Important Claim

Firstly thank you for purchasing fingerprint hybrid terminal, before use, please read this manual carefully to avoid the unnecessary damage! The company reminds you that the proper user will improve the use affect and authentication speed.

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1 Instruction for Use

1.1 Finger Placement

Recommended fingers: The index finger, middle finger or the ring finger; the thumb and little finger are not recommended (because they are usually clumsy on the fingerprint collection screen).

1) Proper finger placement: The finger is flat to the surface and centered in fingered guide.

2) Improper finger placement: Not flat to the surface, off-centre, slanting.

1.2 Verification Modes

1.2.1 1: N Fingerprint Verification

The terminal compares current fingerprint collected by the fingerprint collector with all fingerprint data on the terminal.

Press your finger on the fingerprint collector by adopting the proper finger placement. For details, see 1.1 Finger Placement.

When verification successful, an interface shown above. When verification failed, an interface shown above.

1.2.2 1:1 fingerprint verification

In the 1:1 fingerprint verification mode, the terminal compares current fingerprint collected through the fingerprint collector with that in relation to the user ID entered through keyboard. Adopt this mode only when
it is difficult to recognize the fingerprint.

Enter the user ID using keypad on the initial interface. Then press OK. Place the enrolled finger properly on the fingerprint sensor.

When verification successful, an interface shown above.

When verification failed, an interface shown above.

**Notes:**
1. If it says that the enroll number is wrong, it means that there is no such number or the employee doesn’t enroll password.

2. If the device says "Please press again", place the finger on the fingerprint sensor again. You can try another 2 times by default. The repeated times can be set in 6.3 Fingerprint. If it fails after 2 times, return Step 1 for second operation.

1.2.3 Password Verification

In the password verification mode, the terminal compares the password entered with that in relation to the user ID.

Enter the user ID using keypad on the initial interface. Then press OK.

Enter password and press OK.

When verification successful, an interface shown above.

When verification failed, an interface shown above.
Notes: If the device says "Invalid ID", enter the password again. You can try another 2 times by default. The repeated times can be set in 6.3 Fingerprint. If it fails after 2 times, return Step 1 for second operation.

1.2.4 ID Card Verification

Only the products with a built-in ID card module support the ID card verification. The products with a built-in ID card module support the following two verification modes:

ID Card Only: Users only need to swipe their ID cards for verification.

ID + Finger Verification: After passing the ID card verification, you also need to perform finger verification.

1. ID Card Only

1) If you have your ID card number enrolled in the system, you can pass the verification by swiping your ID card at the swiping area in a proper way.

If the verification is successful, an interface as shown above. If the verification is not successful, an interface as shown above.

2. ID Verification

Swipe your ID card properly at the swiping area to enter the 1:1 verification mode. Place the enrolled finger properly on the fingerprint sensor. If the verification is successful, an interface as shown above.
### 1.3 Status of Icons

<table>
<thead>
<tr>
<th>Status Icon</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="G" /></td>
<td>The status icons indicate whether you are within the coverage of the cellular mobile network, with more green bars indicating stronger signal. G: indicates that the current mobile network is GPRS network★, over which the device accesses the Internet. E: indicates that the operator’s EDGE (GSM) network is available, over which the device accesses the Internet. W: indicates that the current mobile network is WCDMA network, over which the device accesses the Internet.</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Bell" /></td>
<td>Indicates that no mobile network is available.</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Ethernet" /></td>
<td>Indicates that you have set the bell. Indicates that a disassembly alarm.</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="ADMS Server" /></td>
<td>Indicates that the connection to Ethernet has been established. Indicates that the Ethernet is disconnected.</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Short Messages" /></td>
<td>Indicates that the connection between device and ADMS server is successful. The connection between device and ADMS server is failed. The communication data of ADMS are transmitting.</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Wi-Fi signal" /></td>
<td>There are public short messages. The Wi-Fi★ connection is normal. The Wi-Fi★ connection fails.</td>
<td></td>
</tr>
</tbody>
</table>
2 Main Menu

When the device is on initial interface, press **M/OK** to open main menu, as shown below:

User Mgt.: You can browse the user information stored on the terminal, including the user ID, name, user role, fingerprint, badge number, card, password, user photo, add, modify or delete the user information.

User Role: used to set the rights of a user-defined role, that is, rights to menus.

Comm. Settings: You can set related parameters for communication between the terminal and PC, including the IP address, Gateway, Subnet Mask, Baud Rate, Device ID and Comm. Key and so on.

System: You can set system-related parameters, including the Date Time, Attendance, Fingerprint, Camera, Reset and USB Upgrade, to enable the terminal to meet user requirements to the greatest extent in terms of functions and display.

Personalize: used to meet user requirements to the greatest extent regarding display, audio, ringing, and keyboard definition.

Data Mgt.: You can perform management of data stored on the terminal, for example, Delete Data, Backup Data and Restore Data.

USB Manager: You can import user information and attendance data stored in a USB disk to related software or other fingerprint recognition equipment.

Attendance Search: For query the record saved in the device, query record function is provided.

Print ☆: used to determine whether to print attendance records immediately.

Work Code: used to identify different work types, which facilitates work attendance check.

Autotest: This submenu enables the system to automatically test whether functions of various modules are normal, including the Screen, Fingerprint, Voice, Keyboard and Time.

System Info: To check the current device capacity, device information and its firmware information.
Menu Tree

- User Mgt.
  - New User
  - All Users
  - Display Style

- User Role
  - User Defined Role
  - Ethernet
  - Serial Comm
  - PC Connection

- Comm.
  - Wireless Network
  - Data Time
  - Attendance
  - Fingerprint

- System
  - Personalize
    - User Interface
    - Voice
    - Bell Schedules
    - Punch State Option
    - Shortcut Key Mappings

- System Info
  - Sensor
  - Test Clock RTC

- Date Mgt.
  - Delete Date
  - Backup Date
  - Restore Date
  - Download
  - Upload
  - Download Options
  - Attendance Records

- USB Manager
  - Attendance Search
    - Date Field Setup
    - Printer Options

- Print
  - New Work Code
  - All Work Codes
  - Work Code Options

- Work Code
  - Test All
  - Test LCD
  - Test Voice
  - Test Keyboard
  - Test Fingerprint Sensor
  - Test Clock RTC

- Autotest
  - Device Capacity
  - Device Info
  - Firmware Info
3 User Management

Through this submenu, you can browse the user information stored on the terminal, including the user ID, name, user role, fingerprint, badge number, card, password, user photo; add, modify or delete the user information. In company’s attendance management, for employee’s change, the information on fingerprint sensor also needs modification. Therefore, operations including “add, delete, check, modify and so on” can be done on fingerprint sensor.

3.1 Adding a User

Press M/OK key on the initial interface. Select Users and press OK. Select New User and press OK.

3.1.1 Entering a User ID

The terminal automatically allocates an ID starting from 1 for every user in sequence. If you use the ID allocated by the terminal, you may skip this section.

Select User ID and press OK. Enter the user ID using keypad then press OK.

Tip: The terminal supports the 1- to 9-digit user IDs by default.

If a prompt message "The user ID already exists!" is displayed, enter another ID.
3.1.2 Modifying the user role

<table>
<thead>
<tr>
<th>User ID</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Role</td>
<td>Normal User</td>
</tr>
<tr>
<td>Fingerprint</td>
<td>0</td>
</tr>
<tr>
<td>Badge Number</td>
<td>0</td>
</tr>
<tr>
<td>Password</td>
<td>0</td>
</tr>
</tbody>
</table>

Press ▼ to select role. Select the role.

**Super Admin**: The super administrator has the operation rights to all menu functions.

**Normal user**: If the system has an administrator, a common user is entitled only to authentication using his/her fingerprint, password, or card. If the system does not have an administrator, a common user has the operation rights to all menu functions.

**User Defined Role**: A user-defined role can be assigned some other menu functions in addition to the functions available for a common user. (When logging in as a super administrator, you have the rights to assign menu functions to a customized role.)

3.1.3 Enrolling a Fingerprint

Press ▼ to select Fingerprint and press OK. Place your finger on the fingerprint sensor properly. Place the same finger on the fingerprint sensor for three times.

Enrollment succeeds. If the enrollment fails, the system will display a prompt message and return to the [Enroll Fingerprint] interface. In this case, you need to repeat the operations of step 2.
3.1.4 Enrolling an ID Card

Press ▼ to select Badge Number and press OK.

Swipe your ID card properly in the swiping area.

Read Successfully!

3.1.5 Enrolling a Password

Press ▼ to select Password and press OK.

Enter a password using keypad then press OK. The FFR terminal supports the 1- to 8-digit passwords by default.

Re-enter the password according to the system prompt and then press OK.

3.2 Query a User in All User

To facilitate administrators to locate a user quickly from a large number of enrolled users, the FFR terminal enables user query by his/her "User ID" and "Name". (Location Search)

Press M/OK on the initial interface.

Select Users and press OK.

Press ▼ to Select All User and press OK.
3.2.1 Query by User ID and Name

Enter the user ID using keypad to query to view all users.

The cursor to the user to be queried.

Press # on the search interface to change an input method and press letter keys of the numeric keyboard to search by name.

3.2.2 Edit and delete a User

Press ▼ to select a User and press OK.

Press OK to enter User Info interface.

The User ID cannot be modified, and the other operations are similar to those performed to add a user.

Other user-defined administrators are cleared when user rights are deleted.

Press ▼ to select Delete and press OK.

Press ▼ to select item need delete and press OK.
3.3 Display Style

Press M/OK on the initial interface.

Select Users and press OK.

Press ▼ to Select Display Style and press OK.

Press ▼ to select display style and press OK to return.

Single Line

Multiple line

Mixed Line
4 User Role

Set the rights of a user-defined role, that is, rights to menus.

Press M/OK on the initial interface. Press ▼ to select User Role and press OK. Press ▼ to select User Defined Role 1 and press OK.

Press OK to open. Press ▼ to Select Name and press OK. Press * to switch input method and enter the Name, press OK.

Press ▼ to select Define User Role and press OK. Press ▼ and OK to select rights. Press ESC to exit.
5 Communication Setting

Set parameters for communication between the device and a PC. The parameters include the IP address, gateway, subnet mask, baud rate, machine ID, and login password.

Press M/OK on the initial interface. Press ▶ to COMM. Settings and press OK. Select Ethernet and press OK.

5.1 Ethernet

When Ethernet is used for communication of device and PC, the following settings need to be checked:

<table>
<thead>
<tr>
<th>IP Address</th>
<th>192.168.1.201</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subnet Mask</td>
<td>255.255.255.0</td>
</tr>
<tr>
<td>Gateway</td>
<td>192.168.1.254</td>
</tr>
<tr>
<td>DNS</td>
<td>0.0.0.0</td>
</tr>
<tr>
<td>TCP COMM Port</td>
<td>4370</td>
</tr>
</tbody>
</table>

IP Address IP is 192.168.1.201 by default. You can modify it if it is necessary. But it cannot be the same with that of PC.

Subnet Mask It is 255.255.255.0 by default. You can modify it if it is necessary.

Gateway. It is 0.0.0.0 by default. If the device and PC are in different net segment, it is necessary to set address.

DNS: The DNS Server is 0.0.0.0 by default and can be changed as required.

TCP COMM Port: It is 4730 by default. You can modify it if it is necessary.

DHCP: short for Dynamic Host Configuration Protocol, which is used by a server to allocate dynamic IP addresses to clients on a network

Display in Status Bar: used to set whether to display network icons in the status bar of the main interface.
5.2 Serial Comm★

When serial port (RS232/RS485) is used for communication of device and PC, the following settings need to be checked:

<table>
<thead>
<tr>
<th>Serial Comm</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS232</td>
</tr>
<tr>
<td>Baudrate</td>
</tr>
<tr>
<td>USB</td>
</tr>
<tr>
<td>USB Baudrate</td>
</tr>
</tbody>
</table>

RS232/USB: Whether use RS232/USB to communicate. Select “Yes” if RS232/USB is to be used.

Baudrate/USB Baudrate: Used for communication with PC. There are five options: 9600, 19200, 38400, 57600 and 115200. If the communication speed is high, RS232/USB is recommended. If the communication speed is low, USB is recommended.

5.3 PC Connection

To improve the security of attendance data, connection password needs to be set here. Connection password must be input when PC software is to connect device to read data.

Comm Key: System password is 0 by default. (namely, there is no password.) it can be set as other value. After setting, the password must be input if software is to communicate with device. Or the connection will fail. The password length is 1-6 digits.

Device ID: 1-254. If RS232/RS485 is used, this ID needs to be input on the software communication interface.

- Press ▼ to select PC Connection and press OK.
- Press OK.
- Enter a password, press ▼ to select Confirm(OK) and press OK.

5.4 Wireless Network★

Wireless Fidelity (Wi-Fi) is also known as the 802.11b standard. The greatest advantage of WIFI is its high transmission rate up to 11Mbps. Wi-Fi also features long transmission distance and excellent compatibility with various existing 802.11 DSSS devices. IEEE 802.11b is a radio-based variant of IEEE
802.11. The bandwidth of IEEE 802.11b can be up to 11 Mbps and automatically adjusted to 5.5Mbps, 2Mbps and 1Mbps depending on the signal strength and interference level, thus effectively ensuring network stability and reliability. Major advantages: High transfer speed and reliability. The communication distance can be up to 305 m in an open area and 76 m to 122 m in an enclosed area. WIFI can be conveniently integrated with the existing wireline Ethernet, making the networking cost even lower.

Our terminal is also Wi-Fi capable. It supports either built-in or external Wi-Fi module to implement wireless data transmission over the Wi-Fi.

**WIFI:** Press OK to open or close Wi-Fi.

**Operation**

Press ▼ to select Wireless Network and press OK.

Press WIFI can open or close the function.

Press ▼ to select "dlink-123456" and press OK.

Enter a password, press ▼ to press OK.

Connected, as shown in the figure

Connected, the initial interfaces shown in the figure
6 System

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

Press M/OK on the initial interface. Select system and press OK. Select Date Time and press OK.

6.1 Date/Time

Select Date/Time and press OK. Press ▲/▼ and OK to select items. When the setting is completed, press OK to save the setting and exit.

Set Date/Time: This parameter is used to set the date and time of the FFR terminal.

24-Hour Time: This parameter is used to set the time display mode of the initial interface. Select "ON" to adopt the 24-hour display mode. Select "OFF" to adopt the 12-hour display mode.

Date Format: This parameter is used to set the format of the date displayed on the all interface of the FFR terminal.

Calendar Type: The device supports the three calendar type, like Gregorian, Iran Gregorian and Iran Lunai. You can modify it if it is necessary.

Daylight Saving Time: DST, also called Daylight Saving Time is a system to prescribe local time in order to save energy. The unified time adopted during the system date is called "DST". Usually, the time will be one hour forward in summer. It can make people sleep early and get up early. It can also reduce lighting to save power. In autumn, the time will be recovered. The regulations are different in different countries.
At present, nearly 110 countries adopt DST.

To meet the demand of DST, a special option can be customized on our RF Card Time & Attendance recorder. Make the time one hour forward at XX (minute) XX (hour) XX (day) XX (month), and make the time one hour backward at XX (minute) XX (hour) XX (day) XX (month) if necessary.

Operation:

1) Set DST as "enable".

2) Input DST start time and end time.

For example, if 08:00, April 1st is set, the device enter DST, and the time will be one hour forward. If it is 08:00, August 1st, the device will reset normal time.

3) Press OK to save setting. Press "ESC" to exit without saving.

[Daylight Saving Time: 2016-01-28
Set Time: 10:52:00
24-Hour Time: On
Date Format: YYYY-MM-DD
Daylight Saving Time: Off]

[Daylight Saving Setup
Start Date: 00:00
Start Time: 00:00
End Date: 00:00
End Time: 00:00]

[Daylight Saving Mode
By date/time
By week/day]

Open Daylight Saving Time
Set time in By date/time
Set time in By week/day

Daylight Saving Mode: You can select the date mode (month-day-hour) or week mode (month-weekday-hour). By default, the date mode is used.

Daylight Saving Setup: used to set the DST start time and end time.

Description of the date mode and week mode:

1. If the month when DST starts is later than that when DST ends, DST spans two different years. For example, the DST start time is 2012-9-1 4:00 and the DST end time is 2013-4-1 4:00.

2. Assume that the week mode is selected and the DST starts from Sunday of the sixth week of September in 2012. According to the calendar, September of 2013 does not have six weeks but has five weeks. In this case, in 2013, DST starts at the corresponding time point of the last Sunday of September.

3. Assume that the DST starts from Monday of the first week of September in 2012. According to the calendar, the first week of September in 2012 does not have Monday. In this case, the DST starts from the first Monday of September in 2012.
6.2 Attendance

Press ▼ to select Attendance and pressOK. Press ▲/▼ and OK to select items. When the setting is completed, press OK to save the setting and exit.

Duplicate Punch Period (m): If a user's attendance record already exists and the user punches in again within the specified period (unit: minute), his/her second attendance record will not be stored. (Value scope: 1—60 minutes)

Attendance Log Alert: When the available space is insufficient to store the specified number of attendance records, the FFR terminal will automatically generate an alarm. (Value scope: 1—99)

Cyclic Delete ATT Data: specifies the maximum number of attendance records that can be deleted at a time when the number of attendance records reaches the upper limit. This function can be disabled; otherwise, the value ranges from 1 to 999.

Confirm Screen Delay(s): specifies the time for displaying the authentication result. The value ranges from 1s to 9s.

Expiration Rule: You can select one of the three conditions: retaining user information and not saving attendance records; retaining user information and saving attendance records; deleting user information.

6.3 Fingerprint

Press ▼ to select Fingerprint and pressOK. Press ▲/▼ and OK to select items. When the setting is completed, press OK to save the setting and exit.
1:1 matching threshold value: The similarity of ID + fingerprint verification and the enrolled template
1:N matching threshold value: The similarity of verification and the enrolled template

Recommended matching threshold value:

<table>
<thead>
<tr>
<th>FRR</th>
<th>Matching threshold value</th>
<th>FAR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1:N</td>
<td>1:1</td>
</tr>
<tr>
<td>high</td>
<td>45</td>
<td>25</td>
</tr>
<tr>
<td>low</td>
<td>35</td>
<td>15</td>
</tr>
<tr>
<td>low</td>
<td>high</td>
<td>25</td>
</tr>
<tr>
<td>low</td>
<td>high</td>
<td>10</td>
</tr>
</tbody>
</table>

FP Sensor Sensitivity: used to set the sensitivity of fingerprint collection. The default value Medium is recommended. You can set the sensitivity of fingerprint collection to High when the response to fingerprint scan lags in a dry environment. When the usage environment is humid, you can set the sensitivity of fingerprint collection to Low if the fingerprint is difficult to identify.

Live Detection: Select whether to open the Live ID function. Open live ID function, that is open the fingerprint anti false function. After opening, when registering or verifying fingerprints the device would identified the false fingerprint, leading the registration failed or verified not be passed.

1:1 Retry Times: This parameter is used to set the retry times in the event of failure of 1:1 verification or password verification due to absence of fingerprint enrollment or improper finger placement, so as to avoid repetitive operations.

Fingerprint Algorithm: This parameter is used to select the fingerprint algorithm version between 9.0 and 10.0. Please select the algorithm version with caution because the fingerprint templates of these two algorithm versions are incompatible.

Fingerprint Image: This parameter is used to set whether to display the fingerprint image on the screen during fingerprint enrollment or comparison. It has two values: Permanent Display and No Display.
6.4 Reset

Make device's communication option, system option and so on reset to the state of factory.

Press ▼ to select Reset and press OK.

6.5 USB Upgrade

You can upgrade the firmware program of the FFR terminal by using the upgrade file in the USB disk through this parameter.

If you need the firmware upgrade file, please contact our technical support personnel. Generally the firmware upgrade is not recommended.
7 Personalize

Press M/OK key on the initial interface.  
Select Personalize and press OK.  
Select User Interface and press OK.

7.1 User Interface

According to their personal preferences, users can set up the initial interface style.

Press ▼ to select User Interface and press OK.  
Press ▲/▼ and OK to select items. When the setting is completed, press OK to save the setting and exit.

Wallpaper: Users can choose wallpaper to display on the screen.

Language: You can select a language for the device based on your requirements.

Lock power Key: To prevent hostile power-off, select whether to lock power-off or not. "disable": the power is off 3 seconds after pressing power-off, "enable": it is ineffective after pressing power-off.

Menu Screen Timeout(s): The device will display the main interface automatically when no operation is performed on a menu within the menu timeout time. (This function can be disabled; otherwise, the value ranges from 60s to 99999s.)

Idle Time To Slide Show(s): The advertisement picture is displayed when no operation is performed on the main interface within the waiting time. (This function can be disabled; otherwise, the value ranges from 3s to 999s.)

Slide Show Interval(s): This parameter is used to set the picture cycle interval (value scope: 0~999 seconds).

Idle Time To Sleep(m): This parameter is used to specify a period after which the device is put in sleep...
mode if no operation within this period. You can wake up the device from sleep by pressing any key or touching the screen. Numerical range in 1 ~ 30 minutes, the factory default for 3 minutes.

Main Screen Style: set where and how the clock and status key are displayed on the main screen.

Notes: Company name is only in the case of open print function can be set.

7.2 Voice

Press ▼ to select Voice and press OK.

Press ▲/▼ and OK to select items. When the setting is completed, press OK to save the setting and exit.

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 Schedules

Many companies need bell for on-duty and off-duty. Some use manual bell. Some use electronic bell. To save cost and provide convenience for management, we integrate bell functions to fingerprint sensor. You can set time for 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. By default, the device provides 15 ringtones.

1. Adding a Bell

Press ▼ to select Bell Schedules and press OK.

Press ▼ to select New Bell Schedules and press OK.

Press ▲/▼ and OK to select items, press OK to save and exit.

Bell Status: Whether to enable this bell

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

Repeat: specifies whether to repeat the ringtone.

Ring Tone: Bell ring

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

Notice: Only some models have external ringing• options.

2. Edit and delete a Bell

Press ▼ to select Bell Schedules and press OK.

Select New Bell Schedules and press OK.

Select Edit and press OK.
Select Item. Press ▼ to Delete and press OK. Press ▼ to select "Yes" or "No".

### 7.4 Punch State Options

Press ▼ to select Punch State Options and press OK.

Press ▲/▼ and OK to select items. When the setting is completed, press OK to save the setting and exit.

Punch State Mode: used to select a status key mode. The following modes are available:

- **Off**: The status key function is not used. The status keys defined as shortcut keys become unavailable.
- **Manual Mode**: The status keys are switched manually and the current status key will disappear when the preset time elapses.
- **Auto Mode**: If a shortcut status key is configured to be switched after a period of time, the status key is switched automatically when the period of time elapses.
- **Manual and Auto Mode**: The main interface displays the status keys that can be switched automatically, and you are also allowed to switch status keys manually. A status key you select manually will be switched according to the automatic switching plan after it disappears upon a timeout.
- **Manual Fixed Mode**: After a status key is switched, it is always displayed until you switch it later again.
- **Fixed Mode**: A status key is always displayed and cannot be switched.

Punch State Timeout(s): specifies the timeout period of the status key displayed on the main interface.

Punch State Required: specifies whether the status of work attendance check must be selected during authentication.
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.

<table>
<thead>
<tr>
<th>User Interface</th>
<th>Shortcut Key Mappings</th>
<th>Left Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice</td>
<td></td>
<td>Punch State Value 4</td>
</tr>
<tr>
<td>Bell Schedules</td>
<td></td>
<td>Function P S Options</td>
</tr>
<tr>
<td>Punch State Options</td>
<td></td>
<td>Name Overtime-In</td>
</tr>
<tr>
<td>Shortcut Key Mappings</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Press ▼ to select Shortcut Key Mappings and press OK. Press ▼ to select a key and press OK. Press ▲ /▼ and OK to select items. When the setting is completed, press OK to save the setting and exit.

**Notes:** When setting the attendance status shortcut keys, you can also set the “Auto Switch” parameter. When “Auto Switch” is enabled, the FFR terminal automatically switches the attendance status at the specified time. If a status key is selected, the device will not use any status key when the status key function is disabled.
8 Data Mgt.

Press M/OK key on the initial interface.

Select Data Manager and press OK.

Select Delete Data and press OK.

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.

Select Delete Data and press OK.

Press ▼ and OK to select the item to be deleted.

Delete Attendance Date: Delete all the attendance records.

Delete All Data: Delete all the information of enrolled personnel, including their fingerprints, facial images and attendance records.

Delete Admin Role: Change all administrators to ordinary users.

Delete Wallpaper: Delete all WallPaper.

Delete Screen Savers: Purge the promotional pictures uploaded from USB disks to the FFR terminal. (For details on how to upload promotional pictures, see "5.4 Upload Picture").

Delete Backup Date: Delete the backup data from the device.
8.2 Backup Data

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

Press ▼ to select Backup Data and press OK.

Press ▼ to select Backup to Device and press OK.

Press ▼ and OK to select the local configuration items to be backed up to decide the selected items.

Press ▼ to select Backup start and press OK.

Note: Backup to USB Disk, the operations are similar to those performed to Backup to Device.

8.3 Restore Data

Restore the data stored on the device or in the USB drive to the device.

Press ▼ to select Restore Data and press OK.

Press ▼ to select Backup from Device and press OK.

Press ▼ and OK to select the local configuration items to be restored and save the selected items.
Press ▼ to select Start Restore and press OK.

Press ▼ to select "Yes" or "No" Device and press OK.

Note: Backup from USB Disk, the operations are similar to those performed to Backup from Device.
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.

Insert U disk into USB slot of fingerprint sensor through mini USB cable.

Press M/OK on the initial interface.

Press ▼ to Select USB Manager and press OK.

10.1 Download

Select Download and press OK.

Press ▼ and OK to select the item to be downloaded.

Download Attendance Data: Import all the attendance data from the FFR terminal to a USB disk.

Download User Data: Import all the user information, fingerprints and facial images from the FFR terminal to a USB disk.

Download work code: used to save work IDs on the device to a USB drive
10.2 Upload

Press ▼ to Select Download and press OK.
Press ▼ and OK to select the item to be Uploaded.

Upload User Data: Upload the message stored in a USB disk to the terminal.
Upload work code: used to upload work IDs in a USB drive to the device.
Upload Screen Saver: Upload the JPG documents with "ad_ " as initial letters of document names stored in a USB disk to the terminal. After the upload, these pictures can be displayed on the initial interface of the terminal. (For details on picture specifications, see Image Upload Rules)
Upload Wallpaper: Upload the JPG documents with "1~10.jpg" as initial letters of document names stored in a USB disk to the terminal. After the upload, these pictures can be displayed on the interface of the terminal. (For details on picture specifications, see Image Upload Rules)

10.3 Download Options

You can encrypt the data in a USB drive and set to delete data after being downloaded. When download the attendance records, you can also set the calendar type displayed in the attendance time. The device support three calendar types which are Gregorian, Iran Gregorian, Iran Lunar to choose.

Press ▼ to Select Download Options and pressOK.
Press ▼ and OK to select items. When the setting is completed, press OK to save the setting and exit.
11 Attendance Search

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

Attendance Record

Press M/OK on the initial interface. Press ▶ to select Attendance Search and press OK. Press ▶ to select Attendance Record and press OK.

Enter the user ID then press OK. Press ▶ to select Time and press OK. The records in accordance with the conditions will be displayed:

User ID: Enter the user ID of the employee to query. If this field is left blank, you can query the attendance records of all the employees. If you enter a user ID, you can query the attendance record of the employee with this user ID.

Time Range: Select a time period to query, including the customized time period, yesterday, this week, last week, this month, last month, and all time periods.
12 Print★

You can connect the device to a printer so that attendance records can be printed.

Press M/OK on the initial interface. Press ▶ to select Print, press OK. Press ▼ to select Data Field Setup and press OK.

12.1 Data Field Setup

Press ▶ to select Data Field Setup and press OK. Press ▶ to select the item to be set and press OK to enable or disable the selected item.

12.2 Printer Options

Press ▶ to select Printer Options and press OK. Press ▶ to select the item to be set and press OK to enable or disable the selected item.

Notes: To enable the paper cutting function, connect the device to a printer equipped with the function. Paper cutting is implemented automatically during printing based on the selected print information.
### 14 Work Code

Employees' salaries are subject to their attendance records. Employees may be engaged in different types of work which may vary with time periods. Considering the salaries vary with work types, the FFR terminal provides a parameter to indicate the corresponding work type for every attendance record to facilitate rapid understanding of different attendance situations during the handling of attendance data.

Press M/OK on the initial interface. Press ▼ to select Work Code and press OK.

#### 14.1 Add a work code

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Tip: The terminal supports the 1- to 999999999-digit IDs by default. If a prompt message &quot;The ID already exists!&quot; is displayed, enter another ID.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A digital code of the work code.</td>
<td>The meaning of the work code.</td>
<td></td>
</tr>
</tbody>
</table>

1. Enter the ID.

Select ID and Press OK. Enter the user ID using keypad, press OK.

2. Enter the name.

Select Name and press OK. Enter the name then press OK.

The terminal supports the 1- to 23-character names by default.
14.2 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.

Press ▲ to select All Work Codes and press OK. View all work codes. Press▼ to select the one you want to edit or delete.

14.3 work code Options

Set verify whether enter the Work Code number must be entered must exist.

Press ▲ to select Work Code Options and press OK. Press OK to open or close.
15 AutoTest

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

Press M/OK on the initial interface. Press ▲ to select Diagnostics and press OK. Press▼ to select the one you want to see and press OK.

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

Test LCD: The terminal automatically tests the display effect of the color TFT display by displaying full color, pure white and pure black and checks whether the screen displays properly. You can continue the test by touching the screen or exit it by pressing [ESC].

Test Voice: The terminal automatically tests whether the voice files are complete and the voice quality is good by playing the voice files stored in the terminal. You can continue the test by touching the screen or exit it by pressing [ESC].

Test Keyboard: The terminal tests whether every key on the keyboard works normally. Press any key on the [Keyboard Test] interface to check whether the pressed key matches the key displayed on screen. The keys are dark-gray before pressed, and turn blue after pressed. Press [ESC] to exit the test.

Test Fingerprint Sensor: The terminal automatically tests whether the fingerprint collector works properly by checking whether the fingerprint images are clear and acceptable. When the user places his/her finger in the fingered guide, the collected fingerprint image is displayed on the screen in real-time. Press [ESC] to exit the test.

Test Clock RTC: The terminal tests whether its clock works properly by checking the stopwatch of the clock. Touch the screen to start counting, and touch it again to stop to check whether the counting is accurate. Press [ESC] to exit the test.
16 System Information

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

Press M/OK on the initial interface. Press ▶ to select System Info and press OK. Press ▼ to select the one you want to see and press OK.

Device Capacity: The number of enrolled users, administrators, passwords, the total fingerprint storage capacity and occupied capacity, ID cards and attendance capacity are displayed respectively.

Device info: The Device name, serial number, MAC Address, Fingerprint Algorithm, Manufacture and Manufacture date are displayed on the device interface.

Appendix

Image Upload Rules

User photo: Create a new directory named "photo" in the root directory of disk U and place user photos into the directory. A maximum of 8,000 photos can be stored and the size of each photo cannot exceed 15 KB. The image name is X.jpg (X is the user's employee ID, which is not limited in the number of digits). Images must be in .jpg format.

Advertising image: Create a new directory named "advertise" in the root directory of disk U and place advertising images into the directory. A maximum of 20 images can be stored and the size of each image cannot exceed 30 KB. There are no restrictions on the image name and type.

Wallpaper: Create a new directory named "wallpaper" in the root directory of disk U and place wallpapers into the directory. A maximum of 20 wallpapers can be stored and the size of each wall paper cannot exceed 30 KB. There are no restrictions on the image name and type.

Note: If the size of a single user photo or attendance photo is 10 KB or less, a total of 10,000 photos can be stored.

Statement on Human Rights and 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 globe suffer from 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 batteries is 5 years.

<table>
<thead>
<tr>
<th>Parts Name</th>
<th>Pb</th>
<th>Hg</th>
<th>Cd</th>
<th>Cr6+</th>
<th>PBB</th>
<th>PBDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chip resistor</td>
<td>x</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Chip capacitor</td>
<td>x</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Chip inductor</td>
<td>x</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Chip diode</td>
<td>x</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<td>o</td>
</tr>
<tr>
<td>ESD components</td>
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<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Buzzer</td>
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<td>o</td>
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</tr>
<tr>
<td>Adapter</td>
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<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Screws</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>x</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
○: 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 economical constraints.