

# LCT100

## Laser Ultra Short-Throw Projector User's Manual



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# <u>Usage Notice</u>

### Safety Information



The lightning flash with arrow head within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK. DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. DANGEROUS HIGH VOLTAGES ARE PRESENT INSIDE THE ENCLOSURE. DO NOT OPEN THE CABINET. REFER SERVICING TO QUALIFIED PERSONNEL ONI Y

#### Class B emissions limits

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

#### Important Safety Instruction

- 1. Do not block any ventilation openings. To ensure reliable operation of the projector and to protect from over heating, it is recommended to install the projector in a location that does not block ventilation. As an example, do not place the projector on a crowded coffee table, sofa, bed, etc. Do not put the projector in an enclosure such as a book case or a cabinet that restricts air flow.
- 2. Do not use the projector near water or moisture. To reduce the risk of fire and/or electric shock, do not expose the projector to rain or moisture.
- 3. Do not install near heat sources such as radiators, heaters, stoves or any other apparatus such as amplifiers that emits heat.
- 4. Clean only with dry cloth.
- 5. Only use attachments/accessories specified by the manufacturer.
- Do not use the unit if it has been physically damaged or abused. Physical damage/abuse would be (but not limited to):
  - Unit has been dropped.
  - Power supply cord or plug has been damaged.
  - Liquid has been spilled on to the projector.
  - Projector has been exposed to rain or moisture.
  - Something has fallen in the projector or something is loose inside.

Do not attempt to service the unit yourself. Opening or removing covers may expose you to dangerous voltages or other hazards.

- 7. Do not let objects or liquids enter the projector. They may touch dangerous voltage points and short out parts that could result in fire or electric shock.
- 8. See projector enclosure for safety related markings.
- 9. The unit should only be repaired by appropriate service personnel.



# **Usage Notice**

### Precautions



Please follow all warnings, precautions and maintenance as recommended in this user's guide.

- Warning Do not look into the projector's lens when the LED is on. The bright light may hurt your eyes.
- Warning To reduce the risk of fire or electric shock, do not expose this projector to rain or moisture.
- Warning Please do not open or disassemble the projector as this may cause electric shock.
- Warning Allowing the proper amount of space on the top, sides, and rear of the projector cabinet is critical for proper air circulation and cooling of the unit.

## **Usage Notice**

#### Do:

- Turn off and unplug the power plug from the AC outlet before cleaning the product.
- Use a soft dry cloth with mild detergent to clean the display housing.
- Disconnect the power plug from AC outlet if the product is not being used for a long period of time.

#### Do not:

- Block the slots and openings on the unit provided for ventilation.
- Use abrasive cleaners, waxes or solvents to clean the unit.
- Use under the following conditions:
  - In extremely hot, cold or humid environments.
    - Ensure that the ambient room temperature is within  $5^{\circ}C \sim 40^{\circ}C$ .
    - ▶ Relative humidity is 10% ~ 85%.
  - In areas susceptible to excessive dust and dirt.
  - Near any appliance generating a strong magnetic field.
  - In direct sunlight.

#### Viewing 3D projection using the 3D function IMPORTANT SAFETY INFORMATION. READ THE FOLLOWING WARNINGS BEFORE YOU OR YOUR CHILD USE THE 3D FUNCTION.

#### Warning

Children and teenagers may be more susceptible to health issues associated with viewing in 3D and should be closely supervised when viewing these images.

#### Photosensitive Seizure Warning and Other Health Risks

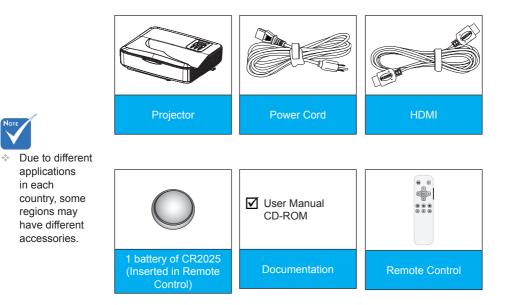
Some viewers may experience an epileptic seizure or stroke when exposed to certain flashing images or lights contained in certain Projector pictures or video games. If you suffer from, or have a family history of epilepsy or strokes, please consult with a medical specialist before using the 3D function.



- Even those without a personal or family history of epilepsy or stroke may have an undiagnosed condition that can cause photosensitive epileptic seizures.
- Pregnant women, the elderly, sufferers of serious medical conditions, those who are sleep deprived or under the influence of alcohol should avoid utilizing the unit's 3D functionality.
- If you experience any of the following symptoms, stop viewing 3D pictures immediately and consult a medical specialist:
   (1) altered vision; (2) light-headedness; (3) dizziness; (4) involuntary movements such as eye or muscle twitching; (5) confusion; (6) nausea; (7) loss of awareness; (8) convulsions; (9) cramps; and/ or (10) disorientation. Children and teenagers may be more likely than adults to experience these symptoms. Parents should monitor their children and ask whether they are experiencing these symptoms.
- Watching 3D projection may also cause motion sickness, perceptual after effects, disorientation, eye strain and decreased postural stability. It is recommended that users take frequent breaks to lessen the potential of these effects. If your eyes show signs of fatigue or dryness or if you have any of the above symptoms, immediately discontinue use of this device and do not resume using it for at least thirty minutes after the symptoms have subsided.
- Watching 3D projection while sitting too close to the screen for an extended period of time may damage your eyesight. The ideal viewing distance should be at least three times the screen height. It is recommended that the viewer's eyes are level with the screen.
- Watching 3D projection while wearing 3D glasses for an extended period of time may cause a headache or fatigue.
   If you experience a headache, fatigue or dizziness, stop viewing the 3D projection and rest.
- Do not use the 3D glasses for any other purpose than for watching 3D projection. Wearing the 3D glasses for any other purpose (as general spectacles, sunglasses, protective goggles, etc.) may be physically harmful to you and may weaken your eyesight.
- Viewing in 3D projection may cause disorientation for some viewers. Accordingly, DO NOT place your 3D PROJECTOR near open stairwells, cables, balconies, or other objects that can be tripped over, run into, knocked down, broken or fallen over.

### **Packaging Overview**

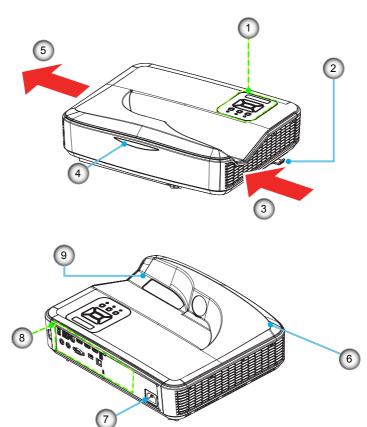
Unpack and inspect the box contents to ensure all parts listed below are in the box. If something is missing, please contact the nearest customer service center.





### **Product overview**

Main Unit





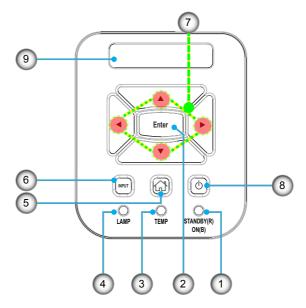
 The interface is subject to model's specifications.

- 1. Control Panel
- 2. Focus Ring
- 3. Ventilation (inlet)
- 4. Infrared Receiver
- 5. Ventilation (outlet)
- 6. Loudspeaker
- 7. Power Socket
- 8. Interface
- 9. Lens

English

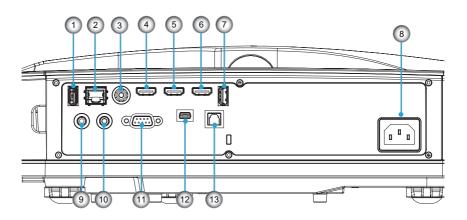
9

### **Control Panel**



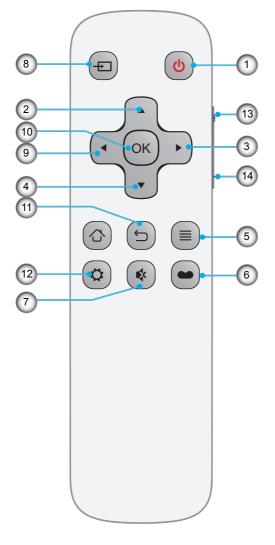
- 1. Power LED
- 2. Confirm
- 3. Temperature LED
- 4. Lamp LED
- 5. Home Page
- 6. Input
- 7. Four-direction Keys
- 8. Power/Standby Button
- 9. Infrared Receiver

### Input/Output Connections



- 1. USB 2.0 (optional)
- 2. RJ45 (optional)
- 3. Video in
- 4. HDMI 1 Input Connector
- 5. HDMI 2 Input Connector
- 6. HDMI 3 / MHL (optional)
- 7. USB 3.0 (optional)
- 8. Power Socket
- 9. Audio Input Connector (3.5 mm Mini Jack)
- 10. Audio Output Connector (3.5 mm Mini Jack)
- 11. Service Connector 1
- 12. Service Connector 2
- 13. Digital Audio Output

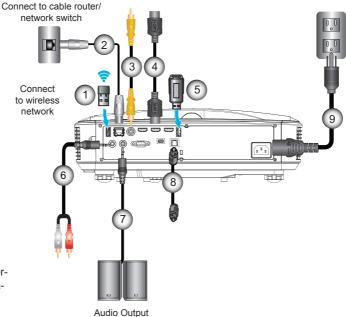
### **Remote Control**



- 1. Power
- 2. Up
- 3. Right
- 4. Down
- 5. Menu
- 6. 3D mode
- 7. Mute
- 8. Signal Source
- 9. Left
- 10. OK
- 11. Back
- 12. MEMC mode
- 13. Volume +
- 14. Volume -



### Connect to the projector Connect to computer/notebook

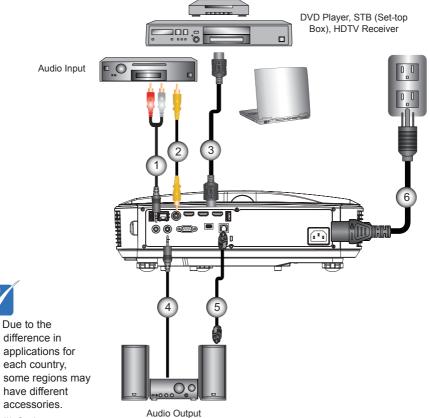




- Due to the difference in applications for each country, some regions may have different accessories.
- (\*) Options

1	Wifi Dongle/USB flash disc (optional)
2	
3	Composite Video Cable
4	
5	Wifi Dongle/USB flash disc (optional)
6	Audio Cable
7	Audio Output Cable
8	SPDIF Cable
9	Power Cord

### **Connect to Video Sources**



(\*) Options

Not

÷.

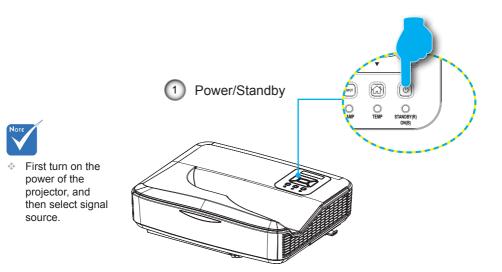
1Audio Cable
2Composite Video Cable
3HDMI Cable
4 Audio Input/Output Cable
5SPDIF Cable
6Power Cord



## Powering On/Off the Projector

### Powering On the Projector

- 1. Securely connect the power cord and signal cable. When connected, the POWER/STANDBY LED will turn Orange.
- Turn on the projector by pressing "U" button either on the projector or on the remote. At this moment, the POWER/ STANDBY LED will now turn Blue. ●
- Turn on the power (computer, laptop, video player, etc.) of the signal source that you want to display on the screen. The projector will automatically detect the signal source.
- In case of connecting multiple sources at the same time, you can press "Input" button on the control panel or the Signal Source button on the remote to switch input.



### Powering off the projector

- 1. Turn off the power of the projector by pressing the "**U**" button on remote control or on control panel, the cooling system will start to operate and meanwhile the device will shut down.
- Cooling fans will process heat dissipation after continually running about 4 seconds, power LED will turn red after flashing blue.

If you want to turn the projector back on, you have to wait until the projector has completed the cooling cycle and has entered standby mode. Once in standby mode, simply press "**U**" button to restart the projector.

3. Unplug the power cord from the power socket and the projector.

### Warning Indicator

When the warning indicator (as described below) turns on, the projector will automatically turn off:

- "LAMP" LED indicator is lit red.
- "TEMP" LED indicator flashes red.
- "TEMP" LED indicator is lit red, this indicates the projector has overheated. Under normal conditions, the projector can be switched back on.

Unplug the power cord from the projector, wait for 30 seconds and try again. If the warning indicator is still lit, please contact the nearby service center for help.



```
    Please contact
the nearest
service center
if the projector
appears
such failure
phenomenon.
```



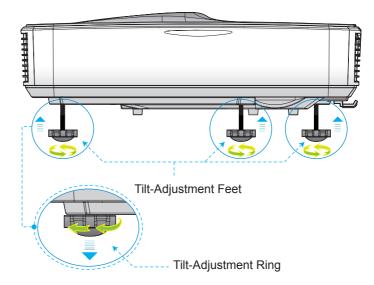


## Adjusting the Projected Image

### Adjusting the Projector's Height

The projector is equipped with elevator feet for adjusting the image height.

- 1. Find the adjustable foot that you want to apply to fix the height of the projector.
- Rotate the adjustable ring clockwise to raise the projector or counterclockwise to lower it. Repeat with the remaining feet as needed.



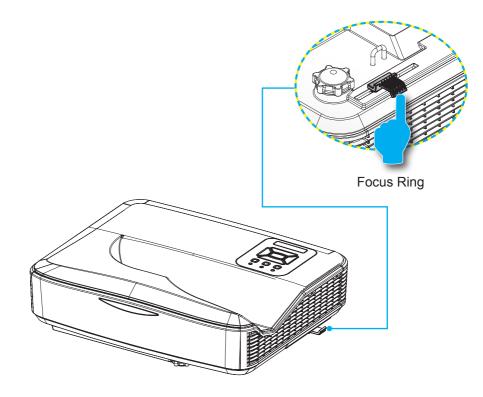




### Adjusting the focus of the projector

To focus on the image, slide the focus ring to the left or to the right until the image is clear.

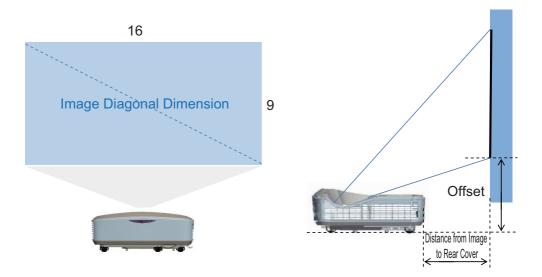
The focusing range of projector is 1.443 ~ 1.887 feet (0.437 ~ 0.572 meters).





# Adjust the best picture of projected image (diagonal)

▶ The focusing range of projector is 87 ~ 102 inches.



LO – Distance from Image to Rear Cover

Offset (table top) – Distance from Image bottom to projector bottom.

Model	Image Diagonal Dimension	L0 (mm)	Offset (de- fault) (mm)	Offset (+ 3% error) (mm)	Offset (- 3% error) (mm)
	87"	232.7	288.6	321.1	256.0
	90"	249.4	296.3	329.9	262.7
1080P	95"	277.3	309.3	344.8	273.8
	100"	305.2	322.2	359.6	284.9
	102"	316.3	327.4	365.5	289.3

This form is only for user reference

## **Control Panel & Remote Control**

### **Control Panel**

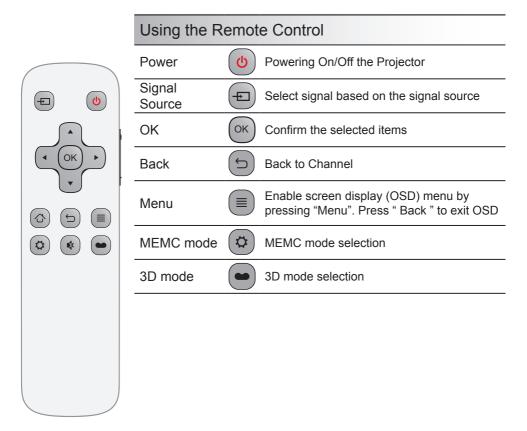


### Using the Control Panel

Power	Refer to "Powering On/Off the Projector" on Page 14-15
Enter	Press "Enter" to confirm your item selection.
Input	Press "Input" to choose an input signal source.
Home Page	Return to the home page.
Four-direction Keys	Select items or adjust the selected contents by using $\blacktriangle \checkmark \blacklozenge \triangleright$ .
Lamp LED	Refer to the LED indicator of the projector light source status.
Temp LED	Refer to the LED indicator of the projector tem- perature status.
Power/Standby LED	Refer to the LED indicator of the projector power status.



### **Remote Control**





## **OSD Menu Operation**

1. Connect the power cord, and press " power" key to start, you will see the startup screen as below:



- 2. To enter the OSD menu, press " Menu" button on the remote control.
- 3. When displaying OSD, use the ◀► button to select an item on the main menu, and press the " OK" button to enter the sub menu.
- 4. Use the ▲ ▼ button to select the item required to be adjusted in the sub menu, and press the " OK" button to see more settings.
- 5. To exit, press the " Back" button. The OSD menu will be closed, and the projector will automatically save the new settings.
  - A. Image Setting

Image settings like "Image Mode", "Zoom Mode", "Image Denoising", "Dynamic Noise Reduction", "Dynamic light source adjustment", and "Dynamic brightness adjustment" are available.

Image Mode includes seven modes including standard, bright, movie, game, computer, sports, and user. In the user mode, users can adjust settings by themselves, such as screen contrast, brightness, color, sharpness, saturation, light source, MEMC and Color temperature.





Picture		• •
Light Source		
	High	
Color Temperature		
Zoum Mode	16:9	
Image Noise Reduction	Weak	
tinzt 🚨 Change Fage	🚾 teer 🚳 fet	UTALI
	600 ten 600 tet	und e 6
nect Discos Page	600 ten 600 tet	und
	Noture	
Picture	••	
Picture Color Temperature	Noture	
Picture Color Temperature Zoom Mode Image Noise	Noture 169	
Picture Color Temperature Zoom Mode Image Noise Reduction MPEG Noise	Noture 16.9 Weak	

B. Audio Setting

Settings like "Horn switch" and "SPDIF output" are available.





C. 3D Setting

Settings like "3D automatic detection", "3D format conversion" and "Left and right exchange" are available.

3D Auto Right Now Detection Right Now 20 Conversion None I.R View Switch Off
Detection right Nove 30 Conversion None LR View Switch Off
LR View Switch Off
1445 🕄 Olivoji Pisje 😳 1546 103 241 1000
14Hrd 🖼 Change Page 👯 Edit 🚱 Edit 🖽
latinst 🖬 Change Page 🚥 Enter 🖽 Ent 📖
Interd 🖬 Charge Page 📖 Enter 105 Ent 0820

D. System Setting

Settings like "Vertical keystone correction", "Menu display time", "Ceiling installation", "High altitude mode" and "Language change" are available.

"Light Source Hours" - To display the total operation hours of projector.

"Test Picture" - The test picture can be used to adjust the screen for the initial installation of projector.

"Restore Default Values" - To restore default values.

V-Keyston	2	
Menu Time	Always	
Projection Mode	Frant	
Lamp Life		
High Altitude	Off	
Test Patten		
Setting		
Setting Projection Made	e e e	
Projection	Front 37	
Projection Mode		
Projection Mode Lamp Life	37	
Projection Mode Lamp Life High Altitude	37	



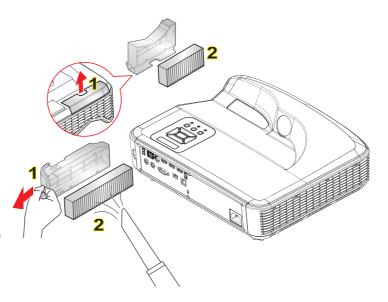
# Appendices

### Install and Clean Filter Net

If you use the projector in a dusty environment, we recommend that you clean dust filter once or clean it more frequently every 500-hour operation.



- Dust filter should be applied in a dusty environment.
- If the filter net is installed, proper maintenance operation can prevent overheating and faulures in the projector.
- The dust filter is optional.
- The specific interfaces are selected in terms of the specifications of types.



#### O Cleaning Procedures of Air Filter Net:

- 1. Turn off the power of the projector by pressing the "U" button.
- 2. Unplug the power cord.
- 3. Pull out the dust filter, as shown in the illustration. 1
- 4. Carefully remove the dust filter. Then clean or change the filter. 2
- To install the filter, reverse the previous steps.
- 5. Turn on the projector after the replacement of dust filter.



# Appendices

### **Regulation & Safety Notices**

This appendix lists the general notices of your projector.

### FCC notice

This device has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

#### Notice: Shielded cables

All connections to other computing devices must be made using shielded cables to maintain compliance with FCC regulations.

#### **Caution**

Changes or modifications not expressly approved by the manufacturer could void the user's authority, which is granted by the Federal Communications Commission, to operate this projector.



#### **Operation conditions**

This device complies with CCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

#### Notice: Canadian users

This Class B digital apparatus complies with Canadian ICES-003.

#### <u>Remarque à l'intention des utilisateurs</u> canadiens

Cet appareil numerique de la classe B est conforme a la norme NMB-003 du Canada.

#### **Declaration of Conformity for EU countries**

- EMC Directive 2004/108/EC (including amendments)
- Low Voltage Directive 2006/95/EC
- R & TTE Directive 1999/5/EC (if product has RF function)

### **Disposal instructions**



Do not throw this electronic device into the trash when discarding. To minimize pollution and ensure utmost protection of the global environment, please recycle it.



# Appendices

### Safety notice





- This projector is a Class 2 laser device that conforms with IEC 60825-1:2007 and CFR 1040.10 and 1040.11.
- Class 2 laser product, Do Not Stare Into Beam.
- This projector has built-in Class 4 laser module. Disassembly or modification is very dangerous and should never be attempted.
- Any operation or adjustment not specifically instructed by the user's guide creates the risk of hazardous laser radiation exposure.
- Do not open or disassemble the projector as this may cause damage by the exposure of laser radiation.
- Do not stare into beam when the projector is on. The bright light may result in permanent eye damage.
- Without following the control, adjustment or operation procedure may cause damage by the exposure of laser radiation.
- Adequate instructions for assembly, operation, and maintenance, including clear warnings concerning precautions to avoid possible exposure to laser and collateral radiation in excess of the accessible emission limits in Class 2.

English

# Appendices

## Trademarks

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