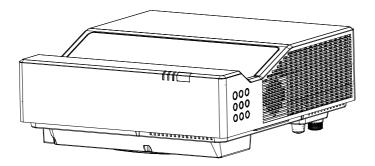


# MULTIMEDIA PROJECTOR LH-WU350UST/LH-WX370UST User's Manual









### Features and design

This projector is ultra-short-throw model with HLD\* LED as high lumen output LED light source. And it has versatile functions. Imaging devices are 3 sets of LCD panel which enables 1,073 million color reproduction.

\* HLD: High Lumen Density

#### High lumen and superior durability with HLD LED

This projector achieves 3,500lm and 3,700lm even with LED light source. Compared to UHP mercury lamp source, it can reduce a labor of maintenance thanks to a long life time of LED.

#### Large and wide image even in a short throw distance

Throw ratio 0.24:1. Setting projector onto the wall,80 inch. diagonal image can be projected.

#### Focus adjustment Center/corner

Since focus performance can be adjusted in both center and corner individually, crisp image can be realized from center to corner all over the screen.

#### H/V keystone function

Projector image can be corrected in  $\pm 5^{\circ}$  horizontally and vertically. Even more corner keystone function is usable. Hence, installation flexibility is improved.

#### Curved correction (LH-WX370UST)

The curved correction can correct a deformation of vertical line and horizontal line.

#### 16W speaker(mono)

Audio output can reach to a corner in a large conference room and class room.

#### Multi scan system

This projector can take multiple types of computer output signal for granted. Max. WUXGA input signal is acceptable.

#### Auto set up function

Only pushing one button once, projector starts to detect input signal and to adopt for it. Then projection completes automatically.

#### Logo Function (LH-WX370UST)

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 24 languages.

#### 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. Passcode lock function prevents unauthorized use of the projector.

#### Power Management

The Power management function reduces power consumption.

✓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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#### WARNING:

- THIS APPARATUS MUST BE GROUNDED.
- TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
- This projector produces intense light from the projection lens. Do not stare directly into the lens, otherwise eye damage could result. Be especially careful that children do not stare directly into the beam.
- Install the projector in a proper position. Otherwise it may result in a fire hazard.
- Do not cover the ventilation slots on the projector. Heat build-up can reduce the service life of your projector, and can also be dangerous.
- If the projector is unused for an extended time, unplug the projector from the power outlet.
- Do not project the same image for a long time.

An afterimage may remain on the LCD panels due to the characteristics of the panels of the projector.

## ▲ CAUTION ON HANGING FROM THE CEILING

When hanging the projector from the ceiling, clean the air intake vents and top of the projector periodically with a vacuum cleaner. If you leave the projector unclean for a long time, the cooling fans can be clogged with dust, and it may cause a breakdown or a disaster.

DO NOT SET THE PROJECTOR IN GREASY, WET, OR SMOKY CONDITIONS SUCH AS IN A KITCHEN TO PREVENT A BREAKDOWN OR A DISASTER. IF THE PROJECTOR COMES IN CONTACT WITH OIL OR CHEMICALS, IT MAY BECOME DETERIORATED.

# ■ READ AND KEEP THIS OWNER'S MANUAL FOR LATER USE.

All the safety and operating instructions should be read before beginning to operate the product.

Read all of the instructions given here and retain them for later use. Unplug this projector from the AC power supply before cleaning. Do not use liquid or aerosol cleaners on the projector. Use a damp cloth for cleaning.

Follow all warnings and instructions marked on the projector.

For added protection of the projector during a lightning storm, or when it is left unattended or unused for long periods of time, unplug it from the wall outlet. This will prevent damage due to lightning and power surges.

Do not expose this unit to rain or use near water... for example, in a wet basement, near a swimming pool, etc...

Do not use attachments not recommended by the manufacturer as they may result in hazards.

Do not place this projector on an unstable cart, stand, or table. The projector may fall, causing serious injury to a child or adult, and serious damage to the projector. Use only with a cart or stand recommended by the manufacturer, or sold with the projector. Wall or shelf mounting should be carried out in accordance with the manufacturer's directions, and should use a mounting kit approved by the manufacturers.

An appliance and cart combination should be moved with care. Sudden stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



Slots and openings in the rear and front of the cabinet are provided for ventilation, to insure reliable operation of the equipment and to protect it from overheating.

The openings should never be covered with cloth or other materials, and the bottom opening should not be blocked by placing the projector on a bed, sofa, rug,or other similar surface. This projector should never be placed near or over a radiator or heat register.

This projector should not be placed in a built-in installation such as a book case unless proper ventilation is provided.

Never push objects of any kind into this projector through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind onto the projector.

Do not install the projector near the ventilation duct of air-conditioning equipment.

This projector should be operated using only the type of power source indicated on the marking label. If you are not sure of the type of power supplied, contact the Canon Customer Support Center or local power company.

Do not overload wall outlets and extension cords as this can result in fire or electric shock. Do not allow anything to rest on the power cord. Do not locate this projector where the cord may be damaged by people walking on it.

Do not attempt to service this projector yourself as opening or removing covers may expose you to dangerous voltages or other hazards. Refer all servicing to qualified service personnel.

Unplug this projector from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a. When the power cord or plug is damaged or frayed.
- b. If liquid has been spilled into the projector.
- c. If the projector has been exposed to rain or water.
- d. If the projector does not operate normally after following the operating instructions. Adjust only those controls that are covered in the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the projector to normal operating condition.
- e. If the projector has been dropped or the cabinet has been damaged.
- f. When the projector exhibits a distinct change in performance-this indicates a need for servicing.

When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer that have the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock, or injury.

Upon completion of any service or repairs to this projector, ask the service technician to perform routine safety checks to determine that the projector is in safe operating condition.

# Safety Symbols in this Manual

This section describes the safety symbols used in this manual. Important projector safety information is identified by the following symbols. Always observe the safety information by these symbols.

Warning	Warning Denotes the risk of death or serious injury from improper handling if the information is not observed. To ensure safe us always observe this information.			
Caution	Denotes the risk of injury from improper handling if the information is not observed. To ensure safe use, always observe this information.			
<u>k</u>	Denotes the risk of electric shock from improper handling if the information is not observed. To ensure safe use, always observe this information.			
	Denotes the risk of burns from improper handling if the information is not observed. To ensure safe use, always observe this information.			
Prohibition	Denotes prohibited actions.			
Denotes required actions or information that must be of Caution				

## **Precautions for Use**

As this section contains important safety-related information, be sure to read the following carefully beforehand in order to use your projector correctly and safely.

# **Warning**

# **Power Supply**

During installation, keep the projector plug easily accessible so that the projector can be unplugged immediately if necessary, or keep a circuit breaker within reach. If the following situations occur, turn the power off, remove the power plug from the power outlet and contact the Canon Customer Support Center. Failure to do so could cause a fire or result in an electric shock.



- · If smoke is emitted
- If an unusual smell or noise is emitted
- If water or other liquid has entered the projector
- If metal or any other foreign material has entered the projector
- If the projector is knocked over or dropped and the cabinet is damaged

Pay attention to the following points regarding the power source, power plug and handling of the connector. Failure to do so may cause a fire or electric shock.

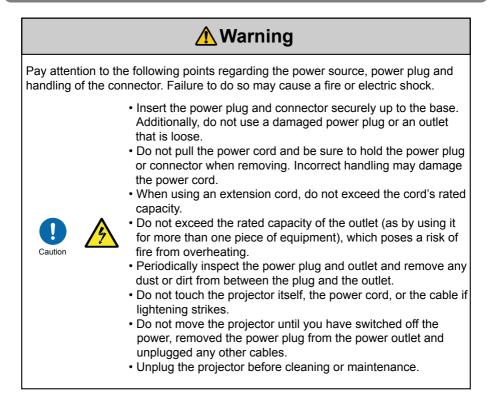
- Do not place any objects on the power cord and do not allow it to become trapped under the projector.
- Do not cover the power cord with a carpet.
- Do not modify or excessively bend, twist, pull, wind, or bundle the power cord.
- Keep the power cord away from heaters and other sources of heat.



- Do not use a damaged power cord. If the power cord is damaged, contact the Canon Customer Support Center.
- Do not use any power source with a voltage other than the voltage indicated (AC 100 240 V).
- Do not insert any metal objects into the contact parts of the power plug or connector.
- The power cord included with this projector is for use exclusively with this product. Do not use this cord for other products.



• Do not remove the power plug or connector with wet hands.



# **Warning**

## Installation and Use

Pay attention to the following points regarding installation and handling of the projector. Failure to do so may cause a fire, electric shock or personal injury.

- Do not use the projector where it might get wet, such as outdoors or by bathtubs or showers.
- Do not place containers containing a liquid on top of the projector.

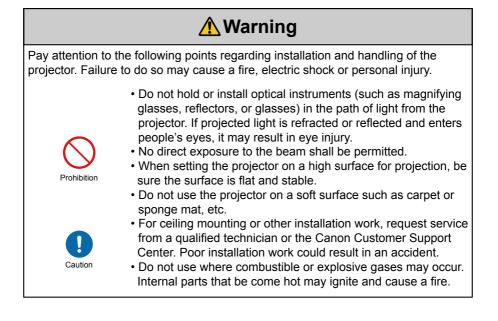


- Do not install the projector in a location that is damp or dusty, or where there is a lot of oily smoke or steam. Oil can degrade the plastic, which could result in a ceiling-mounted projector falling from its mounting.
- · Make sure to implement anti-fall measures such as an anti-fall wire when installing the projector in high places, for example, installing it on the ceiling.
- Do not remove the cabinet from the projector or disassemble it. The interior of the projector contains high-voltage components as well as parts that are hot. If inspection, maintenance or repair is required, contact the Canon Customer Support Center.
- Do not disassemble or modify the projector (including) consumable parts) or the remote control.
- · Do not look directly into the exhaust vents during use.
- Do not insert any object into vents in the projector, such as the air intake vent or exhaust vents.



- · Do not place a pressurized can in front of the exhaust vents. The pressure of the contents of the can may increase due to heat from the exhaust vents and this could result in an explosion.
- When cleaning off dust or dirt from projector parts such as the lens or filter, never use any spray that is flammable. Internal parts that become hot may ignite and cause a fire.
- · Do not use adhesives, lubricants, oils, or alkaline detergents for maintenance of the projector. They could adhere to the cabinet and damage it, possibly resulting in the projector falling from its mounting and causing an accident or personal injury.



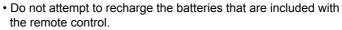


# **Warning**

## **Remote Control Batteries**

Pay attention to the following points regarding handling of batteries. Failing to do so could result in a fire or personal injury.

• Do not heat, short circuit or disassemble the batteries, or place them in a fire.



• Remove the batteries when they are flat or when the remote control will not be used for a long period of time.



Prohibition

- When replacing the batteries, replace both at the same time. Also, do not use two batteries of a different type at the same time.
- Insert the batteries with the + and terminals in the correct directions.
- If any liquid from inside the batteries leaks out and contacts your skin, be sure to wash the liquid off thoroughly.

# 🕂 Caution

# Handling

Pay attention to the following points regarding installation and handling of the projector.

 If the projector will not be used for a long period of time, be sure to remove the power plug from the power outlet to ensure safety. Failure to do so presents a risk of fire if dust accumulates on the plug or outlet.



- Do not plug headphones or earphones into the AUDIO OUT terminal. Doing so may cause hearing impairment.
- Do not set the volume too high initially. Doing so may cause hearing impairment from sudden sounds played at high volume. Lower the volume before turning off the projector, and after startup, raise it gradually.



 Do not touch parts of the cabinet around and above the exhaust vents, which may become hot during projection.
 Pay particular attention in preventing young children from touching these parts. Additionally, do not place any metal objects around or above the exhaust vents. Such objects may become hot from the projector, which may result in burns or other injury.

# **A**Caution

Pay attention to the following points regarding installation and handling of the projector.

- Do not place any objects infront of the projection window during projection. Doing so could cause a fire. Press the BLANK button on the remote control to temporarily black out the image.
- Prohibition
- Do not place any heavy objects on top of the projector or sit/ stand on it. Pay particular attention to prevent small children from doing so. The projector may be knocked over and this could result in damage or a personal injury.
- Do not place the projector on an unstable or slanted surface. Doing so may cause the projector to fall or be knocked over and could result in a personal injury.

# Caution

## **Carrying and Installation**

Pay attention to the following points when carrying or transporting the projector.

- This projector is a precision instrument. Do not knock it over or subject it to impacts. Doing so may cause a malfunction.
- Retract the adjustable feet before moving the projector. Leaving the feet extended may cause damage.



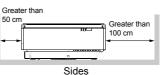
- Do not touch the lens with bare hands. Any smudges or fingerprints on the lens may affect image quality.
- Protection of the projector cannot be guaranteed if used packaging or shockabsorbent materials are reused. Fragments from shockabsorbent material may also enter the interior of the projector which could cause a malfunction.

# Caution

Pay attention to the following points when installing or using the projector.

- Be careful of condensation. If the projector is abruptly taken to a warmer location, or if the room temperature rises abruptly, moisture in the air may condense on the lens or mirror and affect projected images. In this case, wait a while and make sure the moisture has evaporated before resuming use.
- Do not install the projector in a location where the temperature is high or low. Doing so may cause a malfunction. Ranges for the environment of use and storage are as follows.
  - Environment of use: 0°C (32°F) to 40°C (104°F), 20% to 85% RH
  - Storage temperature: -20°C (-4°F) to 60°C (140°F)
- When using the projector at altitudes above 1,400 m (4,593.2'): Adjust projector installation settings from the menu. Failure to adjust the settings may damage the optical parts.
- Do not block the air intake or exhaust vents. Blocking the vents may trap heat inside the projector, which may shorten the useful life of optical components or other parts and damage the projector.
- 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 place any objects on top of the projector that may change shape or color due to heat.
- Do not install the projector near high-voltage electrical power lines or an electrical power source. This may cause malfunction.
- Clean the air filter regularly. Dust that accumulates inside over long periods without cleaning may eventually damage the projector or affect picture quality.
- Afterimages may occur when the image changes after the same image has been projected for some time. This is due to the nature of the LCD panels and does not indicate a problem. The afterimage will dissipate after a while during normal projection.



DO NOT tilt your projector more than 10 degrees.



DO NOT put the projector on a horizontal projection.

# Precautions When Carrying / Shipping the Projector

#### Prepare the projector as described below before carrying it.



- Disconnect the cables connected to the projector. Carrying the projector with the cables attached may cause an accident.
- Retract the adjustable feet before moving the projector. Leaving the feet extended may cause damage.
- Do not subject the projector to strong impacts or vibrations.

# **Precautions for Installation**

Be sure to read "Safety Instructions" and "For Safe Use" (P5 – P16). Also take the following precautions during installation.



- Do not strike the projector or subject it to impact. Doing so may cause a malfunction.
- Do not install the projector standing on one side or in other unsteady positions. The projector may be damaged if it tips over.

# Do Not Use in the Following Environments

Locations with excessive humidity, dust, oily smoke or tobacco smoke

Adhesion to the lens, mirrors or other optical parts may reduce image quality.

In addition, oil can degrade the plastic, which could result in a ceiling-mounted projector falling from its mounting.

• Near high-voltage power lines or sources of electrical power This may cause malfunction.



- On soft surfaces such as carpets or cushioned mats This may cause a fire or damage the projector.
- Locations with excessive temperature or humidity
- Locations subject to vibration or impact
- Near heat or smoke detectors
- Near the ocean, or near air conditioner vents
- Locations where corrosive gases occur, such as sulfur gas from hot springs

This may damage the projector. Acceptable ranges for operating and

storage temperature and humidity are as follows.

\* Operating temperature and humidity applies to when the projector is projecting or in standby mode.

Operating temperature	Operating humidity	Storage temperature
0°C (32°F) – 40°C (104°F)	20% – 85%	-20°C (-4°F) – 60°C (140°F)

# ■ Do Not Touch the Lens with Bare Hands



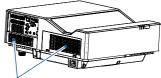
Do not touch the lens with bare hands. Any smudges or fingerprints on the lens may affect image quality.

# Install at a Sufficient Distance from Walls and Other Obstructions



If the air intake or exhaust vent is blocked, heat will accumulate inside the projector, possibly resulting in a shortened projector lifetime or a malfunction.Similarly, do not install in narrow, enclosed spaces with poor ventilation. Install the projector leaving at least 50cm (1.6') / 100cm(3.3') between

air Intake/exhaust vents and walls.



Air intake



Air outlet (For heat exhaust)

# ■ Be Careful of Condensation

If the temperature of the room rises suddenly, moisture in the air may condense on the projector lens and mirror, causing the image to become blurred. Wait until the condensation has evaporated for the image projected to return to normal.

# ■ At Altitudes above 1,400 m (4,593.2'), Adjust the Settings

Projector settings must be adjusted when using the projector at altitudes of 1,400 m (4,593.2') or higher. Specifically, refer to instructions for [High altitude] (P54) in the [Setting] menu.

## ■ When Using Mounted on the Ceiling



When the projector is used mounted on the ceiling or installed in a high location, it is necessary to periodically clean the air intake and exhaust vents, and the area around the air filter. Dust that accumulates in intake or exhaust vents may impair ventilation, raising the temperature inside and posing a risk of damage or fire. Use a vacuum cleaner or similar means to remove dust from the intake vent and exhaust vent.

#### **Copyright Notice**

Please note that enlarging or reducing the size of an image for commercial purposes or public presentation may infringe on the legally protected copyright or the copyright holder of the original material.

#### **Ensure Network Security**

Take measures to ensure network security. Note that Canon is not liable in any way for direct or indirect loss from network security incidents, such as unauthorized access.

Before use, configure projector, computer, and network security settings appropriately.

• Set up the projector for connections only within your protected network, behind a firewall or the like, instead of direct Internet connections.

#### About Trademarks

- Ethernet is a registered trademark of Xerox Corporation.
- Microsoft and Windows are registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
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- All other trademarks are the property of their respective owners.

### **Open Source Software**

The product contains Open Source Software modules.

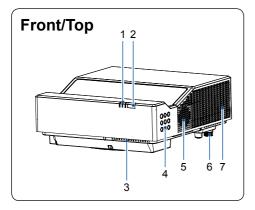
For details, check the files obtained from "Software Used in This Product" on the download site (https://global.canon/iprj/). Please refer to the license information for each module, which is contained in the corresponding file.

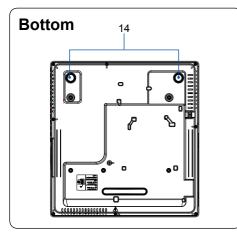
Some third-party software permits the distribution of software modules in executable form only under the condition that the source code of such modules be made available freely. For information on how to acquire the source code for such third-party software, contact the distributor from whom the product was purchased.

Before use, make sure the following items are included in the package.

Power code 1.8m(70.8")	Remote control (type number:LV-RC12) Batteries(AAA*2)		
Note: the AC power cord specification depands on the location of your projector.			
Important Information	Computer Cable 1.5m(59.1")		
Warranty card			

## Name and function of your projector





- 1 LED light indicator
- 2 Remote Receiver (Front)
- 3 Exhaust vent
- 4 Side Control
- 5 Speaker
- 6 Adjustment foot
- 7 Exhaust vent

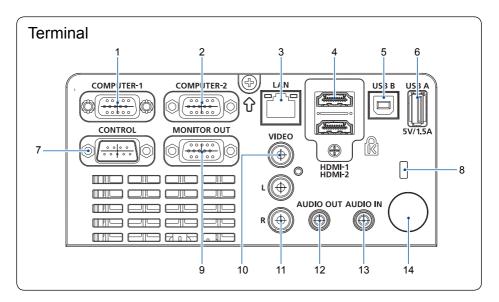
- 8 Terminals and connectors
- 9 Air intake vent
- 10 Remote Receiver (Side)
- 11 Filter cover
- 12 Power cord connector
- 13 Focus lever(A/B)

#### 14 Adjustment feet

# Note:

Do not place your hands or other objects near the Exhaust 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" (100cm) away, or it may cause it burning or damage.



#### 1 COMPUTER-1 terminal

Connect the output signal from the computer to this terminal.

#### 2 COMPUTER-2 terminal

Connect the output signal from RGB to this terminal.

#### 3 LAN terminal

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

#### 4 HDMI-1/HDMI-2 terminal

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

#### 5 USB B terminal

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

#### 6 USB A terminal

When using the Memory Viewer function, insert the USB memory directly to this terminal. USB power supply 5V/1.5A.

#### 7 CONTROL terminal

Select the control function to operate the

projector, connect the serial communication to this terminal.

#### 8 Anti-theft slot

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

#### 9 MONITOR OUT terminal

For monitor output , output the signal from **1** and **2** to other monitors.

#### 10 VIDEO terminal

Connect the Video output signal to this interface.

#### 11 MONO(L/R) terminal

A MoNo audio signal (A single AUDIO terminal) should be connected to the MONO (R / L) interface.

#### **12 AUDIO OUT terminal**

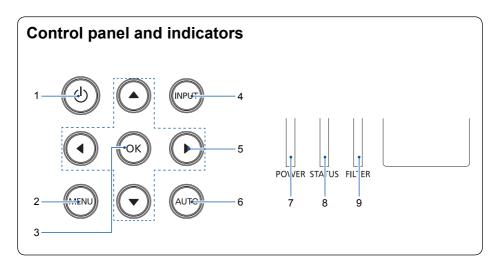
Connect external audio devices to this terminal.

#### **13 AUDIO IN terminal**

Connect audio signal of the PC to this terminal.

#### 14 Remote Receiver (side)

Use the remote control to operate the projector.



#### 1 POWER

Turn the projector on or off.

#### <u>2 MENU</u>

Open or close the OSD menu.

#### <u>3 OK</u>

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

#### 4 INPUT

Open or close the INPUT menu.

#### 5 Arrow▲▼◀►/UP/DOWN/VOL-/VOL+

- Select items or adjust the data in the OSD menu.
- Adjust the volume.

#### <u>6 AUTO</u>

Perform AUTO Setup, including "Source Search" and "Auto PC Adjust."

#### 7 POWER indicator

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

#### 8 STATUS indicator

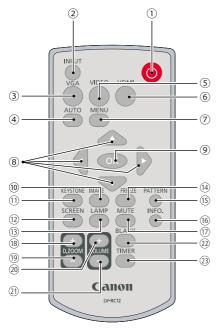
It flashes red when internal temperature of your projector is out of operation range.

#### 9 FILTER indicator

It turns red when the filter needs be replaced.

## Name and function of your projector

## Remote controller



#### 

Power on or off your projector .

② INPUT Open or close the INPUT menu .

③ VGA Select Computer input source .

④ AUTO Enter auto adjustment mode .

Select VIDEO input source .

6 HDMI Select HDMI 1/HDMI 2 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 .

 KEYSTONE Keystone calibration .

#### 12 SCREEN

Enter the screen size adjustment menu.

#### 13 LAMP

Not used with this product.

#### FREEZE Freeze projected images.

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

INFO. Display current status info. of your projector.

#### ⑦ MUTE Turn off the sound Temporarily.

B.ZOOM + Zoom in projected image .

D.ZOOM -Zoom out projected image .

20 VOLUME + Increase volume.

 VOLUME -Decrease volume .

② BLANK Dark out screen images temporarily.

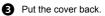
3 TIMER Enable the timer function .

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

## Install battery of remote controller

1 Open the battery cover.

2 Insert a new battery in it.







#### Two AAA batteries

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



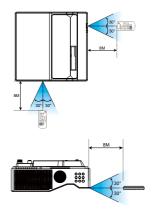
#### Please follow the following rules for safety operation:

- · If buttons on the remote control are inoperative when you attempt to operate the projector, replace the batteries with new ones.
  - · Do not drop the remote control or subject it to impact.
  - · Do not spill any liquids on the remote control. Doing so may cause a malfunction.

## Remote controller operation range

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

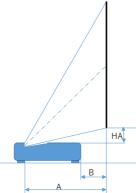
Maximum operation range of your remote controller is about arc 30° and with about an area of 8 meters in straight line.



## Relationship Between Projecting Distance and Image Size

The projected image size is determined by the distance between the projector and screen (projection distance). Refer to the following table and decide the distance between the projector and screen.

Values shown in the figure below are approximates only. They may differ from the actual ones.



Unit: (m)

Saraan Aanaat	Screen size		Projection distance		Offset	
Screen Aspect	(inch)	Width	Height	A	В	HA
	80	1.72	1.08	0.41	0.00	0.14
	85	1.831	1.14	0.43	0.03	0.15
	90	1.94	1.21	0.46	0.05	0.16
16:10	95	2.05	1.28	0.48	0.07	0.17
	100	2.15	1.35	0.50	0.09	0.18
	110	2.37	1.48	0.55	0.14	0.21
	120	2.59	1.62	0.59	0.18	0.23
	80	1.77	1.00	0.42	0.02	0.20
	85	1.88	1.06	0.45	0.04	0.21
	90	1.99	1.12	0.47	0.06	0.23
16:9	95	2.10	1.18	0.49	0.09	0.24
	100	2.21	1.25	0.52	0.11	0.26
	110	2.44	1.37	0.56	0.15	0.29
	120	2.66	1.50	0.61	0.20	0.32
	80	1.63	1.22	0.47	0.06	0.16
	85	1.73	1.30	0.49	0.08	0.17
	90	1.83	1.37	0.52	0.11	0.19
4:3	95	1.93	1.45	0.54	0.13	0.20
	100	2.03	1.52	0.57	0.16	0.21
	110	2.24	1.68	0.612	0.21	0.24
	120	2.44	1.83	0.67	0.26	0.27

## Adjust the projected image

- 1. Place the projector perpendicular to the screen.
- 2. You may use the adjustment foot to change the image height and projection angle. The adjustable angle is up to 4.0 degree, just show as below Image (1).

Rotate the adjustent foot and tilt the projector to the required height , just show as below Image (2)

Turn the foot to tilt your projector to required angle. To raise your projector, turn both feet counterclockwise.

To lower down your projector or close the foot, turn both feet clockwise.

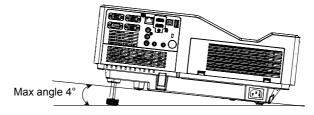


Image (1)

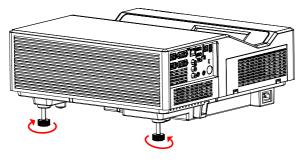
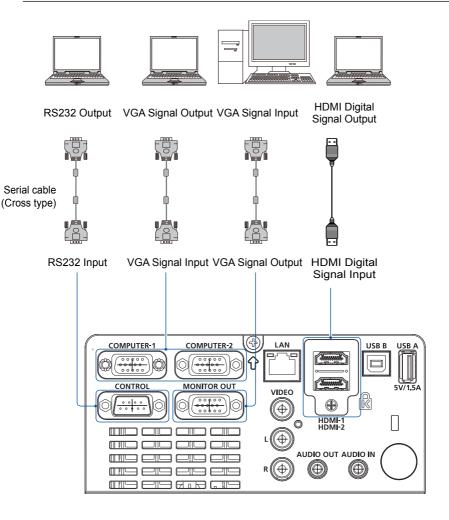


Image (2)

## Connect to PC (Digital and Analog RGB)

Cables for connection:

- VGA cable
- HDMI cable\*
- (\* This cable is not included. )
- Serial cable (Cross type)\*
- HDMI cable\*

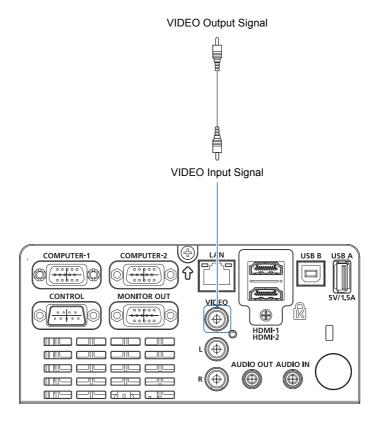


## **Connect to Video equipment**

Cables for connection:

- VIDEO cable\*
- (\* This cable is not included.)



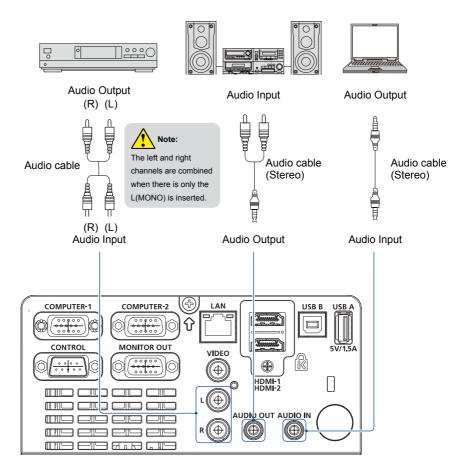


## **Connect to Audio equipment**

Cables for connection:

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

#### External audio equipment



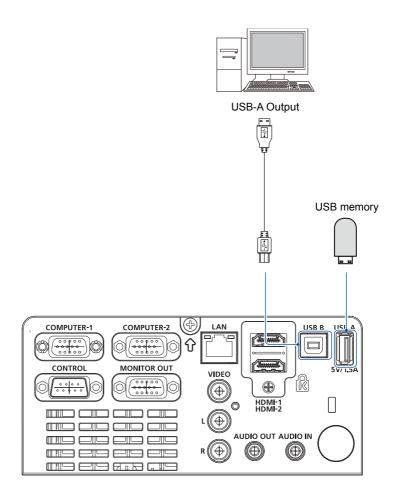
## **Connect to USB**

Cables for connection:

USB cable\*

1

(\* This cable is not included.)



## 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.

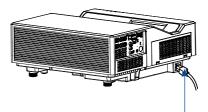
Do not use any other type of power cords or you may face the risks of electric shock. In case you have any doubt on type of power cord you are using, please call authorized dealer or service center for help. Before powering on your projector, get all external equipment connected in advance.



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
	Grounding end
Connect to power cord connector of your projector	Connect to AL 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.

## Power on your projector

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



- 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 Passcode

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.



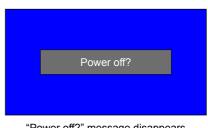
You Passcode code is a 3-digit number. To find out more about protecting your projector with a Passcode, please refer to the Passcode Lock function in the Setup menu on Page 63 for details.

#### Precautions on Passcode operation

You cannot operate a Passcode protected projector without correct Passcode. Please set up a new Passcode and keep your operation manual in safe place. In case the Passcode is lost or forgotten, please refer to the To Cancel the Passcode on Page 63.

## Power off your projector

- 1. Press the Power button at the top control panel or the remote controller, the "Power off?" message displays.
- Press the Power button again within 4 seconds after the "Power off?" message prompted to you. The POWER indicator flashes red while the cooling fan continues running. Do not unplug the power cord until the fan stops running. Failure to do so may shorten life cycle of your projector or lead to power on failures or operation abnormalities.
- The POWER indicator stops flashing once the projector has been cooled down to ready for power on again.



"Power off?" message disappears in 4 seconds.

#### ✓ Note:

- If the "Direct Power On" function is set to "On", your projector will power on once it is connected to an AC power socket. (Refer to page 53)
- Speed of the cooling fan varies with internal temperature of your projector.
- Do not place your projector in any box before it is fully cooled down.
- In case the POWER indicator flashes or turns red, refer to the "Status light indicator " for instructions.
- The POWER indicator flashes when the light source is cooling down. Do not power on your
  projector at this time. Power on your projector only after the POWER indicator turns red.
- Unplug the power cord after the fan stops running..

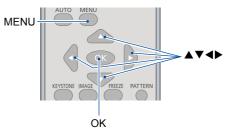
# How to operate the OSD

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

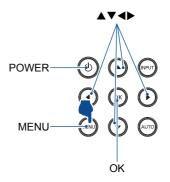
The menu has a multilayer structure. Each main menu is divided into several sub-level menus, then each submenus is divided into several submenus.

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





### Top control panel

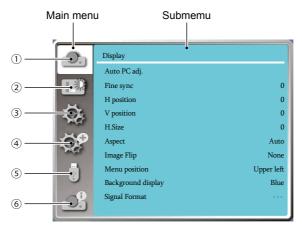


- Press the MENU button on the top control panel or remote controller and the OSD displays.
- Press ▲♥ button to act on or select one main menu item. Press ► button or OK button to enter a submenu.
- Press ▲▼ button to select required submenu, then press OK button or ▶ button to set up or enter an option.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

### OSD Menu



## Menu item overview



- ① Display menu
  - Select Auto PC adj., Fine sync, H Position, V Position, H. size to adjust the parameters to match the VGA format.
  - Aspect : Auto,Full, 16:9.
  - Image Flip: Choose None / Rear / Ceiling mounted / Rear, Ceiling / Auto Ceiling / Auto Ceiling, Rear.
  - Menu position: Set screen menu display position on the screen.
  - Background display: Sets the background color of the projection screen.
  - Signal Format: Select the compatible system signal format with input source .

### Color adjust menu

Available options in the Image mode menu are Presentation, Standard, Blackboard (Green), ECO Mode and User Image.

- For video signal input ,the available color adjust options : Contrast, Brightness, Color level, Color balance, White balance(Red, Green, Blue) and Sharpness.
- For other 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: Direct Power On, Standby mode, High altitude, Cooling fast, Closed caption, Key lock, Dynamic contrast, Sound and HDMI Setup.

④ Advanced menu

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

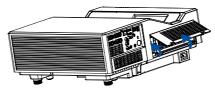
5 Memory Viewer menu

Select Parameter Of Start slide, Slide transition effect, Sort order, Rotate, Best fit, Repeat, Apply.

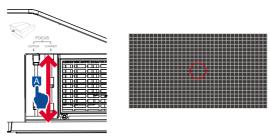
Information menu
 Display information about the projector.

# Focus adjustment

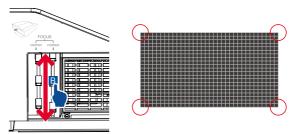
- 1) Select Text Pattern function
  - Press the PATTERN button on the remote controller to choose "**Test Pattern**" item, then enter into "**Cross hatch**" option.
  - The test pattern order is as follows. Grayscale 1  $\rightarrow$  Grayscale 2  $\rightarrow$  Grayscale 3  $\rightarrow$  Grayscale 4  $\rightarrow$  Color bar  $\rightarrow$  Red  $\rightarrow$  Green  $\rightarrow$ Blue  $\rightarrow$  Cross hatch  $\rightarrow$  White  $\rightarrow$  Black  $\rightarrow$  Raster gray.
- 2) Open the filter cover, just as below image show:



3) Slide the FOUCS lever A up or down to adjust the screen's focal length of the center, just as below image show:



4) Slide the FOUCS lever B up or down to adjust the screen's focal length of the corner, just as below image show:



- ✓ Note:
  - When focusing near the center, the focus at the four corners may shift slightly, and when focusing at the four corners, the focus near the center may shift slightly. In this case, finely adjust levers A and B alternately to bring the entire focus.

## **Basic operation**

## Auto setting function

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

## 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 adjustment, Curved correction, Reset value), press ▲▼◀▶ button to adjust keystone distortion.

You may save your settings for keystone adjustment.

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

Corner adjustment......Adjust the projected image when the projector is keystone distortion of four corners .

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

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

\*Only for LV-WX370/LV-X350

# H/V Keystone

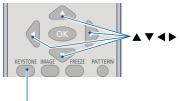


- The arrow mark looks white when there is no keystone adjustment in existence.
- The arrow mark indicating the adjustment direction turns red.
- The arrow mark disappears when the maximum adjustment limit reaches.

Remote controller



#### Remote controller



KEYSTONE

H/V Keystone

Corner correction

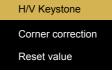
Curved correction

Reset value

#### LH-WX370UST

## **Basic operation**

- The keystone prompt box will disappear if you press the KEYSTONE button again when it is displaying.
- The adjustable range is subject to source of signal input.



LH-WU350UST

# Volume adjustment

#### Volume

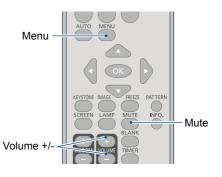
Press the remote control Volume +/- buttons to adjust the volume.

### MUTE

Press the mute button on the remote control to select "ON", you can temporarily turn off the sound. Press the mute button again to select "Off" or press the volume +/- keys to re-open the audio effects.

Mute function is also effective for audio output interfaces.

### Remote controller



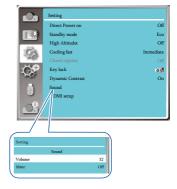
## Menu operation

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

Volume.....Press ▲ button to increase volume. Press ♥ button to decrease volume. Mute......Press ▲♥ button to switch to On or Off.

4. Press OK button to select.

Sound menu



# Remote controller operation

### 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)

Not used with this product.

### 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 to toggle switch your screen as shown below:

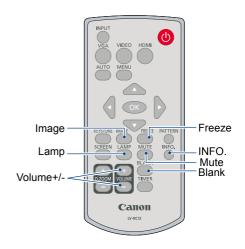
 $\mathsf{BLANK} \to \mathsf{Normal} \to \mathsf{BLANK} \to \mathsf{Normal} \to .....$ 



### ✓ Note:

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

#### Remote controller



Timer (TIMER)

Press the TIMER button on remote controller. A timer animation (00:00) displays on the bottom right conner 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.

02 : 02

Timer display

Digital Zoom + (D.ZOOM+)

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

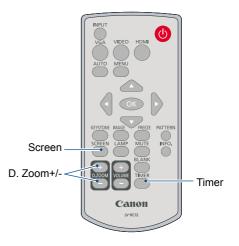
When OSD menu disappear, the screen display digital zoom + information.

\*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 ASPECT. Remote controller



## Input selection

### **Basic operation**

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

#### 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: Computer-1, Computer-2,HDMI-1, HDMI-2, Video, Network, Memory Viewer and USB Display, then press the OK button to select the input signal.

#### Computer -1

Select input Computer-1 if a PC is connected to the COMPUTER-1 IN terminal.

#### Computer -2

Select input Computer-2 if a PC is connected to the COMPUTER-2 IN terminal.

#### HDMI-1

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

### HDMI-2

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

#### Video

Select input Video if a PC is connected to the VIDEO terminal with the BNC cable.

#### ✓ 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.

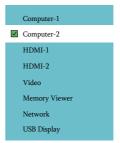
#### Remote controller



#### Top control Panel



### Input menu



## **Basic operation**

#### Network

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

#### Memory Viewer

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

#### USB Display

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

### ✓ Note:

- If the " input search" function in the Auto Setup option is set to "On", once you press the AUTO button, the projector will search for input signals automatically. The AUTO searching function maybe invalid for input of "USB Display", "Memory Viewer" and "Network".
- The following function will be invaild : Freeze, Aspect, Auto setup, Test pattern and Digital zoom, once "USB Display", "Memory Viewer", "Network" has been selected as signal input.
- For further details about Memory Viewer function, please turn to page 68-69,85-87.
- For further details about USB Display function, please turn to page 87-89.

# Auto PC adj.

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

### Menu operation

AUTO PC adj.

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

#### press <OK> or ▶button.

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

#### AUTO PC adj. menu

	Display	
	Auto PC adj.	
	Fine sync	0
	H position	0
C.	V position	0
and a	H.Size	0
CP	Aspect	Auto
and a	Image Flip	None
	Menu position	Upper left
	Background display	Blue
	Signal Format	

## Fine sync

(Only for PC signal input)

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

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

- 2) Press <OK> button.
- 3) Press ▲▼ button to adjust Fine sync .

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

## **H** Position

(Only for PC signal input)

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

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

2) Press <OK> button.

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

Adjustment range is from -5 to +5.

#### ✓ Note:

- The projector will perform Auto PC Adjustment function automatically,when its signal is input for the first time.
- Auto PC Adjustment function may fail to work if computer models is not compatible with the input signal.
- Auto PC adjustment function does not work when HDMI input.
- Auto PC Adjustment function may fail to work if you select the following system signal format: 720 x 480i, 720 x 576i, 720 x 480p, 720 x 576p, 1280 x 720p, 1920 x 1080i, 1920 x 1080p.

# Display

# V Position

(Only for PC signal input)

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

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

## 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  $\blacktriangle \nabla$  button to select the required item.
- Auto....Use the maximum size to project while keeping the aspect of input signal's unchanged.
- 16:9...Project images to aspect ratio 16:9.
- Full.....Project images to the maximum.
  - Only for Computer signal input.

### Aspect menu



## Image Flip

Select this function to set the projection 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 [Image Flip] menu.

2) press <OK> button.

3) Press ▲▼ button to switch.

None : 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 mounted : when use the bracket to lift the projector (optional) in front of the screen.

Rear Ceiling : when use the bracket to lift the projector (optional) in rear of the screen(using translucent screen). Auto Ceiling : when use the bracket to lift the projector in front of the screen, automatically set to the ceiling mounted mode.

Auto ceiling Rear : when use the bracket to lift the projector in rear of the screen, automatically set to the ceiling mounted mode

### Image Flip menu



## Menu position

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

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

- 1) Press ▲▼ button to select [Menu position] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to change menu position.
- Upper left .....The Menu display on the Upper left corner of the screen.
- Upper right....The Menu display on the Upper right corner of the screen.
- Center.....The OSD display in the Center of the screen.
- Lower left ..... The Menu display on the lower left corner of the screen.
- Lower right ... The Menu display on the lower right corner of the screen

#### Menu position menu



# **Background display**

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

or button.

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

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

#### Background display menu

	Display	
	Auto PC adj.	
	Fine sync	
Ck.		
CP.	Aspect	Auto
and a	Image Flip	None
	Menu position	Upper left
	Background display	Blue
$\bigcirc$		

#### ✓ Note:

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

# **Signal Format**

## **Signal Format selection**

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:

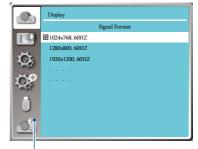
Auto

If your projector failed to identify signals not shown in the signals format table, the "Auto" message will display in the 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.

### Signal format menu



The selected system displays in the PC system menu.

### ✓ Note:

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

## Display

## Select the computer system manually

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

#### ✓ Note:

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

## Video

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

Set Video input signal color system.

- 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.

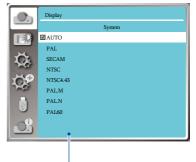
### Video input signal

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.

## Image mode

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

## **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 regiured item.

#### **Presentation**

An image mode suitable for viewing mainly texts in bright room.

#### Standard

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

#### ECO Mode

This mode reduces brightness and color.

#### <u>Movie</u>

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.

#### User Image

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

#### Remote controller



#### Image mode (For PC)

	Color adjust	
	Image mode	Standard
	Contrast	32
	Brightness	32
G	Color temp.	Mid
and the second	Red	32
CP.	Green	32
and a	Blue	32
	Sharpness	0

# Color adjust

## Contrast

Press  $\bigtriangledown$  button to decrease contrast, range from 0 - +63.

press  $\blacktriangle$  button to increase contrast,range from 0 - +63.

# Brightness

Press  $\bigtriangledown$  button to decrease brightness, range from 0 - +63.

press  $\blacktriangle$  button to increase brightness, range from 0 - +63.

# Color temp.(For PC/HDMI input)

It is only for PC/HDMI input.

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

Mid: Suitable natural color.

Low: Become red gradually.

# Color level(For Video input)

It is only for Video input. Press▼ button to decrease saturation, press ▲button to increase saturation.

# Color balance(For Video input)

It is only for Video input. Press ▲▼button to select required tint.

# Red

Press  $\forall$  button to decrease red tint and  $\blacktriangle$  button to increase it.

# Green

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

# Blue

Press  $\checkmark$  button to decrease blue tint and  $\blacktriangle$  button to increase.

# Sharpness

Press  $\checkmark$  button to soften image and  $\blacktriangle$  button to sharpen, range from 0 - +15.

### Color adjust(For PC/HDMI)

	Color adjust	
	Image mode	Standard
	Contrast	32
	Brightness	32
C.	Color temp.	Mid
- AL	Red	32
LCP	Green	32
and a	Blue	32
	Sharpness	8
0		

## Color adjust(For Video)

	Color adjust	
	Image mode	Standard
	Contrast	32
	Brightness	32
G	Color level	32
-	Color balance	32
DOP .	Red	32
1000	Green	32
	Blue	32
	Sharpness	8
<u>O</u>		

## Setting

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

#### Menu operation

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

press <OK> or ▶button.

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

## **Direct Power On**

You can turn on the projector by connecting the power cord only.

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

2) Press <OK> button.

3) Press ▲▼ button to select reqiured 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.
- Normal ..... Even in standby mode, there are no restraint on network function and serial communication function.
- Wake On Lan..This mode is to reduce power consumption and wait for Wake on Lan magic packet.

Network and RS-232C serial

communication will be unavailable except the POWER ON command during that mode.

Eco.....Only RS-232C serial communication will be available .

#### Setting menu



### Direct Power On



#### Standby mode

	Setting	
	Direct Power on	Off
	Standby mode	Eco
	High Altitudet	Off
O'S	Cooling fast	Immediate
100		Off
CP	Key lock	<b>0</b>
and a	Dynamic Contrast	On
	Sound	
	HDMI setup	
S		

# High altitude

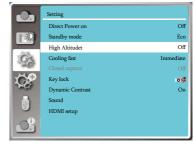
This projector provides Fan control function in the settings menu. You can change the setting about speed of cooling fan according to the altitude your projector is operating at.

- 1) Press ▲▼ button to select [High altitude] menu.
- 2) Press <OK> button.
- 3) Press ▲▼ button to select required menu.
- Off: Normal speed. Set the option "Off " when operating the operator, if the altitude is not too high.
- On: Faster than when in off mode .Set the option "On" when operating the operator in high land .

✓ Note:

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

### High altitude



# **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  $\blacktriangle \nabla$  button to switch required menu.

Normal......Running in normal way.

- 30 seconds.....Running faster than in normal mode with shorter time but a louder sound.
- Immediate......Select this function allow you to unplug the AC power directly after the shutdown, without waiting for the projector cooling off.

### Cooling fast



#### ✓ Note:

- When set the option to Immediate, user cannot restart the projector immediately once turning off.
- Sometimes, the light source may take longer time to start again than usual time during the high temperature.

# **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  $\blacktriangle \nabla$  button to switch required menu.

OFF.....No closed caption.

- CC1.....Display CC1 data.
- CC2.....Display CC2 data.
- CC3.....Display CC3 data.
- CC4.....Display CC4 data.

#### ✓ Note:

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

#### Closed caption

	Setting	
	Direct Power on	Off
	Standby mode	Eco
	High Altitudet	Off
O'S	Cooling fast	Immediate
10.57	Closed caption	Off
CP.	Key lock	्रम
	Dynamic Contrast	On
	Sound	
	HDMI setup	

## **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.
- 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 control panel, but without a remote controller or something wrong with the remote controller, please contact your dealer or service center.

#### Key lock



# **Dynamic Contrast**

Adjust the light output according to the image signal

This function is only available when the image mode is [Presentation]

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

### **Dynamic Contrast**

	Setting	
	Direct Power on	Off
	Standby mode	Eco
	High Altitudet	Off
O's	Cooling fast	Immediate
1457		
DOP	Key lock	ক্ষ
and a	Dynamic Contrast	On
	Sound	
	HDMI setup	

# Sound

Select this function to adjust the sound.

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

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

Mute...... Press ▲▼ button to switch on or off Mute function. On:No audio output.

Off:Audio output.

### Sound





# HDMI Setup

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

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

 $\blacktriangle$   $\forall$  button to select the Setting menu ,then press <OK>

- or  $\blacktriangleright$  button to enter the sub-menu.
- 1) Press ▲▼ button to select [HDMI Setup] menu.
- 2) Press <OK> button.
  - Display [HDMI Setup] instantly.
- 3) Press ▲▼ button to select [Image] or [Sound] .
- 4) Press <OK> button.

### ✓ Note:

• HDMI option can be chosen only in HDMI-1 and HDMI-2 channel.

## HDMI Input Range

Auto	Set the signal level automatically.
Limited	Input the limited signal level from 16 to 235.

### ✓ Note:

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

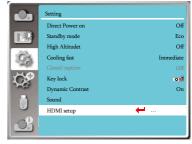
### Sound

	When connect to the HDMI cable to transmit images and audio while the users don't need connect to audio signal separately.
--	--

## EQ Setting

	Change the HDMI reception level according to the AV device connected to the
MODE1-4	HDMI input terminal. If noise appears in the image or the image does not appear,
	change the settings.

### HDMI Setup



## Advanced

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

#### Menu operation

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

#### press <OK> or ▶button.

- 1) Press ▲▼ button to select reqiured item.
- 2) Press <OK> button.
- 3) Press  $\blacktriangle \nabla$  button to set options.
- 4) Press <OK> button.

#### Advaned menu



## Language

Users can selected the language displayed on the screen .

- 1) Press ▲▼ button to select [Language] menu.
- 2) Press <OK> button.
- 3) Press  $\blacktriangle \nabla$  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, Russian, Arabic, Turkish, Finnish, Norwegian, Danish, Indonesian, Hungarian, Czech, Kazakh, Vietnamese, Thai, Farsi.

#### Language



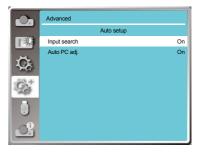
## Auto setup

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

- 1) Press ▲▼ button to select [Auto setup] menu.
- 2) Press <OK> button.
- 3) Press  $\blacktriangle \nabla$  button to select required items.
- Input search : Select this function to detect the signal, then project images automatically.
- Auto PC adj. : Select this function to adjust [Fine sync], [H Position], [V Position] and [H Size] automatically, when projector input analog signals.

#### Auto setup





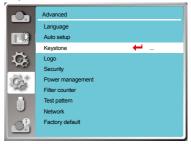
## Keystone

Press < MENU > button on the remote controller or on the top control panel to display the OSD menu.Press ▲♥button to select the Advaned menu ,then press

<OK> or ▶button to enter

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

#### Keystone



## Advanced

### **Keystone**

- Store.....Store Keystone after closing the projector or unpluging the AC power .
- Reset .....Keystone function will be cancelled after closing the projector or unpluging the AC power when reset is set.

### Keystone sub-menu

	Advanced	
	Keyston	ie
	Keystone	Store
	H/V Keystone	
C.	Corner correction	
Constant of	Curved correction	
Ge+	Reset value	
<u>S</u>		

### H/V Keystone

Select this function to correct the projected images horizontally or vertically

Press ▲button to reduce upper width



Press ▼button to reduce bottom width

Press <br/>
duction to reduce left width



Press ▶button to reduce right width

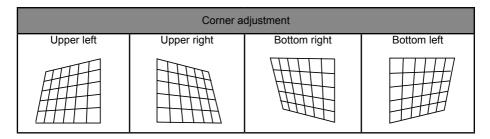


Corner adjustment

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

Press ▲▼◀▶ button to keystone at four corners of

the screen. The four corners are looped in sequence shown below:



✓ Note:

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

Curved correction (LH-WX370UST) Select this function to correct the projected images with linearity uneven or vertical and horizontal bending deformation.

Press  $\blacktriangle \forall \blacktriangleleft \triangleright$  button to adjust options.

Item	Operation	Adjustn	nent
Curved correction	Press 🕨	Adjust from the state of B to A	A B
	Press ◀	Adjust from the state of A to B	
X/Y gain	Press 🔺	Adjust from the state of B to A	A B
	Press ▼	Adjust from the state of A to B	
Curved correction X offset	Press 🕨	Adjust distortion on the right	
	Press <	Adjust distortion on the left	
Y offset	Press 🔺	Adjust distortion on the top	
	Press ▼	Adjust distortion on the bottom	

### ✓ Note:

- After adjusting values about H/V Keystone, if users adjust Corner adjustment and Curved correction, values about H/V Keystone will be reset. And after adjusting values about Corner adjustment and Curved correction, if users adjust about H/V Keystone, values about Corner adjustment will be reset.
- Curved correction X compensation and Curved correction Y compensation can not be adjusted individually. Adjust Curved correction X compensation and Curved correction Y compensation after adjusting the X/Y Curved correction.
- Press KEYSTONE button on the remote control, then the Keystone OSD menu appears (includes: H / V keystone, Corner adjustment, Curved correction and Reset value), and press ▲ ▼ button to to switch the four options.
- Maximum Keystone range up to ±5° vertically and ±5° horizontally.However, the image quality will deteriorate, and become more difficult to focus. Install the projector with the minimal correction value.
- The screen size will be changed with various H/V Keystone adjustments .
- Keystone may influence image aspect .

#### Reset value

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

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

- 2) Press <OK> button.
  - The value adjusted by the keystone is reset.

## Advanced

## Logo

Logo (including Logo and Logo Passcode lock setup) You may use this function to select Logo screen, Logo

Passcode 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:

Canon....Display factory default logo screen.

User......Display capture logo screen (LH-WX370UST) .

Off.....Display countdown logo screen.

#### Capture(LH-WX370UST)

#### Logo menu

	Advanced	
	Logo	
	Logo select	Canon
	Capture	
Ck.	Logo Passcode lock	Off
the second se	Logo Passcode change	
Q.+		
S		

#### ✓ Note:

• After changing the Logo Passcode to a new number, please remember it and keep it safe.

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

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

#### Logo Passcode lock

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

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

On.....You may not alter the logo screen without the Logo Passcode.

To change the Logo Passcode protection, press OK key, and the Logo Passcode change popup dialog box prompts. Follow stepsbelow to enter a logo screen password.

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

### Logo Passcode Change

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

### To Cancel the Logo Passcode

(1) While simultaneously pressing the [POWER] button and [OK] button on the main unit, plug the power cord into the main unit and wait until the LED changes from blinking to lighting.

(2) Press the [POWER] button.

(3) Select OSD menu Logo >> Logo passcode lock>> "on". As the input screen appears again, enter the default value (111) and set the pass code to "off" or set a new pass code.

# Security

Set a passcode to lock the usage of the projector to prevent unauthorized personnel from operating your projector. Once the projector is on, the [passcode] screen will be displayed.

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

### Security menu

	Advanced	
	Security	
	Passcode lock	Off
¢≱	Passcode change	
GY+		
١		

#### Passcode lock

This function helps preventing unauthorized personnel from using the projector.

- Off.....Passcode lock function is not available.
- On.....The [Passcode] screen will appear when the projector is on.If you want to change the PassCode Lock or Passcode (for three digits), you must enter the Passcode. The factory default password is "111."

#### Passcode Change

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

### To Cancel the Passcode

(1) While simultaneously pressing the [POWER] button and [OK] button on the main unit, plug the power cord into the main unit and wait until the LED changes from blinking to lighting.

(2) When the [POWER] button is pressed and lit, the pass code input screen appears. Enter "111".

(3) Select OSD menu security >> passcode >> "on". As the input screen appears again, enter the default value (111) and set the pass code to "off" or set a new pass code.

## Power management

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

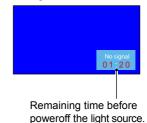
- Press ▲▼ button to select [Power management] menu.
- 2) Press <OK > button.
- 3) Press ▲▼ button to switch required item.
  - Ready......The POWER light indicator flashes green when the light source is fully cooled down. The light source turns on again if an input signal is connected or any key (except the <sup>(0)</sup> power button ) on the rear panel and remote controller is pressed during this period of time.
  - Shut down....The projector shut down after the light source is fully cooled down.
  - Disable......Disable the power management function.
  - Timer.....Once the input signal is interrupted and no keys has been pressed for 30 seconds afterwards, the "No signal" message displays in the timer. The timer counts down until the light source turns off. Press arrow key to set up the timer in range of 1~30 minutes.
  - Ready Countdown...• Set up the interval from ready mode change to standby (0 to 30 minutes). 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.

#### Power management menu

-On	Advanced	
	Power management	
■ 単純	Ready	
	Shut down	
C.	☑ Disable	
Constant of	Timer 5	Min
Q2+	Ready countdown 5	Min

#### Power management



#### ✓ Note:

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

## Advanced

## 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  $\blacktriangle \nabla$  button to switch required item.

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

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

Timer.....Set the time to display a warning icon. 1000H:The screen will popup a warning icon once it is used by 1000H. 2000H:The screen will popup a warning icon once it is used

by 2000H. Off: Warning display function is off. And no warning will pops up.

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

#### Filter counter menu

	Advanced	
	Filter counter	
	Filter counter	1H
	Timer	2000H
₽Ø¢	Filter counter reset	
Q.+		
٢		
0		

	Filter cou	nter reset?	
	Yes	No	
Nove :	<b>((K)</b> :	Select	E Back

# Advanced

# Test pattern

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

- 1) Press ▲▼ button to select [Test pattern] menu.
- 2) Press <OK > button.
- 3) Press  $\blacktriangle \nabla$  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.

### Test pattern menu



0	Advanced		
		Test pattern	2/2
	White		
	Black		
Q.	Raster gray		
Q2+			

# Network

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

#### Preparation

- 1 Required equipment: Projector, computer, network cable
- 2 Connection:

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

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

#### **Operation steps**

- 1 Power on your projector.
- 2 Acquire the IP address, with DHCP set to on and auto IP allocation set to On. (You may set DHCP to Off and set up IP address manually.)
- 3 Enter the network setup menu
  - Press MENU button on remote controller or top control panel, press ▲▼ button to select network icon.
  - (2) Press ▲▼ button select network settings and press OK button to enter. MAC address.....Display the MAC address of wired network.
     IP address......Display the IP address of wired network.
  - (3) Press ▲▼ button to set DHCP On to obtain an IP address, subnet , gateway and DNS automatically , and press OK button to confirm.

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

## 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.

# Return to factory default? Yes No More (K) : Select (1); Back

#### Network menu



LAN	Μ	Vetwork setting	
DHCP	On		
IP address			
Subnet			
Gateway		1. A.	
DNS		1. A.	
	Set	Cancel	
💽 : Move 🚺	Kext : Next	1000 : B	ack



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

Press < MENU > button on the remote controller to display the OSD menu.Press  $\blacktriangle \forall$  button to select the

Memory Viewer menu ,then press <OK> or ▶button.

- 1) Press ▲▼ button to select reqiured item.
- 2) Press <OK> button.
- 3) Press  $\blacktriangle \nabla$  button to set options.
- 4) Press <OK> button.

# Start slide

Select this function to play slides.

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

# Slide transition effect

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

1) Press ▲▼ button to select [Slide Transition

effect] menu.

- 2) Press <OK or ► > button.
- Press ▲▼ button to switch required item. Slide down.....Switch slides from the upper to the

lower .

Slide right..... Switch slides from left to the right.

# Sort order

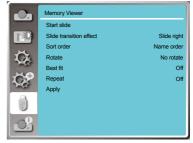
Select this function to set the slide's order.

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

Size order.....Sort by size of file or folder.

- Time order.....Sort by the time of file or folder.
- Name order..... Sort by names of file or folder.

### Memory Viewer menu



## **Memory Viewer**

## Rotate

Set the rotation direction of images.

- 1) Press ▲▼ button to select [Rotate] menu.
- 2) Press < OK > button.
- Press ▲▼ button to switch required item.
- No rotate ......Rotation is invalid.
- 270 Degree.....Rotate 270 degrees.
- 180 Degree.....Rotate 180 degrees.
- 90 Degree..... Rotate 90 degrees.

## Best fit

Set the image to be compatible with projection screen.

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

## Repeat

Select this function to play slides repeatedly.

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

# Apply

When selected [Apply] each setting is applied after changed [Slide transition effect], [Sort order], [Ro-tate], [Best fit], and [Repeat].

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

2) Press <OK or ► > button.

## Info.

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

#### Menu operation

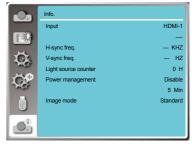
Press <Info. > button on the remote controller or < MENU > button on the control panel to display the OSD menu.Press ▲▼button to select the Info. menu, then press <OK> or ▶button.

#### 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 Hz. Show "---Hz" when no signals are in existence.
- Light source counter.....Display the light source usage time.
- Power management.....Display selected Power management mode.
- Image mode.....Display selected Image Mode.

#### Info. menu



## Network control operation

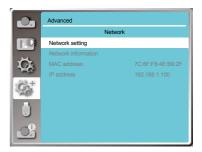
Function: This function is designed to remote control computer in the same LAN.

Preparation

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

Operation steps

- 1 Power on your projector.
- 2 Acquire the IP address, with DHCP set to on and auto IP allocation set to On. (You may set DHCP to Off and set up IP address manually if you are somehow familiar with networking.)
- 3 Enter the network setup menu
  - Press MENU button on remote controller or top control panel, press ▲▼ button to select network icon.
  - (2) Press ENTER button or ► button and the network menu displays.
  - (3) Press ▲▼ button select network settings and press ENTER to confirm.
  - (4) Press ▲▼ button to set DHCP On and press OK button to confirm.
  - (5) Press ▲▼ button to select Set, press OK button to wait until the "Please wait.." message disappears.



LAN		Ne	twork s	setting	
DHCP		On			
IP address					
Subnet					
Gateway					
DNS					
		Set		Cancel	
Nove : Move	<b>OK</b> :	Next		(VENU) :	Back



## Enter through a Web browser

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

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

Set the password yourself (alphanumeric characters).



4) Click the [Login]

NOTE:

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

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

Please change your password.

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

Net	work Display Sys	tem > System Status		
s	System Status	Model Name	LH-WU350UST	
G	General Setup	Versions		
F	Picture Setup	Firmware Version	1.00 .1004	
I	Image Setup	LAN Status		
N	letwork Setup	IP Address	192.168.0.26	
		Subnet	255.255.2	
		Gateway	192.168.0.1	
		Wire MAC Address	7c:6f:f8:4d:1c:b6	

<sup>①</sup> System Status: Click this option to display the [System status] page.

<sup>(2)</sup> General Setup: Click this option to display the [General Setup] page.

<sup>③</sup> Picture Setup: Click this option to display the [Picture Setup] page.

- ④ Image Setup: Click this option to display the [Image Setup] page.
- <sup>⑤</sup> Network Setup: Click this option to display [Network Setup] page.

# [System Status] page

ystem Status	Model Name	LH-WU350UST	
ieneral Setup	Versions		
Picture Setup	Firmware Version	1.00 .1004	
Image Setup	LAN Status		
letwork Setup	IP Address	192.168.0.26	
	Subnet	255.255.255.0	_
	Gateway	192.168.0.1	
	Wire MAC Address	7c:6f:f8:4d:1c:b6	

<sup>①</sup> Versions: Displays the firmware version of the projector.

 $\ensuremath{\textcircled{O}}$  LAN Status: Displays the LAN. connection status .

# [General Setup] page

	Change Password for Webpage	
General Setup	Enter Old password	
Picture Setup	Enter New password	
Image Setup	Confirm New password	Apply
letwork Setup	Power & Source	
	Power	●On Ooff

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

# [Picture Setup] page

Status Brightness (0 63)	-	32		-
Setup Contrast (0 63)		32	+	-
Setup Sharpness (0 15)		8	+	_
Setup Setup		0	+	-
Color balance (0 63)		0		-
Color Temperature				
Red (0 63)		32	+	
Green (0 63)		32	+	
Blue (0 63)		32		

- <sup>①</sup> Brightness: Adjust the brightness of the projected image.
- <sup>2</sup> Contrast: Adjust the contrast of the projected image.
- ③ Sharpness: Adjust the sharpness of the projected image.
- <sup>④</sup> Color level: Adjusts color Color level of the projected image.
- ${\ensuremath{\textcircled{}^{\scriptsize (S)}}}$  Color balance: Adjusts the Color balance of the projected image.
- © Color Temperature: Adjust the color temperature of the projected image.

# [Image Setup] page

Display System	a>Image Setup			
m Status	Aspect	Normal 🗸		
eneral Setup	Fine sync (0 31)		0	+
cture Setup	H Position		0	+
nage Setup	V Position		0	+
work Setup	HLSize (-15 15)		0	+
	Freeze	O <sub>On</sub> ● <sub>Off</sub>		
	A trans and a mag-			
	V Keystone (-60 60)		0	+
	H Keystone (-30 30)		0	+
	Curved correction XGain (-40 40)		0	+
	Curved correction YGain (-40 40)		0	-
	Curved correction XOffset_x (0 1279)		512	+
	Curved correction XOffset_y (0 799)		384	
	Curved correction YOffset_x (0 1279)		512	+
	Curved correction YOffaet_y (0 799)		384	+
	Corner correction TopLeft_x (0 1279)		0	+
	Corner correction TopLeft_y (0 799)		0	+
	Corner correction TopRight_x (0 1279)		1023	+
	Corner correction TopRight_y (0 799)		0	
	Corner correction BottomLeft_x (0 1279)		0	+
	Corner correction BottomLeft_y (0 799)		767	±
	Corner correction BottomRight_x (0 1279)		1023	
	Corner correction BottomRight y (0 799)		767	

Aspect: Switch the aspect ratio of the projected image.

 $\ensuremath{\textcircled{}^{2}}$  Fine sync: Adjust the phase of the projected image.

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

 $\circledast$  V position: Adjust the vertical position of the projected image.

 ${\small \textcircled{\sc {S}}}$  H Size: Adjust the horizontal dimension of the projected image.

<sup>®</sup> Freeze: Select the function to switch the screen freeze on and off.

⑦ Auto PC adj.: Implement the automatic computer adjustment function.

<sup>®</sup> V keystone: Correct trapezoidal distortion in vertical direction.

H keystone: Correc horizontal distortion in horizontal direction.

<sup>®</sup> Curved correction\*:Correct pincushion and barrel of the projected image.

<sup>(1)</sup> Corner correction: Correct four angles of the projected imagehe .

\*Only for LH-WX370UST

# [Network Setup] page

	• Obtain an IP address automatically Observed	the following IP address
	IP Address	192 168 0 26
LAN Setup	Subnet	255 255 255 0
-	Gateway	192 168 0 1
	DNS	192 168 0 1 Apply
	Password Enable Password Disable	
PJLink Setup	Input Password	
		Apply

#### ① Network Setup

If you want to enable the DHCP client, select the IP address automatically. IP address:

Please enter the IP address when you do not use the DHCP server.

Subnet :

Please enter a subnet shield, when you do not use the DHCP server .

Gateway:

Please enter the gateway ,when you do not use the DHCP server.

DNS:

Please enter the DNS address, when you do not use the DHCP server.

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

(For example: 192.168.0.253)

2 Apply

Update settings.

### Network Display

When the input signal source is chosen as the LAN, the network will be used to project computer image.

After entering the IP address of the projector in the web page to the main interface, click "Download", and download the corresponding PwPresenter software with your projector.

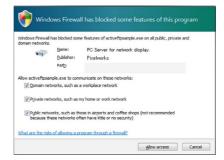
Network Display Sys	tem > Download
Download Login	Yau an dawala day Daarata Window ƙara kara
Login	You can download pwPresenter Windows from here: <u>Download</u> (Windows7/8.1/10)

Click \_\_\_\_\_ the icon to enter into pwPresenter software.

#### 🗟 Windows Firewall

The following alert may be displayed the first time you start the software, depending on your Windows Firewall settings.

To enable communication with projectors, select all check boxes and click the [Allow access].



To change the settings after closing the alert, open the [Start] menu and select [Control Panel] > [System and Security] > [Windows Firewall] > [Allow an app through Windows Firewall]. Select [pwpresenter.exe] in the list of allowed apps and features, and then select each check box.

llowed apps				
—	v 0	Search Corr	trol Panel	
Allow apps to communicate through Windows Firewall To add, change, or remove allowed apps and ports, click Change cettings.				
What are the risks of allowing an app to communicate?		Change set	tings	
Allowed apps and features:				
Name	Priv	ate Publi	c •	
C + New		6 X		
R officer fronter	5			
Property and the second s				
Characterization research Cartonian on State (#7995)		ō		
e pwpresenter	5	8 8		
Carrie DecenterApplication				
Weight Support	5	8 8		
Cover Subscripting	5	8 8		
Theorem Caternianteer	6	8 N	¥	
	Detailt	Fegg	ove.	
	Alle	on another a	app	



① Search for network display

With the search conditions empty, click "Search" to search, select the required projector and connect. Alternatively, enter the IP address of the projector (example: 192.168.1.100) and click "Connect".

#### √ NOTE

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



Pw Presen	ter 😑 🤉
800	🖳 🔅 🏖 🛸
Search result	>> 192.168.1.100  User type: Normal Password: Save password  Select display port Background OK Cancel
Select all	Connect directly

② Screenshot start or pause

Start or pause the selected pictures.

③ Chose capture mode

Select the screen shot mode from "full range", "fixed size" or "variable size", and set the projection size.

④ Parameters setting

Basic setting: Language, Capture region size etc.



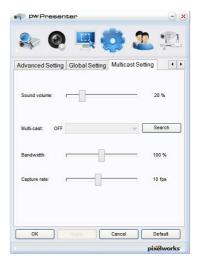
Global setting: Remote control setting, Sound capture and Screen capture, etc.

PW Presenter - x C Basic Setting Advanced Setting Global Setting Multice 4 + Allow remote control: • Yes O No Allow audio capture: • Yes O No • Yes O No Allow screen cantrue 20 % Sound volume: Mode: Video ~ ОК Cancel Default pixelworks

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

Basic Setting Advanced	Global Se	etting   Multica
lpeg image setting Quality:	High	~
YUV sample format:	YUV444	O YUV420
Allow resolution to be changed	t: 💿 Yes	O No
Allow resolution to be changed White list and Black list Devices allowed:		No No

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



(5) Network display Management Set pwPresenter network user name and password etc.

Device Management	Password Management	

🗣 🍳 🖣	1 🔅 🚨 🕸
Device Management Pas	ssword Management
Name:	PWPRESENTER
Readonly password:	•••••
Remote control password:	••••

(6) Stop all the connections

# Controlling the projector remotely through a web browser (e-Control $^{\ensuremath{\mathbb{R}}}$ )

Once you have the correct IP address for the projector and the projector is on or in standby state, you can use any computer that is on the same local area network to control the projector.

When using this function, Adobe Flash Player has to be installed in your computer. Please download the latest version of Adobe Flash Player from the website of Adobe Systems Incorporated.

#### Recommended operating systems: Win7, Win8.1, Win10, macOS 10.5 ~ 10.14..

 Enter the IP address of the projector in the address bar of your browser and press enter. (for example, http://192.168.0.146/crestron)



#### Recommended web browsers: IE11, Chrome 77.

The remote network operation page is displayed. This page allows you to operate the projector as if you were using the remote control or control panel on the projector.



- i. These buttons function the same as the ones on the OSD menus or remote control. See "2.PICTURE menu" on page 41 and "Remote control" on page 30 for details.
- ii. To switch input source, click on your desired source.

When you use the projector control panel or remote control to change the OSD menu settings, it may take a while for the web browser to synchronize these changes with the projector.

The Tools page allows you to manage the projector, configure the LAN control settings and secure access of remote network operation on this projector.

	CrestronControl		Projector		UserPass
	192 108 0 2		LH-WU350UST		PasswordEnabled
(pid		Location		Password	
Pat	41794	Name		ConfirmPassword	
_	Send		Sent		Ser
		lpAddress			AdminPass
		Subredilask			AdminPasswordEn
		DefaultGateway	192,166.2.1	AdminPassword	
				ConfirmAdminPass	
					Ser

i. When using the Crestron Control System, please refer to the user manual of Crestron Control system for setup information.

ii. You can name the projector, keep track of its location and the person in charge of it. This column allows a maximum of 15 single-byte characters.

iii. You can adjust the LAN Settings.

- iv. Once set, access to the remote network operation page on this projector has been passwordprotected. To enable this function, check the box in front of "Enable" and type in your desired password in the New Password column and confirm the new password by re-entering the new password at the Confirm column. To disable password protection, uncheck the box.
- v. Once set, access to the Tools page has been password-protected. Refer to step iv for how to use the password function.
- vi. Press Exit to go back to the remote network operation page.
- · After making the adjustments, press the Send button and the data will be saved in the projector.
- · Once the password is set, the Log Out button will display beside the Tools button.
- Write down your selected password in advance or right after the password is entered so that it is available to you should you ever forget it.
- If you did not write down your password, and you absolutely do not remember it you can reset the
  password by settings to [Factory default](P67)..
- The software is available in English language.
- · When DHCP is turned on, there is a possibility of stopping the webpage connection. If thishappens,

please check the new IP address of the projector and enter the new address to connect again.

4. The Info page displays the information and status of this projector.



- i. The information you entered in the Tools page will display here and these columns are empty when you use e-Control<sup>™</sup> for the first time.
- ii. When the projector is in abnormal conditions, the following information will display.

When the projector is in normal conditions or in any abnormal conditions other than the ones mentioned below, the Error Status column will be "0:No Error".

Error Status	Description
3: Light source fail	The light source fails to ignite or turns off during operation.
3: Over Temp	The projector temperature is too high or cannot be detected.
3: Fan Lock	The fan rotation speed cannot be set or detected.
3: Over Light source	Usage Time The light source is still in use after the light source warning messages display.

#### (3 = error)

iii. Press Exit to go back to the remote network operation page.

5. After pressing the button 'Help', the Title window will appear at the upper right corner. You will be able to deliver messages to RoomView<sup>™</sup> software which is connected to the same local area network.



For more information, visit http://www.crestron.com & www.crestron.com/getroomview.

#### Controlling the projector using PJLink™ application

This projector supports standard protocol PJLink<sup>™</sup> for projector control and you can control and monitor projector's operations using the same application among projectors of different models and different manufacturers.

#### About PJLink™

- To use PJLink<sup>™</sup> function, the PJLink<sup>™</sup> application software is required.
- For the specifications of PJLink<sup>™</sup>, access to the Web site of Japan Business Machine and Information System Industries Association (JBMIA). (http://pjlink.jbmia.or.jp/english)
- This projector is fully compliant to the specifications of JBMIA PJLink™ Class 1. It supports all the commands
- defined by PJLink™ Class 1, and the compliance has been verified with the PJLink™standard specifications Version 1.4.

#### Utilizing the password function

To prevent unauthorized connection to the projector via PJLink<sup>™</sup> application, the projector includes an option for setting up password security. To set the password:

- 1. Open the link to the website and enter Network Display System: select Network Setup menu.
- 2. In PJLink Setup options, select Password Enable.
- 3. Enter the password in the column after Input Password option.
- 4. Enter the password you need to change and select from the number 0-9.
- Enter the change password again in the column after the Confirm Password option and Press Apply to confirm.

If you forget the password, please use the password "projectorcontroller".

tem Status		• Obtain an IP address automatically Use the following IP	address
neral Setup		IP Address	192 168 0 26
icture Setup			255 255 255 0
mage Setup	LAW Setup		192 168 0 1
letwork Setup			
		DNS	192 ,168 ,0 ,1 Apply
		Password Enable Password Disable	
PJ	PJLink Setup	Input Password	
		Confirm Password	Apply

### **Network control**

#### PJLink<sup>™</sup> supported commands

The table below shows commands to control the projector using the PJLink™ protocol.

Commend	Description	Remark (Parameter)	
POWR	Power control	0 = Power off	
FOWR	Fower control	1 = Power on	
DOWIDO		0 = Standby	
POWR? Inqu	Inquiry about the power state	1 = Power on	
		11 = COMPUTER 1	
INPT	Input switching	12 = COMPUTER 2	
		21 = VIDEO	
		31 = HDMI-1	
		32 = HDMI-2	
INPT?	Inquiry about input switching	41 = USB Viewer	
		51 = USB Display	
		52 = LAN	
		10 = BLANK disable	
AVMT	Mute control	11 = BLANK enable	
		20 = Audio mute disable	
		21 = Audio mute enable	
AVMT?	Inquiry about the mute state	30 = BLANK and audio mute disable	
		31 = BLANK and audio mute enable	
		1st byte: Fan error, 0 or 2	
		2nd byte: Light source error, 0 or 2	
		3rd byte: Temperature error, 0 or 2	
ERST?	Inquiry about the error state	4th byte: Always 0	
LINGTI		5th byte: Always 0	
		6th byte: Other errors, 0 or 2	
		* 0 or 2 mean as follows:	
		0 = No error detected, 2 = Error	
	Inquiry about the light source state	1st value (1 to 4 digits): Cumulative lamp operating	
LAMP?		time (This item shows a light source operating time (hour)	
		calculated based on that light source Mode is Economic.)	
		2nd value: 0 = Light source off, 1 = Light source on	
INST?	Inquiry about the available	The following value is returned.	
		"11 12 21 31 32 41 51 52" The command responds with the projector name	
NAME?	Inquiry about the projector		
	Inquiry about the manufacturer	specified in the Tools page.	
INF1?		"Canon" is returned.	
INF2?	name Inquiry about the model name	"LH-WU350UST、LH-WX370UST "is returned.	
<u>_</u>			
INFO?	Inquiry about other information	"Version numver" is returned.	
	Inquiry about the class		
CLSS?	information	"1" is returned.	
	internation		

• The PJLink "INPT?" will be replied only when the source is displayed on screen. When there is no signal, only "ERR3 Time!" will be answered.

- The above-mentioned control may not be performed correctly or the monitoring data may not be obtained correctly in the following conditions:
  - During standby
  - During input source switching
  - During command processing
  - During AUTO PC execution
  - Before the splash screen disappears after the power is turned on.
- Use 1 computer to control/monitor 1 projector.
- For how to control/monitor using PJLink™, see the operation manual of the PJLink™application you use.
- When you monitor the projector's operating state using this function by issuing inquiry commands successively, issue an inquiry command after receiving the response to the previous inquiry command from the projector.

#### Using the Network Function when the projector is in standby mode

When the Standby LAN in the SYSTEM SETUP: Advanced > LAN Settings menu is activated, the projector is able to provide the network function when it is in standby mode.

#### Glossary

For more detail of the glossary below, refer to the technical book that is commercially available.

Term	Description
DHCP	Abbreviation for Dynamic Host Configuration Protocol. This protocol automatically assigns IP Address to networked devices.
IP Address	Numerical address to identify networked computers.
Subnet Mask	A numeric value to define the number of bits used for a network address of a divided network (or subnet) in an IP Address.

### Memory Viewer function

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

■ The projected content of Memory Viewer function Memory Viewer function supports the following picture files.

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

	Extension name	Format	Description
	ing/inog	Baseline encoder 24	Max resolution: 10000x10000
	jpg/jpeg	Progressive RGB24 bit	
Maps	bmp	1.4.8 bit palette-based RGB24,32 bit	Max resolution: 1280X800
	png	24, 48-bit True Color	
	gif	1,4,8-bit palette-based	]
	tiff		

Display memory viewer screen

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

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

2) Insert the USB memory into the <USB (browser) > terminal directly.

- Press RC enter to display standby screen instanly, while the USB memory icon display in the left corner of the screen.
- When the USB memory is independent of the partition, it will display more than one USB icon.
- 3) Press  $\blacktriangle \nabla$  button to switch required items.
  - The root directory of the USB memory is displayed in a thumbnail.

#### Play image

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

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

### **Useful function**

#### Play slide

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

1) Press **♦** button to select a file.

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

3) Press <OK > button.

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

#### Play video

Play video files.

1) Press ◀► button to select a file.

2) Press <OK> button.

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



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

#### The termination of Memory Viewer

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

- 1) Press **♦** button to select **1**, displayed in the left corner of the screen.
- 2) Press <OK > button.
- 3) Unplug the USB memory directly.



- Only USB memory up to FAT32 (32GB) can be read.
- When you insert a USB memory, please make sure insertion direction to avoid damaging the port.
- Please note the following points when inserting and removing USB memory:
  - a. The indicator flashes, when the USB memory insert into the projector or the projector is reading data.DO NOT remove the USB memory When the light is flashing.
  - b. If you use a USB memory device without indicator, the projector will not recognize when reading data. Please close its browse function on and turn off the projector , then remove the USB memory.
  - c. Do not insert and remove USB memory frequently. Then remove it after the installation of at least 5 seconds. After removing at least 5 seconds and then reinsert it.

#### Precautions on processing and storage of USB memory

- If smoke or produce abnormal smell, close the external device and contact the dealer.
- DO NOT put foreign matter or metal items in the USB port. Static electricity may cause data loss or data damage.

### USB display function

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

#### When using Windows:

Windows operating environment

Operating System	Win7,Win8.1,Win10	
CPU	Intel Core 2 Duo 2.0 GHZ or faster compatible processors	
Memory Capacity	256MB or above (512MB or above)	
Disk Space Available	20MB or above	
Monitor	Resolution 640x480 or above, 1600x1200 or above	

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

### **Useful function**

#### Project USB display

- 1) Using USB-B cable to connect the projector to the USB display terminals.
- 2) Press the information source menu on the remote controlor the INPUT button on the control panel, then select [USB display] in the input source menu.
- 3) Press the driver icon in the computer drive in the computer's task bar , the select one item in the pop-up menu bar.
  - Pop-up menu only display in English.

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

# ▲ NOTE

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

#### The termination of USB display

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

### When using macOS

macOS operating environment

Operating System	macOS 10.5 ~ 10.14	
CPU	Power PC G4 1GHz or faster compatible processors	
Memory Capacity	512MB or above	
Disk Space Available	ace Available 20MB or above	
Monitor	Monitor Resolution 640x480 or above, 1600x1200 or above	

When using macOS 10.13 / 10.14, only images are displayed without sound. CAN NOT guarantee that the PC meeting the above conditions can operate normally.

#### Project USB display

- 1) Using USB-B cable to connect the projector to the USB display terminals.
- 2) Press the information source menu on the remote controlor the INPUT button on the control panel, then select [USB Monitor] in the input source menu.
- 3) Double-click "Monitor.app" button installed on the virtual disk.
  - Project image on the computer screen.

4) Press the driver icon in the computer drive in the computer's task bar ≼ , the select one

item in the pop-up menu bar.

• Pop-up menu only display in Chinese.

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



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

The termination of USB display

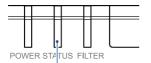
1) Remove the USB cable directly, when terminate USB display.

### **STATUS light indicator**

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

The projector turns off and the status indicator flashes orange.

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



The STATUS indicator flashing orange ✓ Note:

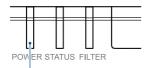
The POWER indicator stops flashing when your projector's internal temperature cooled down to normal and it is powered on again.

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 orange

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



The POWER indicator turns steady orange

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

Note:

Unplug the AC power cord before any cleaning operation.

# Clean casing of your projector

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

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

Do not use adhesives, lubricants, oils, or alkaline detergents for maintenance of the projector. They could adhere to the cabinet and damage it, possibly resulting in the projector falling from its mounting and causing an accident or personal injury.

# **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.

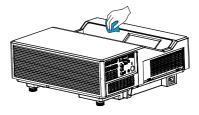
Please follow these steps to clean your filter:

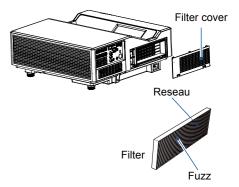
- 1 Power off your projector and unplug from AC power source.
- 2 Remove the filter cover and the filter.
- 3 Gently clean it with a brush.
- 4 Install the reseau side of the filter toward the projector.
- 5. Install the filter cover.



#### Note:

Do not operate your projector during 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.





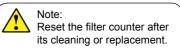
### Reset the filter counter

- 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:

Do not operate your projector during 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.

# Troubleshooting

Check the following before calling your dealer or service center:

Troubleshooting	Solution
Power on failure	<ul> <li>Plug the power cord of your projector in an AC socket.</li> <li>Make sure the POWER indicator turns red.</li> <li>Restart your projector until the POWER indicator turns red. It indicates your projector is ready for power on again.</li> <li>In case that projector can be powered on by remote controller, control panel on projector has been set to Key lock. Set [Key lock] to [Off] by remote controller.</li> <li>In case that projector can be powered on by control panel, remote controller has been set to Key lock. Set [Key lock] to [Off] by control panel on projector.</li> </ul>
Logo screen display failure	<ul> <li>Make sure the Off and Countdown Off is selected in the Display function.</li> </ul>
The Logo screen differs from the standard settings.	<ul> <li>Make sure you did not select User or Off in the Logo Screen.</li> </ul>
Input signal switch (or do not switch) automatically.	<ul> <li>Make sure you have correctly set up the Input Search function.</li> </ul>
Image looks fuzzy	<ul> <li>Adjust focus of your projector.</li> <li>Provide proper projection distance.</li> <li>The projection lens requires cleaning.</li> <li>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.</li> </ul>
Image mirror reflected Image turns upside down	<ul> <li>Check the Ceiling and Rear settings.</li> <li>Check the Ceiling settings.</li> </ul>
Image looks dim	<ul> <li>Check for contrast and brightness settings.</li> <li>Check for correct image mode settings</li> </ul>
No image displays	<ul> <li>Check for the connection between your projector and computer or image equipment.</li> <li>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.</li> <li>It takes about 10 seconds for your projector to show the first image.</li> <li>Check for mode of signal, color system, image system, or computer system.</li> <li>Make sure the ambient temperature is within given range [0°C-40°C].</li> <li>Image does not display in BLANK mode. Check the BLANK button or other buttons on the remote controller.</li> </ul>
Abnormal color	<ul> <li>Check for mode of signal, color system, image system, or computer system.</li> <li>Make sure Blackboard mode is not selected in Image Select.</li> </ul>

Auto PC Adjusting function failure	<ul> <li>Check input signal. Auto PC adjustment function does not work when HDMI input. Auto PC Adjustment function may fail to work if you select the following system signal format: 720 x 480i, 720 x 576i, 720 x 480p,720 x 576p, 1280 x 720p, 1920 x 1080i, 1920 x 1080p</li> </ul>
Keystone settings do not save after power off	<ul> <li>Make sure you have selected Store after Keystone settings adjustment. Keystone settings do not keep without selecting Store.</li> </ul>
Power management failure	<ul> <li>In case of Freeze or Blank operation, the power management function does not work.</li> </ul>
Auto Setting does not work	<ul> <li>Make sure it is not set to "Off" in each setup menu.</li> <li>Make sure "On" is not set in Ceiling function.</li> </ul>
Image distorted or disappeared	<ul> <li>Check and revise the PC Adj. menu or Screen menu.</li> </ul>
A password prompt displays after power on	<ul> <li>You have set up the Logo Passcode lock function</li> </ul>
Remote controller does not work	<ul> <li>Check the battery.</li> <li>Make sure there is no obstacles stand in between your projector and the remote controller.</li> <li>Make sure the remote controller is not too far away from your projector. The maximum operation range is 8m.</li> <li>Disable the key lock of the remote controller in the Setup menu.</li> </ul>
Light indicator turns on or flashes	<ul> <li>Check status of your projector according to the light indicator status.</li> </ul>
"X " mark displays	<ul> <li>Invalid operation, please operate your projector correctly.</li> </ul>
Control panel does not function	<ul> <li>Disable the key lock on control panel function in the Safety option of the Setup menu.</li> </ul>

- Make sure your projector is correctly connected to external equipment.

- Make sure all devices have plugged in an AC power source and have been powered on.

- If your projector fails to project image of the connected computer, restart the computer.



Note:

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

# Menu tree

Main menu	Sub-menu	Setting	Remarks
	Auto PC adj.		
	Fine sync	0-31	
	H Position	-5 - 5	
	V Position	-5 - 5	The range differs from signals.
	H Size	15 - 15	The range of H Size differs from signals.
		Auto*	
	Aspect	16:9	
		Full	
Display	Image Flip	None* Rear Ceiling mounted Rear Ceiling Auto Ceiling Auto Celling Rear	
	Menu position	None* Upper Left Upper Right Center Lower Left Lower Right	
	Background display	Blue*/Black	
	Signal Format	Auto*/PAL/SECAM/NTSC/NTSC4.43/ PAL-M//PAL-60/PAL-N/1080i/1035i/ 720p/480p/480i/576p/576i/	Video Input
	Image mode	Presentation Standard* Movie ECO Mode Blackboard (Green) User Image	
	Contrast	0-63 32*	
	Brightness	0-63 32*	
Color adjust	Color temp	High/Mid*/Low	PC/HDMI Input
	Color level	0-63 32*	Video Input
	Color balance	0-63 32*	Video Input
	Red	0-63 32*	
	Green	0-63 32*	
	Blue	0-63 32*	
	Sharpness	0-15	

\* Indicates an item that is factory-set.

# Appendix

Main menu	Sub-menu	Setting		Remarks
	Direct Power On	On/Off*		
	Standby Mode	Normal/Wake On Lan/	ECO*	
	High altitude	On/Off*		
	Cooling fast	Normal/Immediate*/30	Sec	
	Closed caption	Off*/CC1/CC2/CC3/CC	24	
	Key lock	ICON(Off*/Projector/Re	emote controller)	
Setting	Dynamic Contrast	On*/Off		
		Volume	0-25 12*	
	Sound	Mute	On/Off*	
		HDMI Input Range	Auto*/Full/Limited	
			Audio I/F	
	HDMI Setup	Sound	HDMI*	
		EQ Setting	Mode1*/2/3/4	
	Language	24 languages		Differs from destination.
	Auto Ostur	Input Search	On*/Off	1
	Auto Setup	Auto PC Adj.	On*/Off	
		Keystone	Store*/Reset	
		H/V Keystone		
	Keystone	Corner Correction		
		Curved correction		
		Reset value		
		Logo select	CANON*/ User/Off	
		Capture		
	Logo	Logo Passcode Lock	On/Off*	
		Logo Passcode Change		
	O a suritu	Passcode lock	On/Off*	
Advanced	Security	Passcode change		
		Ready*	n	
		Shut down		
	Power management	Disable		
		Timer	1-30 Min 5Min*	
		Ready Countdown	0-30 Min 5Min*	
		Filter counter		
Filter cou	Filter counter	Timer	Off/1000H*/2000H	
		Filter counter reset		
Test pattern		Off* Gray scale(1-4) Color bar Red Green Blue Cross hatch White Black Raster gray		

\* Indicates an item that is factory-set.

# Appendix

Main menu	Sub-menu	Setting		Remarks
Advanced	Network	Network setting	DHCP Off* IP address 192.168.1.100* Subnet 255.255.255.0* Gateway 192.168.1.1* DNS 192.168.1.1* Set Cancel	
		Network information		
		MAC address		
		IP address		
	Factory default			
	Start slide			
	Slide transition effect	Slide right* Slide down		
	Sort order	Name order* Time order Size order Extend order		
Memory Viewer	Rotate	No rotate* 270° rotate 180° rotate 90°rotate"		
	Best fit	On/Off*		
	Repeat	On/Off*		
	Apply			
	Input			
	H- sync. Freq.			
Info.	V- sync. Freq.			
	Light source counter			
	Power management			
	Image mode			

\* Indicates an item that is factory-set.

Input

- ---- Computer-1
- ----- Computer-2
- HDMI-1
- \_\_\_\_\_ HDMI-2
- \_\_\_\_\_ Video
- \_\_\_\_\_ Network
- Memory Viewer
  - ------ USB Display

## LED indicator status

Check light indicator to learn status of your projector.

Light indicator		or		
POWER Green /Red	STATUS	FILTER	Status of your projector	
0	0	0	Your projector is in Off status (without AC power supply).	
	0	0	Your projector is in standby status. Press Standby button to turn it on.	
	0	0	Your projector is in normal status.	
Ŭ	0	0	It is ready for standby or the light source is cooling. You may power on your projector only after the light source is fully cooled and the POWER light indicator stops flashing.	
	0	0	Your projector is in Ready mode.	
•	•	0	Your projector detects abnormal situation and cannot power on. Unplug the AC power cord and connect it again before powering on your projector. If it powers off again, please unplug the cord and call your dealer or service center for maintenance or inspec- tion. Do not let it continue operating as this may lead to electric shock or fire.	
		0	Your projector detects light source abnormality and cools down.	
		0	Your projector detects light source abnormality and switches into standby mode.	
		0	Your projector cannot power on, as its internal temperature is to high. You may power it on after it is fully cooled, temperature backs to normal, and the POWER light indicator turns red.	
		0	You may power is fully cooled with temperature backs to norma	
0	0		The filter requires cleaning	
• Gre	en	•	Red O Orange O Turns off	



... Flashing green





## Supported Signal Types

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

	Input Sorce								
序号	OSD Display	RGB	Component	HDMI	Video	Signal type/ resolution	Horizontal frequency [kHz]	Vertical frequency [Hz]	Dot clock (MHz)
	NTSC	-	-	-	0	NTSC	15.734	59.940	-
1	NTSC-443	-	-	-	0	NTSC 4.43			
	PAL-60	-	-	-	0	PAL60			
	PAL-M	-	-	-	0	PAL-M			
	PAL	-	-	-	0	PAL	15.625	50.000	-
2	PAL-N	-	-	-	0	PAL-N			
	SECAM	-	-	-	0	SECAM			
3	720x480i 60Hz	0	0	-	-	720x480i	15.734	59.940	13.500
4	720x480i 60Hz	-	-	0	-	720 (1440) x480i	15.734	59.940	27.000
5	720x576i 50Hz	0	0	-	-	720x576i	15.625	50.000	13.500
6	720x576i 50Hz	-	-	0	-	720 (1440) x576i	15.625	50.000	27.000
7	720x483 60Hz	0	0	0	-	720x483(480P)	31.469	59.940	27.000
8	720x576 50Hz	0	0	0	-	720x576(576P)	31.250	50.000	27.000
9	1000 700 0011	0	0	0			45.000	60.000	74.250
9	1280x720p 60Hz	0	0	0	_	1280x720p	44.955	59.940	74.176
10	1280x720p 50Hz	0	0	0	-		37.500	50.000	74.250
4.4	1000 1000 001	0		0			33.750	60.000	74.250
11	1920x1080i 60Hz	0	0	0	-	1920x1080i	33.716	59.940	74.176
12	1920x1080i 50Hz	0	0	0	-	1	28.125	50.000	74.250
							27.000	24.000	74.250
13	1920x1080p 24Hz	-	-	0	-		26.970	23.980	74.176
		-	-	~		1920x1080p	67.500	60.000	148.500
14	1920x1080p 60Hz	0	0	0	-		67.433	59.940	148.352
15	1920x1080p 50Hz	0	0	0	-		56.250	50.000	148.500
16	640x480,60Hz	Ő	_	Ö	-		31.469	59,940	25.175
17	640x480,67Hz	Õ	-	Ő	-		35.000	66.667	30.240
18	640x480.72Hz	Ő	-	Ő	-	640x480	37.861	72.809	31.500
19	640x480,75Hz	ŏ	-	Ö	-		37.500	75.000	31.500
20	640x480,85Hz	Ő	-	Ö	-		43.269	85.008	36.000
21	800x600,56Hz	ŏ	-	Ö	-		35.156	56.250	36.000
22	800x600,60Hz	Ő	-	Ő	-		37.879	60.317	40.000
23	800x600,72Hz	0	-	0	-	800x600	48.077	72.188	50.000
24	800x600,75Hz	ŏ	-	Ö	-		46.875	75.000	49.500
25	800x600,85Hz	ŏ	-	Ö	-		53.674	85.061	56.250
26	832x624,75Hz	Ő	-	Ő	-	832x624	49.725	74.550	57.283
27	1024x768,60Hz	Õ	-	Ő	-		48.363	60.004	65.000
28	1024x768,70Hz	Ő	-	Ő	-		56.476	70.069	75.000
29	1024x768,75Hz	ŏ	-	Ö	-	1024x768	60.023	75.029	78.750
30	1024x768,85Hz	Õ	-	Õ	-		68.678	84.997	94.500
31	1152x864,70Hz	Õ	-	Ő	-		63.995	70.020	94.200
32	1152x864,75Hz	Ő	-	Ö	-	1152x864	67.500	75.000	108.000
33	1280x720,60Hz	0	-	0	-	1280x720	44.772	59.855	74.500
34	1280x768,60Hz	ŏ	-	Ö	-		47.776	59.870	79.500
35	1280x768,75Hz	ŏ	-	Ö	-	1280x768	60.289	74.893	102.250
36	1280x768,85Hz	Ő	- 1	Ő	-	1	68.630	84.840	117.500
37	1280x800,60Hz	ŏ	-	Ö	-	1	49.702	59.810	83.500
38	1280x800,75Hz	Ő	-	Ő	-	1280x800	62.795	74.934	106.500
39	1280x800,85Hz	Ő	-	0	-	1	71.554	84.880	122.500
40	1280x960,60Hz	Ő	- 1	Ö	-	1280x960	60.000	60.000	108.000
41	1280x1024,60Hz	ŏ	- 1	Ö	-		63.981	60.020	108.000
42	1280x1024,72Hz	Ő	- 1	Ő	-		78.16	71.97	135.060
43	1280x1024,75Hz	0	-	0	-	1280x1024	79.976	75.025	135.000
44	1280x1024,85Hz	ŏ	-	Ö	-	1	91.146	85.024	157.500
45	1366x768,60Hz	Ő	-	0	-	1366x768	47.720	59.799	84.750
46	1400x1050,60Hz	Ő	- 1	Ő	-		65.317	59.978	121.750
47	1400x1050,75Hz	ŏ	-	Ö	-	1400x1050	82.278	74.867	156.000
48	1440x900,60Hz	0	-	0	-	1440x900	55.935	59.887	106.500
49	1600x900,60Hz	0	-	0	-	1600x900	55.920	60.000	118.998
50	1600x1200,60Hz	0	-	0	-	1600x1200	75.000	60.000	162.000
51	1680x1050,60Hz	0	-	0	-	1680x1050	65.290	59.954	146.250
52	1920x1080,60Hz	0	-	0	-	1920x1080	66.587	59.934	138.500
53	1920x1200,60Hz	0	-	0	-	1920x1000	74.038	59.950	154.000
- 55	1920X1200,00HZ	0	-	U	-	192041200	74.030	35.530	104.000

" $\bigcirc$ " shows input signal source support this format ; "-" shows input signal source DONOT support.

#### ✓ Note:

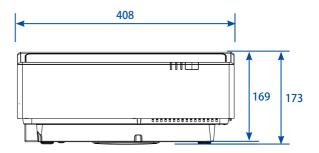
Changes to this manual may be made without notice.

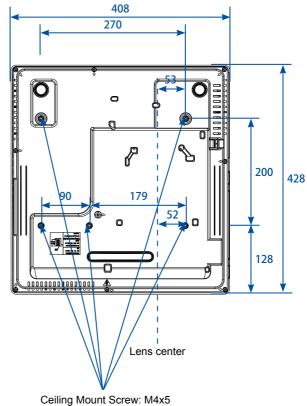
# Terminal configuration

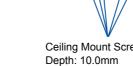
COMPUTER OUT Terminal (D-sub 1	5)			
	1	Red (Input/output)	9	
	2	Green(Input/output)	10	Grounding(field synchronizing)
	3	Blue(Input/output)	11	Grounding
	4		12	DDC data
$\left[ \bigcirc \left( \bigcirc & \bigcirc $	5	Grounding (line synchronizing)	13	Horizontal synchronizing(compound sync.) input/output
	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		
LAN Terminal				
	1	TX +	5	
	2	TX -	6	RX -
	3	RX +	7	
87654321	4		8	
HDMI Terminal (HDMI Type A 19)				
	1	TMDS Data2+	11	TMDS Clock Shield
	2	TMDS Date2 Shield	12	TMDS Clock-
	3	TMDS Date2-	13	CEC
	4	TMDS Date1+	14	Reserved(N.C. on device)
	5	TMDS Datel Shield	15	SCL
19 17 15 13 11 9 7 5 3 1 19 00 00 00 00 18 16 14 12 10 8 6 4 2	6	TMDS Datel-	16	SDA
	7	TMDS Date0+	17	DDC/CEC Ground
	8	TMDS Date0 Shield	18	+5V Power
	9	TMDS Date0-	19	Hot Plug Detect
	10	TMDS Clock+		
COMPUTER IN 1 Terminal / COMPU	TER IN	2 Terminal (D-sub 15)		
	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
$\left[\begin{array}{c} \textcircled{0} \\ \end{array}{} $	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)		

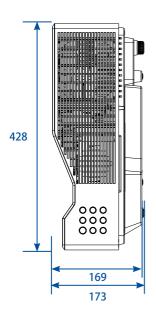
### Dimensions

Unit:mm









# Specifications

Model name	LH-WU350UST LH-WX370U		
Display system	Tansmitting LCD : 3 panels		
Optical system	Three primary color liquid cry	stal shutter projection method	
Displaydevice			
Effective display area size	0.64"/16 : 10		
Effective number of pixels	2,304,000 (1920x1200)x3	1,024,000 (1280x800)x3	
Projectionlens			
Focus	Ma	nual	
Focal length	f=2.9	94mm	
Fnumber	F:	1.7	
Light source	HLC	) LED	
Image size / Projection distance	80 ~ 120 inch	n/ 0.41 ~ 0.59m	
Number of colors	1, 073, 000,	000 colors	
Light output(*1)(*2)	3500lm	3700lm	
Contrast ratio(*1)(*2)(*3)	1000	00:1	
Ratio of brightness at periphery	7	5%	
to center(*2)			
Speaker		SW	
Supported input signal types	See Supported :	Signal Types"(P99)	
Displayable scanning frequency			
Horizontal		~100 KHz	
Vertical	28Hz-	~85 Hz	
Displayresolution		Maximum in a state of a state	
Computer signal input	Maximum input resolution 1920x1200 dots	Maximum input resolution 1920x1200 dots(resizing display) Panel display resolution 1280x800	
Video signal input	NTSC, NTSC4.43, PAL, S	SECAM, PAL-M, PAL-N,	
Video signals			
Mini D-sub 15-pin	Analog PC (WUXGA/FHD/UXGA/WSXGA+/SXGA+/SXGA/WXGA+/WXGA/XGA/SVGA/VGA/Mac16 Component video (1080p/1080i/720p/576p/576i/480p/480i)		
HDMIx2	Digital PC (WUXGA/FHD/UXGA/WSXGA+/SXGA+/SXGA/WXGA+/WXGA/XGA/SVGA/VGA/Mac16 ' Digital Video (1080p/1080i/720p/576p/576i/480p/480i)		
RCA	Video	pinput	
RJ-45	Network connection(100 Base - TX Network	(100Mbps)/10 Base-T (10Mbps)、 < Display)	
USB Туре В	USB connection(USB Dis	play、Firmware Upgrade)	
USB Type A	USB connection (USB Memory	Viewer)、Power supply 5V/1.5A	
Other terminalsand connectors			
Dsub 9	RS-232 c	connection	
Mini D-sub 15-pin	Analog PC/Compo	onent video output	
Mini jack	Audio input		
Mini jack	Autdio output		
2RCA	Audio	o input	
Noise(Normal(*4)/Eco)	39dB / 33dB		
Operating temperature	0C° -	~40C°	
Power supply	AC 100-24	0V 50/60Hz	
Maximum power consumption (Normal/Eco)	525W	525W	
Standby mode power consumption(LAN OFF/ON)	0.4W	/ 2W	

Model name	LH-WU350UST	LH-WX370UST		
Dimensions	W408mm×H17	W408mm×H173mm×D428mm		
Not including protrusion	W408mm×H16	W408mm×H169mm×D428mm		
Weight	Appro	Approx. 10kg		
Accessories	Remote control, remote control dry-c cable, Important Information and Wa			

(\*1) Image mode : Presentation

(\*2) Compliance with ISO21118-2012

(\*3) Dynamic Contrast: ON

(\*4) Image mode : Presentation/Standard

\* 99.99% or more of the LCD panel pixels are effective. During projection, 0.01% or less of pixels may stay lit or unlit due to the characteristics of the LCD panel.

\* Using the projector continuously for an extended period of time may accelerate the deterioration of optical parts.

\* Product specifications and appearance are subject to change without prior notice.

Remote control	
Battery	AAA ALKALINE TYPE x 2
Operating Range	±30° about 8 m straight
Dimensions	110mm(L)X50mm(W)X20mm(H)
Net Weight	38g

### RS232 control mode

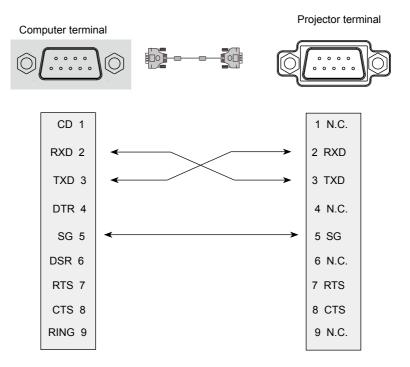
#### Serial connection

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.



#### User commands

Commands		ASCII representation	Binary representation
Model name acqisition		GET=PROD- CODE <cr></cr>	47h 45h 54h 3Dh 50h 52h 4Fh 44h 43h 4Fh 44h 45h 0Dh
Serial number ac	quisition	GET=PRODSN <cr></cr>	47h 45h 54h 3Dh 50h 52h 4Fh 44h 53h 4Eh 0Dh
Devereventy	Power on *1	POWER=ON <cr></cr>	50h 4Fh 57h 45h 52h 3Dh 4Fh 4Eh 0Dh
Power supply	Power off	POWER=OFF <cr></cr>	50h 4Fh 57h 45h 52h 3Dh 4Fh 46h 46h 0Dh
Power status acc	uisition *1	GET=POWER <cr></cr>	47h 45h 54h 3Dh 50h 4Fh 57h 45h 52h 0Dh
	Computer-1	INPUT=DSUB1 <cr></cr>	49h 4Eh 50h 55h 54h 3Dh 44h 53h 55h 42h 31h 0Dh
	Computer-2	INPUT=DSUB2 <cr></cr>	49h 4Eh 50h 55h 54h 3Dh 44h 53h 55h 42h 32h 0Dh
	HDMI-1	INPUT=HDMI1 <cr></cr>	49h 4Eh 50h 55h 54h 3Dh 48h 44h 4Dh 49h 31h 0Dh"
Input source	HDMI-2	INPUT=HDMI2 <cr></cr>	49h 4Eh 50h 55h 54h 3Dh 48h 44h 4Dh 49h 32h 0Dh"
	Video	INPUT=VIDEO <cr></cr>	49h 4Eh 50h 55h 54h 3Dh 56h 49h 44h 45h 4Fh 0Dh
	LAN	INPUT=LAN <cr></cr>	49h 4Eh 50h 55h 54h 3Dh 4Ch 41h 4Eh 0Dh
	USB-MEM	INPUT=USB_M <cr></cr>	49h 4Eh 50h 55h 54h 3Dh 55h 53h 42h 5Fh 4Dh 0Dh
USB-Display		INPUT=USB_D <cr></cr>	49h 4Eh 50h 55h 54h 3Dh 55h 53h 42h 5Fh 44h 0Dh
Input source acq	uisition	GET=INPUT <cr></cr>	47h 45h 54h 3Dh 49h 4Eh 50h 55h 54h 0Dh
Input list acquisit	ion	GET=INPUTL <cr></cr>	47h 45h 54h 3Dh 49h 4Eh 50h 55h 54h 4Ch 0Dh
	Standard	IMAGE=STAN- DARD <cr></cr>	"49h 4Dh 41h 47h 45h 3Dh 53h 54h 41h 4Eh 44h 41h 52h 44h 0Dh"
	Presentation	IMAGE=PRESENTA- TION <cr></cr>	49h 4Dh 41h 47h 45h 3Dh 50h 52h 45h 53h 45h 4Eh 54h 41h 54h 49h 4Fh 4Eh 0Dh
Imaga mada	Cinema	IMAGE=MOVIE <cr></cr>	49h 4Dh 41h 47h 45h 3Dh 4Dh 4Fh 56h 49h 45h 0Dh
Image mode	Blackboard	IMAGE=BLACKB- D <cr></cr>	49h 4Dh 41h 47h 45h 3Dh 42h 4Ch 41h 43h 4Bh 42h 44h 0Dh
	User 1	IMAGE=USER_1 <cr></cr>	49h 4Dh 41h 47h 45h 3Dh 55h 53h 45h 52h 5Fh 31h 0Dh"
	Eco	IMAGE=ECO <cr></cr>	49h 4Dh 41h 47h 45h 3Dh 45h 43h 4Fh 0Dh
Image mode acquisition		GET=IMAGE <cr></cr>	47h 45h 54h 3Dh 49h 4Dh 41h 47h 45h 0Dh"
	Auto	ASPECT=AUTO <cr></cr>	41h 53h 50h 45h 43h 54h 3Dh 41h 55h 54h 4Fh 0Dh
Aspect	16:9	ASPECT=16:9 <cr></cr>	41h 53h 50h 45h 43h 54h 3Dh 31h 36h 3Ah 39h 0Dh
	Full	ASPECT=FULL <cr></cr>	41h 53h 50h 45h 43h 54h 3Dh 46h 55h 4Ch 4Ch 0Dh
Aspect value acc	uisition	GET=ASPECT <cr></cr>	47h 45h 54h 3Dh 41h 53h 50h 45h 43h 54h 0Dh

\*1 Acceptable in standby status.

# Appendix

Commands		ASCII representation	Binary representation
Light source mode acquisition		GET=LIGHT <cr></cr>	47h 45h 54h 3Dh 4Ch 49h 47h 48h 54h 0Dh
Blank	Blank On	BLANK=ON <cr></cr>	42h 4Ch 41h 4Eh 4Bh 3Dh 4Fh 4Eh 0Dh
	Blank Off	BLANK=OFF <cr></cr>	42h 4Ch 41h 4Eh 4Bh 3Dh 4Fh 46h 46h 0Dh
Blank status acquisition		GET=BLANK <cr></cr>	47h 45h 54h 3Dh 42h 4Ch 41h 4Eh 4Bh 0Dh
Audio control	Mute On	MUTE=ON <cr></cr>	4Dh 55h 54h 45h 3Dh 4Fh 4Eh 0Dh
	Mute Off	MUTE=OFF <cr></cr>	4Dh 55h 54h 45h 3Dh 4Fh 46h 46h 0Dh
	Audio volume +	RC=VOL_P <cr></cr>	52h 43h 3Dh 56h 4Fh 4Ch 5Fh 50h 0Dh
	Audio volume -	RC=VOL_M <cr></cr>	52h 43h 3Dh 56h 4Fh 4Ch 5Fh 4Dh 0Dh
Audio mute status acquisition		GET=MUTE <cr></cr>	47h 45h 54h 3Dh 4Dh 55h 54h 45h 0Dh
Audio volume status acquisition		GET=AVOL <cr></cr>	47h 45h 54h 3Dh 41h 56h 4Fh 4Ch 0Dh
Auto search	Auto input search On	QAS=ON <cr></cr>	51h 41h 53h 3Dh 4Fh 4Eh 0Dh
Auto input search Off		QAS=OFF <cr></cr>	51h 41h 53h 3Dh 4Fh 46h 46h 0Dh
Auto input search acquisition		GET=QAS <cr></cr>	47h 45h 54h 3Dh 51h 41h 53h 0Dh
Freeze	Freeze On	FREEZE=ON <cr></cr>	46h 52h 45h 45h 5Ah 45h 3Dh 4Fh 4Eh 0Dh
	Freeze Off	FREEZE=OFF <cr></cr>	46h 52h 45h 45h 5Ah 45h 3Dh 4Fh 46h 46h 0Dh
Freeze acquisition		GET=FREEZE <cr></cr>	47h 45h 54h 3Dh 46h 52h 45h 45h 5Ah 45h 0Dh
High land mode	High land mode On	HIGHALT=ON <cr></cr>	48h 49h 47h 48h 41h 4Ch 54h 3Dh 4Fh 4Eh 0Dh
	High land mode Off	HIGHALT=OFF <cr></cr>	48h 49h 47h 48h 41h 4Ch 54h 3Dh 4Fh 46h 46h 0Dh
High land mode acquisition		GET=HIGHALT <cr></cr>	47h 45h 54h 3Dh 48h 49h 47h 48h 41h 4Ch 54h 0Dh
Image Flip	Image flip Normal	IMAGEFLIP=NONE <cr></cr>	49h 4Dh 41h 47h 45h 46h 4Ch 49h 50h 3Dh 4Eh 4Fh 4Eh 45h 0Dh
	Image flip Rear	IMAGEFLIP=REAR <cr></cr>	49h 4Dh 41h 47h 45h 46h 4Ch 49h 50h 3Dh 52h 45h 41h 52h 0Dh
	Image flip Ceiling	IMAGEFLIP=CEIL- ING <cr></cr>	49h 4Dh 41h 47h 45h 46h 4Ch 49h 50h 3Dh 43h 45h 49h 4Ch 49h 4Eh 47h 0Dh
	Image flip Rear Ceiling	IMAGEFLIP=REAR_ CEIL <cr></cr>	49h 4Dh 41h 47h 45h 46h 4Ch 49h 50h 3Dh 52h 45h 41h 52h 5Fh 43h 45h 49h 4Ch 0Dh
	Image flip Auto Ceiling	IMAGEFLIP=AUTO_ CEILING <cr></cr>	49h 4Dh 41h 47h 45h 46h 4Ch 49h 50h 3Dh 41h 55h 54h 4Fh 5Fh 43h 45h 49h 4Ch 49h 4Eh 47h 0Dh
	Image flip Auto Rear Ceiling	MAGEFLIP=AUTO_ REAR_CEIL <cr></cr>	49h 4Dh 41h 47h 45h 46h 4Ch 49h 50h 3Dh 41h 55h 54h 4Fh 5Fh 52h 45h 41h 52h 5Fh 43h 45h 49h 4Ch 0Dh
Image flip status acquisition		GET=IMAGEFLIP <cr></cr>	47h 45h 54h 3Dh 49h 4Dh 41h 47h 45h 46h 4Ch 49h 50h 0Dh
Ststus acqui- sition	Error code *2 *3	GET=ERR <cr></cr>	47h 45h 54h 3Dh 45h 52h 52h 0Dh
	Filter used time	GET=FLTT <cr></cr>	47h 45h 54h 3Dh 46h 4Ch 54h 54h 0Dh
	light source accumlated time	GET=PJUSGT <cr></cr>	47h 45h 54h 3Dh 50h 4Ah 55h 53h 47h 54h 0Dh
	Temperature	GET=TMPIN <cr></cr>	47h 45h 54h 3Dh 54h 4Dh 50h 49h 4Eh 0Dh
Keystone	H keystone setting	HKS=10 <cr></cr>	48h 4Dh 53h 3Dh 31h 30h 0Dh
	V keystone setting	VKS=-5 <cr></cr>	56h 4Dh 53h 3Dh 2Dh 35h 0Dh
	H keystone setting value acquisition	GET=HKS <cr></cr>	47h 45h 54h 3Dh 48h 4Bh 53h 0Dh
	V keystone setting value acquisition	GET=VKS <cr></cr>	47h 45h 54h 3Dh 56h 4Bh 53h 0Dh
Menu	Menu ON	MENU=ON <cr></cr>	4Dh 45h 4Eh 55h 3Dh 4Fh 4Eh 0Dh
	Menu OFF	MENU=OFF <cr></cr>	4Dh 45h 4Eh 55h 3Dh 4Fh 46h 46h 0Dh
	Arrow key Top	RC=UP <cr></cr>	52h 43h 3Dh 55h 50h 0Dh
	Arrow key Bottom	RC=DOWN <cr></cr>	52h 43h 3Dh 44h 4Fh 57h 4Eh 0Dh
	Arrow Key Left	RC=LEFT <cr></cr>	52h 43h 3Dh 4Ch 45h 46h 54h 0Dh
	Arrow Key Right	RC=RIGHT <cr></cr>	52h 43h 3Dh 52h 49h 47h 48h 54h 0Dh
	Menu OK	RC=OK <cr></cr>	52h 43h 3Dh 4Fh 4Bh 0Dh
		s set to normal in standby sta	

\*2 Acceptable only when standby mode is set to normal in standby status.

\*3 If an error code other than "0000" is returned, contact the Canon Customer Support Center.



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