

USER MANUAL

AT300

Version: 1.0

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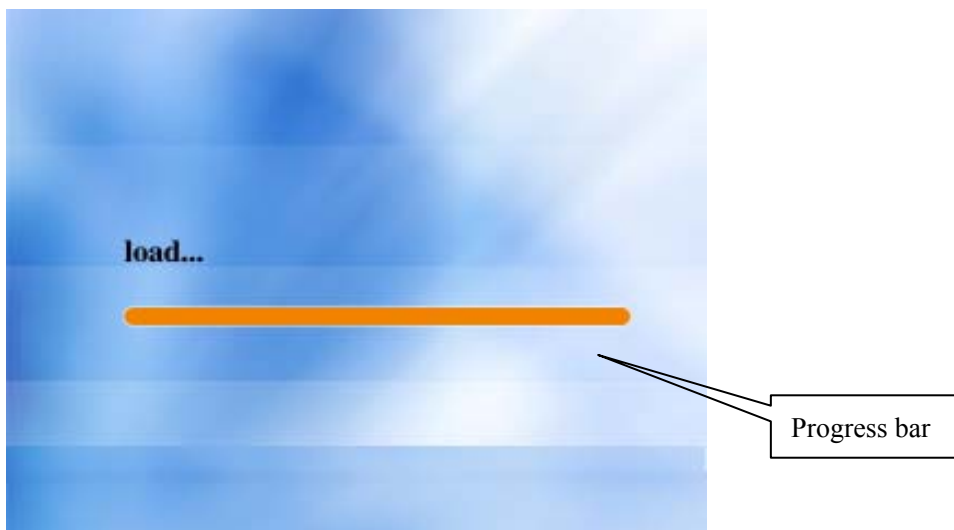
1 Introduction

1.1 Compiling intention

Instruction for users

2 Start-up

When to start up, display firm LOGO and progress bar, collocate LOGO freely, enter original interface after start up, such as:



3 The initial interface

After device links with power supply, the screen shows the first interface we call the initial interface, see figure, the basic information is as follows:

Explanation: 1 Use larger font to display time.

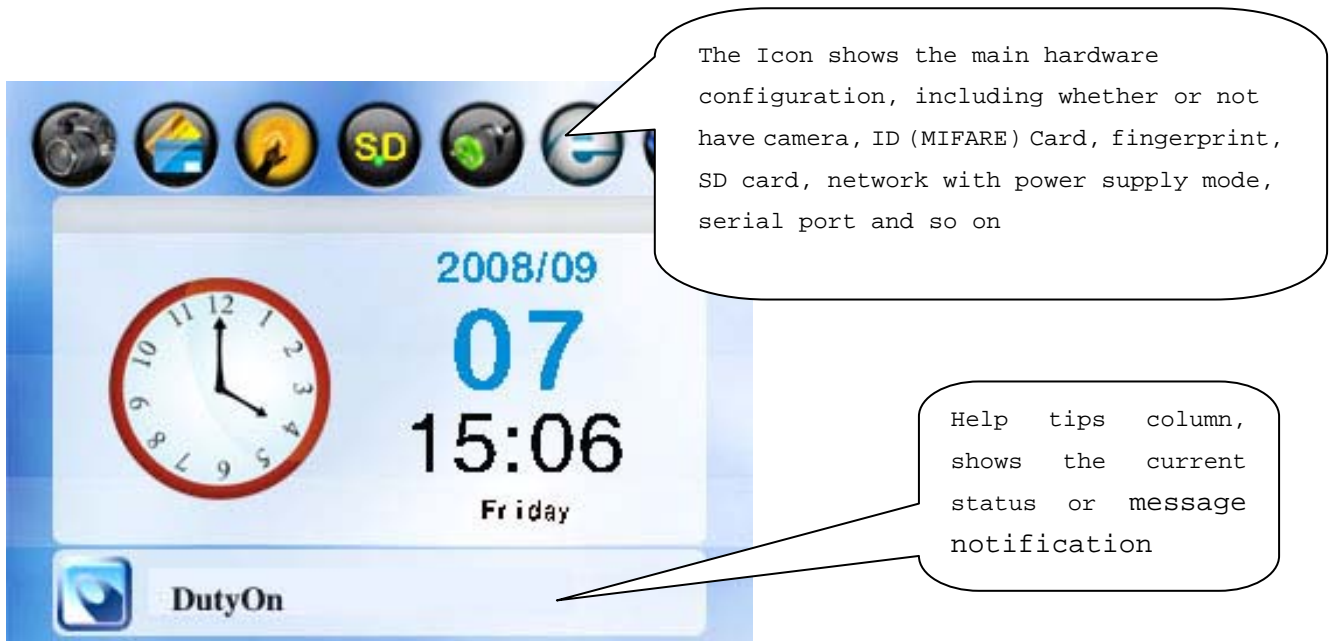
2 Use other smaller font to display date, week, and other information.

3 The current status display: such as: sign in, sign off...

4 Or message information, how to display amount of rolling information.

5 Play colorful propaganda (advertising) page circularly.

Below the initial interface:



1. Administrator enter into management mode,
 - 1) Press MENU key, Equipment prompts “ administrator, Please verify...”
 - 2) Manager loggings in, administrators can use password, fingerprint or cards to log on
2. User checking

Allow user verify only in authentication mode (verification model is carried out in the access control settings), such as:

Press the number keys + OK is the serial number,

If the authentication mode is ID + password, it prompts “enter a password”,

If the authentication mode is ID + fingerprint, it prompts “press finger”,
3. Pressing finger or swiping card is generally direct verification

Please refer to the specific verification process for the verification process

4 Structure and module of Application

AT300 menu list

| The first level menu | The second level menu | The third level menu | The fourth level menu |
|----------------------|--------------------------------|--------------------------|----------------------------|
| | | Fingerprint registration | |
| User management | User registration | RF card registration | Includes ID or Mifare card |
| | | Original sound REC | |
| | deletion of registration datum | Photographing | |
| Device settings | System settings | Basic settings | clock settings |
| | | | Language settings |
| | | | Voice prompts |
| | | | Volume mediation |

| | | |
|-------------------------|--------------------|-----------------------------------|
| | | Keypad tone |
| | | Checking interface settings |
| | | Delete all records |
| | | Delete all registered datum |
| | | Restore the factory settings |
| | Expert settings | Firmware upgrade |
| | | Daylight saving time settings |
| | | Function key settings |
| | | Total numbers of managers |
| | | Password of super manager |
| | | Sensitivity adjustment |
| | | Beginning and end of belling time |
| | Belling settings | belling time |
| | | Belling music |
| | | power off |
| | | dormancy |
| Power supply management | Free time settings | Play colorful propaganda |
| | | Time power off |
| | | Time dormancy |
| | | Time starting up |
| | | locking off key |
| | | timing state transition |
| | | machine number |
| | | RS232 |
| | | RS485 |
| | | Baud rate |
| | | Ethernet network |
| Communication settings | | IP address |
| | | Subnet mask |
| | | Gateway address |
| | | Connection password |
| | | Dynamic IP allocation |
| | | Back-stage address |
| Recording settings | Management | |

| | | |
|----------------------------|-----------------------------------|-------------------------------------|
| | | recording alarm (alarm) |
| | | Checking recording alarm (alarm) |
| | | repeat affirmed time |
| | | Run all testing |
| | | Memory testing |
| | | LCD function testing |
| | Automatic detection | Sound testing |
| | | Fingerprint Collector testing |
| | | Keyboard testing |
| | | Real-time clock |
| | lock drive time | |
| Access Control settings | Time delay of door contact | |
| | Door contact switch settings | |
| | Download checking records | |
| | Download management records | |
| U disk management | Download user information | |
| | Upload user message | |
| | Upload message notification | |
| | Upload mp3 | |
| Alarm reset | | |
| System information | registered user number | |
| | registered fingerprint number | |
| | Checking record number | |
| | Management record number | |
| | Used memory | |
| | Residual capacity | Registered user number |
| | | Registered fingerprint number |

| | |
|--------------------|-------------------------------|
| | Checking record number |
| | Management record number |
| | Residual memory |
| | Fingerprint capacity |
| | Recording capacity |
| | Management recording capacity |
| | Memory capacity |
| Device Information | Standby time |
| | Serial number |
| | Manufacturer |
| | Device name |
| | Device model |
| | Arithmetic version |
| | Firmware version |
| Query and pivot | Checking recording query |
| | Management recording query |
| | User registration |
| | Inquiries |

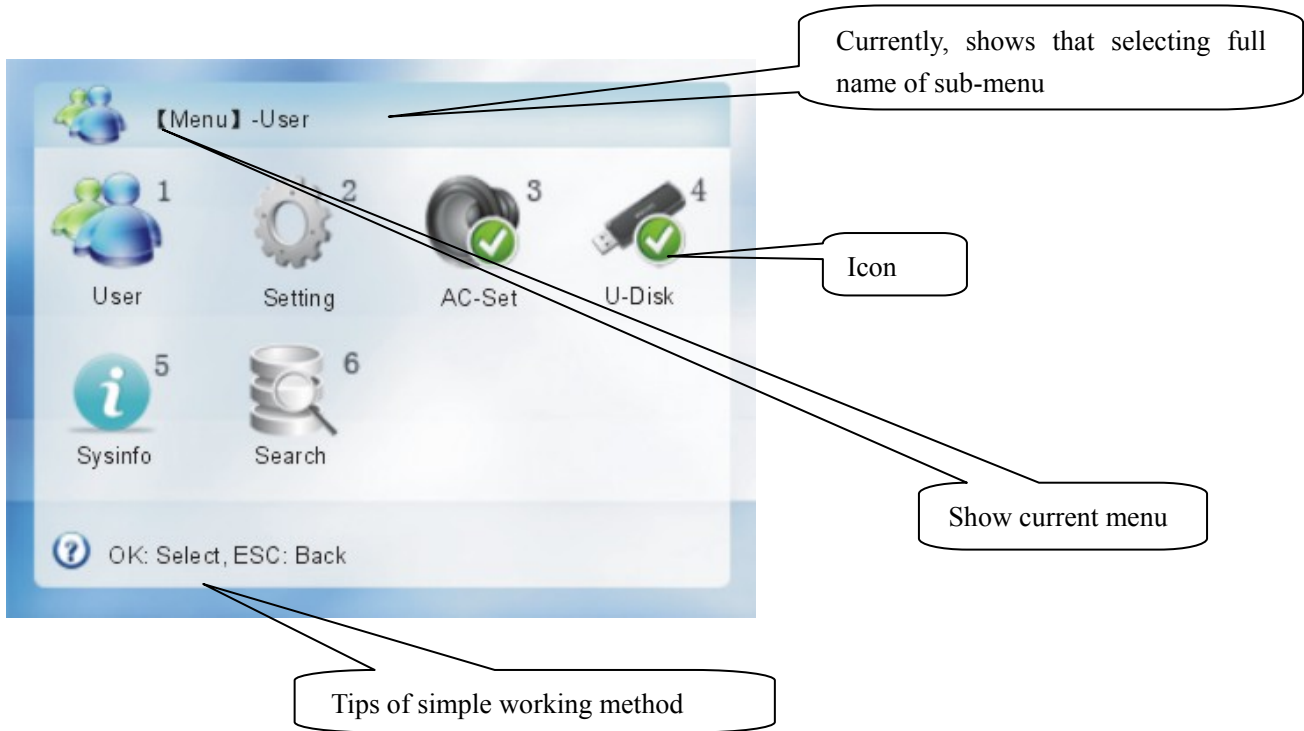
Note: check on work attendance and open the door

Press MENU key, the following “help column” prompts" administrator, Please verify..."

At this time, administrator can be passed through pressing fingerprints, inputting ID and password or swiping card to enter the menu, such as authentication, only proved to be successful can enter the main menu.

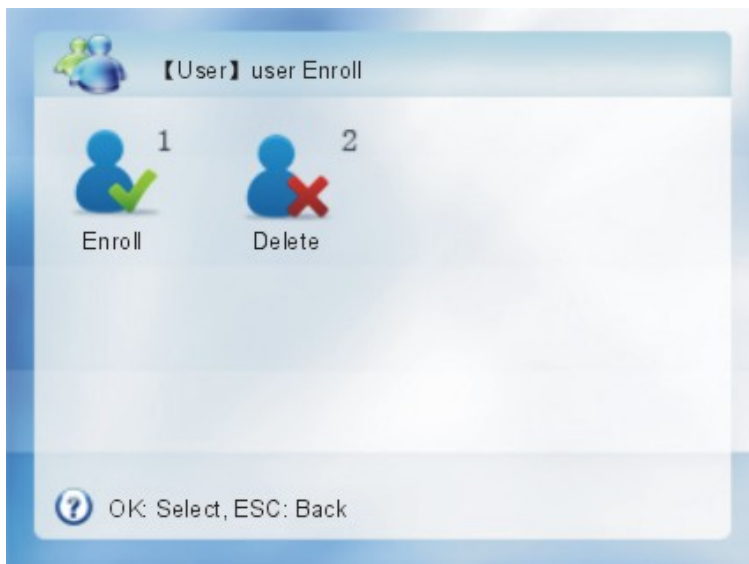
See “**8 validation process**” for verification process

1. Default the first as focus after entering the menu, display borders on the focus icon with.
2. The direction keys moves the focus to the appropriate icon, OK button can enter the corresponding submenu
3. Each icon has a number, press the corresponding number keys can directly enter this sub-menu
4. ESC can return to previous menu, ESC of the main menu key can return to the initial interface
5. Order shows the current menu and the full name of the selected sub-menu, it can show two levels of full name
6. Icon shows 4 Chinese characters at best, use the first three Chinese characters + “...” substitute Chinese characters more than four
7. Press MENU key states can back to the main interface in any menu states, enter the main menu interface at other main interface states,
Start Input Method Editor in other states.



4.1 user management

4.1.1 User Registration



Explanation:

- 1、 The intermediate user: Refer to the general user, namely person who needs to verify identity because of some purpose, such as person who opens the door through the device, or only those who check on work attendance.
- 2、 The administrator: Operates all other work in addition to carry out advanced settings, registration or delete operation of administrators at the same level, can maintain their own data
- 3、 Super-administrator: can carry out all other operations including the deletion of his own and all other administrators except super-0 administrator. After leaving factory, Equipment default with a super administrator (code as "00000",

password is "888888") can enter the menu for all operations. Password can be modified, but not to be deleted.

- 4、 The equipment only register the intermediate user, the general manager may exercise any authority of the super administrator
- 5、 The same ID number can register up to 10 different fingerprints, fingerprint ID from 0 to start, followed by increments, it can also be entered manually
- 6、 After entering the registration menu and the real pre-registration, indicating the default ID (the last No. automatically add 1), at this point, can enter a custom ID. (1-65535 5-bit)
- 7、 Register fingerprint three times is success. In accordance with the message (voice and text), press the same finger (enter the password twice) three times continuously. If it fails, indicating a failure, and prompts re-registration.
- 8、 Choose ID card or Mifare card in accordance with the device configuration,
- 9、 When register fingerprint or RF card, as there have such fingerprint or card number in the system, the system will refuse to register, suggesting that "repeat fingerprint" or "duplicate cards"

Basic Information dialog box:

Once choose the user registration, can enter the following dialog box

The screenshot shows a dialog box titled "[User] Enroll" with the following fields and callouts:

- ID:** A text input field with a callout: "Default empty".
- Name:** A text input field with a callout: "Default empty".
- PWD:** A text input field with a callout: "Password must be six figures, default 888888".
- Confirm:** A text input field with a callout: "Default empty, only the option (subject to sector configuration files)".
- Privilege:** A dropdown menu with a callout: "Default ordinary user, choose by the down direction keys". Below the dropdown, the options are listed: "Intermediate user", "Administrator", and "Super administrator".
- Section:** A text input field.

At the bottom of the dialog box, there are two buttons: "OK" and "ESC". Below the dialog box, a legend indicates: "OK: Sel ESC: Back F2: Save F3: Next".

1. The default code at this point: the last No. automatically add 1, the name is empty, there must be six figures, default 888888 password, the user-level is general
2. Number may input by users, if enter a password, the password and confirmed password must be the same,
3. If it is non-new registration, may targeted by this user ID, and then modify the name, password, user-level, department, cards, photographs, original sound or fingerprint backup.
4. In any input state, F4 is a removal key (only removal of one character or Chinese character, that is, Backspace key (Backspace)), it may delete all after a long press.
- 5. In any state of non-menu, F1 key is help key, it can display the help explanation of this state. Any key may return.**

Input Method Editor

Press MENU key to start Input Method Editor in relation to input, then press MENU key to switch input methods including Pinyin, lowercase letters, uppercase letters, digital, clock input format.

F4 may back at this time. It may delete all after a long press.

T9 Bopomofo

mu nv nu ou

1 2 3 4 5 6 7 8 9
目 母 木 幕 穆 姆 亩 慕 姆 ▼

Appear this chart after pressing figure key 6 and 8
Here select Bopomofo combinations by pressing left and right direction keys
Example: use ► to select ou

mu nv nu ou

欧

2 2 3 4 5 6 7 8 9
欧 偶 藕 鸥 呕 殴 殴 瓯 沔 ▼

Use Up and down arrow keys to flip Chinese characters, directly select the appropriate Chinese characters by giving long-press of figure keys, example: give long-press of key 1 to choose ou

欧

1 2 3 4 5 6 7 8 9 ▲
洲 阳 美 的 了 在 一 人 是 ▼

Bopomofo combinations disappear, start up Lianxiang

欧阳

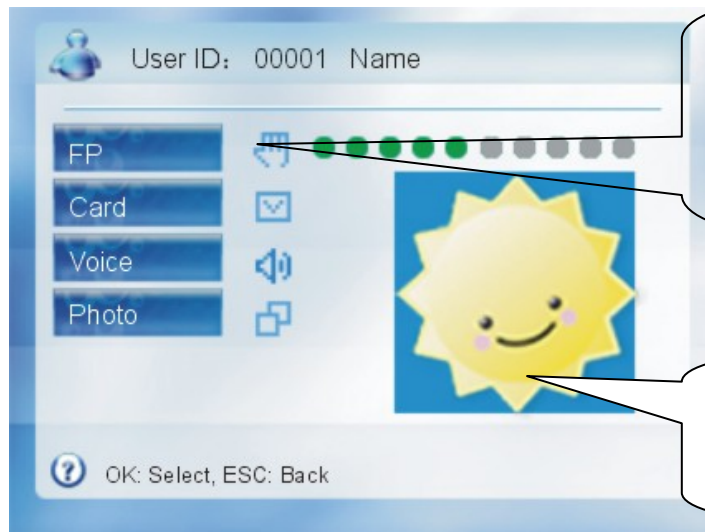
1 2 3 4 5 6 7 8 9
光 春 台 关 的 了 在 一 是 ▼

Give long-press of key 2 to select “Yang”, and have a short-press of figure key again to input Pinyin. Cycle by cycle until satisfied with it

If satisfied, press OK, back to original interface, input content to focus of original interface, ESC-back to original interface and cancel the input content

Register dialog box:

Once identified, enter into the following interface



If Register several fingerprint, it shall display these ones in green, RF card register, original sound REC, having photographing setting is green, otherwise it is white. Display according to registered order. no more than ten

Photo, if user exists, it shall display the photo, otherwise default cartoon, after photographing, show photos immediately

Fingerprint registration

Fingerprint registration dialog box

Choose 1 **Fingerprint registration**, then enter into the following dialog box

Number 0-9. Increase automatically, may modify when input 0...9

Have voice tips at the same time:
 "Please press finger..." after succeed, it prompts: "please leave"
 Please press finger in the second time ...after succeed, it prompts: "please leave"
 Please press finger in the third time...after succeed, it prompts: "please leave"
 No successful, it prompts: "please press finger again..."
 After three times of success, do not prompt "successful fingerprint registration" again. If repeat tips "repeated fingerprint". The three ellipse box is empty.
 Repeat tips "please press finger..." cycle by cycle until succeed or cancel

Before succeed, this button is gray, OK key is not effective. When succeed, it is effective. The following registration dialog box is the same as this button

After succeed, press down arrow, save current fingerprint, then register the next fingerprint, this fingerprint number + 1
 Example:00001—1

Turn green after each success, all 3 times together

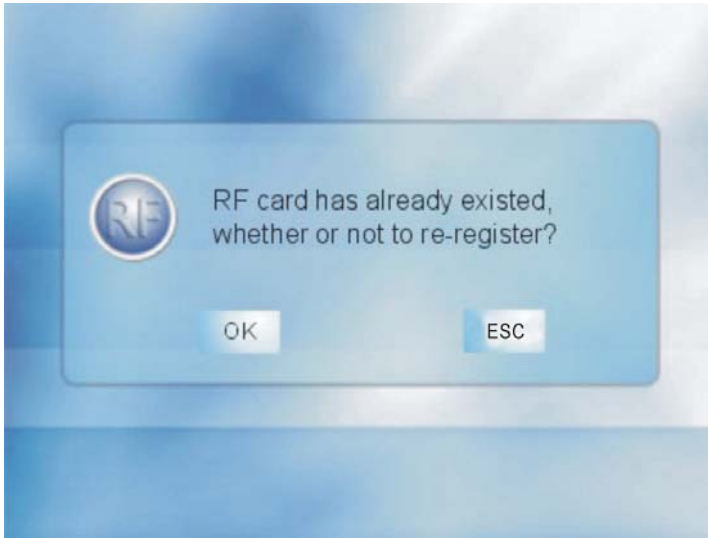
After succeed, press up arrow, no save current fingerprint, re-register again. No change of the fingerprint No.

Show real-time fingerprint

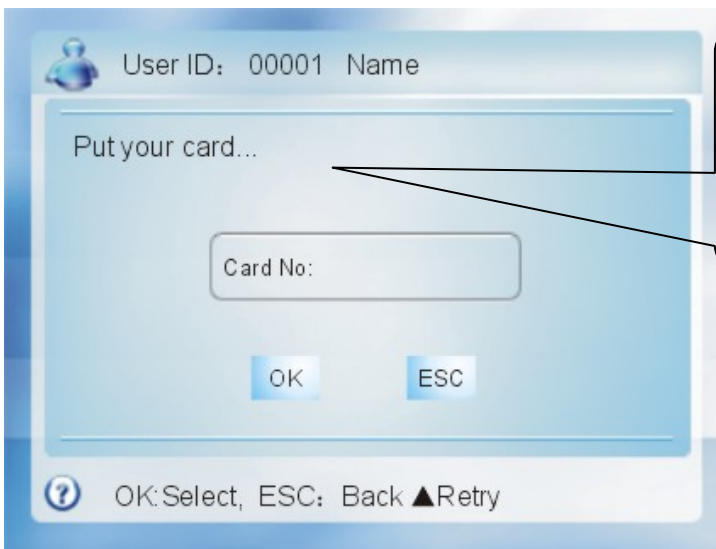
RF card registration dialog box

Choose 2 **RF card to register**, then may enter into the following dialog box

1, If the RF card has been registered and prompts, "RF card is in existence, whether or not to re-register?" Dialog box is shown as below:



After confirm, enter into such dialog box:



Voice tips:

“Please show card...” after succeed, judge whether or not repeat, if not, prompts “successful registration of RF card”, if repeat, prompts “repeat card number, please show card again...”, cycle by cycle until reach success or cancel

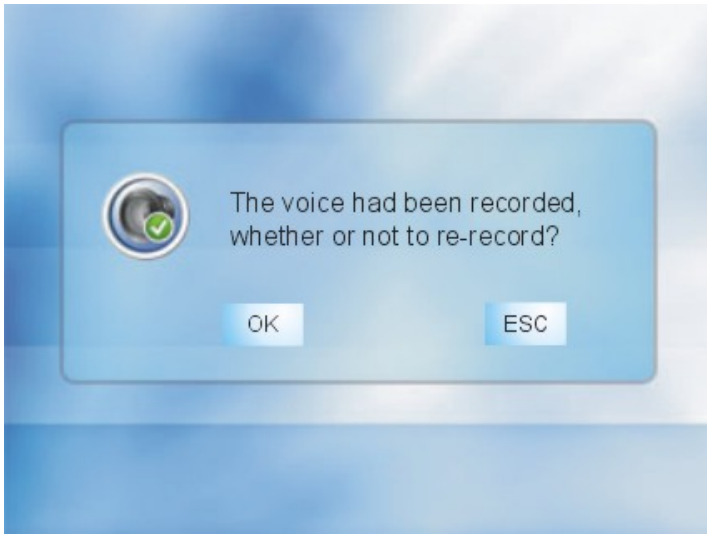
Original sound REC

Through recording real voice of the person (usually my name), as voice prompts when verify, so that current staff can further confirm the miscarriage of justice, thereby reducing the rate of miscarriage of justice. It is certainly faster and more accurate than demonstrate their photos.

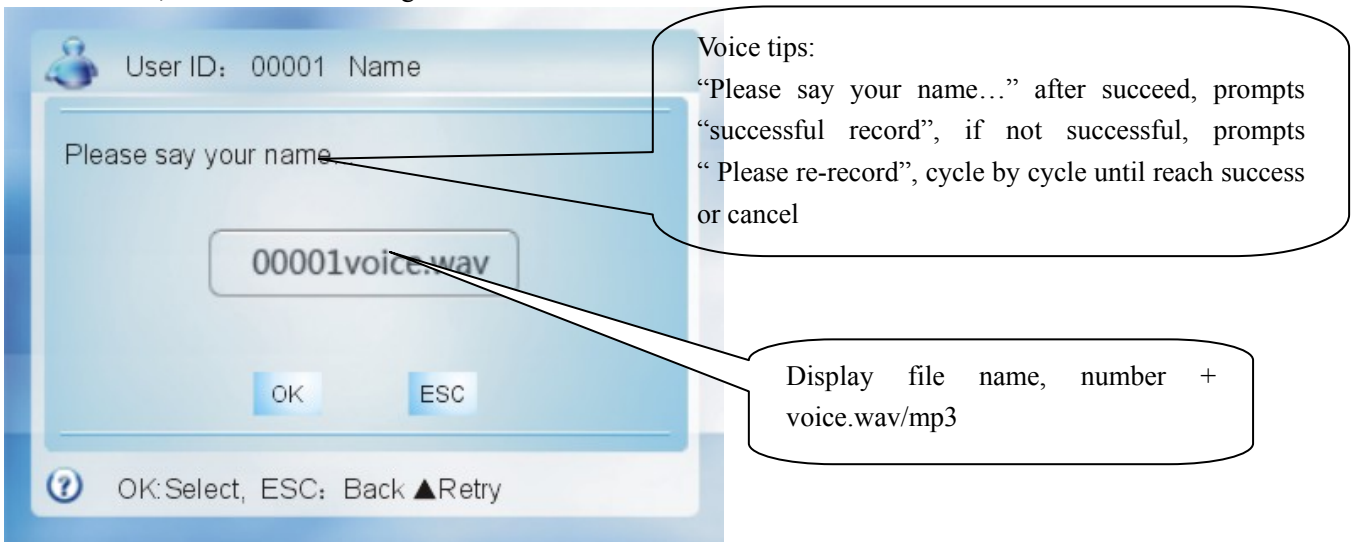
Original sound REC dialog box

Choose 3 **original Sound REC**, then may enter into the following dialog box

1, if the original sound has been recorded and prompts, "the voice had been recorded, whether or not to re-record?" Dialog box is shown as below:



After confirm, enter into such dialog box:



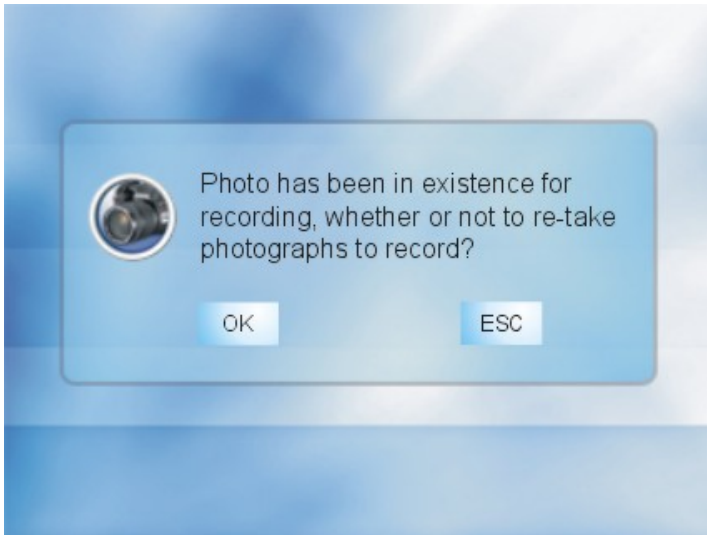
Photographing

The photo is 320*240*24b, size control within 16k,* .jpg form

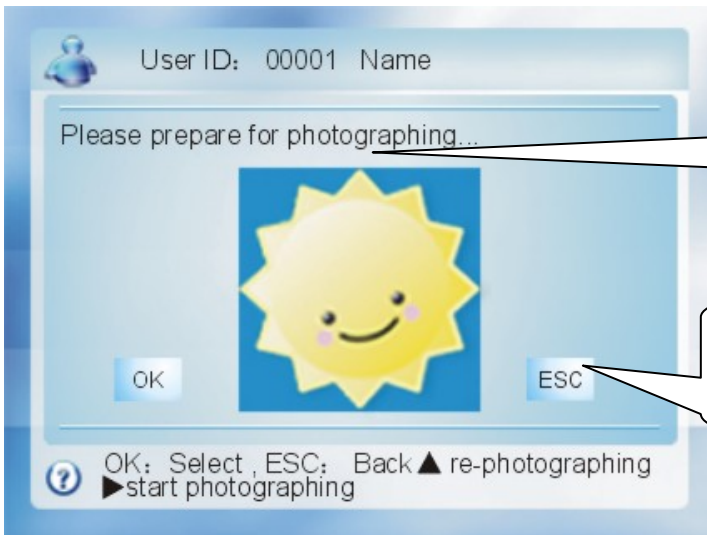
Photographing dialog box

Choose 4 **photographing**, then enter into the following dialog box

1, If the user's photo exists and prompts, "the photo had been recorded, whether or not to re-record?" Dialog box is shown as below:



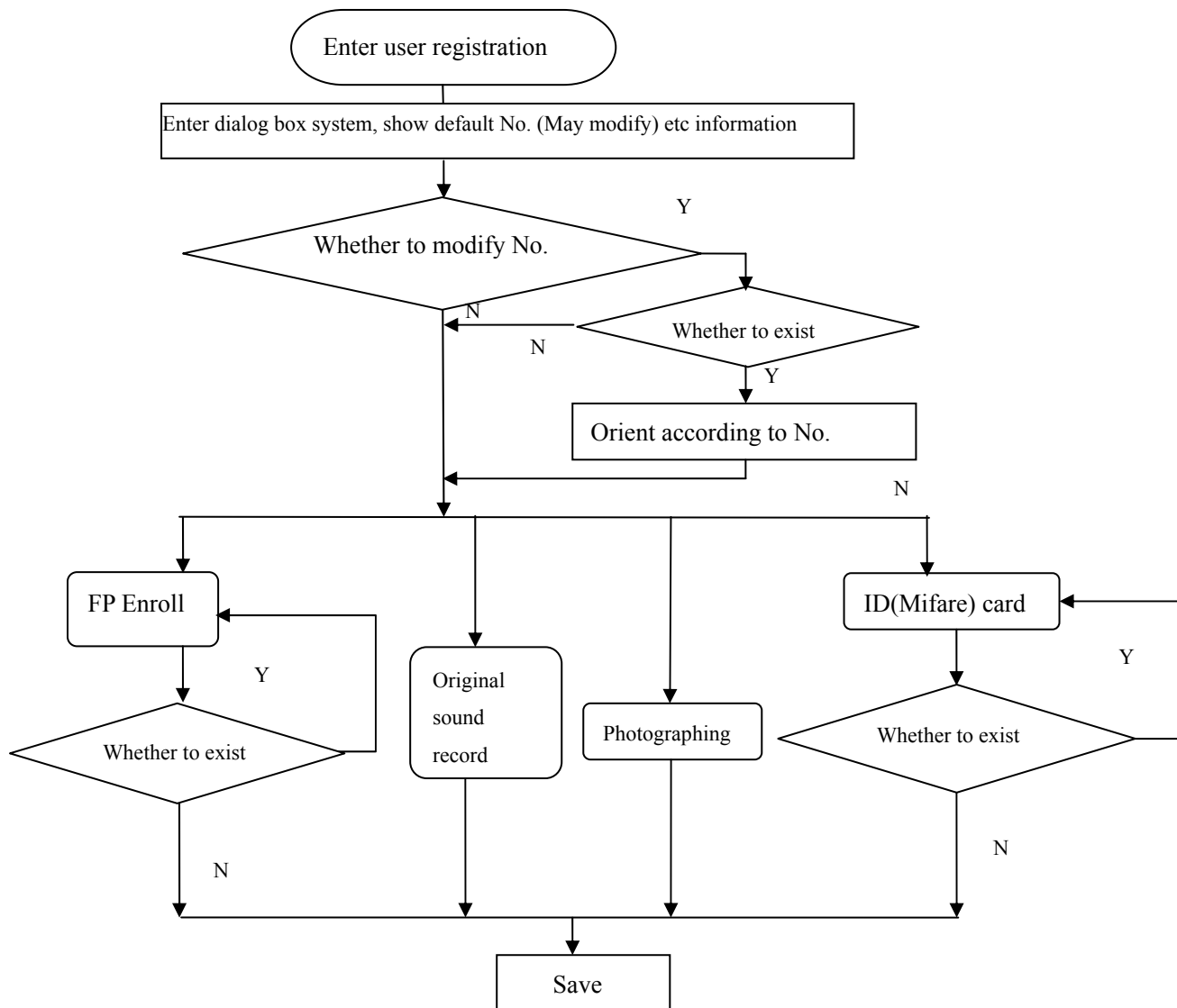
After confirm, enter into such dialog box:



Real-time camera before taking pictures, show photos after taking pictures

If not satisfied, press the UP arrow ▲, may take pictures again, at this time, re-voice and re-text prompts.

Registration flow



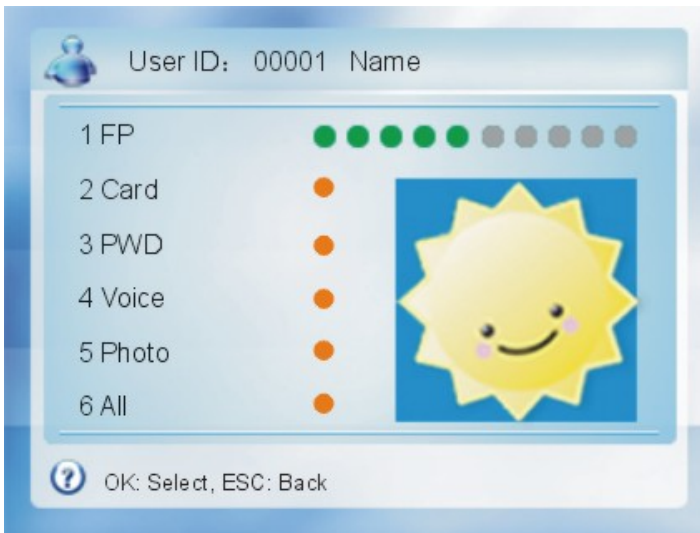
4.1.2 Deletion of registration recording

Explanation:

1. After entering this menu, firstly prompts to input deleting a user ID



After confirm, enter into the following interface



Note:

1. No. 00000 super-administrator can not be deleted
2. The administrator may not delete other administrator, only can delete their own.
3. Super Administrators can delete all users' information except No. 00000 super-administrator
4. May delete some information of user registration, select " delete all" ,then remove the user completely from the system

4.2 Settings

4.2.1 Basic settings

Clock settings

Explanation:

1. Including date and it's form and time settings, default form is YY-MM-DD24H
2. Offer date forms which support at least 10 types,
YYYY MM DD YYYY-MM-DD、YYYY/MM/DD、
MM-DD-YYYY、 MM/DD/YYYY、
DD-MM-YYYY 、 DD/MM/YYYY、
YYYYMMDD、

Language settings

Explanation: language that is displayed on the screen menu of setting fingerprint machine (voice also should be amended accordingly, but currently do not support).Default simplified Chinese

Voice prompts

If choose “yes”, there has corresponding voice hint on the device. If choose “no”, only have “DD” buzzer.
The voice document is mp3 or wav format, approximately have:

1. Successful verification:

May play if having recorded voice of the user, otherwise play user number hint such as “0001”, the voice of the number must be speech synthesis of real people, prior input 0-9 numerical voice.

2. Failing verification:

“Number absence”, “please press finger again”, “please replay card”, “please input password again”.

Volume mediation

Namely regulation of sound volume

Keypad tone

If choose “yes”, press key has sound, otherwise not.

4.2.2 Expert settings

Display this menu only when the super-administrator access to.

4.2.2.1 Checking interface settings

Whether to real-time photographing

If choose "Yes", you have to set up to preserve the ratio of real-time photographing which are as follows:

- 1.0: no save
- 2.30%
- 3.60%
- 4.100% save all

Whether to display photos

Real-time fingerprint display settings

When choose "yes" in the registration of fingerprints and fingerprint mode authentication, it shows corresponding true fingerprint image. Choose "No", it does not show.

4.2.2.2 Delete all records

Delete all validation records.

4.2.2.3 Delete all registered data

Delete all registration records (delete all users, only leave 00,000 user which the system default)

4.2.2.4 Restore the factory settings

Restore all settings message to the state of leaving factory (default state).

4.2.2.5 Firmware upgrade

This option can upgraded the terminal unit, select upgrade file of U disk, Click OK to upgrade.

4.2.2.6 Daylight saving time settings:

In order to meet the needs of daylight saving time of some countries, regulate an hour faster on XX minute XX hour XX day XX month, when on XX minute XX hour XX day XX month, regulate one hour slower.

The beginning of daylight saving time – the beginning time for implementing the daylight saving time

The end of daylight saving time - the end time for implementing the daylight saving time

Correction time - different with the current time

Example: The current time is 16:07 , April 9

The beginning of daylight saving time: Set for April 1

The end of daylight saving time: Set for May 1

Correction time: set to 1 hour

Back to the checking work attendance interface, display the time :2009-4-8 16:07

4.2.2.7 Keypad tone settings

Function keys can be set as features include: overtime registration, off duty registration, work registration, view system information, alarm, ringing, query records, go-off, entering, return, out, overtime work leaving.

Default definition state transition of the system F1: work attendance, F2: check back from work, F3: overtime attendance, F4: signed back to overtime work..

Here the function key is shortcut, you can switch directly to the needed state through these function keys without the need to do those tedious operation.

4.2.3 Power supply management

Time starting up

The equipment automatically opens within specified time. (Run the function only in power off and time dormancy state)

Time power off

The equipment automatically closes within specified time. (All other modules are closed except the CPU core), press the power button or to the boot time, it start up. (In sleep mode)

Time dormancy

The equipment automatically enters sleep mode within specified time. (All other modules are closed except the CPU core and key board), press any key to wake-up equipment in working condition.

Belling settings

Belling Settings include beginning and ending time, duration, music.

Belling can be set 8 kinds of times, you can set up time of timing belling in accordance with the needs, when arrive at the set time, the fingerprint machine will automatically ring, then to reach the length of ringing, it automatically cut-off. If ringing time is 0, the ring is closed. Otherwise, ring according to setting time and length.

Two ringing ways:

- 1) from the loudspeaker of machine itself.
- 2) Connect electric bell with a fingerprint machine, when arrive at the set time, the machine shall send out a relay signal to trigger bells ring.

Free time settings

1. Free means that users do not use terminal equipment
2. Including transit state choice and free time settings, the two options are interrelated, when the free time to 0, the free setting function is turned off; when the free time is non-0 value (in minutes), such as 1, then if there is no any operation within 1 minute, the system will enter free state of the specified settings
3. Free transition state include: sleep and shutdown

Locking off key

Failure to power button: “yes”- failure to shutdown button

“No”-effective to shutdown button

Time state transition

State transitions: when use roll machine, it require to keep a record of roll status in different time, after this setting, when arrive time that user set, the machine will automatically convert to the status of rolling. Display the current rolling state in the current rolling interface.

At least include: sign in, sign off, overtime sign in, overtime sign off etc four states and at least six time sects

4.2.4 Communication settings

Machine number

Number that the machine in the LAN, range from 1 to 255

RS232

Whether or not to use RS232 for communication

RS485

Whether or not to use RS485 for communication

Baud rate

Default 9600, set up five options: 9600,19200,38400,57600,115200.

Ethernet network

Whether or not to open Ethernet communication, if choose "Yes", you should also set the following parameters:

IP address

Default IP is 192.168.1.201, adjust in accordance with demands

Subnet mask

Default subnet mask is 255.255.255.0, adjust in accordance with demands

Gateway address

Default gateway address is 192.168.1.1, adjust in accordance with demands

As the default communication mode: whether or not to use TCP / IP protocols for communications.

Connection password

The system default password is 0, that is no password, you can set, if set password, when connect you have to offer a password. The number of connection password up to eight digits at most.

Dynamic IP allocation

Back-stage address

PC back-stage address is the address of upper computer, it can control the host computer of terminal unit, there is need to enter the IP address of this host device

4.2.5 Recording settings

Management recording alarm (alarm)

When the value of remaining management record capacity arrives at setting standard, the equipment will automatically prompt a warning message of remaining record;

Checking recording alarm (alarm)

When the value of remaining record capacity arrives at setting standard, the equipment will automatically prompt a warning message of remaining record;

Repeat affirmed time

In the set time range (unit: minutes), such as there has existed one person's attendance records, then the second passed checking in result will not be saved.

4.2.6 Automatic detection

Test system components. When equipment fails, it has advantage to analyze failure reason, thus maintain the equipment quickly and easily.

Including testing memory, LCD screen, voice, fingerprint collector, keyboard and the clock, in the testing process, should ensure the stability of power supply, or else they might damage the system hardware, especially during the storage testing process.

- Run all tests
- Memory test
- LED function test
- Voice test
- Fingerprint collector test
- Key board test
- Real-time clock
- MP3 function

4.3 Access control function settings

4.3.1 Lock drive time

The lock drive time length means time difference between validated time and starting electric lock that after machine validates fingerprint. Take 0.5 seconds for the smallest accurate unit. The Largest set is 5s set to "0" means to close lock control function.

4.3.2 Time delay of door contact

Indicates delay time for inspecting door contact after open the door, namely after delay time to inspect door state (open or close), if there is difference between the door contact state and the set state, it gives an alarm. This time is the time delay of door contact, the unit is "s"

4.3.3 Door contact switch settings

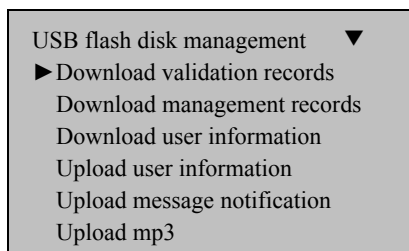
Include three kinds: No, normally opened type, normally closed type;

No: no use of door contact switch;

Normally opened type: if the door is open, the lock should be open, otherwise it shall appear door contact alarm after passing the delay time;

Normally closed type: if the door is closed, the lock should be same, otherwise it shall appear door contact alarm after passing the delay time.

4.4 U disk management



4.5 Alarm reset

When the machine is not alarm, the menu has no option of alarming, only the machine begin to alarm, option "alarm reset" shall appears in the menu, select the option to lift the current alarm status.

4.6system information

4.6.1 User registered number

4.6.2 Fingerprint registered number

4.6.3 Checking record number

4.6.4 Management record number

4.6.5 Used memory

4.6.6 Residual capacity

Registered user number

Registered fingerprint number

Checking record number

Management record number

Residual memory

4.6.7 Device Information

Fingerprint capacity

Note capacity

Management record capacity

Memory capacity

Leave factory date

Serial number

Manufacturer

Device name

Device model

Arithmetic version

Firmware version

4.7 Query and pivot

Checking recording Query

Support query according to date, number, name. Display in report forms

Management recording query

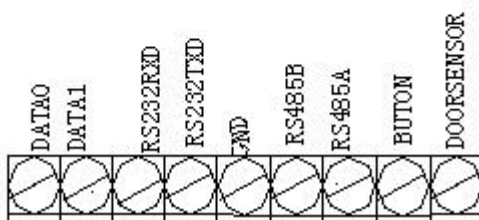
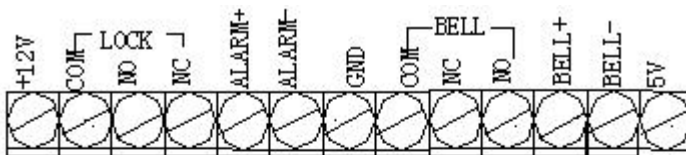
Support query according to date, number, name. Display in report forms

User registration inquiries

Support number, fingerprint, ID (Mifare) card query. Display in report forms

5 Connection mode of external port

5.1 description of external port



Combination mode of links:

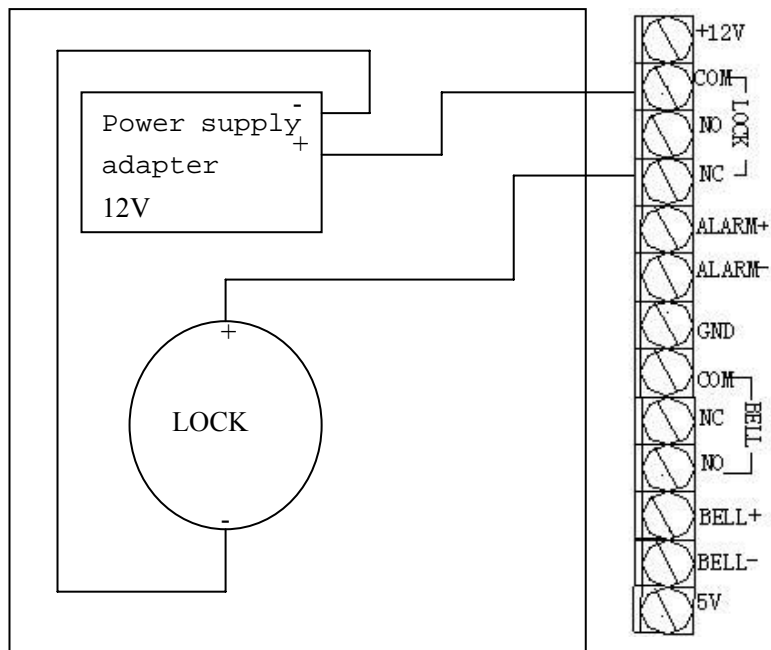
- 1 RS232 connection method—RS232R、RS232T、GND
- 2 RS485 connection method—RS485A、RS485B
- 3 connection mode of Wiegand—GND、DATA0、DATA1
- 4 connection mode of the bell—BELL-、BELL+
- 5 connection mode of OUT switch—BUTON、GND
- 6 mode of door contact—DOORSENSOR、GND
- 7 alarm connection mode—ALARM+、ALARM-

8 connection line of the lock—LK-COM、LK-NO、LK-NC

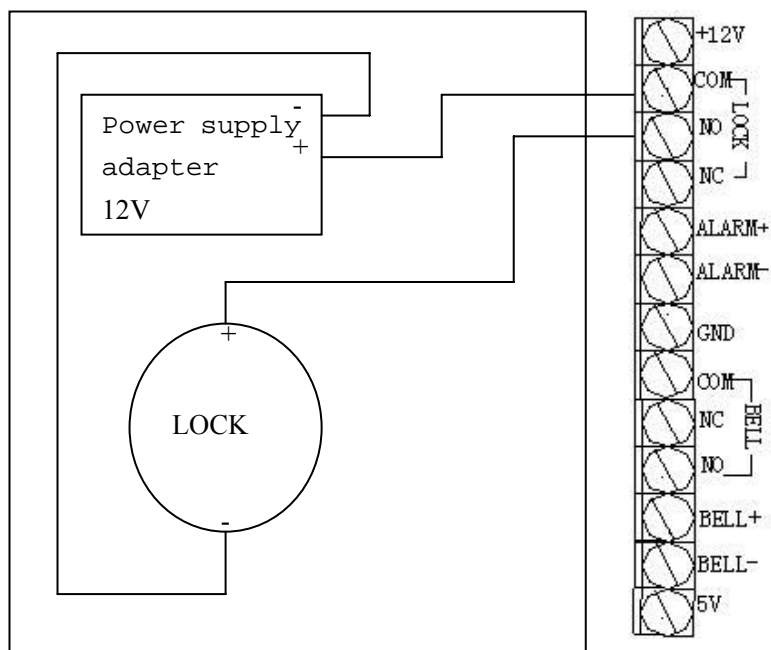
9 connection line of the bell—BL-COM、BL-NC、BL-NO

5.2 Connection mode of lock and electric bell

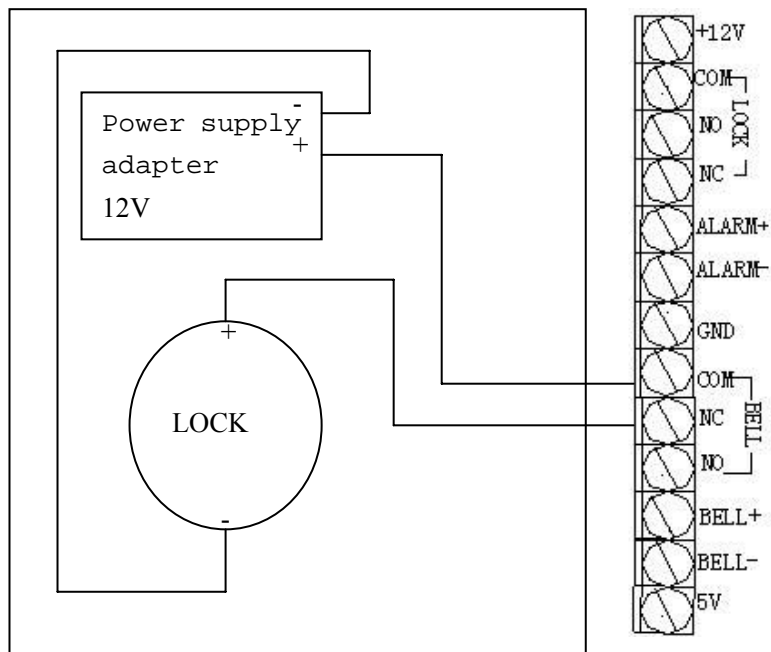
1、connection mode of normally electrified closed lock



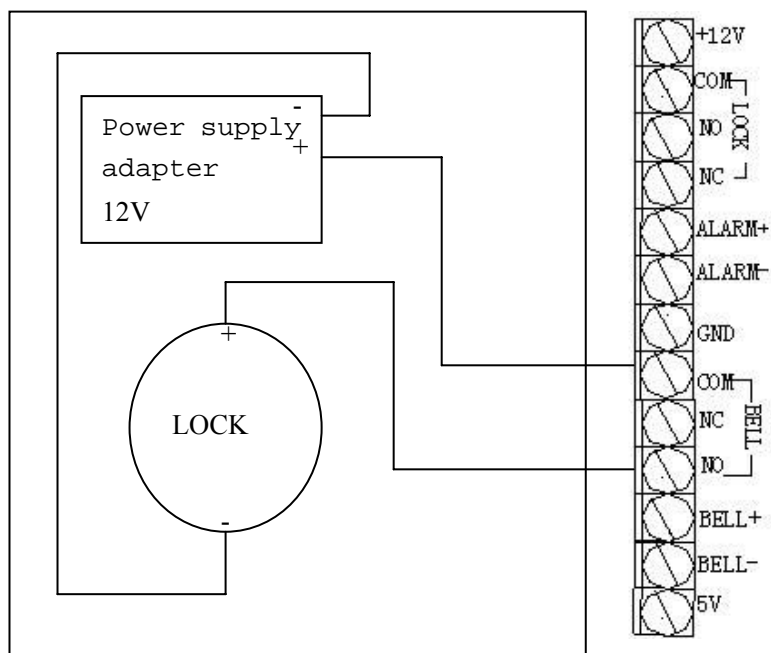
2、connection mode of normally electrified opened lock



3、 connection mode of normally electrified closed electric bell



4、 connection mode of normally electrified opened electric bell



6 Basic concepts and explanation

No trouble found

Fingerprint device identifies the fingerprint of user **A** to user **B**,

Refuse to found

Fingerprint device refuses the registered fingerprint.

Permission rank

Serial fingerprint machine has 3 permission levels:

- User: indicates those who need to establish identity because of some purpose, such as open the door through the device, or record their in and out records
- Administrator: Implements all other operation except carrying through advanced settings and register users that they have power more than administrator (include administrator).
- Super administrator: User that can visit all system functions and alter all settings of the system.

Explanation: registrar can register administrator and super administrator if having no registration of super administrator, at the same time, if there is no super administrator, the administrator may register super administrator; if have super administrator, the junior administrator can not register senior administrator.

Mode key

When using fingerprint, different event corresponds to different state, such as work sign in, off sign in, overtime sign in, out, back etc states according to clock in conditions. It also can be divided into go-in, go-off states according to in and out condition of door contact machine.

Some key board has 4 function key (F) or direction key, they all can be as state key to set current status. But these modes are manual, when you need to use some status, you should press corresponding button. In order to reduce manual operation, you may set transferring function (timing status), when arrive at some set time, the machine shall transfer into current state and display in initial interface.

Message notification

It is divided into public and private message. Set on back-stage of System, and then upload to the fingerprint machine, when start rolling machine, you can see the short message to the public about attendance, it is all along exist. After user input validation fingerprint, there will prompt short message for private people so as to reduce the workload of staff and greatly improve work efficiency.

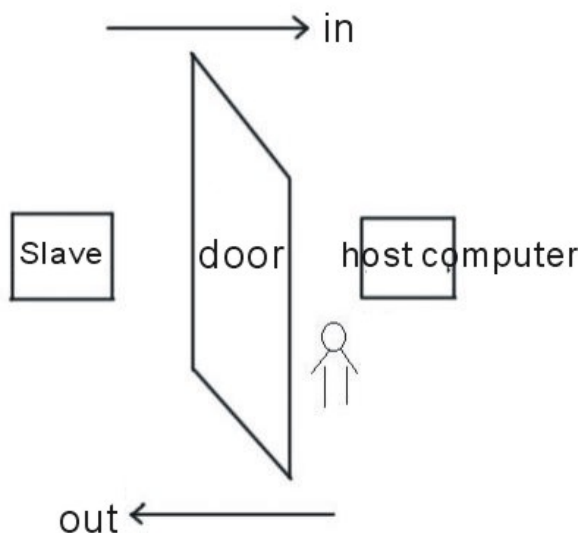
Send message by aiming at somebody, If an employee's birthday is on October 20, you can set up software in the background on October 20 which issues to him a short message "Happy birthday to you", then upload to the machine, after the staff validates the fingerprint authentication on that day, this message will be displayed on screen.

Send message by aiming at many people, such as hold company meeting on June 19, you can set up in the background, then upload to the machine, and the screen shall display "about XX Conference, Room XX, please participate at XX (time) on that day.

There are two ways for transmitting information, first, one is direct transmission by connecting back-stage system with fingerprint machine, and the other is transmitted from the U disk.

Host computer and slave

1、 introduction of host computer and slave



Two machines control one lock, install one machine in the door (hereinafter referred to as the "host"), install the other one out the door (hereinafter referred to as "slave"), at the same time, 2 machines may control the lock only the host connect with the lock. Consequently, solve trivial connection problem of using 2 traditional machines on controlling one lock.

Fingerprint identification, complete to verify user permissions in the host computer, the computer also keep records, slave is fingerprint head or reading module only, carry through fingerprint collection, card reading, and shall need to verify the information, then sent it to the host. Consequently, solve chaos problem of software on managing user information and in and out records of 2 relative machines.

The host and slave machine also has back capabilities, in and out records must be matched, otherwise, it can not open the door, so prevent people who followed by others from entering the door, and prevent the security risks.

2、 work principle of host computer and slave

Host computer: Carry through fingerprint registration, fingerprint authentication, user permission settings, user permission verification, receive fingerprints or card information collected from extension, and then validate and bring the results back to the slave.

Slave: Only as a fingerprint read head, carry through fingerprint collection, read card, and send message which need to be verified to the host computer, the host can choose whether to display the test results of slave.

Daylight saving time (time zone settings)

Daylight Saving Time, also known as "Daylight Saving Time", it is a system which regulate local time artificially in order to save energy, during the implementation of this system, the adopted time known as the "daylight saving time." Generally, in summer day comes early, so people regulate one hour ahead of time, then you can get up and sleep early to reduce amount of lighting and make full use of light resources, thereby saving lighting electricity. In autumn, move clock back. Different countries adopt specific regulation about daylight saving time. At present, nearly 110 countries implement daylight saving time each year.