Face recognize & temperature measurement panel

user manual

Foreword

The purpose of this section is to ensure that user can use product correctly through this manual to avoid danger or property damage during operation. Before using this product, please read the manual carefully and save it for future reference.

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About this manual

Use this manual as a guide. The photos, graphics, diagrams, and illustrations provided in the manual are for reference only. They may differ from specific products. Please refer to actual product. The company may update this manual due to product version upgrades or other needs. If you need the latest version of the manual, please log on to the company's official website to check.

It is recommended that you use this manual under professional person guidance

Disclaimer

1.To the maximum extent permitted by law, the products described in this manual (including hardware, software, firmware, etc.) are provided "as is" and may have defective or errors. The company does not provide any form or Implied warranties, including but not limited to warranties of merchantability, quality satisfaction, fitness for a particular purpose, and non-infringement of third-party rights; nor does it impose any special, incidental, incidental, or indirect damages resulting from the use of this manual or the use of our products Compensation, including but not limited to loss of business profits, loss of data or documents.

2.If you connect the product to Internet, the product may be subject to network attacks, hackers, and virus infections. you have to bear risk by yourself. But we will provide you with technical support in time.

3. When using this product, please strictly follow the applicable laws. If the product is used for infringing the rights of third parties or other improper uses, the company will not bear any responsibility.

If the contents of this manual conflict with applicable laws, the legal provisions shall prevail.

Sign convention

The description of the symbols that appear in the document is shown below.

Sign Description

1. ![] Descriptive text, which supplements and explains the text.
2. ⚠ Warning texts indicate potential risks. If not avoided, they may cause injury, equipment damage, or business interruption.
3. ⚠ Dangerous text indicates that there is a high potential risk. If it is not avoided, it may cause

Serious danger of personal injury or death.

Tips:

To protect your privacy and improve product security, we strongly recommend that you set a more complex password according to the following rules: 8-16 characters, consisting of two or more types of numbers, uppercase and lowercase letters, and special characters Made.

Please understand that you are responsible for properly configuring all passwords and other related product security settings.

Chapter 1: Product Overview

Product Line	Name
7-inch temperature measurement panel	7-inch temperature measurement panel with vertical bracket
	7-inch temperature measurement panel with wall bracket
8-inch temperature measurement panel	8-inch temperature measurement panel with vertical bracket
	8-inch temperature measurement panel with wall bracket

1.1 Product Introduction

The temperature measurement &Face recogniz panel ,using Dual sensor with living detect, based on face recognition and infrared temperature detection.The product realizes identity confirmation and access rights management through face recognition, and also realizes non-contact temperature detection, rapid screening, automatic alarm and automatic detection of whether the mask is worn or not.

The productavoid manual operation, improve efficiency and reduce missing information，and reduces the hidden danger of cross-infection caused by human-to-terminal and human-to-human contact during the detection and management process. Facilitate the rapid screening of people gathering place.

Suit for Hotel, access gate, office building,school,shopping mall, communities, public services.

1.2 Product Features

(1) Using high-precision infrared temperature decector non-contact automatic body temperature detection, accurate and efficient;

(2) Temperature measurement range: 30-45 (℃),
Accuracy can reach ± 0.3(℃);
(3) Real-time output of identify results and voice prompts;
(4) Auto identify people without masks and give real-time warning;
(5) Auto register and record information, avoid manual operation, improve efficiency and reduce missing information;
(6) Dual sensor with living detect, face recognition distance 0.3-3M,
(7) Face recognition within 500ms; Face library 22400 person. Total can storage 100,000 recognize record;
(8) Rich interface protocols, supporting SDK and HTTP protocols under multiple platforms such as Windows / Linux
(9) Supporting machine vision optical dynamics ↗80dB, suitable for backlight environment monitor;
(10) Supports fog, 3D noise reduction, strong light suppression, electronic image stabilization, and has multiple white balance modes, suitable for various scene requirements;
(11) Linux operate system ,more stable.

1.3 Packing list

Temperature measurement panel	1unit
Installation and user manual	1pcs
Warranty card	1pcs
Spare parts package	Post: 1 set of waterproof network head, 6 pcs tie Wall mount: 1 1pcs accessory kit, 1pcs gimbal bracket, 1pcs wall mount bracket, 1 set of waterproof network head

Chapter 2: Appearance

| 7-inch with vertical bracket | 8-inch with vertical bracket | 8-inch with wall bracket |

Pigtail interface description:

No.	Name	Description
J1	WG OUT	1:D0 2:D1 3:GND
J2	WG IN	1:D0 2:D1 3:GND
J3	ALARM OUT	RELAY SWITCH
J4	USB	USB 2.0
J5	RJ45	100M
J6	DC12V	POWER IN 12V/3A

| 7-inch with wall bracket |

No.	Name	Description
J1	Multifunctional interface	WG OUT：Orange D0、White D1、Green GND
		WG IN：Brown and white D0、Yellow D1、Gray GND
		ALARM OUT：Brown ALARM+、Purple ALARM
		RS485：Orange and White 485+、Blue and White 485
		USB：Red 5V、Blue D-、Green and white D+、Black GND
J2	RJ45	100M
J3	Power supply interface	POWER IN12V/3A

Part fittings as shown :

Image Display	Name	Description
	Wall-mounted mounting plate	1. Divided into 7-inch and 8-inch , not shared. 2. Standard configuration of wall-mounted temperature measure-ment panel. 3. Please refer to the actual size.
	Wall bracket	1. Divided into 7-inch and 8-inch , not shared. 2. Standard configuration of wall-mounted temperature measure-ment panel. 3. Please refer to the actual size.
	Gimbal bracket	1. Divided into 7-inch and 8-inch , not shared. 2. Standard configuration of wall-mounted temperature measure-ment panel. 3. Please refer to the actual size.
	Tripod	1.Non standard, purchased by customers. 2.The recommended installation height is less than 145mm.
	"Accessory Pack" to the tripod	1.Standard on tripod for fixed installations. 2.Connected with the gimbal bracket during installation.

Precautions

1. Device working temperature : 10 ℃ - 35 ℃ (Device optimum working temperature :16~32℃). Do not Install under the vent and ensure that there is no heating source within 3 meters;
2. People entering the room from a cold outdoor environment will affect measurement accuracy. The wrist temperature test needs to be performed indoors without covering the wrist for three minutes and the temperature is stable;
3. The temperature read by the temperature measuring device is the temperature in the wrist area. When there is water, sweat, oil orthick makeup on the wrist, or the elderly have wrinkles, the read temperature will be lower than the actual temperature. Make sure there is no hair or clothing covering this area;
4. We suggest end user do mutil practise for testing ,be well know about testing way,detecting result can't replace medical diagnose.
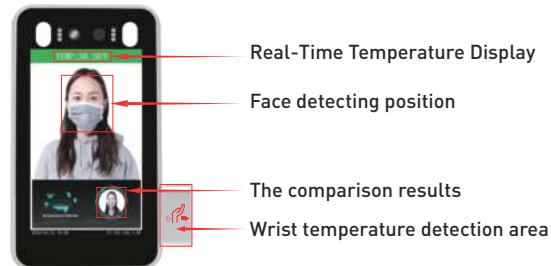
Gate installation

According to the requirements of the installation site, in the space position on the gate or in the front side, the opening diameter of the 7-inch access control machine is 30mm, and the opening diameter of the 8-inch access control machine is 35mm.The diagram is as follows:

Single channel gate   Two channel gate
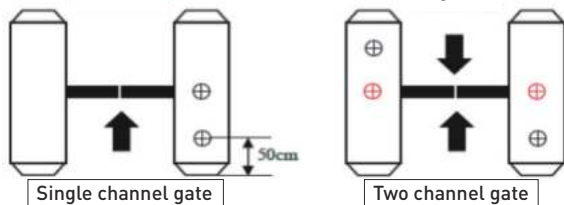
1.2 Adjust angle of temperature detector

After wrist temperature panel complete start, pls stand at front of device,human face directly facing screen. To ensure the face image inside , "temperature measurement area" (optimal temperature detector distance 0.4m). when detect face success, screen will have remind voice: reach out your hand, then please reach out hand to the tempera-ture detector,(detector distance is 1-3cm),it is helpful to paste "Please stand here" label on floor at correct testing distance .

Real-Time Temperature Display

Face detecting position

The comparison results

Wrist temperature detection area

Note： Due to the height of the gate installation, it may cause the test personnel to actively cooperate during the test to ensure that the bare skin on the wrist is placed in the "temperature measurement area".

2.Temporary test position, (Tripod mounting)

2.1 Temperature measurement panel with vertical bracket:
Attach the cable tie from the "Accessory Pack" to the tripod for the temperature measurement access control on the column,

Temperature measurement panel with wall bracket:
Mount the gimbal bracket in the "Accessory Pack" to the tripod for the wall-mounted temperature measurement access control. Connect the power supply and network cable.

2.2 Adjust to best angle and detection position of the detector, as image below:

2.3 After temperature detect are confirmed , make detect position mark on the ground for accurate detection.
Note: There is no need to move or adjust the relevant position or height after installation is completed. Due to the height difference of the inspected person, the inspected person may need to cooperate actively to ensure the accuracy of the inspection data.

3.Wall mounting
Note: The installation height of 1.5 meters here is the recommended installation height, and users can adjust it according to their height.
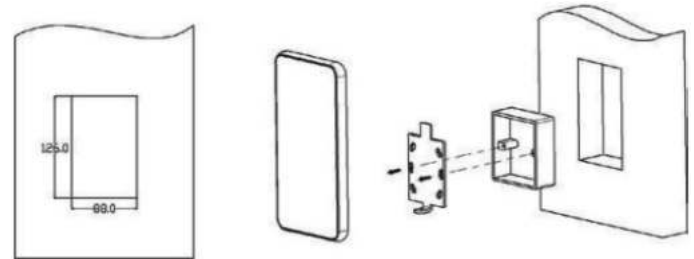
Installation with 86 boxes

Step 1: Make holes in the wall according to the mounting bracket and install 86 boxes.
Step 2: Use a special tamper-proof wrench to loosen the tamper-resis-tant fixing screws at the bottom of the device, remove the mounting plate, and The hanging plate is fixed on the 86 box as shown below.
Step 3: Hang the device from top to bottom on the mounting plate.
**Step 4:** Use a special tamper wrench at the bottom of the device to lock the tamper screws .

Installation without 86 boxes:

Step 1: Fix the mounting base on the mounting wall as shown in the figure below.

Step 2: Use a special tamper-proof wrench to loosen the tamper-resistant fixing screws at the bottom of the device, remove the mounting plate, and lock it to the mounting base plate according to the hole position.

Step 3: Hang the device from top to bottom on the mounting plate.

Step 4: Use a special tamper wrench at the bottom of the device to lock the tamper screws .
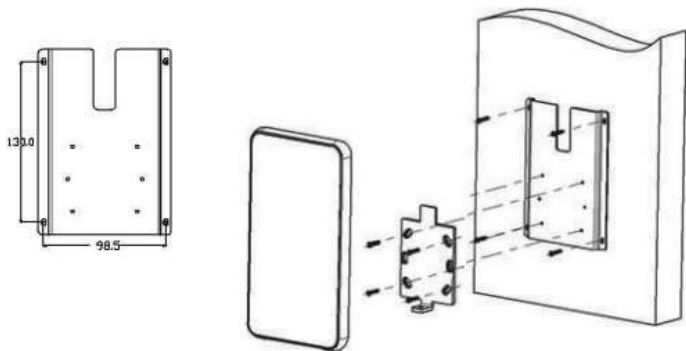
Chapter 4: Instructions

4.1 IE page setup and environment setup

In an environment where all aspects of the device and network work normally, open the IE browser, Input the device IP in the address bar, [IP defaults is 192.168.1.88], press Enter button, pop up login interface, input password: admin ,Click Login.

4.2 Setting

4.2.1 System Info

4.2.1.1 Language config, select the desired language

* Modifying the device language, please close the browser to login.

4.2.1.2 User management, password setting

4.2.1.3 System Time

System Time

Date [2020- 5 - 11] [11 : 55 : 50]

○ NTP Server

○ Synchronize with Local Computer

○ Set the Time Manually

Time zone conversion [1 ∨]

RTC switch [Open ∨]

[Save]

4.2.2 Face recognition-Access control

| System Info | User Manage | System Time | LAN | Mobile | Smart Face | **Access control** |

White light control [Turn off screen display ∨]
Screen display mode [Turn off screen display ∨]
List similarity [75] (1-100)
ID similarity [60] (1-100)
Face filtering [3] (1-10x)
Temperature threshold [37.3]
Temperature correction [Intelligent Algorithm ∨]
compensated temperature [0]
Temperature measurement mode [Precision mode ∨]
Temperature unit [Celsius ∨]
Abnormal temperature opens the door [open ∨]
Date Format [YYYY-MM-DD ∨]
Comparison record storage [open ∨]
Mask temperature detection [Body temperature detec ∨]
Opening conditions [Whitelist + face verification to op ∨]
Control Interface [Wiegand interface ∨]
Card number method [Decimal ∨]
Open the door action [NC ∨]
Wiegand Agreement [32 bit ∨]
Access control public card number [ ]
Range when access control card number is [ ] - [ ]
automatically generated
Hold time [5] ms

[Save]

4.2.2.1 White light control

Set the light status according to the actual environment (default is to turn off when detect no person).

White light control
- White light is always on
- White light time control
- White light is always off
- **Turn off screen display after no one**

4.2.2.2 Screen display mode

Set the display mode according to the usage (default is closed when detect no person).

4.2.2.3 Temperature threshold

The temperature threshold can be set between 35-45 ℃, the default value is 37.3 ℃, can be modified according to actual use needs.

4.2.2.4 Temperature correction

"Smart Algorithm" defaults mode is "Smart Algorithm" under this mode no correction value;

"Low temperature algorithm" mode operation method, choose to use correction method in the environment with low ambient temperature (below 10 ℃):

a. Prepare a forehead temperature gun which meet relevant national standards;

b. On-site temperature calibration requires the cooperation of two persons who are in good health (without fever and fever), one person is responsible for the operation, and the other acts as the person under test;

c. Use the forehead temperature gun to test the forehead temperature of the person under test. It is recommended to make multiple (3-5 times) Mulit time measurements to ensure temperature values accuract is less than 0.3 ℃, record the measured temperature value, and then use the temperature measurement access control machine to test the person . After subtracting the average value measured by the

access control machine from the average value measured by the forehead gun, fill in the "temperature In the "Compensation" box, click "Save". After saving the parameters, perform the test. The above method is set only when the value of the temperature gun and the access control machine are basically the same (the error range is less than 0.3 ℃).

4.2.2.5 Temperature measurement mode

Temperature measurement mode can choose precise temperature measurement or fast measurement mode (default is accurate measurement mode).

4.2.2.6 Temperature measurement unit

Set temperature threshold / temperature unit according to usage habits (default is Celsius, 37.3 ℃).

4.2.2.7 Temperature abnormal switch control

This item default is" turn off" . It is set according to actual needs. After the setting is turned on, when measured forehead temperature too high, or too low, door switch signal will be triggered. In actual appliation,this switich signal can be to connec alarm device,when detect temperature abnormal,have alarm voice output.

4.2.2.8 Comparison record storage

According to actual needs, the comparison information will be stored on the device when the face recognition is turned on, and the record will still exist after the power is turned off.

4.2.2.9 Mask temperature detection

Mask temperature detect" can choose "no temperature detection", "mask detection", "mask + body temperature detection" and other modes, when "no" is selected, the temperature will not be measured, after selecting "body temperature detection" mode, the temperature will be measured, and select "mask detection" "Mode detects that no mask is wear, it will prompt remind voice" please wear a mask ". Select

ing the" body temperature + mask detection "mode will detect when wear mask and measure temperature.
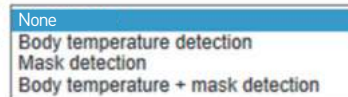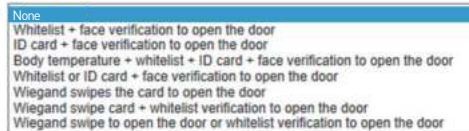

4.2.2.10 Open door setting

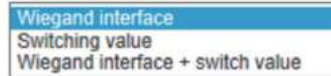This setting can be used in combine with "mask temperature detection setting", or can be set separately.

4.2.2.11 Control interface

Set the interface control mode, including Wiegand interface and alarm out interface. Wiegand interface + switching value.

4.2.2.12 Open state

This setting can be set to normally open or normally closed according to actual application.

4.2.2.13 Wiegand protocol

Wiegand output: When you need to use Wiegand interface, select the corresponding protocol according to external device, we support WG 26 / WG 34 protocol.

4.2.3 Face recognition • Parameter setting

4.2.3.1 Switch

This item is used to enable the face recognition algorithm. Only when the switch is open , the face recognition capture be performed, and other parameter settings will take effect.

4.2.3.2 Arming time

This item is arming time. The user can define two time periods. To make it effective, check the box next to [Arming time period]. Default: Both time periods are enabled, the default time is 00: 00 ~ 23: 59.

4.2.3.3 Sensitivity

Setting range: 0 ~10. The default sensitivity is 9.
The sensitivity values is higher,the capture image quality be worse
The sensitivity Values is lower, The capture image quality will be better.

4.2.3.4 Snapshot Mode

Snapshot mode: The access control machine default to [Single mode] [Single mode]: Used with [Interval Frames], the default [Snapshot Times] is 8 and [Interval Frames] is 5 frame.

Description: Trial scene access control and gate. When multiple people pass the gate, only the front person can be captured (the face pixel is the largest in the picture). There is only one face square in the picture.

4.2.3.5 Maximum and minimum pixels for face recognition

1. Face recognition maximum pixel setting range: 300 ~ 500. Default: 500.
2. Face temperature measurement minimum pixel setting range: 0~500.
Default：**300**
3. Face recognition minimum pixel setting range: 30 ~ 300. Default: 130
4. When the face's pixels in the frame are less than 130 (the smallest pixel for face recognition), they are not captured; when the face's pixels in the frame are greater than 500 (the largest pixel for face recognition), they are not captured.

4.2.3.6 Face Scene

This parameter setting is used to adopt different face exposure strategies for different application scenarios. There are two modes of ordinary scene and lobby scene. The default is [Lobby Scene].Ordinary scene: used in normal environment; lobby scene: suitable for backlit environment.

4.2.3.7 Face Tracking Frame

This parameter is used to overlay the face tracking frame. [Open] by default.
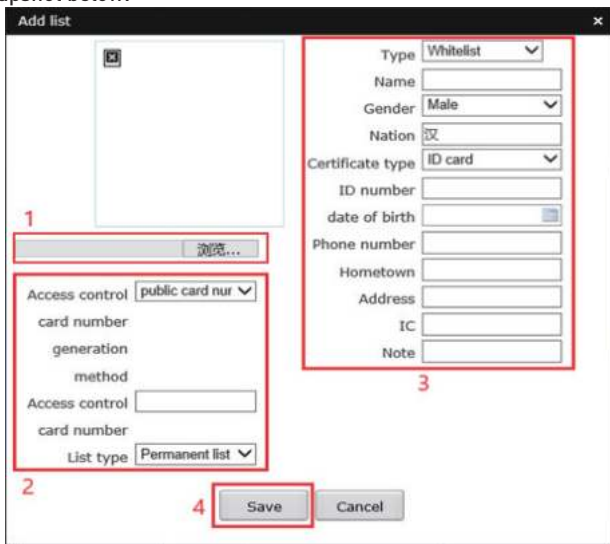
4.2.3.8 Living detect

This parameter is used for live detection. The default state is [On].
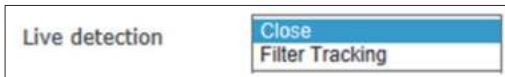

4.2.4 List management

This parameter is used to add face library list，divided into white and VIP lists.

List management：through "Add List", select the face image to add; as snapshot below:

Step 1：Click Browse and select the face image to be imported;
Step 2：Select the type of list library (white list, VIP list), input the name, fill in the face image information;
Step 4：Click"Save"

Batch import: Add face image through batch import, as shown below:
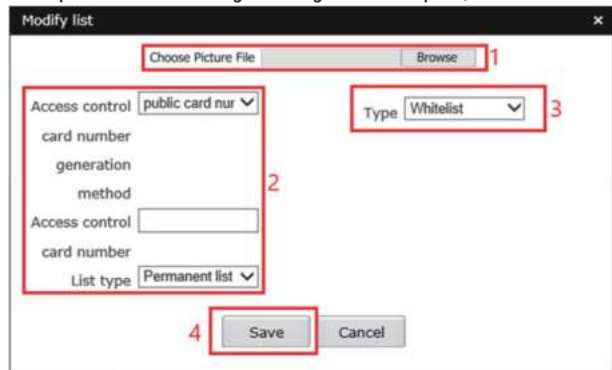
Step 1：Click Browse，according to the storage path Ctrl + A select all or press Ctrl + mouse to select the face image to be imported;
Step 3：Select the type of list library (white list, VIP list);
Step 4：Click"Save"

Picture name, numbering rules: Picture name + picture numbers can not be repeated, single item can be repeated, ID number and mobile phone number can be optional. (Delete the face list and double-click to delete the face image to be deleted).

4.2.5 Attendance and Comparison record

4.2.5.1 Comparison record

You can check the latest 100,000 recognize records; you can check the complete recognize or details person recognize record.

Checking mode:

1. Time period checking: you can enter any time period to query the comparison records in the specified time period;

2. List checking: select any list to query the comparison records of the specified list;

3. Name and Number checking: You can enter the name and number of any person who already exists for specific query.

4.2.5.2 Attendance settings and attendance records

4.2.5.2.1 Attendance setting :

a. Click "set Time" to select the working day to be set, set the commute time, save it.

b. Click "Advanced Settings" to choose single or multiple working days, set the working time, save it.

4.2.5.2.2 Attendance record query

Attendance records can be queried; attendance results can be queried by day, time period, late arrival, early departure, non-attendance, etc., and attendance results can also be queried by specific name number.

(Note: The attendance status can only be recorded when the door opening condition is set to "white list + ..." mode).

4.3 Restore

4.3.1 Restore factory setting, select the desired restore to factory state

4.4 Reboot
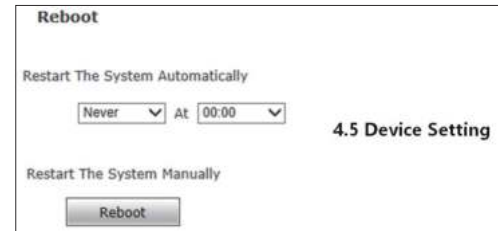
4.5 Device Setting

(This item can be used to clear all the face images and comparison records / attendance records of the device list library)

4.6 Audio attributes setting

4.6.1 This parameter is used to set sound voice size and turn off / on sound

7" access control panel diagram：

8" access control panel diagram :