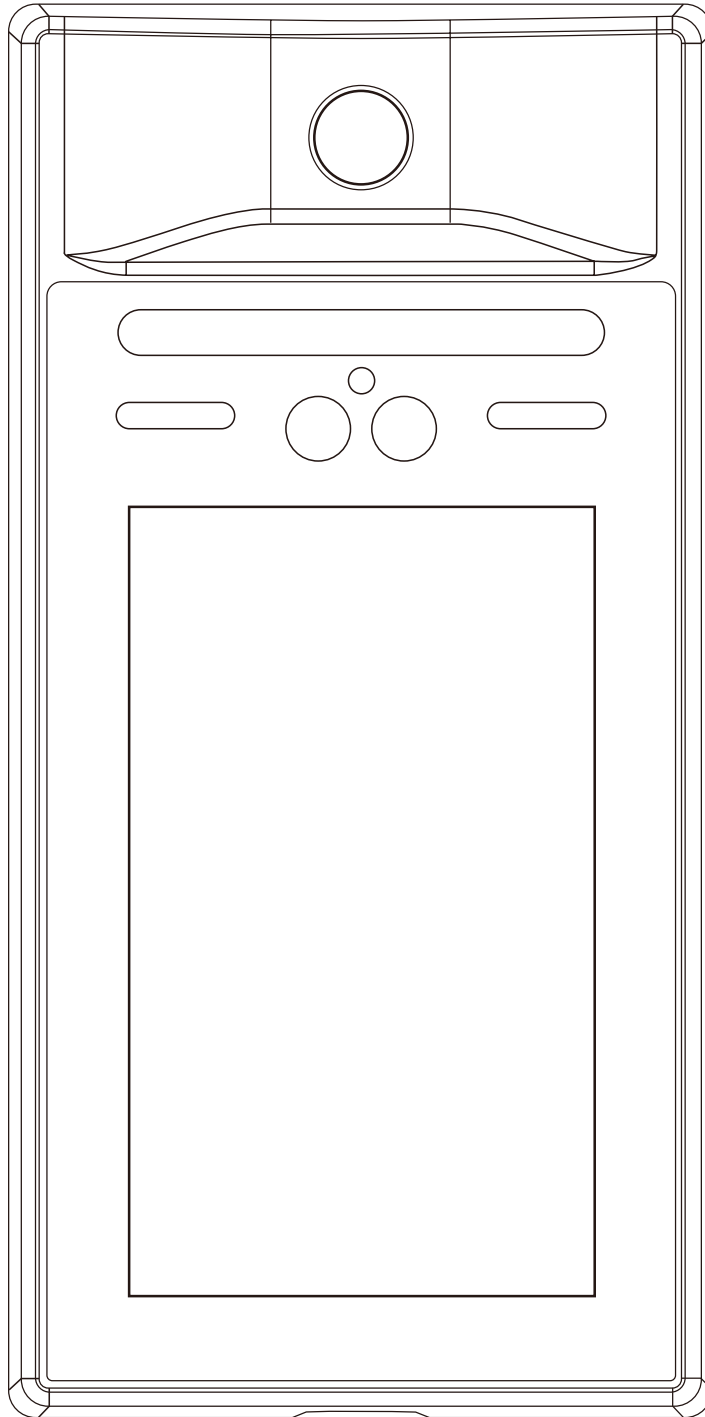# Face Recognition Scanner

## User's manual

Please read this manual before switching the unit on.
Important safety information inside.

# Contents                                          Page

The Face Recognition Scanner supports 3 usage modes, and is equipped with different platform software for more powerful functions.
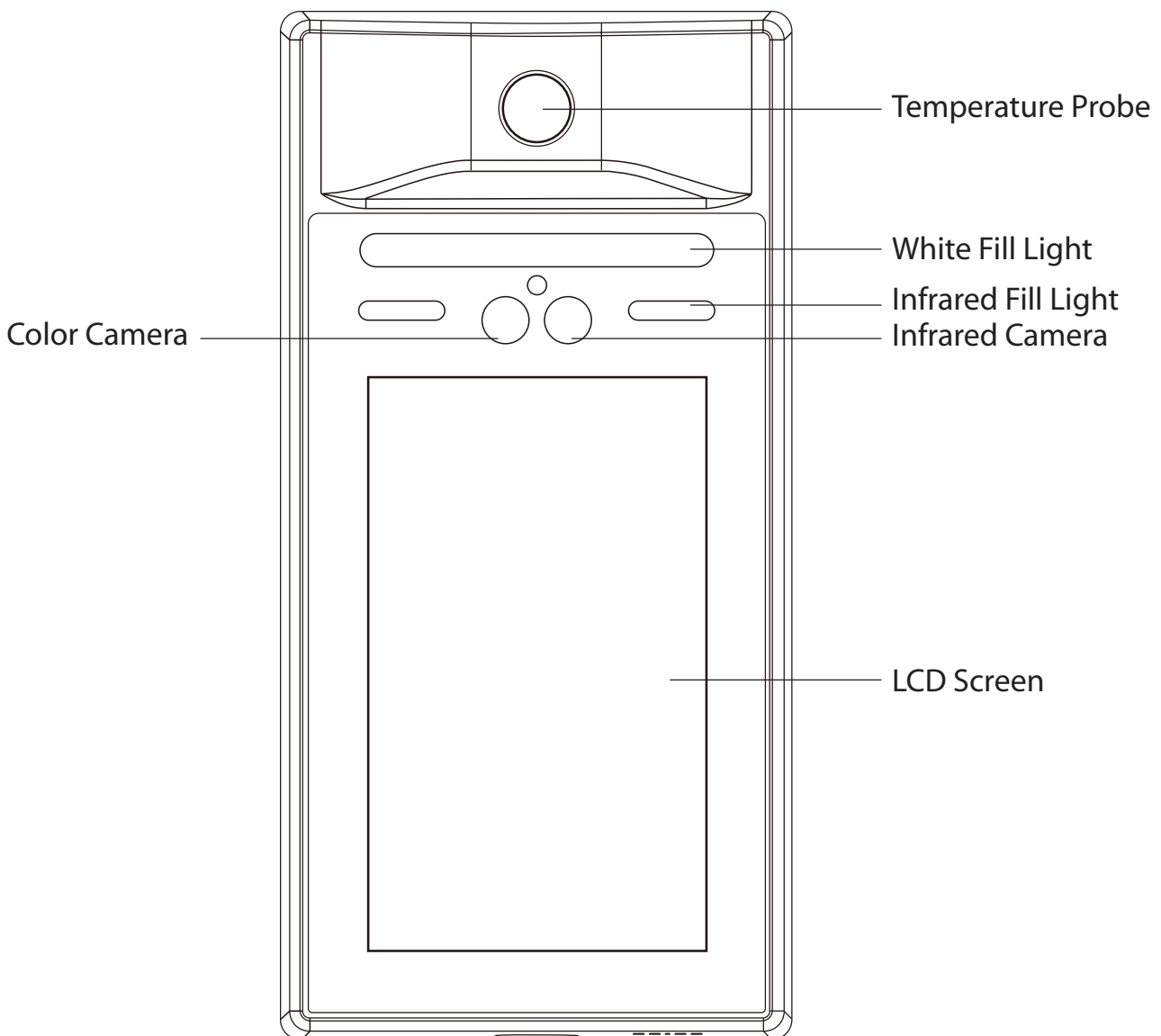
1. Access Control & Attendance for Company | Equipped with Attendance & Access Control Management Platform Software for Company.

2. Access Control & Attendance for School | Equipped with Attendance & Access Control Management Platform for School.

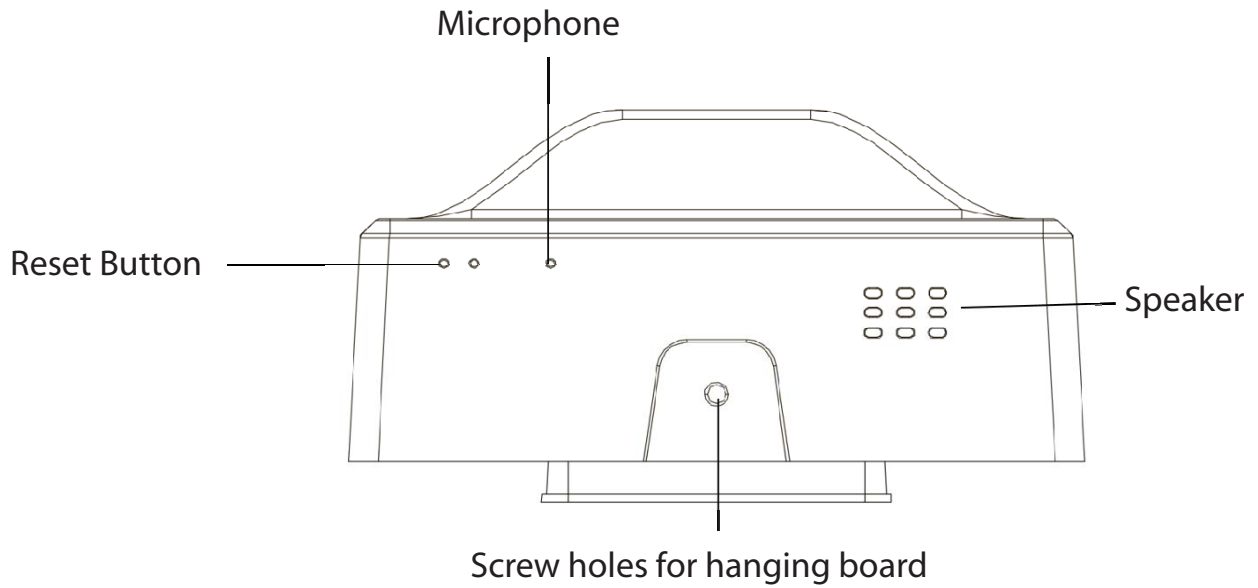3. Quick Screening | Used for quick temperature screening.

Notice:

• During installation and use, all electrical safety regulations of the country and the region of use must be strictly observed.

• When wiring, disassembling and other operations, please be sure to disconnect the power supply, do not operate with electricity.

• If the device emits smoke, produces unusual odors, or makes noises, immediately turn off the power and unplug it, and contact the dealer or service center in time.

• If the equipment is not working properly, please contact customer service, do not disassemble or modify the equipment in any way. (The company does not assume any responsibility for problems caused by unauthorized modification or maintenance)

• Do not drop objects on the device or vibrate the device vigorously to keep the device away from magnetic interference.

• Avoid installing the device where the surface vibrates or is vulnerable to shock.

• Avoid installing the device at the air outlet of the air conditioner or in a place with large airflow fluctuations.

• Try to ensure that the equipment is installed vertically.

• Please do not use the device in high temperature, low temperature or high humidity environment.

• Please do not aim the lens of the device at strong light objects such as the sun, incandescent lamp, etc., otherwise it will cause lens damage.

• Avoid placing the device in direct sunlight, poorly ventilated locations, or heat source accessories such as heaters or heaters.

• Biometric products cannot be 100% suitable for any anti-counterfeiting environment. High security level places, please use combination authentication.
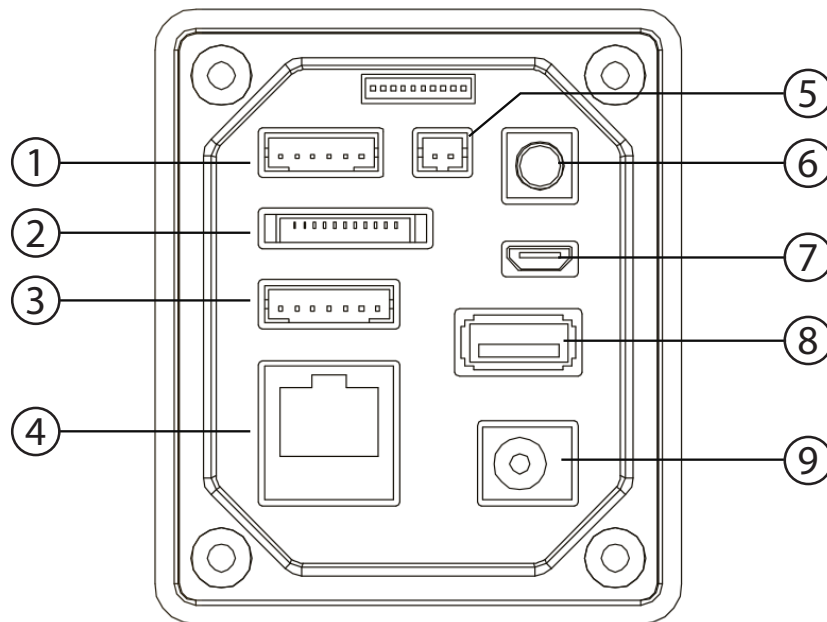
- Do not touch the temperature probe with your fingers or blow the probe.

- Please make sure no hair, sweat, or hat cover your forehead before measuring temperature.

- If the forehead is cold, wait for the forehead to become warm before taking the temperature measurement. Such as: after washing the face, after applying ice, after entering the room from the outside in winter.

## 1. Product Appearance

Temperature Probe

White Fill Light

Infrared Fill Light
Infrared Camera

Color Camera

LCD Screen

Microphone

Reset Button

Speaker

Screw holes for hanging board

## 2. Interface Instruction



### 1. 6PIN Door Button, Door Sensor, Alarm Interface

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| 5V | GND | NC | Door Button | Door Sensor | Alarm |

### 2. 11PIN Reserved IO

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|----|----|
|  | PWRON | IO7 | GND | 3.3V | IO6 | IO5 | IO4 | IO3 | IO2 | IO1 |

3. 7PIN 12V Power Supply, Relay Interface

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| COM | NO | NC | GND | GND | 12V | 12V |

4. Ethernet port
5. 2PIN 485 Interface

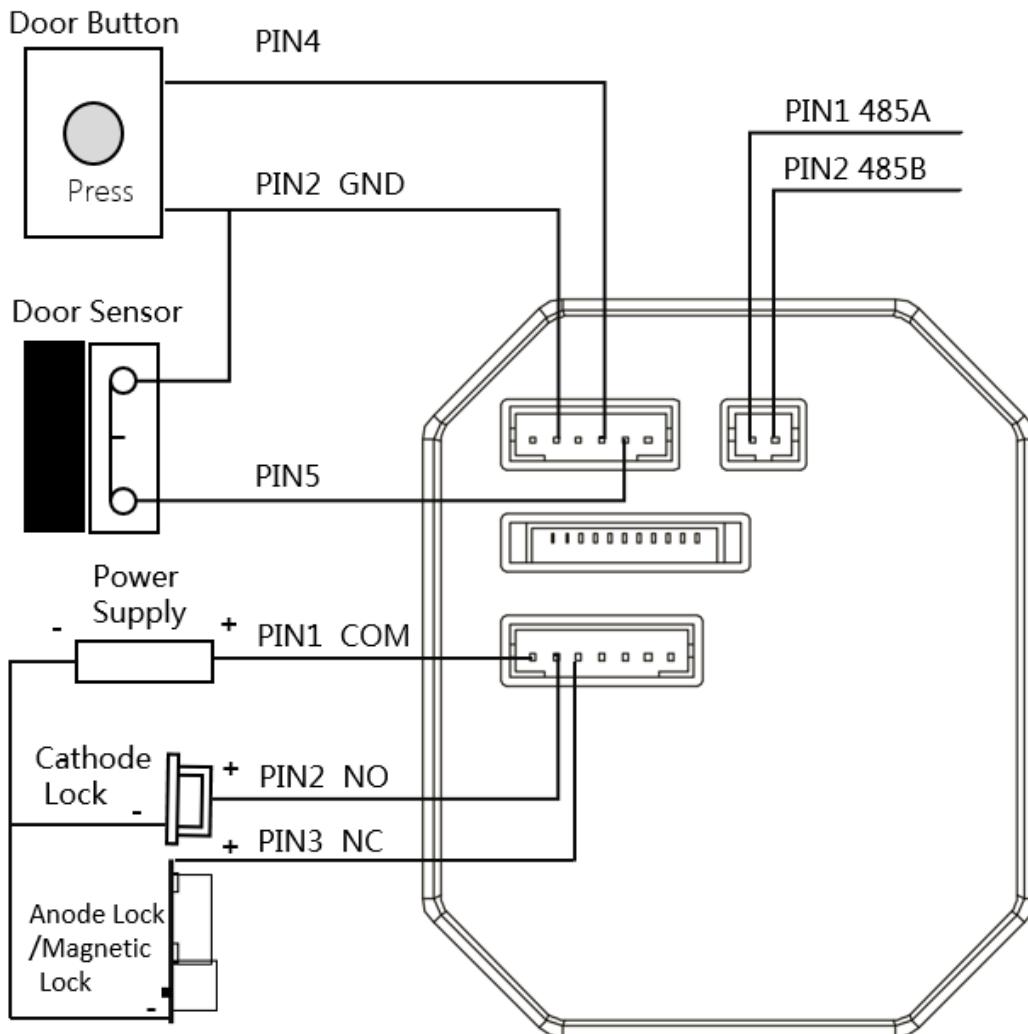| 1 | 2 |
|---|---|
| 485A | 485B |

6. Tamper key
7. Micro USB Port
8. USB-A Port
9. 12V Power Adapter Socket

## 3. Wiring Instruction

## 4. Technical Specifications

| Temperature measurement module parameters | |
| --- | --- |
| Measuring range | 32$^o$C~45$^o$C/ 89.6$^o$F~113$^o$F |
| Measurement accuracy | ±0.5$^o$C/ ±0.9$^o$F |
| Measuring diatance | 20~50cm |
| Measure time | 0.5s |
| System hardware parameters | |
| Processor | 4-core A7 |
| Operating system | Android 8.1 |
| Memory size | 1GB LPDDR3 |
| Storage size | 16G EMMC |
| Cameera Parameters | |
| Resolution | Color 200W (1920*1080) Infrared 130W (1280*960) |
| Imaging device | Color AR0230 Infrared AR0130 |
| Lens | 2.9mm |
| Recognize height | 1m~2m |
| Recognition distance | 0.3m~1.2m |
| Angle of view | Horizontal: 89$^o$ Vertical: 57$^o$ Diagonal: 98$^o$ |
| Face angle | ±30$^o$ |
| Minimum illumination | Color 0.01LUX at F1.2, Infrared: 0.01LUX at F1.2 |
| signal to noise ratio | Color 4dB, Infrared: 44dB |
| Wide dynamic range | Color 105dB, Infrared: 83.5dB |
| Interface parameters | |
| Network interface | 1 RJ45 10M/ 100M adaptive Ethernet port |
| USB interface | 1 USB interface |
| Wireless connection | WiFi+BLE4.0 |
| RS485 interface | 1 RS485 interface |
| Relay interface | 1 relay interface |
| Fire alarm door check button | 1 fire alarm door check button |
| IO reserved | 1 11pin terminal |
| Power supply | DC12V/ 3A |

| Smart functions | |
|---|---|
| Face recognition capacity | 50000 people |
| Offline record | 100000 |
| Recongition accuracy | 99.83% |
| Face liveness detection | Support binocular near infrared live detection |
| Face recognition | 1080P @ 25fps, support face detection tracking, optimization |
| Face recognition Speed | About 200ms |
| Liveness detection Speed | About 400ms |
| Basic parameters | |
| Screen size | 7 inch |
| Product size | 268*135*45 (length*width*height) |
| Operation humidity | 10%~90% |
| Operation temperature | 10~40$^o$C/ 50~140$^o$F |

# 5. Access Control & Attendance for Company

At this mode, User need to login to the Attendance & Access Control Management Platform Software for Company to add the device ID, import employees' information and their face photos and configure this device as an attendance device for employees. After the configuration is complete, the user can use the device to synchronize data. After synchronization is complete, face recognition/temperature measurement/access control/attendance can be started.

For detailed instructions, please refer to the guidance of the Face Recognition Temperature Monitor and the instructions of the Attendance & Access Control Management Platform Software for Company.

# 6. Access Control & Attendance for School

At this mode, User need to login to the Attendance & Access Control Management Platform Software for School to add the device ID, import students and teachers' information and their face photos and configure this device as an attendance device for them. After the configuration is complete, the user can use the device to synchronize data. After synchronization is complete, face recognition/temperature measurement/ access control/attendance can be started.

For detailed instructions, please refer to the guidance of the Face Recognition Temperature Monitor and the instructions of the Attendance & Access Control Management Platform Software for School.

# 7. Quick Screening

At this mode, fast temperature screening and automatic recording of data and face photos can be performed. User need to download the Temperature Cloud APP to add the device ID. Scan the QR code as follow to download the APP.
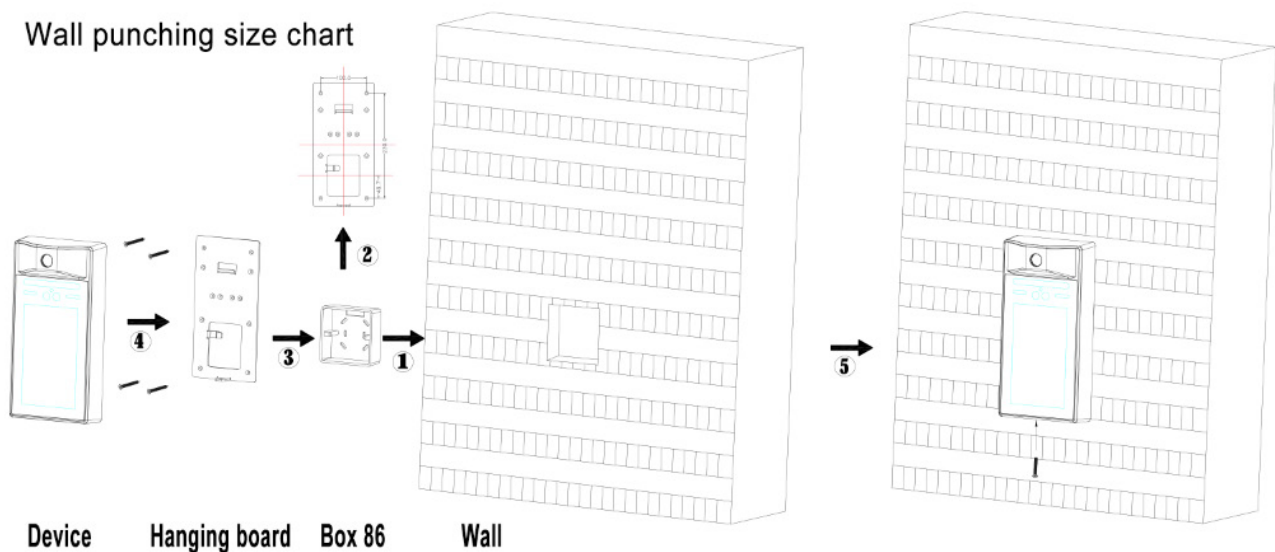


Temperature Cloud APP

8. Scan the QR code as follow to get the guidance of Face Recognition Scanner and the instructions of the Attendance & Access Control Management Platform Software.
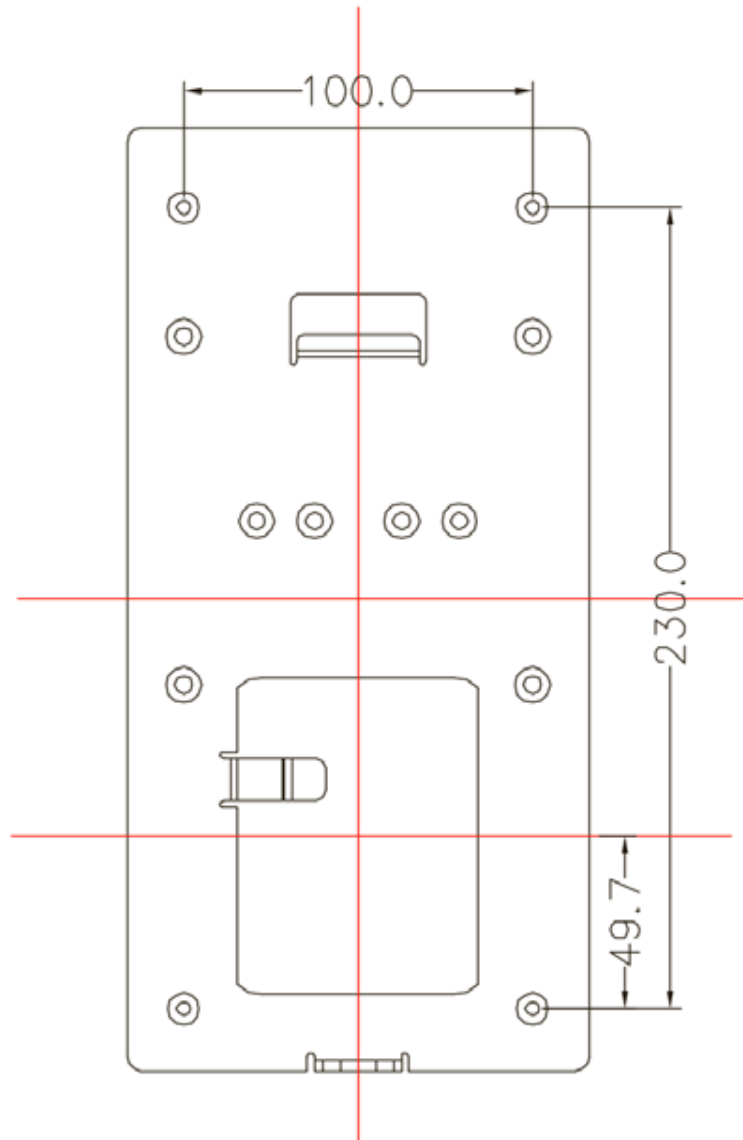
# 9. Install Instruction

Box 86 for Wall-Mounted Installation

1. Install stickers on the wall, and make holes in the wall according to the height and position of the stickers to install Box 86.

2. Align the outlet of the hanging board with the center of the Box 86, punch four mounting holes on the wall according to the punching size diagram, and insert four wall plugs.

3. Use four KA 4*25 screwsto fix the hanging board to the wall. Connect the cable of the external device to the cable, arrange the cables, and determine the cable outlet method.

4. Hook the device from top to bottom on the mounting plate, and make sure that the upper part of the hanging plate is inserted into the groove on the back of the device.

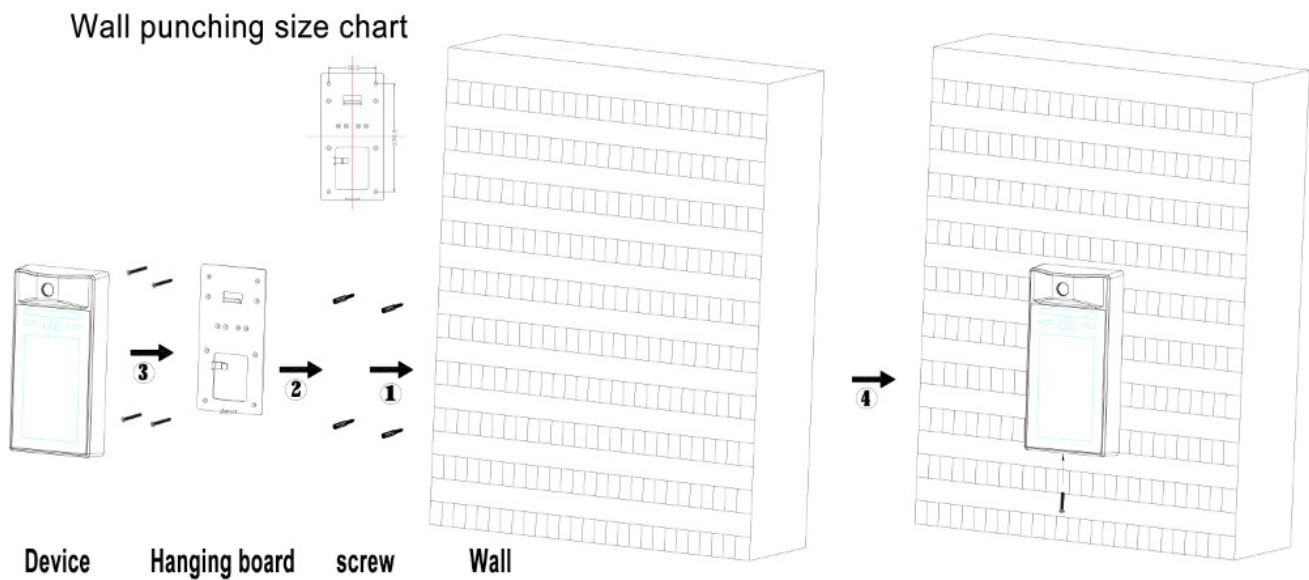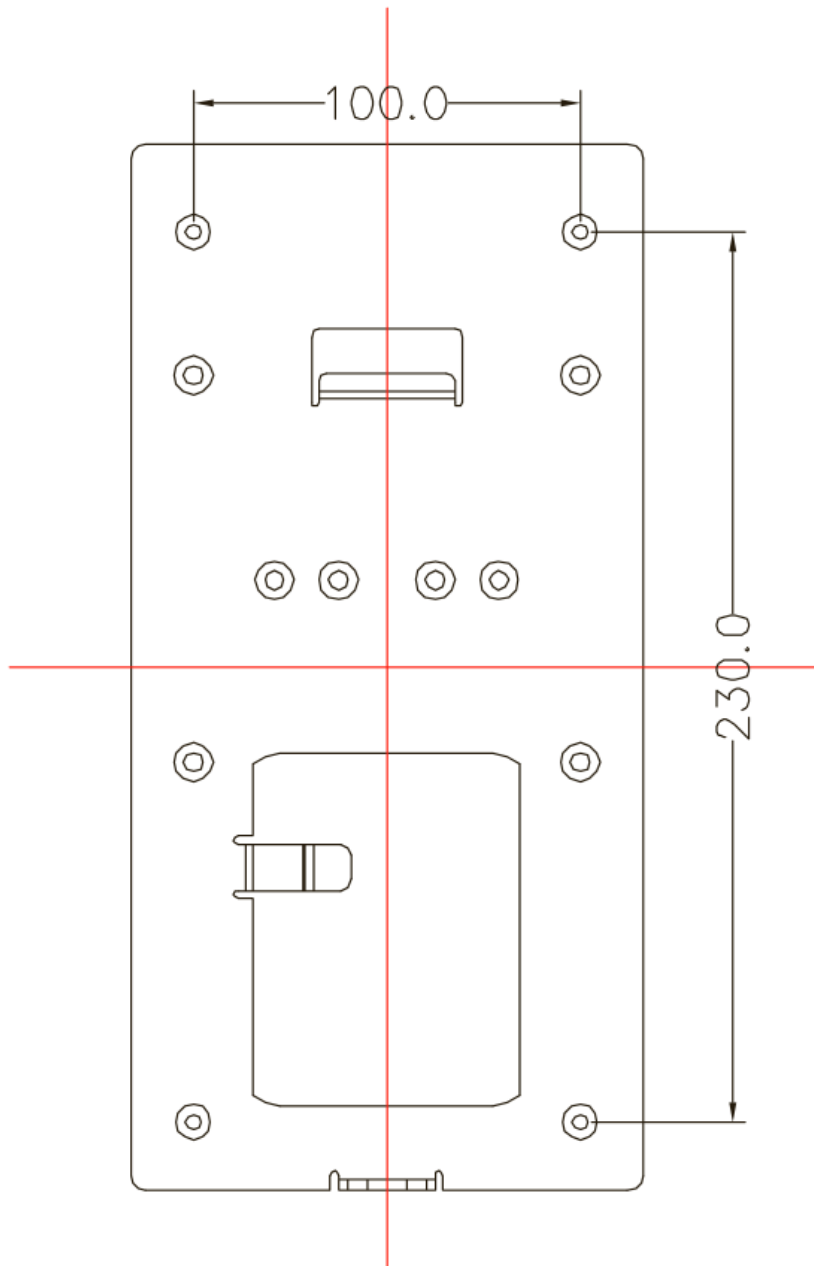5. Fix the device and the hanging plate from the bottom with a screw.

Wall punching size chart

Device    Hanging board    Box 86    Wall

Wall punching size chart

Wall-Mounted Installation

1. Attach an installation sticker to the wall, make holes in the wall according to the height and position of the sticker, insert a wall plug, and install 4 hex screws.

2. Fix the hanging board on the wall with four KM 4* 10 screws.

3. Hook the device from top to bottom on the hanging board, and make sure that the upper part of the hanging board is inserted into the groove on the back of the device.

4. Use a screw to fix the device and the hanging plate from the bottom.



Wall punching size chart

Device     Hanging board     screw     Wall

Wall punching size chart