DS-K1T8105 Series Face Recognition Terminal

Legal Information

User Manual

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During the use of device, personal data will be collected, stored and processed. To protect data, the development of Hikvision devices incorporates privacy by design principles. For example, for

device with facial recognition features, biometrics data is stored in your device with encryption method; for fingerprint device, only fingerprint template will be saved, which is impossible to reconstruct a fingerprint image.

As data controller, you are advised to collect, store, process and transfer data in accordance with the applicable data protection laws and regulations, including without limitation, conducting security controls to safeguard personal data, such as, implementing reasonable administrative and physical security controls, conduct periodic reviews and assessments of the effectiveness of your security controls.

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
Danger	Indicates a hazardous situation which, if not avoided, will or could result in death or serious injury.
Caution	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
Note	Provides additional information to emphasize or supplement important points of the main text.

Regulatory Information

FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
FCC compliance: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help
This equipment should be installed and operated with a minimum distance 20cm between the radiator and your body.
FCC Conditions
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

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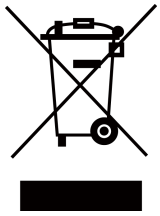
This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2014/30/EU, RE Directive 2014/53/EU,the RoHS Directive 2011/65/EU

2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment,

or dispose of it at designated collection points. For more information see: www.recyclethis.info



2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see:www.recyclethis.info

(1) 이 기기는 가정용으로 전자파적합등록을 한 기기로서 주거지역에서는 물론 모든 지역에서 사용할 수 있습니다。

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This equipment is intended to be supplied from the Class 2 surge protected power source rated DC 12V, 2A.

Safety Instruction

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss.

The precaution measure is divided into Dangers and Cautions:

Dangers: Neglecting any of the warnings may cause serious injury or death.

Cautions: Neglecting any of the cautions may cause injury or equipment damage.

⚠	⚠
Dangers: Follow these safeguards to prevent serious injury or death.	**Cautions:** Follow these precautions to prevent potential injury or material damage.

⚠ Danger:

- All the electronic operation should be strictly compliance with the electrical safety regulations, fire prevention regulations and other related regulations in your local region.
- Please use the power adapter, which is provided by normal company. The power consumption cannot be less than the required value.
- Do not connect several devices to one power adapter as adapter overload may cause over-heat or fire hazard.
- Please make sure that the power has been disconnected before you wire, install or dismantle the device.
- When the product is installed on wall or ceiling, the device shall be firmly fixed.
- If smoke, odors or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.
- 1. Risk of explosion if the battery is replaced by an incorrect type
  2. Improper replacement of the battery with an incorrect type may defeat a safeguard (for example, in the case of some lithium battery types).
  3. This equipment is not suitable for use in locations where children are likely to be present.
  4. Do not dispose of the battery into fire or a hot oven, or mechanically crush or cut the battery, which may result in an explosion.
  5. Do not leave the battery in an extremely high temperature surrounding environment, which may result in an explosion or the leakage of flammable liquid or gas.
  6. Do not subject the battery to extremely low air pressure, which may result in an explosion or the leakage of flammable liquid or gas.
  7. Dispose of used batteries according to the instructions
- If the product does not work properly, please contact your dealer or the nearest service center. Never attempt to disassemble the device yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)

⚠ Cautions:

- Do not drop the device or subject it to physical shock, and do not expose it to high electromagnetism radiation. Avoid the equipment installation on vibrations surface or places subject to shock (ignorance can cause equipment damage).
- Do not place the device in extremely hot (refer to the specification of the device for the detailed operating temperature), cold, dusty or damp locations, and do not expose it to high electromagnetic radiation.
- The device cover for indoor use shall be kept from rain and moisture.
- Exposing the equipment to direct sun light, low ventilation or heat source such as heater or radiator is forbidden (ignorance can cause fire danger).
- Do not aim the device at the sun or extra bright places. A blooming or smear may occur otherwise (which is not a malfunction however), and affecting the endurance of sensor at the same time.
- Please use the provided glove when open up the device cover, avoid direct contact with the device cover, because the acidic sweat of the fingers may erode the surface coating of the device cover.
- Please use a soft and dry cloth when clean inside and outside surfaces of the device cover, do not use alkaline detergents.
- Please keep all wrappers after unpack them for future use. In case of any failure occurred, you need to return the device to the factory with the original wrapper. Transportation without the original wrapper may result in damage on the device and lead to additional costs.
- Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.
- Biometric recognition products are not 100% applicable to anti-spoofing environments. If you require a higher security level, use multiple authentication modes.
- Input voltage should meet both the SELV (Safety Extra Low Voltage) and the Limited Power Source with 100~240 VAC or 12 VDC according to the IEC60950-1 standard. Please refer to technical specifications for detailed information.

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Chapter 1 Overview

1.1 Overview

Face recognition terminal is a kind of access control device for face recognition, which is mainly applied in security access control systems, such as logistic centers, airports, university campuses, alarm centrals, dwellings, etc.

1.2 Features

- Wall mounting and base mounting
- 5-inch LCD touch screen to display operation interface
- 0.3 MP wide-angle lens
- Face recognition distance: 0.3 m to 1 m
- High performance processor with deep learning algorithm
- Face capacity: 1600
- Multiple authentication modes
- Applies data to the device via TCP/IP or uploading data to the device via the USB flash drive
- Stand-alone operation
- Multiple languages: English, Thai, Spanish, and Arabic
- Supported attendance status: check in, check out, break out, break in, overtime in, and overtime out
- Transmits and saves the comparing results and the captured face picture to the client software or others
- Supports TCP/IP, and Wi-Fi communication
- Connects to external access controller or card reader via Wiegand communication
- Connects to secure door control unit via RS-485 communication to avoid the door opening when the terminal is destroyed
- Watchdog design for protecting the device and ensuring device running properly
- Voice prompt

Chapter 2 Appearance

You can view the device appearance introduction and their descriptions.

Refer to the following contents for detailed information of the face recognition terminal.

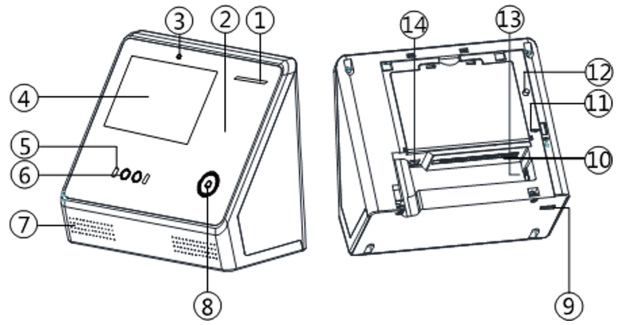


Figure 2-1 Appearance of Face Recognition Terminal

Table 2-1 Face Picture Parameters

No.	Name	Description
1	Indicator	Solid Red: Standby.
		Flashing Red: Authentication failed.
		Solid Green: Authentication completed.
		Flashing Green: Authenticating (combined).
2	Card Swiping Area	Swipe card within this area.
3	Sensor	Detect the illumination intensity. When the environment is too dark, the device will enable the supplement light automatically.
4	Display Screen	5-inch LCD touch screen with the resolution of 800 × 480.
5	Supplement Light	Support white light and IR light. Maximum distance for supplement light: 1m.
6	Camera	Support bi-spectrum.
7	Loudspeaker	The part that the sound comes from.

No.	Name	Description
8	Doorbell Button	Hold the button for 3s to power on and the device indicator will light up. After setting the power button function, hold the doorbell button for 3s to power off. **Note** For details about setting the power button function, see *System Settings*.
9	USB Interface	Plug in the USB flash drive and you can import or export the data.
10	Wiring Terminals	Connect to other external devices
11	Reset	While the device is powering on, hold the reset button and the device will restore to the factory settings.
12	TAMPER	The tamper-proof function is enabled after the device is properly mounted. If the device is removed, the alarm will be triggered. You should enter the device activation password to dismiss the alarm.
13	Network Interface	Connect to Ethernet.
14	Power Interface	Connect to power supply.

Chapter 3 Installation

3.1 Installation Environment

- Install the device at least 2 meters away from the light, and at least 3 meters away from the window or the door.
- Make sure the environment illumination is more than 100 Lux.

Note

For details about installation environment, see *Tips for Installation Environment*.

3.2 Install with Gang Box (Wall Mounting)

You can install the terminal with gang box on the wall or other surfaces.

Steps

1. According to the baseline on the mounting template, stick the mounting template on the wall or other surface, 1.1 meters higher than the ground.

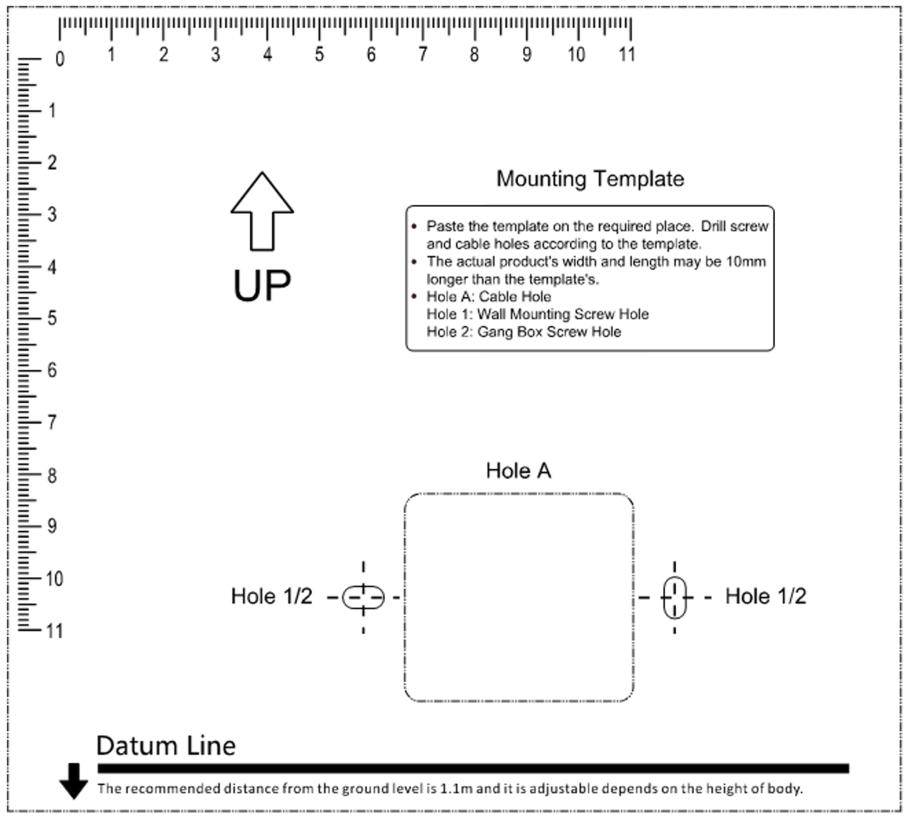


Figure 3-1 Mounting Template

2. Drill holes on the wall or other surface according to the mounting template and install the gang box (80 mm × 80 mm).
3. Use two supplied screws to secure the mounting plate on the gang box.
4. Remove the two screws at the bottom of the device.
5. Align the terminal with the mounting plate and buckle them together.
6. Use a hex wrench to fasten the two screws at the bottom.

Note

- The installation height here is the recommended height. You can change it according to your actual needs.
- For easy installation, drill holes on mounting surface according to the supplied mounting template.

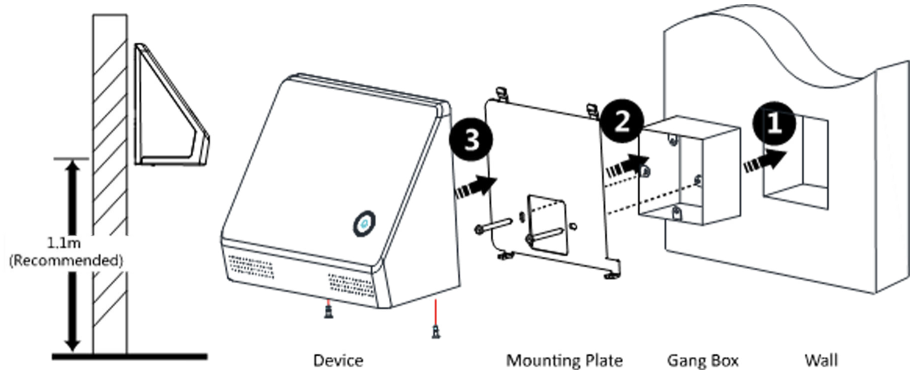


Figure 3-2 Installation with Gang Box Diagram

3.3 Install without Gang Box (Wall Mounting)

You can install the terminal without gang box on the wall or other surfaces.

Steps

1. According to the baseline on the mounting template, stick the mounting template on the wall or other surface, 1.1 meters higher than the ground.

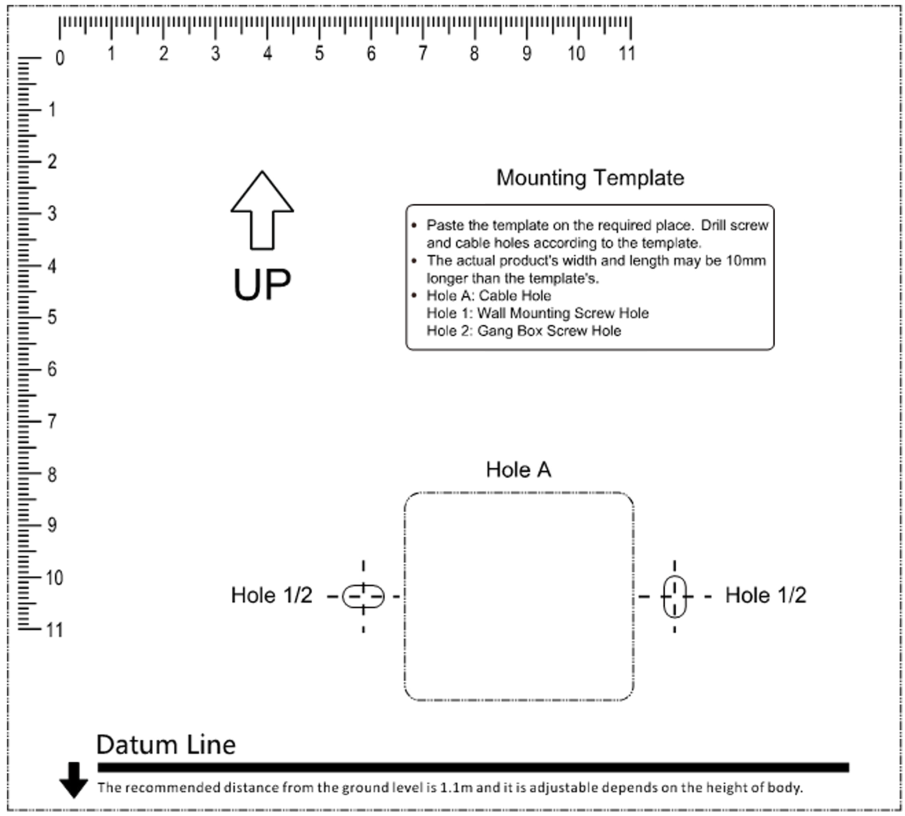


Figure 3-3 Mounting Template

2. Drill holes on the wall or other surface according to the mounting template.
3. Insert the screw sockets of the setscrews in the drilled holes.

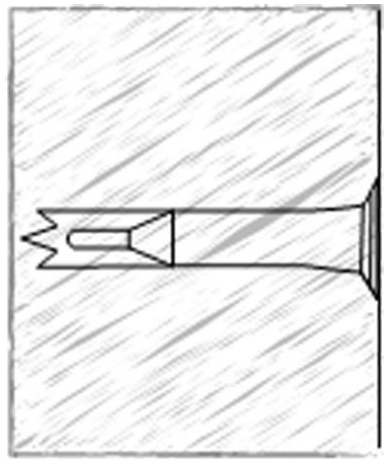


Figure 3-4 Insert Screw Socket

4. Align the two holes to the mounting plate with the drilled holes.
5. Fix and fasten the screws in the sockets on the wall or other surface.
6. Remove the two screws at the bottom of the device.
7. Align the terminal with the mounting plate and buckle them together.

8. Use a hex wrench to fasten the two screws at the bottom.

Note

- The installation height here is the recommended height. You can change it according to your actual needs.
- For easy installation, drill holes on mounting surface according to the supplied mounting template.

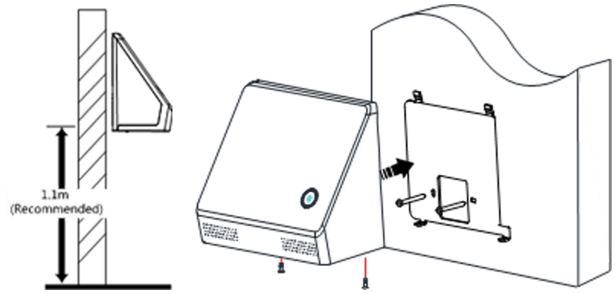


Figure 3-5 Installation without Gang Box Diagram

Chapter 4 Wiring

The device supports connecting to the RS-485 terminal, the door lock, the exit button, the alarm output/input devices, the Wiegand card reader, the access controller, and the power supply. You can wire the peripherals according to the descriptions below.

If connect the Wiegand card reader with the access controller, the face recognition terminal can transmit the authentication information to the access controller and the access controller can judge whether to open the door or not.

Note

- If the cable size is 18 AWG, you should use a 12 V switched-mode power supply. And the distance between the power supply and the device should be no more than 20 m.
- If the cable size is 15 AWG, you should use a 12 V switched-mode power supply. And the distance between the power supply and the device should be no more than 30 m.
- If the cable size is 12 AWG, you should use a 12 V switched-mode power supply. And the distance between the power supply and the device should be no more than 40 m.

4.1 Wire Normal Device

You can connect the terminal with normal peripherals.

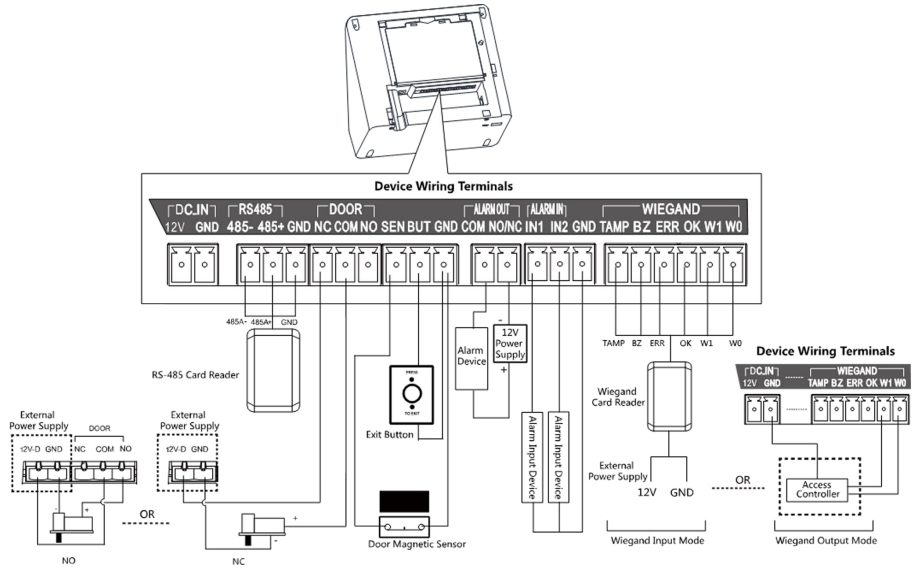


Figure 4-1 Device Wiring

Note

- You should set the face recognition terminal's Wiegand direction as **Input** to connect to a Wiegand card reader. If connects to an access controller, you should set the Wiegand direction as **Output** to transmit authentication information to the access controller.
- For details about Wiegand direction settings, see .
- Do not wire the device to the electric supply directly.

4.2 Wire Secure Door Control Unit

You can connect the terminal with the secure door control unit.

The wiring diagram is as follows.

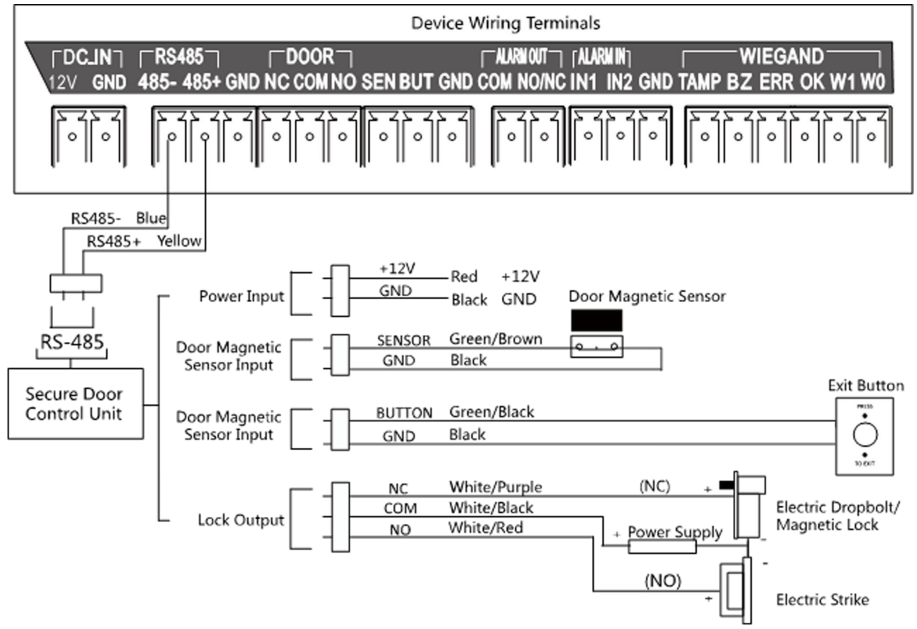


Figure 4-2 Secure Door Control Unit Wiring

Note

The secure door control unit should connect to an external power supply separately. The suggested external power supply is 12V, 0.5A.

Chapter 5 Activation

You should activate the device before the first login. After powering on the device, the system will switch to Device Activation page.

Activation via the device, SADP tool and the client software are supported.

The default values of the device are as follows:

- The default IP address: 192.0.0.64
- The default port No.: 8000
- The default user name: admin

5.1 Activate via Device

If the device is not activated, you can activate the device after it is powered on.

On the Activate Device page, create a password and confirm the password. Tap **Activate** and the device will activated.

Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.
Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

5.2 Activate via SADP

SADP is a tool to detect, activate and modify the IP address of the device over the LAN.

Before You Start

- Get the SADP software from the supplied disk or the official website ***http://www.hikvision.com/en/*** , and install the SADP according to the prompts.
- The device and the PC that runs the SADP tool should be within the same subnet.

The following steps show how to activate a device and modify its IP address. For batch activation and IP addresses modification, refer to *User Manual of SADP* for details.

Steps

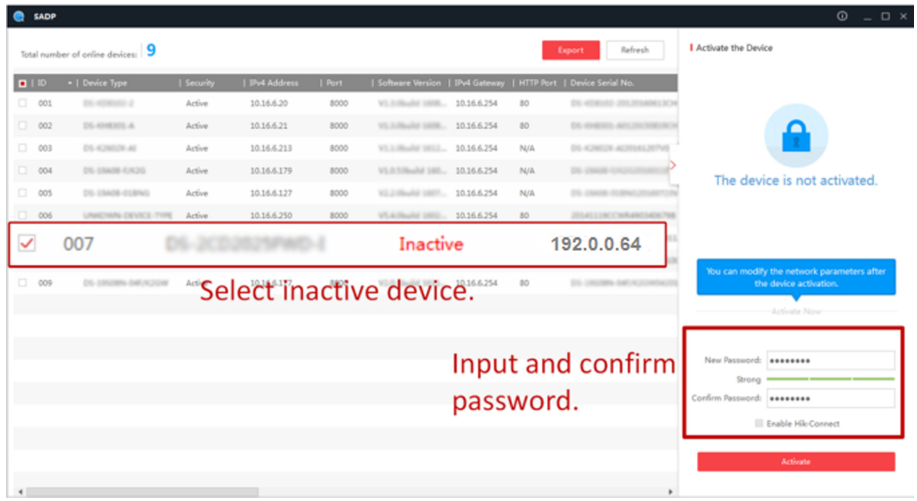
1. Run the SADP software and search the online devices.
2. Find and select your device in online device list.

3. Input new password (admin password) and confirm the password.

Caution

STRONG PASSWORD RECOMMENDED-We highly recommend you create a strong password of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

4. Click **Activate** to start activation.



Status of the device becomes **Active** after successful activation.

5. Modify IP address of the device.
   1) Select the device.
   2) Change the device IP address to the same subnet as your computer by either modifying the IP address manually or checking **Enable DHCP**.
   3) Input the admin password and click **Modify** to activate your IP address modification.

5.3 Activate Device via Client Software

For some devices, you are required to create the password to activate them before they can be added to the software and work properly.

Steps

Note

This function should be supported by the device.

1. Enter the Device Management page.
2. Click on the right of **Device Management** and select **Device**.
3. Click **Online Device** to show the online device area.

The searched online devices are displayed in the list.

4. Check the device status (shown on **Security Level** column) and select an inactive device.
5. Click **Activate** to open the Activation dialog.
6. Create a password in the password field, and confirm the password.

Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.
Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

7. Click **OK** to activate the device.

Chapter 6 Basic Operation

6.1 Login

You should enter the system backend first before setting the device parameters.

First Login

If it is the first time to login, tap the settings icon at the lower right of the initial page and enter the device activation password on the Input Password page. Tap **OK** to enter the home page.

Administrator Login

If the administrator is added, tap the settings icon at the lower right of the initial page. Select a login type and complete the authentication to enter the home page.

Note

- The device will be locked for 30 minutes after 5 failed password attempts.
- For details about setting the administrator authentication mode, see *Adding User*.

6.2 Communication Settings

You can set the network parameters, the Wi-Fi parameter, the RS-485 parameters, and the Wiegand parameters on the communication settings page.

6.2.1 Set Network Parameters

You can set the device network parameters, including the IP address, the subnet mask, and the gateway.

Steps

1. Tap **Comm.** (Communication Settings) on the Home page to enter the Communication Settings page.
2. On the Communication Settings page, tap **Network** to enter the Network tab.

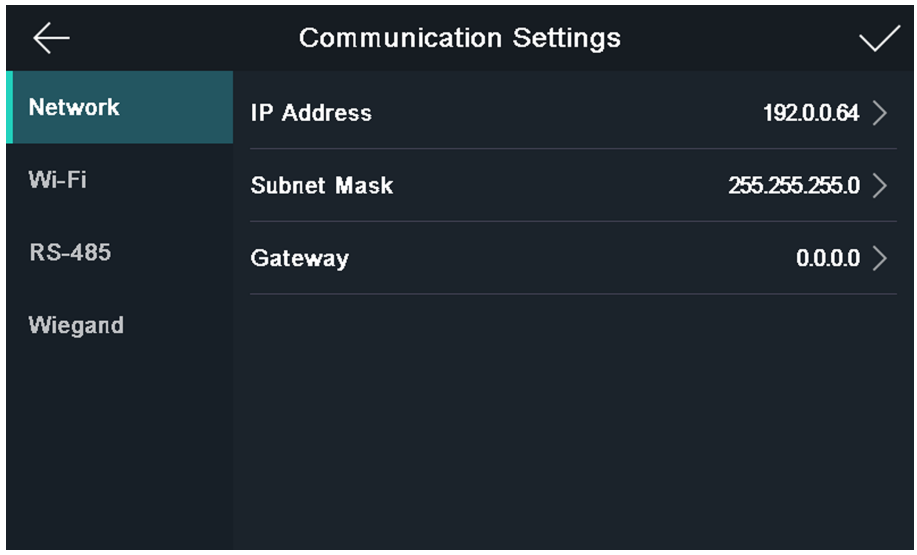


Figure 6-1 Network Settings

3. Tap IP Address, Subnet Mask, or Gateway and input the parameters.
4. Tap **OK** to save the settings.

Note

The device's IP address and the computer IP address should be in the same IP segment.

5. Tap ✓ to save the network parameters.

6.2.2 Set Wi-Fi Parameters

You can enable the Wi-Fi function and set the Wi-Fi related parameters.

Steps

1. Tap **Comm.** (Communication Settings) on the Home page to enter the Communication Settings page.
2. On the Communication Settings page, tap **Wi-Fi** to enter the Wi-Fi tab.

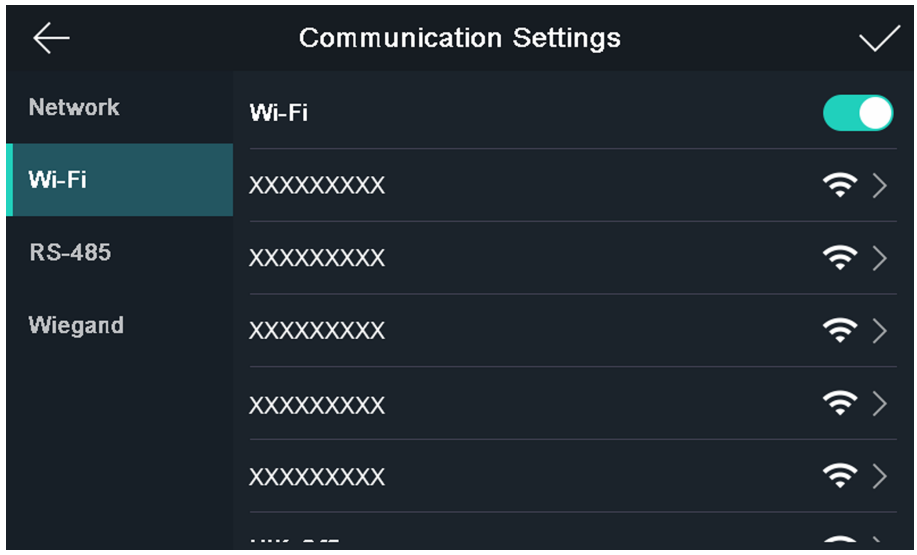


Figure 6-2 Wi-Fi Settings

3. Enable the Wi-Fi function.
4. Select a Wi-Fi in the list to enter the Wi-Fi parameters settings page.
5. Select an IP mode.
   - If selecting **Static**, you should input the Wi-Fi password, IP address, subnet mask and gateway.
   - If selecting **Dynamic**, you should input the Wi-Fi password.

Note

Numbers, upper case letters, lower case letters, and special characters are allowed in the Wi-Fi password.

6. Tap **OK** to save the settings and go back to the Wi-Fi tab.
7. Tap ✓ to save the network parameters.

6.2.3 Set RS-485 Parameters

The face recognition terminal can connect secure door control unit via the RS-485 terminal.

Steps

1. Tap **Comm.** (Communication Settings) on the Home page to enter the Communication Settings page.
2. On the Communication Settings page, tap **RS-485** to enter the RS-485 tab.
3. Select an external device according to your actual needs.

Note

- Unit represents the secure door control unit.
- Set the RS-485 address as 2 if you need to connect an access controller or card reader.

4. Tap ✓ to save the network parameters.

Note

If you change the external device, and after you save the device parameters, the device will reboot automatically.

6.2.4 Set Wiegand Parameters

You can set the Wiegand transmission direction and the Wiegand mode.

Steps

1. Tap **Comm.** (Communication Settings) on the Home page to enter the Communication Settings page.
2. On the Communication Settings page, tap **Wiegand** to enter the Wiegand tab.

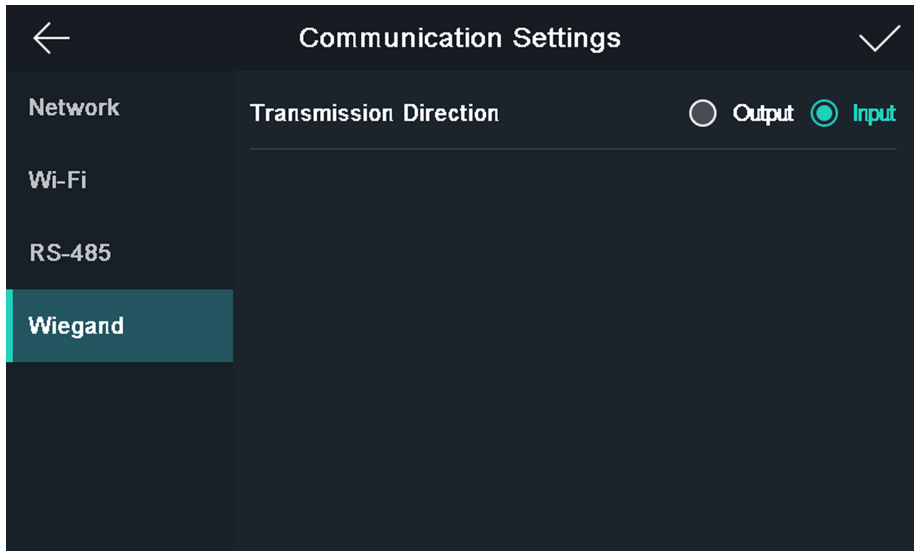


Figure 6-3 Wiegand Settings

3. Select the transmission direction and its mode.
   - Output: A face recognition terminal can connect an external access controller. And the two devices will transmit the card No. via Wiegand 26 or Wiegand 34 mode.
   - Input: A face recognition terminal can connect a Wiegand card reader. And there is no need to set the Wiegand mode.
4. Tap ✓ to save the network parameters.

Note

If you change the external device, and after you save the device parameters, the device will reboot automatically.

6.3 User Management

On the user management interface, you can add, edit, delete and search the user.

6.3.1 Add Face Picture

Add user's face picture to the device. And the user can use the face picture to authenticate.

Steps

Note

Up to 3000 face pictures can be added.

1. Tap **User → +** to enter the Add User page.
2. Edit the employee ID.

   Note

   - The employee ID should be less than 32 characters. And it can be a combination of lower letters, upper letters, and numbers.
   - The employee ID should not start with 0 and should not be duplicated.

3. Tap the Name field and input the user name on the soft keyboard.

   Note

   - Numbers, upper case letters, lower case letters, and special characters are allowed in the user name.
   - Up to 32 characters are allowed in the user name.

4. Tap the Face Picture field to enter the face picture adding page.

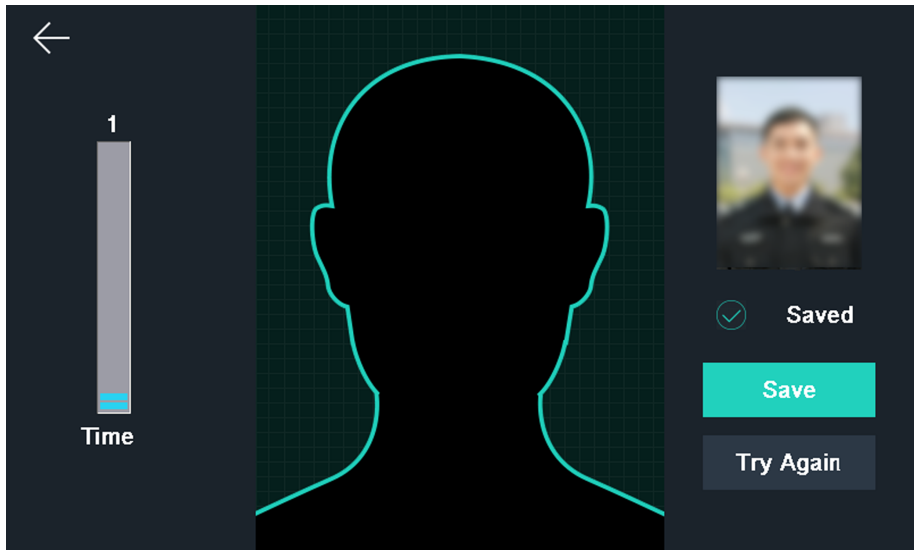


Figure 6-4 Add Face Picture

5. Position your face looking at the camera.

Note

- Make sure your face picture is in the face picture outline when adding the face picture.
- Make sure the captured face picture is in good quality and is accurate.
- For details about the instructions of adding face pictures, see *Tips When Collecting/ Comparing Face Picture*.

After completely adding the face picture, a captured face picture will be displayed at the upper right corner of the page.

6. Tap **Save** to save the face picture.
7. **Optional:** Tap **Try Again** and adjust your face position to add the face picture again.

Note

The maximum duration for adding a face picture is 15s. You can check the remaining time for adding a face picture on the left of the page.

8. Enable or disable the Administrator Permission function.

Enable Administrator Permission

The user is the administrator. Except for the normal attendance function, the user can also enter the Home page to operate after authenticating the permission.

Disable Administrator Permission

The User is the normal user. The user can only authenticate or take attendance on the initial page.

9. **Optional:** Tap the Schedule Template field, select a schedule template and save the settings.
10. Tap ✓ to save the settings.

6.3.2 Add Card

Add a card for the user and the user can authenticate via the added card.

Steps

Note

Up to 5000 cards can be added.

1. Tap **User → +** to enter the Add User page.
2. Tap the Employee ID. field and edit the employee ID.

   Note

   - The employee ID should be less than 32 characters. And it can be a combination of lower letters, upper letters, and numbers.
   - The employee ID should not start with 0 and should not be duplicated.

3. Tap the Name field and input the user name on the soft keyboard.

   Note

   - Numbers, upper case letters, lower case letters, and special characters are allowed in the user name.
   - Up to 32 characters are allowed in the user name.

4. Tap the Card field and input the card No.
5. Configure the card No.
   - Enter the card No. manually.
   - Swipe the card over the card swiping area to get the card No.

   Note

   - The card No. cannot be empty.
   - Up to 20 characters are allowed in the card No.
   - The card No. cannot be duplicated.

6. **Optional:** Enable the Duress Card function. The added card

   When the user authenticates by swiping this duress card, the device will upload an duress card event to the client software.

7. Enable or disable the Administrator Permission function.

   Enable Administrator Permission

   The user is the administrator. Except for the normal attendance function, the user can also enter the Home page to operate after authenticating the permission.

   Disable Administrator Permission

The User is the normal user. The user can only authenticate or take attendance on the initial page.

8. **Optional:** Tap the Schedule Template field, select a schedule template and save the settings.
9. Tap ✓ to save the settings.

6.3.3 Add Password

Add a password for the user and the user can authenticate via the password.

Steps

1. Tap **User → +** to enter the Add User page.
2. Tap the Employee ID. field and edit the employee ID.

Note

- The employee ID should be less than 32 characters. And it can be a combination of lower letters, upper letters, and numbers.
- The employee ID should not start with 0 and should not be duplicated.

3. Tap the Name field and input the user name on the soft keyboard.

Note

- Numbers, upper case letters, lower case letters, and special characters are allowed in the user name.
- Up to 32 characters are allowed in the user name.

4. Tap the Password field and create a password and confirm the password.

Note

- Only numbers are allowed in the password.
- Up to 8 characters are allowed in the password.

5. Enable or disable the Administrator Permission function.

Enable Administrator Permission

The user is the administrator. Except for the normal attendance function, the user can also enter the Home page to operate after authenticating the permission.

Disable Administrator Permission

The User is the normal user. The user can only authenticate or take attendance on the initial page.

6. **Optional:** Tap the Schedule Template field, select a schedule template and save the settings.
7. Tap ✓ to save the settings.

6.3.4 Set Authentication Mode

After adding the user's face picture, password, or other credentials, you should set the authentication mode and the user can authenticate his/her identity via the configured authentication mode.

Steps

1. Long tap on the initial page and login.
2. Tap **User → Add User/Edit User → Authentication Mode** .
3. Select Device or Custom as the authentication mode.

   Device

   If you want to select device mode, you should set the terminal authentication mode in Access Control Settings page first. For details see *Setting Access Control Parameters*.

   Custom

   You can combine different authentication modes together according to your actual needs.
4. Tap ✓ to save the settings.

6.3.5 Search and Edit User

After adding the user, you can search the user and edit it.

Search User

On the User Management page, Tap the search area to enter the Search User page. Tap **Card** on the left of the page and select a search type from the drop-down list. Enter the employee ID, card No., or the user name for search. Tap 🔍 to search.

Edit User

On the User Management page, select a user from the user list to enter the Edit User page. Follow the steps in ***User Management*** to edit the user parameters. Tap ✓ to save the settings.

Note

The employee ID cannot be edited.

6.4 Import and Export Data

On the Transfer page, you can export the attendance data, the user data, the user picture, the access control parameter, and the captured picture to the USB flash drive. You can also import the user data, the user picture, and the access control parameter from the USB flash drive.

6.4.1 Export Data

Steps

1. Tap **Transfer** on the Home page to enter the Transfer page.

Figure 6-5 Transfer Page

2. On the Transfer page, tap Export Att. Data, Export User Data, Export User Profile Photo, Export Access Control Param., or Export Captured Pic.
3. Tap **Yes** on the pop-up page and the data will be exported from the device to the USB flash drive.

Note

- The supported USB flash drive format is FAT 32.
- The system supports the USB flash drive with the storage of 1G to 32G. Make sure the free space of the USB flash drive is more than 512M.
- The exported user data is a BIN file, which cannot be edited.

6.4.2 Import Data

Steps

1. Plug a USB flash drive in the device.
2. On the Transfer page, tap Import User Data, Import User Profile Photo, or Import Access Control Param.
3. Tap **Yes** on the pop-up window and the data will be imported from the USB flash drive to the device.
   - If you want to transfer all user information from one device (Device A) to another (Device B), you should export the information from Device A to the USB flash drive and then import from

the USB flash drive to Device B. In this case, you should import the user data before importing the profile photo.
- The supported USB flash drive format is FAT 32.
- The imported picture should be saved in the folder (named enroll_pic) of the root directory and the picture's name should be follow the rule below:
  Card No._Name_Department_Employee ID_Gender.jpg
- The employee ID should between 1 and 99999999, should not be duplicated, and should not start with 0.
- Requirements of face picture: It should be taken in full-face view, directly facing the camera. Do not wear a hat or head covering when taking the face picture. The format should be JPEG or JPG. The resolution should be more than 640 × 480 pixel and less than 2160 × 3840 pixel. The picture size should be between 40 KB and 200 KB.

6.5 Time and Attendance Status Settings

Set time and attendance status. You can set the attendance mode as check in, check out, break out, break in, overtime in, and overtime out according to your actual situation.

Note

The function should be used cooperatively with time and attendance function on the client software.

6.5.1 Set Manual Attendance via Device

Set the attendance mode as manual, and you can select a status manually when you take attendance.

Before You Start

Add at least one user, and set the user's authentication mode. For details, see *User Management*.

Steps

1. Tap **T&A Status** to enter the T&A Status page.
2. Set the **Attendance Mode** as **Manual**.

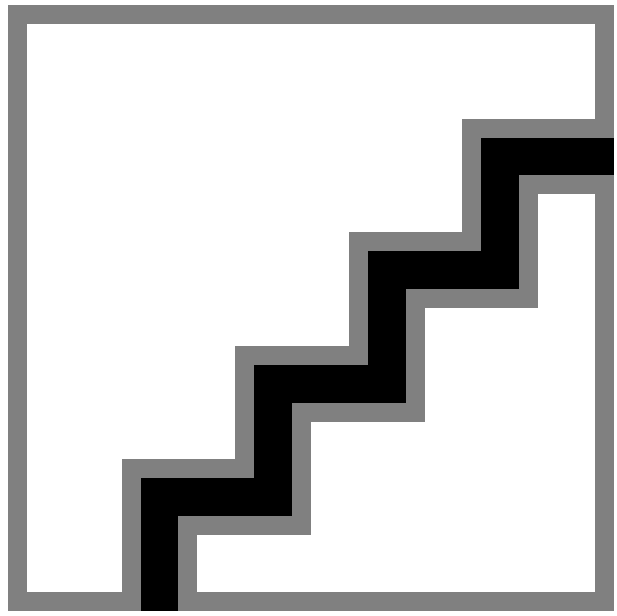


Figure 6-6 Manual Attendance Mode

3. Enable the **Attendance Status** function.

Result

You should select the attendance status manually after authentication.

Note

If you do not select a status, the authentication will be failed and it will not be marked as a valid attendance.

6.5.2 Set Auto Attendance via Device

Set the attendance mode as auto, and you can set the attendance status and its available schedule. The system will automatically change the attendance status according to the configured parameters.

Before You Start

Add at least one user, and set the user's authentication mode. For details, see *User Management*.

Steps

1. Tap **T&A Status** to enter the T&A Status page.

2. Set the **Attendance Mode** as **Auto**.

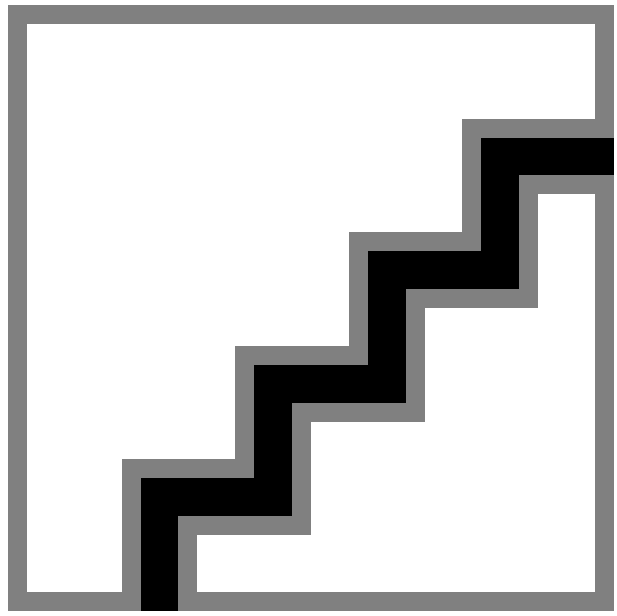


Figure 6-7 Auto Attendance Mode

3. Select an attendance status and set its schedule.
   1) Select **Check In**, **Check Out**, **Break Out**, **Break In**, **Overtime In**, or **Overtime Out** as the attendance status.
   2) Tap **Schedule**.
   3) Select **Monday**, **Tuesday**, **Wednesday**, **Thursday**, **Friday**, **Saturday**, or **Sunday**.
   4) Tap the select date and set the selected attendance status's start time.
   5) Tap **Confirm**.
   6) Repeat step 1 to 5 according to your actual needs.

Note

The attendance status will be valid within the configured schedule.

4. Tap ✓.

Result

When you authenticate on the initial page, the authentication will be marked as the configured attendance status according to the configured schedule.

Example

If set the **Break Out Schedule** as Monday 11:00, and **Break In Schedule** as Monday 12:00, the valid user's authentication from Monday 11:00 to 12:00 will be marked as break.

6.5.3 Set Manual and Auto Attendance via Device

Set the attendance mode as **Manual and Auto**, and the system will automatically change the attendance status according to the configured parameters. At the same time you can manually change the attendance status after the authentication.

Before You Start
Add at least one user, and set the user's authentication mode. For details, see *User Management*.

Steps
1. Tap **T&A Status** to enter the T&A Status page.
2. Set the **Attendance Mode** as **Manual and Auto**.

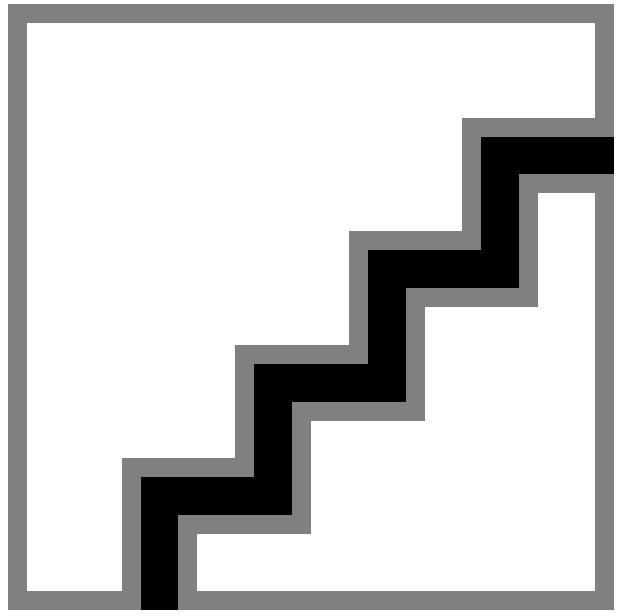


Figure 6-8 Manual and Auto Mode

3. Select an attendance status and set its schedule.
   1) Select **Check In**, **Check Out**, **Break Out**, **Break In**, **Overtime In**, or **Overtime Out** as the attendance status.
   2) Tap **Schedule**.
   3) Select **Monday**, **Tuesday**, **Wednesday**, **Thursday**, **Friday**, **Saturday**, or **Sunday**.
   4) Tap the select date and set the selected attendance status's start time.
   5) Tap **Confirm**.
   6) Repeat step 1 to 5 according to your actual needs.

Note

The attendance status will be valid within the configured schedule.

4. Tap ✓.

Result

On the initial page and authenticate. If you do not select a status, the authentication will be marked as the configured attendance status according to the schedule. If you tap **Select Status** and select a status to take attendance, the authentication will be marked as the selected attendance status.

Example
If set the **Break Out Schedule** as Monday 11:00, and **Break In Schedule** as Monday 12:00, the valid user's authentication from Monday 11:00 to 12:00 will be marked as break.

6.5.4 Disable Attendance Mode via Device

Disable the attendance mode and the system will not display the attendance status on the initial page.

Tap **T&A Status** to enter the T&A Status page.

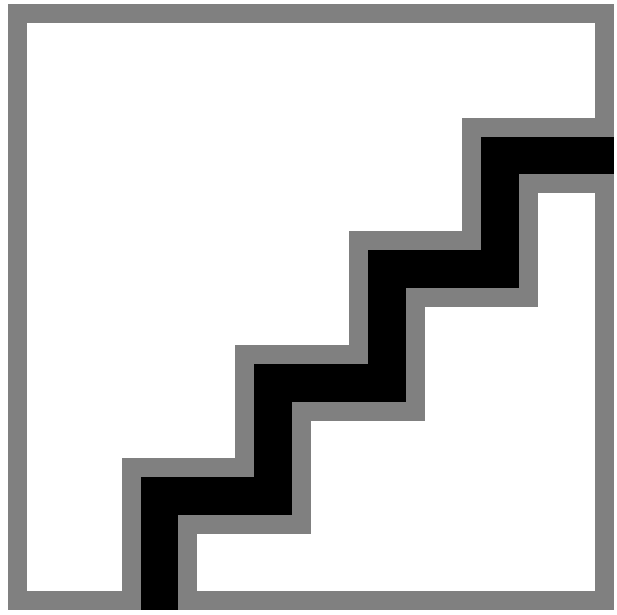


Figure 6-9 Disable Attendance Mode

Set the **Attendance Mode** as **Disable**. And tap ✓ .

You will not view or configure the attendance status on the initial page. And the system will follow the attendance rule that configured on the platform.

6.6 Identity Authentication

After network configuration, system parameters configuration and user configuration, you can go back to the initial page for identity authentication. The system will authenticate person according to the configured authentication mode.

You can authenticate identity via 1:1 matching or 1:N matching.

1:N Matching

Compare the captured face picture with all face pictures stored in the device.

1: 1 Matching

When swiping card, compare the captured face picture with the information stored in the card.

6.6.1 Authenticate via 1:1 Matching

Steps

1. On the Initial page, tap 1:1 at the lower right corner of the page to enter the 1:1 matching page.
2. Input the employee ID.
3. Select an authentication type to authenticate via face picture or password.

Note

Tap to switch to the password entering page. You can enter the super password or duress code to authenticate.

6.6.2 Authenticate via Other Types

Steps

1. According to the configured authentication mode, authenticate by comparing face pictures or by swiping card.

   Face Picture Authentication

   Stand in front of the device. Position your face looking at the camera and the device will enter the face picture authentication mode.

   Note

   For detailed information about authenticating face picture, see *Tips When Collecting/ Comparing Face Picture*.

   Authentication by Swiping Card

   Swipe card above the card swiping area.

2. If the user has no other authentication modes, the authentication is completed. If the user has other authentication modes after the first authentication, follow the instructions to continue authenticating until the authentication is completed.

6.7 System Settings

On the System Settings page, you can set the system basic parameters, set the face picture parameters, and upgrade the firmware.

6.7.1 Set Basic Parameters

You can set the device ID, time format, keyboard sound, voice prompt, voice volume, application mode, power button, auto enable supplement light, brightness, language, and threshold for auto enabling Supplement Light.

On the Home page, tap **System** (System Settings) to enter the System Settings page.

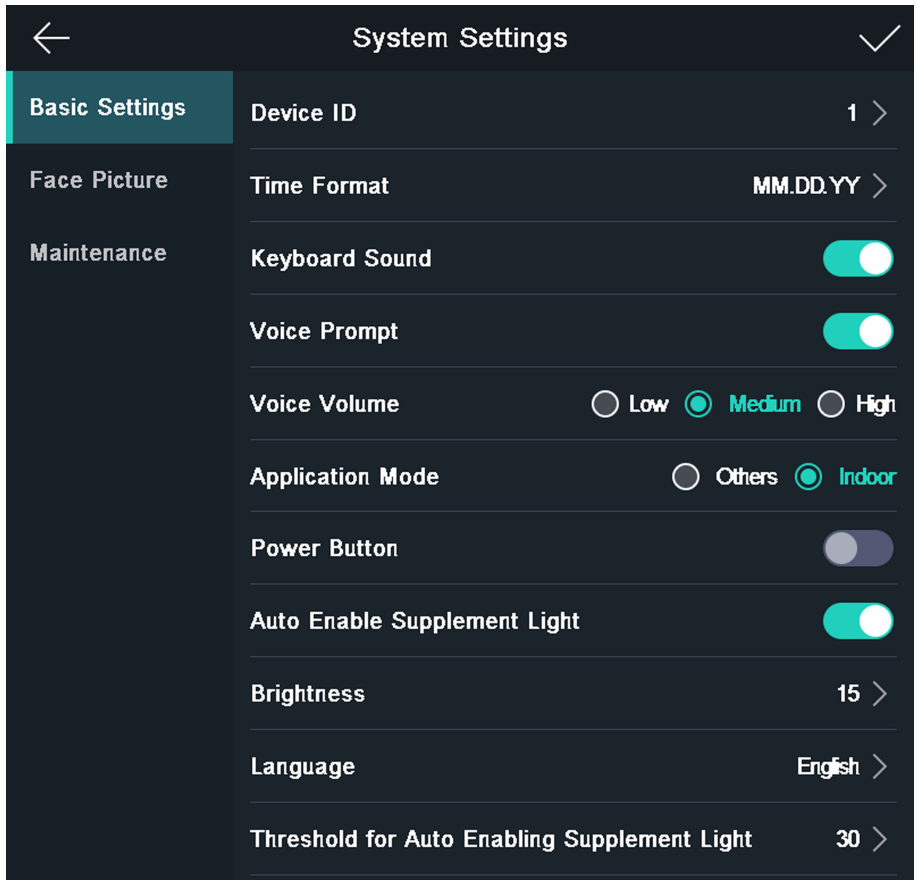


Figure 6-10 Basic Parameters

Parameter	Description
Device ID	Set the face recognition terminal's device ID No. The device ID is the DIP address for the communication between the device and the access controller if the device should connect to an access controller via RS-485 protocol.
Time Format	You can select one of the following formats: MM/DD/YYYY, MM.DD.YYYY, DD-MM-YYYY, DD/MM/YYYY, DD.MM.YYYY, YYYYMMDD, YY-MM-DD, YY/MM/DD, and MM-DD-YYYY.
Keyboard Sound	Tap or to disable or enable the keyboard sound.
Voice Prompt	Tap or to disable or enable the voice prompt.
Voice Volume	Adjust the voice volume. The larger the value, the louder the volume.
Application Mode	You can select either others or indoor according to actual environment.
Power Button	Namely, it is the doorbell button. Tap or to disable or enable the function. If enabling the function, hold the doorbell button for 3s to power off. If disabling the function, the doorbell button will not contain the powering off function. **Note** • Some device models do not support the function. • If you power off the device via this button, you should hold the button to power on for the next time.
Auto Enable Supplement Light	If enabling the function, when it is too dark, the supplement light will be turned on automatically. If disabling the function, the supplement light will be on all the time.
Brightness	You can set the supplement light's brightness. The brightness ranges from 0 to 100. 0 refers to turning off the light. 1 refers to the darkest light, and 100 refers to the brightest light.
Language	Change the system language. English, Thai, Spanish, and Arabic are available. **Note** The system will auto reboot after you change the language.
Threshold for Auto Enabling Supplement Light	When the auto enable supplement light function is enabled, you can set the illumination threshold. When the illumination is lower than the configured threshold, the supplement light will turned on automatically.

6.7.2 Set Face Picture Parameters

You can set the face picture 1:N security level, 1:1 security level, liveness security level, face recognition interval, duplicated person, live face detection.

On the Home page, tap **System** (System Settings) to enter the System Settings page.

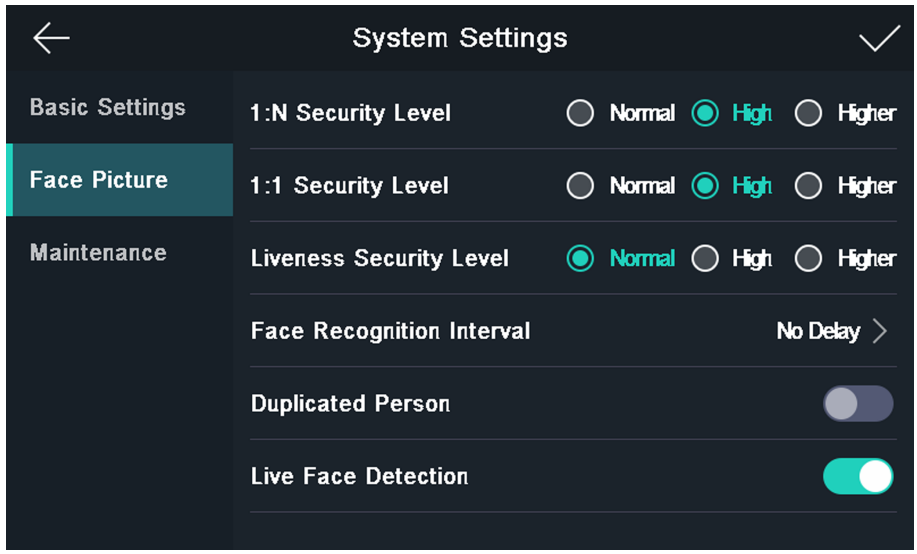


Figure 6-11 Face Picture Parameters

Table 6-1 Face Picture Parameters

Parameter	Description
1:N Security Level	Set the matching security level when authenticating via 1:N matching mode.
1:1 Security Level	Set the matching security level when authenticating via 1:1 matching mode.
Liveness Security Level	After enabling Live Face Detection function, you can set the matching security level when performing live face authentication.
Face Recognition Interval	The time interval between two continuous face recognitions when authenticating. By default, it is 2s. **Note** You can input the number from 1 to 10 or 255. 255 refers to infinite.

Parameter	Description
Duplicated Person	If enabling the function, the system will compare the adding face picture with all pictures in the database when adding a user. If the person already exists in the database, the system will remind you.
Live Face Detection	Enable or disable the live face detection function. If enabling the function, the device can recognize whether the person is a live one or not.

6.7.3 Set Time

You can set the device time and the DST in this section.

Tap **Time** (Time Settings) on the Home page to enter the Time Settings page. Edit the time parameters and tap ✓ to save the settings.

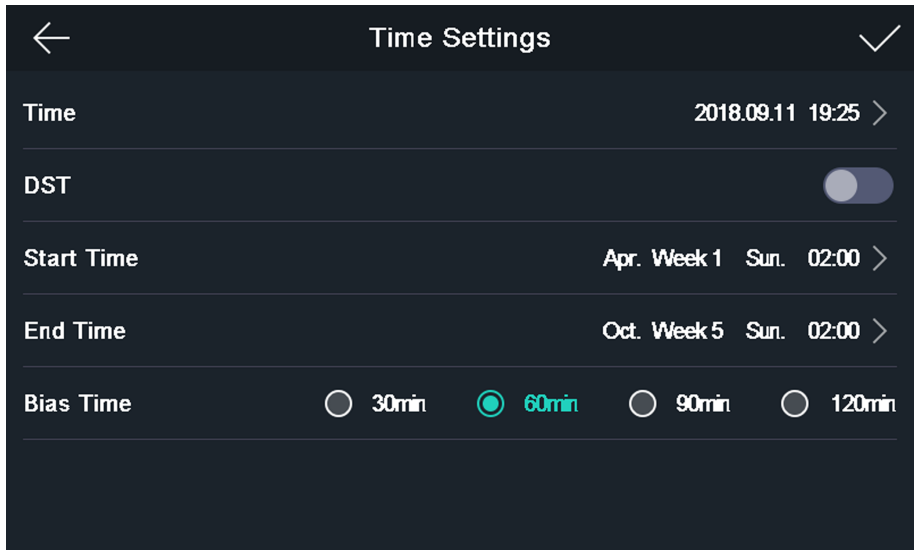


Figure 6-12 Time Parameters

6.8 Set Access Control Parameters

You can set the access control permissions, including the functions of authentication mode, door magnetic sensor, anti-passback, lock locked time, door open timeout alarm, etc.

On the Home page, tap **ACS** (Access Control Settings) to enter the Access Control Settings page. Edit the access control parameters on this page and tap ✓ to save the settings.

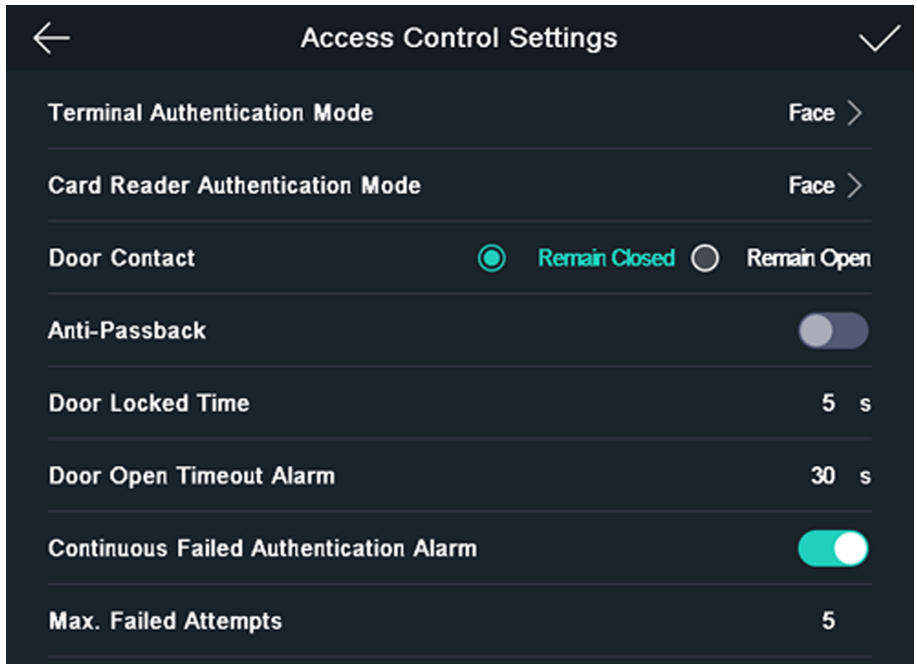


Figure 6-13 Access Control Parameters

The available parameters descriptions are as follows:

Table 6-2 Access Control Parameters Descriptions

Parameter	Description
Terminal Authentication Mode	Select the face recognition terminal's authentication mode. You can also customize the authentication mode. **Note** • Biometric recognition products are not 100% applicable to anti-spoofing environments. If you require a higher security level, use multiple authentication modes. • If you adopt multiple authentication modes, you should authenticate other methods before authenticating face.
Card Reader Authentication Mode	Select the card reader's authentication mode.
Door Contact	You can select "Remain Open" or "Remain Closed" according to your actual needs. By default, it is Remain Closed.
Anti-Passback	When enabling the anti-passback function, you should set the anti-password path in the client software. The person should authenticate according to the configured path. Or the authentication will be failed.

Parameter	Description
Door Locked Time	Set the door unlocking duration. If the door is not opened for the set time, the door will be locked. Available door locked time range: 1 to 255s.
Door Open Timeout Alarm	The alarm can be triggered if the door has not been closed. Available range: 0 to 255s.
Continuous Failed Authentication Alarm	When you enable the function, you can set the maximum authentication times. If you failed to authenticate for the set times, the alarm will be triggered. Available range: 1 to 10.

6.9 Maintenance

6.9.1 Upgrade Firmware

Plug in the USB flash drive. Tap Maint. (Maintenance) on the System Settings page and tap **Upgrade**. The device will automatically read the upgrading file in the USB flash drive and upgrade the firmware.

Note

- Do not power off during the device upgrade.
- The upgrading file should be in the root directory.
- The upgrading file name should be digicap.dav.

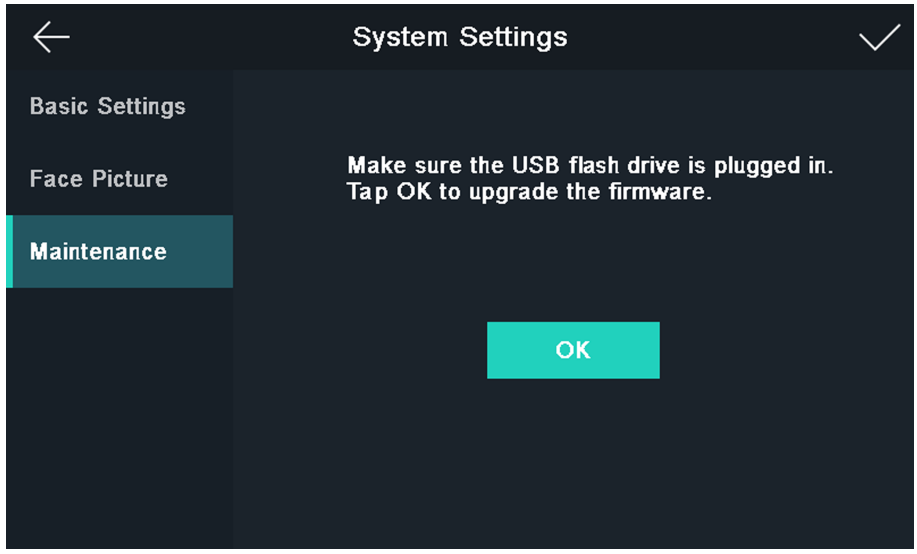


Figure 6-14 Upgrade

6.9.2 Data Management

On the Data Management page, you can delete all events, delete user data, delete all data, clear permission, delete captured pictures, restore to factory settings, or restore to default settings.

Tap **Data** (Data Management) to enter the Data Management page. Tap the button on the page to manage the data. Tap **Yes** on the pop-up window to complete the settings.

The available button descriptions are as follows:

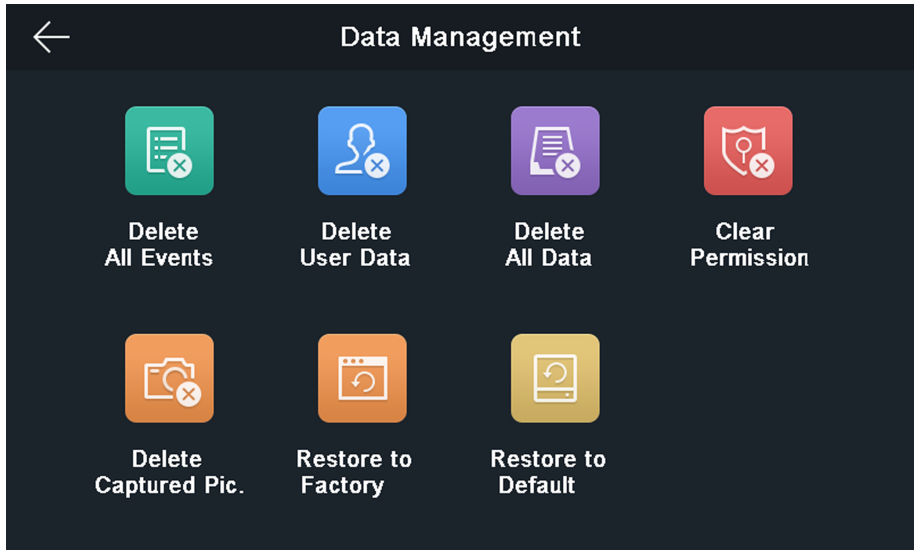


Figure 6-15 Data Management

Table 6-3 Data Descriptions

Parameters	Description
Delete All Events	Delete all events stored in the device.
Clear Permission	Clear the administrator's permission but the administrator and the related logs will not be deleted.
Delete User Data	Delete all user data in the device.
Delete Captured Pic.	Delete the device captured pictured.
Restore to Factory	Restore the system to the factory settings. The device will reboot after the setting.
Restore to Default	Restore the system to the default settings. The system will save the communication settings and the remote user settings. Other parameters will be restored to default.

6.9.3 Log Query

You can search the authentication logs within a period of time by inputting employee ID, card No., or user name.

Steps

1. On the Home page, tap **Log** (Log) to enter the Log page.

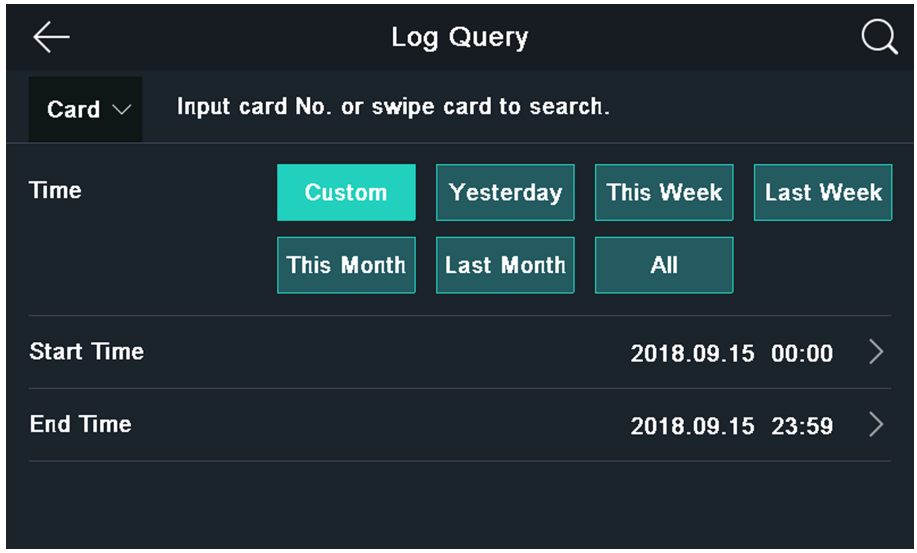


Figure 6-16 Log Query

2. Tap **Card** on the left of the page and select a search type from the drop-down list.
3. Tap the input box and input the employee ID, the card No., or the user name for search.
4. Select a time.

> **Note**
>
> You can select from Custom, Yesterday, This Week, Last Week, This Month, Last Month, or All. If you select Custom, you can customize the start time and the end time for search.

5. Tap to start search.

   The result will be displayed on the page.

6.9.4 Test

You can test the capability of the device's face detection function, voice prompt function, time, and button.

Tap **Test** on the Home page to enter the Automatic Test page.

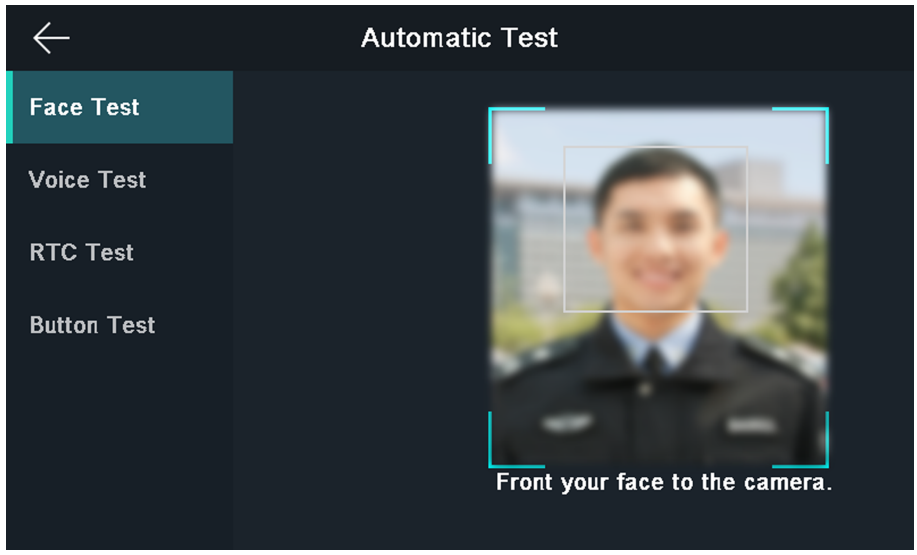


Figure 6-17 Test

6.10 View System Information

View device capacity, device information, and the open source software license.

View Capacity

You can view the added user's number, the face picture's number, the card's number, and the password's number.

Tap **Info. (System Information) → Capacity** on the Home page to enter the Capacity page.

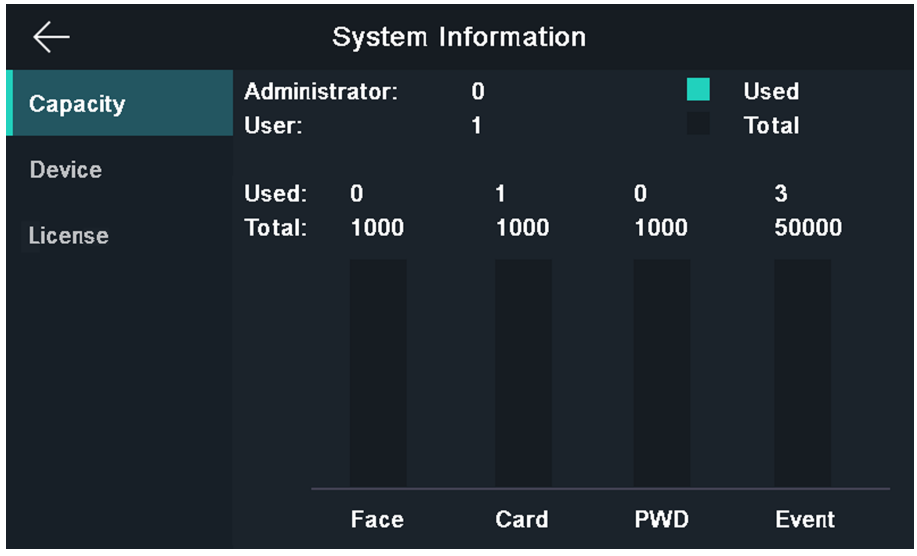


Figure 6-18 Capacity

View Device Information

You can view the device information.
Tap **Info. (System Information) → Device** to enter the Device page.

Open Source License

View the Open Source License information.
Tap **Info. (System Information) → License** to enter the Open Source Software Licenses page.

Chapter 7 Client Software Configuration

7.1 Person Management

You can add person information to the system for further operations such as access control, video intercom, time and attendance, etc. You can manage the added persons such as issuing cards to them in a batch, importing and exporting person information in a batch, etc.

7.1.1 Add Organization

You can add an organization and import person information to the organization for effective management of the persons. You can also add a surbodinate organization for the added one.

Steps

1. Enter **Person** module.
2. Select a parent organization in the left column and click **Add** in the upper-left corner to add an organization.
3. Create a name for the added organization.

   Note

   Up to 10 levels of organizations can be added.

4. **Optional:** Perform the following operation(s).

Edit Organization	Hover the mouse on an added organization and click to edit its name.
Delete Organization	Hover the mouse on an added organization and click to delete it. **Note** • The lower-level organizations will be deleted as well if you delete an organization. • Make sure there is no person added under the organization, or the organization cannot be deleted.
Show Persons in Sub Organization	Check **Show Persons in Sub Organization** and select an organization to show persons in its sub organizations.

7.1.2 Configure Basic Information

You can add person to the client software one by one and configure the person's basic information such as name, gender, phone number, etc.

Steps

1. Enter **Person** module.
2. Select an organization in the organization list to add the person.
3. Click **Add** to open the adding person window.

   The Person ID will be generated automatically.
4. Enter the basic information including person name, gender, tel, email address, etc.
5. **Optional:** Set the effective period of the person. Once expired, the credentials and access control settings of the person will be invalid and the person will have no authorization to access the doors\floors.

   Example

   For example, if the person is a visitor, his/her effective period may be short and temporary.
6. Confirm to add the person.
   - Click **Add** to add the person and close the Add Person window.
   - Click **Add and New** to add the person and continue to add other persons.

7.1.3 Issue a Card to One Person

When adding person, you can issue a card with a unique card number to the person as a credential. After issued, the person can access the doors which he/she is authorized to access by swiping the card on the card reader.

Steps

Note

Up to five cards can be issued to one person.

1. Enter **Person** module.
2. Select an organization in the organization list to add the person and click **Add**.

   Note

   Enter the person's basic information first. For details about configuring person's basic information, refer to ***Configure Basic Information*** .
3. In the **Credential → Card** panel, click **+**.
4. Enter the card number.
   - Enter the card number manually.
   - Place the card on the card enrollment station or card reader and click **Read** to get the card number. The card number will display in the Card No. field automatically.

     Note

     You need to click **Settings** to set the card issuing mode and related parameters first. For details, refer to ***Set Card Issuing Parameters*** .
5. Select the card type according to actual needs.

Normal Card

The card is used for opening doors for normal usage.

Duress Card

When the person is under duress, he/she can swipe the duress card to open the door. The door will be unlocked and the client will receive a duress event to notify the security personnel.

Patrol Card

This card is used for the inspection staff to check the their attendance of inspection. By swiping the card on the specified card reader, the person is marked as on duty of inspection at that time.

Dismiss Card

By swiping the card on the card reader, it can stop the buzzing of the card reader.

6. Click **Add**.

   The card will be issued to the person.
7. Confirm to add the person.
   - Click **Add** to add the person and close the Add Person window.
   - Click **Add and New** to add the person and continue to add other persons.

7.1.4 Upload a Face Photo from Local PC

When adding person, you can upload a face photo stored in local PC to the client as the person's profile.

Steps

1. Enter **Person** module.
2. Select an organization in the organization list to add the person and click **Add**.

   Note

   Enter the person's basic information first. For details about configuring person's basic information, refer to ***Configure Basic Information*** .
3. Click **Add Face** in the Basic Information panel.
4. Select **Upload**.
5. Select a picture from the PC running the client.

   Note

   The picture should be in JPG or JPEG format and smaller than 200 KB.
6. **Optional:** Enable **Verify by Device** to check whether the facial recognition device managed in the client can recognize the face in the photo.
7. Confirm to add the person.
   - Click **Add** to add the person and close the Add Person window.

- Click **Add and New** to add the person and continue to add other persons .

7.1.5 Take a Photo via Client

When adding person, you can take a photo of the person by the webcam of the PC running the client and set this photo as the person's profile.

Before You Start
Add at least one access control device checking whether the face in the photo can be recognized by the facial recognition device managed by the client.

Steps
1. Enter **Person** module.
2. Select an organization in the organization list to add the person and click **Add**.

   Note

   Enter the person's basic information first. For details about configuring person's basic information, refer to ***Configure Basic Information*** .
3. Click **Add Face** in the Basic Information panel.
4. Select **Take Photo**.
5. Connect the face scanner to the PC running the client.
6. **Optional:** Enable **Verify by Device** to check whether the facial recognition device managed in the client can recognize the face in the photo.
7. Take a photo.
   1) Face to the webcam of the PC and make sure your face is in the middle of the collecting window.
   2) Click to capture a face photo.
   3) **Optional:** Click to capture again.
   4) Click **OK** to save the captured photo.
8. Confirm to add the person.
   - Click **Add** to add the person and close the Add Person window.
   - Click **Add and New** to add the person and continue to add other persons.

7.1.6 Collect Face via Access Control Device

When adding person, you can collect the person's face via access control device added to the client which supports facial recognition function.

Steps
1. Enter **Person** module.
2. Select an organization in the organization list to add the person and click **Add**.

Note

Enter the person's basic information first. For details about configuring person's basic information, refer to ***Configure Basic Information*** .

3. Click **Add Face** in the Basic Information panel.
4. Select **Remote Collection**.
5. Select an access control device which supports face recognition function from the drop-down list.
6. Collect face.
   1) Face to the camera of the selected access control device and make sure your face is in the middle of the collecting window.
   2) Click to capture a photo.
   3) Click **OK** to save the captured photo.
7. Confirm to add the person.
   - Click **Add** to add the person and close the Add Person window.
   - Click **Add and New** to add the person and continue to add other persons .

7.1.7 Collect Fingerprint via Client

Collecting fingerprints locally means you can collect the fingerprint via the fingerprint recorder connected directly to the PC running the client. The fingerprints recorded can be used as credentials of the persons to access the authorized doors.

Before You Start

Connect the fingerprint recorder to the PC running the client.

Steps

1. Enter **Person** module.
2. Select an organization in the organization list to add the person and click **Add**.

Note

Enter the person's basic information first. For details about configuring person's basic information, refer to ***Configure Basic Information*** .

3. In the **Credential → Fingerprint** panel, click **+**.
4. In the pop-up window, select the collection mode as **Local**.
5. Select the model of the connected fingerprint recorder.

Note

If the fingerprint recorder is DS-K1F800-F, you can click **Settings** to select the COM the fingerprint recorder connects to.

6. Collect the fingerprint.
   1) Click **Start**.

2) Place and lift your fingerprint on the fingerprint recorder to collect the fingerprint.
3) Click **Add** to save the recorded fingerprint.

7. Confirm to add the person.
- Click **Add** to add the person and close the Add Person window.
- Click **Add and New** to add the person and continue to add other persons.

7.1.8 Collect Fingerprint via Access Control Device

When adding person, you can collect fingerprint information via the access control device's fingerprint module. The fingerprints recorded can be used as credentials of the persons to access the authorized doors.

Before You Start
Make sure fingerprint collection is supported by the access control device.

Steps
1. Enter **Person** module.
2. Select an organization in the organization list to add the person and click **Add**.

Note

Enter the person's basic information first. For details about configuring person's basic information, refer to ***Configure Basic Information*** .

3. In the **Credential → Fingerprint** panel, click **+**.
4. In the pop-up window, select the collection mode as **Remote**.
5. Select an access control device which supports fingerprint recognition function from the drop-down list.
6. Collect the fingerprint.
1) Click **Start**.
2) Place and lift your fingerprint on the fingerprint scanner of the selected access control device to collect the fingerprint.
3) Click **Add** to save the recorded fingerprint.

7. Confirm to add the person.
- Click **Add** to add the person and close the Add Person window.
- Click **Add and New** to add the person and continue to add other persons .

7.1.9 Configure Access Control Information

When adding a person, you can set her/his access control properties, such as setting the person as visitor or as blocklist person, or as super user who has super authorization.

Steps
1. Enter **Person** module.
2. Select an organization in the organization list to add the person and click **Add**.

Note

Enter the person's basic information first. For details about configuring person's basic information, refer to ***Configure Basic Information*** .

3. In the **Access Control** panel, set the person's access control properties.

PIN Code

The PIN code must be used after card or fingerprint when accessing. It cannot be used independently. It should contain 4 to 8 digits.

Super User

If the person is set as a super user, he/she will have authorization to access all the doors/floors and will be exempted from remaining closed restrictions, all anti-passback rules, and first person authorization.

Extended Door Open Time

When the person accessing door, grant this person more time to pass through doors which have been configured with extended open duration. Use this function for the persons with reduced mobility.

For details about setting the door's open duration, refer to ***Configure Parameters for Door/Elevator*** .

Add to Blocklist

Add the person to the blocklist and when the person tries to access doors/floors, an event will be triggered and send to the client to notify the security personnel.

Mark as Visitor

If the person is a visitor, set the maximum times of authentications, including access by card and fingerprint to limit the visitor's access times.

Note

The maximum times of authentications should be between 1 and 100.

Device Operator

For person with device operator role, he/she is authorized to operate on the access control devices.

Note

The Super User, Extended Door Open Time, Add to Blocklist, and Mark as Visitor functions cannot be enabled concurrently. For example, if one person is set as super user, you cannot enable extended door open time for her/him, add her/him to the blocklist, or set her/him as visitor.

4. Confirm to add the person.
   - Click **Add** to add the person and close the Add Person window.
   - Click **Add and New** to add the person and continue to add other persons.

7.1.10 Customize Person Information

You can customize the person properties which are not pre-defined in the client according to actual needs, e.g., place of birth. After customizing, when add a person, you can enter the custom information to make the person information complete.

Steps

1. Enter **Person** module.
2. Set the fields of custom information.
   1) Click **Custom Property**.
   2) Click **Add** to add a new property.
   3) Enter the property name.
   4) Click **OK**.
3. Set the custom information when adding a person.
   1) Select an organization in the organization list to add the person and click **Add**.

      Note

      Enter the person's basic information first. For details about configuring person's basic information, refer to ***Configure Basic Information*** .
   2) In the **Custom Information** panel, enter the person information.
   3) Click **Add** to add the person and close the Add Person window, or click **Add and New** to add the person and continue to add other persons.

7.1.11 Configure Resident Information

If the person is resident, for video intercom purpose, you need to set the room number for her/him and bind an indoor station. After bound, you can call this person by calling the indoor station and perform video intercom with her/him.

Steps

1. Enter **Person** module.
2. Select an organization in the organization list to add the person and click **Add**.

   Note

   Enter the person's basic information first. For details about configuring person's basic information, refer to ***Configure Basic Information*** .
3. In the **Resident Information** panel, select the indoor station to bink it to the person.

   Note

   If you select **Analog Indoor Station**, the **Door Station** field will display and you are required to select the door station to communicate with the analog indoor station.
4. Enter the floor No. and room No. of the person.

5. Confirm to add the person.
   - Click **Add** to add the person and close the Add Person window.
   - Click **Add and New** to add the person and continue to add other persons.

7.1.12 Configure Additional Information

When adding person, you can configure the additional information for the person, such as person's identity type, identity No., country, etc., according to actual needs.

Steps

1. Enter **Person** module.
2. Select an organization in the organization list to add the person and click **Add**.

   Note

   Enter the person's basic information first. For details about configuring person's basic information, refer to ***Configure Basic Information*** .

3. In the **Additional Information** panel, enter the additional information of the person, including person's ID type, ID No., job title, etc., according to actual needs.
4. Confirm to add the person.
   - Click **Add** to add the person and close the Add Person window.
   - Click **Add and New** to add the person and continue to add other persons .

7.1.13 Import and Export Person Identify Information

You can import the information and pictures of multiple persons to the client software in a batch. Meanwhile, you can also export the person information and pictures and save them in your PC.

7.1.14 Import Person Information

You can enter the information of multiple persons in a predefined template (a CSV file) to import the information to the client in a batch.

Steps

1. Enter the Person module.
2. Select an added organization in the list, or click **Add** in the upper-left corner to add an organization and then select it.
3. Click **Import** to open the Import panel.
4. Select **Person Information** as the importing mode.
5. Click **Download Template for Importing Person** to download the template.
6. Enter the person information in the downloaded template.

Note

- If the person has multiple cards, separate the card No. with semicolon.
- Items with asterisk are required.
- By default, the Hire Date is the current date.

7. Click ... to select the CSV file with person information.
8. Click **Import** to start importing.

Note

- If a person No. already exists in the client's database, delete the existing information before importing.
- You can import information of no more than 10,000 persons.

7.1.15 Import Person Pictures

After importing face pictures for the added persons to the client, the persons in the pictures can be identified by an added face recognition terminal. You can either import person pictures one by one, or import multiple pictures at a time according to your need.

Before You Start

Be sure to have imported person information to the client beforehand.

Steps

1. Enter the Person module.
2. Select an added organization in the list, or click **Add** in the upper-left corner to add an organization and then select it.
3. Click **Import** to open the Import panel and check **Face**.
4. **Optional:** Enable **Verify by Device** to check whether face recognition device managed in the client can recognize the face in the photo.
5. Click ... to select a face picture file.

Note

- The (folder of) face pictures should be in ZIP format.
- Each picture file should be in JPG format and should be no larger than 200 KB.
- Each picture file should be named as "Person ID_Name". The Person ID should be the same with that of the imported person information.

6. Click **Import** to start importing.

   The importing progress and result will be displayed.

7.1.16 Export Person Information

You can export the added persons' information to local PC as a CSV file.

Before You Start
Make sure you have added persons to an organization.

Steps
1. Enter the Person module.
2. **Optional:** Select an organization in the list.

   Note
   All persons' information will be exported if you do not select any organization.
3. Click **Export** to open the Export panel and check **Person Information** as the content to export.
4. Check desired items to export.
5. Click **Export** to save the exported CSV file in your PC.

7.1.17 Export Person Pictures

You can export face picture file of the added persons and save in your PC.

Before You Start
Make sure you have added persons and their face pictures to an organization.

Steps
1. Enter the Person module.
2. **Optional:** Select an organization in the list.

   Note
   All persons' face pictures will be exported if you do not select any organization.
3. Click **Export** to open the Export panel and check **Face** as the content to export.
4. Click **Export** to start exporting.

   Note
   - The exported file is in ZIP format.
   - The exported face picture is named as "Person ID_Name_0" ("0" is for a full-frontal face).

7.1.18 Get Person Information from Access Control Device

If the added access control device has been configured with person information (including person details, fingerprint, and issued card information), you can get the person information from the device and import them to the client for further operations.

Steps

Note

- If the person name stored in the device is empty, the person name will be filled with the issued card No. after importing to the client.
- The gender of the persons will be **Male** by default.
- If the card number or person ID (employee ID) stored on the device already exists in the client database, the person with this card number or person ID will not be imported to the client.

1. Enter **Person** module.
2. Select an organization to import the persons.
3. Click **Get from Device**.
4. Select the access control device from the drop-down list.
5. Click **Get** to start importing the person information to the client.

   The person information, including person details, person's fingerprint information (if configured), and the linked cards (if configured), will be imported to the selected organization.

7.1.19 Move Persons to Another Organization

You can move the added persons to another organization if you need.

Before You Start

- Make sure you have added at least two organizations.
- Make sure you have imported person information.

Steps

1. Enter **Person** module.
2. Select an organization in the left panel.

   The persons under the organization will be displayed in the right panel.
3. Select the person to move.
4. Click **Change Organization**.
5. Select the organization to move persons to.
6. Click **OK**.

7.1.20 Issue Cards to Persons in Batch

The client provides a convenient way to issue cards to multiple persons in a batch.

Steps

1. Enter **Person** module.
2. Click **Batch Issue Cards**.

   All the added persons with no card issued will display.
3. Set the card issuing parameters. For details, refer to ***Set Card Issuing Parameters*** .

4. Click **Initialize** to initialize the card enrollment station or card reader to make it ready for issuing cards.
5. Click the card number column and enter the card number.
   - Place the card on the card enrollment station.
   - Swipe the card on the card reader.
   - Enter the card number manually and press **Enter** key on your keyboard.

   The card number will be read automatically and the card will be issued to the person in the list.
6. Repeat the above step to issue the cards to the persons in the list in sequence.

7.1.21 Report Card Loss

If the person lost his/her card, you can report the card loss so that the card's related access authorization will be inactive.

Steps

1. Enter **Person** module.
2. Select the person you want to report card loss for and click **Edit** to open the Edit Person window.
3. In the **Credential → Card** panel, click on the added card to set this card as lost card.

   After reporting card loss, the access authorization of this card will be invalid and inactive. Other person who gets this card cannot access the doors by swiping this lost card.
4. **Optional:** If the lost card is found, you can click to cancel the loss.

   After cancelling card loss, the access authorization of the person will be valid and active.
5. If the lost card is added in one access group and the access group is applied to the device already, after reporting card loss or cancelling card loss, a window will pop up to notify you to apply the changes to the device. After applying to device, these changes can take effect on the device.

7.1.22 Set Card Issuing Parameters

The client provides two modes for reading a card's number: via card enrollment station or via the card reader of the access control device. If a card enrollment station is available, connect it to the PC running the client by USB interface or COM, and place the card on the card enrollment to read the card number. If not, you can also swipe the card on the card reader of the added access control device to get the card number. As a result, before issuing a card to one person, you need to set the card issuing parameters including the issuing mode and related parameters.

When adding a card to one person, click **Settings** to open the Card Issuing Settings window.

Local Mode: Issue Card by Card Enrollment Station

Connect a card enrollment station to the PC running the client. You can place the card on the card enrollment station to get the card number.

Card Enrollment Station

Select the model of the connected card enrollment station

Note

Currently, the supported card enrollment station models include DS-K1F100-D8, DS-K1F100-M, DS-K1F100-D8E, and DS-K1F180-D8E.

Card Type

This field is only available when the model is DS-K1F100-D8E or DS-K1F180-D8E.

Select the card type as EM card or IC card according to the actual card type.

Serial Port

It is only available when the model is DS-K1F100-M.

Select the COM the card enrollment station connects to.

Buzzing

Enable or disable the buzzing when the card number is read successfully.

Card No. Type

Select the type of the card number according to actual needs.

M1 Card Encryption

This field is only available when the model is DS-K1F100-D8, DS-K1F100-D8E, or DS-K1F180-D8E.

If the card is M1 card, and if you need to enable the M1 Card Encryption function, you should enable this function and select the sector of the card to encrypt.

Remote Mode: Issue Card by Card Reader

Select an access control device added in the client and swipe the card on its card reader to read the card number.

7.2 Configure Schedule and Template

You can configure the template including holiday and week schedule. After setting the template, you can adopt the configured template to access groups when setting the access groups, so that the access group will take effect in the time durations of the template.

Note

For access group settings, refer to ***Set Access Group to Assign Access Authorization to Persons*** .

7.2.1 Add Holiday

You can create holidays and set the days in the holidays, including start date, end date, and holiday duration in one day.

Steps

Note

You can add up to 64 holidays in the software system.

1. Click **Access Control → Schedule → Holiday** to enter the Holiday page.
2. Click **Add** on the left panel.
3. Create a name for the holiday.
4. **Optional:** Enter the descriptions or some notifications of this holiday in the Remark box.
5. Add a holiday period to the holiday list and configure the holiday duration.

   Note

   Up to 16 holiday periods can be added to one holiday.

   1) Click **Add** in the Holiday List field.
   2) Drag the cursor to draw the time duration, which means in that duration of time, the configured access group is activated.

      Note

      Up to 8 time durations can be set to one holiday period.
   3) **Optional:** Perform the following operations to edit the time durations.
      - Move the cursor to the time duration and drag the time duration on the timeline bar to the desired position when the cursor turns to .
      - Click the time duration and directly edit the start/end time in the appeared dialog.
      - Move the cursor to the start or the end of time duration and drag to lengthen or shorten the time duration when the cursor turns to .
   4) **Optional:** Select the time duration(s) that need to be deleted, and then click in the Operation column to delete the selected time duration(s).
   5) **Optional:** Click in the Operation column to clear all the time duration(s) in the time bar.
   6) **Optional:** Click in the Operation column to delete this added holiday period from the holiday list.
6. Click **Save**.

7.2.2 Add Template

Template includes week schedule and holiday. You can set week schedule and assign the time duration of access authorization for different person or group. You can also select the added holiday(s) for the template.

Steps

Note

You can add up to 255 templates in the software system.

1. Click **Access Control → Schedule → Template** to enter the Template page.

   Note

   There are two default templates: All-Day Authorized and All-Day Denied, and they cannot be edited or deleted.

   All-Day Authorized

   The access authorization is valid in each day of the week and it has no holiday.

   All-Day Denied

   The access authorization is invalid in each day of the week and it has no holiday.

2. Click **Add** on the left panel to create a new template.
3. Create a name for the template.
4. Enter the descriptions or some notification of this template in the Remark box.
5. Edit the week schedule to apply it to the template.
   1) Click **Week Schedule** tab on the lower panel.
   2) Select a day of the week and draw time duration(s) on the timeline bar.

      Note

      Up to 8 time duration(s) can be set for each day in the week schedule.

   3) **Optional:** Perform the following operations to edit the time durations.
      - Move the cursor to the time duration and drag the time duration on the timeline bar to the desired position when the cursor turns to .
      - Click the time duration and directly edit the start/end time in the appeared dialog.
      - Move the cursor to the start or the end of time duration and drag to lengthen or shorten the time duration when the cursor turns to .
   4) Repeat the two steps above to draw more time durations on the other days of the week.
6. Add a holiday to apply it to the template.

   Note

   Up to 4 holidays can be added to one template.

   1) Click **Holiday** tab.
   2) Select a holiday in the left list and it will be added to the selected list on the right panel.
   3) **Optional:** Click **Add** to add a new holiday.

      Note

      For details about adding a holiday, refer to ***Add Holiday*** .

   4) **Optional:** Select a selected holiday in the right list and click to remove the selected one, or click **Clear** to clear all the selected holiday(s) in the right list.
7. Click **Save** to save the settings and finish adding the template.

7.3 Set Access Group to Assign Access Authorization to Persons

After adding the person and configuring the person's credentials, you can create the access groups to define which person(s) can get access to which door(s) and then apply the access group to the access control device to take effect.

Steps

- For one person, you can add up to 4 access groups to one access control point of one device.
- You can add up to 128 access groups in total.
- When the access group settings are changed, you need to apply the access groups to the devices again to take effect. The access group changes include changes of template, access group settings, person's access group settings, and related person details (including card number, fingerprint, face picture, linkage between card number and fingerprint, linkage between card number and fingerprint, card password, card effective period, etc).

1. Click **Access Control → Access Group** to enter the Access Group interface.
2. Click **Add** to open the Add window.
3. In the **Name** text field, create a name for the access group as you want.
4. Select a template for the access group.

   Note

   You should configure the template before access group settings. Refer to ***Configure Schedule and Template*** for details.

5. In the left list of the Select Person field, select person(s) and the person(s) will be added to the selected list .
6. In the left list of the Select Door field, select door(s) or door station(s) for the selected persons to access, and the selected door(s) or door station(s) will be added to the selected list.
7. Click **OK**.
8. After adding the access groups, you need to apply them to the access control device to take effect.
   1) Select the access group(s) to apply to the access control device.

      To select multiple access groups, you can hold the **Ctrl** or **Shift** key and select access groups.
   2) Click **Apply All to Devices** to start applying all the selected access group(s) to the access control device or door station.

      Caution

      - Be careful to click **Apply All to Devices**, since this operation will clear all the access groups of the selected devices and then apply the new access group, which may brings risk to the devices.
      - You can click **Apply Changes to Devices** to only apply the changed part of the selected access group(s) to the device(s).

   3) View the apply status in the Status column or click **Applying Status**to view all the applied access group(s).

The selected persons in the applied access groups will have the authorization to enter/exit the selected doors/door stations with their linked card(s) or fingerprints.

9. **Optional:** Click to edit the access group if necessary.

7.4 Configure Advanced Functions

You can configure the advanced functions of access control to meet some special requirements in different scene, such as multi-factor authentication, anti-passback, etc.

Note

- For the card related functions(the type of access control card/multi-factor authentication), only the card(s) with access group applied will be listed when adding cards.
- The advanced functions should be supported by the device.
- Hover the cursor on the Advanced Function, and then Click to customize the advanced function(s) to be displayed.

7.4.1 Configure Device Parameters

After adding the access control device, you can configure the parameters of access control device (access controller), access control points (door or floor), alarm inputs, alarm outputs, card readers and lane controller.

Configure Parameters for Access Control Device

After adding the access control device, you can configure its parameters, including overlaying user information on picture, uploading pictures after capturing, saving captured pictures, etc.

Steps

1. Click **Access Control → Advanced Function → Device Parameter** .

   Note

   If you can find Device Parameter in the Advanced Function list, Hover the cursor on the Advanced Function, and then Click to select the Device Parameter to be displayed.

2. Select an access device to show its parameters on the right page.
3. Turn the switch to ON to enable the corresponding functions.

   Note

   - The displayed parameters may vary for different access control devices.
   - Some of the following parameters are not listed in the Basic Information page, click **More** to edit the parameters.

RS-485 Comm. Redundancy

You should enable this function if you wire the RS-485 card reader to the access control device redundantly.

Display Detected Face

Display face picture when authenticating.

Display Card Number

Display the card information when authenticating.

Display Person Information

Display the person information when authenticating.

Overlay Person Info. on Picture

Display the person information on the captured picture.

Voice Prompt

If you enable this function, the voice prompt is enabled in the device. You can hear the voice prompt when operating in the device.

Upload Pic. After Linked Capture

Upload the pictures captured by linked camera to the system automatically.

Save Pic. After Linked Capture

If you enable this function, you can save the picture captured by linked camera to the device.

Press Key to Enter Card Number

If you enable this function, you can input the card No. by pressing the key.

Wi-Fi Probe

If you enable this function, the device can probe the surrounding communication devices' MAC address and upload the MAC address to the system. If the MAC address match the specified MAC address, the system can trigger some linkage actions.

3G/4G

If you enable this function, the device can communicate in 3G/4G network.

4. Click **OK**.
5. **Optional:** Click **Copy to**, and then select the access control device(s) to copy the parameters in the page to the selected device(s).

Configure Parameters for Door/Elevator

After adding the access control device, you can configure its access point (door or floor) parameters.

Before You Start

Add access control device to the client.

Steps

1. Click **Access Control → Advanced Function → Device Parameter** .
2. Select an access control device on the left panel, and then click to show the doors or floors of the selected device.
3. Select a door or floor to show its parameters on the right page.
4. Edit the door or floor parameters.

Note

- The displayed parameters may vary for different access control devices.
- Some of the following parameters are not listed in the Basic Information page, click **More** to edit the parameters.

Name

Edit the card reader name as desired.

Door Contact

You can set the door sensor as remaining closed or remaining open. Usually, it is remaining closed.

Exit Button Type

You can set the exit button as remaining closed or remaining open. Usually, it is remaining open.

Door Locked Time

After swiping the normal card and relay action, the timer for locking the door starts working.

Extended Open Duration

The door contact can be enabled with appropriate delay after person with extended accesss needs swipes her/his card.

Door Left Open Timeout Alarm

The alarm can be triggered if the door has not been closed in a configured time period. If it is set as 0, no alarm will be triggered.

Lock Door when Door Closed

The door can be locked once it is closed even if the **Door Locked Time** is not reached.

Duress Code

The door can open by inputting the duress code when there is duress. At the same time, the client can report the duress event.

Super Password

The specific person can open the door by inputting the super password.

Dismiss Code

Create a dismiss code which can be used to stop the buzzer of the card reader (by entering the dismiss code on the keypad).

Note

- The duress code, super code, and dismiss code should be different.
- The duress code, super password, and the dismiss code should be different from the authentication password.
- The length of duress code, super password, and the dismiss code is according the device, usually it should contains 4 to 8 digits.

5. Click **OK**.
6. **Optional:** Click **Copy to** , and then select the door/floor(s) to copy the parameters in the page to the selected doors/floor(s).

Note

The door or floor's status duration settings will be copied to the selected door/floor(s) as well.

Configure Parameters for Card Reader

After adding the access control device, you can configure its card reader parameters.

Before You Start

Add access control device to the client.

Steps

1. Click **Access Control → Advanced Function → Device Parameter** .
2. In the device list on the left, click to expand the door, select a card reader and you can edit the card reader's parameters on the right.
3. Edit the card reader basic parameters in the Basic Information page.

Note

- The displayed parameters may vary for different access control devices. There are part of parameters listed as follows. Refer to the user manual of the device for more details.
- Some of the following parameters are not listed in the Basic Information page, click **More** to edit the parameters.

Name

Edit the card reader name as desired.

OK LED Polarity/Error LED Polarity/Buzzer Polarity

Set OK LED Polarity/Error LED Polarity/Buzzer LED Polarity of main board according to the card reader parameters. Generally, adopts the default settings.

Minimum Card Swiping Interval

If the interval between card swiping of the same card is less than the set value, the card swiping is invalid. You can set it as 0 to 255.

Max. Interval When Entering PWD

When you inputting the password on the card reader, if the interval between pressing two digits is larger than the set value, the digits you pressed before will be cleared automatically.

Alarm of Max. Failed Attempts

Enable to report alarm when the card reading attempts reach the set value.

Max. Times of Card Failure

Set the max. failure attempts of reading card.

Tampering Detection

Enable the anti-tamper detection for the card reader.

Communicate with Controller Every

When the access control device cannot connect with the card reader for longer than the set time, the card reader will turn offline automatically.

Buzzing Time

Set the card reader buzzing time. The available time ranges from 0 to 5,999s. 0 represents continuous buzzing.

Card Reader Type/Card Reader Description

Get card reader type and description. They are read-only.

Fingerprint Recognition Level

Select the fingerprint recognition level in the drop-down list.

Default Card Reader Authentication Mode

View the default card reader authentication mode.

Fingerprint Capacity

View the maximum number of available fingerprints.

Existing Fingerprint Number

View the number of existed fingerprints in the device.

Score

The device will score the captured picture according to the yaw angle, pitch angle, and pupillary distance. If the score is less than the configured value, face recognition will be failed.

Face Recognition Timeout Value

If the recognition time is more than the configured time, the device will remind you.

Face Recognition Interval

The time interval between two continuous face recognitions when authenticating. By default, it is 2s.

Face 1:1 Matching Threshold

Set the matching threshold when authenticating via 1:1 matching mode. The larger the value, the smaller the false accept rate and the larger the false rejection rate when authentication.

1:N Security Level

Set the matching security level when authenticating via 1:N matching mode. The larger the value, the smaller the false accept rate and the larger the false rejection rate when authentication.

Live Face Detection

Enable or disable the live face detection function. If enabling the function, the device can recognize whether the person is a live one or not.

Live Face Detection Security Level

After enabling Live Face Detection function, you can set the matching security level when performing live face authentication.

Max. Failed Attempts for Face Auth.

Set the maximum live face detection failed attempts. The system will lock the user's face for 5 minutes if the live face detection is failed for more than the configured attempts. The same user cannot authenticate via the fake face within 5 minutes. Within the 5 minutes, the user can authenticate via the real face twice continuously to unlock.

Lock Authentication Failed Face

After enabling the Live Face Detection function, the system will lock the user's face for 5 minutes if the live face detection is failed for more than the configured attempts. The same user cannot authenticate via the fake face within 5 minutes. Within the 5 minutes, the user can authenticate via the real face twice continuously to unlock.

Application Mode

You can select indoor or others application modes according to actual environment.

4. Click **OK**.
5. **Optional:** Click **Copy to**, and then select the card reader(s) to copy the parameters in the page to the selected card reader(s).

Configure Parameters for Alarm Input

After adding the access control device, you can configure the parameters for its alarm inputs.

Before You Start

Add access control device to the client, and make sure the device supports alarm input.

Steps

Note

If the alarm input is armed, you cannot edit its parameters. Disarm it first.

1. Click **Access Control → Advanced Function → Device Parameter** .
2. In the device list on the left, click to expand the door, select an alarm input and you can edit the alarm input's parameters on the right.
3. Set the alarm input parameters.

   Name

   Edit the alarm input name as desired.

   Detector Type

   The detector type of the alarm input.

   Zone Type

   Set the zone type for the alarm input.

   Sensitivity

   Only when the duration of signal detected by the detector reaches the setting time, the alarm input is triggered. For example, you have set the sensitivity as 10ms, only when the duration of signal detected by the detector reach 10ms, this alarm input is triggered.

   Trigger Alarm Output

   Select the alarm output(s) to be triggered.
4. Click **OK**.
5. **Optional:** Click the switch on the upper-right corner to arm or disarm the alarm input.

Configure Parameters for Alarm Output

After adding the access control device, if the device links to alarm outputs, you can configure the parameters.

Before You Start
Add access control device to the client, and make sure the device supports alarm output.

Steps
1. Click **Access Control → Advanced Function → Device Parameter** to enter access control parameter configuration page.
2. In the device list on the left, click to expand the door, select an alarm input and you can edit the alarm input's parameters on the right.
3. Set the alarm output parameters.

   Name

   Edit the card reader name as desired.

   Alarm Output Active Time

   How long the alarm output will last after triggered.
4. Click **OK**.
5. **Optional:** Set the switch on the upper right corner to **ON** to trigger the alarm output.

Configure Parameters for Lane Controller

After adding the lane controller to the client, you can configure its parameters for passing through the lane.

Steps

1. Click **Access Control → Advanced Function → Device Parameter** to enter Parameter Settings page.
2. In the device list on the left, select a lane controller and you can edit the lane controller's parameters on the right.
3. Edit the parameters.

   Passing Mode

   Select the controller which will control the barrier status of the device.

   - If you select **According to Lane Controller's DIP Settings**, the device will follow the lane controller's DIP settings to control the barrier. The settings on the software will be invalid.
   - If you select **According to Main Controller's Settings**, the device will follow the settings of the software to control the barrier. The DIP settings of the lane controller will be invalid.

   Free Passing Authentication

   If you enable this function, when both entrance and exit's barrier mode is Remain Open, the pedestrians should authenticate each time passing through the lane. Or an alarm will be triggered.

   Opening/Closing Door Speed

   Set the barrier's opening and closing speed. You can select from 1 to 10. The greater the value, the faster the speed.

   Note

   The recommended value is 6.

   Audible Prompt Duration

   Set how long the audio will last, which is played when an alarm is triggered .

   Note

   0 refers to the alarm audio will be played until the alarm is ended.

   Temperature Unit

   Select the temperature unit that displayed in the device status.

4. Click **OK**.

7.4.2 Configure Remaining Open/Closed

You can set the status of the door as open or closed and set the elevator controller as free and controlled. For example, you can set the door remaining closed in the holiday, and set the door remaining open in the specified period of the work day.

Before You Start

Add the access control devices to the system.

Steps

1. Click **Access Control → Advanced Function → Remain Open/Closed** to enter the Remain Open/Closed page.
2. Select the door or elevator controller that need to be configured on the left panel.
3. To set the door or elevator controller status during the work day, click the **Week Schedule** and perform the following operations.
   1) For door, click **Remain Open** or **Remain Closed**.
   2) For elevator controller, click **Free** or **Controlled**.
   3) Drag the cursor to draw the time duration, which means in that duration of time, the configured access group is activated.

      Note

      Up to 8 time durations can be set to each day in the week schedule.
   4) **Optional:** Perform the following operations to edit the time durations.
      - Move the cursor to the time duration and drag the time duration on the timeline bar to the desired position when the cursor turns to .
      - Click the time duration and directly edit the start/end time in the appeared dialog.
      - Move the cursor to the start or the end of time duration and drag to lengthen or shorten the time duration when the cursor turns to .
   5) Click **Save**.

   Related Operations

Copy to Whole Week	Select one duration on the time bar, click **Copy to Whole Week** to copy all the duration settings on this time bar to other week days.
Delete Selected	Select one duration on the time bar, click **Delete Selected** to delete this duration.
Clear	Click **Clear** to clear all the duration settings in the week schedule.

4. To set the door status during the holiday, click the **Holiday** and perform the following operations.
   1) Click **Remain Open** or **Remain Closed**.
   2) Click **Add**.
   3) Enter the start date and end date.
   4) Drag the cursor to draw the time duration, which means in that duration of time, the configured access group is activated.

Note

Up to 8 time durations can be set to one holiday period.

5) Perform the following operations to edit the time durations.
   - Move the cursor to the time duration and drag the time duration on the timeline bar to the desired position when the cursor turns to .
   - Click the time duration and directly edit the start/end time in the appeared dialog.
   - Move the cursor to the start or the end of time duration and drag to lengthen or shorten the time duration when the cursor turns to .
6) **Optional:** Select the time duration(s) that need to be deleted, and then click in the Operation column to delete the selected time duration(s).
7) **Optional:** Click in the Operation column to clear all the time duration(s) in the time bar.
8) **Optional:** Click in the Operation column to delete this added holiday period from the holiday list.
9) Click **Save**.

5. Optional: Click **Copy to** to copy the door status settings of this door to other door(s).

7.4.3 Configure Multi-Factor Authentication

You can manage the persons by group and set the authentication for multiple persons of one access control point (door).

Before You Start

Set access group and apply the access group to the access control device. For details, refer to ***Set Access Group to Assign Access Authorization to Persons*** .

Perform this task when you want to set authentications for multiple cards of one access control point (door).

Steps

1. Click **Access Control → Advanced Function → Multi-Factor Auth** .
2. Select an access control device in device list on the left panel.
3. Add a person/card group for the access control device.
   1) Click **Add** on the right panel.
   2) Create a name for the group as desired.
   3) Specify the start time and end time of the effective period for the person/card group.
   4) Select members(s) and card(s) in the Available list, and the selected member(s) and card(s) will be added to the Selected list.

      Note

      Make sure you have issue card to the person.
      Make sure you have set access group and apply the access group to the access control device successfully.

   5) Click **Save**.
   6) **Optional:** Select the person/card group(s), and then click **Delete** to delete it(them).

7) **Optional:** Select the person/card group(s), and then click **Apply** to re-apply access group that failed to be applied previously to the access control device.

4. Select an access control point (door) of selected device on the left panel.

5. Enter the maximum interval when entering password.

6. Add an authentication group for the selected access control point.

1) Click **Add** on the Authentication Groups panel.
2) Select a configured template as the authentication template from the drop-down list.

Note

For setting the template, refer to ***Configure Schedule and Template*** .

3) Select the authentication type as **Local Authentication**, **Local Authentication and Remotely Open Door**, or **Local Authentication and Super Password** from the drop-down list.

Local Authentication

Authentication by the access control device.

Local Authentication and Remotely Open Door

Authentication by the access control device and by the client. When the person swipes the card on the device, a window will pop up. You can unlock the door via the client.

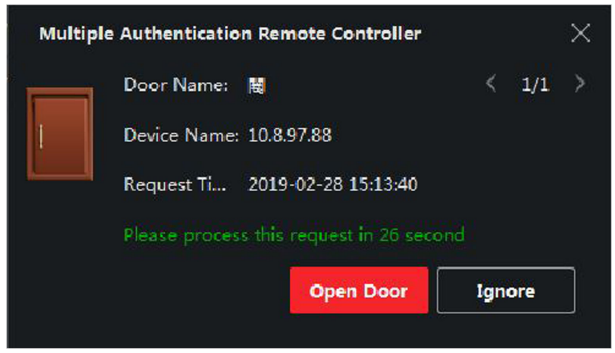


Figure 7-1 Remotely Open Door

Note

You can check **Offline Authentication** to enable the super password authentication when the access control device is disconnected with the client.

Local Authentication and Super Password

Authentication by the access control device and by the super password.

4) Select the added person/card group in the left list below and it will be added to the Selected list on the right as the authentication group.
5) Click the added authentication group in the right list to set authentication times in the Auth Times column.

Note

- The authentication times should be larger than 0 and smaller than the added personnel quantity in the personnel group.
- The maximum value of authentication times is 16.

6) Click **Save**.

Note

- For each access control point (door), up to four authentication groups can be added.
- For the authentication group of which authentication type is **Local Authentication**, up to 8 person/card groups can be added to the authentication group.
- For the authentication group of which authentication type is **Local Authentication and Super Password** or **Local Authentication and Remotely Open Door**, up to 7 person/card groups can be added to the authentication group.

7. Click **Save**.

7.4.4 Configure Custom Wiegand Rule

Based on the knowledge of uploading rule for the third party Wiegand, you can set multiple customized Wiegand rules to communicate between the device and the third party card readers.

Before You Start
Wire the third party card readers to the device.

Steps

Note

- By default, the device disables the custom wiegand function. If the device enables the custom Wiegand function, all wiegand interfaces in the device will use the customized wiegand protocol.
- Up to 5 custom Wiegands can be set.
- For details about the custom Wiegand, see .

1. Click **Access Control → Advanced Function → Custom Wiegand** to enter the Custom Wiegand page.
2. Select a custom Wiegand on the left.
3. Create a Wiegand name.

Note

Up to 32 characters are allowed in the custom Wiegand name.

4. Click **Select Device** to select the access control device for setting the custom wiegand.
5. Set the parity mode according to the property of the third party card reader.

Note

- Up to 80 bits are allowed in the total length.
- The odd parity start bit, the odd parity length, the even parity start bit and the even parity length range from 1 to 80 bit.
- The start bit of the card ID, the manufacturer code, the site code, and the OEM should range from 1 to 80 bit.

6. Set output transformation rule.
   1) Click **Set Rule** to open the Set Output Transformation Rules window.

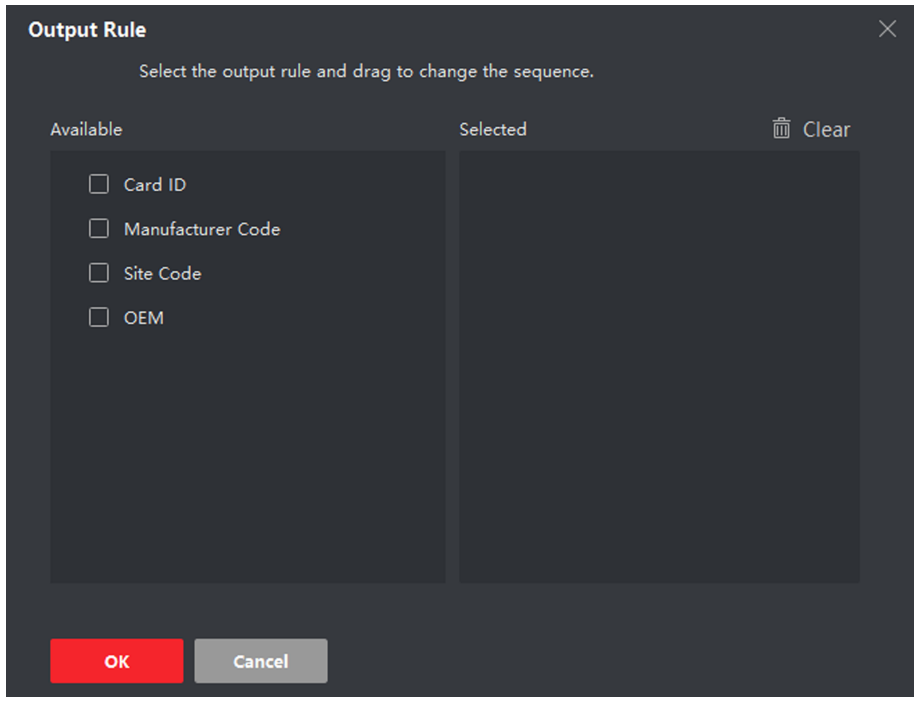


Figure 7-2 Set Output Transformation Rule

   2) Select rules on the left list.

      The selected rules will be added to the right list.
   3) **Optional:** Drag the rules to change the rule order.
   4) Click **OK**.
   5) In the Custom Wiegand tab, set the rule's start bit, length, and the decimal digit.
7. Click **Save**.

7.4.5 Configure Card Reader Authentication Mode and Schedule

You can set the passing rules for the card reader of the access control device according to your actual needs.

Steps

1. Click **Access Control → Advanced Function → Authentication** to enter the authentication mode configuration page.
2. Select a card reader on the left to configure.
3. Set card reader authentication mode.
   1) Click **Configuration**.

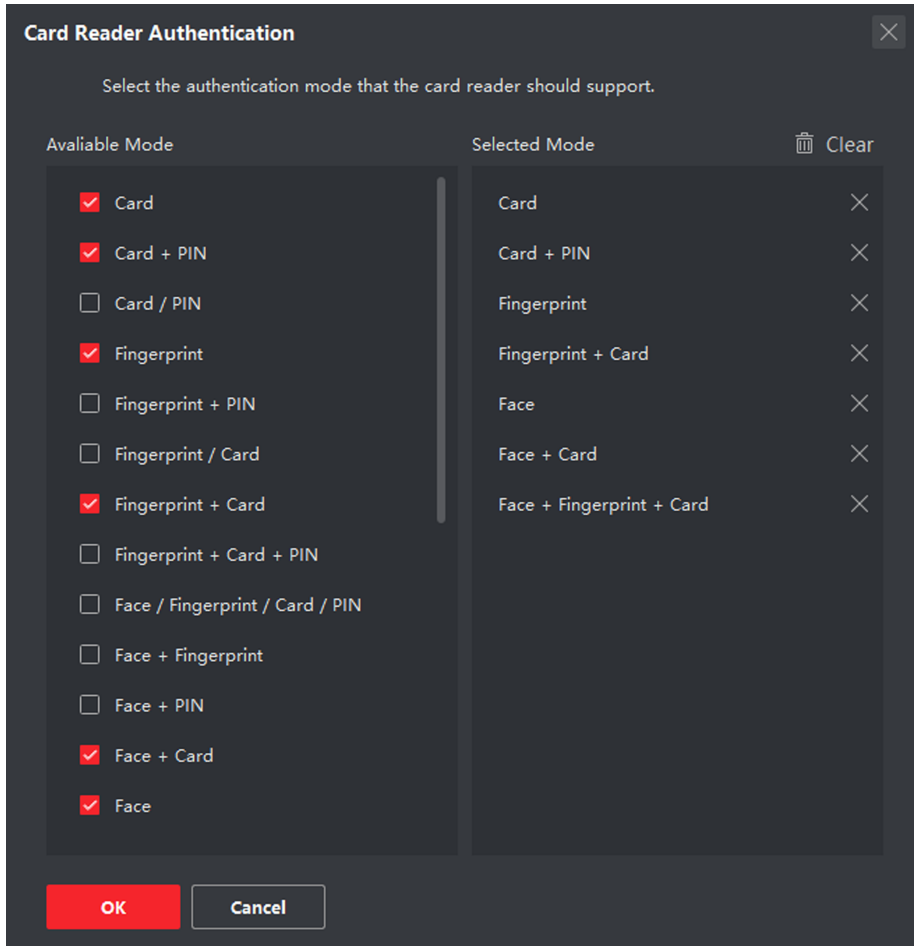


Figure 7-3 Select Card Reader Authentication Mode

Note

PIN refers to the PIN code set to open the door. Refer to ***Configure Access Control Information*** .

   2) Check the modes in the Available Mode list and they will be added to the selected modes list.
   3) Click **OK**.

   After selecting the modes, the selected modes will display as icons with different color.
4. Click the icon to select a card reader authentication mode, and drag the cursor to draw a color bar on the schedule, which means in that period of time, the card reader authentication is valid.
5. Repeat the above step to set other time periods.

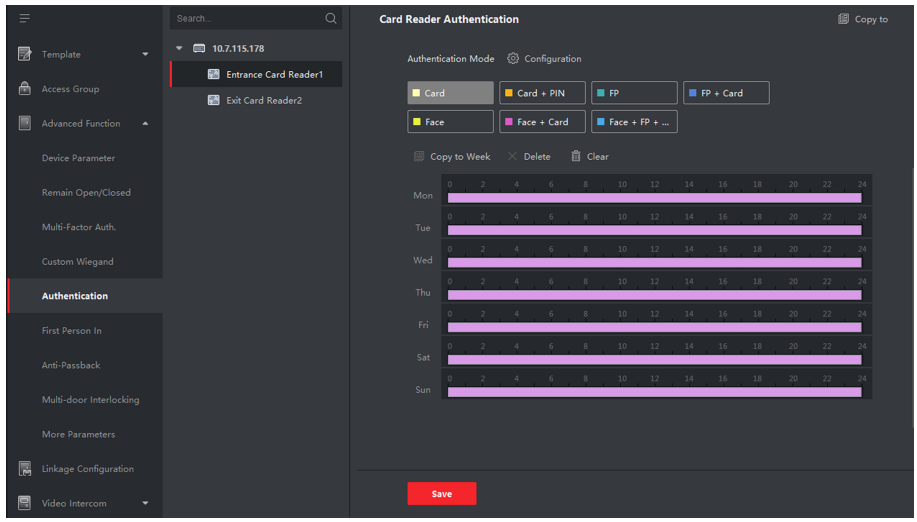


Figure 7-4 Set Authentication Modes for Card Readers

6. **Optional:** Select a configured day and click **Copy to Week** to copy the same settings to the whole week.
7. **Optional:** Click **Copy to** to copy the settings to other card readers.
8. Click **Save**.

7.4.6 Configure First Person In

You can set multiple first persons for one access control point. After the first person is authorized, it allows multiple persons access the door or other authentication actions.

Before You Start

- Add access control device to the client, and make sure the device supports the first person in function.
- Add person and assign access authorization to designed person. For details, refer to ***Person Management*** and ***Set Access Group to Assign Access Authorization to Persons*** .

Steps

1. Click **Access Control → Advanced Function → First Person In** to enter the First Person In page.
2. Select an access control device in the list on the left panel.
3. Select the current mode as **Enable Remaining Open after First Person**, **Disable Remaining Open after First Person**, or **Authorization by First Person** from the drop-down list for each access control point of the selected device.

   Enable Remaining Open after First Person

   The door remains open for the configured time duration after the first person is authorized until the remain open duration ends. If you select this mode, you should set the remain open duration.

Note

The remain open duration should be between 0 and 1440 minutes. By default, the remain open duration is 10 minutes.

Disable Remaining Open after First Person

Disable the function of first person in, namely normal authentication.

Authorization by First Person

All authentications (except for the authentications of super card, super password, duress card, and duress code) are allowed only after the first person authorization.

Note

You can authenticate by the first person again to disable the first person mode.

4. Click **Add** on the First Person List panel.
5. Select person(s) in the left list and the person(s) will be add to the selected persons as the first person(s) of the doors.

   The added first person(s) will list in the First Person List
6. **Optional:** Select a first person from the list and click **Delete** to remove the person from the first person list.
7. Click **Save**.

7.4.7 Configure Anti-Passback

You can set to only pass the access control point according to the specified path and only one person could pass the access control point after swiping the card.

Before You Start

Enable the anti-passing back function of the access control device.

Perform this task when you want to configure the anti-passing back for the access control device.

Steps

Note

Either the anti-passing back or multi-door interlocking function can be configured for an access control device at the same time. For the configuration of multi-door interlocking, refer to ***Configure Multi-door Interlocking*** .

1. Click **Access Control → Advanced Function → Anti-Passback** to enter the Anti-Passpack Settings page.
2. Select an access control device on the left panel.
3. Select a card reader as the beginning of the path in the **First Card Reader** field.
4. Click of the selected first card reader in the **Card Reader Afterward** column to open the select card reader dialog.

5. Select the afterward card readers for the first card reader.

Note

Up to four afterward card readers can be added as afterward card readers for one card reader.

6. Click **OK** in the dialog to save the selections.
7. Click **Save** in the Anti-Passback Settings page to save the settings and take effect.

Example

Set Card Swiping Path

If you select Reader In_01 as the beginning, and select Reader In_02, Reader Out_04 as the linked card readers. Then you can only get through the access control point by swiping the card in the order as Reader In_01, Reader In_02 and Reader Out_04.

7.4.8 Configure Multi-door Interlocking

You can set the multi-door interlocking between multiple doors of the same access control device. To open one of the doors, other doors must keep closed. That means in the interlocking combined door group, up to one door can be opened at the same time.

Before You Start

Add access control device to the client, and make sure the device supports the multi-door interlocking function.

Steps

Note

- Multi-door Interlocking function is only supported by the access control device which has more than one access control points (doors).
- Either the anti-passing back or multi-door interlocking function can be configured for an access control device at the same time. For the configuration of anti-passing back function, refer to ***Configure Anti-Passback*** .

1. Click **Access Control → Advanced Function → Multi-door Interlocking** .
2. Select an access control device on the left panel.
3. Click **Add** on the Multi-door Interlocking List panel to open Add Access Control Point to open the Add window.
4. Select at least two access control points(doors) from the list.

Note

Up to four doors can be added in one multi-door interlocking combination.

5. Click **OK** to add the selected access control point(s) for interlocking.

   The configured multi-door interlocking combination will list on the Multi-door Interlocking List panel.

6. **Optional:** Select an added multi-door interlocking combination from the list and click **Delete** to delete the combination.
7. Click **Apply** to apply the settings to the access control device.

7.4.9 Configure Other Parameters

After adding the access control device, you can set its parameters such as network parameters, capture parameters, RS-485 parameters, Wiegand parameters, etc.

Set Multiple NIC Parameters

If the device supports multiple network interfaces, you can set the network parameters of these NICs via the client, such as IP address, MAC address, port number, etc.

Before You Start
Add access control device to the client, and make sure the device supports multiple NICs.

Steps
1. Enter the Access Control module.
2. On the navigation bar on the left, enter **Advanced Function → More Parameters** .
3. Select an access control device in the device list and click **NIC** to enter Multiple NIC Settings page.
4. Select an NIC you want to configure from the drop-down list.
5. Set its network parameters such as IP address, default gateway, subnet mask, etc.

   MAC Address

   A media access control address (MAC address) is a unique identifier assigned to the network interface for communications on the physical network segment.

   MTU

   The maximum transmission unit (MTU) of the network interface.
6. Click **Save**.

Set Network Parameters

After adding the access control device, you can set the device log uploading mode, and create EHome account via wired or wireless network.

Set Log Uploading Mode

You can set the mode for the device to upload logs via EHome protocol.

Steps

Note

Make sure the device is not added by EHome.

1. Enter the Access Control module.
2. On the navigation bar on the left, enter **Advanced Function → More Parameters** .
3. Select an access control device in the device list and enter **Network → Uploading Mode** .
4. Select the center group from the drop-down list.
5. Check **Enable** to enable to set the uploading mode.
6. Select the uploading mode from the drop-down list.
   - Enable **N1** or **G1** for the main channel and the backup channel.
   - Select **Close** to disable the main channel or the backup channel

   Note

   The main channel and the backup channel cannot enable N1 or G1 at the same time.
7. Click **Save**.

Create EHome Account in Wired Communication Mode

You can set the account for EHome protocol in wired communication mode. Then you can add devices via EHome protocol.

Steps

Note

- This function should be supported by the device.
- Make sure the device is not added by EHome.

1. Enter the Access Control module.
2. On the navigation bar on the left, enter **Advanced Function → More Parameters** .
3. Select an access control device in the device list and enter **Network → Network Center** .
4. Select the center group from the drop-down list.
5. Select the **Address Type** as **IP Address** or **Domain Name**.
6. Enter IP address or domain name according to the address type.
7. Enter the port number for the protocol.

   Note

   The port number of the wireless network and wired network should be consistent with the port number of EHome.
8. Select the **Protocol Type** as **EHome**.
9. Set an account name for the network center.
10. Click **Save**.

Create EHome Account in Wireless Communication Mode

You can set the account for EHome protocol in wireless communication mode. Then you can add devices via EHome protocol.

Steps

Note

- This function should be supported by the device.
- Make sure the device is not added by EHome.

1. Enter the Access Control module.
2. On the navigation bar on the left, enter **Advanced Function → More Parameters** .
3. Select an access control device in the device list and enter **Network → Wireless Communication Center** .
4. Select the **APN Name** as **CMNET** or **UNINET**.
5. Enter the SIM Card No.
6. Select the center group from the drop-down list.
7. Enter the IP address and port number.

   Note

   - By default, the port number for EHome is ***7660***.
   - The port number of the wireless network and wired network should be consistent with the port number of EHome.

8. Select the **Protocol Type** as **EHome**.
9. Set an account name for the network center.
10. Click **Save**.

Set Device Capture Parameters

You can configure the capture parameters of the access control device, including manual capture and event triggered capture.

Note

- The capture function should be supported by the device.
- Before setting the capture parameters, you should set the picture storage first to define where the event triggered pictures are saved. For details, refer to .

Set Triggered Capture Parameters

When an event occurs, the camera of the access control device can be triggered to capture picture(s) to record what happens when the event occurs. You can view the captured pictures when checking the event details in Event Center. Before that, you need to set the parameters for the capture such as number of pictures captured for one time.

Before You Start
Before setting the capture parameters, you should set the picture storage first to define where the captured pictures are saved. For details, refer to .

Steps

Note
This function should be supported by the device

1. Enter the Access Control module.
2. On the navigation bar on the left, enter **Advanced Function → More Parameters → Capture** .
3. Select an access control device in the device list and select **Linked Capture**.
4. Set the picture size and quality.
5. Set the capture times once triggered which defines how many pictures will be captures for one time.
6. If the capture times is more than 1, set the interval for each capture.
7. Click **Save**.

Set Manual Capture Parameters

In Status Monitoring module, you can capture a picture manually the access control device's camera by clicking a button. Before that, you need to set the parameters for the capture such as picture quality.

Before You Start
Before setting the capture parameters, you should set the saving path first to define where the captured pictures are saved. For details, refer to .

Steps

Note
This function should be supported by the device

1. Enter the Access Control module.
2. On the navigation bar on the left, enter **Advanced Function → More Parameters → Capture** .
3. Select an access control device in the device list and select **Manual Capture**.
4. Select the resolution of the captured pictures from the drop-down list.

5. Select the picture quality as **High**, **Medium**, or **Low**. The higher the picture quality is, the larger size the picture will be.
6. Click **Save**.

Set Parameters for Face Recognition Terminal

For face recognition terminal, you can set its parameters including face picture database, QR code authentication, etc.

Steps

Note

This function should be supported by the device.

1. Enter the Access Control module.
2. On the navigation bar on the left, enter **Advanced Function → More Parameters** .
3. Select an access control device in the device list and click **Face Recognition Terminal**.
4. Set the parameters.

   Note

   These parameters displayed vary according to different device models.

   COM

   Select a COM port for configuration. COM1 refers to the RS-485 interface and COM2 refers to the RS-232 interface.

   Face Picture Database

   select Deep Learning as the face picture database.

   Authenticate by QR Code

   If enabled, the device camera can scan the QR code to authenticate. By default, the function is disabled.

   Blocklist Authentication

   If enabled, the device will compare the person who want to access with the persons in the blocklist.

   If matched (the person is in the blocklist), the access will be denied and the device will upload an alarm to the client.

   If mismatched (the person is not in the blocklist), the access will be granted.

   Save Authenticating Face Picture

   If enabled, the captured face picture when authenticating will be saved on the device.

   MCU Version

   View the device MCU version.
5. Click **Save**.

Set RS-485 Parameters

You can set the access control device's RS-485 parameters including the baud rate, data bit, the stop bit, parity type, flow control type, communication mode, work mode, and connection mode.

Steps

Note

The RS-485 Settings should be supported by the device.

1. Enter the Access Control module.
2. On the navigation bar on the left, enter **Advanced Function → More Parameters** .
3. Select an access control device in the device list and click **RS-485** to enter the RS-485 Settings page.
4. Select the serial port number from the drop-down list to set the RS-485 parameters.
5. Set the baud rate, data bit, the stop bit, parity type, communication mode, working mode, and connection mode in the drop-down list.
6. Click **Save**.
   - The configured parameters will be applied to the device automatically.
   - After changing the working mode or connection mode, the device will reboot automatically.

Set Wiegand Parameters

You can set the access control device's Wiegand channel and the communication mode. After setting the Wiegand parameters, the device can connect to Wiegand card reader via Wiegand communication.

Before You Start

Add access control device to the client, and make sure the device supports Wiegand.

Steps

1. Enter the Access Control module.
2. On the navigation bar on the left, enter **Advanced Function → More Parameters** .
3. Select an access control device in the device list and click **Wiegand** to enter the Wiegand Settings page.
4. Set the switch to on to enable the Wiegand function for the device.
5. Select the Wiegand channel No. and the communication mode from the drop-down list.

   Note

   If you set **Communication Direction** as **Sending**, you are required to set the **Wiegand Mode** as **Wiegand 26** or **Wiegand 34**.

6. Click **Save**.

- The configured parameters will be applied to the device automatically.
- After changing the communication direction, the device will reboot automatically.

Enable M1 Card Encryption

M1 card encryption can improve the security level of authentication.

Steps

Note

The function should be supported by the access control device and the card reader.

1. Enter the Access Control module.
2. On the navigation bar on the left, enter **Advanced Function → More Parameters** .
3. Select an access control device in the device list and click **M1 Card Encryption** to enter the M1 Card Encryption page.
4. Set the switch to on to enable the M1 card encryption function.
5. Set the sector ID.

   The sector ID ranges from 1 to 100.
6. Click **Save** to save the settings.

Set Attendance Status

You can set the attendance mode on the device via the client. You can also set the attendance parameters as check in, check out, break out, break in, overtime in, and overtime out on the device according to your actual needs.

Note

This function should be supported by the device.

Disable Attendance Mode

Disable the attendance mode and the system will not display the attendance status on the device initial page.

Before You Start

Add at least one person, and set the person's authentication mode. For details, see ***Person Management*** .

Steps

1. Click **Access Control → Advanced Function → More Parameters** to enter the More Parameters page.
2. Select a device from the left panel.

3. Click **Attendance Status**.
4. Set the attendance mode as **Disable**.
5. Click **Save**.

Result

The attendance status function is disabled, and you will not view or configure the attendance status on the device initial page.

Set Manual Attendance

Set the attendance mode as manual, and you can select a status manually when you take attendance on the device.

Before You Start
Add at least one person, and set the person's authentication mode. For details, see ***Person Management*** .

Steps
1. Click **Access Control → Advanced Function → More Parameters** to enter the More Parameters page.
2. Select a device from the left panel.
3. Click **Attendance Status**.
4. Set the attendance mode as **Manual**.
5. Make sure **Attendance Status Required** is enabled.

   Note

   By default, **Attendance Status Required** is enabled.
6. Set shortcut key from the drop-down list for the attendance status.
7. Click **Save**.

Result

Press a key on the device keypad to select an attendance status and authenticate. The authentication will be marked as the configured attendance status according to the defined shortcut key.

Or when you authenticate on the device initial page, you will enter the Select Status page. Select a status to take attendance.

Note

If you do not select a status for about 20 s, the authentication will be failed and it will not be marked as a valid attendance.

Set Auto Attendance

Set the attendance mode as auto, and you can set the attendance status and its available time duration. The system will auto change the attendance status according to the configured parameters.

Before You Start

Add at least one person, and set the person's authentication mode. For details, see ***Person Management*** .

Steps

1. Click **Access Control → Advanced Function → More Parameters** to enter the More Parameters page.
2. Select a device from the left panel.
3. Click **Attendance Status**.
4. Set the attendance mode as **Auto**.
5. Make sure **Attendance Status Required** is enabled.

   Note

   By default, **Attendance Status Required** is enabled.

6. Set available time for the target attendance status.
   1) Move the cursor on the target time and the enable checkbox will display.
   2) Check the checkbox and set the available time.
   3) Click anywhere on the page to confirm the settings. The configured time will be displayed in white.
7. Set shortcut key from the drop-down list for the attendance status.
8. Click **Save**.

   The attendance status will be valid within the configured time duration.

Result

Enter the device initial page, the current attendance mode will be displayed on the page. When you authenticate on the initial page, the authentication will be marked as the configured attendance status according to the configured time.

Example

If set the Up key as check in and the Down key as check out, and set the check in's schedule as Monday 08:00, and check out's schedule as Monday 17:00, the valid person's authentication before 17:00 on Monday will be marked as check in. And the valid person's authentication after 17:00 on Monday will be marked as check out.

Set Manual and Auto Attendance

Set the attendance mode as manual and auto and the device system will auto change the attendance status according to the configured parameters. At the same time you can manually change the attendance status before the authentication.

Before You Start
Add at least one person, and set the person's authentication mode. For details, see ***Person Management*** .

Steps
1. Click **Access Control → Advanced Function → More Parameters** to enter the More Parameters page.
2. Select a device from the left panel.
3. Click **Attendance Status**.
4. Set the attendance mode as **Manual and Auto**.
5. Make sure **Attendance Status Required** is enabled.

   Note

   By default, **Attendance Status Required** is enabled.
6. Set status lasts time.
7. Set available time for the target attendance status.
   1) Move the cursor on the target time and the enable checkbox will display.
   2) Check the checkbox and set the available time.
   3) Click anywhere on the page to confirm the settings. The configured time will be displayed in white.
8. Set shortcut key from the drop-down list for the attendance status.
9. Click **Save**.

   The attendance status will be valid within the configured time duration.

Result

Enter the device initial page, the current attendance mode will be displayed on the page. If you do not select a status, the authentication will be marked as the configured attendance status according to the configured time. If you press the key on the keypad, and select a status to take attendance, the authentication will be marked as the selected attendance status.

Example
If set the Up key as check in and the Down key as check out, and set the check in's time as Monday 08:00, and check out's time as Monday 17:00, the valid person's authentication before 17:00 on Monday will be marked as check in. And the valid person's authentication after 17:00 on Monday will be marked as check out.

7.5 Configure Linkage Actions for Access Control

You can configure different linkage actions for the event detected by the access control device. After that, linkage actions will be triggered once the event happens. This mechanism is used for notifying the security personnel the event, or triggering automatic access control in real time.

Two types of linkage actions are supported:

- **Client Actions:** When the event is detected, it will trigger the actions on the client, such as the client making an audible warning..
- **Device Actions:** When the event is detected, it will trigger the actions of a specific device, such as buzzing of a card reader and, opening/closing of a door, ..

7.5.1 Configure Client Actions for Access Event

You can assign client linkage actions to the event by setting up a rule. For example, when the event is detected, an audible warning appears to notify the security personnel.

Steps

Note

The linkage actions here refer to the linkage of the client software's own actions such as audible warning, email linkage, etc.

1. Click **Event Management → Access Control Event** .

   The added access control devices will display in the device list.
2. Select a resource (including device, alarm input, door/elevator, and card reader) from the device list.

   The event types which the selected resource supports will display.
3. Select the event(s) and click **Edit Priority** to define the priority for the event(s), which can be used to filter events in the Event Center.
4. Set the linkage actions of the event.
   1) Select the event(s) and click **Edit Linkage** to set the client actions when the events triggered.

      Audible Warning

      The client software gives an audible warning when alarm is triggered. You can select the alarm sound for audible warning.

      Note

      For setting the alarm sound, please refer to .

      Email Linkage

      Send an email notification of the alarm information to one or more receivers.
   2) Click **OK**.

5. Enable the event so that when the event is detected, en event will be sent to the client and the linkage actions will be triggered.
6. **Optional:** Click **Copy to...** to copy the event settings to other access control device, alarm input, door/elevator, or card reader.

7.5.2 Configure Device Actions for Access Event

You can set the access control device's linkage actions for the access control device's triggered event. After that, when an event is triggered, it can trigger the alarm output, buzzer on access controller, and other actions.

Steps

Note

The linkage actions should be supported by the device.

1. Click **Access Control → Linkage Configuration** .
2. Select the access control device from the list on the left.
3. Click **Add** to add a new linkage.
4. Select **Event Linkage** as the event source.
5. select the event type and detailed event to set the linkage.
6. In the Linkage Target area, set the property target to enable this action.

Buzzer on Controller

The audible warning of access control device will be triggered.

Capture

An event-related picture will be captured when the selected event happens.

Recording

An event-related picture will be captured when the selected event happens.

Note

The device should support recording.

Buzzer on Reader

The audible warning of card reader will be triggered.

Alarm Output

The alarm output will be triggered for notification when the selected event happens

Alarm Input

Arm or disarm the alarm input.

Note

The device should support alarm input function.

Access Point

The door status of open, close, remain open, or remain close will be triggered.

Note

The target door and the source door cannot be the same one.

Audio Play

The audio prompt will be triggered. And the select audio index related audio content will be played according to the configured play mode.

7. Click **Save**.
8. **Optional:** After adding the device linkage, you can do one or more of the followings:

Edit Linkage Settings	Select the configured linkage settings in the device list and you can edit its event source parameters, including event source and linkage target.
Delete Linkage Settings	Select the configured linkage settings in the device list and click **Delete** to delete it.

7.5.3 Configure Device Actions for Card Swiping

You enable access control device's linkage actions (such as disarming a zone and triggering audio prompt) for the swiping of a specific card, In this way, you can monitor the card holder's behaviors and whereabouts.

Steps

Note

It should be supported by the device.

1. Click **Access Control → Linkage Configuration** .
2. Select the access control device from the list on the left.
3. Click **Add** to add a new linkage.
4. Select **Card Linkage** as the event source.
5. Enter the card number or select the card from the drop-down list.
6. Select the card reader where the card swipes.
7. In the Linkage Target area, set the property target to enable this action.

Buzzer on Controller

The audible warning of access control device will be triggered.

Buzzer on Reader

The audible warning of card reader will be triggered.

Capture

An event-related picture will be captured when the selected event happens.

Recording

An event-related picture will be captured when the selected event happens.

Note

The device should support recording.

Alarm Output

The alarm output will be triggered for notification.

Alarm Input

Arm or disarm the alarm input.

Note

The device should support alarm input function.

Access Point

The door status of open, close, remain open, or remain closed will be triggered.

Audio Play

The audio prompt will be triggered. And the select audio index related audio content will be played according to the configured play mode.

8. Click **Save**.

   When the card (configured in Step 5) swipes on the card reader (configured in Step 6), it can trigger the linked actions (configured in step 7).

9. **Optional:** After adding the device linkage, you can do one or more of the followings:

Delete Linkage Settings	Select the configured linkage settings in the device list and click **Delete** to delete it.
Edit Linkage Settings	Select the configured linkage settings in the device list and you can edit its event source parameters, including event source and linkage target.

7.5.4 Configure Device Linkage for Mobile Terminal's MAC Address

You can set the access control device's linkage actions for the specified MAC address of mobile terminal. When access control device detects the specified MAC address, it can trigger the alarm output, host buzzer, and other actions.

Steps

Note

The function should be supported by the device.

1. Click **Access Control → Linkage Configuration** .
2. Select the access control device from the list on the left.
3. Click **Add** to add a new linkage.
4. Select **Mac Linkage** as the event source.

5. Enter the MAC address to be triggered.

Note

MAC Address Format: AA:BB:CC:DD:EE:FF.

6. In the Linkage Target area, set the property target to enable this action.

Buzzer on Controller

The audible warning of access control device will be triggered.

Buzzer on Reader

The audible warning of card reader will be triggered.

Capture

An event-related picture will be captured when the selected event happens.

Recording

An event-related picture will be captured when the selected event happens.

Note

The device should support recording.

Alarm Output

The alarm output will be triggered for notification.

Alarm Input

Arm or disarm the alarm input.

Note

The device should support alarm input function.

Access Point

The door status of open, close, remain open, or remain closed will be triggered.

Audio Play

The audio prompt will be triggered. And the select audio index related audio content will be played according to the configured play mode.

7. Click **Save**.
8. **Optional:** After adding the device linkage, you can do one or more of the followings:

Edit Linkage Settings	Select the configured linkage settings in the device list and you can edit its event source parameters, including event source and linkage target.
Delete Linkage Settings	Select the configured linkage settings in the device list and click **Delete** to delete it.

7.5.5 Configure Device Actions for Person ID

You can set the access control device's linkage actions for the specified person ID. When access control device detects the specified person ID, it can trigger the alarm output, buzzer on card reader, and other actions, so as to implement special monitoring on the specified person.

Steps

Note

It should be supported by the device.

1. Click **Access Control → Linkage Configuration** .
2. Select the access control device from the list on the left.
3. Click **Add** to add a new linkage.
4. Select **Person Linkage** as the event source.
5. Enter the employee number or select the person from the drop-down list.
6. Select the card reader where the card swipes.
7. In the Linkage Target area, set the property target to enable this action.

   Buzzer on Controller

   The audible warning of access control device will be triggered.

   Buzzer on Reader

   The audible warning of card reader will be triggered.

   Capture

   An event-related picture will be captured when the selected event happens.

   Recording

   An event-related picture will be captured when the selected event happens.

   Note

   The device should support recording.

   Alarm Output

   The alarm output will be triggered for notification.

   Alarm Input

   Arm or disarm the alarm input.

   Note

   The device should support zone function.

   Access Point

   The door status of open, close, remain open, or remain closed will be triggered.

   Audio Play

The audio prompt will be triggered. And the select audio index related audio content will be played according to the configured play mode.

8. Click **Save**.
9. **Optional:** After adding the device linkage, you can do one or more of the followings:

Delete Linkage Settings	Select the configured linkage settings in the device list and click **Delete** to delete it.
Edit Linkage Settings	Select the configured linkage settings in the device list and you can edit its event source parameters, including event source and linkage target.

7.6 Door/Elevator Control

In Monitoring module, you can view the real-time status of the doors or elevators managed by the added access control device. You can also control the doors and elevators such as open/close the door, or remain the door open/closed via the client remotely. The real-time access event are displayed in this module. You can view the access details and person details.

Note

For the user with door/elevator control permission, the user can enter the Monitoring module and control the door/elevator. Or the icons used for control will not show. For setting the user permission, refer to .

7.6.1 Control Door Status

You can control the status for a single door, including opening door, closing door, remaining the door open, and remaining the door closed.

Steps

1. Click **Monitoring** to enter the status monitoring page.
2. Select an access point group on the upper-right corner.

   Note

   For managing the access point group, refer to .

   The doors in the selected access control group will display.
3. Click a door icon to select a door, or press **Ctrl** and select multiple doors.
4. Click the following buttons to control the door.

   Open Door

   When the door is locked, unlock it and it will be open for once. After the open duration, the door will be closed and locked again automatically.

   Close Door

When the door is unlocked, lock it and it will be closed. The person who has the access authorization can access the door with credentials.

Remain Open

The door will be unlocked (no matter closed or open). All the persons can access the door with no credentials required.

Remain Closed

The door will be closed and locked. No person can access the door even if he/she has the authorized credentials, except the super users.

Capture

Capture a picture manually.

Note

The **Capture** button is available when the device supports capture function. The picture is saved in the PC running the client. For setting the saving path, refer to .

Result

The icon of the doors will change in real-time according to the operation if the operation is succeeded.

7.6.2 Control Elevator Status

You can control the elevator status of the added elevator controller, including opening elevator's door, controlled, free, calling elevator, etc.

Before You Start

- Add person and assign access authorization to designed person, and person will have the access authorization to the access points (floors). For details, refer to ***Person Management*** and ***Set Access Group to Assign Access Authorization to Persons*** .
- Make sure the operation user has the permission of the access points (floors). For details, refer to .

Steps

Note

- You can control the elevator via the current client if it is not armed by other client. The elevator cannot be controlled by other client software if the elevator status changes.
- Only one client software can control the elevator at one time.
- The client which has controlled the elevator can receive the alarm information and view the elevator real-time status.

1. Click **Monitoring** to enter the status monitoring page.
2. Select an access point group on the upper-right corner.

Note

For managing the access point group, refer to .

The elevators in the selected access point group will display.

3. Click a door icon to select an elevator.
4. Click the following buttons to control the elevator.

Open Door

When the elevator's door is closed, open it. After the open duration, the door will be closed again automatically.

Controlled

You should swipe the card before pressing the target floor button. And the elevator can go to the target floor.

Free

The selected floor's button in the elevator will be valid all the time.

Disabled

The selected floor's button in the elevator will be invalid and you cannot go to the target floor.

Result

The icon of the doors will change in real-time according to the operation if the operation is succeeded.

7.6.3 Check Real-Time Access Records

The access records will display in real time, including card swiping records, face recognitions records, fingerprint comparison records, etc. You can view the person information and view the picture captured during access.

Steps

1. Click **Monitoring** and select a group from the drop-down list on the upper-right corner.

   The access records triggered at the doors in the selected group will display in real time. You can view the details of the records, including card No., person name, organization, event time, etc.
2. **Optional:** Check the event type and event status so that these events will show in the list if the events are detected. The events of unchecked type or status will not be displayed in the list.
3. **Optional:** Check **Show Latest Event** and the latest access record will be selected and displayed at the top of the record list.
4. **Optional:** Click the event to view the accessed person details, including person pictures (captured picture and profile), person No., person name, organization, phone, contact address, etc.

Note

You can double click the captured picture to enlarge it to view the details.

5. **Optional:** Right click on the column name of the access event table to show or hide the column according to actual needs.

7.7 Time and Attendance

The Time and Attendance module provides multiple functionalities to track and monitor when employees start and stop work, and full control of employees working hours such as late arrivals, early departures, time taken on breaks and absenteeism.

Note

In this section, we introduce the configurations before you can getting the attendance reports. The access records recorded after these configurations will be calculated in the statistics.

7.7.1 Configure Attendance Parameters

You can configure the attendance parameters, including the general rule, overtime parameters, attendance check point, holiday, leave type, etc.

Configure General Rule

You can configure the general rule for attendance calculation, such as the week beginning, month beginning, weekend, absence, etc.

Steps

Note

The parameters configured here will be set as default for the newly added time period. It will not affect the existed one(s).

1. Enter Time & Attendance module.
2. Click **Attendance Settings → General Rule** .
3. Set the day as week beginning and the date as month beginning.
4. Select the day(s) as weekend.
5. Set absence parameters.
6. Click **Save**.

Configure Overtime Parameters

You can configure the overtime parameters for workday and non-workday, including overtime level, pay rate, attendance status for overtime, etc.

Steps

1. Enter Time & Attendance module.
2. Click **Attendance Settings → Overtime** .
3. Set required information.

   Overtime Level for Workday

   When you work for certain period after end-work time on workday, you will reach different overtime level: overtime level 1, overtime level 2 and overtime level 3 . You can set different pay rate for three overtime levels, respectively.

   Pay Rate

   Set corresponding pay rates for three overtime levels, which can be generally used to calculate total work hours.

   Overtime Rule for Non-Workday

   You can enable overtime rule for non-workday and set calculation mode.
4. Click **Save**.

Configure Attendance Check Point

You can set the card reader(s) of the access point as the attendance check point, so that the authentication on the card readers will be recorded for attendance .

Before You Start

You should add access control device before configuring attendance check point. For details, refer to .

Steps

Note

By default, all card readers of the added access control devices are set as attendance checkpoint.

1. Enter the Time & Attendance module.
2. Click **Attendance Settings → Attendance Check Point** to enter the Attendance Check Point Settings page.
3. **Optional:** Set **Set All Card Readers as Check Points** switch to off.

   Only the card readers in the list will be set as the attendance check points.
4. Check the desired card reader(s) in the device list as attendance check point(s).
5. Set check point function as **Start/End-Work**, **Start-Work** or **End-Work**.
6. Click **Set as Check Point**.

The configured attendance check point displays on the right list.

Configure Holiday

You can add the holiday during which the check-in or check-out will not be recorded.

Add Regular Holiday

You can configure a holiday which will take effect annually on regular days during the effective period, such as New Year's Day, Independence Day, Christmas Day, etc.

Steps

1. Enter the Time & Attendance module.
2. Click **Attendance Settings → Holiday** to enter the Holiday Settings page.
3. Check **Regular Holiday** as holiday type.
4. Custom a name for the holiday.
5. Set the first day of the holiday.
6. Enter the number of the holiday days.
7. Set the attendance status if the employee works on holiday.
8. **Optional:** Check **Repeat Annually** to make this holiday setting effective every year.
9. Click **OK**.

   The added holiday will display in the holiday list and calendar.

   If the date is selected as different holidays, it will be recorded as the first-added holiday.
10. **Optional:** After adding the holiday, perform one of the following operations.

Edit Holiday	Click to edit the holiday information.
Delete Holiday	Select one or more added holidays, and click **Delete** to delete the holiday(s) from the holiday list.

Add Irregular Holiday

You can configure a holiday which will take effect annually on irregular days during the effective period, such as Bank Holiday.

Steps

1. Enter the Time & Attendance module.
2. Click **Attendance Settings → Holiday** to enter the Holiday Settings page.
3. Click **Add** to open the Add Holiday page.
4. Check **Irregular Holiday** as holiday type.
5. Custom a name for the holiday.
6. Set the start date of the holiday.

Example

If you want to set the forth Thursday in November, 2019 as the Thanksgiving Day holiday, you should select 2019, November, 4th, and Thursday from the four drop-down lists.

7. Enter the number of the holiday days.
8. Set the attendance status if the employee works on holiday.
9. **Optional:** Check **Repeat Annually** to make this holiday setting effective every year
10. Click **OK**.

    The added holiday will display in the holiday list and calendar.

    If the date is selected as different holidays, it will be recorded as the first-added holiday.
11. **Optional:** After adding the holiday, perform one of the following operations.

Edit Holiday	Click to edit the holiday information.
Delete Holiday	Select one or more added holidays, and click **Delete** to delete the holiday(s) from the holiday list.

Configure Leave Type

You can customize the leave type (major leave type and minor leave type) according to actual needs. You can also edit or delete the leave type.

Steps

1. Enter the Time & Attendance module.
2. Click **Attendance Settings → Leave Type** to enter the Leave Type Settings page.
3. Click **Add** on the left to add a major leave type.
4. **Optional:** Perform one of the following operations for major leave type.

Edit	Move the cursor over the major leave type and click to edit the major leave type.
Delete	Select one major leave type and click **Delete** on the left to delete the major leave type.

5. Click **Add** on the right to add a minor leave type.
6. **Optional:** Perform one of the following operations for minor leave type.

Edit	Move the cursor over the minor leave type and click to edit the minor leave type.
Delete	Select one or multiple major leave types and click **Delete** on the right to delete the selected minor leave type(s).

Synchronize Authentication Record to Third-Party Database

The attendance data recorded in client software can be used by other system for calculation or some other operations. You can enable synchronization function to apply the authentication record from client software to the third-party database automatically.

Steps

1. Enter Time & Attendance module.
2. Click **Attendance Settings → Third-Party Database** .
3. Set **Apply to Database** switch to on to enable synchronization function.
4. Set the required parameters of the third-party database, including database type, server IP address, database name, user name and password.
5. Set table parameters of database according to the actual configurations.
   1) Enter the table name of the third-party database.
   2) Set the mapped table fields between the client software and the third-party database.
6. Click **Connection Test** to test whether database can be connected.
7. Click **Save** to save the settings.

   The attendance data will be written to the third-party database.

Configure Break Time

You can add break time and set start time, end time, duration, calculation mode and other parameters for the break. The added break time can also be edited or deleted.

Steps

1. Click **Time & Attendance → Timetable** .

   The added timetables are displayed in the list.
2. Select an added timetable or click **Add** to enter setting timetable page.
3. Click **Settings** in the break time area to enter break time management page.
4. Add break time.
   1) Click **Add**.
   2) Enter a name for the break time.
   3) Set related parameters for the break time.

      Start Time / End Time

      Set the time when the break starts and ends.

      No Earlier Than / No Later Than

      Set the earliest swiping time for starting break and the latest swiping time for ending break.

      Break Duration

      The duration from start time to end time of the break.

      Calculation

Auto Deduct

The fixed break duration will be excluded from work hours.

Must Check

The break duration will be calculated and excluded from work hours according to actual check-in and check-out time.

Note

If you select **Must Check** as calculation method, you need to set attendance status for late or early returning from break.

5. Click **Save** to save the settings.
6. **Optional:** Click **Add** to continue adding break time.

Configure Report Display

You can configure display contents displayed in the attendance report, such as the company name, logo, date format, time format, and mark.

Steps

1. Enter Time & Attendance module.
2. Click **Attendance Statistics → Report Display** .
3. Set the display settings for attendance report.

   Company Name

   Enter a company name to display the name in the report.

   Attendance Status Mark

   Enter the mark and select the color. The related fields of attendance status in the report will display with the mark and color.

   Weekend Mark

   Enter the mark and select the color. The weekend fields in the report will display with the mark and color.
4. Click **Save**.

7.7.2 Add Timetable

You can add the timetable for the shift schedule.

Steps

1. Click **Time & Attendance → Timetable** to enter timetable settings window.
2. Click **Add** to enter Add Timetable page.
3. Create a name for the timetable.
4. Select calculation method.

   First In & Last Out

The first check-in time is recorded as start work time and the last check-out time is recorded as the end-work time.

Each Check-In/Out

Each check-in time and check-out time is valid and the sum of all periods between adjacent check-in and check-out time will be recorded as the valid working duration.

You need to set **Valid Auth. Interval** for this calculation method. For example, if the interval between card swiping of the same card is less than the set value, the card swiping is invalid.

5. **Optional:** Set **Enable T&A Status** switch to on to calculate according to attendance status of the device.
6. Set the related attendance time.

Start/End-Work Time

Set the start-work time and end-work-time.

Valid Check-in/out Time

Set the time period during which the check-in or check-out is valid.

Calculated as

Set the duration calculated as the actual work duration.

Late/Early Leave Allowable

Set the time period for late or early leave.

7. **Optional:** Select break time to exclude the duration from work hours.

Note

You can click **Settings** to manage break time. For more details about configuring break time, refer to ***Configure Break Time*** .

8. Click **Save** to add the timetable.
9. **Optional:** Perform one or more following operations after adding timetable.

Edit Timetable	Select a timetable from the list to edit related information.
Delete Timetable	Select a timetable from the list and click **Delete** to delete it.

7.7.3 Add Shift

You can add the shift for the shift schedule.

Before You Start

Add a timetable first. See ***Add Timetable*** for details.

Steps

1. Click **Time & Attendance → Shift** to enter shift settings page.
2. Click **Add** to enter Add Shift page.
3. Enter the name for shift.

4. Select the shift period from the drop-down list.
5. Select the added timetable and click on the time bar to apply the timetable.

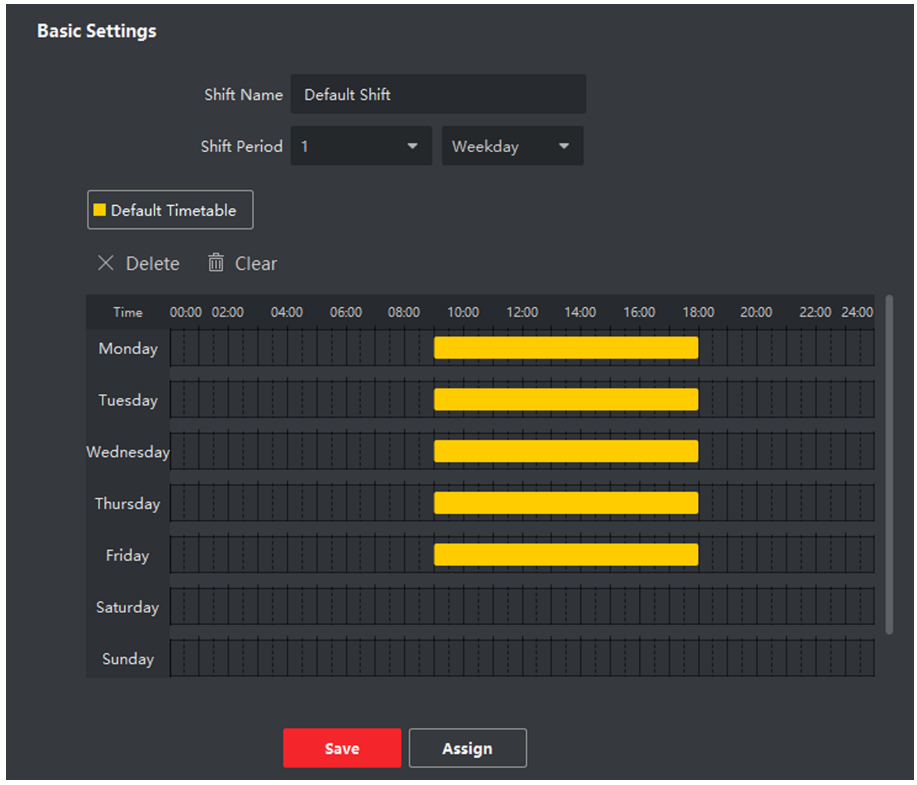


Figure 7-5 Add Shift

6. Click **Save**.

   The added shift lists on the left panel of the page. At most 64 shifts can be added.
7. **Optional:** Assign the shift to organization or person for a quick shift schedule.
   1) Click **Assign**.
   2) Select **Organization** or **Person** tab and check the desired organization(s) or person(s) box.

      The selected organizations or persons will list on the right page.
   3) Set the effective period for the shift schedule.
   4) Set other parameters for the shift schedule, including Check-in Not Required, Check-out Not Required, Effective for Holiday, and Effective for Overtime.
   5) Click **Save** to save the quick shift schedule.

7.7.4 Manage Shift Schedule

Shift work is an employment practice designed to make use of all 24 hours of the clock each day of the week. The practice typically sees the day divided into shifts, set periods of time during which different shifts perform their duties.

You can set department schedule, person schedule, and temporary schedule.

Set Department Schedule

You can set the shift schedule for one department, and all the persons in the department will be assigned with the shift schedule.

Before You Start
In Time & Attendance module, the department list is the same with the organization. You should add organization and persons in Person module first. See ***Person Management*** for details.

Steps
1. Click **Time & Attendance → Shift Schedule** to enter the Shift Schedule Management page.
2. Click **Department Schedule** to enter Department Schedule page.
3. Select the department from the organization list on the left.

   Note

   If **Include Sub Organization** is checked, when selecting the organization, its sub organizations are selected at the same time.
4. Select the shift from the drop-down list.
5. Check the checkbox to enable **Multiple Shift Schedules**.

   Note

   After checking **Multiple Shift Schedules**, you can select the effective time period(s) from the added time periods for the persons in the department.

   Multiple Shift Schedules

   It contains more than one time periods. The person can check in/out in any of the time periods and the attendance will be effective.
   If the multiple shift schedules contains three time periods: 00:00 to 07:00, 08:00 to 15:00 and 16:00 to 23:00. The attendance of the person adopting this multiple shift schedules will be effective in any of the three time periods. If the person checks in at 07:50, it will apply the nearest time period 08:00 to 15:00 to the person's attendance.
6. Set the start date and end date.
7. Set other parameters for the schedule, including Check-in Not Required, Check-out Not Required, Effective for Holiday, and Effective for Overtime.
8. Click **Save**.

Set Person Schedule

You can assign the shift schedule to one or more persons. You can also view and edit the person schedule details.

Before You Start
Add department and person in Person module. See ***Person Management*** for details.

Steps

Note

The person schedule has the higher priority than department schedule.

1. Click **Time & Attendance → Shift Schedule** to enter the Shift Schedule Management page.
2. Click **Person Schedule** to enter Person Schedule page.
3. Select the organization and select the person(s).
4. Select the shift from the drop-down list.
5. Check the checkbox to enable **Multiple Shift Schedules**.

   Note

   After checking the **Multiple Shift Schedules**, you can select the effective timetable(s) from the added timetables for the persons.

   Multiple Shift Schedules

   It contains more than one timetables. The person can check in/out in any of the timetables and the attendance will be effective.
   If the multiple shift schedules contains three timetables: 00:00 to 07:00, 08:00 to 15:00 and 16:00 to 23:00. The attendance of the person adopting this multiple shift schedules will be effective in any of the three timetables. If the person checks in at 07:50, it will apply the nearest timetable 08:00 to 15:00 to the person's attendance.
6. Set the start date and end date.
7. Set other parameters for the schedule, including Check-in Not Required, Check-out Not Required, Effective for Holiday, and Effective for Overtime.
8. Click **Save**.

Set Temporary Schedule

You can add a temporary schedule for the person and the person will be assigned with the shift schedule temporarily. You can also view and edit the temporary schedule details.

Before You Start
Add department and person in Person module. See ***Person Management*** for details.

Steps

Note

The temporary schedule has higher priority than department schedule and person schedule.

1. Click **Time & Attendance → Shift Schedule** to enter the Shift Schedule Management page.
2. Click **Temporary Schedule** to enter Temporary Schedule page.
3. Select the organization and select the person(s).
4. Click one date or click and drag to select multiple dates for the temporary schedule.

5. Select **Workday** or **Non-Workday** from drop-down list.

   If **Non-Workday** is selected, you need to set the following parameters.

   Calculated as

   Select normal or overtime level to mark the attendance status for temporary schedule.

   Timetable

   Select a timetable from drop-down list.

   Multiple Shift Schedule

   It contains more than one timetables. The person can check in/out in any of the timetables and the attendance will be effective.

   If the multiple shift schedules contains three timetables: 00:00 to 07:00, 08:00 to 15:00 and 16:00 to 23:00. The attendance of the person adopting this multiple shift schedules will be effective in any of the three timetables. If the person checks in at 07:50, it will apply the nearest timetable 08:00 to 15:00 to the person's attendance.

   Rule

   Set other rule for the schedule, such as **Check-in Not Required**, and**Check-out Not Required**.

6. Click **Save**.

Check Shift Schedule

You can check the shift schedule in calendar or list mode. You ca also edit or delete the shift schedule.

Steps

1. Click **Time & Attendance → Shift Schedule** to enter the Shift Schedule Management page.
2. Select the organization and corresponding person(s).
3. Click or to view the shift schedule in calendar or list mode.

   Calendar

   In calendar mode, you can view the shift schedule for each day in one month. You can click the temporary schedule for one day to edit or delete it.

   List

   In list mode, you can view the shift schedule details about one person or organization, such as shift name, type, effective period and so on. Check the shift schedule(s), and click **Delete** to delete the selected shift schedule(s).

7.7.5 Manually Correct Check-in/out Record

If the attendance status is not correct, you can manually correct the check-in or check out record. You can also edit, delete, search, or export the check-in or check-out record.

Before You Start

- You should add organizations and persons in Person module. For details, refer to ***Person Management*** .
- The person's attendance status is incorrect.

Steps

1. Click **Time & Attendance → Attendance Handling** to enter attendance handling page.
2. Click **Correct Check-In/Out** to enter adding the check-in/out correction page.
3. Select person from left list for correction.
4. Select the correction date.
5. Set the check-in/out correction parameters.
   - Select **Check-in** and set the actual start-work time.
   - Select **Check-out** and set the actual end-work time.

   Note

   You can click ⊕ to add multiple check in/out items. At most 8 check-in/out items can be supported.
6. **Optional:** Enter the remark information as desired.
7. Click **Save**.
8. **Optional:** After adding the check-in/out correction, perform one of the following operations.

   View Click ▦ or ☰ to view the added attendance handling information in calendar or list mode.

   Note

   In calendar mode, you need to click **Calculate** to get the attendance status of the person in one month.

   Edit
   - In calendar mode, click the related label on date to edit the details.
   - In list mode, double-click the related filed in Date, Handling Type, Time, or Remark column to edit the information.

   Delete Delete the selected items.

   Export Export the attendance handling details to local PC.

   Note

   The exported details are saved in CSV format.

7.7.6 Add Leave and Business Trip

You can add leave and business trip when the employee want to ask for leave or go on a business trip.

Before You Start

You should add organizations and persons in the Person module. For details, refer to ***Person Management*** .

Steps

1. Click **Time & Attendance → Attendance Handling** to enter attendance handling page.
2. Click **Apply for Leave/Business Trip** to enter adding the leave/business trip page.
3. Select person from left list.
4. Set the date(s) for your leave or business trip.
5. Select the major leave type and minor leave type from the drop-down list.

   Note

   You can set the leave type in Attendance Settings. For details, refer to ***Configure Leave Type*** .

6. Set the time for leave.
7. **Optional:** Enter the remark information as desired.
8. Click **Save**.
9. **Optional:** After adding the leave and business trip, perform one of the following operations.

   View Click or to view the added attendance handling information in calendar or list mode.

   Note

   In calendar mode, you need to click **Calculate** to get the attendance status of the person in one month.

   Edit
   - In calendar mode, click the related label on date to edit the details.
   - In list mode, double-click the filed in Date, Handling Type, Time, or Remark column to edit the related information.

   Delete Delete the selected items.

   Export Export the attendance handling details to local PC.

   Note

   The exported details are saved in CSV format.

7.7.7 Calculate Attendance Data

You need to calculate the attendance data before searching and viewing the overview of the attendance data, employees' detailed attendance data, employees' abnormal attendance data, the employees' overtime working data, and card swiping log.

Automatically Calculate Attendance Data

You can set a schedule so that the client can automatically calculate attendance data of the previous day at the time you configured every day.

Steps

Note

1. Enter the Time & Attendance module.
2. Click **Attendance Settings → General Rule** .
3. In the Auto-Calculate Attendance area, set the time that you want the client to calculate the data.
4. Click **Save**.

   The client will calculate the attendance data of the previous day from the time you have configured.

Manually Calculate Attendance Data

You can calculate the attendance data manually by setting the data range.

Steps

1. Enter the Time & Attendance module.
2. Click **Attendance Statistics → Calculate Attendance** .
3. Set the start time and end time to define the attendance data range.
4. Set other conditions, including department, person name, employee No. and attendance status.
5. Click **Calculate**.

   Note

   It can only calculate the attendance data within three months.

6. Perform one of the following operations.

Correct Check-in/out	Click **Correct Check-in/out** to add check-in/out correction.
Report	Click **Report** to generate the attendance report.
Export	Click **Export** to export attendance data to local PC. **Note** The exported details are saved in CSV format.

7.7.8 Attendance Statistics

You can check the original attendance record, generate and export the attendance report based on the calculated attendance data.

Get Original Attendance Record

You can search the employee's attendance time, attendance status, check point, etc. in a time period to get an original record of the employees.

Before You Start

- You should add organizations and persons in Person module and the persons has swiped card. For details, refer to ***Person Management*** .
- Calculate the attendance data.

Note

- The client will automatically calculate the previous day's attendance data at 1:00 am on the next day.
- Keep the client running at 1:00 am or it cannot calculate the previous day's attendance data automatically. If not calculated automatically, you can calculate the attendance data manually. For details, refer to ***Manually Calculate Attendance Data*** .

Steps

1. Enter the Time & Attendance module.
2. Click **Attendance Statistics → Original Records** .
3. Set the attendance start time and end time that you want to search from.
4. Set other search conditions, such as department, person name, and employee No.
5. **Optional:** Click **Get from Device** to get the attendance data from the device.
6. **Optional:** Click **Reset** to reset all search conditions and edit the search conditions again.
7. Click **Search**.

   The result displays on the page. You can view the employee's required attendance status and check point.
8. **Optional:** After searching the result, perform one of the following operations.

Generate Report	Click **Report** to generate the attendance report.
Export Report	Click **Export** to export the results to the local PC.

Generate Instant Report

It supports to generate the a series of attendance reports manually to view the employees' attendance results.

Before You Start

Calculate the attendance data.

Note

You can calculate the attendance data manually, or set the schedule so that the client can calculate the data automatically every day. For details, refer to ***Calculate Attendance Data*** .

Steps

1. Enter the Time & Attendance module.
2. Click **Attendance Statistics → Report** .
3. Select a report type.
4. Select the department or person to view the attendance report.
5. Set the start time and end time during which the attendance data will be displayed in the report.
6. Click **Report** to generate the statistics report and open it.

Custom Attendance Report

The client supports multiple report types and you can pre-define the report content and it can send the report automatically to the email address you configured.

Steps

Note

Set the email parameters before you want to enable auto-sending email functions. For details, refer to .

1. Enter the Time & Attendance module.
2. Click **Attendance Statistics → Custom Report** .
3. Click **Add** to pre-define a report.
4. Set the report content.

   Report Name

   Enter a name for the report.

   Report Type

   Select one report type and this report will be generated.

   Report Time

   The time to be selected may vary for different report type.

   Person

   Select the added person(s) whose attendance records will be generated for the report.
5. **Optional:** Set the schedule to send the report to the email address(es) automatically.
   1) Check the **Auto-Sending Email** to enable this function.

2) Set the effective period during which the client will send the report on the selected sending date(s).
3) Select the date(s) on which the client will send the report.
4) Set the time at which the client will send the report.

Example

If you set the effective period as ***2018/3/10 to 2018/4/10***, select ***Friday*** as the sending date, and set the sending time as ***20:00:00***, the client will send the report at 8 p.m. on Fridays during 2018/3/10 to 2018/4/10.

Note

Make sure the attendance records are calculated before the sending time. You can calculate the attendance data manually, or set the schedule so that the client can calculate the data automatically every day. For details, refer to ***Calculate Attendance Data*** .

5) Enter the receiver email address(es).

Note

You can click **+** to add a new email address. Up to 5 email addresses are allowed.

6) **Optional:** Click **Preview** to view the email details.

6. Click **OK**.

7. Optional: After adding the custom report, you can do one or more of the followings:

Edit Report	Select one added report and click **Edit** to edit its settings.
Delete Report	Select one added report and click **Delete** to delete it.
Generate Report	Select one added report and click **Report** to generate the report instantly and you can view the report details.

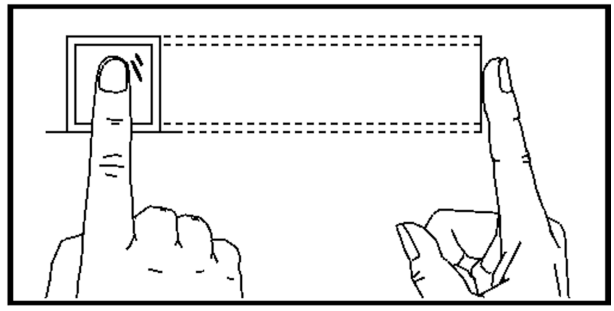
Appendix A. Tips for Scanning Fingerprint

Recommended Finger

Forefinger, middle finger or the third finger.

Correct Scanning

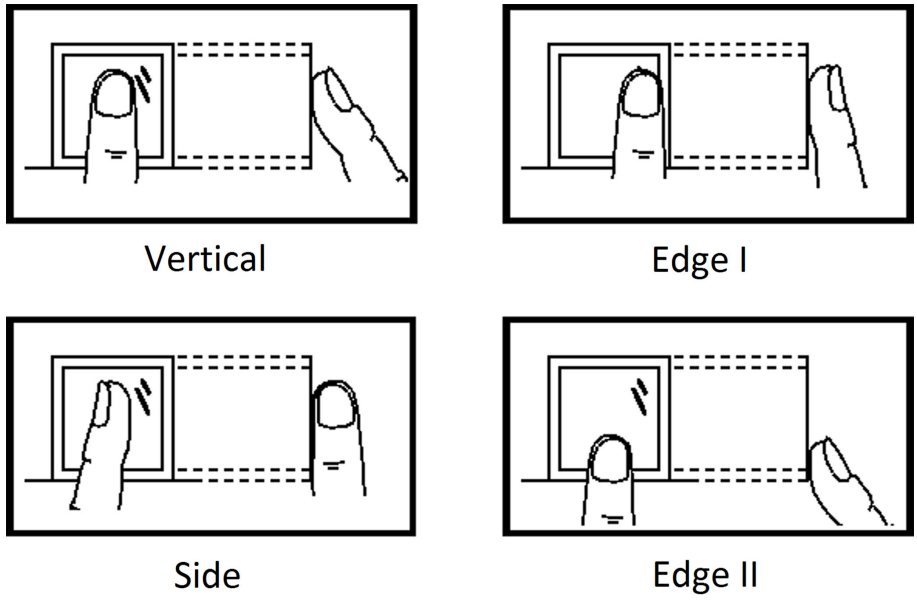
The figure displayed below is the correct way to scan your finger:



You should press your finger on the scanner horizontally. The center of your scanned finger should align with the scanner center.

Incorrect Scanning

The figures of scanning fingerprint displayed below are incorrect:



Environment

The scanner should avoid direct sun light, high temperature, humid conditions and rain.
When it is dry, the scanner may not recognize your fingerprint successfully. You can blow your finger and scan again.

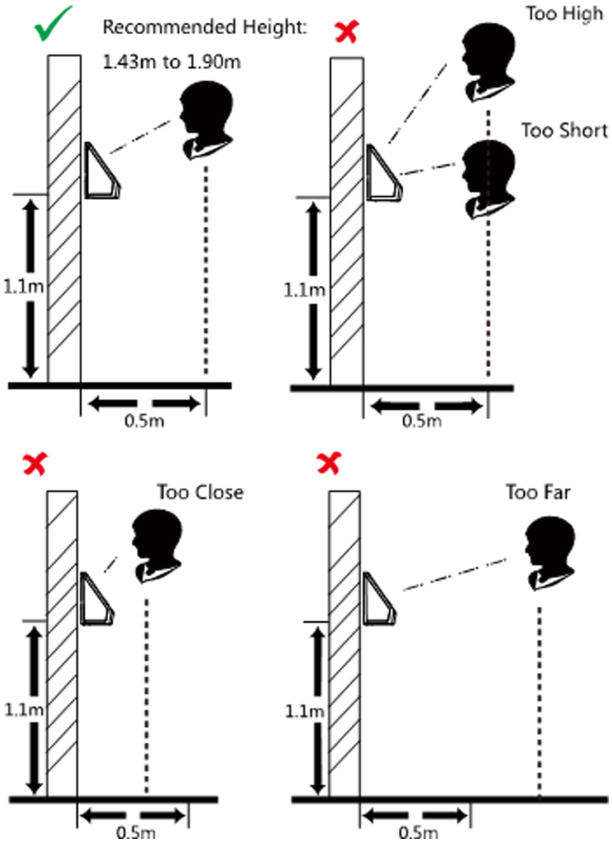
Others

If your fingerprint is shallow, or it is hard to scan your fingerprint, we recommend you to use other authentication methods.
If you have injuries on the scanned finger, the scanner may not recognize. You can change another finger and try again.

Appendix B. Tips When Collecting/Comparing Face Picture

The position when collecting or comparing face picture is as below:

Positions (Recommended Distance: 0.5 m)



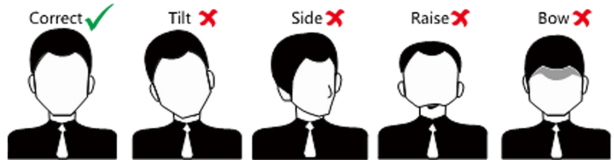
Expression

- Keep your expression naturally when collecting or comparing face pictures, just like the expression in the picture below.

- Do not wear hat, sunglasses, or other accessories that can affect the facial recognition function.
- Do not make your hair cover your eyes, ears, etc. and heavy makeup is not allowed.

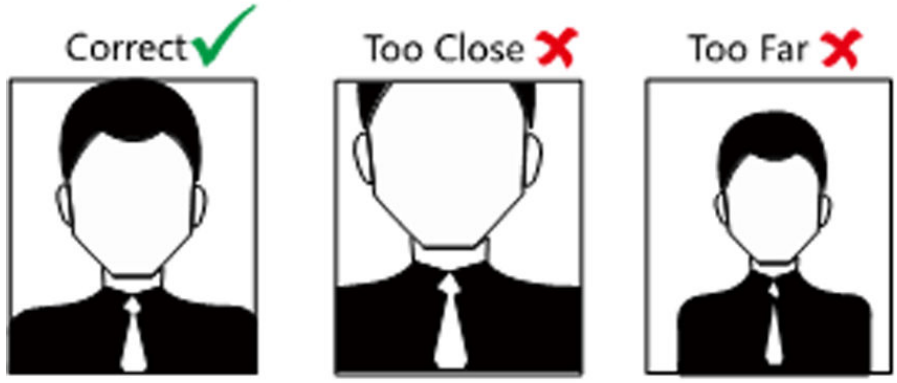
Posture

In order to get a good quality and accurate face picture, position your face looking at the camera when collecting or comparing face pictures.



Size

Make sure your face is in the middle of the collecting window.



Appendix C. Relationship between Device Height, Person Height, and Standing Distance

Standing Distance (m) / Person Height (m) / Device Height (m)	0.3	0.5	0.8
1	1.31 to 1.52	1.33 to 1.80	1.39 to 1.99
1.1 (Recommended)	1.41 to 1.62	1.43 to 1.90	1.49 to 2.09
1.2	1.51 to 1.72	1.52 to 2.11	1.56 to 2.20

Appendix D. Tips for Installation Environment

1. Light Source Illumination Reference Value

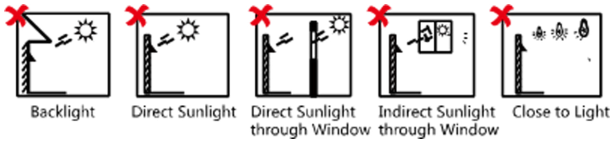
Candle: 10Lux

Bulb: 100~850Lux

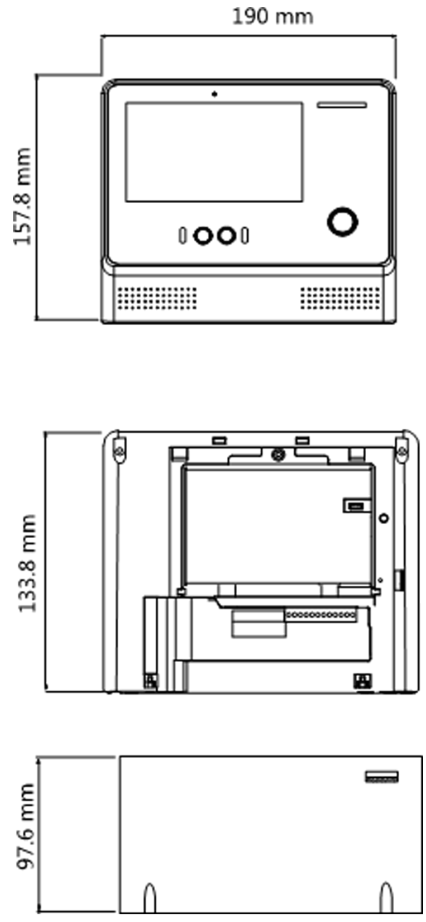
Sunlight: More than 1200Lux

2. Install the device at least 2 meters away from the light, and at least 3 meters away from the window or door.

3.Avoid backlight, direct and indirect sunlight



Appendix E. Dimension



See Far, Go Further