



FGA-1500

Biometric fingerprint time attendance with Access Control Device advanced algorithm for reliability, precision and fast speed with Built-in battery.



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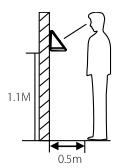
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1. Instruction for Use

1.1 Standing Positions and Face expressions

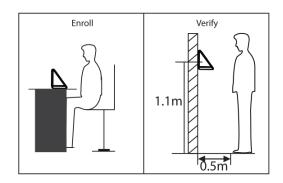
> Below is the correct position for enrolling and verification.



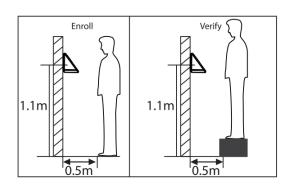
For users 5-6 feet tall (1.55m-1.85m), we recommend to stand about 2 feet (0.5m) from the device. When viewing your image on the device display window, step away if your image appears too bright. Step closer if your image appears too dark.

During enrollment and verification, the installation position of device must remain the same. If need to move the device, keep the same installation height, or else, the recognition function will be poor.

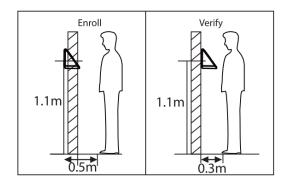
> Factors affecting verification



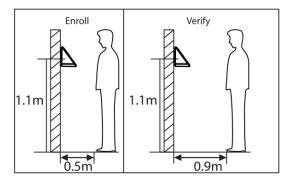
Non-identical posture



Non-identical height



Non-identical distance



Non-identical distance

Note: Please keep the natural gesture and expression while enrolling and verifying.

> Correct facial expression vs poor expression



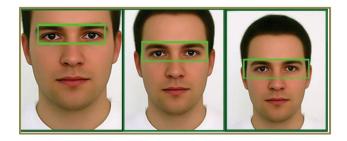


> Correct gesture vs poor gesture



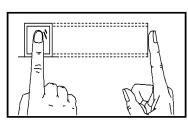


➤ How to correctly enrol the face

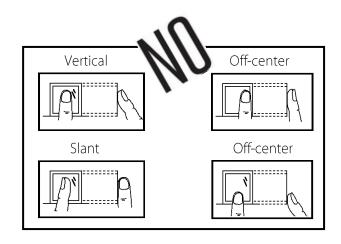


During enrollment locate your face at the center of the screen, and follow the voice prompts "Focus eyes inside the green box". The user needs to move forward and backward to adjust the eye position during the face registration.

1.2 Finger placement



Recommended placement



1.3 Verification Modes

1.3.1. Fingerprint verification

> 1:N fingerprint verification mode

The device compares the current fingerprint with all users' fingerprints in the device. Use the proper way with one of the recommended fingers to enroll and verify. There are two responses after verification: *Successfully verified* and *Failed to verify*.



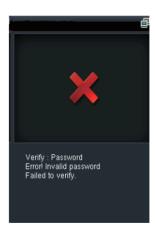


> 1:1 fingerprint verification mode

The device compares the current fingerprint with the fingerprint of the user whose ID is entered. The user chooses this mode unless poor recognition. Enter User ID and press "fingerprint", there are two responses after verification: *Successfully verified* and *Failed to verify*.







Notes:

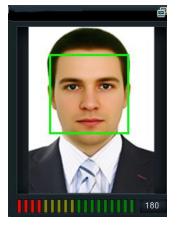
- → The device prompts "Invalid ID" when there is no such user.
- → The device prompts "Please try again" when failed to verify. After 2 attempts, if it fails the 3rd time, it returns to the initial interface.

1.3.2. Face Verification

➤ 1:N face verification mode

The device compares the current face with all users' faces in the device. Use the proper way to

enroll and verify.





➤ 1:1 face verification mode

The device compares the current face with the face of entered user ID. Enter User ID and press "Face".







> Password verification

The device compares entered password with one user's password whose ID is input. Enter user ID, press "Password" and enter your password. There are two responses after verification:





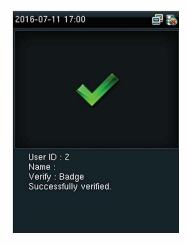


Note: The device prompts "Incorrect password" when failed to verify. After 2 attempts, if it fails after the 3rd time, it returns to the initial interface.

1.3.3. Badge verification

Swipe your registered badge surround the fingerprint sensor in standby mode:







The device "prompts" "Duplicated Punch" when you swipe badge twice. The device prompts "Ou Ou" when the badge is unregistered.

2. Main Menu

Start the device; press [M/OK] to enter the Main Menu. Press ▼ to scroll the page down.





Function Definition:

User Mgt. (User Management): Add, edit, and delete users' information, including user ID, name, user role, fingerprint, FC, password, user photo and access control parameters.

User Role: Set the privilege of defined roles, that is, the privilege of operating menu.

Comm. (Communication Setting): Set the communication parameters between device and PC, such as IP address, subnet mask, gateway, DNS, TCP COMM. Port and so on.

System: Set system parameters, such as date/time, attendance parameters, face and fingerprint parameters, reset and USB upgrade.

Personalize: Set user interface parameters, voice, bell schedules, punch state options and shortcut key mappings.

Data Mqt. (Data Management): Delete/ Backup/ Restore data stored in the device.

Access Control: Set access control options, schedule time/holidays/access group/combined verification group, set anti-passback and duress options.

USB Manager: Download and upload attendance data, user data, work code, short message, etc. With USB disk, you can import data restored in the device into attendance software, or import data into other devices.

Attendance Search: It is convenient for employees to search his or her attendance record restored in this device.

Short Message: Add/check/edit/delete public and personal messages. Set options.

Work Code: Add/check/edit/delete work code. If this function is enabled, you must select one or enter an existence work code after verification.

Autotest: Test whether each module is available or not, including LCD, voice, keyboard, fingerprint sensor, face and clock RTC.

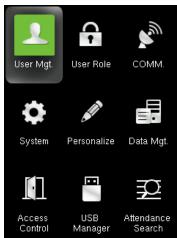
System Info: Check device capacity, basic information, and firmware information etc.

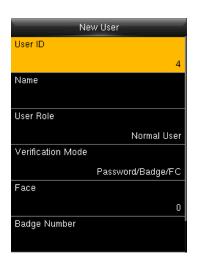
3. User Management

3.1 New User

Only the registered user can make verification in the device. Start the device, enter into the Main Menu. Enter into "User Mgt." > "New User"







3.1.1. Enter User ID and Name

Press ▼/▲ to select any of the fields on the New User interface, press [M/OK]:

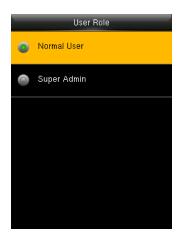




Note: You can input an ID, or use which is allotted by the device.

3.1.2. Enter User Role

Press ▼ / ▲ to select "User Role" on the New User interface, press [M/OK]:

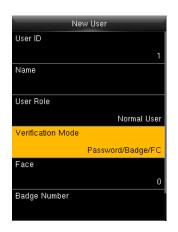


Super Admin: A super admin is granted rights to operate all functions and menus in the device.

Normal User: Normal user is only allowed to punch, query its own attendance record, check messages. Note: You had better to enroll a super admin for ease of management.

3.1.3. Verification Mode

Press ▼ / ▲ to select "Verification Mode" on the New User interface, press [M/OK]:



Three options we have here: Password/Badge/FC

3.1.4. Enrolling a fingerprint (Not all the devices have this function)

Press ▼ / ▲ to select "Fingerprint" on the New User interface, press [M/OK]:



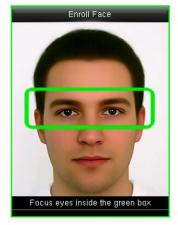


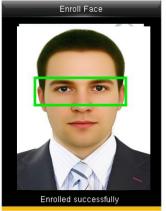
- 1. Press numeric key corresponding to the fingerprint as you want, then press [M/OK].
- 2. Press your fingerprint on the sensor three times upon prompting by the device.

Note: You need to re-enroll if the device says "Please try again".

3.1.5. Enrolling a face

Press ▼ / ▲ to select "Face" on the New User interface, press [M/OK]:





Focus your eyes inside the green box, as the device says.

Note: During face enrollment, a photo will be taken and saved in the device automatically for "User Photo" unless another is taken.

3.1.6. Enrolling a Badge (Not all the devices have this function)

Press ▼ / ▲ to select "Badge Number" on the New User interface, press [M/OK]:





Swipe your badge around the fingerprint sensor.

Note: Please take another badge if the device displays "Error! Badge already enrolled" .The Badge must be IC card.

3.1.7. Enrolling a password

Press ▼ / ▲ to select "Password" on the New User interface, press [M/OK]:



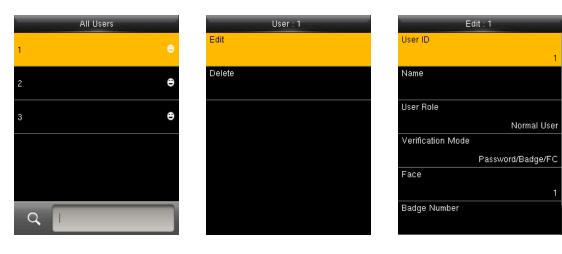


Input 1-8 digits password and press [M/OK], then re-type the password.

3.2 All Users

Start the device, enter into the Main Menu. Enter into "User Mgt." → "All Users".

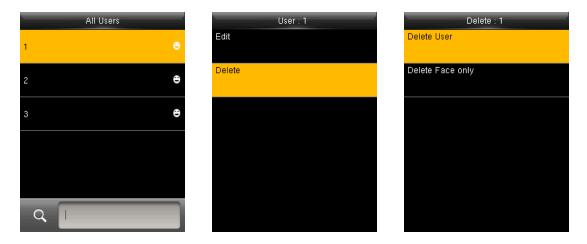
3.2.1 Editing a user



All information can be modified except User ID.

3.2.2 Deleting a User

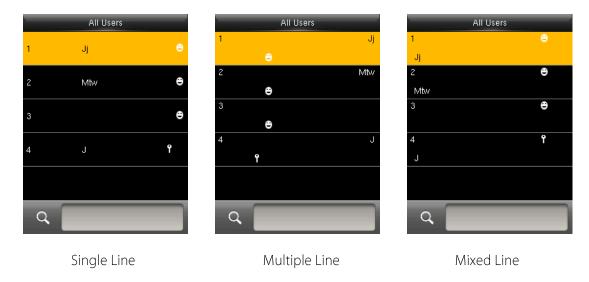
Press ▼ / ▲ to select a user to edit and press [M/OK]. Enter into "Delete":



You can choose different kinds of user data to delete.

3.3 Display Style

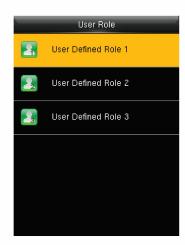
The default style is "Single Line". Enter into "User Mgt." \rightarrow "Display Style":

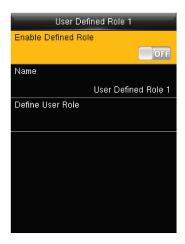


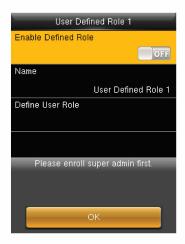
4. User Role

Use to define roles to operate the device. You can specify the available menus to operate for a role. There are 3 roles.

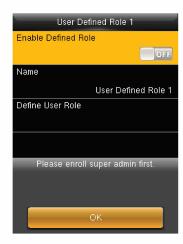
Enter into "User Role". Press one of the three roles to edit:







A Super admin must be enrolled before a new role is defined.



4.1 Creating a new role and its function

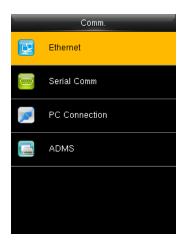




- 1. Enter name with T9 Input.
- 2. You can define more than one available menu for a role. Press [M/OK] to select.

5. Communication Setting

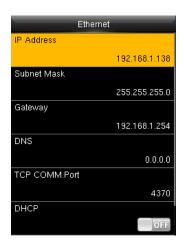
Set communication parameters. Enter into "Comm."



- 1. Ethernet: The device can communicate with PC each other via the parameters you set.
- **2. Serial Comm:** The device can communicate with PC each other via the serial port parameters you set.
- **3. PC Connection:** Set the password and device ID so that you can connect the device with software in PC.
- **4. ADMS:** Settings used for connecting with ADMS server

5.1 Ethernet

Enter into "Comm."→"Ethernet"



- 1. **IP Address:** Modify it if necessary. It cannot be same with
- 2. Subnet Mask: Modify it if necessary.
- **3. Gateway:** It is necessary to set an address if the device and PC are in different network segment. Modify it if necessary.
- 4. DNS: Set the address of your DNS server.
- 5. TCP COMM Port: Set the TCP communication port.
- **6. DHCP:** Dynamic Host Configuration Protocol, which is used to allocate dynamic IP addresses to clients by a server.
- **7. Display in Status Bar:** Whether to display network status icons in the status bar.

5.2 Serial Comm.

Enter into "Comm." → "Serial Comm."



- 1. **Serial port:** When serial port (RS232/RS485) is used for communication of device and PC, this setting need to be checked:
- **2. Baudrate:** Used for communication with PC. RS232 is recommended for high speed.

Note: There are 5 baudrate types available for RS232: 9600, 19200, 38400, 57600 and 115200; "9600" is not applicable to RS485. Reboot the device to make the change active.

5.3 PC Connection

To improve the security of attendance data, connection password needs to be set here. Enter into Comm.→ "PC Connection"



- 1. Comm Key: Set 1-6 digits connection password, the password must be input when PC software is to connect device to read data.
- 2. Device ID: The ID is in the range of 1-254. If RS232 or RS485 is enabled, this ID needs to be input in the software communication interface.

5.4 ADMS

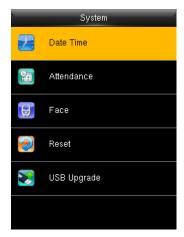


- 1. Enable Domain Name: When the domain name mode is enabled, you access a website using a domain name in the format of http://; otherwise, you must enter an IP address for website access.
- 2. Server Address: IP address of Webserver
- 3. Server port: Port used by Webserver
- 4. Enable Proxy Server: When you enable the proxy function, set the IP address and port number of the proxy server. This option indicates whether to use a proxy IP address. You may choose to enter the proxy IP address or the server address for Internet access, whichever you like.

6. System

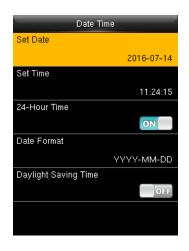
Set system parameters to meet user's demand as many as possible. Including the Date Time, Attendance, Fingerprint and so on





6.1 Date Time

Set the system data and time. Enter into "System"→"Date Time":



- 1. Set Date/Time: Set date and time of device.
- **2. 24-Hour Time:** Whether to use the 24-hour display mode. If not, the 12-hour display mode is adopted.
- 3. Date Format: Set the date format: YY-MM-DD, YY/MM/DD, YY.MM.DD, DD-MM-YY etc

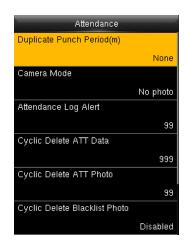
Daylight Saving Time:

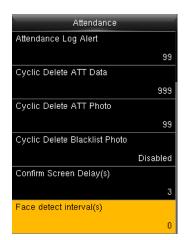
The DST is a widely used system of adjusting the official local time forward to save energy. The uniform time adopted during the implementation of this system is known as the DST. Typically clocks are adjusted forward one hour in the summer to make full use of illumination resources and save electricity. Clocks are adjusted backward in autumn. The DST regulations vary with countries. The device supports the DST function to adjust forward one hour at $\times\times$ (Hour): $\times\times$ (Minute) $\times\times$ (Day) $\times\times$ (Month) and backward one hour at $\times\times$ (Hour): $\times\times$ (Minute) $\times\times$ (Day) $\times\times$ (Month). For example, adjust the clock forward one hour at 08: 00 on April 1 and backward one hour at 08: 00 on October 1. Daylight Saving Mode: Select the date mode or week mode. Daylight Saving Setup: Set the DST start time and end time.

Note: The end time of DST cannot be set for next year. More specifically, the end time must be later than the start time in the same year.

6.2 Attendance

Enter into "System"→"Attendance":





Parameters of Attendance interface state as below:

Duplicate Punch Period (m): In set time period (unit: minute), repeated attendance record of a user will not be saved (the valid time is 1~999999 minutes).

Camera Mode: Set whether to capture and save the photos when users verify face.

No Photo: The device does not take photo as users verify.

Take Photo, no save: Take photo, but not save photo as users verify.

Take photo and save: Take and save photo as users verify.

Save on successful verification: Take and save photo as users verify successfully.

Save on failed verification: Take and save photo as users fail to verify.

Attendance Log Alert: When remainder log capacity is less than the set value, the device will prompt an alert message automatically. The valid value is 1~9999.

Cyclic Delete ATT Data: When Attendance records reach to the maximum capacity, the amount to delete attendance Data one time. The valid value is 1~999.

Cyclic Delete ATT Photo: When Attendance photos reach to the maximum capacity, the amount to delete attendance photo one time. The valid value is 1~99.

Cyclic Delete Blacklist Photo: When more than 999 pictures are stored in the device, the system will automatically delete these pictures.

Confirm Screen Delay (s): The delay to display the verification result, the value is 1~9.

Face detect interval (s): Set interval for the same face verification, the value is $0\sim9$.

6.3 Face

Enter into "System "→"Face"



- 1: 1 Match Threshold: The similarity of a face verification and the enrolled template.
- 1: N Match Threshold: The similarity of a face verification and all of the templates.

Detect false face:

Exposure: Set the exposure value of camera. The value ranges from 40 to 1000.

Quality: Set a quality threshold for the images obtained. The device processes them by adopting the face algorithm when their quality is higher than the threshold; otherwise, it filters these face images. The value is 50-150.

Note: Improper adjustment of the Exposure and Quality parameters may severely affects the performance of the device. Please adjust the Exposure and Quality parameter under the guidance of our after-sales service personnel.

The recommended thresholds are as follows:

FRR	FAR	Threshold	
LUU		1:N	1:1
High	Low	85	80
Medium	Medium	82	75
Low	High	80	70

6.4 Reset

Reset communication settings, system settings, personalize settings etc.



6.5 USB Upgrade

The firmware program of device can be updated with upgrade package in USB disk. You are not suggested to upgrade. If you need the upgrade file, please contact our technical support personnel.

7. Personalize

To set some usual parameters. Enter into "Personalize".



7.1 User Interface

To set displayed parameters. Enter into "Personalize"→"User Interface"





Wallpaper: Select the wallpaper of the main screen as required.

Language: Select the language of device as required.

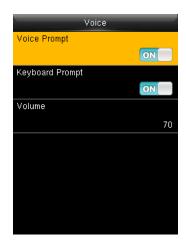
Menu Screen Timeout (s): When operating standby time is larger than this value, the system will return to initial interface. The valid value scope is 60~99999 seconds.

Idle Time To Slide Show (s): When standby time in main screen is larger than this value, the main screen will display a slide show. The valid value scope is 3~999 seconds.

Slide Show Interval (s): Set interval to change displayed pictures in the slide show, the value scope is 3~999 seconds.

Idle Time To Sleep (m): When operating standby time reaches to this value, the device will go to sleep. Pressing any keyboard or fingerprint will wake the device. The valid value scope is 1~999 minutes. Main Screen Style: Select one displayed style as required (3 styles available).

7.2 Voice



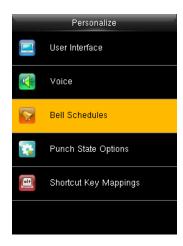
Voice Prompt: This parameter is used to set whether to play voice prompts during the operation of the FFR terminal. Select "ON" to enable the voice prompt, and select "OFF" to mute.

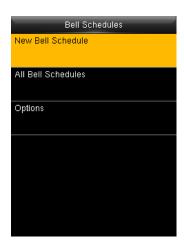
Keyboard Prompt: This parameter is used to set whether to generate beep sound in response to every keyboard touch. Select "ON" to enable the beep sound, and select "OFF" to mute.

Volume:This parameter is used to adjust the volume of voice prompts.

7.3 Bell Schedule

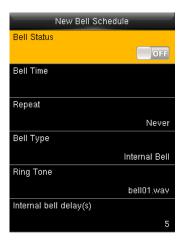
Many companies need a bell for on-duty and off-duty. Some uses manual bell and some uses electronic. To save cost and provide convenience to management, we integrate bell functions to fingerprint sensor. You can set the time for the bell. When it is the scheduled time, the device will automatically play the selected ringtone and trigger the relay signal. The ringtone playing does not stop until the ringing duration has elapsed.





7.3.1 New Bell Schedule

Enter into "Personalize"→"Bell Schedules"→"New Bell Schedule"



Bell Status: Enable/Disable this bell.

Bell Time: The bell rings automatically when it is the specified time.

Repeat: Specifies whether to repeat the ringtone.

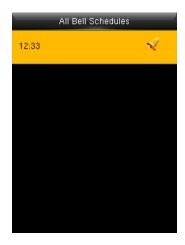
Bell Type: You can select between internal ringing and external ringing. For internal ringing, the ring tone is played by the loudspeaker of the terminal. For external ringing, the ring tone is played by an external electric bell that is wired with the terminal.

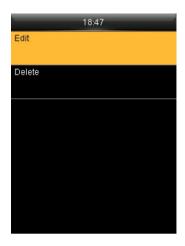
Ring Tone: Bell ring

Internal bell delay (s): Specifies the duration for ringtone play. The value ranges from 1 s to 999s.

7.3.2 All Bell Schedule

For editing the scheduled bells

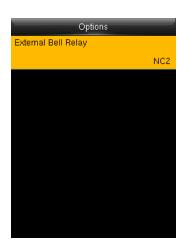


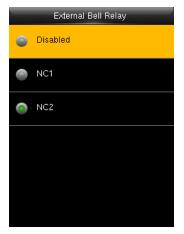


- 1. Select a bell to edit.
- 2. Press "Edit" to modify data.
- 1. Select a bell to delete it.
- 2. Press "Delete" to remove bell.

7.3.3 Options

When the function of external ringing is used, set the output terminal of external ringing.





7.4 Punch State Options

To set the mode of state keys. Enter into "Personalize"→"Punch State Options":



Punch State Mode: Off: Disable the punch state key function.

Manual Mode: User manually switches punch state by pressing corresponding shortcut key.

Auto Mode: The set punch states will auto switch when reaching switch time.

Manual and Auto Mode: A status key manually switching will switch to the automatic plan upon a timeout.

Manual Fixed Mode: After manually switching, it will keep this state until next manual switching.

Fixed Mode: Displaying the fixed punch state.

Punch State Timeout (s): The time of one punch state displays. The punch state will disappear or switch to other punch states as the time is out. The value is 5~999 seconds. **Punch State Required:** Setwhether to select punch state during verification.

Note: There are four punch states: Check-In, Check-Out, Overtime-In, and Overtime-Out.

7.5 Shortcut Key Mappings

You can define six shortcut keys as attendance status shortcut keys or functional shortcut keys. On the main interface of the FFR terminal, press corresponding keys and the attendance status will be displayed or the function interface will be rapidly displayed.





Note Only when Punch State is selected as function, will Punch State Value, Name, Set Switch Time options appear on the interface. The punch state can be set as auto switch. Punch state will switch automatically once the setting switch time is out.

Select Function of shartcut key as Funch State Option, the shortcut key will not take effect under that Funch State Mode is set as OFF.

Punch State Value: The device sets 4 different values corresponding to four punch states by default. Value 0 corresponds to punch state Check-In, 1 for Check-Out, 4 for Overtime-In, 5 for Overtime-Out. The value ranges from 0 to 250.

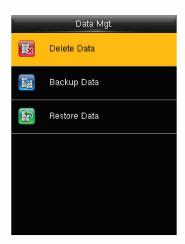
Function: Se extrpunch state options or menu function options.

Name: Enter the name of punch state.

Set Switch Time: Set switch time for punch state.

8. Data Mgt.

Manage data saved in the device. Enter into "Data Mgt."



8.1 Delete Data

Through the [Data Mgt.] menu, you can perform management of data stored on the FFR terminal, for example, deleting the attendance record, all data and promotional pictures, purging management rights and resetting the FFR terminal to factory defaults.



Delete Attendance Data: Delete all attendance data.

Delete Attendance Photo: Delete all users' attendance photos.

Delete Blacklist Photo: Delete captured and saved photos when verification failed.

Delete All Data: Delete all enrolled users' information, fingerprints, attendance records, short messages and work codes etc.

Delete Admin Role: Change all administrators into normal users.

Delete Wallpaper: Delete all wallpapers in the device.

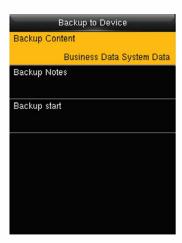
Delete Screen Savers: Delete all screen savers of the device.

Delete Backup Data: Delete data backup of the device.

8.2 Backup Data

Back up the service data or configuration data of the device to the device or a USB drive.





Note: When Backup data to USB Disk, you need to insert a USB Disk into the device at first, and then press [M/OK] to backup data to USB disk.

8.3 Restore Data:

Restore the data stored on the device or on the USB drive inserted into the device.





- 1. Select a route.
- Z. Select the data type.
- 3. Start the restore.

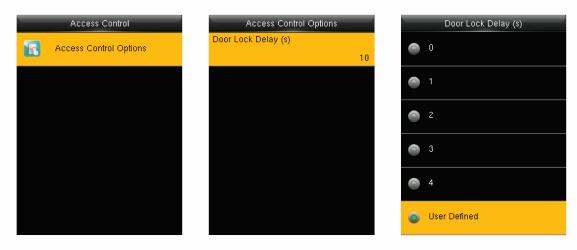
Nate: When restoring data from a USB Disk, you need to insert a USB Disk into the device at first, which has the restored data.

9. Access Control

Access control option is to set user's open door Lock delay.

To unlock, the enrolled users must owned these conditions:

- 1. The current unlock time should be within the effective time of user time zone or group zone.
- 2. The group a user belongs to must be in access controlling. The new enrolled user is allocated in the group 1 and in time zone 1by default, in time zone as 1. The new enrolled user is in unlock status. You can modify the status in user editing.



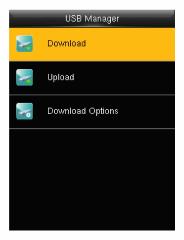
Door Lock Delay(s): The enabling time of electronic lock. The value ranges from 1to10 seconds.

10. USB Manager

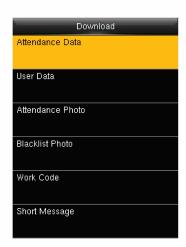
Import user information, fingerprint template, attendance data and so on in the device to attendance software or import user information and fingerprint to other devices through U disk.

Before you upload/download data from/to a USB drive, insert the USB drive into the USB interface of the device.





10.1 Download



Attendance Data: Download attendance data to USB disk.

User Data: Download all user data to USB disk.

Attendance Photo: Download attendance photos to USB disk, the

format of attendance photo is .jpg.

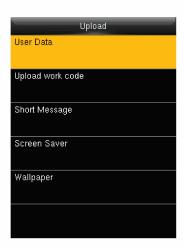
Blacklist Photo: Download attendance blacklist photos to USB disk,

format of blacklist photo is .jpg.

Work Code: Download all work codes to USB disk.

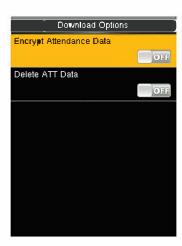
Short Message: Download all short messages to USB disk.

10.2 Upload



User Data: Upload user data saved in USB disk to the device. Upload work code: Upload all work code saved in USB disk. Short Message: Upload all short messages in USB disk. Screen Saver: Upload screen saver saved in USB disk. Wallpaper: Upload wallpapers saved in USB disk

10.3 Download Options



You can encrypt the data in a USB drive and set to delete data after being downloaded.

During downloading the attendance records, you can also set the calendar type displayed in the attendance time.

The device supports three calendar types which are Gregorian, Iran Gregorian, and Iran Lunar.

11. Attendance Search

Employee's attendance record will be saved in the device. For query convenience, the attendance search function is provided.



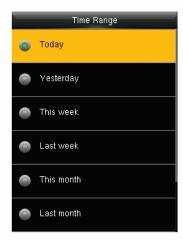
Attendance Record: Search the attendance records in the device. When you have verified in the device, the record is saved.

Attendance photo: Search the attendance record restored in the device. When you have verified, the device's camera will capture a photo to save in the device.

Blacklist ATT photo: When you verified failed four fixed times, the device's camera will capture a photo to save in the backlist of device.

Go to Attendance Record





- 1. Input the user ID to search.
- 2. Select the time period of attendance record.

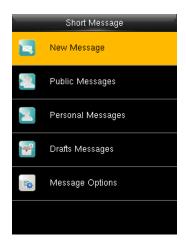
Note: You can input nothing in user ID box to search all users' attendance record.





- 3. The record list is displayed.
- 4. Select any to check details.

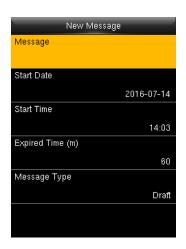
12. Short Message



You can add, edit, delete and send public or personal message. And you can save the message in drafts. In assigned time, the public message will display to all users at the bottom of main screen, and personal message will display to specified user after successful verification.

You can check public, personal or drafts message in corresponding menus. Public message will display at bottom of main screen in assigned time. Personal message will appear after user verified successfully in assigned time.

12.1 Creating a New Message



Message: Input the message text.

Start Date/Time: Set the start date & time of message pops. **Expired Time:** Time of message expired, calculated from the time you add.

Message Type: Public, Personal, Drafts.

Public: SMS able to be seen by all employees.

Personal: SMS aimed at individual only.

Draft: Pre-set SMS, no difference of individual SMS or common

SMS.

➤ Viewing or editing the message:

Press ▼ to select the message list, then press OK. You can view, edit or delete the one you selected. When editing message, the operations are similar to those performed to add SMS.



While editing personal message you can select more than one user to receive this message.

Press [ESC] to save and exit.

12.2 Message Options

To set the personal Message Show Delay time on the initial interface.



Message Show Delay (s): It means the duration that personal message shows. The personal message showing interface will back to initial interface after reaching Message. Show Delay. The valid value is 1-99999 seconds:

13. Work Code



Salary is based on attendance. There are many work types for employees. An employee may have different work type in different time period. Different work types have different pays. Therefore, in order to distinguish different attendance states when user is dealing with attendance data, the device has provided a parameter to mark which attendance record belongs to which work type. Work codes are downloaded together with attendance records. Users can use relevant data based on the specific attendance software.

13.1 New Work Code





ID: The allocated working number. The range is 1-99999999.

Name: Input a name with T9 input. 23-characters are limited.

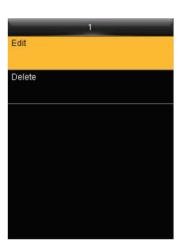
Note: The work code cannot be

modified once confirmed

13.2 All Work codes

You can view, edit or delete the work code from the work codes list. The ID cannot be modified, and the other operations are similar to those performed to add a work code when edit.





- 1 Select a work code.
- 2. Press "Edit" to modify the name. Press "Delete" to delete.

13.3 Wark Cade Options

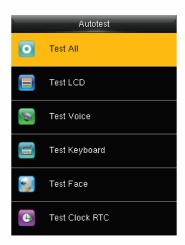


Wark Cade Required: The work cade must be input during verification. Select whether to enable this function.

Wark Cade Must Defined: The input work code has to exist during verification. Select whether to enable this function.

14. Autotest

The auto test enables the system to automatically test whether the functions of various modules are normal, including the LCD, voice, sensor, keyboard and clock tests.



Test All: The terminal automatically tests the LCD, voice, sensor, keyboard and click, press [OK] to continue and press [ESC] to exit.

Test LCD: Checks the LCD (Liquid Crystal Display).

Test Voice: Checks if the voice prompts is displayed normally.

Test Keyboard: Checks if the keyboard is available.

Test Fingerprint Sensor: Checks if the fingerprint sensor is available to use.

Test Face: Checks if the camera is normal.

Test Clock RTC: Checks if the RTC (Real-Time Clock) is accurate.

While checking modules, please follow the prompts in the specific interface.

15. System Info

You can check the storage status as well as firmware information of the terminal through the [System Info] option.



Click specific option to check the parameters:

Device Capacity: Number of users, admin users, number and the most capacity of fingerprints, face, badge, attendance record and attendance photos number.

Device Info. (Information): Device name, serial number, MAC address, fingerprint algorithm, face algorithm, platform information, manufacturer, manufacturer date.

Firmware info: Firmware version, bio service, standalone service, device service.

All information here is not allowed to modify.

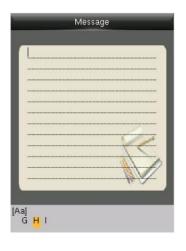
16. Appendix

1. T9 Input

T9 input (intelligent input) is quick and high efficient. There are 3 or 4 letters on the numeric keys $(2\sim9)$, for example, A, B, C are on numeric key 2. Press the corresponding key once, and the program will generate effective spelling. Refer below example to understand the methods:



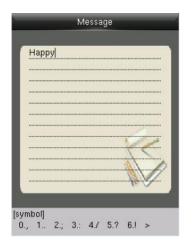
Enter into "New Message".



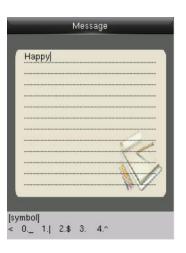
Press [4] twice to input H.



Input"appy"with the same way.



Press ►to "symbol" type



Press ► to find to "3."

Press 3 to input a blank



Input"New Year" with that way Press ►to numeric type.



[symbol] 0., 1. 2.; 3.: 4./ 5.? 6.! >

- 1. Input "2015" ,press ► to "symbol" type.
- 2. Press "6" to input "!"

2. Rules to upload picture

- ➤ User Photo: First, create a directory named "photo" in the root directory of USB disk, and then put user photos in the directory. Max capacity of the directory is 8000 photos. The size of each photo is smaller or equal 15K. Name of the photo is X.jpg (X represents User ID, which does not limit digits). The format of the photo must be JPG.
- > Screen Saver: First, create a directory named "advertise" in the root directory of USB disk, and then put screen savers in the directory. Max capacity of the directory is 20 pictures. The size of each screen saver is smaller or equal 30K. There is no limit on the name and format of the screen saver.
- ➤ Wallpaper: First, create a directory named "wallpaper" in the root directory of USB disk, and then put wallpapers in the directory. Max capacity of the directory is 20 pictures. The size of each wallpaper is smaller or equal 30K. There is no limit on the name and format of the wallpaper. It supports format of jpg, png, bmp etc.

Note: If the size of each user photo and attendance photo is smaller or equal 10K, the device can store 10000 user photos and attendance photos in total.

Statement of Human privacy

Dear Customers:

Thank you for choosing the hybrid biometric products designed and manufactured by us. As a world-renowned provider of biometric technologies and services, we pay much attention to the compliance with the laws related to human rights and privacy in every country while constantly performing research and development.

We hereby make the following statements:

- 1. All of our fingerprint recognition devices for civil use only collect the characteristic points of fingerprints instead of the fingerprint images, and therefore no privacy issues are involved.
- 2. The characteristic points of fingerprints collected by our products cannot be used to restore the original fingerprint images, and therefore no privacy issues are involved.
- 3. We, as the equipment provider, shall not be held legally accountable, directly or indirectly, for any consequences arising due to the use of our products.
- 4. For any dispute involving the human rights or privacy when using our products, please contact your employer directly. Our other police fingerprint equipment or development tools will provide the function of collecting the original fingerprint image of citizens. As for whether such a type of fingerprint collection constitutes an infringement of your privacy, please contact the government or the final equipment provider. We, as the original equipment manufacturer, shall not be held legally accountable for any infringement arising thereof.

Note: The law of the People's Republic of China has the following regulations regarding the personal freedom:

- 1. Unlawful arrest, detention or search of citizens of the People's Republic of China is prohibited; infringement of individual privacy is prohibited.
- 2. The personal dignity of citizens of the People's Republic of China is inviolable.
- 3. The home of citizens of the People's Republic of China is inviolable.
- 4. The freedom and privacy of correspondence of citizens of the People's Republic of China are protected by law.

At last we stress once again that biometrics, as an advanced recognition technology, will be applied in a lot of sectors including e-commerce, banking, insurance and legal affairs. Every year, people around the world suffers a great loss due to the insecurity of passwords. The fingerprint recognition actually provides adequate protection for your identity under a high security environment.

Environment-Friendly Use Description

The Environment Friendly Use Period (EFUP) marked on this product refers to the safety period of time in which the product is used under the conditions specified in the product instructions without leakage of noxious and harmful substances.

The EFUP of this product does not cover the consumable parts that need to be replaced on a regular basis such as batteries and so on. The EFUP of the batteries is 5 years.

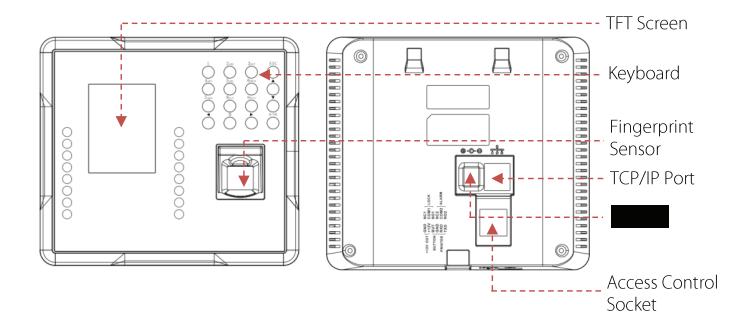
Names and Concentration of Toxic and Hazardous Substances, or Elements						
11311						
Parts Name	Toxic and Hazardous Substances or Elements					
	Pb	Нд	Cd	Cr6+	PBB	PBDE
Chip resistor	×	0	0	0	0	0
Chip Capacitor	×	0	0	0	0	0
Chip Inductor	×	0	0	0	0	0
Chip Diode	×	0	0	0	0	0
ESD component	×	0	0	0	0	0
Buzzer	×	0	0	0	0	0
Adapter	×	0	0	0	0	0
Screws	0	0	0	×	0	0

o: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.

➤ Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials for this part is above the limit requirement in SJ/T11363-2006. Note: 80% of the parts in this product are manufactured with non-hazardous environment-friendly materials. The hazardous substances or elements contained cannot be replaced with environment-friendly materials at present due to technical or economic constraints.

(i) IOMO Installation Guide

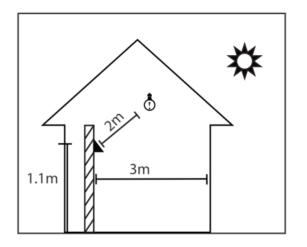
Device Overview



Installation

1. Installation environment

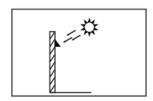
a. Recommended location



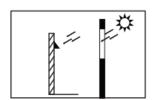
Install the device indoors at least 10 feet (3m) away from window, and 6.5 feet (2m) from light source.

It is not recommended to install on the windows or in outdoor.

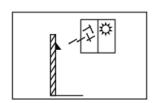
b. Not recommended locations



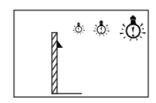
Direct Sunlight Outdoor



Direct Sunlight through window

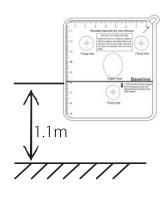


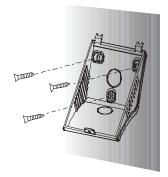
Indirect Sunlight through window



Too close to light source

2. Installation step





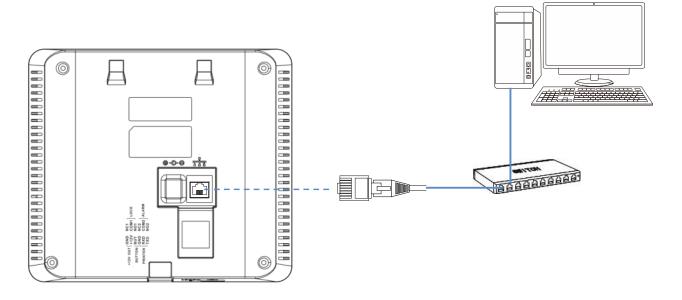




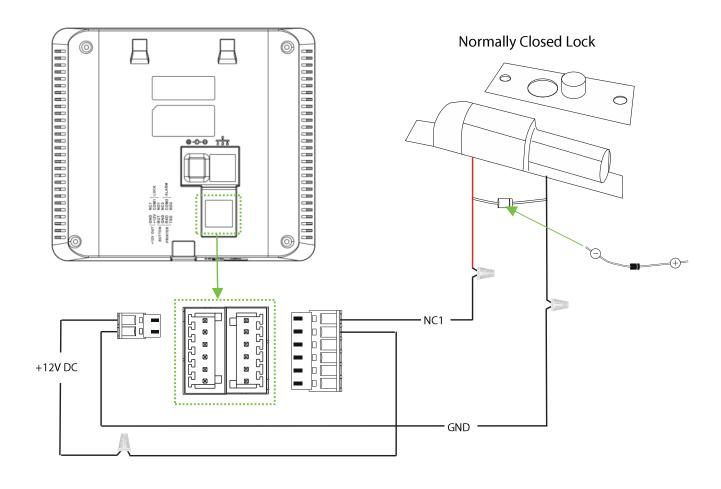
- a. Stick the mounting paper and drill holes accordingly.
 - **Note**: The distance from the baseline to the ground should be 1.1m for a height range of 1.55m-1.85m. And if the distance is 1.2m, then the height should be more than 1.65m.
- b. Fix the plate with the screws on the wall through the drilled holes.
- c. Then fix the device into the plate.
- d. Lastly, fix the device through screw at the bottom.

Wiring Diagrams

1. Ethernet Connection

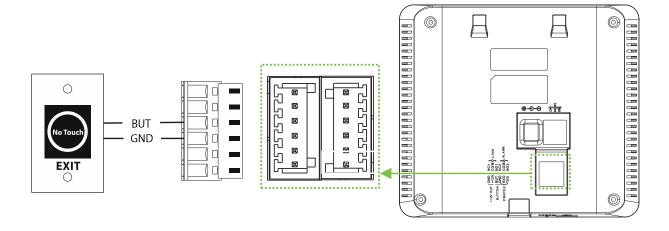


2. Device sharing power to lock

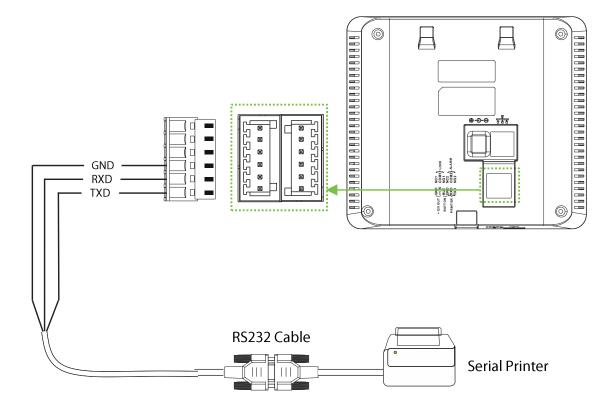


Wiring Diagrams

3. Exit Button Connection



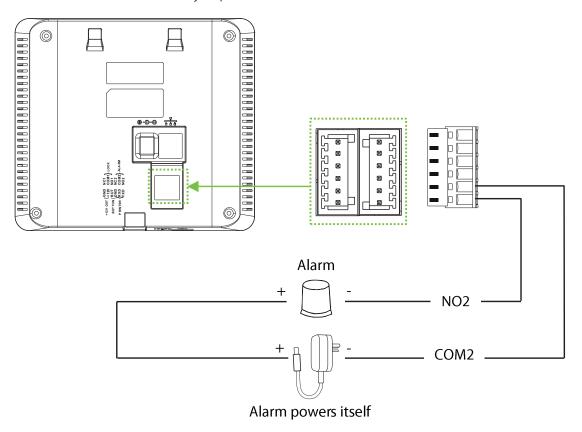
4. Printer Connection



Wiring Diagrams

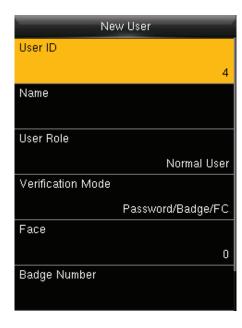
5. Alarm Connection

External Alarm Normally Opened connection



1. Enrolling New User

Go to Main Menu User Mgt New User



User ID: Enroll user ID; it supports 1-9 digits of numbers. **Use Role**: Select the user role between Normal User and Super Admin.

Verification Mode: Select required mode from list.

Fingerprint: Enroll a fingerprint or fingerprints.

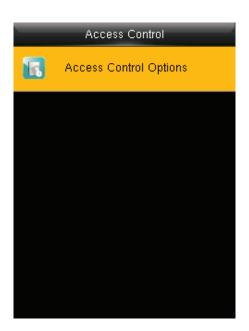
Face: Enroll face according to the prompts of screen and voice.

Badge Number: Enroll a badge by swiping the badge **Password**: Enroll the password; it supports 1-9 digits of numbers.

NOT ALL THE DEVICES HAS THIS FEATURE.

2. Access Control

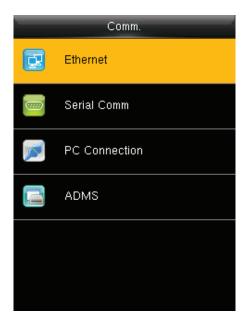
Go to Main Menu Access Control



Access Control Options: Includes Door Lock Delay.

3. Comm setting

Go to Main Menu Comm.



Ethernet: The device can communicate with PC via the Ethernet parameters.

Serial Comm: The device can communicate with PC via the serial port according to the user defined parameters. PC Connection: Set the password and device ID so that you can connect the device with software in PC. ADMS: Settings used for connecting with ADMS server.

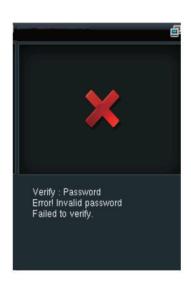
4. Verification

1:1 Fingerprint verification mode

The device compares current fingerprint with the entered user ID. Enter User ID and press fingerprint.







NOT ALL THE DEVICES HAS THIS FEATURE.

1:1 Face verification mode







Password verification







Badge verification

Swipe your registered badge over the fingerprint sensor in standby mode. The device "prompts" "Duplicated Punch" when you swipe badge twice. The device prompts "Ou-Ou" when the badge is unregistered.

5. Attendance Record

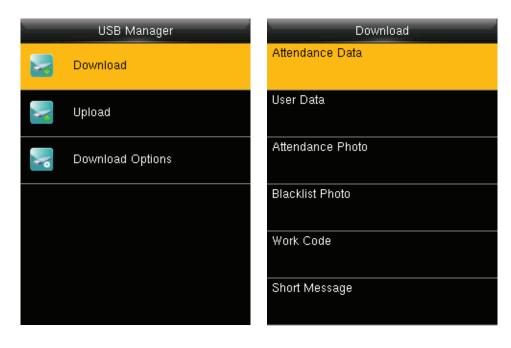
Go to Main Menu Attendance search Attendance record



Enter the User ID and then select the time range for which attendance is required.

6. Attendance record on PC

Go to Main Menu USB manager Download Attendance data



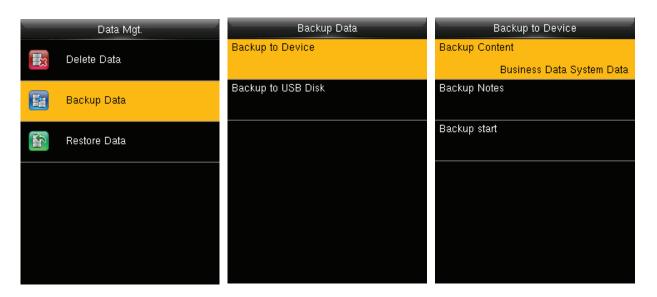
- a. Insert the USB disk correctly.
- b. Download the attendance data to the disk.

c. Then upload data from the disk to your computer. The downloaded data file is "Device Serial Number.dat". You can open it to view.

7. Backup data

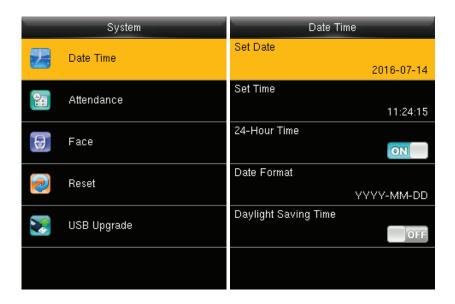
To prevent data loss, you can back up the data to local drive or USB disk at any time.

Go to Main Menu Data Mgt. Backup Data Select the required content

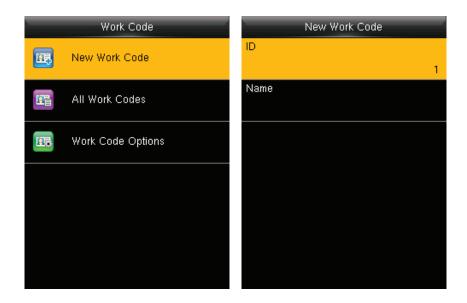


8. Some miscellaneous settings

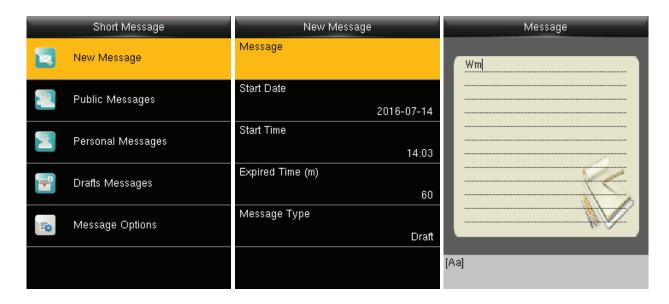
Go to Main Menu System Date time



Go to Main Menu System Work Code New Work Code



Go to Main Menu System Short Message



Troubleshooting

9. Troubleshooting

a. The face is not recognized by the device while verification.

Solution:

Check out if the expressions or standing postures and distance is same in enrolling and verifying.

Check out if the sunlight is direct to the device or if the device is near to the windows.

b. User hasn't worn glasses while enrolling and wear glasses while verifying.

Solution:

You can enroll face wearing glasses during the first or second catching face as the device supports 3 times to catch the face templates.

c. The device make a misjudgment while verification.

Solution:

There is a certain probability of misjudgment, you can re-enroll the face.



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