Table of Content

I Using Environment

1. It is better to avoid putting the fingerprint or card machine under shining of light. Shining of light will degrade seriously the performance of the fingerprint sensor. It will cause the failure of verification by fingerprint sensor.

2. The working temperature of the fingerprint/card machine should be in the range of 0℃－60℃. Try to avoid using it in outdoor for a long time or the normal operation will be affected. If it is really necessary to use it in outdoor, please try to use it in shaded area with radiating equipment. In winter, we can add some warm facilities in company with it.

II Installation Reminder

1. Before installation, please make sure the power of the fingerprint/card device is off. Installion with power on or cable connection with power on may damge the machine.

2. In season of Autum or Winter, human being has static electricity. Before installation, please connect the wire of ground before others. This is to prevent damage of machine by instant static electricity over voltage.

3. Please do not expose the socket. They must have cable plug inserted. Besides, please do not expose the contact of electric wire to the air to prevent short circuit between 2 wires. To help the identification of the electric wire, please use different color for different pin. For example, we always use green color wire for grounding.

4. Before connecting the power cable, please do all the connection of other cables first. At last, connecting the power cable. If some problem has been discovered, disconnect the power immediately.

5. If the distance betwen the power socket and the fingerpint/card machine is very far away, please do not use network cable for electric wire extension. The standard electric wire should be used instead. Be remined that if the distance is far way, the voltage of the power adaptor will be degraded continuously.

6. If user connects the cable wrongly causing the damage of the machine, the warranty will be voided.

7. It is better to install the fingerprint/card machine at around 1.4 to 1.5 meters high.

III Button Explanation

The layout of the keyboard is as follows:

F1	F2	F3	F4

1	2	3	ESC
4	5	6	MENU
7	8	9	▲
*	0	OK	▼

Fig 2-1

Button Description:

|	
ESC	quit the current screen or and for canceling an action
MENU	to access the menu items
OK	to confirm the current screen
*	* character
▲	up arrow for the current screen
▼	down arrow for the current screen
0…9	to invoke an item in the current screen
F1	to change the current status to on duty
F2	to change the current status to off duty
F3	to change the current status to on overtime on
F4	to change the current status to on overtime off

4

IV Right way of pressing fingerprint

The following is the right way of doing fingerprint enrollment and verification. Fingerprint should be parallel to the fingerprint sensor and the heart of fingerprint should be pressing to the centre of the fingerprint sensor.
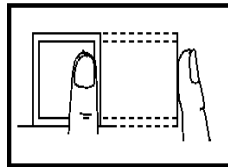
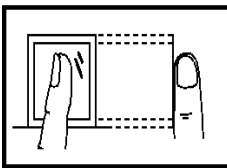The right way of pressing fingerprint：
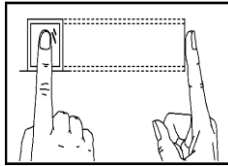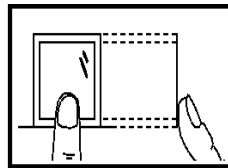

Correct
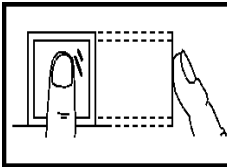
not parallel
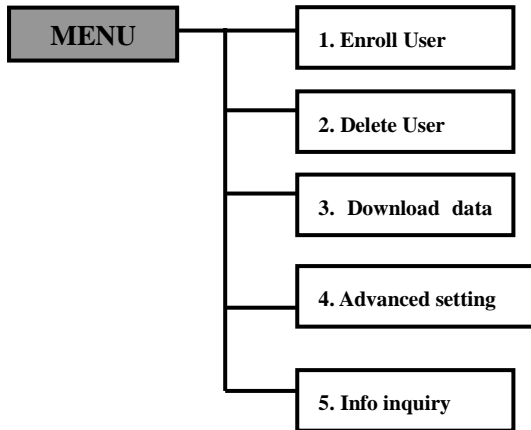

not in centre

tilt

too low in position

V Menu Operation

When the fingerprint/card machine is in idle mode, pressing the button "menu" will go into the main menu. To select a menu item, press the item numeric key and it will be invoked.

```
   ┌──────────┐          ┌─────────────────┐
   │  MENU    │──────────│ 1. Enroll User  │
   └──────────┘          └─────────────────┘

                         ┌─────────────────┐
                         │ 2. Delete User  │
                         └─────────────────┘

                         ┌─────────────────┐
                         │ 3. Download data│
                         └─────────────────┘

                         ┌──────────────────┐
                         │ 4. Advanced setting│
                         └──────────────────┘

                         ┌─────────────────┐
                         │ 5. Info inquiry │
                         └─────────────────┘
```

The main menu consists of

1. User Enrollment

2. Delete User

3. Download Data

4. Advance Setting

5. Info Inquiry

Each menu item may consists of lower level sub-menu.

1. User Enrollment：

to enroll a fingerprint or password or card.

2. Delete User   ：

delete resigned user information(fingerprint or password or card)

3. Download Data ：

to set the communication argument or using U disk to download in out records.

4. Access Control ：

to set the time zone, user vs time zone, unlock group, alarm and so on.

5. Advanced Setting   ：

to set the machine number, time of the machine, time bell and so on
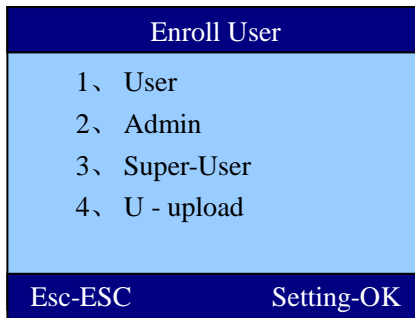
6. Info Inquiry   ：

to view the enrollment capacity, record information and product parameter and so on.

VI User Enrollment

In the machine idle state, press "menu" to go into the main menu. If there is at least one administrator in the fingerprint device, press menu button will require the administrator fingerprint/card/password to access the menu.

Menu
1、 Enroll User
2、 Delete User
3、 Download data
4、 Access Control
5、 Advanced Setting
Esc-ESC   Setting-OK
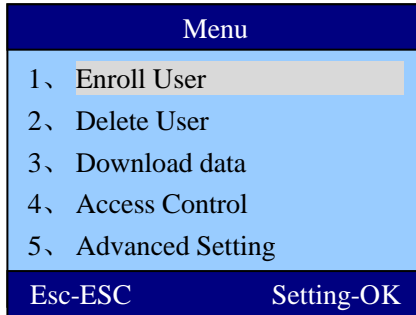
In "user enrollment", it includes "user", "admin", "super user" and "U disk upload".

Enroll User
1、 User
2、 Admin
3、 Super-User
4、 U - upload
Esc-ESC   Setting-OK

In the menu item of "user", you can see 3 sub-items. They are

1. new enrollment
2. backup enrollment
3. duress fingerprint

```
┌─────────────────────────────────┐
│             User                │
│                                 │
│    1、 New Enrollment            │
│    2、 Backup Enrollment         │
│                                 │
│                                 │
│                                 │
│  Esc-ESC          Setting-OK    │
└─────────────────────────────────┘
```
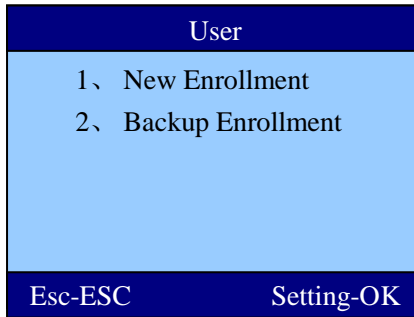
【New Enrollment】
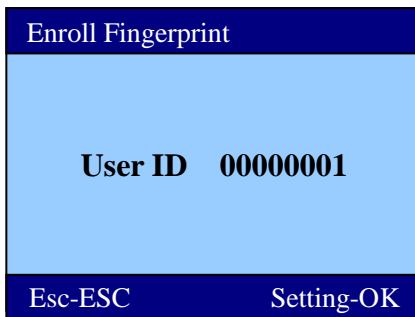an user enroll the fingerprint the first time (or password or card)

【Backup Enrollment】
an user enroll the second fingerprint (password or card)
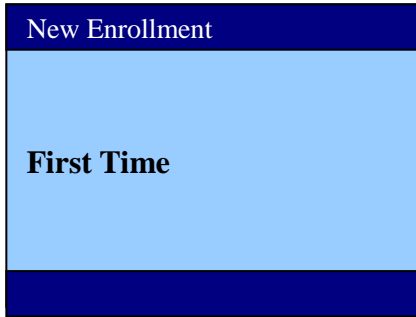
VII Enrollment of Fingerprint

① New Enrollment

Select "new enrollment" and then "fingerprint"
Input the new user ID and press "ok" button to confirm. The default value is the next unused user ID.

```
┌─────────────────────────────────┐
│  Enroll Fingerprint             │
│                                 │
│                                 │
│      User ID    00000001        │
│                                 │
│                                 │
│  Esc-ESC          Setting-OK    │
└─────────────────────────────────┘
```

In the fingerprint enrollment screen, press fingerprint 2 times.
If both image are near, the enrollment succeed.

```
New Enrollment


First Time

```

If the enrollment of fingerprint succeed, the machine will ask
whether to continue to enroll another user.

```
Fingerprint Enrollment


           Continue


Esc-ESC           Continue-OK
```
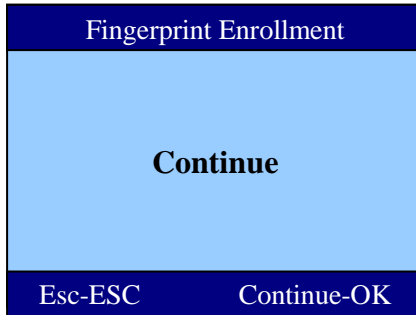
Click "ok" button to continue another enrollment. Or, click
"esc" button to cause the menu to go back to the enrollment
method.

```
New Enrollment
1、 Fingerprint
2、 Card
3、 Password
4、 FP & Card
5、  FP & Password
Esc-ESC           Setting-OK
```
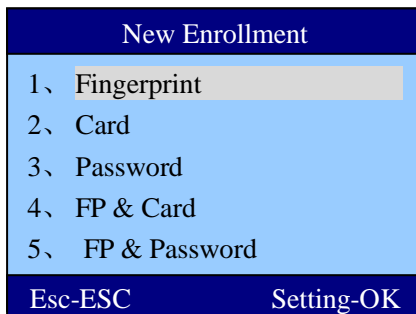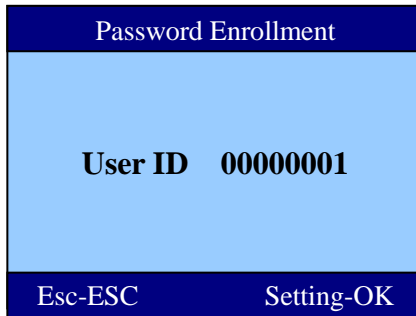
② Backup Enrollment

A user can enroll the other fingerprint for backup purpose. In case the main fingerprint has problem in verification, it can change to use another fingerprint.

The operation of backup enrollment is similar to that of the new enrollment. Backup enrollment only could be done for existing user.

VIII Enrollment of password

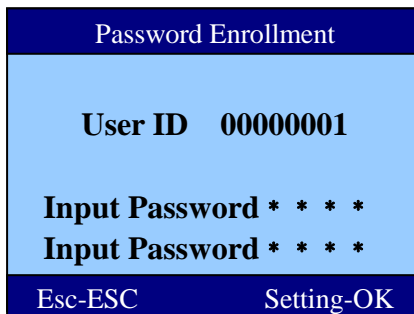In the menu of "enrollment", select "password"

Password Enrollment
User ID   00000001
Esc-ESC   Setting-OK

Input the user ID of the new user and click "ok" button to confirm.

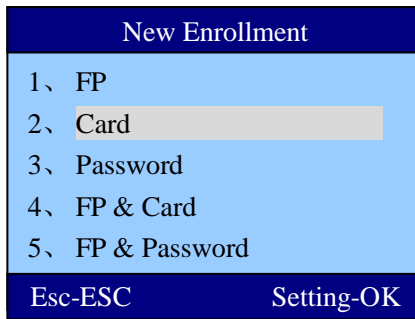| Password Enrollment |
|---|
| **User ID   00000001** |
| |
| **Input Password ＊ ＊ ＊ ＊** |
| **Input Password ＊ ＊ ＊ ＊** |
| Esc-ESC   Setting-OK |

Input a new password of maximum 8 characters. After input, do the input again for verification. If both values are the same, the enrollment succeed.

VIIII Enrollment of Card

In the menu of "enrollment", select "card".

New Enrollment
1、 FP
2、 Card
3、 Password
4、 FP & Card
5、 FP & Password
Esc-ESC   Setting-OK

Input the "user ID" of the new user and click "ok" button to confirm.

Enrollment of Card
User ID   00000001
Esc-ESC   Setting-OK
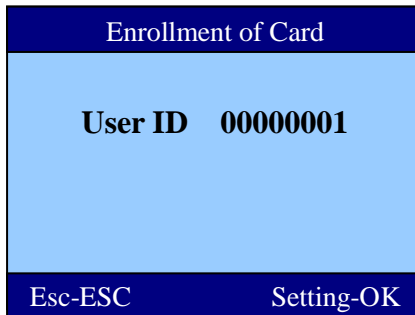
Swipe the new card in the card sensing area.

```
Input ID Card



Esc-ESC                 Setting-OK
```
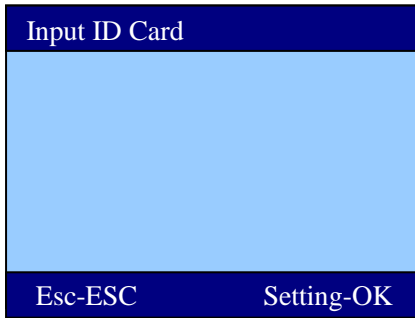
X Fingerprint + Card

In the menu of "New Enrollment", select "Fingerprint & Card".

```
New Enrollment
1、 FP
2、 Card
3、 Password
4、 FP & Card
5、 FP & Password
Esc-ESC                 Setting-OK
```
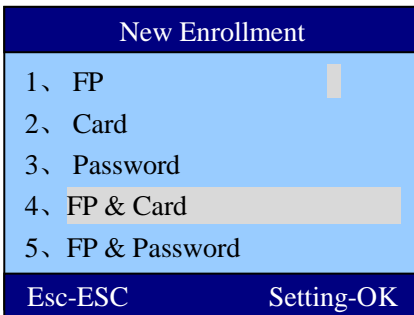
Input the user ID of the enrolled employee and then click "ok".

```
New Enrollment

   User ID    00000001




Esc-ESC              Setting-OK
```
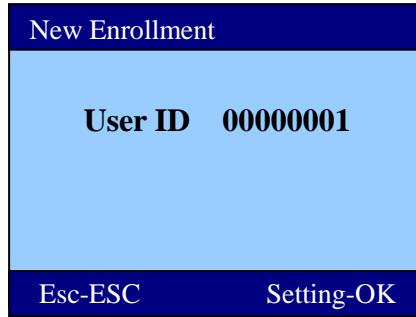
Swipe a card in the card sensing area. In the fingerprint enrollment screen, use a finger to press 2 times. If both pressing are ok, the enrollment is succeeded.

```
FP & Card


First Time


```
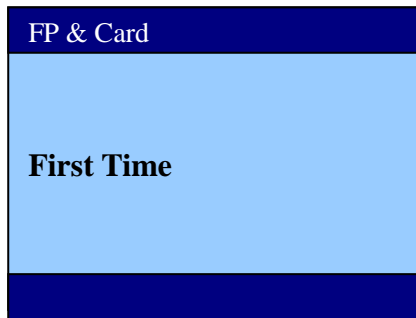
Note: After the enrollment of fingerprint & card, you can try the verification. Either pressing fingerprint or swipe your card and then press fingerprint.

XI Fingerprint & Password

In the "New Enrollment", select "Fingerprint and Password".

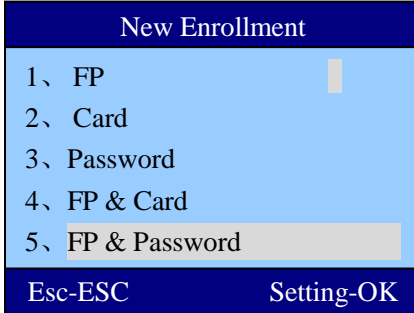| New Enrollment	
1、 FP	
2、 Card	
3、Password	
4、FP & Card	
5、FP & Password	
Esc-ESC	Setting-OK

Input a user ID and click "ok". Press a finger 2 times. If both pressing are ok, input the same password 2 times. Now the enrollment is succeeded.

New Enrollment	
User ID 00000001	
Esc-ESC	Setting-OK

New Enrollment	
Input Password * * *	
Input Password * * * *	
Esc-ESC	Setting-OK
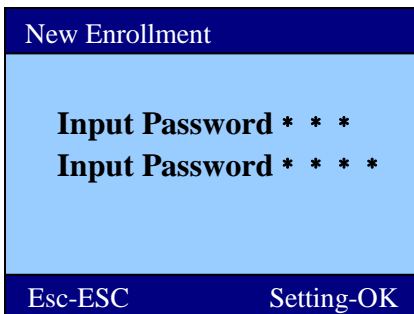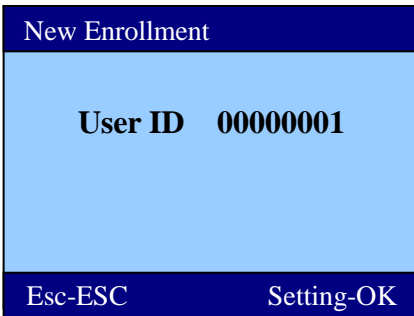
Note: In the verification, press fingerprint and you will be prompted to input the password. If password is correct, the verification is ok.

XII Enrollment of Administrator

Enrollment of administrator is to prevent normal user from chaning the fingerprint machine parameter. The method is the same as that of user. The enrolled administrator has no difference in normal operation. The operation of administrator will be logged in the fingerprint machine.

XIII Enrollment of Super User

Super user is equal to lower level administrator. It only has partial administration rights. The enrollment of it is the same as normal user.
Difference : Super user only has rights of user enrollment, "download data" (u disk download in out records, modification of IP and so on).

To enroll super user, we need to have at least one administrator. In the normal operation, super user has no difference. The operation of super user in the fingerprint/card machine has been logged in the machine.

XIV U Disk Upload

We can use U disk to upload enrollment information. The enrollment information is downloaded from one machine. Please be noted that the device number of the enrollment information must be the same as that of the target machine.

For example, the downloaded enrollment is in file afp_001.dat. 001 is the machine id. The target machine must also have the same machine id of 001.

XV Delete User

In the main menu, select "delete user".

Menu
1、Enroll User
2、Delete User
3、Download Data
4、Access Control
5、Advanced Setting
Esc-ESC   Setting-OK
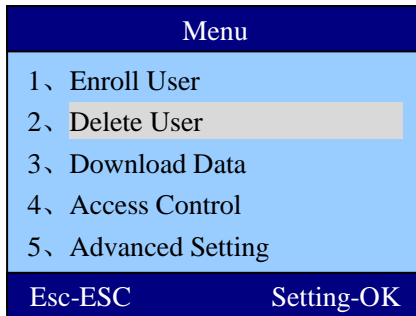
Input the user ID for deletion.

Delete User
User ID   00000001
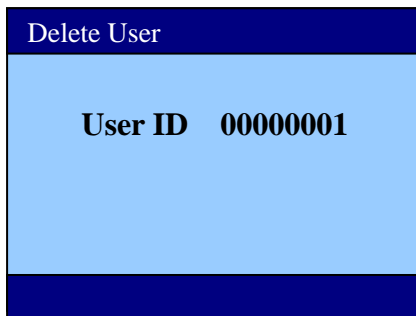
The machine will ask for confirmation.

Delete
Confirm Delete?
No-ESC   Yes-OK
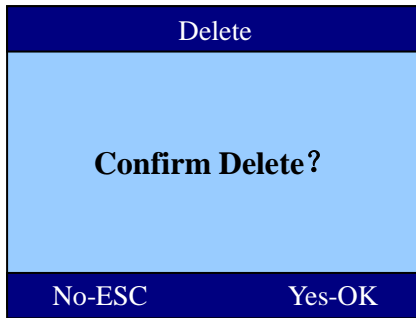
Press "ok" to confirm deletion or "esc" to abort the action.

Delete User
Continue
Esc-ESC
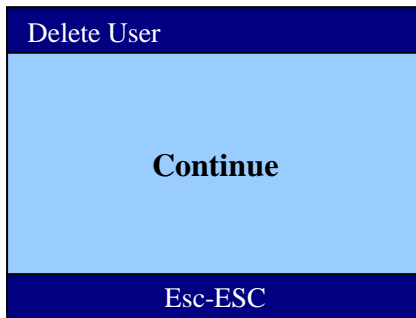
XVI Download Data

Select menu -> download data and you will see the following
screen.

Download Data
U-Download
RS485 download
Ethernet Download
Esc-ESC   Setting-OK
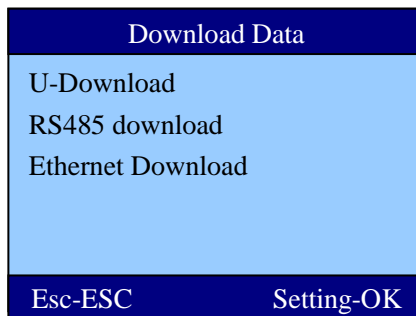
U Disk Download

This item is to download in out records and enrollment information to U disk.

RS485 Download

This is to set the RS485 communication speed in bits per second.

TCP/IP Download

This is to set the parameter for TCP/IP connection. It has IP address, subnet mask, gateway. Set it according to the actual requirement.

U Disk Download

Select "U Disk Management" in the main menu.

Download enrollment information

A) Insert U disk into the U disk socket of the fingerprint machine.

B) Select menu -> U disk download.

C) Select "download enrollment" to download all enrolment information(fingerprint info,name and so on) into the U disk as a file of afp_001.dat.

D) Take out the U disk and insert it into the computer. In the attendance software, select "get u disk enrollment" to get the enrollment information into software.

Note: The above operation needs to be done again after new user enrolled into the fingerprint/card machine.

② Download data

A) Insert U disk into the U disk socket of the fingerprint machine.

B) Select menu -> U disk download.

C) Select "download data" to download in out record into the U disk as a text file. The file name will look like "glg_001.txt".

D) Take out the U disk and insert it into the computer. In the attendance software, select "get u disk enrollment" to get the enrollment information into software.

2）USB Connection

This is for USB cable communication between computer and the fingerprint machine.

3）RS485 Connection

By using RS485 to 232 connector, the communication distance could be extended into 800 meters or more.

It is suggested to use baud rate of 9600 bps for rs485 communication which will give a stable data transfer.

4) Ethernet Communication

the default IP address of ethernet communication is 192.168.1.224. This is the legal IP address in a lot of LAN. Please set the corresponding subnet mask and gateway.

Note: If fingerprint/card machine is connected with computer directly, we need to use ethernet 10/100 base-t cross over cable.

XVII Advanced Setting

Advanced setting has 4 modules. They are terminal setting, record setting, time setting and time bell.

Advanced setting
1. Terminal setting
2. Record setting
3．Time setting
4．Time bell
Esc-ESC   Settiing-OK

XVIII Terminal Setting

In the main menu, select 5. Advanced Setting -> 1. Terminal setting

Terminal setting

It is to set the fingerprint/card machine internal parameters.

Setting	Description	Range	Default
Device ID	the unique identifier of the fingerprint/card machine	1-255	1
Admin No.	number of admin that can be present in the machine	1-10	5
Language	the displayed language in the machine	Multi	English
Voice	to set the loudness of the voice of the machine	1-10	6
Screen saver	the idle time for displaying the screen saver	No/1-255	No
Verification	verification method	Multi	F/P/C
Upload screen	modify the screen of the machine	n/a	No
Restore factory default	restore machine parameter to factory default	n/a	n/a
Clear admin	downgrade all machine admin to normal user	n/a	n/a

Verification Method : The fingerprint/card machine allow different verification method for attendance. For example, we set the verification method to card+fp. Then user need to swipe card and then punch fingerprint for passing the verification.

fp/card/pin	any method (fingerprint or card or password) to pass
card+fp	swipe card and then punch fingerprint
fp+pin	punch fingerprint and then input password
card+fp+pin	swipe a card, punch fingerprint and then input password

XVIIII Record Setting

7.2.1 Management record alert

The fingerprint/card machine will record all the operation by administrator(e.g. enrolling a new fingerprint, delete a fingerprint). The maximum record to store is 1000 pieces. When the number of stored record will reach 1000 after a threshold, the machine will alert "exceed management record" in the screen. Management Threshold is the number of records remaining for reaching the maximum 1000 pieces.
For example, the management threshold record is set to 100. When the storage of management record reaches 900, the machine will display the alert "exceed management records".

7.2.2 In out record alert

The operation of this is similar to that of the management record. The only difference is that it is for in out record, not management record. For example, the in out threshold is set to 1500. When the in out records reach 98501, the machine will display the alert of "exceed in out records". When the in/out storage record reaches 100000, you will both see the alert and not allow to do verification again till the in out records has been deleted.

7.2.3 Reverify Time

It is to check whether user will do verification continuously within a period. It is suggested to set this value to 5 minutes. If a user do verification other than the first time within the setting period, the fingerprint/card machine will voice out (reverify). The record will not be stored in the machine.

XX Time Setting

In the adanced menu, select "time setting" to connect the clock of the fingerprint/card machine. When the machine is released from factory, the time of the machine is already set to Beijing area. If it is not correct to the user region time, you can use this item to correct it.

```
Time setting
                        Saturday
              2013-01-01
                  16：12
```
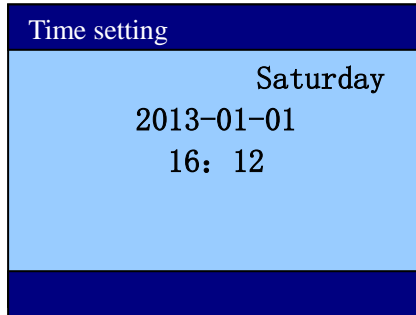
XXI Time Bell

In "advanced setting", select "time bell".

```
Time bell
  1.  Bell count
  2.  Bell time



  Esc-ESC           Setting-OK
```
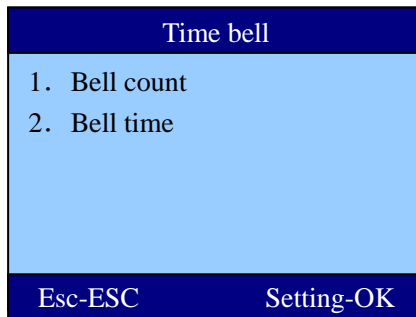
Bell Count : Number of times for the bell to ring.
Bell Time   : This is to set the time for the bell to ring.The
maximum allowed time is 8.

XXII Info Inquiry

1. This is to inquire the storage information of the fingerprint/card machine. It includes "storage information", "record detail", "system information". Storage Info is to view the enrolled information. Use up or down arrow to move the highlight bar into different items for pinpointing.

```
┌─────────────────────────────────┐
│          Info Inquiry           │
├─────────────────────────────────┤
│  1. User Enroll          0      │
│  2. Admin Enroll         0      │
│  3. FP Enroll            0      │
│  4. Password Enroll      0      │
│  5. ID Card Enroll       0      │
│   Esc-ESC        Setting-OK     │
└─────────────────────────────────┘
```

2. Record Detail

This is to view the number of records stored or to delete all records.

```
┌─────────────────────────────────┐
│          Record Detail          │
├─────────────────────────────────┤
│  1. Attendance Record    100    │
│  2. Management Record      1    │
│  3. Attendance Inquiry          │
│  4. Delete All Records          │
│                                 │
│   Esc-ESC        Setting-OK     │
└─────────────────────────────────┘
```

User can either use the "up" or "down" arrow to move the current menu item or use numeric key to go into exactly the menu item for inquiry of in out record or management record.
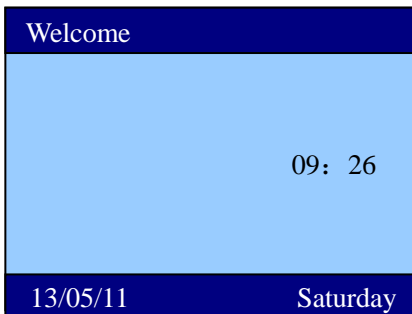
2. System Info

It is to show the machine information.

```
        Soft:   TH200 V1.0
        Hard:   TH-1 v1.0
      Camera:   OV0307
  Device ID:   1
   Baudrate:   38400
  IP Address:   192.168.001.224
  Set   28   2013
  SN:   ZX00068275EB
```
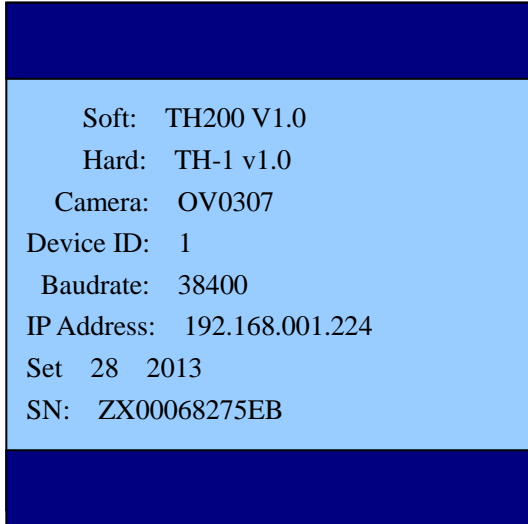
4. Inquiry of in out record

1. Idle screen of fingerprint/card machine

```
Welcome


              09: 26



13/05/11            Saturday
```

2. Press "ok" button to go into the screen of "In out record inquiry".

In out record inquiry
Please verify

3. After user do the verification, the user in out records in the current month will be displayed.

00001   2013-05   1/1   ▼
1   12：10
2   08：23 16：30
3   09：10

In the above screen, you can see that user id (00001) has in out records in 3 days. In 01 May 2013, it has 1 in record. In 02 May 2013, it has 2 in out records. In 03 May 2013, it again has 1 in record. In the upper right corner, you can see 1/1. It means the current page is 1 while the total pages is also 1.

Use "▲"、"▼" to change the current page.

*** The End ***