Face Recognition Time Attendance & Access Control

Hardware User Manual

Rev: 1.1

Content

Chapter 1 Notice 4
1.1 Operating Environment 4
1.2 Notes for Installation 4
Chapter 2 Quick Guide 5
2.1 Product Diagram 5
2.2 User Verification 5
2.2.1 Face Verification 5
2.2.2 Password Verification 6
2.2.3 Card Verification 6
2.3 MENU 6
2.4 Basic Operation 7
Chapter 3 User Management 9
3.1 Verify 9
3.2 Enroll User 9
3.1 Edit User 10
3.4 Delete User 10
3.5 Level 10
Chapter 4 Data Management 11
4.1 Delete Data 11
4.1.1 Delete User Information 11
4.1.2 Delete Records 11
4.2 View Data 11
4.2.1 View Enroll Info 11
4.2.2 View Attendance Log 12
4.2.3 View Management Log 12
4.3 U-Disk Management 12
4.3.1 Download 13
4.3.2 Upload 14
4.3.3 Upgrade Firmware via U-Disk 14
4.1 Device Info 14

Chapter 5 Settings 15
5.1 System 15
5.1.1 Basic 15
5.1.2 Advanced 16
5.2 Lock Control 17
5.3 Communication 17
5.4 Data Management 20
5.5 Attendance Setting 20
Chapter 6 FAQ 22
6.1 Cannot download the data via USB flash drive. 22
6.2 How to remove the manager? 22
6.2.1 Remove by Software 22
6.2.2 Remove by Hardware 24

Chapter 1 Notice

Thanks for purchasing our Face Time Attendance & Access Control Terminal. Please refer to this user manual carefully before using, which helps you improve the efficiency of using this device.

1.1 Operating Environment

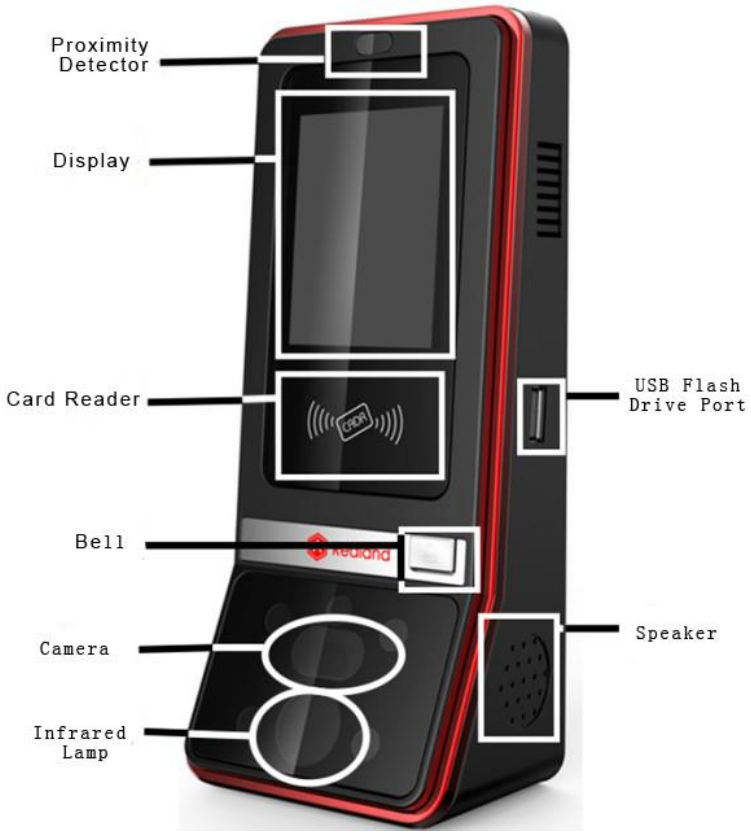
- Avoid installing the device at places where irradiated by strong light directly. The strong light affects the collecting of fingerprints that would lead to the failure of the fingerprint verification.
- The operating temperature of the device is 0℃ ~ 60℃. Avoid using the device outdoors for a long time. The normal working of the Access Control device will be affected by the long term outdoor usage. It is suggested that using sunshade or cooling equipment in summer and heating installation in winter to protect the device if it is necessary to use outdoor.

1.2 Notes for Installation

- Please make sure the power supply is off. Else it may damage the device or the core part of the device if you turn on the power during installation.
- When installing in electrostatic environment or dry weather, please connect to the GND cable first to avoid the device damage from excessive static electricity.
- The core of the cables should not be exposed more than 5MM. It's better to use the insulating tape on the connection area, and use different color to differentiate the cables.
- Please connect the power cable after connecting all other cables. Once the device cannot work normally, please cut off the power and check all the connection. Note: all wiring operation with live may lead to device damage. Warranty does not apply under this damage.
- If the device is far from the power supply, please do not connect the device to the power supply with an Ethernet cable. Because the long transmission distance might cause the voltage attenuation.
- It's recommended to install the device on height of 1.4M - 1.5M.
- Please make sure someone is outside the door during testing the door opening function to avoid any accident that you cannot open the door.
- Please strictly follow this "installation manual. Otherwise, any device damage because of the incorrect wiring is not under the warranty.

Chapter 2 Quick Guide

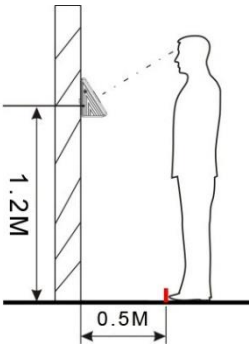
2.1 Product Diagram



2.2 User Verification

2.2.1 Face Verification

The standing position as the picture is recommended. When verify, we recommend that the distance between the person and the device is 0.5m (accommodating the height range from 1.5m to 1.85m). Align the face with the white box in the middle of the screen when verifying. Verify successfully, the User ID and Name shows on the screen with voice prompt “OK”.



Tips

Please keep natural expression and standing posture while enrolling or verifying.

Noted:

☺ Recommended

Wearing a hat may affect verification

Wearing sunglasses and fringe may affect verification

Unnatural expression mav affect verification

Profile may affect verification.

2.2.2 Password Verification

Click the “LOCK” button → input the Enroll ID → Input Password → click “OK”.

2.2.3 Card Verification

① Place the card on the sensing area and keep about 3 cm away from it.

② When verify successfully, the screen shows the Enroll ID, Name, Time and ‘Verified Success’. Meanwhile, the device prompts ‘Verified. Thank you’ or ‘OK’.

③ When fail to verify, the screen shows ‘Match Fail’ and the device prompts ‘Dingdong’.

2.3 MENU

When the device is in standby status, click **[ ]** to enter the main menu.

The main menu includes: **[User]**, **[Setting]**, **[U-Disk]**, **[Lock Control]**, **[Log]** and **[System]**. The main menu is as below:

- **[User]**
  You could enroll user, edit user info and delete user info.
- **[Setting]**
  It includes five submenus: [Basic], [Advanced], [Comm.], [Data] and [Att].
- **[U-Disk]**
  You could download the attendance log, user info and upload user info.
- **[Lock Control]**
  You could set Unlock Delay, Sensor Delay, Sensor Check, etc.
- **[Log]**
  You could query the attendance records and administrator operation records.
- **[System]**
  You could view the storage usage and device information.

2.4 Basic Operation

- Power On

  Plug in and the LCD shows the power on interface with music (the device is defaulted Auto Power On).

  Note: The power supply pf this device must be DC 12V.

- Menu

  Click **[ ]**, then you could enter **[User]**, **[Setting]**, **[U-Disk]**, **[Lock Control]**, **[Log]** or **[System]** menu according to your needs.

  Note:

  If the device has been registered admin, users need to be validated when enter the main menu.

- **[User]**

  Click **[ ]** → select **[User]** → select **[Enroll]**, you could enroll face/ card/ password.

  The admin includes Manager, Registrar and Querier, which have different privilege. (Please refer to '3.5 Level' for more details.)

- **[Setting]**

  Click **[ ]** → select **[Setting]**. It includes **[Basic]**, **[Advanced]**, **[Comm.]**, **[Data]** and **[Att.]**.

- **[U-Disk]**

  Insert USB Flash Drive → click **[ ]** → select **[U-Disk]**, you could download logs, user info and upload user info.

- **[Lock Control]**

  Click **[ ]** → select **[Lock Control]**, you could set Unlock Delay, Sensor Delay, Sensor Type and so on.

- **[Log]**

  Click **[ ]** → select **[Log]**, you could view GLog and SLog. GLog is attendance record. SLog is management/ operation record.

- **[System]**

  Click **[ ]** → select **[System]**, you could view the Storage Usage and Device Info.

- Verification

  When verifying, the device must be in standby status. Then users could verify according to the verification method what they enroll. If verify successfully, the device prompts "Thank you" and the screen shows the Enroll ID and Name.

Chapter 3 User Management

Click **[ ]** and select **[User]** to enter the submenu, which includes **[Enroll]**, **[Edit]** and **[Delete]**.

3.1 Verify

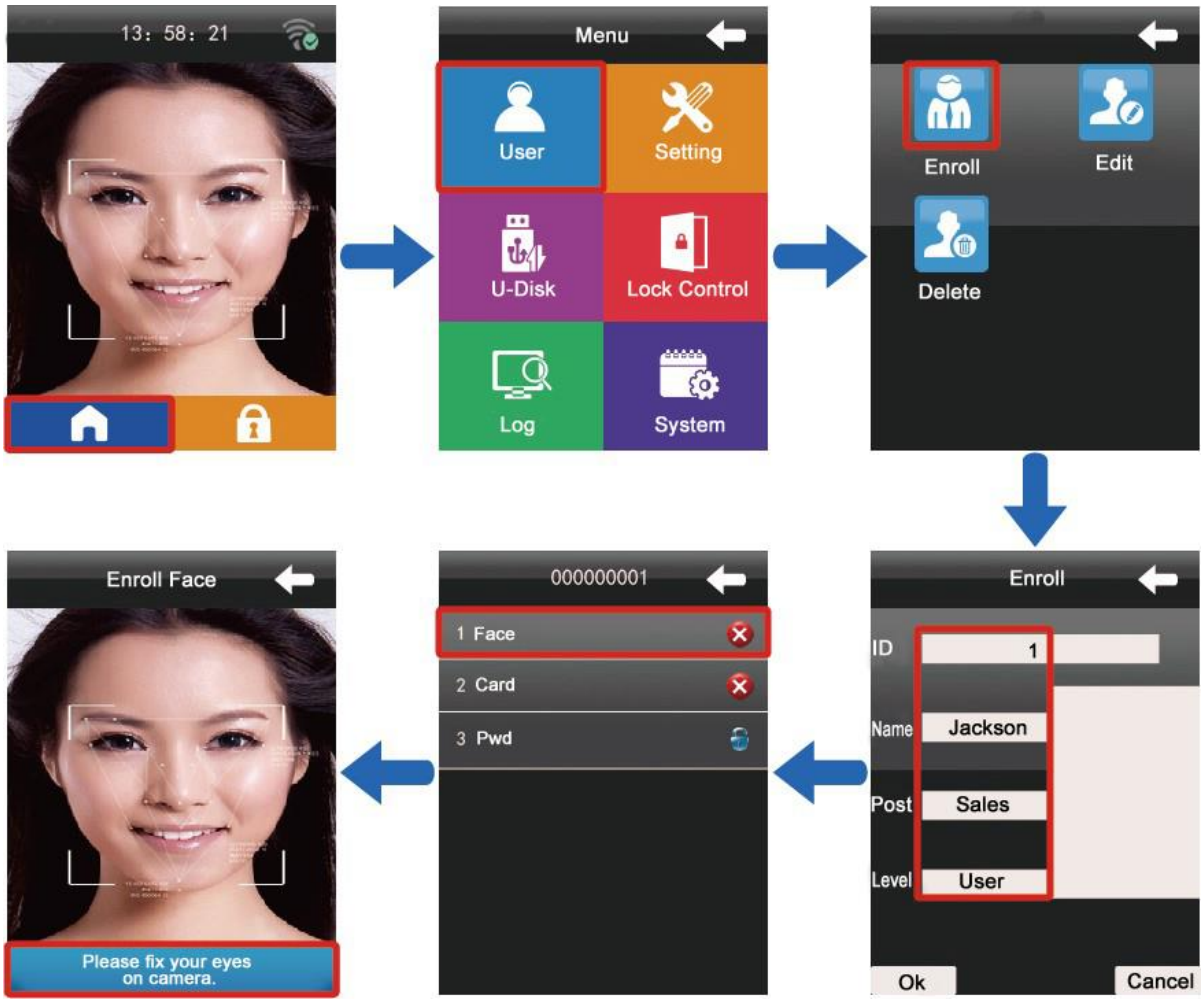
There are three verification methods: Face/Card/Password, Face/Password and Face.

Each user has a unique Enroll ID, which must be the same on the device and the desktop software. You could enroll no more than one face, one card and one password for each user.

3.2 Enroll User

Click **[ ]** → select **[User]** → select **[Enroll]** → edit the user information (ID/Name/ Post/Level) → register Face/Card/Password → enroll successfully and exit.

The pictures below are for reference.



Name: We suggest that edit the user name on the software if there are a huge number of users.

Level: There are 4 levels—User, Manager, Registrar and Querier. You could enroll no more than 10 administrators (Manager/Registrar/Querier).

Note:

When query a user information, you just need to input the far left digit of the Enroll ID. For example, when the Enroll ID is '000000050', you just need to input '50' then you could query the user info.

3.1 Edit User

Click **[** **]** → select **[User]** → select **[Edit]** → click "Query" → input the Enroll ID and click "OK" → edit the options (Name/ Post/ Level/ Face/ Card/ Password) → done → click **[** **]** to exit.

3.4 Delete User

Click [ ] → select [User] → select [Delete] → click "Query" → input the Enroll ID and click "OK" → you could delete Face, Card, Password or all information of this user. (If you need to delete all user, please view '4.1.1 Delete User Information' for more details.)

3.5 Level

There are four levels— User, Manager, Registrar and Querier.

- When there is no admin, each user could operate all the functions and change the settings of the device. If the device has been registered admin, users need to be validated when enter the main menu.
- The admin includes Manager, Registrar and Querier.

Manager: could operate all the functions and change all the settings on the device.

Registrar: could only enter the [User] menu and [System] menu.

Querier: could only enter the [Log] menu and [System] menu.

Chapter 4 Data Management

4.1 Delete Data

4.1.1 Delete User Information

You could delete a user and delete all user.

Delete a user: The details please view '3.4 Delete User'.

Delete all user: Click **[ ]** → select **[Setting]** → select **[Data]** → select "Del. All User".

4.1.2 Delete Records

You could delete GLog (attendance records) and SLog (management/ operation records).

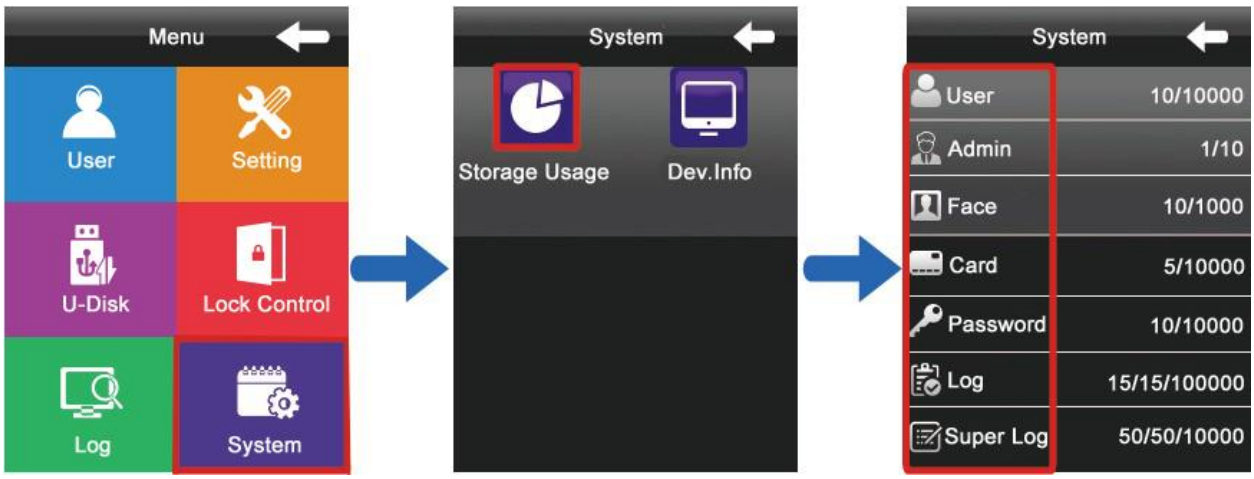
Del. All Log: Click **[ ]** → select **[System]** → select **[Data]** → select "Del. All Log".

Del. All Slog: Click **[ ]** → select **[System]** → select **[Data]** → select "Del. All Slogr".

4.2 View Data

4.2.1 View Enroll Info

Click **[ ]** → select **[System]** → select **[Storage Usage]**.



You could view the registered amount and the max capacity (Max User=10000; Max Card=10000; Max Password=10000; Max Face=1000).

Log: It's the amount of attendance records. Max = 100,000.

Super Log: It's the amount of administrator(s) entering the menu to operate. Max = 10,000.

4.2.2 View Attendance Log

Click **[⌂]** → select **[Log]** → select **[GLog]** → input the Enroll ID → select the date range → click "OK" to view.

- You could view the attendance logs for any period of time and all attendance logs.
- You could view the details of verification when input the Enroll ID.
- When the ID is "0", it shows all the attendance records of all users and the amount of the attendance records within the selected date range.

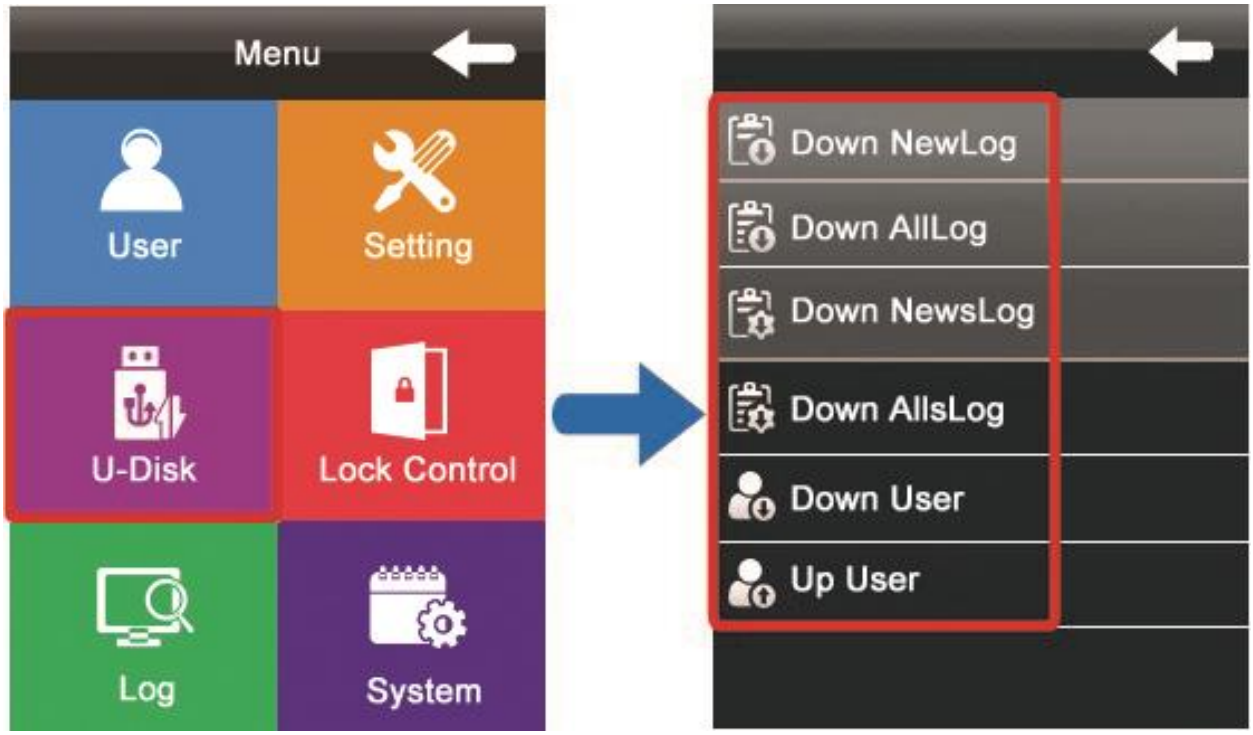
4.2.3 View Management Log

Click **[⌂]** → select **[Log]** → select **[SLog]** → input the Enroll ID of the administrator → select the date range → click "OK" to view.

- SLog means the records of the administrator(s) entering the menu to operate. If there is no administrator, there is no management log.
- You could view details of this administrator's operations, such as entering the menu, enrolling, deleting user, deleting logs, changing settings, operations time, etc.
- When the ID is "0", it shows all the management logs of all administrators and the amount of the management logs within the selected date range.

4.3 U-Disk Management

Insert the USB flash drive → Click **[⌂]** → select **[U-Disk]**.



4.3.1 Download

- Download Attendance Log
  - **Down NewLog**: It means to download the latest attendance logs since the last attendance logs you downloaded. If you have downloaded all logs, there is no data in this option.
  - **Down AllLog**: It means to download all the attendance logs in this device.
- Download Management Log
  - **Down NewsLog**: It means to download the latest management logs since the last management logs you downloaded. If you have downloaded all management logs, there is no data in this option.
  - **Down AllsLog**: It means to download all the management logs in this device.
- Download User Information
  - **Down User**: It means to download the registered user information. You can upload it to another device, so that you don't have to register the users again on other device.

  Tips:

  - The user information is saved in the file named "AllEnrollData.DAT".
  - The attendance logs are saved in the file named "ASLG_xxx.csv".
  - The management logs are saved in the file named "SLG_xxx.csv".

- The new attendance logs are saved in the file named “NewFlog_xxx_yyy.csv”.
- The new management logs are saved in the file named “HisGLog_xxx_yyy.csv”.
- “yyy” means the date & time you download the logs; “xxx” means the device No.

4.3.2 Upload

- Upload User Information
  - **Up User: It means to upload the user information saved in the file named “AllEnrollData.DAT” to the device.**

4.3.3 Upgrade Firmware via U-Disk

Click **[ ]** → select **[Setting]** → select **[Advance]** → select “Upgrade FW”.

When something wrong with the firmware or the manufacturer upgrade/optimize the firmware, please copy the latest firmware ”zd4960_um.bin” to the USB flash drive, then insert the USB flash drive to the device and upgrade the firmware.

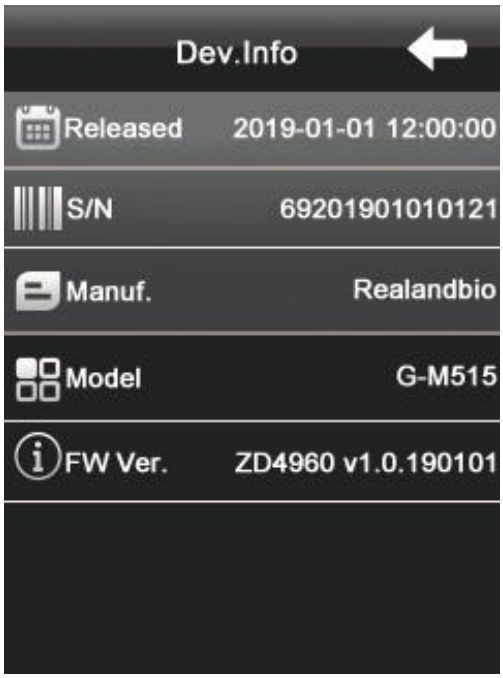
Attention:

Please follow the technician’s instruction when upgrade the firmware.

4.1 Device Info

Click **[ ]** → select **[System]** → select **[Dev.Info]**.

You could view released date, serial number, manufacturer, model and firmware version.



Chapter 5 Settings

5.1 System

5.1.1 Basic

Click **[ ]** → select **[Setting]** → select **[Basic]**.

Item	Description
Language	You could set the language as English or Chinese.
Time	You could calibrate date and time when they are incorrect.
Voice	Turn it on and the device prompts when verify.
Key Tone	Turn it one and it prompts “DI” when touch the screen.
Volume	You could set it as 0~10. Default is “5”.
Set Bell	You could set 24 groups of bells.

5.1.2 Advanced

Click **[ ]** → select **[Setting]** → select **[Advanced]**.

Item	Description
Verify Mode	There three verification mode: FC/C/P, FC/P and FC.
Max Mngr	Max manager=10.
Upgrade FW	Please view “4.3.3 Upgrade Firmware” for more details.
Factory reset	To reset all the settings to the default, but

	the user info and logs won't be deleted.
Reset time	Set a time to reset the device. For example, the reset time is 07:30:00, that means the device will reset at 07:30:00 every day when it plugs in.
Sleep Time	To set how long the device will be on sleep mode after no one operate it in order to save power. When the camera detects dynamic, the sleep mode ends.

5.2 Lock Control

Click **[ ]** → select **[Lock Control]**.

Unlock Delay: To set how long will the door close. You could set it as 0~255 (Unit: second).

Sensor Delay: To set how long it will alarm after the door doesn't close. You could set it as 0~255 (Unit: second). Note: Only when the door sensor is installed, it works.

Sensor Check: Turn it on and it will check the status of the door (opened or closed).

Sensor Type: To set the status of the door sensor. You could set it as NG (auto), NC (normal close) or NO (normal open).

Wiegand Output: You could set Wiegand output Format (26 or 34) and Wiegand output type (User ID or UidOrCard).

Alert Delay: After turn it off, it will alarm, if the device is disassembled illegally.

Fire alarm: Turn it on, connecting the fire alarm to the "Fire In" terminal, then the door opens and the device alarms. Meanwhile, the fire alarm rings. (Note: You couldn't set the "Unlock Delay" to "0".)

5.3 Communication

Click **[ ]** → select **[Setting]** → select **[Comm.]**.

- **WIFI**

① Click **[ ]** → select **[Setting]** → select **[Comm.]** → turn on WIFI → select "Scan WIFI" → select the available WIFI and connect

② Confirm if the IP address of the device and the IP address of the PC are in the same network segment. You could test it via "PING".

③ Open the desktop application and add the device.

Note: Weak WIFI hotpot signal may cause failed connection.

➢ **TCP/IP**

① Plug in the Ethernet cable.

② Click [ ] → select **[Setting]** → select **[Comm.]** → turn on DHCP.

③ Confirm if the IP address of the device and the IP address of the PC are in the same network segment. You could test it via “PING”.

④ Open the desktop application and add the device.

- **Upload Record**

Upload record: real-time push the data to the PC.

① Connect the device to the RAMS software.

② Click [ ] → select **[Setting]** → select **[Comm.]** → enable “Upload record” → set “Server Addr” as the same as the IP address of PC → set the “UDP Port” on the software as the same as the “Server Port” on the device.

5.4 Data Management

Click **[ ]** → select **[Setting]** → select **[Data]**.

Log Warning: The device prompts when the capacity of attendance log is equal to the setting value. The max capacity of attendance log is 100,000.

SLog Warning: The device prompts when the capacity of Slog is equal to the setting value. The max capacity of Slog is 10,000.

Reverify Time: Repeatable verification at the set time is invalid. The default is 3min.

Del. All Log: Empty all the attendance logs. Please backup the data before deleting.

Del. All Slog: Empty all the management logs. Please backup the data before deleting.

Del. All User: Empty all the user information.

5.5 Attendance Setting

Click **[ ]** → select **[Setting]** → select **[Att]**.

- **[Att]**

  You could set the time of six states--Duty On, Duty Off, In, Out, OT-On and OT-Out. You could set no more than 24 groups.

Chapter 6 FAQ

6.1 Cannot download the data via USB flash drive.

Make sure the USB flash drive works. We suggest to use 2~8G USB flash drive. If there are any conflicted files, please format the USB flash drive. We suggest to use a specialized one for attendance data.

6.2 How to remove the manager?

6.2.1 Remove by Software

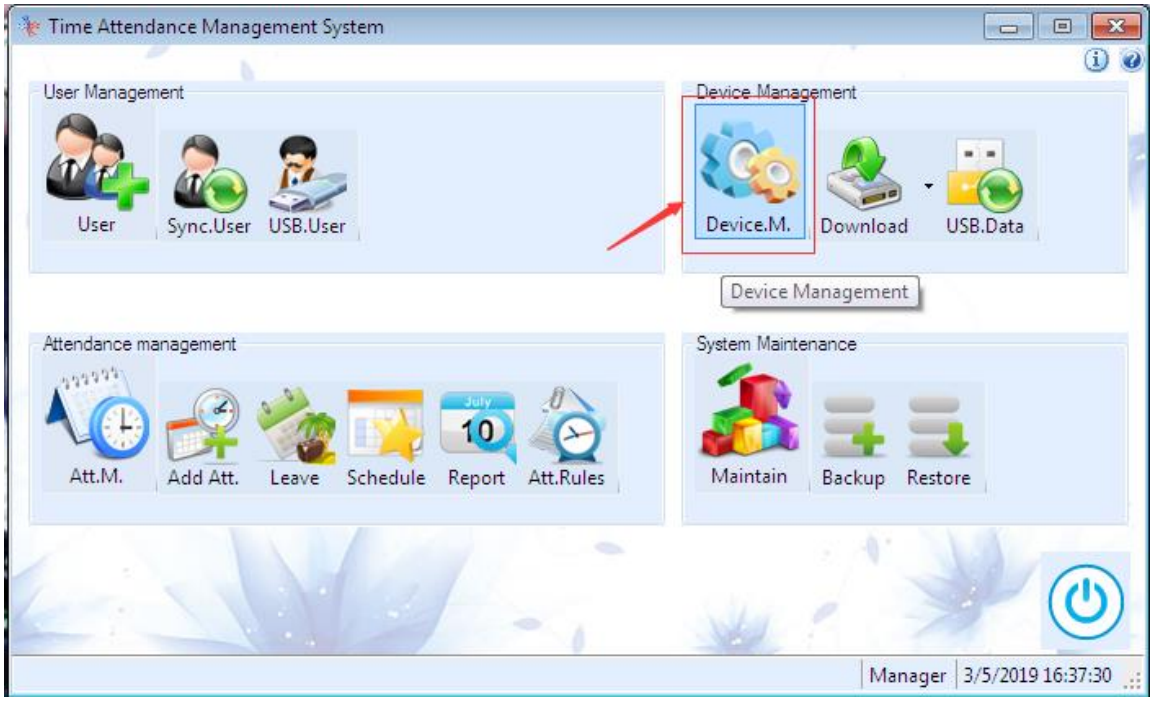
It's suggested to enroll at least two admins in the device. When an admin is unable to operate the device, another admin can be verified.

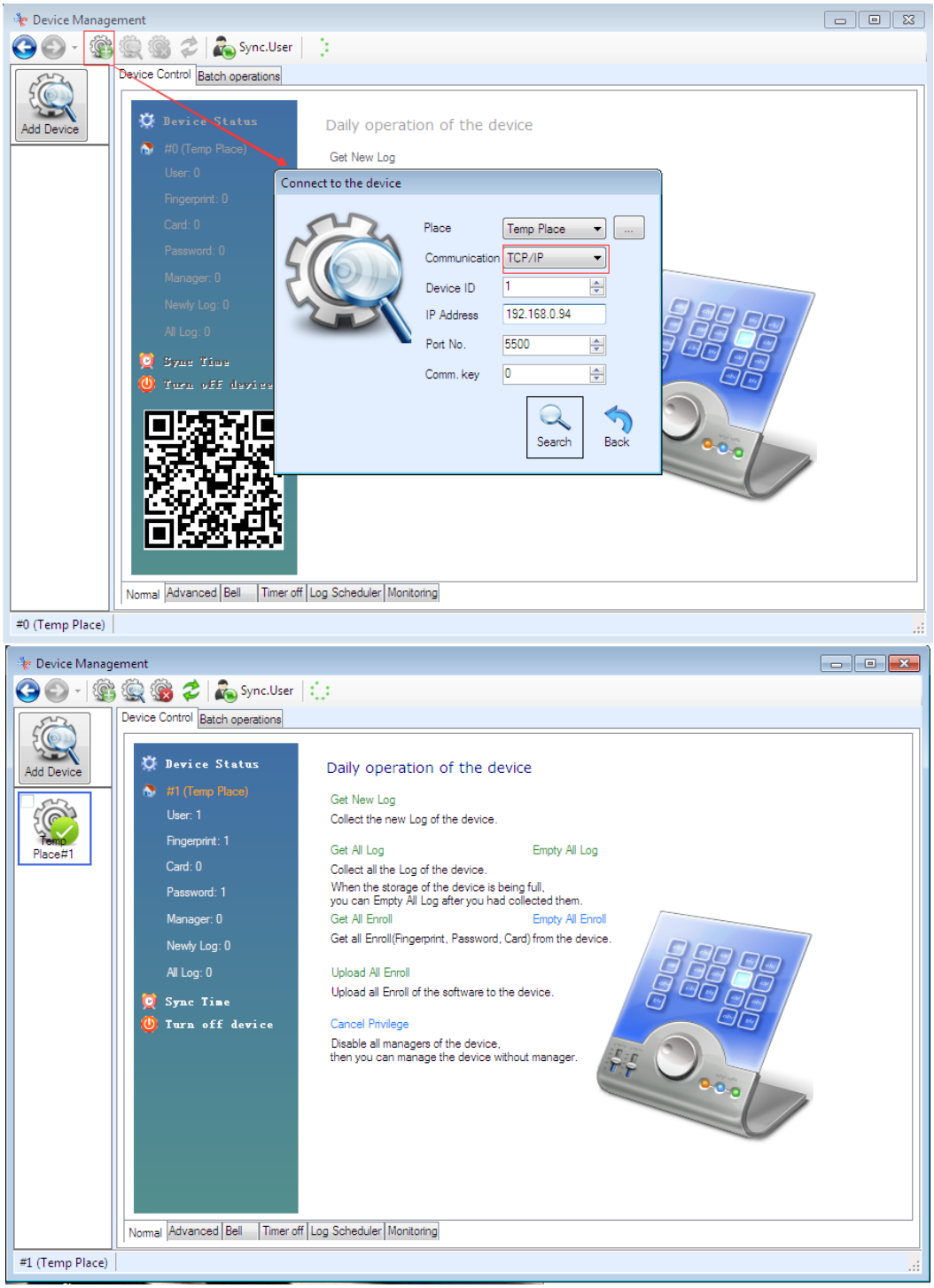
When the only one admin cannot enter the main menu, please connect the device to the software and cancel the privilege on the software.

Steps:

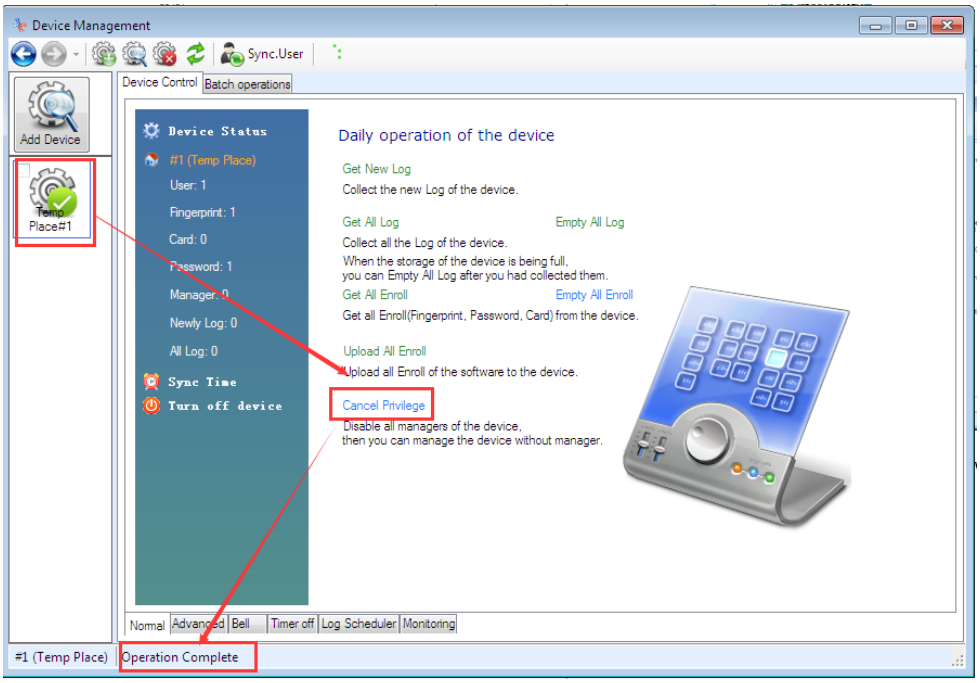
① Connect the device and PC to the same LAN. (Please choose TCP/IP communication.)

② Open the RAMS software → select [Device Management] and add the device as below:





③When the device connected to the software successfully, click “Cancel Privilege”. If the bottom left shows “Operation Complete”, the admin is removed.



④ If you need you enroll a new admin, please refer to the enrollment details above.

6.2.2 Remove by Hardware

You could remove the admin privilege by pressing a key on the mainboard.

Steps:

Disassemble the device → press the button ‘KEY5’ on the mainboard → press ‘OK’ button