

OMMC Laser Theater

For Home Installation

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JUNO.018.3803 V1.0

Please read carefully before using

1. Packaging Overview

The packing box of this machine contains the following items. Please check carefully whether the following items are complete. If there are any missing items, please contact your local distributor.



Main unit × 1



Product user manual × 1



Remote control × 1



Power cord × 1



AAA Battery × 1 pair



Lifting screws × 4

	Prompt Information
①	Please note that product accessories may be increased or decreased due to product upgrades; the appearance of remote control shall be subject to the real object.
②	Due to differences in product application in each country (region), the product accessories may vary in some countries (regions)

2. Product Introduction

2.1 Product Specification

Product Specification Parameters				
Product Model	L4K1	Movement System	Android Intelligent Movement	
Display	Laser light source +DLP technology	Network connection	Wired network + wireless network	
Resolution	3840×2160	Method of remote	Bluetooth	
Recommended Display Size	100"	Built-in speakers	10W×2	
Power Supply	AC 100-240V, 3.6A, 50-60Hz	Implementation standard	Q20541230-8.154-2019	
Port	LAN ×1 COAX ×1 AUDIO OUT×1 VGA AUDIO IN ×1 VGA INPUT×1 USB×2 HDMI ×2	Environment	Run	Net weight of main unit
				9.7Kg
				Temperature 0~35°C
			Storage	Relative humidity 20%~80%
				Temperature - 20~50°C
			Storage	Relative humidity +20%~80%
 This device contains a radio transmission module with model approval code: CMIIT ID: 2019AP1584				

2.2 Appearance

2.2.1 Main Unit Structure

Figs. 1 to 4 Structure



Fig. 1 45° left top



Fig. 2 Front top



Fig. 3 Rear view



Fig. 4 30° bottom view

Main Unit Structure	
No.	Name
①	Ventilation mesh
②	Voice emitting hole of built-in speaker
③	Infrared protective sensor
④	Light emitting hole
⑤	Power key and indicator
⑥	Ventilation mesh
⑦	Port
⑧	Power input
⑨	Anti-theft lock hole
⑩	Height adjusting Kickstand
⑪	Lifting screw hole

2.2.2 Ports

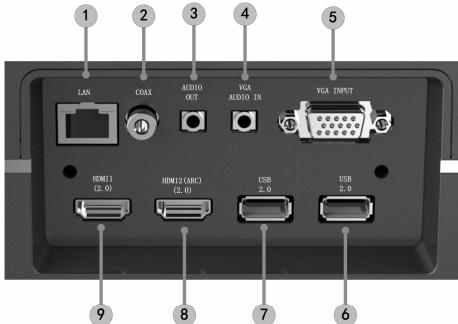


Fig. 5 Port

 As the starting current of USB mobile hard disk is big, when the file in USB mobile hard disk is playing in the device, please do not plug another USB mobile hard disk into/out other USB interfaces, so as to avoid damaging the device or causing other malfunctions.

Port		
No.	Name	Function
①	LAN	For wired network connections
②	COAX	The "coaxial output" mainly provides the transmission of digital audio signals and can be connected to an external sound system
③	AUDIO OUT	Provide output of analog audio signal (L/R)
④	VGA AUDIO IN	For connection with output of analog audio in video playback equipment (e.g L/R, Audioout)
⑤	VGA INPUT	For connection with computers or other devices with VGA ports (input ports)
⑥	USB 2.0	For connection with USB devices, such as flash disk, mobile hard disk drive, etc
⑦	USB 2.0	For connection with USB devices, such as flash disk, mobile hard disk drive, etc
⑧	HDMI2(ARC) (2.0)	For connection with external devices with HDMI ports (ARC)
⑨	HDMI1 (2.0)	For connection with external devices with HDMI ports

2.2.3 Remote Control

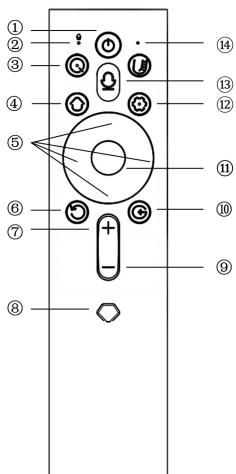


Fig 6 Remote Control

Keys and Functions		
No.	Name	Function
①	Power key	Standby switch
②	Reserved key	Function not defined
③	Reserved key	Function not defined
④	Home key	Short press this key to call up the main scene; long press this key to call up the list recently used
⑤	Up/Down /Left/Right	When a menu is displayed, it is menu Up/Down/Left/Right; When the media plays without menu, the function defined by the system is executed
⑥	Return key	Return to the previous menu
⑦	Volume + key	Volume up
⑧	Reserved key	Function not defined
⑨	Volume -	Volume down
⑩	Program key	Open the selection menu of program
⑪	OK key	Enter the page of selection
⑫	Menu key	Short press this key to open the setting menu in program and local media; under any scene, long press this key to call up all setting menus
⑬	Reserved key	Function not defined
⑭	Indicator	Indicating the response status of the key

Matching of remote control

Bluetooth remote control is adopted in this device, the remote control can be used after being matched with the device. When starting up the device for the first time and the main unit is not matched with the remote control, please match by the following the steps as below.

- a. Press the "ON/OFF" key of main unit to start up the device;
- b. Carry the remote control towards the device and hold it within 50 cm right ahead the main unit, press the "Menu" key and "Volume -"key at the same time and hold for more than three seconds;
- c. Remote control indicator will flash quickly and the remote control will enter the matching mode;
- d. When the remote control indicator lights up for long and the screen will display as Fig 7, loosen the keys and wait for connection;
- e. The indicator of remoter control will go out, and the tip of "Match succeed" is displayed on the screen, that means the matching is completed;
- f. The remote control can be used to control the device only when the matching is completed. In case the matching is failed, it is required to make the matching again.

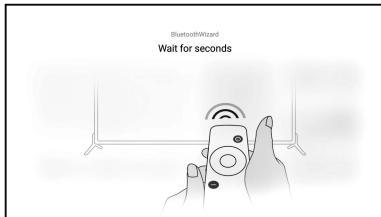


Fig 7 Matching

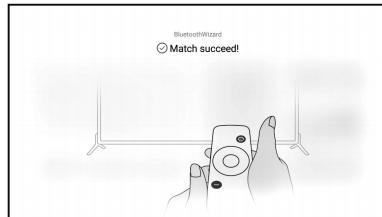


Fig 8 Matched

3. Installation and Commissioning

3.1 Installation

According to different application scenarios, the machine supports four installation methods: desktop front projection, desktop back projection, lifting front projection and lifting back projection.

3.1.1 Installation Method

The display mode (front desktop, rear lifting, front lifting and rear desktop) needs to be changed and set from the OSD menu due to different applications.

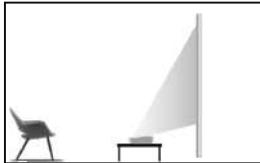


Fig. 9 Desktop Front Projection



Fig. 10 Desktop Rear Projection

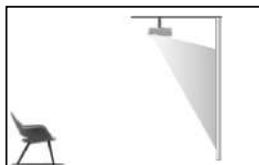


Fig. 11 Lifting Front

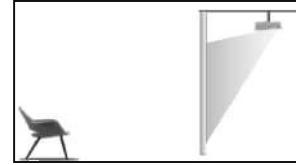


Fig. 12 Lifting Rear

3.1.2 Screen Size and Installation Distance

The distance between projector and screen is proportionate to display size, the closer the projector and the screen, the smaller the display size. Conversely, the bigger the display size. Please read screen user manual carefully before installing, Laser Theater is precise optical device, it is recommended to be installed by authorized professional technicians. Please follow the below steps to install.

- a. Confirm display size and projector position: confirm display size and projector position according to screen size and installation environment.
- b. Image position: put projector onto TV bench, adjust focusing to make clear the image, move projector to confirm image size(same as screen display area) and position.
- c. Projector position: Mark projector position, easy to recover if projector moving is required.
- d. Screen position: keep image stable, mark screen position with the help of screen user manual, move away the projector.
- e. Screen installation: install screen according to screen user manual.
- f. Projector position: put the projector back to the place which we marked.
- g. Adjust image: start projector, adjust focusing, move projector position, make sure the image covers all screen surface.

Screen Size and Display Distance			Unit: mm
Screen Size	Display Width	Display Height	Distance between Projector and Screen①
80"	1771	996	102
90"	1992	1121	148
100"	2214	1245	195
110"	2435	1370	241

	<ol style="list-style-type: none"> 1. Viewing distance is recommended to be 1.5 times than screen diagonal length, it will influence eye vision if watching screen in near distance for long time. 2. It is recommended to use screen which has the same display ratio as the projector. 3. The above data is for reference only. There may be deviations, please note.
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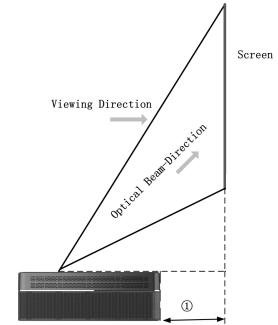


Fig. 13 Installation distance

3.2 Picture Adjustment

3.2.1 Adjust Image Position

This section takes the installation method of desktop front projection as an example to explain the picture adjustment for users' reference.

- a. Connect the power supply and start the main unit;
- b. According to the picture display, adjust the size and position of the picture by moving the main unit forward, backward, left and right or rotating the height adjustment kickstand.

3.2.2 Focus Adjustment

- a. Call up the electric focusing screen through the user menu: long press the "Menu" key of the remote control → select **Display Setting** → select the **Electric Focusing**;
- b. Use Up arrow and Down arrow to make rough adjustment: Use the "Up/Down" key in the remote control to select the "Up/Down" arrow→press the "OK"key time after time to adjust the image into approximately clear (judging by observing the definition in the center of the image);

- c. Afterwards, use the Left arrow and Right arrow to make fine adjustment: Use the "Left/Right" key in the remote control to select the "Left/Right" arrow→press the "OK"key time after time to adjust the image definition into the optimum;
- d. In case the definition still cannot reach the ideal status, it is required to repeat the step b and c.



Fig. 14 Focus adjusting image

4. Operating Instructions

4.1 Basic Settings Menu

- a. Under the program source and local media, press the "Menu" key to open the "Settings" menu, and press the "Up/Down" key to cycle through the adjustment items of the first-level menu, and press the "OK" key or the "Right" key to enter the next-level menu. When any parameter adjustment option is selected, press the "OK" key to confirm the selection or enter for adjustment, and then use the arrow key and the "OK" key to adjust;
- b. Under any scene, long press the "Menu" key to call up the "All Settings" menu, and press the "Up/Down" key to select various menus, and then press the "OK" key to enter;
- c. The parameters such as sound, image, network, system, etc. can be set in the "Settings" and "All Settings" menus;
- d. After completing the required operations, press the "return" key to return to the previous menu interface step by step, or press the "Menu" key to exit the menu directly.

4.2 System Home Page

- a. Press the "Home" key to enter the "Main Scene" interface;
- b. There are icons such as Setting, Source, System manager, Media etc. The home menu, can be configured according to specific requirements.

	Prompt Information
①	Some options in the user's operation interface are not selectable, displayed or hidden automatically in different models, signal sources or states
②	The user operation interface can be updated through software upgrade. If there is any difference between the user manual and the final product, the actual display shall prevail

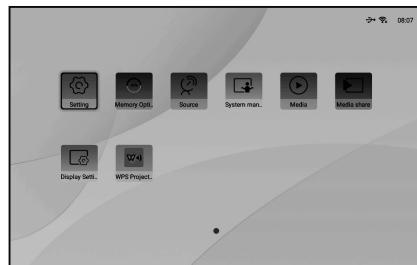


Fig. 15 System Home Page

5. Safety Precautions

This machine contains a laser module. For your safety, please follow the following tips.

	Precautions
①	Do not look directly at the bright light emitted by this machine, otherwise it may cause eye injury
②	Do not open or disassemble the machine, which may cause damage due to exposure to laser radiation
③	Do not use some optical instruments (such as magnifying glass and microscope for experiments) to observe the laser output, otherwise eye injury may be caused
④	Wear professional laser protection glasses when there is a need to have direct contact with bright light
⑤	Prompt Information: The product is evaluated to be Class 3B according to IEC 60825-1: 2014.
⑥	For your safety, please select the right viewing direction

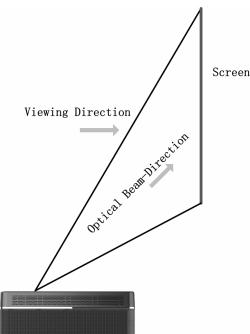


Fig. 16 Viewing direction

 Precautions	
①	As with any bright light source, do not stare into the beam, R2 IEC 62471-5:2015
②	When the machine is moved from a low temperature environment to a high temperature environment, condensation may occur inside the machine. Please do not use it immediately
③	In case of any abnormality or malfunction, such as no image, no sound, smoking or unusual odor, please disconnect the power supply immediately, unplug and contact our after-sales service personnel to open the machine for inspection
④	Do not block the air vent and install the machine in a well-ventilated place to prevent the machine from overheating
⑤	Do not use flammable materials such as books and cardboard to block the light beam emitted by the machine. Flammable materials may melt or ignite objects or even cause fire when exposed to the light beam for a long time
⑥	Do not place the machine directly in areas with poor ventilation such as carpets, cushions, bookshelves or closets.
⑦	To facilitate ventilation, please ensure that the distance between the ventilation opening of the machine and the wall is greater than 30cm
⑧	Do not place flammable spray or other flammable substances beside this machine
⑨	If there is a gas leak, please do not touch or switch the wall socket. Open the window immediately for ventilation
⑩	Do not touch or wipe the lens with hands or ordinary cleaning cloth. To remove dust from the lens, please use an ear syringe ball
⑪	When installing the machine by hoisting, professional technicians shall use corresponding professional tools for installation. Improper installation may cause the machine to fall, thus causing personal injury or damage to the machine
⑫	Please contact your dealer for inspection, adjustment or maintenance. Non-professional operation may cause electric shock or damage to the machine

6. Recycling

	It indicates that packaging materials can be recycled, please do not discard them at will
	It indicates that the environmental protection service life of the product is 10 years under normal working and using conditions, and the product can be used safely within the environmental protection service life
	In order to protect the environment, used batteries and products can be recycled by regular dealers or manufacturers. Please do not discard them at will

7. Warranty Service

If the product fails during use, or if you have any comments or suggestions, please contact an authorized dealer or seller. Regarding the after-sales service including installation, service and maintenance, please refer to the local country (region) laws and the local authorized dealer's policy.

FCC Statement

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

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

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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.

RF Exposure Information

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.