

# **Face Recognition Terminal**

**User Manual** 

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

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

# **Regulatory Information**

#### **FCC Information**

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

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

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

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

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

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

**FCC** Conditions

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

1. This device may not cause harmful interference.

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

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# ( (

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# Safety Instruction

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

The precaution measure is divided into Dangers and Cautions:

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

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

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

#### A Danger:

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

#### A 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.
- Input voltage should meet both the SELV (Safety Extra Low Voltage) and the Limited Power Source with 100~240 VAC or 12 VDC according to the IEC60950-1 standard. Please refer to technical specifications for detailed information.

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# **Chapter 1 Overview**

#### **1.1 Overview**

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

#### 1.2 Features

- 4.3-inch touch screen
- 2 MP wide-angle dual-lens
- Face anti-spoofing
- Face recognition distance: 0.3 m to 3 m
- Deep learning algorithm
- 6,000 face capacity, 10,000 card capacity, 5,000 fingerprint capacity for device support fingerprint related functions, and 150,000 event capacity
- Face recognition duration < 0.2 s/User; face recognition accuracy rate  $\ge$  99%
- Capture linkage and captured pictures storage
- Transmits card and user data from or to the client software via TCP/IP protocol and saves the data on the client software
- Imports pictures from the USB flash drive to the device or export pictures, events, from the device to the USB flash drive
- Stand-alone operation
- Manage, search and set device data after logging in the device locally
- Connects to one external card reader via RS-485 protocol
- Connects to secure door control unit via RS-485 protocol to avoid the door opening when the terminal is destroyed
- Connects to external access controller or Wiegand card reader via Wiegand protocol
- Two-way audio with indoor station and main station
- Supports 6 attendance status, including check in, check out, break in, break out, overtime in, overtime out
- Configuration via the web client
- Remotely opens door and starts live view via mobile client
- Supports ISAPI and ISUP5.0 protocol
- Support English, Spanish (South America), Arabic, Thai, Indonesian, Russian, Vietnamese, Portuguese (Brazil)

#### iNote

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

# **Chapter 2 Appearance**

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

# iNote

The appearance of the device vary according to different models. Refers to the actual device. Here takes face recognition terminal as example.

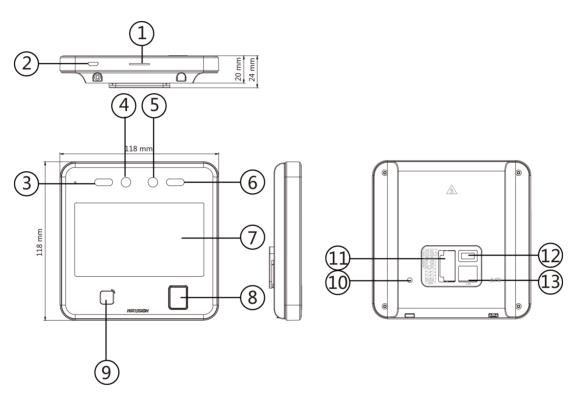


Figure 2-1 Face Recognition Terminal Diagram

No.	Description
1	Loudspeaker
2	microUSB
	<b>i</b> Note
	micro USB to USB cable is available.
3	IR Light

No.	Description
4	Camera
5	Camera
6	IR Light
7	Display Screen
8	Fingerprint Module
	<b>i</b> Note
	Supported by parts of the device modules.
9	Card Presenting Area
10	TAMPER
11	Wiring Terminal
12	Debugging Port
13	Network Interface

▲ : This sticker means "Hot parts! Burned fingers when handling the parts. Wait one-half hour after switching off before handling parts." It is to indicate that the marked item can be hot and should not be touched without taking care. For device with this sticker, this device is intended for installation in a restricted access location, access can only be gained by service persons or by users who have been instructed about the reasons for the restrictions applied to the location and about any precautions that shall be taken.

# **Chapter 3 Installation**

#### **3.1 Installation Environment**

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

#### **i**Note

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

## 3.2 Wall Mounting

#### Steps

## **i**Note

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

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

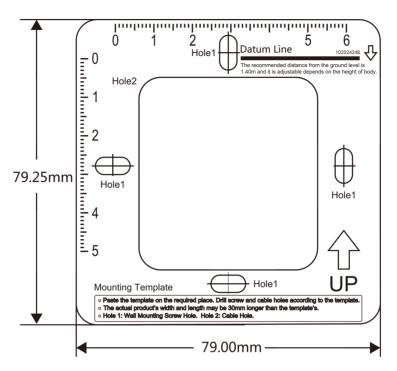


Figure 3-1 Mounting Template

- 2. Drill holes on the wall or other surface according to the instructions on the mounting template.
- **3.** Align the holes to the mounting plate and secure the mounting plate on the wall with the 4 supplied screws.

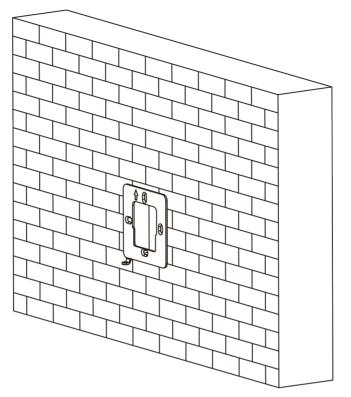
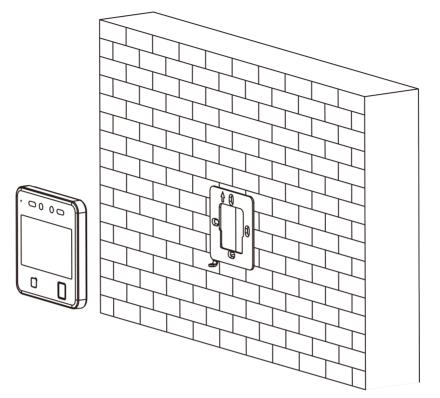


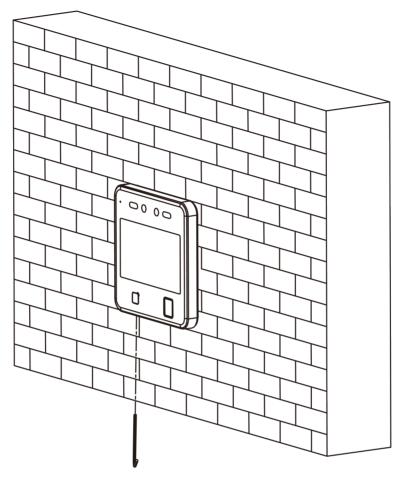
Figure 3-2 Install Mounting Plate

- **4.** Route the cable through the cable hole of the mounting plate, and connect to corresponding external devices' cables.
- 5. Align the device with the mounting plate and hang the device on the mounting plate.



#### Figure 3-3 Hang Device

6. Use one supplied screw to secure the device and the mounting plate.



**Figure 3-4 Secure Device** 

## 3.3 Base Mounting (Optional)

#### Steps

**1.** Align the hole of the mounting bracket with the device interfaces on the back.

# iNote

The bracket is optional.

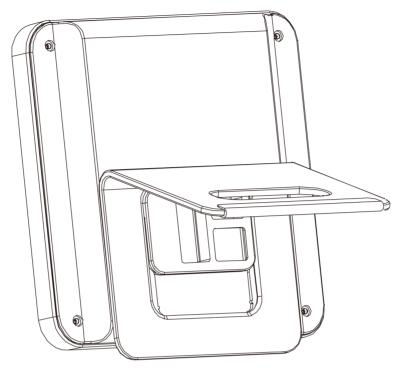


Figure 3-5 Align Bracket and Device

**2.** Push the bracket from bottom to top. Make sure the device is buckled with the bracket.

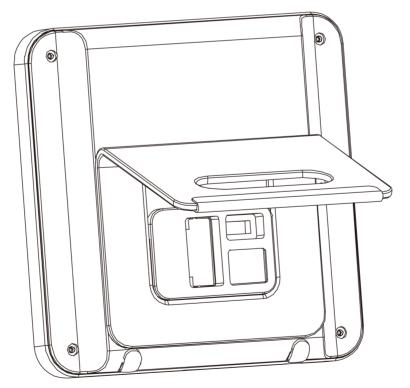


Figure 3-6 Buckle

- **3.** Route the cable through the cable hole of the mounting plate, and connect to corresponding external devices' cables.
- 4. Insert two non-slip silicone pads.
- 5. Put the mounted device on the desk or other surface.

# **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, 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.

## iNote

If the cable size is 18 AWG, the distance between the power supply and the device should be no more than 60 m when wiring a single device. And the door lock and the other peripherals should connect to a 12 VDC external power supply. If connecting to a 12 VDC door lock, the distance between the power supply and the device should be 30 m.

## 4.1 Terminal Description

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

The descriptions of the terminals are as follows:

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	RS-485	Yellow	485+	RS-485 Wiring
	B2		Blue	485-	
	B3		Red/Black	GND	Ground
Group C	C1	Wiegand	Green	W0	Wiegand Wiring 0
	C2		White	W1	Wiegand Wiring 1
	С3		White/Black	GND	Ground
Group D	D1	Door Lock	White/Purple	NC	Lock Wiring (NC)

Table 4-1 Terminal Descriptions
---------------------------------

Group	No.	Function	Color	Name	Description
	D2		White/Yellow	СОМ	Common
	D3		White/Red	NO	Lock Wiring (NO)
	D4		Yellow/Green	SENSOR	Door Contact
	D5		Black	GND	Ground
	D6	1	Yellow/Gray	BUTTON	Exit Door Wiring
	D7		Yellow/Black	GND	Ground

#### 4.2 Wire Normal Device

You can connect the terminal with normal peripherals.

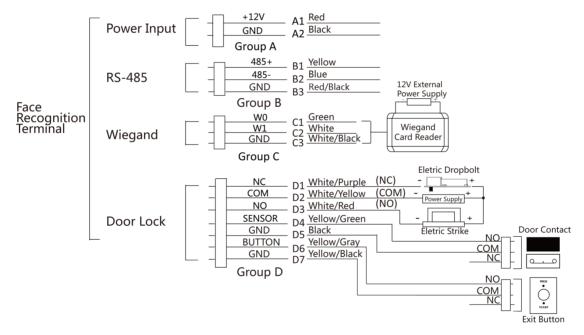


Figure 4-1 Device Wiring

# iNote

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

### 4.3 Wire Secure Door Control Unit

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

The wiring diagram is as follows.

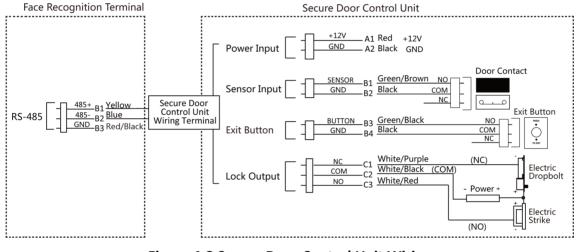


Figure 4-2 Secure Door Control Unit Wiring

#### **i**Note

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

#### 4.4 Wire Fire Module

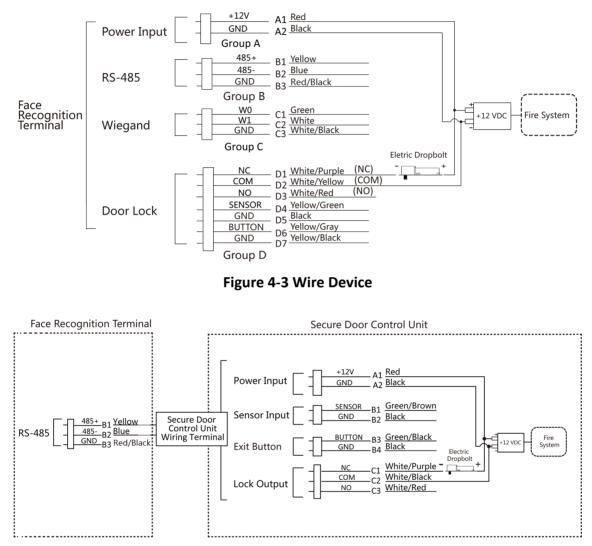
#### 4.4.1 Wiring Diagram of Door Open When Powering Off

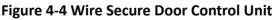
Lock Type: Anode Lock, Magnetic Lock, and Electric Bolt (NO) Security Type: Door Open When Powering Off Scenario: Installed in Fire Engine Access

#### Type 1

#### **i** Note

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

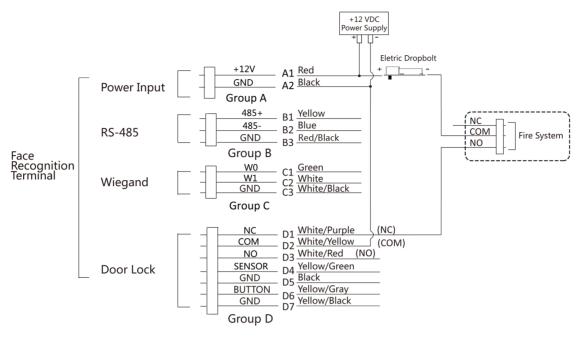




#### Type 2

#### **i**Note

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



**Figure 4-5 Wiring Device** 

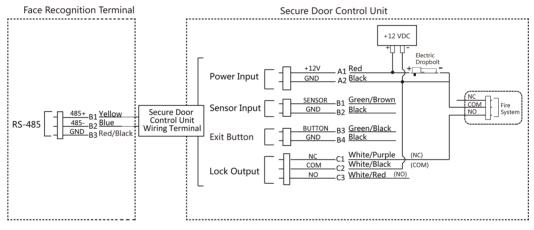


Figure 4-6 Wiring Secure Door Control Unit

#### 4.4.2 Wiring Diagram of Door Locked When Powering Off

Lock Type: Cathode Lock, Electric Lock, and Electric Bolt (NC) Security Type: Door Locked When Powering Off Scenario: Installed in Entrance/Exit with Fire Linkage

# iNote

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

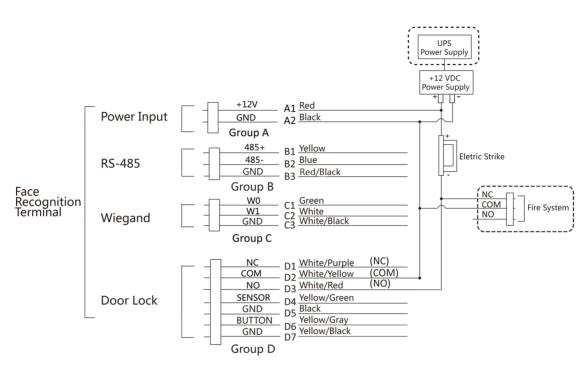
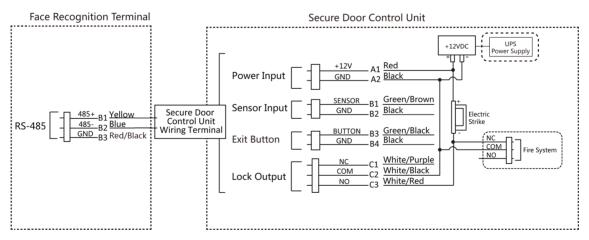


Figure 4-7 Device Wiring





# **Chapter 5 Activation**

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

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

The default values of the device are as follows:

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

#### 5.1 Activate via Device

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

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

 Activate Device
Enter 8 to 16 characters.
Enter Password
Confirm Password
Confirm Password
Enter 8 to 16 characters (Two or more of the followi character types are allowed: digit, letter, and symbo Activate

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.

## **i**Note

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

#### 5.2 Activate via Web Browser

You can activate the device via the web browser.

#### Steps

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

## **i**Note

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

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

# **A**Caution

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

# iNote

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.

## 5.3 Activate via SADP

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

#### **Before You Start**

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

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

#### Steps

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

# 

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.

#### **i** Note

Characters containing admin and nimda are not supported to be set as activation password. **4.** Click **Activate** to start activation.

	r of online devices: 9	Security	IPv4 Address	Port	Software Version   IPv4 Gatewa			
001	•   Device Type	Active	10.16.6.20	8000	10.16.6.254	80	ort   Device Senal No.	
002	D5-4048303-A	Active	10.16.6.21	8000	10.16.6.254	80	DS-HHRIDS-APICIDIONEDHCM	
003	DS-428028-44	Active	10.16.6.213	8000	10.16.6.254	N/A	DS-KONECK ACCESSION	
004	D5-15408-0425	Active	10.16.6.179	8000	10.16.6.254	N/A	>	
005	DS-13408-018NG	Active	10.16.6.127	8000	10.16.6.254	N/A		The device is not activated.
005	UNKOWN-DEVICE TYPE		10.16.6.250	8000	10.16.6.254	80	204030000000000000000000000000000000000	
009	007 (i	<sup>Adi</sup> Se	lect ina	activ	Inactive e device.	80	192.0.0.64	You can modify the network parameters after the device activation.
							nd confirm	

Status of the device becomes Active after successful activation.

- 5. Modify IP address of the device.
  - 1) Select the device.

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

## **5.4 Activate Device via 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

#### iNote

This function should be supported by the device.

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

The searched online devices are displayed in the list.

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

# Caution

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

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

## **i**Note

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

7. Click OK to activate the device.

# **Chapter 6 Quick Operation**

#### 6.1 Select Language

After activation, you should select a language.

#### Steps

1. Select a language according to the actual needs.

Select Language		
English	$\checkmark$	
Tiếng Việt		
ภาษาไทย		
Next		

Figure 6-1 Select Language

2. Click Next.

#### 6.2 Set Password Change Type

You can set the password change type as reserved email address or security questions. Once you forgot the device password, you can change the password via the selected change type.

#### **Change Password via Email Address**

If you need to change password via reserved email, you can enter an email address, and tap Next.

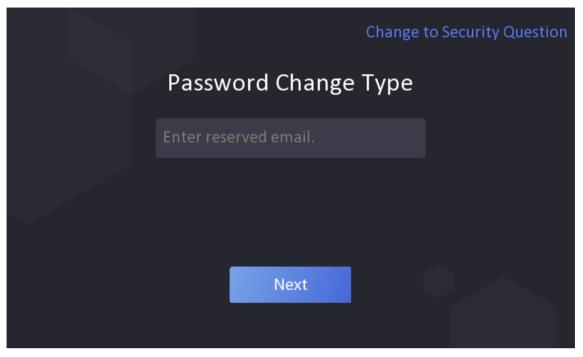


Figure 6-2 Password Change Page

#### **Change via Security Questions**

If you need to change password via security questions, you can tap **Change to Security Questions** on the right corner. Select the security questions and enter the answers. Click **Next**.

## iNote

You can only select one type to change password. If you need, you can enter the web page to set both of the changing types.

#### **6.3 Set Network Parameters**

You can set the network for the device.

#### Steps

iNote

Parts of the device models supports wi-fi function. Refers to the actual device for details.

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

Wired Network 🗸
Wi-Fi
Disconnect wired Network before connecting to Wi-Fi.
Skip Next

Figure 6-3 Select Network

# **i**Note

Disconnect the wired network before connecting a Wi-Fi.

#### 2. Tap Next.

Wired Network

# iNote

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 Access to Platform

Enable the function and the device can communicate via Hik-Connect. You can add the device to Hik-Connect mobile client and so on.

Steps

#### **i** Note

Parts of the device models supports function. Refers to the actual device for details.

1. Enable Access to Hik-Connect, and set the server IP and verification code.

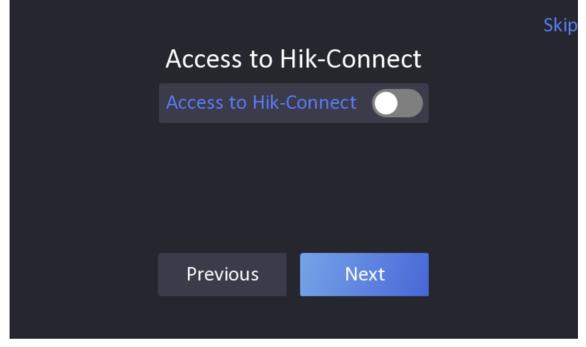


Figure 6-4 Access to Hik-Connect

- 2. Tap Next.
- 3. Optional: Tap Skip to skip the step.
- 4. Optional: Tap Previous to go to the previous page.

#### **i**Note

If you tap **Previous** to return to the Wi-Fi configuration page, you need to tap the connected Wi-Fi or connect another Wi-Fi to enter the platform page again.

## 6.5 Remote Operation via APP

You can add the device to your mobile client for remote operation.

Download Hik-Connect to your mobile client and run the APP. Scan the QR Code in the following picture to add the device to your mobile client for remote operation.

Following the instruction in your mobile client to add the device.



Figure 6-5 Operate Remotely via APP

# 6.6 Privacy Settings

You should set the privacy parameters, including the picture uploading and storage.

Select parameters according to your actual needs.

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

Upload the pictures captured when authenticating to the platform automatically.

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

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

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

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

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

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

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

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

# 6.7 Set Administrator

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

#### **Before You Start**

Activate the device.

#### Steps

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

Add Adm Employee ID	inistrator
1	
Name	
Enter Name	
Skip	Next

Figure 6-6 Add Administrator Page

3. Select a credential to add.

# **i**Note

Up to one credential should be added.

- 🔯 : Face forward at the camera. Make sure the face is in the face recognition area. Click 🔂 to capture and click 🕑 to confirm.
- Some interest of the instructions on the device screen. Click of 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.

## SS / SS

Hik-Connect is enabled/disabled.

## ≞ / 🗵 / 💷

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

# ବ/ ରୁ / ବୃ

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 <u>Preference</u> <u>Settings</u>.

#### - -- #

Scan QR code to authenticate.

**i**Note

The QR code can be obtained from the visitor terminal.

# ۲,

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

# iNote

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

## È

Enter password to authenticate.

# **Chapter 7 Basic Operation**

# 7.1 Login

Login the device to set the device basic parameters.

## 7.1.1 Login by Administrator

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

#### Steps

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

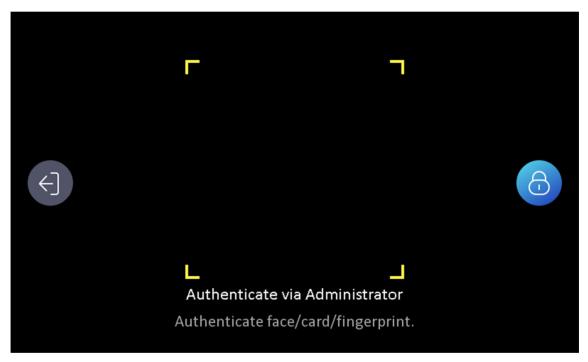


Figure 7-1 Admin Login

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

<-]	Me	nu	
2	7		((ț)) 
User	ACS	T & A	Comm.
		Ŀ	Y
Basic	Biometrics	Data	Maint.

Figure 7-2 Home Page

# iNote

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

- **3. Optional:** Tap **and** you can enter the device activation password for login.
- **4. Optional:** Tap **[6]** 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.

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

**3.** Tap **OK** to enter the home page.

# **i**Note

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

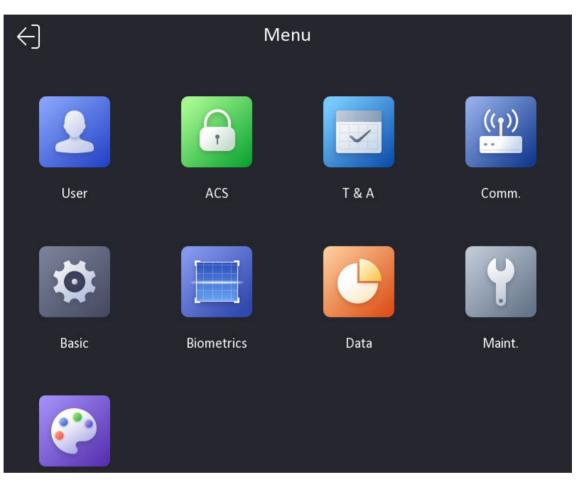


Figure 7-3 Home Page

## 7.1.3 Forgot Password

If you forget the password during authentication, you can change the password.

- **1.** Hold the initial page for 3 s and slide to the left/right by following the gesture and log in the page.
- **2. Optional:** If you have set an administrator, tap <a>[6]</a> in the pop-up admin authentication page.
- 3. Tap Forgot Password.
- 4. Select a password change type from the list.

# iNote

If you have only set 1 password change type, you will go to the corresponded password change page for further settings.

- 5. Answer the security questions or change the password according to email address.
  - Security Questions: Answer the security questions that configured when activation.
  - Email Address

# **i**Note

Make sure the device has added to the Hik-Connect account.

- a. Download Hik-Connect app.
- b. Go to More  $\rightarrow$  Reset Device Password .
- c. Scan the QR code on the device and a verification code will be popped up.

## **i**Note

Tap the QR code to get a larger picture.

- d. Enter the verification code on the device page.
- 6. Create a new password and confirm it.
- **7.** Tap **OK**.

# 7.2 Communication Settings

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

## 7.2.1 Set Wired Network Parameters

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

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

$\langle$	Wired Network
DHCP	
IP Address	>
Subnet Mask	>
Gateway	>
Auto Obtain DNS	
Preferred DNS Server	>
Alternate DNS Server	>

#### Figure 7-4 Wired Network Settings

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

# **i**Note

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

**4.** Set the DNS parameters. You can enable **Auto Obtain DNS**, set the preferred DNS server and the alternate DNS server.

## 7.2.2 Set Wi-Fi Parameters

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

#### Steps

## iNote

The function should be supported by the device.

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



#### Figure 7-5 Wi-Fi Settings

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

# **i**Note

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

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

## 7.2.3 Set RS-485 Parameters

The face recognition terminal can connect external access controller, secure door control unit 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.

<	RS-485		
RS-485 Settings			
Peripheral	Access Controller		Card Reader >
	Control Unit		
	Card Reader	$\checkmark$	

Figure 7-6 Set RS-485 Parameters

- 3. Enable RS-485 Settings.
- 4. Select an peripheral type according to your actual needs.

# **i**Note

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

**5.** 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.

- **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.

$\langle$	Wiegand
Wiegand Settings	
Direction	Output >
Mode	Wiegand 26 >

#### Figure 7-7 Wiegand Settings

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

## **i**Note

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

## 7.2.5 Set ISUP Parameters

Set ISUP parameters and the device can upload data via ISUP protocol.

#### **Before You Start**

Make sure your device has connect to a network.

#### Steps

1. Tap Comm. → ISUP .

$\langle$	ISUP
Protocol Version	5.0 >
Central Group	
Main Channel	N1 >
ISUP	
Address Type	Ib >
IP	0.0.0.0 >
Port	7660 >
Device ID	$\left.\right>$
ISUP Key	>

#### Figure 7-8 ISUP Settings

2. Enable the ISUP function and set the ISUP server parameters.

#### **ISUP Version**

Set the ISUP version according to your actual needs.

#### **Central Group**

Enable central group and the data will be uploaded to the center group.

#### Main Channel

Support N1 or None.

#### ISUP

Enable ISUP function and the data will be uploaded via ISUP protocol.

#### Address Type

Select an address type according to your actual needs.

#### **IP Address**

Set the ISUP server's IP address.

#### Port No.

Set the ISUP server's port No.

## **i**Note

Port No. Range: 0 to 65535.

#### **Device ID**

Set device serial no.

#### **ISUP Key**

If you choose V5.0, you should create an account and ISUP key. If you choose other version, you should create an ISUP account only.

## **i** Note

- Remember the ISUP account and ISUP key. You should enter the account name or the key when the device should communicate with other platforms via ISUP protocol.
- ISUP key range: 8 to 32 characters.

## 7.2.6 Platform Access

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

#### **Before You Start**

Make sure your device has connected to a network.

#### Steps

# iNote

Parts of the device models supports function. Refers to the actual device for details.

- **1.** Tap **Comm.** (Communication Settings) on the Home page to enter the Communication Settings page.
- 2. On the Communication Settings page, tap Access to Hik-Connect.
- 3. Enable Access to Hik-Connect
- 4. Enter Server IP.
- 5. Create the Verification Code, and you need to enter the verification code when you manage the devices via Hik-Connect.

# 7.3 User Management

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

## 7.3.1 Add Administrator

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

## Steps

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

$\langle$	Add User	$\checkmark$
Employee ID		2 >
Name		Not Configured >
Card		0/5 >
Fingerprint		0/10 >
PIN		Not Configured
Face		Not Configured >
Auth. Settings		Device Mode >
User Role		Normal User >

**3.** Edit the employee ID.

# **i**Note

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

# **i**Note

- Numbers, upper case letters, lower case letters, and special characters are allowed in the user name.
- Up to 32 characters are allowed in the user name.
- 5. Optional: Add a face picture, fingerprints, cards, or Pin for the administrator.

# **i**Note

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

For details about adding a fingerprint, see Add Fingerprint .

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

## **i**Note

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

7. Enable the Administrator Permission function.

#### **Enable Administrator Permission**

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

8. Tap 🔽 to save the settings.

## 7.3.2 Add Face Picture

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

### Steps

# **i**Note

Up to 6,000 face pictures can be added.

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

# **i**Note

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

## **i**Note

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

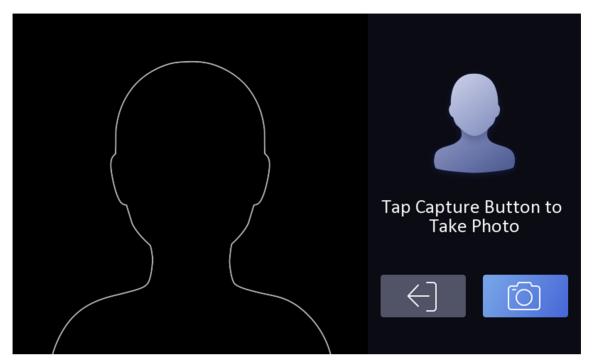


Figure 7-9 Add Face Picture

6. Look at the camera.

# **i**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> <u>Comparing Face Picture</u>.

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

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

## Administrator

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

## Normal User

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

**10.** Tap 🔽 to save the settings.

## 7.3.3 Add Fingerprint

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

## Steps

## iNote

- The function should be supported by the device.
- Up to 5,000 fingerprints can be added.
- **1.** Long tap on the initial page for 3 s and slide to the left/right by following the gesture and enter the device backend.
- **2.** Tap **User**  $\rightarrow$  + to enter the Add User page.
- **3.** Tap the Employee ID. field and edit the employee ID.

# iNote

- The employee ID should be less than 32 characters. And it can be a combination of lower letters, upper letters, and numbers.
- The employee ID should not start with 0 and should not be duplicated.
- **4.** Tap the Name field and input the user name on the soft keyboard.

# iNote

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

# **i**Note

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

## 7. Set the user role.

## Administrator

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

## Normal User

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

8. Tap 🔽 to save the settings.

## 7.3.4 Add Card

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

## Steps

## iNote

Up to 10,000 cards can be added.

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

# iNote

- 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.

# iNote

- Numbers, upper case letters, lower case letters, and special characters are allowed in the user name.
- The suggested user name should be within 32 characters.

## 6. Tap the Card field and tap +.

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

# iNote

- 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 v to save the settings.

## 7.3.5 View PIN code

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

Steps

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

# iNote

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

# **i**Note

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

# iNote

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

6. Set the user role.

#### Administrator

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

#### Normal User

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

**7.** Tap 🔽 to save the settings.

## 7.3.6 Set Authentication Mode

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

## Steps

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

#### Device

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

#### Custom

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

## 7.3.7 Search and Edit User

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

## Search User

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

## **Edit User**

On the User Management page, select a user from the user list to enter the Edit User page. Follow the steps in <u>User Management</u> to edit the user parameters. Tap vertices to save the settings.

# **i**Note

The employee ID cannot be edited.

# 7.4 Data Management

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

## 7.4.1 Delete Data

Delete user data.

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

## 7.4.2 Import Data

## Steps

- 1. Plug a USB flash drive in the device.
- **2.** On the Home page, tap **Data**  $\rightarrow$  **Import Data** .
- 3. Tap User Data, Face Data or Access Control Parameters .

# **i**Note

The imported access control parameters are configuration files of the device.

**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.

# iNote

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

# 7.4.3 Export Data

## Steps

- 1. Plug a USB flash drive in the device.
- **2.** On the Home page, tap **Data**  $\rightarrow$  **Export Data** .
- 3. Tap Face Data, Event Data, User Data, or Access Control Parameters.

# **i**Note

The exported access control parameters are configuration files of the device.

**4. Optional:** Create a password for exporting. When you import those data to another device, you should enter the password.

# iNote

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

# 7.5 Identity Authentication

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

## 7.5.1 Authenticate via Single Credential

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

Authenticate face, fingerprint, card or QR code.

Face

Face forward at the camera and start authentication via face.

#### Fingerprint

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

#### Card

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

## **i**Note

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

#### QR Code

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

# ∎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.

#### Password

Enter the password to authenticate via password.

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

## 7.5.2 Authenticate via Multiple Credential

## Before You Start

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

## Steps

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

**i**Note

- The card can be normal IC card, or encrypted card.
- If the QR Code Scanning function is enabled, you can put the QR code in front of the device camera to authenticate via QR code.
- The dimension of the recognized QR code picture should be larger than 6 cm  $\times$  6 cm.

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

# **i**Note

- For detailed information about scanning fingerprint, see *Tips for Scanning Fingerprint*.
- For detailed information about authenticating face, see *Tips When Collecting/Comparing Face Picture*.

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

# 7.6 Basic Settings

You can set the sound, time, sleeping, language, community No., building No., Unit No., and beauty.

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**.

<	Basic Settings
Sound Settings	>
Time Settings	>
Sleeping (s)	60 >
Select Language	English >
Community No.	1 >
Building No.	1 >
Unit No.	1 >
Beauty	Disable >

#### Figure 7-10 Basic Settings Page

#### Sound Settings

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

# iNote

You can set the voice volume between 0 and 10.

#### **Time Settings**

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

#### Sleeping (s)

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

# iNote

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

#### Select Language

Select the language according to actual needs.

#### Community No.

Set the device installed community No.

## **Building No.**

Set the device installed building No.

## Unit No.

Set the device installed unit No.

## Beauty

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

# iNote

By default, the function is disabled.

# 7.7 Set Biometric Parameters

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

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

<	Biometrics
Face Liveness Level	Normal >
Recognition Distance	Auto >
Face Recognition Interval	3 >
Wide Dynamic	
Face 1:N Security Level	87 >
Face 1:1 Security Level	60 >
ECO Settings	$\rightarrow$
Hard Hat Detection Level	Disable >
Face with Mask Detection	Disable >

## Figure 7-11 Biometric Parameters Page

#### Table 7-1 Face Picture Parameters

Parameter	Description
Face Liveness Level	After enabling face anti-spoofing function, you can set the matching security level when performing live face authentication.
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.
	<b>∐i</b> 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.

Parameter	Description
	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
	When enabling the ECO mode, you can set the ECO mode's threshold. The larger the value, the easier the device entering the ECO mode.
	ECO Mode (1:1)
	Set the matching threshold when authenticating via ECO mode 1:1 matching mode. The larger the value, the smaller the false accept rate and the larger the false rejection rate.
	ECO Mode (1:N)
	Set the matching threshold when authenticating via ECO mode 1:N matching mode. The larger the value, the smaller the false accept rate and the larger the false rejection rate
	Face with Mask&Face(1:1 ECO)
	Set the matching value when authenticating with face mask via ECO mode 1:1 matching mode. The larger the value, the smaller the false accept rate and the larger the false rejection rate.
	Face with Mask&Face(1:N ECO)
	Set the matching value when authenticating with face mask via ECO mode 1:N matching mode. The larger the value, the smaller the false accept rate and the larger the false rejection rate.
Hard Hat Detection	After enabling the hard hat detection, you can set the strategy.
	Reminder of Wearing
	If the person do not wear the hard hat when authenticating, the device will pop up a prompt and the door will open.

Parameter	Description
	Must Wear
	If the person do not wear the hard hat when authenticating, the device will pop up a prompt and the door will keep closed.
	None
	If the person do not wear a face mask when authenticating, the device will not prompt a notification.
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.

# 7.8 Set Access Control Parameters

You can set the access control permissions, including the functions of authentication mode, enable NFC card, enable M1 card, door contact, open duration (s) and authentication interval (s).

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

<	Access Control Settings	
Terminal Auth. Mode		>
Reader Auth. Mode		>
Enable NFC Card		
Enable M1 Card		
M1 Card Encryption		
Door Contact		Remain Closed >
Open Duration (s)		5 >
Authentication Interva	l (s)	0 >

## Figure 7-12 Access Control Parameters

The available parameters descriptions are as follows:

Parameter	Description
Terminal Auth. Mode (Terminal Authentication Mode)	Select the face recognition terminal's authentication mode. You can also customize the authentication mode.
	<b>i</b> Note
	<ul> <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.

Parameter	Description
Enable M1 Card	Enable the function and you can present the M1 card to authenticate.
M1 Card Encryption	Enabling the M1 card encryption function can improve the card security level. The card will not be copied easily.
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.

## 7.9 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.

## 7.9.1 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.

## 7.9.2 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.

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

$\langle$	T & A Status	
Attendance Mode		Manual >
Attendance Status Required		
check in check out		Disable >
break out break in		Disable >
overtime in overtime out		Disable >

#### Figure 7-14 Manual Attendance Mode

- 3. Enable the Attendance Status Required.
- 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.

## Result

You should select an attendance status manually after authentication.

# **i**Note

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

## 7.9.3 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.

$\langle$	T & A Status	
Attendance Mode		Auto >
Attendance Status Required		
check in check out		Disable >
break out break in		Disable >
overtime in overtime out		Disable >

#### Figure 7-15 Auto Attendance 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 **Confirm**.
  - 5) Repeat step 1 to 4 according to your actual needs.

# iNote

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.

## 7.9.4 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.

<	T & A Status
Attendance Mode	Manual and Auto >
Attendance Status Required	
check in check out	Disable >
break out break in	Disable >
overtime in overtime out	Disable >

#### 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.

## iNote

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.

# 7.10 Preference Settings

You can configure preference settings parameters.

#### Steps

1. Tap Preference to enter the preference settings page.

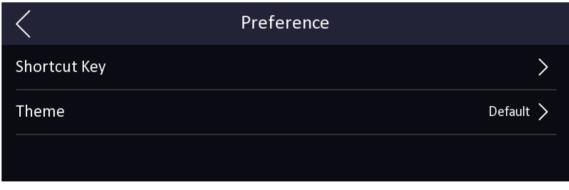


Figure 7-17 Preference Settings

#### 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.

# iNote

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

#### Call Room

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

#### **Call Center**

When you tap the call button on the authentication page, you can call the center directly.

#### Call Specified Room No.

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

#### Call APP

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

#### Password

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

#### QR Code

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

#### Theme

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

## Default

The device authentication page will display the live view page. And the person's name, employee ID, face pictures will all be displayed after authentication.

## Simple

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

## 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, reboot the device, set face parameters and view version information.

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.** 

<	System Maintenance		<b>?</b>
System Information			>
Capacity			>
Device Upgrade			>
Restore to Factory Settings			
Restore to Default Settings			
Reboot			

Figure 7-18 System Maintenance

#### System Information

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

## **i**Note

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

#### Capacity

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

#### **Device Upgrade**

**Online Update** 

If the device has been connected to Hik-Connect and network, when there is a new installation package in Hik-Connect, you can tap **Device Upgrade**  $\rightarrow$  **Online Update** to upgrade the device system.

#### Update via USB

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

#### **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.

#### **Advanced Settings**

Long Tap on the right corner to enter the advanced settings page. Enter the password.

#### **Face Parameter**

#### **Custom Anti-Spoofing Detection**

#### **Face Liveness Level**

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

#### **Anti-Spoofing Detection Threshold**

The larger the value, the smaller the false accept rate and the larger the false rejection rate. The smaller the value, the larger the false accept rate and the smaller the false rejection rate.

#### Anti-Spoofing Detection Threshold of Face with Mask

The larger the value, the smaller the false accept rate and the larger the false rejection rate of the face with mask. The smaller the value, the larger the false accept rate and the smaller the false rejection rate of the face with mask.

#### Lock Face for Anti-Spoofing Protection

After enabling this function, the device will lock automatically when anti-spoofing detection failed.

#### Lock Duration

The lock duration after enabling **Lock Face for Anti-Spoofing Protection** when antispoofing detection failed.

#### **Version Information**

You can view the device information.

## 7.12 Video Intercom

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

## **i**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 Sto call the client software.
- 6. Tap **Answer** on the pop-up page of the client software and you can start two-way audio between the device and the client software.

## iNote

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

## 7.12.2 Call Center from Device

#### Steps

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

## **i**Note

For details about adding device, see Add Device.

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

## iNote

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

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

## **i**Note

The device will call the main station in priority.

## 7.12.3 Call Device from Client Software

#### Steps

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

## **i**Note

For details about adding device, see Add Device.

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

## **i**Note

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

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

## 7.12.4 Call Room from Device

#### Steps

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

## iNote

For details about adding device, see Add Device.

- 5. Link a user to an indoor station and set a room No. for the indoor station.
- 6. Call the room.
  - If you have configured a specified room No. in the <u>Basic Settings</u>, you can tap **N** to call the room.
  - If you have not configured a specified room No. in the <u>Basic Settings</u>, you should tap C on the authentication page of the device. Enter the room No. on the dial page and tap C to call the room.
- **7.** After the indoor station answers the call, you can start two-way audio with the indoor station.

## 7.12.5 Call Mobile Client from Device

#### Steps

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

## **i**Note

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

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

# **Chapter 8 Quick Operation via Web Browser**

## 8.1 Time Settings

Click d in the top right of the web page to enter the wizard page.

#### **Device Time**

Display the device time in real time.

#### Time Zone

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

#### Time Synchronization Mode

#### 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.

#### DST

You can enable DST, set and view the DST start time, end time and bias time.

Click Next to save the settings and go to the next parameter. Or click Skip to skip time settings.

## 8.2 Privacy Settings

Set the picture uploading and storage parameters.

Click a in the top right of the web page to enter the wizard page. After setting device language and time, you can click **Next** to enter the **Privacy Settings** page.

## **Picture Uploading and Storage**

#### Save Picture When Authenticating

Save picture when authenticating automatically.

#### **Upload Picture When Authenticating**

Upload the pictures when authenticating to the platform automatically.

#### 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. Click **Next** to save the settings and go to the next parameters. Or click **Skip** to skip privacy settings.

## 8.3 Administrator Settings

#### Steps

- **1.** Click a in the top right of the web page to enter the wizard page. After previous settings, you can click **Next** to enter the **Administrator Settings** page.
- 2. Enter the employee ID and name of the administrator.
- **3.** Select a credential to add.
  - 1) Click Add Face to upload a face picture from local storage.

## **i**Note

The uploaded picture should be within 200 K, in JPG、 JPEG、 PNG format.

2) Click Add Card to enter the Card No. and select the property of the card.

## **i**Note

Up to 5 cards can be supported.

3) Click Add Fingerprint to add fingerprints.

**i**Note

Up to 10 fingerprints are allowed.

Click **Complete** to complete the settings.

## 8.4 No. and System Network

#### Steps

- **1.** Click a in the top right of the web page to enter the wizard page. After previous settings, you can click **Next** to enter the **No. and System Network** settings page.
- 2. Set the device type.

If you set the device type as **Door Station** or **Access Control Device**, you can set the floor No., No., and click **More** to set **Community No.**, **Building No.**, and **Unit No.** 

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

#### Device Type

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

#### Floor No.

Set the device installed floor No.

No.

Set the device No.

## iNote

The main door station No. is 0, and the sub door station No. ranges from 1 to 16.

### Community No.

Set the device community No.

## Building No.

Set the device building No.

## Unit No.

Set the device unit No.

3. Click Complete to save the settings.

# **Chapter 9 Operation via Web Browser**

## 9.1 Login

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

## **i**Note

Make sure the device is activated.

### Login via Web Browser

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

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

## Login via Remote Configuration of Client Software

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

## 9.2 Forgot Password

If you forget the device password, you can change the device password via security questions.

#### Steps

## iNote

You can change the device password via PC web.

1. ClickForgot Password on the login page.

- 2. Select the verification method.
- 3. Answer the reserved security questions.

## **i**Note

The answers are configured when you first activate the device.

**4.** Create a new password and confirm the password.

5. Click Next to save the settings.

## 9.3 Live View

You can view the live video of the device, real-time event, person information, network status, basic information, and device capacity.

Function Descriptions:

#### Door Status

Click 🕑 to view the device live view.

Set the volume when starting live view.

## iNote

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

Ø

You can capture image when starting live view.

9 **9** 

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

**8**3

Full screen view.

The door status is open/closed/remaining open/remaining closed.

## **Controlled Status**

You can select open/closed/remaining open/remaining closed status according to your actual needs.

#### **Real-Time Event**

You can view the event Employee ID, Name, Card No., Event Type, Time, and Operation. You can also click **View More** to enter the search conditions, including the event type, employee ID, the name, the card No., the time, the unit, the temperature and the temperature exception. Click **Search**. The results will be displayed on the right panel.

## Person Information

You can view the added and not added information of person face and card.

#### **Network Status**

You can view the connected and registered status of wired network, wireless network, ISUP and cloud service.

## **Basic Information**

You can view the model, serial No. and firmware version.

## **Device Capacity**

You can view the Person, Face, Card and Event capacity.

## View More

You can click **View More** to view the device name, device No., language, model, serial No., version, number of channels, IO input, IO output, lock, alarm input, alarm output, and device capacity, etc.

## 9.4 Person Management

Click **Add** to add the person's information, including the basic information, certificate, authentication and settings.

### Add Basic Information

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

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

If you select **Visitor** as the person type, you can set the visit times.

Click **Save** to save the settings.

#### **Set Permission Time**

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

Enable Long-Term Effective User, or set Start Time and End Time. If you select Visitor as the person type, you also can set the visit times. If you select Normal User as the person type, you also can enable and set him or her as administrator.

Click Save to save the settings.

## Set Certificate Configuration

#### Add Card

Click **Person Management** → Add → +Add Card to set Card No. and select the **Property**, and click **OK** to add the card.

#### Add Fingerprint

Click **Person Management**  $\rightarrow$  **Add**  $\rightarrow$  **+Add Fingerprint** and press your finger on the fingerprint module of the device to add your fingerprint.

## **i**Note

Only devices supporting the fingerprint function can add the fingerprint.

#### Add Face Picture

Click **Person Management**  $\rightarrow$  **Add**  $\rightarrow$  **Upload** to upload a face picture from the local PC.

## **i**Note

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

## Authentication Settings

Click **Person Management** → **Add** to enter the Add Person page. Set the authentication type. Click **Save** to save the settings.

## 9.5 Search Event

Click Event Search to enter the Search page.

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

The results will be displayed on the right panel.

## 9.6 Configuration

## 9.6.1 Set Local Parameters

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

### **Set Live View Parameters**

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

## Set Record File Saving Path

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

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

## Set Captured Pictures Saving Path

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

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

## 9.6.2 View Device Information

View the device name, device No., language, model, serial No., version, number of channels, IO input, IO output, lock, alarm input, alarm output, and device capacity, etc.

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

You can view and edit the device name and the device language.

You can view the model, serial No., version, cameras, IO input, IO output, lock, RS-485, alarm input, alarm output, and device capacity, etc.

## 9.6.3 Set Time

Set the device's time zone, synchronization mode, server address, NTP port, and interval.

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

#### Device Time

Display the device time in real time.

#### Time Zone

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

#### Time Synchronization Mode

#### 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.

#### DST

You can enable DST, set and view the DST start time, end time and bias time.

## 9.6.4 Change Administrator's Password

#### Steps

#### 1. Click Configuration → User Management .

- **2.** Click 🕜 .
- **3.** Enter the old password and create a new password.
- 4. Confirm the new password.
- 5. Click Save.

# Caution

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

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

### 9.6.5 View Device Arming/Disarming Information

View device arming type and arming IP address.

Click Configuration  $\rightarrow$  System  $\rightarrow$  User Management  $\rightarrow$  Arming/Disarming Information . You can view the device arming/disarming information. Click **Refresh** to refresh the page.

#### 9.6.6 Network Settings

Set TCP/IP, port parameters, platform access, ISUP and SDK server.

## **i**Note

Refer to the actual products when configuration.

#### Set Basic Network Parameters

#### Click Configuration → Network → Network Settings → TCP/IP .

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

#### NIC Type

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

#### DHCP

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

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

#### **DNS Server**

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

#### Set Wi-Fi Parameters

Set the Wi-Fi parameters for device wireless connection.

#### Steps

## **i**Note

The function should be supported by the device.

**1.** Click Configuration  $\rightarrow$  Network  $\rightarrow$  Network Settings  $\rightarrow$  Wi-Fi .

- 2. Check Wi-Fi.
- 3. Select a Wi-Fi
  - Click **Connect** of a Wi-Fi in the list and enter the password.
  - Click Manual Add and enter SSID and select the security mode. Click OK. Click Connect.
- 4. Optional: Set the WLAN parameters.
  - 1) Set the IP address, subnet mask, default gateway and DNS server address. Or enable **DHCP** and the system will allocate the IP address, subnet mask, default gateway and DNS server address automatically.
- 5. Click Save.

### **Set Port Parameters**

Set the HTTP, HTTPS, HTTP Listening, RTSP and Server port parameters.

#### Click Configuration → Network → Network Service → HTTP(S).

#### 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.

#### HTTPS

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

#### **HTTP Listening**

The device can send alarm information to the event alarm IP address or domain name via HTTP protocol/HTTPS protocol. Edit the event alarm IP address or domain name, URL, port, and protocol.

You can also click **Default** to reset the HTTP parameters.

## **i**Note

The event alarm IP address or domain name should support the HTTP protocol/HTTPS protocol to receive the alarm information.

#### RTSP

#### $Click \text{ Configuration} \rightarrow Network \rightarrow Network \text{ Service} \rightarrow RTSP .$

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

## **Platform Access**

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

#### Steps

### **i** Note

Parts of the device models supports function. Refers to the actual device for details.

**1.** Click **Configuration** → **Network** → **Device Access** → **Hik-Connect** to enter the settings page.

## iNote

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.

- 2. Check Enable to enable the function.
- 3. Optional: Check the checkbox of Custom, and you can set the server address by yourself.
- **4.** Enter the verification code.
- **5.** Check **Enable** to enable video encryption. Set the video encryption password and confirm password.
- 6. Click More and enable Allow Access behind Wired Network to adjust the network priority.
- **7.** Click **View** to view device QR code. Scan the QR code to bind the account.

## iNote

8 to 32 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.

8. 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 → Device Access → ISUP .

- 2. Check Enable.
- **3.** Select the ISUP version and Server IP Address, Port, Device ID, and you can view the Register status.

## iNote

If you select 5.0 as the version, you should set the Encryption Key and Network Connection Priority as well. You can click **More** and check **WLAN** or **Wired Network** to adjust the network priority.

**4.** Set the ISUP listening parameters, including ISUP alarm center IP address/domain name, ISUP alarm center URL, and ISUP alarm center port.

5. Click Save.

## 9.6.7 Set Video and Audio Parameters

Set the image quality and resolution.

### Set Video Parameters

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

Set the camera name, stream type, video type, resolution, bit rate type, Max. bit rate and I Frame Interval.

Click Save to save the settings after the configuration.

## **i**Note

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

## **Set Audio Parameters**

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

Set the audio stream type, input volume, and output volume. Check **Enable Voice Prompt** according to your needs.

## 9.6.8 Set Image Parameters

You can adjust the image parameters, video parameters, supplement light parameters, beauty parameters, enable WDR and set capture interval.

#### Steps

- 1. Click Configuration → Image .
- 2. Configure the parameters to adjust the image.

#### Image Adjustment

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

#### Video Adjustment (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.

#### LED Light

Set the supplement light type and mode. You can also set the brightness.

#### Beauty

Set whiten and smooth value for the face appeared on the device live view page.

#### Backlight

Enable or disable WDR.

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.

#### Start All Recording

You can click  $\odot$  to record when starting live view.

#### **Capture Interval**

You can click 🛅 to capture image when starting live view.

#### Full Screen

You can click 🐼 for full screen view.

3. Click Restore Default Settings to restore the parameters to the default settings.

## 9.6.9 Access Control Settings

### **Set Authentication Parameters**

#### $\mathsf{Click} \ \mathbf{Configuration} \ \textbf{\rightarrow} \ \mathbf{Access} \ \mathbf{Control} \ \textbf{\rightarrow} \ \mathbf{Authentication} \ \mathbf{Settings} \ .$

## **i**Note

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

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

If select Terminal 1:

#### Terminal/Terminal Type/Terminal Model

Select terminal and get the terminal description. They are read-only.

#### **Enable Authentication Device**

Enable the authentication 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.

#### **Tampering Detection**

Enable the anti-tamper detection for the card reader.

#### Card No. Reversing

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

#### If select Terminal 2:

#### Terminal/Terminal Type/Terminal Model

Select terminal and get the terminal description. They are read-only.

#### **Enable Authentication Device**

Enable the authentication 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.

#### 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.

#### **Tampering Detection**

Enable the anti-tamper detection for the card reader.

### **Set Door Parameters**

#### Click Configuration $\rightarrow$ Access Control $\rightarrow$ Door Parameters .

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

#### Door 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 Magnetic Sensor Type**

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

#### **Exit Button Type**

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

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

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

#### **Extended Open Duration**

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

#### Door Remain Open Duration with First Person

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

#### **Duress Code**

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

#### Super Password

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

## **i**Note

The duress code and the super code should be different.

### Set RS-485 Parameters

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

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

You can view the default RS-485 protocol, baud rate, date bit, stop bit, parity, flow control and communication mode.

Check Enable, and set the parameters.

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

#### **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**.

#### **RS-485 Address**

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

# iNote

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.

#### **Set Wiegand Parameters**

You can set the Wiegand transmission direction.

#### Steps

## iNote

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

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

- 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.

## **i**Note

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

### **Set Terminal Parameters**

You can set terminal parameters for accessing.

Click Configuration  $\rightarrow$  Access Control  $\rightarrow$  Terminal Parameters .

You can set Working Mode as Permission Free Mode or Access Control Mode.

#### **Permission Free Mode**

The device only judge your credential is in the valid duration, and will not authenticate the permission.

#### **Access Control Mode**

The access control mode is the device normal mode. You should authenticate your credential for accessing.

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

## 9.6.10 Video Intercom Settings

#### Set Video Intercom Parameters

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

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

If set the device type as **Door Station** or **Access Control Device**, you can set the floor No. and No., and click **More** to set **Community No.**, **Building No.**, and **Unit No.** 

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

#### Device Type

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

## **i**Note

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

#### Floor No.

Set the device installed floor No.

#### No.

Set the device No.

## **i**Note

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

#### Community No.

Set the device community No.

#### **Building No.**

Set the device building No.

#### Unit No.

Set the device unit No.

## iNote

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

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

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

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

## iNote

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

#### Community No.

Set the device community No.

#### **Configure SIP Parameters**

Set the device's IP address and the SIP server's IP address. After setting the parameters, you can communicate among the access control device, door station, indoor station, main station, and the platform.

## iNote

Only the access control device and other devices or systems (such as door station, indoor station, main station, platform) are in the same IP segment, the two-way audio can be performed.

#### Go to Configuration $\rightarrow$ Intercom $\rightarrow$ Linked Network Settings .

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

Click Save.

## **Press Button to Call**

#### Steps

- **1.** Click **Configuration** → **Intercom** → **Press Button to Call** to enter the settings page.
- 2. Check Call Indoor Station, Call Specified Indoor Station, Call Management Center or APP at your needs.

iNote

If you check **Call Specified Indoor Station**, you need to enter the number of the indoor station. **3.** Click **Save**.

## 9.6.11 Card Settings

### Set Card Security

Click Configuration  $\rightarrow$  Card Settings  $\rightarrow$  Card Type to enter the settings page.

Set the parameters and click **Save**.

#### Enable NFC Card

Reserved.

#### 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.

## **i**Note

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

#### **Enable DESFire Card**

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

#### **DESFire Card Read Content**

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

#### Enable FeliCa Card

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

### Set Card No. Authentication Parameters

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

```
Go to Configuration \rightarrow Card Settings \rightarrow Card No. Authentication Settings .
```

Select a card authentication mode and click Save.

#### Full Card No.

All card No. will be read.

#### Wiegand 26 (3 bytes)

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

#### Wiegand 34 (4 bytes)

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

## 9.6.12 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.

## 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 → T&A Status to enter the settings page.
- 2. Enable Time and Attendance.
- 3. Set the Attendance Mode as Manual.
- 4. Enable the Attendance Status Required and set the attendance status lasts duration.
- 5. Enable On/Off work, and set Custom Name of Check In/Out.
- 6. Enable Break, and set Custom Name for Break Out/In.
- 7. Enable Overtime, and set Custom Name for Overtime Out/In.
- 8. Click Save to finish settings.

### 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** → **T&A Status** to enter the settings page.
- 2. Set the Attendance Mode as Auto.
- 3. Enable the Attendance Status Required function.
- 4. Enable a group of attendance status.

## **i**Note

The Attendance Property will not be changed.

- 5. Optional: Select an status and change its name if required.
- 6. Set the status' schedule.

#### 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 → T&A Status to enter the settings page.
- 2. Set the Attendance Mode as Manual and Auto.
- 3. Enable the Attendance Status Required function.
- 4. Enable a group of attendance status.

## iNote

- The Attendance Property will not be changed.
- 5. Optional: Select an status and change its name if required.
- 6. Set the status' 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.

### 9.6.13 Set Privacy Parameters

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

#### Go to Configuration → Security → Privacy Settings

### **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, and Employee ID, to display the authentication result.

#### Name De-identification

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

#### Authentication Result Display Duration

You can set authentication result display duration.

## Picture Uploading and Storage

#### Save Picture When Authenticating

Save picture when authenticating automatically.

#### **Upload Picture When Authenticating**

Upload the pictures when authenticating to the platform automatically.

#### Save Registered Picture

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

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

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

#### Save Pictures After Linked Capture

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

### **Clear All Pictures in Device**

### **i**Note

All pictures cannot be restored once they are deleted.

#### **Clear Registered Face Pictures**

All registered pictures in the device will be deleted.

#### **Clear Captured Pictures**

All captured pictures in the device will be deleted.

### 9.6.14 Set Biometric Parameters

#### **Set Basic Parameters**

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

## iNote

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

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

#### Face Anti-spoofing

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

## **i**Note

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

#### **Anti-spoofing Detection Level**

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

#### **Recognition Distance**

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

#### **Pitch Angle**

The maximum pitch angle when starting face authentication.

#### Yaw Angle

The maximum yaw angle when starting face authentication.

#### Face Picture Quality Grade for Applying

Set the face picture's grade.

#### 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.

#### **Fingerprint Security Level**

According to the actual situation, select the level.

#### 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 Threshold

The larger the value, the device enter the ECO Mode easier.

#### ECO Mode (1:1) Threshold

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) Threshold

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 without mask detection, the system will recognize the captured face with mask picture or not. You can set face with mask1:N matching threshold, it's ECO mode, and the strategy.

#### None

The function is disabled. The device will not detect whether a person is wearing a face mask or not.

#### Reminder of Wearing Face Mask

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

#### Must Wear Face Mask

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

#### Face with Mask & Face (1:1)

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

#### Face with Mask 1:N Match Threshold

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

#### Face with Mask & Face 1:1 Match Threshold (ECO)

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

#### Face with Mask & Face 1:N Match Threshold (ECO)

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

#### **Enable Hard Hat Detection**

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

#### None

The function is disabled. The device will not detect whether a person is wearing a hard hat or not.

#### **Reminder of Wearing**

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

#### **Must Wear**

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

#### Set Recognition Area

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

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

Or drag the block of each parameter to set the area.

#### Click Save.

Click o or 💿 , or 🔀 to capture pictures, record videos, and view full screen live video.

## 9.6.15 Preference Settings

Set the theme, notice publication, prompt schedule, custom prompt, and authentication result text.

## Set Screen Display

You can set the display theme and the sleep time for the device.

#### Click Configuration → Preference → Screen Display .

#### Sleep

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

#### **Display Theme**

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

### **Notice Publication**

You can set the notice publication for the device.

#### Click Configuration $\rightarrow$ Preference $\rightarrow$ Notice Publication .

#### **Theme Management**

Click **Media Library Management**  $\rightarrow$  + to upload the picture from the local PC.

You can click +, and set **Name** and **Type** to create a theme. After creating the theme, click + in the **Theme Management** panel to select pictures in the media library. Click **OK** to add pictures to the theme.

#### Schedule Management

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

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

#### Slide Show Interval

Enter a number to set the slide show interval. The picture will be changed according to the interval.

## Set Prompt Schedule

Customize the output audio content when authentication succeeded and failed.

#### Steps

- 1. Click Configuration → Preference → Prompt Schedule .
- 2. Enable the function.
- 3. Set the appellation.
- 4. Select time schedule.
- 5. Set the time period when authentication succeeded.
- 1) Click Add Time Duration.
  - 2) Set the time duration.

## **i**Note

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

- 3) Set the audio prompt content.
- 4) **Optional:** Repeat substep 1 to 3.
- 5) **Optional:** Click fit to delete the configured time duration.
- 6. Set the time duration when authentication failed.
  - 1) Click Add Time Duration.
  - 2) Set the time duration.

## **i**Note

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

- 3) Set the audio content.
- 4) Optional: Repeat substep 1 to 3.
- 5) **Optional:** Click fit to delete the configured time duration.
- 7. Click Save to save the settings.

## **Customize Prompt Voice**

You can customize prompt voices for the device.

#### Steps

#### 1. Click Configuration → Preference → Custom Prompt .

**2.** Click  $\blacksquare \rightarrow \square$  and import audio file from local PC according to your actual needs.

## **i**Note

The uploaded audio file should be less than 512 kb, in WAV format.

## **Configure Authentication Result Text**

#### Steps

**1.** Go to **Configuration**  $\rightarrow$  **Preference**  $\rightarrow$  **Authentication Result Text**.

- 2. Enable Customize Authentication Result Text.
- **3.** Enter custom texts.
- 4. Click Save.

### 9.6.16 Upgrade and Maintenance

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

#### **Reboot Device**

#### Click Maintenance and Security → Maintenance → Restart .

Click **Restart** to reboot the device.

#### Upgrade

#### $Click \text{ Maintenance and Security} \rightarrow Maintenance \rightarrow Upgrade .$

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

If the device has been connected to Hik-Connect and network, when there is a new installation package in Hik-Connect, you can click **Upgrade** after Online Update to upgrade the device system.

## **i**Note

Do not power off during the upgrading.

#### **Restore Parameters**

#### Click Maintenance and Security → Maintenance → Backup and Reset .

#### **Restore All**

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

#### Restore

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

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

#### $\mathsf{Click}\ \mathbf{Maintenance}\ \mathbf{and}\ \mathbf{Security}\ \boldsymbol{\rightarrow}\ \mathbf{Maintenance}\ \boldsymbol{\rightarrow}\ \mathbf{Backup}\ \mathbf{and}\ \mathbf{Reset}\ .$

#### Export

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

**i**Note

You can import the exported device parameters to another device.

#### Import

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

## **Advanced Settings**

Click Advanced Settings, and enter the admin password.

#### **Face Parameter**

#### **Custom Anti-spoofing Detection**

#### **Anti-spoofing Detection Level**

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

#### **Anti-Spoofing Detection Threshold**

The larger the value, the smaller the false accept rate and the larger the false rejection rate. The smaller the value, the larger the false accept rate and the smaller the false rejection rate.

#### Lock Face for Anti-spoofing Protection

After enabling this function, the device will lock automatically when anti-spoofing detection failed.

#### Lock Duration

The lock duration after enabling **Lock Face for Anti-spoofing Protection** when anti-spoofing detection failed.

#### Unlock

You can click **Unlock** according to your needs.

#### **Version Information**

You can view the device information.

#### 9.6.17 Device Debugging

You can set device debugging parameters.

#### Steps

#### **1.** Click Maintenance and Security → Maintenance → Device Debugging .

**2.** You can set the following parameters.

#### Enable SSH

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

#### Print Log

You can click **Export** to export log.

#### **Capture Network Packet**

You can set the Capture Packet Duration, Capture Packet Size, and click Start to capture.

## 9.6.18 Log Query

You can search and view the device logs.

#### Go to Maintenance and Security $\rightarrow$ Maintenance $\rightarrow$ Log .

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.

## 9.6.19 Security Mode Settings

Set the security mode for logging in the client software.

On the Device for Management page, click **Maintenance and Security**  $\rightarrow$  **Security**  $\rightarrow$  **Security Service** .

Select a security mode, 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.

#### 9.6.20 Certificate Management

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

## ∎Note

The function is only supported by certain device models.

## **Create and Import HTTPS Certificate**

#### Steps

- **1.** Go to Maintenance and Security → Security → Certificate Management .
- 2. In the HTTPS Certificate area, click Create Certificate Request.
- 3. Input certificate information and click Save.
  - Click View and the created certificate will be displayed.
  - The certificate will be saved automatically.
- **4.** Download the certificate and save it to an asking file in the local computer.
- **5.** Send the asking file to a certification authority for signature.

- **6.** Import the signed certificate.
  - 1) In the Import Key area, select a certificate from the local, and click Import.
  - 2) In the **Import Communication Certificate** area, select a certificate from the local, and click **Import**.

### Create and Import SYSLOG Certificate

#### Steps

**1.** Go to Maintenance and Security → Security → Certificate Management .

- 2. In the SYSLOG Certificate area, click Create Certificate Request.
- 3. Input certificate information and click Save.
  - Click View and the created certificate will be displayed.
  - The certificate will be saved automatically.
- **4.** Download the certificate and save it to an asking file in the local computer.
- 5. Send the asking file to a certification authority for signature.
- 6. Import the signed certificate.
  - 1) In the Import Key area, select a certificate from the local, and click Import.
  - 2) In the **Import Communication Certificate** area, select a certificate from the local, and click **Import**.

## Import CA Certificate

#### **Before You Start**

Prepare a CA certificate in advance.

#### Steps

- **1.** Go to Maintenance and Security → Security → Certificate Management .
- 2. Create an ID in the CA Certificate ID area.

## **i**Note

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

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

# **Chapter 10 Other Platforms to Configure**

You can also configure the device via iVMS-4200 Client Software or HikCentral Access Control. For details, see the platforms' user manual.

#### iVMS-4200 Client Software

Click/tap the link to view the client software's user manual.

http://enpinfodata.hikvision.com/analysisQR/showQR/ca930247

#### **HikCentral Access Control (HCAC)**

Click/tap the link to view the HCAC's user manual.

http://enpinfodata.hikvision.com/analysisQR/showQR/f2f6cf42

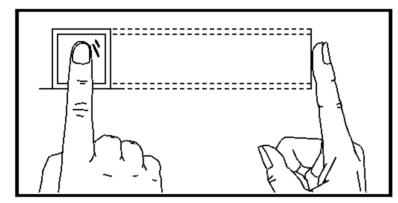
# **Appendix A. Tips for Scanning Fingerprint**

#### **Recommended Finger**

Forefinger, middle finger or the third finger.

#### **Correct Scanning**

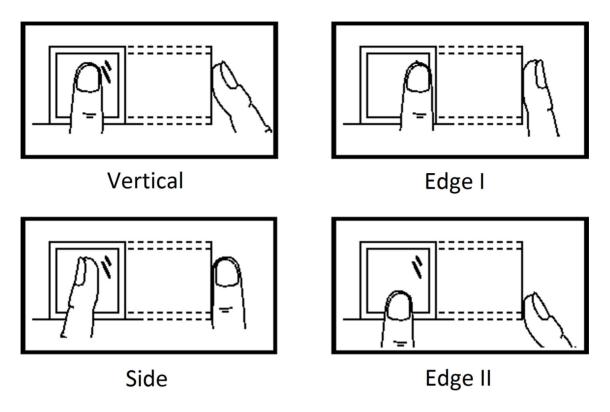
The figure displayed below is the correct way to scan your finger:



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

#### **Incorrect Scanning**

The figures of scanning fingerprint displayed below are incorrect:



### Environment

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

## Others

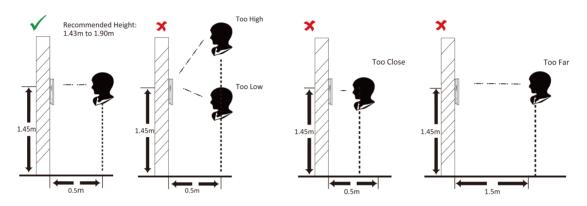
If your fingerprint is shallow, or it is hard to scan your fingerprint, we recommend you to use other authentication methods.

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

# Appendix B. Tips When Collecting/Comparing Face Picture

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

### Positions (Recommended Distance: 0.5 m)



### Expression

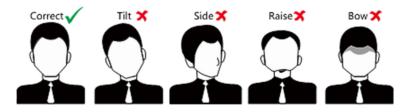
• Keep your expression naturally when collecting or comparing face pictures, just like the expression in the picture below.



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

#### Posture

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



## Size

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



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

1. Light Source Illumination Reference Value



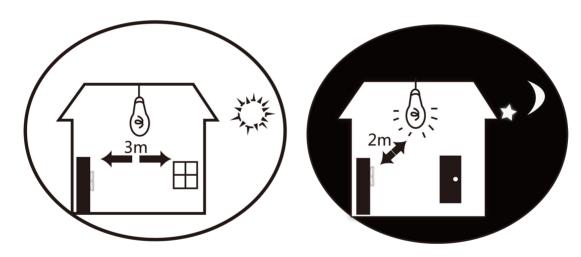
Candle: 10Lux

Bulb: 100~850Lux

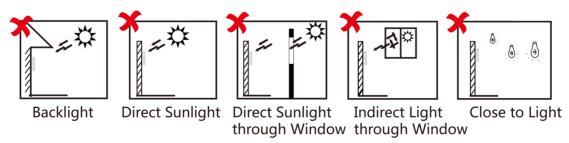


Sunlight: More than 1200Lux

2. 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 D. Dimension**

