

rubiQube

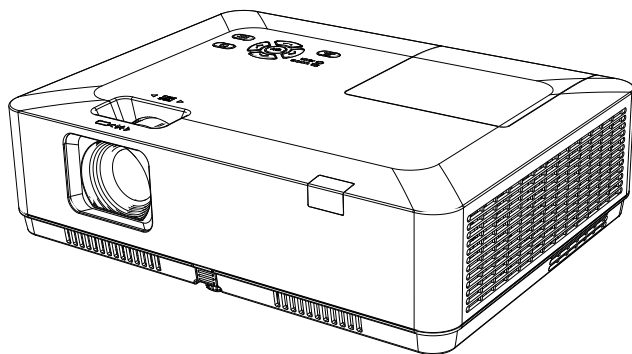
CRYSTAL 3800

User manual

Detailed articles

Multimedia Projector

Models: Solo low-end series



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

ENGLISH

2018.07

Features and design

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

Simple Computer System Setting

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

Useful Functions for Presentations

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

Lamp Control

Brightness of the projection lamp can be selected.

Logo Function

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

Multilanguage Menu Display

The screen menu of the projector is available in 26 languages: English, German, French, Italian, Spanish, Polish, Swedish, Dutch, Portuguese, Japanese, Simplified Chinese, traditional Chinese, Korean, Russian, Arabic, Turkey, Finland, Norway, Denmark, Indonesia, Hungary, Czech Republic, Kazakhstan, Vietnamese, Thai, Farsi.

Convenient Maintenance Functions

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

Security Function

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

projector.

Auto Setup Function

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

Colorboard Function

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

Power Management

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

Closed Caption

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

✓ *Note:*

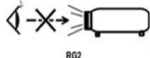
- The screen menu and images in the manual may slightly differ from the real product.
- The manual is subject to change without prior notice.

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Safety operation guideline

Safety instructions

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

 Caution	Ignoring messages indicated by this symbol may lead to personal injuries or deaths due to human errors.
 Note	Ignoring messages indicated by this symbol may lead to personal injuries or property damage.
	High voltage inside with risks of electric shock.
 RG2	RG2.DO NOT stare into the beam. RG2.Ne regarde pas dans la poutre.

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

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

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

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

 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.

Safety operation Guideline

Notes



Caution

Safety precautions:

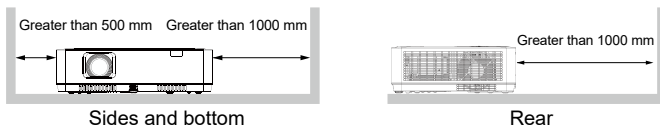
- GROUND your projector.
- Lens of your projector projects strong light. DO NOT look at the light beam directly. You may get your eyesight hurt. This is especially the case with children.
- Unplug the AC power plug if your projector will not be used for long time.
- DO NOT overload the socket of power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



Caution

Precautions on air outlet:

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



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



Caution:

Precautions on location of your projector:

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

FOR EU USERS

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

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

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

Note:

If a chemical symbol is printed beneath the symbol mark, this chemical symbol means that the battery or accumulator contains a heavy metal at a certain concentration.

This will be indicated as follows: Hg: mercury, Cd: cadmium, Pb: lead In the European

Union there are separate collection systems for used electrical and electronic equipment, batteries and accumulators.

Please, dispose of them correctly at your local community waste collection/recycling centre.

Please help us to conserve the environment we live in!



Caution:

Contains mercury

For more information on safe handling procedures, the measures to be taken in case of accidental breakage and safe disposal options visit: ec.gc.ca/mercure-mercury/

Dispose of or recycle in accordance with applicable laws.

Safety operation Guideline



Note:

Precautions on using your projector:

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

Information for users in the European Union

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

Directive 2009/125/EC.

NOTE FOR CUSTOMERS IN THE US

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

Air ventilation

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

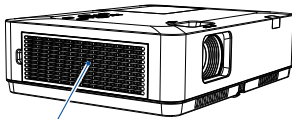


Note:

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

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

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



Air outlet
(For heat exhaust)



Air intake

Place your projector correctly

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

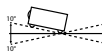


Note:

Avoid installing your projector as illustrated below.



DO NOT tilt your projector more than 10 degrees.



DO NOT tilt your projector more than 10 degrees.



DO NOT put the projector on a vertical projection.



DO NOT put the projector upside down to make a projection.



DO NOT put the projector on a horizontal projection.



Note:

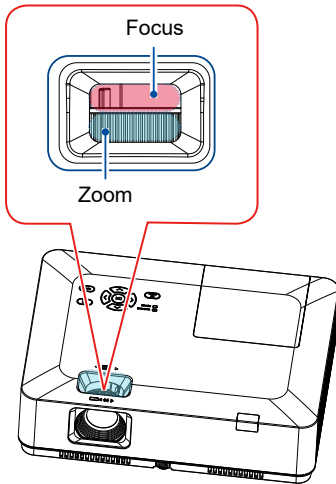
Precautions on ceiling mount racket installation:

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

Safety operation Guideline

Moving your projector

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



Note:

Precautions on moving or shipping your projector:

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

Precautions on dealing with your projector:

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

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



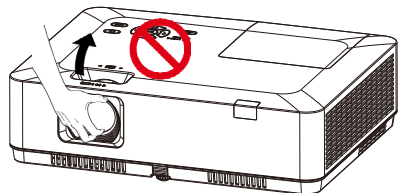
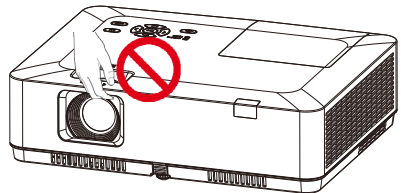
Note:



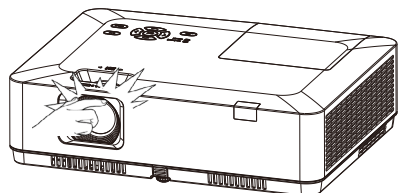
Projection lens are manual ones. Precautions on using your projector:



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



DO NOT hold the lens or area around it.



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:

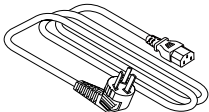
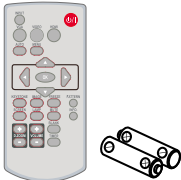
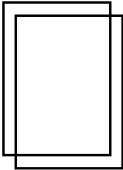
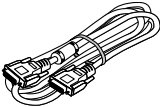
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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.

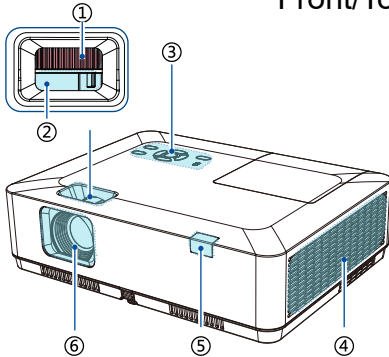
Accessory

Accessory for Solo low-end series as follows:

AC Power Cord  Note: the AC power cord specification depends on the location of your projector.	Remote Control With Batteries (AAA*2) 
Quick Start Guide 	VGA Cable 

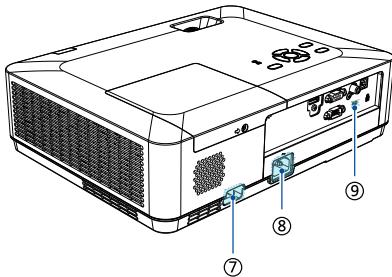
Name and function of your projector

Front/Top



- ① Zoom ring
- ② Focus ring
- ③ Top control panel
- ④ FILTER
- ⑤ Remote Receiver (Front)
- ⑥ Projection lens

Rear



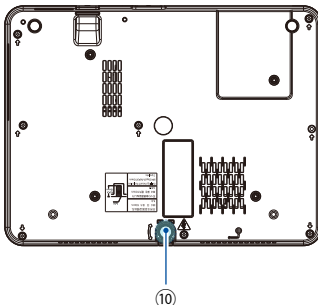
- ⑦ Anti-theft lock hole
- ⑧ AC Power Cord port
- ⑨ Kensington Security Slot



Note:

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

Bottom



- ⑩ Adjustment pad

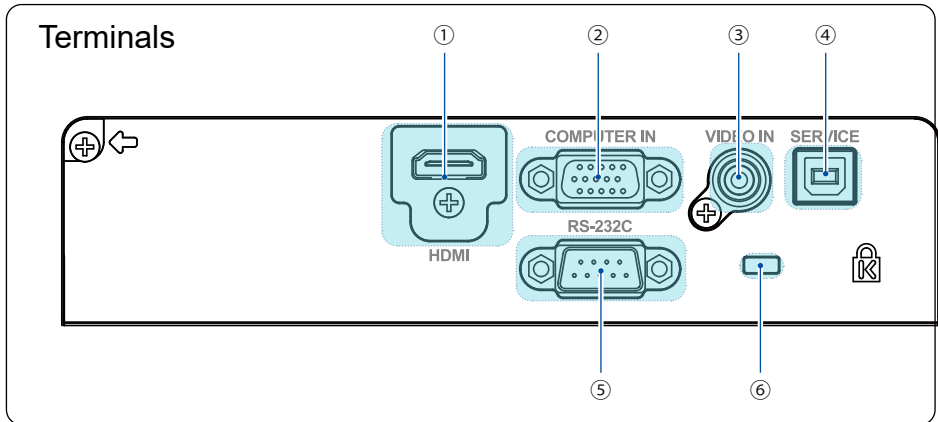


Note:

Donot place your hands or other objects near the vent:

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

Name and function of your projector



① **HDMI connector**

Connect HDMI1 digital output signals or HDMI2 digital output signals to this terminal.

② **COMUTER IN**

Connect RGB to this terminal.

③ **VIDEO IN terminal**

Connect video output signal to this terminal.

④ **SERVICE terminal**

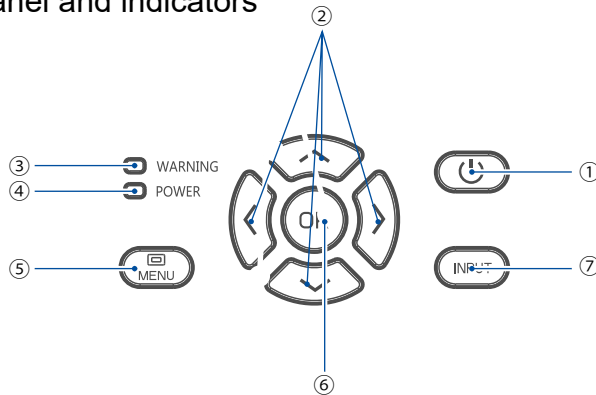
⑤ **RS-232C**

When using the RS232 functional to operate the projector, connect the serial communication to this terminal.

⑥ **Kensington Security Slot**

When using the "Kensington Security Slot" function, it will help users to deter theft of the projector.

Top control panel and indicators



① **POWER**

Open or close the projector.

② **Arrow ▲ ▼ ◀ ▶ /UP/DOWN/VOL-/VOL+**

- Select items or adjust the data in the OSD menu.
- Shift the image in the "Digital zoom +/-" mode.
- Adjust the volume.

③ **WARNING indicator**

- The indicator is flashing red, when the internal temperature of the projector exceeds the operating range.

④ **POWER indicator**

- The POWER indicator turns steady red, when the projector is in standby mode,
- The POWER indicator turns steady green, during the working time.
- The POWER indicator is flashing green, when the projector is in power management mode
- The POWER indicator is flashing red, when the projector is in cooling mode.
- The POWER indicator turns steady green yellow, when the projector power is abnormal.

⑤ **MENU**

Open or close the OSD menu.

⑥ **OK**

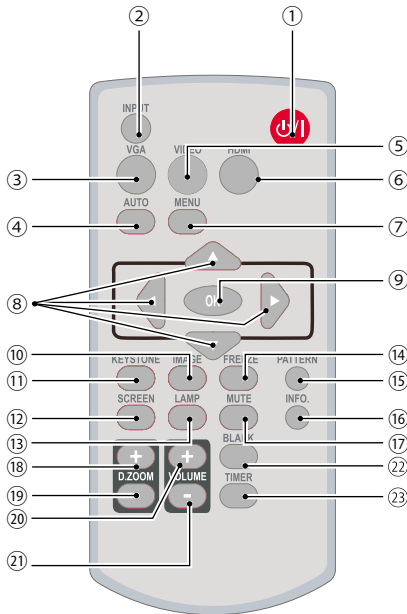
- Enter the OSD menu
- Select options in the OSD menu .

⑦ **INPUT**

Open or close the INPUT menu.

Name and function of your projector

Remote controller



1 **POWER**

Power on or off your projector .

2 **INPUT**

Open or close the INPUT menu .

3 **VGA**

Select VGA input source .

4 **AUTO**

Enter auto adjustment mode .

5 **VIDEO**

Select VIDEO input source .

6 **HDMI**

Select HDMI input source.

7 **MENU**

Open or close the OSD menu .

8 **Arrow**

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

9 **OK**

Enter the OSD menu or select options in it .

10 **IMAGE**

Select image mode .

11 **KEYSTONE**

Keystone calibration .

12 **SCREEN**

Enter the screen size adjustment menu.

13 **LAMP**

Select LAMP mode.

14 **FREEZE**

Freeze projected images.

15 **PATTERN**

Select built-in test pattern of your projector.

16 **INFO.**

Display current status info. of your projector .

17 **MUTE**

Turn off the sound Temporarily.

18 **D.ZOOM +**

Zoom in projected image .

19 **D.ZOOM -**

Zoom out projected image .

20 **VOLUME +**

Increase volume.

21 **VOLUME -**

Decrease volume .

22 **BLANK**

Dark out screen images temporarily.

23 **TIMER**

Enable the timer function .



PATTERN button on the remote controller is invalid when you choose USB display, Memory viewer and Network as input signal.

Name and function of your projector

Install battery of remote controller

Open the battery cover.



Insert a new battery in it.



Two AAA batteries

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

Put the cover back.



Please follow the following rules for safety operation:

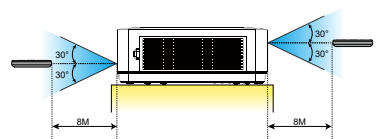
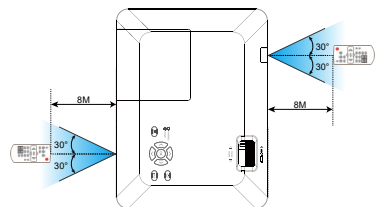


- Use two of AAA batteries.
- Replace both batteries at the same time.
- Do not mix new and old batteries as one pair.
- Keep your remote controller away from water or other liquids.
- Do not expose your remote controller to environments with high humidity or temperature.
- Do not drop your remote controller.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

Remote controller operation range

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

Maximum operation range of your remote controller is about arc 15° and with about an area of radius 6 meters or about 8 meters in straight line.

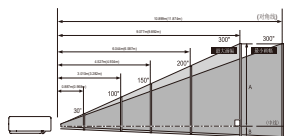


Installation

Set up your projector

- Ambient brightness may affect your projection image quality. For the optimal image effect, it is recommended to control brightness in your environment.
- Values shown in figure below are approximates only. They may differ from the actual ones.

XGA Series (EL-S302X)



✓NOTE:

- Data in the image are about the maximum frame value.
- Data in brackets are for 16: 9.

Screen size (WxH)m 4:3 aspect	30"	100"	150"	200"	300"
	0.610x0.457	2.032x1.524	3.048x2.286	4.064x3.048	6.096x4.572
Frame (Max.)	0.887m	3.010m	4.527m	6.044m	9.077m
Frame (Min.)	1.069m	3.617m	5.438m	7.258m	10.899m

Screen size (WxH)m 16:9 aspect	30"	100"	150"	200"	300"
	0.664x0.374	2.214x1.245	3.321x1.868	4.428x2.491	6.641x3.736
Frame (Max.)	0.968m	3.282m	4.934m	6.587m	9.892m
Frame (Min.)	1.167m	3.943m	5.926m	7.909m	11.874m

Adjust the projected image

Adjust the position of the projected image

1. Place the projector so that it is perpendicular to the screen, just show as below Image (1).
2. Raise the front of the projector and press the foot lock on the projector.
Loosen the foot lock can lock the adjustable foot. Rotate the adjustable foot to adjust the height.
Rotating the adjustable foot in the direction shown in the Image (2) to lengthens it, and rotating in the opposite direction retracts it, thus adjusting the projection angle of the vertical direction.

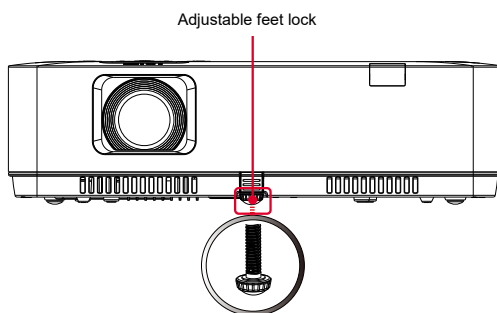
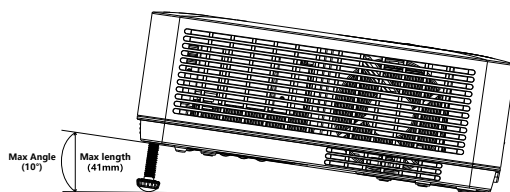


Image (1)

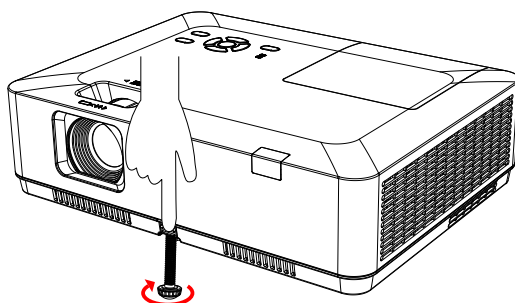


Image (2)

Installation

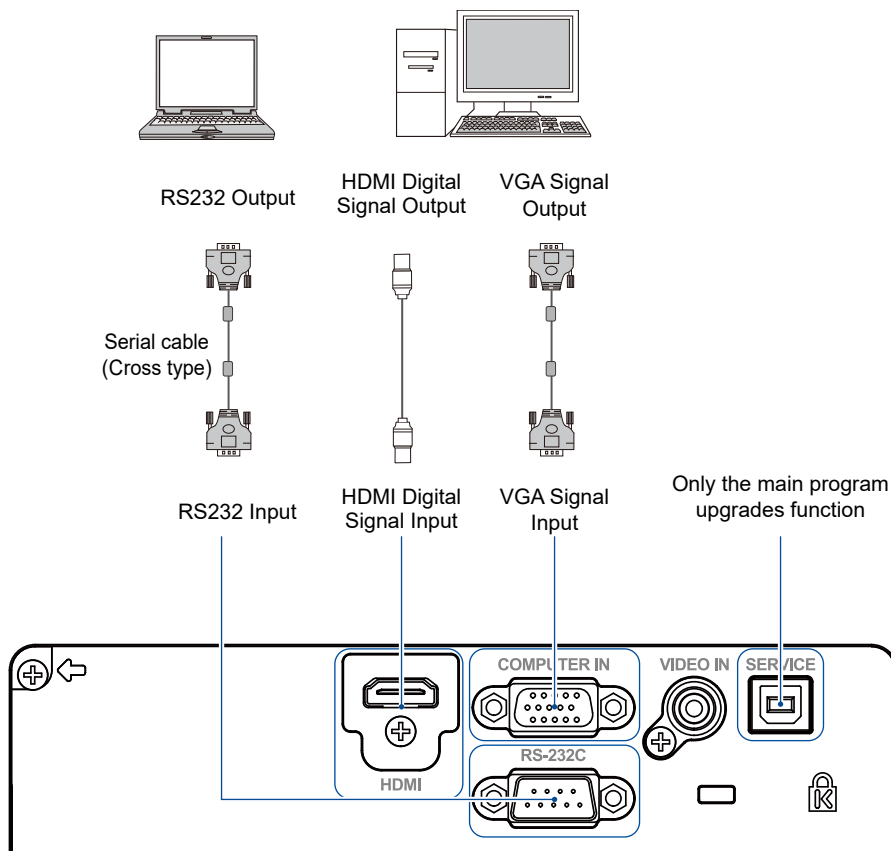
Connect to PC (Digital and Analog RGB)

Cables for connection:

- VGA cable
- Serial cable (Cross type)*

- HDMI cable*

(* This cable is not included.)



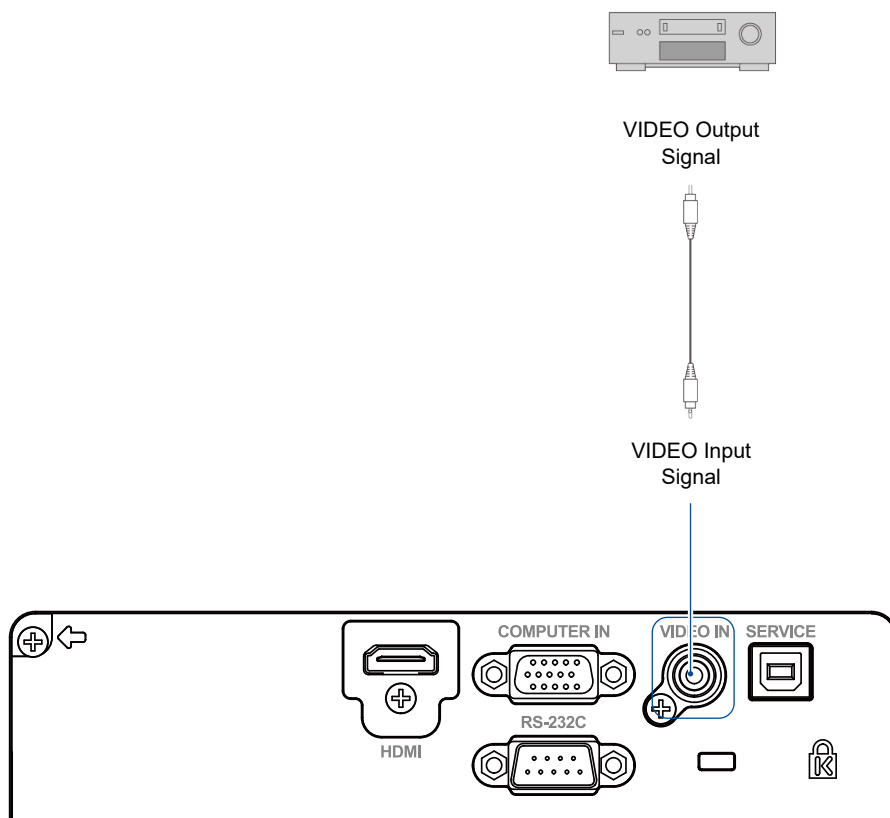
Unplug power cords of your projector and all external equipment before connecting any cable to them.

Connect to video equipment

Cables for connection:

- VIDEO cable*

(* This cable is not included.)



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

Installation

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.

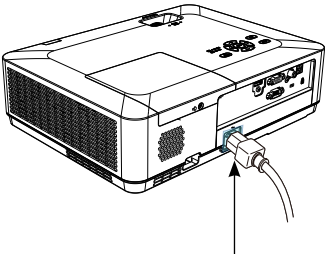


Note:

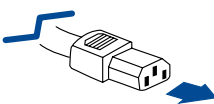
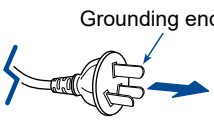
Keep your AC power socket close to your projector for easy plugging and unplugging.

✓ 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.

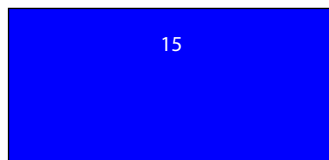
Precautions on power cord Your AC power cord should meet regulations of the country/district where your projector is used. Please make sure the type of the power plug is compliant with those given in figure below. Make sure you are using a valid AC power cord. In case the included AC power cord does not comply with the AC power socket in your location, call your dealer for replacement.	
The projector side	Connect to the AC power socket
 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.

Power on your projector

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



✓ Note:

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

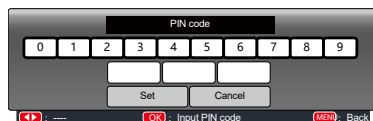
Enter password (PIN)

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

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

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

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



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



What is a password (PIN)?

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

Your password (PIN) code is a 3-digit number. To find out more about protecting your projector with a password (PIN), please refer to the PIN Code Lock function in the Setup menu on Page 49 for details.

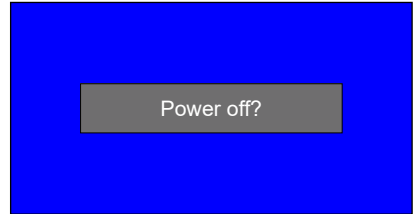
Precautions on password (PIN) operation

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.

Basic operation

Power off your projector

1. Press the Power button at the top control panel or the remote controller, the "Power off?" message displays.
2. Press the Power button again in 4 seconds after the "Power off?" message prompted to you. The POWER indicator flashes red while the cooling fan continues running. (You may set up noise level and speed of the fan.) Unplug the power cord until the fan stops running. Failure to do so may shorten life cycle of your projector or lead to power on failures or operation abnormalities.
3. The POWER indicator stops flashing once the projector has been cooled down to ready for power on again.



"Power off?" message disappears in 4 seconds.



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

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

✓ Note:

- If the "On Start" function is set to "On", your projector will power on once it is connected to an AC power socket. (Refer to page 41)
- 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 66)
- The POWER indicator flashes when the lamp is cooling down. Do not power on your projector at this time. Power on your projector only after the POWER indicator turns red.
- Unplug the power cord after your projector has been turned off. The fan stops running.
- The POWER indicator turns red when your projector is ready for power on again. It takes less time to restart your projector after it was powered off in the standard power off procedure than that of the non-standard one.

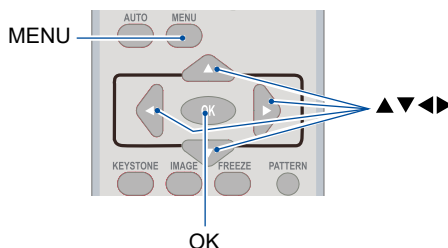
How to operate the OSD

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

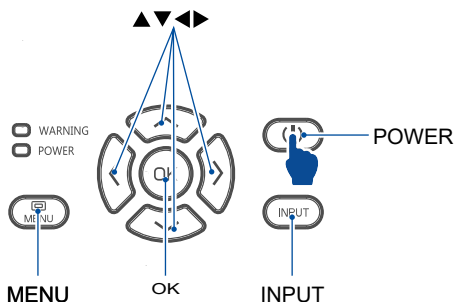
The menu has a multilayer structure. Each main menu is divided into several sub-level menus, then each submenus is divided into several submenus.

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

Remote controller

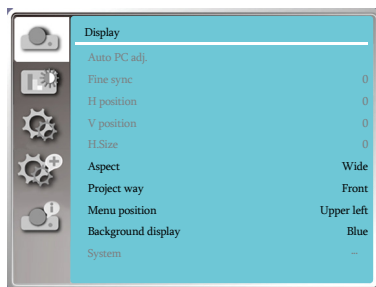


Rear control panel



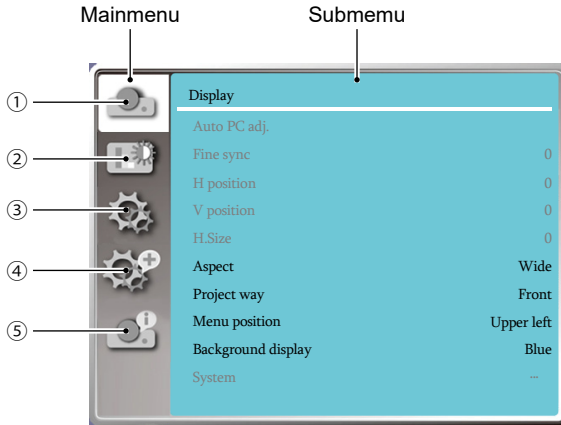
1. Press the MENU button on the top control panel or remote controller and the OSD displays.
2. Press ▲▼ button to act on or select one mainmenu item. Press ► button or OK button to enter a submenu.
3. Press ▲▼ button to select required sub-menu, then press OK button or ► button to set up or enter an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

OSD Menu



Basic operation

Menu item overview



- ① Display menu
 - Select Auto PC adj., Fine sync, H Position, V Position, H. size to adjust the parameters to match the VGA format.
 - Aspect : Normal, Widescreen, Fullscreen, Advanced.
 - Project way: Choose Front, Rear, Ceiling / Front, Ceiling / Rear, Auto ceiling/Front and Auto ceiling/Rear .
 - Menu position: Set screen menu display position on the screen.
 - Background display: Sets the background color of the projection screen.
 - System: Select the compatible system signal format with input source .
- ② Color adjust menu

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

 - For AV signal input ,the available color adjust options : Contrast, Brightness, Color, Tint, White balance(Red, Green, Blue) and Sharpness.
 - For PC signal input ,the available color adjust options :Contrast, Brightness, Color temp. , White balance(Red, Green, Blue) and Sharpness.
- ③ Setting menu

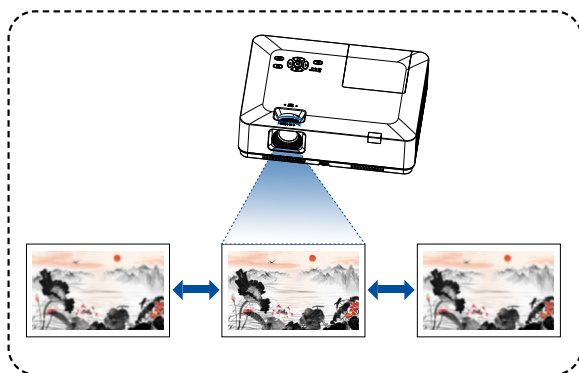
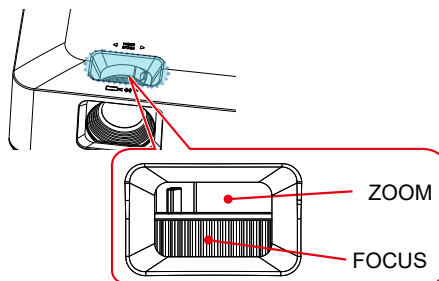
Configuration of the basic function operation on the projector: On start, Standby mode, High land, Lamp control, Cooling fast , Closed caption, Key lock, Iris, Terminal, Sound and HDMI Setup.
- ④ Expand menu

Available adjust options are Language, Auto Setup, Keystone, LOGO , Security, Power management, Filter counter, Test pattern, Network, Factory default and Lamp counter.
- ⑤ Information menu

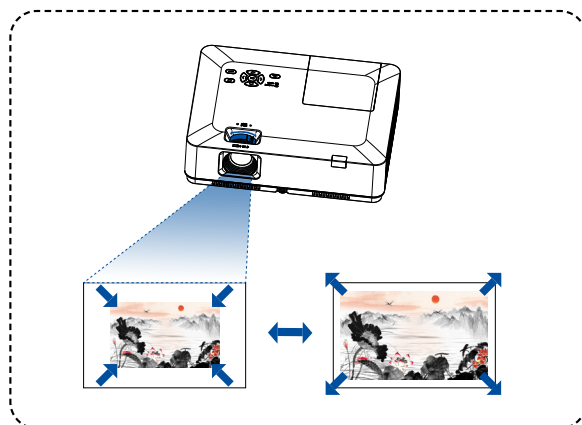
Display information about the projector.

Adjust the Projector Zoom and Focus

1. Rotate the zoom ring from the center, Rotate the picture to the left to zoom out or Rotate the picture to the right to zoom in.
2. Rotate the focus ring to adjust the focal length of the image, and adjust it to be clear according to the display content of the screen.



Adjust the projector Focus



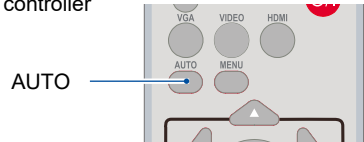
Adjust the projector Zoom

Basic operation

Auto setting function

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

Remote controller



Keystone adjustment

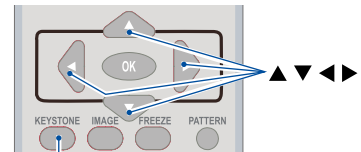
You may adjust keystone distortion of image in your projector with the V keystone adjustment. Follow steps below to adjust keystone distortion of projected image manually.

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

You may save your settings for keystone adjustment.

V Keystone.....Adjust the projected image when the projector is on the vertical keystone distortion.

Remote controller



KEYSTONE

V Keystone adjust



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

Remote controller operation

Use your remote controller for common operations.

Freeze (FREEZE)

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

Mute (MUTE)

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

VOLUME +/- (VOLUME +/-)

press the Volume +/- on remote controller to increase or decrease volume.

IMAGE (IMAGE)

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

LAMP (LAMP)

Press the Lamp button on remote controller to change screen brightness.



Normal.....Normal brightness.



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

INFO.(INFO.)

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

BLANK (BLANK)

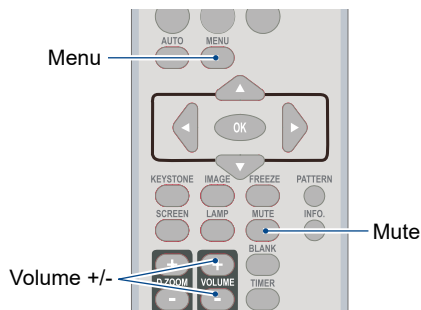
Press the BLANK button on remote controller; a blank screen displays to replace existing image. Press the BLANK button or any other button to restore the image. Press the BLANK button to toggle switch your screen as shown below:

BLANK → Normal → BLANK → Normal →

✓ Note:

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

Remote controller



The BLANK screen disappears if no buttons are pressed in 2 seconds.

Basic operation

Timer (TIMER)

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

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



Timer display

Digital Zoom + (D.ZOOM+)

Press the D.ZOOM+ button on remote controller to enter the Digital Zoom mode.

When OSD menu disappear, the screen display digital zoom + information.

*Only for input as VGA, RGBHV, and the screen size setting as Normal or Wide.

Digital Zoom - (D.ZOOM-)

Press the D.ZOOM- button on remote controller to enter the Digital Zoom mode.

When OSD menu disappear, the screen display digital zoom - information.

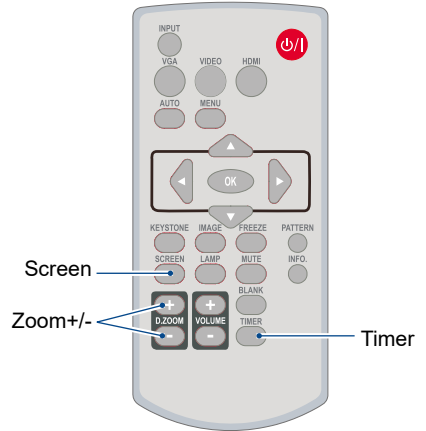
Press any other key to exit the Digital Zoom + / - mode

Screen size selection (SCREEN)

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

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

Remote controller



Input selection

Basic operation

Press the INPUT button on the control panel or on the remote control to select one of the following input: VGA ,Video,HDMI.

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, Video, HDMI, and then press the OK button to select the input source.

VGA

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

HDMI

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

Video

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

Input menu

VGA

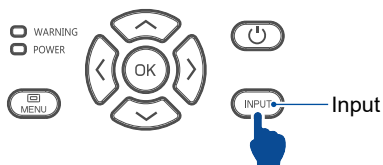
☒ HDMI

Video

Remote controller



Top Control Panel



✓ Note:

- If the " Input search" function in the Auto Setup option is set to "On", once you press the AUTO button, the projector will search for input signals automatically.

Display

Auto PC adj.

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

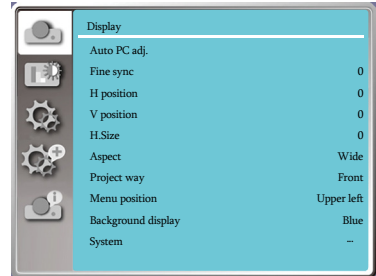
Menu operation

AUTO PC adj.

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

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

AUTO PC adj. menu



Fine sync

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

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

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

✓ Note:

- The projector will perform Auto PC Adjustment function automatically when its signal is input for the first time.
- Auto PC Adjustment function may fail to work if computer models are not compatible with the input signal .
- Auto PC Adjustment function may fail to work if you select the following system signal format: 480i, 576i, 480p, 576p, 720p, 1080i, 1080p, or signals from the HDMI terminal.

H Position

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

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

Adjustment range is from -5 to +5.

V Position

(Only for PC signal input)

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

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

Adjustment range is from -5 to +5.

H size

(Only for PC signal input)

You can adjust and reduce the interference caused by patterns of the projected vertical stripes. The following projected patterns may cause a circular pattern (Noise). Adjust the amount of interference to the minimum. Users can point the clock to adjust images.

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

Adjustment range is from -15 to +15.

Aspect

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

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

Press ▲▼ button to select the Display menu, then

Press <OK> or ► button.

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

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

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

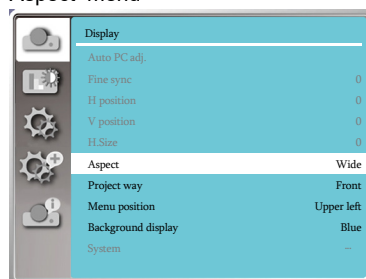
Full.....Project images to the maximum.

- Only for PC (VGA1) signal input .

Advanced Splicing screen.

- Only for PC (VGA1) signal input .

Aspect menu



Display

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

H Total.....Set the H total ,and images will be vertical division by the set value.
Adjustment range is from 1 to 5 of widescreen .

V Total.....Set the V total ,and images will be horizontal division by the set value.
Adjustment range is from 1 to 5 of widescreen .

H Position....Set the projector in horizontal position.
Adjustment range is from 1 to the current H Total value .

V Position....Set the projector in horizontal position.
Adjustment range is from 1 to the current V Total value .

Project way

Select this function to set the project way .
Please change the projection way,if the OSD displays inversely or reversedly.
Press < MENU > button on the remote controller or on the top control panel to display the OSD menu.
Press ▲▼button to select the Display menu ,then press <OK> or ►button.

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

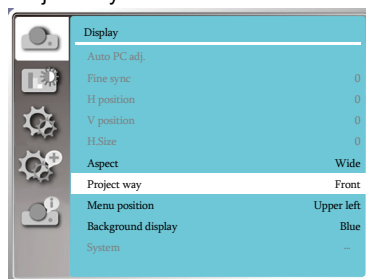
Front : when the projector is installed on the table and projected in front of the screen.

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

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

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

Project way menu



Menu position

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

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

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

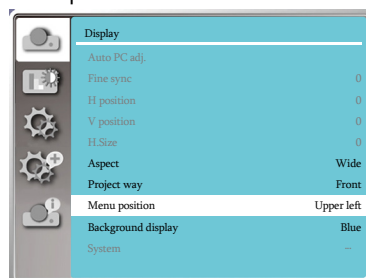
Upper right ...The Menu display on the Upper right corner of the screen.

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

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

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

Menu position menu



Background display

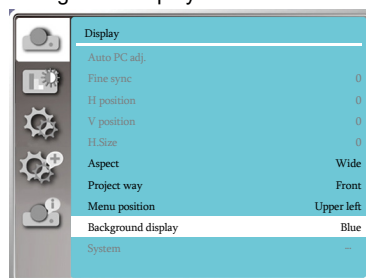
Select this function can adjusts background color.
Press < MENU > button on the remote controller or on the top control panel to display the OSD menu.Press ▲▼button to select the Display menu ,then press <OK> or ►button.

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

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

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

Background display menu



✓ Note:

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

Display

System

System selection

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

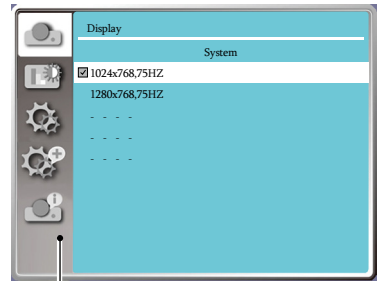
Your projector will display one of the following:

Auto

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

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

Computer system menu



The selected system displays in the PC system menu.

✓ Note:

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

Select the computer system manually.

- 1 Press the MENU button on remote controller and the OSD displays. Press ◀▶ button to point to the Input icon, press ▲▼ button or OK button and the Input menu displays.
- 2 Press ▲▼ button to select System Signal Format, then press OK button.
- 3 Press ▲▼ button to select required system signal format, then press OK button to confirm your selection.

✓ Note:

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

Video

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

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

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

RGB input signal

1024x768 60HZ, etc:display the compatible name input signal name.

Auto: When projector has no compatible input signal with one from connected PC ,the PC can adjust automatically to run and Auto appear on the system. If the image is not projected out correctly, please adjust it to match your computer manually.

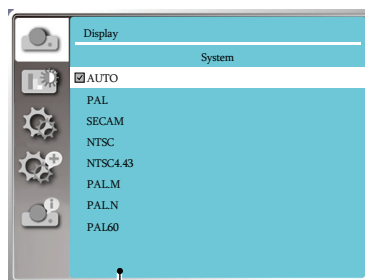
- - -: No signal input come from PC. Please check the connections.

Video input signal

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

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

Computer system menu



Video displays in the PC system menu.

Color adjust

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

Image mode

Direct operation

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

Menu operation

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

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

Dynamic

An image mode suitable for viewing in bright room.

Normal

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

Cinema

Enriched grayscale for viewing movies.

Blackboard (Green)

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

Colorboard

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

User Image

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

Remote controller

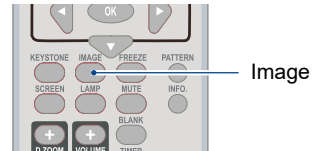
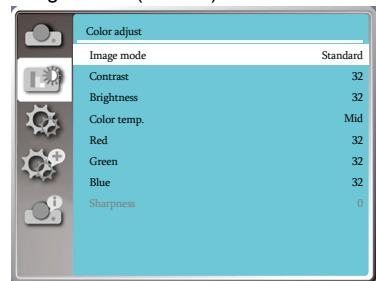


Image mode (For PC)



Colorboard



Color adjust(For PC.)

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

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

Contrast

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

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

Brightness

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

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

Color temp.

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

High temp: Become blue gradually.

Mid temp: Suitable natural color.

Low temp: Become red gradually.

Red

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

Green

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

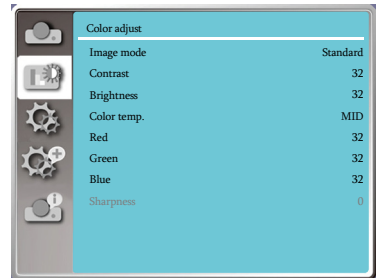
Blue

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

Sharpness

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

Color adjust(For PC)



✓ Note:

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

Color adjust

Color adjust(For Video)

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

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

Contrast

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

Brightness

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

Color

Press▼ button to decrease saturation, press ▲button to increase saturation.

Tint.

Press ▲▼button to select required tint.

Red

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

Green

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

Blue

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

Sharpness

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

Color adjust(For Video)



✓ Note:

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

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

Menu operation

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

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

On start

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

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

Off..... Get into Standby mode.

On.....Start up immediately.

Standby mode

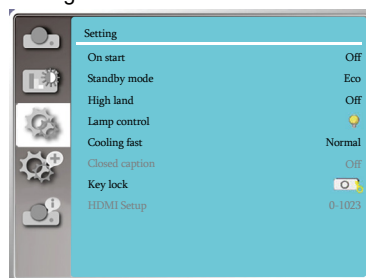
Set power consumption in standby mode,no matter whenever your projector is operated through network

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

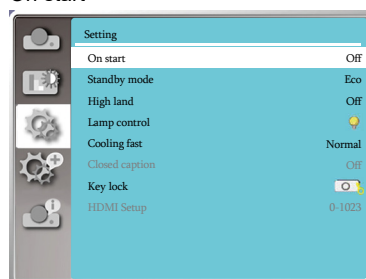
ECO mode.....Some function will be disabled once your projector is in ECO. STANDBY mode to reduce power consumption. Network and RS-232C serial communication will be unavailable except the POWER ON command during that mode.

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

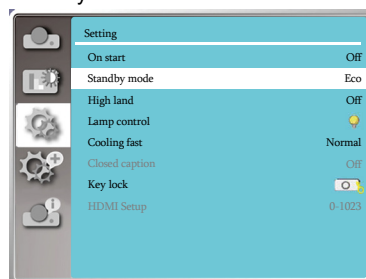
Setting menu



On start



Standby mode



Setting

High land

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

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

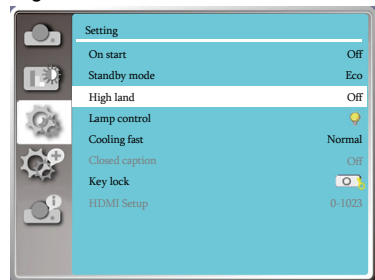
Off: Normal speed. Set the option OFF when operating the operator, if the altitude is not too high .

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

✓ Note:

- Set high land option ON when you operate the operator at an altitude of 1400-2000 meters.

High land



Lamp control

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

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

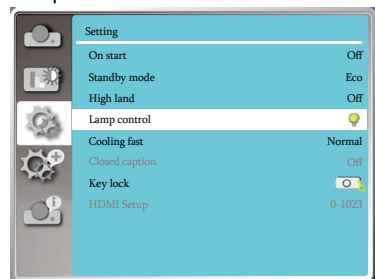


Normal.....Normal brightness.



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

Lamp control



Cooling fast

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

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

Normal.....Running in normal way.

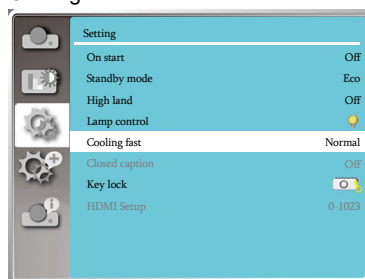
60 seconds.....Running faster than in normal mode with shorter time but a louder sound.

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

✓ Note:

- When set the option 0 seconds, user cannot re-start the projector immediately after turning off it.
- While sometimes, the lamp may take a longer time to cool off than usual to light again for high temperature.

Cooling fast



Closed caption

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

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

OFF:No closed caption.

CC1.....Display CC1 data.

CC2.....Display CC2 data.

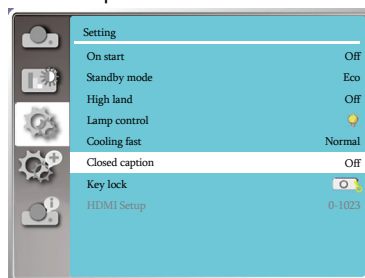
CC3.....Display CC3 data.

CC4.....Display CC4 data.

✓ Note:

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

Closed caption



Setting

Key lock

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

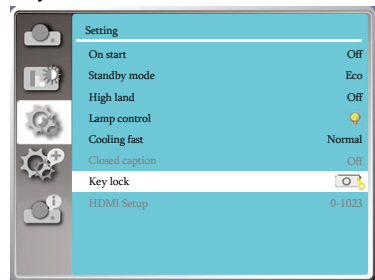
- 1) Press ▲▼ button to select [Key lock] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to switch required menu.

-  Off.....The control panel or remote controller keypad are effective.
-  Projector.....Control panel keypad is invalid.
-  Remote controller.....Remote controller keypad is invalid.

✓ Note:

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

Key lock



HDMI setup

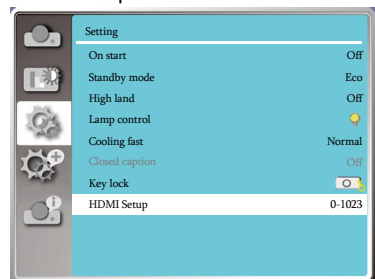
Press < MENU > button on the remote controller or on the top control panel to display the OSD menu. Press ▲▼ button to select the Setting menu ,then press <OK> or ► button.

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

64-940: When external device (such as:a blu ray disc player) is connected to the HDMI setup terminal .

0-1023: We should select this option when the output of an external device (such as a computer), via a conversion cable or a similar cable is connected to the HDMI setup terminal or when the output of the PC or any other device is connected to the HDMI setup terminal.

HDMI Setup



✓ Note:

- HDMI setup option can be chosen only in HDMI channel.
- The best settings about projectors may differ slightly from your external output device .
- For external output, please refer to the instructions for use of the external device.

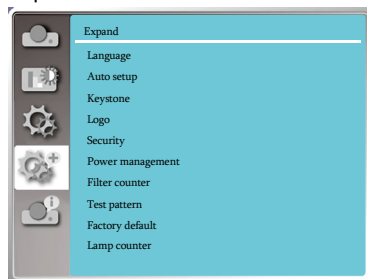
The projector has Expand function, you can select other functions as described below.

Menu operation

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

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

Expand menu



Language

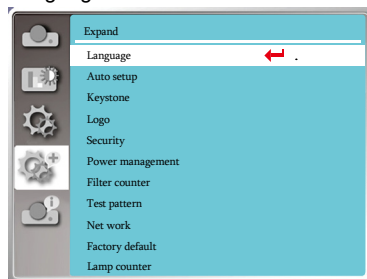
Users can selected the language displayed on the screen .

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

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

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

Language



Expand

Auto setup

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

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

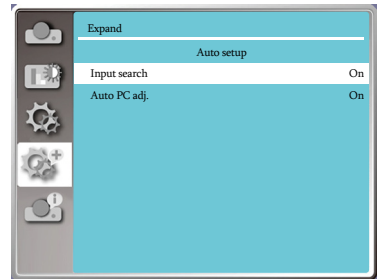
Input search : Select this function to detect the signal, then project images and input signals automatically .

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

✓ Note:

- One of Input search and Auto PC adj. option should be set to On at least .

Auto setup

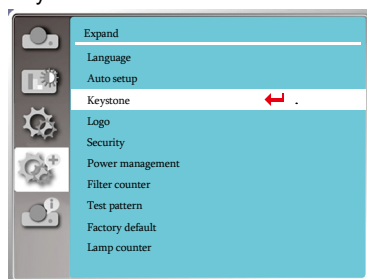


Keystone

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

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

Keystone



Keystone

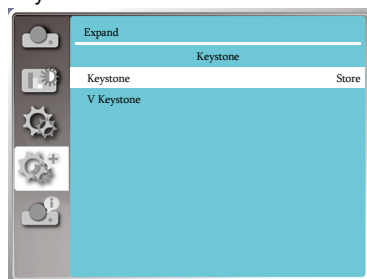
Select this function to store and reset Keystone after closing the projector or unplugging the AC power .

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

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

Reset value.....Keystone function will be cancelled after closing the projector or unplugging the AC power when the Standby mode is set to ECO. mode .
When the Standby mode is set to Normal, Keystone will be cancelled if you unplug the AC power ; while it will be stored when closing the projector .

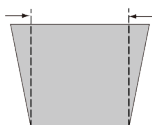
Keystone sub-menu



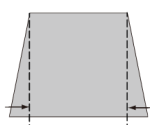
V Keystone

Select this function to correct the projected images horizontally or vertically

Press ▲button to
reduce upper width



Press ▼button to
reduce bottom width



Expand

Logo

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

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

Logo Select

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

Normal.....Display factory default logo screen.

User.....Display capture logo screen.

Off.....Display countdown logo screen.

Capture

Enable us to capture images being projected and use it for a startup display or interval of presentations. Upon capturing the projected image, press OK button, then a confirmation box appears, Select Yes to capture it.

After capturing the projected images, go to "select a logo", and set it to "User". Then, the captured image is displayed when the projector is turned on next time.

Logo PIN Code lock

LOGO PIN Code lock

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

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

On.....You may not alter the logo screen without the Logo PIN Code.

To change the logo screen password protection, press OK key, and the Logo PIN Code change popup dialog box prompts. Follow steps below to enter a logo screen password.

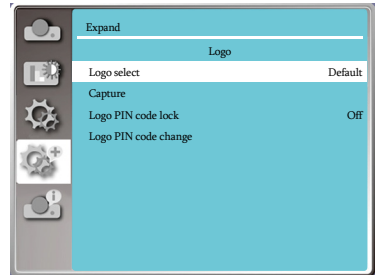
- Press arrow ◀▶ button to select a number, then press OK button to enter it and move the cursor. The number you typed is displayed as "*". To edit number you have entered, press MENU button to move the cursor to the number you want to change, press ▲▼ button to select the correct one.
- Repeat this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

Logo PIN Code Change

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

You cannot change the Logo PIN Code again if you forgot the password you have set.

Logo menu



✓ Note:

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

Security

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

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

Logo PIN Code lock

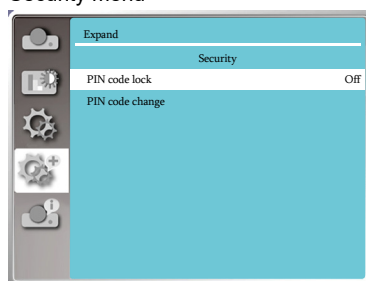
LOGO PIN Code lock

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

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

On.....The [Logo Password] screen will appear when the projector is on.If you want to change the PIN Code Lock or password (for three digits), you must enter the password. The factory default password is "111."

Security menu



Reset password

- To change the logo screen password protection, press OK button, and the Logo PIN Code change popup dialog box prompts.
Press arrow ◀▶ button to select a number, then press OK button to enter it and move the cursor.
- The number you typed is displayed as " * ". To edit number you have entered, press MENU button to move the cursor to the number you want to change, press ◀▶ button to select the correct one.
- Repeat this step to type in a 3-digit number.
- Enter a three-digit number, move the cursor to "set" . Press the OK button, you can start to operate the projector.
- If the password is invalid, the password displayed as " *** " will be in red. Please try again with a valid one.

Logo PIN Code Change

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

Press OK key to select Logo PIN Code change.

The Logo PIN Code change dialog box prompts, press arrow ◀▶ button to give a valid new code.

The New Logo PIN Code dialog box prompts. Set up a new Logo PIN Code, check contents contained in the dialog box, select Set and the new password is set now.

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

✓ Note:

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

Expand

Power management

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

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

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

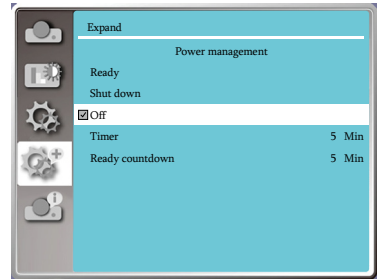
Power Off.....The projector shut down after the lamp is fully cooled down.

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

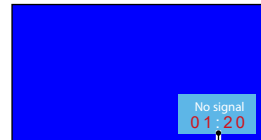
Timer.....Once the input signal is interrupted and no keys has been pressed for 30 seconds afterwards, the "No signal" message displays in the timer. The timer counts down until the lamp turns off. Press arrow key to set up the timer in range of 1~30 minutes.

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

Power management menu



Power management



Remaining time before poweroff the lamp.

✓ Note:

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

Filter counter

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

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

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

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

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

Filter counter resetreset filter counter.

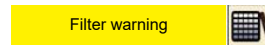
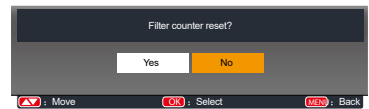
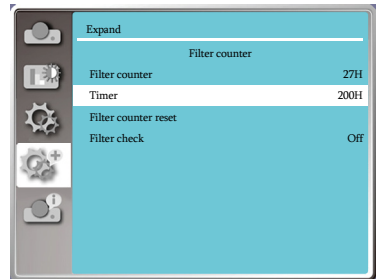
Filter check..Check the temperature inside the projector and make reactions.

On: Check filter.

- Once tthe projector has checked any filter problem, the screen will display a warning icon"Filter warning! Please change the filter! " .

Off: DONOT check filter.

Filter counter menu



✓ Note:

- The screen will display the icon "Filter warning! Please change the filter! " when the projector has checks one warning. And the the warning icon will disappear 30S later atuomatically, while only the POWER button is effective during that period.
- The projector will give warning again if the projector has checked filter block and will record the information.

Expand

Test pattern

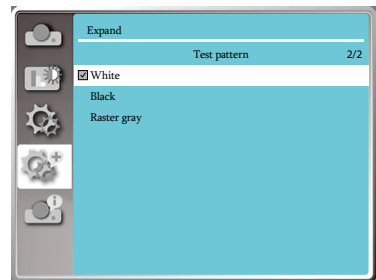
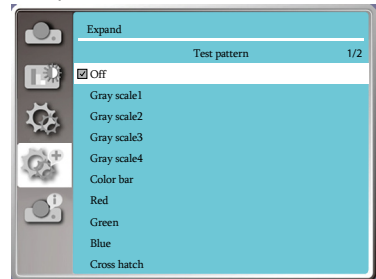
Select this function to display the projector's built-in test pattern.

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

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

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

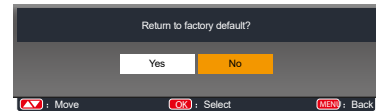
Test pattern menu



Factory default

This function resets all your settings to factory default .

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



Lamp counter

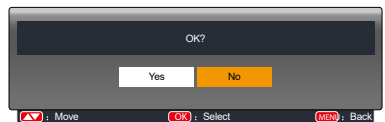
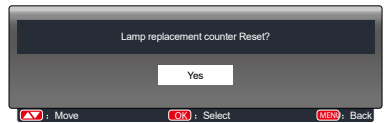
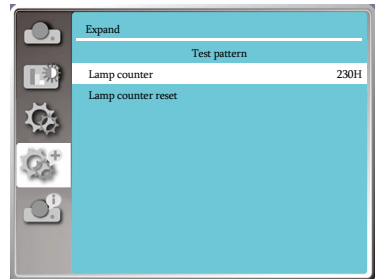
Make sure to reset the lamp counter, when replacing the lamp. Then the WARNING indicator goes out and the lamp replacement icon will disappear.

- 1) Press ▲▼ button to select [Lamp counter] menu.
- 2) Press < OK or ►> button.
- 3) Press ▲▼ button to select the "Lamp replacement Reset? ", and press the < OK > button. The "Lamp replacement counter Reset ?" message displays. Select Yes to proceed.
- 4) In another pop-up dialog box, select Yes to reset the filter counter.

✓ Note:

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

Filter counter menu



Info.

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

Menu operation

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

Info. display as follows:

Input : Display selected input source.

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

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

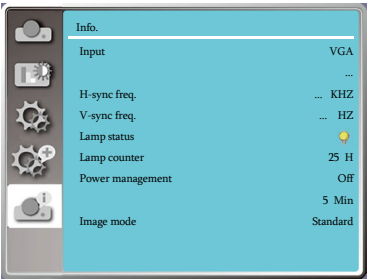
Lamp status.....Display selected Lamp.

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

Power management... Display selected Power management mode.

Image mode...Display selected Image Mode.

Info. menu



WARNING light indicator

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



Note:

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

The projector turns off and the WARNING indicator flashes red.

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



WARNING

POWER

The WARNING indicator
flashing red

✓ Note:

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

Check the following:

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

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

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



WARNING



POWER

The POWER indicator
turns steady yellow

Maintenance and cleaning

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



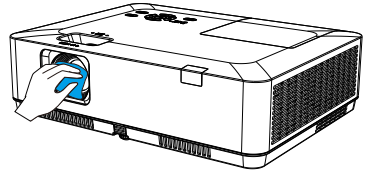
Note:

Unplug the AC power cord before any cleaning operation.

Clean the lens

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

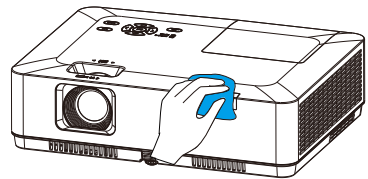
Do not over apply cleaner to the lens. Abrasive cleaner, solution, or other rough chemical may scratch the lens.



Clean casing of your projector

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

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

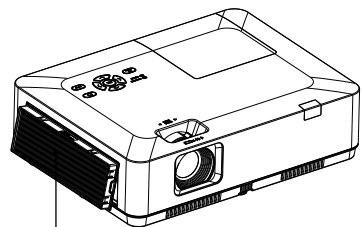


Clean the filter

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

Please follow these steps to clean your filter:

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



Filter counter



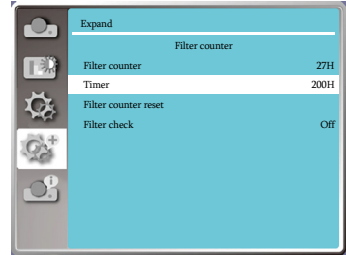
Note:

Do not operate your projector after its filter is removed. Dust may attach to the lens assembly and deteriorate image quality.

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

Reset the filter counter

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



Recommendations

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



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

Lamp replacement

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

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

The lamp warning icon



The lamp replacement icon



Lamp model

Your projector's lamp is a consumable. You can confirm your usage time according to "Lamp counter" on the Info. menu in Page 54.

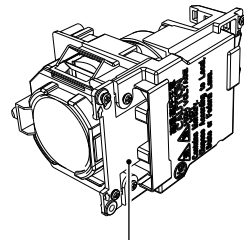
You'd better ask a professional technician to replace the lamp. Contact your dealer for help.

Please call your dealer to replace the lamp.

Recommendations

DONOT replace the lamp when it is so hot .Make sure to replace it at lease 1hour later after using it.

The internal cover of lamp model is getting hot in use. Take care, or you may get burned.



The lamp model

Maintenance and cleaning



Note:

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



Note:

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

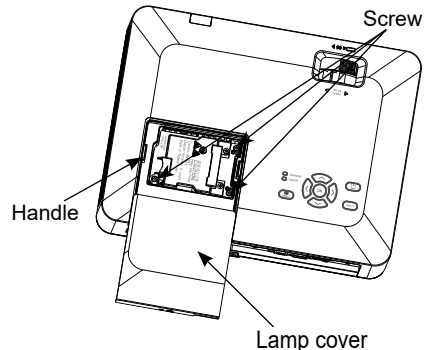


Note:

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

Follow steps below to replace the lamp:

1. Power off your projector and unplug the AC power cord. Let it cool down for at least 45 minutes.
2. Open the lamp cover after removing screws holding the cover.
3. Loose all 3 screws fixing the lamp. Remove the lamp by holding its handle.
4. 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.
5. Connect your projector to an AC power source and power it on.



Precautions on lamp operation

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

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

In case of lamp explosion, take the following safety measures:

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

Troubleshooting

Check the following before calling your dealer or service center:

Troubleshooting	Solution
Power on failure	– Plug the power cord of your projector in an AC socket. – Make sure the POWER light indicator turns red. – Restart your projector until the POWER light indicator turns red. It indicates your projector is ready for power on again. – Check the lamp. – Disable the Key Lock function of your projector.
Logo screen display failure	– Make sure the Off and Countdown Off is selected in the Display function.
The Logo screen differs from the standard settings.	– Make sure you did not select User or Off in the Logo Screen.
Input signal switch (or do not switch) automatically.	– Make sure you have correctly set up the Input Search function.
Press INPUT button during power on and a non-input mode icon displays.	– This is a filter or lamp replacement alerts.
A non-input or lamp mode icon displays.	– This is a filter replacement alerts.
Image looks fuzzy	– Adjust focus of your projector. – Provide proper projection distance. – The projection lens requires cleaning. – Moving your projector from a colder environment to a hotter one may result in condensing on the lens. If this is the case, wait until the condensing water evaporated before powering on your projector.
Image mirror reflected	– Check the Ceiling and Rear settings.
Image turns upside down	– 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.

Appendix

No image displays	– Check for the connection between your projector and computer or image equipment. – Check for correct input signal from computer. Connection with certain notebook computer may mandate changes to its display output settings. See the user manual included with the computer for details on settings. – It takes about 30 seconds for your projector to show the first image. – Check for mode of signal, color system, image system, or computer system. – Make sure the ambient temperature is within given range [0°C–40°C(35-ECO)]. – Image does not display in BLANK mode. The BLANK button or other buttons on the remote controller.
Abnormal color	– Check for mode of signal, color system, image system, or computer system. – Make sure Blackboard mode is not selected in Image Select.
Some operations are invisible	– Check the display function.
Auto PC Adjusting function failure	– Check input signal. Auto PC Adjusting function is unavailable in 480p, 576p, 720p, 480i, 576i or 1080i mode.
Settings do not save after power off	– Make sure you have selected Store after settings adjustment. Certain settings do not keep without selecting Store.
Power management failure	– In case of Freeze or Blank operation, the power management function does not work.
Auto Setting does not work	– Make sure it is not set to "Off" in each setup menu. – Make sure "On" is not set in Ceiling function.
Image distorted or disappeared	– Check and revise the PC Adj. menu or Screen menu.
A password prompt displays after power on	– You have set up the Logo PIN Code lock function
Remote controller does not work	– Check the battery. – Make sure there is no obstacles stand in between your projector and the remote controller. – Make sure the remote controller is not too far away from your projector. The maximum operation range is 8m. – Make sure the remote controller and your projector are paired with the same remote control codes. – Disable the key lock of the remote controller in the Setup menu.

Light indicator turns on or flashes	– Check status of your projector according to the light indicator status.
"X " mark displays	– Invalid operation, please operate your projector correctly.
Control panel does not function	– Disable the key lock on control panel function in the Safety option of the Setup menu.
Cannot remove the Logo Select password, Key Lock, and PIN Code lock	– Please call your dealer or service center.

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



Note:

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

Appendix

Menu tree

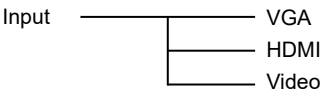
Main menu	Sub-menu	Setting	Remarks
Display	Auto PC adj.		
	Fine sync	0-31	
	H Position	-5 - +5	
	V Position	-5 - +5	
	H Size	-15 - +15	The range of H Size differs from signals.
	Aspect	Normal Widescreen Advanced Fullscreen	
	Project way	Front Rear Ceiling / Front Ceiling / Rear Auto ceiling / Front Auto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

Main menu	Sub-menu	Setting	Remarks
Color adj.	Contrast	0-63	Component Input S-Video Input Video Input
	Brightness	0-63	
	Color	0-63	
	Tint	0-63	
	Red	0-63	
	Green	0-63	
	Blue	0-63	
	Sharpness	0-15	
Setting	On start	On/Off	
	Standby Mode	Normal/ECO mode	
	High land	On/Off	
	Lamp control	Normal/ECO mode	
	Cooling fast	Normal/60s /0s	
	Closed caption	Off/CC1/CC2/CC3/CC4	
	Key lock	Off/Projector/Remote controller	
	HDMI Setup	64-940 0-1023	
Expand	Language	Projector provides multiple language support	
	Auto Setup	Input Search	On/Off
		Auto PC Adj.	On/Off
	Keystone	Keystone	Store / Reset
		V Keystone	
	Security	PIN code lock	On/Off
		PIN code change	

Appendix

Main menu	Sub-menu	Setting		Remarks
Expand	Logo	Logo select	Default/User/Off	
		Capture		
		Logo pln Code Lock	On/Off	
		Logo pln Code Change		
	Power management	Ready power Off Off Timer Ready Countdown		
	Filter counter	Filter counter Timer Filter counter reset Filter check		
	Text p attern	Off, Gray scale (1-4), Color bar, Red, Green, Blue, Cross hatch , White, Black, Raster gray		
	Factory default			
	Lamp counter	Lamp counter Lamp counter reset		
Memory Viewer	Set slide			
	Slide transition effect	Slide down Slide right		
	Sort order	Expand name orde Magnitude order Time orde Name order		
	Sort order	No rotate 270° rotate 180° rotate 90°rotate		
	Best fit	On/Off		

Main menu	Sub-menu	Setting	Remarks
Memory Viewer	Repeat	On/Off	
	Apply		
Info.	Input		
	H- sync. Freq.		
	V- sync. Freq.		
	Lamp status		
	Lamp counter		
	Power management		
	Image mode		



Appendix

Light indicator status

Check light indicator to learn status of your projector.

Light indicator		State of your projector
WARNING (Red)	POWER (Red / Green / Yellow)	
		Your projector is in Off status (without AC power supply).
		Your projector is in standby status. Press Power button to turn it on.
		Your projector is in normal status.
		It is in ready status or the light source is cooling.
		Your projector is in Ready mode.
		Your projector detects the voltage abnormality and switches into standby mode.
		Your projector detects the FAN abnormality and switches into cooling mode.
		Your projector detects the temperature abnormality and switches into cooling mode.
		Your projector detects the temperature abnormality and switches into stand-by mode.
		Your projector detects the light source abnormality and switches into cooling mode.
		Your projector detects the light source abnormality and switches into standby mode.
		Your projector detects its usage time $\geq$ the life of the projector and < 1.1 times of the life of the projector.
		Your projector detects its usage time ≥ 1.1 times of the life of the projector.

 ... Green

 ... Red

 ... Yellow

 ... Turns off

 ... Flashing green

 ... Flashing red

 ... Flashing yellow

Compatible computer screen

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

序号	OSD Display	输入源				规格			
		RGB	Component	HDMI	Video/ S-Video	分辨率	水平频率(KHz)	垂直频率(Hz)	Pixel clock (MHz)
1	NTSC	—	—	—	○	NTSC	15,734	59,940	—
	NTSC-443	—	—	—	○	NTSC 4.43			
	PAL-60	—	—	—	○	PAL60			
	PAL-M	—	—	—	○	PAL-M			
2	PAL	—	—	—	○	PAL	15,625	50,000	—
	PAL-N	—	—	—	○	PAL-N			
	SECAM	—	—	—	○	SECAM			
3	720x480i 60Hz	○	○	—	—	720x480i	15,734	59,940	13,500
4	720x480i 60Hz	—	—	○	—	720 (1440) x480i	15,734	59,940	27,000
5	720x576i 50Hz	○	○	—	—	720x576i	15,625	50,000	13,500
6	720x576i 50Hz	—	—	○	—	720 (1440) x576i	15,625	50,000	27,000
7	720x483i 60Hz	○	○	○	—	720x483(480P)	31,469	59,940	27,000
8	720x576i 50Hz	○	○	○	—	720x576(576P)	31,250	50,000	27,000
9	1280x720p 60Hz	○	○	○	—	1280x720p	45,000	60,000	74,250
10	1280x720p 50Hz	○	○	○	—		44,955	59,940	74,176
11	1920x1080i 60Hz	○	○	○	—	1920x1080i	37,500	50,000	74,250
12	1920x1080i 50Hz	○	○	○	—		33,750	60,000	74,250
13	1920x1080p 24Hz	—	—	○	—		33,716	59,940	74,176
14	1920x1080p 60Hz	○	○	○	—	1920x1080p	28,125	50,000	74,250
15	1920x1080p 50Hz	○	○	○	—		27,000	24,000	74,250
16	640x480i 60Hz	○	○	○	—		26,970	23,980	74,176
17	640x480i 67Hz	○	○	○	—		67,500	60,000	148,500
18	640x480i 72Hz	○	○	○	—		67,433	59,940	148,352
19	640x480i 75Hz	○	○	○	—		56,250	50,000	148,500
20	640x480i 85Hz	○	○	○	—		31,469	59,940	25,175
21	800x600i 56Hz	○	○	○	—		35,000	66,667	30,240
22	800x600i 60Hz	○	○	○	—		37,861	72,809	31,500
23	800x600i 72Hz	○	○	○	—		37,500	75,000	31,500
24	800x600i 75Hz	○	○	○	—		43,269	85,008	36,000
25	800x600i 85Hz	○	○	○	—		35,156	56,250	36,000
26	832x624i 75Hz	○	○	○	—		37,879	60,317	40,000
27	1024x768i 60Hz	○	○	○	—		48,077	72,188	50,000
28	1024x768i 70Hz	○	○	○	—		46,875	75,000	49,500
29	1024x768i 75Hz	○	○	○	—		53,674	85,061	56,250
30	1024x768i 85Hz	○	○	○	—		49,725	74,550	57,283
31	1152x864i 70Hz	○	○	○	—		48,363	60,004	65,000
32	1152x864i 75Hz	○	○	○	—		56,476	70,069	75,000
33	1280x720i 60Hz	○	○	○	—		60,023	75,029	78,750
34	1280x768i 60Hz	○	○	○	—		68,678	84,997	94,500
35	1280x768i 75Hz	○	○	○	—		63,995	70,020	94,200
36	1280x768i 85Hz	○	○	○	—		67,500	75,000	108,000
37	1280x800i 60Hz	○	○	○	—		44,772	59,855	74,500
38	1280x800i 75Hz	○	○	○	—		47,776	59,870	79,500
39	1280x800i 85Hz	○	○	○	—		60,289	74,893	102,250
40	1280x960i 60Hz	○	○	○	—		68,630	84,840	117,500
41	1280x1024i 60Hz	○	○	○	—		49,702	59,810	83,500
42	1280x1024i 72Hz	○	○	○	—		62,795	74,934	106,500
43	1280x1024i 75Hz	○	○	○	—		71,554	84,880	122,500
44	1280x1024i 85Hz	○	○	○	—		60,000	60,000	108,000
45	1366x768i 60Hz	○	○	○	—		63,981	60,020	108,000
46	1400x1050i 60Hz	○	○	○	—		78,16	71,97	135,060
47	1400x1050i 75Hz	○	○	○	—		79,976	75,025	135,000
48	1440x900i 60Hz	○	○	○	—		91,146	85,024	157,500
49	1600x900i 60Hz	○	○	○	—		47,720	59,799	84,750
50	1600x1200i 60Hz	○	○	○	—		65,317	59,978	121,750
51	1680x1050i 60Hz	○	○	○	—		82,278	74,867	156,000
52	1920x1080i 60Hz	○	○	○	—		55,935	59,887	106,500
53	1920x1200i 60Hz	○	○	○	—		55,920	60,000	118,998
							75,000	60,000	162,000
							65,290	59,954	146,250
							66,587	59,934	138,500
							74,038	59,950	154,000

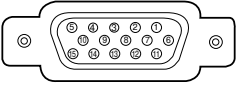
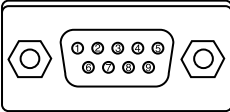
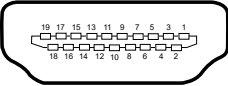
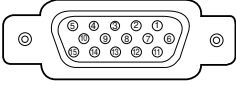
" ○ " shows input signal source support this format ; " — " shows input signal source DONOT support.

✓ Note:

Changes to this manual may be made without notice.

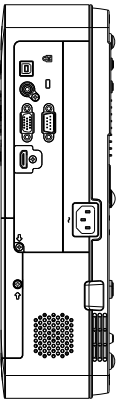
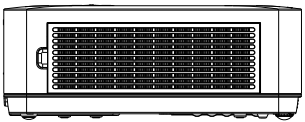
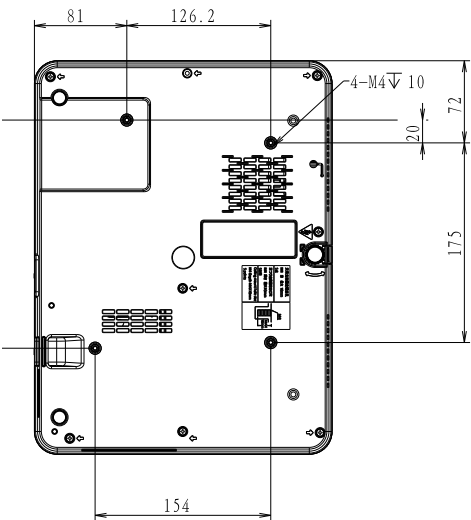
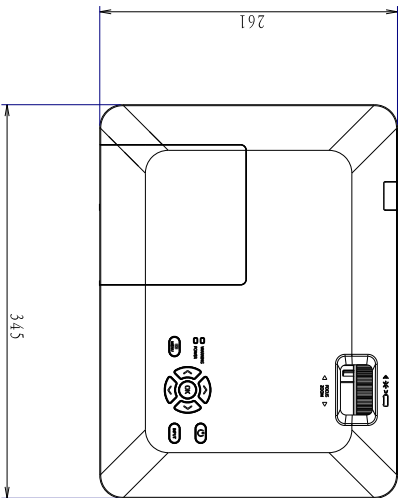
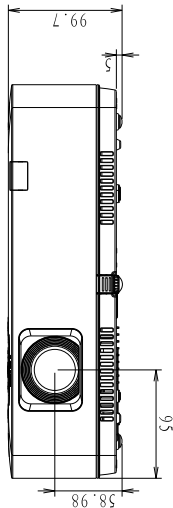
Appendix

Terminal configuration

MONITOR OUT Terminal (D-sub 15)				
	1	Red (Input/output)	9	----
	2	Green(Input/output)	10	Grounding(field synchronizing)
	3	Blue(Input/output)	11	Grounding
	4	----	12	DDC data
	5	Grounding (line synchronizing)	13	Horizontal synchronizing(compound sync.) input/output
	6	Grounding(red)	14	Vertial 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		
HDMI Terminal (HDMI Type A 19)				
	1	TMDS Data2+	11	TMDS Clock Shield
	2	TMDS Date2 Shield	12	TMDS Clock-
	3	TMDS Date2-	13	CEC
	4	TMDS Date1+	14	Reserved(N.C. on device)
	5	TMDS Date1 Shield	15	SCL
	6	TMDS Date1-	16	SDA
	7	TMDS Date0+	17	DDC/CEC Ground
	8	TMDS Date0 Shield	18	+5V Power
	9	TMDS Date0-	19	Hot Plug Detect
	10	TMDS Clock+		
VGA IN Terminal				
	1	Red/Pr/S-C input	9	----
	2	Green/Y/S-Y input	10	Grounding(field synchronizing)
	3	B/Pb/- input	11	Grounding
	4	----	12	DDC data
	5	Grounding(line synchronizing)	13	Horizontal synchronizing (compound sync.)input
	6	Grounding(red)	14	Vertial synchronizing input
	7	Grounding(green)	15	DDC clock
	8	Grounding(blue)		

Dimensions

↙
Support frame for Ceiling Mount
Screw: M4
Depth: 10.0 Unit: mm



Appendix

Technical Specifications

Mechanical properties

Dimensions (W×H×D) :	345x261x100mm
Net Weight	3.06Kg
Adjustable foot	10°

LCD resolution

LCD system	0.63/0.59" TFT, active matrix
LCD resolution	1024x768/1280x800

Compatible signals

Color standard	PAL, SECAM, NTSC, NTSC4.43, PAL-M and PAL-N,PAL-60
HDTV signal	480i, 480p, 576i, 576p, 720p, 1080i and 1080p
Scanning frequency	Horizontal frequency: 15 kHz–100 KHz; Vertical frequency: 48–85 Hz

Optical elements

Image size (diagonal lines)	30"-300", adjustable
Projection distance	XGA:0.887m-9.077m (Frame.Max) 1.069m-10.899m (Frame.Min)
Lens (Standard Lens)	XGA:F=2.1~2.25,f=19.109~22.936mm Manual zooming and focusing; Zoom times: 1.2
Lamp power	225W/150W(ECO. mode)

Terminal

CPMPUTER IN	Mini D-sub 15pin x1
HDMI1 terminal	HDMI A type 19 pin
SERVICE terminal	USB connector (B type x1)
RS-232 terminal	D-sub 9 pin x1
VIDEO terminal	RCA connector * 1

Power

Voltage and power consumption	AC 100–240 V (Max3.6A), 50/60 Hz
Fuse	6.3A/250V
Internal speaker	

Operating Environment

Operating temperature	0°C ~40°C (35~ ECO)
Storage Temperature	-20°C ~60°C
High land	2000 m

Remote control

Battery	AAA ALKALINE TYPE x 2(not ncluding batteries)
Operating Range	±15° about 6 m or about 8 m straight
Dimensions	110mm(L)X50mm(W)X20mm(H)
Net Weight	38g

Accessories

Owner's Manual	
Quick Start Guide	
Remote control and batteries	
AC power cord (US Type x 1 / Euro Type x 1)	
VGA cable	

- 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

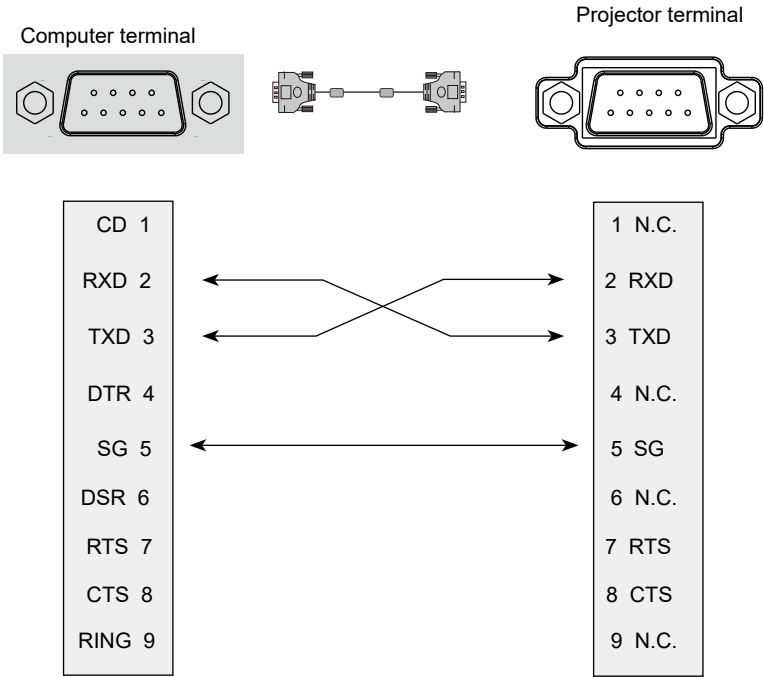
Serial connection

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.



Appendix

2. Basic commands

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

Command	Option	Command	Option
C00	POWER ON	C07	Video
C01	POWER OFF(Immediatly)	C15	NETWORK
C02	POWER OFF	C16	MEMROY VIEWER
C36	HDMI1	C17	USB DISPLAY
C37	HDMI2	C05	VGA 1

2.1 POWER ON command

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

2.2 POWER OFF command (Namely Power Off immediatly)

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

2.3 POWER OFFcommand

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

2.4 HDMI command

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

2.5 VGA command

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

2.6 Video command

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

