微光互联
二维码扫描专家

M800
User manual

Please read it carefully and keep it properly.

☑ Various output interface

☑ Support secondary development

☑ Integrated code scanning and card swiping module

Disclaimer

Before using the product, please read all the contents in this product manual carefully to ensure the safe and effective use of the product. Do not disassemble the product or tear up the seal on the device by yourself, or Beijing Vguang Internet Technology Co., Ltd. will not be responsible for the warranty or replacement of the product.

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Edit history

Change date	Version	Description	Modifier
2022.5.11	V1.0	Initial version	
2022.10.24	V1.1	Correct the operating parameters of the device	

Catalog

1. Preface

Thanks for using the M800 device. Reading this manual carefully can help you understand the function and features of this device, and quickly master the use and installation of the device。

1.1. Product introduction

M800 integrates card swiping and QR code reading. Card swiping and QR code reading can be configured into the RS485, Wiegand, Ethernet and WiFi.

M800 support GPS and BD positioning functions.

M800 support protocol mode, and users can conduct secondary development according to protocol provided by our company.
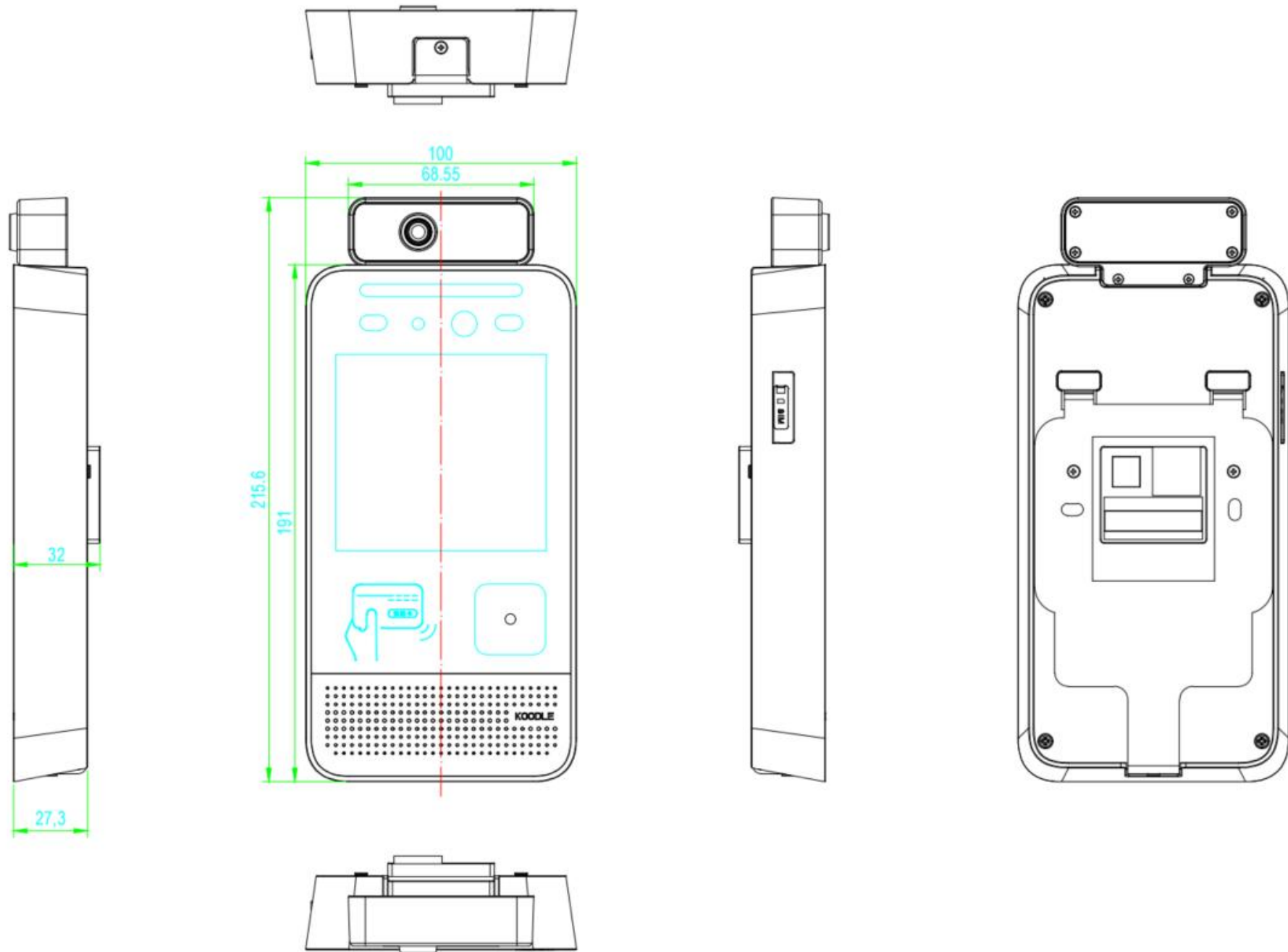
1.2. Product features

1，Integrated card swiping and QR code reading.

2，4.2 inch high brightness LCD screen, real voice prompt.

3，Positioning function.

4，Support the distribution of QR code and card white list.

5，Support remote control relay.

2. Product appearance

2.1. Product appearance drawing

2.2. Product size drawing

3. Product parameters

3.1. System parameters

Product parameters	
System parameters	OS：Linux
	Storage capacity：8GB
	Processor：ARM Cortex A7 MP2 1GHz
Display screen	Size：4.2 inch LCD
	Resolution ratio：720*672
Communication mode	Wired：1 10/100M adaptive network port
	Wireless：2.4G WiFi
	1 RS485
	1 Wiegand 26/Wiegand 34
Positioning function	Hybrid positioning of GPS and Beidou
Physical interface	Relay：30V1A
	1 Alarm signal input interface
Power supply	Supply voltage：9～24V(DC)（12V power supply is recommended）
	Power consumption：Max.9.6W

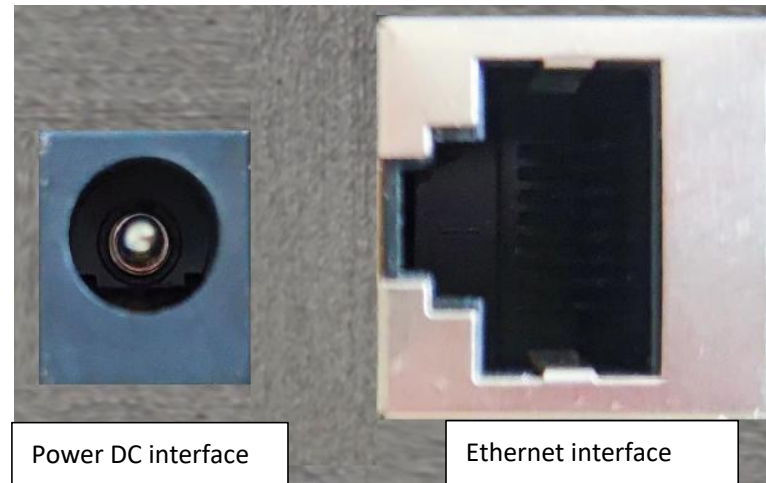| Speaker	Built in 4Ω 5W speaker
Material	Fireproof ABS + organic glass
Working environment	Working temperature -20 ℃～60℃
	Working humidity 10%～90%（No condensation）
IP Grade	Electrostatic protection：Contact 8KV, air 12KV
	Dustproof and waterproof grade：IP54

3.2. Card swiping parameters

Card swiping parameters	
Antenna specification	13.56MHz
Antenna size	42mm*28mm
Reading distance	0-5cm（Card swiping distance may vary with different card types and specifications）
Supported card type	S50, S70, FM1208, FM1216-137, MIFARE CLASSIC EV1 4K(S70)，mifare desfire ev2 d42, UL, FM12081K+7K, NTAG216, ultralight c, UL EV1, DESFIRE EV2 D41, Ultralight EV1, Mifare Desfire ev2 d82.

3.3. Code scanning parameters

Code scanning parameters	
Symbologies	Two-dimensional（QRCODE, PDF417 etc）
Scanning support	Mobile screen
Image sensor	640*480
Reading direction	Tilt±78.9°，rotation±360°，deflection±69.2°
	Level：72.5°，vertical：55.2°
Precision	≥15mil
Reading distance	0.3~13cm
Scanning feedback	Voice prompt
Ambient illumination	0~80000Lux

4. Interface definition

4.1 Power supply and network interface

Power DC interface　　Ethernet interface

4.2 Output terminal definition

484A 485B NC COM NO WGD0 WGD1 IN1 GND VCC

From right to left, the ports are:

VCC	VCC 9 ~ 24V(DC)	NO	Normally open end of relay
GND	GND	COM	Relay common terminal
IN1	Alarm signal input terminal 1 (effective at low level)	NC	Normally close end of relay
WGD1	Wiegand D1 interface	485B	RS485_B interface
WGD0	Wiegand D0 interface	485A	RS485_A interface

Wiring precautions：The exposed copper wire of the power cord should not be too long. It needs to be inserted into the innermost part of the terminal so that the terminal can be fixed to the black rubber part of the power cord.
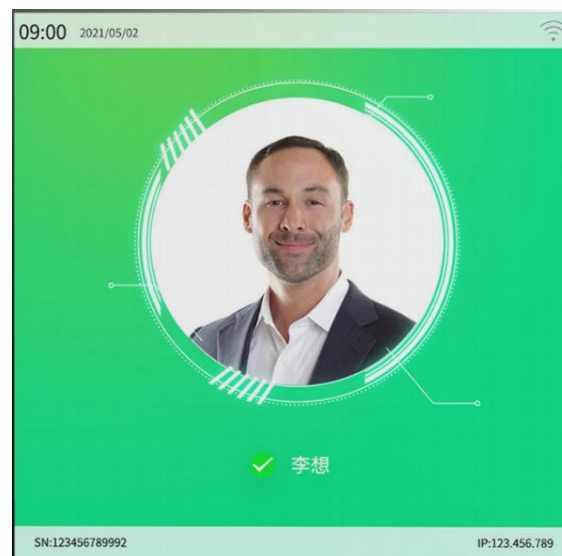

Wrong

Correct

5. Instructions

5.1. Network setting

Ethernet communication mode is adopted by default, and IP is obtained dynamically.

Step 1 ：If you want to use Ethernet to access the network, you need to connect the device to the network according to the interface definition, and then supply power to the device. After the device is started, it will automatically obtain the IP and display it in the lower right corner of the screen, and the networking sign will be displayed in the upper right corner.

Step 2: If there is no condition for connecting Ethernet on site, device need to connect wifi to access the network. Can use the config tool to generate wifi configuration code and scan the M800 before connecting the device to the set wifi.

Step 3 ：In the address bar of the computer browser under the same LAN, enter http: / / device IP address: 8060 /, and press enter to enter the background management interface. It is assumed that the IP information obtained on the face device screen is: 10.102.106.91.

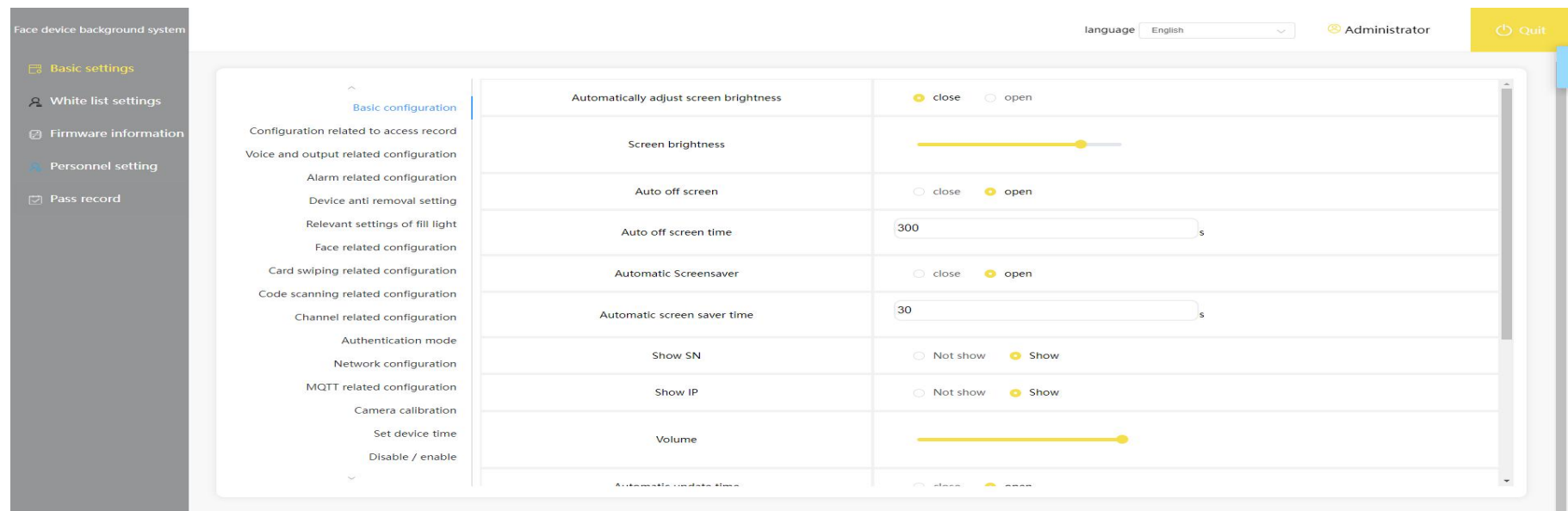Open the browser, enter the login IP information in the address bar, and press enter.

Enter the device background login interface.

The default account name is "admin" and the login password is "password".

Enter the password and click login. If there is no response on the web page after clicking login,

you need to refresh the page and fill in the password again.

The successful login interface is as follows, which can be set according to business requirements.

Step 4：Modify the network connection mode in the background system, and select Ethernet or wifi as required.

5.2. Code scanning and card swiping process

Step 1 ：Connect the device to the network. If you need to scan the code and swipe the card to output 485 or Wiegand data, you need to connect the corresponding interface of the device to 485 or Wiegand controller. If you need to scan code and swipe card to transmit through the network, you need to build a TCP server in advance.

Step 2 ：Power the equipment. After the device starts, it will automatically obtain the IP and display it on the screen.

Step 3 ：In the address bar of the computer browser under the same LAN, enter http: / / device IP address: 8060 /, and enter enter to enter the background management interface, the same as the operation steps in 5.1.

Step 4 ：In the background management system, set the code scanning and card swiping output mode, and specify the transparent transmission address when network transparent transmission is required.

Step 5 ：After the setting is successful, code scanning and card swiping data can be transmitted through the setting method.

5.3. Device working mode instructions

Pass-through mode: in pass-through mode, data is transmitted directly by scanning code/swiping card, and there is no authentication process.

Protocol mode: In protocol mode, users need to build a host computer to receive data and return authentication results through 485, TCP or HTTP protocols. The protocol document can be obtained on the official website.
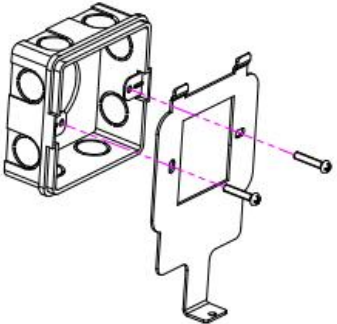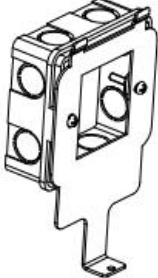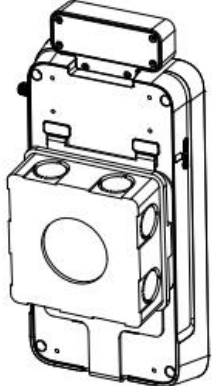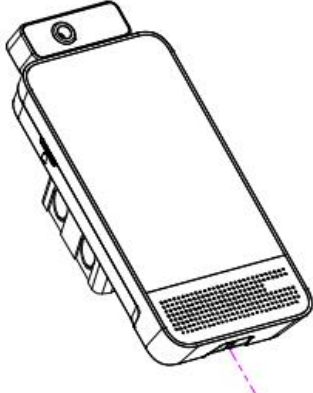
Development mode: Currently, the development mode is only used for reading and writing card operations,

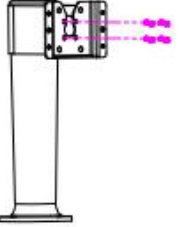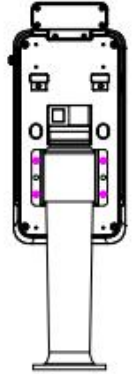and other functions are not supported temporarily.

Local whitelist mode: Referring to the device protocol, send the QR code or IC card whitelist to the device through MQTT or HTTP, and the device offline authentication.

6. Installation method

6.1. 86 box installation method

1.Fix the metal bracket on the 86 box or mounting panel.	2.Tighten the screws.	3.Install the device on the metal holder. Note: first insert the snap on the top of the metal holder into the	4.Tighten the screws.

6.2. Column installation method

1. The opening of the sheetmetal bracket is upward and fix the torch holder with screws.	2. Fix the device to sheetmetal bracket.	3. Fix the top cover plate to the torch and connect the wire terminals.	4. Assemble the top cover plate to the column. Complete installation.

6.3. Installation attention

The code reading window is made of tempered glass, which has good light transmittance, compression resistance and impact resistance. Nevertheless, it is important to avoid scratching tempered glass on objects with higher hardness to avoid affecting the performance of code recognition.

7. Attention

1，The standard device is 9-24V power supply, which can be obtained from the upper machine power supply or can be supplied separately. High voltage may cause the device to not work properly or even damage the device.

2，Do not disassemble the device without permission, otherwise the device may be damaged.

3，Avoid direct sunlight as much as possible in the installation location of the device. Otherwise, it may affect the reading effect. The scanner reading panel should be clean, otherwise normal reading may be affected.

4，Device wiring shall be firm and reliable. And the insulation between the wire and the wire should be ensured to prevent the short circuit from burning out the device.

8. Contact info

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