

# **Face Recognition Terminal**

**User Manual** 

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

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

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

- Reorient or relocate the receiving antenna.
- —Increase the separation between the equipment and receiver.
- —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- —Consult the dealer or an experienced radio/TV technician for help

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

**FCC Conditions** 

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

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

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

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

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- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

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- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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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>Cautions:</b> Follow these precautions to prevent potential injury or material damage.

#### ♠ Danger:

- All the electronic operation should be strictly compliance with the electrical safety regulations, fire prevention regulations and other related regulations in your local region.
- Please use the power adapter, which is provided by normal company. This equipment is intended to be supplied from the Class 2 surge protected power source rated 12 VDC, 2 A.
- 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 completely applicable to anti-spoofing environments. If you require a higher security level, use multiple authentication modes.
- Working temperature: 0 °C to 50 °C; Working humidity: 10% to 90% (no condensing)
- Indoor use. The device should be at least 2 meters away from the light, and at least 3 meters away from the window.
- Version: 1.0, Issue Date: 20200519
- Outdoor use or use in environment exceeding the device temperature measurement will affect the temperature measurement accuracy.

## **Available Models**

Product Name	Model
Face Recognition Terminal	DS-K5671-3XF/ZU

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

The face recognition terminal is a kind of access control device integrated with temperature screening function. It can fast taking skin-surface temperature and upload abnormal temperature event to the center, which can be widely applied in multiple scenarios, such as enterprises, stations, dwellings, factories, schools, campus and so on.

#### 1.2 Features

- · Compatible with Hikvision turnstile
- Communicates with the third-party turnstile via IO output or Wiegand
- Supports Vanadium Oxide uncooled sensor to measure target's temperature
- Temperature measuring range: 30 °C to 45 °C (86 °F to 113 °F), accuracy: 0.1 °C, deviation:  $\pm$  0.5 °C without black body calibration
- Recognition distance: 0.3 to 2 m
- Fast temperature measurement mode: Detects face and takes skin-surface temperature without identity authentication.
- Multiple authentication modes with temperature measure are available
- Face mask wearing alert
   If the recognizing face does not wear a mask, the device will prompt a voice reminder. At the same time, the authentication or attendance is valid.
- Forced mask wearing alert
   If the recognizing face does not wear a mask, the device will prompt a voice reminder. At the same time, the authentication or attendance will be failed.
- Displays temperature measurement results on the authentication page
- Triggers voice prompt when detecting abnormal temperature
- Configurable door status (open/close) when detecting abnormal temperature
- Transmits online and offline temperature information to the client software via TCP/IP communication and saves the data on the client software
- Adjustable supplement light brightness
- · High performance processor with deep learning algorithm
- 50,000 face capacity and 100,000 event capacity
- Face recognition duration ≤ 0.2 s/User; face recognition accuracy rate ≥ 99%
- Transmits and saves the comparison results and the captured pictures to the client software or others
- NTP, manually time synchronization, and auto synchronization
- Watchdog design for protecting the device and ensuring device running properly

Supports 6 attendance status, including check in, check out, break in, break out, overtime in, overtime out Audio prompt for authentication result

## **Chapter 2 Appearance**

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

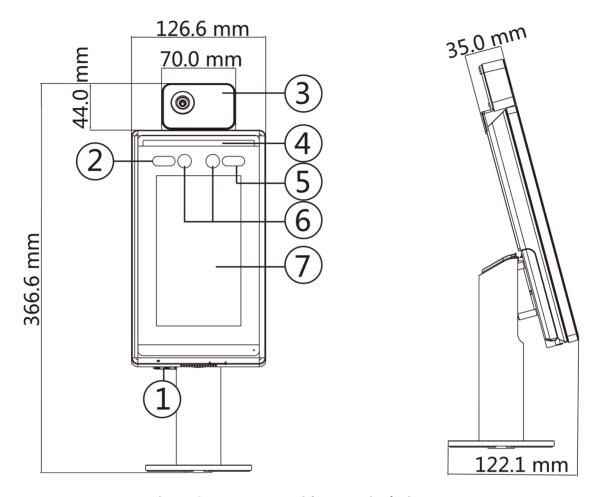


Figure 2-1 Face Recognition Terminal Diagram

**Table 2-1 Description of Face Recognition Terminal** 

No.	Name
1	USB Interface
2	IR Light
3	Thermographic Module
4	White Light
5	IR Light

No.	Name
6	Camera
7	Touch Screen

### **Chapter 3 Installation**

#### 3.1 Installation Environment

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

#### 3.2 Mount With Bracket

#### 3.2.1 Preparation before Mounting with Bracket

Make sure you have drilled holes on the turnstile. If not, follow the steps below to drill holes.

#### Steps

**1.** Use 4 screws (M3 or M4), secured by flange nuts, to install the reinforcing board on the inner surface of the turnstile.



The distance between the turnstile and the edge should be no longer than 10 mm.

2. Drill holes on the turnstile's inner surface according to the figure displayed below. And install water-proof nut.

### **i** Note

Solder after pressing rivets to avoid water from entering.

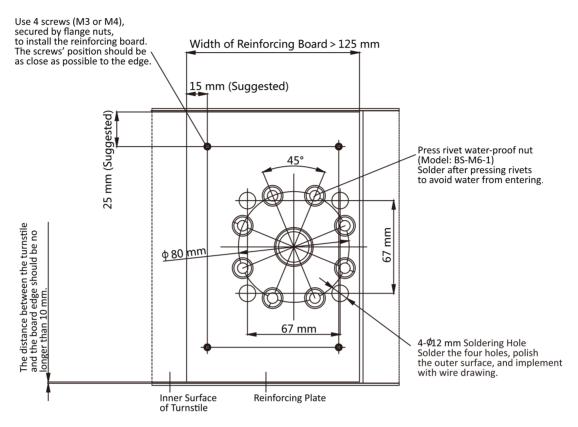
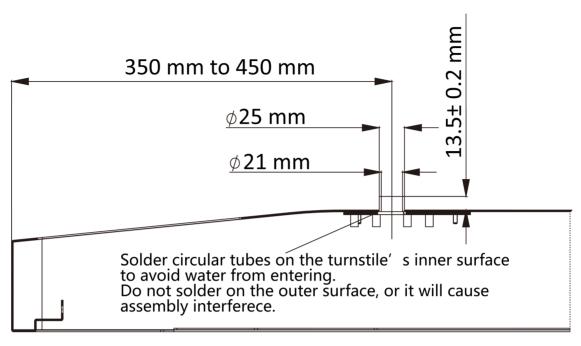


Figure 3-1 Drill Holes on Turnstile

- 3. Solder the other four holes, polish the surface, and implement wire drawing.
- 4. Solder circular tubes on the turnstile's inner surface to avoid water from entering.



**Figure 3-2 Solder Tubes** 

#### 3.2.2 Mount with Bracket

#### **Steps**

- 1. Rotate to open the lower cover.
- 2. Route the cables through the cable hole on the turnstile.
- **3.** Align the holes on the base with those on the turnstile and place the device with bracket on the turnstile.
- 4. Use 4 screws to secure the bracket and the turnstile.

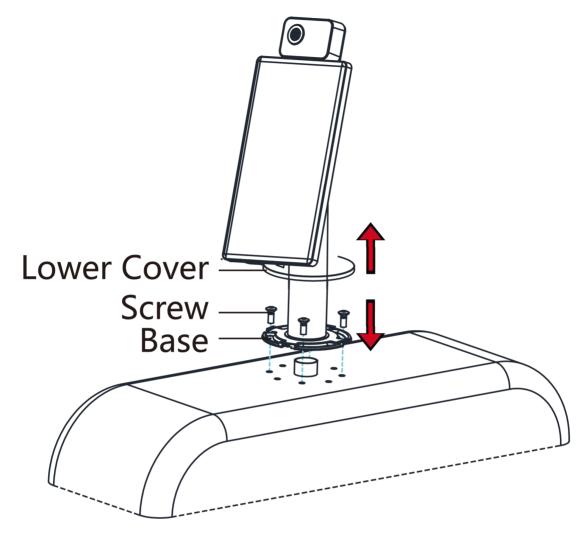
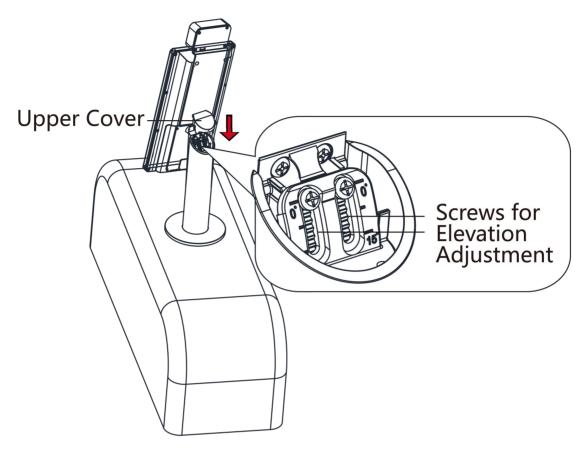


Figure 3-3 Secure Bracket and Turnstile

- 5. Install the lower cover back on the base and rotate to secure.
- 6. Adjust the device elevation.
  - 1) Loosen the screws inside.
  - 2) Adjust the device elevation.
  - 3) After adjustment, secure the screws and install the upper cover.



The default elevation angle is 15°. The adjustable elevation angle is from 0° to 15°.



**Figure 3-5 Adjust Elevation** 

**7.** 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**

You can connect the RS-485 terminal with the RS-485 card reader, connect the NC and COM terminal with the door lock, connect the SENSOR terminal with the door contact, the BTN/GND terminal with the exit button, connect the alarm output and input terminal with the alarm output/input devices, and connect the Wiegand terminal with the Wiegand card reader or the access controller.

If connect the WIEGAND terminal 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.



- If cable size is 18 AWG, you should use a 12 V 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 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 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:

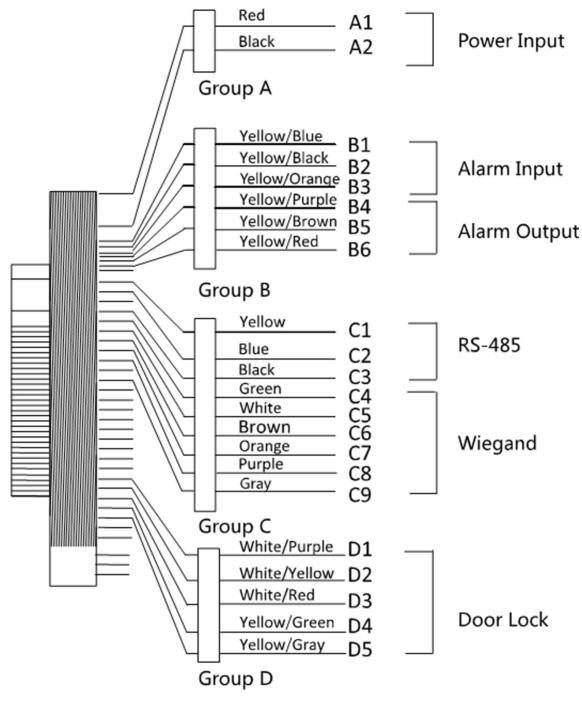


Figure 4-1 Terminal Diagram

The descriptions of the terminals are as follows:

**Table 4-1 Terminal Descriptions** 

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		Yellow/Black	GND	Ground
	В3		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	GND	Ground
	C4	Wiegand	Green	W0	Wiegand Wiring 0
	C5		White	W1	Wiegand Wiring 1
	C6		Brown	WG_OK	Wiegand Authenticated
	С7		Orange	WG_ERR	Wiegand Authentication Failed
	C8		Purple	BUZZER	Buzzer Wiring
	C9		Gray	TAMPER	Tampering Alarm Wiring
Group D	D1	Door Lock	White/Purple	NC	Lock Wiring (NC)
	D2		White/Yellow	СОМ	Common
	D3		White/Red	NO	Lock Wiring (NO)

Group	No.	Function	Color	Name	Description
	D4		Yellow/Green	SENSOR	Door Contact
	D5		Yellow/Gray	BTN	Exit Door Wiring

#### 4.2 Wire Normal Device

You can connect the terminal with normal peripherals.

The wiring diagram without secure door control unit is as follows.

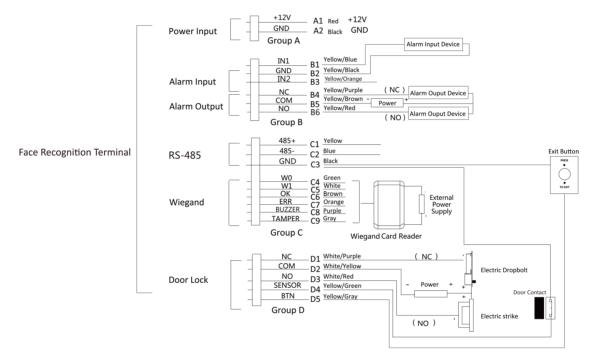


Figure 4-2 Device Wiring



- You should set the face recognition terminal's Wiegand direction to "Input" to connect to a
  Wiegand card reader. If connects to an access controller, you should set the Wiegand direction to
  "Output" to transmit authentication information to the access controller.
- For details about Wiegand direction settings, see *Setting Wiegand Parameters* in *Communication Settings*.
- The power supply for the device should be 12 VDC/2 A. The suggested external power supply for door lock is 12 V, 1 A. The suggested external power supply for the Wiegand card reader is 12 V, 1A.

- The suggested power cable's diameter: 22 AWG. The suggested other cable's diameter: 26 AWG.
- Do not wire the device to the electric supply directly.



The face recognition terminal shall adapt an external listed Class 2 power supply with surge protected function.

#### 4.3 Wire Secure Door Control Unit

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

The wiring diagram is as follows.

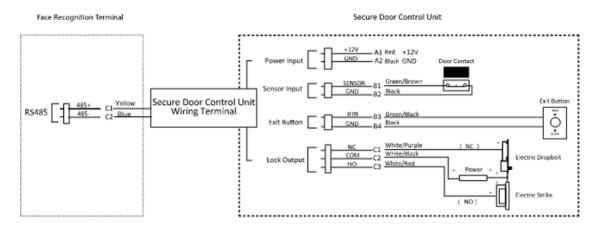


Figure 4-3 Secure Door Control Unit Wiring



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

### **Chapter 5 Activation**

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

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

The default values of the device are as follows:

• The default IP address: 192.0.0.64

The default port No.: 8000The 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.

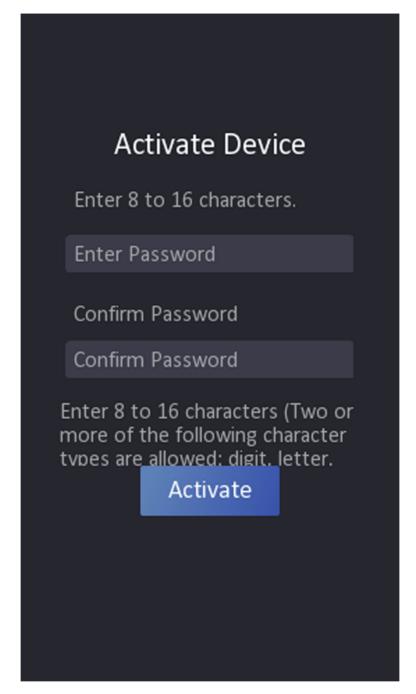


Figure 5-1 Activation Page



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.



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

- 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 add the device to the client software or other platforms, you should edit the device IP address. For details, see **Set Network Parameters** .
- After activation, if you need to operate the device remotely via APP, you should scan the QR code to link to the APP. For details, see .
- 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 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 <a href="http://www.hikvision.com/en/">http://www.hikvision.com/en/</a>, 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.

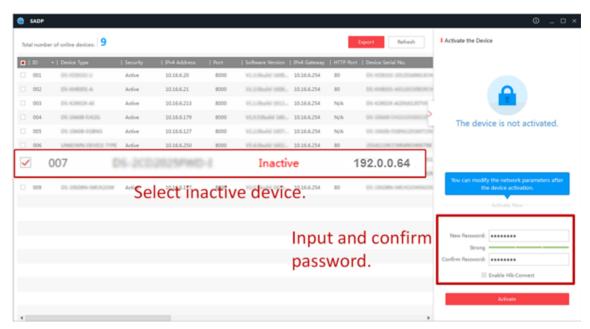


STRONG PASSWORD RECOMMENDED-We highly recommend you create a strong password of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password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



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

4. Click Activate to start activation.



Status of the device becomes Active after successful activation.

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

#### 5.3 Activate Device via Client Software

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

#### **Steps**



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.



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.

 $\bigcap$ i Note

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

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

#### 5.4 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**.



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

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



STRONG PASSWORD RECOMMENDED-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.



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

- 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.

## **Chapter 6 Quick Operation**

### **6.1 Select Language**

You can select a language for the device system.

After the device activation, you can select a language for the device system.

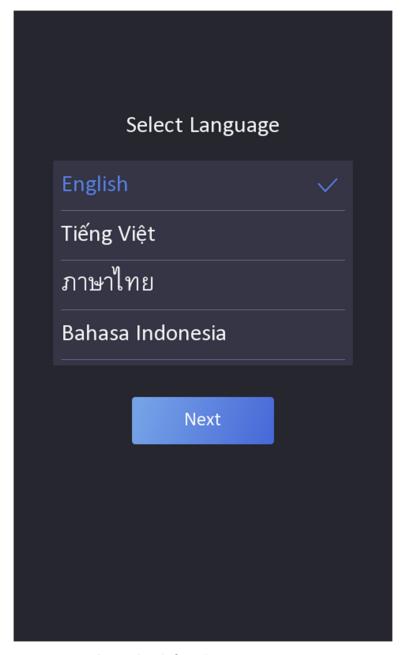


Figure 6-1 Select System Language

By default, the system language is English.

### **6.2 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.

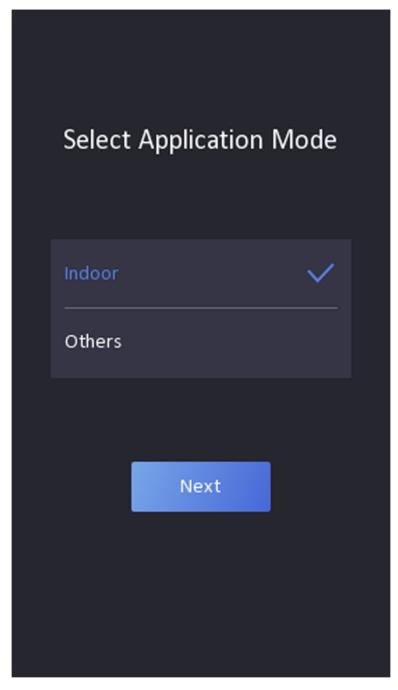


Figure 6-2 Welcome Page

2. Tap OK to save.

## Face Recognition Terminal User Manual

# **i**Note

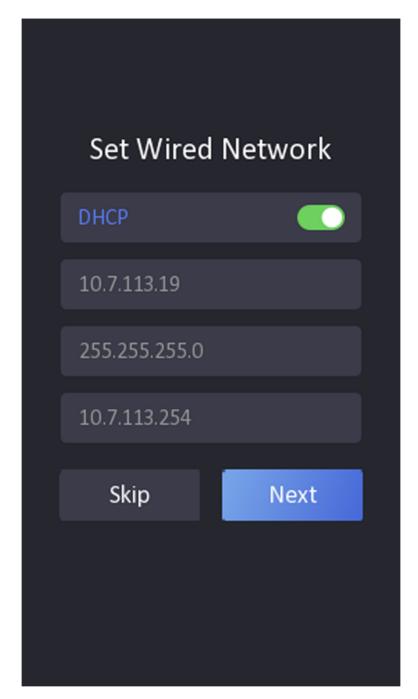
- You can also change the settings in System Settings.
- If you install the device indoors near the window or the face recognition function is not working well, select **Others**.
- If you do not configure the application mode and tap Next, the system will select Indoor by default.
- If you activate the device via other tools remotely, the system will select **Indoor** as the application mode by default.

## **6.3 Set Network Parameters**

After activation and select application mode, you can set the network for the device

## **Steps**

1. When you enter the Select Network page, tap Wired Network or Wi-Fi for your actual needs.



**Figure 6-3 Select Network** 

**i**Note

Disconnect the wired network before connecting a Wi-Fi.

2. Tap Next.

**Wired Network** 

## Face Recognition Terminal User Manual

Note

Make sure the device has connected to a network.

If enable **DHCP**, the system will assign the IP address and other parameters automatically. If disable **DHCP**, you should set the IP address, the subnet mask, and the gateway.

#### Wi-Fi

Select a Wi-Fi and enter the Wi-Fi's password to get connected.

Or tap Add Wi-Fi and enter the Wi-Fi's name and the password to get connected.

3. Optional: Tap Skip to skip network settings.

## 6.4 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.

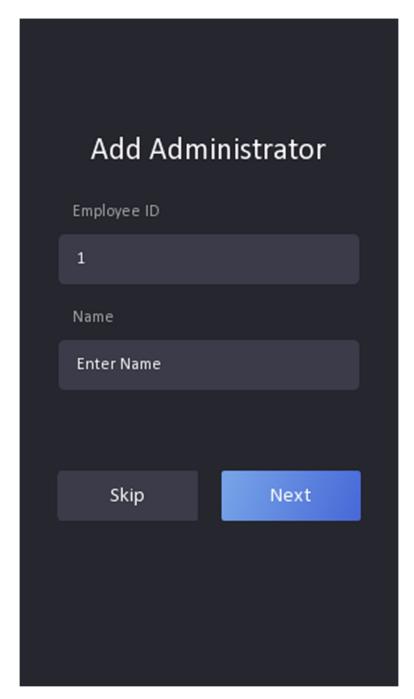


Figure 6-4 Add Administrator Page

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.
- Enter the card No. or present card on the card presenting area. Click **OK**.

#### 4. Click OK.

You will enter the authentication page.

## **Status Icon Description**



Device is armed/not armed.



Hik-Connect is enabled/disabled.

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

ନ୍/ର୍/ନ୍ଧ

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

## **Shortcut Keys Description**

**i** Note

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



- Enter the device room No. and tap OK to call.

**i** Note

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

Ė

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 or card to enter the home page.

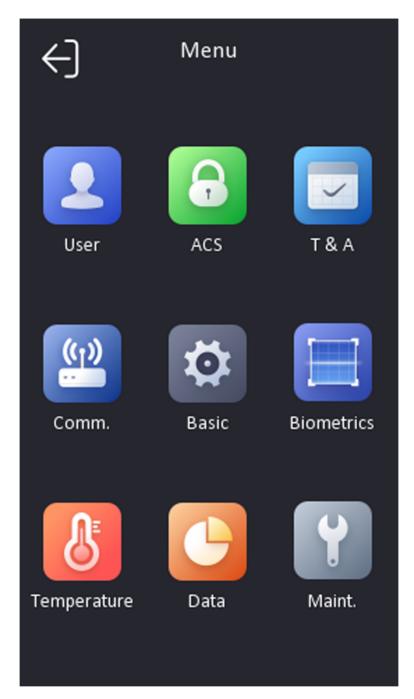


Figure 7-2 Home Page

**i** Note

The device will be locked for 30 minutes after 5 failed 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.** Tap the Password field and enter the device activation password.
- 3. Tap OK to enter the home page.

$\widetilde{f i}$	Note
$\sim$	14016

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

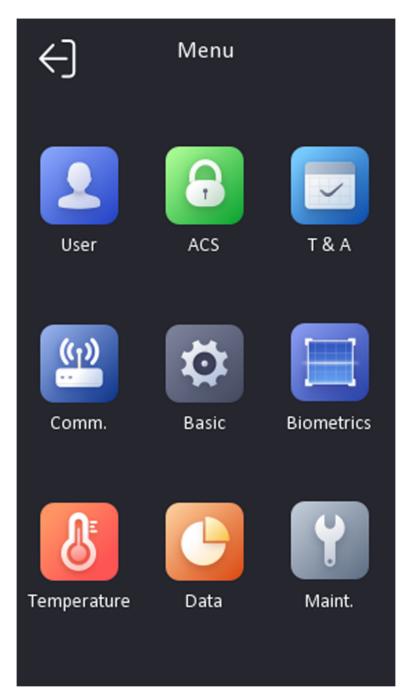


Figure 7-3 Home Page

# **7.2 Communication Settings**

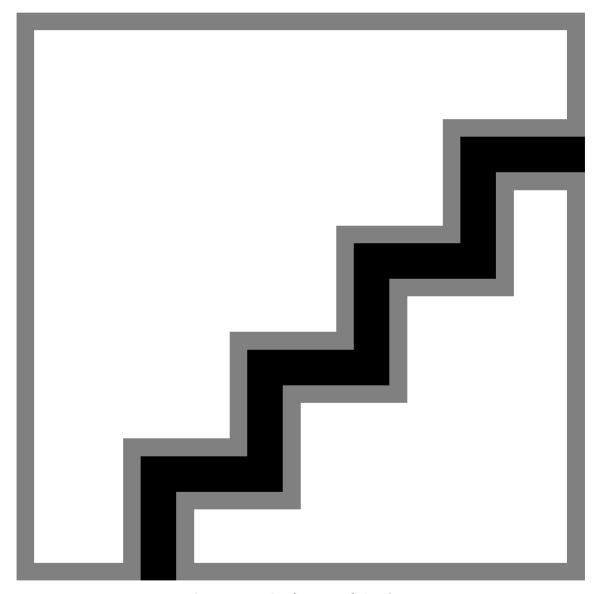
You can set the network parameters, the Wi-Fi parameter, the RS-485 parameters, and the Wiegand parameters on the communication settings page.

## 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.

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<ul> <li>Disable DHCP, and you should set the IP address, subnet mask, and gateway manually.</li> </ul>			
iNote			
The device's IP address and the computer IP address should be in the same IP segment.			
<b>4.</b> Set the DNS parameters. You can enable <b>Auto Obtain DNS</b> , 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			
Note			
The function should be supported by the device.			
<ol> <li>Tap Comm. (Communication Settings) on the Home page to enter the Communication Settings page.</li> <li>On the Communication Settings page, tap.</li> </ol>			
2. On the Communication Settings page, tap.			

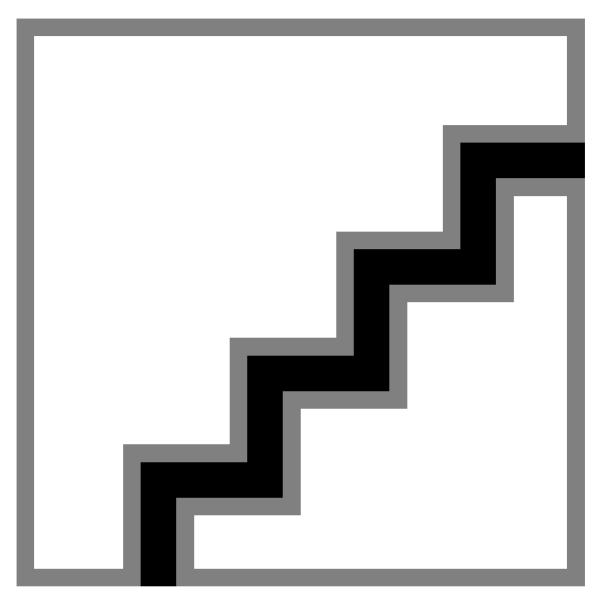


Figure 7-5 Wi-Fi Settings

- 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 volume 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 or card reader 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.

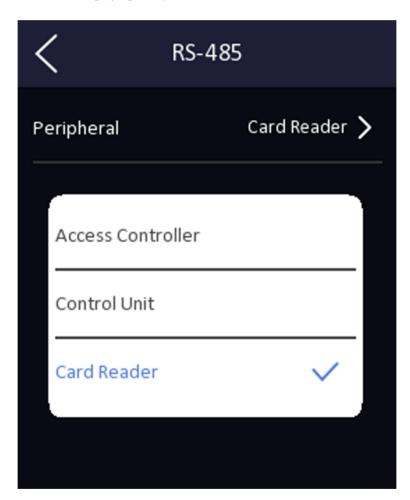


Figure 7-6 Set RS-485 Parameters

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

 $\begin{bmatrix} \mathbf{i} \end{bmatrix}_{\mathsf{Note}}$ 

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.

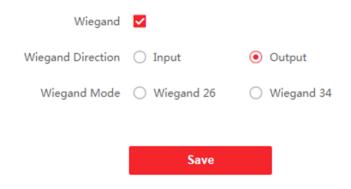
**4.** Tap the back icon at the upper left corner and you should reboot the device if you change the parameters.

## 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  $\checkmark$  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.

## 7.3 User Management

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

## 7.3.1 Add Administrator

The administrator can login the device backend and configure the device parameters.

### **Steps**

- 1. Long tap on the initial page and log in the backend.
- 2. Tap User → + to enter the Add User page.
- 3. Edit the employee ID.



- 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, or cards for the administrator.



- For details about adding a face picture, see Add Face Picture .
- · For details about adding a card, see Add Card.
- **6. Optional:** Set the administrator's authentication type.



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

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

- **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 → + to enter the Add User page.
- 3. Edit the employee ID.



- The employee ID should be less than 32 characters. And it can be a combination of lower letters, upper letters, and numbers.
- The employee ID should not be duplicated.
- **4.** Tap the Name field and input the user name on the soft keyboard.

Note

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

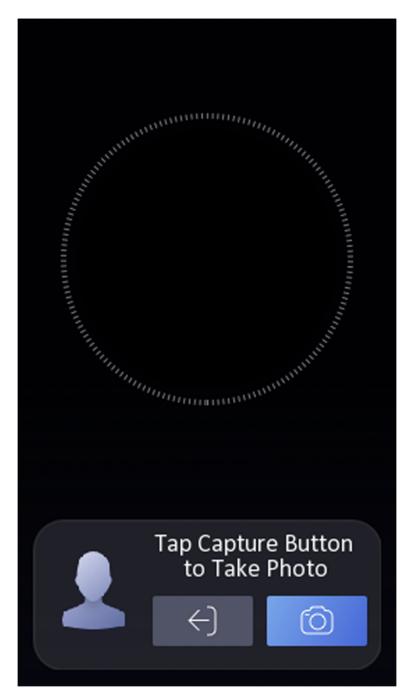


Figure 7-8 Add Face Picture

6. Look at the camera.

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Note

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

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 volume to save the settings.

### 7.3.3 Add Card

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

#### **Steps**

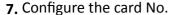
- **1.** Long tap on the initial page for 3 s and slide to the left/right by following the gesture and log in the backend.
- 2. Tap User → + to enter the Add User page.
- 3. Connect an external card reader according to the wiring diagram.
- 4. Tap the Employee ID. field and edit the employee ID.

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.

 $\mathbf{1}_{\mathsf{Note}}$ 

- 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 +.



- Enter the card No. manually.
- Present the card over the card presenting area to get the card No.

# $\bigcap$ 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 volume to save the settings.

## 7.3.4 View Password

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

#### **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 → + to enter the Add User page.
- 3. Tap the Employee ID. field and edit the employee ID.



- 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 Password to view the password.



The password 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 v to save the settings.

## 7.3.5 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  $\checkmark$  to save the settings.

#### 7.3.6 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 (a) to search.

## **Edit User**

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

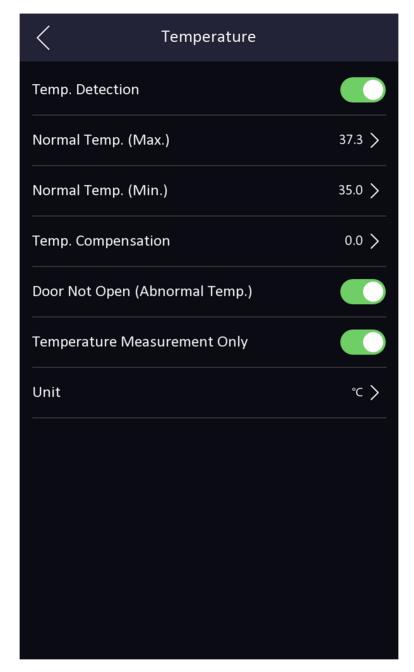
**i** Note

The employee ID cannot be edited.

## 7.4 Temperature Measurement Settings

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

On the Home page, tap **Temperature** to enter the Temperature page. Edit the temperature measurement parameters on this page and tap  $\bigvee$  to save the settings.



**Figure 7-9 Temperature Measurement Parameters** 

The available parameters descriptions are as follows:

**Table 7-1 Temperature Measurement Parameters Descriptions** 

Parameter	Description
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.
Norm Temp. (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°.
Temp. 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 (Abnormal Temp.)	When enabling the function, the door will not open when the detected temperature is higher or lower than the configured temperature threshold. By default, the function is enabled.
Temperature Measurement Only	When enabling the function, the device will not authenticate the permissions, but only take the temperature. When disabling the function, the device will authenticate the permissions and at the same time take the temperature.
Unit	Select a temperature unit according to your preference.
Measurement Area Calibration	Configure the temperature measurement area.

# 7.5 Data Management

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

## 7.5.1 Delete Data

Delete user data.

On the Home page, tap Data  $\Rightarrow$  Delete Data  $\Rightarrow$  User Data . All user data added in the device will be deleted.

## 7.5.2 Import Data

## **Steps**

1. Plug a USB flash drive in the device.

- 2. On the Home page, tap Data -> 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.

# 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  $640 \times 480$  pixel or more than of  $640 \times 480$  pixel. The picture size should be between 60 KB and 200 KB.

## 7.5.3 Export Data

#### Steps

- 1. Plug a USB flash drive in the device.
- 2. On the Home page, tap Data → 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.

# **i**Note

- 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.

## 7.6 Identity Authentication

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

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

## 1:N Matching

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

## 1: 1 Matching

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

## 7.6.1 Authenticate via Single Credential

Set the user authentication type before authentication. For details, see  $\underline{\textit{Set Authentication Mode}}$ . Authenticate face, card or QR code.

#### Face

Face forward at the camera and start authentication via face.

#### Card

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

Note

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

### **QR Code**

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

 $\bigcap_{\mathbf{i}}_{\mathsf{Note}}$ 

- Authentication via QR code should be supported by the device.
- The dimension of the recognized QR code picture should be larger than 6 cm × 6 cm.

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

## 7.6.2 Authenticate via Multiple Credential

#### **Before You Start**

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

#### **Steps**

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

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- 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. The dimension of the recognized QR code picture should be larger than 6 cm × 6 cm.
- 2. After the previous credential is authenticated, continue authenticate other credentials.

 $\bigcap_{\mathbf{i}}_{\mathsf{Note}}$ 

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

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

## 7.7 Basic Settings

You can set the shortcut key, voice, time, language, supplement light, community No., building No., Unit No., beauty, and advertisement.

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**.

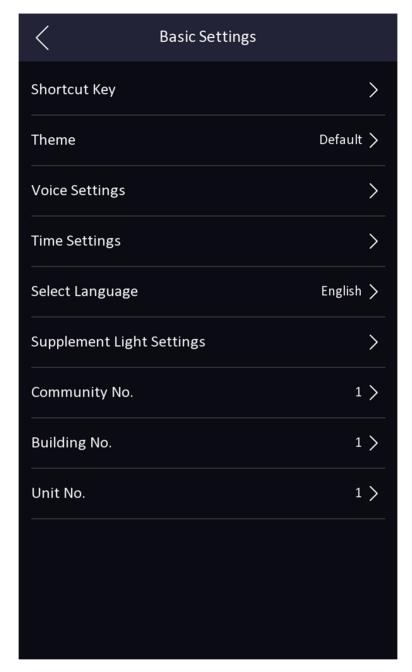


Figure 7-10 Basic Settings Page

shortcut key, voice, time, language, supplement light, community No., building No., and Unit No.

## **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.

# Note

- If the combination authentication of face and QR code is supported, and the QR code shortcut key is disabled (there is no QR code shortcut key icon in the authentication page), you can scan the QR code in the middle of the authentication page to authenticate.
- You can select call type from Call Room, Call Center, and Call Specified Room No.

#### **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.

#### **Theme**

You can set the theme of the prompt window on the authentication page. You can select **Theme** as **Default/Simple**. If select **Simple**, 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.

### **Voice Settings**

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



You can set the voice volume between 0 and 10.

#### **Time Settings**

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

### **Select Language**

Select the language according to actual needs.

## **Supplement Light Settings**

Tap **White Light** and you can set the supplement light mode. You can select to enable or disable the supplement light, or customize the supplement light's brightness, start time, and end time.

#### Community No.

Set the device installed community No.

#### **Building No.**

Set the device installed building No.

#### Unit No.

Set the device installed unit No.

## 7.8 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, and face with mask detection.

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

**Table 7-2 Face Picture Parameters** 

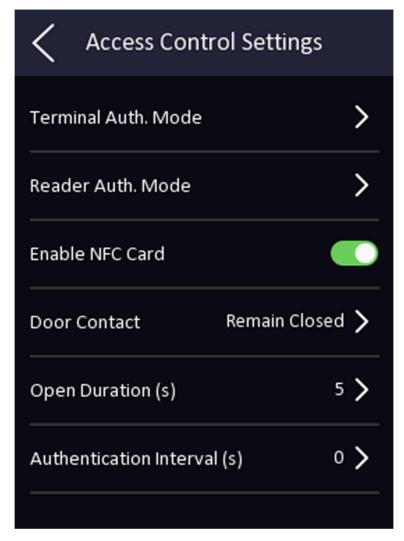
Parameter	Description
Application Mode	Select either others or indoor according to actual environment.
Face Liveness Level	After enabling face anti-spoofing function, you can set the matching security level when performing live face authentication.
Face Recognition Distance	Set the valid distance between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

Parameter	Description
	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 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
	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.

## 7.9 Set Access Control Parameters

You can set the access control permissions, including the functions of authentication mode, enable NFC card, door contact, and door open time.

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



**Figure 7-12 Access Control Parameters** 

The available parameters descriptions are as follows:

**Table 7-3 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>Biometric recognition products are not completely 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.
Door Contact	You can select "Open (Remain Open)" or "Close (Remian Closed)" according to your actual needs. By default, it is Close (Remian 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 Time and Attendance Status Settings

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

**i**Note

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

## 7.10.1 Disable Attendance Mode via Device

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

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

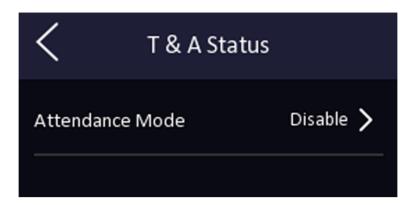


Figure 7-13 Disable Attendance Mode

## Set the Attendance Mode as Disable.

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.

## 7.10.2 Set Manual Attendance via Device

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

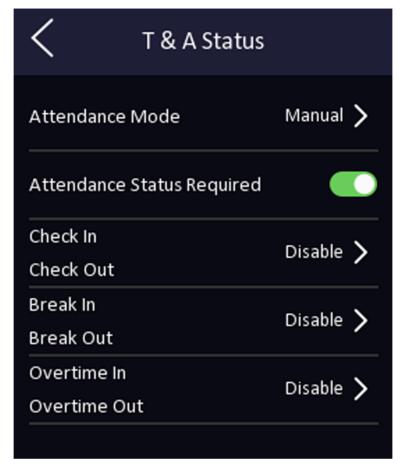


Figure 7-14 Manual Attendance Mode

- 3. Enable the Attendance Status Required.
- 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.

The name will be displayed on the T & A Status page and the authentication result page.

#### Result

You should select an attendance status manually after authentication.



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

## 7.10.3 Set Auto Attendance via Device

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

#### **Before You Start**

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

## **Steps**

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

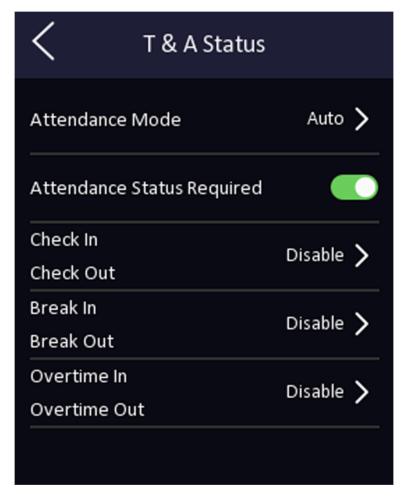


Figure 7-15 Auto Attendance Mode

- 3. Enable the Attendance Status function.
- 4. Enable a group of attendance status.

Note

The Attendance Property will not be changed.

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

The name will be displayed on the T & A Status page and the authentication result page.

- 6. Set the status' schedule.
  - 1) Tap Attendance Schedule.
  - 2) Select Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, or Sunday.
  - 3) Set the selected attendance status's start time of the day.
  - 4) Tap Confirm.
  - 5) Repeat step 1 to 4 according to your actual needs.



The attendance status will be valid within the configured schedule.

#### Result

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

#### **Example**

If set the **Break Out** 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.

#### 7.10.4 Set Manual and Auto Attendance via Device

Set the attendance mode as **Manual and Auto**, and the system will automatically change the attendance status according to the configured 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. Tap T&A Status to enter the T&A Status page.
- 2. Set the Attendance Mode as Manual and Auto.

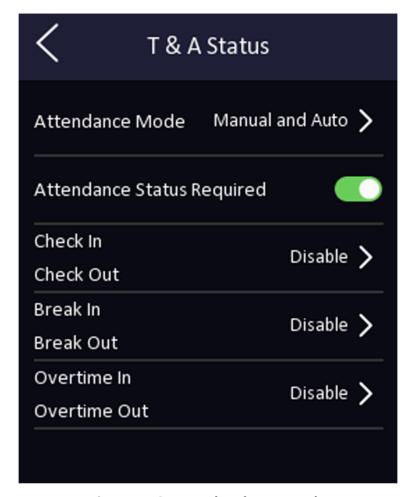


Figure 7-16 Manual and Auto Mode

- 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.

The name will be displayed on the T & A Status page and the authentication result page.

- 6. Set the status' schedule.
  - 1) Tap Attendance Schedule.
  - 2) Select Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, or Sunday.
  - 3) Set the selected attendance status's start time of the day.
  - 4) Tap **OK**.
  - 5) Repeat step 1 to 4 according to your actual needs.

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The attendance status will be valid within the configured schedule.

#### 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.

## 7.11 System Maintenance

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

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

Hold the ? on the upper-right corner of the page and enter the password to view the version of the device.

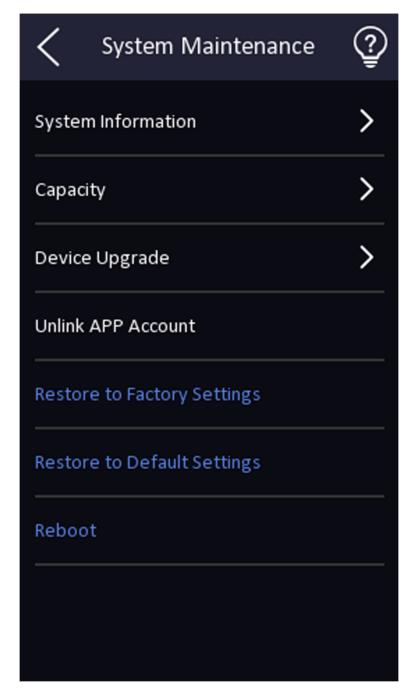


Figure 7-17 Maintenance Page

### **System Information**

You can view the device model, serial No., versions, address, production data, QR code, and open source code license.



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

### Capacity

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

#### **Device Upgrade**

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

#### **Unlink APP Account**

After unlinking APP account, you cannot operate via APP.

#### **Restore to Default Settings**

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 Settings**

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

#### Reboot

Reboot the device.

### 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, or call the indoor station from the device.

#### 7.12.1 Call Client Software from Device

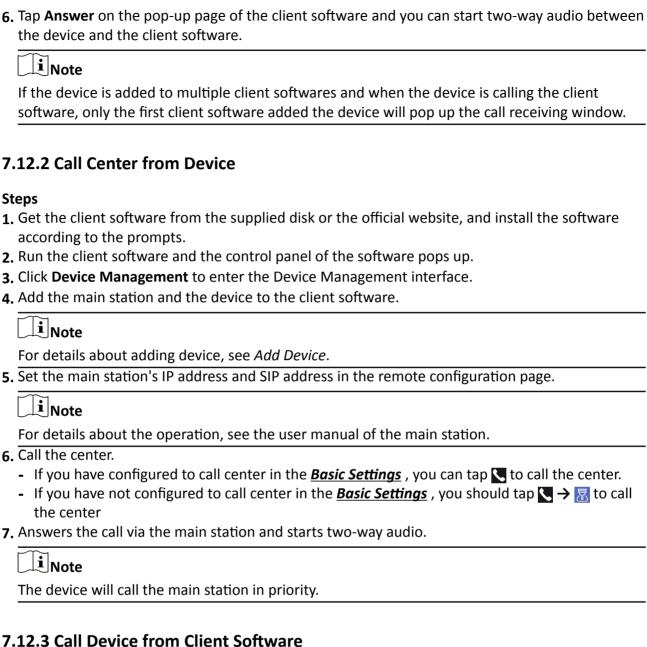
#### Steps

- **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.

Note

For details about adding device, see Add Device.

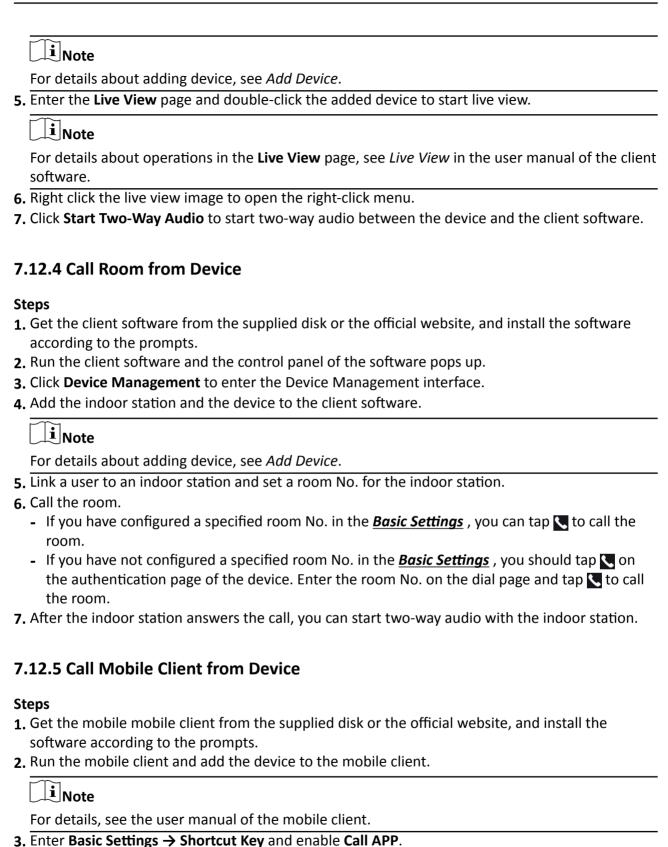
- 5. Call the client software.
  - 1) Tap \ on the device initial page.
  - 2) Enter **0** in the pop-up window.
  - 3) Tap to call the client software.



#### **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.

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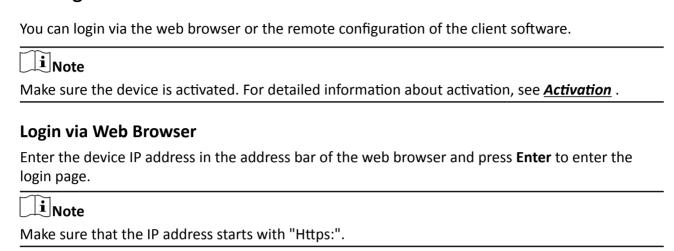


4. Go back to the initial page and call the mobile client.

- Tap on the device initial page.
   Tap to call the mobile client.

# **Chapter 8 Operation via Web Browser**

## 8.1 Login



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:** 



Select the image size when starting live view.

**(**)

Set the volume when starting live view.



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

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.

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

KX

Full screen view.

### 8.3 Person Management

Click and add the person's information, including the basic information, card, authentication mode, and the picture.

Click **OK** to save the person.

### **Add Basic Information**

Click **User** → **Add** to enter the Add Person page.

Add the person's basic information, including the employee ID, the person's name, user level, floor No., and room No.

Click **OK** to save the settings.

#### **Add Card**

Click **User** → **Add** to enter the Add Person page.

Click Add Card and enter a card number.

Click **OK** to save the settings.

#### **Add Face Picture**

Click **User** → **Add** to enter the Add Person page.

Click + on the right to upload a face picture from the local PC.



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

Click **OK** to save the settings.

#### **Set Permission Time**

Click **User** → **Add** to enter the Add Person page.

Set Start Time and End Time.

Click **OK** to save the settings.

#### **Set Access Control**

Click **User** → **Add** to enter the Add Person page.

After check **Adminstrator** in **Access Control**, the added person can log in by authenticating face.

Click **OK** to save the settings.

### **Add Authentication Mode**

Click **User** → **Add** to enter the Add Person page.

Set the authentication type.

Click **OK** to save the settings.

### 8.4 Search Event

Click **Search** to enter the Search page.

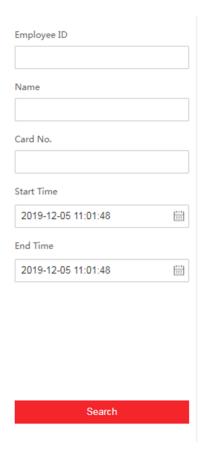


Figure 8-2 Search Page

Enter the search conditions, including 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 Configuration

### **8.5.1 Set Local Parameters**

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

### **Set Live View Parameters**

Click **Configuration** → **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** → **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** → **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.

#### 8.5.2 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.

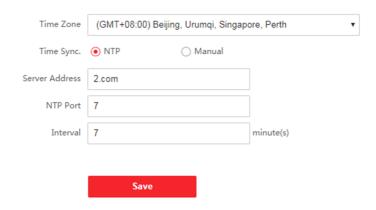
Click **Configuration** → **System** → **System Settings** → **Basic Information** to enter the configuration page.

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.

#### **8.5.3 Set Time**

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

Click Configuration → System → System Settings → Time Settings.



**Figure 8-3 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.

### 8.5.4 Set DST

### **Steps**

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

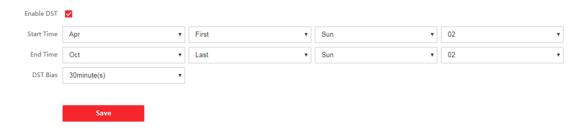


Figure 8-4 DST Page

- 2. Check Enable DST.
- 3. Set the DST start time, end time and bias time.

4. Click Save to save the settings.

### 8.5.5 View Open Source Software License

Go to **Configuration** → **System** → **System Settings** → **About Device**, and click **View Licenses** to view the device license.

### 8.5.6 Upgrade and Maintenance

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

### **Reboot Device**

Click Configuration → System → Maintenance → Upgrade & Maintenance .

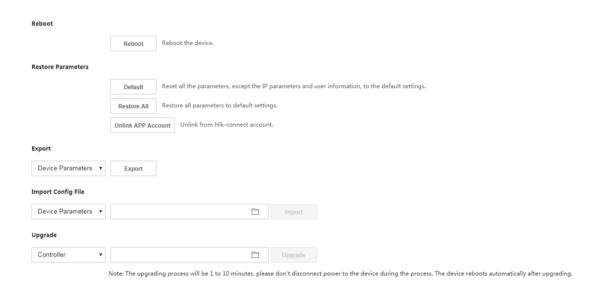


Figure 8-5 Upgrade and Maintenance Page

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

#### **Restore Parameters**

Click Configuration → System → Maintenance → 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 Configuration → System → Maintenance → Upgrade & Maintenance .

#### **Export**

Click <b>Export</b> to export the logs or device parameters.
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 Configuration → System → Maintenance → Upgrade & Maintenance .

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

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	•	
		NI - L -
	_	Note
$\overline{}$	$\sim$	

Do not power off during the upgrading.

### 8.5.7 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.

### 8.5.8 Security Mode Settings

Set the security mode for logging in the client software.

On the Device for Management page, click **Configuration** → **System** → **Security** → **Security** 

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 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.

### 8.5.9 Certificate Management

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



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 → System → Security → 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 → System → Security → Certificate Management.
- 2. Create an ID in the Inport CA Certificate area.



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

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

### 8.5.10 Change Administrator's Password

#### **Steps**

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



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.

### 8.5.11 View Device Arming/Disarming Information

View device arming type and arming IP address.

Go to Configuration → Arming/Disarming Information .

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

## 8.5.12 Network Settings

Set TCP/IP, port, Wi-Fi, report strategy, platform access and HTTP listening.

### **Set Basic Network Parameters**

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

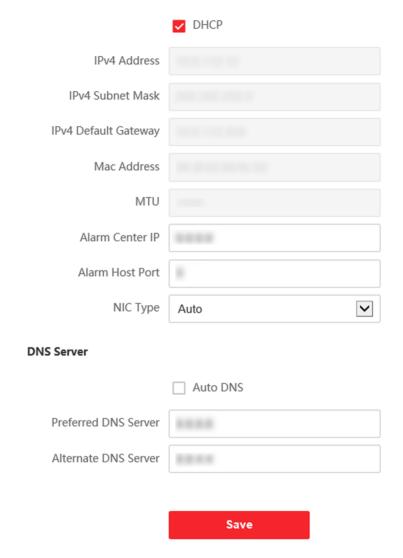


Figure 8-6 TCP/IP Settings Page

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, HTTPS and Server port parmaeters.

Click Configuration  $\rightarrow$  Network  $\rightarrow$  Basic 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.

#### Server

It refers to the port through which the client adds the device.

### **Set Wi-Fi Parameters**

Set the Wi-Fi parameters for device wireless connection.

#### Steps



The function should be supported by the device.

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



Figure 8-7 Wi-Fi Settings Page

#### 2. Check Wi-Fi.

- 3. Select a Wi-Fi
  - Click % of a Wi-Fi in the list and enter the Wi-Fi password.
  - Click **Add** and enter a Wi-Fi's name, password, and encryption type. Click **Connect**. When the Wi-Fi is connected, click **OK**.
- 4. Optional: Set the WLAN parameters.
  - 1) Click TCP/IP 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 Save.

### **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.

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. Check the checkbox of **Enable** to enable the function.
- 3. Select the Platform Access Mode.

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.

4. Create a Stream Encryption/Encryption Key for the device.



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.

5. Click Save to enable the settings.

#### **Set ISUP Parameters**

Set the ISUP parameters for accessing device via ISUP protocol.

### **Steps**



The function should be supported by the device.

- 1. Click Configuration → Network → Advanced Settings → Platform .
- 2. Select ISUP from the platform access mode drop-down list.
- 3. Check Enable.
- **4.** Set the ISUP version, server address, device ID, and the ISUP status.



If you select 5.0 as the version, 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.



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.

### 8.5.13 Set Video and Audio Parameters

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

### **Set Video Parameters**

Click Configuration → Video/Audio → Video .

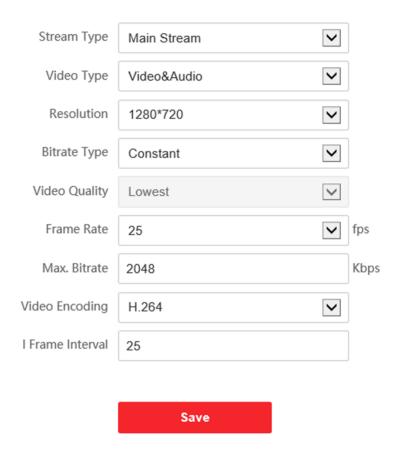


Figure 8-8 Video Settings Page

Set the stream type, the video type, the bitrate type, the frame rate, the Max. bitrate, and the video encoding.

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

### **Set Audio Parameters**

### Click Configuration → Video/Audio → Audio .

Set the audio stream type and audio encoding.

Drag the slider to adjust the device input and output volume.

You can also enable voice prompt.

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



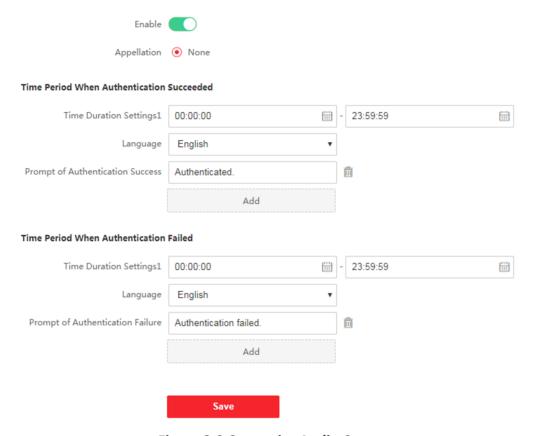
The functions vary according to different models. Refers to the actual device for details.

### 8.5.14 Customize Audio Content

Customize the output audio content when authentication succeeded and failed.

#### **Steps**

1. Click Configuration → Video/Audio → Audio Prompt .



**Figure 8-9 Customize Audio Content** 

- 2. set the appellation.
- 3. Enable the function.
- 4. Set the time duration when authentication succeeded.
  - 1) Click Add.
  - 2) Set the time duration and the language.



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  $\hat{\mathbf{m}}$  to delete the configured time duration.
- 5. Set the time duration when authentication failed.

- 1) Click Add.
- 2) Set the time duration and the language.



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  $\hat{\mathbf{m}}$  to delete the configured time duration.
- 6. Click Save to save the settings.

### 8.5.15 Set Image Parameters

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

#### **Steps**

1. Click Configuration → Image Adjustment.

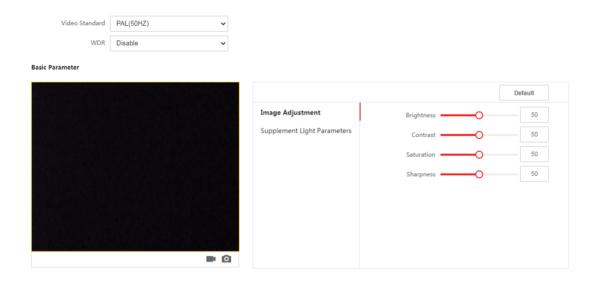


Figure 8-10 Image Settings Page

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/Sharpness**

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



Start/end recording video.



Capture the image.

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

### 8.5.16 Set Supplement Light Brightness

Set the device supplement light brightness.

#### **Steps**

1. Click Configuration → Image → Supplement Light Parameters .

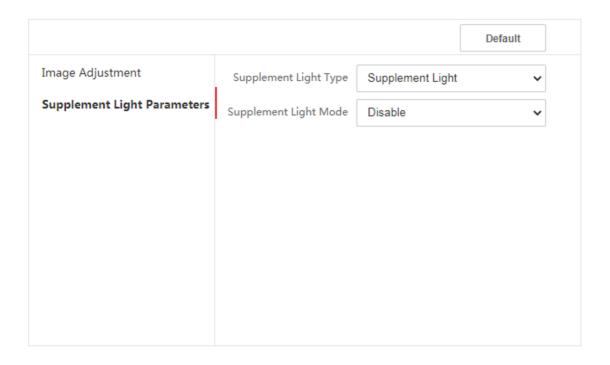


Figure 8-11 Supplement Light Settings Page

**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.

### 8.5.17 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**



- 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.



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 → 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.



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.



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.



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 *Time Settings* 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 *Time Settings* 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.

#### 8.5.18 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 → Video Intercom → Device No. .

If set the device type as **Door Station**, **Outer Door Station**, **Access Control Device**, you can set the period No., building No., unit No., floor No., door station No., and community No.

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

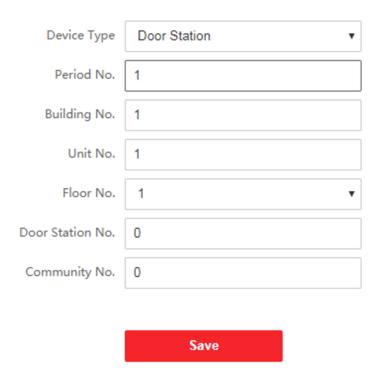


Figure 8-12 Device No. Settings

#### **Device Type**

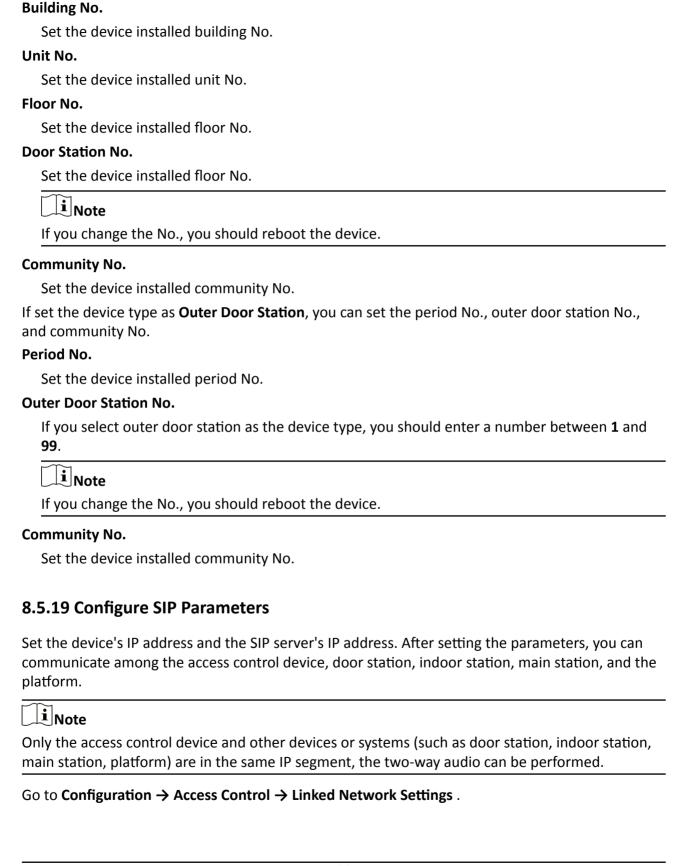
The device can be used as a door station, outer door station, or access control device. Select a device type from the drop-down list.

 $\bigcap_{\mathbf{i}}$ Note

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

Period No.

Set the device installed period No.



Set the main station's IP address and SIP server's IP address.

Click Save.

### 8.5.20 Access Control Settings

#### **Set Authentication Parameters**

Click Configuration → Access Control → Authentication Settings .



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

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

### **Device Type**

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.

### **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.

#### **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.

#### **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.

#### **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 Door Parameters**

Click Configuration → Access Control → Door Parameters .

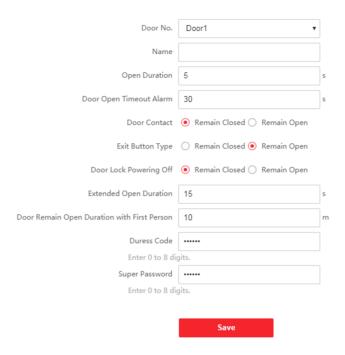


Figure 8-13 Door Parameters Settings Page

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.



The duress code and the super code should be different.

### **Set Card Security**

Click **Configuration** → **Access Control** → **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 authenticating by 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.

 $\bigcap$ i Note

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

# **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. 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. $\mathbf{\tilde{i}}_{\mathsf{Note}}$ 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. $\widetilde{\mathbf{i}}$ 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**

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

1. Click Configuration → Access Control → Wiegand Settings .

**i**Note

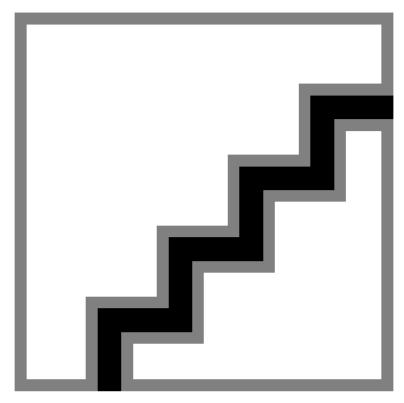


Figure 8-14 Wiegand Page

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



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

# **Set Face Recognition Parameters**

You can set face recognition parameters for accessing.

Click Configuration → Access Control → Face Recognition Parameters .

You can set **Working Mode** as **Access Control Mode**. The access control mode is the device normal mode. You should authenticate your credential for accessing.

### **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.

### **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.

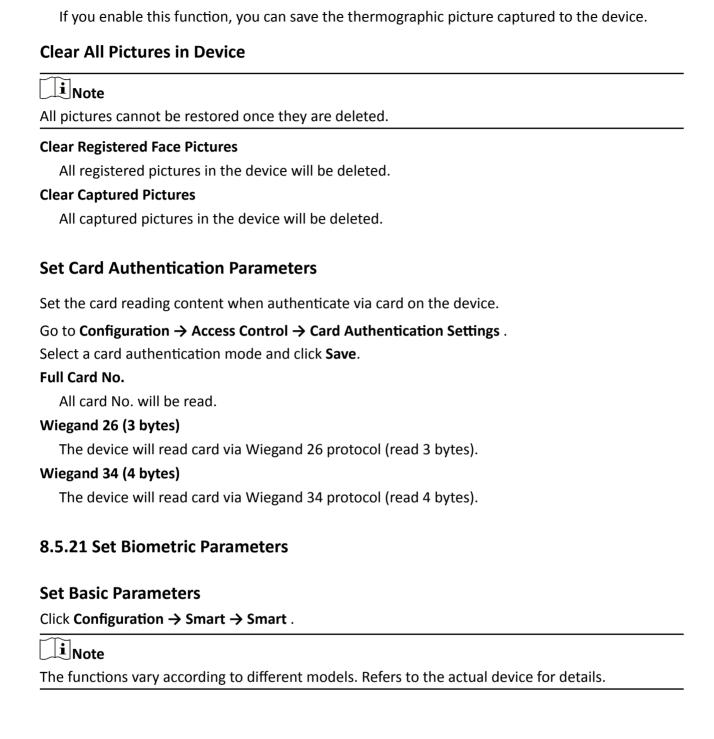
### **Save Pictures After Linked Capture**

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

### **Upload Thermographic Picture**

Upload thermographic picture captured to the platform automatically.

### **Save Thermographic Picture**



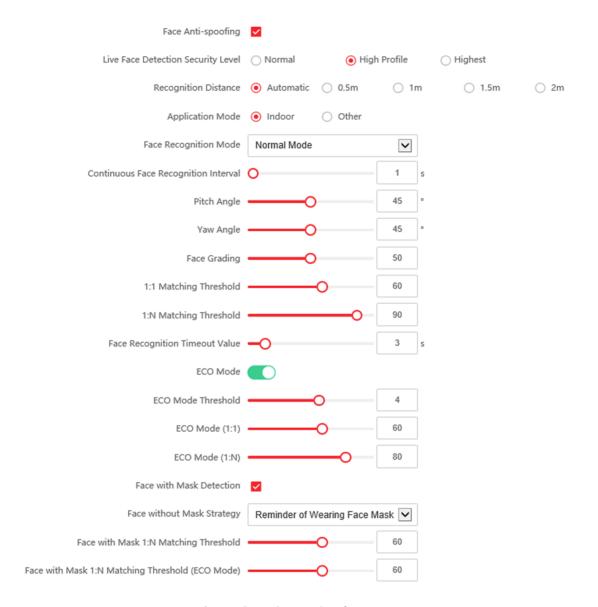


Figure 8-15 Smart Settings Page

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.

 $\bigcap_{\mathbf{i}}_{\mathsf{Note}}$ 

Biometric recognition products are not completely 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**

The device can recognize a much wider people range than the normal mode. This mode is applicable to a more complicated environment.

### **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

### **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.

### **Prompt and Open**

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

### **Prompt and Not Open Door**

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

# **Set Recognition Area**

# Click Configuration → Smart → 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 to record videos or capture pictures.

### 8.5.22 Set Notice Publication

You can set the theme for the device.

Click Configuration → Theme .

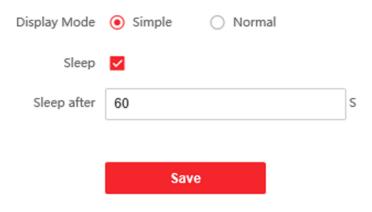


Figure 8-16 Theme Page

### **Display Mode**

You can select display theme for device authentication. You can select **Display Mode** as **Simple** or **Normal**. When you select **Simple**, the information of name, ID, face picture will be not displayed.

### Sleep

Enable **Sleep** and the device will enter the sleep mode when no operation within the configured sleep time. After enabling **Sleep**, you need set the start time of display.

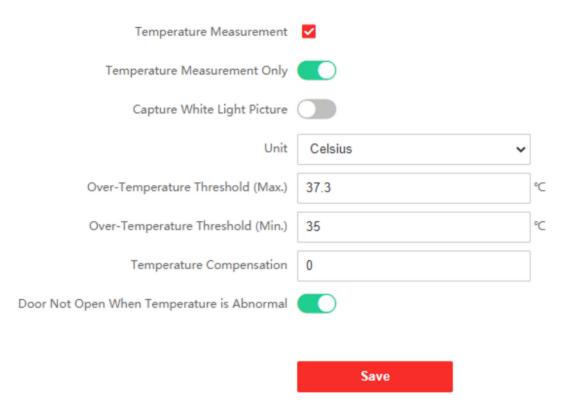
# **8.5.23 Temperature Measurement Settings**

# **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 .



**Figure 8-17 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 .

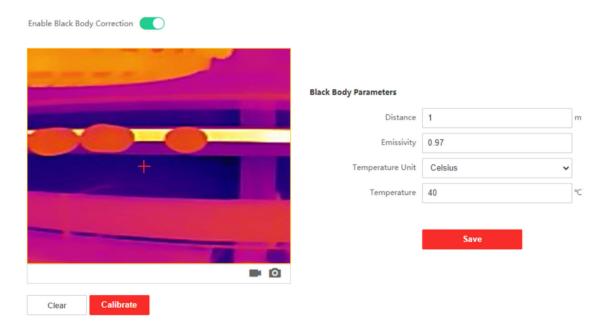


Figure 8-18 Black Body Settings

- 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.

# Face Recognition Terminal User Manual

Note				
	ck body's temperature is fixed.  Iibrate, and draw the black body's position on the page. When + is displayed on the black the screen, the black body is calibrated.			
		n on the page. V	age. When + is displayed on the black	
6. CHCK Save.				

# **Chapter 9 Client Software Configuration**

# 9.1 Configuration Flow of Client Software

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

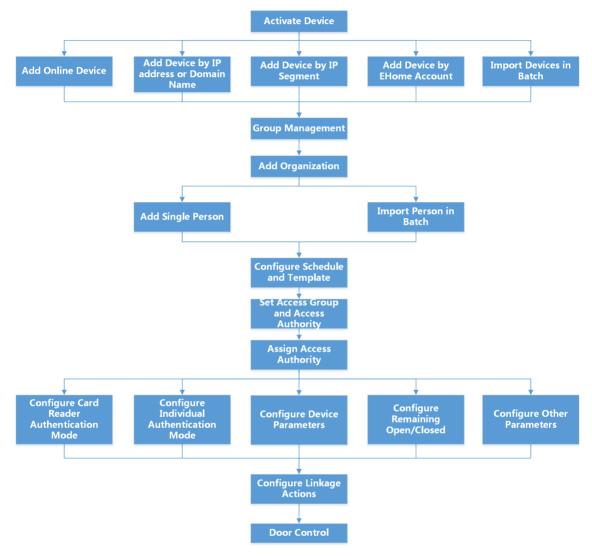


Figure 9-1 Flow Diagram of Configuration on Client Software

# 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.



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.



- 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.

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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.



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  $\mathcal{D}$  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.



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



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.

**Table 9-1 Manage Added Devices** 

Edit Device	Click to edit 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 to set remote configuration of the corresponding device. For details, refer to the user manual of device.
View Device Status	Click 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.

Upgrade Device	View device status on Firmware Upgrade column, check one or more upgradable devices, and click <b>Upgrade Device Firmware</b> to upgrade the selected devices. For details, refer to .
Get Events from Device	Check one device, and click <b>Get Events from Device</b> to synchronize events. For details, refer to .

# 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** → **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.



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

Note

You can click  $\blacksquare$  or  $\blacksquare$  to switch the 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**

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

Note

Up to 10 levels of organizations can be added.

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

**Edit Organization** 

**Delete** 

Organization

Hover the mouse on an added organization and click  $\overline{\phantom{a}}$  to edit its name.

Hover the mouse on an added organization and click  $\times$  to delete it.

**i** Note

- The lower-level organizations will be deleted as well if you delete an organization.
- Make sure there is no person added under the organization, or the organization cannot be deleted.

Show Persons in Check Show Persons in Sub Organization 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.
  - 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.
  - $\bigcap_{\mathbf{i}}$ 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.



- 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.



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.
- Click Export to save the exported file in CSV/Excel file on your PC.

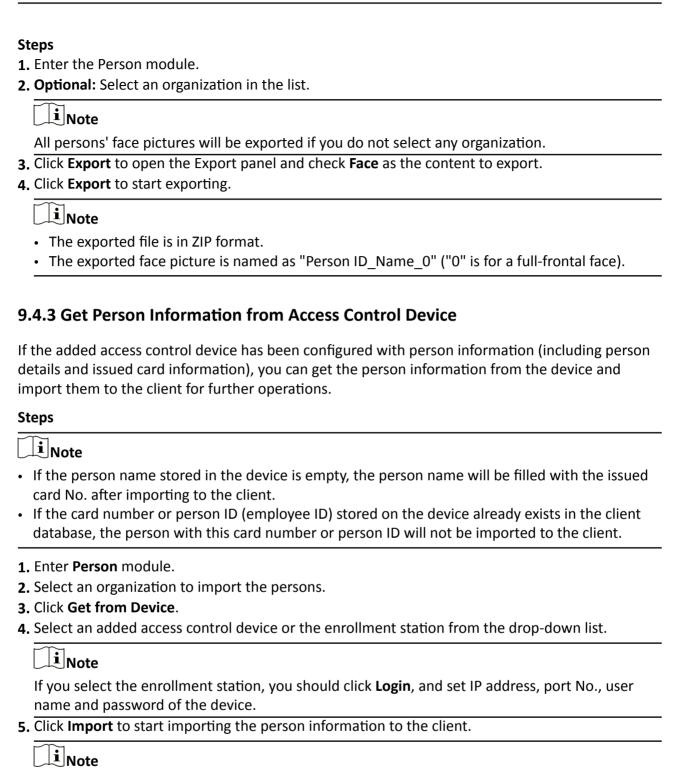
# **Export Person Pictures**

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.

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

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

# 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 **a** on the added card to set this card as lost card.

  After reporting card loss, the access authorization of this card will be invalid and inactive. Other person who gets this card cannot access the doors by swiping this lost card.
- **4. Optional:** If the lost card is found, you can click **to** cancel the loss.
  - After cancelling card loss, the access authorization of the person will be valid and active.
- **5.** If the lost card is added in one access group and the access group is applied to the device already, after reporting card loss or cancelling card loss, a window will pop up to notify you to apply the changes to the device. After applying to device, these changes can take effect on the device.

### 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



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.



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**

 $\bigcap$ i Note

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

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

Note

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

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

ŪNote

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

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

- 6) **Optional:** Click in the Operation column to delete this added holiday period from the holiday list.
- 6. Click Save.

# 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**



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

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



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.



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

- 3) **Optional:** Perform the following operations to edit the time durations.
  - Move the cursor to the time duration and drag the time duration on the timeline bar to the desired position when the cursor turns to [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) 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.

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iNote
Up to 4 holidays can be added to one template.
<ol> <li>Click Holiday tab.</li> <li>Select a holiday in the left list and it will be added to the selected list on the right panel.</li> <li>Optional: Click Add to add a new holiday.</li> </ol>
iNote
For details about adding a holiday, refer to Add Holiday.
4) Optional: Select a selected holiday in the right list and click 🔀 to remove the selected one, or

- click **Clear** to clear all the selected holiday(s) in the right list.
- 7. Click **Save** to save the settings and finish adding the template.

# 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.

 $\square_{\mathsf{Note}}$ 

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.

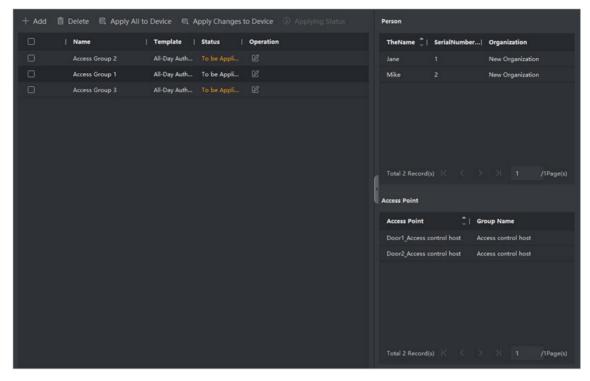


Figure 9-2 Display the Selected Person(s) and Access Point(s)

- **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).



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 **1** 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**.

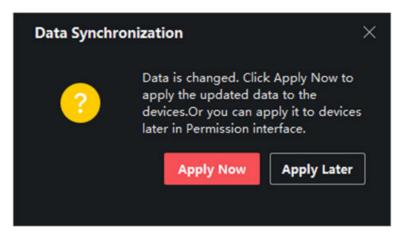


Figure 9-4 Data Synchronization

# 9.7 Configure Advanced Functions

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

# Note

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

# 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.



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

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



- 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 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).

# iNote

- 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).



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

# **Configure Parameters for Card Reader**

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

### **Before You Start**

Add access control device to the client.

### **Steps**

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



- 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**

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

### **Passing Mode**

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

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

### **Free Passing Authentication**

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

Opening/Closing 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.
Note
The recommended value is 6.
Audible Prompt Duration
Set how long the audio will last, which is played when an alarm is triggered .
Note
0 refers to the alarm audio will be played until the alarm is ended.
Temperature Unit  Soloct the temperature unit that displayed in the device status

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
iNote
This function should be supported by the device.

1. Enter the Access Control module.

- 2. On the navigation bar on the left, enter Advanced Function -> More Parameters.
- 3. Select an access control device in the device list and click Face Recognition Terminal.
- 4. Set the parameters.



These parameters displayed vary according to different device models.

### COM

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

### **Face Picture Database**

select Deep Learning as the face picture database.

# **Authenticate by QR Code**

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

### **Blocklist Authentication**

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

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

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

### **Save Authenticating Face Picture**

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

### **MCU Version**

View the device MCU version.

5. Click Save.

### **Set RS-485 Parameters**

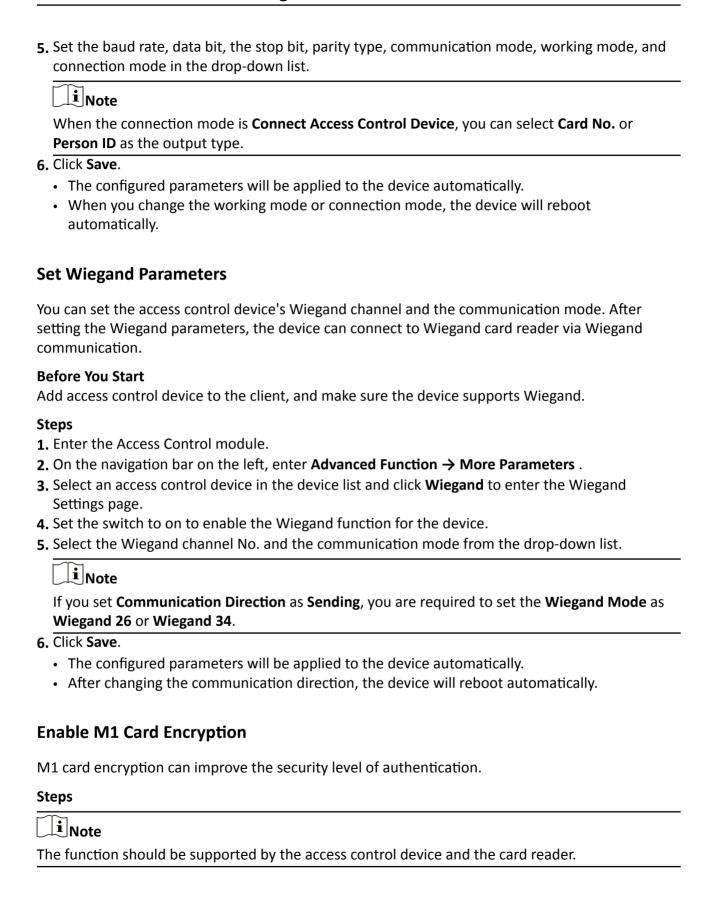
You can set the access control device's RS-485 parameters including the baud rate, data bit, the stop bit, parity type, flow control type, communication mode, work mode, and connection mode.

### **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 → 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.



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

The sector ID ranges from 1 to 100.

6. Click Save to save the settings.

### 9.8 Door Control

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



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

### 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.

# **Face Recognition Terminal User Manual**

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.



The **Capture** button is available when the device supports capture function. The picture is saved in the PC running the client. For setting the saving path, refer to *Set File Saving Path* in the user manual of the client software.

### Result

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

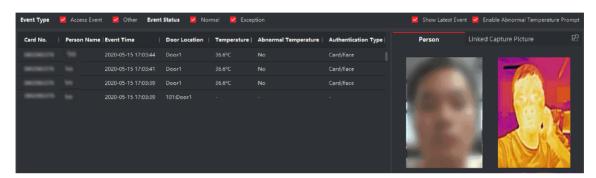
### **Before You Start**

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

### **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** 



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.



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).



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

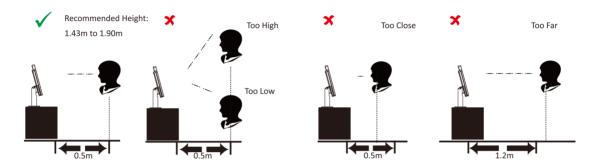
# Face Recognition Terminal User Manual

Note					
n the pop-up wir	ndow, you can c	lick 🔳 to vie	w details in fu	ll screen.	

# Appendix A. 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 B. Tips for Installation Environment**

1. Light Source Illumination Reference Value



Candle: 10Lux

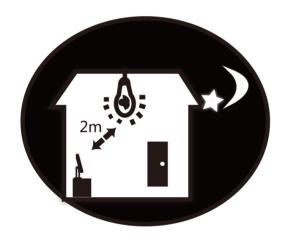


Bulb: 100~850Lux



Sunlight: More than 1200Lux

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





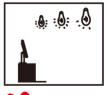
3. Avoid backlight, direct and indirect sunlight



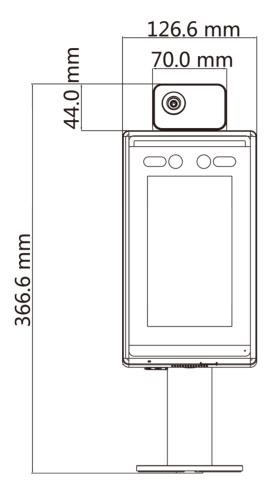








# **Appendix C. Dimension**





# Appendix D. 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 D-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 D-2 Device Command** 

