HIKVISION°

DS-K11T341BM(W)I-T
Touchless Identity Authentication Terminal
User Manual

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To ensure the accuracy of the human skin-surface temperature measurement, the technology shall be used to measure only one subject's temperature at a time and shall not be used to measure multiple individuals' temperatures simultaneously.

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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.

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

FCC Conditions

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

EU Conformity Statement



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

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- This device may not cause interference, and
- This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de

licence. L'exploitation est autorisée aux deux conditions suivantes :

- l'appareil ne doit pas produire de brouillage, et
- l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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

Danger!

- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region.
- Do not connect several devices to one power adapter as adapter overload may cause overheating 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.
- 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.)
- The socket-outlet shall be installed near the equipment and shall be easily accessible.
- An all-pole mains switch shall be incorporated in the electrical installation of the building.
- The equipment has been designed, when required, modified for connection to an IT power distribution system.
- This equipment is not suitable for use in locations where children are likely to be present.
- CAUTION: Risk of explosion if the battery is replaced by an incorrect type.
- Improper replacement of the battery with an incorrect type may defeat a safeguard (for example, in the

case of some lithium battery types).

- 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.
- 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.
- Do not subject the battery to extremely low air pressure, which may result in an explosion or the leakage of flammable liquid or gas.
- Dispose of used batteries according to the instructions.
- + identifies the positive terminal(s) of equipment which is used with, or generates direct current. identifies the negative terminal(s) of equipment which is used with, or generates direct current.
- CAUTION: This bracket is intended for use only with DS-K1T341BMI-T/DS-K1T341BMWI-T temperature screening terminal. Use with other equipment may result in instability causing injury.
- CAUTION: This equipment is for use only with the corresponded bracket. Use with other (carts, stands, or carriers) may result in instability causing injury.
- To prevent possible hearing damage, do not listen at high volume levels for long periods.

Cautions!

- Provide a surge suppressor at the inlet opening of the equipment under special conditions such as the mountain top, iron tower, and forest.
- No naked flame sources, such as lighted candles, should be placed on the equipment.
- The serial port of the equipment is used for debugging only.
- Burned fingers when handling the back panel. Wait one-half hour after switching off before handling the parts.
- 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).
- Install the equipment according to the instructions in this manual. To prevent injury, this equipment must be securely attached to the floor/wall in accordance with the installation instructions.
- 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.

Available Models

Product Name	Model	
Touchloss Identity Authorization Torminal	DS-K1T341BMI-T	
Touchless Identity Authentication Terminal	DS-K1T341BMWI-T	

Use only power supplies listed in the user instructions:

Model	Manufacturer	Standard
ADS-26FSG-12 12024EPG	Shenzhen Honor Electronic Co.,Ltd	PG
MSA-C2000IC12.0-24P-DE	MOSO Technology Co.,Ltd	PDE
ADS-26FSG-12 12024EPB	Shenzhen Honor Electronic Co.,Ltd	PB
ADS-26FSG-12 12024EPCU/EPC	Shenzhen Honor Electronic Co.,Ltd	PCU
ADS-26FSG-12 12024EPI-01	Shenzhen Honor Electronic Co.,Ltd	PI
ADS-26FSG-12 12024EPBR	Shenzhen Honor Electronic Co.,Ltd	PBR

NOTE: Make sure the power supply is used indoors, and the working temperature is between 32° to 104° F (0° and 40° C).

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Chapter 1 Overview

1.1 Overview

The temperature screening terminal is a type of access control device integrated with a temperature screening function. It can quickly take skin-surface temperature and upload abnormal temperature events to the center, which can be widely applied in multiple scenarios such as enterprises, stations, dwellings, factories, schools, campuses, etc.

1.2 Features

- Supports vanadium oxide uncooled sensor to measure target's temperature
- Temperature measuring range: 30° to 45° C (86° to 113° F), accuracy: 0.1° C, deviation: ±0.5° C
- Authentication distance: 1 ft to 3 ft 4 in (0.3 m to 1 m)
- Fast temperature measurement mode: Detects identity and takes skin-surface temperature without identity authentication.
- Multiple authentication modes are available: card and temperature, identity and temperature, card and identity and temperature, etc.
- · Face mask wearing alert
 - If the authenticated identity does not wear a mask, the device will prompt a voice reminder. At the same time, the authentication or attendance is valid.
- Forced mask wearing alert
 - If the recognizing identity does not wear a mask, the device will prompt a voice reminder. At the same time, the authentication or attendance will be failed.
- · Displays temperature measurement results on the authentication page
- Triggers voice prompt when detecting abnormal temperature
- Configurable door status (open/close) when detecting abnormal temperature
- Transmits online and offline temperature information to the client software via TCP/IP communication and saves the data on the client software
- Identity authentication duration <0.2 s/user; identity authentication accuracy rate ≥99%
- Suggested height for identity authentication: between 4 ft 7 in and 6 ft 2 in (1.4 m and 1.9 m)
- 3000 identity capacity, 5000 card capacity, and 100,000 event capacity
- Supports six attendance status, including check in, check out, break in, break out, overtime in, overtime
 out

- Watchdog design and tamper function
- · Audio prompt for authentication result
- NTP, manually time synchronization, and auto synchronization
- Connects to external access controller or Wiegand card reader via Wiegand protocol
- Connects to secure door control unit via RS-485 protocol to avoid the door opening when the terminal is destroyed
- Imports and export data to the device from the client software
- Supports ISAPI protocols

Chapter 2 Appearance

Refer to the following contents for detailed information of the temperature screening terminal:

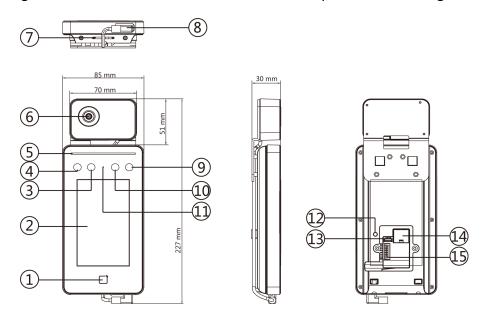


Figure 1, Temperature Screening Terminal Diagram

Table 2-1 Description of Temperature Screening Terminal

No.	Description				
1	Card Presenting Area				
2	Display Screen				
3	Camera				
4	IR Light				
	Indicator Description:				
5	Default: Solid green				
3	Authenticated: Green light flashes three times				
	Authentication Failed: Green light turns off for 1 s				
6	Thermographic Module				
7	Loudspeaker				
8	MicroUSB Interface				
0	NOTE: Connected with the thermographic module.				
9	IR Light				
10	Camera				
11	MIC				
12	Tamper				
13	Debugging Port				
	NOTE: For debugging use only.				
14	Network Interface				
15	Wiring Terminals				

Chapter 3 Installation

3.1 Installation Environment

- Avoid backlight, direct sunlight, and indirect sunlight.
- For better identity authentication, there should be light source in or near the installation environment.
- Sunlight, wind, hot/cool air from air conditioner and other external factors, which may affect surface temperature, will create the deviation of the temperature measurement. In order to get an accurate result, make sure the device is applied indoors and windlessly (where is relatively isolated from the outdoors). The working temperature should keep between 50° and 95° F (10° and 35° C). If there are no suitable environments for temperature measurement (the area faces the indoor and connects the outdoor, the area at the door of the indoor environment, etc.), building a temporary temperature measurement environment is suggested.
- Influence Factors of Temperature Measurement:
 - Wind: The wind will take the heat away, which may affect the measurement result.
 - Sweat: The sweat will take the heat away, which may affect the measurement result.
 - Air Conditioner (Cool Air): If the indoor temperature is low, the surface temperature may also lower than the actual temperature, which may affect the measurement result.
 - Air Conditioner (Heat) or Heating: If the indoor temperature is high, the surface temperature may also higher than the actual temperature, which may affect the measurement result.
- In order to make the device work properly, you should wait for 90 min after the device is powered on.
- For details about installation environment, see Tips for Installation Environment.

3.2 Wall Mounting

3.2.1 Flush Mounting

NOTE: The hole distance of the gang box is 83.3 mm to 83.5 mm.

The additional force shall be equal to three times the weight of the equipment. The equipment ad its associated mounting means shall remain secure during the installation. After the installation, the equipment, including any associated mounting plate, shall not be damaged.

Select the mounting method according to your actual situation.

1. Make sure the gang box is installed on the wall.

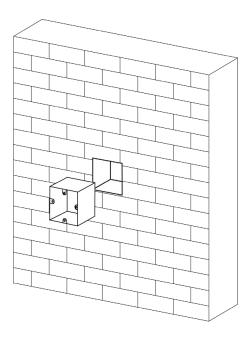


Figure 2, Install Gang Box

2. Use four supplied screws (KA4×22) to secure the mounting plate on the gang box.

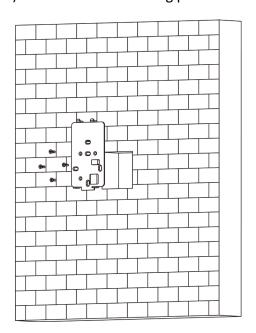


Figure 3, Secure Mounting Plate

- 3. Remove the back sheet of the device with tools to display the wiring terminals.
- 4. Route the cable through the cable hole of the mounting plate, and connect to corresponding external devices' cables.
- 5. Align the device with the mounting plate and hang the device on the mounting plate.

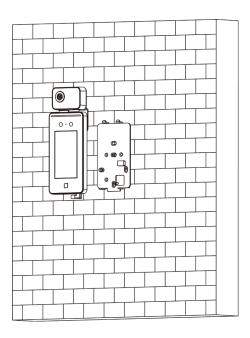


Figure 4, Hang Device

6. Use the two screws at the bottom of the device to secure the device on the mounting plate.

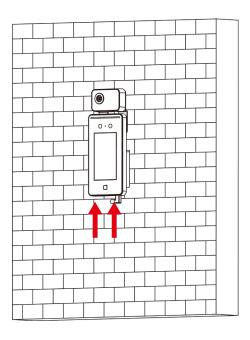


Figure 5, Secure Device

3.2.2 Surface Mounting

NOTE:

The additional force shall be equal to three times the weight of the equipment. The equipment ad its associated mounting means shall remain secure during the installation. After the installation, the equipment, including any associated mounting plate, shall not be damaged.

Select the mounting method according to your actual situation.

1. According to the datum line on the mounting template, stick the mounting template on the wall or other surfaces, 1.4 meters higher than the ground.

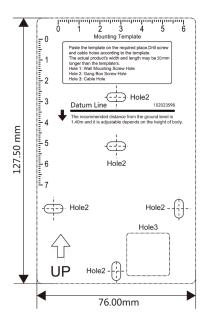


Figure 6, Mounting Template

- 2. Drill holes on the wall or other surface according to the Hole 2 on the mounting template.
- 3. Align the holes to the mounting plate and secure the mounting plate on the wall with the 4 supplied screws (KA4×22).

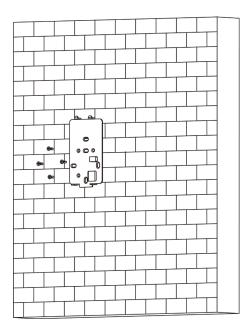


Figure 7, Install Mounting Plate

- 4. Remove the back sheet of the device with tools to display the wiring terminals.
- 5. Route the cable through the cable hole of the mounting plate, and connect to corresponding external devices' cables.
- 6. Align the device with the mounting plate and hang the device on the mounting plate.

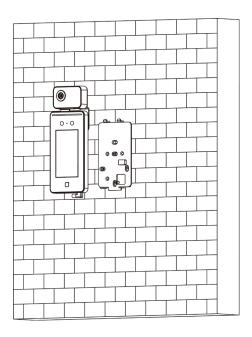


Figure 8, Hang Device

7. Use the two screws at the bottom of the device to secure the device on the mounting plate.

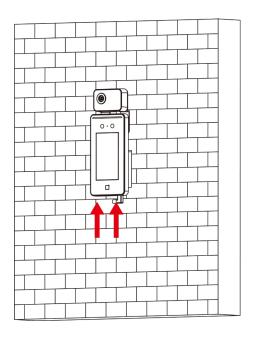


Figure 9, Secure Device

3.3 Bracket Mounting

Before You Start

- Select the mounting method according to your actual situation.
- Make sure the ground surface has drilled holes for device installation.

NOTE: The device should be installed on a concrete or other non-flammable surface.

1. Use two supplied screws (SC-KM4×18-GB819) to secure the mounting plate on the bracket.

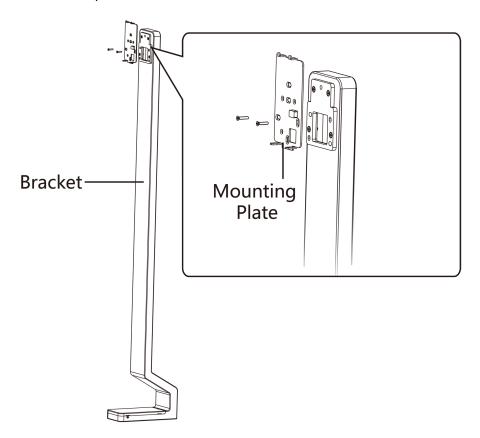


Figure 10, Secure Mounting Plate

- 2. Route the cable through the cable hole of the mounting plate and the bracket, and connect to corresponding external devices' cables.
- 3. Use the two screws at the bottom of the device to secure the device on the mounting plate.

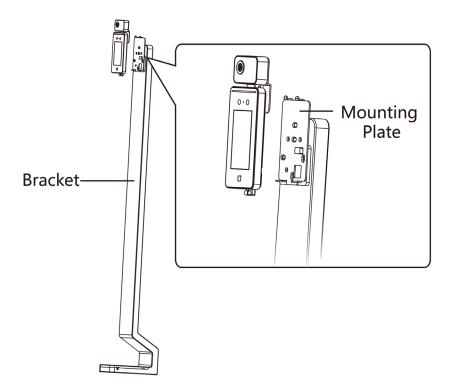


Figure 11, Install Device

4. Remove the bottom cover and the back cover by removing the screws (M3).

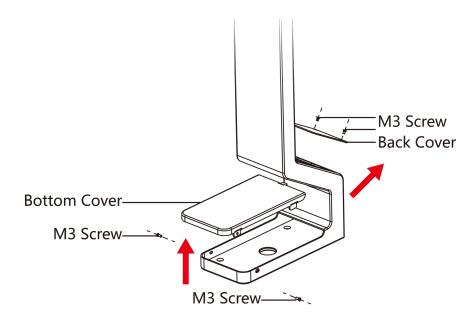


Figure 12, Remove Bottom Cover and Back Cover

- 5. Route the cable through the cable hole of the bottom of the bracket, and connect to corresponding external devices' cables.
- 6. Align the device with the drilled holes on the ground and insert four supplied expansion bolts (M8). Make sure the expansion bolts are higher than the ground.
- 7. Secure the expansion bolts with nuts.

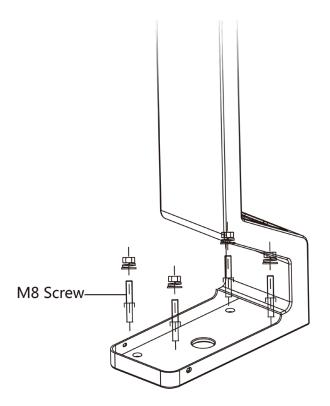


Figure 13, Secure Bracket on Surface

8. Install the bottom cover and the back cover back on the bracket with screws.

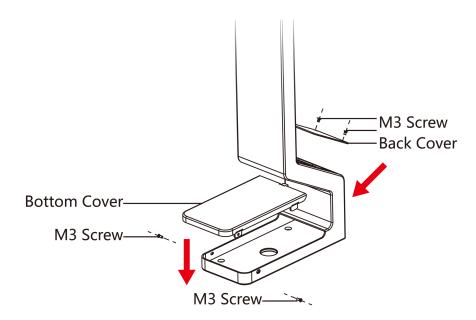


Figure 14, Install Cover Back

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 temperature screening 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 Terminal Description

The terminals contains power input, RS-485, Wiegand output, and door lock.

The descriptions of the terminals are as follows:

Table 4-1 Terminal Descriptions

Group	No.	Function	Color	Name	Description
Croup A	A1	Daywar Immyt	Red	+12 V	12 VDC Power Supply
Group A	A2	Power Input	Black	GND	Ground
	B1		Yellow	485+	RS-485 Wiring
Group B	B2	RS-485	Blue	485-	
	В3		Red/Black	GND	Ground
	C1		Green	W0	Wiegand Wiring 0
Group C	C2	Wiegand	White	W1	Wiegand Wiring 1
	C3		White/Black	GND	Ground
	D1	Door Lock	White/Purple	NC	Lock Wiring (NC)
	D2		White/Yellow	COM	Common
	D3		White/Red	NO	Lock Wiring (NO)
Group D	D4		Yellow/Green	SENSOR	Door Contact
	D5		Black	GND	Ground
	D6		Yellow/Gray	BUTTON	Exit Door Wiring
	D7		Yellow/Black	GND	Ground

4.2 Wire Normal Device

You can connect the terminal with normal peripherals.

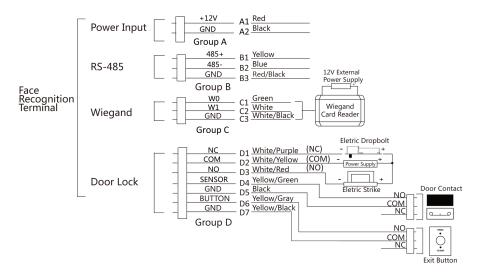


Figure 15, Device Wiring

NOTE: You should set the temperature screening 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 Set Wiegand Parameters.

The suggested external power supply for door lock is 12 V, 1 A. The suggested external power supply for the Wiegand card reader is 12 V, 1A.

Do not wire the device to the electric supply directly.

If the interface for network connection is too large, you can use the supplied cable as shown below.

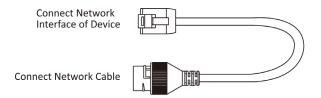


Figure 16, Cable Diagram

4.3 Wire Secure Door Control Unit

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

The wiring diagram is as follows.

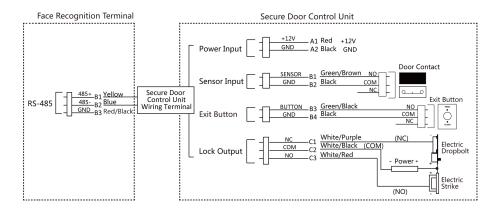


Figure 17, Secure Door Control Unit Wiring

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

4.4 Wire Fire Module

4.4.1 Wiring Diagram of Door Open When Powering Off

- Lock Type: Anode Lock, Magnetic Lock, and Electric Bolt (NO)
- Security Type: Door Open When Powering Off
- Scenario: Installed in Fire Engine Access

Type 1

NOTE: The fire system controls the power supply of the access control system.

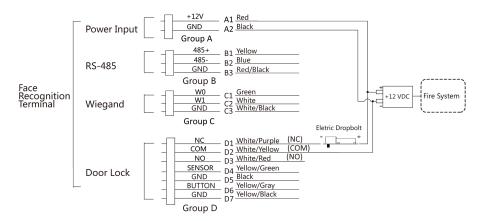


Figure 18, Wire Device

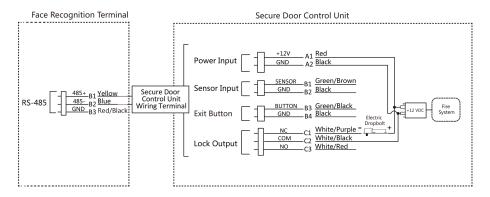


Figure 19, Wire Secure Door Control Unit

Type 2

NOTE: The fire system (NO and COM, normally open when powering off) is connected with the lock and the power supply in series. When an fire alarm is triggered, the door remains open. In normal times, NO and COM are closed.

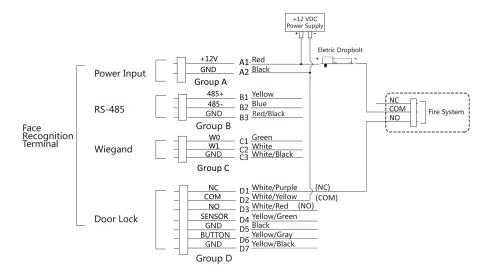


Figure 20, Wiring Device

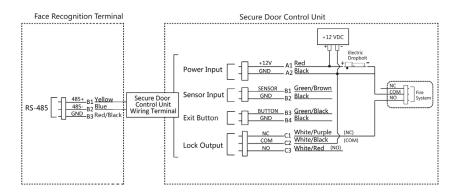


Figure 21, Wiring Secure Door Control Unit

4.4.2 Wiring Diagram of Door Locked When Powering Off

Lock Type: Cathode Lock, Electric Lock, and Electric Bolt (NC)

- Security Type: Door Locked When Powering Off
- Scenario: Installed in Entrance/Exit with Fire Linkage

NOTE: An Uninterpretable Power Supply (UPS) is required.

The fire system (NC and COM, normally closed when powering off) is connected with the lock and the power supply in series. When an fire alarm is triggered, the door remains open. In normal times, NC and COM are open.

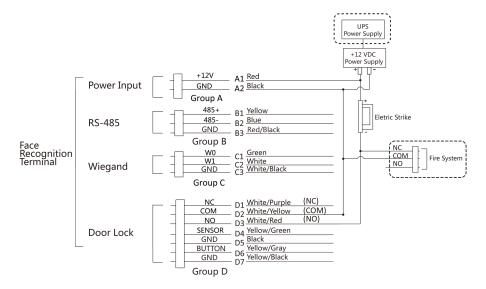


Figure 22, Device Wiring

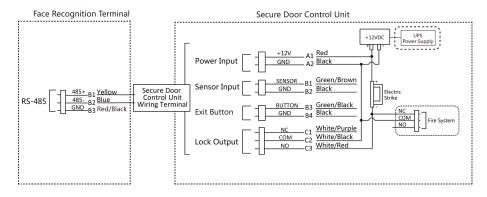


Figure 23, Wiring Diagram

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.

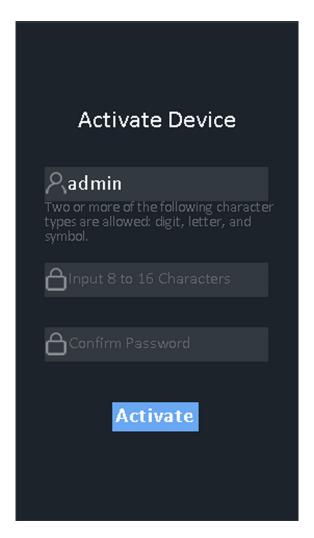


Figure 24, Activation Page



STRONG PASSWORD RECOMMENDED — The password strength of the device can be automatically checked. We highly recommend that you create a strong password of your own choosing (using a minimum of eight characters, including at least three of the following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. We also recommend that you reset your password regularly. Especially in high security systems, 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.

After activation, you should select an application mode. For details, see **Set Application Mode**.

After activation, if you need to add the device to the client software or other platforms, you should edit the device IP address. For details, see *Communication Settings*.

5.2 Activate via Web Browser

You can activate the device via the Web browser.

1. Enter the device default IP address (192.0.0.64) in the address bar of the Web browser, and press **Enter**.

NOTE: Make sure the device IP address and the computer's should be in the same IP segment.

2. Create a new password (admin password) and confirm the password.



STRONG PASSWORD RECOMMENDED — The password strength of the device can be automatically checked. We highly recommend that you create a strong password of your own choosing (using a minimum of eight characters, including at least three of the following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. We also recommend that you reset your password regularly. Especially in high security systems, 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.

- 3. Click Activate.
- 4. Edit the device IP address. You can edit the IP address via the SADP tool, the device, and the client software.

5.3 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.

- 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.



STRONG PASSWORD RECOMMENDED — The password strength of the device can be automatically checked. We highly recommend that you create a strong password of your own choosing (using a minimum of eight characters, including at least three of the following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. We also recommend that you reset your password regularly. Especially in high security systems, 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.

4. Click Activate to start activation.

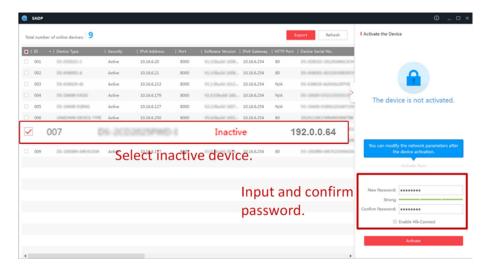


Figure 25, Device Status Becomes Active After Successful Activation

- 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.

5.4 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.

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 for online devices are listed.
- 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.



STRONG PASSWORD RECOMMENDED — The password strength of the device can be automatically checked. We highly recommend that you create a strong password of your own choosing (using a minimum of eight characters, including at least three of the following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. We also recommend that you reset your password regularly. Especially in high security systems, 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 Set Application Mode

After activating the device, you should select an application mode for better device application.

1. On the Welcome page, select **Indoor** or **Others** from the drop-down list.

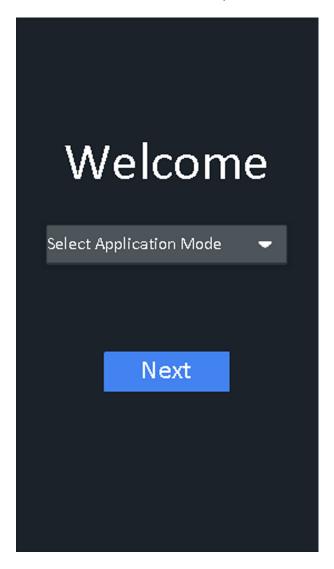


Figure 26, Welcome Page

2. Tap OK to save.

NOTE: You can also change the settings in *System Settings*.

If you install the device indoors near the window or the identity recognition function is not working well, select **Others**.

If you do not configure the application mode and tap **Next**, the system will select **Indoor** by default.

If you activate the device via other tools remotely, the system will select Indoor as the

application mode by default.

6.2 Login

Login the device to set the device basic parameters. You should enter the device activation password for the first login. Or if you have add the administrator's credential, you can login via the configured credential.

6.2.1 First Time Login

You should login the system before other device operations.

- 1. Long tap on the initial page for 3 s to enter password entering page.
- 2. Tap the Password field and enter the device activation password.
- 3. Tap **OK** to enter the home page.

NOTE: The device will lock for 30 minutes after five failed password attempts.

For details about setting the administrator authentication mode, see Adding User.

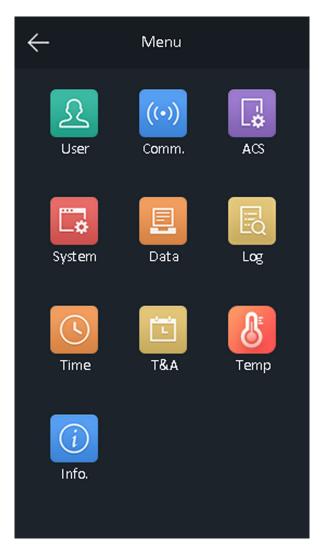


Figure 27, Home Page

6.2.2 Log in by Administrator

After you add the administrator for the device, only the administrator can log in to the device for device operation.

1. Long tap on the initial page for 3 s to enter the admin login page.

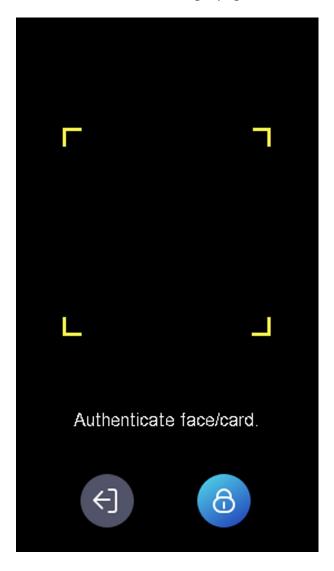


Figure 28, Admin Login

2. Authenticate the administrator's identity or card to enter the home page.

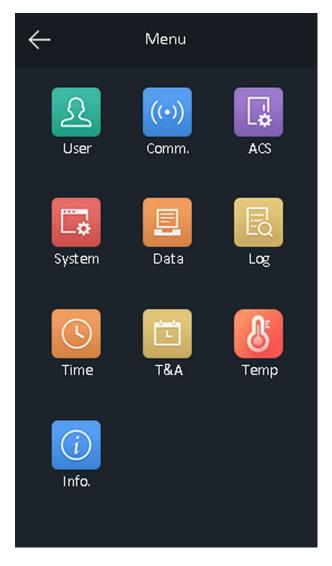


Figure 29, Home Page

NOTE: The device will lock for 30 minutes after five failed identity or card attempts.

- 3. (Optional): Tap and you can enter the device activation password for login.
- 4. (Optional): Tap and you can exit the admin login page.

6.3 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.

6.3.1 Set Network Parameters

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

- 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.

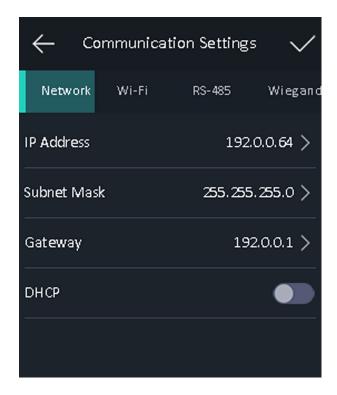


Figure 30, Network Settings

- 3. Set the device network information.
- If the DHCP function is enabled, the system will allocate an IP address, subnet mask, and gateway automatically.
- If the DHCP function is not enabled, you should set the device IP address, subnet mask, and gateway.
- 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 vertex to save the network parameters.

6.3.2 Set Wi-Fi Parameters

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

NOTE: The function should be supported by the device, or it will not displayed on the configuration page and cannot be used.

- 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 31, 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 **DHCP**, you should input the Wi-Fi password. If selecting **Static**, you should input the Wi-Fi password, IP address, subnet mask and gateway.

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 volume to save the network parameters.

6.3.3 Set RS-485 Parameters

The temperature screening terminal can connect external access controller, secure door control unit or card reader via the RS-485 terminal.

- 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.

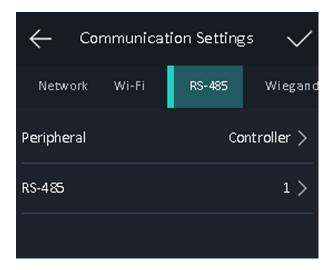


Figure 32, Set RS-485 Parameters

3. Select an peripheral type according to your actual needs.

NOTE: Controller represents the access controller, Unit represents the secure door control unit and Reader represents the card reader.

If you select **Controller**: If connect the device to a terminal via the RS-485 interface, set the RS-485 address as 2. If you connect the device to a controller, set the RS-485 address according to the door No.

4. Tap v to save the network parameters.

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

6.3.4 Set Wiegand Parameters

You can set the Wiegand transmission direction.

- 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.

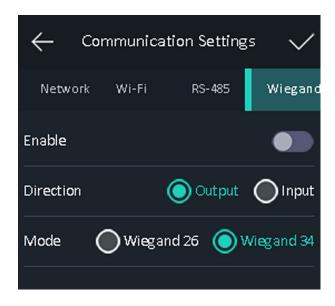


Figure 33, Wiegand Settings

- 3. Enable the Wiegand function.
- 4. Select a transmission direction.
 - **Output:** A temperature screening terminal can connect an external access controller. And the two devices will transmit the card No. via Wiegand 26 or Wiegand 34.
 - Input: A temperature screening terminal can connect a Wiegand card reader.
- 5. Tap vert to save the network parameters.

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

6.4 User Management

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

6.4.1 Add Administrator

The administrator can log in the device and configure the device parameters.

- 1. Long tap on the initial page and login.
- 2. Tap **User** → + to enter the Add User page.
- 3. 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 be duplicated.

4. 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.

5. (Optional): Add an identity picture, cards, or password for the administrator.

NOTE: For details about adding an identity picture, see *Add Identity Picture*.

For details about adding a card, see Add Card.

For details about adding a password, see **Add Password**.

6. (Optional): Set the administrator's authentication type.

NOTE: For details about setting the authentication type, see **Set Authentication Mode**.

- 7. Enable the Administrator Permission function.
 - 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.
- 8. Tap v to save the settings.

6.4.2 Add Identity Picture

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

NOTE: Up to 3000 identity pictures can be added.

- 1. Long tap on the initial page and login.
- 2. Tap **User** \rightarrow + to enter the Add User page.
- 3. 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 be duplicated.

4. 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.

5. Tap the **Face Picture** field to enter the identity picture adding page.

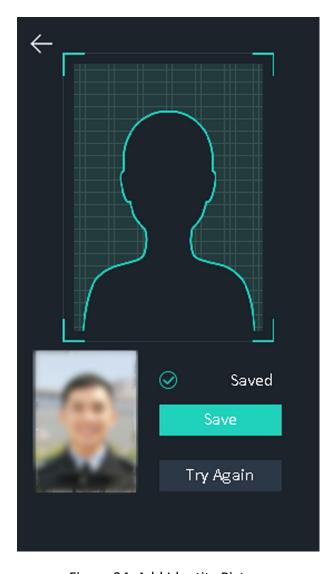


Figure 34, Add Identity Picture

6. Position your face looking at the camera.

NOTE:

Make sure your identity picture is in the identity picture outline when adding the identity picture.

Make sure the captured identity picture is in good quality and is accurate.

For details about the instructions of adding identity pictures, see *Tips When Collecting/Comparing identity Picture*.

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

- 7. Tap **Save** to save the identity picture.
- 8. (Optional): Tap **Try Again** and adjust your face position to add the identity picture again.

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

- 9. 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.
- 10. Tap volume to save the settings.

6.4.3 Add Card

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

Up to 5000 cards can be added.

- 1. Long tap on the initial page and login.
- 2. Tap **User** \rightarrow + to enter the Add User page.
- 3. Tap the Employee ID. field and edit the employee ID.

NOTE: The employee ID should be less than 32 characters. It can be a combination of lower case

letters, upper case letters, and numbers.

The employee ID should not be duplicated.

4. 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.

- 5. Tap the Card field and input the card No.
- 6. 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.

- 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. Tap v to save the settings.

6.4.4 Add Password

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

- 1. Long tap on the initial page and login.
- 2. Tap **User** \rightarrow + to enter the Add User page.
- 3. 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 be duplicated.

4. 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.

5. 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.

- 6. 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.
- 7. Tap vertings to save the settings.

6.4.5 Set Authentication Mode

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

- 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, first set the terminal authentication mode in the Access

Control Settings page. For details see Setting Access Control Parameters.

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

6.4.6 Search and Edit User

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

- 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.

6.5 Temperature Measurement Settings

You can set the temperature measurement parameters, including temperature detection, over-temperature alarm threshold, temperature compensation, door not open when temperature is abnormal, temperature measurement mode, temperature unit, measurement area calibration, measurement area, etc.

On the Home page, tap **Temp** (Temperature) to enter the Temperature Settings page. Edit the temperature measurement parameters on this page and tap to save the settings.

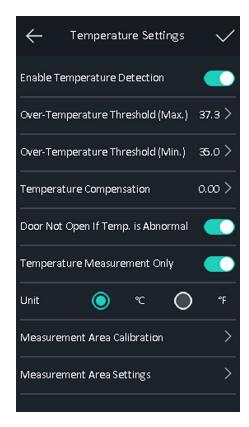


Figure 35, Temperature Measurement Parameters

The available parameters' descriptions are as follows:

Table 6-1 Temperature Measurement Parameters Descriptions

Parameter	Description
Enable Temperature Detection	When enabling the function, the device will authenticate the permissions and at the same time take the temperature. When disabling the device, the device will authenticate the permissions only.
Over-Temperature Threshold(Max./Min.)	Edit the threshold according to actual situation. If the detected temperature is higher or lower than the configured parameters, an alarm will be triggered. By default, the value is 99.14° F (37.3° C).
Temperature Compensation	If the measured temperature is higher/lower than the actual object's temperature, you can set the compensation temperature here. Available range: -146.2° to 210.2° F (-99° to 99° C)
Door Not Open If Temp. is Abnormal	When enabling the function, the door will not open when the detected temperature is higher or lower than the configured temperature threshold. By default, the function is enabled.
Temperature Measurement Only	When enabling the function, the device will not authenticate the permissions, but only take the temperature. When disabling the function, the device will authenticate the permissions and at the same time take the temperature.
Unit	Select a temperature unit according to your preference.
Measurement Area Calibration/Measure Area Settings	Configure the temperature measurement area and the correction parameters.

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 identity picture with all identity pictures stored in the device.
- 1: 1 Matching Compare the captured identity picture with the identity pictures linked person information in the device.

6.6.1 Authenticate via Multiple Credential

Before You Start

Set the user authentication type before authentication. For details, see **Set Authentication Mode**.

1. If the authentication mode is Card and Face, Password and Face, Card and Password, authenticate any credential according to the instructions on the live view page.

NOTE: The card can be normal IC card, or encrypted card.

2. After the previous credential is authenticated, continue authenticate the other credential.

NOTE: For detailed information about scanning fingerprint, see *Tips for Scanning Fingerprint*.

For detailed information about authenticating identity, see *Tips When Collecting/Comparing Identity Picture*.

If authentication succeeds, an "Authenticated" prompt will pop up.

6.6.2 Authenticate via Single Credential

Set the user authentication type before authentication. For details, see **Set Authentication Mode**.

Authenticate Identity or Card

- Face Face forward at the camera and start authentication via face.
- Card Present the card on the card presenting area and start authentication via card.

NOTE: The card can be a normal IC card or encrypted card.

If authentication completed, an "Authenticated" prompt will pop up.

6.7 System Settings

On the System Settings page, you can set the system basic parameters, the identity parameters, upgrade the firmware, and reboot the device.

6.7.1 Set Basic Parameters

You can set community no., building no., unit no., voice prompt, voice volume, application, and language.

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

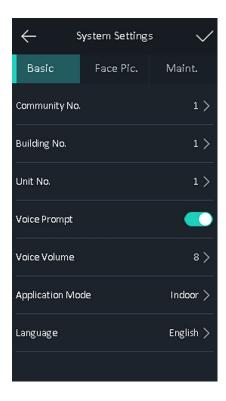


Figure 36, Basic Parameters

Table 6-2 Basic Parameters

Parameter	Description
Community No.	Set the device installed community No.
Building No.	Set the device installed building No.
Unit No.	Set the device installed Unit No.
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.
Language	Select the system language.
	NOTE: The device will reboot after the language is changed.

6.7.2 Set Identity Picture Parameters

You can set the identity 1:N security level, 1:1 security level, recognition interval, liveness security level, WDR level, pupillary distance, face with mask detection, and ECO mode.

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

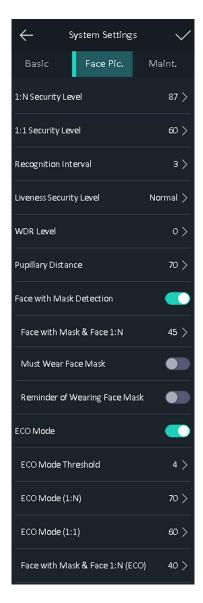


Figure 37, Identity Picture Parameters

Table 6-3 Identity Picture Parameters

Parameter	Description
	Set the matching threshold when authenticating via 1:N matching mode. The
1:N Security Level	larger the value, the smaller the false accept rate and the larger the false
	rejection rate. By default, the value is 84.
	Set the matching threshold when authenticating via 1:1 matching mode. The
1:1 Security Level	larger the value, the smaller the false accept rate and the larger the false
	rejection rate. By default, the value is 75.
	Set the time interval between two continuous identity recognitions when
Recognition Interval	authenticating one person's permission.
	NOTE: You can enter a number from 1 to 10.
Liveness Security	After enabling Live Face Detection function, you can set the matching security
Level	level when performing live identity authentication.
WDR Level	The device can auto enable the WDR function. The higher the level, the device
	can enter the WDR mode easier. 0 represents WDR is disabled.
Pupillary Distance	The minimum resolution between two pupils when starting identity recognition.
	The actual resolution should be larger than the configured value.

Parameter	Description
	By default, the resolution is 70.
Face with Mask Detection	After the function is enabled, when a person authenticates the permissions on
	the authentication page, the device can recognize the identity whether wearing
	a mask or not, and prompts to wear a mask according to the configuration.
Face with Mask &	Matching threshold for identity with mask 1 : N. The larger the value, the smaller
	the false accept rate and the larger the false rejection rate. By default, the value
Face (1:N)	is 45.
Must Wear Face Mask	After the function is enabled, the authenticated person must wear a face mask,
	otherwise the authentication will be failed.
Reminder of Wearing	After the function is enabled, if the authenticating person does not wear a face
Face Mask	mask, a prompt will be pop up to remind to wear a face mask.
ECO Mode	After enabling the ECO mode, the device will use the IR camera to authenticate
	identities in the low light or dark environment. And you can set he ECO mode
	threshold, ECO mode (1:N), and ECO mode (1:1).
ECO Mode Threshold	When enabling the ECO mode, you can set the ECO mode's threshold. The larger
Leo Wode Threshold	the value, the easier the device entering the ECO mode. Available range: 0 to 8.
	Set the matching threshold when authenticating via ECO mode 1:N matching
ECO Mode (1:N)	mode. The larger the value, the smaller the false accept rate and the larger the
	false rejection rate. By default, the value is 84.
ECO Mode (1:1)	Set the matching threshold when authenticating via ECO mode 1:1 matching
	mode. The larger the value, the smaller the false accept rate and the larger the
	false rejection rate. By default, the value is 75.
Face with Mask&Face	Matching threshold for identity with mask 1: N in ECO mode. The larger the
1:N (ECO)	value, the smaller the false accept rate and the larger the false rejection rate.

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.

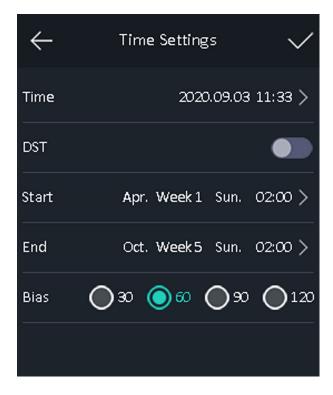


Figure 38, Time Parameters

6.8 Set Access Control Parameters

You can set the access control permissions, including the functions of authentication mode, door contact, and lock locked time.

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.

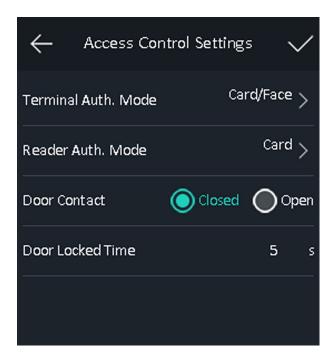


Figure 39, Access Control Parameters

The available parameters descriptions are as follows:

Table 6-4 Access Control Parameters Descriptions

Parameter	Description
Terminal Auth. Mode (Terminal Authentication Mode)	Select the temperature screening 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 identity.
Reader Auth. Mode (Card Reader Authentication Mode)	Select the card reader's authentication mode.
Door Contact	You can select "Open (Remain Open)" or "Close (Remian Closed)" according to your actual needs. By default, it is Close (Remian Closed).
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.

6.9 Maintenance

6.9.1 Reboot Device

Tap **Maint.** (Maintenance) on the System Settings page and tap **Reboot**. Confirm the operation and the device starts rebooting.

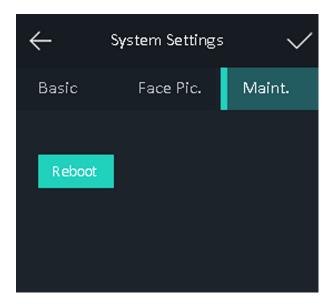


Figure 40, Reboot Device Page

6.9.2 Data Management

On the Data Management page, you can delete user data, 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.

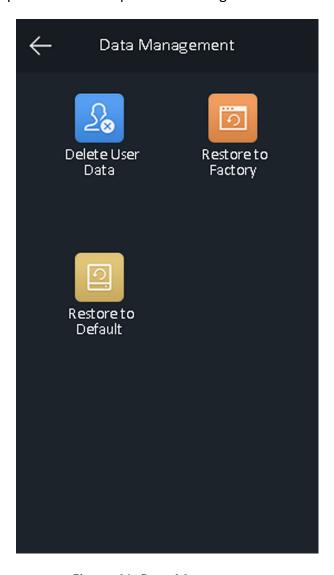


Figure 41, Data Management

The available button descriptions are as follows:

Table 6-5 Data Descriptions

Parameters	Description
Delete User Data	Delete all user data in the device.
Restore to Factory	Restore the system to the factory settings. The device will reboot after the setting.
	Restore the system to the default settings. The system will save the
Restore to Default	communication settings and the remote user settings. Other parameters will be
	restored to default. The device will reboot after the settings.

6.9.3 Log Query

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

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

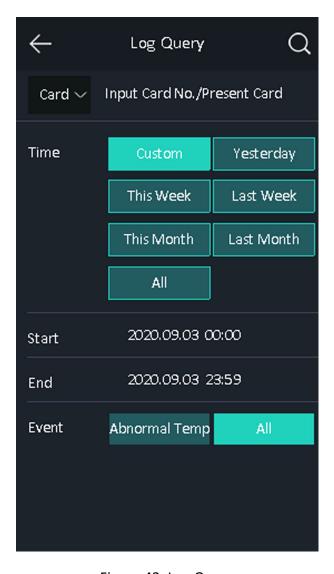


Figure 42, Log Query

- 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. Select **Abnormal Temp** or **All** in the Event area according to your actual needs.
- 6. Tap to start search.

The result will be displayed on the page.

6.10 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.

6.10.1 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.

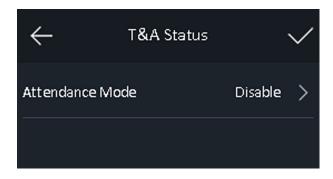


Figure 43, Disable Attendance Mode

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.

6.10.2 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*.

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

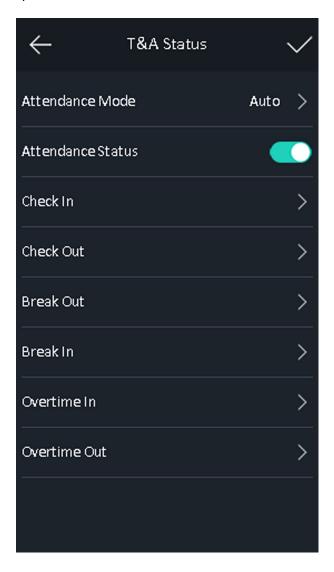


Figure 44, Auto Attendance Mode

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

6.10.3 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*.

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

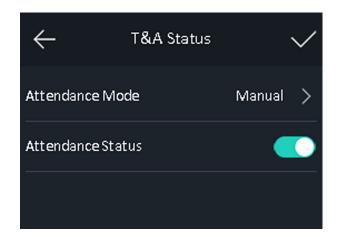


Figure 45, Manual Attendance Mode

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.

6.10.4 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*.

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

2. Set the Attendance Mode as Manual and Auto.

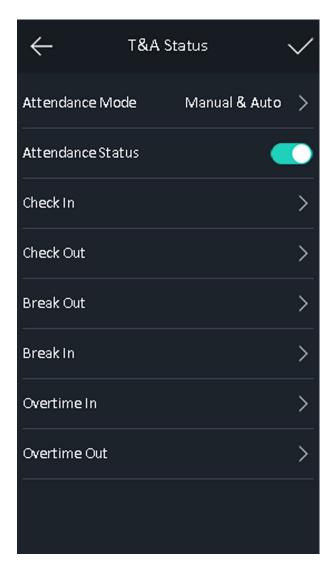


Figure 46, Manual and Auto Mode

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

6.11 View System Information

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

• **View Capacity** – You can view the added user's number, the identity picture's number, the card's number, and the event's number.

NOTE: Some device models do not support displaying the fingerprint capacity.

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

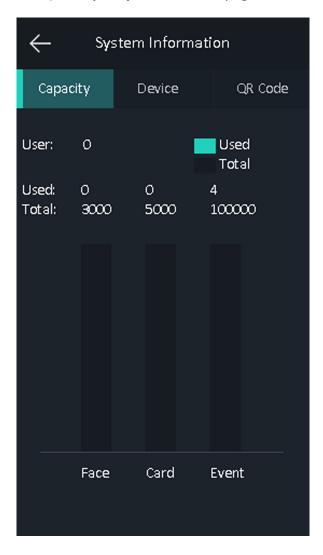


Figure 47, Capacity

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

NOTE: Some device models do not support displaying the fingerprint information.

- Open Source License View the Open Source License information.
 - 1. Tap Info. (System Information) → License to enter the Open Source Code Licenses page.
- View Device QR Code You can add the device to the mobile client by scanning the device QR code.
 - 1. Tap Info. (System Information) → QR Code to enter the QR code page. And you can view the device QR code.

6.12 Video Intercom

After adding the device to the client software, you can call the device from the client software, call the main station from the device, call the client software from the device, or call the indoor station from the device.

6.12.1 Call Client Software from Device

- 1. Get the client software from the supplied disk or the official website, and install the software according to the prompts.
- 2. Run the client software and the control panel of the software pops up.
- 3. Click **Device Management** to enter the Device Management interface.
- 4. Add the device to the client software.

NOTE: For details about adding device, see *Add Device*.

- 5. Call the client software.
 - 1) Tap \(\subseteq \) on the device initial page.
 - 2) Enter **0** in the pop-up window.
 - 3) Tap \sum to call the client software.
- 6. Tap **Answer** on the pop-up page of the client software and you can start two-way audio between the device and the client software.

NOTE: If the device is added to multiple client software, when the device is calling the client software, only the first client software added to the device will pop up the call receiving window.

6.12.2 Call Center from Device

1. Get the client software from the supplied disk or the official Website, and install the software according to the prompts.

- 2. Run the client software and the control panel of the software pops up.
- 3. Click **Device Management** to enter the Device Management interface.
- Add the main station and the device to the client software.

NOTE: For details about adding device, see *Add Device*.

5. Set the main station's IP address and SIP address in the remote configuration page.

NOTE: For details about the operation, see the user manual of the main station.

- 6. Tap \searrow \rightarrow \boxtimes to call the center.
- 7. Answers the call via the main station and starts two-way audio.

NOTE: The device will call the main station in priority.

6.12.3 Call Device from Client Software

- 1. Get the client software from the supplied disk or the official website, and install the software according to the prompts.
- 2. Run the client software and the control panel of the software pops up.
- 3. Click **Device Management** to enter the Device Management page.
- 4. Add the device to the client software.

NOTE: For details about adding device, see *Add Device*.

5. Enter the **Live View** page and double-click the added device to start live view.

NOTE: For details about operations in the **Live View** page, see *Live View* in the user manual of the client software.

- 6. Right click the live view image to open the right-click menu.
- 7. Click **Start Two-Way Audio** to start two-way audio between the device and the client software.

6.12.4 Call Room from Device

- 1. Get the client software from the supplied disk or the official website, and install the software according to the prompts.
- 2. Run the client software and the control panel of the software pops up.
- 3. Click **Device Management** to enter the Device Management interface.
- 4. Add the indoor station and the device to the client software.

NOTE: For details about adding device, see *Add Device*.

- 5. Link a user to an indoor station and set a room No. for the indoor station.
- 6. Tap \(\subseteq \) on the authentication page of the device. Enter the room No. on the dial page and tap \(\subseteq \) to call the room.
- 7. After the indoor station answers the call, you can start two-way audio with the indoor station.

Chapter 7 Client Software Configuration

7.1 Configuration Flow of Client Software

Follow the flow diagram below to configure on the client software.

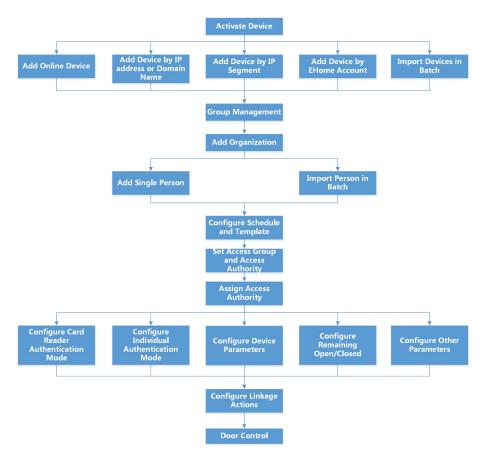


Figure 48, Flow Diagram of Configuration on Client Software

7.2 Device Management

The client supports managing access control devices and video intercom devices.

Example: You can control entrance and exit and manage attendance after adding access control devices to the client; you can perform video intercom with the indoor stations and door stations.

7.2.1 Add Device

The client provides three device adding modes including by IP/domain, IP segment, and ISUP protocol. The client also supports importing multiple devices in a batch when there are large amount of devices to be added.

Add Online Device

The active online devices in the same local subnet with the client software will be displayed on the **Online Device** area. You can click **Refresh Every 60s** to refresh the information of the online devices.

Add a Detected Online Device

You can select a detected online device displayed in the online device list and add it to the client.

- 1. Enter the Device Management module.
- 2. Click **Device** tab on the top of the right panel.
- 3. Click **Online Device** to show the online device area. The searched online devices are displayed in the list.
- 4. Select an online device in the **Online Device** area, and click **Add** to open the device adding window.

NOTE: For the inactive device, you need to create the password for it before you can add the device properly. For detailed steps, refer to .

- 5. Enter the required information.
- Name Enter a descriptive name for the device.
- IP Address Enter the device's IP address. The IP address of the device is obtained automatically in this adding mode.
- **Port** You can customize the port number. The port number of the device is obtained automatically in this adding mode.
- User Name By default, the user name is *admin*.
- **Password** Enter the device password.



STRONG PASSWORD RECOMMENDED — The password strength of the device can be automatically checked. We highly recommend that you create a strong password of your own choosing (using a minimum of eight characters, including at least three of the following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. We also recommend that you reset your password regularly. Especially in high security systems, 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.

- 6. (Optional): Check **Transmission Encryption (TLS)** to enable transmission encryption using TLS (Transport Layer Security) protocol for security purpose.
 - **NOTE:** This function should be supported by the device.

If you have enabled Certificate Verification, you should click **Open Certificate Directory** to open the default folder, and copy the certificate file exported from the device to this default directory to strengthen the security. See for details about enabling certificate verification.

You can log into the device to get the certificate file by web browser.

7. Check Synchronize Time to synchronize the device time with the PC running the client after adding the

device to the client.

8. (Optional): Check **Import to Group** to create a group by the device name, and import all the channels of the device to this group.

Example: For access control device, its access points, alarm inputs/outputs, and encoding channels (if exist) will be imported to this group.

9. Click Add.

Add Multiple Detected Online Devices

For detected online devices sharing the same user name and password, you can add them to the client in a batch.

Before You Start

Make sure the to-be-added devices are online.

- 1. Enter the Device Management module.
- 2. Click **Device** tab on the top of the right panel.
- 3. Click **Online Device** to show the online device area at the bottom of the page. The searched online devices are displayed in the list.
- 4. Select multiple devices.

NOTE: For the inactive device, you need to create the password for it before you can add the device properly. For details, refer to .

- 5. Click **Add** to open the device adding window.
- 6. Enter the required information.
- User Name By default, the user name is *admin*.
- Password Enter the device password.



STRONG PASSWORD RECOMMENDED — The password strength of the device can be automatically checked. We highly recommend that you create a strong password of your own choosing (using a minimum of eight characters, including at least three of the following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. We also recommend that you reset your password regularly. Especially in high security systems, 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. (Optional): Check **Synchronize Time** to synchronize the device time with the PC running the client after adding the device to the client.

8. (Optional): Check **Import to Group** to create a group by the device name, and import all the channels of the device to this group.

Example: For access control device, its access points, alarm inputs/outputs, and encoding channels (if exist) will be imported to this group.

9. Click Add to add the devices.

Add Device by IP Address or Domain Name

If you know the IP address or domain name of the device to add, you can add devices to the client by specifying the IP address (or domain name), user name, password, etc.

- 1. Enter Device Management module.
- 2. Click **Device** tab on the top of the right panel. The added devices are displayed on the right panel.
- 3. Click **Add** to open the Add window, and then select **IP/Domain** as the adding mode.
- 4. Enter the required information.
- Name Create a descriptive name for the device. For example, you can use a nickname that can show the location or feature of the device.
- Address The IP address or domain name of the device.
- Port The devices to add share the same port number. The default value is 8000.
- User Name Enter the device user name. By default, the user name is admin.
- **Password** Enter the device password.



STRONG PASSWORD RECOMMENDED — The password strength of the device can be automatically checked. We highly recommend that you create a strong password of your own choosing (using a minimum of eight characters, including at least three of the following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. We also recommend that you reset your password regularly. Especially in high security systems, 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. (Optional): Check **Transmission Encryption (TLS)** to enable transmission encryption using TLS (Transport Layer Security) protocol for security purpose.

NOTE: This function should be supported by the device.

If you have enabled Certificate Verification, you should click **Open Certificate Directory** to open the default folder, and copy the certificate file exported from the device to this default directory to strengthen the security. See for details about enabling certificate verification.

You can log into the device to get the certificate file by Web browser.

- 6. Check **Synchronize Time** to synchronize the device time with the PC running the client after adding the device to the client.
- 7. (Optional): Check **Import to Group** to create a group by the device name, and import all the channels of the device to this group.

Example: For access control device, its access points, alarm inputs/outputs, and encoding channels (if exist) will be imported to this group.

- 8. Finish adding the device.
- Click Add to add the device and back to the device list page.
- Click Add and New to save the settings and continue to add other device.

Add Devices by IP Segment

If the devices share the same port No., user name and password, and their IP addresses ranges in the same IP segment, you can add them to the client by specifying the start IP address and the end IP address, port No., user name, password, etc of the devices.

- 1. Enter the Device Management module.
- 2. Click **Device** tab on the top of the right panel. The added devices are displayed on the right panel.
- 3. Click **Add** to open the Add window.
- 4. Select **IP Segment** as the adding mode.
- 5. Enter the required information.
- Start IP Enter a start IP address.
- End IP Enter an end IP address in the same network segment with the start IP.
- Port Enter the device port No. The default value is 8000.
- User Name By default, the user name is *admin*.
- **Password** Enter the device password.



STRONG PASSWORD RECOMMENDED — The password strength of the device can be automatically checked. We highly recommend that you create a strong password of your own choosing (using a minimum of eight characters, including at least three of the following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. We also recommend that you reset your password regularly. Especially in high security systems, 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.

6. (Optional): Check **Transmission Encryption (TLS)** to enable transmission encryption using TLS (Transport Layer Security) protocol for security purpose.

NOTE: This function should be supported by the device.

If you have enabled Certificate Verification, you should click **Open Certificate Folder** to open the default folder, and copy the certificate file exported from the device to this default directory to strengthen the security.

You can log into the device to get the certificate file by Web browser.

- 7. Check **Synchronize Time** to synchronize the device time with the PC running the client after adding the device to the client.
- 8. (Optional): Check **Import to Group** to create a group by the device name, and import all the channels of the device to the group.
- 9. Finish adding the device.
- Click Add to add the device and back to the device list page.
- Click Add and New to save the settings and continue to add other device.

Add Device by ISUP Account

For access control devices supports ISUP 5.0 protocol, you can add them to the client by ISUP protocol after entering device ID and key, if you have configured their server addresses, port No., and device IDs.

Before You Start

Make sure the devices have connected to the network properly.

- 1. Enter Device Management module. The added devices are displayed on the right panel.
- 2. Click **Add** to open the Add window.
- 3. Select **ISUP** as the adding mode.
- 4. Enter the required information.
- **Device Account** Enter the account name registered on ISUP protocol.
- **ISUP Key** For ISUP 5.0 devices, enter the ISUP key if you have set it when configuring network center parameter for the device.

NOTE: This function should be supported by the device.

- 5. (Optional): Check **Synchronize Time** to synchronize the device time with the PC running the client after adding the device to the client.
- 6. (Optional): Check **Import to Group** to create a group by the device name, and import all the channels of the device to the group.
- 7. Finish adding the device.

- Click Add to add the device and go back to the device list.
- Click Add and New to save the settings and continue to add other device.

NOTE: Identity pictures cannot be applied to devices added by ISUP account except DS-K1T671 series and DS-K1T331 series.

- 8. (Optional): Perform the following operation(s).
 - Device Status Click on Operation column to view device status.
 - Edit Device Information Click on Operation column to edit the device information, such as device name, device account, and ISUP key.
 - Check Online User Click on Operation column to check the online users who access the device, such as user name, user type, user's IP address, and login time.
 - Refresh Click on Operation column to get the latest device information.
 - Delete Device Select one or multiple devices and click Delete to delete the selected device(s) from the client.

Import Devices in a Batch

You can add multiple devices to the client in a batch by entering the device parameters in a pre-defined CSV file.

- 1. Enter the Device Management module.
- 2. Click **Device** tab on the top of the right panel.
- 3. Click **Add** to open the Add window, and then select **Batch Import** as the adding mode.
- 4. Click **Export Template** and then save the pre-defined template (CSV file) on your PC.
- 5. Open the exported template file and enter the required information of the devices to be added on the corresponding column.

NOTE: For detailed description of the required fields, refer to the introductions in the template.

- Adding Mode Enter 0 or 1 or 2.
- Address Edit the address of the device.
- Port Enter the device port number. The default port number is 8000.
- User Name Enter the device user name. By default, the user name is admin.
- Password Enter the device password.



STRONG PASSWORD RECOMMENDED — The password strength of the device can be automatically checked. We highly recommend that you create a strong password of your own choosing (using a minimum of eight characters, including at least three of the following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. We also recommend that you reset your password regularly. Especially in high security systems, 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.

Import to Group

Enter **1** to create a group by the device name. All the channels of the device will be imported to the corresponding group by default. Enter **0** to disable this function.

- 6. Click and select the template file.
- 7. Click **Add** to import the devices.

7.2.2 Reset Device Password

If you forgot the password of the detected online devices, you can reset the device password via the client.

- 1. Enter **Device Management** page.
- 2. Click **Online Device** to show the online device area. All the online devices sharing the same subnet will be displayed in the list.
- 3. Select the device from the list and click P on the **Operation** column.
- 4. Reset the device password.
 - Click Generate to pop up the QR Code window and click Download to save the QR code to your PC. You
 can also take a photo of the QR code to save it to your phone. Send the picture to our technical
 support.

NOTE: For the following operations for resetting the password, contact our technical support.



STRONG PASSWORD RECOMMENDED — The password strength of the device can be automatically checked. We highly recommend that you create a strong password of your own choosing (using a minimum of eight characters, including at least three of the following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. We also recommend that you reset your password regularly. Especially in high security systems, 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.

7.3 Group Management

The client provides groups to manage the added resources in different groups. You can group the resources into different groups according to the resources' locations.

Example: For example, on the 1st floor, there mounted 16 doors, 64 alarm inputs, and 16 alarm outputs. You can organize these resources into one group (named 1st Floor) for convenient management. You can control door status, and do some other operations of the devices after managing the resources by groups.

7.3.1 Add Group

You can add group to organize the added device for convenient management.

- 1. Enter the Device Management module.
- 2. Click **Device Management** \rightarrow **Group** to enter the group management page.
- 3. Create a group.
 - Click Add Group and enter a group name as you want.
 - Click Create Group by Device Name and select an added device to create a new group by the name of the selected device.

NOTE: The resources (such as alarm inputs/outputs, access points, etc.) of this device will be imported to the group by default.

7.3.2 Import Resources to Group

You can import the device resources (such as alarm inputs/outputs, access points, etc.) to the added group in a batch.

Before You Start

Add a group for managing devices. Refer to **Add Group**.

- 1. Enter the Device Management module.
- 2. Click **Device Management** → **Group** to enter the group management page.
- 3. Select a group from the group list and select the resource type as **Access Point**, **Alarm Input**, **Alarm Output**, etc.
- 4. Click **Import**.
- 5. Select the thumbnails/names of the resources in the thumbnail/list view.

NOTE: You can click **III** or **III** to switch the resource display mode to thumbnail view or to list view.

6. Click **Import** to import the selected resources to the group.

7.3.3 Edit Resource Parameters

After importing the resources to the group, you can edit the resource parameters. For access point, you can edit the access point name. For alarm input, you can edit the alarm input name. Here we take access point as an example.

Before You Start

Import the resources to group.

- 1. Enter the Device Management module.
- Click Device Management → Group to enter the group management page. All the added groups are displayed on the left.
- 3. Select a group on the group list and click **Access Point**. The access points imported to the group will display.
- 4. Click in the Operation column to open the Edit Resource window.
- 5. Edit the resource name.
- 6. Click **OK** to save the new settings.

7.3.4 Remove Resources from Group

You can remove the added resources from the group.

- 1. Enter the Device Management module.
- 2. Click **Device Management** → **Group** to enter the group management page. All the added groups are displayed on the left.
- 3. Click a group to show the resources added to this group.
- 4. Select the resource(s) and click **Delete** to remove the resource(s) from the group.

7.4 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.

7.4.1 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.

- 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 do to edit its name.
 - **Delete Organization** Hover the mouse on an added organization and click X 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.

7.4.2 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.

- 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.

7.4.3 Issue a Card by Local Mode

If a card enrollment station is available, you can issue a card by local mode. To read the card number, you should connect the card enrollment station to the PC running the client by USB interface or COM, and place the card on the card enrollment station.

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

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** area, click +.
- 4. Click **Settings** to enter the Settings page.
- 5. Select **Local** as the card issuing mode.

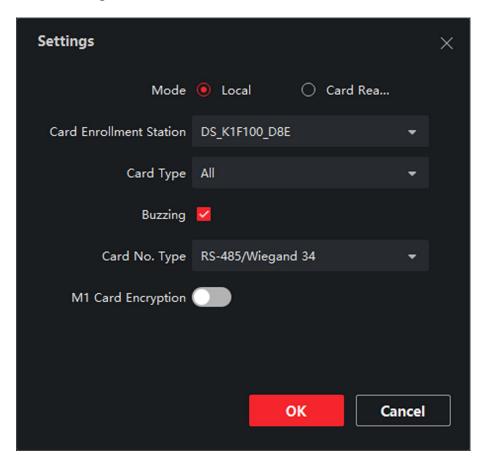


Figure 49, Issue a Card by Local Mode

- 6. Set other related parameters.
 - 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 available only when the model is DS-K1F100-D8E or DS-K1F180-D8E. Select the card type as EM card or Mifare card according to the actual card type.
- 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, then you can enable the M1 Card Encryption function and select

the sector of the card to encrypt.

- 7. Click **OK** to confirm the operation.
- 8. Place the card on the card enrollment station, and click **Read** to get the card number. The card number will display in the Card No. field automatically.
- 9. Click **Add**. The card will be issued to the person.

7.4.4 Upload an Identity Photo from Local PC

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

- 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 identity 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.

7.4.5 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 identity in the photo can be recognized by the identity authentication device managed by the client.

- 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 identity scanner to the PC running the client.
- 6. (Optional): Enable **Verify by Device** to check whether the identity authentication device managed in the client can recognize the identity in the photo.
- 7. Take a photo.
 - 1) Face the PC webcam, and make sure your face is in the middle of the collecting window.
 - 2) Click o to capture an identity photo.
 - 3) (Optional): Click 5 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.

7.4.6 Collect Identity via Access Control Device

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

- 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 identity recognition function from the drop-down list.
- 6. Collect identity.
 - 1) Face the camera of the selected access control device and make sure your face is in the middle of the collecting window.
 - 2) Click o 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.

7.4.7 Configure Access Control Information

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

- 1. Enter Person module.
- 2. Select an organization in the organization list to add the person and click **Add**.
- 3. In the **Access Control** area, set the person's access control properties.
 - Access Group You can select one or more access groups for the person to give him/her the
 authorization to the selected access points. For details, refer to Set Access Group to Assign Access
 Authorization to Persons.
 - **Password** The person must enter the password after swiping the card or fingerprint when accessing. It cannot be used independently and 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.

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

- 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.

7.4.8 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.

- 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.

7.4.9 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 being bound, you can call this person by calling the indoor station and perform video intercom sessions with her/him.

- 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 bind 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.

7.4.10 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.

- 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.

7.4.11 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.

7.4.12 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.

- 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.

7.4.13 Import Person Pictures

After importing identity pictures for the added persons to the client, the persons in the pictures can be identified by an added temperature screening 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.

- 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 identity recognition device managed in the client can recognize the identity in the photo.
- 5. Click to select a identity picture file.

NOTE: The (folder of) identity 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.

7.4.14 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.

- 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.

7.4.15 Export Person Pictures

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

Before You Start

Make sure you have added persons and their identity pictures to an organization.

- 1. Enter the Person module.
- 2. (Optional): Select an organization in the list.

NOTE: All persons' identity 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 identity picture is named as "Person ID_Name_0" ("0" is for a full-frontal face).

7.4.16 Get Person Information from Access Control Device

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

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 an added access control device or the enrollment station from the drop-down list.

NOTE: If you select the enrollment station, you should click **Login**, and set IP address, port No., user name and password of the device.

5. Click **Import** to start importing the person information to the client.

NOTE: Up to 2,000 persons and 5,000 cards can be imported.

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

7.4.17 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.
- 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.

7.4.18 Issue Cards to Persons in Batch

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

- 1. Enter **Person** module.
- 2. Click Batch Issue Cards. All the added persons with no card issued will be displayed in the right panel.
- 3. (Optional): Enter key words (name or person ID) in the input box to filter the person(s) that need issuing cards.
- 4. (Optional): Click **Settings** to set the card issuing parameters. For details, refer to .
- 5. Click **Initialize** to initialize the card enrollment station or card reader to make it ready for issuing cards.

- 6. Click the Card No. column and enter the card number.
 - Place the card on the card enrollment station.
 - Swipe the card on the card reader.
 - Manually enter the card number and press the Enter key.

The person(s) in the list will be issued with card(s).

7.4.19 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.

- 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** \rightarrow **Card** panel, click \square 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.

7.4.20 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 available only 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 available only 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 available only 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.

7.5 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**.

7.5.1 Add Holiday

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

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

- 1. Click Access Control \rightarrow Schedule \rightarrow 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 X in the Operation column to delete this added holiday period from the holiday list.
- 6. Click Save.

7.5.2 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.

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

1. Click Access Control \rightarrow Schedule \rightarrow 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.

- 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 four 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.

7.6 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.

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, identity picture, linkage between card number and linkage between card number and card password, card effective period, etc).

- 1. Click Access Control → Authorization → 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) to assign access authority.
- 6. In the left list of the Select Access Point field, select door(s), door station(s) or floor(s) for the selected

persons to access.

7. Click **Save**. You can view the selected person(s) and the selected access point(s) on the right side of the interface.

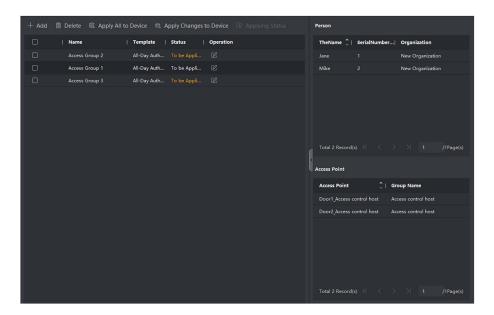


Figure 50, Display the Selected Person(s) and Access Point(s)

- 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.
 - 2) Click **Apply All to Devices** start applying all the selected access group(s) to the access control device or door station.
 - 3) Click Apply All to Devices or Apply Changes to Devices.
 - **Apply All to Devices** This operation will clear all the existed access groups of the selected devices and then apply the new access group to the device.
 - **Apply Changes to Devices** This operation will not clear the existed access groups of the selected devices and only apply the changed part of the selected access group(s) to the device(s).
 - 4) View the applying status in the Status column or click **Applying Status** to view all the applied access group(s).

NOTE: You can check **Display Failure Only** to filter the applying results.

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).

9. (Optional): Click does to edit the access group if necessary.

NOTE: If you change the persons' access information or other related information, you will view the prompt**Access Group to Be Applied** on the right corner of the client.

You can click the prompt to apply the changed data to the device. You can select either **Apply Now** or **Apply Later**.

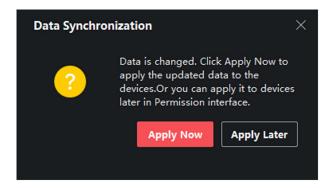


Figure 51, Data Synchronization

7.7 Configure Advanced Functions

You can configure the advanced functions of access control to meet some special requirements in different scene.

NOTE: For the card related functions(the type of access control card), 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.

7.7.1 Configure Device Parameters

After adding the access control device, you can configure the parameters of access control device, access control points.

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.

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.

- **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.
- Identity Recognition Mode
- Normal Mode Authenticate identity via the camera normally.
- **Deep Mode** The device can recognize a much wider people range than the normal mode. This mode is applicable to a more complicated environment.
- Enable NFC Card If enable the function, the device can recognize the NFC card. You can present NFC card on the device.
- Enable M1 Card If enable the function, the device can recognize the M1 card. You can present M1 card on the device.
- **Enable EM Card** If enable the function, the device can recognize the EM card. You can present EM card on the device.
- **Enable CPU Card** Reserved. If enable the function, the device can recognize the CPU card. You can present CPU card on the device.
- **Enable ID Card** Reserved. If enable the function, the device can recognize the ID card. You can present ID card on the device.
- 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

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

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

NOTE: The displayed parameters may vary for different access control devices.

• 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.
- **Open Duration** After swiping the normal card and relay action, the timer for locking the door starts working.
- 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.
- Super Password The specific person can open the door by inputting the super password.
- 5. Click **Advanced** to configure advanced parameters.
 - Extended Open Duration The door contact can be enabled with appropriate delay after person with extended accesss needs swipes her/his card.
 - **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.

NOTE: The duress code and super password should be different.

The duress code and super password should be different from the authentication password.

The length of duress code and super password is according the device, usually it should contains 4 to 8 digits.

- 6. Click OK.
- 7. (Optional): Click **Copy to**, and then select the door to copy the parameters in the page to the selected doors.

NOTE: The door's status duration settings will be copied to the selected door as well.

Configure Parameters for Card Reader

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

- 1. Click Access Control \rightarrow Advanced Function \rightarrow 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 **Advanced** to edit the parameters.

Basic Information

- Name Edit the card reader name as desired.
- **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.
- **Alarm of Max. Failed Attempts** Enable to report alarm when the card reading attempts reach the set value.
- Card Reader Type/Card Reader Description Get card reader type and description. They are readonly.

• Advanced

- Enable Card Reader Enable the function and e device can be used as an card reader.
- 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.
- 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.
- **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.
- Face 1:N Matching Threshold Set the matching threshold 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.
- **Face Recognition Interval** The time interval between two continuous identity recognitions when authenticating. By default, it is 2s.
- **Face Anti-spoofing** Enable or disable the live identity detection function. If enabling the function, the device can recognize whether the person is a live one or not.
- **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.
- Application Mode You can select indoor or others application modes according to actual environment.
- Lock Authentication Failed Face After enabling Live Face Detection, the system will lock user's identity for five minutes if the live identity detection fails for more than the configured attempts. The same user cannot authenticate via the fake identity within five minutes. Within the five minutes, the user can authenticate via the real identity twice continuously to unlock.

- **Liveness Detection Security Level** After enabling Live Identity Detection function, you can set the matching security level when performing live identity authentication.
- 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).

7.7.2 Configure Remaining Open/Closed

You can set the status of the door as open or closed. 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.

- Click Access Control → Advanced Function → Remain Open/Closed to enter the Remain Open/Closed page.
- 2. Select the door that need to be configured on the left panel.
- 3. To set the door status during the work day, click the **Week Schedule** and perform the following operations.
 - 1) Click Remain Open or Remain Closed.
 - 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 eight time durations can be set to 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) 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).

7.7.3 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).

- 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.

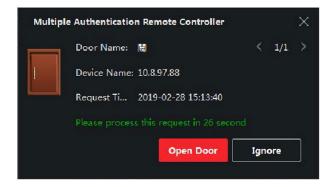


Figure 52, Remotely Open Door

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.

7.7.4 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.

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 five custom Wiegands can be set.

For details about the custom Wiegand, see Custom Wiegand Rule Descriptions.

- 1. Click Access Control \rightarrow Advanced Function \rightarrow 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.

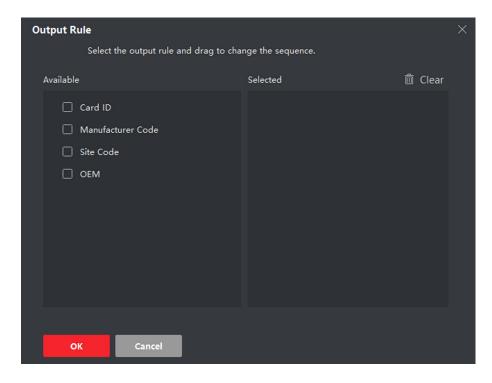


Figure 53, Set Output Transformation Rule

- 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.

7.7.5 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.

Perform this task if you need to configure the card reader's authentication mode and schedule.

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

NOTE: Password refers to the card password set when issuing the card to the person. For details, refer to *Add Single Person*.

Authentication password refers to the password set to open the door. Refer to Configure Authentication Password.

The supported card reader authentication mode varies according to different devices. For details, refer to the actual product.

- 2) Select the modes and click be to add to the selected modes list.
- 3) (Optional): Click ↑ or ↓ to adjust the display order.
- 4) Click **OK**. After selecting the modes, the selected modes will display as icons.
- 4. Click the icon to select a card reader authentication mode, and drag on the day 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.
- 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.

7.7.6 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

Set the 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 configure opening door with first person.

- 1. Click Access Control \rightarrow Advanced Function \rightarrow 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** or **Disable Remaining Open after 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.

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 be listed 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.

7.7.7 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.

NOTE: Either the anti-passing back or multi-door interlocking function can be configured for an access control device at the same time.

- 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 PathIf 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.

7.7.8 Configure Device Parameters

After adding the access control device, you can set its parameters such as network parameters.

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.

- 1. Enter the Access Control module.
- 2. On the navigation bar on the left, enter **Advanced Function** \rightarrow **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 ISUP account via wired network.

Set Log Uploading Mode

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

NOTE: Make sure the device is not added by ISUP.

Enter the Access Control module.

- 2. On the navigation bar on the left, enter **Advanced Function** \rightarrow **More Parameters**.
- 3. Select an access control device in the device list and enter **Network** \rightarrow **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.

N1 refers to wired network and G1 refers to GPRS.

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.

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 \rightarrow 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.

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 Picture Storage* in the user manual of the client software.

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 *Set Picture Storage* in the user manual of the client software.

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** \rightarrow **More Parameters** \rightarrow **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 *Set Picture Storage* in the user manual of the client software.

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 \rightarrow More Parameters \rightarrow 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 Temperature Screening Terminal

For temperature screening terminal, you can set its parameters.

NOTE: This function should be supported by the device.

- Enter the Access Control module.
- 2. On the navigation bar on the left, enter **Advanced Function** \rightarrow **More Parameters**.
- 3. Select an access control device in the device list and click **Temperature Screening Terminal**.
- 4. Set the parameters.

NOTE: These parameters displayed vary according to different device models.

- Algorithm Select Deep Learning as the identity picture database.
- Save Authenticating Face Picture If enabled, the captured identity picture when authenticating will be saved on the device.
- **ECO Mode** After enabling the ECO mode, the device can authenticate identities in the low light or dark environment. And you can set he ECO mode threshold, ECO mode (1:N), and ECO mode (1:1).

NOTE: Only device in the normal mode supports configuring ECO mode parameters.

- **Work Mode** Set the device work mode as Access Control Mode. The access control mode is the device normal mode. You should authenticate your credential for accessing.
- 5. Click Save.

Enable M1 Card Encryption

M1 card encryption can improve the security level of authentication.

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** \rightarrow **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.

NOTE: The sector ID ranges from 1 to 100.

By default, Sector 13 is encrypted. It is recommended to encrypt sector 13.

6. Click **Save** to save the settings.

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.

Before You Start

Add access control device to the client, and make sure the device supports RS-485 interface.

- 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.

NOTE: When the connection mode is **Connect Access Control Device**, you can select **Card No.** or **Person ID** as the output type.

- 6. Click Save.
 - The configured parameters will be applied to the device automatically.
 - When you change 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.

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 \rightarrow 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. Check **Enable Wiegand** to enable the Wiegand function.

7. Click Save.

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

7.8 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.

7.8.1 Configure Client Actions for Access Event

Even if you are far away from an access point, you can still know what happens and how urgent the event is by configuring linked actions of access event on the client. You will be notified on the client once an event is triggered, so that you can response to the event instantly. You can also configure client actions of access points in a batch at a time.

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

- 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 *Set Alarm Sound* in the user manual of client software.

Send Email – Send an email notification of the alarm information to one or more receivers.

NOTE: For details about setting e-mail parameters, refer to *Set Email Parameters* in the user manual of client software.

- 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, or card reader.

7.8.2 Configure Device Actions for Access Event

You can set the access control device's linkage actions for the access control device's triggered event. When the event is triggered, it can trigger the alarm output, host buzzer, and other actions on the same device.

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** button to add a new linkage.
- 4. Select the event source as **Event Linkage**.
- 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 The real-time capture will be triggered.
 - Access Point The door status of open, close, remain open, and remain close will be triggered.

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

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

7.8.3 Configure Device Actions for Card Swiping

You can set the access control device's linkage actions for the specified card swiping. When you swipe the specified card, it can trigger the host buzzer, and other actions on the same device.

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** button to add a new linkage.
- 4. Select the event source as **Card Linkage**.
- 5. Enter the card number or select the card from the drop-down list.
- 6. Select the card reader where the card swipes to trigger the linked actions.
- 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.
 - Capture The real-time capture will be triggered.
 - Access Point The door status of open, close, remain open, or remain closed will be triggered.
- 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 following:
 - 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.

7.8.4 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 buzzer on card reader, and other actions.

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.

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

7.9 Door Control

In Monitoring module, you can view the real-time status of the doors managed by the added access control device. You can also control the doors 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 control permission, the user can enter the Monitoring module and control the door. Or the icons used for control will not show. For setting the user permission, refer to **Person Management**.

7.9.1 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.

- 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 *Group Management* in the user manual of the client software.

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 *Set File Saving Path* in the user manual of the client software.

Result

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

7.9.2 Check Real-Time Access Records

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

- 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.

7.10 Event Center

The event information (for example, device offline) received by the client displays. In the Event Center, you can check the detailed information of the real-time and historical events, view the event linked video, handle the events, and so on.

Before the client can receive the event information from the device, you need to enable the events of the resource and arm the device first. For details, refer to *Enable Receiving Event from Devices*.

7.10.1 Enable Receiving Event from Devices

Before the client software can receive event notifications from the device, you need to arm the device first.

- 1. Click \Longrightarrow **Tool** \Rightarrow **Device Arming Control** to open Device Arming Control page. All the added devices appear on this page.
- 2. In the Auto-Arming column, turn on the switch to enable auto-arming.

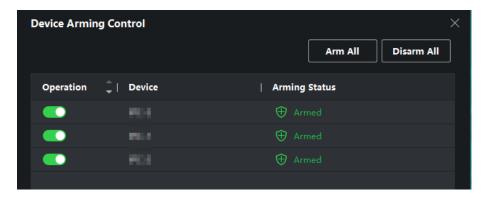


Figure 7-8 Arm Device

After turning on, the device(s) will be armed, and notifications about the events triggered by the armed device(s) will be automatically sent to the client software in real-time.

7.10.2 View Real-Time Events

The real-time event information received by the client of the connected resources are displayed. You can check the real-time event information, including event source, event time, priority, etc.

Before You Start

Enable receiving events from devices before the client can receive event from the device, see *Enable Receiving Event from Devices* for details.

- Click Event Center → Real-time Event to enter the real-time event page and you can view the real-time events received by the client.
 - **Event Time** For encoding device, event time is the client time when it receives the event. For other device types, event time is the time when the event is triggered.
 - Priority Priority represents the emergency degree of the event.
- 2. Filter the events.
 - Filter by Device Type and (or) Priority Select device type(s) and (or) priorities to filter events.
 - Filter by Keywords Enter the keywords to filter the events.
- 3. (Optional): Right-click the table header of the event list to customize the event related items to be

displayed in the event list.

- 4. View the event details.
 - 1) Select an event in the event list.
 - 2) Click **Expand** in the right-lower corner of the page.
 - 3) View the detail description and handing records of the event.
- 5. (Optional): Perform the following operations if necessary.
 - Handle Single Event Click Handle to enter the processing suggestion, and then click Commit.

NOTE: After an event is handled, the **Handle** button will become **Add Remark**. Click **Add Remark** to add more remarks for this handled event.

- Handle Events in a Batch Select events that need to be processed, and then click Handle in Batch.
 Enter the processing suggestion, and then click Commit.
- Enable/Disable Alarm Audio Click Enable Audio/Disable Audio to enable/disable the audio of the
 event.
- **Select the Latest Event Automatically** Check **Auto-Select Latest Event** to select the latest event automatically and the event information details is displayed.
- Clear Events Click Clear to clear the all the events in the event list.
- **Send Email** Select an event and then click **Send Email**, and the information details of this event will be sent by email.

NOTE: You should configure the e-mail parameters first.

7.10.3 Search Historical Events

In the Event Search module of the event center page, you can search the historical events via time, device type, and other conditions according to the specified device type, and then process the events.

Before You Start

Enable receiving events from devices before the client can receive event information from the device, see *Enable Receiving Event from Devices* for details.

- 1. Click **Event Center** → **Event Search** to enter the event search page.
- 2. Set the filter conditions to display the required events only.
 - **Time** The time when the event starts.
 - Search by
 - **Device** Search the events by device or the device's resource channels. If searched by device, you need to set the following:

- > Include Sub-Node: Search the events of the device and all resource channels.
- > **Device Type**: The device type which events you want to search.
- Group Search the events by resource channels in the group.

NOTE: For video intercom device, you need to select searching scope: All and Locking Log.

For access control device, you can click **Show More** to set more conditions: status, event type, card reader type, person name, card No., and organization.

- **Priority** The priority including low, medium, high and uncategorized which indicates the emergency degree of the event.
- **Status** The handling status of the event.
- 3. Click **Search** to search the events according the conditions you set.
- 4. (Optional): Right-click the table header of the event list to customize the event related items to be displayed in the event list.

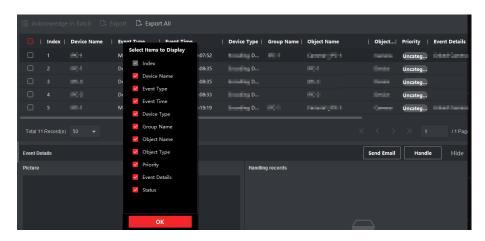


Figure 54, Customize Event Related Items to Display

- 5. (Optional): Perform one of the following operations.
 - **Handle a Single Event** Select one event that needs to be processed, and then click **Handle** in the event information details page, and enter the processing suggestion.

NOTE: After an event is handled, the **Handle** button will become **Add Remark**, click **Add Remark** to add more remarks for this handled event.

• **Batch Handle Events** – Select the events that need to be processed, and then click **Handle in Batch**, and enter the processing suggestion.

NOTE: After an event is handled, the **Handle** button will become **Add Remark**, click **Add Remark** to add more remarks for this handled event.

• **Send Email** – Select an event and then click **Send Email**, and the information details of this event will be sent by email.

NOTE: You should configure the e-mail parameters first.

- **Export Event Information** Click **Export** to export the event log or event pictures to the local PC in CSV format. You can set the saving path manually.
- Download Event Related Picture Hover the cursor on the related picture, and then click the
 download icon on the upper-right corner of the picture to download it to the local PC. You can set the
 saving path manually.

7.11 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.

7.11.1 Configure Attendance Parameters

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

Set Weekend

The days of weekends may vary in different countries and regions. The client provides weekends definition function. You can select one or more days as the weekends according to actual requirements, and set different attendance rules for weekends from workdays.

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. Select the day(s) as weekend such as Saturday and Sunday.
- 4. Click Save.

Configure Overtime Parameters

You can configure the overtime parameters for workday and weekend, including overtime level, work hour rate, attendance status for overtime, etc.

- 1. Click Time & Attendance → Attendance Settings → Overtime.
- 2. Set required information.
 - Overtime Level for Workday When you work for a 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 work hour rate for three overtime levels, respectively.

- Work Hour Rate Work Hour Rate is used to calculate work hours by multiplying it by overtime. When you work for a certain period after end-work time on workday, you will reach different overtime level. You can set different work hour rates (1-10, can be a decimal) for three overtime levels. For example, your valid overtime is one hour (in overtime level 1), and the work hour rate of overtime level 1 is set as 2, then the work hours in the period will be calculated as 2 hours.
- Overtime Rule for Weekend You can enable overtime rule for weekend and set calculation mode.
- 3. 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 **Add Device**.

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.
- 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 create 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.

NOTE: 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 M 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.
- 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 create 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, 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.

NOTE: 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 M 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.

- 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 do 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.

- 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. Select **Database Type** as **SQLServer** or **MySql**.

NOTE: If you select **MySql**, you should import the configuration file (libmysql.dll) from local PC.

- 5. Set the other required parameters of the third-party database, including server IP address, database name, user name and password.
- 6. Set table parameters of database according to the actual configuration.
 - 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.
- 7. Click **Save** to test whether database can be connected and save the settings for the successful connection.
 - The attendance data will be written to the third-party database.
 - During synchronization, if the client disconnects with the third-party database, the client will start

reconnection every 30 mins. After being reconnected, the client will synchronize the data recorded during the disconnected time period 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.

- 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 **Break Time** to enter **Break Time** page.
- 4. Click Break Time Settings.
- 5. 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.

- 6. Click **Save** to save the settings.
- 7. (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.

- 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.

7.11.2 Add General Timetable

On the timetable page, you can add general timetable for employees, which requires the fixed start-work time and end-work time. Also, you can set valid check-in/out time, allowable timetable for being late and leaving early.

- 1. Click **Time and Attendance** → **Timetable** to enter the timetable settings page.
- 2. Click Add to enter add timetable page.

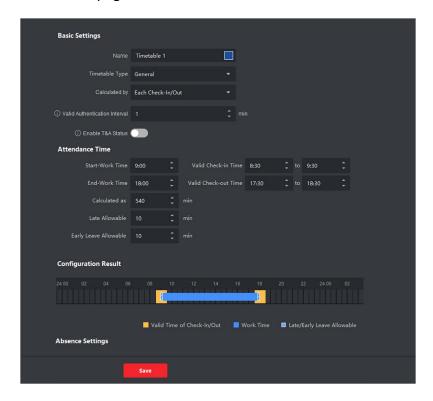


Figure 55, Add Timetable

3. Create a name for the timetable.

NOTE: You can click the color icon beside the name to customize the color for the valid timetable on the time bar in the Configuration Result area.

4. Select the timetable type as general.

- 5. 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.

NOTE: You need to set **Valid Authentication 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.

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

NOTE: This function should be supported by the device.

- 7. Set the related attendance time parameters as the following:
 - Start/End-Work Time Set the start-work time and end-work-time.
 - Valid Check-in/out Time On the time bar, adjust the yellow bar to set the timetable 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 timetable for late or early leave.
- 8. Set absence related parameters.
 - Check-In, Late for You can set the late time duration for the employee who has checked in but is late for work. If the employee exceeds the required time period, his/her attendance data will be marked as absent.
 - Check-Out, Early Leave for You can set the early leave time duration for the employee who checks out earlier than the normal leave time, and his/her attendance data will be marked as absent.
 - No Check-in If the employee does not check in, his/her attendance data may be marked as absent or late.
 - **No Check-Out** If the employee does not check out, his/her attendance data may be marked as absent or early leave.
- 9. Click **Save** to add the timetable.
- 10. (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.

7.11.3 Add Shift

You can add shift for employees including setting shift period (day, week, month) and the effective attendance time. According to the actual requirements, you can adding multiple timetables in one shift for employees, which requires them to check in and check out for each timetable.

Before You Start

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

- 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.

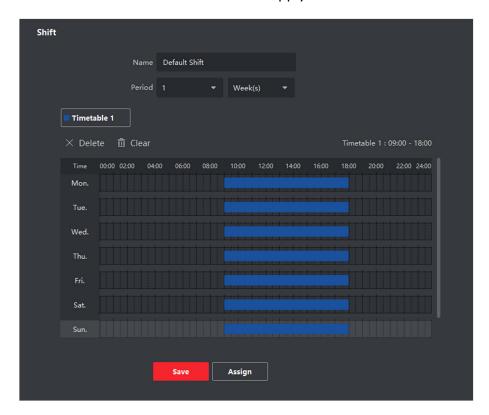


Figure 56, Add Shift

NOTE: You can select more than one timetables. The start and end work time and the valid checkin and out time in different time tables can not be overlapped.

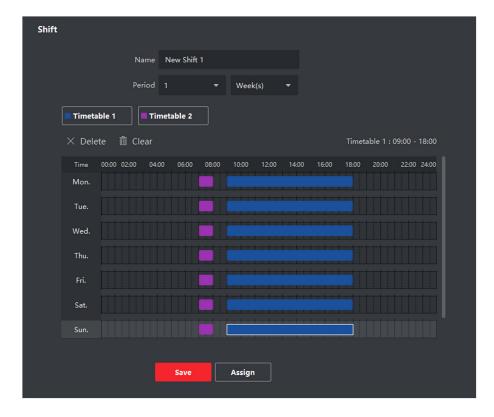


Figure 57, Add Multiple Timetables

- 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 Expire Date for the shift schedule.
- 4) Set other parameters for the schedule.
 - Check-in Not Required Persons in this schedule do not need to check-in when they come to work.
 - Check-out Not Required Persons in this schedule do not need to check-out when they end work.
 - **Scheduled on Holidays** On the holidays, this schedule is still effective and the persons needs to go to work according to the schedule.
 - Effective for Overtime The persons' overtime will be recorded for this schedule.
- 5) Click **Save** to save the quick shift schedule.

7.11.4 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.

- 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. (Optional): Enable **Multiple Shift Schedules** and select the effective time period(s) from the added timetables for the persons.

NOTE: This is available only for shifts with only one timetable.

• **Multiple Shift Schedules** – It contains more than one timetable. The person can check in/out in any of the timetables and the attendance will be effective.

Example: If the multiple shift schedules contain 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.
 - Check-in Not Required Persons in this schedule do not need to check-in when they come to work.
 - Check-out Not Required Persons in this schedule do not need to check-out when they end work.
 - **Scheduled on Holidays** On the holidays, this schedule is still effective and the persons needs to go to work according to the schedule.
 - Effective for Overtime The persons' overtime will be recorded for this schedule.
- 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.

NOTE: The person schedule has the higher priority than department schedule.

- 1. Click **Time & Attendance** → **Shift Schedule** to enter the **Shift Schedule** 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. (Optional): Enable **Multiple Shift Schedules** and select the effective time period(s) from the added timetables for the persons.

NOTE: This is available only for shifts with only one timetable.

• Multiple Shift Schedules – It contains more than one timetable. The person can check in/out in any of the timetables and the attendance will be effective.

Example: If the multiple shift schedules contain 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.
 - Check-in Not Required Persons in this schedule do not need to check-in when they come to work.
 - Check-out Not Required Persons in this schedule do not need to check-out when they end work.
 - **Scheduled on Holidays** On the holidays, this schedule is still effective and the persons needs to go to work according to the schedule.
 - Effective for Overtime The persons' overtime will be recorded for this schedule.
- 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.

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 timetable. The person can check in/out in any of the timetables and the attendance will be effective.

Example: If the multiple shift schedules contain 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 can also edit or delete the shift schedule.

- 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).

7.11.5 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.
- 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 \(\frac{\pmathbb{H}}{\pmathbb{H}} \) or \(\frac{\pmathbb{H}}{\pmathbb{E}} \) 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.
 - **NOTE:** 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.

7.11.6 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**.

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.
- Click Save.
- 9. (Optional): After adding the leave and business trip, perform one of the following operations.
 - View Click \blacksquare or \blacksquare 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.

7.11.7 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.

- 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.

- 1. Enter the **Time & Attendance** module.
- 2. Click Attendance Statistics → Calculation.
- 3. Set the start time and end time to define the attendance data range.
- 4. Set other conditions, including department, name, person ID 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.
 - **Select Items to Display** Click , or right-click the titles of different items to select items to be displayed in the report.
 - Generate Report Click Report to generate the attendance report.
 - Export Report Click Export to export attendance data to local PC.

NOTE: The exported details are saved in .CSV format.

7.11.8 Attendance Statistics

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

Get an Overview of Employees' Attendance Data

You can search and view the employee's attendance records on the client, including attendance time, attendance status, check point, etc.

Before You Start

- You should add organizations and persons in Person module and the persons have swiped cards. 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.

- 1. Enter the **Time & Attendance** module.
- Click Attendance Statistics → Attendance Record.
- 3. Set the attendance start time and end time that you want to search.
- 4. Set other search conditions, including department, name, and person ID.
- 5. Select data source as **Original Records on Device** or **Manual Handling Records**.
- 6. (Optional): Click **Get Events from Device** to get the attendance data from the device.
- 7. (Optional): Click **Reset** to reset all the search conditions and edit the search conditions again.
- 8. Click **Search**. The result displays on the page. You can view the employee's required attendance status and check point.
- 9. (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.
 - Custom Export Click Custom Report and set conditions to export attendance records according to
 actual needs.

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*.

- 1. Enter the **Time & Attendance** module.
- 2. Click Attendance Statistics → Report.
- 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.

NOTE: Set the email parameters before you want to enable auto-sending email functions. For details, refer to *Set Email Parameters* in the user manual of the client software.

- 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 e-mail 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.

7.12 Remote Configuration (Web)

Configure device parameters remotely.

7.12.1 View Device Information

View and set device name, view device type, serial No., version, lock number, and local RS-485 number.

- 1. Select a device from the Device for Management tab and click \bigcirc **System** \rightarrow **Device Information** to enter the Device Information page.
- 2. You can set the device name, view the device type, serial No., version, lock number, and local RS-485 number.
- 3. Click **Save** to save the settings.

7.12.2 View Open Source Software License

- 1. Select a device from the Device for Management tab.
- 2. Click \longrightarrow System \rightarrow Device Information \rightarrow About.
- 3. Click **View Licenses** to view the open source code license.

7.12.3 Change Device Password

You can change the device password.

Before You Start

Make sure the device is activated. For details, see Activation.

- 1. On the **Device for Management** page, click \square \rightarrow **System** \rightarrow **User** to enter the **User** tab.
- 2. Select a user and click **Edit** to enter the **Edit** page.
- 3. Input the old password, create a new password, and confirm the new password.



STRONG PASSWORD RECOMMENDED — The password strength of the device can be automatically checked. We highly recommend that you create a strong password of your own choosing (using a minimum of eight characters, including at least three of the following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. We also recommend that you reset your password regularly. Especially in high security systems, 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.

4. Click OK.

Result

The device password is changed. You should enter the new password on the Device for Management page to reconnect the device.

7.12.4 Time Management

Manage device's time zone, time synchronization, and DST parameters.

Time Zone and Time Synchronization

- 2. You can select a time zone, set NTP parameters, or manually synchronize time.
 - Time Zone Select a time zone from the drop-down list.
 - **NTP** The device will synchronize time with NTP automatically. After you enable **NTP**, you should set the NTP server address, NTP port, and synchronization interval.
 - Manual Time Synchronization After you enable Manual Time Synchronization, you can manually set the device time.

If you check **Synchronize with Computer Time**, the **Set Time** will display the current computer's time. At this time, uncheck **Synchronize with Computer Time**, and click , you can edit the device time manually.

Click **Save** to save the settings.

• **DST** – On the Device for Management page, click **Remote Configuration** → **System** → **Time** → **DST** to enter the DST tab.

Enable DST and you can edit the DST bias time, the DST start time, and end time.

Click Save.

7.12.5 System Maintenance

You can reboot the device remotely, restore the device to default settings, import configuration file, upgrade the device, etc.

Reboot

- 2. Click **Reboot** and the device starts to reboot.

Restore Settings

- On the Device for Management page, click Remote Configuration → System → System Maintenance to enter the System Maintenance tab.
 - Restore Default The parameters will be restored the default ones, excluding the IP address.
 - Restore Part of Settings Restore all settings except communication settings and the remote user settings to default ones.
 - **Restore All** All device parameters will be restored to the default ones. The device should be activated after restoring.

Import and Export

- 1. On the **Device for Management** page, click **Remote Configuration** → **System** → **System Maintenance** to enter the **System Maintenance** tab.
- 2. Import or export configuration file.
 - Import Configuration File Import the configuration file from the local PC to the device.

NOTE: The configuration file contains the device parameters.

• Export Configuration File – Export the configuration file from the device to the local PC.

NOTE: The configuration file contains the device parameters.

Upgrade

- 1. On the **Device for Management** page, click **Remote Configuration** → **System** → **System Maintenance** to enter the **System Maintenance** tab.
- 2. Select a device type from the drop-down list, click **Browse** and select an upgrade file from the local computer, and click **Upgrade**.

NOTE: If you select **Card Reader** as the device type, you should also select a **Card Reader No.** from the drop-down list.

The upgrade will lasts for about 2 min. Do not power off during the upgrading. After upgrading, the device will reboot automatically.

7.12.6 Configure RS-485 Parameters

You can set the RS-485 parameters, including the baud rate, data bit, stop bit, parity type, communication mode, work mode, and connection mode.

- 1. Click Maintenance and Management → Device to enter the device list.
- 2. Click to enter the remote configuration page.
- 3. Click System → RS-485 Settings to enter the Configuring the RS-485 Parameters tab.

- 4. Select the serial No. of the port from the drop-down list to set the RS-485 parameters.
- 5. Set the baud rate, data bit, the stop bit, parity, flow control, communication mode, working mode, and the connection mode from the drop-down list.
- 6. Click **Save** and the configured parameters will be applied to the device automatically.

NOTE: After changing the working mode, the device will be rebooted. A prompt will pop up after changing the working mode.

7.12.7 Security Mode Settings

Set the security mode for logging in the client software.

- 1. On the Device for Management page, click \bigcirc \rightarrow System \rightarrow Security to enter the Security Mode tab.
- 2. Select a security mode from the drop-down list, and click **Save**.

NOTE: You can also enable **SSH** to get a more secure network.

- Security Mode High security level for user information verification when logging in the client software.
- **Compatible Mode** The user information verification is compatible with the old client software version when logging in.

7.12.8 Network Parameters Settings

Set device network parameters, including the NIC type, DHCP, and HTTP.

- On the Device for Management page, click → Network → Network Parameters to enter the Network Parameters Settings tab.
 - NIC Type Select a NIC type from the drop-down list. You can select either Self-adaptive, 10M, or 100M.
 - **DHCP** If you disable the function, you should manually set the device's IPv4 address, IPv4 subnet mask, IPv4 default gateway, MTU, and port.

If you enable the function, the system will automatically assign IPv4 address, IPv4 subnet mask, IPv4 default gateway for the device.

HTTP – Set the HTTP port, DNS1 server address, and DNS2 server address.

7.12.9 Report Strategy Settings

You can set the center group for uploading the log via the EHome protocol.

- On the Device for Management page, click → Network → Report Strategy to enter the Report Strategy Settings tab.
- 2. You can set the center group, and the system will transfer logs via EHome protocol. Click **Save** to save the

settings.

- Center Group Select a center group from the drop-down list.
- Main Channel The device will communicate with the center via the main channel.

NOTE: N1 refers to wired network.

7.12.10 Network Center Parameters Settings

You can set the notify surveillance center, center's IP address, the port No., the protocol (EHome), the EHome account user name, etc. to transmit data via EHome protocol.

- 2. Select a center from the drop-down list.
- 3. After enabling the function, you can set the center's address type, IP address/domain name, port No., EHome user name, etc.
- 4. Click Save.

7.12.11 Configure Wi-Fi

- 1. On the **Device for Management** page, click \bigcirc \rightarrow **Network** \rightarrow **Wi-Fi** to enter the **Wi-Fi Settings** tab.
- 2. Check **Enable** to enable the Wi-Fi function.
- 3. Enter the SSID name and password or you can select a network from the Wi-Fi list.
- 4. Set the Wi-Fi Security Mode from the drop-down list.
- (Optional): Click Refresh to refresh the network status.
- (Optional): Set WLAN parameters.
 - 1) On the Wi-Fi Settings page, click WLAN to enter the WLAN page.
 - 2) Uncheck **DHCP** and set the IP address, the subnet mask, the default gateway, the MAC address, the DNS1 IP Address, and the DNS2 IP address.
- 7. Click Save.

7.12.12 Set Access Control Parameters

- 1. On the Device for Management page, click → Others → Access Control Parameters to enter the Access Control Parameters tab.
- 2. Check the checkbox to enable the function.
 - Audio Prompt (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 Pictures after Capturing** If you enable this function, the captured pictures will be sent to the client software.
- Save Captured Pictures If you enable this function, the captured pictures will be saved.
- **Temperature Measurement Only** When enabling the function, the device will not authenticate the permissions, but only take the temperature. When disabling the function, the device will authenticate the permissions and at the same time take the temperature.
- Capture White Light Picture When enabling the function, the pictures captured by the white light camera will be uploaded to the platform. If disabling the function, the device will only upload pictures captured by thermographic camera to the platform.
- **Door Not Open When Detecting Abnormal Temperature** When enabling the function, the door will not open when the detected temperature is higher or lower than the configured temperature threshold. By default, the temperature is enabled.
- Must Wear Face Mask After enabling this function, the authenticated person must wear a face mask, otherwise the authentication will be failed.
- Over-Temperature Alarm Edit the threshold according to actual situation. If the detected temperature is higher than the configured parameters, an alarm will be triggered. The value should be between 95.18° F (35.1° and 44.9° C).
- 3. Click Save.

7.12.13 Set Temperature Screening Terminal Parameters

- 1. Click Maintenance and Management → Device to enter the device list.
- 2. Press CTRL and click to enter the remote configuration page.
- 3. Click Other \rightarrow Temperature Screening Terminal Parameters and you can configure the device parameters.
 - Face Picture Database Select Deep Learning as the identity picture database.
 - Save Authenticating Face Picture If enabled, the captured identity picture when authenticating will be saved on the device.
 - Working Mode Set the device work mode as Normal Mode. You should authenticate your credential for accessing.
 - **ECO Mode** After enabling the ECO mode, the device will use the IR camera to authenticate identities in the low light or dark environment. And you can set he ECO mode threshold, ECO mode (1:N), and ECO mode (1:1).
 - **ECO Mode (1:1)** Set the matching threshold when authenticating via ECO mode 1:1 matching mode. The larger the value, the smaller the false accept rate and the larger the false rejection rate.

- **ECO Mode (1:N)** Set the matching threshold when authenticating via ECO mode 1:N matching mode. The larger the value, the smaller the false accept rate and the larger the false rejection rate.
- **ECO Mode Threshold** When enabling the ECO mode, you can set the ECO mode's threshold. The larger the value, the easier the device entering the ECO mode. Available range: 0 to 8.
- 4. Click **Save** to save the settings.

7.12.14 Configure Identity Picture Parameters

- 1. Click Maintenance and Management → Device to enter the device list.
- 2. Click to enter the remote configuration page.
- 3. Click Other \rightarrow Face Picture Parameters to enter the Configuring Face Picture Parameters page.
 - **Pitch Angle** The maximum pitch angle when using identity authentication.
 - Yaw Angle The maximum yaw angle when using identity authentication.
 - Margin (Left) The distance percentage from the face left side to the left margin in the recognition area.

The actual distance percentage should be larger than the configured value when using identity picture authentication. Other percentages, distances, and angles should also meet their conditions.

• Margin (Right) – The distance percentage from the identity right side to the right margin in the recognition area.

The actual distance percentage should be larger than the configured value when identity picture authentication. Other percentages, distances, and angles should also meet their conditions.

• Margin (Top) – The distance percentage from the identity top side to the top margin in the recognition area.

The actual distance percentage should be larger than the configured value when identity picture authentication. Other percentages, distances, and angles should also meet their conditions.

• Margin (Bottom) – The distance percentage from the identity bottom side to the bottom margin in the recognition area.

The actual distance percentage should be larger than the configured value when identity picture authentication. Other percentages, distances, and angles should also meet their conditions.

• **Pupillary Distance** – The minimum resolution between two pupils when identity recognition.

The actual resolution should be larger than the configured value.

• **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, identity recognition will be failed.

You can set the identity picture parameters when authenticating.

4. Click Save.

7.12.15 Configure Supplement Light Parameters

You can turn on or off the supplement light. You can also adjust the supplement light brightness.

- 1. Click Maintenance and Management → Device to enter the device list.
- 2. Click to enter the remote configuration page.
- 3. Click Other → Supplement Light Parameters to enter the Configuring Supplement Light Parameters page.
- 4. Select a supplement light type from the drop-down list.
- 5. Select a supplement light mode from the drop-down list.
- 6. (Optional): Set the supplement light brightness.
- 7. Click **Save** to save the settings.

7.12.16 Configure Video and Audio Parameters

You can set the device camera's image quality, resolution and other parameters.

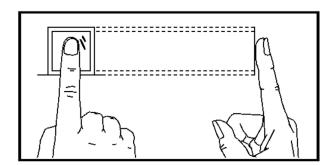
- 1. Click Maintenance and Management → Device to enter the device list.
- 2. Click to enter the remote configuration page.
- 3. Click Image → Video & Audio to enter the settings page.
- 4. Set the device camera's parameters, including the stream type, the bitrate type, the video quality, the frame rate, the audio encoding type, the video type, the bitrate, the resolution, and the I frame interval.
- 5. Click Save.

7.12.17 Configure Volume Input or Output

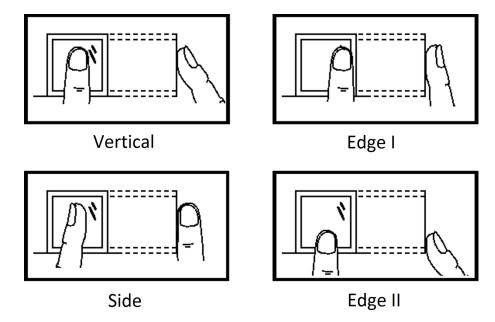
- On the Device for Management page, click → Image → Audio Input or Output to enter Audio Input or Output tab.
- 2. Move the block to adjust the device input and output volume.
- 3. Click Save.

A. Tips for Scanning Fingerprint

- Recommended Finger Forefinger, middle finger or 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 – Fingerprint scanning 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.

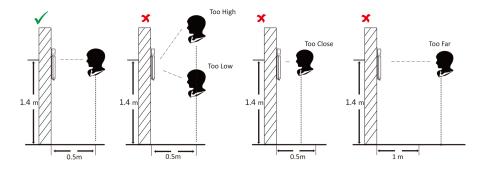
Others

- 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.

B. Tips When Collecting/Comparing Identity Picture

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

Positions – Recommended distance: 1 ft 7 in (0.5 m)



Expression

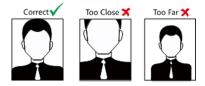
- Keep your expression naturally when collecting or comparing identity pictures, just like the expression in the picture below.



- Do not wear hat, sunglasses, or other accessories that can affect the identity authentication 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 identity picture, position your face looking at the camera when collecting or comparing identity pictures.



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



C. Tips for Installation Environment

Light Source Illumination Reference Value



Candle: 10 lux

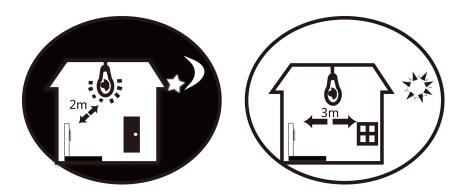


Bulb: 100 to 850 lux



Sunlight: More than 1200 lux

• Installation Location – Install the device at least 6 ft 7 in (2 m) away from the light, and at least 9 ft 10 in (3 m) away from the window or door.



• Light Cautions – Avoid backlight, direct, and indirect sunlight.



Direct Sunlight







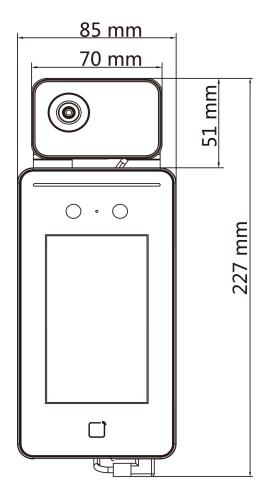
Backlight Direct Sunlight

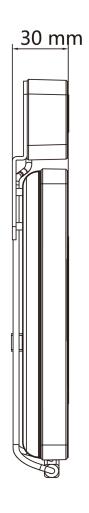
Indirect Sunlight through Window

Direct Sunlight through Window

Close to Light

D. Dimensions





E. Communication Matrix and Device Command

• **Communication Matrix** – Scan the following QR code to get the device communication matrix.

NOTE: Note that the matrix contains all communication ports of Hikvision access control and video intercom devices.



Figure 58, QR Code of Communication Matrix

• **Device Command** – Scan the following QR code to get the device common serial port commands.

NOTE: Note that the command list contains all commonly used serial ports commands for all Hikvision access control and video intercom devices.



Figure 59, Device Command