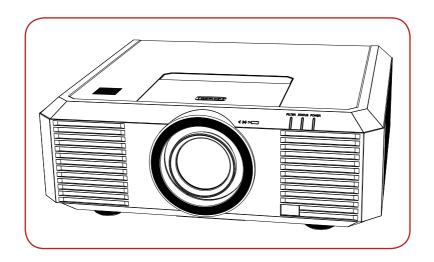


Liquid Crystal Display Fixed Installation Projector

User Manual



PCL-LT8000U

Note:

- —OSD options and pictures shown in this document may differ slightly from your product.
- —Changes to this manual may be made without prior notice.

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

<u>Please read this manual carefully before installing and operating your projector.</u>

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.



Caution

Danger of electric shock

DO NOT open this.



Note: DO NOT remove the casing (or back cover) as this may result in electric shock. Users shall not execute any maintenance work on components within your projector 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	Toxic or harmful substances or elements						
Component name	Pb	Hg	Cd	Cd(vi)	PBB	PBDE	
PCB	×	0	0	0	0	0	
Optical components	×	0	0	0	0	0	
Projection lens	×	0	0	0	0	0	
Projection lamp	×	×	0	0	0	0	
outer casing	×	0	0	0	0	0	
Internal mechanical parts	×	0	0	0	0	0	
speaker	×	0	0	0	0	0	
Remote control	×	0	0	0	0	0	
annex	×	0	0	0	0	0	

- The contents of toxic and hazardous substances in all homogeneous materials of this part is below the limit requirement in SJ/T11363-2006
- × The contents of toxic and hazardous substances in at least one of the homogeneous materials of this part is above the limit requirement in SJ/T11363-2006

Notes



Caution

Safety precautions:

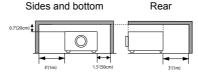
- GROUND your projector.
- Lens of your projector emits strong light. DO NOT look at the light beam directly. You may get your eyesight hurt. This is especially the case with children.
- Unplug the AC power plug if your projector will not be used for long time.
- DO NOT overload the socket of power cord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



Caution

Precautions on air outlet:

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



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



Note:

Precautions on using your projector:

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

Information for users in the European Union

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

Directive 2009/125/EC.

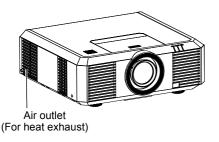
NOTE FOR CUSTOMERS IN THE US

(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.

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. The projector can project image on, down, or in an inclined way under the direction of the vertical direction of the horizontal plane.



Note:

•Enable the "Ceiling" function if flip over screen is required.

DO NOT install your projector beyond +/- 10° as illustrated below.



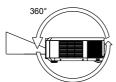
DO NOT tilt your projector more than 20 degrees.





DO NOT place your projector as illustrated above.

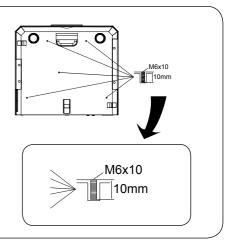
The projector supports 360° projection in Vertical.





Precautions on ceiling mount racket installation:

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

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.

FCC preventive measures:

- Readjust the direction and location of the receiving antenna.
- Connect this device to a socket on different circuits of the receiver.
- Consult the dealer or an experienced radio or TV technician.

FCC Precautions:

To ensure the device can be used continuously, please use the shielded wire, when it connected to a computer or a peripheral device.

Any unauthori zed changes or modifications to the device will make the user's operating rights invalid.

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.

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.

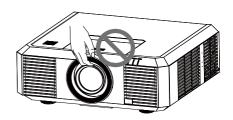


Note:

Lens or your projector is electric powered.

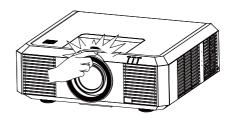
Precautions on using your projector:

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





DO NOT hold the lens or area around it.



Compliance

FCC Caution

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

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

Use of shielded cable is required to comply with class B limits in Subpart B of Part 15 of FCC Rules. Do not make any changes or modifications to the equipment unless otherwise specified in the instructions. If such changes or modifications should be made, you could be required to stop operation of the equipment.

AC Power Cord Requirement

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

AC Power Cord for the United States and Canada:

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

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

AC Power Cord for the United Kingdom:

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

If the plug supplied is not suitable for your socket outlet, it should be cut off and destroyed.

The end of the flexible cord should be suitably prepared and the correct plug fitted.

WARNING : A PLUG WITH BARED FLEXIBLE CORD IS HAZARDOUS IF ENGAGED IN A LIVE SOCKET OUTLET.

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

Green-and-yellow Earth
Blue Neutral
Brown Live

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

The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol $\frac{1}{2}$ or coloured green or green-and-yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

WARNING: THIS APPARATUS MUST BE EARTHED.

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

Accessories

Owner's Manual(CD)	AC Power cord	Remote controller with batteries (AA or LR6)
	US Type x1 Euro Type x1	
VGA cable	Quick start guide	Lens Cap

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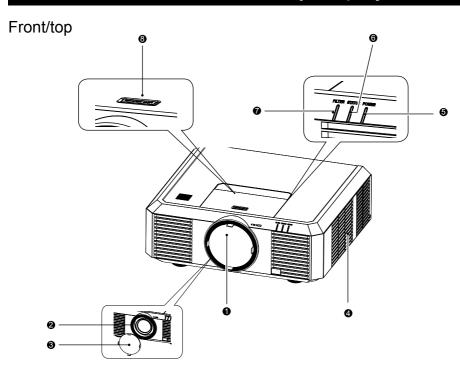
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Overview

This chapter presents names and functions of individual component.



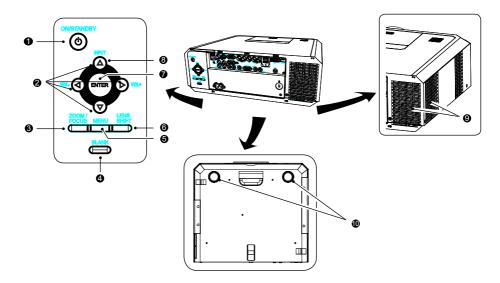
- Projection lens
- 2 Lens ring
- S Lens protection cap
- Air intake with filter
- **5** POWER indicator (Refer tvo Page 69)
 - The power indicator turns steady red when your projector is in standby mode
 - It turns steady green when your projector is in normal operation
- STATUS indicator (Refer to Page 69)
 It flashes red when internal temperature of your projector is out of operation range
- FILTER indicator (Refer to Page 69)
 It turns red when the filter needs be replaced
- 3 Lens release button



NOTE

Please refer to Appendix section about the description of STATUS indicator to get better understanding of the projector.

Rear

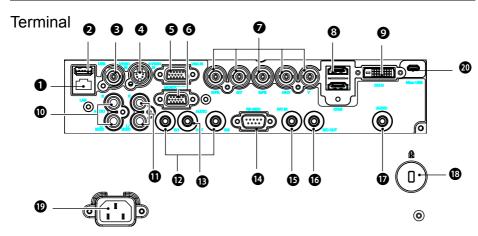


- ON/STAND-BY
 Power on or off your projector
- 2 Arrow ▲▼◀▶
 - Select items or adjust values in the OSD menu.
 - Select display area in digital zoom+ mode
 - Adjust the volume.
- 3 ZOOM/FOCUS
 - Enter the optical zoom adjustment mode
 - Enter the focus adjustment mode
- BLANK Dark out screen images temporarily
- MENU Open or close the OSD menu

- **6** LENS SHIFT Enter the lens moving mode
- ENTER Enter the OSD menu or select options in a menu
- 8 INPUT Select source of input
- Air exhaust
- Adjustment pad



Air outlet emits hot air. DO NOT place heat sensitive objects near it.



1 LAN terminal

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

- USB -A connector When using the Memory Viewer function, insert the USB memory directly to this terminal
- VIDEO IN Connect video output signal to this terminal.
- S-VIDEO IN Connect S-VIDEO output signal of video device to this terminal.
- VGA IN Connect output signal from computer to this terminal
- MONITOR OUT Transmit signals from ⑤ or ⑥ to other displays when your projector is acting as a display output.
- **②** 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.
- Onnect HDMI digital output signals or MHL digital output signals to this terminal.
- DVI-D IN(HDCP)
 Connect DVI digital output signals to this terminal.
- AUDIO (Video)
 Connect audio signal from 3 to this terminal.

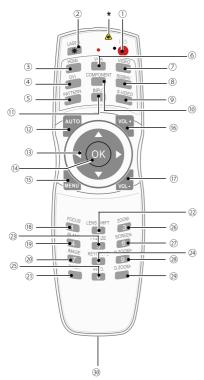
- MONO(L/R) (Video)Connect audio signal from to this terminal.
- AUDIO IN1/AUDIO IN2
 - Connect audio signals for device 5 to AUDIO IN1
 - Connect audio signals for device to AUDIO IN2
- AUDIO OUT

Output audio signals to amplifier or other audio equipment.

- SERIAL Connect serial cable to this terminal when using network to control and operate your projector.
- REMOTE IN Connect wired remote controller to this terminal. Connection of a wired remote controller will disable the wireless one.
- REMOTE OUT Transmit wired remote controller signals of to another projector when a wired remote controller is used.
- AUDIO/DVI-D Connect audio signals of DVI equipment to this terminal.
- Anti-theft slot
- Power cord connector
- MICRO USB connector

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

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.

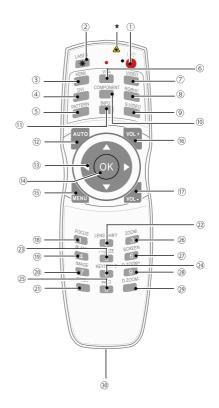
Do not stare directly at the laser transmitting window or aim the window at human body, to avoid any physical injury.

- 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 DVI Select DVI input source
- PATTERN
 Select built-in test pattern of your projector
- ⑥ VGA Select VGA input source
- VIDEO Select VIDEO input source
- 8 RGBHV Select RGBHV input source
- S-VIDEO
 Select S-VIDEO input source
- COMPONENT Select Component input source
- INPUT
 Open or close the INPUT menu
- ② AUTO Enter auto adjustment mode
- Arrow ▲▼◀▶
 - Select items or adjust values in the OSD menu
 - Select display area in digital zoom+ mode
- (4) OK Enter the OSD menu or select options in it
- MENU Open or close the OSD menu
- VOLUME +
 Increase volume
- VOLUME -Decrease volume
- ® FOCUS
 Enter the focus adjustment mode
- BLANK
 Dark out screen images temporarily
- ② IMAGE Select image mode

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

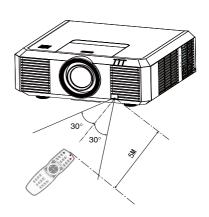
- ② TIMER
 Enable the timer function
- ② LENS SHIFT Enter the lens moving mode
- ③ FREEZE Freeze projected images
- ② KEYSTONE Keystone calibration
- ② INFO. Display current status information of your projector
- ② ZOOM Enter the zooming mode
- ② SCREEN Select screen size
- ②8 D.ZOOM+ Zoom in projected image
- ② D.ZOOM-Zoom out projected image
- 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

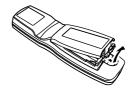
Point your remote controller to the IR receiver of your projector

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

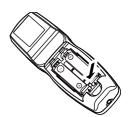


Install battery of remote controller

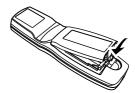
Open the battery cover.



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.



3 Put the cover back.



Please follow the following rules for safety operation:

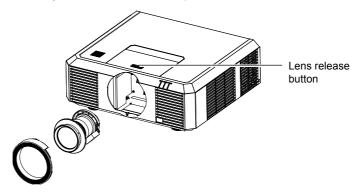


- Use two of AA or LR6 alkaline batteries.
- Replace both batteries at the same time.
- Do not mix new and old batteries as one pair.
- Keep your remote controller away from water or other liquids.
- Do not expose your remote controller to environments with high humidity or temperature.
- Do not drop 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.

This chapter introduces the information of install.

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

- 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 Pull out the lens ring gently before use the projector.



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.

Lens shift adjustment

The electric lens shift function may adjust your lens in all four directions.

This function enables easy image position adjustment.

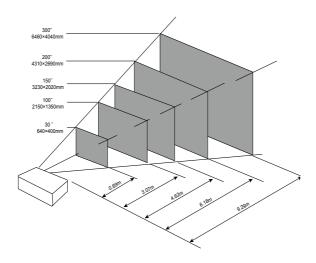
The projection location of your image may be moved upward a distance up to 60% between the upper and lower range of the image.	Move lens to it top position
The projection location of your image may be moved downward a distance up to 60% between the upper and lower range of the image.	Move lens to it bottom position
The projection location of your image may be moved leftward a distance up to 30% 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% 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.

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.



WUXG	GA(16:10	0)	AH-E22010 (OL-XL7100FR)		22020 7100SZ)	AH-E	21010		23010 7100LZ)	AH-E2 (OL-XL7	
Screen size	Width	Height	Distance	Wide	Tele	Wide	Tele	Wide	Tele	Wide	Tele
30 inch	64	40	0.51	0.68	0.89	0.89	1.64	1.51	2.71	2.56	4.52
100 inch	215	135	1.66	2.44	3.22	3.07	5.57	5.37	9.27	8.98	15.41
150 inch	323	202	2.44	371	4.78	4.62	8.20	8.20	13.95	13.56	23.12
200 inch	431	269	3.32	498	6.44	6.18	10.93	10.93	18.63	18.15	30.93
300 inch	646	404	4.88	751	9.66	9.29	16.39	16.39	28.00	27.32	46.54

Connect the AC power cord

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

Do not use any other type of power cords or you may face the risks of electric shock. In case you have any doubt on type of power cord you are using, please call authorized dealer or service center for help. Before powering on your projector, get all external equipment connected in advance

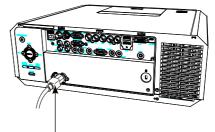


Note:

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

√ Note:

For safety reasons, unplug the AC power cord when your projector is not in use. Your projector will consume a small amount of power when it is connected to AC grid power and in standby mode.



Connect included AC power cord to your projector.

Precautions on power cord

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

Please make sure the type of the power plug is compliant with those given in figure below. Make sure you are using a valid AC power cord.

In case the included AC power cord does not comply with the AC power socket in your location, call your dealer for replacement.

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

Connection to equipment

Connection to the PC (Digital and Analog RGB)

Cables for connection:

VGA cable

• DVI cable*

• BNC cable*

HDMI cable*

(* This cable is not included.)

Ports on y	our projector	С	onnection cable	Equipment
DVI-D(HDCP)		DVI cable		
HDMI		HDMI cable		
R(PR) / G(Y) / B(PB) / H(HV) / V	NOT SETS NOT V	BNC cable		
VGA	MONITOR OUT	VGA 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		Coni	nection cable	Equipment
S-VIDEO IN		S-VIDEO cable		
VIDEO IN		VIDEO cable		
R(PR) / G(Y) / B(PB) / H(HV) / V	0,000,0	BNC cable		



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

Connection to equipment

Connection to audio equipment

Cables for connection:

- Audio cable*
- (* This cable is not included.)

Ports on you	ır projector	Cor	nection cable	Equipment
MONO L/R		Audio cable		
AUDIO IN	06	Audio cable		
AUDIO IN / OUT		Audio cable		
AUDIO DVI-D		Audio Cable		
REMOTE IN/OUT	<u></u>	Audio cable		



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

Connect to USB equipment

Cables for connection:

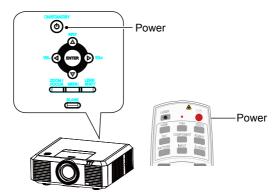
- Micro USB cable*
- (* This cable is not included.)

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

This chapter introduces you to basic operation of your projector.

Power on your projector





- 1. Connect all external equipment to your projector (e.g. computer or camera) before powering it on.
- Connect AC power cord of your projector to an AC power socket. The Power indicator turns on in red.
- Press the Power button on the rear control panel or the remote controller.The Power indicator lights in green and the cooling fan starts running.
- If your projector is setting as password protected, the password dialog box displays. Enter your password as instructed below.

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 OK after you have typed the 3-digit number. Press the ENTER 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.

✓ 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.



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

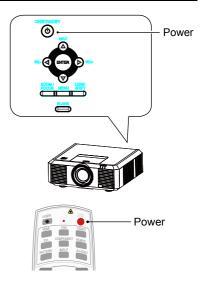
You password (PIN) code is a 3-digit number. To find out more about protecting your projector with a password (PIN), please refer to the PIN Code Lock function in the Setup menu on Page 54 for details.

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

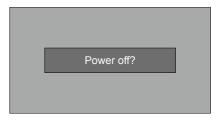
- Press the Power button at the rear control panel or the remote controller, the "Power off?" message displays.
- Press the Power button again in 4 seconds after the "Power off?" message prompted to you. The POWER indicator flashes red while the cooling fan continues running. (You may set up noise level and speed of the fan.) 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.
- The POWER indicator stops flashing once the projector has been cooled down to ready for power on again.





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

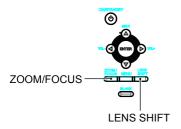
Do not use your projector without stop. As it may hurt the life cycle of your lamp. Power off your projector at least once every 24 hours and have it idle for an hour

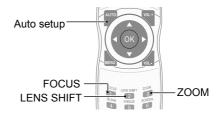


"Power off?" message disappears in 4 seconds.

✓ 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 53)
- 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 69)
- 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.





Zoom /focus function

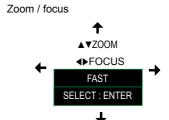
- Press the ZOOM / FOCUS button on the rear control panel or remote controller for zooming and focusing.
- Press ▲▼ button to zoom in and out.
 Press ◀► button to change focus of image. Default adjustment speed is set to FAST. You may press the ENTER button, select STEP for speed fine-tuning.

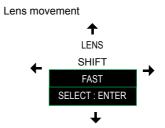
Lens movement adjustment

- 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.
- 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%. Leftward or rightward: 30%.
- 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.

Auto setting function

Press the AUTO button on your remote controller to auto execute settings given in the Auto Setup menu (including Auto Searching, Auto PC Adjusting and Auto Keystone).





√ Note:

The arrow mark displays in black when the lens is not moved. It turns red once the lens is moved for adjustment.



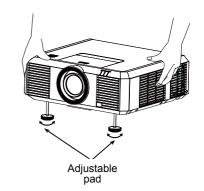
Adjustment pad

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.

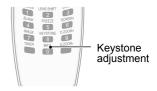
You may use the auto setup function to adjust your projector's keystone distortion automatically or do this with the remote controller or OSD menu manually.



You may adjust keystone distortion of image in your projector with the V keystone adjustment.

Follow steps below to adjust keystone distortion of projected image manually.

Press the KEYSTONE button on your remote controller. The keystone adjustment dialog box displays, press **The Notice of State of**



Press ▲ button to narrow upper part of the image

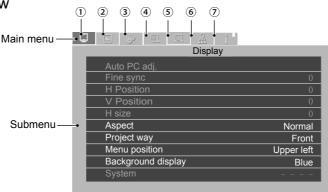
V keystone adjustment

Press ▼ button to narrow lower part of the image

Keystone Adjustment 💠

- 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 adjustment will be canceled if you press the keystone adjustment button when it is displaying.
- The adjustable range is subject to source of signal input.

Menu item overview



① OSD

- Select Auto PC adj., Fine sync, H Position, V Position, H Size to adjust the parameters to match the VGA format.
- Aspect: Keep the ratio of signal source and widescreen.
- Project way: Choose front project, rear project, ceiling / front project and Ceiling / Rear project.
- Menu position: Set screen menu display position on the screen.
- Background display: Sets the background color of the projection screen.
- System: Select the compatible system signal format with input source .
- 2 Color Adjust Menu

Available options in the Image Select menu are Dynamic, Normal, Cinema, Blackboard (Green), Colorboard, or User Image.

- For AV signal input ,the available color adjust options are Image Mode, Contrast, Brightness, Color Saturation, Tone, Red, Green, Blue and Sharpness.
- For PC signal input ,the available color adjust options are Image Mode, Contrast, Brightness, Color Temp, White balance(Red, Green, Blue) and Sharpness.
- 3 Setting Menu

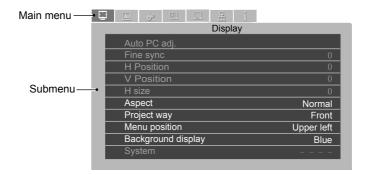
Configuration of the basic function operation on the projector: On start, Standby mode, High land, Lamp control, Cooling fast, Closed Caption, Key lock, Iris, Sound and HDMI settings.

4 Expand Menu

Available adjust options are Language, Auto Setup, Keystone, LOGO, Security, Power Management, Filter Counter, Test Pattern, Remote Control and Factory Default.

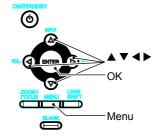
- S Memory Viewer Menu Select Parameter Of Set Slide, Slide Transition Effect, Sort Order, Rotate, Best Fit, Repeat, Apply.
- Network Menu
 Network setting ,Network information, MAC address, IP address menu.
- Information Menu Display information about the projector.

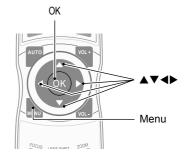
How to use the OSD



Menu operation

- Press the MENU button on the rear control panel or remote controller and the OSD displays.
- Press ◀► button to act on or select one main menu item. Press ▼ button or OK button to enter a submenu.
- Press ▲▼ button to select required submenu, then press OK button or ► button to set up or enter an option.
- Press ▲▼◀► button to select settings or navigate options, then press OK button to act on the item and exit.
- Press ▲ button to return to mainmenu.
 Press the MENU button on remote controller or control panel to exit the OSD.





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, the shift 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)

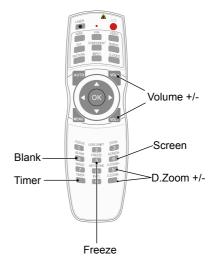
Press the FREEZE button on remote controller to freeze image on the screen. Press the FREEZE button or any button to cancel the freeze function.

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:

 $BLANK \rightarrow Normal \rightarrow BLANK \rightarrow Normal \rightarrow$





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

SETTING

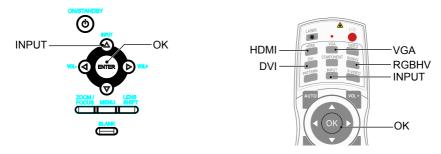
This chapter introduces you to basic setup of your projector.

Setting-Input source

Access signal source

Basic operation

Press the INPUT button on the control panel or on the romote control to select one of the following input: VGA, RGBHV, HDMI 1,HDMI 2(MHL),DVI, Color Components, Video, S-Video, Memory Viewer, Network, USB Display. Alternatively, you may press the VGA, RGBHV, HDMI DVI,VIDEO,COMPONT,S-VIDEObutton on remote controller to select VGA,RGBHV,HDMI,HDMI 2(MHL),VIDEO,COMPONENT,S-VIDEO directly.



Menu operation

- 1 Press the INPUT button on remote controller to enter the Input menu.
- 2 Press ▲▼ button to select one of the following input: VGA, RGBHV, HDMI 1,HDMI 2(MHL),DVI, Components, Video, S-Video, Memory Viewer, Network, USB Display, and then press the OK button to select the input source.



Input menu

✓ Note:

If the Input Search option in the Auto Setup function is set to On, your projector will search for input signals automatically.

Memory Vlewer / Network / USB Diaplay cannot search automatically.

Setting-Input source (Computer signals)

Input source selection (Analog signal: VGA / RGBHV)

VGA 1

Select input VGA if a PC is connected to the VGA IN port with a VGA cable.

RGBHV

Select input RGBHV if a PC is connected to the BNC terminal with a 5 BNC cable.

Input source selection (Digital signal:HDMI 1 / HDMI 2(MHL)/DVI)

HDMI(MHL)

MHL link mobile phones and projector through the MHL dedicated cable . Display the phone content on the projector directly . (*Mobile phone support for this feature)

HDMI 1

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

HDMI 2

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

DVI

Select input DVI if a device is connected to the DVI terminal with a DVI cable.

Setting-Input source (Computer signals)

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

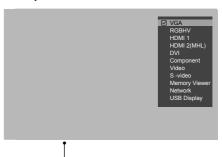
If your projector failed to identify signals not shown in the signals format table, the "Auto" message will display in the System Signal Format menu. The Auto PC Adjusting function will make necessary adjustment to your projector to project valid images. If images are displayed incorrectly, adjust it manually.

No PC signals detected. Check the connection between PC and your projector.

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.

VGA system menu



The selected system displays in the PC system menu.

√ Note:

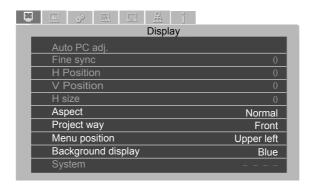
Your projector may save data generated by the Auto PC Adjusting function.

√ Note:

The computer system menu will be disabled once HDMI 1,HDMI 2(MHL) ,Memory Viewer,Network,USB Display or DVI has been selected.

Setting-Display

[Display] menu



Auto PC adj.

(Only for PC signal input)

The image may jitter up, down, left and right, When input the PC (RGB) signal. Press < Auto > button to adjust [Fine sync], [H Position], [V Position] and [H Size] automatically to the best state. Set the image to the best state to adapt to the use of audio-visual environment of the projector.

- 1) Press **◄**▶ button to select [Auto PC adj.] menu.
- 2) Press <OK> button.

Fine sync

(Only for PC signal input)

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

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

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

H Position

(Only for PC signal input)

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

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

Adjustment range is from -5 to +5.

Setting-Display

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 [H Position] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to adjust vertical image 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 [Horizontal dimension] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to adjust horizontal size level

Adjustment range is from -15 to +15.

Aspect

Adjust the image to fit the screen size, while keeping aspect ratio of input signal's unchanged.

- Press ▲▼ button to select [Aspect] menu.
- 2) press <OK> button.
- 3) Press ▲▼ button to switch.

Normal: Use the maximum size to project ,while keeping the aspect ratio of input signal's unchanged.

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

Project way

Set the projection way according to the projector's installation state.

Please change the projection way, if the image displays inversely or reversedly.

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

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

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

<u>Suspended / Front Project:</u> when use the bracket to lift the projector (optional) in front of the screen.

<u>Suspended / Rear Project:</u> when use the bracket to lift the projector (optional) in rear of the screen(using translucent screen).

AUTO / Front Project: when the projector is projected in front of the screen.

AUTO / Rear Project: when the projector is projected in rear of the screen.

Setting-Display

Menu position

Set OSD location

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

 $[Upper\ Left] \rightarrow [Upper\ Right] \rightarrow [Center] \rightarrow [Lower\ Left] \rightarrow [Lower\ Right] \rightarrow [Upper\ Left] \rightarrow ...$

Background

Please select the background image, when there is no input signal .

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

Blue: The entire projection area shows blue. Black: The entire projection area shows black.

System

Set resolution of input signal is compatible with the PC.

Set video / S video input signal color system or YCBCR/YPBPR input signal scanning mode.

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

Blue: The entire projection area shows blue.

Black: The entire projection area shows black.

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: projector select the input signal color system automatically. Set [PAL-M] or [PAL-N] manually . [PAL]/[SECAM]/[NTSC]/[NTSC4.43]/[PAL-M]/ [PAL-N]: when projector can not display images correctly in [Auto], please set input signal color system manually.

Color difference component input signal

Auto: projector select input signal scanning mode automatically.

[1080p]/[1080i]/[720p]/[576p]/[483p]/ [576i]/[480i]:when projector can not display images correctly in [Auto], please set scanning mode on the left manually.

Setting-Color adjust

[Color Adju.] Menu



Image mode

You can switch image mode to fit the image source and the projector

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

Dynamic

An image mode suitable for viewing in bright room.

Normal

The default mode of your projector.

Cinema

Enriched grayscale for viewing movies.

Blackboard (Green)

An image mode designed for displaying on a

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

Colorboard

A image mode suitable for image projecting on

surface of wall in red, blue, yellow or green. Select [Colorboard]. Press the <OK> button, and then display the [Colorboard] menu. Choose [red], [blue], [yellow] or [green], and press <OK> button.

Personal setting

Display images after adjusting [Color Adjustment] menu manually .

Setting-Color adjust

Contrast

Adjust the color contrast

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

Press ▲ button to brighten picture and darken color from 0~+63.

Press ▼button to darken picture and lighten color from 0~+63.

Brightness

Adjust the dark(black) part of projected image.

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

Press ▲ button to brighten the dark(black) part of projected image from 0~+63.

Press ▼button to darken the dark(black) part of projected image from 0~+63.

Color temp

Switch color temp, when the white part of the projected image become reddish and bluish.

- 1) Press ▲▼ button to select [Color temp] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to select required color temperature.

High temp:

Become blue gradually

High temp:

Suitable natural color

Low temp:

Become red.

Setting-Color

Red/Green/Blue

Adjust the white balance.

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

Red

Press ▲ button to lighten red tint and ▼ button to darken it.

Green

Press ▲ button to lighten green tint and ▼ button to darken it.

Blue

Press ▲ button to lighten blue tint and ▼ button to darken it.

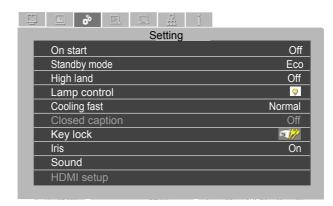
Sharpness

Adjust the sharpnes of projected image.

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

Sharpness range from $0 \sim +15$

[Setting] menu



On start

Set the power mode, 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 required menu.

OFF:Turn off the projector.

ON:Turn on the projector.

Standby Mode

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

- 1) Press ▲▼ button to select [Standby Mode] menu.
- 2) Press <OK> button.
- Press ▲▼ button to adjust levels.

ECO mode:Some function will be disabled once your projector is in ECO mode to reduce power consumption.

Normal*1:Even in standby mode, there are no restraint on network function and serial communication function.

High land

You can change the setting 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: Projector fail to work at an altitude of 1400 meters or less

ON:Projector works well at an altitude from 1400 to 2700 meters

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:In high brightness

ECO mode:In less brightness

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:Run in normal way.

60 seconds:Run in short- cooling time way

Closed Caption

Set up closed caption(Only for NTSC, 480i YCBCR).

- 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.

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.

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 aperture.

Sound

Adjust the sound.

- 1) Press ▲▼ button to select [Sound] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to select [Volume] menu.
- 4) Press <OK> button.
- 5) Press ▲▼ button to adjust the volume.

Press ▲ button to turn up volume, from 0~+25.

Press ▼button to turn down volume, from 0~+25.

Adjust the mute.

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

ON:No audio output.

OFF:Audio output.

HDMI Setup

When the external device is connected to the HDMI terminal of the projector, the projection image can not be projected normally, please switch the setting or switch to Audio Input setting.

Image

- 1) Press ▲▼ button to select [HDMI Setup] menu.
- 2) Press <OK> button.
 - · Display [HDMI Setting] instantly.
- 3) Press ▲▼ button to select [Image] .
- 4) Press < OK > button.
- 5) Press ▲▼ button to select required menu.
 - · Every press key will switch menu.

[64-940]	Select it, when the terminal of external device (such as:a blu ray disc player) is connected to the HDMI terminal setting.
[0-1023]	Select it 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 setting. Select it also,when the terminal of the PC or any other device is connected to the HDMI terminal setting.



NOTE

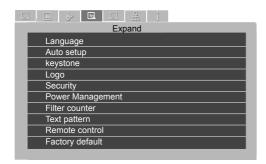
• The best set of projectors may differ, When connected to an external device output setting is not the same on the projector.

Voice

- 1) Press ▲▼ button to select [HDMI Setup] menu.
- 2) Press <OK> button.
 - · Display [HDMI Setting] instantly.
- 3) Press ▲▼ button to select [Sound].
- 4) Press < OK > button.
- 5) Press ▲▼ button to select required menu.
 - · Every press key will switch menu.

[HDMI]	Select it when you connect to HDMI cable, transmission of images or audio, and the user does not need to connect a separate audio signals.
[VGA]	Select it 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 setting. Images can not be transmitted. The audio signal is input to the Audio Settings terminal.

[Expand] Menu



Language

Users can switch the displayed language.

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

The name of various menus, settings, adjustment screens, control 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, Portuguese, Dutch, Swedish, Finnish, Norwegian, Danish, polish, Hungarian, Czech, Russian, Turkish, Arabic, Kazakh, Vietnamese, traditional Chinese, Indonesian, Chinese, Persian, Japanese and Thai.

Auto Setup

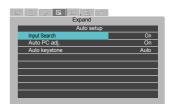
Press the AUTO button on your remote controller to execute functions including Auto Search, Auto PC Adj., and Auto Keystone.

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

Input Search:Select this function to detect the signal, projection screen and input signal automatically .

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

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



Keystone

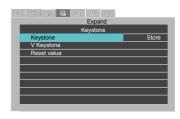
Select this function to correct keystone distortion when the projector is installed tilted or screen inclined.

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

V keystone: Select this function to adjust the projected images of the vertical trapezoidal distortion.

Reset value: Make the correction back to the factory default. settings.

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



Security

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

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

<u>Logo PIN Code Lock:</u>The [Enter Logo Password] screen will appear when the projector is on. You cannot operate the projector without the Logo PIN Code.

Logo PIN Code change: You may change the Logo PIN Code.

Logo PIN Code lock

Type the 3-digit number as your Logo PIN code.

- 1) Press ▲▼ button to select [Security] menu.
- 2) Press <OK or ▶ > button.
- 3) Press ▲▼ button to select [Logo PIN Code Lock] menu.
- 4) Press <OK> button.
- 5) Press <OK> button.
- 6) Enter the Logo PIN Code according to [Logo Password] step.
- 7) Press ▲▼ button to switch required items.
 - On......When the projector is on,the [Logo Password] screen will appear .You may not alter the [logo screen] without the Logo PIN Code.
 - Off......The Logo screen may be changed without the Logo PIN Code.

Logo PIN Code Change

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

- 1) Press ▲▼ button to select [Security] menu.
- 2) Press <OK > button.
- 3) Press ▲▼ button to select [Logo PIN Code Change] menu.

- 4) Press <OK> button.
- 5) Set the Logo PIN Code according to [Logo Password] step.
- 6) Press <OK> button.
- 7) Enter the new Logo PIN Code according to [Logo Password] step.

Logo

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

Logo Select: Select this to set up the logo screen when power on your projector:

Logo PIN Code Lock: Select this helps preventing unauthorized personnel from changing screen.

Logo PIN Code Change: You may change [the Logo PIN Code].

Logo Select

Select this to set up the logo screen when power on your projector:

- 1) Press ▲▼ button to select [Logo Select] menu.
- 2) Press <OK or ▶ > button.
- 3) Press ▲▼ button to switch required items.
- 4) Press <OK> button.
- 5) Press ▲▼ button to switch required items.

OFF.....Power on without logo screen.

Default...Power on with logo screen.

Logo PIN Code lock

Type the 3-digit number as your Logo PIN code.

- 1) Press ▲▼ button to select [Logo PIN Code] menu.
- Press <OK or ▶ > button.
- 3) Press ▲▼ button to select [Logo PIN Code Lock] menu.
- 4) Press <OK> button.
- 5) Press <OK> button.
- 6) Enter the Logo PIN Code according to [Logo Password step.
- 7) Press ▲▼ button to switch required items.
 - On.....You may not alter the [Logo Screen] without the Logo PIN Code.
 - Off.....The Logo screen may be changed without the Logo PIN Code.

Logo PIN Code Change

- 1) Press ▲▼ button to select [Logo Screen] menu.
- 2) Press <OK > button.
- 3) Press ▲▼ button to select [Logo PIN Code Change] menu.
- 4) Press <OK> button.
- 5) Press **◄** button to select the 3-digit number as Logo PIN Code from 0--9 password, then press the <OK > button.
- 6) Press <OK> button.
- 7) Enter the new Logo PIN Code according to [Logo Password] step .

Power management

Set the following operation, when your projector has no signal input:

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

ReadyOnce the input signal is interrupted for 30 seconds afterwards ,the "No signal"
message displays in the timer .The power management function will turn off the
projection lamp and cool down. The lamp turns on again if an input signal is
connected or any key on the rear panel and remote controller is pressed except
power supply (POWER key) during this period of time.

Power Off.....Once the input signal is interrupted for 30 seconds afterwards ,the "No signal" message displays in the timer. The power management function will turn off the projection lamp and cool down.

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

Timer.....Set the time to the power management function

Ready Countdown.....when Power Control are in sleep mode, Set up the interval every ally.

1minute from ready mode change to standby (0 to 30 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 or ▶ > button.
- 3) Press ▲▼ button to switch required item.

Fliter: Displays the filter usage time.

Timer: Set the time to display a warning icon.

Reset filter counter: Reset filter counter.

Timer

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

Reset filter counter:

- 1) Press ▲▼ button to select [Reset filter counter] menu.
- 2) Press <OK> button.
- 3) Press **◄**▶button to select YES ,then press <OK> button.

Text 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 [Text pattern] menu.
- 2) Press <OK or ▶ > button.
- 3) Press ▲▼ button to switch required item.
- 4) Press <OK> button.

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

NOTE: Text pattern is not adjustable or ashing under USB DISPLAY channel.

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.

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

The projector provides ten different remote control code: Code 0 ~ Code 9.

All: 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.

Sensor for the remote controller

Set up the sensor when operating your projector with remote controller.

- 1) Press ▲▼ button to select [Remote Control] menu.
- 2) Press <OK or ▶ > button.
- 3) Press ▲▼ button to switch required item.
- 4) Press <OK> button.

Front Select the front sensor.

Rear..... Select the rear sensor.

Both Select the front and rear sensors.

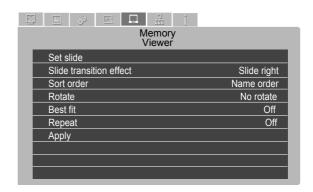
Factory default

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.
- 4) Press **◆▶** button to select YES ,then press <OK> button.

Setting-Memory Viewer

Memory Viewer menu



Set slide

Select this function to play slides.

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

Slide transition effect

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

- 1) Press ▲▼ button to select [Slide Transition effect] menu.
- 2) Press <OK or ▶ > button.
- 3) Press ▲▼ button to switch required item.

Slide down:

Switch slides from the upper to the lower.

Slide right:

Switch slides from left to the right.

Setting-Memory Viewer

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 name order

Sort by the expand name of file or folder.

Magnitude order

Sort by the name of file or folder.

Time order

Sort by the time of file or folder.

Name order

Sort by the name of file or folder.

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 counterclockwise by 180 degrees.

90 degree rotate

Rotate counterclockwise 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.

Setting-Memory Viewer

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.

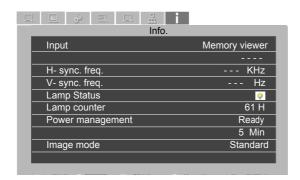


Note:

- When input [Memory Viewer] 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.

Setting-Info.

Info. Menu



Displays projector's mode.

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 Mode mode.

Lamp counter: Display the lamp's usage time. (when in[(Economic Model 1)], it displays the transformed running time.)

Power management: Display selected Power management mode.

Image mode: Display selected Image Mode mode.

Maintenance

This chapter describes the regular maintenance procedure of your projector to ensure its optimal operation status for long.

Status light indicator

The status light indicator shows status of projector protection function. Check status 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 status light 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 STANDBY button to power your projector on again when it is cooled down to normal operation temperature.

FILTER STATUS POWER

The status indicator flashing red

✓ Note:

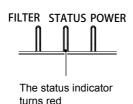
The POWER indicator stops flashing when your projector's internal temperature cooled down to normal and it is powered on again.

Check the following:

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

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

The STATUS indicator turns red 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.



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



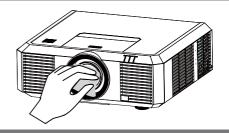
Note:

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.

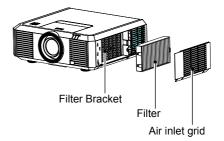
Place your projector in proper container after use to protect it from dirt and dust and being scratched.



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:

- 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.

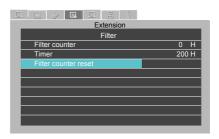
Do not insert any small object in the air outlet. It may fail your projector.

Reset the filter counter

- 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.





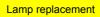
Note:

Reset the filter counter after its cleaning or replacement.

Lamp replacement

The lamp replacement icon displays when its use life dues. Please replace it with a new one of the same model immediately.

The lamp replacement icon







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.

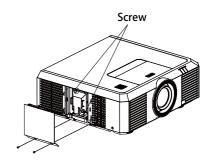


Note:

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:

- Power off your projector and unplug the AC power cord. Let it cool down for at least 45 minutes.
- Open the lamp cover after removing screws holding the cover.
- 3. Loose all 3 screws fixing the lamp. Remove the lamp by holding its handle.
- Replace with a new lamp and tighten all 3 screws. Make sure the lamp has been installed correctly. Close the lamp cover and tighten the screw.
- 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 (41°F–95°F; 5°C–35°C). 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, 1035i 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 5m. 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.
Exclamation 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.

Warning:

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.

Light indicator status

Check light indicator to learn status of your projector.

Light indicator		or	Otation of concessioning		
POWER	STATUS	FILTER	Status of your projector		
			Your projector is in Off status (without AC power supply).		
Ø			Your projector is in standby status. Press Standby button to turn it on.		
0			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.		
Ö			Your projector is in Ready mode.		
0	0	•	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.		
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\oslash		Your projector detects lamp abnormality and cools down.		
0	\oslash	•	Your projector detects lamp abnormality and switches into standby mode.		
Ö.	Ö	•	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.		
Ø	Ö	•	You may power is fully cooled with temperature backs to normal.		
	\oslash		The lamp cover is not fully closed.		
•	•	0	The filter requires cleaning		

	_						
	\oslash	•	The lamp cover is not fully closed.				
		\Diamond	The filter requires	cleaning			
O	Green	()	Red	Turns on	Off		
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	lashing gree	en 🔘	Flashing red	Flashing			

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)
		640x480	60
		640x480	68
	VGA	640x480	72
		640x480	75
		640x480	85
		800x600	56
		800x600	60
	SVGA	800x600	72
		800x600	75
		800x600	85
	MAC 16	832x624	75
		1024x768	60
	XGA	1024x768	70
	XGA	1024x768	75
		1024x768	85
	MXGA	1152x864	75
PC		1280x768	60
		1280x768	75
	WXGA	1280x768	85
		1280x800	60
		1280x800	75
		1280x800	85
		1366x768	60
	QVGA	1280x960	60
		1280x960	85
		1280x1024	60
	SXGA	1280x1024	75
		1280x1024	85
	0.00.4	1400x1050	60
	SXGA+	1400x1050	75
	UXGA	1600x1200	60
	WSXGA+	1680x1050	60
	WUXGA	1920X1200	60
	480i	720x480i	60
	576i	720x576i	50
	483p	720x483p	60
Component	576p	720x576p	50
Component	720p	1280x720	50
	720p	1280x720	60
	1080i	1920x1080i	50
	1080i	1920X1080i	60

1			
Input	Signal format	Resolution	Frequency (Hz)
		640x480	60
		640x480	68
	VGA	640x480	72
		640x480	75
		640x480	85
		800x600	56
		800x600	60
	SVGA	800x600	72
		800x600	75
		800x600	85
	MAC 16	832x624	75
		1024x768	60
	V04	1024x768	70
	XGA	1024x768	75
		1024x768	85
	XGA+	1152x864	75
HDMI		1280x768	60
		1280x768	75
		1280x768	85
	WXGA	1280x800	60
		1280x800	75
		1280x800	85
		1366x768	60
	QVGA SXGA	1280x960	60
		1280x960	85
		1280x1024	60
		1280x1024	75
		1280x1024	85
	0.7.04	1400x1050	60
	SXGA+	1400x1050	75
	UXGA	1600x1200	60
ļ	WSXGA+	1680x1050	60
	WUXGA	1920X1200	60
	NTSC	NTSC	-
Ì	PAL	PAL	-
İ	SECAM	SECAM	-
Video/S-video	NTSC4.43	NTSC4.43	-
İ	PAL-M	PAL-M	-
ļ	PAL-N	PAL-N	-
	PAL-60	PAL-60	-

√ Note:

Changes to this manual may be made without notice.

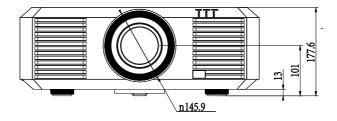
Terminal configuration

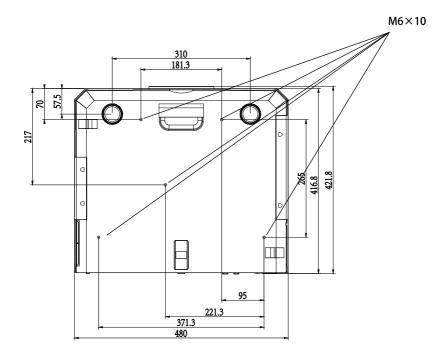
VGA IN / MONITOR OUT Terminal (D-sub 15)					
		Red (Input/output)	9		
	2	Green(Input/output)	10	Grounding (field synchronizing)	
		Blue(Input/output)	11	Grounding	
	4		12	DDC data	
$ \left[\begin{array}{ c c c c c c c c c c c c c c c c c c c$	5	Grounding (line synchronizing)	13	Horizontal synchronizing (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		1	
P 49	1	TX +	5		
	2	TX -	6		
	3		7	RX +	
87654321	4		8	RX -	
HDMI Terminal (HDMI Type A 19)		1			
	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)	
19 17 15 13 11 9 7 5 3 1 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5	TMDS Date1 Shield	15	SCL	
18 16 14 12 10 8 6 4 2	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	
DV// Terminal /DV// D.C4)	10	TMDS Clock+			
DVI Terminal (DVI-D,24)	4	TMDS Date 2	40	T	
	2	TMDS Date 2-	13	+5V Power	
	3	TMDS Date 2+	15	Ground (for +5V)	
	4	TIVIDS Date 2 Shleid	16	Hot Plug Detect	
	5	 	17	TMDS Data 0-	
	6	DDC Clock	18	TMDS Data 0-	
	7	DDC Clock	19	TMDS Date 0 Shield	
	8		20		
	9	TMDS Date 1-	21	 	
	10	TMDS Date 1+	22	TMDS Clock Shield	
	11	TMDS Date 1 Shield	23	TMDS Clock +	
	12		24	TMDS Clock -	
	12			TIMES SIOUK -	

Dimensions

ע Unit: mm Screw Holes for Ceiling Mount

Screw: M6 Depth: 10.0





Technical Specifications

Mechanical properties

Dimensions (W×H×D): 480.0mmx177.6mmx421.8mm

Net Weight 9.98Kg Adjustable foot 5°

LCD resolution

0.79" TFT, active matrix LCD system

LCD resolution 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

40"-300", adjustable Image size (diagonal lines)

16:10 1.23m-9.53m(W) 2.25m-17.23m(T) Projection distance

Lens (Standard Lens) F=1.8~2.6, f=24.0~43.2mm; Electric zooming and focusing; Zoom times: 1.8

350W /264W Lamp power

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 DVI Digital (DVI-D) 24 pin x1 **HDMI** HDMI A type 19 pin

HML (HDMI 2):MHLcable AUDIO IN RCA(L,R)x4

AUDIO OUT 3.5mm Mini Type Stereo x3 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

100 Base-TX (100Mbps)/10 Base-T (10Mbps), RJ45 Network terminal

Video terminal Single (needle socket, 1 V [p-p] 75Ω) MEVORY VIEWER terminal USB connector (A type x1)

MICRO USB terminal USB connector (A type x1)

Power

Voltage and power consumption AC 100-240 V (Max 5.4A), 50/60 Hz

10A/250V Fuse

Internal speaker 10W RMS 8ohm, *1

Operating Environment

Operating temperature 41°F-95°F (5°C-35°C) Storage Temperature 14°F-140°F (-10°C-60°C)

High land 1400 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 (including batteries)

Accessories

Owner's Manual(CD) Quick Start Guide

Remote control and batteries

AC power cord (US Type x 1 / Euro Type x 1)

VGA cable LENS CAPS

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 of the liquid crystal panel, a fraction of the pixels (0.01% or less) may be ineffective.

RS232 control mode

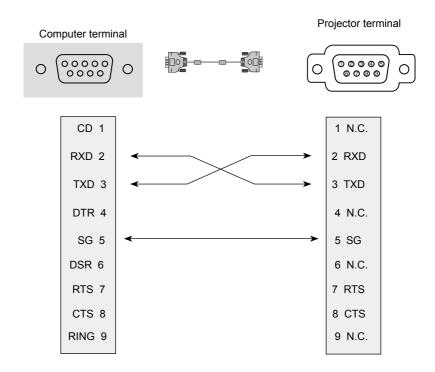
Serial connection

1.1 Port setting

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

1.2 Connection mode

Can only use RS232 serial cross connect PC and projector.



2. Basic commands

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

Command	Option	Command	Option
C00	POWER ON	C17	USB DIAPLAY
C01	POWER OFF	C32	DVI
C02	POWER OFF	C33	Component
C05	VGA IN	C34	S-Video
C07	Video	C36	HDMI 1
C15	NETWORK	C37	RGBHV
C16	MEMROY VIEWER	C38	HDMI 2(MHL)

2.1 POWER ON command

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

2.2 POWER OFF command (Namely Power Off)

Command	"C01" [CR]	
Details	Power OFF (In standby mode) If you use the On/Stand-by button on the projector or the remote control, OFF Power, when the PowerOFF is shown to be ready for the next command to cut off the power supply.	
	Receive Successfully	[ACK] [CR]
Return Value	Receive Unsuccessfully	"? " [CR]

2.3 POWER OFFcommand

Command	"C02" [CR]	
Power OFF (In standby mode)		
Details	do as when you are in (On/Stand-by OFF (Power) on the projector or the remote
Details	control, which needs to s	end the command to cut off the power supply do.
	Send this command can force the end of the countdownthe in the countdown.	
	Receive Successfully	[ACK] [CR]
Return Value	Receive Unsuccessfully	"?"[CR]

2.4 VGA IN command

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

2.5 Video command

Command	"C07"[CR]	
Details	Select Video Input Do as when you press the "Video" on the projector or the remote control .	
		[ACK] [CR]
Return Value	Receive Unsuccessfully	"? " [CR]

2.6 NETWORK command

Command	"C15"[CR]	
Details	Select NETWORK Input .	
		[ACK] [CR]
Return Value	Receive Unsuccessfully	"? " [CR]

2.7 MEMORY VIEWER command

Command	"C16"[CR]	
Details	Select MEMORY VIEWER Input .	
		[ACK] [CR]
Return Value	Receive Unsuccessfully	"? " [CR]

2.8 USB Display command

Command	"C17"[CR]	
Details	Select RGBHV Input	
Datum Valua	Receive Successfully	[ACK] [CR]
Return Value	Receive Unsuccessfully	"? " [CR]

2.9 DVI command

Command	"C32" [CR]	
II)etails	Select DVI Input . Do as when you press the "HDMI" on the projector or the remote control .	
		[ACK] [CR]
Return Value	Receive Unsuccessfully	"? " [CR]

2.10 COMPONENT command

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

2.11 S-Video command

Command	"C34"[CR]	
פוובזאו ו	Select S-Video Input . Do as when you press th	e "S-Video" on the projector or the remote control .
	Receive Successfully	[ACK] [CR]
Return Value	Receive Unsuccessfully	"? " [CR]

2.12 HDMI1 command

Command	"C36"[CR]	
Details	Select HDMI1 Input . Do as when you press th	e "HDMI" on the projector or the remote control .
Return Value	Receive Successfully	[ACK] [CR]
	Receive Unsuccessfully	"? " [CR]

2.13 RGBHV command

Command	""C37"[CR]		
Details	Select RGBHV Input		
		[ACK]	[CR]
Return Value	Receive Unsuccessfully	"? "	[CR]

2.14 HDMI2 command

Command	"C38"[CR]	
Details	Select HDMI 2 Input. Do as when you press th	e "HDMI" on the projector or the remote control .
	Receive Successfully	[ACK] [CR]
Return Value	Receive Unsuccessfully	"? " [CR]

Note: [ACK] "CR" is the return value for receiving valid commands.

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	The ADPCM	Maximum: 1280x720,30fps
			1	

	Extension name	Format	Description
	jpg/jpeg	Baseline encoder 24	Max resolution: 10000x10000
		Progressive RGB24 bit	Max resolution: Panel Resolution
Maps	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		

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 enter again 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 Time Interval (seconds)'and 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.
O ₁ O	Each time press the icon , the box switches . When the box appears, the video can playback.

The termination of Memory Viewer

The 'Slide Show Time Interval (seconds)'and 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.
 - · Press reenter 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.

<u>Precautions on processing and storage of USB memory</u>

- 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 cable to connect the projector to the Micro 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) 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
 - · Items in grey are not available.

[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: WUXGA.
- 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 disconnecting the USB hub, it may be abnormal.

The termination of USB display

- 1) Remove the USB cable directly, when terminate USB display.
 - · 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 1 GHz 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 cable to connect the projector to the Micro 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) Double-click "Monitor.app" button installed on the virtual disk.
 - Project 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
 - · Items in grey are not available.

[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: WUXGA.
- You need wait for a moment, if you want project computer screen.
- Connect the USB cable directly to the computer's USB connector. When disconnecting the USB hub, it may be abnormal.

The termination of USB display

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

Network control operation

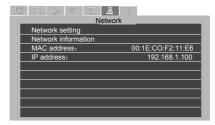
Function: This function is designed to remote control computer in the same LAN.

Preparation

- 1 Required equipment: Projector, connection, 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 and computer port of your projector flashes after it is powered on.

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
 - 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.



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.
- Click [Login], and enter the password in the [Password].
 "* "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.

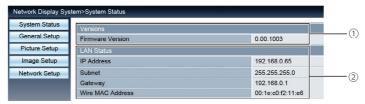
Please change your password.

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.
- S Network Setup: Click this option to display [Network Setup] page.

[System Status] page



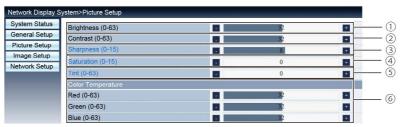
- ① Versions: Displays the firmware version of the projector.
- ② LAN Status: Displays the LAN. connection status .

[General Setup] page



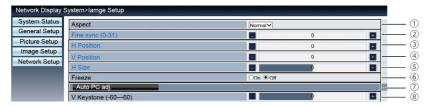
- ① Enter old password: Enter the password for the configuration.
- ② Enter new password: Enter a new password.
- 3 Confirm new password: Re-enter the new password required to confirm.
- Power & Source: Update settings.
- © Power: Switch on the power of the projector on / off.
- Source select: Switch 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.
- © Color Temperature: Adjust the color temperature of the projected image.

[Image Setup] page



- ① Aspect: Switch the aspect of the projected image.
- ② Fine sync: Adjust the phase of the projected image.
- 3 H Position: Adjust the horizontal position of the projected image.
- V Position: Adjust the vertical position of the projected image.
- (5) H Size: Adjust the horizontal dimension of the projected image.
- 6 Freeze: Select the function to switch the screen freeze on and off.
- ② Auto PC adj.: Select the function to adjust the PC automaticlly.
- ® V Keystone: Select the function to correct the distortion in the vertical direction.

[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.



the icon to enter into pwPresenter software.



Search and connect projector

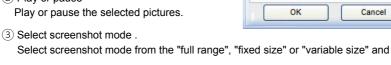
Click to enter to search, select the needed projector and connect it . Set the same IP address (for example: 192.168.1.100) as the projector in pwPresenter software ,and set user type as "average user", and the password is "admin".

✓ NOTE

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



(2) Play or pause





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



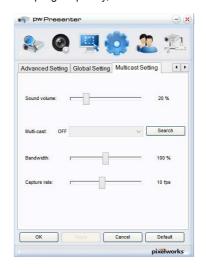
Global setting: Remote control setting, Sound capture and Screen capture, etc.



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



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



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





(6) Cut off projector connection.