

# Face Recognition Terminal User Manual



**Issue**

**V1.1**

**Date**

**2020-12-18**








# Precautions

## Precautions

Fully understand this document before using this device, and strictly observe rules in this document when using this device. If you install this device in public places, provide the tip "You have entered the area of electronic surveillance" in an eye-catching place. Failure to correctly use electrical products may cause fire and severe injuries. To prevent accidents, carefully read the following context:

## Symbols

This document may contain the following symbols whose meanings are described accordingly.

Symbol	Description
 <b>DANGER</b>	It alerts you to fatal dangers which, if not avoided, may cause deaths or severe injuries.
 <b>WARNING</b>	It alerts you to moderate dangers which, if not avoided, may cause minor or moderate injuries.
 <b>CAUTION</b>	It alerts you to risks. Neglect of these risks may cause device damage, data loss, device performance deterioration, or unpredictable results.
 <b>TIP</b>	It provides a tip that may help you resolve problems or save time.
 <b>NOTE</b>	It provides additional information.



To prevent electric shocks or other dangers, keep power plugs dry and clean.



Strictly observe installation requirements when installing the device. The manufacturer shall not be held responsible for device damage caused by users' non-conformance to these requirements.

Strictly conform to local electrical safety standards and use power adapters that are marked with the LPS standard when installing and using this device. Otherwise, this device may be damaged.

Use accessories delivered with this device. The voltage must meet input voltage requirements for this device.

If this device is installed in places with unsteady voltage, ground this device to discharge high energy such as electrical surges in order to prevent the power supply from burning out.

When this device is in use, ensure that no water or any liquid flows into the device. If water or liquid unexpectedly flows into the device, immediately power off the device and disconnect all cables (such as power cables and network cables) from this device.

Do not expose the thermal imaging camera or unpacked product to extremely strong radiation sources, such as the sun, laser, or arc welding machine, regardless of whether the device is being electrified or not; do not put the camera close to high thermal objects such as the sunlight; otherwise, the precision of the camera may be affected and even the detector inside the camera may suffer a permanent damage.

If this device is installed in places where thunder and lightning frequently occur, ground the device nearby to discharge high energy such as thunder strikes in order to prevent device damage.



## CAUTION

Unless otherwise specified, do not use the camera in a temperature lower than 0 °C (32°F) or higher than +50 °C (+122 °F). Too-high or too-low temperature may cause image display anomaly of the camera and the camera will be damaged if it is working under such a condition for a long time.

If the camera is installed outdoors, avoid direct sunlight at dawn and dusk on the camera lens and install a sunshield with frontal and rear positions adjusted according to the sunlight angle.

Avoid heavy loads, intensive shakes, and soaking to prevent damages during transportation and storage. The warranty does not cover any device damage that is caused during secondary packaging and transportation after the original packaging is taken apart.

Protect this device from fall-down and intensive strikes, keep the device away from magnetic field interference, and do not install the device in places with shaking surfaces or under shocks.

Clean the device with a soft dry cloth. For stubborn dirt, dip the cloth into slight neutral cleanser, gently wipe the dirt with the cloth, and then dry the device.

Since the camera lens is painted with a durable coating material, it adapts to outdoor environment. The lens must be cleaned regularly. If the image quality is reduced or excessive dirt is deposited on the lens, clean the lens in a timely manner. In sandy (in desert) or corrosive (on sea) environment, use the camera with caution; improper use may cause the coating to peel off.

Do not jam the ventilation opening. Follow the installation instructions provided in this document when installing the device.

Keep the device away from heat sources such as radiators, electric heaters, or other heat equipment.

Keep the device away from moist, dusty, extremely hot or cold places, or places with strong electric radiation.

If the device is installed outdoors, take insect- and moisture-proof measures to avoid circuit board corrosion that can affect monitoring.

Remove the power plug if the device is idle for a long time.

Before unpacking, check whether the fragile sticker is damaged. If the fragile sticker is damaged, contact customer services or sales personnel. The manufacturer shall not be held responsible for any artificial damage of the fragile sticker.

## Special Announcement

All complete products sold by the manufacturer are delivered along with nameplates, operation instructions, and accessories after strict inspection. The manufacturer shall not be held responsible for counterfeit products.

This manual may contain misprints, technology information that is not accurate enough, or product function and operation description that is slightly inconsistent with the actual product. The manufacturer will update this manual according to product function enhancement or changes and regularly update the software and hardware described in this manual. Update information will be added to new versions of this manual without prior notice.

This manual is only for reference and does not ensure that the information is totally consistent with the actual product. For consistency, see the actual product.



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# 1 Hardware Description

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## 1.1 Product Features

Based on self-developed AI chip, with the support of powerful computing power and face recognition algorithms, temperature measurement face recognition terminals are designed to detect skin-surface temperatures, and can thus be used for rapid and preliminary fever screening in office buildings; New face recognition system for identifying whom are people wearing masks, granting access only to verified personnel and eliminating possible fraudulent activities.

### Advantages

- Proximity wake-up activation: the device is automatically activated when a person approaches.
- 7-inch IPS HD screen: displays the software interface, operation guidance and face frame. Performs real-time face detection (supports local video preview).
- million pixel binocular wide angle camera.
- Anti-fake function for pictures and videos.
- Temperature measuring distance: 0.5 to 1.2 m, response speed:  $\leq 100\text{ms}$
- Face recognition distance: 0.3 to 2.0 m.
- Use of deep learning algorithms to support a capacity of 30,000 faces. Fast recognition with a higher recognition rate.
- Storage of up to 60,000 events.
- Multiple authentication methods.
- Facial comparison time  $\leq 0.2$  s/person. Recognition rate  $\geq 99.8\%$ .
- Support for importing of card and facial data to devices through TCP/IP transmission.
- Uploading of data through the internet.
- Uploading of comparison results and interconnected snapshots to the platform for storage.
- Personnel information can be sent down from the platform or uploaded from local devices.
- Stand-alone operation in offline mode.
- Local login for managing, searching and configuring device parameters.

## 1.2 Unlock Instructions

Face recognition terminal can control the lock of door through the multi cable connect to system, in the retention of existing access control system function of the colleague, the access control intelligent operation upgrade.

**NOTE**

If 1.0 mm standard wire is used, 12V switching power supply is used, and the wiring distance from the site construction (switching power to equipment distance) does not exceed 20 m.

If 1.5 mm standard cable is used, 12V switching power supply is used, and the wiring distance from the site construction (switching power to equipment distance) does not exceed 30 m.

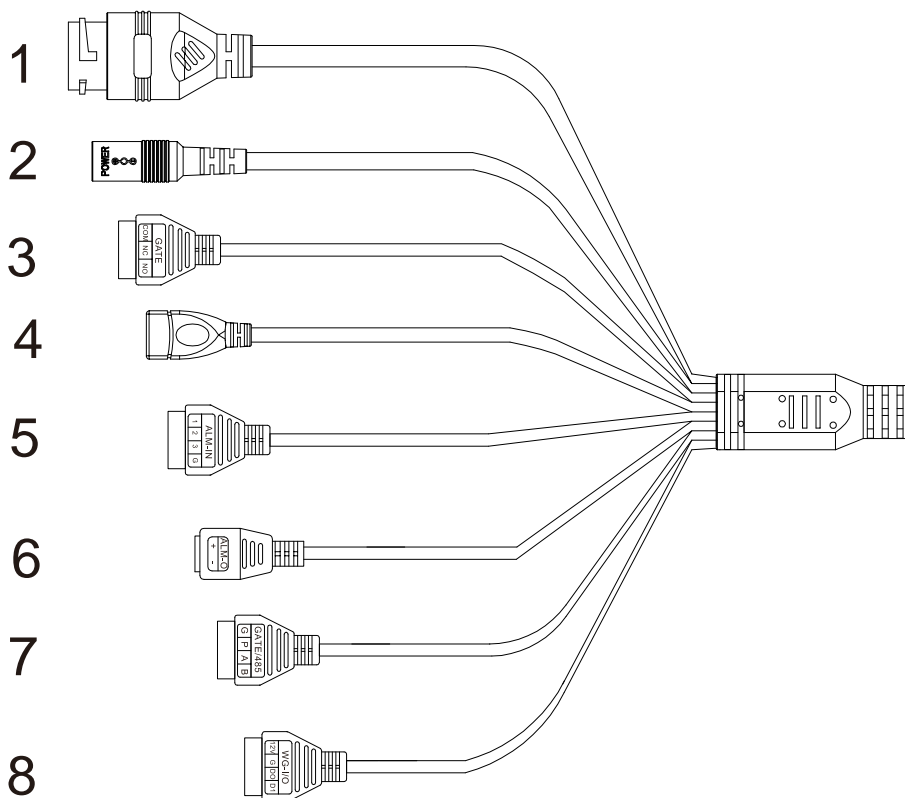
If 2.0 mm standard wire is used, 12V switching power supply is used, and the wiring distance (switching power to the equipment distance) is not more than 40 m.

# 1.3 Appearance Instructions and Cable description

Figure 1-1 Appearance Instructions



Figure 1-2 Multi cable



**NOTE**

Different device may have different multi-head cable, please refer to actual products.

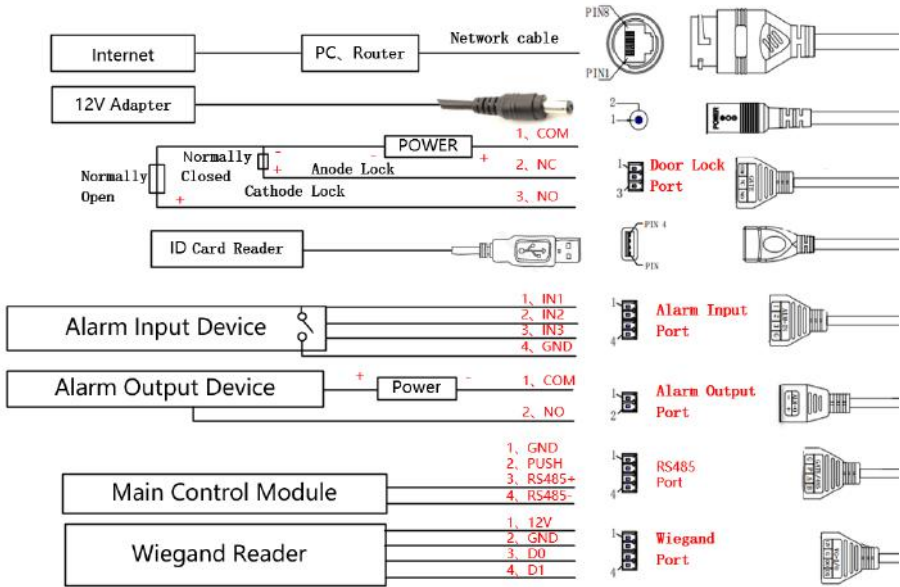
Table 1-1 Cable description

ID	Description	Description	Remarks
1RJ45	Network port	Connect to Ethernet	Not support POE
2POWER	Power	Connect to DC 12V	
3GATE	COM	Connect to Access control's COM	Access control port  When the door lock is not triggered, COM-NC is short-circuited and NO is
	NC	Connect to Access control's COM NC	

	NO	Connect to Access control's NO	suspended; COM-NO is short-circuited when the door lock is triggered; NC is suspended;
4USB	USB port	Connect to USB ID reader.	
5ALARM-IN	1	Connect to alarm device line 1	Alarm IN
	2	Connect to alarm device line 2	
	3	Connect to alarm device line 3	
	G	GND	
6ALARM-OUT	-	Alarm out COM, negative	Alarm OUT
	+	Alarm out, positive	
7GATE/485	G	GND	
	P	Connect to alarm light negative	
	A	RS485 port A(+)	RS485 port
	B	RS485 port B(-)	
8WG-I/O	12V	DC 12V	Wiegand IN/OUT port
	G	GND	
	D0	Wiegand data port 0	
	D1	Wiegand data port 1	

The detail of connection is shown in Figure 1-3.

Figure 1-3 Multi cable connection diagram



## 1.4 Requirement of Use

To ensure the measurement accuracy, please install the devices indoors, with 20~35°C(68-95°F) ambient temperature.

No other obvious heat source around

No cover on forehead

It is recommended to start measure temperature after 30 minutes being powered on.

Please wait for 2-3 minutes before measuring temperature when coming from outdoors or other environment with large temperature difference.

The temperature can be measured in real time by aiming the human face at measurement area on the panel, and trigger high temperature alarm.

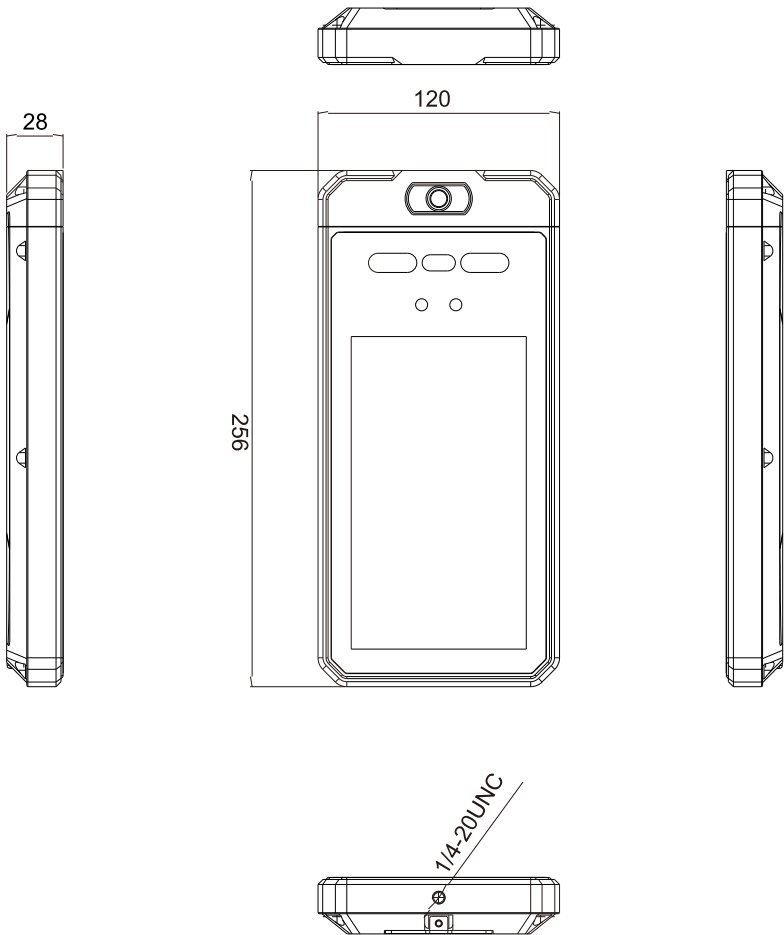
## 1.5 Dimensions



### NOTE

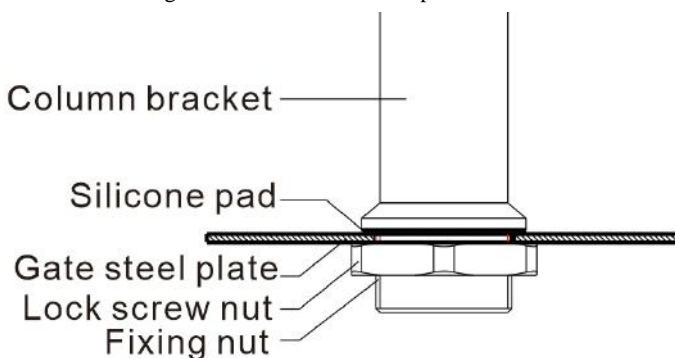
Different device may have different dimensions, please refer to the actual products.

Figure 1-4 Dimensions (unit: mm)



## 1.6 Installation and Precaution

Figure 1-5 Accessories description



### Position of opening hole:

The diameter of the steel plate opening is 34 mm, the specific position depends on the situation. When the all-in-one is installed in the factory configuration, the elevation angle is about 5°.

Figure 1-6 Position of opening hole

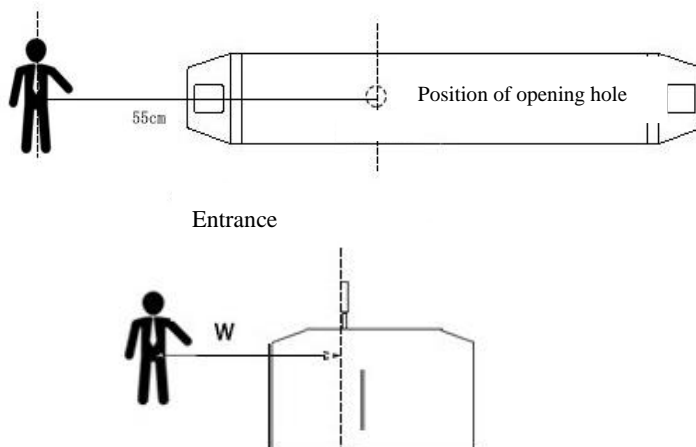


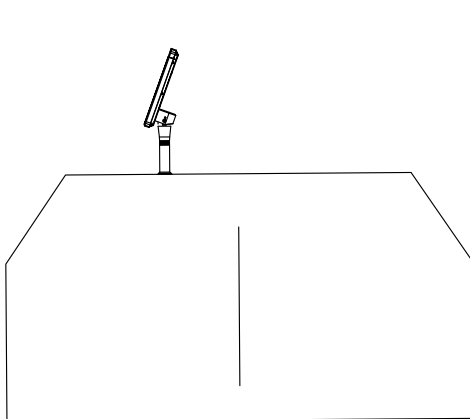
Table 1-2 Installing distance

Distance between person and device	Recognizable height range
55 cm	150~185 cm
60 cm	145~190 cm

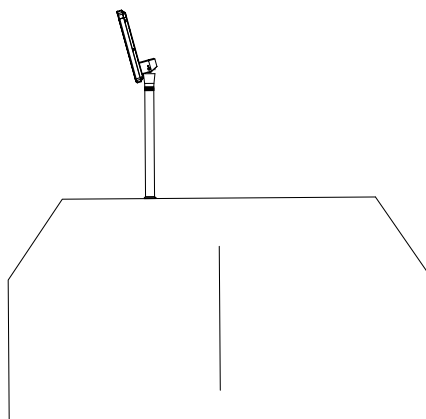


65 cm	140~195 cm
-------	------------

Distance between person and device	Recognizable height range
65 cm	130~185 cm
75 cm	130~190 cm
85 cm	130~195 cm



Place at an elevation without adding a column



Place at an elevation with adding a column

### Procedure of installing at the gate:

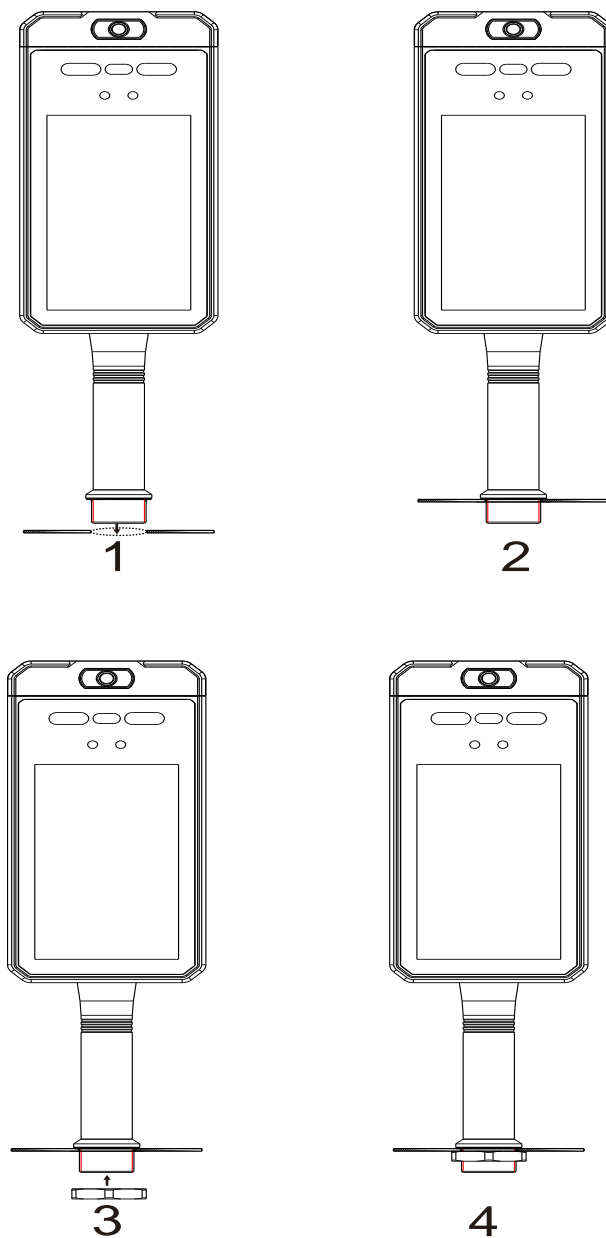
Drill a hole with the diameter is 34mm on the gate machine according to Table 1-2 (Figure 1);

Remove the nut on the column of the integrated machine, and pass the threaded section of the column through the hole (Figure 2);

Screw the column nut onto the threaded section of the column, and use a wrench or other tools to tighten the nut (Figure 3);

Connect the corresponding functions' cable to multi cable, and the installation is completed (Figure 4);

Figure 1-7 Fix steel plate

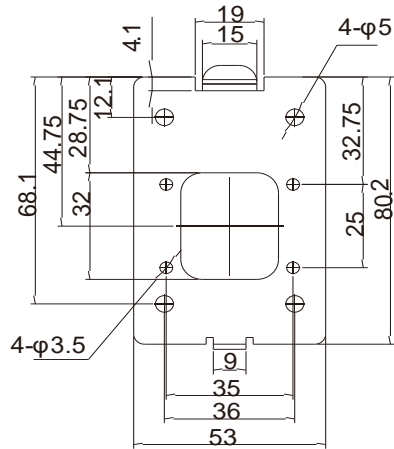
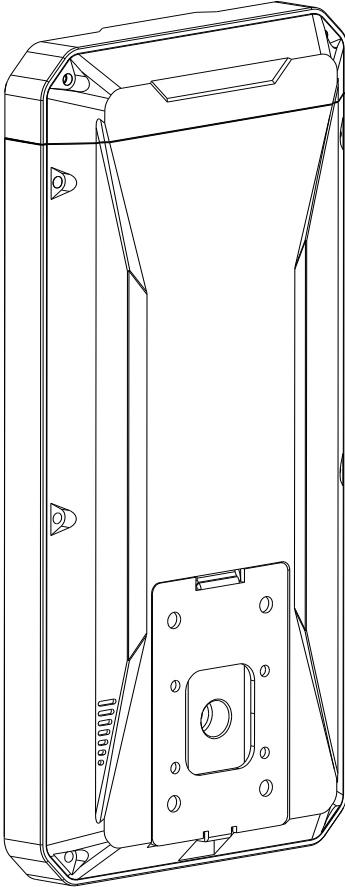


# Instruction of wall mounting :



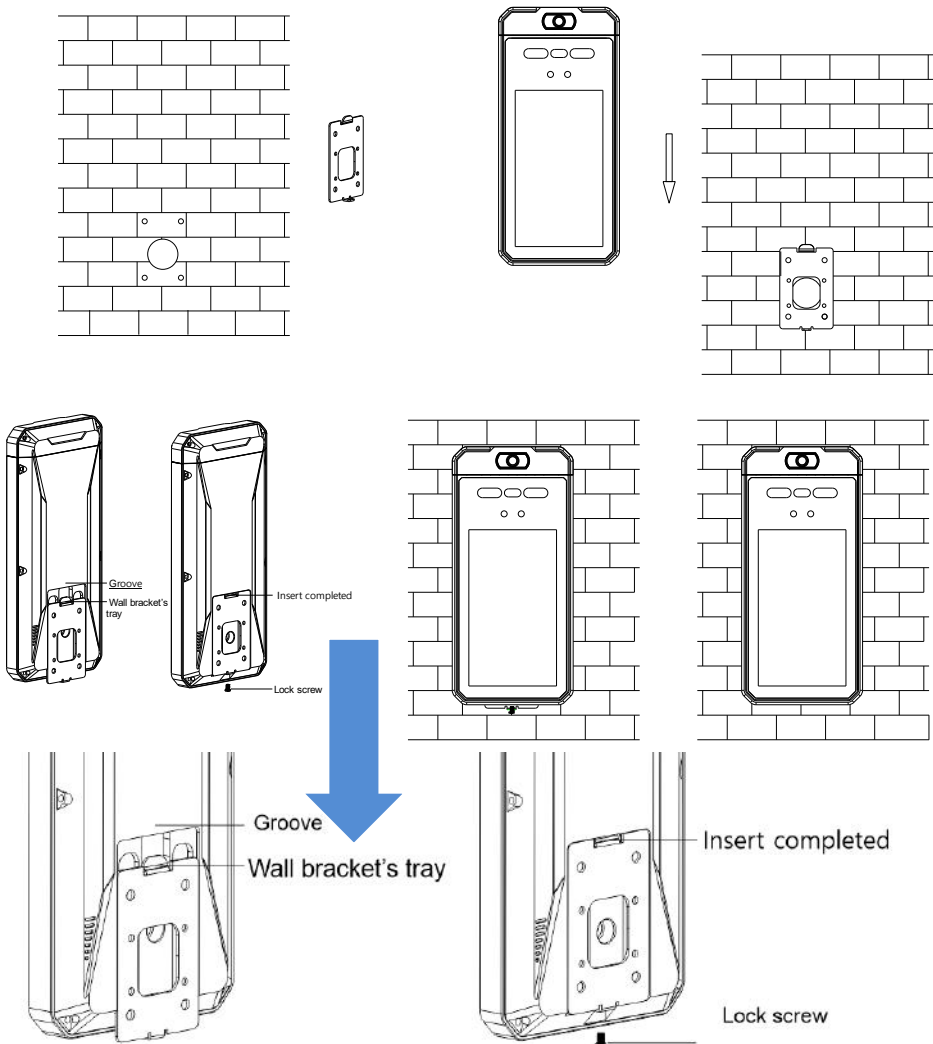
## **CAUTION**

When mounting on the wall, user can choose to drill hole on wall, or no drill hole, the accessory is optional following with the different installment.



The installation method is to first install the wall hanging brackets on the wall and the device respectively, and then fit the bracket of the all-in-one machine and the wall hanging brackets, as shown in Figure 1-8.

Figure 1-8 Wall mounting (drill the passing cables hole)



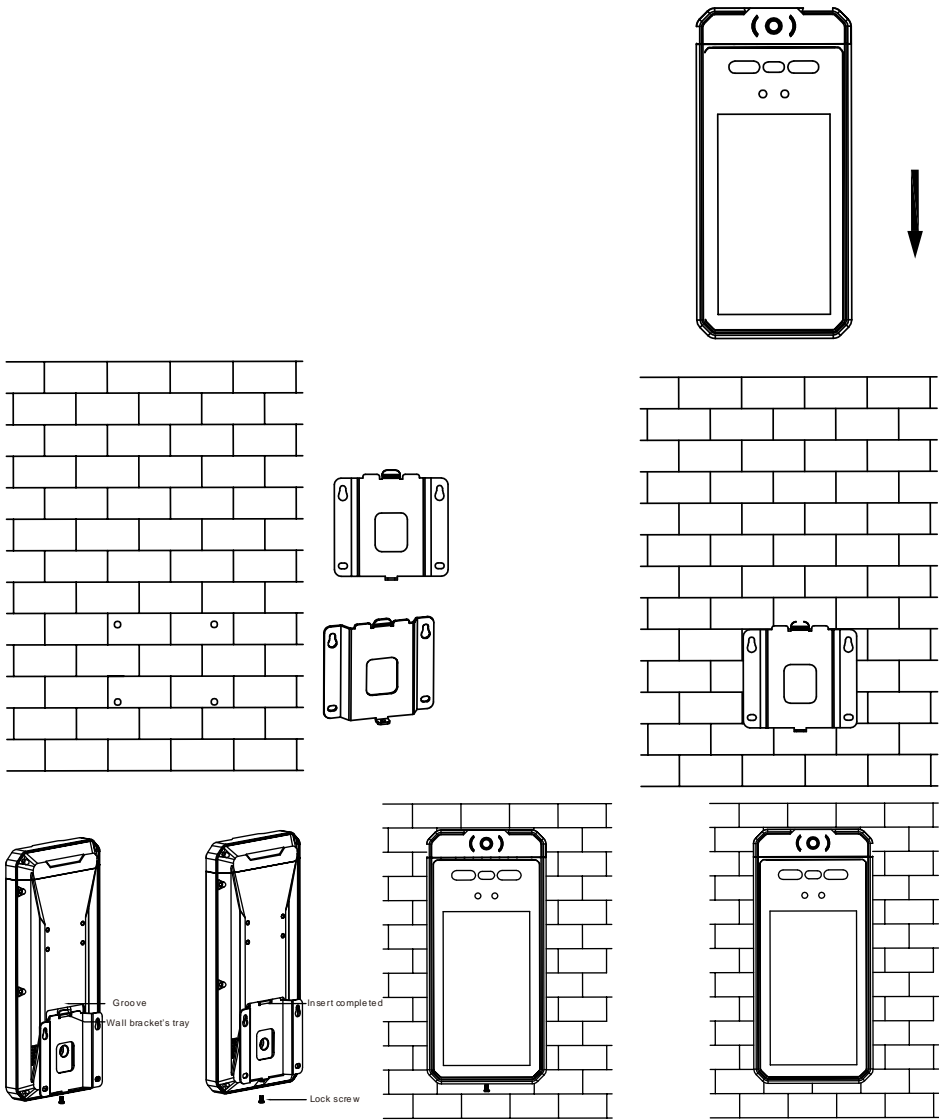
Drill holes (56 X 36 mm) on the wall as the dimensions of the wall bracket, insert the rubber plug into the hole, and reserve a cable hole on the wall;

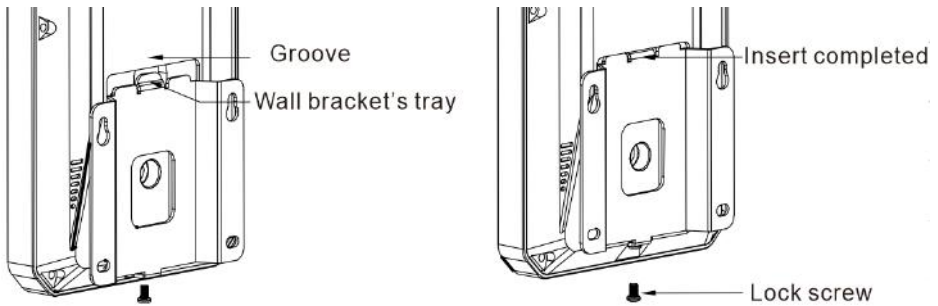
Fix the wall mount bracket to the wall plug with 4 self-tapping screws, and first pass the equipment wire through the wall mount bracket into the reserved hole on the wall;

When the camera falls from the top, insert the tray of the bracket into the groove on the back of the camera;

After the device falls to the final position, tighten the middle screw at the bottom of the device.

Figure 1-9 Wall mounting (no the passing cables hole)





Drill holes (75 X 60 mm) on the wall as the dimensions of the wall bracket, insert the rubber plug into the hole;

Fix the wall mount bracket to the wall plug with 4 self-tapping screws, and pass the equipment wire through the wall mount bracket up or down depending on the need;

When the camera falls from the top, insert the tray of the bracket into the groove on the back of the camera;

After the device falls to the final position, tighten the middle screw at the bottom of the device.

#### NOTE

The installation height should choose the appropriate face height, when the angle of human face is deviate too much from the device, the temperature is detected will be less accuracy, when the person pass through the device, he should adjust face parallel to device.

## 1.7 Packaging and instrctions

Table 1-3 Package list

No.	Item	Quantity	Remark
1	Device	1	-
2	Power	1	DC12V 2A
3	Screw package	1	Optional
4	L wrench	2	-
5	Bracket	1	The default is wall bracket, column is optional

## 2 Quick Configuration

### 2.1 System Login and Logout

Enter the device IP address in the address bar of the Firefox browser or Google Chrome (device default IP:192.168.0.120, the IP is showing on device panel.), press Enter to open the login page, as shown in Figure 2-1.

Figure 2-1 Login interface



Enter the username and password (the default username is admin), user must activation at first to login, set the Password and security configuration questions, as shown in Figure 2-2.

Switch the language at the page as shown in Figure 2-1..

Figure 2-2 Activation page

The screenshot shows the 'activation' page with a light blue header. The 'Username' field is filled with 'admin'. The 'password' field is empty and has a red 'x' icon to its right. Below the password field, a text box specifies the password requirements: '8-16, only two kinds or more in combination with numbers, lowercase letters, uppercase letters, special characters'. The 'Password Confirmation' field is also empty and has a red 'x' icon and the text 'Can not be empty' to its right. An 'OK' button is located at the bottom right of the form area.

**activation**

**Username** admin

**password**  ✖

8-16, only two kinds or more in combination with numbers, lowercase letters, uppercase letters, special characters

**Password Confirmation**  ✖ Can not be empty

OK

Figure 2-3 Security configuration questions

The screenshot shows the 'Security Configuration issues' page with a light blue header. It contains three security questions, each with a dropdown menu for the question and a text input for the answer. The first question is 'What are your favorite games' and its answer field is empty with a red 'x' icon and the text 'Can not be empty' to its right. The second question is 'What is your favorite book is' and its answer field is empty. The third question is 'What's your favorite color' and its answer field is empty. An 'OK' button is located at the bottom right of the form area.

**Security Configuration issues**

Security Question1  ▼

answer  ✖ Can not be empty

Security Question2  ▼

answer

Security Question3  ▼

answer

OK

You can exit to the login page by clicking the Exit button in the top right corner of the page.

If you have forgotten your password, you can answer the security configuration questions to verify identity, set the new password, as shown in Figure 2-4.

If you have forgotten password and answer of the security configuration questions, Please contact our technical support.



Figure 2-4 Forgetting password

1

2

3

Verify identitySet a new passwordcarry out

Ways of identifying

Security verification

Security Question1

What are your favorite games

answer

Security Question2

What is your favorite book is

answer

Security Question3

What's your favorite color

answer

The next step

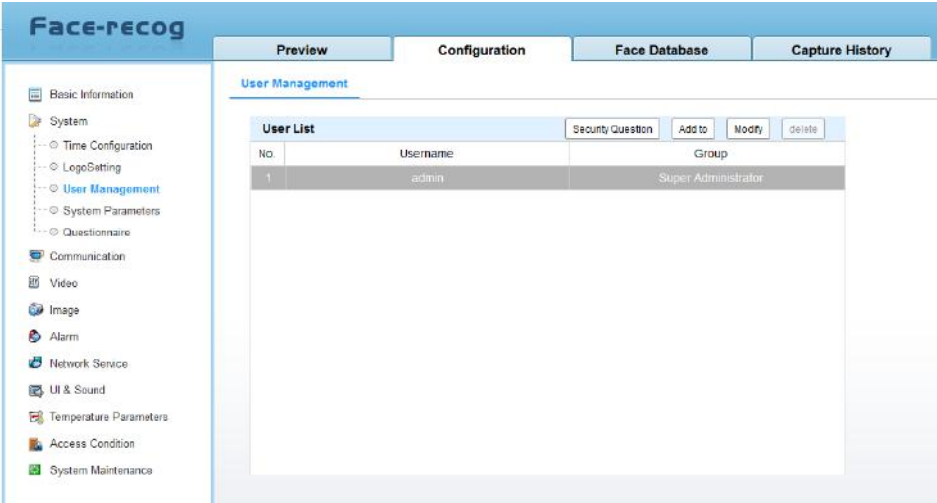
Remove

----End

## 2.2 Modify the Password

At “Configuration < System < User Management” interface to modify the password, as shown in Figure 2-5.

Figure 2-5 User Management



Choose the user name from the user list, click “Modify” to change a new password, as shown in Figure 2-6.

Figure 2-6 Modify password

Users modify ✕

Username

admin

User Type

Administrator

Administrator password

password

8-16, only two kinds or more in combination with numbers, lowercase letters, uppercase letters, special characters

Password Confirmation

OK

cancel

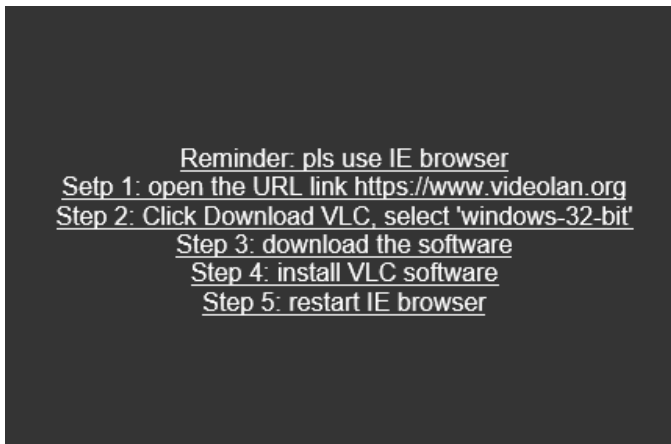
----End

## 2.3 Preview Interface

### 2.3.1 Download VLC

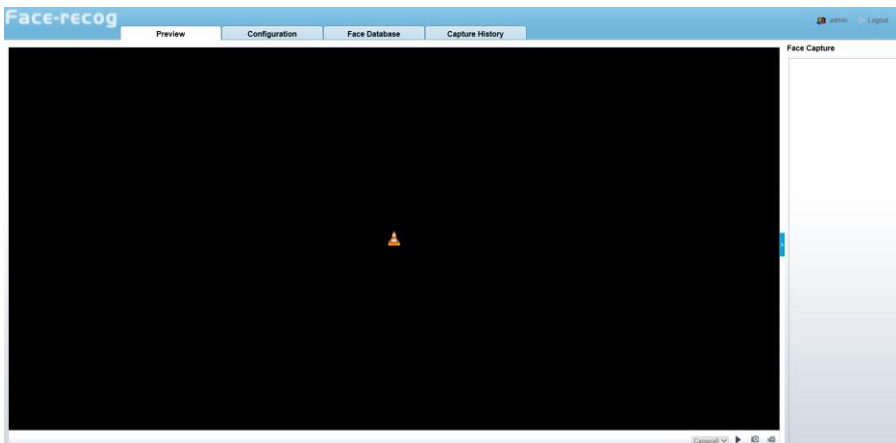
Enter the web interface, as shown in Figure 2-7. User need to download the VLC player at first login.


Figure 2-7 Download VLC



Following the reminder to download the VLC, after installing the VLC, browse the IP again, as shown in Figure 2-8.

Figure 2-8 Installing VCL .

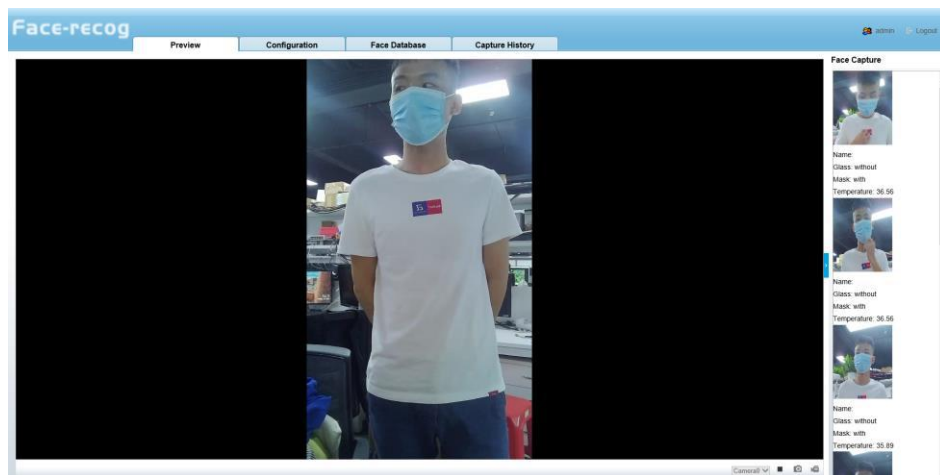


After installing VCL it will play live video, if not user can Click  to preview, the live video will showing.

## 2.3.2 Live Video Interface

The page setting items of the notify sound and interface are as shown in Figure 2-9.

Figure 2-9 Preview interface



1. The live video interface.
2. Configuration, set the system, communication, video, image, algorithm, face database.
3. User of current login account.

prompt

Whether Logout?

OK cancel

4. Logout, leave out the current account

----End

# 3 Configuration Setting

## 3.1 Basic Information

At basic information interface, user can set the device name, device ID, view the device model, device serial number, hardware version, web version, thermal serial, thermal SDK version, as shown in Figure 3-1.

Figure 3-1 Basic information

The screenshot shows the 'Face-recog' configuration interface. The 'Configuration' tab is selected, displaying a list of device parameters and their values in a table-like structure. A 'Save' button is located at the bottom of the configuration area.

Parameter	Value
Device Name	10FACE
Device ID	0900337C
Device Model	SN-M2207NT-D-84
Device Serial Number	0900337C
Hardware Version	v2.1
Sdk Version	11.0.1501.1004.0.0.1.9.0_APP_30_20201210
Arstack Version	0.3.95T_33f4_20201210T015231
Web version	0.1.0_33f4_2020/12/10
Thermal Serial	C8360200101147
Thermal Firmware	42
Thermal SDK Version	1.1.1.20200828_Release

Save

## 3.2 System Setting

At System interface, user can set time configuration, logo settings, user management, system parameters, questionnaire.

### 3.2.1 Time configuration

Set the time zone, and the time of device, as shown in Figure 3-2.

Figure 3-2 Time configuration page

There are two modes to set time, NTP timing and manual timing.

### 3.2.2 Logo Settings

At “Configuration > System > Logo Setting” interface, User can custom the logo of company, as shown in Figure 3-3.

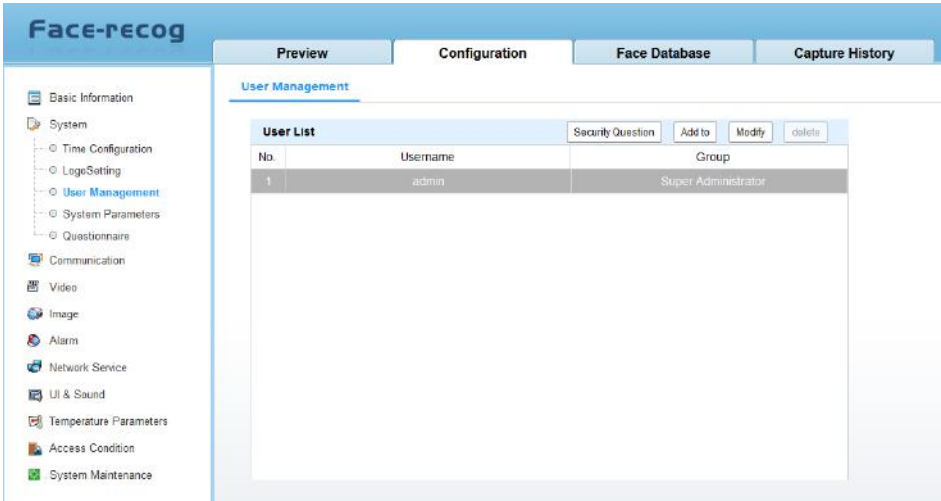
Figure 3-3 Logo settings

----End

### 3.2.3 User Management

At “Configuration > System > User Management” interface, user can modify the security question and password, as show in Figure 3-4.

Figure 3-4 User management interface



Click “Security question” the pop-up window shows as following,

**Password Confirmation** ✕

Administrator password

input the password to enter security configuration questions, as shown in Figure 3-5.

Figure 3-5 Security qusetion

Security Configuration issues

Security Configuration issues

Security Question1

What are your favorite games

answer

Security Question2

What is your favorite book is

answer

Security Question3

What's your favorite color

answer

OK

cancel

What is your father's name

What is your favorite book is

What's your favorite color

What is your favorite movie

What is your favorite flower

What is your first mobile phone brand

The first plane is where you go

What is your mother's name is

What is the name of your high school teacher

What is the name of your junior high school teacher

What you are most familiar name is roommates school dormitory

The most influential name of the person you

who is your favourite celebrity

Your favorite car brand is what

What are your favorite games

Choose the questions, and input the answers, if the password was forgot, you can use the security questions to verify identity and set the new password.

Choose the admin user, click “Modify” to modify password, as shown in Figure 3-6.



Figure 3-6 User modify

**Users modify** [X]

Username:

User Type:

password:

Strong

8-16, only two kinds or more in combination with numbers, lowercase letters, uppercase letters, special characters

Password Confirmation:

OK cancel

----End

### 3.2.4 System Parameters

At “ Configuration > System > System Parameters” interface, set the parameters of system.  
Normal Setting: Attribute Settings, Recognize Settings, Capture Timing Delete Trigger EMMC Snapshot, ID Reader, as shown in Figure 3-7.

Figure 3-7 System parameters interface

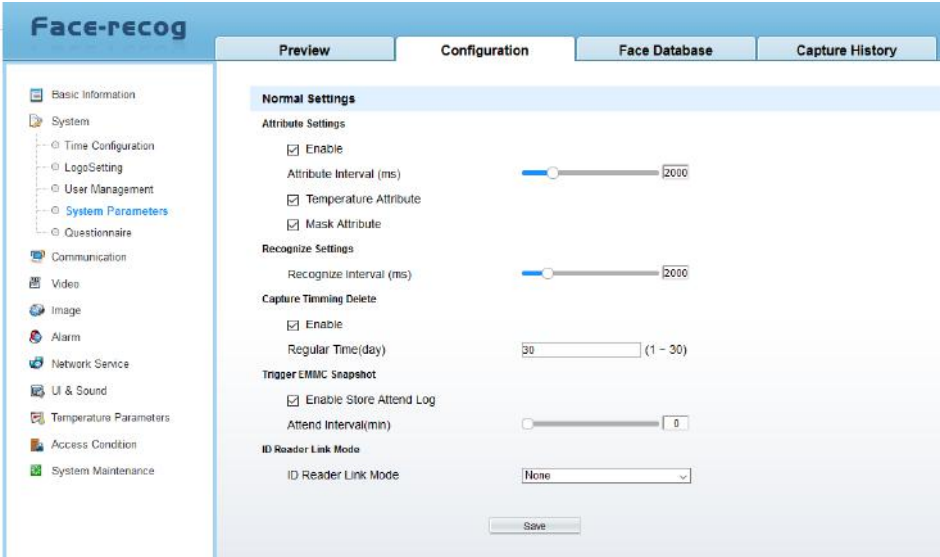


Table 3-1 System parameters

Parameter	Description	Configuration Method
Attribute Settings	Enable the attribute, you can choose whether to detect body temperature or do mask detection, and manually drag the slider to set the attribute interval.	[Setting method] Tick Drag the slider.
Recognize Settings	Set the recognition interval (milliseconds).	[Setting method] Drag the slider.
Capture timing delete	Enable, user can set the regular time to delete the recordings of capture.	[Setting method] Tick Input the value from 1 to 30 days
Trigger EMMC Snapshot	Check whether to start storing attendance records, or the attendance records of strangers. Manually drag the slide bar to set the attend recording interval (minutes).	[Setting method] Tick Drag the slider.
ID Reader Link Mode	None, USB, Serial three modes <div> None  USB  Serial </div>	[Setting method] Choose from drop-down list

----End

### 3.3 Communication Settings

At communication interface, user can set TCP/IP, Device Port settings.

#### 3.3.1 TCP/IP

At “ Configuration > Communication > TCP/IP” interface, user can set the TCP/IP parameters, as shown in Figure 3-8.

Figure 3-8 TCP/IP configuration interface

The screenshot shows the 'Face-recog' configuration interface. The left sidebar lists various system settings, with 'TCP/IP' selected under the 'Communication' category. The main panel displays the 'Configuration' tab for TCP/IP settings. Key parameters include the IPv4 Address (192.168.0.120), Subnet Mask (255.255.255.0), Default Gateway (0.0.0.0), MAC Address (00:15:18:10:BA:CE), and MTU (1500). The 'Enable DHCP' checkbox is checked. A 'DNS Server Configuration' section is also present with fields for Preferred and Alternate DNS Servers. A 'Save' button is located at the bottom right of the configuration area.

You can tick the enable DHCP to obtain parameters automatically, or modify the parameter manually.

----End

#### 3.3.2 Device Port Configuration

At “ Configuration > Communication > Device Port” interface, user can set the HTTP port, HTTPS port, and HTTPS certification, as shown in Figure 3-9.

Figure 3-9 Device Port Configuration interface

**Face-recog**

**Preview Configuration Face Database Capture History**

Basic Information  
System  
Communication  
    TCP/IP  
    **DevicePort**  
Video  
Image  
Alarm  
Network Service  
UI & Sound  
Temperature Parameters  
Access Condition  
System Maintenance

HTTP Port  (1-9999)  
HTTPS Port  (1-9999)  
HTTPS Certification

Input the http port(default is 80) and https port(default is 443). Click “Save” to save the settings. You will need to login the web using the new port after changing the port.

----End

## 3.4 Video Settings

At “ Configuration > Video” interface, user can set the parameters of video, as shown in Figure 3-10.

Figure 3-10 Video settings interface

**Face-recog**

**Preview Configuration Face Database Capture History**

Basic Information  
System  
Communication  
**Video**  
Image  
Alarm  
Network Service  
UI & Sound  
Temperature Parameters  
Access Condition  
System Maintenance

Resolution   
Rate type   
Video frame rate   
Max Bitrate  Kbps  
Average Bitrate  Kbps  
Video Encoding   
I Frame Interval

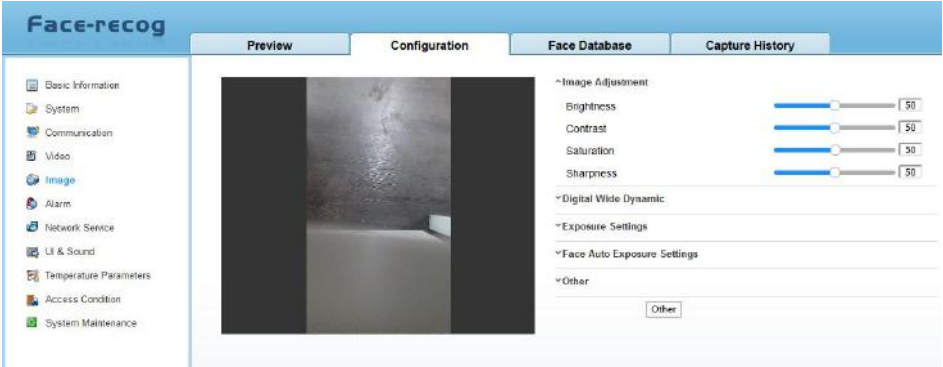
Set the video frame rate, max bitrate, average bitrate, I frame interval. Click “Save” to save the settings. The device is restarted, login again and the settings take effect.

---End

### 3.5 Image Settings

At “ Configuration > Image” interface, user can set display settings and exposure Area ROI, as shown in Figure 3-11.

Figure 3-11 Image settings interface



#### 3.5.1 Display Settings

At display settings page, user can set image adjustment, digital wide dynamic, HDR, exposure settings, face AE settings and other parameters.

**Image adjustment:**

Table 3-2 Image adjustment

Parameter	Description	Configuration Method
Contrast	It indicates the contrast between the bright part and the dark part of an image. As the value increases, the contrast increases.	[Setting method] Drag the slider. [Default value] <b>50</b>
Brightness	It indicates the total brightness of an image. As the value increases, the image becomes brighter.	[Setting method] Drag the slider. [Default value] <b>50</b>
Sharpness	It indicates the border sharpness of an image. As the value increases, the borders become clearer, and the number of noise points increases.	[Setting method] Drag the slider. [Default value] <b>50</b>
Saturation	It indicates the color saturation of an image. As the value increases, the image becomes more colorful.	[Setting method] Drag the slider. [Default value] <b>50</b>

### Digital Wide Dynamic:

When low-brightness areas and high-brightness areas appears in the same picture at the same time, it may cause overexposure or loss of details in the dark. Turning on wide dynamic can enhance the dark part and suppress the bright part to get better performance. You can choose manual, automatic, or off mode.

When the DRC mode is manually, set the gain, k1, k2, k3 by drag the slider, as shown in Figure 3-12.

Figure 3-12 Digital wide dynamic page

^ Digital Wide Dynamic

DRC Mode

Manually

gain

3

k1

1

k2

4

k3

1

### Exposure Settings:

Tick “Enable Exposure Limit” to enable the function, as shown in Figure 3-13.

Figure 3-13 Exposure settings page

^ Exposure Settings

☒ Enable Exposure Limit

exposure limit (us)

5000

### FaceAE Settings:

Figure 3-14 Face AE settings page

#### ^ FaceAE Settings

☒ Open

### Other:

Figure 3-15 Other page



---End

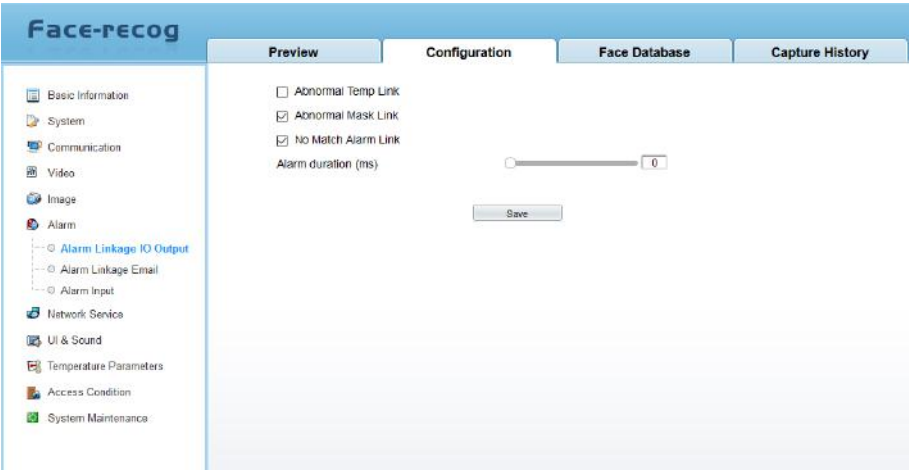
## 3.6 Alarm

At alarm interface, user can set the Alarm Linkage IO Output, Alarm Linkage Email, and Alarm Input.

### 3.6.1 Alarm Linkage IO Output

At “ Configuration > Alarm > Alarm Linkage IO Output” interface, user can tick the abnormal temperature link, abnormal mask link, no match alarm link, set alarm duration, as shown in Figure 3-16. User should connect the alarm IO output port to external alarm device at first.

Figure 3-16 Alarm linkage IO output



---End

### 3.6.2 Alarm Linkage Email

At “ Configuration > Alarm > Alarm Linkage Email” interface, user can tick the abnormal temperature link, abnormal mask link, no match alarm link, as shown in Figure 3-17. User should set the parameters of SMTP so that the alarm information can be send.

Figure 3-17 Alarm linkage Email



---End

### 3.6.3 Alarm Input

At “Configuration > Alarm > Alarm Input” interface, user can enable the alarm input. Choose the alarm index(it depends on which alarm input port is used.), choose the trigger mode(it depends on the feature of alarm input device.), as shown in Figure 3-18.

Figure 3-18 Alarm input





## 3.7 Network Service

### 3.7.1 Upload Service

At “ Configuration >Network Service > Upload Service” interface, set the parameters of HTTP Upload Server Settings, MQTT Upload Server Settings, and Back Ground Settings as shown in Figure 3-19.

Figure 3-19 Server settings interface

The screenshot shows the 'Face-recog' configuration interface. The left sidebar contains a tree view with categories: Basic Information, System, Communication, Video, Image, Alarm, Network Service (selected), UI & Sound, Temperature Parameters, Access Condition, and System Maintenance. Under 'Network Service', 'Upload Service' is selected. The main area has four tabs: Preview, Configuration (active), Face Database, and Capture History. The 'Configuration' tab displays three sections: 'HTTP Upload Server Settings' with an 'Enable HTTP Upload' checkbox; 'MQTT Upload Server Settings' with input fields for 'Mqtt Posting URL', 'Mqtt Topic', 'Mqtt Certification' (with a 'Browse' button), 'Mqtt Client ID', 'Mqtt UserName', and 'Mqtt Password'; and 'Picture upload settings' with a 'Picture resolution' dropdown set to '720P(1280\*720)' and three checked checkboxes: 'Background image upload', 'Capture Img Upload', 'Infrared Img Upload', and 'Register Img Upload'. A 'Save' button is at the bottom.

#### Picture Upload Settings :

User can choose different pictures to upload, tick background image upload, capture image upload, infrared image upload, register image upload.

---End

### 3.7.2 SMTP

At “ Configuration >Network Service > SMTP” interface, as shown in Figure 3-20.

Figure 3-20 SMTP

Face-recog

Basic Information

System

Communication

Video

Image

Alarm

Network Service

Upload Service

SMTP

UI & Sound

Temperature Parameters

Access Condition

System Maintenance

Preview

Configuration

Face Database

Capture History

SMTP Server Address

SMTP Server Port

25

(1-9999)

Username

password

Sender Email Address

Recipient Email Address 1

Recipient Email Address 2

Recipient Email Address 3

Recipient Email Address 4

Recipient Email Address 5

Recipient Email Address 6

Transport Mode

No Encrypt

test

Save

Table 3-3 SMTP

Parameter	Description
SMTP Server Address	The server address of Email.
SMTP Server Port	The server port of Email
Username	The username of Email
Password	The password of Email
Sender Email Address	The sender address of Email
Recipient Email Address	The email address of recipient.

3.8 UI & Sound Settings

At “ Configuration > UI & Sound” interface, set the parameters of panel, as shown in Figure 3-21.

Figure 3-21 UI & Sound interface

Face-recog

Basic Information

System

Communication

Video

Image

Alarm

Network Service

UI & Sound

Temperature Parameters

Access Condition

System Maintenance

Preview

Configuration

Face Database

Capture History

Panel UI Settings

☒ Show IP

☒ Show Track Box

☒ Show Number Of Registrations

☒ Show Measure Area

☒ Show Face Match Result

☒ Show Temperature

☐ Scan code epidemic prevention mode

Language

Simplified Chinese

Voice Gender

Female

Volume

Light Mode

Off

Sleep Mode

On

UI Style

visible Image

UI Main Title

Panel Sound And Picture Settings (Confirm Enable Attribute)

☐ Enable Single Warning

☒ Enable Liveliness

☐ Enable No Match Warning

Mask Detection

☐ Enable

Over Temperature Detection

☐ Enable

Pass Scene

☐ Enable

Liveliness Detection

☐ Enable

No Match Detection

☐ Enable







Save

Table 3-4 UI &amp; Sound settings

Parameter	Description	Configuration Method
Panel UI Settings	<p>Tick the <b>show IP, show track box, show number of registrations, show measure area, show face match result, show temperature, scan code epidemic mode</b>.</p> <p>Scan code epidemic is default to close, user need to open manually; if enable, machine enters the scan code mode, the personnel pass through the device, the device capture the face , then the personnel show the QR code to device, The QR code is successfully scanned and the QR code information is scanned to generate a serial code. The scan results are displayed on the UI interface in real time, and finally the face photos, temperature measurement data and QR code information are saved in the capture record, and can also be uploaded to the backstage platform in real time via the network, as shown in Figure 3-22.</p> <p>Choose the panel's language, there are many languages can be chosen, English, Simplified Chinese, Traditional Chinese, Japanese, Korean, Russian, Italian, Spanish, German, French, Portuguese, Turkish, Romanian, Polish.</p> <p>Select voice gender, adjust the volume.</p> <p>Set the <b>light mode, sleep mode</b>(set the mode of LCD), <b>UI style</b>(visible image, thermal image, big font temperature), UI main title.</p>	<p>[Setting method]</p> <p>Tick, or choose from drop-down list.</p>
Panel Sound and Picture Settings(Confirm Enable Attribute)	<p>Tick the single warning ( the same person will only be warned for once when keeping standing before the device.), liveness, no match warning (stranger warning). The attribute must be enabled.</p>	<p>[Setting method]</p> <p>Tick</p>
Mask Scene	<p>Enable mask scene, select picture settings and prompt sound settings. The camera will display and broadcast the set pictures and voices when it detects mask is not worn, as shown Figure 3-23.</p>	<p>[Setting method]</p> <p>Tick, and choose the file</p>
Over Temperature Detection	<p>Enable, choose picture settings and sound settings, when the temperature is over normal temperature, camera will display and broadcast the set pictures and voices, as shown in Figure 3-24</p>	<p>[Setting method]</p> <p>Tick, and choose the file</p>

Pass scene	Enable the pass scene to set the picture setting and sound setting. When someone pass it will show picture on UI panel, or play the sound reminder, as shown in Figure 3-25.	[Setting method] Tick, and choose the file
Liveness Detection	Enable the liveness scene. If there is an inanimate face, the set picture and voice will be displayed, as shown in Figure 3-26.	[Setting method] Tick, and choose the file
No Match Detection	Check to enable the No Match Detection. Choose picture settings and sound settings. When a stranger appears, the picture and voice set in the corresponding scene will be displayed, as shown in Figure 3-27.	[Setting method] Tick, and choose the file

Figure 3-22 Scanning result

Serial N...	Capture Time	FIG sheet	Mask	Temperature	Scanning result	Operation
198	2020-12-21 11:43:58.812		without	35.97°C	<a href="https://u.wechat.com/MCboBbDqrU1YHDSagfcXPBw">https://u.wechat.com/MCboBbDqrU1YHDSagfcXPBw</a>	
199	2020-12-21 11:44:08.611		without	36.14°C	<a href="https://u.wechat.com/MCboBbDqrU1YHDSagfcXPBw">https://u.wechat.com/MCboBbDqrU1YHDSagfcXPBw</a>	
200	2020-12-21 11:44:14.707		without	36.12°C	<a href="https://u.wechat.com/MCboBbDqrU1YHDSagfcXPBw">https://u.wechat.com/MCboBbDqrU1YHDSagfcXPBw</a>	

**Show IP:** The IP address can be displayed on the UI interface, and you can directly input the IP address in the browser to access the web.

**Show Track Box:** The face appears in the interface, and a white frame appears to frame the face.

**Show Number of Registrations:** show the number of registered users at the bottom of the UI page.

**Show Measure Area:** A blue frame of the display area appears on the UI interface to help the personnel choose a suitable standing position.

**Show Face Match Result:** compare the captured face with the person in the registered database, if it is a registered person, display relevant information on the UI interface, such as name, work ID, etc.

**Show Temperature:** The body temperature of the detected person is displayed on the UI interface.

**Scan Code Epidemic Prevention Mode:** After detecting a person, a health code scan is also required, and the health code related information is uploaded to the back-end platform.

Figure 3-23 Mask detection

**Mask Detection**

☒ Enable

Current Picture

Picture Setting   (jpg/png, <300kb, <1020\*600)

Current Sound

Sound Setting   (wav, <300kb)

Figure 3-24 Over temperature detection

**Over Temperature Detection**

☒ Enable

Current Picture

Picture Setting   (jpg/png, <300kb, <1020\*600)

Current Sound

Sound Setting   (wav, <300kb)

Figure 3-25 Pass scene

**Pass Scene**

☒ Enable

Current Picture

Picture Setting   (jpg/png, <300kb, <1020\*600)

Current Sound

Sound Setting   (wav, <300kb)

Figure 3-26 Liveliness detection

**Liveliness Detection**

☒ Enable

Current Picture

Picture Setting   (jpg/png, <300kb, <1020\*600)

Current Sound


Sound Setting   (wav, <300kb)

Figure 3-27 No match detection

No Match Detection

☒ Enable

Current Picture



delete

Picture Setting

Browse

(jpg/png, <300kb, <1020\*600)

Current Sound

Browse

(wav, <300kb)

Sound Setting

Browse

(wav, <300kb)

----End

### 3.9 Temperature Parameters

At “Configuration > Temperature Parameters” interface, set the parameters of temperature, as shown in Figure 3-28.

Figure 3-28 Temperature parameters interface

FACE-RECOG

Preview

Configuration

Face Database

Capture History

Basic Information

System

Communication

Video

Image

Alarm

Network Service

UI & Sound

Temperature Parameters

Access Condition

System Maintenance

FFC Control

☒ Show Infrared Image

Infrared Test

Shutter Adjust

Temperature Parameters

Temperature Unit

Celsius Degree

Min Temperature

30.0 °C (30.0 ~ 45.0)

Max Temperature

37.3 °C (30.0 ~ 45.0)

Correction Coefficient

0.0 °C (-0.5 ~ 0.5)

Env Temp Offset

0.0 °C (-10 ~ 10)

Env Temperature

33.0 °C

Emulate Temperature Mode

Normal-2

Save

Table 3-5 Temperature parameters

Parameter	Description	Configuration Method
FFC Control	Tick the Show infrared image, the infrared video will show on the UI panel. Click “Shutter Adjust” to test the sheet of infrared.	[Setting method] Tick Click to restart the shutter.

## Configuration Setting

Temperature Parameters	Set the unit of temperature, min temperature, max temperature, correction coefficient, environment temperature offset, emulate temperature mode(normal-1 and normal-2)	[Setting method] Input the value, or choose from drop-down list.
------------------------	--	---

----End

## 3.10 Access Condition

At “Configuration > Access Condition” interface, set the parameters of access condition, as shown in Figure 3-29.

Figure 3-29 Access condition interface

**FACE-REC OG**

Basic Information  
System  
Communication  
Video  
Image  
Alarm  
Network Service  
UI & Sound  
Temperature Parameters  
**Access Condition**  
System Maintenance

Preview Configuration Face Database Capture History

**Unlock Condition (Confirm Enable Attribute)**

☐ Enable Temperature  
☐ Enable Mask  
☐ Enable Guest

**wiegand Settings**

Wiegand Mode Wiegand Input  
Wiegand Bits 34  
Wiegand Format Wiegand34  
type Card Number

Save



Table 3-6 Access condition

Parameter	Description	Configuration Method
Unlock Condition (Confirm Enable Attribute)	<p>Enable body temperature access control mode, mask access control mode, and guest access control mode.</p> <p>Body temperature mode: As long as the registered person whose body temperature meets the set conditions, the door can be opened.</p> <p>Mask mode: As long as the registered person wearing a mask can open the door.</p> <p>Guest mode: Anyone can open the door, regardless of whether the body temperature and mask conditions are met.</p> <p>Body temperature + guest: registration is not necessary, as long as the body temperature meets the set conditions, the door can be opened.</p> <p>Mask +guest: No need to register, person who only just wear a mask can open the door.</p> <p>Body temperature + mask: Only registered personnel who meet the temperature setting conditions and wear a mask can open the door.</p> <p>Body temperature + mask + guest: Registration is not required, as long as the body temperature setting conditions are met and the mask is worn, the door can be opened.</p> <p>Neither option: The door can only be opened by registered personnel in the whitelist or permission group that meet the temperature setting conditions and wear a mask at the same time.</p>	[Setting method] Tick
Wiegand Settings	<p>There are three Wiegand modes, wiegand input, wiegand output, wiegand shutdown.</p> <p>Choose one mode to set, as shown in the following pictures.</p>	----

Figure 3-30 Wiegand input interface

**wiegand Settings**

Wiegand Mode	Wiegand Input	▼
Wiegand Bits	26	▼
Wiegand Format	Wiegand26	▼
type	Card Number	▼

Figure 3-31 Wiegand output interface

**wiegand Settings**

Wiegand Mode	Wiegand Output	▼
Wiegand Bits	26	▼
Wiegand Format	Wiegand26	▼
Pulse Width(us)	100	(0-10000)
Pulse Interval(us)	1000	(0-100000)
type	Work ID	▼

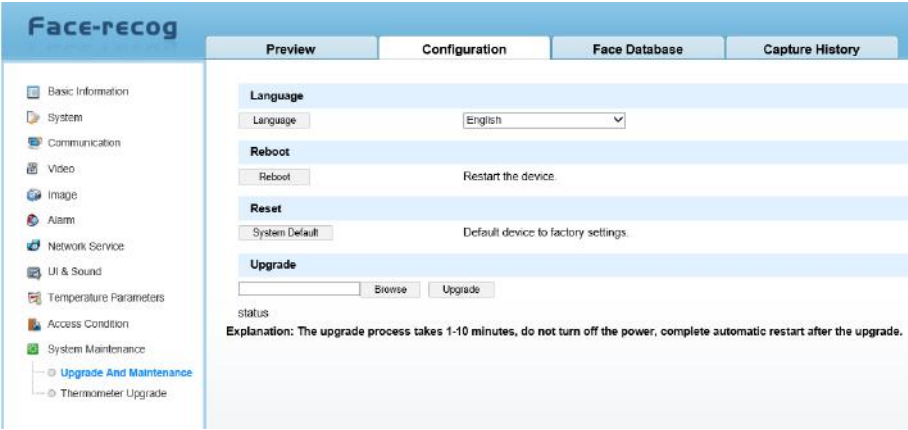
----End

## 3.11 System Maintenance

### 3.11.1 Upgrade and Maintenance

At “ Configuration > System Maintenance > Upgrade and Maintenance interface, user can upgrade and maintenance, thermometer upgrade, as shown in Figure 3-32 .

Figure 3-32 System maintenance interface



**Language:**



Change the language of web, as shown in figure

**Reboot:**



Whether restart the device?

Reboot the device, click “Reboot”, on the pop-up window



, click “OK”

prompt

Device is restarted ...

, wait few seconds, the device will restart.

**Reset:**

Reset the device, click “System Recovery” to recover device to factory settings.

prompt

The device will automatically reboot after restore defaults complete, confirm that the recovery?



, click “OK” to reset. Wait a few moment, the page will jump to login interface, activation the device again.

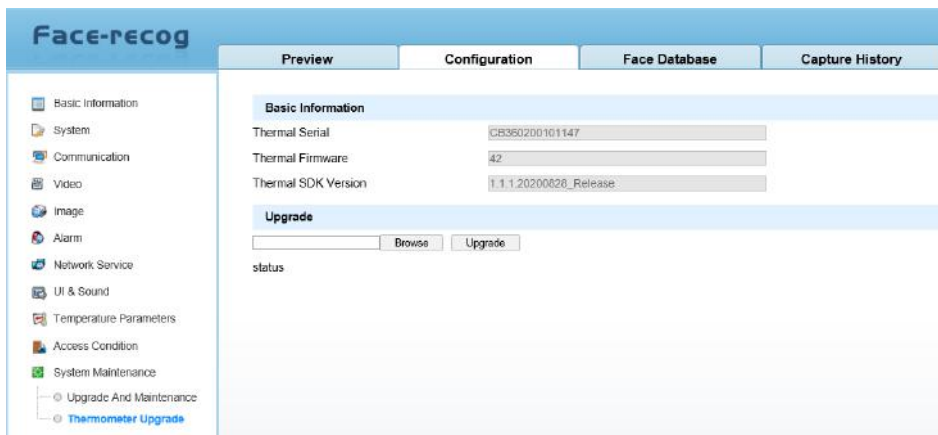
## Upgrade

Browse the local folder where the upgrade software locates, click “Upgrade” to upgrade the device.

### 3.11.2 Thermometer Upgrade

At “Configuration > System > thermometer upgrade interface, user can upgrade the software of thermometer module, as shown in Figure 3-33 .

Figure 3-33 Thermometer Upgrade interface



Browse the local folder to upgrade software, click “Upgrade” to start update, after upgrading the device will restart.

#### NOTE



The upgrade process takes 1-10 minutes, do not power off the device, it will automatically restart after upgrading.

----End

# 4 Face Database

At Face database interface, user can add face information to the local database, and support up to 30,000 face information. User can delete, import, export, search the database.

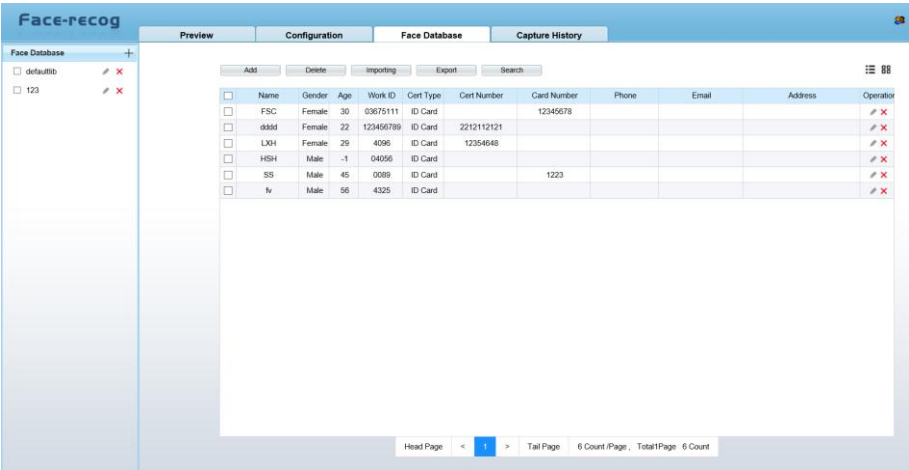
Click “+” to add new face database, as shown in Figure 4-1.

Click  to edit the face database. Click  to delete database.

## 4.1 Add Face

At Face Database interface, user can add the person to database one by one, or import the face database, as shown in Figure 4-1.

Figure 4-1 Face database interface



Click "Add " to add the person to database, as shown in Figure 4-2. After successful registration, relevant information will be displayed in the list, the persons detail can be shown as two modes, list and graph.

Figure 4-2 Add person

Add Person

Name

Gender

Female

Age

Work ID

password

Face Database

defaultlib

Cert Type

ID Card

Cert Number

Card Number

Phone

Email

Address

Picture

Tip: Face pixels must be greater than 100x100

OK

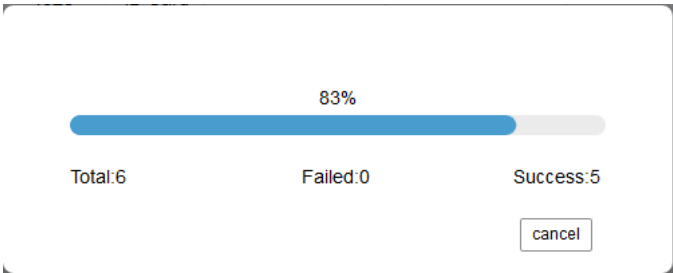
cancel

Add person should input name, work ID, add picture. Other parameter is optional, the password is used for UI panel to unlock by password.

Tick the persons want to be delete, click “Delete” to delete.

Click “Export” to export the data to local folder, the status is showing as Figure 4-3.

Figure 4-3 Export database



Import the database means that user can import other face recognition terminal’s database batch. User can refer to the template of export to finish file.

Figure 4-4 Search person

**Search**

Name

Work ID

OK

cancel


Click  to modify the information, as shown in Figure 4-5. Click “OK” to save the changes.

Figure 4-5 Modify personal information

**Modify**

Name

SS

Gender

Male

Age

45

Work ID

0069

password

Face Database

defaultlib

Cert Type

ID Card

Cert Number

Card Number

1223

Phone

Email

Address

Picture





+

Tip: Face pixels must be greater than 100x100

OK

cancel


prompt

Confirm Delete

OK

cancel

is

Click  to delete the person information, the pop-up window showing, click “OK” to delete.

----End

# 5 Capture History

Set the start time and end time to search capture image, it will show capture time ,FIG sheet, mask, temperature, and the scanning result as shown in Figure 5-1.

Figure 5-1 Capture History interface

Face-recog

Preview

Configuration

Face Database

Capture History

Query conditions

Start Time  
2020-12-14T15:56:53  
End Time  
2020-12-14T16:56:53  

Search Export

Serial N...	Capture Time	FIG sheet	Mask	Temperature	Scanning result	Operation
9119	2020-12-14 16:01:17.377		without	36.31°C		+
9120	2020-12-14 16:03:07.968		without	36.53°C	<a href="https://a.weixin.com/MicroSRACv3.0/SPST1.jpg">https://a.weixin.com/MicroSRACv3.0/SPST1.jpg</a>	
9121	2020-12-14 16:14:03.747		without	36.50°C		
9122	2020-12-14 16:14:37.362		without	36.48°C		
9123	2020-12-14 16:14:44.569		without	36.47°C		
9124	2020-12-14 16:14:51.973		without	36.19°C		
9125	2020-12-14 16:14:57.166		without	36.14°C		+
9126	2020-12-14 16:15:03.169		without	36.07°C		+
9127	2020-12-14 16:16:10.993		without	36.48°C		

Head Page

1

Tail Page

9 Count / Page

TotalPage 12 Count

The FIG sheets are saved in camera, it can save up to 30000 image records, the images can be overwritten.



Figure 5-2 Set detail time

**Start Time**  
2020-12-14T15:56:53

**End Time**  
2020-12-14T16:56:53

◀◀ Dec 2020 ▶▶

**Quick Selection** ×

2020-12-14T16:56:00

2020-12-14T16:56:15

2020-12-14T16:56:	0	1	2	3	4	5
2020-12-14T16:56:	6	7	8	9	10	11
2020-12-14T16:56:	12	13	14	15	16	17
2020-12-14T16:56:	18	19	20	21	22	23

Time 16 : 56 : 53

OK

User can set the detail time to search.

----End

101-300-0585-02