

Face recognition terminal system

User Manual

| Usei | r Mar | nual | 1 |
|------|-------|---|----|
| Α. | Cha | pter1 Introduction | 2 |
| | | 1. Document description | 2 |
| В. | | Chapter2 Product instructions | .2 |
| | | 1. System function description | 2 |
| C. | | Face recognition system parameter setting interface 1 | 2 |
| D. | | Software operation 2 | 24 |
| | 1. | Add face machine 22 | 24 |
| | 2. | Update parameters 22 | 26 |
| | 3. | Set permissions 22 | 26 |
| | 4. | Add personnel 22 | 26 |
| | 5. | Downloader | 28 |



A. Chapter1 Introduction

1. Document description

This document is a user's manual for face recognition software.

Thank you very much for using our products. We will be happy to provide you with the best service.

This manual may contain technical inaccuracies or typographical errors.

The content of this manual will be updated regularly, and the updated content will be added in new versions of this manual.

We may improve or update the products or programs described in this manual at any time.

2. Use range

This document is intended to help users understand the use of product features.

B. Chapter2 Product instructions

1. System function description

The function of the face recognition system is divided into two parts: human-machine interaction and management module. When the customer uses it, only the human-machine interaction interface is displayed, and the background management can be entered only after being verified by the administrator.





GND, +12V: external +12V power input; GND: ground wire, +12V: 12V input; use 12V power adapter;

RJ45: Ethernet interface;

USB: standard USB inter face;

ON, COM, NC, COM: a group of relay outputs to control the opening signal of the external access control board ;

NC, D0, D1, GND: Wiegand output, connected to the access controller .

1.1 Human-computer interaction

1. The main UI face-swipe interface is shown in Figure 1, UI1 (the default UI), and UI2 is shown in Figure 2, which only shows the results after the camera captures the video and compares!





Figure 1





Figure 2





8-inch touch screen version

2. Operation display of quick icon bar at the bottom of UI1 and function introduction of quick icons, as shown in Figure 3 and Figure 4









3. The operation display of the quick icon bar at the bottom of UI2 and the function introduction of quick icons are shown in Figure 5 and Figure 6:



Figure 3





- (1) Click in this area to display the shortcut icon at the bottom.
- 2 Click to enter the password, the password is correct to open the door, as shown in Figure4, long press the pop-up password box to return to the desktop, as shown in Figure 5.



| 1 | | | | | -/ | | 202 | 0-04-02.0 | 9:11:19 |
|-----|-----|-----|--------|-------|-------|--------|------|-----------|----------|
| | Ple | ase | e bi | rus | ιh c | ert | ific | ate | <u>,</u> |
| | - | | | | / | | - 1 | | |
| | | Р | ease (| enter | openi | ng coo | de | | 1 |
| | | |] | | | | | | |
| ľ. | | | | / | | | | | |
| | | | | | | | | | |
| | | - | | | | | | | |
| | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| @ | # | \$ | % | II | * | - | / | (|) |
| ALT | - ! | | E. | | : | ; | , | ? | H N |
| 英 | 符 | ?12 | 3 | | - | | • | 完 | 成 |

Figure 5



Figure 6



(3) Administrator password setting button. After clicking, enter the management password to enter the setting management interface. Initial default password (111111),

users can change the initial administrator password after login, as shown in Figure 6.

| (| Ple | ase | e bi | rus | h c | ert | | ate | |
|-----|-----|-----|-----------------|-------|------|------|----|-----|----|
| | | Р | lease | enter | mana | geme | nt | | 1 |
| | | | | | | | | | 1 |
| | | | - Y., 11 - 2 | / | | | | | 1 |
| | | | | | | | | | |
| | | | - - | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| @ | # | \$ | % | " | * | - | / | (|) |
| ALT | - ! | | 10 J | | : | ; | , | ? | ž, |
| 英 | 符 | ?12 | 3 | | | | • | 完 | 成 |

Figure 7

(1) People flow statistics button, you can view the statistics of current day and month respectively, the types are divided into 1: 1 and 1: N, click to switch to view, as shown in Figure 7.







2 Run status button, you can view the device number, IP address, verification mode and fill light brightness.







C. Face recognition system

parameter setting interface

Face recognition system parameter settings

| := | \bigcirc | 1 | မိုမိုမို |
|---------------------------|-------------------------|----------------------|--------------------------|
| Device information | Time settings | Standby settings | General settings |
| | . | P | <€ |
| Face recognition settings | Personnel management | Data management | Device rules |
| ٩ | 1 | i | Ċ |
| Network settings | Access control settings | Log settings | Shutdown restart |
| 30 | 2 | 0 | N |
| Firmware upgrade | Password management | Internal Memory Size | Restore factory settings |

Device Information

You can view the basic information of the device, the entrance and exit settings, and the device location settings, as shown in Figure 15:



| + | Device information | |
|-------------------|--------------------|-------------------|
| Device Name | | |
| Device Model | | |
| Serial Number | | 0039be0c08cf93e4 |
| Version Number | | V3.2.20200330_T1 |
| Algorithm Version | | V2.0+V3.0 |
| MAC Address | | 28:ed:e0:75:e8:20 |
| Manufacturer | | One Tech |
| Device Type | | Entry - |
| Device Location | | please enter |

Figure 13

Time setting

Set the local time and date of the device, and automatically synchronize the time with the server after networking. And turn on or off the restart setting at 3 am every day (factory, recommended to be on by default), as shown in Figure 16:



| + | Time settings | |
|--------------|-------------------|--|
| 🗹 Get networ | k time | |
| 🗆 Manually u | pdate device time | |
| | PRESERVATION | |

Figure 14

Set the time Click the red box to set the time. After setting the time, the save takes effect, as shown in Figure 17:



Figure 15



Standby display settings

Switch for standby mode. Standby time, loop playback switch, carousel time setting, switching between standby display of picture or video, options for importing pictures and videos, as shown in Figure 18:

| + | Standby | y display | |
|-------------------|---------|------------------|---------------|
| Standby mode: OFF | | Standby time: | 5 S 🕕 |
| Loop: OFF | | Carousel time: 🧲 | 5 S 🕣 |
| Standby photo AD | | | × |
| Standby video ads | | | |
| File List | | In | porting files |



General settings

Set the main interface screen display information, the theme wallpaper can set the UI style as shown in Figure 20, the system language settings are Chinese and English, the screen is equipped with 5 inch and 8 inch options, verification information full name display switch, fill light intelligent adjustment switch, Fill light brightness adjustment range $0 \sim 100$, fill light 2 brightness adjustment range $0 \sim 100$, screen brightness adjustment $0 \sim 100$, sound switch, sound size adjustment range $0 \sim 100$, verification success tone and verification failure tone setting, Finally submit the save button. As shown in Figure 19:



PRESERVATION

Figure 17





Figure 18

Face recognition settings

According to the requirements of the security level, different scenarios are selected, and the threshold, resolution, and recognition distance settings are set respectively. 1: N verification mode introduction:

The factory default 1: N threshold is 75, which can be adjusted according to the actual environment. Smart_5_ is on. Parameter 5 is the small compensation adjustment for the threshold within the system time of 19: 00: 0-5: 00: 00.

Considering the security level, the threshold setting is recommended for all indoors: 85-90, semi-outdoor recommended 80-88, outdoor recommended 75-85, as shown in Figure 20-21:



21 _____

| Face recognition settings | | Face recognition settings | |
|---|---------------|--|-----------------|
| Verification Mode | | Verification Mode | |
| 1:1 verification: Face+ID card verification: | ~ | 1:1 verification: Face+ID card verification: | |
| 1:N verification: 1:N verification: | | 1:N verification: 1:N verification: | |
| Intelligent verification mode: 1:1 first 1:N second: | | Intelligent verification mode: 1:1 first 1:N second: | |
| Scene selection | | Scene selection | |
| Fast situation: Suitable for people with more traffic | ~ | Fast situ Parameter configuration | - 11 |
| Security situation: Suitable for more stringent environment | nts | Security The threshold of 1:N: | |
| Custom scenario: Customize | | Custom | |
| Other | | Other | - 10 |
| Import photo size limit: OFF | | Import F CANCEL | |
| RFID number verification: OFF | | RFID number verification: OFF | Q |
| T D: OFF Face+T * Don't wear masks * 37.2 | y the display | T D: OFF 1:N+T * Don't wear masks * 37.2 | ify the display |
| ID card secondary comparison: OFF | | ID card secondary comparison: OFF | O |
| | | | |
| | | | |

Figure 19

Figure 20

1: 1 ID card verification mode introduction:1:

1: 1 authentication mode parameter configuration, according to the factory default settings, if you need to adjust, please set according to the age of the ID card, as shown in Figure 22:1:



| * | Face recogniti | ion settings | | |
|-----------------------|----------------------------|--------------|---------|---|
| Verificatio | n Mode | | | |
| 1:1 verifier | ID Parameter configuration | low. | | * |
| Intellige Scene s | 0 to 5 years: | 3 70 | • | |
| Fast situ Security | 5 to 10 years: | 65 | 0 | ~ |
| Custom Other | 10 to 20 years: | 60 | • | |
| Import p | at least 20 years: | 0 60 | • | 8 |
| T D: OFI | CANCEL | | CONFIRM | 0 |
| ID card se | condary comparison: 0 | DFF | | 0 |
| | | | | |
| | | | | |



Introduction of other parameters: (Identify speed setting items) Note: Face quality defaults to 50 and face reliability defaults to 51. Other parameters remain the default. Non-technical personnel must not modify them.

- a. Failed filtering times: To report how many times the recognition has failed, the recognition failure will be broadcast to prevent strangers from continuously reporting failure. The recommended setting is: 3.
- b. Same-person filtering time: How long does it take to re-identify after the same person is successfully identified? Prevent whitelisted people from continuously reporting success tips. The recommended setting is: 3000.

The default settings are shown in Figure 23:

c. Min Pixel Of Eye: equivalent to setting the recognition distance 30 is about a distance of 100cm . 150 is about 50cm dista nce



| + | Face recognition settings | |
|----------------------|--|---|
| Verificati | on Mode | |
| 1:1 verif | Parameter configuration | |
| 1:N verif | Min Pixel Of Eye: 😑 30 😌 | ~ |
| Intellige Scene s | Max Pixel Of Eye: 😑 240 😯 | |
| Fast situ | Frame Rate(ms): Solution Solut | |
| Security | Fail Number: 🛛 🔁 3 🚯 | |
| Custom | succ interval(ms): | ~ |
| Other | | |
| Import p | Min Face Quality:not easy to change 8 | |
| RFID nu | Min Face Reliability:not easy to change 8 | O |
| T D: OFI | Live detection: OFF 0.01 | 0 |
| ID card : | \otimes | 0 |
| | | |
| | | |



d. Import photo size limitation, as shown in Figure

| | Face recognition settings | |
|---------------------|---|----------|
| Verification Mod | de | |
| 1:1 verification: | Face+ID card verification: | |
| 1:N verification: | 1:N verification: | V |
| Intelligent verific | cation mode: 1:1 first 1:N second: | |
| Scene selection | | |
| Fast situation: | Suitable for people with more traffic | |
| Security situatio | n: Suitable for more stringent environments | |
| Custom scenari | o: Customize | × |
| Other | | |
| Import photo siz | ze limit: ON | |
| RFID number ve | rification: OFF | |
| T D: OFF 1:N+T | Don't wear masks * 37.2 Verify the displ | lay |
| ID card seconda | ary comparison: OFF | |
| Im | age size max 720x960, min 320x320 | |





Network settings

Set the wired network address of the device. Static mode (manual configuration) and dynamic mode (automatic acquisition) can be selected, as shown in Figure 40-41:

| Ethernet | Wifi |
|-----------------------------------|-------------------|
| STATIC | |
| DHCP | v |
| Configuring IP | |
| ipAddress | 0.0.0.0 |
| netmask | 0.0.0.0 |
| gateway | 0.0.0.0 |
| DNS1 | 0.0.0.0 |
| DNS2 | 0.0.0.0 |
| Server Ip Address: http://192.168 | .0.1 PRESERVATION |
| Upload CardInfo:OFF | |
| Upload FaceInfo:OFF | |



| | Ethernet | | Wifi | |
|-----------|------------------|---|---------|---------|
| STATIC | | | | |
| DHCP | | | | |
| Configu | | _ | | |
| ipAddress | Configuring IP | | | |
| netmask | ipAddress 0.0.0. | 0 | | |
| gateway | netmask 0.0.0.0 | | | |
| | gateway 0.0.0.0 | | | |
| DNS1 | DNS1: 0.0.0.0 | | | |
| DNS2 | DNS2: 0.0.0.0 | | | 0.0.0.0 |
| Server I | CANCEL | | CONFIRM | ATION |
| Upload | Garuinio.OFF | | CONTINM | D |
| Upload | FaceInfo:OFF | | | 0 |
| | | | | |
| | | | | |

Set the device's wireless network address. You can choose between static mode (manual configuration) and dynamic mode (automatic acquisition), as shown in Figure 42:



| ÷ | Network settings | |
|--------------------|--------------------|----------------|
| Ethernet | | Wifi |
| STATIC | | |
| DHCP | | × |
| Configuring IP | | |
| ipAddress | | 192.168.0.22 |
| netmask | | 255.255.255.0 |
| gateway | | 192.168.0.1 |
| DNS1 | | 202.96.134.133 |
| DNS2 | | 202.96.128.166 |
| | WIFI SETTING | |
| Server Ip Address: | http://192.168.0.1 | PRESERVATION |
| Upload CardInfo:OF | F | |
| Upload FaceInfo:OF | F | |

Figure 41

Click "Set WIFI", select a valid wifi, enter the WIFI password to connect, Note: WIFI may not be standard for different products.

38



| ÷ | WLA | 1 | : |
|----|-----|------------------------|---|
| 开启 | | | • |
| | • | KEFAFacetest 已连接 | |
| | • | 科发手机网络连接 已保存 | |
| | • | HUAWEI-B311-DAE9 | |
| | - | 13622373477@163.com | |
| | - | TP-LINK_ELEV_FD89 | |
| | | | |

Figure 42

D. Software operation

After the face machine is connected to the network, in stall the Web access control management software (B/S software). Plug in the dongle and start the software operation.

1. Add face machine

Click Add in "My Device" to add a face machine

| Web access system | | | | | | | | | | | |
|-------------------|-------------------|--------------------|-------------|----|--|--|--|--|--|--|--|
| Device | Key words | rch 🛛 🗿 Add 📝 Edit | 🌼 Parameter | ×c | | | | | | | |
| Authority | Update parameter | Download card data | NO. | | | | | | | | |
| Employee | Update parameters | Download CardNo | 1 | | | | | | | | |
| Мар | | | | | | | | | | | |
| Report | | | | | | | | | | | |



| add controller | | | | | 23 |
|------------------------|---------------------|----------|-------------|------|----|
| Name: | face recognition 01 | | | | |
| Status: | V Enable | | | | |
| PullCmd: | Enable | | | | |
| Area: | | ~ | | | |
| Serial: | 1231232 | | | | |
| Model NO.: | Face recognition KF | ~ | | | |
| IP-address: | 192.168.5.149 | | Port: | 8000 | |
| Communication mode: | As TCP Server | • | | | |
| Alarm Time(s): | 10 | Fir | e Time(S): | 99 | |
| Lock Each: | 🔲 1-2Door 📄 3-4Door | 5 | Section ID: | 0 | |
| Duress PIN: | | | | | |
| | У ОК | X Cancel | | | |

Fill in the controller name, serial number, model, IP address, etc., a nd then click OK.

Name: The name of the face machine, named according to your own needs, so that it is easy to remember and recognize, i t is best to determine the installation position of the face machine by the name.

Status: Select this option to termina te communication with the software. Checked by default. Serial number: Any 6 - digit number cannot be repeated.

| Multifunctional 1door Sluice | ^ |
|------------------------------|---|
| Face recognition 1 | |
| Face recognition 2 | |
| Face recognition 3 | |
| Face recognition A | |
| Face recognition YF | |
| Face recognition KF | |
| Fingerprint machine ZK_01 | ¥ |

Model: Select "Face Recog nition KF". It cannot be modified after filling in, it can only be deleted and re - added.

IP address: Fill in the IP add ress of the face machine.



After the addition is complete, the status of the face machine can be seen as a green icon in the device.

2. Update parameters

After adding the face machine, the parameters need to be updated once to cover the server- related parameters on the face machine. Note: The face machine parameters need to be updated after they are added or modified. If they are not modified, they need not be ignored.

3. Set permissions

Access permission defines a used access control permission. The access con trol authority here is equivalent to the position power of people, which means that certain positions can enter those doors, and when they can enter the door. It can also be understood as a combination of door opening hours.

The system will g enerate a perm ission named all access by default. For simple applications, use the default permission.

4. Add personnel

| Web access system | | | | | | | | | | |
|-------------------|------------------|-----------|----------|--------|-----------------|---------|------------|--|--|--|
| Device | Key words | Key words | ₽ Search | O Add | 🖉 Edit 🛛 🗙 D | elete 📃 | Photo 🔅 | | | |
| Authority | Search 🤹 Refresh | No. | Name | Photo | Gende Card numb | QR Code | Authority | | | |
| Employee | Zedit | | Hame | 111000 | | Qircout | Additioney | | | |
| Мар | All | | | | | | | | | |
| Report | | | | | | | | | | |

Fill in the relevant personnel information above, the number is required, (name when using the face machine, the card number is required) Others can n ot fill in or fill in later. Click OK to complete personnel editing.



| Add | | | 83 |
|------------------|--------------------|----------------|----------------------|
| No.: | 10001 | | |
| Name: | Crystal | | |
| English name: | | | |
| Gender: | 💿 Male 🔘 Female | | |
| Birthday: | 2000-01-01 | | |
| Nation: | | | |
| Department: | × | | |
| Job: | × | | |
| | | Person Code: | |
| Phone: | | licence plate: | |
| Address: | | Note 1: | |
| Email: | | Note 2: | |
| Validity period: | 2040-06-10 16:12 | Record date: | 2020-06-15 |
| Authority: | · · · · · | Card number: | 333222 |
| | | OR Code: | QR Code Make QR Code |
| | | QR Code: | Show QR Code |
| Status: | Enabled | Password: | 1234 |
| | Read identity card | 🖌 ок 🗱 са | ancel |

note:

1: Modify personnel can double - click to enter the modification, or, select a person and click the "Edit" button.

2: The person to be deleted must be in the "logout" state. Select multiple deregistered persons to delete in batches.

Set photo:

1: After selecting the person, click the "Photo" in the upper menu to set the person registration image. (You can also browse the photo file to add when adding a person.)





After adjusting t he marquee to a suitable size, click the "Crop" button. Click O K after the avatar appears on the right.

5. Downloader

Download the personnel data in the database to the face machine. Select download card data, the data download progress bar will prompt the c ompletion status. There are two ways to download card d ata:

1) Download in "My Device"

In the device, choosing which face machine is to download the card data of which face machine, and choosing which interface to download the card data is to download the card data to all face machines with normal communication on this interface. All personnel card data is downloaded in this way.



2) Download in "Personnel Management"

In the personnel management, select the personnel column to be downloaded (can be a certain person, a certain group of people), click "downloa d" above.



| Key words | | ₽ Search | O Add | 2 E | dit 🗙 D | elete 📃 📕 | Photo | 🗘 QR Code | 💎 Fingerprint | 🧠 Batch op | eration * | 🦻 Issue card | 🏫 Authority | 🐺 Donv | vload |
|-----------|-------------------------------------|----------|-------|------|-----------|----------------|------------|---------------|-----------------|------------|-------------|--------------|-------------|--------|-------|
| | No. | Name | Photo | Gend | Card numb | QR Code | Author | ity Statu | Validity period | Max times | Card swip | Department | Job | | Phone |
| | 10001 | Crystal | 9 | Male | 333222 | | All Acce | ess | 2040-06-10 16:1 | 2 | 0 | | | | |
| | selection co | ontrol | | | | | | | | | | _ | | | 23 |
| | NO.:1000 | 1 | | | Name:C | rystal | | | | | | | | | |
| | 🔲 All Key words 🖉 Search 🗸 Download | | | | | | | wnload | × Close | | | | | | |
| | | | | NO. | Status | | N | lame | S | erial | Model NO. | IP-address | Po | rt | Area |
| | | | | 1 | 0 100 | 1% Download Ca | rdNo:3: fa | ace recogniti | on 01 1 | 231232 | Face recogn | 192.168.5.1 | 49 80 | 00 | |

Tick the target controller to be downloaded, and then click the "Download" button in the upper right corner.

Tip: If there is already a large amount of personnel information, it is recommended to download only the newly added card data in "Personnel Management" when adding more personnel to avoid downloading huge personnel card data, saving time and improving efficiency.

The face test is normal, and events will be pushed in real time at the bottom of the software.