



CHiQ Laser Theatre

For Education/Corporation Installation

Sichuan Changhong Electric Co., Ltd.

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Unified national customer service hotline: 4008-111-666 4006-111-666

Changhong community forum: <http://bbs.changhong.com>

Changhong official website: [Http://cn.changhong.com](http://cn.changhong.com)

JUN0.018.2614 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 (with AAA battery 1 pair)




Power cord×1



HDMI cable ×1




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 Parameters

| Product Specification Parameters | | | | | | |
|---|--|--|-------------------------|---------|----------------------------------|----------|
| Product Model | B5U | | Movement System | | Android Intelligent Movement | |
| Display Technology | Laser light source +DLP technology | | Network connection | | Wired network + wireless network | |
| Resolution | 3840×2160 | | Method of remote | | Bluetooth | |
| Best Visible Picture Size | 100" | | Built-in speakers | | 10W×2 | |
| Power Supply | AC 220V, 50Hz | | Implementation standard | | Q20541230-8. 154-2018 | |
| Port | VGA input ×1 Digital audio output ×1 USB2.0×2 Network port ×1 VGA audio input×1 Audio output×1 HDMI input ×2 | | Body size (approx.) | | 485mm×325mm×135mm | |
| | | | Net weight of main unit | | 9. 7Kg | |
| | | | Environment | Run | Temperature | 0~35℃ |
| | | | | | Relative humidity | 20%~80% |
| | | | | Storage | Temperature | - 20~50℃ |
| | | | | | Relative humidity | 20%~80% |
|  | This device contains a radio transmission module with model approval code: CMIIT ID: 2018AP0094. | | | | | |

2. 2 Appearance

2. 2. 1 Main Unit Structure

Figs. 1 to 4 below show the structure of the unit



Fig. 1 45° left top



Fig. 2 Front top



Fig. 3 Rear view

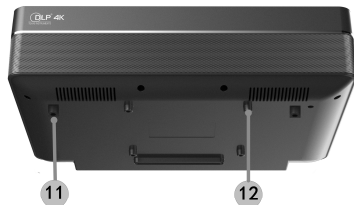


Fig. 4 30° bottom view

| 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 | Ventilation mesh |
| ⑪ | Height adjusting Kickstand |
| ⑫ | Lifting screw hole |

2. 2. 2 Ports

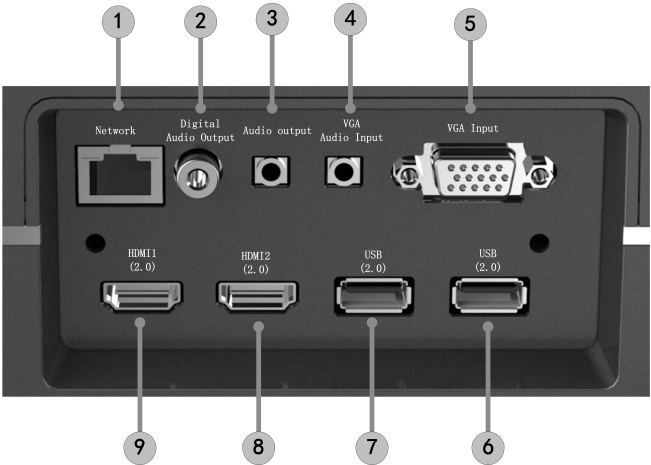


Fig. 5 Port



As the starting current of USB mobile hard disk is big, when the file in USB mobile hard disk is played back in the device, please do not plug and unplug USB mobile hard disk in other USB interface, so as to avoid damaging the device or causing other malfunctions.

| Port | | |
|------|----------------------|---|
| No. | Name | Function |
| ① | Network | For wired network connections |
| ② | Digital audio output | The "coaxial output" mainly provides the transmission of digital audio signals and can be connected to an external sound system |
| ③ | Audio output | Provide output of analog audio signal (L/R) |
| ④ | VGA audio Input | 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 | HDMI 2 (2. 0) | For connection with external devices with HDMI ports (ARC) |
| ⑨ | HDMI 1 (2. 0) | For connection with external devices with HDMI ports |

2. 2. 3 Remote Control

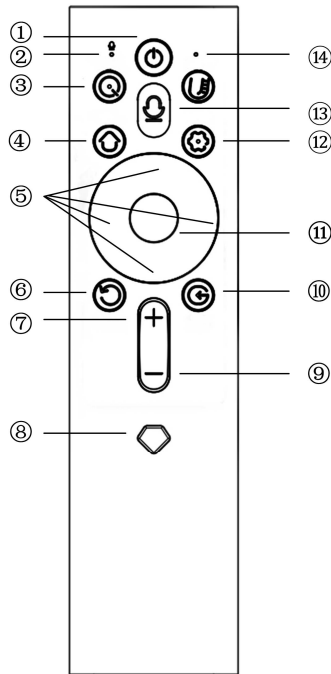


Fig 6 Remote Control

| Keys and Functions | | |
|--------------------|---------------------|---|
| No. | Name | Function |
| ① | Power key | Standby state switch |
| ② | Microphone | Microphone hole of remote control (Note: do not block this hole) |
| ③ | Shortcut key | Press this key to enter the shortcut menu |
| 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 + | Volume up |
| ⑧ | VIP key | Press this key to enter video VIP interface |
| ⑨ | Volume - | Volume down |
| ⑩ | Program key | Open the selection menu of program |
| ⑪ | OK key | Enter the interface 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 | Voice key | Press this key to open the voice function, the red indicator in the remote control will light up and the microphone is opened, and follow the tips in the device to make the voice input. |
| ⑭ | Indicator | Indicating the response status of the key |

Pairing of remote control

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

- Press the “ON/OFF”key of main unit to start up the device;
- 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;
- Remote control indicator will flash quickly and the remote control will enter the pairing mode;
- When the remote control indicator lights up for long and the screen will display as Fig 7, loosen the keys and wait for connection.
- The indicator of remoter control will go out, and the tip of “Paired” is displayed in the screen, that means the pairing is completed;
- The remote control can be used to control the device only when the pairing is completed. In case the pairing is failed, it is required to make the pairing again.

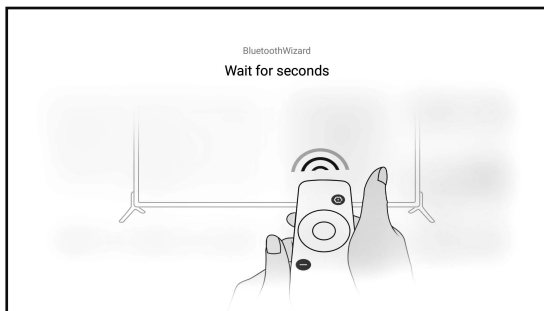


Fig 7 In pairing

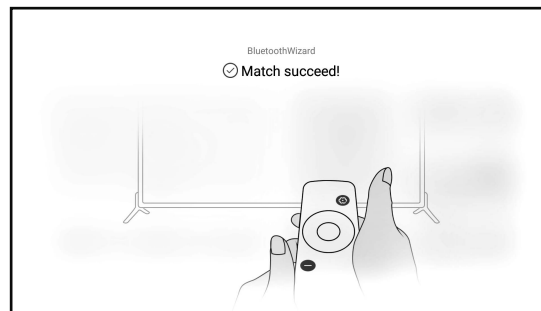


Fig 8 Paired

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

When changing the installation mode, the display mode (front desktop, rear lifting, front lifting and rear desktop) needs to be changed and set from the OSD menu.

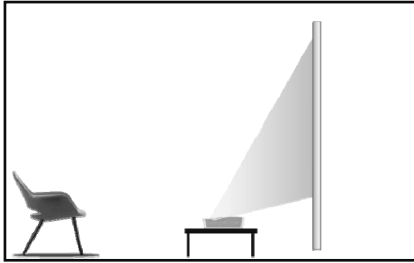


Fig. 9 Desktop Front Projection

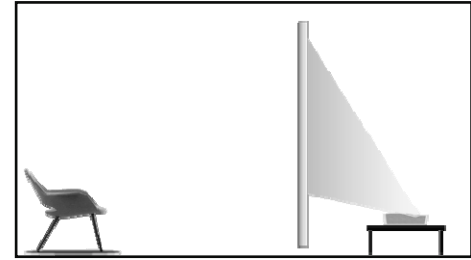


Fig. 10 Desktop Rear Projection

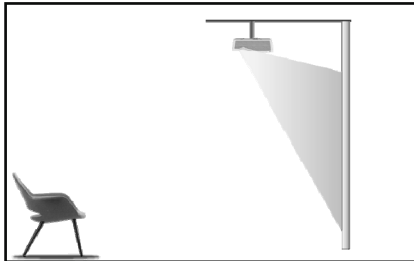


Fig. 11 Lifting Front

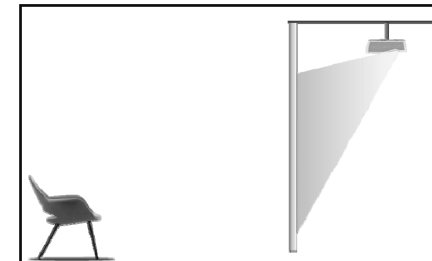


Fig. 12 Lifting Rear

3. 1. 2 Screen Size and Installation Distance

The distance between the main unit and the screen is proportional to the image size. The closer the main unit is to the screen, the smaller the image size will be; vice versa. The following is a brief description of the relationship between screen size and installation distance, with the desktop front projection as an example. Please refer to the following data to determine the approximate installation distance.

| Screen size and installation distance | | | | Unit: mm |
|---------------------------------------|-----------------------|------------------------|----------------------|----------------------------------|
| Screen Size | Width of Display Area | Height of Display Area | Projection distance① | Height from main unit to screen② |
| 80" | 1771 | 996 | 102 | 199 |
| 90" | 1992 | 1121 | 148 | 230 |
| 100" | 2214 | 1245 | 195 | 261 |
| 110" | 2435 | 1370 | 241 | 293 |

| Prompt Information | | | |
|--------------------|--|---|--|
| ① | "①" in Fig. 14 is the distance between the back end of the main unit and the screen | ② | "②" in Fig. 14 is the height of the top of the main unit relative to the bottom of the screen |
| ③ | It is suggested that the viewing distance should be more than 1.5 times of the diagonal length of the screen. Long-term close watching of the screen may affect vision | ④ | The above data are for users' reference only. Please be noted that there may be deviations in actual use |

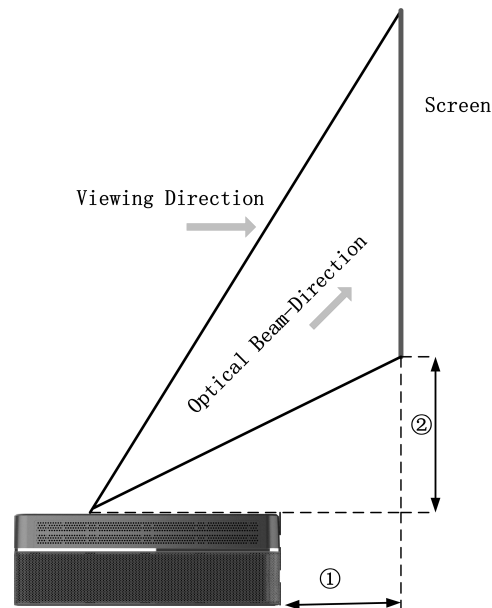


Fig. 13 Installation distance

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.

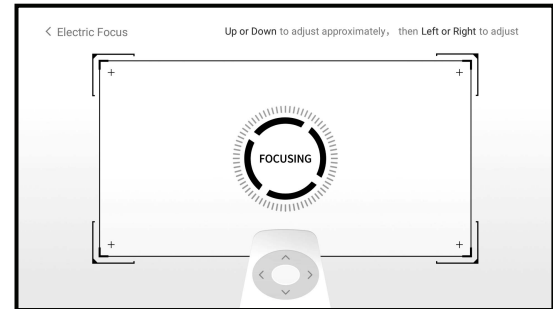


Fig. 14 Focus adjusting image

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. Short press the "Home" key to enter the "Main Scene" interface;
- b. Long press the "Home" key to call up the "List used recently";
- c. There are submenus such as setting, memory optimism, source, TV manager, media, media share etc under the home menu, which 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 |

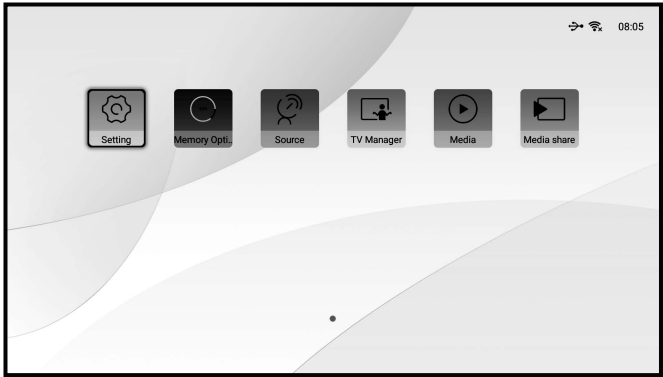



Fig. 15 System Home Page

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 | Appropriate instructions for assembly, operation and maintenance, including preventive measures and clear warnings to avoid possible exposure to laser light and accompanying excessive radiation reaching Class 1 emission limits |
| ⑥ | For your safety, please select the right viewing direction |

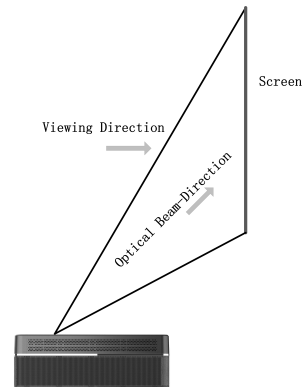






Fig. 16 Viewing direction

Prompt Information:

- Conforming to GB7247.1-2012 safety standards;
- Laser wavelength: 445~465 nm; Output optical power of this machine: $\leq 3.0\text{W}$; Pulse width: about 1.5ms;
- Conforming to Class 1 laser equipment conforming to IEC 60825-1: 2014 and IEC 62471-5:2015 Low Risk Group 1.

| | |
|---|---|
|  | <h2 style="text-align: center;">Precautions</h2> |
| ① | Do not place the machine near heat sources such as direct sunlight, radiator, fire or stove |
| 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 wipe the machine with solvents such as volatile oil and thinner, which may deteriorate the casing or damage the painted surface |
| ⑨ | Do not place flammable spray or other flammable substances beside this machine |
| ⑩ | If there is a gas leak, please do not touch or switch the wall socket. Open the window immediately for ventilation |
| ⑪ | 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 |
| ⑫ | 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 |
| ⑬ | Please contact your dealer or Changhong After-sales Service Center for inspection, adjustment or maintenance. Non-professional operation may cause electric shock or damage to the machine |

Note: The reason why the content of toxic and harmful substances or elements in the above-mentioned product components exceeds the limit specified in the standard is that there is no fully mature substitute for the time being due to the limitation of current industry technology and technological level

| | |
|---|---|
|  | 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

Dear user,

Thank you for your favor to Changhong products! Please fill in the warranty card timely and accurately to ensure that you can get better service after purchasing the product. In the future use process, if there is product failure or you have any comments/suggestions, please contact us through the following methods:

a. Call the national unified customer service hotline:

4008-111-666/4006-111-666

b. Send fax to: 0816-2410433

c. Our website: <http://www.changhong.com>

D. Send E-mail to: service@changhong.com

We provide the following service contents of after-sales three guarantees service pursuant to the *Consumer Rights Protection Law* and the *Product Quality Law*:

a. This product is guaranteed for one year from the date of purchase.

In order to safeguard your legitimate rights and interests, if you install it yourself, please call Changhong National Unified Customer Service Hotline within 5 days.

- ① Within 7 days of purchase, you can choose to return, replace or repair the product if there is electrical performance failure;
 - ② Within 15 days of purchase, you can choose to replace or repair the product if there is electrical performance failure;
 - ③ After purchasing for more than 15 days, we will provide you with maintenance service if the product has electrical performance failure.
- b. During the three-guarantee period, if there is any fault caused by the product quality issues, you can enjoy the free maintenance service with the completed service warranty card and purchase invoice.

Please paste the purchase invoice here

-
- c. Please properly keep the service warranty card and the purchase invoice as the warranty certificate.
 - d. The warranty will automatically become invalid once the service warranty card and the purchase invoice are altered.
 - e. Matters not covered shall be implemented with reference to relevant national laws and regulations or industry regulations.

Under any of the following circumstances, three guarantees will not be applicable, and you will be provided with paid maintenance services:

- a. Exceeding the validity period of three guarantees.
- b. Damage caused by failure to use, maintain and keep the product in accordance with the *Product Operating Manual*.
- c. Damage caused by dismantling by maintenance personnel not authorized by Changhong.
- d. There is no valid three guarantees certificate and valid invoice (unless the product can be proved that it is within the validity period of three guarantees)

For those who lost the invoices, the warranty period shall be calculated with the starting date according to the delivery date of the complete machine barcode plus three months).

- e. Altering the three-guarantee certificate without authorization.
- f. The product model or number of the three guarantees certificate does not conform to the actual goods.
- g. Other circumstances not falling into the category of "Three Guarantees" as stipulated in the national laws and regulations.

In case of any changes in the list above, the newly formulated relevant regulations of the company or the relevant laws and regulations updated by the state shall prevail.

Warranty Card

Date of Installation: MM/DD/YY

| | | | |
|--|--|--|--|
| User name | | Tel | |
| Address | | | |
| Machine model | | Shopping mall | |
| Invoicing date | | Invoice No. | |
| Body barcode | | | |
| Service Status: <input type="checkbox"/> Screen Installation and Commissioning <input type="checkbox"/> Mount Installation and Commissioning <input type="checkbox"/> Separate Onsite Debugging | | | |
| Please confirm the wall properties for screen installation: <input type="checkbox"/> Solid Brick Wall <input type="checkbox"/> Hollow Wall Brick <input type="checkbox"/> Wooden Wall <input type="checkbox"/> Other | | | |
| The appearance of the machine and the electrical performance are in good condition after installation: <input type="checkbox"/> normal <input type="checkbox"/> abnormal | | | |
| User Satisfaction Survey: <input type="checkbox"/> Satisfied <input type="checkbox"/> Not Satisfied | | | |
| User signature: | | | |
| Name of Authorized Installation Unit (Seal) | | National unified customer service hotline: | |
| | | 4008-111-666 | |
| Signature of installation personnel: | | 4006-111-666 | |
| MM DD YY | | | |

The first copy is retained by customer (warranty)

Warranty Card

Date of Installation: MM/DD/YY

| | | | |
|--|--|--|--|
| User name | | Tel | |
| Address | | | |
| Machine model | | Shopping mall | |
| Invoicing date | | Invoice No. | |
| Body barcode | | | |
| Service Status: <input type="checkbox"/> Screen Installation and Commissioning <input type="checkbox"/> Mount Installation and Commissioning <input type="checkbox"/> Separate Onsite Debugging | | | |
| Please confirm the wall properties for screen installation: <input type="checkbox"/> Solid Brick Wall <input type="checkbox"/> Hollow Wall Brick <input type="checkbox"/> Wooden Wall <input type="checkbox"/> Other | | | |
| The appearance of the machine and the electrical performance are in good condition after installation: <input type="checkbox"/> normal <input type="checkbox"/> abnormal | | | |
| User Satisfaction Survey: <input type="checkbox"/> Satisfied <input type="checkbox"/> Not Satisfied | | | |
| User signature: | | | |
| Name of Authorized Installation Unit (Seal) | | National unified customer service hotline: | |
| | | 4008-111-666 | |
| Signature of installation personnel: | | 4006-111-666 | |
| MM DD YY | | | |

Second stub (service unit deposit)

