# HITACHI Inspire the Next

# User's Manual Projector LP-WU6500

Deutsch

English

Português

簡体中文

繁體中文

한국어

Русский



Thank you for purchasing this product. Please read this manual before using the product. Store it for future reference.

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## Notice

This product is intended for the adults who have the ability to operate this machine.

Please write down your projector model number and serial number and keep the information for maintenance purposes in the future. Should the equipment be lost or stolen, the information could also be used for the police report.

Model number:

Serial number:

Please check the accessories that come with the projector with the following list. Should you find any missing accessory, contact your dealer immediately.

1. AC Power Cord

Do not open

- 2. Remote control
- CD-ROM
  Printed Manual
  EAC Document
- 3. AAA battery 2pcs

  - CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN CAUTION / TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER(OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL
- 7. 3D Sync cable 1pcs
- 8. RGB cable
  - The lightning flash with an arrowhead within a triangle is intended to tell the user that inside this product may cause risk of electrical shock to persons.

The exclamation point within a triangle is intended to tell the user that important operating and/or servicing instructions are included in the technical documentation for this equipment.

## About Electro-Magnetic Interference

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

This product may cause interference if used in residential areas. Such use must be avoided unless the user takes special measures to reduce electromagnetic emissions to prevent interference to the reception of radio and television broadcasts.

## **Description pertaining to FCC Rules Part 15**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy. If not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. Operation of this equipment in a residential area is likely to cause harmful interference in which case.

The user will be required to correct the interference at his own expense.

Caution: Changes or modifications not expressly approved by the manufacturer void the user's authority to operate the equipment.

CAN ICES-3(A) / NMB-3(A)

## Information for users applicable in European Union countries

#### Disposal of Old Equipment and Batteries Only for European Union and countries with recycling systems

The above mark is in compliance with the Waste Electrical and Electronic Equipment Directive 2012/19/EU (WEEE).



The mark indicates the requirement NOT to dispose the equipment including any spent or discarded batteries as unsorted municipal waste, but use the return and collection systems available.

If the batteries or accumulators included with this equipment display the chemical symbol Hg, Cd, or Pb, then it means that the battery has a heavy metal content of more than 0.0005% Mercury, or more than 0.002% Cadmium or more than 0.004% Lead.



#### Note for the battery symbol (bottom symbol):

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

## **Sun light Warning**

Avoid using this projector in direct sun light.

Sunlight may cause serious damage to the digital mirror device (DMD<sup>TM</sup>) at the back of the projector lens.

#### Never look into the projector light source directly

When turn on the projector, make sure nobody's eye will effects by the projection of light.

Always avoid to let eyes contact to the light.

As with any bright source, do not stare into the direct beam, RG2 IEC 62471-5:2015.

## Key any object away from concentrated projection light beam

Blocking the beam by something causes high temperature and could result in fire or smoke.





## **Electric shock**

To protect your projector, avoid turning on the projector during lightning storms and unplug it from the wall outlet. This will prevent sudden electrical surges caused by the lightning from damaging the projector.

## Do not overload wall outlets/extension cords

Pay attention to the current load of the outlet and cord you are using to prevent fire or electrical shock.

## Cleaning

When cleaning the projector, be sure to unplug it from the wall outlet to prevent electric shock.

Do not use liquid or aerosol cleaners. Use a dry/damp cloth with excessive moisture removed for cleaning. Be sure to use cleaning cloth designed to clean monitors for the projector to prevent damages to the projector casing due to abrasion.

### Dampness, smoke, steam, dust, high temperature and direct exposure to sunlight

Do not operate the projector in environments where it could be expose to dampness, smoke, steam, dust, high temperature or direct sunlight. For example: bathroom, kitchen, adjacent to washing machine, damp basement rooms, electric heaters or similar environments. Keeping or operating the projector in the above-mentioned environment could lead to discoloration, mold formation, grease or damages to the projector.

Do not place the projector where any oils, such as cooking or machine oil, are used. Oil may harm the product, resulting in malfunction, or falling from the mounted position. Do not use adhesive such as threadlocker, lubricant and so on.

## Ventilation

The projector case is designed with slots and openings to remove the heat inside the projector so that it will not overheat and damage the components. Be sure to operate the projector in an environment with ideal ventilation and don't operate it on a sofa, rug or other closed-in environments that could obstruct ventilation.

## **Intrusion of foreign objects**

Be sure to keep all foreign objects away from entering the projector because it could be exposed to hazardous voltages and cause parts to short circuit. This could in turn lead to fire hazard or electric shock. Examples of foreign objects include: cockroach, screws, liquid and so forth.

In addition, never spill liquid into the projector.

## **Carrying the projector**

The projector net weight is approximately 10.9 kg. When moving the projector on a cart, be sure to handle the cart with care as abrupt stops, jolts of excessive force or uneven ground could lead the projector to topple.



## Please install the projector on an even and stable surface

Avoid placing the projector on unstable cart, tripod, table and so forth to prevent the projector from falling, becoming damaged or causing injuries.

### Servicing

Should you encounter problem with the projector, please seek assistance from your local dealer or qualified service personnel. Do not attempt to service the projector by yourself so that you would not be exposed to high voltage or other potential hazards.



No service is allowed except by authorized personnel.

Should you encounter any of the following situation, please unplug your projector from the wall outlet and contact a qualified service personnel for assistance:

- Damaged power cord or power plug.
- If a foreign object has fallen into the projector or if you have spilled water or other liquid into the projector.
- If the projector has been dropped accidentally or damaged.
- If you experience noticeably poor performance or malfunctioning with the projector despite having followed instructions for normal operation.

## **Changing parts**

Should any part of the projector be damaged, check with your servicing personnel that only manufacturer certified parts were used for replacement. Used of non-certified parts may result in damages to the projector or hazards such as fire or electric shock. After changing parts, be sure to remind the servicing personnel to perform safety inspections to ensure that the projector operates normally.



No maintenance allowed by end user, Do not open the cabinet.

No user serviceable part inside.

## Power cord

Don't place the projector where the cord can be walked on. This may result in fraying or damage to the power cord, especially at the plug and the point of connection between the power cord and the projector.

Please use the power cord that comes with the projector or the type of power cord specified for the projector (refer to the descriptions printed on the power cord). If you are not sure of the power available at the region you are in, consult your local power company to prevent damages to the projector due to the use of wrong power cord or potential fire hazards due to current overload.

Depending on the country and region you are in, the voltage and type of socket of the wall outlet may be different from the projector. If you are unable to fit the power plug into the wall outlet, contact your local dealer and do not remove the extra pin on the power plug to forcibly fit it to the socket at the risk of your own safety.

Connect the ground terminal for the AC inlet of this unit to the ground terminal of the building using an appropriate power cord (bundled).

Install the projector where you can access the power outlet easily.

#### ENGLISH DEUTSCH **ESPAÑOL** PORTUGUÊS FRANÇAIS Descriptions of the Les descriptions de ces Beschreibungen der am Descripciones de los Descrições dos símbolos symbols displayed on the symboles sont affichées Projektor angezeigten símbolos mostrados en el apresentados no projector Symbole projector sur le projecteur provector Alternating Current Courant Alternatif Wechselstrom Corriente alterna Corrente alternada Bereitschaft (h)Standby (Power) Veille (Alimentation) En espera (Alimentación) Em espera (Alimentação) (Stromversorgung) On (Power) Marche (Alimentation) Ein (Stromversorgung) Encendido (Alimentación) Ligado (Alimentação) $\bigcirc$ Off (Power) Arrêt (Alimentation) Aus (Stromversorgung) Apagado (Alimentación) Desligue (Alimentação) AVERTISSEMENT / WARNUNG / ADVERTENCIA / WARNING / CAUTION AVISO / PRECAUÇÃO ATTENTION VORSICHT PRECAUCIÓN HAUTE HIGH TEMPERATURE HOHE TEMPERATUR ALTA TEMPERATURA TEMPERATURA ALTA TEMPERATURE HIGH VOLTAGE HAUTE TENSION HOCHSPANNUNG ALTO VOLTAJE VOLTAGEM ALTA HIGH PRESSURE HAUTE PRESSION HOCHDRUCK ALTA PRESIÓN PRESSÃO ALTA PROYECTOR NO PROJECTEUR PROJEKTOR NICHT PROJECTOR NÃO PROJECTOR NOT FOR DESTINADO A USO DESTINÉ À UN USAGE FÜR DEN PRIVATEN DESTINADO AO USO CONSUMER USE POR PARTE DE DE CONSUMIDORES PROFESSIONNEL GEBR AUCH CONSUMIDORES ATTENTION ADVERTENCIA SOBRE OPTICAL RADIATION WARNUNG! OPTISCHE AVISO DE RADIAÇÃO `₩ RAYONNEMENT LA RADIACIÓN WARNING STRAHLUNG ÓPTICA LASER ÓPTICA Ŕ Kensington Kensington Kensington Kensington Kensington MERCURY CONTIENT DU (Hg) QUECKSILBERHALTIG CONTIENE MERCURIO CONTÉM MERCÚRIO CONTAINED MERCURE

## Safety mark

	ENGLISH	FRANÇAIS	DEUTSCH	ESPAÑOL	PORTUGUÊS
	Descriptions of the symbols displayed on the projector	Les descriptions de ces symboles sont affichées sur le projecteur	Beschreibungen der am Projektor angezeigten Symbole	Descripciones de los símbolos mostrados en el proyector	Descrições dos símbolos apresentados no projector
Rez	RG2 caution	ATTENTION: RG2	Achtung! RG2	Precaución sobre RG2	Atenção RG2
	DO NOT LOOK INTO THE BEAM	NE PAS REGARDER DANS LE FAISCEAU	NICHT IN DEN STRAHL BLICKEN	NO MIRE AL HAZ	NÃO OLHE PARA O FEIXE
<u> </u>	DO NOT SHADE THE LIGHT	NE PAS COUVRIR LA LUMIÈRE	LICHTWEG NICHT BLOCKIEREN	NO TAPE LA LUZ	NÃO BLOQUEIE A LUZ
	Laser Warning	Avertissement Relatif au Laser	Warnhinweis zum Laser	Advertencia Relacionada con el Láser	Aviso Relativo ao Laser
	中文	한국어	РУССКИЙ	日本語	
	投影机上显示的标志符 号说明	프로젝터에 표시되 어 있는 기호에 대 한 설명	Описания символов, отображаемых на проекторе	機器上に表示しているシ ンボル説明	-
$\sim$	交流电	교류 전류	Переменный ток	交流電流	_
Ċ	待机(电源)	스탠바이(전원)	Ожидание (питание)	スタンバイ(電源)	_
I	开启(电源)	온(전원)	Включено (питание)	オン(電源)	
0	关闭(电源)	끄기 (전원)	выключено (питание)	オフ (電源)	-
	警告 / 注意事项	경고 / 주의	ПРЕДУПРЕЖДЕНИЕ / ВНИМАНИЕ	注意 / 警告	-
	一小心高温	고온 주의	ВЫСОКАЯ ТЕМПЕРАТУРА	高温注意	
	小心触电	감전 주의	ВЫСОКОЕ НАПРЯЖЕНИЕ	感電注意	-
	小心破裂	파열 주의	ВЫСОКОЕ ДАВЛЕНИЕ	破裂注意	
	该投影机非普通消费 者使用	비소비자용 프로젝 터	ПРОЕКТОР НЕ ПРЕДНАЗНАЧЕН ДЛЯ ПОТРЕБИТЕЛЬСКОГО ИСПОЛЬЗОВАНИЯ	民生用では無い機器	-
	光辐射警告	광 방사 경고	ПРЕДУПРЕЖДЕНИЕ ОБ ОПТИЧЕСКОМ ИЗЛУЧЕНИИ	光放射警告	-
<u>R</u>	Kensington	Kensington	Kensington	Kensington	
Hg	含水银	수은 함유	РТУТОСОДЕРЖАЩИЙ	水銀含有	-
RG2	小心RG2	RG2 주의	Внимание RG2	RG2 注意 (覗き込み 禁止)	_
	〕禁止直视光束	빔을 들여다 보지 마십시오	НЕ СМОТРИТЕ НА ЛУЧ	覗き込み禁止	-
<u> </u>	)小心不要遮挡投影机发 〕出的光	램프를 가리지 마십시오	НЕ ЗАТЕНЯЙТЕ СВЕТ	光を遮るな注意	-
	激光警告	레이저 경고	Предупреждение о Лазерноем Излучении	レーザーに関する警告	

## Notices you should read prior to the installation of the projector

## Take frequent breaks to let your eyes rest

Prolonged viewing of the projector screen could strain your eyes. Please be sure to rest your eyes adequately.

## Installation environment for the projector

You should avoid installing the projector at place of excessive dampness, dust or smoke. If installation in such environment is unavoidable, be sure to have the interior of the projector.

Cleaned routinely to prolong the projector's lifecycle. Cleaning of the projector's interior should only be performed by qualified service personnel dispatched by your local dealer and you should not attempt to clean the inside of the projector by yourself.

If other light source is directly projected onto the projector screen, the color of the picture from the projector will appear to be pale and the picture quality will be lower. In addition, your eyes would be more prone to fatigue. Therefore, it is recommended that the projector be installed in places without direct exposure to sunlight or other sources of intense light.

The ideal operating temperature range for the projector is between  $0^{\circ}C \sim 40^{\circ}C$  ( $32^{\circ}F \sim 104^{\circ}F$ ) The ideal storage temperature range for the projector is between  $-20^{\circ}C \sim 60^{\circ}C$  ( $4^{\circ}F \sim 140^{\circ}F$ )

## Configurations for projector operation at high altitudes

When operating the projector at higher altitudes, be sure to manually set the fan mode to "High" or it could shorten the life of the optical system in the projector. High altitude is defined as places being 1520 meters (5000 feet) or higher.

Please refer to Page 62 and Page 76.

## Protect the projector with care

When placing the projector at a high position, be sure to secure the projector firmly so that it would not fall and cause injuries. Take care to protect the projector's lens from collision, abrasion or other damages. Be sure to close the lens cover or cover the projector with a dust cover if you need to store the projector or if it will not be used for an extended time.

## Keep the projector's ventilation inlets and outlets free from obstructions

Note the direction of air flow at the designated spot of installation. Do not let the hot air released from the outlet flow back to the inlet as it will prevent proper cooling and lead to damage of the projector's internal structure.

In the event of high temperature due to malfunctioning of the internal cooling fan caused by clogging at the ventilation inlets and outlets, the projector will activate its automatic protection mode and shutdown. When this happens, it does not necessary mean that the equipment is malfunctioning. Try to unplug the power cord from the wall outlet and wait for approximately 15 minutes before operating the projector again (remember to remove the objects that have caused poor ventilation so that the projector will not go into the protection mode again).

Description: The regulation of temperature inside the projector by the cooling fan is automatic. And as such, the sound of cooling fan changing its operating speed does not imply that a problem has occurred with the projector.



## **Positioning precautions**

This projector can be installed 360° range. But life of optical parts will be shorten as portrait situation:



## **Caution for 3D**

- Don't let children view the 3D by themselves , please always be accompanied by an adult.
- Although more than six years old can view the 3D. But children may not tell you if they are feeling unwell when viewing 3D content, so always be sure to check with the child.
- When viewing 3D content, be sure you are at an appropriate distance from the front of the screen. Suggest keep at least three times the height of the screen away from the screen.
- Check that the settings are correct and that the 3D effect is being correctly applied. If the image is inversed and the left and right eye images are swapped, the 3D effect does not work, which could cause eye strain or cause you to feel unwell.

3D content not suitable for below situation, it could aggravate their pre-existing conditions.

- People with a history of photosensitive epilepsy.
- People has heart disease.
- Pregnant women.
- People with serious illnesses.
- People with a history of epileptic seizures.

Suggest stop to view the 3D, if has below situation:

- When you feel unwell, tired, sleep deprived, fatigued or inebriated.
- The 3D image doubled or not clear.
- Enjoying 3D content that rotates, rolls, or shakes, some person may feel they are moving and trigger a form of "sea sickness".
- Take too long time for viewing 3D content, be sure to take regular breaks to avoid cause eyestrain.

## LASER WARNING



This symbol indicates that there is a potential hazard of eye exposure to laser radiation unless the instructions are closely followed.

## **CLASS 3R LASER PRODUCT**



This Laser Product is designated as Class 3R during all procedures of operation.

LASER LIGHT - AVOID DIRECT EYE EXPOSURE.

Do not point laser or allow laser light to be directed or reflected toward other people or reflective objects.

Direct or scattered light can be hazardous to eyes and skin.

There is a potential hazard of eye exposure to laser radiation if the included instructions are not followed.

Caution – use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

## Laser parameters

Wavelength	450nm - 460nm (Blue)
Mode of operation	Pulsed, due to frame rate
Pulse width	1.34ms
Pulse repetition rate	120Hz
Maximum laser energy	0.698mJ
Total internal power	>100W
Apparent source size	>10mm, at lens stop
Divergence	>100 mili Radian

## **Product labels**

Below drawing show the label's location.

## **1** Manufacturer's ID



## 2 Serial No. MAC Label



- a. Serial No.
- b. MAC Label



Warning, Notices and Safety Instructions

- a. Hazard Warning Symbol
- b. Aperture Label
- c. Certification Statement Label
- d. Explanatory Label

## Location of laser aperture

Following drawing shows the laser aperture location. Be careful not to see the light directly.



## **Interlock switches**

This machine has interlock switches to protect the laser light leakage.



**O** Switch will power-off the system when the Top cover is opened.

## **Projector parts and functions**

## **Front view**



#### 1. LENS SHIFT

Adjust the projected image position.

2. Ventilation outlet

The hot air generated inside the projector is dispersed through the ventilation slot. Make sure the ventilation slot is free from obstruction.

3. Zoom

Zoom in or zoom out the projected image

- 4. Infrared receiver
- 5. Adjustable foot

Adjust the height and angle of the projector with the adjustable foot.

- 6. LED Indicator
- 7. Projector keypad
- 8. Ventilation inlet The internal cooling fan draws cool air from the ventilation inlet into the projector.
- 9. Speaker
- 10. Focus

Adjust the projected image's focus.

11. Lens

## **LED Indicator**



#### 1. POWER

The indicator shows the power status. The indicator lights when the projector is in standby state. The indicator blinks once every 5 seconds when the projector is an ON state.

#### 2. LIGHT

The indicator shows the light source and system error status.

3. **TEMP.** 

The indicator shows the thermal error message.

## **Projector parts and functions**

## **Rear view**



- 1. I/O port
- 2. Power inlet
- 3. Infrared sensor
- 4. Security bar

**Projector keypad** 



- 6. Ventilation outlet
- 7. Kensington<sup>®</sup> lock



## 1. 🔺 / 🗖

Use this button to make your selection or configure, adjust configuration on the menu.

Keystone can be adjusted when no other menu is displayed.

#### 2. AUTO

Auto adjust the signal synchronization.

#### 3. ◀/◀

Use this button to make your selection or configure, adjust configuration on the menu.

Keystone can be adjusted when no other menu is displayed.

4. Ů

Press to turn on or off the projector.

5. 🔻 / 🗖

Use this button to make your selection or configure, adjust configuration on the menu.

Keystone can be adjusted when no other menu is displayed.

## 6. ENTER

Press to select items in the menu or confirm the settings you have changed.

#### 7. SOURCE

Select input signal source.

8. ►/►

Use this button to make your selection or configure, adjust configuration on the menu.

Keystone can be adjusted when no other menu is displayed.

9. MENU

Displays or hides the menu.

## I/O Port (Input / Output)



- 1. **HDMI 1** (Digital audio/video connector) Connect to HDMI or DVI source.
- 2. **RJ45**

Connect a LAN cable from Ethernet.

- 3. **HDMI 2** (Digital audio/video connector) Connect to HDMI or DVI source.
- HDBaseT (RJ-45 jack) Connect to HDBaseT source via LAN cable.
- HDMI 3 / MHL (Digital audio/video connector) Connect to a HDMI or MHL-compatible device.
- 6. MONITOR OUT (D-sub 15-pin mini shrink jack)Connect to a monitor.Loop through only for COMPUTER.
- COMPUTER (D-sub 15-pin mini shrink jack)
   Connect to a PC.(Support RGB and

component video signal input).

- 8. **VIDEO** (RCA jack) Connect to the composite video device.
- 3D SYNC (VESA 3-pin) Connect to 3D IR glasses receiver unit.

## 10. SERVICE

For service personnel only.

USB POWER (USB A type jack)
 Connect a USB device. (Support 5V/1.5A output while the projector Power On.)

12. **AC** 

Connect a POWER cable.

 RS-232C (9-pin D-sub socket) (Cross cable)
 Connect your PC or system control

equipment.

- 14. **AUDIO OUT** (3.5 mm, mini jack) Connector to an audio amplifier device.
- 15. **AUDIO IN** (3.5 mm, mini jack) Connect an audio source input. (Available for Computer, BNC, DVI-D source.)
- AUDIO IN (L/R) (RCA jack) Connect an audio source. (Available for Video signal input.)

## **Projector parts and functions**

## **Bottom view**



## Mounting bracket screw hole

These screw holes are used to mount the projector to its designated mounting bracket using 6 M4x12L screws. The dimensions of the screw holes are shown in the picture below.

## Adjustable foot

Adjust the height and angle of the projector with the adjustable foot.

## **Remote control**



- 1. IR transmitter
- 2. **ON**

This button is used to turn on the projector.

#### 3. PC

Displays the VGA (COMPTER IN) / BNC (R/B/G/H/V) source selection (toggle).

4. **HDMI** Displays the HDMI 1/HDMI 2/DVI source

selection (toggle).

5. HDBaseT

Displays the HDBaseT source selection.

6. USB

Not available for this projector.

#### 7. 🔺 / 🛋

Use this button to make your selection or configure, adjust configuration on the menu.

Keystone can be adjusted when no other menu is displayed.

#### 8. MENU

Displays or hides the menu.

#### 9. ← (ENTER)

Press to select items in the menu or confirm the settings you have changed.

10. ৰ /

Use this button to make your selection or configure, adjust configuration on the menu.

Keystone can be adjusted when no other menu is displayed.

#### 11. 🔻 / 🕊

Use this button to make your selection or configure, adjust configuration on the menu.

Keystone can be adjusted when no other menu is displayed.

#### 12. Keystone

Press to open keystone adjustment menu.

#### 13. **⊳**∥

Play or pause video/music for MHL.

#### 14. 🖊

Play the previous item on the programming list for MHL.

#### 15. 🗖

Stop video/music playing for MHL.

#### 16.

Reverse in set increments for MHL.

#### 17. Source

Select input source.

Combo key function for Remote Control ID settings (Press ID button + Number for 3 seconds).

#### 18. Auto / 0

This button is used to Resync the picture; when the picture signal becomes unstable or picture quality deteriorates simply press this button and the projector will automatically adjust the screen dimension, phase, timing and so forth.

Number for Remote ID setting used.

#### 19. Brightness

Displays the brightness setting bar.

#### 20. Contrast / 2

Displays the Contrast settings bar. Number for Remote ID setting used.

#### 21. Light

Displays the light power adjustment menu.

#### 22. Zoom / 4

Displays the digital zoom settings bar. Number for Remote ID setting used.

#### 23. Freeze

Freeze/unfreeze the picture on the screen.

#### 24. Blank / 6

Makes the screen blank.

Number for Remote ID setting used.

#### 25. STANDBY

This button is used to turn off the projector.

#### 26. Video / S-Video

Displays the Video source selection.

#### 27. Network

Open the Network menu.

#### 28. EXIT

Press this button to exit menu or return to previous menu level.

#### 29. 🕨 / 🕨

Use this button to make your selection or configure, adjust configuration on the menu. Keystone can be adjusted when no other menu is displayed.

#### 30. MHL

Change MHL / Projector mode.

#### 31. 🛏

Play the following item on the programming list for MHL.

#### 32.

Forward in set increments for MHL.

- 33. Volume / 1Displays the Volume setting bar.Number for Remote ID setting used.
- 34. Mute /3

Mutes the built-in speaker. Number for Remote ID setting used.

### 35. **3D / 5**

Open the 3D Setting menu. Number for Remote ID setting used.

#### 36. Status / 7

Opens the Status menu (the menu only opens when an input device is detected). Number for Remote ID setting used. *Note:* 

> Remote Combo Key Settings: ID+0: Reset Remote Control ID to default settings. ID+1: Set Remote Control ID to "1".

> ID+7: Set Remote Control ID to "7". Projector also need setting ID for unique control. Refer to Page 62 : "Remote ID".

Note: When the projector is under **MHL** mode, the keypad on projector should be same definition of the key on remote control.

With MHL function:

MENU for App settings, ▲ Up, ▼ Down, ◀ Left and ▶ Right are used as directional arrows, also included ENTER and EXIT.

## Controlling your smart device with the remote control:

When the projector displays the content from your MHL compatible smart device, you can use the remote control to control your smart device. To enter the MHL mode, the following buttons are available for controlling your smart device, Arrow keys ( Up,

▼ Down, ◀ Left, ▶ Right), MENU, EXIT, MHL control buttons.

## Range of effective remote control signal reception

The diagram below illustrates the range of effective remote control signal reception (Unused new battery).



*Note: Avoid placing the remote control at places of high temperature or humidity as it could cause the remote control to malfunction.* 

*Note: If the infrared receiver is exposed to fluorescent lamp or strong sunlight, the remote control may not operate normally.* 

## Installing batteries in the remote control

- 1. Remove the cover by sliding it in the direction indicated by the arrow.
- 2. Insert two new AAA batteries (check the polarity).
- 3. Replace the cover.



Note: Always handle the batteries with care and use them only as directed. Improper use may result in battery explosion, cracking or leakage, which could result in fire, injury and/or pollution of the surrounding.

Note: Keep a battery away from children and pets.

### **Remote control**

Note: Do not recharge, short circuit, solder or disassemble a battery.

- Note: Be sure to insert the batteries in the corresponding orientations to match the polarities.
- *Note: Do not mix new battery with used one as it would shorten the life of new one or cause leakage.*
- *Note: Use AAA batteries as instructed; do not attempt to insert different types of batteries into the remote control.*
- *Note: If you will not use the remote control for long period, remove the batteries from the remote control and store them in a safe place.*
- Note: The liquid contents in the batteries is harmful to the skin; do not touch the leakage with your bare hands directly. When installing fresh batteries, be sure to clean up the leakage thoroughly.
- *Note: If the range of effective remote control signal reception decreases or if the remote control stops working, replace the batteries.*
- Note: Refer to the regulations enforced by your local government on the disposal of used batteries; improper disposal could damage the environment.
- Caution: RISK OF THE EXPLOSION IF BATTERY IS REPLACED BY ANY INCORRECT TYPE.
- Caution: DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

## **Projector installation**

## **Throw distance**

Throw Distance (TD) = Screen Width (W) x Throw Ratio (TR)



Projector offers the following throw ratios:

• 1.15~1.9 : 1, 36.7~201.9inch

## **Modes of installation**

- Install the projector in an environment from 0°C (32°F) to 40°C (104°F). The projector should be kept away from sources of heat and / or ventilation openings of air conditioner. *Note: The temperature also depends on altitude. Please refer to Page 62 and Page 76.*
- The projector should be kept away from devices that emit electromagnetic energy, such as motors or transformers. Common devices that emit electromagnetic energy include slideshow system, speakers, power amplifiers and elevators.
- If you choose to install the projector from the ceiling, be sure to use the ceiling installation components verified safety. For details, please contact your local dealer.

## Projection



Advantages: easy to install can be easily moved or adjusted easy to operate. Disadvantage: occupies floor space and limits

seating capacity.



## **Projector installation**

#### Ceiling

- Refer to Page 42 : "Ceiling"
- Advantage: does not occupy floor space does not draw attention to it. Eliminates the possibility that someone would accidentally move the projector.
- Disadvantage: stricter installation requirements and conditions; care should be taken during the installation to ensure the projector has been securely mounted. Operation of the projector becomes inconvenient without the remote control.



#### Rear

Refer to Page 42 : "Rear"

- Advantage: the projector is completely hidden from plain view the projector can be easily operated
  - this setup usually offers better reduction of ambient noise.
- Disadvantage: requires an additional room for installation relatively higher costs for installation.



## Rear + Ceiling

Refer to Page 43 : "Rear + Ceiling"

- Advantage: the projector is completely hidden from plain view this setup usually offers better reduction of ambient noise.
- Disadvantage: requires an additional room for installation. Stricter installation requirements and conditions; care should be taken during the installation to ensure the projector has been securely mounted. Operation of the projector becomes inconvenient without the remote control.



### Rear with a Mirror

If you wish to have a rear projection setup with limited space to the rear of the projector, you can use a mirror to reflect the light path.

However, both the projector and the mirror have to be precisely located. If you are considering such installation, please contact your dealer for assistance.

Advantage: the projector is completely hidden from plain view this setup usually offers better reduction of ambient noise.

Disadvantage: requires an additional room for installation relatively higher costs for installation.



## Horizontal and vertical lens shift

In addition to using the adjustable feet to adjust projection angle, you can also use the Lens Shift function to adjust the projected picture.

#### Lens shift

- 1. Turn the **VERTICAL** adjuster fully counter clockwise. Then turn it clockwise and adjust the vertical lens position upward.
- 2. Turn the **HORIZONTAL** adjuster clockwise or counter clockwise to adjust the horizontal lens position.



#### Note for adjusting the lens shift

- 1. Adjust the lens shift / zoom / focus after 30 minutes since the projector was turned on.
- 2. Slight changes of the image position and/or focus may occur within 30 minutes after the projector was turned on. If the room temperature and humidity have changed after adjusting the lens shift / zoom / focus, readjust them as necessary.
- 3. Set the image size including the margin from the screen edge in anticipation of the changes after installation.
- 4. When adjusting the lens shift vertically, finish adjusting lens shift by moving the projected screen upward. If you finish adjusting the lens shift by moving the projected screen downward, the projected screen may be misaligned slightly downward over time.

## **Projector installation**

#### Note for adjusting the lens shift

- 1. You can feel the rotational resistance of the lens adjuster increasing if the lens shift exceed its range. Do not turn the lens adjuster further. If the lens adjuster is turned excessively, it runs idle by a clutch mechanism inside the adjuster. Although it makes a clicking sound, it is not a malfunction. Turn the lens adjuster to the opposite direction to adjust the lens shift.
- 2. Keep turning the lens adjuster while pressing it downward if the adjuster is turned to the opposite direction with a clicking sound and the lens shift does not work after the adjuster has been turned exceeding the lens shift range. You need to turn the lens adjuster for a while until the lens shift starts.
- 3. Do not turn the lens adjuster while pressing it downward out of the lens shift range. The lens shift may be locked because a clutch mechanism does not work. In such a case, keep turning the lens adjuster while pressing it downward like in step2.
- 4. When adjusting the lens shift to the maximal oblique direction, the periphery of the projected screen may be dark or a shadow may be cast.

Caution: Operate the lens adjusters gently as the lens may malfuction when subjected to shocks.



## Moving the lens vertically

The distance of vertical lens movement is 12% of the screen height directions (The offset range is about 63% to 75%). For instance, if you are using a  $2.15m \times 1.35m (100")$  screen, you will be able to move the picture upwards no more than 13.5cm(10%) and downwards no more than 2.7cm(2%) from default position. (please confirm the default position in Page 97).



This illustration shows normal vertical lens shift without the use of special specification lens or projector.

Note: Please make sure the center of lens is rectangular to the center of the screen.

## Moving the lens horizontally

The distance of horizontal lens movement is 2.5% of the screen width in both directions. For instance, if you are using a  $2.15m \times 1.35m (100")$  screen, you will be able to move the picture left or right by no more than 5.4cm.





This illustration shows normal horizontal lens shift without the use of special specification lens or projector.

Note: Please make sure the center of lens is rectangular to the center of the screen.

Note: Although the lens shift position can be moved beyond the specification, please use it in the position within the specification. When used at a position outside specifications, the corner of the screen becomes shade or color unevenness becomes large, and sufficient optical performance can not be obtained.

## **Connecting the projector**

## HDMI / MHL / DVI connection

Signals from picture source offer the best projection picture quality when sent through HDMI/DVI. Therefore, try to use input devices with HDMI/DVI output as the source of picture.



## **RGB** connection

Connect your PC or other devices with RGB output to the RGB input connectors (COMPUTER (in OSD we say VGA)) on the projector to be used as the source of picture input.



Connect a monitor to MONITOR OUT for through COMPUTER signal.



## **Projector installation**

## **HDBaseT connection**

HDBaseT is a technology to transmit image signal use LAN function, RS-232 function and IR function through a LAN cable.

Connect Cat5e/Cat6 cable from HDBaseT TX Box for HDBaseT signal received.

Video Signal - Connect it to HDBaseT output equipment (Such as high-definition TV source, Blu-ray Player....etc).

LAN Function - Key in the correct IP Address or the computer host name which is the same as the projector's host name, then you can remote control the projector by internet.

RS-232 Function: When the projector connects to HDBaseT by RS-232 communication, the projector can be controlled with RS-232 commands from the computer. For details of RS-232 commands, refer to RS-232 Communication command table.

Please turn On the "HDBase-T-IR/RS232/RJ45" in the OSD menu when using LAN function / RS232 function.

Note: RJ45 port and RS-232C port are disabled when "HDBaseT-IR/RS-232/RJ45" is turned On.

Use LAN cables of up to 100m long. Exceeding this length, the image will be deteriorated, and can experience malfunction on LAN transmission.



Note: HDBaseT BEST PRACTICE:

When In Doubt, Use Shielded Cat6 With Shielded Plugs.
 Use Proper Grounding.
 Isolate HDBaseT Cat Cables from Other Signal Types.

## **RJ45** connection

Connect it to your computer or Hub. Key in the correct IP Address or the computer host name which is the same as the projector's host name then you can remote control the projector by internet.



#### USB POWER (5V/1.5A) connection

Connect a USB cable for USB device. Support 5V/1.5A output as long as the projector is powered on.



## **Projector installation**

## **3D SYNC connection**

Connect 3D IR glasses receiver unit.



## **VIDEO** connection

Connect the composite cable from a video device.



## **SERVICE** connection

For service personnel only.



### **RS232C** connection

Connects to the computer by RS-232 communication, the projector can be controlled with RS-232 commands from the computer.



## **Projector installation**

## Audio IN (L/R) connection

Connect an audio source input (Available for video source).



## Audio OUT (Mini jack) connection

Connect to an audio amplifier device.



## Audio IN (Mini jack) connection

Connect an audio source input (Available for computer, BNC, DVI source).



## Powering the projector on or off

## Powering on the projector

Press  $\bigcirc$  on the projector or  $\blacksquare$  on the remote control to start up the projector.

The POWER LED will now flash green. The startup screen will display in approximately 10 seconds. The first time you use the projector, you can select your preferred language from the quick menu after the startup screen display.

If security lock is enabled, refer to Page 40 : "Setting an access password (security lock)".

## Connect the power cord to the projector



## Turning off the projector

Press  $\bigcirc$  on the projector or 0 on the remote control. The message "Power Off? /Press Power again" will appear on the screen. Press the button again while the message appears. When the projector has been turned off, the cooling fan will remain in operation for approximately 5 seconds.



## Selecting an input source

If more than one input device is connected, press **SOURCE** and press  $\blacktriangle \lor$  to scroll among devices. (Component is supported through the RGB to Component adapter.)

	Source		
	HDMI 1 HDMI 2 HDMI 3 / MHL VGA Composite Video HDBaseT		
Item Adjust 4/∕) Scroll ▲▼ Menu = Exit			

- HDMI 1: High-Definition Multimedia Interface compatible
- HDMI 2: High-Definition Multimedia Interface compatible
- HDMI 3 / MHL: High-Definition Multimedia Interface and Mobile High-Definition Link compatible
- VGA: Analog RGB DVD input YCbCr/ YPbPr, or HDTV input YPbPr via D-sub connector
- Composite Video: Traditional composite video
- HDBaseT: Digital Video trough the HDBaseT transmitter

Note: It is recommended to use a certified TX box for the HDBaseT function. Using a single HDBaseT CAT5e cable, the projector supports an HDBaseT connection distances to 100m/328ft.

## Setting an access password (security lock)

You can use the four (arrow) buttons to set a password and prevent unauthorized use of the projector. When enabled, the password must be entered after you power on the projector.

- Note: Keep the password in a safe place. Without the password, you will not be able to use the projector. If you lose the password, contact your dealer for information on clearing the password.
- 1. Press **MENU** to open the OSD menu.



2. Press  $\triangleleft \triangleright$  to move to the Settings 1 menu and press  $\triangleleft \lor$  to select Advanced 1.

image 🕅	Settings 1	Settings 2
	-	
Source		<b>↓/</b> ▶
Projection		P
Aspect Ratio		16:10
Keystone		<b>↓/</b> )
Digital Zoom		0
Audio		4/>
Advanced 1		
Advanced 2		<b>↓</b> /▶
4 Corner		<b>4!∕</b> ≯
Menu = Exit	Menu Select 🜗	Scroll 🔺 🔻

## **Projector installation**

- 3. Press ENTER / ► to enter the Advanced 1 sub menu. Press ▲▼ to select Security Lock.
- 4. Press  $\blacktriangleleft$  to enter and enable or disable security lock function.

image	Settings 1	Settings 2
	Settings 1 Advanced 1	
Language		English
Security Lock		Off
Splash Logo		Std.
Closed Captioning		Off
Keypad Lock		Off
3D Setting		<b>4</b> 1∕▶
Menu = Return		Scroll 🔺

A password dialog box automatically appears.

5. Press ▲▼◀▶ either on keypad or IR remote control for password entry. You can use any combination including the same arrow five times, but not less than five.

Password
Register Password Confirm Password
Menu = Exit

Press  $\blacktriangle \lor \blacklozenge \lor$  in any order to set the password. Push **MENU** button to exit the dialog box.

Password					
Register Password	*	*	*	*	*
Confirm Password	*	*	*	*	*
ОК					
Menu = Exit					

6. The password confirm menu appears when user presses the power-on key in case the Security Lock is enabled. Enter the password in the order you set it at step 5. In case you forget the password, please contact the service center.

The service center will validate the owner and help reset the password.



## **Choosing a location**

By default, the projector is configured for "Normal". If you choose to install your projector in other setups, be sure to adjust the screen orientation to achieve the correct projection mode.

😻 Image	Settings 1	Settings 2
Source		<b>4</b> 1/ <b>)</b>
Projection		P
Aspect Ratio		16:10
Keystone		<b>4</b> 1∕▶
Digital Zoom		0
Audio		41/>
Advanced 1		41/>
Advanced 2		41/>
4 Corner		4//▶
Menu = Exit	Menu Select 🜗	Scroll 🔺 🔻

## Ceiling

d Press  $M_{\text{LTV}} \rightarrow \text{Settings } 1 \rightarrow \text{Projection}$ , select Ceiling, the projector is now configured for "Ceiling".







## Rear

**Rear** Press  $\mathbf{NU} \rightarrow \mathbf{Settings} \ \mathbf{1} \rightarrow \mathbf{Projection}$ , select **Rear**, the projector is now configured for "Rear".

## **Correct Picture**





## Rear + Ceiling

Press **MENU**  $\rightarrow$  **Settings 1**  $\rightarrow$  **Projection**, select Rear + Ceiling, the projector is now configured for "Rear + Ceiling".



## Adjusting the projector's angle

Use the adjustable feet to change the angle of the projector in order to achieve the most suitable angle for projection on the screen.



## Adjusting the projector's zoom and focus

Zoom



## **Projector installation**

## Focus



## Note for adjusting the zoom/focus

- 1. Adjust the lens shift/zoom/focus after 30 minutes have passed since the projector turned on.
- 2. Slight changes of the image position and/or focus may occur within 30 minutes after the projector was turned on. If the room temperature and humidity have changed after adjusting the lens shift/zoom/focus, readjust them as necessary.
- 3. Set the image size including the margin from the screen edge in anticipation of the changes after installation.

## **Correcting keystone**

- 1. To adjust keystoning, press V▲◀► on the keypad or remote control and press V▲◀► to adjust Vertical or Horizontal Keystone. Refer to Fig 2 and 3.
- To adjust keystoning, press the MENU button on the keypad or remote control and choose Settings 1 → Keystone adjust and press VA <> to adjust Vertical and Horizontal Keystone. Refer to Fig 2 and 3.



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