USER MANUAL

FG-1000

Fingerprint scan time attendance

The lastest BioID fingerprint scan
High-capacity time attendance
with 2.8 Inch TFT Color display

empeo
CERTIFIED

FOLLOW US
www.iomotech.com

About this Manual

- This manual includes the operations, interfaces and functions of FG-1000 Platform Product. For installation, please refer to the *Quick Start Guide* of the product accordingly.

- Features and parameters with ★ are not available in all devices.

- All pictures shown in this manual are for illustration purpose only. Pictures in this manual may not be exactly in consistent with the actual product.

Table of Contents

1. Operation instructions

1.1 Method of fingerprint registration

It is recommended to use the **index finger, middle finger** or **ring finger**; avoid using the thumb or little finger.

- **Correct way:**

Press the finger horizontally onto the fingerprint sensor; the center of the fingerprint should be placed

- **Wrong ways:**

Pressing on sides

Pressing fingertip

Too low

Inclined

Please use the correct method of pressing fingerprint for registration and verification. Our company will not undertake the responsibility for the lowered verification performance caused by user's improper operation. The rights to final interpretation and amendment are

1.2　Verification Modes

1.2.1　1:N Fingerprint Verification

In this method, the fingerprint template collected by the sensor is matched/verified with all the templates stored in the device.

Please place the finger correctly onto the fingerprint sensor (for detailed instruction, please refer to 1.1 Method of fingerprint registration).

| Verification Succeeds | Verification Fails |

✍**Remarks:** When the device prompts "Please press your finger again", press your finger again onto the fingerprint sensor.

1.2.2　1:1 Fingerprint Verification

In this fingerprint verification method, the fingerprint template collected by the sensor is matched/verified with the corresponding template of the entered user ID. Please use this method only when difficulty is encountered in 1:N fingerprint verification.

Input the user ID and press

[M/OK].

Press ▼ button to choose

"**Fingerprint**" and press

Then press finger onto

the sensor.

[M/OK].

Verification succeeds

Verification fails

✍**Remarks:**

1. Input the user ID in the initial interface and press **[M/OK]** button. If wrong ID is entered, "Incorrect user ID!" is displayed.

2. When the device displays "Please press your finger again", press your finger again onto the fingerprint sensor. If the verification still failed at the third attempt, it will exit and returns to the initial interface.

1.2.3 Password Verification

In this verification method, the entered password is verified with the password of the entered user ID.

Input the user ID and press **[M/OK]**	Choose "**Password**" and press **[M/OK]**	Input password

Verification succeeds	Verification fails

✍**Remarks:** If "Incorrect password" is displayed, please enter the password again. If the verification still failed at the third attempt, it will exit and return to the initial interface.

1.2.4　Card Verification★

✍**Remarks:** Card function is optional. Products, only with a built-in card module has card verification function. Please contact our technical support as required.

Swipe the card above the   Verification succeeds   Verification fails

card reader (the card must

be registered first)

1.3   Initial interface

When the device is turned on, the initial interface is shown as below:

GPRS

Date &

2018-09-20 Thursday

ADMS Connection

Network Connection

Alarm Signal

Cloc

12

9   3

6

Check-In

Attendance

2. Main Menu

When the device is in standby mode, press **[M/OK]** to open the Main Menu.

Menu Item	Description
User Mgt.	Basic information of registered users, including user ID, name, user role, department, fingerprint, badge★ (ID and MiFare card are optional) and password.
User Role	Assigning authority to user for accessing the menu and modifying settings.
COMM.	To set the related parameters of the communication between the device and PC, including Ethernet parameters such as IP Address etc., Serial Comm., PC Connection and Cloud Sever Setting.
System	To set related parameters of the system and upgrade firmware, including setting date & time, attendance, fingerprint parameters, and resetting to factory settings.

Personalize	This includes interface display, voice, bell, punch state key mode and shortcut key settings.
Data Mgt.	Manage data in the device, such as delete attendance data, delete all data, delete admin role and delete screen savers etc.
Department Management★	Establish the organizational structure of the department, including adding, editing or deleting the department, and scheduling the department, etc.
Shift set★	Set attendance rules and the number of shifts to be used, and schedule employees. The equipment supports up to 24 shifts.
Report★	Use USB flash drive to download the attendance statistics form to check on the computer, or download the attendance settings form to set shifts on the computer, assign shifts to employees and then upload the attendance settings form. At this time, the device will give priority to the use of the schedule of the settings form.
Access Control	To set the parameters of the lock and the relevant access control device.
USB Manager	To transfer data such as user data and attendance logs from the USB disk to the supporting software or other devices.

Attendance Search	To search for the stored records in the device after successful verification.
Short Message	Add/check/edit/delete public and personal messages. Set options.
Work Code	To mark different work categories, facilitating user attendance check.
Auto test	To automatically test different module's functions, including the LCD, voice, keyboard, fingerprint sensor and clock RTC test.
System Info	To check device capacity, device and firmware information.

3. Date/Time settings

In the initial interface, press **[M/OK]** > **System** > **Date Time** to enter the **Date Time** setting interface. It includes setting date, time, 24-hour clock, date format and daylight-saving time.

When resetting to factory settings, the date format will be restored to YYYY-MM-DD format.

✎ **Remarks:** When resetting to factory settings, the device's date/time will not be restored.

3.1 Daylight Saving Time

DST, which is also called **Daylight Saving Time**, is a system which adjusts local time in order to save energy. The time used during the set dates is called "DST". Usually, the time will be one hour ahead in summer. This enables users to sleep or get up earlier, and also reduce device's lighting to save power. In autumn, the time will shift to the standard time. Regulations are different in different countries. At present, nearly 110 countries adopt DST.

In order to meet the demand of DST, a special option can be customized. Input the time one hour ahead in XX (hour) XX (day) XX (month) format, and input the time one

hour backward in XX (hour) XX (day) XX (month) format.

In the initial interface, press **[M/OK]** > **System** > **Date Time** > **Daylight Saving Time**, then press **[M/OK]** to enable Daylight Saving Time.

- **Daylight Saving Mode:** Daylight Saving Time Mode, by date/time mode and by week/day mode for selection.

- **Daylight Saving Setup:** Set date/time or week/day of the Daylight-Saving Time according to the selection in Daylight Saving Mode.

How to set the Daylight Saving Time?

For example, adjust the clock one hour ahead at 08: 00 on April 1 and one hour backward at 08: 00 on October 1 (the system turns back to the original time).

- **By date/time mode:**

- **By week/date mode:**

?**Remarks:**

1. If the DST start month is later than DST end month, then DST spans two different years. For example, the DST start time is 2014-9-1 4:00 and the DST end time is 2015-4-1 4:00.

2. Assume that the week /day mode is selected in **[Daylight Saving Mode]** and the DST starts from Sunday of the sixth week of September in 2014. According to the calendar, September of 2014 does not have six weeks but has five weeks. In this case, in 2014, 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 2014. According to the calendar, the first week of September in 2015 does not have Monday. In this case, the DST starts from the first Monday of September in 2015.

4. User Management

4.1 Adding User

It includes adding super admin and normal user.

In the initial interface, press **[M/OK] > User Mgt. > New User** to enter **New User** setting interface. You can input User ID, Name, choose User Role, register Fingerprint and Badge Number ★(ID and Mifare card are optional), and set Password.

- **Add a Super Admin:** Choose "Super Admin" in **[User Role]**, who can access and operate all the functions on the menu.

  As shown below, the user with User ID 1 is a super admin.

- **Add a Normal User:** Choose "Normal User" in **[User Role]**. Super Admin must be set to register fingerprint, password or card for normal users. If the Super Admin is not yet set, Normal Users can access all the functions on the menu.

- **Password**: Up to 8 digits of password can be entered.

✍ **Remarks:**

1. The device will automatically allocate user ID for users in sequence, but user can also set it manually.

2. The device supports entering user ID of up to 9 digits.

4.2   Searching User

Enter user ID on the User List to search for a user.

In the initial interface, press **[M/OK]** > **User Mgt.** > **All User** to enter **All User** interface. Input "User ID" in [🔍] field, the corresponding user will be shown. In the above shown example, User ID 2 is searched.

4.3   Editing User

After selecting a user through 4.2 Searching User, press **[M/OK]** and select **[Edit]** to enter user editing interface.

Or in the initial interface press **[M/OK]** > **User Mgt.** > **All User** > Search a user > Press **[M/OK]** > **Edit** to enter user editing interface.

The operation method of editing user is the same as adding user. But here, the user ID cannot be edited.

4.4 Deleting a User

After selecting a user through 4.2 Searching User, press **[M/OK]** and select **[Delete]** to enter user deleting interface.

Or in the initial interface press **[M/OK]** > **User Mgt.** > **All User** > Search a user > Press **[M/OK]** > **Delete** to enter user deleting interface.

✍**Note:** 1. The registered details of the user, e.g. registered fingerprint, password and badge★, will the available for deletion.

2. Card function is optional.

4.5 User Display Style

In the initial interface, press **[M/OK]** > **User Mgt.** > **Display Style** to enter **Display**

Style setting interface. Several Display Styles are shown as below:

| Single Line Style | Multiple Line Style | Mixed Line Style |

5. User Role

It is used to set user rights for accessing the menu (a maximum of 3 roles can be set). When user role is enabled, in **[User Mgt.]** > **[New User]** > **[User Role]**, you can allocate suitable user role to required user.

- **Role:** Super user needs to allocate different rights to new users. To avoid setting rights for each user one by one, you can set user roles to categorize different permission levels in user management.

5.1 Enabling User Role

In the initial interface, press **[M/OK]** > **User Role** > **User Defined Role 1 (2 / 3)** > **Enable Defined Role**, Press **[M/OK]** to enable defined role.

After activating Enable Defined Roles, you can check the enabled user roles in **[User Mgt.]** > **[New User]** > **[User Role]**.

✎**Remarks:** At least one registered Administrator is required to enable user role.

5.2 Rights Allocation

In the initial interface, press **[M/OK]** > **User Role** > **User Defined Role 1 (2 / 3)** > **Define User Role** to enter **User Defined Role 1 (2 /3)** rights allocating interface. Press **[M/OK]** to select or cancel the operating right to each menu for **User Defined Role 1 (2 /3)**.

6. Communication Settings

6.1 Ethernet Settings

In the initial interface, press **[M/OK]** > **Comm.** > **Ethernet** to enter the **Ethernet** setting interface.

The parameters below are the factory default values, please adjust them according to the actual network situation.

- **IP Address:** 192.168.1.201

- **Subnet Mask:** 255.255.255.0

- **Gateway:** 0.0.0.0

- **DNS:** 0.0.0.0

- **TCP COMM. Port:** 4370

- **DHCP:** Dynamic Host Configuration Protocol, which is to dynamically allocate IP addresses for clients via server. **If DHCP is enabled, IP cannot be set manually.**

- **Display in Status Bar:** Enable to display the network icon on the status bar.

6.2 PC Connection

- **Comm key Settings**

To secure data efficiently, **Comm Key** needs to be set for the communication between

the device and PC.

If a **Comm Key** is set in the device, enter the correct connection password when the device is connected to the PC software, so that the device and software can communicate.

In the initial interface, press **[M/OK]** > **Comm.** > **PC Connection** > **Comm Key** to enter the **Comm Key** setting interface.

- **Comm Key:** There is no default key password. **Comm Key** can be up to 6 digits between 0 to 999999.

● **Device ID Settings**

If the communication method is RS232/RS485, device ID must be entered in the software communication interface.

In the initial interface, press **[M/OK]** > **Comm.** > **PC Connection** > **Device ID** to enter the **Device ID** setting interface.   **Device ID:** Identity number of the device ranges between 1~254.

7. System Settings

7.1 Attendance Parameters

In the initial interface, press **[M/OK]** > **System** > **Attendance** to enter **Attendance** setting interface.

- **Duplicate Punch Period (m):** Up to this time period (unit: minutes), the duplicated attendance logs will neither be considered nor saved (value ranges from 1 to 999999 minutes).

- **Attendance Log Alert:** When the remaining storage is less than the set value, the device will automatically alert user about the remaining storage information. It can be disabled or set to a value ranging from 1 to 9999.

- **Cyclic Delete ATT Data:** It's the number of attendance logs which will be deleted at once when the maximum storage is attained. It can be disabled or set to a value ranging from 1 to 999.

- **Confirm Screen Delay(s):**The verification information interface will be displayed after verification. Value ranges from 1 to 9 seconds.
  For example, if the **Confirm Screen Delay(s)** is set to 5 seconds, after successful verification, the verification information interface will appear for 5 seconds.

- **Verification Result Font Size:** It's to set the font size of verification result. Three

choices are available.

- **Short Message Font Size:** It's to set the font size of short message.Three choices
  are available.

7.2 Fingerprint Parameters

In the initial interface, press **[M/OK]** > **System** > **Fingerprint** to enter the **Fingerprint**
setting interface.

- **1:1 Match Threshold:** In this method, this value must be reached for successful
  verification. It means the similarity value between the verifying fingerprint and the
  user's actual registered fingerprint must be greater than this value.

- **1:N Match Threshold:** In this method, this value must be reached for successful
  verification. It means the similarity value between the verifying fingerprint and all
  registered fingerprints must be greater than this value.

  Recommended Match Threshold:

FRR	FAR	Match Threshold	
		1:N	1:1
High	Low	45	25
Medium	Medium	35	15

Low	High	25	10

- **FP Sensor Sensitivity:** This option is used to set the sensibility of fingerprint collection. It is recommended to use the default level "**Medium**". When the environment is dry, resulting in slow fingerprint detection, you can set the level to "**High**" to raise the sensibility; when the environment is humid, making it hard to identify the fingerprint, you can set the level to "**Low**".

- **1:1 Retry Times:** In 1:1 Verification or Password Verification, users might forget the registered fingerprint or password, or the finger is improperly placed on to sensor. To reduce the stress of re-entering user ID, retry is allowed; retry attempt can be set within 1~9.

- **Fingerprint Image:** Used to display the fingerprint image on the screen during registration or verification. Four options are available: Show for enroll, Show for match, Always show, None.

7.3 Reset to Factory Settings

It can reset data such as communication settings and system settings to factory settings.

In the initial interface, press **[M/OK]** > **System** > **Reset** > **OK** to finish the reset setting.

Reset parameters include; Duress Options, Anti-passback Setup, communication

setting (namely, the setting of Ethernet, Serial Comm., PC Connection, WIFI, ADMS★ and Wiegand Setup), Personalize (such as Voice Prompt, Keyboard Prompt, Volume and Idle Time To Sleep), close punch state etc.

Parameters	Factory Defaults
Duress Options	Duress Function: OFF Alarm on 1:1 Match: OFF Alarm on 1: N Match: OFF Alarm on Password: OFF Alarm Delay: 10 seconds
Ethernet	IP Address: 192.168.1.201 Subnet Mask: 255.255.255.0 Gateway: 0.0.0.0
PC Connection	Comm Key: 0 Device ID: 1
ADMS	Enable Domain Name: OFF Server Address: 0.0.0.0 Server Port: 8081 Enable Proxy Server: ON Proxy Server IP: 0.0.0.0 Proxy Server Port: 0
Idle Time To Slide Show	60 seconds

Idle Time To Sleep	30 minutes
Menu Screen Timeout	60 seconds
Keyboard Prompt	ON
Voice Prompt	ON
Volume	70

✎ **Remarks:** When performing factory reset, the date and time will not be affected.

7.4   USB Upgrade

Insert the U disk with upgrade file into the device's USB port, and in the initial interface, press **[M/OK]** > **System** > **USB Upgrade** to complete firmware upgrade operation.

ⓘ   If upgrade file is needed, please contact out technical

support. Firmware upgrade is not recommenced under normal

8. Personalize Settings

8.1 User Interface Settings

In the initial interface, press **[M/OK]** > **Personalize** > **User Interface** to set **User Interface.**

- **Wallpaper:** You can select the wallpaper of main screen from the list as required.

- **Language:** Select the language of device as required.

- **Lock Power Key:** To set whether to lock the power key. When this function is enabled, pressing the power key does not work. When this function is disabled, the system shuts down after you press the power key for three seconds.

- **Menu Screen Timeout (s):** This is the amount of idle time after which the menu returns to initial interface. When there is no operation in the menu interface and the time exceeds the set value, the device will automatically exit to the initial interface. You can disable it or set the value to 60~99999 seconds.

  ✍**Remarks:** If **[Disabled]** is chosen, the system will not exit the menu interface even when there is no operation. Disabling this function is not recommended because it will result in more power consumption and security risk.

- **Idle Time To Slide Show (s):** When the device is on the initial interface for a specified time, a slide show will appear after this specific time. It can be disabled

(set to "**None**") or set to 3~999 seconds.

- **Slide Show Interval (s):** It refers to the frequency of displaying different slide show pictures. It can be disabled or set to 3~999 seconds.

- **Idle Time To Sleep (m):** When the device is idle for this duration, the device will switch to standby mode. Press any key to awake the device. You can disable this function, or set the value to 1~999 minutes. If this function is turned to **[Disabled]**, the device will not enter standby mode.

  ✍**Remarks:** Disabling this function is not recommended because of more
      power consumption.

- **Main Screen Style:** Choose the layout of clock and status key.

8.2   Voice Settings

In the initial interface, press **[M/OK]** > **Personalize** > **Voice** to enter the **Voice** settings interface.

- **Voice Prompt:** This option allows to prompt voice while operating menu, press **[M/OK]** to enable it.

- **Keyboard Prompt:** You can enable/disable key tone while pressing keyboard, press **[M/OK]** to enable it.

- **Volume:** Sets the volume of device. Press ▶ key to increase the volume, press ◀

key to decrease the volume.

8.3   Bell Settings

Some companies require to intimate their employee about on-duty and off-duty time, to fulfill this requirement, Bell settings are used. When the bell ring schedule time is reached, the device will play the selected ringtone automatically for a specified ringing duration.

In the initial interface, press **[M/OK]** > **Personalize** > **Bell Schedules** > **New Bell Schedule** to enter the **New Bell Schedule** adding interface.

- **Bell Status: [ON]** is to enable the bell, while **[OFF]** is to disable it.

- **Bell Time:** The bell rings at this schedule time.

- **Repeat:** This option allows the bell to ring again at the schedule bell time.

- **Ring Tone:** Choose a desired ringtone for bell.

- **Internal bell delay (s):** Used to set the ringing duration. The value ranges from 1 to 999 seconds.

8.4 Punch States Options

In the initial interface, press **[M/OK]** > **Personalize** > **Punch State Options** to enter the **Punch State Options** settings interface.

- **Punch State Mode:** Choose a required **Punch State Mode;** it includes the following modes:

  1. **Off:** It will disable the punch state key function. The punch state key set under **Shortcut Key Mappings** menu will become invalid.

  2. **Manual Mode:** It will allow to switch the punch state key manually, and after setting, the punch state key will disappear.

  3. **Auto Mode:** After enabling this mode, set the switching time of punch state key in **Shortcut Key Mappings**; when the switching time is reached, the set punch state key will be switched automatically.

  4. **Manual and Auto Mode:** In this mode, the main interface will display the auto-switching punch state key, meanwhile supports manually switching punch state key. After timeout, the manually switching punch state key will become auto-switching punch state key.

  5. **Manual Fixed Mode:** After punch state key is manually switched, the punch state key will remain unchanged until being manually switched next time.

6. **Fixed Mode:** Only the fixed punch state key will be shown and it cannot be switched.

- **Punch State Timeout:** It is the time duration after which the punch state key will disappear.

8.5 Shortcut Keys Mappings

Setting up Shortcut keys is same as defining the punch state keys or menu function key. When the device is on the main interface, pressing the set shortcut key will display the attendance state or enters the menu operation interface.

In the initial interface, press **[M/OK]** > **Personalize** > **Shortcut Key Mappings** to enter the **Shortcut Key Mappings** settings interface.

- **To set Auto Switching Time:**

Choose any shortcut key, and select **[Punch State Options]** in **[Function]**, so that auto switching time can be set.

- **Auto Switch:** When the set time is reached, the device will switch the attendance state automatically.

When the shortcut key is set to **Punch State Key**, but **[Punch State Mode]** (**Personalize** > **Punch State Options** > **Punch State Mode** > Select **OFF**) is in **[OFF]** mode, then the shortcut key cannot be enabled.

9. Data Mgt.

9.1 Data Deletion

It is used to manage data in the device, which includes delete attendance data, delete all data, delete admin role and delete screen savers etc.

In the initial interface, press **[M/OK]** > **Data Mgt.** > **Delete Data** to enter the **Delete Data** settings interface.

- **Delete Attendance Data:** To delete all the attendance data from the device.

- **Delete All Data:** To delete all user information, fingerprints and attendance logs etc.

- **Delete Admin Role:** To convert all Administrators to Normal Users.

- **Delete Wallpaper:** To delete all the wallpapers from the device.

- **Delete Screen Savers:** To delete all the screen savers from the device. (For details of uploading screen savers, please refer to 20.2 Image Uploading Rule.)

- **Delete Backup Data:** To delete all the backup data.

9.2 Data Backup

Used to back up the business data, or configuration data to the device or U disk.

- **Backup to USB Disk:**

Insert the USB disk, then from the initial interface, press **[M/OK]** > **Data Mgt.** > **Backup Data** > **Backup to USB Disk** > **Backup Content** > choose content to back up (**Business Data / System Data**) > **Backup Start** to start backup. Restarting the device is not required after backup is complete.

✎ **Remarks: Backup to Device** operations are the same as that of **Backup to USB Disk**.

9.3   Data Restoration

To restore the data in the device or U disk to the device.

- **Restore from USB disk**

Insert the USB disk. In the initial interface, press **[M/OK]** > **Data Mgt.** > **Restore Data** > **Restore from USB Disk** > **Content** > choose content to be restored (**Business Data / System Data**) > **Start Restore** > select **Yes** to start restoring. After restoration

completes, click **[OK]** to automatically restart the device.

✍**Remarks:** The operations of **Restore from Device** are the same as that of **Restore**

from USB Disk.

10. Department Management ★

Used to view the department information of the device, establish the organizational structure of the company, arrange the shift for the department, add, edit or delete the number or name of the department.

10.1 Add a Department

In the initial interface, press **[M/OK]** > **Department Management** > **Add Dept.** to enter the **Add Dept.** settings interface. Select **Dept. Name** and enter the department name using the T9 input method.

✎ **Remarks:**

1. The equipment will automatically assign numbers to departments, starting from 1 and so on.

2. Dept. Shift: Select the shift attendance used by all users of the department. Shifts can be set in **Shift set** > **Shifts setting**, with a maximum of 24 shifts set by default.

Refer to section <u>11. Shift setting</u>.

10.2 Edit a Department

There are 8 departments in the device by default. You can edit the department name and department shift, but you cannot delete them. In addition to the 8 default departments, additional departments can be edited and deleted.

In the initial interface, press **[M/OK]** > **Department Management** > **Dept. Lists** to enter the **Dept. Lists** settings interface. Select a department to edit and press **[M/OK]** to enter. Modify **Dept. Name** and **Dept.Shifting**, and the editing of the department is the same as **Add Dept**. The modification is completed and saved by **[M/OK]**.

10.3 Delete a Department

In the initial interface, press **[M/OK]** > **Department Management** > **Dept. Lists** to enter the **Dept. Lists** settings interface. Select a department to delete and press **[M/OK]** to enter. Select Delete and press **[M/OK]**.

Remarks: Only departments other than the 8 default departments in the device can be

deleted.

11. Shift Set ★

Set attendance rules and the number of shifts to be used, and schedule employees.

11.1 Attendance Rule

All attendance statistics are conducted according to the attendance rules. Therefore, first set up the staff attendance rules, including late, early leave calculation method and scheduling type. Once the attendance rules are set, it is not recommended to modify them frequently, because the modification may affect the result of attendance calculation, and may cause chaos in the scheduling if it is modified in the middle of the month.

In the initial interface, press **[M/OK]** > **Shift Set** > **Attendance Rule** to enter the **Attendance Rule** settings interface.

- **Count Late On-duty:** Set the time to start counting lateness. Disable means to start counting lateness after the start of working hours.

- **Count Leave Off-duty:** Set the time to start counting early leave. Disable means to start counting early leave before the end of the working hours.

- **Schedule Type:** Department-based scheduling and individual-based scheduling are supported. If a company uses one timetable, only one department needs to

be set and department-based scheduling is recommended. If departments have their respective timetables, department-based scheduling is recommended. If employees may take different shifts, individual-based scheduling is recommended.

- **Default Shift:** When individual-based scheduling is used, employees who are not scheduled to take the default shift.

- **SAT On-duty:** When individual-based scheduling is used, employees who are not scheduled to take the default shift.

- **SUN On-duty:** When individual-based scheduling is used, employees who are not scheduled to take the default shift.

11.2 Shift Setting

In the initial interface, press **[M/OK]** > **Shift Set** > **Shift Setting** to enter the **Select Shift** settings interface. Select a Shift on the list, and press **[M/OK]**. Use T9 input method to enter "Shift Name", and set the time of the required time period.

✍**Remarks:** The device supports a maximum of 24 shifts including two default shifts (shift 1 and shift 2). All shifts can be edited and a single shift includes three-time ranges at most.

11.3 Schedule

As the basis of attendance calculation, shifts should be set based on the actual condition of a company. If no shift is set, the system makes attendance calculations based on default shifts set in attendance rules.

11.3.1 Department-based Scheduling

The Schedule type in Attendance Rule is Department shifting.

In the initial interface, press **[M/OK]** > **Shift Set** > **Schedule** to enter the **Dept. Shifting** settings interface. Select a Shift on the list, and press **[M/OK]**.

✎**Remarks:** When a shift is selected for a department, it is used by all members of the department.

11.3.2 Individual-based Scheduling

The Schedule type in Attendance Rule is Personal shift.

● **Add Schedule**

In the initial interface, press **[M/OK]** > **Shift Set** > **Schedule** to enter the **Personal Shift** settings interface. Select **Add Personal Shift** and press **[M/OK]** to enter. Enter an ID. The device automatically displays the name. Select Shift Name and then press **[M/OK]**.

● **Edit Schedule**

Enter the **Personal Shift Lists** for editing when the scheduling of individual employee needs to be adjusted.

In the initial interface, press **[M/OK]** > **Shift Set** > **Schedule** to enter the **Personal Shift** settings interface. Select **Personal Shift Lists** and press **[M/OK]** to enter. Select a scheduled user and press **[M/OK]**. Select **Edit**, press **[M/OK]** to enter and modify the "Shift Name" of the user.

✍**Remarks:** The User ID cannot be modified, and the other operations are similar to those performed to add a shift.

● **Delete a shift**

When an employee's schedule is no longer needed, go to the **Personal Shift Lists** and delete it.

In the initial interface, press **[M/OK]** > **Shift Set** > **Schedule** to enter the **Personal Shift** settings interface. Select **Personal Shift Lists** and press [M/OK] to enter. Select a personal shift and press **[M/OK]**. Select **Delete**, press **[M/OK]** the Shift is deleted successfully.

12. Report ★

This menu item allows you to download statistical reports of attendance or attendance setting reports to a USB flash drive or SD card, or to upload attendance setting reports in which shifts are set and employees' schedules are arranged. The device gives priority to the schedules in an attendance setting report.

In the initial interface, press **[M/OK]** > **Report** to enter the **Report** settings interface.

☞**Note:** First insert the USB flash drive into the USB port of the machine, and then enter the main menu to perform the related operations of **Report**.

12.1 Download Att. Report

In the initial interface, press **[M/OK]** > **Report** > **Download Att. Report** to enter the **Download Att. Report** settings interface. Set the On-duty time and Off-duty time. Press **[M/OK]** to download.

When Data download successfully, Press **[M/OK]** to take out the USB disk. The

SSRTemplateS.xls shall be stored in the USB disk. The schedule information, statistical report of attendance, attendance Record Report, Exception Statistic Report and card report can be viewed on a PC. The following reports show the preceding information: To make reports more understandable, a report containing two-day attendance records of four employees is provided as an example.

➢ **Schedule Information Report**: The report allows you to view schedule records of all employees.

Schedule Information Report

Stat.Date:	2019-08-01 ~ 2019-08-15										Special shifts:25-Ask for leave, 26-Out, Null-Holiday							
ID	Name	Department	1 FEB	2 MAR														
1	Joe	company	1	1														
2	David	company	1	1														
3	Mark	company	1	1														
4	Tom	company	1	1														

➢ **Statistical Report of Attendance:** The report allows you to query attendance of each person in a specified period. Salaries can be calculated directly based on this report.

Statistical Report of Attendance

Stat.Date: 2019-08-01~2019-08-15

ID	Name	Department	Work hour		Late		Leave early		Overtime hour		Att. Days (Nor./Real)	Out (Day)	Absent(Day)	AFL (Day)	Additem payment			Deduction payment			Real pay	Note
			Normal	Real	Times	Min	Times	Min	Workday	Holiday					Label	Overtime	Subsidy	Late/Leave	AFL	Cutpayment		
1	Joe	company	18:00	17:50	0	0	1	10	00:00	00:00	2/2	0	0	0								
2	David	company	18:00	17:48	1	12	0	0	00:00	00:00	2/2	0	0	0								
3	Mark	company	18:00	08:50	1	5	1	10	00:00	00:00	2/2	0	0	0								
4	Tom	company	18:00	18:00	0	0	0	0	00:00	00:00	2/2	0	0	0								

✍**Note:** The unit of Work hour and Overtime hour in the Statistical Report of Attendance is HH: MM. For example, 17:50 indicates that the on-duty time is 17 hours and 50 minutes.

➢ **Attendance Record Report:** The report lists the daily attendance records of all employees within a specified period.

Attendance Record Report

Att. Time 2019-08-01~2019-08-15   Tabulatior 2019-08-15

1	2					Name:	Joe				Dept.:	company						
ID:	1																	
07:26	07:54																	
12:25	12:56																	
13:31	13:51																	
17:50	18:52																	
ID:	2					Name:	David				Dept.:	company						
07:36	09:12																	
12:26	15:50																	
13:31	15:51																	
18:31	18:52																	
ID:	3					Name:	Mark				Dept.:	company						
07:50																		
12:30	09:05																	
17:50																		
ID:	4					Name:	Jack				Dept.:	company						
07:45	08:11																	
12:50	17:55																	
18:31	18:06																	

➢ **Exception Statistic Report:** The report displays the attendance exceptions of all employees within a specified period so that the attendance department handles the exceptions and confirm them with the employees involved and their supervisors.

Exception Statistic Report

Stat.Date: 2019-01-01 ~ 2019-08-15

ID	Name	Department	Date	First time zone On-duty	First time zone Off-duty	Second time zone On-duty	Second time zone Off-duty	Late time(Min)	Leave early(Min)	Absence (Min)	Total(Min)	Note
1	Joe	company	2019-08-01	07:26	17:50			0	10	0	10	
2	David	company	2019-08-02	09:12	18:52			12	0	0	12	
3	Mark	company	2019-08-01	07:50	17:50			0	10	0	10	
4	Tom	company	2019-08-02	09:05				5	0	535	540	

➢ **Card Report:** The report can substitute for clock-based cards and can be sent to each employee for confirmation.

Card Report

Att. Date: 2019-08-01 ~ 2019-08-15   Tabulation: 2019-08-15

Dept.	company		Name	Joe	Dept.	company		Name	David	Dept.	company		Name	Mark
Date	2019-08-01 ~ 2019-08-15		ID	1	Date	2019-08-01 ~ 2019-08-15		ID	2	Date	2019-08-01 ~ 2019-08-15		ID	3

Absent(Day)	AFL (Day)	Out (Day)	On-duty	Overtime(H) Workday	Overtime(H) Holiday	Late (Times)	Late (Min)	Leave early (Times)	Leave early (Min)
0	0	0	2	0.0	0.0	0	0	1	10
0	0	0	2	0.0	0.0	1	12	0	0
0	0	0	2	0.0	0.0	1	5	1	10

Att. Report

Week Date	First time zone On-duty	First time zone Off-duty	Second time zone On-duty	Second time zone Off-duty	Overtime Check-In	Overtime Check-Out
01 FEB	07:26	17:50				
02 MAR	07:54	18:52				
01 FEB	07:36	18:31				
02 MAR	09:12	18:52				
01 FEB	07:50	17:50				
02 MAR	09:05					

12.2 Download Att. Setting Report

If shifts are complex or the shifts of a person are not fixed, it is recommended that the attendance setting report be downloaded and shifts and schedules be set for employees in the attendance setting report.

In the initial interface, press **[M/OK]** > **Report** to enter the **Report** settings interface. Select **Download Att. Setting Report** and press **[M/OK]** to download.

Open the setting "AttSettingE.xls" in the USB disk on a PC. Set the Shift in the Attendance setting report. The shifts that have been set on the attendance machine shall be displayed. (For more details, see 11.2 Shift Setting) You can modify the 24 shifts and add shifts. After modification, the shifts shall prevail on the attendance machine.

Attendance Setting Report

Number	Shift					
	First time zone		Second time zone		Overtime	
	On-duty	Off-duty	On-duty	Off-duty	Check-In	Check-Out
1	9:00	18:00				
2	9:00	12:00	13:30	18:00		
3	9:00	12:00	13:30	18:00		
4	9:00	12:00	13:30	18:00		
5	9:00	12:00	13:30	18:00		
6	9:00	12:00	13:30	18:00		
7	9:00	12:00	13:30	18:00		
8	9:00	12:00	13:30	18:00		
9	9:00	12:00	13:30	18:00		
10	9:00	12:00	13:30	18:00		
11	9:00	12:00	13:30	18:00		
12	9:00	12:00	13:30	18:00		
13	9:00	12:00	13:30	18:00		
14	9:00	12:00	13:30	18:00		
15	9:00	12:00	13:30	18:00		
16	9:00	12:00	13:30	18:00		
17	9:00	12:00	13:30	18:00		
18	9:00	12:00	13:30	18:00		
19	9:00	12:00	13:30	18:00		
20	9:00	12:00	13:30	18:00		
21	9:00	12:00	13:30	18:00		
22	9:00	12:00	13:30	18:00		
23	9:00	12:00	13:30	18:00		
24	9:00	12:00	13:30	18:00		

ⓘ Enter the on/off duty time in the corresponding columns, where the First time zone shall be the on/off duty time of Time 1 [11.2 Shift Setting](#) in and the Second time zone shall be the on/off duty time of Time 2. For the correct schedule time format, see

● **Set a schedule setting report**

Enter the **ID**, **Name**, and **Department** respectively on the left of the **Schedule Setting Report**. Set shifts for employees on the right of the **Schedule Setting Report**, where shifts 1–24 are shifts those set in the **Attendance setting report** and shift 25 is for leave and shift 26 is for out.

Schedule Setting Report

Special shifts:25-Ask for leave, 26-Out, Null-Holiday

ID	Name	Department	Card number	1 THU	2 FRI	3 SAT	4 SUN	5 MON	6 TUE	7 WED	8 THU	9 FRI	10 SAT	11 SUN	12 MON	13 TUE	14 WED	15 THU	16 FRI	17 SAT	18 SUN	19 MON	20 TUE	21 WED	22 THU	23 FRI	24 SAT	25 SUN	26 MON	27 TUE	28 WED	29 THU	30 FRI	31 SAT
	Schedule date		2019-8-1																														
1	Joe	company																																
2	David	company																																
3	Mark	company																																
4	Jack	company																																

✎ **Notes:**

1. The shifts of only 31 days can be arranged in one schedule setting report. For example, if the scheduling date is 2012-1-1, the schedule setting report contains the schedules of 31 days after 2012-1-1, that is, schedules from 2012-1-1 to 2012-1-31. If the scheduling date is 2012-1-6, the schedule setting report contains the schedules of 31 days after 2012-1-6, that is, schedules from 2012-1-

6 to 2012-2-5.

2. If no schedule setting report is set, all employees use the report 1 by default from Monday to Friday.

12.3 Upload Att. Setting Report

After setting the attendance setting table, save the "Setting Report.xls" to the USB flash drive and reinsert the USB flash drive into the USB port of the device.

In the initial interface, press **[M/OK]** > **Report** to enter the **Report** settings interface. Select **Upload Att. Setting Report** and press **[M/OK]**.

After uploading, remove the USB disk or SD card. At this time, the employee information, shift, and department in the setting report can be viewed respectively by the management user, shift number, and department in the equipment, or the above information and scheduling information can be seen in the standard download report.

✍**Note:** If the schedule time format is incorrect, Re-upload the attendance setting report after modification.

12.4 Setting

Set whether to synchronize the card report and distinguish the device ID when

downloading the attendance report.

In the **Report** settings interface, select **Setting** and press **[M/OK]**.

13. Access Control

Access control management is the setting of the parameters of the control lock.

● **Access Control Options**

In the initial interface, press **[M/OK]** > **Access Control** > **Access Control Options** to enter the **Access Control Options** settings interface.

- **Door Lock Delay (s)**: The length of time that the device controls the electric lock to be unlocked. Valid value: 1~10 seconds; 0 second represents disabling the function.

14. USB Manager

Upload or download data between device and the corresponding software by USB disk.

Before uploading/downloading data from/to the USB disk, insert the USB disk into the USB port first.

14.1 USB Download

In the initial interface, press **[M/OK]** > **USB Manager** > **Download** to enter the USB **Download** interface. In downloading **Attendance Data** entering time period is required.

- **Attendance Data**: To download attendance data for a specified time period into USB disk.

- **User Data**: To download all user information and fingerprints from the device into USB disk.

- **Work Code**:To download all work codes from the device into USB disk.

- **Short Message**: To download set public or private short messages, which are read by specified objects within the specified time after attendance, facilitating information transmission.

14.2 USB Upload

In the initial interface, press **[M/OK]** > **USB Manager** > **Upload** to enter the USB

Upload interface.

- **Wallpaper:** You can upload all wallpapers from USB disk into the device. You can

    choose **[Upload selected picture]** or **[Upload all pictures]**. The images will be

    displayed on the screen after uploading (for the specifications of wallpapers,

    please refer to 20.2 Image Uploading Rule).

- **User Data:** To upload all the user information and fingerprints from USB disk into

    the device.

- **Upload work code**: To upload work codes from USB disk into the device.

- **Short Message**: To upload short messages saved in the USB disk to the device.

- **Screen Saver:** You can upload all screen savers from USB disk into the device. You

    can choose **[Upload selected picture]** or **[Upload all pictures]**. The images will

    be displayed on the device' s main interface after uploading (for the

    specifications of screen savers, please refer to 20.2 Image Uploading Rule).

14.3 Download Options Settings

You can encrypt attendance data in the USB disk or delete attendance data.

In the initial interface, press **[M/OK]** > **USB Manager** > **Download Options** to enter

the **Download Options** settings interface.

Press **[M/OK]** to enable or disable the **[Encrypt Attendance Data]** and **[Delete ATT**

Data] options.

- **Encrypt Attendance Data:** During uploading and downloading, the attendance

  data is encrypted.

- **Delete ATT Data:** After downloading successfully, the attendance data on the

  device is deleted.

15. Attendance Search

After a successful user verification, attendance records are saved in the device. This function allows users to check attendance logs.

In the initial interface, press **[M/OK]** > **Attendance Search** > enter **User ID** (To get all user records, do not enter any ID and search) > select **Time Range** > press **[M/OK]**, then the corresponding attendance logs will be shown.

16. Short Message

SMS is similar to notice. The operator can edit the notice content in advance and make it into SMS displayed on the screen. SMS includes common SMS and individual SMS. If common SMS is set, ✉ will be displayed in information column at the top of standby interface in the specified time. If individual SMS is set, the employee who can receive SMS can see SMS after successful attendance.

16.1 Add a New Short Message

1. **Entering the content:** Enter the content of a short message with an input method.

Enter the content and press **[M/OK]** to save the entered content and quit.

2. **Setting the Start Date and Time**: The date and time when the short message

    becomes valid.

    Press the numeric keys on the keypad to enter the date or time and select **[M/OK]**.

3. **Set Expired time(m):** SMS appears in the effective time. After the effective time,

    it won't appear.

    ✍**Note:** For public short messages, the effective period is also the display period.

    For private short messages, you need to set a display period after setting an

    effective period. That is, the display period of a private short message can

    be viewed when you punch in or out during the effective period of the

    message.

4. **Set Message Type**

    Select a type and press **[M/OK]** for confirmation.

*   **Public:** SMS is able to seen by all person.

- **Personal:** SMS is aimed at individuals only.

- **Draft:** Preset SMS, no difference between individual SMS or common SMS.

16.2 Message Options

Set the personal Message Show Delay time on the initial interface.

In the initial interface, press **[M/OK]** > **Short Message** > **Message Options** to enter the **Message Options** settings interface.

16.3 View the Public Messages and Personal Message

After a public short message is set, the short message icon ✉ is displayed on the upper right of the main interface, and the public short message content is displayed in scroll mode below. The content of a personal short message is displayed after successful user authentication.

✧ The public short message is displayed in the lower part of the interface.

✧ The personal short message is displayed after successful user authentication.

17. 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.

17.1 Add a Work Code

- **ID**: A digital code of the work code.

- **Name**: To indicate the work code.

1. **Editing an ID**

In the initial interface, press **[M/OK]** > **Work Code** > **New Work Code** to enter the **New Work Code** interface. Select **ID** and press **[M/OK]** to enter. Press the numeric

keys to assign a number between 1~99999999.

2. Editing a name

In the initial interface, press **[M/OK]** > **Work Code** > **New Work Code** to enter the

New Work Code interface. Select **Name** and press **[M/OK]** to enter. Press * to select

an input method and enter a name.

17.2 All Work Codes List

You can view, edit and delete work codes in All Work Codes. The process of editing

a work code is the same as that of adding a work code except that the ID is not

allowed to be modified.

In the initial interface, press **[M/OK]** > **Work Code** > **All Work Codes** to enter the

All Work Codes interface.

17.3 Work Code Options

To set whether the work code must be entered and whether the entered work code

must exist during authentication.

18. Autotest

It will automatically test all the modules of the device for proper functioning. The test includes: the LCD, voice, keyboard, fingerprint sensor, camera and RTC (Real-Time Clock).

In the initial interface, press **[M/OK]** > **Autotest** to enter the **Autotest** interface.

- **Test All:** To test LCD, voice, keyboard, fingerprint sensor, camera and RTC. During the test, press **[M/OK]** to continue the test, or else press **[ESC]** to exit the test.

- **Test LCD:** To test the display effect of LCD screen by displaying full color, pure white, and pure black to check whether the screen displays colors properly. During the test, press **[M/OK]** to continue the test, or else press **[ESC]** to exit the test.

- **Test Voice:** The device automatically tests whether the voice files stored in the device are complete and the voice quality is good. During the test, press **[M/OK]** to continue to the next test, while press **[ESC]** to exit the test.

- **Test Keyboard:** It will test the functioning of all the keys. Press any key in the **Keyboard** testing interface; if the pressed key is consistent with the key sign shown on the screen, then the key functions properly. Press **[M/OK]** or [ESC] to exit the test.

- **Test Fingerprint Sensor:** It will test the fingerprint sensor by checking if the

collected fingerprint image is clear or not. When pressing fingerprint on the sensor, the image will be displayed on the screen. Press **[M/OK]** or **[ESC]** to exit the test.

- **Test Clock RTC:** It will test the Real-Time Clock. The device tests whether the clock works properly and accurately by checking the stopwatch. Press **[M/OK]** to start counting time, and press it again to stop counting, to see if the stopwatch counts time accurately. Press **[ESC]** to exit the test.

19. System Information

It will display data capacity, device and firmware information.

In the initial interface, press **[M/OK]** > **System Info** to enter the **System Info** interface.

| Device Capacity | Device Info | Firmware Info |

- **Device Capacity:** It will display the number of registered users, administrators, passwords, fingerprints, badges, attendance logs. It also checks the total storage of users, fingerprints, badges and attendance records.

- **Device Info:** It displays the device name, serial number, MAC address, fingerprint algorithm, platform information, manufacturer and manufacturer date.

- **Firmware Info:** It displays the firmware version, Bio service, push service, standalone service and Dev service.

✎**Remarks:** The Device Capacity, Device Info and Firmware Info on the system information interface of different products may vary; the actual product shall prevail.

20. Appendices

20.1 Self-Service Attendance Terminal FAQs

1. Does self-service attendance terminal support scheduling based on every other days?

A: No.

2. Can the setting records downloaded from the device be edited on WPS software?

A: Yes. Setting records are supported in Microsoft Office 2003, Microsoft Office 2007, and WPS Office 2012 Personal.

3. What is the attendance calculation flow adopted by the self-service attendance terminal?

A: SSR attendance calculation flow.

4. How to calculate special overtime hours?

A: The following cases are deemed special overtime:

1) When an EXCEL schedule record exists and attendance reports are used for attendance calculation, there are check-in and check-out records though there is no schedule (or rest is arranged) for the current date.

2) When no EXCEL schedule record is available, there are check-in and check-out records though Saturday and Sunday are non-work days.

Overtime hours refer to the duration counted from the first check-in time to the last check-out time on the current day.

5. How to arrange schedules using the attendance setting report?

Step 1: Insert a USB flash drive into the USB port or SD card into the SD port of the device and download the Attendance Setting Report.xls to the USB flash drive or SD card.

Step 2: Open the Attendance Setting Report.xls on a computer.

Step 3: Set shifts in the Attendance Setting Report.xls.

Attendance Setting Report

Numbe r	Shift					
	First time zone		Second time zone		Overtime	
	On-duty	Off-duty	On-duty	Off-duty	Check-In	Check-Out
1	9:00	18:00				
2	9:00	12:00	13:30	18:00		
3	9:00	12:00	13:00	18:00		
4	9:00	12:00	14:00	18:00		

Data enclosed by a red rectangle is new shifts (shift 3 and shift 4). To

Step 4: Arrange schedules for employees.

Schedule Setting Report

Special shifts:25-Ask for leave, 26-Out, Null-Holiday

Schedule date 2019-1-1

ID	Name	Department	Card number	1 SUN	2 MON	3 TUE	4 WED	5 THU	6 FRI	7 SAT	8 SUN	9 MON	10 TUE	11 WED	12 THU	13 FRI	14 SAT	15 SUN	16 MON	17 TUE	18 WED	19 THU	20 FRI	21 SAT	22 SUN	23 MON	24 TUE	25 WED	26 THU	27 FRI	28 SAT	29 SUN	30 MON	31 TUE
1	Joe	company					1	1	1			2	2	2	2	2			25	1	1	1	1			3	3	3	3	3			3	3
3	David	company					2	2	2			1	1	1	1	1			25	3	3	25	3			4	4	4	26	4			4	4
3	Mark	company					3	3	3			2	2	2	2	2			2	2	2	2	2			4	4	4	26	4			3	3
4	Jack	company					25	2	4			3	3	3	3	3			1	1	2	2	2			4	4	4	4	4			1	1

Holiday Shifts Leave On

Note: Dates must be set correctly. For example, if the scheduling date is 2012-1-1, the schedule setting report contains the schedules of 31 days after 2012-1-1, that is, schedules from 2012-1-1 to 2012-1-31. If the scheduling date is 2012-1-6, the schedule setting report contains schedules of 31 days after 2012-1-6, that is, schedules from 2012-1-6 to 2012-2-5.

Step 5: Insert a USB flash drive into the USB port or SD card into the SD port of the device and upload the *Attendance Setting Report.xls* to the device. Then,

schedules in the *Attendance Setting Report* can be used.

6. What is the correct time format used in the setting reports?

A. The correct time format is shown in the following table.

Shift No.	First Time Range		Second Time Range		Overtime Range	
	On-duty	Off-duty	On-duty	Off-duty	Check-in	Check-out
1	09:00	18:00				
2	09:00	12:00	13:30	18:00		
3	9:5	18:00				

B. Incorrect time formats are as follows:

1) A time value is beyond the time range, such as 24:00.

2) A time value contains Chinese characters, for example, 9:00, which differs from 9:00.

3) A time value is preceded by a space. As shown in the following table, there is a space in front of 09:00 in shift 1.

Shift No.	First Time Range		Second Time Range		Overtime Range	
	On-duty	Off-duty	On-duty	Off-duty	Check-in	Check-out
1	09:00	18:00				

2	09:00	12:00	13:30	18:00		
3	9:5	18:00				

4) A time value contains special characters, for example, _9:00 and 09:-1.

The device performs a validity check and error tolerance for other formats.

7. How does the self-service attendance terminal collect the correct attendance time based on the preset shift time?

A: The device collects attendance time based on the following principles:

1) Adopt the earliest time for normal attendance and the nearest time for abnormal attendance.

2) Adopt the normal attendance time if the normal attendance time and abnormal attendance time coexist.

3) Adopt a median in the attendance time range.

B: The following uses four examples to describe the preceding principles.

Example 1: Normal attendance

Attendance Time Range	09:00 — 12:00	13:00 — 18:00	

Attendance time of #1 employee	8:30, 8:35, 11:55,12:01, 12:50, 18:02,19:00					
Statistical result based on attendance rules	8:30	12:01	12:50	18:02		

Description: The attendance time 8:30 and 8:35 are earlier than the on-duty time 9:00 and they are within the normal attendance time range. Therefore, 8:30 is adopted for the on-duty time 9:00 based on the principle of adopting the earliest time for normal attendance. 18:02 and 19:00 are later than the off-duty time 18:00, and therefore, 18:02 is adopted based on the same principle.

Example 2: Late arrival

Attendance Time Range	09:00 — 12:00	13:00 — 18:00				
Attendance time of #1 employee	9:01, 9:04, 12:01, 12:50, 18:00					
Statistical result based on attendance rules	9:01	12:01	12:50	18:00		

Description: Employer 1 checks in for work at 9:01 and 9:04 and he/she is late based on the preset on-duty time. Based on the principle of adopting the nearest time for abnormal attendance, the correct check-in time is 9:01 rather than 9:04 because of 9:01 is nearer 9:00.

Example 3: Early leave

Attendance Time Range	09:00 — 12:00	13:00 — 18:00			
Attendance time of #1 employee	8:50, 11:40,11:55, 12:50, 18:01				
Statistical result based on attendance rules	8:50	11:55	12:50	18:01	

Description: The attendance time 12:50 is adopted based on the principle of adopting a median in the attendance time range. For the attendance time range from 9:00 to 12:00, the normal check-out time range for the off-duty time 12:00 is from 12:00 to 12:30 (that is, 12:00 + (13:00 - 12:00)/2). Therefore, the calculated time of attendance is shown in the preceding table.

Example 4: Absence

Case 1:

Attendance Time Range	09:00 — 12:00	13:00 — 18:00			
Attendance time of #1 employee	8:50, 12:50, 18:01				
Statistical result based on attendance rules	8:50		12:50	18:01	

Description: The attendance time 12:50 is adopted based on the principle of adopting a median in the attendance time range. For the attendance time range

from 9:00 to 12:00, the normal check-out time range for the off-duty time 12:00 is

from 12:00 to 12:30 (that is, 12:00 + (13:00 - 12:00)/2). Therefore, the check-out time

is blank. The normal check-in time range for the on-duty time from 13:00 is from

12:30 to 13:00. The calculated time of attendance is shown in the preceding table.

Case 2:

Attendance Time Range	09:00 — 12:00	13:00 — 18:00	
Attendance time of #1 employee	8:50, 11:55, 12:20, 18:01		
Statistical result based on attendance rules	8:50	12:20	18:01	

Description: The time 12:20 is adopted based on the principle of adopting a median

in the attendance time range. The normal check-out time range for the off-duty time

12:00 is from 12:00 to 12:30 (that is, 12:00 + (13:00 - 12:00)/2). Therefore, the check-

out time of the employee is 12:20. The normal check-in time range for the on-duty

time from 13:00 is from 12:30 to 13:00. Therefore, the check-in time of the employee

is blank. The calculated time of attendance is shown in the preceding table.

20.2 Image Uploading Rule

1. User photo★: It is required to create a folder and rename it as "**photo**" in the USB

disk file, and put user photos into this folder. The capacity is 8000 images

(considering the actual capacity of the device, it is suggested to upload 5000

images at most), with each of them not exceeding 15 kb. The image name is x.jpg (x is the actual user ID, max. 9 digits). The photo format must be JPG.

2. **Advertising image:** It is required to create a folder and rename it as "**advertise**" in the USB disk file, and put advertising images into this folder. The capacity is 20 images with each of them not exceeding 30 kb. There is no restriction on Image name and format.

3. **Wallpaper:** It is required to create a folder and rename it as "**wallpaper**" in the USB disk file, and put wallpapers into this folder. The capacity is 20 images with each of them not exceeding 30 kb. There is no restriction on Image name and format.

✍**Note:** When each user photo and attendance photo does not exceed 10 kb, the device can save a total number of 10000 user and attendance photos. (considering the actual capacity of the device, it is strongly suggested to upload 5000 user and attendance photos at most.)

20.3 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.

Names and Concentration of Toxic and Hazardous Substances or Elements

Parts Name	Toxic and Hazardous Substances or Elements					
	Pb	Hg	Cd	Cr6+	PBB	PBDE
Chip resistor	×	○	○	○	○	○
Chip capacitor	×	○	○	○	○	○
Chip inductor	×	○	○	○	○	○
Chip diode	×	○	○	○	○	○
ESD components	×	○	○	○	○	○

Buzzer	×	○	○	○	○	○
Adapter	×	○	○	○	○	○
Screws	○	○	○	×	○	○

○: 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.

IOMO

Installation Guide

FG-1000

Exit Button

5V DC Input

GND BUT NO COM NC

+12V DC Power Input

+

−

LOCK

+ −

IOMO

Workplace Intelligence

2525 FYI Center, Building 1, 5th Floor,
Unit 1/506, Rama 4 Road, Klong Toei,
KlongToei, Bangkok 10110, Thailand

Tel : (+66) 2 784-5855