

# **DS-K1T690 Series Face Recognition Terminal**

**User Manual** 

# Legal Information

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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 serious injury.
<b>A</b> Caution	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
<b>I</b> Note	Provides additional information to emphasize or supplement important points of the main text.

# **Regulatory Information**

## **FCC Information**

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC compliance: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help

This equipment should be installed and operated with a minimum distance 20cm between the radiator and your body.

**FCC** Conditions

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

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation.

### **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

# 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.

$\triangle$	$\triangle$
<b>Dangers:</b> Follow these safeguards to prevent serious injury or death.	<b>Cautions:</b> Follow these precautions to prevent potential injury or material damage.

### A Danger:

- All the electronic operation should be strictly compliance with the electrical safety regulations, fire prevention regulations and other related regulations in your local region.
- Please use the power adapter, which is provided by normal company. This equipment is intended to be supplied from the Class 2 surge protected power source rated DC 12V, 3A.
- Do not connect several devices to one power adapter as adapter overload may cause over-heat or fire hazard.
- Please make sure that the power has been disconnected before you wire, install or dismantle the device.
- When the product is installed on wall or ceiling, the device shall be firmly fixed.
- If smoke, odors or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.
- Do not ingest battery, Chemical Burn Hazard. This product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
   Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.
- If the product does not work properly, please contact your dealer or the nearest service center. Never attempt to disassemble the device yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)

## **▲** Cautions:

- Do not drop the device or subject it to physical shock, and do not expose it to high electromagnetism radiation. Avoid the equipment installation on vibrations surface or places subject to shock (ignorance can cause equipment damage).
- Do not place the device in extremely hot (refer to the specification of the device for the detailed operating temperature), cold, dusty or damp locations, and do not expose it to high electromagnetic radiation.
- The device cover for indoor use shall be kept from rain and moisture.
- Exposing the equipment to direct sun light, low ventilation or heat source such as heater or radiator is forbidden (ignorance can cause fire danger).
- Do not aim the device at the sun or extra bright places. A blooming or smear may occur otherwise (which is not a malfunction however), and affecting the endurance of sensor at the same time.
- Please use the provided glove when open up the device cover, avoid direct contact with the device cover, because the acidic sweat of the fingers may erode the surface coating of the device cover.
- Please use a soft and dry cloth when clean inside and outside surfaces of the device cover, do not use alkaline detergents.
- Please keep all wrappers after unpack them for future use. In case of any failure occurred, you need to return the device to the factory with the original wrapper. Transportation without the original wrapper may result in damage on the device and lead to additional costs.
- Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.
- Biometric recognition products are not 100% applicable to anti-spoofing environments. If you require a higher security level, use multiple authentication modes.
- Working temperature: -30 °C to +60 °C
- Indoor and outdoor use. If installing the device indoors, the device should be at least 2 meters away from the light, and at least 3 meters away from the window or the door. If installing the device outdoors, you should apply Sililcone sealant among the cable wiring area to keep the raindrop from entering.
- Protection level: IP65

# **Available Models**

Product Name	Model	Wireless Description
Face Recognition Terminal	DS-K1T690MF	13.56MHz + Bluetooth
	DS-K1T690MF-X	13.56MHz + Bluetooth
	DS-K1T690M-T	13.56MHz + Bluetooth
	DS-K1T690M-E1	13.56MHz + Bluetooth
	DS-K1T690MW	13.56 MHz + 2.4 G Wi-Fi + Bluetooth

Use only power supplies listed in the user instructions:

Model	Manufacturer	Standard
C2000IC12.0-24P-DE	MOSO Power Supply Technology Co., Ltd.	CEE
C2000IC12.0-24P-GB	MOSO Power Supply Technology Co., Ltd.	BS
KPL-040F-VI	Channel Well Technology Co Ltd.	CEE

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# **Chapter 1 Overview**

## **1.1 Overview**

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

## 1.2 Features

- 15.6-inch LCD touch screen
- 2 MP wide-angle dual-lens
- Face recognition distance: 0.3 m to 2 m
- Face anti-spoofing
- Support remote video live view
- Support QR code recognition after connecting peripheral module
- Deep learning algorithm
- Suggested height for face recognition: between 1.4 m and 1.9 m
- 100,000 face capacity in normal mode and 50,000 face capacity in deep mode, 150,000 card capacity, 10,000 fingerprint capacity, 150,000 event capacity and 25,000 captured picture capacity

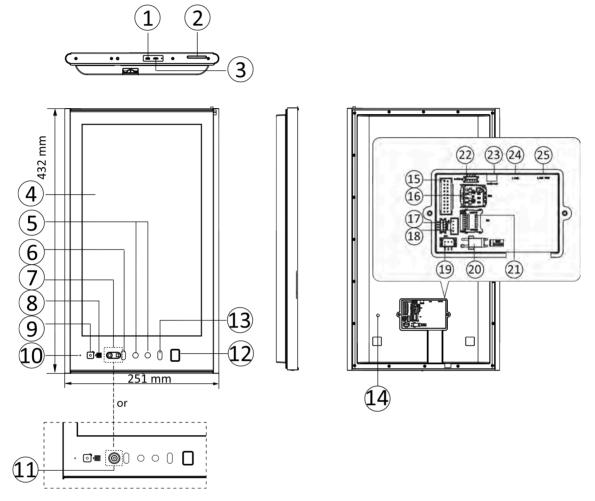
## **i**Note

Only the device with fingerprint module supports fingerprint function.

- Multiple authentication modes
- Face recognition duration  $\leq$  0.2 s/User; face recognition accuracy rate  $\geq$  99%
- Supports mask wearing detection
- Supports temper alarm, door opening alarm by external force, duress card and duress password alarm, and blocklist alarm
- Support multiple display modes, including advertisement mode, simple mode, authentication mode and meeting mode
- Audio prompt
- Connects to secure door control unit via RS-485 protocol to avoid the door opening when the terminal is destroyed
- Connects to external access controller or Wiegand card reader via Wiegand protocol
- Watchdog design and tamper function
- Two-way audio with client software, door station, indoor station, and main station

# **Chapter 2 Appearance**

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





No.	Name
1	HDMI Interface
2	Loudspeaker
3	Built-in microUSB Interface
4	Touch Screen

No.	Name
5	Camera
6	IR Light
7	TOF
8	QR Code Scanner
9	Card Presenting Area
10	MIC
11	Temperature Measurement Module
12	Fingerprint Recognition Area
13	IR Light
14	Tamper
15	WiringTerminal
16	SIM Slot
17	Debugging Port
18	USB Expended Interface
19	Reserved
20	Network Interface
21	SD Card Slot
22	Debugging Port
23	Speaker Interface
24	Network Interface
25	PoE Network Interface

# **i**Note

- Interfaces of the device vary by model. The figures are for reference only.
- The soundbox interface does not support external headphones.
- Only devices that support the POE function have POE network ports. Other devices feature network ports.

# **Chapter 3 Installation**

## **3.1 Installation Environment**

- Avoid backlight, direct sunlight, and indirect sunlight.
- For better recognition, there should be light source in or near the installation environment.
- The minimum bearing weight of the wall or other places should be 3 times heavier than the device weight.
- There shall be no strong reflective objects (such as glass doors/walls, stainless steel objects, acrylic and other glossy plastics, lacquer, ceramic tiles, etc.) within 1 m of the field of view of the device.
- Avoid device reflection.
- Face recognition distance shall be greater than 30 cm.
- Keep the camera clean.

## **i**Note

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

## 3.2 Flush Mounting with Gang Box (Type I)

#### **Before You Start**

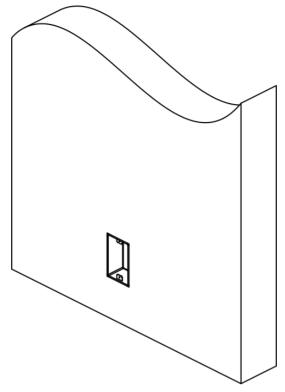
Remove the back sheet of the device.

#### Steps

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

## **i**Note

Gang box is not supplied.



#### Figure 3-1 Install Gang Box

**2.** After aligning the mounting plate screw holes with the gang box holes, secure the mounting plate on the wall with four supplied screws (SC-KA4×22).

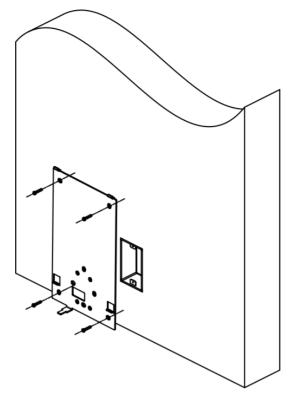


Figure 3-2 Install Mounting Plate

**3.** Route the cable through the cable hole, wire the cables and insert the cables in the gang box.

# **i**Note

Apply silicone sealant among the cable wiring area to keep the raindrop from entering.

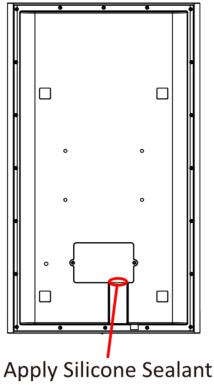


Figure 3-3 Apply Silicone Sealant

**4.** Align the device with the mounting plate, and secure the device on the mounting plate with 1 supplied screw (SC-M4×8-SUS-NL).

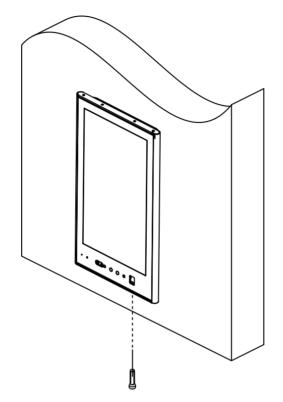


Figure 3-4 Secure Device

**5.** After installation, for the proper use of the device (outdoor use), stick the protection film (parts of models supplied) on the screen.

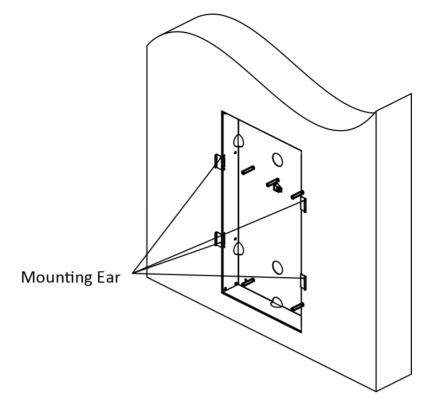
# 3.3 Flush Mounting (Type II)

#### Steps

**1.** Cave an installation hole on the wall. Pull the cable out from the wall.

# **i**Note

- The suggested dimension of the installation hole is 324 mm (W) × 337 mm (H) × 47.5 mm (D).
- The mounting methods is optional. You should pay for the gang box.
- 2. Install the gang box on the wall, and remove the mounting ears of the gang box.



#### Figure 3-5 Install Gang Box

**3.** Install the mounting plate on the gang box with the four supplied screws (SC-K1M4×6).

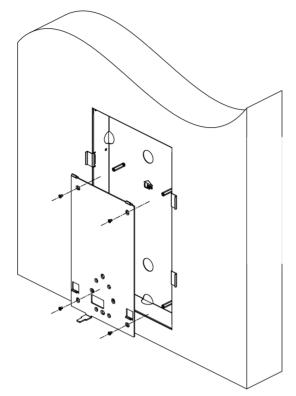


Figure 3-6 Install Mounting Plate

**4.** Route the cable through the cable hole, wire the cables and insert the cables in the gang box.

# **i**Note

Apply silicone sealant among the cable wiring area to keep the raindrop from entering.

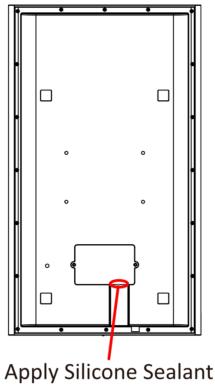
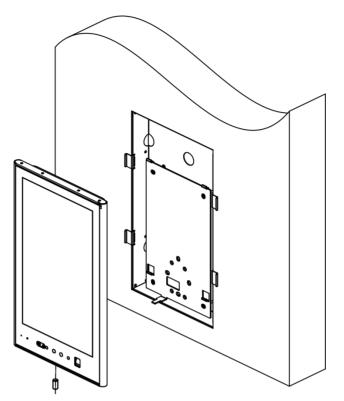


Figure 3-7 Apply Silicone Sealant

**5.** Align the device with the mounting plate, and secure the device on the mounting plate with 1 supplied screw (SC-M4×8-SUS-NL).



#### Figure 3-8 Secure Device

**6.** After installation, for the proper use of the device (outdoor use), stick the protection film (parts of models supplied) on the screen.

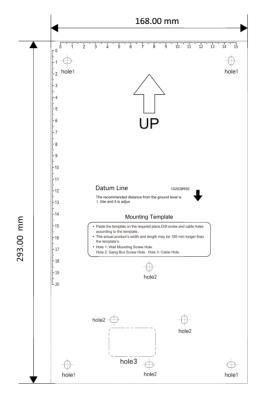
# 3.4 Surface Mounting

#### Steps

## **i**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.

**1.** According to the datum line on the mounting template, stick the mounting template on the wall or other surfaces, 1.55 meters higher than the ground.



#### Figure 3-9 Mounting Template

- **2.** Drill holes on the wall or other surface according to the Hole 1 on the mounting template.
- **3.** Remove the cable hole on the mounting plate with tools.
- **4.** Align the holes to the mounting plate and secure the mounting plate on the wall with the 4 supplied screws (K1A×24).

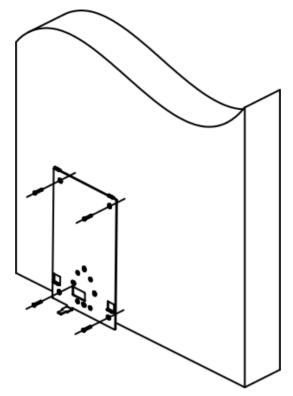


Figure 3-10 Install Mounting Plate

**5.** Route the cable through the cable hole of the mounting plate, and connect to corresponding peripherals cables.

## **i**Note

If the device is installed outdoor, you should apply silicone sealant to the wiring exit to avoid water from entering.

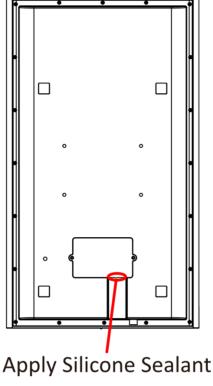


Figure 3-11 Apply Silicone Sealant

6. Align the device with the mounting plate and hang the device on the mounting plate.

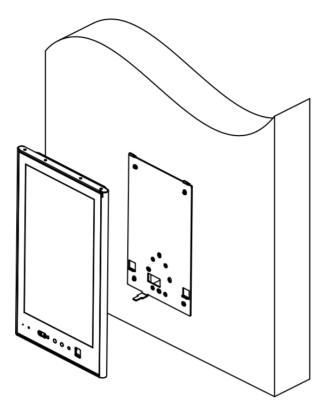


Figure 3-12 Hang Device

**7.** Use 1 supplied screw (SC-M4×8-SUS-NL) to secure the device and the mounting plate.

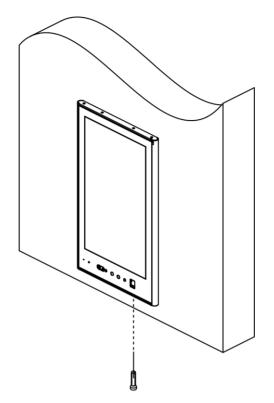


Figure 3-13 Secure Device

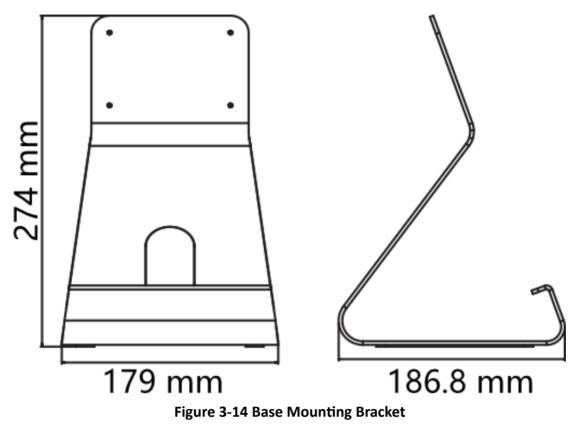
**8.** After installation, for the proper use of the device (outdoor use), stick the protection film (parts of models supplied) on the screen.

## 3.5 Base Mounting

Steps

**i**Note

You can refer to the following figure for base mounting bracket size.



- **1.** Remove the back cover plate, route the cables through the cable hole, and connect them to the corresponding external devices' cables.
- 2. Install the back cover plate back, and install the device on the bracket with 4 supplied screws (SC-KM3×6-T10-SUS).

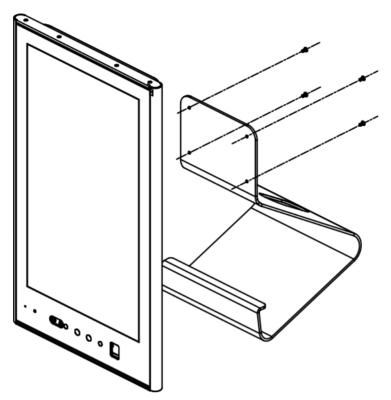


Figure 3-15 Remove Back Cover Plate

# **i**Note

The base mounting bracket is optional accessory. You should buy it for yourself.

**3.** Put the mounted device on the desk or other surface.

**4.** After installation, for the proper use of the device (outdoor use), stick the protection film (parts of models supplied) on the screen.

## 3.6 Bracket Mounting

#### Steps

**1.** Install the mounting plate on the bracket with 4 supplied screws (SC-K1M4×6).

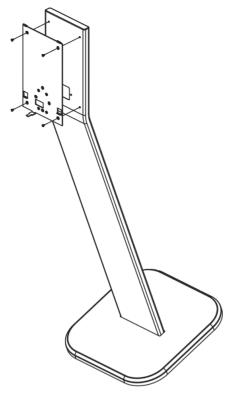


Figure 3-16 Install Mounting Template

# **i**Note

The bracket is optional accessory. You should buy it for yourself.

- 2. Remove the back cover plate, route the cables through the cable hole, and connect them to the corresponding external devices' cables.
- **3.** Install the back cover plate back, and install the device on the bracket with 1 supplied screw (SC-M4×8\_SUS-NL).

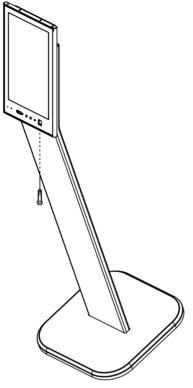


Figure 3-17 Install Device

**4.** After installation, for the proper use of the device (outdoor use), stick the protection film (parts of models supplied) on the screen.

# **Chapter 4 Wiring**

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

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

# **i**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, alarm input, alarm output, RS-485, Wiegand output, and door lock.

The terminal's diagram is as follows:

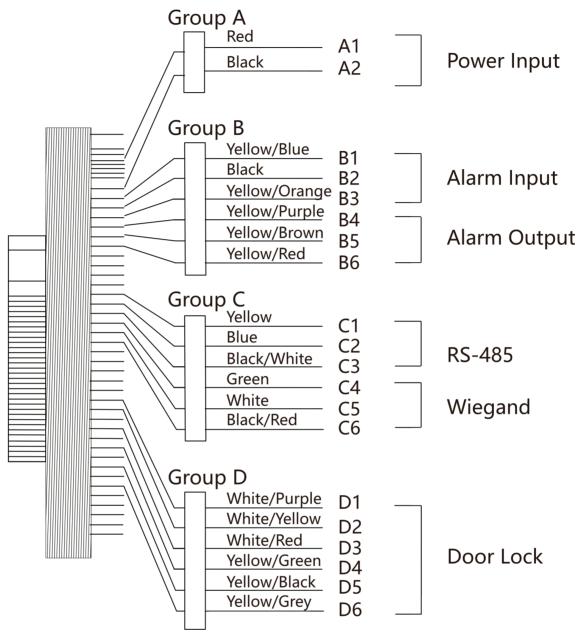


Figure 4-1 Terminal Diagram

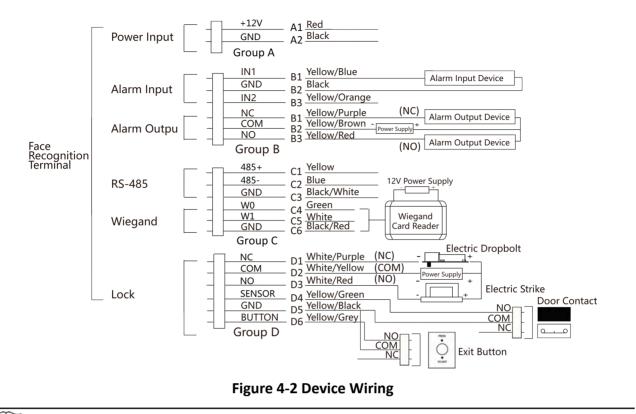
The descriptions of the terminals are as follows:

Group	No.	Function	Color	Name	Description
Group A	A1	Power Input	Red	+12 V	12 VDC Power Supply
	A2		Black	GND	Ground
Group B	B1	Alarm Input	Yellow/Blue	IN1	Alarm Input 1
	B2		Black	GND	Ground
	B3		Yellow/Orange	IN2	Alarm Input 2
	B4	Alarm Output	Yellow/Purple	NC	Alarm Output Wiring
	B5		Yellow/Brown	СОМ	
	B6		Yellow/Red	NO	
Group C	C1	RS-485	Yellow	485+	RS-485 Wiring
	C2		Blue	485-	
	C3		Black/White	GND	Ground
	C4	Wiegand	Green	W0	Wiegand Wiring 0
	C5		White	W1	Wiegand Wiring 1
	C6		Black/Red	GND	Ground
Group D	D1	Door Lock	White/Purple	NC	Lock Wiring (NC)
	D2		White/Yellow	СОМ	Common
	D3		White/Red	NO	Lock Wiring (NO)
	D4		Yellow/Green	SENSOR	Door Contact
	D5		Yellow/Grey	BTN	Exit Door Wiring
	D6		Yellow/Black	GND	Ground

**Table 4-1 Terminal Descriptions** 

## 4.2 Wire Normal Device

You can connect the terminal with normal peripherals.



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

## 4.3 Wire Secure Door Control Unit

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

The wiring diagram is as follows.

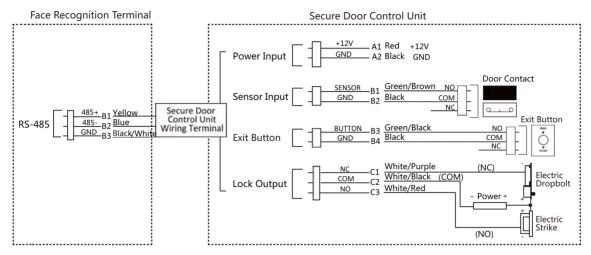


Figure 4-3 Secure Door Control Unit Wiring

# **I**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

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

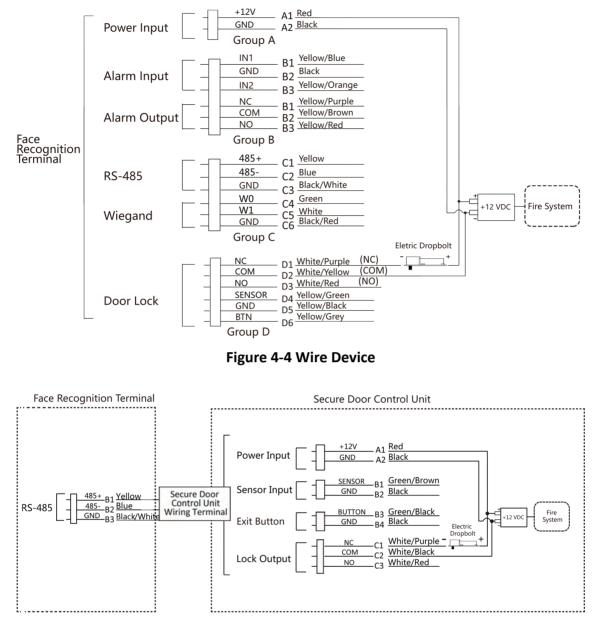


Figure 4-5 Wire Secure Door Control Unit

## Type 2

## **i** 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.

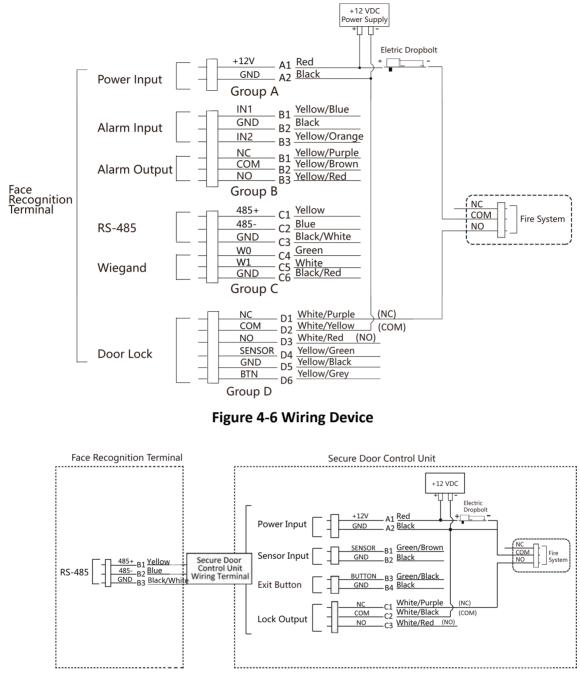


Figure 4-7 Wiring Secure Door Control Unit

### 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

### **i** Note

- The 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.

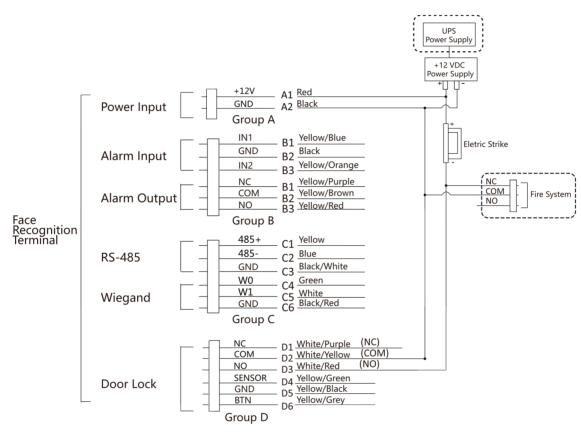


Figure 4-8 Device Wiring

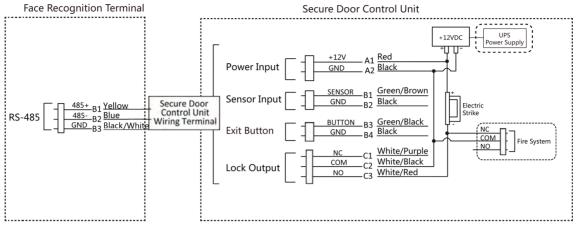


Figure 4-9 Wiring Diagram

# **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.

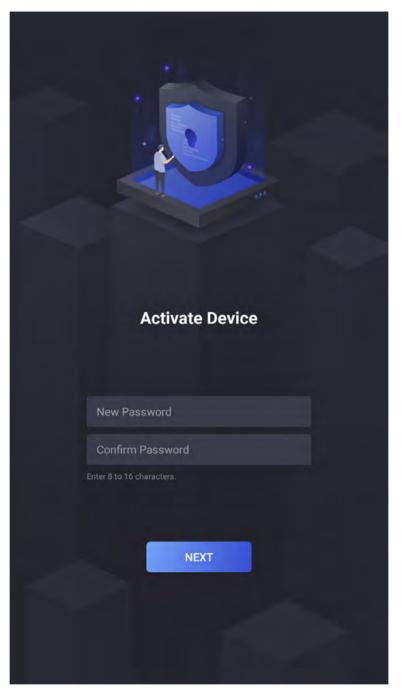


Figure 5-1 Activation Page

# **A**Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special

characters) in order to increase the security of your product. And we recommend you change your password regularly, especially in the high security system, changing 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 a language according to your actual needs.
- After activation, you should select an application mode. For details, see *Set Application Mode*.
- After activation, if you need to set privacy, you should check the item. For details, see <u>Privacy</u>
   <u>Settings</u>.
- After activation, if you need to add administrator to manage the device parameters, you should set administrator. For details, see *Add Administrator*.

## 5.2 Activate via Web Browser

You can activate the device via the web browser.

#### Steps

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

#### **i**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.

# **A**Caution

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

#### 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 <u>http://</u> <u>www.hikvision.com/en/</u>, and install the SADP according to the prompts.
- The device and the PC that runs the SADP tool should be within the same subnet.

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

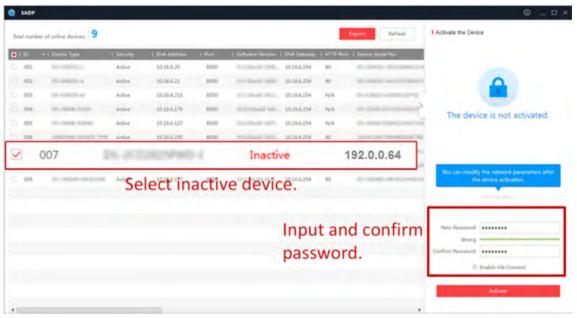
#### Steps

- 1. Run the SADP software and search the online devices.
- 2. Find and select your device in online device list.
- 3. Input new password (admin password) and confirm the password.

# **A**Caution

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

4. Click Activate to start activation.



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

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

## 5.4 Activate Device via iVMS-4200 Client Software

For some devices, you are required to create the password to activate them before they can be added to the iVMS-4200 software and work properly.

#### Steps

# **i**Note

This function should be supported by the device.

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

The searched online devices are displayed in the list.

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

# **A**Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you change your password regularly, especially in the high security system, changing 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.

# **i**Note

Characters containing admin and nimda are not supported to be set as activation password.

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

# **Chapter 6 Quick Operation**

## 6.1 Set Application Mode

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

#### Steps

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

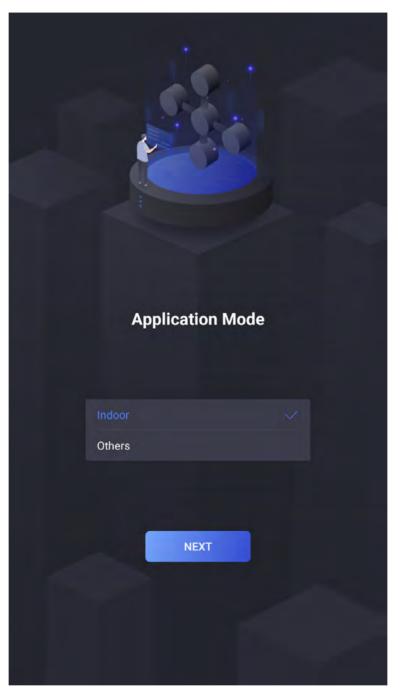


Figure 6-1 Welcome Page

2. Tap OK to save.

- You can also change the settings in System Settings.
- If you install the device indoors near the window or the face 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 Privacy Settings

After activation, selecting application mode, and selecting network, you should set the privacy parameters, including the picture uploading and storage.

Select parameters according to your actual needs.

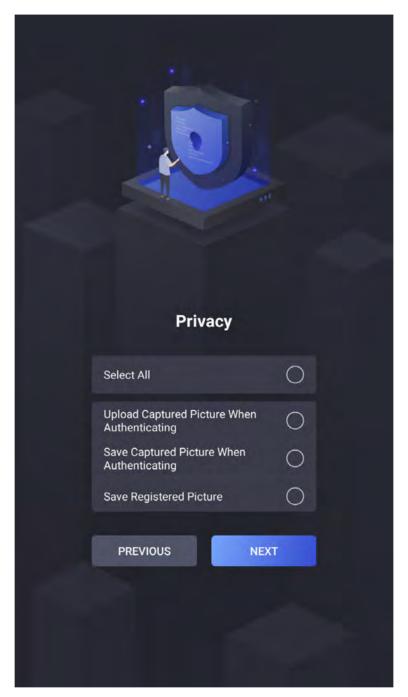


Figure 6-2 Privacy

Upload Captured Pic. When Auth. (Upload Captured Picture When Authenticating)

Upload the pictures captured when authenticating to the platform automatically.

Save Captured Pic. When Auth. (Save Captured Picture When Authenticating)

If you enable this function, you can save the picture when Authenticating to the device.

#### Save Registered Pic. (Save Registered Picture)

The registered face picture will be saved to the system if you enable the function.

#### Upload Pic. After Linked Capture (Upload Picture After Linked Capture)

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

#### Save Pic. After Linked Capture (Save Pictures After Linked Capture)

If you enable this function, you can save the picture captured by linked camera to the device. Tap **Next** to complete the settings.

## 6.3 Set Administrator

After device activation, you can add an administrator to manage the device parameters.

#### Before You Start

Activate the device and select an application mode.

#### Steps

- **1. Optional:** Tap **Skip** to skip adding administrator if required.
- 2. Enter the administrator's name (optional) and tap Next.

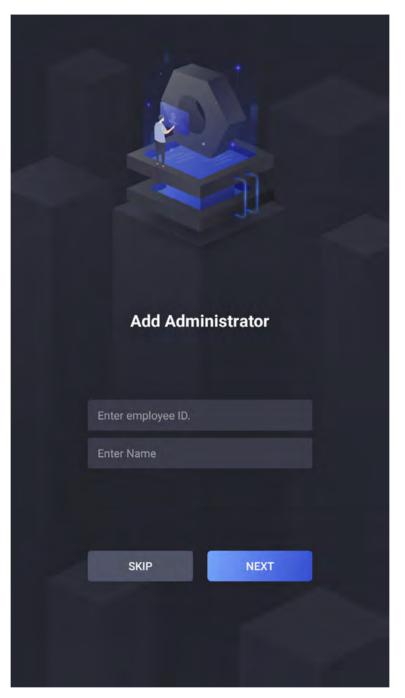


Figure 6-3 Add Administrator Page

**3.** Select a credential to add.

# **i**Note

Up to one credential should be added.

- 🔯 : Face forward at the camera. Make sure the face is in the face recognition area. Click 📷 to capture and click 🧭 to confirm.
- Some series of the instructions on the device screen. Click is to confirm.
- Enter the card No. or present card on the card presenting area. Click **OK**.

### INote

- Devices with fingerprint module support fingerprint function. Refers to the actual device.
- Some models support WiFi function. Refers to the actual device.

#### 4. Click OK.

You will enter the authentication page.

#### **Status Icon Description**

### $\overline{\otimes} / \overline{\otimes}$

Device is armed/not armed.

### \$\$/\$<u>\$</u>

Hik-Connect is enabled/disabled.

### ≝ / 🗵 / 💷

The device wired network is connected/not connected/connecting failed.

## ବି/ ଲି/ ଲି

The device' Wi-Fi is enabled and connected/not connected/enabled but not connected.

੫ਿੰ

3G/4G is enabled.

#### 20

The device displays the number of authenticated people in the right corner of the logo.

#### **Shortcut Keys Description**

# **i**Note

You can configure those shortcut keys displayed on the screen. For details, see **Basic Settings**.

÷

Scan QR code to authenticate.

### **i** Note

The QR code can be obtained from the visitor terminal.

## **ار**

- Enter the device room No. and tap **OK** to call.
- Tap 🔣 to call the center.

The device should be added to the center, or the calling operation will be failed.

È

Enter password to authenticate.

# **Chapter 7 Basic Operation**

## 7.1 Login

Login the device to set the device basic parameters.

## 7.1.1 Login by Administrator

If you have added an administrator for the device, only the administrator can login the device for device operation.

#### Steps

**1.** Long tap on the initial page for 3 s and slide to the left/right by following the gesture to enter the admin login page.



Figure 7-1 Admin Login

**2.** Authenticate the administrator's face, fingerprint or card to enter the home page.



#### Figure 7-2 Home Page

## **i**Note

The device will be locked for 30 minutes after 5 failed fingerprint 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.

## 7.1.2 Login by Activation Password

You should login the system before other device operations. If you do not configure an administrator, you should follow the instructions below to login.

#### Steps

- **1.** Long tap on the initial page for 3 s and slide to the left/right by following the gesture to enter password entering page.
- 2. Enter the password.
  - If you have added an administrator for the device, tap Sand enter the password.
  - If you haven't added an administrator for the device, enter the password.
- **3.** Tap **OK** to enter the home page.

## **i**Note

The device will be locked for 30 minutes after 5 failed password attempts.



Figure 7-3 Home Page

## 7.2 Communication Settings

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

### 7.2.1 Set Wired Network Parameters

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

#### Steps

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



#### Figure 7-4 Wired Network Settings

- 3. Set IP Address, Subnet Mask, and Gateway.
  - Enable DHCP, and the system will assign IP address, subnet mask, and gateway automatically.
  - Disable DHCP, and you should set the IP address, subnet mask, and gateway manually.

# **i**Note

- The device's IP address and the computer IP address should be in the same IP segment.
- Network Interface 1 and Network Interface 2 should not be in the same IP segment.
- **4.** Set the DNS parameters. You can enable **Auto Obtain DNS**, set the preferred DNS server and the alternate DNS server.

### 7.2.2 Set Wi-Fi Parameters

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

#### Steps

**i** Note

The function should be supported by the device.

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



Figure 7-5 Wi-Fi Settings

- **3.** Enable the Wi-Fi function.
- **4.** Configure the Wi-Fi parameters.
  - Select a Wi-Fi from the list, and enter the Wi-Fi's password. Tap **OK**.
  - If the target Wi-Fi is not in the list,tap **Add Wi-Fi**. Enter the Wi-Fi's name and password. And tap **OK**.

Only digits, letters, and special characters are allowed in the password.

- 5. Set the Wi-Fi's parameters.
  - By default, DHCP is enable. The system will allocate the IP address, the subnet mask, and the gateway automatically.
  - If disable DHCP, you should enter the IP address, the subnet mask, and the gateway manually.
- 6. Tap OK to save the settings and go back to the Wi-Fi tab.
- **7.** Tap **v** to save the network parameters.

### 7.2.3 Set RS-485 Parameters

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

#### Steps

- **1.** Tap **Comm.** (Communication Settings) on the Home page to enter the Communication Settings page.
- 2. On the Communication Settings page, tap RS-485 to enter the RS-485 tab.



Figure 7-6 Set RS-485 Parameters

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

# **i**Note

If you select **Access 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 the back icon at the upper left corner and you should reboot the device if you change the parameters.

### 7.2.4 Set Wiegand Parameters

You can set the Wiegand transmission direction.

#### Steps

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



Figure 7-7 Wiegand Settings

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

## **i**Note

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

## 7.2.5 Platform Access

You can change the device verification code and set the server address before you add the device to the Hik-Connect mobile client.

#### **Before You Start**

Make sure your device has connected to a network.

#### Steps

- **1.** Tap **Comm.** (Communication Settings) on the Home page to enter the Communication Settings page.
- 2. On the Communication Settings page, tap Access to Hik-Connect.

- 3. Enable Access to Hik-Connect
- 4. Enter Server IP.
- 5. Create the Verification Code, and you need to enter the verification code when you manage the devices via Hik-Connect.

## 7.3 User Management

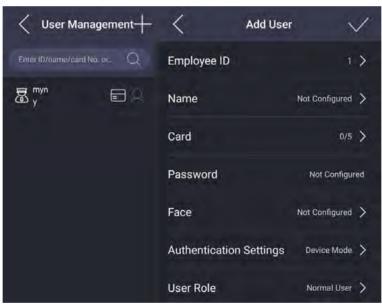
On the user management interface, you can add, edit, delete and search the user.

### 7.3.1 Add Administrator

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

#### Steps

- **1.** Long tap on the initial page and log in the backend.
- **2.** Tap **User**  $\rightarrow$  + to enter the Add User page.



3. Edit the employee ID.

# **i**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.

- 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 a face picture, fingerprints, cards, or Pin for the administrator.

# **i**Note

- For details about adding a face picture, see <u>Add Face Picture</u>.
- Note

For details about adding a fingerprint, see Add Fingerprint .

- For details about adding a card, see <u>Add Card</u>.
- For details about adding a password, see <u>View PIN code</u>.
- 6. Optional: Set the administrator's authentication type.

# **I**Note

For details about setting the authentication type, see <u>Set Authentication Mode</u>.

7. Enable 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.

**8.** Tap 🔽 to save the settings.

## 7.3.2 Add Face Picture

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

#### Steps

## **i**Note

Up to 10,000 face pictures can be added.

- **1.** Long tap on the initial page for 3 s and slide to the left/right by following the gesture and log in the backend.
- **2.** Tap **User**  $\rightarrow$  + to enter the Add User page.
- **3.** Edit the employee ID.

# **i**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.

- Numbers, upper case letters, lower case letters, and special characters are allowed in the user name.
- The suggested user name should be within 32 characters.
- 5. Tap the Face Picture field to enter the face picture adding page.



Figure 7-8 Add Face Picture

6. Look at the camera.

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

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

- 7. Tap Save to save the face picture.
- 8. Optional: Tap Try Again and adjust your face position to add the face picture again.
- 9. Set the user role.

#### Administrator

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.

#### Normal User

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

**10.** Tap v to save the settings.

### 7.3.3 Add Fingerprint

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

#### Steps

# **i**Note

- The function should be supported by the device.
- Up to 100,000 fingerprints can be added.
- **1.** Long tap on the initial page for 3 s and slide to the left/right by following the gesture and enter the device backend.
- **2.** Tap **User**  $\rightarrow$  **+** to enter the Add User page.
- 3. Tap the Employee ID. field and edit the employee ID.

# **i**Note

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

#### **4.** Tap the Name field and input the user name on the soft keyboard.

- Numbers, upper case letters, lower case letters, and special characters are allowed in the user name.
- The suggested user name should be within 32 characters.
- 5. Tap the Fingerprint field to enter the Add Fingerprint page.
- 6. Follow the instructions to add a fingerprint.

# **i**Note

- The same fingerprint cannot be repeatedly added.
- Up to 10 fingerprints can be added for one user.
- You can also use the client software or the fingerprint recorder to record fingerprints.
   For details about the instructions of scanning fingerprints, see <u>Tips for Scanning Fingerprint</u>.

#### 7. Set the user role.

#### Administrator

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.

#### Normal User

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.

## 7.3.4 Add Card

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

#### Steps

**i**Note

Up to 150,000 cards can be added.

- **1.** Long tap on the initial page for 3 s and slide to the left/right by following the gesture and log in the backend.
- **2.** Tap **User**  $\rightarrow$  + to enter the Add User page.
- **3.** Connect an external card reader according to the wiring diagram.
- 4. Tap the Employee ID. field and edit the employee ID.

## **I**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.
- 5. Tap the Name field and input the user name on the soft keyboard.

# **i**Note

- Numbers, upper case letters, lower case letters, and special characters are allowed in the user name.
- The suggested user name should be within 32 characters.
- 6. Tap the Card field and tap +.
- 7. Configure the card No.
  - Enter the card No. manually.
  - Present the card over the card presenting area to get the card No.

# **i**Note

- The card No. cannot be empty.
- Up to 20 characters are allowed in the card No.
- The card No. cannot be duplicated.
- 8. Configure the card type.
- 9. Set the user role.

### Administrator

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.

### Normal User

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

**10.** Tap 🔽 to save the settings.

## 7.3.5 View PIN code

Add a PIN code for the user and the user can authenticate via the PIN code.

## Steps

- **1.** Long tap on the initial page for 3 s and slide to the left/right by following the gesture and log in the backend.
- **2.** Tap **User**  $\rightarrow$  + to enter the Add User page.
- 3. Tap the Employee ID. field and edit the employee ID.

# **i**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.

# **i**Note

- Numbers, upper case letters, lower case letters, and special characters are allowed in the user name.
- The suggested user name should be within 32 characters.
- 5. Tap the PIN code to view the PIN code.

# **i**Note

The PIN code cannot be edited. It can only be applied by the platform.

6. Set the user role.

### Administrator

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.

### Normal User

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

**7.** Tap 🔽 to save the settings.

## 7.3.6 Set Authentication Mode

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

### Steps

- **1.** Long tap on the initial page for 3 s and slide to the left/right by following the gesture and log in the backend.
- 2. Tap User → Add User/Edit User → Authentication Mode .
- **3.** Select Device or Custom as the authentication mode.

## Device

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

## Custom

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

# 7.3.7 Search and Edit User

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

## Search User

On the User Management page, Tap the search area to enter the Search User page. Tap **Card** on the left of the page and select a search type from the drop-down list. Enter the employee ID, card No., or the user name for search. Tap **Q** 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 <u>User Management</u> to edit the user parameters. Tap vertices to save the settings.

## **i**Note

The employee ID cannot be edited.

## 7.3.8 Delete User

Tap **User**  $\rightarrow$  + to enter the User Information page.

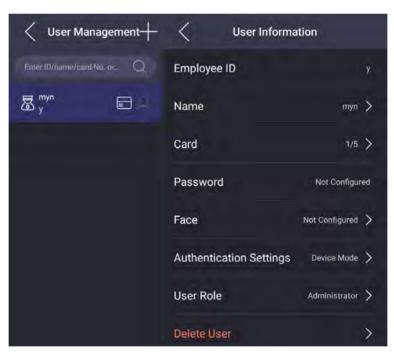


Figure 7-9 Delete User

Select the user you want to delete and tap **Delete User** to delete the user information.

# 7.4 Data Management

You can delete data, import data, and export data.

# 7.4.1 Delete Data

Delete user data.

On the Home page, tap **Data** → **Delete Data** → **User Data** . All user data added in the device will be deleted.

# 7.4.2 Import Data

## Steps

- 1. Plug a USB flash drive in the device.
- **2.** On the Home page, tap **Data**  $\rightarrow$  **Import Data** .
- 3. Tap User Data or Face Data.
- **4.** Enter the created password when you exported the data. If you do not create a password when you exported the data, leave a blank in the input box and tap **OK** immediately.

# **i**Note

- If you want to transfer all user information from one device (Device A) to another (Device B), you should export the information from Device A to the USB flash drive and then import from the USB flash drive to Device B. In this case, you should import the user data before importing the profile photo.
- The supported USB flash drive format is FAT32.
- The imported pictures should be saved in the folder (named enroll\_pic) of the root directory and the picture's name should be follow the rule below: Card No. Name Department Employee ID Gender.jpg
- If the folder enroll\_pic cannot save all imported pictures, you can create another folders, named enroll\_pic1, enroll\_pic2, enroll\_pic3, enroll\_pic4, under the root directory.
- The employee ID should be less than 32 characters. It can be a combination of lower letters, upper letters, and numbers. It should not be duplicated, and should not start with 0.
- Requirements of face picture should follow the rules below: It should be taken in full-face view, directly facing the camera. Do not wear a hat or head covering when taking the face picture. The format should be JPEG or JPG. The resolution should be 640 × 480 pixel or more than of 640 × 480 pixel. The picture size should be between 60 KB and 200 KB.

# 7.4.3 Export Data

## Steps

- 1. Plug a USB flash drive in the device.
- **2.** On the Home page, tap **Data**  $\rightarrow$  **Export Data** .
- 3. Tap Event Data, User Data, or Face Data.
- **4. Optional:** Create a password for exporting. When you import those data to another device, you should enter the password.

# iNote

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

# 7.5 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.

## 7.5.1 Authenticate via Single Credential

Set the user authentication type before authentication. For details, see <u>Set Authentication Mode</u>.

Authenticate face, fingerprint, card or QR code.

Face

Face forward at the camera and start authentication via face.

### Fingerprint

Place the enrolled fingerprint on the fingerprint module and start authentication via fingerprint.

### Card

Present the card on the card presenting area and start authentication via card.

# **I**Note

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

### QR Code

Put the QR code in front of the device camera to authenticate via QR code.

# **i**Note

Authentication via QR code should be supported by the device.

### Password

Enter the password to authenticate via password.

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

# **i**Note

After enabling temperature detection, the device displays the temperature information.

# 7.5.2 Authenticate via Multiple Credential

### **Before You Start**

Set the user authentication type before authentication. For details, see <u>Set Authentication Mode</u>.

### Steps

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

**i**Note

- The card can be normal IC card, or encrypted card.
- If the QR Code Scanning function is enabled, you can put the QR code in front of the device camera to authenticate via QR code.
- 2. After the previous credential is authenticated, continue authenticate other credentials.

# **i**Note

- For detailed information about scanning fingerprint, see *Tips for Scanning Fingerprint*.
- For detailed information about authenticating face, see *Tips When Collecting/Comparing Face Picture*.
- After enabling temperature detection, the device displays the temperature information.

If authentication succeeded, the prompt "Authenticated" will pop up.

# 7.6 Basic Settings

You can set the sound settings, time settings, beauty and sleeping (s).

Long tap on the initial page for 3 s and slide to the left/right by following the gesture and login the device home page. Tap **Basic**.

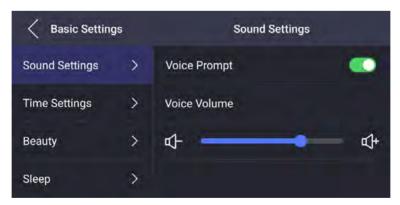


Figure 7-10 Basic Settings Page

### Sound Settings

You can enable/disable the voice prompt function and adjust the voice volume.

# **i**Note

You can set the voice volume between 0 and 10.

### Time Settings

Set the time zone, the device time and the DST.

### Beauty

You can enable the beauty function and set the smooth and the whiten parameter. Tap + or - to control the effect strength.

# **i** Note

By default, the function is disabled.

### Sleep

Set the device sleeping waiting time (minute). When you are on the initial page and if you set the sleeping time to 30 min, the device will sleep after 30 min without any operation.

# **i**Note

If you set the sleeping time to 0, the device will not enter sleeping mode.

# 7.7 Set Biometric Parameters

You can customize the face parameters to improve the face recognition performance. The configurable parameters includes application mode, face liveness level, face recognition distance, face recognition interval, wide dynamic, face 1:N security level, face 1:1 security level, ECO settings, face with mask detection and hard hat detection.

Long tap on the initial page for 3 s and login the home page. Tap **Biometric**.

Parameter	Description
Application Mode	Select either others or indoor according to actual environment.
Face Liveness Level	After enabling face anti-spoofing function, you can set the matching security level when performing live face authentication.
Face Recognition Distance	Set the valid distance between the user and the camera when authenticating.
Face Recognition Interval	The time interval between two continuous face recognitions when authenticating.

Parameter	Description
	<b>I</b> INote
	You can input the number from 1 to 10.
Wide Dynamic	It is suggested to enable the WDR function if installing the device outdoors.
	When there are both very bright and very dark areas simultaneously in the view, you can enable the WDR function to balance the brightness of the whole image and provide clear images with details.
Face 1:N Security Level	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.
Face 1:1 Security Level	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.
ECO Settings	After enabling the ECO mode, the device will use the IR camera to authenticate faces in the low light or dark environment. And you can set the 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 the value, the easier the device entering the ECO mode.
	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
	Face with Mask & Face(1:N ECO)
	Set the matching value when authenticating with face mask via ECO mode 1:N matching mode. The larger the value, the smaller the false accept rate and the larger the false rejection rate.
Face with Mask Detection	After enabling the face with mask detection, the system will recognize the captured face with mask picture. You can set face with mask & face 1:N level and the strategy.
	Reminder of Wearing

Parameter	Description
	If the person do not wear a face mask when authenticating, the device prompts a notification and the door will open.
	Must Wear
	If the person do not wear a face mask when authenticating, the device prompts a notification and the door keeps closed.
	None
	If the person do not wear a face mask when authenticating, the device will not prompt a notification.
Hard Hat Detection	After enabling the hard hat detection, you can set the strategy.
	Reminder of Wearing
	If the person do not wear the hard hat when authenticating, the device will pop up a prompt and the door will open.
	Must Wear
	If the person do not wear the hard hat when authenticating, the device will pop up a prompt and the door will keep closed.
	None
	If the person do not wear a face mask when authenticating, the device will not prompt a notification.

# **7.8 Temperature Measurement Settings**

You can set the temperature measurement parameters, including temp. detection, normal temp., temperature compensation, door not open (abnormal temperature), temperature measurement only, measurement area and unit.

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

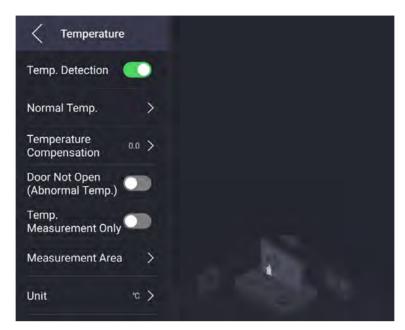


Figure 7-11 Temperature Measurement Parameters

The available parameters descriptions are as follows:

#### Temp. 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.

#### Normal Temp.

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 minimum value is 1 °C and the maximum value is 45 °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: -99 to 99.

i Note

You can select the unit as celsius degree or fahrenheit degree.

#### Door Not Open (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 function is enabled.

#### Temp. 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.

### Measurement Area

Configure the temperature measurement area.

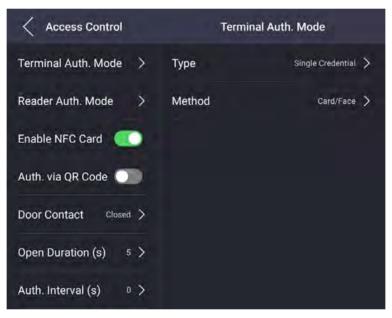
Unit

Select a temperature unit according to your preference.

# 7.9 Set Access Control Parameters

You can set the access control permissions, including the functions of terminal auth. mode, reader auth. mode, enable NFC card, auth. via QR Code, door contact, open duration (s) and authentication interval (s).

On the Home page, tap **Access Control** to enter the Access Control Settings page. Edit the access control parameters on this page.



### Figure 7-12 Access Control Parameters

The available parameters descriptions are as follows:

Table 7-2 Access Control Parameters Descriptions
--

Parameter	Description
Terminal Auth. Mode (Terminal Authentication Mode)	Select the face recognition terminal's authentication mode. You can also customize the authentication mode.

Parameter	Description
	<ul> <li>Note</li> <li>Only the device with the fingerprint module supports the fingerprint related function.</li> <li>Biometric recognition products are not 100% applicable to anti-spoofing environments. If you require a higher security level, use multiple authentication modes.</li> <li>If you adopt multiple authentication modes, you should authenticate other methods before authenticating face.</li> </ul>
Reader Auth. Mode (Card Reader Authentication Mode)	Select the card reader's authentication mode.
Enable NFC Card	Enable the function and you can present the NFC card to authenticate.
Auth. via QR Code	After enabling this function, you can put the QR code in front of the device camera to authenticate via QR code.
Door Contact	You can select "Remain Open" or "Remain Closed" according to your actual needs. By default, it is Remain Closed.
Open Duration	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.
Authentication Interval	Set the device authenticating interval. Available authentication interval range: 0 to 65535.

# 7.10 Preference Settings

You can configure preference settings parameters.

Steps

**1.** Tap **Basic Settings** → **Preference Settings** to enter the preference settings page.

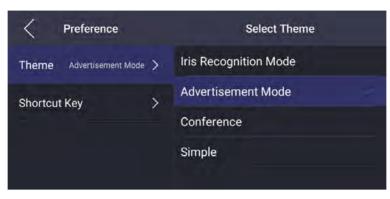


Figure 7-13 Preference Settings

### Theme

You can set the theme of the prompt window on the authentication page. You can select **Theme** as **Iris Recognition Mode/Advertisement/Meeting/Simple**.

### Advertisement

After selecting this mode, the advertising area and identification authentication area of the device will be displayed on separate screens. Video and advertising information playback, welcome speech display are supported.

### Meeting

After selecting this mode, the device supports editing and displaying meeting room name, displaying scheduled meeting information and the status of the meeting room, and signing in on the device.

### Simple

After selecting this mode, the live view of the authentication page will be disabled, and in the meanwhile, the person's name, employee ID, face pictures will all be hidden.

### Shortcut Key

Choose the shortcut key that displayed on the authentication page, including the QR code function, the call function, call type, and the password entering function.

## **i** Note

You can select call type from Call Room, Call Center, Call Specified Room No. and Call APP.

### Call Room

When you tap the call button on the authentication page, you should dial a room No. to call.

### Call Center

When you tap the call button on the authentication page, you can call the center directly. **Call Specified Room No.** 

You should set a room No. When you tap the call button on the authentication page, you can call the configured room directly without dialing.

#### Call APP

When you tap the call button on the authentication page, you will call the mobile client where the device is added.

#### Password

Enable this function amd you can enter the password to authenticate via password.

#### QR Code

You can use the QR code scanning function on the authentication interface. The device will upload the information associated with the obtained QR code to the platform.

## 7.11 System Maintenance

You can view the device system information and capacity. You can also restore the system to factory settings, default settings, reboot, and exit the system.

Long tap on the initial page for 3 s and slide to the left/right by following the gesture and enter the device backend. Tap **Maint.**.

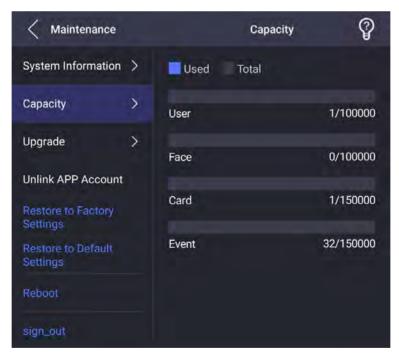


Figure 7-14 Maintenance Page

#### **System Information**

You can view the device information.

# **i**Note

The page may vary according to different device models. Refers to the actual page for details.

### Capacity

You can view the number of administrator, user, face picture, card, and event.

# **i** Note

- Parts of the device models support displaying the fingerprint number. Refers to the actual page for details.
- The capacity varies according to the configured enrollment rules. For details about setting enrollment rules, see .

### **Restore to Default**

All parameters, except for the communication settings, remotely imported user information, will be restored to the default settings. The system will reboot to take effect.

### **Restore to Factory**

All parameters will be restored to the factory settings. The system will reboot to take effect.

### Upgrade

Plug the USB flash drive in the device USB interface. Tap **Upgrade**  $\rightarrow$  **OK**, and the device will read the *digicap.dav* file in the USB flash drive to start upgrading.

### Reboot

The device will reboot after the confirmation.

### Exit

Tap Exit to exit the application.

## **?**

Long tap 💿 , and enter admin password to view device version information.

# 7.12 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, call the indoor station from the device, or call the specific room from the device.

## 7.12.1 Call Client Software from Device

### Steps

- **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.

# INote

For details about adding device, see Add Device.

- 5. Call the client software.
  - 1) Tap 💽 on the device initial page.
  - 2) Enter **0** in the pop-up window.
  - 3) Tap 🎑 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.

# **i**Note

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

# 7.12.2 Call Center from Device

### Steps

- **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 main station and the device to the client software.

# **i**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.

# **i**Note

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

- 6. Call the center.
  - If you have configured to call center in the *Basic Settings*, you can tap **S** to call the center.
  - If you have not configured to call center in the <u>Basic Settings</u>, you should tap → k to call the center
- 7. Answers the call via the main station and starts two-way audio.

# **i**Note

The device will call the main station in priority.

# 7.12.3 Call Device from Client Software

## Steps

- **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.

# **II**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.

# **i**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.

# 7.12.4 Call Room from Device

## Steps

- **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.

# **i**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. Call the room.
  - If you have configured a specified room No. in the *Basic Settings*, you can tap **V** to call the room.
  - If you have not configured a specified room No. in the <u>Basic Settings</u>, you should tap S on the authentication page of the device. Enter the room No. on the dial page and tap S to call the room.
- 7. After the indoor station answers the call, you can start two-way audio with the indoor station.

# 7.12.5 Call Mobile Client from Device

## Steps

- **1.** Get the mobile mobile client from the supplied disk or the official website, and install the software according to the prompts.
- 2. Run the mobile client and add the device to the mobile client.

# **i**Note

For details, see the user manual of the mobile client.

- 3. Enter Basic Settings → Shortcut Key and enable Call APP.
- **4.** Go back to the initial page and call the mobile client.
  - 1) Tap 🔍 on the device initial page.
  - 2) Tap 🦲 to call the mobile client.

# **Chapter 8 Operation via Web Browser**

# 8.1 Login

You can login via the web browser or the remote configuration of the client software.

# **i**Note

Make sure the device is activated. For detailed information about activation, see Activation .

## Login via Web Browser

Enter the device IP address in the address bar of the web browser and press **Enter** to enter the login page.

Enter the device user name and the password. Click Login.

## Login via Remote Configuration of Client Software

Download and open the client software. After adding the device, click 📷 to enter the Configuration page.

# 8.2 Live View

You can view the live video of the device.

After logging in, you will enter the live view page. You can perform the live view, capture, video recording, and other operations.

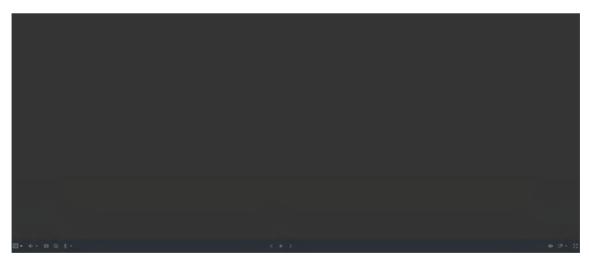


Figure 8-1 Live View Page

Function Descriptions:

## IX

Select the image size when starting live view.

### 

Set the volume when starting live view.

# **i** Note

If you adjust the volume when starting two-way audio, you may hear a repeated sounds.

Ø

You can capture image when starting live view.

 $\odot$ 

Reserved function. You can zoom in the live view image.

## ►

Start or stop live view.

Start or stop video recording.

9 9

Select the streaming type when starting live view. You can select from the main stream and the sub stream.

53

Full screen view.

# 8.3 Person Management

Click and add the person's information, including the basic information, card, authentication mode. And you can also edit user information, view user picture and search user information in the user list.

Click **OK** to save the person.

## **Add Basic Information**

Click **User**  $\rightarrow$  **Add** to enter the Add Person page.

Add the person's basic information, including the employee ID, the person's name, the gender, and the user role.

Click **Save** to save the settings.

## Add Card

Click **User**  $\rightarrow$  **Add** to enter the Add Person page.

Click Add Card, enter the Card No. and select the Property, and click OK to add the card. Click Save to save the settings.

## Add Face Picture

Click **User**  $\rightarrow$  **Add** to enter the Add Person page. Click + on the right to upload a face picture from the local PC.

# **i**Note

The picture format should be JPG or JPEG or PNG, and the size should be less than 200 K.

Click Save to save the settings.

## Add Authentication Mode

Click **User**  $\rightarrow$  **Add** to enter the Add Person page. Set the authentication mode. Click **Save** to save the settings.

# 8.4 Search Event

Click Search to enter the Search page.

Atom Channel Law     Image: 100 (100 (100 (100 (100 (100 (100 (100	1 mm - 100 mm	Employee ID	tione	Card No.	Event Types	Time	Operation	
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Figure 8-2 Search Event

Enter the search conditions, including the event type, the employee ID, the name, the card No., the start time, and the end time, and click **Search**.

The results will be displayed on the right panel.

# 8.5 Device Management

You can manage the linked device on the page.

### Steps

1. Click Device Management to enter the settings page.

+ Ac	id 🗜 Import 🕻	🖁 Export 📋 Del	ete 📿 Refresh					Status	All	Device Typ	e All	V
	No.	Device Type	IP Address	Serial No.	Model	Current Version	Floor No.	Room No.	No.	User Name	Network Status	Operation

#### Figure 8-3 Device Management

- 2. Click Add to add the indoor station or sub door station. Enter the parameters and click OK to add.
- **3.** Click **Import**. Enter the information of the device in the template to import devices in batch.
- 4. Click Export to export the information to the PC.
- 5. Select the device and click **Delete** to remove the selected device from the list.
- 6. Click Refresh to get the device information.
- 7. Optional: Set Device Information.

Edit Device Information	Click 🗷 to edit device information.
Delete Device Information	Click 💼 to delete device information from the list.
Search Devices	Select Status and Device Type to search devices.

# 8.6 Configuration

## 8.6.1 Set Local Parameters

Set the live view parameters, record file saving path, and captured pictures saving path.

## Set Live View Parameters

Click **Configuration**  $\rightarrow$  **Local** to enter the Local page. Configure the stream type, the play performance, auto start live view, and the image format and click **Save**.

## Set Record File Saving Path

Click **Configuration**  $\rightarrow$  **Local** to enter the Local page. Select a record file size and select a saving path from your local computer and click **Save**.

You can also click **Open** to open the file folder to view details.

## **Set Captured Pictures Saving Path**

Click **Configuration**  $\rightarrow$  **Local** to enter the Local page. Select a saving path from your local computer and click **Save**.

You can also click **Open** to open the file folder to view details.

## 8.6.2 View Device Information

View the device name, language, model, serial No., QR code, version, number of channels, alarm input, alarm output, lock and RS-485, device capacity, etc.

Click **Configuration**  $\rightarrow$  **System**  $\rightarrow$  **System Settings**  $\rightarrow$  **Basic Information** to enter the configuration page.

You can view the device name, language, model, serial No., QR code, version, number of channels, alarm input, alarm output, lock and RS-485, device capacity, etc.

## 8.6.3 Set Time

Set the device's time zone, synchronization mode, and the device time.

### $Click \text{ Configuration} \rightarrow System \rightarrow System \text{ Settings} \rightarrow Time \text{ Settings} .$

Time Sync.	NTP     Manual		
erver Address	2.com		
NTP Port	7		
Interval	7	minute(s)	

Figure 8-4 Time Settings

Click **Save** to save the settings after the configuration.

### Time Zone

Select the device located time zone from the drop-down list.

### Time Sync.

NTP

You should set the NTP server's IP address, port No., and interval.

### Manual

By default, the device time should be synchronized manually. You can set the device time manually or check **Sync. with Computer Time** to synchronize the device time with the computer's time.

## 8.6.4 Set DST

### Steps

```
1. Click Configuration → System → System Settings → DST .
```

tart Time	Apr	,	First	•	Sun	٠.	02	•
nd Time	Oct		Last	•	Sun	•	02	•
DST Bias	30minute(s)	•						

### Figure 8-5 DST Page

- 2. Check Enable DST.
- **3.** Set the DST start time, end time and bias time.
- 4. Click Save to save the settings.

## 8.6.5 View Open Source Software License

Go to **Configuration**  $\rightarrow$  **System**  $\rightarrow$  **System** Settings  $\rightarrow$  **About**, and click **View Licenses** to view the device license.

## 8.6.6 Upgrade and Maintenance

Reboot device, restore device parameters, and upgrade device version.

### **Reboot Device**

 $Click \text{ Configuration} \rightarrow System \rightarrow Maintenance \rightarrow Upgrade \& Maintenance .$ 

Reboot		
	Reboot Reboot the device.	
Restore Parameters		
	Default Reset all the parameters, except the IP par	rameters and user information, to the default settings.
	Restore All Restore all parameters to default settings	
	Unlink APP Account Unlink from Hik-connect account.	
Export		
Device Parameters •	Export	
Import Config File		
Device Parameters •	D	(magent)
Upgrade		
Controller •	D	
	ote: The upgrading process will be 1 to 10 minutes, please o	don't disconnect power to the device during the process. The device reboots automatically after upgrading.

### Figure 8-6 Upgrade and Maintenance Page

Click **Reboot** to start reboot the device.

Or you can check **Reboot Automatically** to set desired reboot mode by selecting **Reboot by Duration** or **Reboot by Time** and set the corresponding parameters. Click **Save**.

### **Restore Parameters**

 $Click \text{ Configuration} \rightarrow System \rightarrow Maintenance \rightarrow Upgrade \& Maintenance .$ 

#### **Restore All**

All parameters will be restored to the factory settings. You should activate the device before usage.

#### Default

The device will restore to the default settings, except for the device IP address and the user information.

#### **Unlink APP Account**

Unlink the Hik-Connect account from the platform.

#### **Import and Export Parameters**

#### $Click \text{ Configuration} \rightarrow System \rightarrow Maintenance \rightarrow Upgrade \& Maintenance .$

#### Export

Click **Export** to export the logs or device parameters.

## **i** Note

You can import the exported device parameters to another device.

### Import

Click 🛅 and select the file to import. Click **Import** to start import configuration file.

## Upgrade

### $Click \text{ Configuration} \rightarrow System \rightarrow Maintenance \rightarrow Upgrade \& Maintenance .$

Select an upgrade type from the drop-down list. Click and select the upgrade file from your local PC. Click **Upgrade** to start upgrading.

# **i**Note

Do not power off during the upgrading.

## 8.6.7 Log Query

You can search and view the device logs.

### Go to Configuration $\rightarrow$ System $\rightarrow$ Maintenance $\rightarrow$ Log Query .

Set the major and minor type of the log type. Set the start time and end time for searching, and click **Search**.

The results will be displayed below, which including the No., time, the major type the minor type, the channel No., the local/remote user information, the remote host IP, etc.

## 8.6.8 Security Mode Settings

Set the security mode for logging in the client software.

On the Device for Management page, click **Configuration**  $\rightarrow$  **System**  $\rightarrow$  **Security**  $\rightarrow$  **Security Service**.

Select a security mode from the drop-down list, and click Save.

### 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.

### Enable SSH

To raise network security, disable SSH service. The configuration is only used to debug the device for the professionals.

### **Enable ADB Remote Control**

After enabling ADB Remote Control function, you can debug, print and write commands. **Enable HTTP** 

In order to increase the network security level when visiting websites, you can enable HTTP to acquire a more secure and encrypted network communication environment. The communication should authenticated by identity and encryption password after enabling HTTP, which is save.

## 8.6.9 Certificate Management

It helps to manage the server/client certificates and CA certificate.

## **i**Note

The function is only supported by certain device models.

## **Create and Install Self-signed Certificate**

### Steps

- 1. Go to Configuration → System → Security → Certificate Management .
- 2. In the Certificate Files area, select a Certificate Type from the drop-down list.
- 3. Click Create.
- 4. Input certificate information.
- 5. Click OK to save and install the certificate.

The created certificate is displayed in the **Certificate Details** area.

The certificate will be saved automatically.

- 6. Download the certificate and save it to an asking file in the local computer.
- 7. Send the asking file to a certification authority for signature.
- **8.** Import the signed certificate.
  - 1) Select a certificate type in the **Import Passwords** area, and select a certificate from the local, and click **Install**.
  - 2) Select a certificate type in the **Import Communication Certificate** area, and select a certificate from the local, and click **Install**.

## Install Other Authorized Certificate

If you already has an authorized certificate (not created by the device), you can import it to the device directly.

### Steps

- **1.** Go to **Configuration**  $\rightarrow$  **System**  $\rightarrow$  **Security**  $\rightarrow$  **Certificate Management** .
- 2. In the Import Passwords and Import Communication Certificate areas, select certificate type and upload certificate.
- 3. Click Install.

## **Install CA Certificate**

## Before You Start

Prepare a CA certificate in advance.

## Steps

**1.** Go to **Configuration**  $\rightarrow$  **System**  $\rightarrow$  **Security**  $\rightarrow$  **Certificate Management**.

2. Create an ID in the Inport CA Certificate area.

# **i** Note

The input certificate ID cannot be the same as the existing ones.

- **3.** Upload a certificate file from the local.
- 4. Click Install.

## 8.6.10 Change Administrator's Password

## Steps

- 1. Click Configuration → User Management .
- **2.** Click 🕜 .
- 3. Enter the old password and create a new password.
- 4. Confirm the new password.
- 5. Click OK.

# **A**Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you change your password regularly, especially in the high security system, changing 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.

# 8.6.11 Online Users

The information of users logging into the device is shown.

Go to **Configuration**  $\rightarrow$  **System**  $\rightarrow$  **User Management**  $\rightarrow$  **Online Users** to view the list of online users.

# 8.6.12 View Device Arming/Disarming Information

View device arming type and arming IP address.

Go to Configuration → User Management → Arming/Disarming Information .

You can view the device arming/disarming information. Click **Refresh** to refresh the page.

## 8.6.13 Network Settings

Set TCP/IP, port, SIP, WiFi, report strategy, platform access and ISUP.

# **i**Note

Some device models do not support Wi-Fi settings. Refer to the actual products when configuration.

## Set Basic Network Parameters

Click Configuration  $\rightarrow$  Network  $\rightarrow$  Basic Settings  $\rightarrow$  TCP/IP.

DHCP	
IPv4 Address	10.7.113.27
IPv4 Subnet Mask	255,255,255.0
IPv4 Default Gateway	10.7.113.254
Mac Address	2c a5 9c ce 94 9c
MTU	1500
NIC Type	Auto
DNS Server	
DHCP	
Preferred DNS Server	10 1 7.97
Alternate DNS Server	10.1.7.98
	Save

Figure 8-7 TCP/IP Settings Page

Set the parameters and click **Save** to save the settings.

#### DHCP

If uncheck the function, you should set the IPv4 address, IPv4 subnet mask, IPv4 default gateway, MTU, and the device port.

If you check the function, the system will allocate the IPv4 address, IPv4 subnet mask, and the IPv4 default gateway automatically.

#### NIC Type

Select a NIC type from the drop-down list. By default, it is **Auto**.

### **DNS Server**

Set the preferred DNS server and the Alternate DNS server according to your actual need.

### **Set Port Parameters**

Set the HTTP, RTSP and HTTPS port parmaeters.

### $Click \text{ Configuration} \rightarrow Network \rightarrow Basic \text{ Settings} \rightarrow Port .$

#### HTTP

It refers to the port through which the browser accesses the device. For example, when the HTTP Port is modified to 81, you need to enter *http://192.0.0.65:81* in the browser for login.

### RTSP

It refers to the port of real-time streaming protocol.

### HTTPS

Set the HTTPS for accessing the browser. Certificate is required when accessing.

### Set Wi-Fi Parameters

Set the Wi-Fi parameters for device wireless connection.

### Steps

# **i**Note

The function should be supported by the device.

#### 1. Click Configuration → Network → Basic Settings → Wi-Fi .

waas 🛃			
Add C Endrech			
s Fi Name		Operation	
- inter-		8	
NAME -		8	
and products	2	8	
NAME (NOT	4	8	
unit par- age a annuale annuale		8	
		6	
	4	8	
and the second se		8	
man		8	

#### Figure 8-8 Wi-Fi Settings Page

- 2. Check Wi-Fi.
- 3. Select a Wi-Fi
  - Click  $\otimes$  of a Wi-Fi in the list and enter the Wi-Fi password.

- Click Add, and enter the SSID, working mode, and encryption type. Click Connect. When the Wi-Fi is connected, click OK.
- **4. Optional:** Set the WLAN parameters.
  - 1) Click Network Settings.
  - 2) Set the IP address, subnet mask, and default gateway. Or check **Enable DHCP** and the system will allocate the IP address, subnet mask, and default gateway automatically.
- 5. Click OK.

## **SIP Setting**

### Steps

- 1. Click Network → Basic Settings → SIP to enter the settings page.
- 2. Check Enable VOIP Gateway.
- 3. Configure the SIP parameters.
- 4. Click Save to enable the settings.

## **Report Strategy Settings**

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

### Go to Configuration $\rightarrow$ Network $\rightarrow$ Basic Settings $\rightarrow$ Report Strategy .

You can set the center group and the system will transfer logs via ISUP 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.

**I**Note

N1 refers to wired network.

## **Platform Access**

Platform access provides you an option to manage the devices via platform.

#### Steps

**1.** Click **Configuration** → **Network** → **Advanced** → **Platform Access** to enter the settings page.

2. Select the Platform Access Mode.

# **i**Note

Hik-Connect is an application for mobile devices. With the App, you can view live image of the device, receive alarm notification and so on.

- 3. Check the checkbox of Enable to enable the function.
- 4. Optional: Check the checkbox of Custom, and you can set the server address by yourself.
- 5. Create a Stream Encryption/Encryption Key for the device.

# **I**Note

6 to 12 letters (a to z, A to Z) or numbers (0 to 9), case sensitive. You are recommended to use a combination of no less than 8 letters or numbers.

6. Click Save to enable the settings.

## **Set ISUP Parameters**

Set the ISUP parameters for accessing device via ISUP protocol.

### Steps

**i**Note

The function should be supported by the device.

### **1.** Click Configuration $\rightarrow$ Network $\rightarrow$ Advanced $\rightarrow$ Platform Access .

- 2. Select ISUP from the platform access mode drop-down list.
- 3. Check Enable.
- **4.** Set the protocol version, alarm receiver type, port, device ID, ISUP key, and the register status.

# **i**Note

Only 5.0 version is supported, you should set the ISUP key as well.

5. Click Save.

## **Configure HTTP Listening**

The device can send alarm information to the destination IP or host via HTTP protocol/HTTPS protocol.

#### **Before You Start**

The destination IP or host name should support the HTTP protocol/HTTPS protocol to receive the alarm information.

# **I**Note

The function should be supported by the device.

### Steps

- **1.** Click **Configuration** → **Network** → **Advanced** → **HTTP Listening** .
- **2.** Edit the destination IP or host name, URL and port.
- 3. Optional: Click Test to test whether the entered IP address or host name are valid.
- 4. Optional: Click Default to reset the destination IP or host name.
- 5. Click Save.

## 8.6.14 Set Video and Audio Parameters

Set the image quality, resolution, and the device volume.

## Set Video Parameters

 $Click \text{ Configuration} \rightarrow Video/Audio \rightarrow Video .$ 

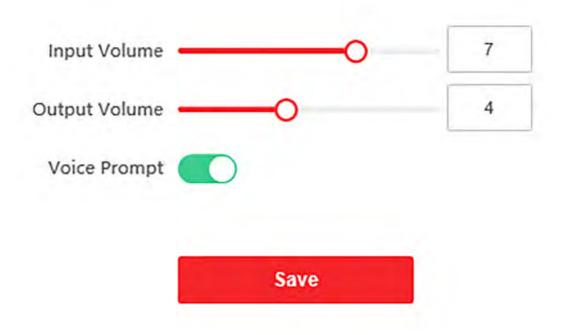
Video Channel	Camera1	$\checkmark$	]
Stream Type	Main Stream	~	]
Video Type	Video&Audio	$\checkmark$	
Resolution	1280*720	$\checkmark$	
Bitrate Type	Constant	~	
Video Quality	Lowest	$\checkmark$	
Frame Rate	25	~	fps
Max. Bitrate	2048		Kbps
Video Encoding	H.264	~	1
I Frame Interval	50		
	Save		

### Figure 8-9 Video Settings Page

Set the video channel, the stream type, the video type, resolution, the bitrate type, video quality, the frame rate, the Max. bitrate, the video encoding, and I frame interval. Click **Save** to save the settings after the configuration.

### **Set Audio Parameters**

Click Configuration  $\rightarrow$  Video/Audio  $\rightarrow$  Audio .



### Figure 8-10 Set Audio Parameters

Drag the block to adjust the device input and output volume. Click **Save** to save the settings after the configuration. You can also enable **Voice Prompt**.

# **i**Note

The functions vary according to different models. Refers to the actual device for details.

## 8.6.15 Customize Audio Content

Customize the output audio content when authentication succeeded and failed.

### Steps

**1.** Click Configuration  $\rightarrow$  Video/Audio  $\rightarrow$  Prompt .

5	
îme Schedule	Configuration
Default	Enable:
	Appellation 💿 None
	Time Period When Authentication Succeeded
	Add
	Time Period When Authentication Failed
	Add
	Save

Figure 8-11 Customize Audio Content

- 2. Select Prompt as TTS(Text to Speech) to turn the text to audio content.
- 3. Select time schedule.
- 4. Enable the function.
- 5. Set the appellation.
- 6. Set the time period when authentication succeeded.
  - 1) Click Add.
  - 2) Set the time duration and the language.

# **i**Note

If authentication is succeeded in the configured time duration, the device will broadcast the configured content.

- 3) Enter the audio content.
- 4) **Optional:** Repeat substep 1 to 3.
- 5) **Optional:** Click <a>im</a> to delete the configured time duration.
- 7. Set the time duration when authentication failed.

## 1) Click Add.

2) Set the time duration and the language.

## **i**Note

If authentication is failed in the configured time duration, the device will broadcast the configured content.

- 3) Enter the audio content.
- 4) **Optional:** Repeat substep 1 to 3.
- 5) **Optional:** Click find to delete the configured time duration.
- 8. Optional: Add holiday schedule.
  - 1) Click Add to add holiday schedule.
  - 2) Repeat step 3 to 6.
- 9. Click Save to save the settings.

## 8.6.16 Set Image Parameters

Set the video standard, WDR, brightness, contrast, and saturation.

## Steps

## 1. Click Configuration → Image Adjustment .

2. Configure the parameters to adjust the image.

## Video Standard

Set the video frame rate when performing live view remotely. After changing the standard, you should reboot the device to take effect.

## PAL

25 frames per second. Suitable for mainland China, Hong Kong (China), the Middle East countries, Europe countries, etc.

## NTSC

30 frames per second. Suitable for the USA, Canada, Japan, Taiwan (China), Korea, the Philippines, etc.

## WDR

Enable or disable the WDR function.

When there are both very bright and very dark areas simultaneously in the view, WDR balances the brightness level of the whole image and provide clear images with details.

## **Brightness/Contrast/Saturation**

Drag the block or enter the value to adjust the live video's brightness, contrast and saturation.

## 

Start/end recording video.

## Ø

Capture the image.

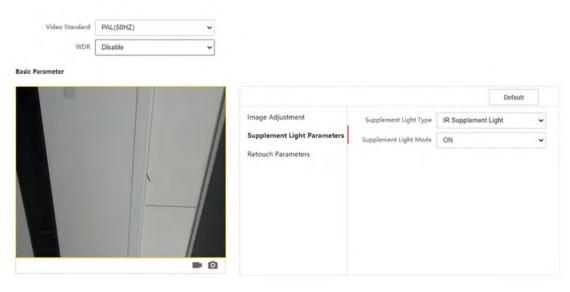
## 3. Click **Default** to restore the parameters to the default settings.

## 8.6.17 Set Supplement Light Brightness

Set the device supplement light brightness.

### Steps

1. Click Configuration → Image → Supplement Light Parameters .



### Figure 8-12 Supplement Light Settings Page

**2.** Select a supplement light type and mode from the drop-down list. If you select the mode as **ON**, you should set the brightness.

## 8.6.18 Set Beauty Parameters

You can enable beauty camera and set the parameters.

### Steps

- 1. Click Configuration → Image → Beauty Parameters .
- 2. Check Enable Beauty Photos, and adjust the Whiten Level and Smoothing Skin Level according to your actual needs.

## 8.6.19 Set Fusion Parameters

You can enable the image fusion to improve the recognition effect of low-light environment.

### Steps

- **1.** Click **Configuration**  $\rightarrow$  **Image**  $\rightarrow$  **Image** Fusion to enter the page.
- 2. Set the mode as Automatic or Disable.

Auto

After selecting **Automatic**, the device will enter automatically enter the image fusion mode. You need to set set the **Sensitivity**. The larger the value, the higher the sensitivity, and the easier it is for the device to enter the image fusion mode.

### Disable

The device will not enter the image fusion mode automatically.

## 8.6.20 Time and Attendance Settings

If you want to track and monitor when the persons start/stop work and monitor their working hours and late arrivals, early departures, time taken on breaks, and absenteeism, you can add the person to the shift group and assign a shift schedule (a rule for the attendance defining how the schedule repeats, the shift type, break settings, and the card swiping rule.) to the shift group to define the attendance parameters for the persons in the shift group.

## **Disable Attendance Mode via Web**

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

### Steps

- 1. Click **Configuration** → **Attendance** to enter the settings page.
- 2. Set the Attendance Mode as Disable.

### Result

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.

## **Time Settings**

### Steps

- 1. Click **Configuration** → **Time Settings** to enter the settings page.
- 2. Select Status Type.
- 3. Optional: Edit Schedule Name according to the actual needs.
- **4.** Drag mouse to set the schedule.

## **i**Note

Set the schedule from Monday to Sunday according to the actual needs.

- 5. Optional: Select a timeline and click Delete. Or click Delete All to clear the settings.
- 6. Click Save.

## Set Manual Attendance via Web

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

### **Before You Start**

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

### Steps

- **1.** Click **Configuration**  $\rightarrow$  **Attendance** to enter the settings page.
- 2. Set the Attendance Mode as Manual.
- 3. Enable the Attendance Status Required and set the attendace status lasts duration.
- **4.** Enable a group of attendance status.

## **i** Note

The Attendance Property will not be changed.

5. Optional: Select an status and change its name if required.

## Result

You should select an attendance status manually after authentication.

## **i**Note

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

## Set Auto Attendance via Web

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 schedule.

### **Before You Start**

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

### Steps

- 1. Click Configuration → Attendance to enter the settings page.
- 2. Set the Attendance Mode as Auto.
- 3. Enable the Attendance Status function.
- 4. Enable a group of attendance status.

## **I**Note

The Attendance Property will not be changed.

- 5. Optional: Select an status and change its name if required.
- 6. Set the status' schedule. Refers to *<u>Time Settings</u>* for details.

## Set Manual and Auto Attendance via Web

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

### **Before You Start**

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

## Steps

- 1. Click Configuration → Attendance to enter the settings page.
- 2. Set the Attendance Mode as Manual and Auto.
- 3. Enable the Attendance Status function.
- 4. Enable a group of attendance status.



The Attendance Property will not be changed.

- 5. Optional: Select an status and change its name if required.
- 6. Set the status' schedule. Refers to *<u>Time Settings</u>* for details.

### Result

On the initial page and authenticate. The authentication will be marked as the configured attendance status according to the schedule. If you tap the edit icon on the result tab, you can select a status to take attendance manually, the authentication will be marked as the edited attendance status.

### Example

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

## 8.6.21 General Settings

## **Set Authentication Parameters**

Click Configuration  $\rightarrow$  General  $\rightarrow$  Authentication Settings .

## **i**Note

The functions vary according to different models. Refers to the actual device for details.

Click **Save** to save the settings after the configuration.

### **Card Reader**

Select Main Card Reader or Sub Card Reader from the drop-down list.

### **Main Card Reader**

You can configure the device card reader's parameters.

### Sub Card Reader

You can configure the connected peripheral card reader's parameters.

### If select Main Card Reader:

### Card Reader Type/Card Reader Description

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

### **Enable Card Reader**

Enable the card reader's function.

### Authentication

Select an authentication mode according to your actual needs from the drop-down list.

### **Multiple People Authentication**

Multiple people can be authenticated at the same time.

### **Recognition Interval**

You can set the interval between 2 continuous recognition of a same person during the authentication. In the configured interval, Person A can only recognized once. If another person (Person B) has recognized during the interval, Person A can recognized again.

### Authentication Interval

You can set the authentication interval of the same person when authenticating. The same person can only authenticate once in the configured interval. A second authentication will be failed.

### Alarm of Max. Failed Attempts

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

## Max. Authentication Failed Attempts

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

### **Enable Tampering Detection**

Enable the anti-tamper detection for the card reader.

### **Enable Card No. Reversing**

The read card No. will be in reverse sequence after enabling the function.

## If select Sub Card Reader:

## Card Reader Type/Card Reader Description

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

## **Enable Card Reader**

Enable the card reader's function.

## Authentication

Select an authentication mode according to your actual needs from the drop-down list.

### **Multiple People Authentication**

Multiple people can be authenticated at the same time.

### **Recognition Interval**

If the interval between card presenting of the same card is less than the configured value, the card presenting is invalid.

### Authentication Interval

You can set the authentication interval of the same person when authenticating. The same person can only authenticate once in the configured interval. A second authentication will be failed.

### Alarm of Max. Failed Attempts

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

### Max. Authentication Failed Attempts

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

### **Communication 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.

### Max. Interval When Entering Password

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

## **OK LED Polarity/Error LED Polarity**

Set OK LED Polarity/Error LED Polarity of the access control device according to the card reader parameters. Generally, adopts the default settings.

### **Enable Tampering Detection**

Enable the anti-tamper detection for the card reader.

## **Set Privacy Parameters**

Set the event storage type, picture upload and storage parameters, and the picture clearing parameters.

## Go to Configuration → Access Control → Privacy

## **Event Storage Settings**

Select a method to delete the event. You can select from **Delete Old Events Periodically**, **Delete Old Events by Specified Time**, or **Overwriting**.

## **Delete Old Events Periodically**

Drag the block or enter number to set the period for event deleting. All events will be deleted according to the configured time duration.

### **Delete Old Events by Specified Time**

Set a time and all events will be deleted on the configured time.

### Overwriting

The earliest 5% events will be deleted when the system detects the stored events has been over 95% of the full space.

## **Authentication Settings**

### **Display Authentication Result**

You can check **Face Picture**, **Name**, **Employee ID** and **Temperature**, to display the authentication result.

### Name De-identification

You can check Name De-identification, and the whole name will not be displayed.

### **ID De-identification**

You can check **ID De-identification**, and the ID will not be displayed.

### Overwriting

The earliest 5% events will be deleted when the system detects the stored events has been over 95% of the full space.

## **Picture Uploading and Storage**

## **Upload Captured Picture When Authenticating**

Upload the pictures captured when authenticating to the platform automatically.

## Save Captured Picture When Authenticating

If you enable this function, you can save the picture when authenticating to the device.

### **Save Registered Picture**

The registered face picture will be saved to the system if you enable the function.

### **Upload Picture After Linked Capture**

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

### Save Pictures After Linked Capture

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

## **Clear All Pictures in Device**

## **i**Note

All pictures cannot be restored once they are deleted.

## **Clear Registered Face Pictures**

All registered pictures in the device will be deleted.

## **Clear Captured Pictures**

All captured pictures in the device will be deleted.

## Set Card Security

Click **Configuration**  $\rightarrow$  **General**  $\rightarrow$  **Card Security** to enter the settings page.

Set the parameters and click **Save**.

## **Enable NFC Card**

In order to prevent the mobile phone from getting the data of the access control, you can enable NFC card to increase the security level of the data.

## Enable M1 Card

Enable M1 card and authenticateingby presenting M1 card is available.

## M1 Card Encryption

## Sector

M1 card encryption can improve the security level of authentication.

Enable the function and set the encryption sector. By default, Sector 13 is encrypted. It is recommended to encrypt sector 13.

## Enable EM Card

Enable EM card and authenticating by presenting EM card is available.



If the peripheral card reader supports presenting EM card, the function is also supported to enable/disable the EM card function.

## Enable CPU Card

The device can read the data from CPU card when enabling the CPU card function.

## **CPU Card Read Content**

After enable the CPU card content reading function, the device can read the CPU card content.

## Enable ID Card

Enable ID card and authenticating by presenting ID card is available.

## **Set Card Authentication Parameters**

Set the card reading content when authenticate via card on the device.

## Go to Configuration $\rightarrow$ General $\rightarrow$ Card Authentication Settings .

Select a card authentication mode and click **Save**.

## Full Card No.

All card No. will be read.

## Wiegand 26 (3 bytes)

The device will read card via Wiegand 26 protocol (read 3 bytes).

## Wiegand 34 (4 bytes)

The device will read card via Wiegand 34 protocol (read 4 bytes).

## 8.6.22 Video Intercom Settings

## Set Video Intercom Parameters

The device can be used as a door station, outer door station, or access control device. You should set the device No. before usage.

## Click Configuration $\rightarrow$ Intercom $\rightarrow$ Device No. .

If set the device type as **Door Station** or **Access Control Device**, you can set the floor No., door station No., and click **Advanced Settings** to set **Phase No.**, **Building No.**, and **Unit No.** 

Click **Save** to save the settings after the configuration.

Device Type	Door Station	V
Floor No.	1	
Door Station No.	0	
Advanced Settings		~
Phase No.	1	
Building No.	1	
Unit No.	1	
	Save	

Figure 8-13 Device No. Settings

### **Device Type**

The device can be used as a door station or outer door station. Select a device type from the drop-down list.

## **i** Note

If you change the device type, you should reboot the device.

### Floor No.

Set the device installed floor No.

## Door Station No.

Set the device installed floor No.

# **i**Note

- If you change the No., you should reboot the device.
- The main door station No. is 0, and the sub door station No. ranges from 1 to 16.

#### Phase No.

Set the device phase No.

#### **Building No.**

Set the device building No.

### Unit No.

Set the device unit No.

## **i** Note

If you change the No., you should reboot the device.

If set the device type as **Outer Door Station**, you can set the period No., outer door station No., and community No.

### **Outer Door Station No.**

If you select outer door station as the device type, you should enter a number between **1** and **99**.

## **i**Note

If you change the No., you should reboot the device.

### Phase No.

Set the device phase No.

## **Session Settings**

Enable the communication between door station, main station, and video intercom server.

### Steps

1. Click Configuration → Intercom → Session Settings to enter the settings page.

Registration Password		
Main Station IP	0.0.0.0	
Private Server IP	0.0.0.0	
Enable Protocol 1.0		
	Save	

## Figure 8-14 Session Settings

2. Set registration password, main station IP, private server IP and enable Protocol 1.0.

### **Registration Password**

Activation password of the main station.

#### **Main Station IP**

IP address of the main station.

#### **Private Server IP**

IP address of the private server.

### **Enable Protocol 1.0**

After enabling, the device is registered to the main station through the previous protocol. If disabled, the device is registered to the main station through the new protocol.

3. Click Save.

## **Time Duration Settings**

Set the Max. call duration.

### Go to Configuration $\rightarrow$ Intercom $\rightarrow$ Time Parameters .

Drag the block to set the Max. call duration. Click Save.

## **i**Note

The Max. call duration range is 90 s to 120 s.

## **Number Settings**

Link the room No. and SIP numbers.

Click **Configuration**  $\rightarrow$  **Intercom**  $\rightarrow$  **Device No.** to enter the page.

Device Type	Door Station	$\checkmark$
Floor No.	1	
Door Station No.	0	
Advanced Settings		~
Phase No.	1	
Building No.	1	
Unit No.	1	
	Save	

Figure 8-15 Number Settings

- 1. Set the **Device Type**.
- 2. Set the Floor No.
- 3. Set the Door Station No..
- 4. You can also set the Phase No., Building No. and Unit No. in advanced settings.
- 5. Click Save.

## 8.6.23 Access Control Settings

## **Set Door Parameters**

 $\mathsf{Click} \ \mathbf{Configuration} \ \textbf{\rightarrow} \ \mathbf{Access} \ \mathbf{Control} \ \textbf{\rightarrow} \ \mathbf{Door} \ \mathbf{Parameters} \ .$ 

Doar No.	Door1	
Name	door1	
Open Duration	5	\$
Door Open Timeout Alarm	30	s
Door Contact	🖲 Remain Closed 🗋 Remain Open	
Exit Button Type	🗍 Remain Closed 🖲 Remain Open	
Extended Open Duration	15	\$
Door Remain Open Duration with First Person	10	m
Duress Code	*****	
	Invase 0 to 8 deglos	
Super Password		
	Frager O to O sugers.	
	Save	

## Figure 8-16 Door Parameters Settings Page

Click **Save** to save the settings after the configuration.

## Door No.

Select the device corresponded door No.

### Name

You can create a name for the door.

## **Open Duration**

Set the door unlocking duration. If the door is not opened for the set time, the door will be locked.

## Door Open Timeout Alarm

An alarm will be triggered if the door has not been closed within the configured time duration.

## Door Contact

You can set the door contact as **Remain Open** or **Remain Closed** according to your actual needs. By default, it is **Remain Closed**.

#### **Exit Button Type**

You can set the exit button as **Remain Open** or **Remain Closed** according to your actual needs. By default, it is **Remain Open**.

#### **Door Lock Powering Off Status**

You can set the door lock status when the door lock is powering off. By default, it is **Remain Closed**.

### **Extended Open Duration**

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

#### Door Remain Open Duration with First Person

Set the door open duration when first person is in. After the first person is authorized, it allows multiple persons access the door or other authentication actions.

#### **Duress Code**

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

#### Super Password

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

## **i**Note

The duress code and the super code should be different.

## Set RS-485 Parameters

You can set the RS-485 parameters including the peripheral, address, baud rate, etc.

### Click Configuration → Access Control → RS-485 Settings .

Check Enable RS-485, and set the parameters.

Click **Save** to save the settings after the configuration.

No.

Set the RS-485 No.

### **Peripheral Type**

Select a peripheral from the drop-down list according the actual situation. You can select from **Card Reader**, **Extension Module**, **Access Controller**, or **Disable**.

## **i**Note

After the peripheral is changed and saved, the device will reboot automatically.

### **RS-485 Address**

Set the RS-485 Address according to your actual needs.

## **i**Note

If you select **Access 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.

### **Baud Rate**

The baud rate when the devices are communicating via the RS-485 protocol.

## **Set Wiegand Parameters**

You can set the Wiegand transmission direction.

#### Steps

## **i**Note

Some device models do not support this function. Refer to the actual products when configuration.

### 1. Click Configuration → Access Control → Wiegand Settings .



## Figure 8-17 Wiegand Page

- 2. Check Wiegand to enable the Wiegand function.
- 3. Set a transmission direction.

## Input

The device can connect a Wiegand card reader.

## Output

The can connect an external access controller. And the two devices will transmit the card No. via Wiegand 26 or 34.

**4.** Drag the block to set the time interval and pulse width.

# **i**Note

- The time interval ranges from 1 ms to 20 ms.
- The pulse width ranges from 1 us to 100 us.
- 5. Click Save to save the settings.

## **i**Note

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

## **Elevator Control**

## Steps

**1.** Click **Configuration** → **Access Control** → **Elevator Control Parameters** .

$\checkmark$

### Figure 8-18 Access Control and Elevator Control

#### 2. Check Enable Elevator Control.

**3.** Set the elevator parameters.

#### **Elevator No.**

Select an elevator No. for configuration from the drop-down list.

#### **Elevator Controller Type**

Select an elevator controller from the drop-down list.

#### Interface Type

Select a communication type from the drop-down list for elevator communication.

If you select **RS-485**, make sure you have connected the device to the elevator controller with RS-485 wire.

If you select **Network Interface**, enter the elevator controller's IP address, port No., user name, and password for communication.

#### Negative Floor Capacity

Set the negative floor number.

## **i** Note

- Up to 4 elevator controllers can be connected to 1 device.
- Up to 10 negative floors can be added.
- Make sure the interface types of elevator controllers, which are connected to the same device, are consistent.

## 8.6.24 Temperature Measurement Settings

### **Temperature Measurement Settings**

You can set the temperature measurement parameters, including temperature measurement only, temperature unit, over-temperature threshold, temperature compensation, door not open when temperature is abnormal, etc.

#### Steps

```
1. Click Configuration → Temperature → Temperature Settings .
```

Temperature Measurement		
Temperature Measurement Only		
Capture White Light Picture		
Unit	Celsius	
Over-Temperature Threshold (Max.)	37.3	°C
Over-Temperature Threshold (Min.)	35	°C
Temperature Compensation	0	
Door Not Open When Temperature is Abnormal		
	Save	

### Figure 8-19 Temperature Measurement Settings

### 2. Enable Temperature Measurement.

3. Configure the temperature measurement parameters.

### **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 Alarm 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 37.3°.

### **Temperature Compensation**

If the measured temperature is higher/lower than the actual object's temperature, you can set the compensation temperature here. Available range: -99 °C to 99 °C.

### Door Not Open When Temperature 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.

### **Capture White Light Picture**

After enabling **Temperature Measurement Only**, you can enable **Capture White Light Picture**. After enabling this function, the device will capture white light picture.

## **Measure Area Settings**

Configure the temperature measurement area.

## Unit

Select a temperature unit according to your preference.

### 4. Click Save.

## **Black Body Settings**

The black body can correct the measuring temperature. You should set the black body parameters if the black body temperature measurement scene is required. If no black body is required, do not set the black body parameters, or the temperature may not correct.

## Steps

## 1. Click Configuration → Temperature → Black Body Settings .

	-			
	в	ack Body Parameters		
 		Distance	1	
		Emissivity	0.97	
+	1	Temperature Unit	Celsius	~
		Temperature	40	
			Save	
	■ 0			

## Figure 8-20 Black Body Settings

- 2. Enable black body correction function.
- **3.** Put a black body in front of the camera. Make sure there are no other objects between the camera and the black body.
- **4.** Set the distance between the black body and the camera (straight line), the emissivity of the black body, and the temperature unit.

## **i**Note

The black body's temperature is fixed.

- **5.** Click **Calibrate**, and draw the black body's position on the page. When **+** is displayed on the black body on the screen, the black body is calibrated.
- 6. Click Save.

## Draw Temperature Measurement Area

### Click Configuration $\rightarrow$ Temperature $\rightarrow$ Temperature Measurement Area .

Drag the yellow frame in the live video to adjust the measurement area. Only the temperature within the area can be measured by the system.

Click **Save** to save the settings.

Click and or of to record videos or capture pictures.

## 8.6.25 Set Biometric Parameters

## **Set Basic Parameters**

## Click Configuration $\rightarrow$ Smart $\rightarrow$ Smart .

## **i**Note

The functions vary according to different models. Refers to the actual device for details.

Face Anti-spoofing			
Live Face Detection Security Level	Normal	High Profile	
Recognition Distance	0.5m 0 1m	<ul> <li>1.5m</li> <li>2m</li> <li>Autom.</li> </ul>	Geo
			auc
Application Mode	<ul><li>● Indoor</li><li>○ Oth</li></ul>	her	
Face Recognition Mode	Normal Mode	$\checkmark$	
Continuous Face Recognition Interval	-0	3 s	
Pitch Angle	0	45 -	
Yaw Angle		45 *	
24			
Face Grading	0	50	
1.1 Matching Threshold		60	
1:N Matching Threshold	(	37	
Face Recognition Timeout Value	-0	3 5	
ECO Mode	-		
ECO Mode Threshold		4	
ECO Mode (1:1)		60	
ECO Mode (1:N)	0	70	
Enable Hard Hat Detection			
Face with Mask Detection	-		
lass min mak beredun	<u> </u>		

Figure 8-21 Smart Settings Page

Click **Save** to save the settings after the configuration.

## Face Anti-spoofing

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

## **i**Note

Biometric recognition products are not 100% applicable to anti-spoofing environments. If you require a higher security level, use multiple authentication modes.

### Live Face Detection Security Level

After enabling the face anti-spoofing function, you can set the matching security level when performing live face authentication.

### **Recognition Distance**

Select the distance between the authenticating user and the device camera.

### **Application Mode**

Select either others or indoor according to actual environment.

### Face Recognition Mode

### Normal Mode

Recognize face via the camera normally.

### Deep Mode

In the deep mode, you can add the face pictures only via the user adding function of the device or the enrollment station. It is not supported to add face pictures via pictures importing.

## **i** Note

The two modes cannot be compatible with each other. Do not change the mode once it is selected. If you change the mode, all face pictures of the previous mode will be cleared.

### **Continuous Face Recognition Interval**

Set the time interval between two continuous face recognitions when authenticating.

## **Pitch Angle**

The maximum pitch angle when starting face authentication.

### Yaw Angle

The maximum yaw angle when starting face authentication.

### **Face Grading**

Set the face grading according to your needs.

### 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.

### **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.

## Face Recognition Timeout Value

Set the timeout value when face recognizing. If the face recognition time is longer than the configured value, the system will pop up a prompt.

## ECO Mode

After enabling the ECO mode, the device will use the IR camera to authenticate faces in the low light or dark environment. And you can set the 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

## **Enable Hard Hat Detection**

After enabling the hard hat detection, you can set the strategy.

## **Reminder of Wearing**

If the person do not wear the hard hat when authenticating, the device will pop up a prompt and the door will open.

## Must Wear

If the person do not wear the hard hat when authenticating, the device will pop up a prompt and the door will keep closed.

## Face with Mask Detection

After enabling the face with mask detection, the system will recognize the captured face with mask picture. You can set face with mask1:N matching threshold, it's ECO mode, and the strategy.

## None

The device will detect the face with mask without prompt.

## **Reminder of Wearing**

If the person do not wear a face mask when authenticating, the device prompts a notification and the door will open.

## Must Wear

If the person do not wear a face mask when authenticating, the device prompts a notification and the door keeps closed.

## Face with Mask 1:N Matching Threshold

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

## Face with Mask 1:N Matching Threshold (ECO Mode)

Set the matching threshold when authenticating with face mask via ECO mode 1:N matching mode. The larger the value, the smaller the false accept rate and the larger the false rejection rate.

## Set Recognition Area

### Click Configuration $\rightarrow$ Smart $\rightarrow$ Area Configuration .

Drag the yellow frame in the live video to adjust the recognition area. Only the face within the area can be recognized by the system.

Click Save to save the settings.

Click or or capture pictures.

## 8.6.26 Set Meeting Plans

You can set meeting plans for the device.

#### Steps

1. Click Configuration → Smart → Meeting Plans .

Conference Room Name	10.000			
Conference Theme	01000-010		[	
Host			]	
Start Time	2021-07-06 17:55:00	0 🛗		
End Time	2021-07-06 21:00:00	0 📾		
Participants			]	
	You can add by entering n	ames or work number	s to inquire device workers.	
Participants(1)	BARN E	1		~
				~
Advanced Check-in Time	0	1	min	
Latest Check-in Time	0	1	min	
Check-in Type	O Single Participant	All Participant	ts 🔘 Disable	
	Save			

### Figure 8-22 Meeting Plans

- 2. Set Meeting Room Name, Meeting Theme, and Host.
- 3. Set Start Time and End Time of the meeting.
- 4. Add Participants.

## **i**Note

You can add by entering names or work numbers to inquire device workers.

5. Drag the block to set the advanced check-in time and the latest check-in time.

## **i**Note

- The advanced check-in time ranges from 1 min to 255 min.
- The latest check-in time ranges from 1 min to 255 min.
- 6. Select the check-in type.

## **Single Participant**

Only one of the participant attending the meeting checks in.

### **All Participants**

All of the participant attending the meeting check in.

### Disable

You can diable this function and participants attending the meeting don't have to check in. **7.** Click **Save**.

## 8.6.27 Set Notice Publication

You can set the screen saver and the sleep time for the device.

Click **Configuration** → **Notice Publication** .

Sleep after	60 s 📀		
heme Management	+ Add Program		
	1(6/8)	Ľ	Ô
	1(0/8)	Ľ	Ô
	- <del>1</del> -		
Play Schedule	<ul> <li>t</li> <li>Select a theme first and then set the playing time.</li> </ul>		
Play Schedule	Image: The set of the playing time.       X Delete		
Play Schedule			
Play Schedule	X Delete All		

Figure 8-23 Notice Page

## **Display Mode**

You can select from Simple, Normal, Advertisement Mode or Meeting Mode.

## Simple

After selecting this mode, the live view of the authentication page will be disabled, and in the meanwhile, the person's name, employee ID, face pictures will all be hidden.

### Normal

After selecting this mode, the device displays the video preview screen and performs authentication.

### Advertisement

After selecting this mode, the advertising area and identification authentication area of the device will be displayed on separate screens. Video and advertising information playback, welcome speech display are supported.

## **i**Note

Up to 8 images and 3 videos can be uploaded. And the images should be JPG format and the videos should be MP4 format.

### Meeting

After selecting this mode, the device supports editing and displaying meeting room name, displaying scheduled meeting information and the status of the meeting room, and signing in on the device.

### Sleep

Enable **Sleep** and the device will enter the sleep mode when no operation within the configured sleep time.

### Sleep after

Set the device sleeping waiting time (second).

## Theme Management

You can click + in the frame and upload the screen saver pictures from the local PC.

## **i**Note

By now, there is only one theme can be added.

## **Play Schedule**

After you have created a theme, you can select the theme and draw a schedule on the time line. Select the drawn schedule and you can edit the exact start and end time.

Select the drawn schedule and you can click **Delete** or **Delete All** to delete the schedule.

## **Slide Show Interval**

Drag the block or enter the number to set the slide show interval. The picture will be changed according to the interval.

# **Chapter 9 Client Software Configuration**

## 9.1 Configuration Flow of Client Software

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

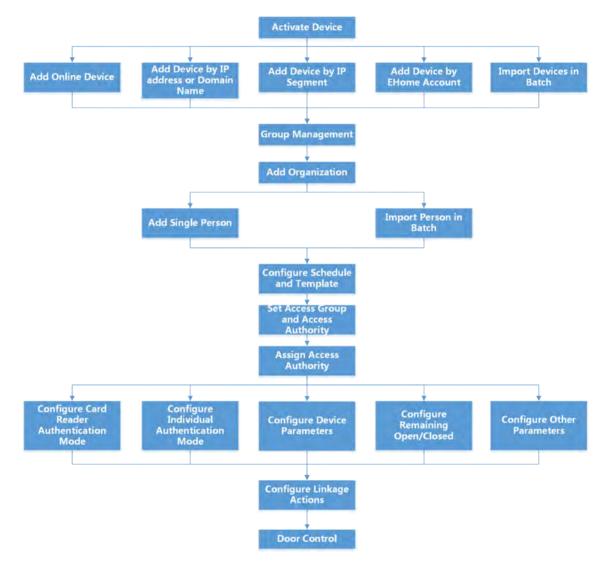


Figure 9-1 Flow Diagram of Configuration on Client Software

## 9.2 Device Management

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

## Example

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

## 9.2.1 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 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.

### Steps

- 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.

# A Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend

you change your password regularly, especially in the high security system, changing 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.

## **i**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.

## **Import Devices in a Batch**

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

## Steps

- **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.

## **i**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.

# A Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you change your password regularly, especially in the high security system, changing 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.

## 9.2.2 Reset Device Password

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

## Steps

- 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 🖉 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.

# **i**Note

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

# **A**Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you change your password regularly, especially in the high security system, changing 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.

## 9.2.3 Manage Added Devices

After adding devices to device list, you can manage the added devices including editing device parameters, remote configuration, viewing device status, etc.

Edit Device	Click device information including device name, address, user name, password, etc.
Delete Device	Check one or more devices, and click <b>Delete</b> to delete the selected devices.
Remote Configuration	Click log to set remote configuration of the corresponding device. For details, refer to the user manual of device.
View Device Status	Click I to view device status, including door No., door status, etc. Note For different devices, you will view different information about device status.
View Online User	Click 🛾 to view the details of online user who access the device, including user name, user type, IP address and login time.
Refresh Device Information	Click 🔁 to refresh and get the latest device information.

### **Table 9-1 Manage Added Devices**

## 9.3 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.

## 9.3.1 Add Group

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

### Steps

- 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.

## **i**Note

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

## 9.3.2 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 .

### Steps

- **1.** Enter the Device Management module.
- **2.** Click **Device Management**  $\rightarrow$  **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.

# **i**Note

You can click or for the selected resource display mode to thumbnail view or to list view. 6. Click Import to import the selected resources to the group.

# 9.4 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.

### 9.4.1 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.

#### Steps

4

- 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.

<b>i</b> Note		
Up to 10 levels of organizations can be added.		
1. Optional: Perform the following operation(s).		

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

### 9.4.2 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.

### **Import Person Information**

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

#### Steps

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

## **I**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/Excel file with person information from local PC.
- 8. Click Import to start importing.

# **i**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 2,000 persons.

### **Import Person Pictures**

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

#### **Before You Start**

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

#### Steps

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

# **i**Note

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

The importing progress and result will be displayed.

### **Export Person Information**

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

#### **Before You Start**

Make sure you have added persons to an organization.

#### Steps

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

# **I**Note

All persons' information will be exported if you do not select any organization.

- 3. Click Export to open the Export panel.
- 4. Check Person Information as the content to export.
- 5. Check desired items to export.
- 6. Click Export to save the exported file in CSV/Excel file on your PC.

### **Export Person Pictures**

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

#### **Before You Start**

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

#### Steps

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

# **I**Note

All persons' face pictures will be exported if you do not select any organization.

- 3. Click Export to open the Export panel and check Face as the content to export.
- 4. Click Export to start exporting.

# **i**Note

- The exported file is in ZIP format.
- The exported face picture is named as "Person ID\_Name\_0" ("0" is for a full-frontal face).

### 9.4.3 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.

#### Steps

### **I**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.

# **i**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.

# **i**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.

### 9.4.4 Issue Cards to Persons in Batch

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

#### Steps

1. Enter Person module.

#### 2. Click Batch Issue Cards.

All the added persons with no card issued will 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 *Issue a Card by Local Mode*.
- **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).

## 9.4.5 Report Card Loss

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

#### Steps

- 1. Enter Person module.
- 2. Select the person you want to report card loss for and click Edit to open the Edit Person window.
- 3. In the Credential → Card panel, click and 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.

## 9.4.6 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

# **i**Note

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

#### Card Type

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

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

#### Serial Port

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

Select the COM the card enrollment station connects to.

#### Buzzing

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

#### Card No. Type

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

#### M1 Card Encryption

This field is only available when the model is DS-K1F100-D8, DS-K1F100-D8E, or DS-K1F180-D8E. If the card is M1 card, and if you need to enable the M1 Card Encryption function, you should

enable this function and select the sector of the card to encrypt.

#### Remote Mode: Issue Card by Card Reader

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

# 9.5 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.

# **i**Note

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

# 9.5.1 Add Holiday

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

#### Steps

# **i**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.

# **i**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.

# **i**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 [7].
- 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 **m** in the Operation column to clear all the time duration(s) in the time bar.
- 6) **Optional:** Click in the Operation column to delete this added holiday period from the holiday list.
- 6. Click Save.

## 9.5.2 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.

#### Steps

### **i**Note

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

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

# **i**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.

# **I**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.

# **i**Note

Up to 4 holidays can be added to one template.

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

# **i**Note

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

- 4) **Optional:** Select a selected holiday in the right list and click it 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.

# 9.6 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.

#### Steps

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, face 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.

# **i**Note

You should configure the template before access group settings. Refer to <u>Configure Schedule</u> <u>and Template</u> 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.

Name	Template	Status	Operation	TheName	SerialNumber.	Organization
Access Group 2	All-Day Auth	To be Applia.		Jane		New Organization
Access Group 1	All-Day Auth	To be Appli		Mike		New Organization
Access Group 3	All-Day Auth	To be Appli		Total 2 Record(	et k	ī /lPage
				Access Point		
				Access Point		Group Name
				Door1_Access c	ontrol host	Access control host
				Door2_Access o	ontrol host	Access control host

Figure 9-2 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).

# **i**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 **a** to edit the access group if necessary.

# **i**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**.

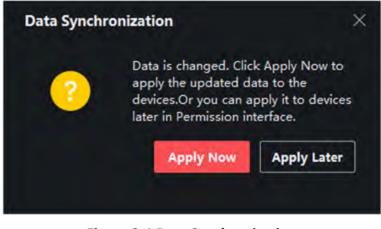


Figure 9-4 Data Synchronization

# 9.7 Configure Advanced Functions

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

# **i**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 at to customize the advanced function(s) to be displayed.

### 9.7.1 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.

#### **Before You Start**

Add access control device to the client.

#### Steps

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

#### **i** Note

If you can not find Device Parameter in the Advanced Function list, hover the cursor on the Advanced Function, and then Click in the 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.

# **i**Note

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

#### **RS-485 Comm. Redundancy**

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

#### **Display Detected Face**

Display face picture when authenticating.

#### **Display Card Number**

Display the card information when authenticating.

#### **Display Person Information**

Display the person information when authenticating.

#### **Overlay Person Info. on Picture**

Display the person information on the captured picture.

#### **Voice Prompt**

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

#### **Upload Pic. After Linked Capture**

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

#### Save Pic. After Linked Capture

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

#### Press Key to Enter Card Number

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

#### Wi-Fi Probe

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

#### 3G/4G

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

#### **NFC Anti-Cloning**

If you enable this function, you cannot use the cloned card for authentication and further enhance security.

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

### **Configure Parameters for Door/Elevator**

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

#### **Before You Start**

Add access control device to the client.

#### Steps

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

- 2. Select an access control device on the left panel, and then click is to show the doors or floors of the selected device.
- 3. Select a door or floor to show its parameters on the right page.
- **4.** Edit the door or floor parameters.



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

#### Name

Edit the card reader name as desired.

#### **Door Contact**

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

#### **Exit Button Type**

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

#### **Door Locked Time**

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

#### **Extended Open Duration**

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

#### Door Left Open Timeout Alarm

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

#### Lock Door when Door Closed

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

#### **Duress Code**

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

#### **Super Password**

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

#### **Dismiss Code**

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

# **i**Note

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

#### 5. Click OK.

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

## **i** Note

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

#### **Configure Parameters for Card Reader**

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

#### **Before You Start**

Add access control device to the client.

#### Steps

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

- 2. In the device list on the left, click **I** 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.

# **i** Note

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

#### Name

Edit the card reader name as desired.

#### OK LED Polarity/Error LED Polarity/Buzzer Polarity

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

#### **Minimum Card Swiping Interval**

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

#### Max. Interval When Entering PWD

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

#### Alarm of Max. Failed Attempts

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

#### Max. Times of Card Failure

Set the max. failure attempts of reading card.

#### **Tampering Detection**

Enable the anti-tamper detection for the card reader.

#### **Communicate with Controller Every**

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

#### **Buzzing Time**

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

#### Card Reader Type/Card Reader Description

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

#### Fingerprint Recognition Level

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

#### **Default Card Reader Authentication Mode**

View the default card reader authentication mode.

#### **Fingerprint Capacity**

View the maximum number of available fingerprints.

#### **Existing Fingerprint Number**

View the number of existed fingerprints in the device.

#### Score

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

#### Face Recognition Timeout Value

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

#### Face Recognition Interval

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

#### Face 1:1 Matching Threshold

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

#### 1:N Security Level

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

#### Live Face Detection

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

#### Live Face Detection Security Level

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

#### Max. Failed Attempts for Face Auth.

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

#### Lock Authentication Failed Face

After enabling the Live Face Detection function, the system will lock the user's face for 5 minutes if the live face detection is failed for more than the configured attempts. The same

user cannot authenticate via the fake face within 5 minutes. Within the 5 minutes, the user can authenticate via the real face twice continuously to unlock.

#### **Application Mode**

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

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

### **Configure Parameters for Alarm Output**

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

#### **Before You Start**

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

#### Steps

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

#### Name

Edit the card reader name as desired.

#### **Alarm Output Active Time**

How long the alarm output will last after triggered.

4. Click OK.

5. Optional: Set the switch on the upper right corner to ON to trigger the alarm output.

#### **Configure Parameters for Lane Controller**

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

#### **Before You Start**

Add access control device to the client.

#### Steps

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

#### Passing Mode

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

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

#### **Free Passing Authentication**

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

#### **Opening/Closing Barrier Speed**

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

# **i**Note

The recommended value is 6.

#### **Audible Prompt Duration**

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

# **I**Note

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

#### **Temperature Unit**

Select the temperature unit that displayed in the device status.

#### 4. Click OK.

### 9.7.2 Configure Device Parameters

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

### Set Parameters for Face Recognition Terminal

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

#### Steps

#### **i**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 Face Recognition Terminal.
- 4. Set the parameters.

# **i**Note

These parameters displayed vary according to different device models.

#### сом

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

#### Face Picture Database

select Deep Learning as the face picture database.

#### Authenticate by QR Code

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

#### **Blocklist Authentication**

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

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

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

#### Save Authenticating Face Picture

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

#### **MCU** Version

View the device MCU version.

#### 5. Click Save.

### Set RS-485 Parameters

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

#### **Before You Start**

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

#### Steps

- 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 **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.

# **I**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.

#### **Before You Start**

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

#### Steps

- 1. Enter the Access Control module.
- **2.** On the navigation bar on the left, enter **Advanced Function**  $\rightarrow$  **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.

# INote

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

#### 6. Click Save.

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

#### Enable M1 Card Encryption

M1 card encryption can improve the security level of authentication.

#### Steps

### **i** 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.

The sector ID ranges from 1 to 100.

6. Click Save to save the settings.

# 9.8 Door/Elevator Control

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

# **i** Note

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

## 9.8.1 Control Door Status

You can control the status for the door(s), including unlock door, locking door, remaining the door unlock, remaining the door locked, remain all unlocked, etc.

#### **Before You Start**

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

#### Steps

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

## **i**Note

For managing the access point group, refer to Group Management.

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.

# **i**Note

#### For Remain All Unlocked and Remain All Locked, ignore this step.

**4.** Click the following buttons to control the door.

#### Unlock

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.

#### Lock

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 Unlocked**

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

#### Remain Locked

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.

#### **Remain All Unlocked**

All doors in the group will be unlocked (no matter closed or open). All the persons can access the doors with no credentials required.

#### **Remain All Locked**

All doors in the group will be closed and locked. No person can access the doors even if he/she has the authorized credentials, except the super users.

#### Capture

Capture a picture manually.

# **I**Note

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

#### Result

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

## 9.8.2 Check Real-Time Access Records

The real-time access records can be displayed in the client, including card swiping records, face recognition records, skin-surface temperature information, etc. Also, you can view the person information and view the picture captured during access.

#### Before You Start

You have added person(s) and access control device(s) to the client. For details, refer to <u>Person</u> <u>Management</u> and <u>Add Device</u>.

#### Steps

1. Click Monitoring to enter monitoring module.

Real-time access records are displayed on the bottom of the page. You can view record details, including card No., person name, event time, door location, temperature, authentication type etc.



Figure 9-5 Real-time Access Records

# **I**Note

You can right click the column name of access event table to show or hide the column according to actual needs.

- **2. Optional:** Select an access point group from the drop-down list in the upper-right corner to show the real time access records of the selected group.
- **3. Optional:** Check the event type and event status.

The detected events of checked type and status will be displayed in the list below.

4. Optional: Check Show Latest Event to view the latest access record.

The record list will be listed reverse chronologically.

**5. Optional:** Check **Enable Abnormal Temperature Prompt** to enable abnormal skin-surface temperature prompt.

# **I**Note

When enabled, if there is abnormal temperature information, an Abnormal Temperature window pops up when you enter Monitoring module, displaying person's picture, skin-surface temperature, card No., person name, etc.

6. Optional: Click an event to view person pictures (including captured picture and profile).

# **i**Note

In **Linked Capture Picture** field, you can double click the captured picture to view an enlarged picture.

**7. Optional:** Click 🖬 to view details (including person's detailed information and the captured picture).

**i**Note

In the pop-up window, you can click 🔲 to view details in full screen.

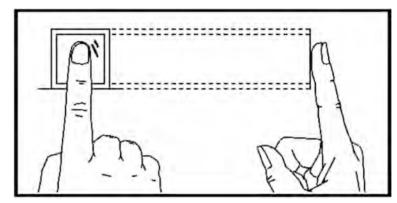
# **Appendix A. Tips for Scanning Fingerprint**

### **Recommended Finger**

Forefinger, middle finger or the third finger.

### **Correct Scanning**

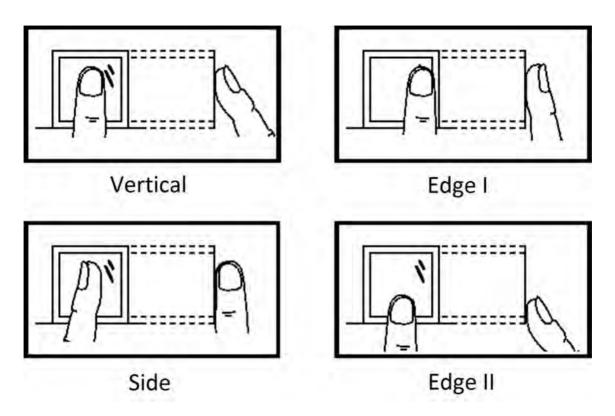
The figure displayed below is the correct way to scan your finger:



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

#### **Incorrect Scanning**

The figures of scanning fingerprint displayed below are incorrect:



### Environment

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

### Others

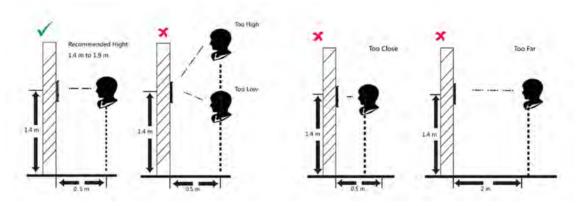
If your fingerprint is shallow, or it is hard to scan your fingerprint, we recommend you to use other authentication methods.

If you have injuries on the scanned finger, the scanner may not recognize. You can change another finger and try again.

# Appendix B. Tips When Collecting/Comparing Face Picture

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

### Positions (Recommended Distance: 0.5 m)



### Expression

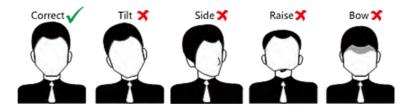
• Keep your expression naturally when collecting or comparing face pictures, just like the expression in the picture below.



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

### Posture

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



### Size

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



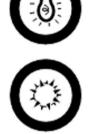
# **Appendix C. Tips for Installation Environment**

1. Light Source Illumination Reference Value



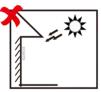
Candle: 10Lux

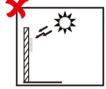
Bulb: 100~850Lux



Sunlight: More than 1200Lux

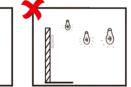
2. Avoid backlight, direct and indirect sunlight











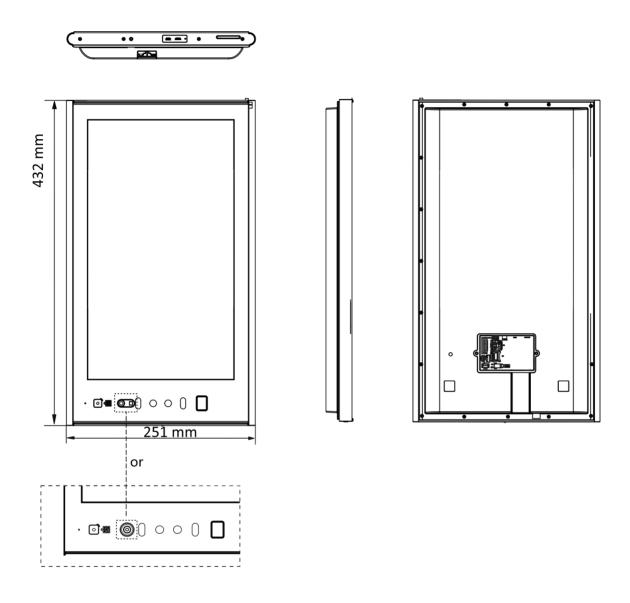
Backlight

Direct Sunlight Direct Sur

Direct Sunlight through Windo

		<u>k</u>
nlight	Indirect Light	Close to Light
Window	through Window	W

**Appendix D. Dimension** 



# Appendix E. Communication Matrix and Device Command

### **Communication Matrix**

Scan the following QR code to get the device communication matrix. Note that the matrix contains all communication ports of Hikvision access control and video intercom devices.



Figure E-1 QR Code of Communication Matrix

#### **Device Command**

Scan the following QR code to get the device common serial port commands. Note that the command list contains all commonly used serial ports commands for all Hikvision access control and video intercom devices.



Figure E-2 Device Command

