

# User Manual for Interactive Flat Panel Display (IFPD) 65-Inch IR Touch Screen

(Model No. PL-Q2-65)



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# Manual

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# 1 Product Overview

## 1.1 Introduction

The infrared touch screen, all-in-one PC for education or corporate conferences is a convenient and new type of human-computer interaction device. It combines the advantages of touching, computer, multimedia, audio, network, industrial design, mechanical manufacturing, as well as smooth touch performance. It can be used to check the information and of great help with the HMI (Human-Machine Interfaces) experience.

It's a product in lightweight aluminum frame and safe corner design, integrating HD display technology, built-in Android 9.0 system OPS (Open Pluggable Specification) function, 20-point touch, writable whiteboard, one-button power-on, automatic channel switching, one-button child lock and quick shifting between Android and Windows system during operation.

## 1.2 Features

- Support dual operation system: Android and Windows 
  - (1) DTV, ATV cable TV viewing function
  - (2) USB multimedia file playback function
  - (3) Android 9.0 embedded system
- Touch function
  - (1) Standard 20 points touch operation & 20 persons' simultaneous writing;
  - (2) Image zoom in/out, reduction rotation or screen shortcut;
  - (3) Floating shortcut menu, with the functions of Back, Menu operation, Task preview, Channel switching, Volume tuning, etc. and,
  - (5) Optional: single (finger) point / 20 (-finger)-point touch.

- Other functions

- (1) One-key child lock, U disk lock function, automatically identify the signal source and switch channels;
- (2) Sleep timing, shutdown memory channel function, multiple signal source selection;
- (3) Dual operation systems: seamlessly switch between Android and Windows systems
- (4) Remote control with hot keys such as Alt+F4, Alt+Tab, Space, Enter, Windows, etc. Power on and one-click to start interactive whiteboard software; Page up/down for PPTs; One button to lock/unlock the physical button of the whole machine and one button to realize the black screen;
- (5) Click on any source on the main page of the system to preview the image function of the channel;
- (6) Front button: one button switch computer; signal source; menu; ECO model; home page; volume tuning. Front VGA, AUDIO, HDMI, USB2.0, USB3.0, Touch USB interface, easy to use;
- (7) Wireless WiFi, WLAN, you can browse the web and play online video;
- (8) The floating shortcut menu can be added by the user to the application function, and the display can be freely moved at any position;
- (9) Dual stream decoding of 3D content;
- (10) Optional: Photosensitive module; automatic adjustment of screen brightness in different bright environments;
- (11) Optional: embedded high-definition photo or video function, and
- (12) OPS (Open Pluggable Specification) computer to realize Windows system teaching function;

## 2 Technical Parameters

### 2.1 System Design

|                      |  |
|----------------------|--|
| VGA input/output     | Connection with external/internal computers  |
| HDMI input/output    | Connection with internal/external computer   |
| Touch function       | Infrared touch technology, anti-glare interference   |
| Network features     | Wide-area, local area network, audio/video and writing synchronous high-speed transmission |
| PC Video decoding    | 1080P (Full HD), MPEG. H.264, etc  |
| Structure design     | Aluminum alloy frame corner, block design, front button, front port, front speaker         |
| System               | PC, touch one, one button switch   |
| Controlling function | Infrared remote control PC,, touch menu/touch control platform                             |

### 2.2 LCD Panel Parameters

|                  |  |
|------------------|--|
| Panel type       | LED panel (a-Si TFT-LCD WLED backlight)      |
| Size             | 65 inch (16:9)                               |
| Display area     | 1429(W)*804(H)mm                             |
| Max. resolution  | 3840 × 2160P                                 |
| Brightness       | 350 cd/m <sup>2</sup>                        |
| Contract         | 3000:1                                       |
| Response time    | < 7ms  |
| No. Of colors    | 8bit,1.07B                                   |
| Refresh          | 60 Hz  |
| Angle of viewing | Level ≥178 degrees Vertical ≥178 degrees     |
| Glass protection | 4mm full tempered high explosion-proof glass |
| Life time        | Max. 60000 hours                             |

### 2.3 Touchscreen Parameters

|                             |  |                          |                         |
|-----------------------------|--|--------------------------|-------------------------|
| Touchscreen Technology      | Infrared touch screen  |                          |                         |
| Response Time               | <7ms   |                          |                         |
| Touch Points                | Standard 20 points touch, (single touch is optional )  |                          |                         |
| Touch effective recognition | > 1.5mm  | Touch data output method | Coordinate output       |
| Scanning frequency          | 120Hz  | Scanning Precision       | 32768×32768             |
| Communication Portal        | Full speed USB 2.0/3.0   | Theoretical clicks       | ≥5000 Million times     |
| Firmware                    | Can be upgraded  | Drive                    | No drive, plug and play |
| Working current / voltage   | 180Ma/DC+5V±5%   |                          |                         |
| Anti-light interference     | Work normally in the light of (strong) sunlight, incandescent lamps, or fluorescent lamps, etc |                          |                         |
| Surface hardness            | Physical tempering, Mohs 7 explosion-proof glass   |                          |                         |
| Operating system            | XP/Win 7/Win 8/Win 10/CE/Mac/Android/Linux   |                          |                         |

### 2.4 Electrical Performance

|         |                     |               |         |
|---------|---------------------|---------------|---------|
| Input   | 110-240V AC 50/60Hz | Standby       | < 0.5 W |
| Monitor | < 150 W             | Android       | < 150 W |
| Windows | <220W               | Speaker power | 8 Ω 5W  |

### 2.5 Working Environment

|                     |              |
|---------------------|--------------|
| Working temperature | -10°C-60°C   |
| Working humidity    | 10% - 80%    |
| Storage temperature | -20°C - 65°C |
| Storage humidity    | 5% - 90%     |

## 2.6 AIO Configuration (Touch monitor without parameters)

| Computer configuration (OPS solution) |   |  |   |
|---------------------------------------|---|--|---|
| Program                               | Standard version  | Deluxe version                                   | Flagship version  |
| Chip                                  | Intel Chip  |  |   |
| CPU                                   | Industrial motherboard<br>Celeron quad core<br>J1900  | Industrial motherboard<br>Intel i5               | CVT motherboard<br>CT972  |
| Memory                                | RAM: DDR3 / DDR4 (optional)<br>SSD:128G/256G  |  |   |
| Graphics                              | Intel Core Graphics<br>Intel HD Graphics 2500   | Intel Core Graphics<br>Intel HD<br>Graphics 2500 | Intel Core Graphics<br>Intel HD Graphics<br>4000/Optional discrete graphics |
| Port                                  | USB*4, I RS232*4, RJ45*1, network interface*1, MIC input*1, HDMI output*1, 1 VGA output,<br>1 LINE output, WiFi 802.11b/g/n |  |   |
| OS                                    | Default Windows 10 Professional operating system (not activated due to the copyrights)                                      |  |   |

## 2.7 Parameters - Education IFPD (optional)

|                  |                                  |
|------------------|----------------------------------|
| CPU              | CORTEX A53*2 quad core 1.3GHz    |
| OS               | Android 9.0 embedded system      |
| Memory           | DDR3 2G/4G, DDR3/DDR4 (optional) |
| Storage          | 32GB                             |
| External storage | SD card max 128GB                |

## 2.8 Parameters - Business IFPD (optional)

|                  |                                 |
|------------------|---------------------------------|
| CPU              | CORTEX A53*4 quad core 1.4GHz   |
| OS               | Android 9.0 embedded system     |
| Memory           | DDR3 - 4GB                      |
| Storage          | 32GB                            |
| External storage | SD card maximum expansion 256GB |

## 3 Interfaces / Accessory

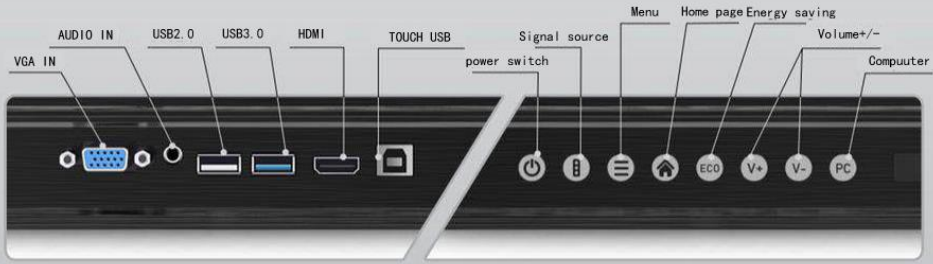
### 3.1 Touch screen - Android AIO interfaces

|               |   |            |   |
|---------------|---|------------|---|
| Ethernet RJ45 | 2 | VGA output | 1 |
| VGA input     | 1 | AV input   | 1 |
| YPbPr input   | 1 | Earphone   | 1 |
| AV output     | 1 | SPDIF      | 1 |
| RS232         | 1 | HDMI input | 2 |
| USB port      | 2 | RF-IN      | 1 |
| USB touch     | 1 | MIC IN     | 1 |
| TF Card slot  | 1 |            |   |

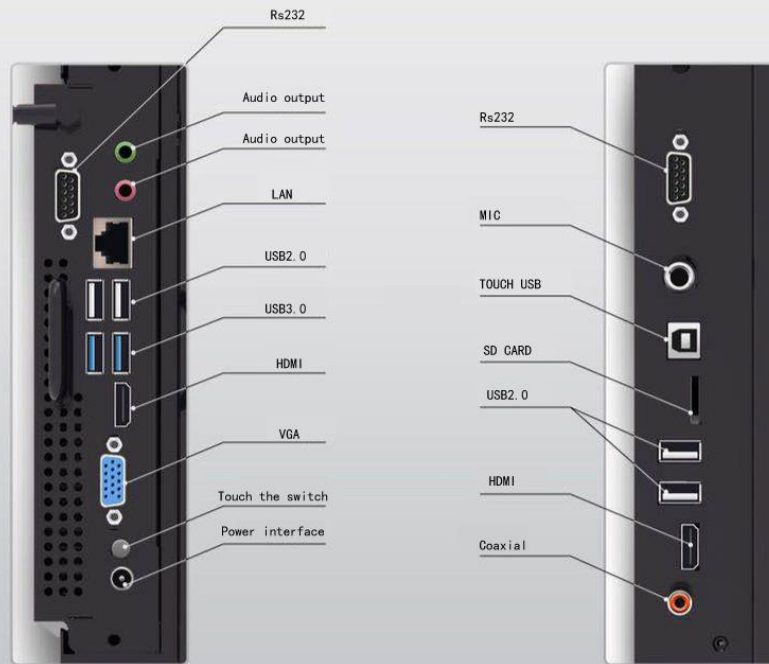
### 3.2 Windows AIO interfaces

|                           |                 |                  |     |
|---------------------------|-----------------|------------------|-----|
| DC port                   | 0               | RJ45             | 1   |
| VGA output (15 pin D-Sub) | 1               | HDMI             | 1   |
| USB                       | 6(3*2.0, 3*3.0) | Headphone /MIC   | 1/1 |
| WIFI                      | 1               | PWM power button | 1   |

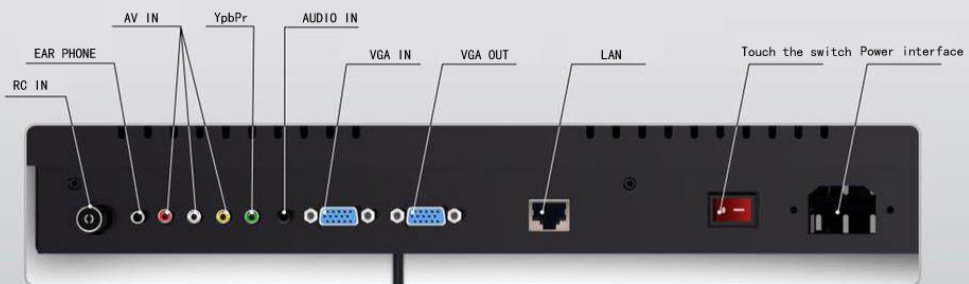




Main view interface parameters



Left view interface parameters



Bottom view interface parameters

Note: Different motherboards may have different interface ports, which are subject to the actual product.

### 3.3 Accessory

|                    |  |
|--------------------|--|
| Specification      | 1 pc   |
| AC power cable     | 1 pc   |
| Power adapter      | 1 pc   |
| Wall mount/bracket | 1 pc   |
| Warranty           | 1 pc   |
| Certificate        | 1 pc   |
| HDMI/USB cable     | 1 pc for each (default 1.5 meter for touch monitor only) |
| WIFI               | 1 pc(Only for Windows/Android)                           |



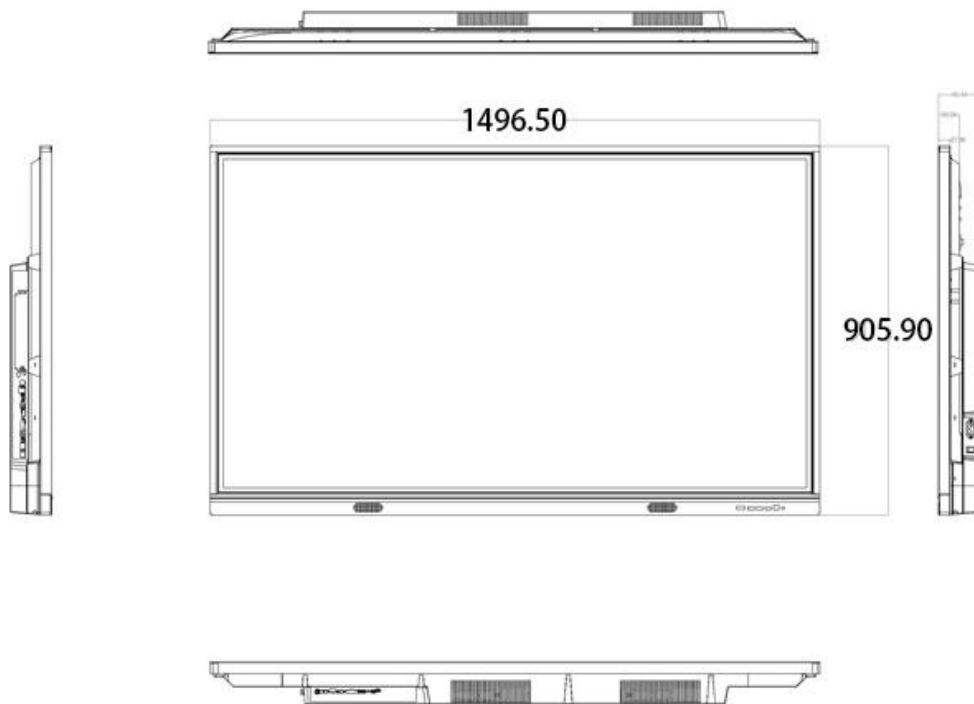
## 4 Structure/Drawing

### 4.1 Physical Dimension

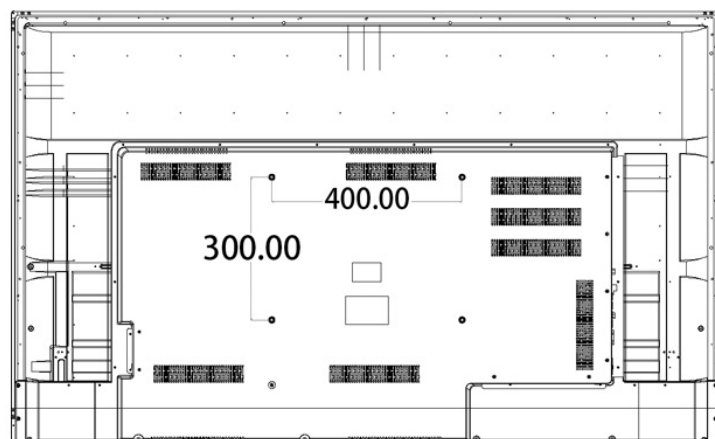
|                           |  |
|---------------------------|--|
| Screen                    | 65 inch  |
| Display area              | 1429 * 804 mm (16:9)                           |
| Machine dimension (W×H×T) | 1497*906*100mm                                 |
| Packing dimension (W×H×T) | 1580*185*1025mm                                |
| Stand                     | Wall mount default (N.W 1.82 kg),Stand options |
| Wall mount holes (L×W)    | 600×400 mm                                     |
| Wall mount screws         | M8   |
| N.W                       | 46.4 KG  |
| G.W                       | 58.3 KG  |

4.2 Drawings

Front side



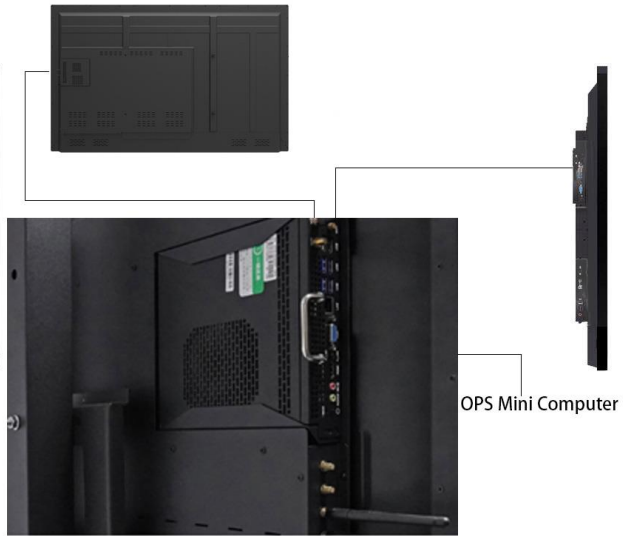
Back side



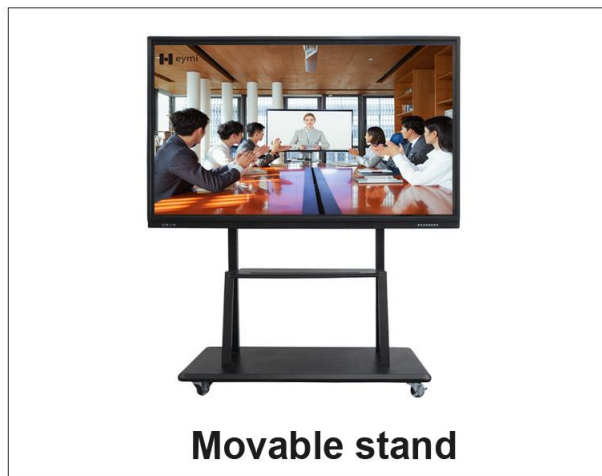
## 5.1 Application scenarios



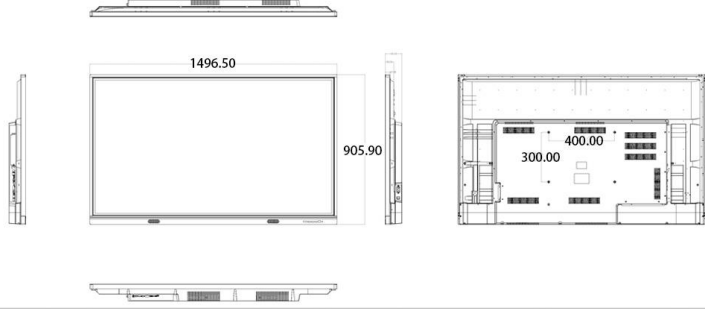

Classic pure black style.  
Black panel and back cover, black frame

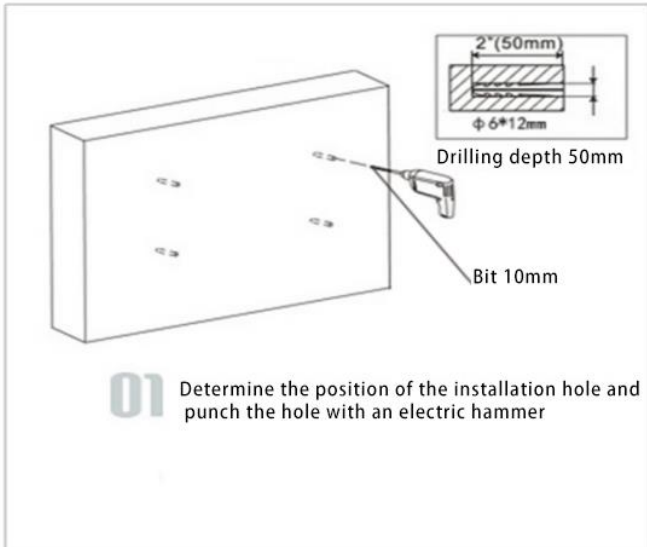


## 5.2 Mounting bracket

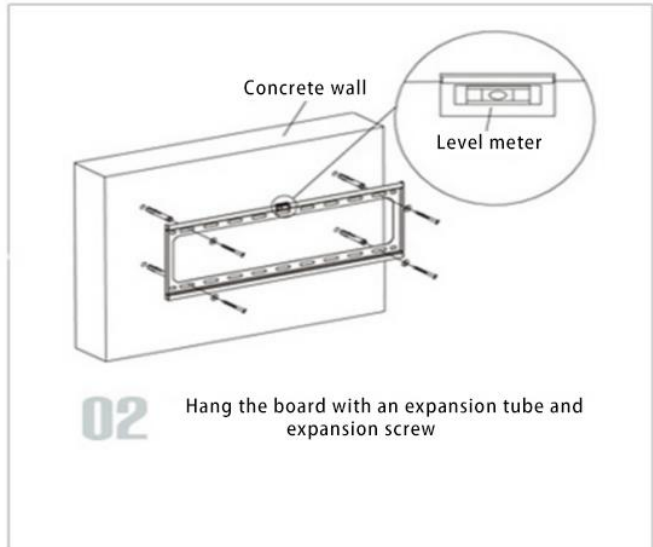


### 5.3 Packing & Instruction

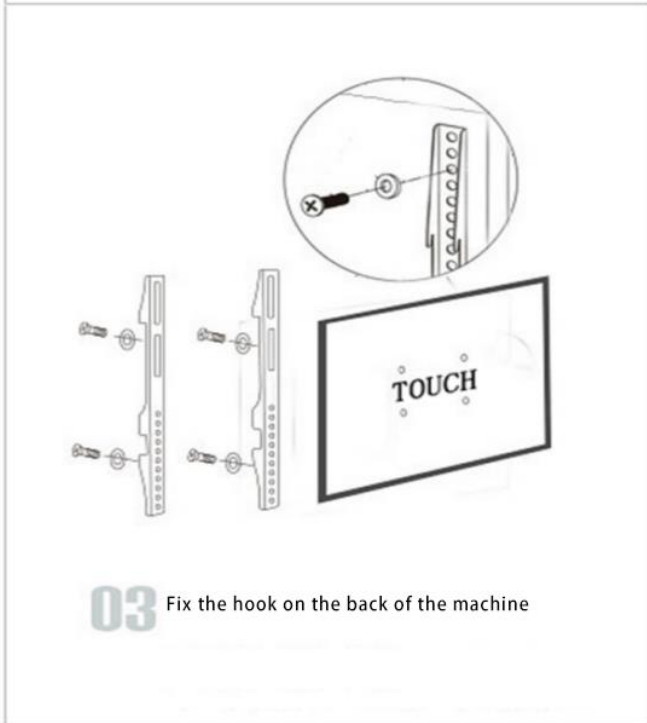
|                            |  |
|----------------------------|--|
| Machine size drawing       |  |
| Outer packing size drawing |  |



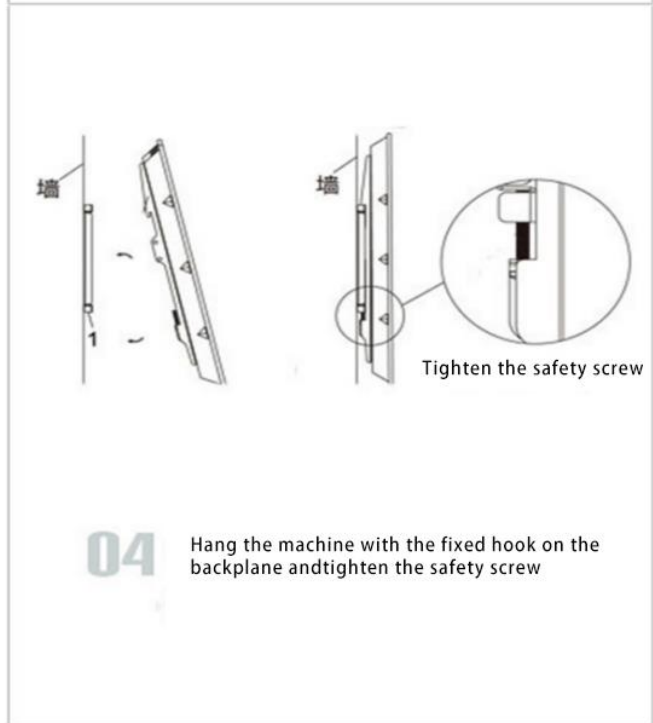
**01** Determine the position of the installation hole and punch the hole with an electric hammer



**02** Hang the board with an expansion tube and expansion screw



**03** Fix the hook on the back of the machine



**04** Hang the machine with the fixed hook on the backplane and tighten the safety screw

## 6 Warning

- 
- This device belongs to precision electronic equipment. Its front protection level is IP55; the overall protection level is IPX3. Water splashing rain should be avoided;
  - Do not place this equipment in a damp environment. Outdoor equipment needs to be equipped with a moisture-proof cover. Once it rains or dews, it needs to be protected. The wet environment will accelerate the aging of any of the electronic component, which may cause damage to the parts and reduce the life span;
  - The recommended ambient temperature for this product is -10°C - 60°C and humidity is 10%-80%.