .....reset filter counter.

Filter counter menu





Test pattern

Select this function to display the projector's built-in test pattern.

Location, size, and other factors cannot be reflected in the test pattern. Please make sure to display the input signal before performing various adjustments.

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

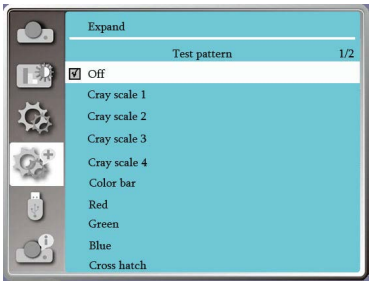
2) Press <OK > button.

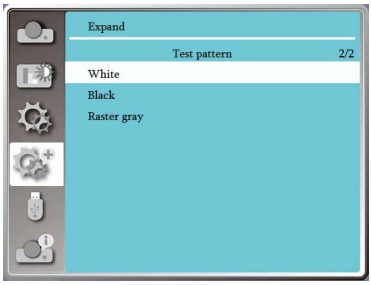
3) Press ▲▼ button to switch required item.

4) Press <OK> button.

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

Test pattern menu





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.



Lamp counter

Make sure to reset the lamp counter, when replacing the lamp. Then the WARNING indicator goes out and the lamp replacement icon will disappears.

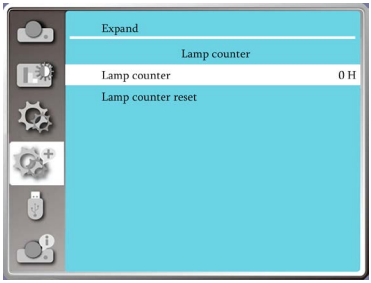
1) Press ▲▼ button to select [Lamp counter] menu.

2) Press < OK or ▶ > button.

3) Press ▲▼ button to select the "Lamp replacement Reset? ", and press the < OK > button. The "Lamp replacement counter Reset ?" message displays. Select Yes to proceed.

4) In another pop-up dialog box, select Yes to reset the filter counter.

Filter counter menu



✓ Note:

- DONOT reset the lamp counter, unless you need to replace the lamp.







Memory Viewer

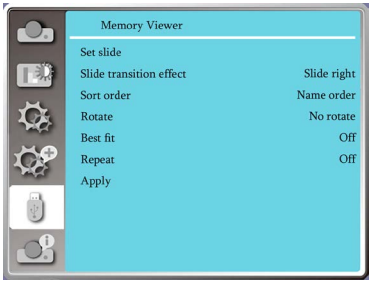
Select Memory Viewer function can project images stored in USB memory,when you insert the USB memory into the projector.
Press < MENU > button on the remote controller to display the OSD menu.Press ▲▼button to select the Memory Viewer menu ,then press <OK> or ▶button.

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

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.

Memory Viewer menu



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.

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 [Application], 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

Only be used in playing slides.

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

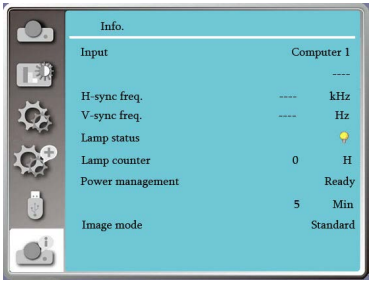
2) Press <OK or ▶ > button.

Info.

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

Menu operation
Press <INFO. > button on the remote controller to display the OSD menu.Press ▲▼button to select the Info. menu, then press <OK> or ▶button.

Info. menu



Info. display as follows:

Input : Display selected input source.

H- sync. Freq. ...Display H- sync. Freq. of input signal in unit of KHz. Show “---KHz” when no signals are in existence.

V- sync. Freq....Display V- sync. Freq of input signal in unit of KHz. Show “---KHz” when no signals are in existence.

Lamp status.....Display selected Lamp.

Lamp counter.....Display the lamp's usage time.

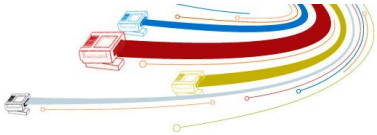
Power management... Display selected Power management mode.

Image mode... ....Display selected Image Mode.

HD-Base T function operation

Function: It uses RJ45 interface (commonly known as crystal head or Ethernet connector). Using the special Cat. 6 cable as the transmission cable, with a maximum transmission distance of 100 meters to transmit video signals; Meanwhile it has both the two fuction: Network connection and signal transmission function. Strong safety performance is its greatest feature.

Connecting and operating



1) Connecting the HDMI cable signal source(Such as DVD,STB etc) or mesh cable to HD-Base T transmitter.
2) Connect Cat. 6 or better cables to the HD-BaseT terminal.
3) Switch the signal path to the HD-Base T.
4) Turn on all devices.
   - Insert/Extract the cables gently.

✓ **Feature**:
- Have the maximum transmission distance of 100 meters;
- Strong security;
- Expand the transmission range, simplify the installation and reduce the total system cost.

✓ Note:
- HD-Base T function is optional, please refer to the HD-Base T function in the additional appendix for details.

Network control operation

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

Preparation

1 Required equipment: Projector, computer, network cable

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

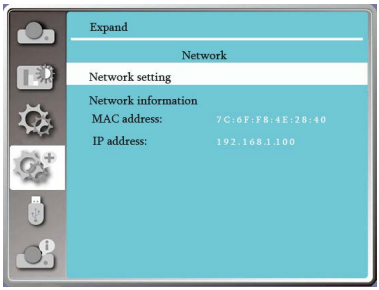
3 Turn on the computer. The LAN port on computer and projector are flashing after power on the projector.

Operation steps

1 Power on your projector.

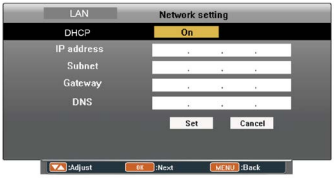
2 Acquire the IP address, with DHCP set to on and auto IP allocation set to On. (You may set DHCP to Off and set up IP address manually if you are somehow familiar with networking.)

3 Enter the network setup menu



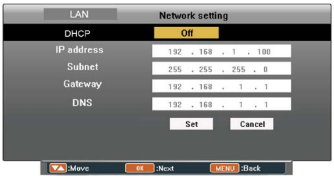
(1) Press MENU button on remote controller or top of the control panel, press ▲▼ button to select network icon.

(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.



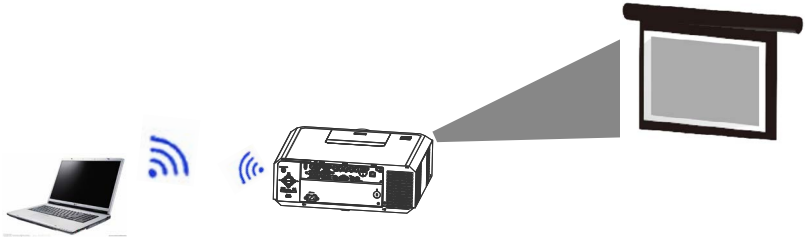
(5) Press ▲▼ button to select Set, press OK button to wait until the “Please wait..” message disappears.

✓ 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.

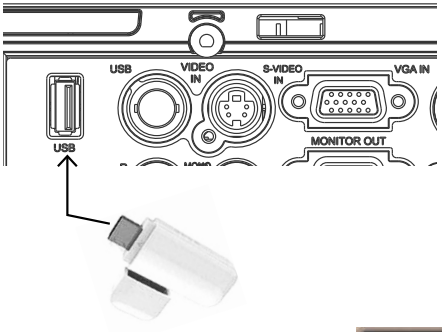
WI-FI display(For PC.)

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 fuction,users need to purchase the WIFI dongle seperately with your suppliers.



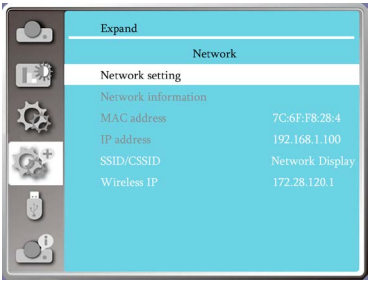
2. Please find "NetworkDisplay" in the Open Network and Sharing Center and click "Connect" to connect the WIFI .



Installation procedure:

1) Type the Wireless SSID/ESSID address (172.28.120.1) of the projector in the address bar of the web browser.
(Please find the SSID/ESSID address from the Network information in the OSD.)





2) Click Download button.

3) pwPresenter Software: After entering the IP address of the projector in the web page to the main interface, click "Download", and download the corresponding PwPresebter software with your projector.



4) Click  the icon to enter into pwPresenter software.(Details about pwPresenter operation, please turn to Page 73-75.



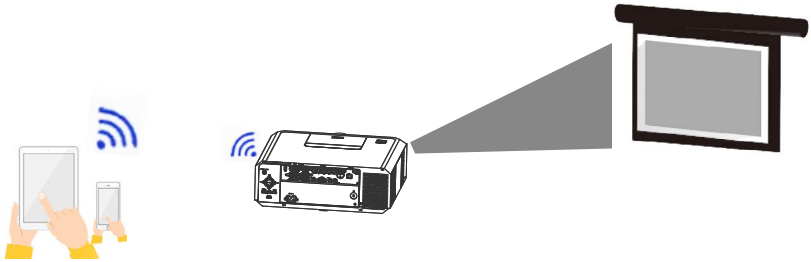
Click to enter to search, select the needed projector and connect it . Set the same IP address (for example: 172.28.120.1) as the projector in pwPresenter software ,and set user type as "average user", and the password is "admin".

✓**NOTE**

- Before using the pwPresenter search, please switch to the input signal of Network.

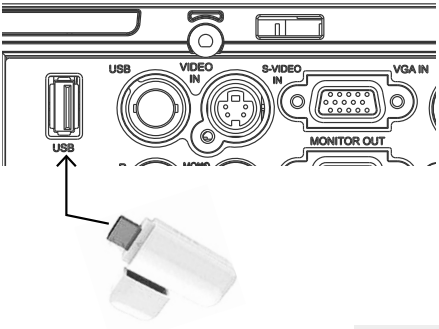
WI-FI display(For Mobile devices)

Wi-Fi display enable to connect any mobile devices 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 fuction,users need to purchase the WIFI dongle seperately with your suppliers.



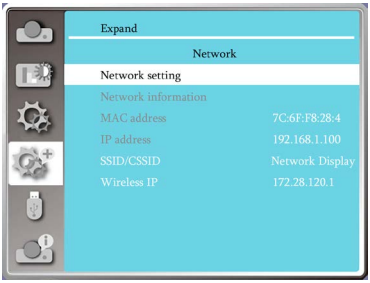
2. Please find "NetworkDisplay" during WLAN in Setting menu and click "Connect" to connect the WIFI .



Installation procedure:

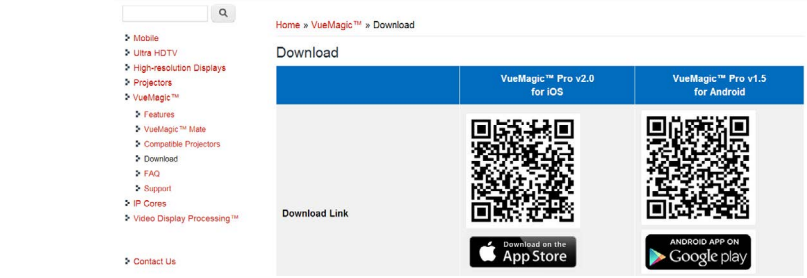
1) Type the Wireless address (https://www.pixelworks.com/?q=node/19) of the projector in the address bar of the web browser.





2) Click Download button.

3) VueMagic Software: Choose to download the appropriate VueMagic software system based on the mobile device and install it.



4) Click icon to enter VueMagic software, then select the appropriate screen display menu location, and click on the top left icon of the mobile device can be projected image or a file.



Click to enter to search, select the needed projector and connect it . Set the same IP address (for example: 172.28.120.1) as the projector in VueMagic software .

✓**NOTE**

- Before using the pwPresenter search, please switch to the input signal of Network.

Enter through a Web browser

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



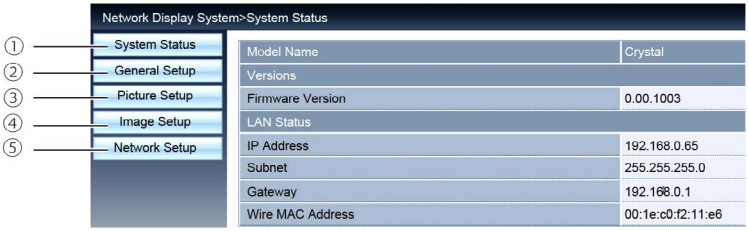
4) Click the [Login]

NOTE:
Users can click on the top right corner of the Web browser screen to select the display language.

Do not start multiple Web browser settings or control. Do not use more than one computer set or control the projector.

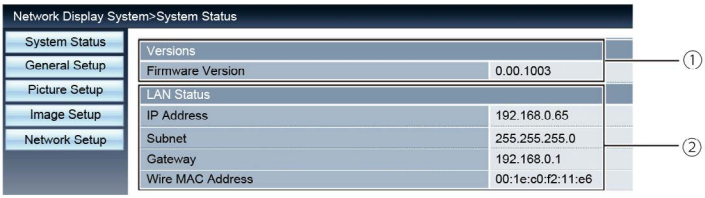
Please change your password.

If the network does not appear on screen controls, please consult your network administrator.
Description of each option



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

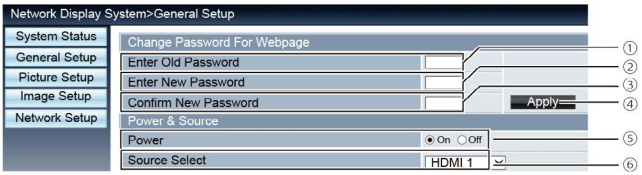
[System Status] page



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.

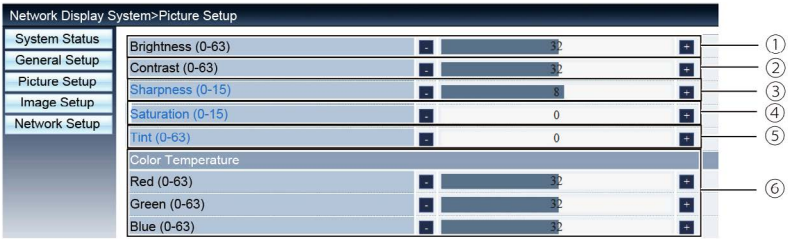
③ Confirm new password: Re-enter the new password to confirm.

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.

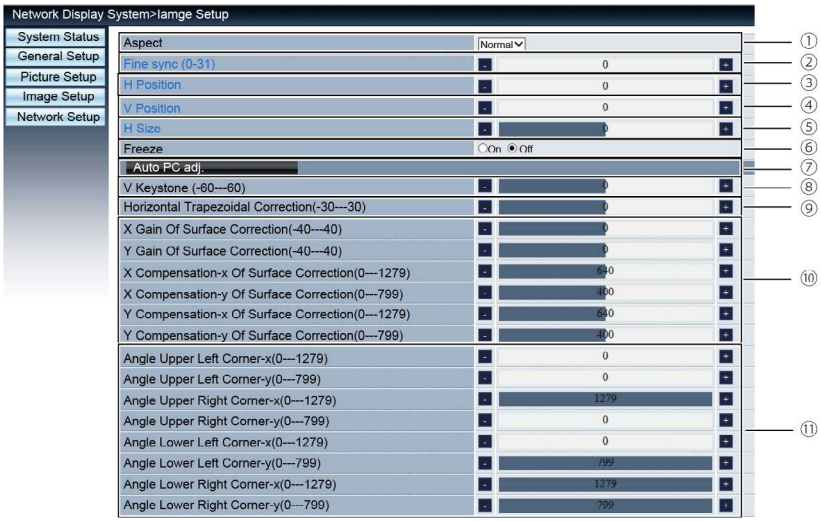
③ Sharpness: Adjust the sharpness of the projected image.

④ Saturation:Adjusts color saturation of the projected image.

⑤ Tint: Adjusts the tint of the projected image.

⑥ Color Temperature: Adjust the color temperature of the projected image.

[Image Setup] page



① Aspect ratio: Switch the aspect ratio of the projected image.

② Phase: Adjust the phase of the projected image.

③ Horizontal position: Adjust the horizontal position of the projected image.

④ Vertical position: Adjust the vertical position of the projected image.

⑤ Horizontal Dimension: Adjust the horizontal dimension of the projected image.

⑥ Screen Freeze: Select the function to switch the screen freeze on and off.

⑦ Automatic computer adjustment: Implement the automatic computer adjustment function.

⑧ Vertical trapezoidal correction: Correct trapezoidal distortion in vertical direction.

⑨ Horizontal trapezoidal correction: Correc horizontal distortion in horizontal direction.

⑩ Surface correction:Correct pincushion and barrel of the projected image.

⑪ Angle: Correct four angles of the projected imagehe .

[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)

② Apply

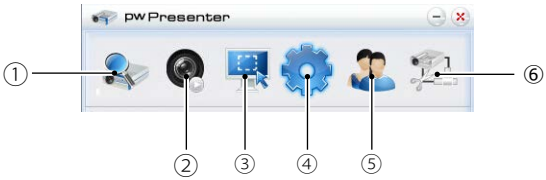
Update settings.

5) pwPresenter Software: 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 "Download", and download the corresponding PwPresebter software with your projector.



6 Click the icon to enter into pwPresenter software.

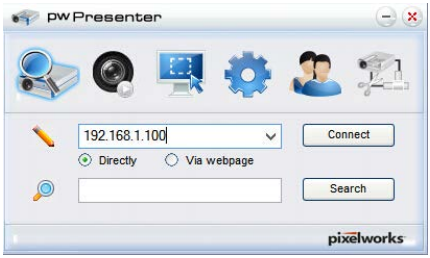


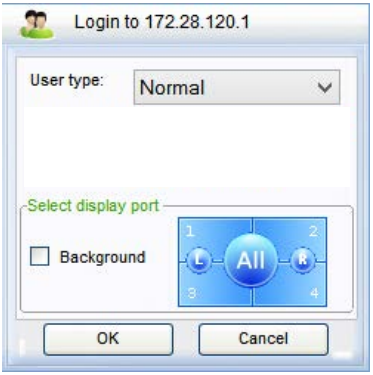
① Search network projector

Click to enter to search, select the needed projector and connect it . Set the same IP address (for example: 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

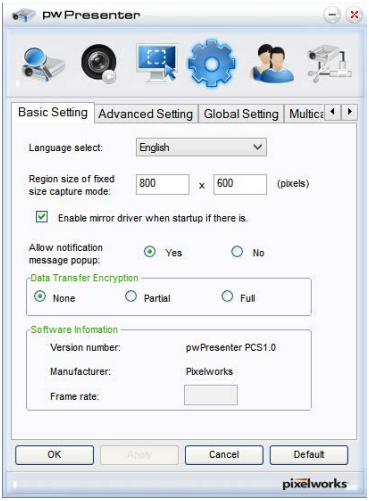
Start or pause the selected pictures.

③ Select screenshot mode .

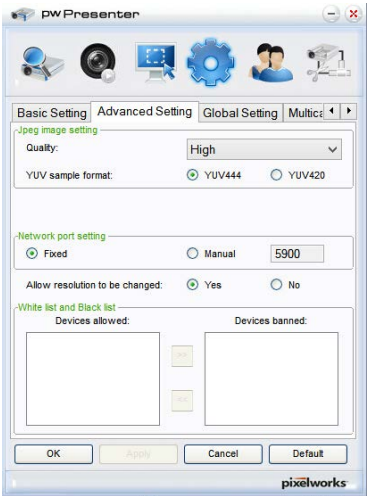
Select screenshot mode from the "full range", "fixed size" or "variable size" and

④ Parameter Setting

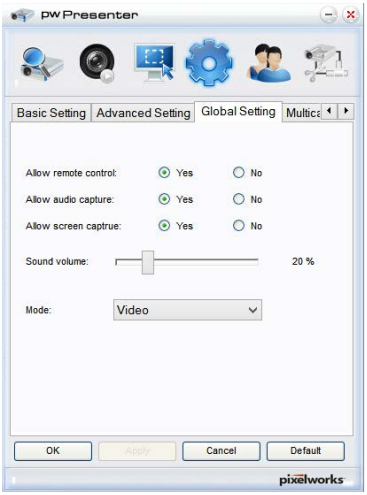
Basic setting: Language, Capture region size etc.



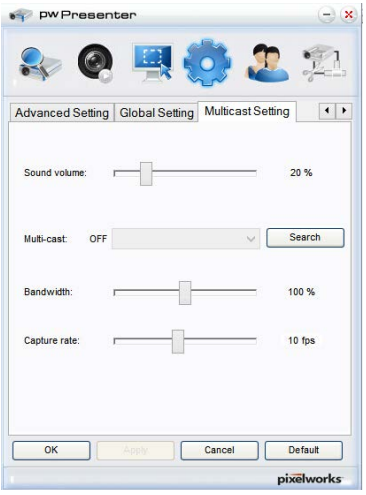
Advanced setting: JPEG image setting, Network port setting, White list and Black list etc.



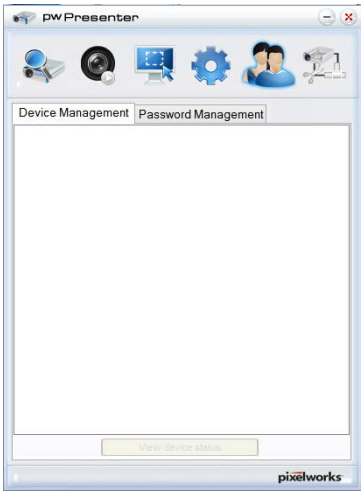
Global setting: Remote control setting, Sound capture and Screen capture, etc.



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 inset into the projector, the viewer memory function can projecte 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	Video Codec	Audio Codec	Video Format
Video	Avi	MotionJPEG	ADPCM	Maximum 1280x720,30fps

	Extension name	Format	Description
Maps	jpg/jpeg	Baseline encoder 24 Progressive RGB24 bit	Max resolution: 10000x10000 Max resolution: Panel Resolution
	bmp	1.4.8 bit palette-based RGB24,32 bit	Max resolution: 1280X800
	png	24, 48-bit True Color	-24-Bit color palette space Max resolution: 1024x768
	gif	1,4,8-bit palette-based	Max resolution: 800x600
	tiff		Max resolution: 800x600

Display memory viewer screen

When the USB memory inset into the projector, the viewer memory function can projecte the video and pictures stored in the USB memory.

1) Press INPUT button on the control panel and on the top control panel and select the input source of [Memory Viewer].

2) Insert the USB memory into the <USB (browser) > 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 a special setting ,all images in the same folder can play automatically.

1) Press◀▶ button to select a file.

2) Press ▲▼ button to select [Memory Viewer] menu,then select [From Scratch] menu.

3) Press <OK > button.

- Full screen display
- Press <OK> button to return the thumbnail.

Play video

Play video files.

1) Press◀▶ button to select a file.

2) Press <OK> button.

- Full screen display
- Use the remote control to operate the controller that appears at the bottom of the screen.



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

The termination of Memory Viewer

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

1) Press◀▶ button to select , displayed in the left corner of the screen.

2) Press <OK > button.

- Please Press RC ENTER to display standby screen 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. If you use a USB memory device without lights, the projector will not recognize when reading data. Please close its browse function on and turn off the projector , then remove the USB memory.
  c. Do not install and remove USB memory frequently. Then remove it after the installation of at least 5 seconds. After removing at least five seconds and then reinstall it. The projector is on switch mode during the operation,when installing or removing the USB memory.

Precautions on processing and storage of USB memory

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

NOTE
It allows the insertion or removal of the USB memory when the projector is in any power status.

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 Windows 32, 32/64 Windows7, Windows 8 32/64
CPU	Intel Core 2 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

CAN NOT guarantee that the PC meeting the above conditions can operate normally .

Project USB display

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

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

NOTE

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

The termination of USB display

1) Remove the USB cable directly,when terminate USB monitor.
   ● You never 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

CAN NOT guarantee that the PC meeting the above conditions can operate normally .

Project USB display

1) Using USB-B cable to connect the projector to the USB display terminals.
   ● Items in grey are not available.
2) Press the information source menu on the remote controlor the INPUT button on the control panel, then select [USB Monitor] in the input source menu.
3) Double-click "Monitor.app" button installed on the virtual disk.
   ● Projecte 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 be switched.
- You need wait for a moment,if you want project computer screen.
- Connect the USB cable directly to the computer's USB connector. When connecting the USB hub, it may be abnormal.

The termination of USB display

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

WARNING light indicator

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

> 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 WARNING indicator flashes red.

Your projector powers off automatically to protect components within it when it is overheated. The POWER 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 WARNING 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.

The power is abnormal and the POWER indicator turns steady yellow.

The POWER indicator turns steady yellow 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 steady yellow

Maintenance and cleaning

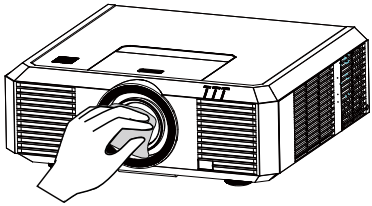
Clean your projector when it is contaminated by foreign matter or its display effects are getting worse.

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

Clean the lens

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

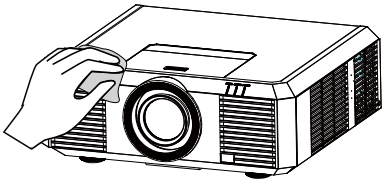
Do not over apply cleaner to the lens. Abrasive cleaner, solution, or other rough chemical may scratch the lens.



Clean casing of your projector

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

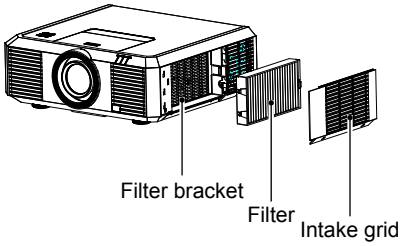
Place your projector in proper container after use to protect it from dirt and dust and being scratched.



Clear the filter

The filter is designed to keep dust from entering in your projector, which may lead to dusts accumulated on surface of internal components. Clogged filter may reduce cooling fan effects, which, in turn, will overheat your projector and shorten its life cycle. Clean the filter immediately whenever the Filter Warning icon displays.
Please follow these steps to clean your filter:

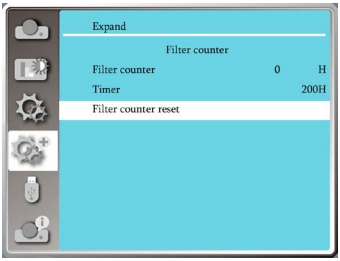
1 Power off your projector and unplug from AC power source.
2 Remove the filter.
3 Gently clean it with a brush.
4 Replace the filter. Make sure it has been fully inserted.



> Note:
> Do not operate your projector after its filter is removed. Dust may attach to the lens assembly and deteriorate image quality.
> Do not insert any small object in the air outlet. It may fail your projector.

Reset the filter counter

1 Press MENU button and the OSD displays. Press ◀▶ button to select Setup menu, press ▶ button or OK.
2 Press ▲▼ button to select "Filter Counter", press ▶ button or OK. Press ▲▼ button to select “Reset the filter counter” and press OK. The “Reset filter counter?” message displays. Select Yes to proceed.
3 In another pop-up dialog box, select Yes to reset the filter counter.



■ Recommendations

Please do not use your projector at place of dust and smoke. This may affects image quality. Using your projector in place of dust and smoke may lead to piling dusts on lens, LCD panel, and lens components within it. In case like this, call your dealer or service center for correct cleaning.

Note:
Reset the filter counter after its cleaning or replacement.

Lamp replacement

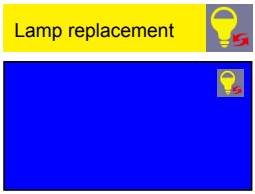
The lamp warning icon displays when its usage time are more than the life of the projector minus 300H and less than 1.1 times the life of the projector.

The lamp replacement icon displays when its usage time are more than the life of the projector.

The lamp warning icon



The lamp replacement icon

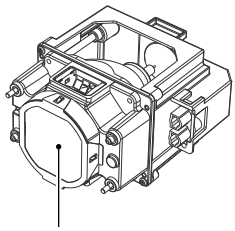


Lamp model

Your projector’s lamp is a consumable. You can comfirm your usage time according to "Lamp counter" on the Info. menu in Page 61.
You'd better ask a professional technician to replace the lamp. Contact your dealer for help.
Pleae call your dealer to replace the lamp (ESP-LAP350 and ESP-LAP430).

■ Recommendations

DONOT replace the lamp when it is so hot .Make sure to replace it at lease 1hour later after using it.
The internal cover of lamp model is getting hot in use. Take care, or you may get burned.



The lamp model

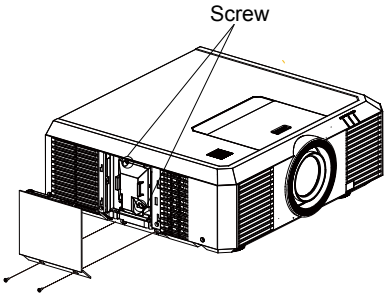
Note:
Do not replace the lamp after it went dark as it may be broken. Always assume the lamp of a ceiling mount your projector is broken when replacing it. Stand beside the lamp cover instead of below it. Remove the lamp cover gently. Small piece of glass debris may fall off when opening the lamp cover. Consult with a doctor immediately if there is any glass debris fell in your eyes or mouth.

Note:
Let your projector cool for at least 45 minutes before opening the lamp cover, as temperature within your projector is high.

Note:
Replace the lamp with a new one of the same model just in case. Do not drop or touch the lamp! It may break and lead to personal injuries.

Follow steps below to replace the lamp:

1. Power off your projector and unplug the AC power cord. Let it cool down for at least 45 minutes.
2. Open the lamp cover after removing screws holding the cover.
3. Loose all 2 screws fixing the lamp. Remove the lamp by holding its handle.
4. Replace with a new lamp and tighten all 2 screws. Make sure the lamp has been installed correctly. Close the lamp cover and tighten the screw.
5. Connect your projector to an AC power source and power it on.



Precautions on lamp operation

Your projector employs high voltage lamp, which requires careful and correct operation. Fail to do so may lead to accidents, personal injuries, or fire.

- Life cycle of lamp varies with environment it is in service. Life cycle of lamp varies. That is, some lamps may last longer than their counterparts.
- If your projector prompts you to replace lamp (by showing a lamp replacing icon) then replace it with a new one after powering it off and it is fully cooled down. (Please replace lamp by strictly following steps given in this manual.)
  If you keep on using the lamp after being prompted to replace it then you are exposed to greater risks of lamp explosion.
- Lamp may explode due to external impact and shock. Risks of explosion vary with projector and use environment and status of the lamp.

In case of lamp explosion, take the following safety measures:
Disconnect your projector from power source immediately in case of lamp explosion. Call authorized service center to inspect your projector and replace lamp. Make a thorough inspection to ensure every piece of debris after explosion has been removed. Remove every piece of debris after explosion. No one else may inspect the internal of your projector except those authorized and well trained technician who also are familiar with its maintenance. Or we shall not be held liable for the consequences.

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. – Check the lamp. – 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.
Press INPUT button during power on and a non-input mode icon displays.	– This is a filter or lamp replacement alerts.
A non-input or lamp mode icon displays.	– This is a filter replacement alerts.
Image looks fuzzy	– Adjust focus of your projector. – Provide proper projection distance. – The projection lens requires cleaning. – Moving your projector from a colder environment to a hotter one may result in condensing on the lens. If this is the case, wait until the condensing water evaporated before powering on your projector.
Image mirror reflected Image turns upside down	– Check the Ceiling and Rear settings. – Check the Ceiling settings.
Image looks dim	– Check for contrast and brightness settings. – Check for correct image mode settings – Check for lamp brightness settings. – Check for lamp replacement alert. The lamp replacement alert suggests the lamp is reaching the end of its life cycle. Please replace it with a new one of the same model immediately.

No image displays	– Check for the connection between your projector and computer or image equipment. – Check for correct input signal from computer. Connection with certain notebook computer may mandate changes to its display output settings. See the user manual included with the computer for details on settings. – It takes about 30 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 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 controller 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 status of your projector according to the light indicator status.
" X" mark displays	– Invalid operation, please operate your projector correctly.
Control panel does not function	– Disable the key lock on control panel function in the Safety option of the Setup menu.
Cannot remove the Logo Select password, Key Lock, and PIN Code lock	– Please call your dealer or service center.

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

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

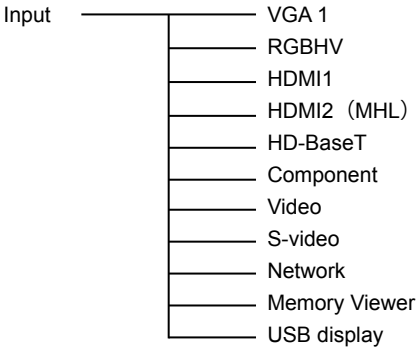
Menu tree

Main menu	Sub-menu	Setting	Remarks
Display	Auto PC adj.		
	Fine sync	0-31	
	H Position	-5 - +5	
	V Position	-5 - +5	
	H Size	-15 - +15	The range of H Size differs from signals.
	Aspect	Normal Widescreen Advanced	
	Project way	Front Rear Ceiling / Front Ceiling / Rear Auto ceiling / Front Auto ceiling / Rear	
	Menu position	Upper Left, Upper Righ Center Lower Left, Lower Right	
	Background display	Black Blue	
	System	Auto PAL SECAM NTSC NTSC4.43 PAL-M PAL-N PAL-60	S-Video Input Video Input
Color adj.	Image mode	Dynamic Normal Cinema Blackboard (Green) Colorboard User Image	
	Contrast	0-63	PC Input
	Brightness	0-63	
	Color temp	High/Middle/Low	
	Red	0-63	
	Green	0-63	
	Blue	0-63	
	Sharpness	0-15	

Main menu	Sub-menu	Setting		Remarks
Color adj.	Contrast	0-63		Component Input S-Video Input Video Input
	Brightness	0-63		
	Color	0-63		
	Tint	0-63		
	Red	0-63		
	Green	0-63		
	Blue	0-63		
	Sharpness	0-15		
Setting	On start	On/Off		
	Standby Mode	Normal/ECO mode		
	High land	On/Off		
	Lamp control	Normal/ECO mode		
	Cooling fast	Normal/60s		
	Closed caption	Off/CC1/CC2/CC3/CC4		
	Key lock	Off/Projector/Remote controller		
	Iris	On/Off		
	Remote control	Code 0-9		
	Sound	Volume	0-25	
		Mute	On/Off	
	HDMI Setup	Image	64-940	
			0-1023	
		Volume	HDMI	
			PC	
Expand	Language	Projector provides multiple language support		
	Auto Setup	Input Search	On/Off	
		Auto PC Adj.	On/Off	
		Auto Keystone	Off	
			AUTO	
			Manual	
	Keystone	Keystone	Store / Reset	
		H/V Keystone		
		Corner correction		
		Curved correction		
		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		
	Filter counter	Filter counter Timer Filter counter reset		
	Text pattern	Off，Gray scale（1-4），Color bar， Red，Green，Blue，Cross hatch ， White，Black，Raster gray		
	Network	Network setting	LAN DHCP(On/Off) IP address Subnet Gateway DNS	
		Network status	MAC address IPaddress	
	Factory default			
	Lamp counter	Lamp counter Lamp counter reset		
Memory Viewer	Set slide			
	Slide transition effect	Slide down Slide right		
	Sort order	Expand name orde Magnitude order Time orde Name order		
	Sort order	No rotate 270° rotate 180° rotate 90°rotate		
	Best fit	On/Off		
	Repeat	On/Off		
	Apply			

Main menu	Sub-menu	Setting	Remarks
Info.	Input		
	H- sync. Freq.		
	V- sync. Freq.		
	Lamp status		
	Lamp counter		
	Power management		
	Image mode		



Light indicator status

Check light indicator to learn status of your projector.

Light indicator			Status of your projector
POWER Green /Red	STATUS	FILTER	
○	○	○	Your projector is in Off status (without AC power supply).
●	○	○	Your projector is in standby status. Press Standby button to turn it on.
●	○	○	Your projector is in normal status.
✳	○	○	It is ready for standby or the lamp is cooling. You may power on your projector only after the lamp is fully cooled and the POWER light indicator stops flashing.
✳	○	○	Your projector is in Ready mode.
●	●	○	Your projector detects abnormal situation and cannot power on. Unplug the AC power cord and connect it again before powering on your projector. If it powers off again, please unplug the cord and call your dealer or service center for maintenance or inspection. Do not let it continue operating as this may lead to electric shock or fire.
✳	●	○	Your projector detects lamp abnormality and cools down.
●	●	○	Your projector detects lamp abnormality and switches into standby mode.
✳	✳	○	Your projector cannot power on, as its internal temperature is too high. You may power it on after it is fully cooled, temperature backs to normal, and the POWER light indicator turns red.
●	✳	○	You may power is fully cooled with temperature backs to normal.
○	●	○	The lamp cover is not fully closed.
○	○	●	The filter requires cleaning

● . . . Green ● . . . Red ● . . . Yellow ○ . . . Turns off

✳ . . . Flashing green ✳ . . . Flashing red ✳ . . . Flashing yellow

Compatible computer screen

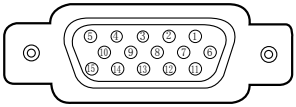
Your projector is designed to accept every analog computer signal below Dot Clock 160MHz and digital computer signal below Dot Clock 150MHz.
See table below for details on resolution and relevant frequency.

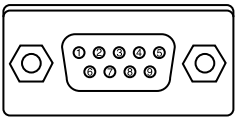
Input	Signal format	Resolution	Frequency (Hz)
PC	VGA	640x480	60
		640x480	68
		640x480	72
		640x480	75
		640x480	85
	SVGA	800x600	56
		800x600	60
		800x600	72
		800x600	75
		800x600	85
	MAC 16	832x624	75
	XGA	1024x768	60
		1024x768	70
		1024x768	75
		1024x768	85
	MXGA	1152x864	75
	WXGA	1280x768	60
		1280x768	75
		1280x768	85
		1280x800	60
		1280x800	75
		1280x800	85
		1366x768	60
	QVGA	1280x960	60
		1280x960	85
	SXGA	1280x1024	60
		1280x1024	75
		1280x1024	85
	SXGA+	1400x1050	60
		1400x1050	75
	UXGA	1600x1200	60
	WSXGA+	1680x1050	60
	WUXGA	1920X1200	60
Component	480i	720x480i	60
	576i	720x576i	50
	483p	720x483p	60
	576p	720x576p	50
	720p	1280x720	50
	720p	1280x720	60
	1080i	1920x1080i	50
	1080i	1920X1080i	60

Input	Signal format	Resolution	Frequency (Hz)
HDMI	VGA	640x480	60
		640x480	68
		640x480	72
		640x480	75
		640x480	85
	SVGA	800x600	56
		800x600	60
		800x600	72
		800x600	75
		800x600	85
	MAC 16	832x624	75
	XGA	1024x768	60
		1024x768	70
		1024x768	75
		1024x768	85
	XGA+	1152x864	75
	WXGA	1280x768	60
		1280x768	75
		1280x768	85
		1280x800	60
		1280x800	75
		1280x800	85
		1366x768	60
	QVGA	1280x960	60
		1280x960	85
	SXGA	1280x1024	60
		1280x1024	75
		1280x1024	85
	SXGA+	1400x1050	60
		1400x1050	75
	UXGA	1600x1200	60
	WSXGA+	1680x1050	60
	WUXGA	1920X1200	60
Video/S-video	NTSC	NTSC	-
	PAL	PAL	-
	SECAM	SECAM	-
	NTSC4.43	NTSC4.43	-
	PAL-M	PAL-M	-
	PAL-N	PAL-N	-
	PAL-60	PAL-60	-

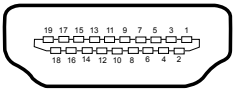
✓ Note:
Changes to this manual may be made without notice.

Terminal configuration

VGA IN / MONITOR OUT Terminal (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		

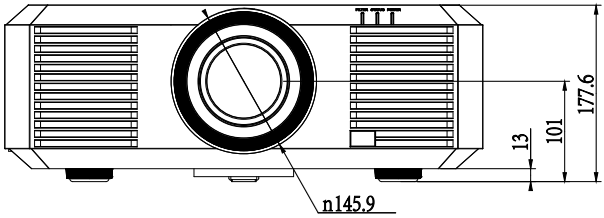
LAN Terminal				
	1	TX +	5	-----
	2	TX -	6	-----
	3	-----	7	RX +
	4	-----	8	RX -

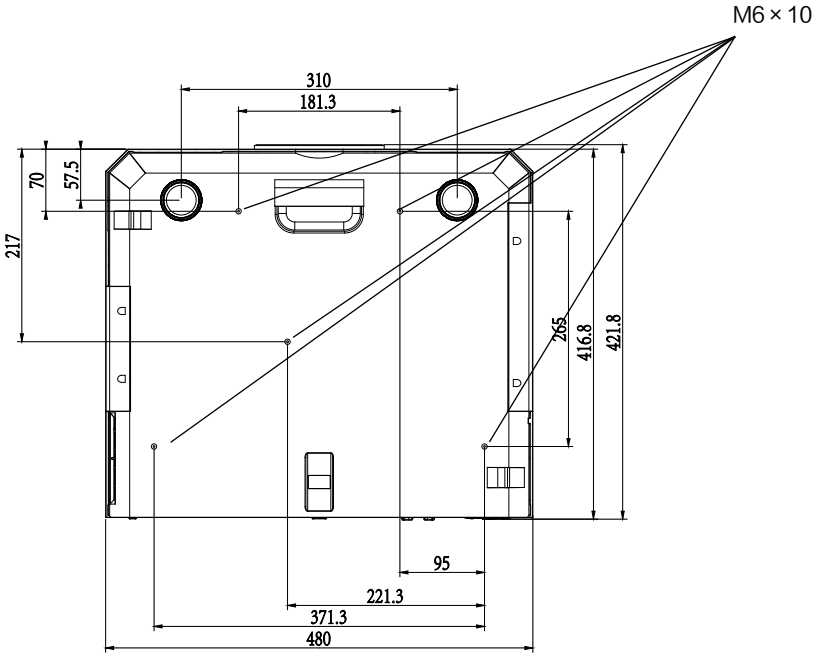
HDMI Terminal (HDMI Type A 19)				
	1	TMDS Data2+	11	TMDS Clock Shield
	2	TMDS Date2 Shield	12	TMDS Clock-
	3	TMDS Date2-	13	CEC
	4	TMDS Date1+	14	Reserved (N.C. on device)
	5	TMDS Date1 Shield	15	SCL
	6	TMDS Date1-	16	SDA
	7	TMDS Date0+	17	DDC/CEC Ground
	8	TMDS Date0 Shield	18	+5V Power
	9	TMDS Date0-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

Dimensions

↘ Unit: mm

Screw Holes for Ceiling Mount
Screw: M6
Depth: 10.0





Technical Specifications

Mechanical properties	
Dimensions (W×H×D):	481x179x418 mm
Net Weight	9.98Kg
Adjustable foot	5˚
LCD resolution	
LCD system	0.79/0.76" TFT, active matrix
LCD resolution	1024x768/1280x800/1920x1200
Compatible signals	
Color standard	PAL, SECAM, NTSC, NTSC4.43, PAL-M and PAL-N,PAL-60
HDTV signal	480i, 480p, 576i, 576p, 720p, 1080i and 1080p
Scanning frequency	Horizontal frequency: 15 kHz–100 KHz; Vertical frequency: 48–85 Hz
Optical elements	
Image size (diagonal lines)	40"-300", adjustable
Projection distance	XGA (4:3) : 1.165-9.058 (W) 2.147-16.412 (T) WXGA / WUXGA (16:10) : 0.900-9.413(W) 1.659-17.044(T)
Lens (Standard Lens)	F=1.8-2.6, f=24.0-43.2mm ; Electric zooming and focusing; Zoom times: 1.8
Lamp power	430W/350W
Terminal	
S-Video	S-Video Mini Din 4pin x1
BNC/VIDEO	BNC x 5 (G or Video/Y, B or Pb/Cb, R or Pr/Cr, HV and V)
VGA IN	Mini D-sub 15 pin x1
MONITOR OUT	Mini D-sub 15 pin x1
HDMI	HDMI A type 19 pin
HML	HDMI A type 19 pin
AUDIO IN	Mini Stereo 3.5mm x1
AUDIO OUT	Mini Stereo 3.5mm x1
Wired remote control input terminal	Mini Jack, 3.5mm x1
Wired remote control output terminal	Mini Jack, 3.5mm x1
SERIAL terminal	D-sub 9 pin x1
Network terminal	100 Base-TX (100Mbps)/10 Base-T (10Mbps), RJ45
Video terminal	RCA connector * 2
Memory Viewer terminal	USB connector (A type x1)
MICRO USB terminal	USB connector (A type x1)
Power	
Voltage and power consumption	AC 100–240 V (Max5.8A), 50/60 Hz
Fuse	10A/250V
Internal speaker	10W RMS 8ohm, *1
Operating Environment	
Operating temperature	0˚C ~40˚C（35~ ECO）
Storage Temperature	-20˚C ~60˚C
High land	2700 m
Remote control	
Battery	AA or LR6 1.5V ALKALINE TYPE x 2
Operating Range	16.4' (5 m)/±30
Dimensions	48mm (W) x 26mm (H) x 160mm (D)
Net Weight	67g
Accessories	
Owner's Manual	
Remote control and batteries	
AC power cord (US Type x 1 / Euro Type x 1)	
VGA cable	
Lens cap	

- *The aforesaid 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 c the liquid crystal panel, a fraction of the pixels (0.01% or less) may be ineffective.*

RS232 control mode

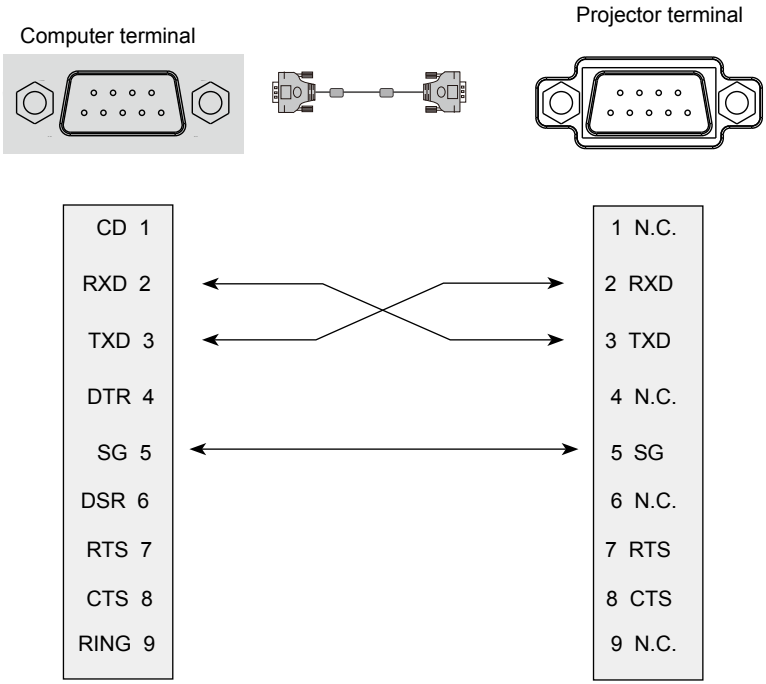
Serial connection

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	C07	Video
C01	POWER OFF(Immediatly)	C33	Component
C02	POWER OFF	C34	S-Video
C36	HDMI1	C15	Network
C38	HDMI2 (MHL)	C16	Memory Viewer
C05	VGAIN 1	C17	USB Display
C06	RGBHV	C32	HD-BaseT

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 immediatly)

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

2.3 POWER 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 countdownthe in the countdown state.	
Return Value	Receive Successfully	[ACK] [CR]
	Receive Unsuccessfully	" ? " [CR]

2.4 HDMI command

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

2.5 VGA IN 1 command

Command	“C05” [CR]	
Details	Select VGAIN 1 Input	
Return Value	Receive Successfully	[ACK] [CR]
	Receive Unsuccessfully	“? ” [CR]

2.6 RGBHV command

Command	“C06” [CR]	
Details	Select RGBHVInput	
Return Value	Receive Successfully	[ACK] [CR]
	Receive Unsuccessfully	“? ” [CR]

2.7 S-Video command

Command	“C34”[CR]	
Details	Select S-Video Input .	
Return Value	Receive Successfully	[ACK] [CR]
	Receive Unsuccessfully	“? ” [CR]

2.8 Component command

Command	“C33” [CR]	
Details	Select Component Input.	
Return Value	Receive Successfully	[ACK] [CR]
	Receive Unsuccessfully	“? ” [CR]

2.9 Network command

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

2.10 HD-BaseT command

Command	“C32”[CR]	
Details	Select HD-BaseT 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 RGBHV Input	
Return Value	Receive Successfully	[ACK]［CR］
	Receive Unsuccessfully	“? ” [CR]

2.13 Video command

Command	“C07”[CR]	
Details	Select Video Input .	
Return Value	Receive Successfully	[ACK]［CR］
	Receive Unsuccessfully	“? ” [CR]

2.14 HDMI 2 command

Command	“C38”[CR]	
Details	Select HDMI 2 Input.	
Return Value	Receive Successfully	[ACK]［CR］
	Receive Unsuccessfully	“? ” [CR]