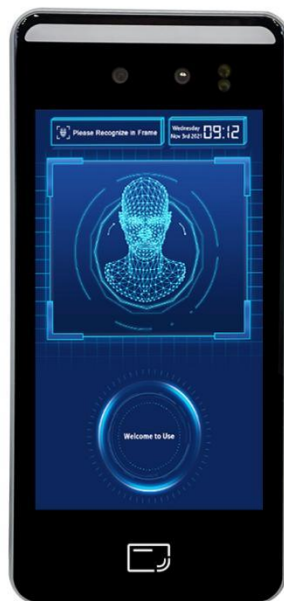


F1 PRO Face Terminal Manual

Model: F1Pro (5 inch) Android 11

Version: V1.0



Shenzhen Rakinda Technologies Co.,Ltd

Content

One、	Product Description	错误！未定义书签。
Two、	Function Feature	错误！未定义书签。
Three、	Specification Performance	错误！未定义书签。
Four、	Product List	错误！未定义书签。
Five、	Product Structure	错误！未定义书签。
Six、	Product Wiring	错误！未定义书签。
	6.1 Integrated Harness Wiring Instructions	10
	6.2 On-site magnetic door installation reference instructions	10
	6.2.1 Magnetic door system installation diagram	10
	6.2.2 Magnetic door system wiring diagram	11
Seven、	Installation Instructions	错误！未定义书签。
	7.1 Wall Mount Installation Instructions	13
	7.1.1 Installation location	13
	7.1.2 Dimensions and hole positions of the wall bracket	14
	7.1.3 Installation steps	15
Eight、	Declaration of Toxic and Hazardous Substances	错误！未定义书签。
Nine、	Product warranty	错误！未定义书签。

One、Product Description



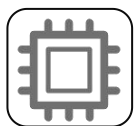
(The picture is for reference only)

This product is a convenient and safe industrial-grade visual face recognition all-in-one machine. In response to the needs of large capacity, high performance, wide application, and customizability in the face recognition application process, a face recognition intelligent hardware was launched. Face dynamic recognition provides users with a safe environment.

The product is based on 200W RGB, 200W IR binocular camera, supports WIFI+10/100M networking and rich peripheral security interfaces, meets user access control needs, and can realize personnel authentication, personnel access management and attendance management.

The products are widely used in office buildings, office areas, hotels, schools, shopping malls, communities, public services, stations and scenic exhibition halls and other traffic scenarios that need to be used, helping to achieve intelligent security control.

Two、Function Features



High Engine Binocular living Distance sensing Card Reader Security interface Various installations

No.	Features	Contents
1	Performance	Combined with face recognition algorithm, it supports 10,000-level face database
2	Algorithm	Support the algorithms of top domestic AI
3	Speed	Combined with face recognition algorithm, face recognition can be completed quickly
4	Anti-counterfeiting	Binocular face recognition, support live detection
5	Interact	Adopt live detection, 5-inch ultra-clear touch screen + voice interactive prompt
6	Environment	Super environmental adaptability, good performance in low light and strong backlight
7	Stability	Android 11.0 system, long-term stable operation
8	Openness	Provide SDK to meet the secondary development
9	Epidemic Prevention	Infrared temperature measurement and screening [optional]
10	Wireless Communication	4G network [optional]

Three、Specifications Performance

Smart Facial Access Control Terminal				
Models		Standard:	4G:	With Temp:
		F1 PRO	F1 PRO-4G	F1 PRO-T
Product Features	Main function	Access control, attendance, face recognition		
	Use environment	Indoor		
	Device shell	Aluminum alloy material		
Camera	Type	RGB	IR	
	Resolution	2 million pixels	2 million pixels	
	Vertical wide angle	65°	65°	
	Horizontal wide angle	40°	40°	
	White fill light	Supported		
	Infrared fill light	Supported		
Core parameter	OS	Android 11.0		
	CPU	RK3566 4x ARM® Cortex™ A55 up to1.8GHz		
	Storage	2G+ 8G		
Human-computer interaction	Display	5 inches, full viewing angle, 170°IPS LCD screen, resolution 720*1280		
	Touch screen	Supported		
	Human body	Test accuracy: 0.1℃		

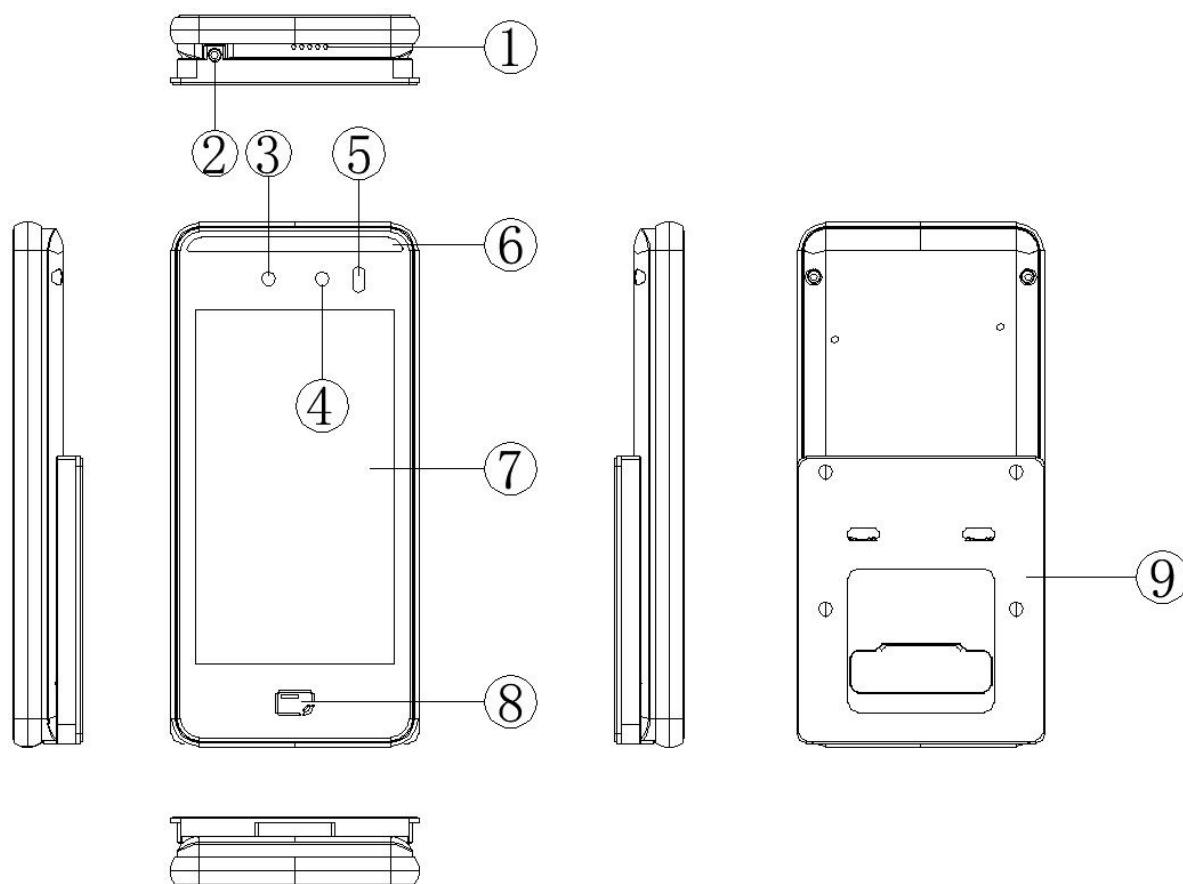
	temperature measurement module	Test error: $\leq \pm 0.5^{\circ}\text{C}$
	【Optional】	Recommended distance of 50cm
		Working temperature: $15^{\circ}\text{C} \sim 40^{\circ}\text{C}$
Communication	Ethernet	10/100Mbps Ethernet
	WIFI	Compliant with IEEE802.11b/g/n standard (2.4G)
	4G 【optional】	CAT1, domestic full Netcom
Identification method	Face	Supported
	IC card	Supported
Interface	Data port	USB 2.0*2
	Replay	*1
	Serial port	RS232*1
	Wiegand	26bit/34bit protocol
	Exit switch	*1 【Expandable】
	Fire linkage	*1 【Expandable】
	Button	Reset function
Power supply	Adapter	DC12V/1.5A power supply
Environmental requirements	Operating temperature	$-10^{\circ}\text{C} \sim 60^{\circ}\text{C}$
	Working humidity	20% to 90% (in the state of non-condensing water droplets)
	ESDElectrostatic	IEC61000-4-2,LEVEL3

	ESD		
	Protection level	IP41	
Installation method		Wall mounted	
		F1 PRO	

Four、Product list

No.	Content	数量
1	Host	*1
2	Wall Mount Kit	*1
3	4G module and external antenna [optional]	*1
4	Power Adapter	*1
5	Wall Mounted Harness	*1
6	Mounting screw pack	*1
7	Product Instructions (Product Warranty Card)	*1

Five、Product structure

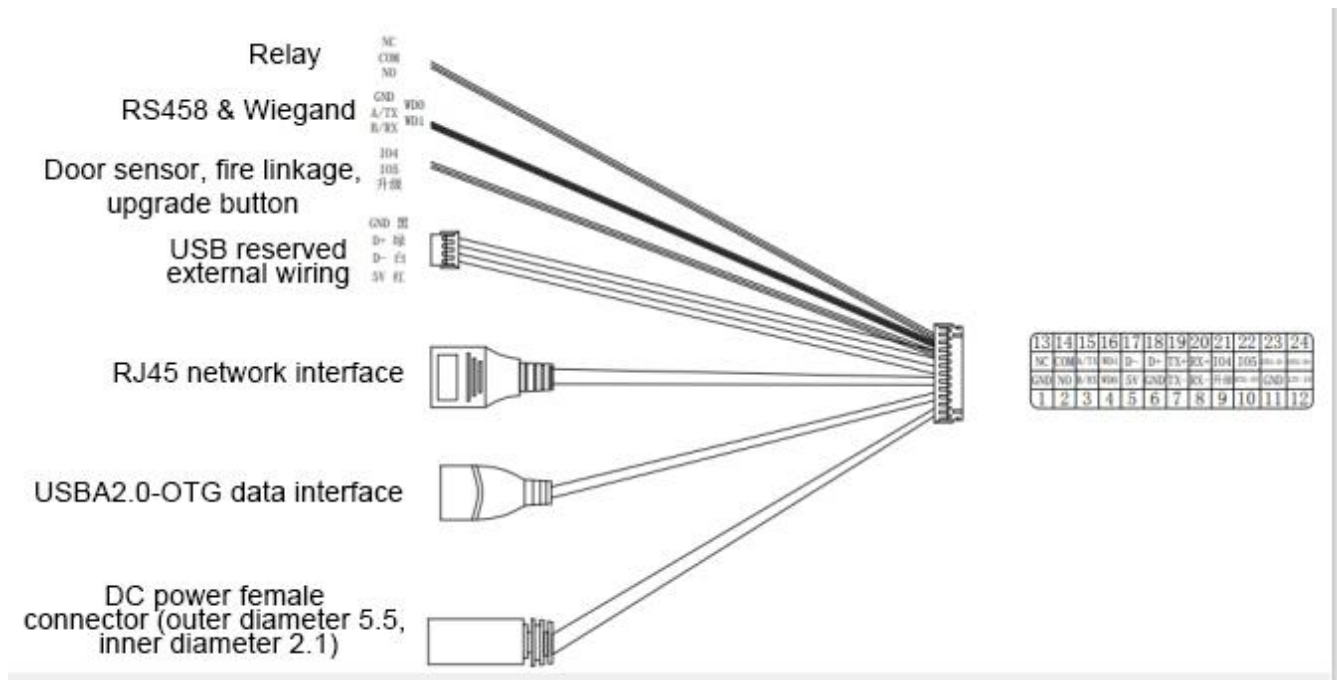


Parts No,	Function Instructions
①	speaker mesh
②	Wall Mount Bracket Fixing Screws
③	RGB camera
④	IR camera
⑤	Infrared fill light
⑥	white fill light
⑦	Multi-point capacitive touch screen
⑧	swipe
⑨	wall mount
⑩	WIFI antenna
⑪	pigtail interface

Six、Product wiring

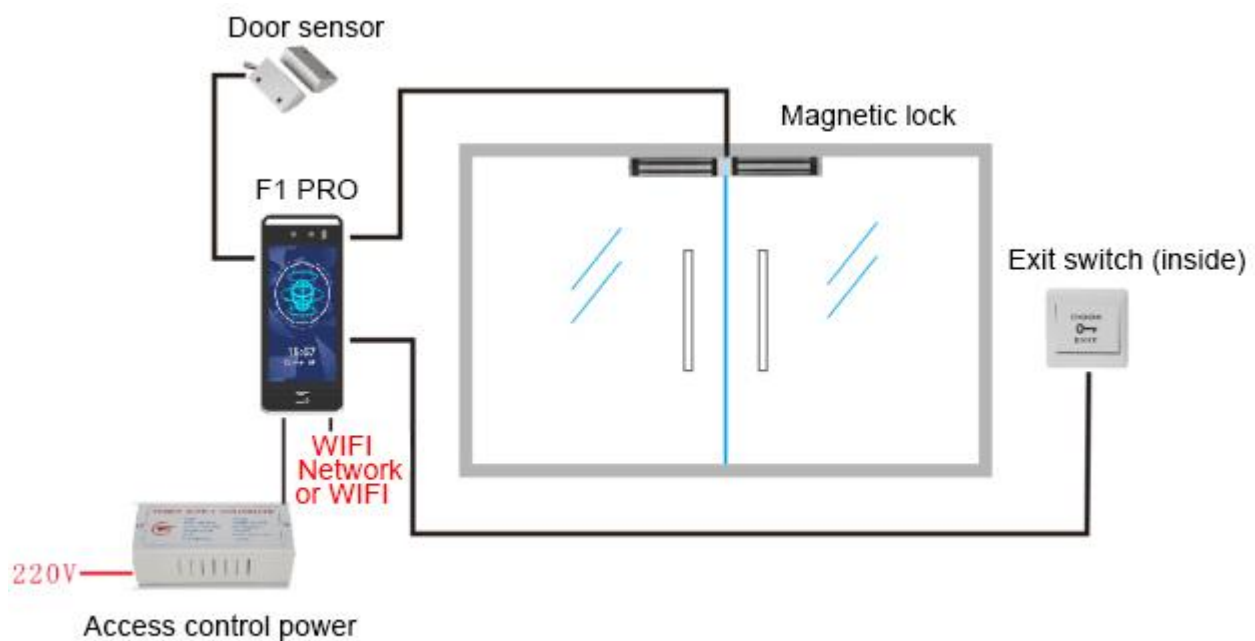
External Interface Hardware Wiring Instructions		
Type	Port	Instruction
Network port	RJ45	Support 10/100Mbps
Relay	NC COM NO	Relay normally closed end/common end/normally open end. Generally, the door lock power supply is connected to the COM terminal, and then according to the type of door lock, the relay power supply is negatively connected to the NO port or the NC port. Note: The maximum load of relay contacts is 1A
Exit button	IO5 GND	Detect the key to open the door control signal, input
Call the police	IO4 GND	Detect fire linkage control signal, input
Reset	Upgrade GND	Support manual reset and upgrade
Serial port	RS232 TX RS232 RX	Support serial RS232
Wiegand	WG_D1 WG_D0	Wiegand output interface, support 26bit/34bit protocol
Input power	GND 12V+	Power Input: 12V DC
USB	USB_HOST-4P	External reserved USB interface to connect peripherals
	USBA 2.0_OTG	Equipment upgrade, debugging, U disk

6.1 Integrated Harness Wiring Instructions

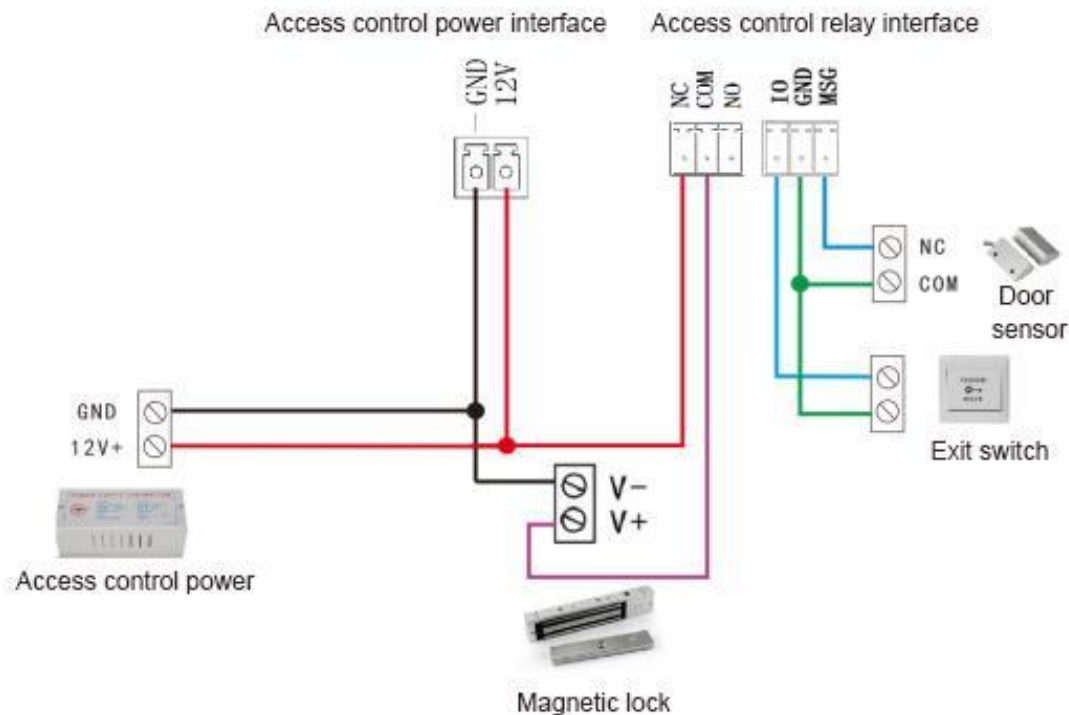


6.2 On-site magnetic door installation reference instructions

6.2.1 Magnetic door system installation diagram





6.2.2 Magnetic door system wiring diagram



Seven、 Installation instructions

! Environmental requirements

During the installation and use of this product, all electrical regulations of the country and region must be strictly observed. If the device does not work properly, please do not disassemble and repair it by yourself, otherwise it will affect the warranty of the device. During installation and use, avoid harsh or extreme environments such as extreme high temperature (or low temperature), high humidity, strong backlight, vibration, radiation, and chemical corrosion.

 light environment	It is recommended to install it in an indoor or semi-open air environment to ensure a good light environment, avoid direct strong light or weak light affecting the recognition speed, and avoid facing the glass door or glass wall.
 Web environment	It is recommended to install it in an environment with a smooth network to avoid the poor network affecting the recognition speed and accuracy.



Precautions

Before turning on the host device, the screen protector should be torn off to avoid affecting the camera and infrared recognition accuracy

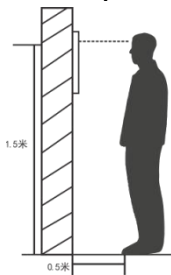


Utilized location

The recommended installation height of the VTO is 150cm (camera height).

Recommended standing position

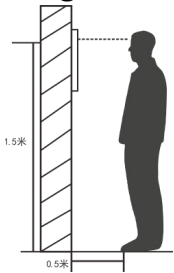
Comparison



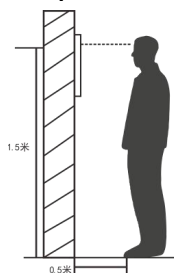
The recommended distance between the person and the machine is 0.5 meters, (the applicable height range is 1.55 meters to 1.85 meters), which can be adjusted according to the effect of the device acquiring the face image. When the face image is large, it can be moved backward appropriately; when the face image is small, it can be moved forward appropriately.

Recommended location

Register



Comparasion



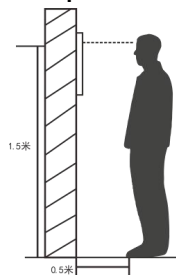
The installation location of the device must remain the same during registration and use. If it is necessary to move the position of the device, the installation height must be kept the same. If they are inconsistent, the recognition effect of the device may deteriorate. It is recommended that the distance between the face and the machine when registering is 0.5-0.8 meters

Several methods of affecting the recognition effect

Register

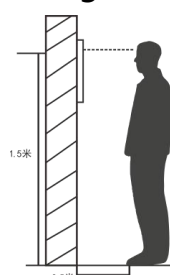


Comparasion

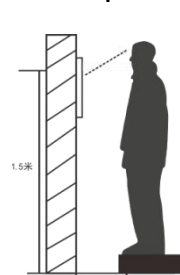


Inconsistent posture

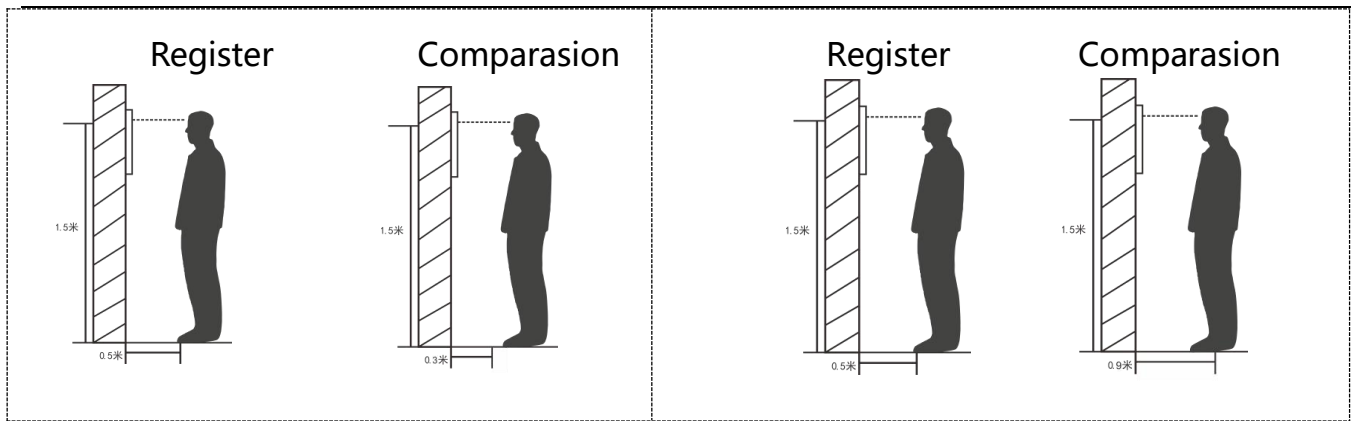
Register



Comparasion



Different heights



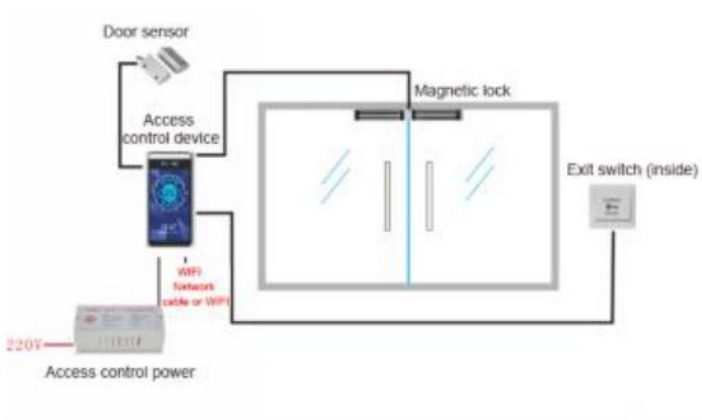
Distance too close

Distance too far

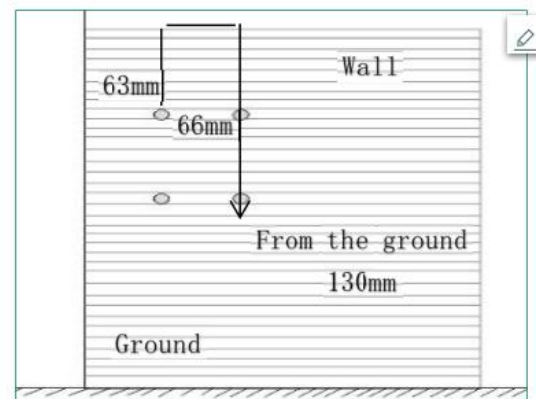
7.1 Wall Mount Installation Instructions

7.1.1 Installation location

On the wall about 130cm above the ground, start drilling the holes in the first row (using a 6mm drill bit, drilling diameter 6mm, drilling depth 4cm, second hole translation 66mm). Move up 63mm and drill two holes for the second row.



140CM



Front opening indication

3 groups of lines need to be embedded in advance at the host equipment (the reserved line length is 10cm)

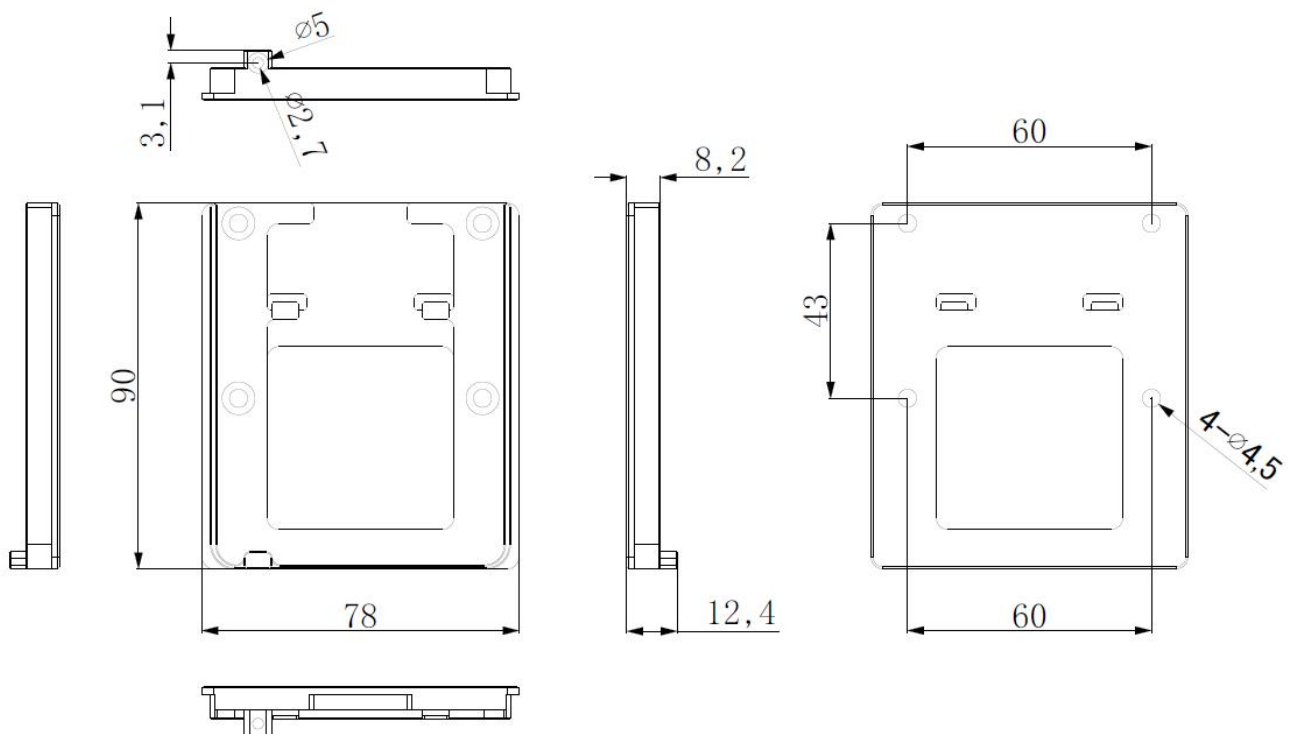
(1) 12V power cord RVV2x1.0 standard and above, one end is at the host device, the other end is pulled to the original access control dedicated power supply or the 2-pin socket of the 220V power supply on the top of the sliding door, and the factory-built 12V1.5A power supply is connected during installation The 12V end of the adapter, the

220V power cord of the adapter is directly inserted into the 2-hole socket of the 220V power supply.

(1) The door opening control line is RVV2x0.5 standard and above, one end is at the host device, the other end is pulled to the original access control dedicated power supply or the sliding door top controller, and the door opening signal interface is connected to them during installation.

(1) Super Category 5 network cable is 8x0.5 oxygen-free copper standard and above, one end is at the host equipment, and the other end is pulled to the switch in the weak current room to connect to the Internet during installation. In special cases, if it is difficult to increase the wired network, the door wireless network will also Very stable, can consider using wireless.

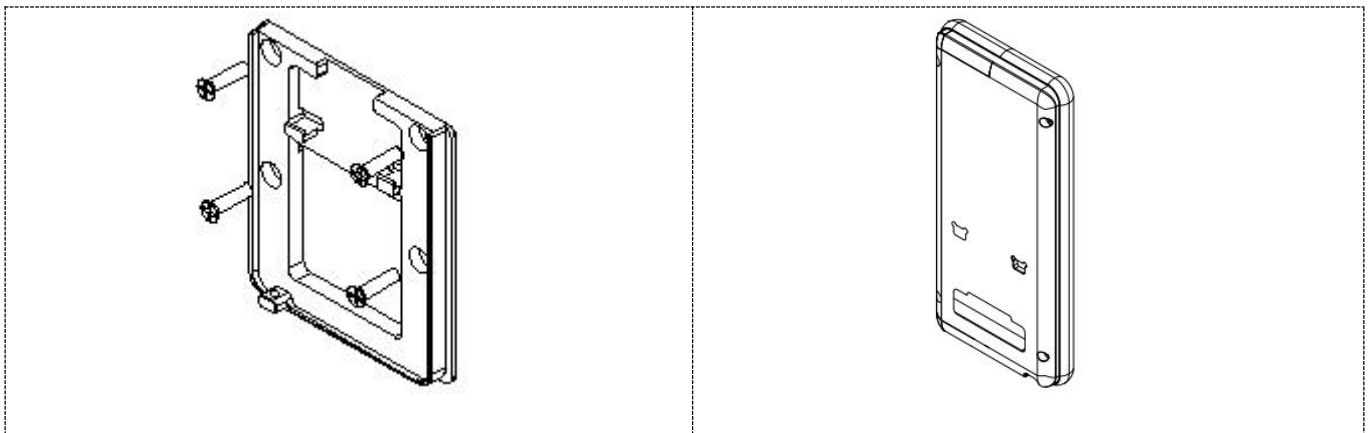
7.1.2 Dimensions and hole positions of the wall bracket



Fix the wall-mounted board and the host with a machine tooth cup head socket head cap screw M3*6 (package is equipped), be careful not to short-circuit the wire head.

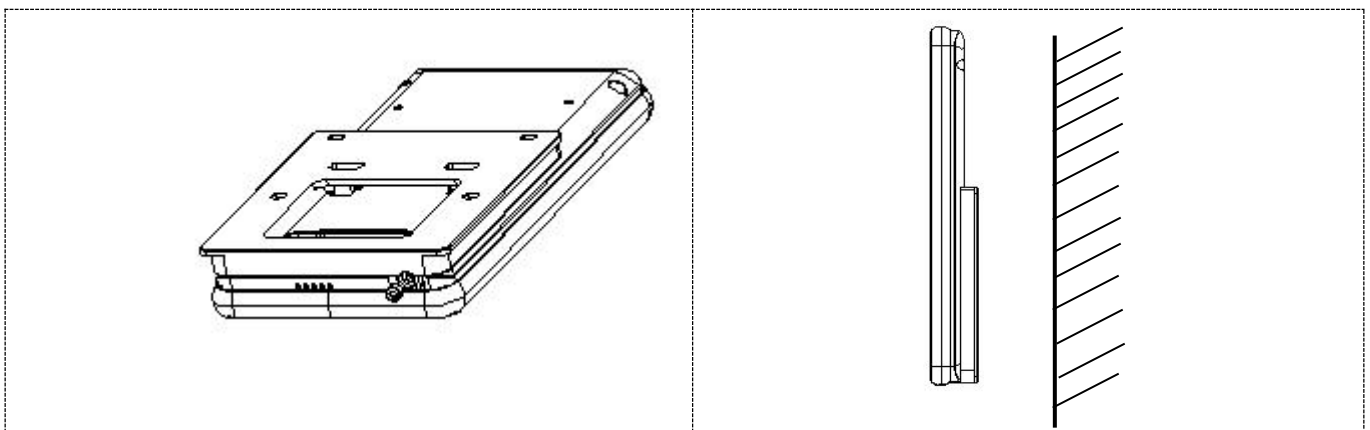
Remarks: If the installation environment is a glass plate or a smooth stone wall surface that is inconvenient to open holes, it needs to be fixed with adhesive backing, and the outgoing line will come out from the bottom;

7.1.3 Installation steps



Step 1: Fix. Fix the wall mount accessories to the wall with screws..

Step 2: Wiring. Refer to "Wiring Instructions" to connect the wires to the device



Step 3: Adjust. Use screws to tighten the accessories and fixing screws on the fixed device.

Step 4: Lock. Fasten the device with the main unit and the wall mount with screws.

wire, adjust the wiring length until the device can be snapped into the wall mount.

Eight、Declaration of Toxic and Hazardous Substances

Part Name	Toxic and Hazardous Substances or Elements					
	Lead (Pd)	HG (Hd)	Cadmium (Cd)	Hexavalent chromium	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers
Shell	○	○	○	○	○	○
Circuit boards and their component	○	○	○	○	○	○
Power Adapter	○	○	○	○	○	○

This table is prepared according to the provisions of SJ/T11364

○	Indicates that the content of the hazardous substance in all homogeneous materials of the part is below the limit requirement specified in GB/T26572
X	Indicates that the content of the hazardous substance in at least one homogeneous material of the part exceeds the limit specified in GB/T26572



This labeling period refers to the period (ten years), and the harmful substances in electrical and electronic products will not be released under normal conditions of use.

If there is any leakage or mutation, the use of this electronic information product by the user will not cause serious pollution to the environment or cause serious pollution to his personal property.

period for causing serious damage.

This product complies with the RoHS environmental protection requirements: At present, there is no mature technology in the world that can replace or reduce electricity.

Lead content in glass, ceramic optical glass, steel and copper alloys.

Nine、Product warranty

Thank you for purchasing our company's products. In order to ensure the interests of users, any user who purchases our company's products, if the product has quality problems

In case of failure, you can contact the local dealer or special maintenance station with the invoice and warranty card.

Warranty Notes:

1. Within one year from the date of purchase by the user, in the event of a failure under normal use, the company will provide free warranty parts replacement and other services according to the failure situation;

2. The warranty card and purchase invoice are the proofs that the company provides after-sales service to customers.

(1) It is valid only after the dealer affixes the official seal;

3. In one of the following situations, no warranty service will be implemented, and maintenance will be charged.

(1) Exceed the validity period of the warranty;

(2) Damage caused by improper use, maintenance or storage not in accordance with

the requirements of the product instruction manual;

(3) Failure and damage caused by disassembling, repairing or refitting the product without the permission of the company;

(4) Machine failure or damage caused by force majeure;

(5) wearing parts and random accessories.