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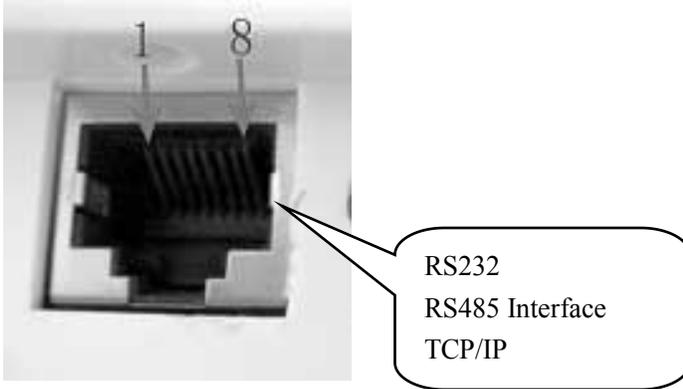
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# Chapter I Introduction of the Basic Operation of Finger Keeper

## 1. Interface Description of Finger Keeper

A finger keeper is equipped with three types of communication interface: RS232/485 and TCP/IP protocol interfaces, as shown in the following picture:



The positions of communication interface and power connector of finger keeper are as follows:

Communication Interface	Power Connector
----------------------------	-----------------

**※ TCP/IP communication function is non-standard configuration, depending on specific model**

## 2. Power Management in Finger Keeper

① Press the power key on the finger keeper to start the device and enter normal working state (attendance state).

② If auto off function is set in the finger keeper and no operation is implemented under normal working state (attendance state), it will close

automatically in a set time.

③ Under normal working state (attendance state), pressing the power key for about 4 seconds and the power of the finger keeper will be cut off (manual shutdown), which is similar to the personal computer.

④ You can turn on or cut off the power of the finger keeper by way of communication in the supervisor computer.

### **3. User of Finger Keeper**

Users of the finger keeper include administrators and regular users.

① Regular users can only register attendance in the finger keeper, they can't carry out the management operation.

② The administrator has the operation rights of the finger keeper management.

The administrator can register and delete the fingerprint and password of the user, view record data and system information, and set the functions.

### **4. Enroll Method of Finger Keeper**

Enroll method of the finger keeper includes: Fingerprint, password and ID induction card. Each user can register three fingerprints, one password and one ID induction card.

Each of them has its own features, therefore user should carefully read the instruction manual first and then choose the proper enroll method suitable to you.

Note: Induction card function is non-standard configuration function, depending on specific model.

## 5. User Number and Password

① User ID number (employee identification number) of the finger keeper is the arbitrary digit from 1 to 65535 and the password is the arbitrary digit from 1 to 9999. (The machine in ARM7 platform possesses five-digit user ID and four-digit password.)

② User ID number (employee identification number) of the finger keeper is the arbitrary digit from 1 to 99999999 and the password is the arbitrary digit from 1 to 99999999. (The machine in ARM8 platform possesses eight-digit User ID and eight-digit password.)

## 6. Working State of Finger Keeper

Working state of the finger keeper includes: attendance state, administrator operating state and attendance prohibition state.

① The attendance state is the operating condition of the finger keeper. After inputting fingerprint or password, it compares with the stored fingerprint or password to judge whether it is the registered user and store the record of the attendance time. If it is the registered user, the ID of the user will be displayed in the display device.

In addition, the electronic lock control signal and indicator signal will be provided according to the setting of the finger keeper and the ID and time will be recorded in the internal storage.

② Registration of new user, modification of registration data, deletion of registration data, function setting operation and system information inquiry can be implemented under the administrator operating state.

- a. Only the administrator can implement management operation.
  - b. The administrator shall be identified through fingerprint or password to enter the management operating state. (Please refer to the introduction in “Chapter III Administrator Operating Procedure”)
  - c. If no administrator is registered in the finger keeper, the system will not identify the administrator and it can be set by any operator.
- ③ Attendance prohibition state is set according to the finger keeper by PC management software.

## 7. Data Recorded in Finger Keeper

★ The finger keeper automatically records all information related to the using condition in the internal storage.

★ Date recorded by the finger keeper includes administrative record data and user record data.

★ Administrative record is the operating record of the related administrator in the finger keeper.

★ User record is the record to verify attendance condition under attendance state.

The record data is transmitted to the attendance PC management software through communication interface and saved in database to be viewed and counted.

### Content of record data is as follows:

Record Type	Operation	Record Content
Administrative Record	New register	Date, time, machine number, operator number and ID of the registered object

	Delete registration data	Date, time, machine number, operator number and ID of the deleted object
	Delete all record data	Date, time, machine number and operator number
	Advanced setting	Date, time, machine number and operator number
	Time setting	Date, time, machine number and operator number
	Record setting	Date, time, machine number and operator number
<b>User Record</b>	User verification	Date, time, machine number and the verified ID

## 8. Function Setting of Finger Keeper

You can flexibly set the finger keeper through the friendly user function setting menu provide by the finger keeper according to your demand.

The setting content is as follows:

### 8.1 Device Setting

#### ① Administrator quantity

Setting Content	Description
1—10	Set the quantity of the finger keeper administrator
<b>Factory Setting</b>	5

#### ② Machine number

Setting Content	Description
1—2 5 5	The sole number to identify the finger keeper during the

	networking usage of the finger keeper
<b>Factory Setting</b>	1

► If the finger keepers with same machine number appear during network using, it cannot work in normal condition and the PC management software will be out of order when records attendance data, so please pay more attention to it.

③Baud rate

<b>Setting Content</b>	<b>Description</b>
9 6 0 0	Baud rate of communication interface is set to 9600bps
1 9 2 0 0	Baud rate of communication interface is set to 19200bps
3 8 4 0 0	Baud rate of communication interface is set to 38400bps
57600	Baud rate of communication interface is set to 57600bps
115200	Baud rate of communication interface is set to 115200bps
<b>Factory Setting</b>	3 8 4 0 0

► The set value shall be consistent with the communication port setting of the PC supervisor computer, otherwise, the communication cannot be realized.

④Display language

<b>Setting Content</b>	<b>Description</b>
<b>Chinese traditional</b>	All contents displayed in the display device is in Chinese traditional
<b>Chinese simplified</b>	All contents displayed in the display device is in Chinese simplified
<b>English</b>	All contents displayed in the display device is in English
<b>Factory Setting</b>	Chinese simplified

⑤ Time delay of lock

Setting Content	Description
Yes	Output electronic control signal after successfully verifying
No	Not output electronic control signal after successfully verifying
<b>Factory Setting</b>	Yes, delay for 1s

▶ The lock control signal can be outputted when the finger keeper displays successful comparison information and sets the lock output signal.

**(Note: The lock control signal of the current finger keeper series is used to control green indicator.)**

⑥ Auto off

Setting Content	Description
No	The auto off function of the finger keeper is invalid
1—2 5 5	If no any operation is implemented in the finger keeper, it will close automatically in a set time. The unit is “Minute”.
<b>Factory Setting</b>	No

⑦ Time setting

Setting Content	Description
<b>Time Setting</b>	Set the time of the finger keeper
<b>Factory Setting</b>	The time setting of the finger keeper shall be consistent with the computer time of installing management software and it can be set in the management software.

⑧Voice out

Setting Content	Description
No	No voice prompt when identifies the fingerprint
<b>Factory Setting</b>	Yes

⑨Default setting

Press OK and the system will restore the factory default of each setting.

8.2 Record Setting

① Administrative record warning

When the surplus of the administrative record reaches to the set value, the finger keeper will notify the user that the space of administrative record storage will be full by means of displaying or prompt tone.

Setting Content	Description
No	The finger keeper will not warn the administrative record over. If it exceeds, the finger keeper will not store the administrative record.
1—2 5 5	The finger keeper notifies the administrative record over according to the set value. If the value is 10, the warning will be sounded from the 990 <sup>th</sup> record. If it exceeds, the finger keeper will not store the administrative record.
<b>Factory Setting</b>	100

③User record warning

When the surplus of the in/out record reaches to the set value, the finger keeper will notify the user that the space of in/out record storage will be full by means of displaying or prompt tone. When the finger keeper sounds a warning, please timely download user record with software! (The setting method refers to the instruction in Chapter III.)

Setting Content	Description
No	The finger keeper will not warn the user record over. If it exceeds, the finger keeper will not store the user record.
1—1500	The finger keeper notifies the user record over according to the set value. If it exceeds, the finger keeper will not store the user record.
<b>Factory Setting</b>	1000

③Reverify

Verify the interval of twice identifications of the same user. If the user checks on work attendance for many times within the set time, the finger keeper will notify the user has signed in and the in/out record will not be stored repeatedly.

Setting Content	Description
No	The finger keeper will not check repeated attendance
1—2 5 5	The finger keeper checks the repeated attendance condition according to the set value and the unit is “Minute”.

<b>Factory Setting</b>	No
------------------------	----

## IX. Keyboard

### 9.1 Keyboard Configuration

As shown in the right picture:

1	2	3	ESC
4	5	6	MENU
7	8	9	▲
⊙	0	OK	▼

### 9.2 Keyboard Function

Keyboard function description is as follows:

▪ ESC	Exit when operates the menu
▪ MENU	Enter the menu operating state
▪ OK	Confirm the current set option (ENTER)
▪ ▲	Move up the cursor when operates the menu
▪ ▼	Move down the cursor when operates the menu
▪ 0...9	Input numerical value when operates and selects the menu
▪ ⊙	Button of start and close

## 10. Menu

The finger keeper is equipped with user-friendly menu operation to

flexibly implement menu selection, keyboard input and all kinds of settings and inquiries adopting five operational keys and the number keys. In addition, the correctness of the operation is notified by means of displaying, prompt tone and voice prompt.

### 10.1 Menu Division

◆ The menu is divided into operating menu, setting menu and status inquiry menu.

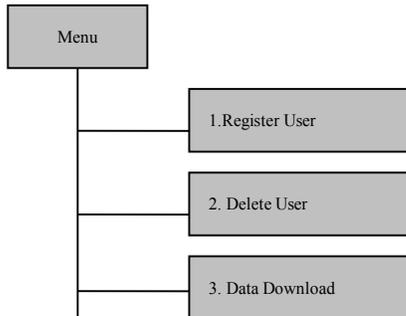
◆ Function of the operation menu is to implement user management.

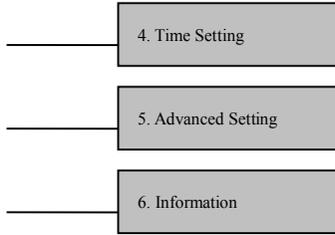
◆ Function of the setting menu is to set the related information of the finger keeper.

◆ Function of status inquiry menu is to inquire the system information content of the finger keeper.

### 10.2 Menu Structure

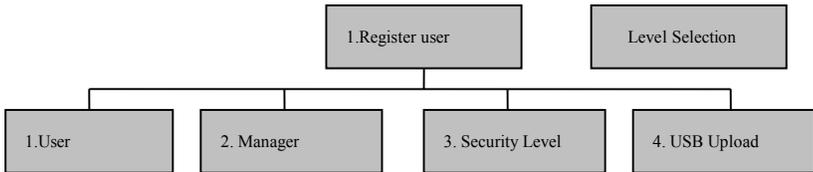
▶ Press MENU to enter the primary menu, including six options. Select the corresponding column with “▲” and “▼” key or enter the menu option through pressing the corresponding number key. For example, Press “MENU” and “3” to enter “Data Download”.



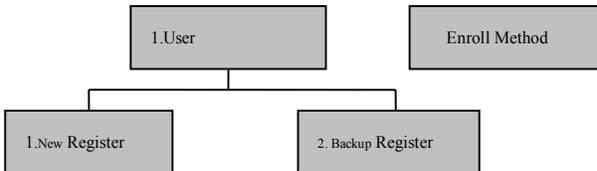


### 10.21 Register user menu

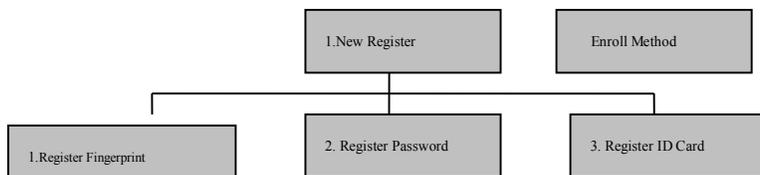
▶ The option of “Register User” includes “User Registration”, “Manager Registration”, setting of “Fingerprint Security Level” and “USB Upload”. Select “Register User” in the primary menu and press OK to enter the secondary menu.



▶ Select “User” or “Administrator” in different levels to be registered and press OK, or press “1” and “2” to enter the third level menu, including two options as shown in the following picture. New register is used to register new user and backup register is used to register backup data of the registered user.



After selecting “1. New register” or “2. Backup register”, the screen will display the selection of enroll method, as shown in the following picture. Select the corresponding method and complete according to the screen tips.



(Remark: The functions of manager registration, user registration and ID card registration depend on the specific model. Backup register means to register the second and third fingerprint or password and induction card for the registered user.)

▶ User setting of “Security Level”: 1 : 1 verify level, 1 : 1 all verify levels and 1:N identification accuracy. If the setting numerical value is higher, the comparison and identification during using will be more accurate and the requirement of fingerprint and operating mode of the user will be super high. So non-professionals do not set to avoid affecting the usage.

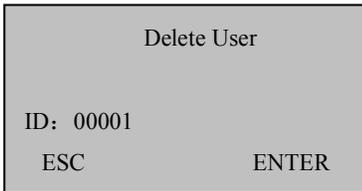
Note: The machine in ARM9 platform is equipped with collecting instrument to automatically regulate the brightness of the fingerprint reader.

▶ USB upload menu

Partial models with USB interface function can upload the backup data to the current finger keeper through the menu.

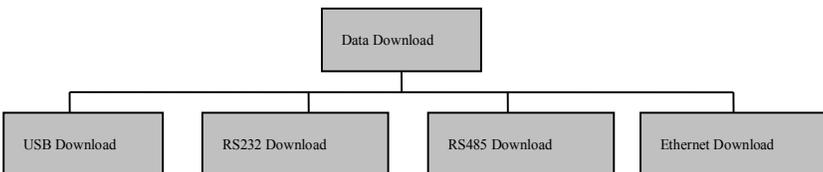
## 10.22 Delete user menu

▶ Select “Delete User” in the primary menu and press OK or directly press “2” to delete user, as shown in the following picture. Input the number to be deleted with the number key or the select key and press OK to delete the information of the corresponding user. (The machine in ARM9 platform possesses eight-digit user ID.)



### 10.23 Data download menu

▶ Select “Data Download” in the primary menu and press OK or directly press “3” to enter data download menu, including four options.



▶ USB download option includes two functions of downloading user record and registration data to respectively realize the

download of user record and registration data in the finger keeper. The function depends on the specific model.

▶RS232 download menu is used to set attendance and computer communication speed. The communication speed can be set with the select key.

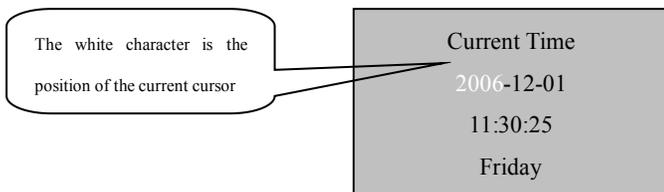
▶RS485 download menu is used to start and close the RS485 communication function of the finger keeper. Select Yes to start the RS485 communication function and select No to close.

▶Ethernet download menu is used to set all parameters of the Ethernet of the finger keeper, including IP address, subnet mask and gateway. Enter with select key and input according to network actual environment.

**Note: The communication port, server IP address, server port and whether automatically upload record to the computer of the machine TCP can be set to the machine in ARM9 platform under Ethernet download.**

#### 10.24 Time setting

Move the cursor to “Time Setting” with the up/down key and press OK or directly press “4” to set the time, as shown in the following picture.



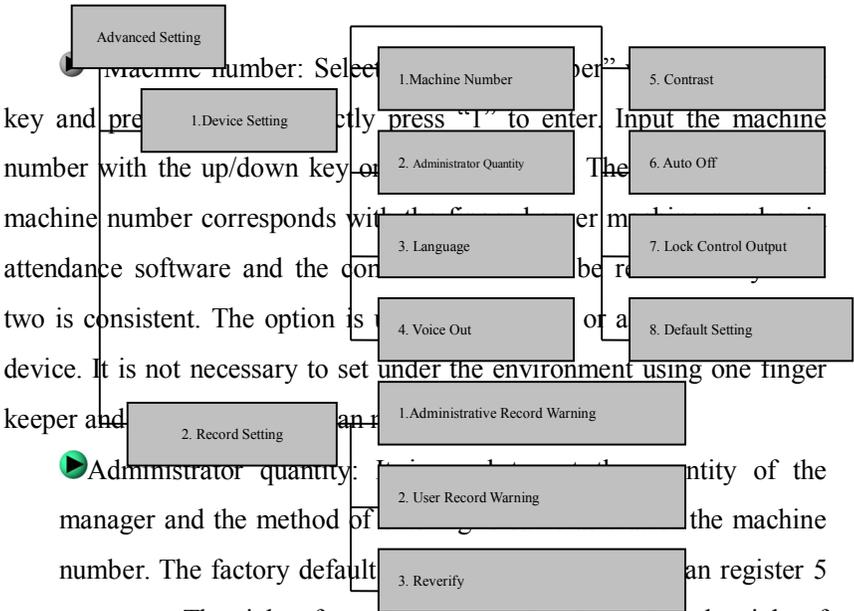
Move the cursor with the up/down key and input corresponding

numerical value with the number key. Day of the week is calculated by the software and not to input.

**(Note: The current cursor position is the position of the current setting option in the selected menu.)**

### 10.25 Advanced Setting

The advanced setting option is used to set the finger keeper and the menu structure is as follows:



Machine number: Select the machine number with the up/down key or press "1" to enter. Input the machine number with the up/down key or press "1" to enter. The machine number corresponds with the fingerprint attendance software and the door controller. The machine number of the two is consistent. The option is used to set the machine number of the device. It is not necessary to set the machine number of the finger keeper and the door controller.

▶ Administrator quantity: It is used to set the quantity of the manager and the method of entering is the same as that of the machine number. The factory default quantity is 5. The right of regular user can be changed to the right of manager in the attendance software and the specific operating method refers to the software instruction manual.

▶ Language: It is used to set the language displayed in the screen and the method of entering is same as that of the machine number. The finger keeper series supports three languages, including

Chinese simplified, Chinese traditional and English. The user can select according to the demand.

▶Voice out: It is used to set whether start the voice out function. The voice category of the finger keeper is non-optional and if it shall be changed, please contact with the dealer or the customer service department of our company.

▶Contrast: It is used to display the contrast of the device display screen. If it is not clear, the numerical value can be regulated.

▶Auto off: It is used to set whether start the auto off function and the auto off time of the finger keeper. The factory default is closing and the auto off time means the time delaying to close when no operation is in the finger keeper.

▶Lock control output: It is used to set whether start the lock control output function and the holding time of the control signal of the finger keeper. When starting, the holding time of signal shall be set. The signal is used to drive and verify the indicator in finger keeper series. After passing verification, the bright time of the green light is the set value and the unit is second. (Note: the option of the machine in ARM9 platform is the verification mode, that is, three verification modes of fingerprint + card/ fingerprint + password, fingerprint /card password.

▶Default setting: It is used to restore each parameter under advanced setting option of the finger keeper to the factory default.

▶Administrative record warning: It is used to set that the prompt can be sounded from which administrative record when the administrative record reaches the storage limit of the finger keeper.

All operation implemented by manager will be recorded as the administrative record.

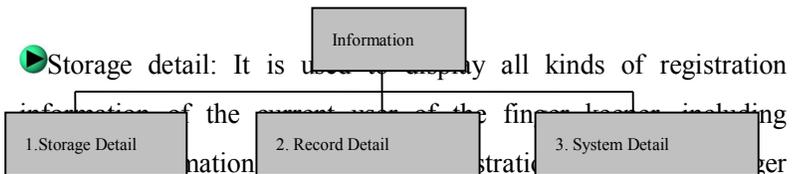
▶ **User record warning:** It is used to set that the prompt can be sounded from which user record when the user record reaches the storage limit of the finger keeper. When the prompt appears, please timely download the administrative record with software and delete the data in the finger keeper to ensure the storage of new data.

▶ **Reverify:** It is used to set the interval of twice fingerprint identifications and the unit is minute. After setting, the attendance data within the interval will not be recorded totally and the finger keeper will notify the user has signed in.

The machine in ARM9 platform is equipped with the door lock out function and the specific setting refers to the detailed introduction of “Door Lock Out” in “Quick Install Guide”.

### 10.26 Information Inquiry

The information inquiry enables user to view the registration, record, manufacturer and software version of the machine and the menu structure is as follows:



▶ **Storage detail:** It is used to display all kinds of registration information of the current user of the finger keeper, including registration quantity, fingerprint registration quantity, password registration quantity and ID card registration quantity.

▶ **Record detail:** It is used to display all kinds of current in/out record of the finger keeper, including five contents of user record

quantity, administrative record quantity, viewing user record, viewing administrative record and deleting all records.

▶ System detail: It is used to display the information of manufacturing plant, device name and software version of the finger keeper, including six contents of manufacturer, device name, release date, serial number, engine version and soft version.

▶ If the current set value in the setting menu shall be changed, select the menu set option. Selecting the menu set option means entering the setting state, user can select or input the set value with the up/down key and the number key.

Inputting the value which cannot be set will cause a warning.

If want to set the inputted value, press the key of “OK”, otherwise press the key of “ESC”.

Press “ESC” to exit the setting state of the menu option.

### **10.3 Prompt Tone and Voice Out**

Prompt tone: The finger keeper notifies the correctness of user operation by means of displaying and prompt tone.

If the “Voice Out” is opened and the operation is correct, it will be displayed in the screen and the device will sound “Thanks”.

If the “Voice Out” is opened and the operation is incorrect, it will be displayed in the screen and the device will sound “Place Again”.

If the “Voice Out” is closed and the operation is correct, it will be displayed in the screen and the device will sound “Bee-Bee-Bee”.

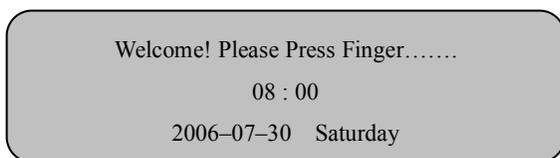
If the “Voice Out” is closed and the operation is incorrect, it will be displayed in the screen and the device will sound “Bee-Bee-Bee”.

After two seconds, the prompt tone will be automatically cleared or press any key to clear and return to the original state.

## Chapter II General Operation of Finger Keeper

### 1. Process of the First Operation

Turn on the power of the finger keeper to enter attendance state and it displays:



#### 1.1 Press “MENU” to Enter Management Operating State

There is no registration data when use the product for the first time, so the administrator identity needs not verification. If there is administrator identity verification, close the machine and notify the seller or delete in the management software. Please refer to the software

operating instruction for the deleting method of the management software.

▶ **Set date and time**

Please refer to the time setting instruction in 10.24 of Chapter III.

▶ **Function setting**

Please refer to 10.25 in Chapter III.

▶ **Initialization management and user record** (It can be ignored since there is no data when the finger keeper is released).

Please refer to the instruction of deleting all records in 2.6 of Chapter III.

▶ **Register administrator**

Please refer to the administration registration instruction in 2.2 of Chapter III.

## 1.2 Press “ESC” to Return to General Use State

▶ **Press “Menu” again to return to management operating state**

Because the administrator has been registered, the administrator identity needs verification.

▶ **Register regular user**

Please refer to 2.1 of Chapter III for detailed instruction of the user registration.

▶ **Press “ESC” to enter the general use state**

## 2. Use Method under Attendance State

For the use method under the attendance state, the fingerprint password keeper includes fingerprint attendance and password attendance and the device with induction card includes fingerprint attendance, password attendance and ID card attendance.

### 2.1 Fingerprint Attendance

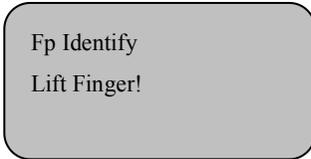
Under attendance state, it displays:

Welcome! Please Press Finger.....

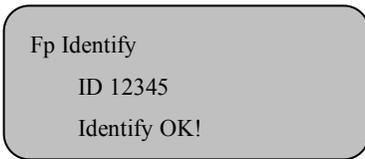
08 : 30

2005-07-30 Staurday

For fingerprint registration user, press the registered finger in the fingerprint window and it displays:

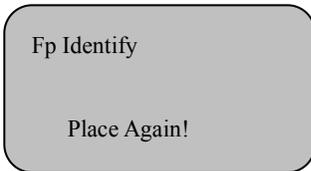


1. After lifting the finger, if it identifies successfully, it displays:



If it identifies successfully and the voice out is “Yes”, it sounds “Thanks”; If the voice out is “No”, it sounds “Bee”; if the unlock is set, the unlock signal will be outputted.

2. After lifting the finger, if it identifies unsuccessfully, it displays:



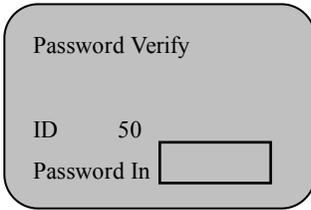
If it identifies unsuccessfully and the voice out is “Yes”, it sounds “Place Again”; If the voice out is “No”, it sounds “Bee”; if the unlock is set, the unlock signal will be outputted.

▶ The user should confirm whether the pressing finger is the registered finger and the method of pressing must be correct.

## 2.2 Password Attendance

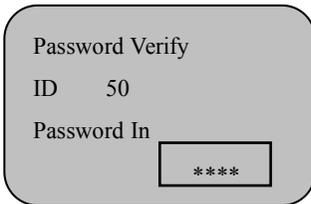
password registration user shall input his own ID using the number

key (Note: input the non-zero part and the digit after it), for example, if the employee ID is 00050, input “50” and then press “OK”, and it displays:

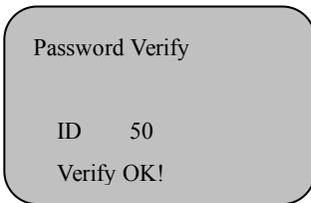


1	2	3	ESC
4	5	6	MENU
7	8	9	▲
⊙	0	OK	▼

Then input password using the number key and it displays:

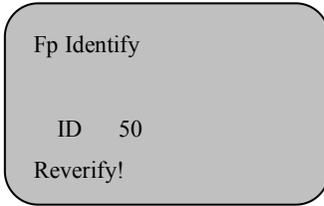


Press OK, and it displays:



Successful sign in through the password; if the unlock is set, the unlock signal will be outputted. If input error ID or password, it displays “Try Again” and sounds “Place Again” or “Bee”, and then return to the main attendance interface.

If the finger keeper sets reverify time and the fingerprint or password user signs in for many times within the reverify time under the attendance state, the finger keeper will display “Reverify” and not store the user record. For example:



## Chapter III Administrator Operating Method of Finger Keeper

Each function can be operated after identifying the administrator and entering the primary management menu of the finger keeper. The detailed introduction of the specific operating method of the administrator is as follows.

### 1. Operating Procedure of Administrator Operating State

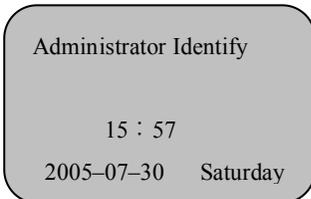
Press “Menu” under the attendance state

①If the administrator is unregistered, it displays



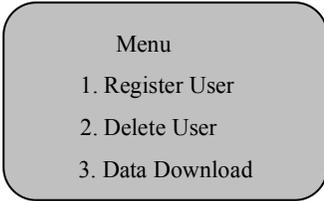
Enter the menu interface under the administrator operating state.

②If the administrator is registered, it enters the administrator identify window and displays:



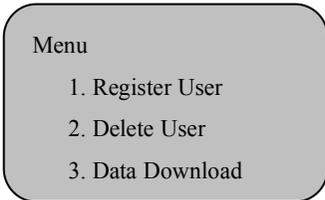
a.To the administrator of fingerprint registration, press the registered

finger in the fingerprint input window. After it identifies successfully, it displays



Enter the menu interface under the administrator operating state.

b.To the administrator of password registration, re-input password after inputting ID with the number key and pressing “OK”, and then press “OK” to confirm and display:



Enter the menu interface under the administrator operating state.

There is no registration data when use the product at the first time, so the administrator identity is not needed to be verified. If there is administrator identity verification, close it and notify the seller.

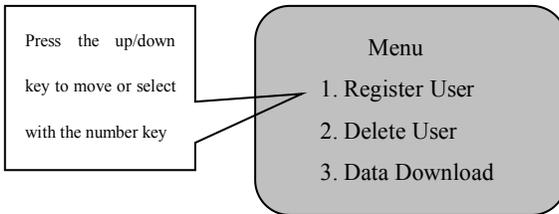
③ If the administrator identity cannot be verified, the finger keeper will display “Illegal Operation!” and sounds the prompt tone and voice prompt. At that time, re-verify the administrator identity.

★ Reading tips: In the following operating procedure introductions, the Arabic figure of title number like “1” indicates the primary menu; its subsidiary secondary menu is indicated in the serial number 1.1; its third level menu is indicated in the serial number of 1.11; and the classification description of the third level menu is indicated in the serial number of 1.111.

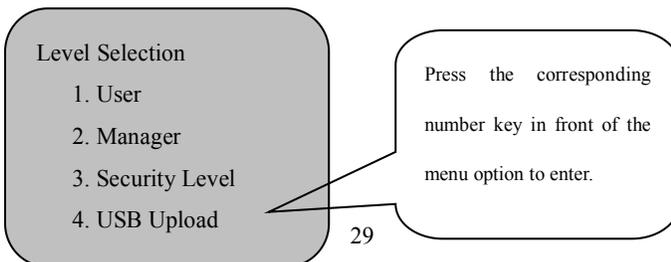
## 2. User Management

Press Menu under the general mode and it displays:

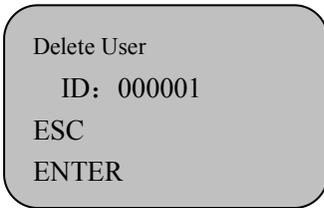
Press Menu under the administrator mode to verify the fingerprint of the registered administrator and it displays:



① Press the up/down key or input the digit to move the cursor and select the registered user, and press OK or directly input “1” to enter.



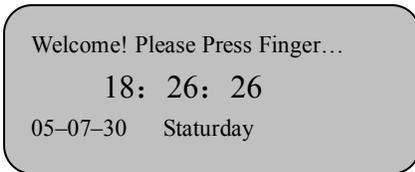
② Move the cursor to Delete User with the up/down key and press OK to display or input “2”



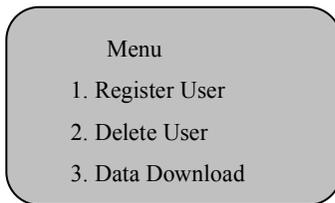
### 2.1 Register User

The user registration is the most basic operation, so the operator shall be familiar with it.

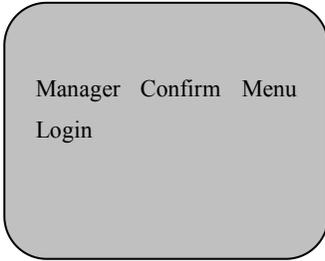
① Under the attendance state it displays



② Press “Menu” under the attendance state and it displays

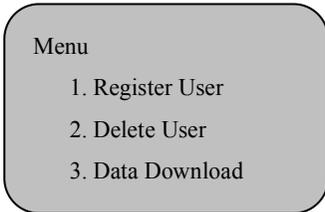


③ With administrator, it displays:

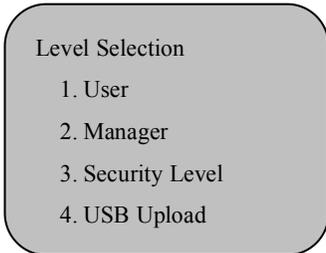


1	2	3	ESC
4	5	6	MENU
7	8	9	▲
⊙	0	OK	▼

After inputting the administrator fingerprint and verifying, it displays:

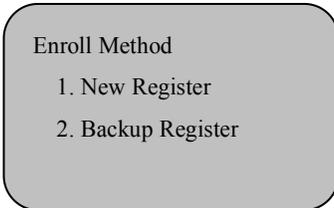


④ Register user menu displays:



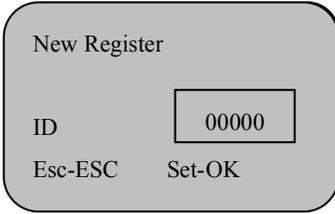
Move the cursor to the user and  
press OK or “1” to enter

⑤ User registration menu displays:



- The user registration includes new register and backup register
- Each mode can select fingerprint, password or ID card
- The Password or ID card is suggested to select for the user whose fingerprint is not clear

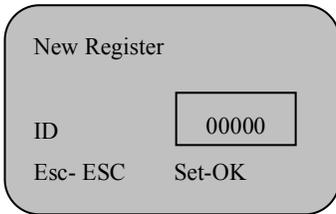
### 2.11 Register fingerprint



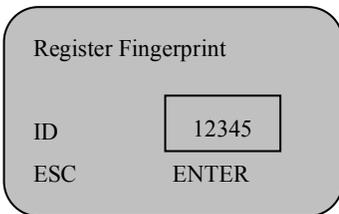
1	2	3	ESC
4	5	6	MENU
7	8	9	▲
⊙	0	OK	▼

Press OK

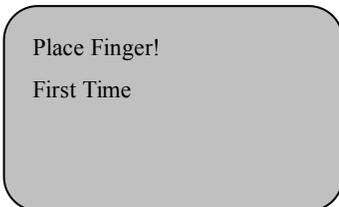
① New user register



Press the number key and select ID number 12345, and it displays



Press OK to display

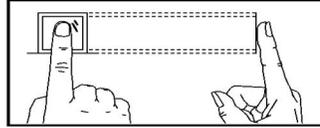


The administrator can press the number key to set the user ID in new register interface.

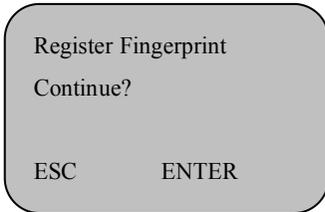
The ID is the arbitrary number from 1 to 65535; (The machine in ARM9 platform possesses the eight-digit registration number)

The registration number is the sole ID number to identify the user and it is equal to the employee number, so the administrator and the user shall remember it.

After pressing the finger, it displays



After pressing the finger for three times, it displays



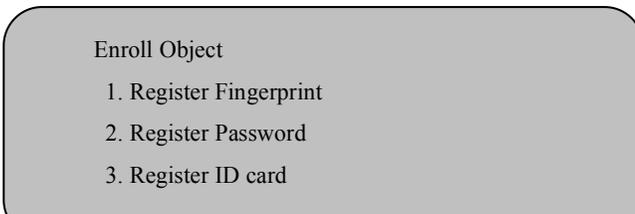
If continue to register, press OK,  
otherwise, press ESC to return.

## ② Backup register

Fingerprint backup register: The administrator can register different fingerprint, password or ID card for backup to the registered user with the same registration number (User ID). The backup register includes 2 fingerprints, 1 password and 1 induction card and the operating method is same as that of the new register.

### 2.12 Register password

Register password is suitable to the user whose fingerprint is not clear to register. Operate to the enroll method option menu and it displays:

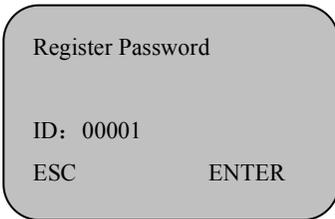


Press the up/down key or input the digit to move the cursor to Register Password and press OK to display register password

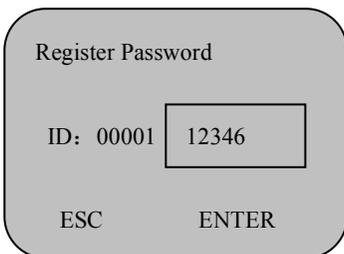


1	2	3	ESC
4	5	6	MENU
7	8	9	▲
⌚	0	OK	▼

①New user register



Press the number key and select the ID number 12346, and it displays



1	2	3	ESC
4	5	6	MENU
7	8	9	▲
⌚	0	OK	▼

Press OK to display new register

Register Password  
ID: 12346  
Password In:   
ESC                  ENTER

1	2	3	ESC
4	5	6	MENU
7	8	9	▲
⌂	0	OK	▼

Press the number key to input one to four digits password. Input the password 1234 and press OK to display

Password Verify  
Password Reinput  
Password In:   
ESC                  ENTER

Press the number key to verify the password. Input 1234 and press OK to display

Register Password  
  
Continue?  
ESC                      ENTER

1	2	3	ESC
4	5	6	MENU
7	8	9	▲
⊙	0	OK	▼

**\*To the attendance user, register only one password to each user.**

### 2.13 Register induction card

Press the up/down key or input the digit to move the cursor to Enroll

Method:

Enroll Method  
1. Register Fingerprint  
2. Register Password  
3. Register ID Card

Press the up/down key to select register ID card, and press OK or the number key

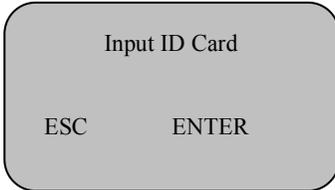
Register ID Card  
ID: 00001  
ESC                      ENTER

1	2	3	ESC
4	5	6	MENU
7	8	9	▲
⊙	0	OK	▼

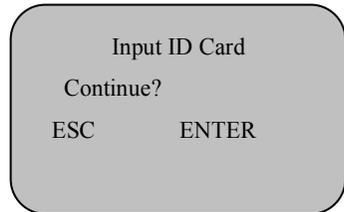
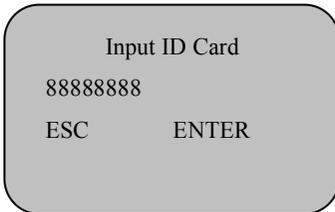
Press the number key and select ID number 12347

Register ID Card  
ID 12347  
ESC                      ENTER

Press OK to display



Brush in the induction zone with the ID card to be registered and the screen displays



Press OK to save and press ESC to cancel. After saving, the screen will display the content in the right picture and the user can select to continue or return to the previous menu according to the demand.

## 2.2 Register Manager

Register manager is to authorize to the administrator who implements the management operation and the method is same as that of user registration. Please refer to register user.

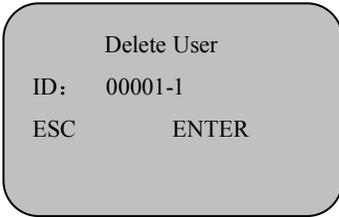
**Difference:** The registered user under the administrator registration menu and the backup registration is the manager.

The manager registered in the machine can be regarded as the regular user for general usage. In addition, it can implement the management operation.

The operating record of the administrator will be recorded on the finger keeper.

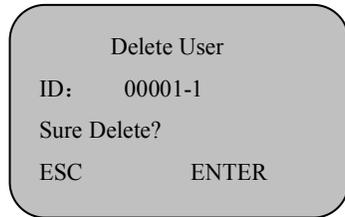
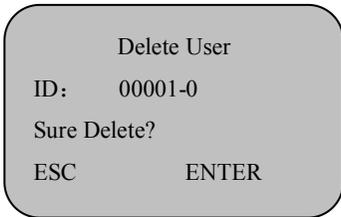
### 2.3 Delete User

Operate to the delete user menu and it displays



1	2	3	ESC
4	5	6	MENU
7	8	9	▲
⌚	0	OK	▼

Press the up/down key or input the ID of the user to be deleted with the number key and it displays as the following pictures:



Press OK to delete and press ESC to cancel. If the ID possesses backup registration, the screen will prompt whether delete the backup data, as shown in the above right picture. 1. Digit “0” indicates the first registration, “1” indicates the backup registration 1, and so forth. P indicates register password and C indicates register ID card.

### 2.4 Inquire In/Out Record

Operate to the information menu and it displays:



The meaning of the character and the information displayed in the screen is as follows:

C: Indicates the quantity of in/out records

(For example, C-05431 indicates 5431 records)

N: Indicates the serial number of in/out record

(For example, N- 00001 indicates the first record)

V\_F: Indicates the verification of fingerprint

V\_P: Indicates the verification of password

12345: Indicated the user ID

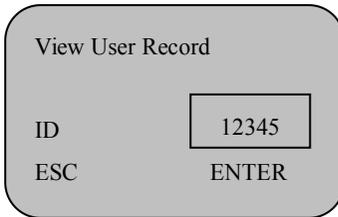
01-11-30 17:30 indicates the attendance time of the user

Press “OK” and “▼▲” key to view in/out record

The record displayed firstly is the last record.

Press “▼” to view the first record data.

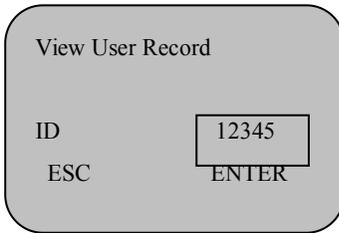
**Press “ESC” to exit.**



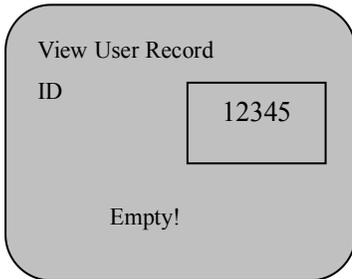
◆ If view the in/out record of a user in the interface, for example, the user of 12345, press the number key to input 12345.

Repeat other operations and only the in/out record of 12345 user can be viewed.

If there is no in/out record of 12345 user, press OK to display

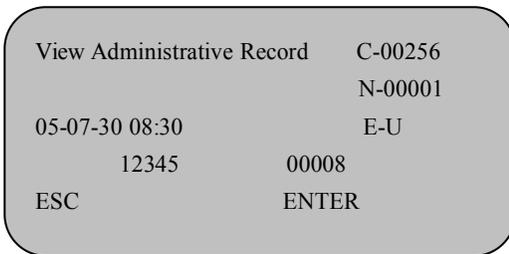


It sounds “Bee-----“and returns to the interface of viewing in/out record



### 2.5 Inquire Administrative Record

The operation of viewing administrative record is same as that of viewing in/out record; but the character and the information displayed in the screen is different



The meaning of the character and the information displayed in the screen is as follows:

E\_U: Register regular user

E\_M: Register administrator

E\_DF: Delete fingerprint registration data

E\_DP: Delete password registration data

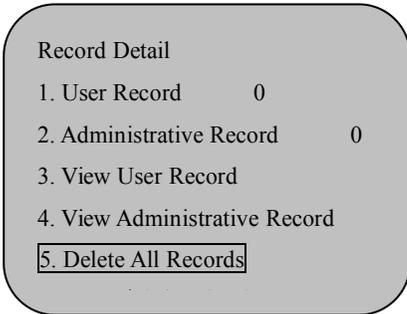
D\_L: Delete all record data

S\_T: Time setting

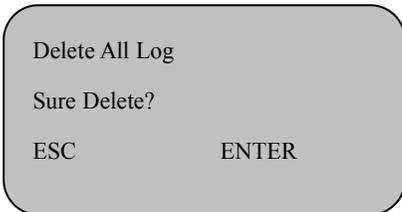
S\_S: System setting

### 2.6 Delete All Records

Operate to the data management menu and it displays



Press the down key to move the left cursor to Delete All Records and press OK to enter the menu of deleting all records, and it displays

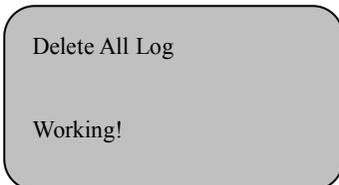


If the administrator confirms it is wrong to delete, press ESC to cancel;

The interface displays the data management menu;

If the administrator confirms it is right to delete, press OK

The menu of deleting all records displays



After deleting and sounding “Bee----”, it returns to the interface to display the record detail menu.

**Notes of the user and administrator registration:**

- ① Correctly select the user or manager when the menu displays “level selection”. When inputting an un-existing or registered ID and the backup registration password is required or the backup fingerprint of the user is full, the “Finger Keeper” will display “Full Backup Registration” and voices out.
- ② The “Finger Keeper” can automatically provide ID.
  - a. Use other ID for new register and input new register number from 1 to 65535 (the inputting number shall be larger than the number automatically provided by the machine), and then press “OK”.
  - b. When inputting error number during inputting ID (the user of the number has existed when register), the “Finger Keeper” will display “Error ID!” and voices out. At that time, re-input the ID number.
- ③ When pressing the finger in the input window, if there is excessive perspiration in the finger or not pressing in the center, is displays “Place Again!”. Please press following the prompts.

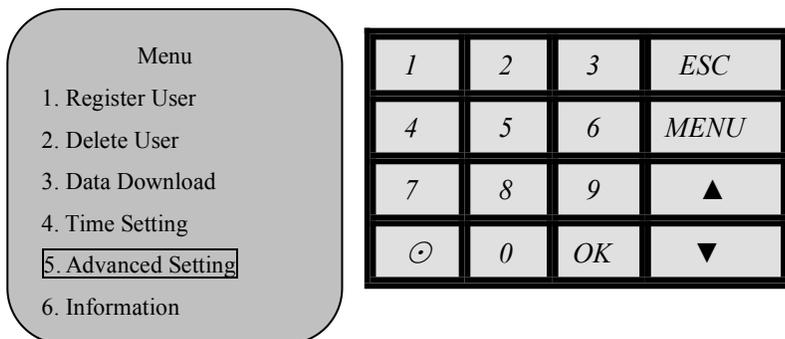
**3. Advanced Setting**

For the detailed setting, please refer to the instruction in “8. Advanced Function Setting of Finger Keeper of Chapter I ”. Here, we mainly introduce the operating method of the setting.

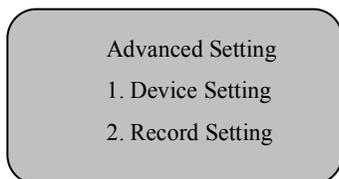
Press Menu to display under the general mode;

Press Menu under the administrator mode. After verifying the

registered administrator fingerprint, it displays:



Press the up/down key or input the digit to move the cursor to Advanced Setting and press OK to display

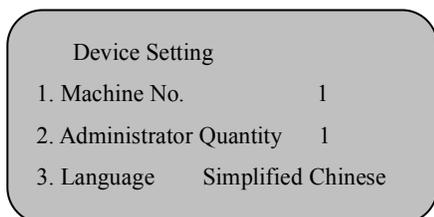


Two secondary menus are set under the “Setting” menu and their function description is as follows:

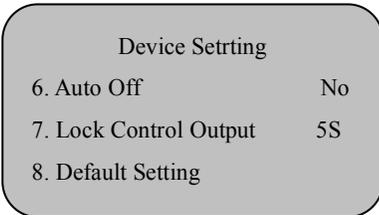
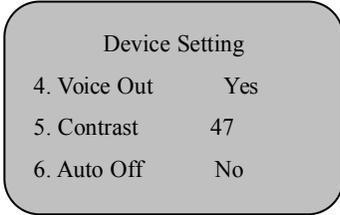
The machine in ARM9 platform is equipped with Door Lock Out function. For the detailed instruction, please refer to the “Door Lock Out” in “Quick Installation Guide”.

### 3.1 Device Setting

Press the up/down key or input the digit to move the cursor to Advanced Setting and select Advanced Setting---Device Setting. Eight functions are set under the menu and press OK to display the first three



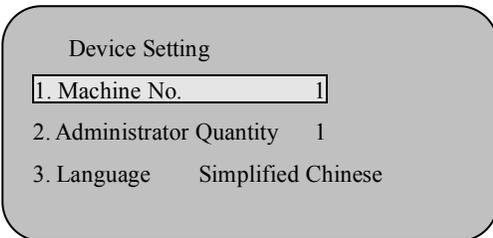
Press the up/down key or input the digit to move the cursor to 4-8 options, as shown in the following picture



“Lock Control Output” is not set in ARM9 platform and it is the “Verify” setting (fingerprint verification)

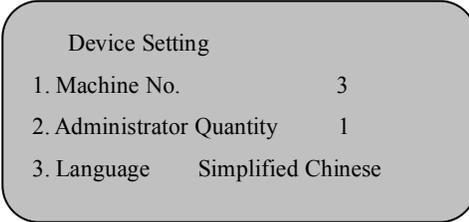
### 3.11 Machine number

Press the up/down key or input the digit to move the cursor to Administrator Quantity and press OK to display



Press the up/down key or input the digit to select the machine number

parameter and the range is from 1 to 255. For example, select 3 and press OK to display

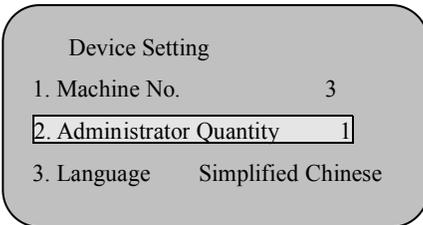


★ In the setting menu, the procedure is universal to save and change the setting.

★ If there is finger keeper with the same machine number during network use, it cannot work in normal condition and it will be out of order when reading the administrative attendance record data, so please pay more attention to the setting. The machine number shall be sole in the network.

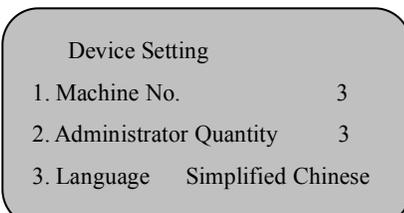
### 3.12 Administrator quantity

Press the up/down key or input the digit to move the cursor to Administrator Quantity and press OK to display



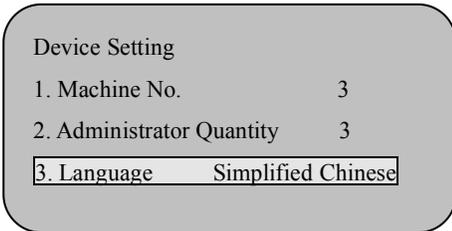
1	2	3	ESC
4	5	6	MENU
7	8	9	▲
⊙	0	OK	▼

Press the up/down key or input the digit to Administrator Quantity 3 and press OK to display



### 3.13 Language

Press the up/down key or input the digit to move the cursor to Language and press OK to display

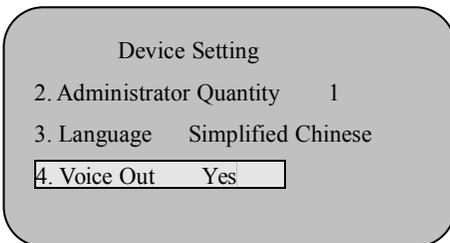


Move the cursor with the up/down key to select the language and press OK.

**(Note: languages include simplified Chinese, traditional Chinese and English.)**

### 3.14 Voice out

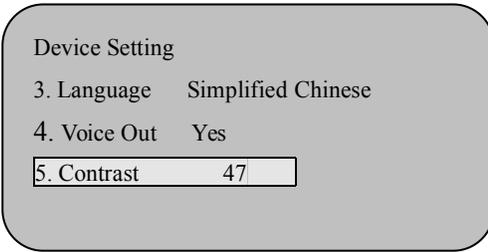
Press the up/down key or input the digit to move the cursor to Voice Out and press OK to display



Press the up/down key to “Yes” or “No” and select to press OK.

### 3.15 Contrast

Press the up/down key or input the digit to move the cursor to Contrast and press OK to display



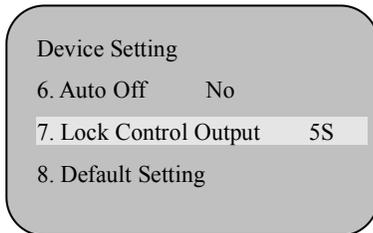
Input the numerical value with the number key or the up/down key and press OK to save.

### 3.16 Auto off setting

The operating procedure is totally same as that of the “Lock Delay” setting. The time unit of auto off is “minute”.

### 3.17 Lock control output

Press the up/down key or input the digit to move the cursor to Lock Control Output and press OK to display



“Lock Control Output” is not set in ARM9 platform and it is the “Verify” setting (fingerprint verification)

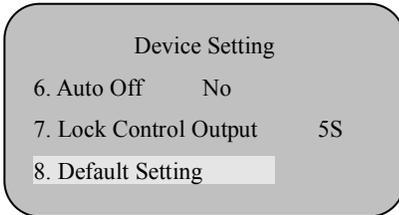
Press OK or the up/down key to set parameter in ARM7 platform, select Yes or No, and set the delay time.

Press OK or the up/down key to set parameter in ARM9 platform and

select fingerprint verification.

### 3.18 Default setting

Press the up/down key or input the digit to move the cursor to Default Setting and it displays

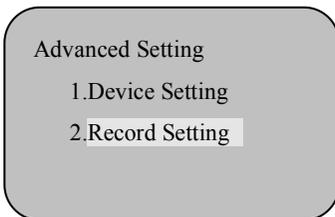


Press OK or “8” to restore default and all parameters in the advanced setting of the machine will be restored the factory default.

### 3.2 Record Setting

For the detailed setting, please refer to the “Record Setting” in the function setting instruction of the finger keeper in Chapter I

In the menu, press the up/down key or input the digit to move the cursor to Advanced Setting and press OK to display



Press the up/down key or input the digit to move the cursor to Record Setting and press OK to display

Record Setting	
1. Administrative Record Warning	100
2. User Record Warning	1000
3. Reverify	No

1	2	3	ESC
4	5	6	MENU
7	8	9	▲
⌚	0	OK	▼

### 3.21 Administrative record warning

Press the up/down key or input the digit to move the cursor to Administrative Record Warning and press OK to display

Record Setting	
1. Administrative Record Warning	100
2. User Record Warning	1000
3. Reverify	No

Select 20 with the number key and press OK to display

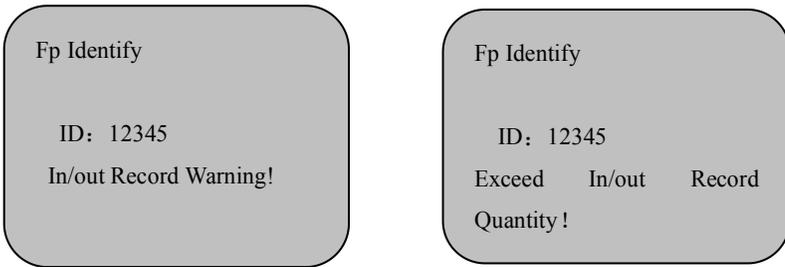
Record Setting	
1. Administrative Record Warning	20
2. User Record Warning	1000
3. Reverify	No

The form of the administrative record warning is same as that of “User Record Warning”.

### 3.22 User record warning

The operating procedure is totally same as that of the administrative record warning setting. For the function setting, please refer to the “User Record” in the function setting of Chapter I.

Here, we shall explain the form of the user record warning. If the value is 1500 and the in/out record reaches 48500, it will display “Record Over” from the 48501<sup>th</sup> record when the user implements attendance verification and it sounds “Thanks!”; when the finger keeper record exceeds 49999 and it displays the interface of “Record Over”, the record will not be recorded and the user record is invalid.



The value can be set by the user according to the demand (Any integer from 1 to 1500) and the finger keeper will notify “Record Over” according to the set value.

**Note: The user record of the machine in ARM9 platform is 80,000.**

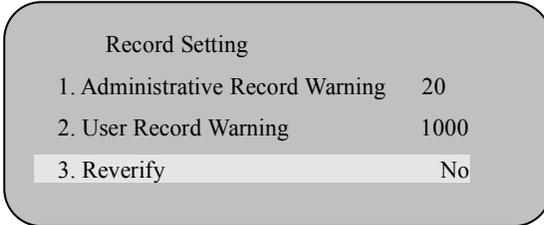
### 3.23 Reverify

It is used to check whether the user repeatedly checks on work attendance within the corresponding time and the value is suggested to set as 5 (minutes).

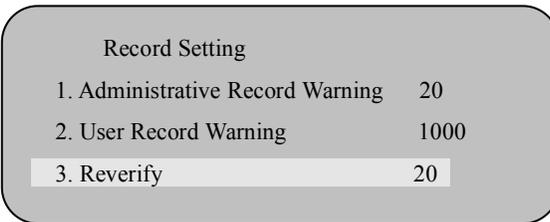
If the user repeatedly checks on work attendance within the set time, the finger keeper will notify that the user has signed in but not record the

attendance record.

Press the up/down key or input the digit to move the cursor to Reverify and press OK to display

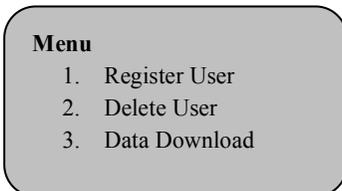


If the re-verification time shall be set, input data with the number key like 20 (the unit is “minute”) and press OK to display



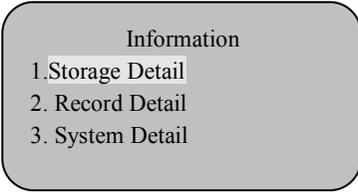
#### IV. Information Inquiry

Press Menu to display under the general mode; press Menu under the administrator mode and it displays after verifying the registered administrator fingerprint.

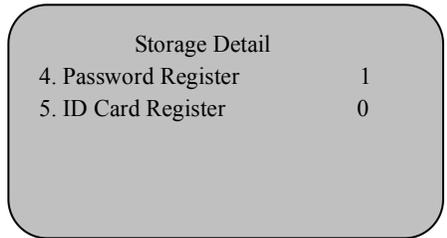
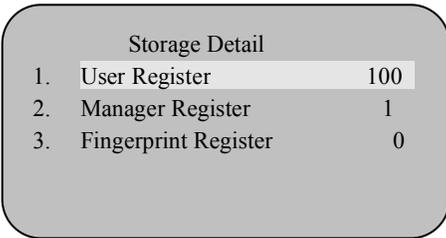


Move the cursor to the information option with the up/down key and

press OK or directly press “6”, the following picture will appear, including three submenus.



**1.Storage detail:** It displays the registered information in the finger keeper. Press the up/down key to move the cursor to “Storage Detail” and press OK or press “1” to enter and view. As shown in the following picture, press the up/down key or the number key to select the registration information to be inquired.



**2. Record detail:** It displays all kinds of records number of the finger keeper and deletes all records in the machine. Press the up/down key to move the cursor to “Record Detail” and press OK or directly press “2”, the screen displays:

Record Detail	
1. User Record	100
2. Administrator Record	1
3. View User Record	

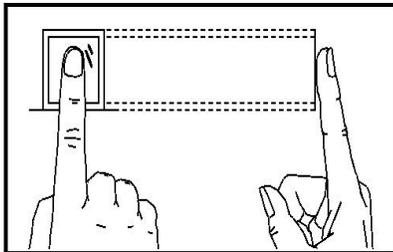
Record Detail	
4. View Administrative Record	
5. Delete All Records	

The user can enter the corresponding submenu with the up/down key or inputting the digit in front of each menu option. For the form of viewing user record and administrative record, see the above record inquiry.

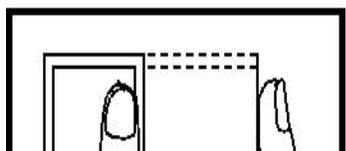
## Chapter IV Attachment

### 1. Notices of Pressing Finger

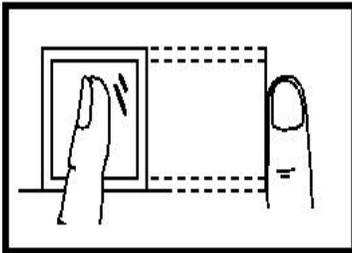
Hint: the fingerprint center location shall align to the center of the window.



Correct  
54

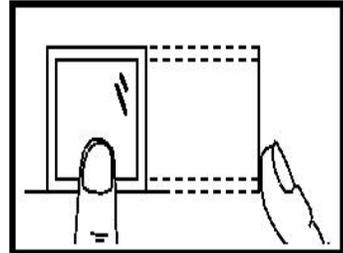


**False Alignment**



**Slant**

**Too Slant**



**Too Low**

## **2. Software Use License Agreement**

### *End User License Agreement*

License:

Our Company authorizes the use rights of the software program to you, but you must promise to our Company that: Do not use, copy, modify, lease or transfer the system or its any part except in accordance with the clauses stipulated in this Agreement.

#### **You promise to:**

1. Use the system only in one machine;
2. In order to use in the machine, prepare the copy of the system in machine readable format for the purposes of backup and archive

management;

3. On the basis of other party accepting the terms and conditions of this Agreement, transfer the system and the license agreement to that party;

If there is a transfer, all copies of the source file and its accompanying file shall be transferred to other party, or you must destroy the copies that haven't been transferred.

4. The system can be used in the multi-household environment or the network system only on one of the following bases;

- ⊙ The system clearly permits to be used in the multi-household environment or the network system; or
- ⊙ Each node and terminal using the system has purchased the Use License.

**You promise not to:**

1. Re-transfer the license of the system;
2. Implement reverse engineering, reverse assembly or disassembly to the system;
3. Copy or transfer the whole or part of the system, except otherwise stipulated expressly in the Agreement.

Your license is terminated automatically when you transfer the whole or part of the system or copies to other party.

**Copyright and ownership of the system**

The name of the system and all its copies exist together with the company marked in the disk or the system. The system and the file enjoy the copyright and are protected by the national copyright law and the terms of the international agreements. You cannot delete its copyright statement from the system and you promise to copy the copyright statement in the copies (whole or part) of the system. In addition, you

agree to prohibit the illegally copy of the system and the file in any way.

**After-sales warranty:**

Our Company guarantees that the software carrier has no defect in material and techniques within 90 days after the date of selling under the normal usage. If it is verified to be defective, our Company's full responsibility is to return the software carrier, which is also our only compensation for you. If the carrier defect is caused by accident, abuse, use of unauthorized software, or misapplication, the after-sales warranty will be invalid. The returned carrier enjoys the residual warranty period of the original warranty, or thirty-day warranty, whichever is longer.

**At own risk:**

Except for the above-mentioned warranties, the system doesn't enjoy any after-sales warranty in other form.

**Limited liability:**

The above-mentioned warranties, whether explicit or implicit, are the whole content of warranty, including the warranties for the merchantability and suitability for the purpose of special application. Whether the Agreement is abided by or not, our Company and its agents and sellers have no responsibility for any profit loss, usability loss, business interruption, or indirect, special, accidental or inevitable damage in any form, or the claim of any other party caused by the use of the system, even if our Company is notified in advance that these things may happen.

**License termination**

If you violate any term and condition of the Agreement, our

Company may terminate the license at any time. When the license is terminated, you must immediately destroy all copies of the system and the file, or return to our Company.

### **Applicable law**

*Regulations on the Protection of Intellectual Property, Copyright Law, Patent Law, etc.*

## **3. Frequently Asked Questions**

### 3.1 Hardware Device

#### **1. The fingerprint attendance of some users always cannot be verified, how to solve it?**

Answer: Some employees are hard to implement or cannot implement the fingerprint attendance because of the following situations:

- Some fingerprint has been smoothened;
- Too many wrinkles are in the hand and it changes frequently;
- Serious desquamation of the finger;

To the user whose fingerprint cannot be identified, delete it and reregister or register another finger.

To register the fingerprint for the user like this, select the fingerprint with high quality (little wrinkles, non-scale and clear). The area for the finger touching the fingerprint collecting head shall be larger. After registering, implement the comparison test. We suggest registering several backup fingerprints.

In addition, our finger keeper provides 1:1 comparison method and password attendance function to set the 1:1 method attendance or password attendance for the employees.

**2. What reasons may cause that the communication of the finger keeper cannot be realized?**

Answer: the reason includes:

- The setting of the communication port is incorrect and the selected communication port is not the actual COM port;
- The set value of the computer's communication port baud rate is different with that of the finger keeper's baud rate;
- The finger keeper is not connected to power or not connected with the computer;
- The finger keeper has been connected but not be started;
- The number of the connected terminal machine is incorrect;
- The communication of the data cable and the converter cannot be realized;
- The COM port of the computer is broken.

**3. After the finger keeper is connected to the power and started, the liquid crystal display is not complete; sometimes it displays a half and sometimes it appears screen mess, what the problem is and how to solve it?**

Answer: The reason includes:  the main board is broken;  the internal characteristics problem of the liquid crystal. Contact with the supplier and return to be repaired.

**4.How to eliminate the manager of the finger keeper:**

Answer: Communicate the finger keeper with the computer. After realizing the communication successfully, enter the employee information and fingerprint management, select the manager, click to modify the user rights, and eliminate the manager of the finger keeper. Enter the menu mode of the finger keeper after disconnecting.

**5.What reasons cause the sound of beep when implement the**

**communication connection of the finger keeper?**

Answer: □ if the above phenomenon appears when adopt the RS-232 to communicate, the setting of the computer's baud rate is different with the finger keeper's baud rate; □ if adopt the RS-485 to communicate, maybe two wires of the converter communication is reversed, or two wires are stuck together;

**6.After starting the finger keeper, the screen repeatedly displays “Place Again (Lift Finger)”. What problem it is and how to solve it?**

Answer: The reason causing the problem includes:

- 1.The surface of the collecting head is not clean or possesses scratch through long-term usage, which gives the false sense to the collecting head that there is finger is pressed in the surface, so it cannot be verified and appear the problem. Under the circumstance, use the adhesive tape to stick the dirt on the surface of the collecting head.
2. The wire of the fingerprint collecting head is loosened or completely dropped off.
- 3.The chip of the main board is broken.

For the second and the third reason, contact with the supplier to apply for maintenance.

**7.When operate during the terminal machine management, it is normal to download the fingerprint and password data, but it fails to read the attendance record or it is error in midway, how to solve it?**

Answer: It is related to the data cable, or the converter, or the COM port of the computer. Reduce the communication baud rate of the finger keeper and the computer, for example, set it as 38400 or 9600 and then read it.

- 8.The hardware of the attendance system —— the optical fingerprint collector, which adopts the principle of optical collecting image.

When the fingerprint cannot be verified for many times, please check whether there is light source directly irradiates the collector.

### 3.2 Software

#### **1. How to define the overnight shift?**

Answer: For example: If start to work at 18:00 p.m. and end at 2:00 early in the next morning. The shift definition is: 18:00-26:00

Explanation: Please add 24 hours based on the ending time of the overnight shift.

#### **2. How to calculate irregular overtime?**

Answer: For example: If start to work at 8:00 a.m. and end at 12:00 at noon; then re-start to work at 14:00 p.m. and end at 18:00 p.m. Sometimes the employee needs to work overtime according to the factory regulation after work. The irregular overtime starts from 19:00 and it is basically 2 hours. Maybe it is more than 2 hours or less than 2 hours. Please define according to the following shift:

Work hours 1: 08:00 – 12:00      Normal attendance

Work hours 2: 14:00 – 18:00      Normal attendance

Work hours 3: 19:00 – 21:00      Overtime category (Please select the category of working overtime when choose the shift treatment category).

Floatingly tick it.

Explanation: It is necessary to tick “Floatable” and the addition of overtime category is in {Calculation Rule}.

#### **3. How to handle the irregular shift?**

Answer: For example: I have two shifts and the shift definition is as follows:

Shift definition1:

Work hours 1: 08:00 – 12:00

Work hours 2: 14:00 – 18:00

Shift definition2:

Work hours 1: 09:00 – 13:00

Work hours 2: 15:00 – 19:00

No data of the original record	<ul style="list-style-type: none"> <li>a. Fail to collect data</li> <li>b. The setting of the entry data is incorrect in the employee information setting</li> <li>c. The personnel information is introduced and without entry data</li> </ul>
If the software has been used, it will prompt “Primary use, please pre-set”	<ul style="list-style-type: none"> <li>a. Database is in the native machine: Fail to connect to the database, and check SQL</li> <li>b. Database is not in the native machine: Check the database connection of the server</li> </ul>
Fail to connect to the device RS232 / RS485	<ul style="list-style-type: none"> <li>a. The baud rate of the computer is not 38400</li> <li>b. The hardware communication baud rate of the finger keeper is not 38400</li> <li>c. The software communication baud rate is not 38400</li> <li>d. Whether the collecting data communication of the software is 38400</li> <li>e. Whether the corresponding machine number of the collecting data is same</li> <li>f. Whether the connection of the communication wire is correct</li> </ul>
TCP / IP Fail to connect to the device TCP / IP	<ul style="list-style-type: none"> <li>a. Whether the corresponding IP address of the software communication is correct</li> <li>b. Whether the corresponding machine number of the software communication is correct</li> <li>c. Whether the communication password is correct</li> <li>d. Check whether the communication wire is correct</li> </ul>
No data of the attendance report	<ul style="list-style-type: none"> <li>a. Check the employee entry date</li> <li>b. Check whether there is the original record</li> <li>c. Check whether a shift is arranged (or whether it is arranged automatically)</li> <li>d. Check whether the data is processed</li> <li>e. Check whether the “timeworker” attendance method is used</li> </ul>

To the irregular shift, please tick automatic shift arrangement and both two shall be ticked

Explanation: Please select the department of the employee in the shift when select the department of shift definition.

## **Statement Relating to Human Rights and Privacy**

Dear customers,

First of all, thank you for the use of the fingerprint identification product designed and produced by us. While continuing to carry out the development and research, we focus on the abidance by the relevant laws relating to human rights and privacy in every country.

Our statement is as follows:

1. All of our civil fingerprint identification devices collect only the feature points, not the fingerprint image, thus no privacy is involved.
2. All fingerprint feature points collected by us cannot be restored to the original fingerprint image, thus no privacy is involved.
3. As the device supplier, we have not any direct or indirect legal responsibility for the consequences caused by your use of our device.
4. If you have any controversy on the human rights and privacy in using our device, please contact with your employer directly.

Our other police fingerprint devices or development tools will provide the function of collecting the original image of the citizen's fingerprint. Whether or not they infringe your rights, please contact with the government or the end suppliers of the devices. As the device supplier, we have not any legal responsibility.

Remark: citizens' personal freedom rights under Chinese laws include the following:

1. Persons are free from illegal arrest, detention, search and infringement;
2. The personal dignity related to personal freedom is free from infringement;
3. Citizen's residences are free from infringement;
4. Freedom and privacy of correspondence of citizens are protected by laws.

Finally, we reiterate that fingerprint identification as an advanced identification technology will enter the industries of e-commerce, banking, insurance and law in the future. Every year human being is suffering huge loss due to unsafe passwords throughout the world. Under the highly secure environment, the fingerprint identification actually protects your identity.

## Quick Installation Guide

### Hardware Part

#### ▶▶ Start and Close Finger Keeper

1. Connect the finger keeper's accompanying power adapter with 220V alternating current;
2. Insert the power plug into the power port of the finger keeper and press the start key on the keyboard, the machine will start;
3. After connecting with the alternating current, directly press the power button on the finger keeper to start or close the system.

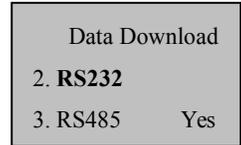
Data Download	
2. RS232	
3. RS485	Yes

## ▶▶ Connect with Computer

The finger keeper can be connected with the computer through three methods.

### I. Connect through RS232

1. Set the finger keeper as RS232 communication mode, as shown in the following picture:



Enter the menu system (MENU—3—2--1) and select “Data Download” and “RS232”. Press the up/down key to set the communication speed as: 38400;

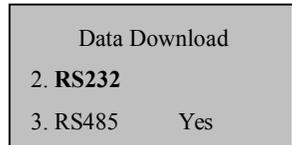
Note: The default of RS232 communication speed is 38400.

2. Press power key to power off;
3. Insert RS232 connecting wire to the RS232/RS485 communication port of the finger keeper;
4. Insert the other end of the RS232 connecting wire to the RS232 interface of the computer;
5. Power on;

### II. Connect through RS485

1. Set the finger keeper as RS485 communication mode;

Enter the menu system (press MENU-3-3 under the standby mode), select “Data Download”-“RS485”-“Yes” to start the RS485 connecting function;



Note: RS485 cannot be used together with Ethernet.

2. Press power key to power off;

3. Insert RS485 connecting wire to the RS232/RS485 socket of the finger keeper and connect the other end to the RS232/RS485 converter;

4. Connect the RS232/RS485 converter to the RS232 interface of the computer;

5. Power on.

Note: RS232/RS485 converter and RS485 connecting wire are the optional parts, excluding in the standard configuration.

### III. Connect through RS485 Network

1. Set the finger keeper as RS485 communication mode;

Enter the menu system (press MENU-3-3 under the standby mode), select “Data Download”-“RS485”-“Yes” to start the RS485 connecting function;

2. Press power key to power off;

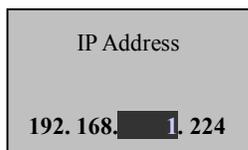
3. Insert RS485 connecting wire to the RS232/RS485 socket of the finger keeper and connect the other end to the RS232/RS485 network;

4. Connect the computer to the RS485 network through the RS232/RS485 converter;

5. Power on.

### IV. Connect through Ethernet

1. Set the IP address modifying the finger keeper according to the network;



The default IP address of the finger keeper is 192.168.1.224, which is a legal and available address in many local area networks. If the network address of your host is 192.168.1.1, it is in a same network segment with the finger keeper, and the host with the address of

192.168.1.224 is not set in the network segment, it is not necessary for you to modify the IP address of the finger keeper. Otherwise, modify the IP address of the finger keeper to be legal and available in the network. In addition, it shall be visited by the computer to be connected.

2. Power off;

3. Insert the network plug in the Ethernet interface of the finger keeper;

Note: When directly connect the finger keeper with the computer, please use crossover cable (Ethernet 10/100Base-T Crossover Cable). When connect the finger keeper to the Ethernet network through Hub/Switch, please use straight thru cable (Ethernet 10/100Base-T Straight Thru Cable).

4. Power on.

Note: The Ethernet connecting function is only equipped in the partial models of the finger keeper

5. Definition of Communication Interface Signal

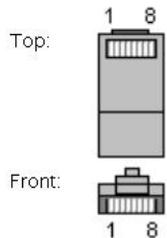
**Pin                      Function**

**COM2**

PIN	Function
1	TCP/IP TX+
2	TCP/IP TX-
3	TCP/IP RX+
4	Access input
5	GND
6	TCP/IP RX-
7	Access NO port
8	Access NC port

**COM1**

PIN	Function
1	Access NO port
2	Access NC port
3	RS485A +
4	RS485B -
5	DND
6	Access input
7	RS232 RX
8	RS232 TX



## Door Lock Out

### Door Lock Out

Door Lock Out

- 1. Time Setting
- 2. Lock Register
- 3. Time Group Set
- 4. Unlock Group
- 5. Unlock Timed
- 6. Lock Type Set

1.1.1 Move with the up/down key and select Time Setting, and press OK to display

Time Setting

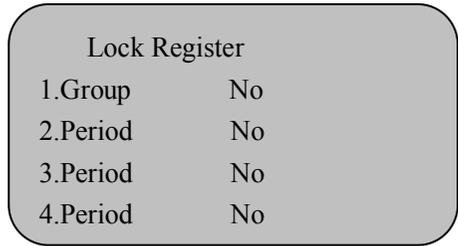
- Period No. 01
- Period No. 02
- Period No. 03

Select period number (ranging from 1 to 50) with the up/down key or the number key and press OK to display

- 1. Period
- S 00:00-23:59
- M 00:00-23:59
- T 00:00-23:59
- W 00:00-23:59
- T 00:00-23:59
- F 00:00-23:59
- S 00:00-23:59

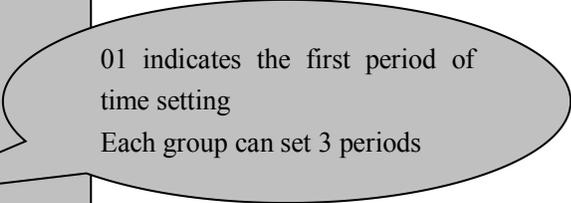
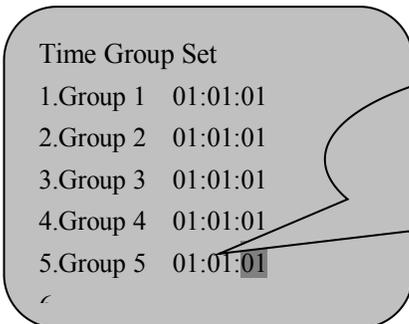
Set the daily open time and the attendance time

1.12 Select Lock Register (ranging from 1 to 99999999) with the up/down key or the number key and press OK to display



The group of the user and the open period can be set.

1.13 Select time group number (ranging from 1 to 5) with the up/down key or the number key. For example, select 1 and press OK to display



1.34 Select Unlock Group (ranging from group 1 to group 10) with the up/down key or the number key to set unlock group

Unlock Group	
1. Group	No
2. Group	No
3. Group	No

**1.35 Select Unlock Group with the up/down key or the number key to set the open time and the range is from 1 to 255 seconds.**

Door Lock Out	
1. Time Setting	
2. Lock Register	
3. Time Group Set	
4. Unlock Group	
5. Unlock Timed	No
6. Lock Type Set	

Range: From 1 to 255 seconds

**1.36 Select Lock Type Set with the up/down key or the number key and the range of the alarm delay is from 1 to 255 seconds.**

The alarm type includes open type, close type, and unused alarm; The alarm delay can set the closing time of the alarm. If the alarm has not closed within the set time, the machine will alarm. The alarm delay also can be closed and the machine will not alarm.

Door Lock Out	
1. Time Setting	
2. Lock Register	
3. Time Group Set	
4. Unlock Group	
5. Unlock Timed	No
6. Lock Type Set	

Lock Type Set	
1. Alarm Type	No
2. Alarm Delay	No