

# **DS-K3G501** Series Tripod Turnstile

**Quick Start Guide** 

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# **Regulatory Information**

#### **FCC Information**

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

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

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

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

**FCC Conditions** 

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

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

### **EU Conformity Statement**



This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed

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

# **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.

<u>^</u>	<u>^</u>
<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.

### ♠ 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.

If the top caps should be open and the device should be powered on for maintenance, make sure:

- 1. Power off the fan to prevent the operator from getting injured accidentally.
- 2. Do not touch bare high-voltage components.
- 3. Make sure the switch's wiring sequence is correct after maintenance.
- Please make sure that the power has been disconnected before you wire, install or dismantle the
  device.
- When the product is installed on wall or ceiling, the device shall be firmly fixed.
- If smoke, odors or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.
- Do not ingest battery, Chemical Burn Hazard.
  - This product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
  - Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.
- If the product does not work properly, please contact your dealer or the nearest service center. Never attempt to disassemble the device yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)

### **⚠** Cautions:

- Stainless steel may be corroded in some circumstances. You need to clean and care the device by using the stainless steel cleaner. It is suggested to clean the device every month.
- Do not drop the device or subject it to physical shock, and do not expose it to high electromagnetism radiation. Avoid the equipment installation on vibrations surface or places subject to shock (ignorance can cause equipment damage).
- Do not place the device in extremely hot (refer to the specification of the device for the detailed operating temperature), cold, dusty or damp locations, and do not expose it to high electromagnetic radiation.
- The device cover for indoor use shall be kept from rain and moisture.
- Exposing the equipment to direct sun light, low ventilation or heat source such as heater or radiator is forbidden (ignorance can cause fire danger).
- Do not aim the device at the sun or extra bright places. A blooming or smear may occur otherwise (which is not a malfunction however), and affecting the endurance of sensor at the same time.
- Please use the provided glove when open up the device cover, avoid direct contact with the device cover, because the acidic sweat of the fingers may erode the surface coating of the device cover.
- Please use a soft and dry cloth when clean inside and outside surfaces of the device cover, do not use alkaline detergents.
- Please keep all wrappers after unpack them for future use. In case of any failure occurred, you
  need to return the device to the factory with the original wrapper. Transportation without the
  original wrapper may result in damage on the device and lead to additional costs.
- Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.
- Biometric recognition products are not 100% applicable to anti-spoofing environments. If you require a higher security level, use multiple authentication modes.
- Do not stay in the lane when the device is rebooting.
- RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.
- SUITABLE FOR MOUNTING ON CONCRETE OR OTHER NON-COMBUSTIBLE SURFACE ONLY.
- The instructions shall require connection of the equipment protective earthing conductor to the installation protective earthing conductor.

# **Available Models**

Product Name	Model
Tripod Turnstile	DS-K3G501

Scan the QR code to get User Manual of Tripod Turnstile. Note that mobile data charges may apply if Wi-Fi is unavailable.



Figure 1-1 QR Code

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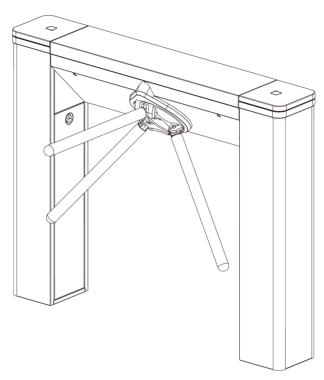
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# **Chapter 1 Overview**

### 1.1 Introduction



The tripod turnstile is designed to detect unauthorized entrance or exit. By adopting the turnstile integratedly with the access control system, person should authenticate to pass through the lane via swiping IC or ID card, scanning QR code, etc. It is widely used in attractions, stadiums, construction sites, residences, etc.

#### 1.2 Main Features

- 32-bit high-speed processor
- TCP/IP network communication
   The communication data is specially encrypted to relieve the concern of privacy leak
- Remaining open/closed mode selectable
- Bidirectional (Entering/Exiting) lane
   The barrier opening and closing speed can be configured according to the visitor flow
- Self-detection, Self-diagnostics, and automatic alarm
- Remote control and management
- Online/offline operation
- LED indicates the entrance/exit and passing status

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- Barrier is in free status when powered down. People can pass through the lane along single/both singe and double directions
- Fire alarm passing When the fire alarm is triggered, the barrier will be dropped down automatically for emergency evacuation
- Valid passing duration settings
   System will cancel the passing permission if a person does not pass through the lane within the valid passing duration
- Opens/Closes barrier according to the schedule template
- Up to 3000 visitor cards and up to 60,000 cards except for visitor cards can be added
- Up to 180,000 presenting card events can be recorded
- Adjustable strip light brightness

# **Chapter 2 Installation**

### 2.1 Disassemble Pedestals

Before installation, you should use the key to open the pedestals.

View the pictures below to find the lock holes.

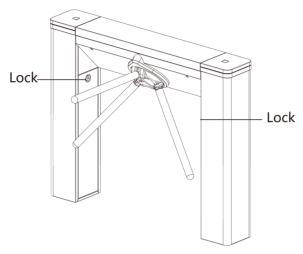


Figure 2-1 Lock Holes

### 2.2 Install Pedestals

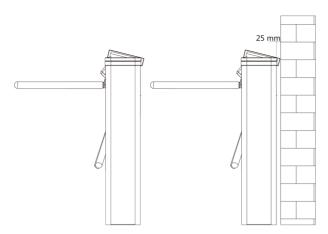
#### **Before You Start**

Prepare for the installation tools, check the device and the accessories, and clear the installation base.

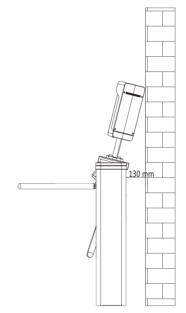
### **Steps**



- The device should be installed on the concrete surface or other non-flammable surfaces.
- No face recognition terminal installed: If the installation area is too close to the wall, make sure the distance between the pedestal and the wall should be more than 25 mm, or you cannot open the pedestal's top panel.



Face recognition terminal installed: If the installation area is too close to the wall, make sure the distance between the pedestal and the wall should be more than 130 mm, or you cannot open the pedestal's top panel.



• The dimension is as follows.

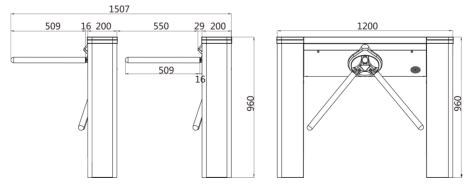


Figure 2-2 Dimension

- 1. Prepare for the installation tools, check the components, and prepare for the installation base.
- 2. Draw a central line on the installation surface of the left or right pedestal.
- 3. Draw other parallel lines for installing the other pedestals.

# **i**Note

The distance between the nearest two line is L+200 mm. L represents the lane width.

- **4.** Drill holes on the ground according to the installation holes on the pedestals and insert the expansion sleeves.
- **5.** Seal the bottom of the turnstile to avoid water from entering.

### iNote

Make sure the installation holes on the pedestals and the base are aligned with each other.

6. Secure the pedestals with expansion bolts.

# **i** Note

- Do not immerse the pedestal in the water. In special circumstances, the immersed height should be no more than 690 mm.
- The installation footprint is as follows:

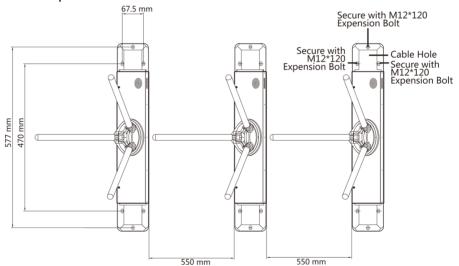


Figure 2-3 Installation Footprint

# **Chapter 3 Wiring**

### 3.1 Components Introduction

By default, basic components of the turnstile are connected well. The turnstile supports wiring the AC electric supply for the whole system's power supply.



The voltage fluctuation of the electric supply is between 100 VAC and 220 VAC, 50 to 60 Hz.

The picture displayed below describes each component's position on the turnstile.

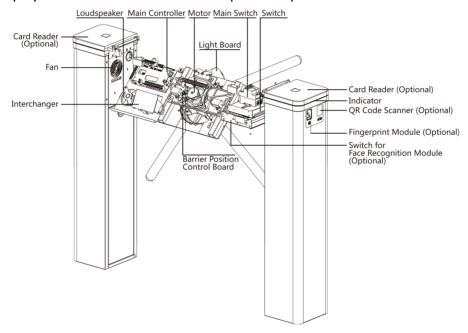
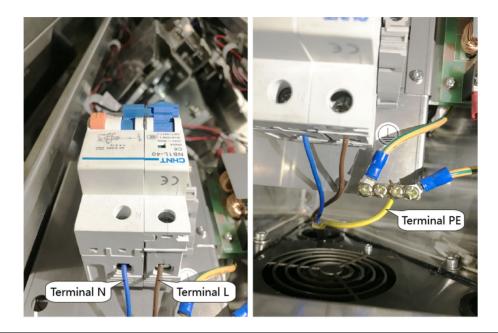


Figure 3-1 Components Diagram 1

# 3.2 Wiring Electric Supply

Wire electric supply with the switch in the pedestal. Terminal L and terminal N are on the switch, while terminal PE should connect to a ground wire (yellow and green wire).



# **i**Note

- The cable bare part should be no more than 8 mm. If possible, wear an insulation cap at the end of the bare cable. Make sure there's no bare copper or cable after the wiring.
- The Terminal L and the Terminal N cannot be wired reversely. Do not wire the input and output terminal reversely.
- To avoid people injury and device damage, when testing, the ground resistance of the equipotential points should not be larger than 2  $\Omega_\circ$

### 3.3 General Wiring

The picture displayed below describes the interconnecting cable's wiring diagram.

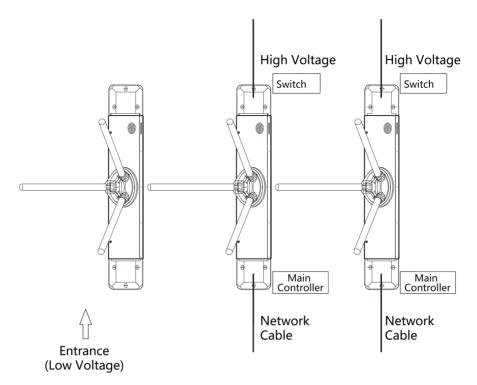


Figure 3-2 Wire General Device



- The suggested inner diameter of the low voltage conduit is larger than 30 mm.
- If the face recognition module are required to be connected on the left lane, you should increase the conduit diameter or bury another conduit for the external cables.
- You should bury one network cable and one high voltage conduit for the right and middle lane.
- The network cable must be CAT5e or the network cable has better performance. And the suggested network cable length should be less than 100 m.

### 3.4 Terminal Description

### 3.4.1 Main Control Board Terminal and BUS Description

### **Main Control Board Terminal Description**

You can view the main control board's terminals.

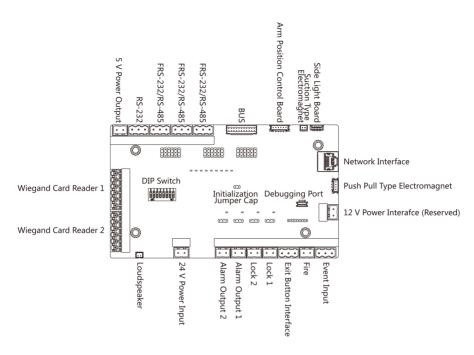


Figure 3-3 Main Control Board Diagram

**Table 3-1 Table of Main Control Board Terminal Description** 

	Main Con	trol Board Terminal Description
24 V Power Input	+24 V	Power Input
	GND	Grounding
Wiegand Card Reader 1	ОК	Indicator of Card Reader Control Output (Invalid Card Output)
	ERR	Indicator of Card Reader Control Output (Valid Card Output)
	BZ	Card Reader Buzzer Control Output
	W1	Wiegand Head Read Data Input Data1
	W0	Wiegand Head Read Data Input Data0
	GND	Grounding
Wiegand Card Reader 2	ОК	Indicator of Card Reader Control Output (Invalid Card Output)
	ERR	Indicator of Card Reader Control Output (Valid Card Output)
	BZ	Card Reader Buzzer Control Output
	W1	Wiegand Head Read Data Input Data1

Main Control Board Terminal Description			
	W0	Wiegand Head Read Data Input Data0	
	GND	Grounding	
RS-485 Interface (In	GND	Grounding	
the BUS)	RS-485 B-	Connect to Card Reader RS485-	
	RS-485 B+	Connect to Card Reader RS485+	
	GND	Grounding	
	RS-485 A-	Connect to Card Reader RS485-	
	RS-485 A+	Connect to Card Reader RS485+	
5 V Power Output	5 V	5 VDC Power Output	
	GND	5 VDC Grounding	
RS-232 Interface	GND	Grounding	
(QR Code Scanner Interface, Parts of	RS-232 G-	Connect to Card Reader RS232-	
Interfaces are in the	RS-232 G+	Connect to Card Reader RS232+	
BUS)	GND	Grounding	
	RS-232 H-	Connect to Card Reader RS232-	
	RS-232 H+	Connect to Card Reader RS232+	
Fire	XF	Connect to Fire Module	
	GND	Grounding	
Event Input	C1	Event Alarm Input 1	
	GND	Grounding	
	C2	Event Alarm Input 2	
Exit Button	K2	Door 2 Signal Input	
	GND	Grounding	
	K1	Door 1 Signal Input	
Door Lock	D1-	Door 1 Relay Output (Dry Contact)	
	D1+		
	D2-	Door 2 Relay Output (Dry Contact)	
	D2+		

	Main Control Board Terminal Description			
Alarm Output1/	NO/NC1	Alarm Output Relay 1 (Dry Contact)		
Alarm Output 2	COM1			
	NO/NC2	Alarm Output Relay 2 (Dry Contact)		
	COM2			
Network Interface	LAN	Network Accessing		

### **i**Note

- The alarm input hardware interface is normally open by default. So only the normally open signal is allowed. It can be linked to the buzzer of the card reader and access controller, and the alarm relay output and open door relay output.
- The DIP of RS485 card ID is set as 1 and 4 by default. 1 is for entering, and 4 is for exiting. Set the DIP as 3 for connecting visitor card reader.
- The Wiegand card reader 1 and 2 respectively refer to the entering and exiting card reader.
- The alarm output supports relay output.
- For detailed information about the DIP switch, see DIP Switch Description.

#### **BUS Description**

You can use the BUS to connect card reader, fingerprint module, etc.

**Table 3-2 Table of BUS Terminal Description** 

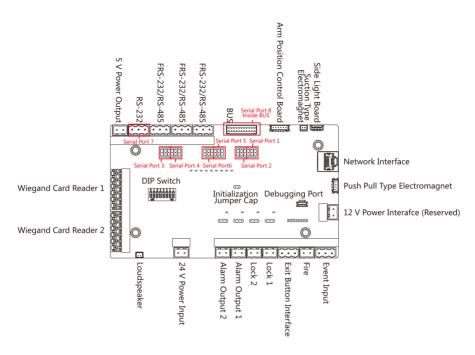
Terminal Group	Terminal Name	Color	Description
Fingerprint Module	5V	Red	5 V Power Terminal
Terminal Group	485/232+	Purple	Connect to Fingerprint Module RS-485+
	485/232-	Yellow	Connect to Fingerprint Module RS-485-
	GND	Black	Grounding
QR Code Scanner Terminal Group	5V	Red	5 V Power Terminal
	232+	Blue	Connect to QR Code Scanner RS-232+
	232-	Green	Connect to QR Code Scanner RS-232-
	GND	Black	Grounding
Tamper Terminal (Connected)	TAMPER	Brown	Tamper Terminal

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Terminal Group	Terminal Name	Color	Description
Fan Power Terminal	12_FS	Red	Connect to Fan
Group (Connected)	GND	Black	Grounding
Card Reader Terminal	12V	Red	12 V Power Terminal
Group (Entrance)	485/232+	Yellow	Connect to Card Reader RS-485+
	485/232-	Blue	Connect to Card Reader RS-485-
	GND	Black	Grounding
Card Reader Terminal Group (Exit)	12V	Red	12 V Power Terminal
	485/232+	Yellow	Connect to Card Reader RS-485+
	485/232-	Blue	Connect to Card Reader RS-485-
	GND	Black	Grounding
Light Board Terminal Group (Connected)	12V	Red	12 V Power Terminal
	485+	Yellow	Connect to Light Board RS-485+
	485-	Blue	Connect to Light Board RS-485-
	GND	Black	Grounding

### 3.4.2 Main Control Board Serial Port ID Description

You can use the jumper cap on the main control board to switch the interface communication mode. For details about switching between RS-232 and RS-485 communication type, see *Switching RS-485/RS-232 Mode*.



**Figure 3-4 Main Control Board** 

According to the picture above, the serial port 1 to 6 refers to the RS-485/RS-232 interface. You can use the jumper cap to change the communication type.

The main control board descriptions are as follows:

#### **Serial Port 1**

RS-485 communication interface. You can connect RS-485 card reader and so on.

#### **Serial Port 5 Jumper Cap**

Use the jumper cap to switch the serial port communication mode. You can switch between the RS-485 communication mode and the RS-232 communication mode. By default, it is in RS-485 communication mode.

#### **Serial Port 2**

RS-232 communication interface. You can connect the fingerprint and so on.

#### **Serial Port 3 Jumper Cap**

Use the jumper cap to switch the serial port communication mode. You can switch between the RS-232 communication mode and the RS-485 communication mode. By default, it is in RS-232 communication mode. Use the serial port to connect with fingerprint module.

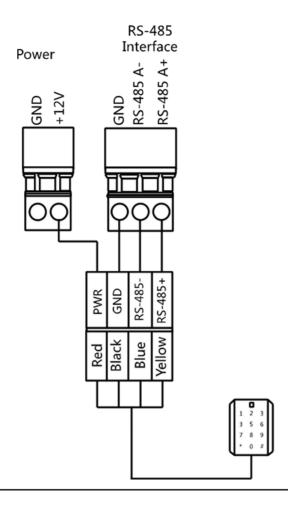
#### Serial Port 4/Serial Port 6 Jumper Cap

Use the jumper cap to switch the serial port communication mode. You can switch between the RS-484 communication mode and the RS-232 communication mode. By default, it is in RS-485 communication mode. Use the serial port to connect with face recognition module.

### Serial Port 7/Serial Port 8

The serial port has a fixed RS-232 communication mode. It has no jumper cap and cannot change the communication mode. It can connect QR code scanner.

### 3.4.3 RS-485 Wiring



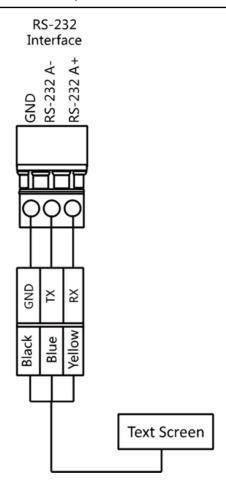
# Note

- There are four RS-485 interfaces, which are for connecting ID card reader, IC card reader, QR code scanner, fingerprint and card reader, card recycler, text screen, fingerprint reader, and face recognition terminal. Take the wiring of RS-485 card reader as an example.
- For details about text screen, see *Configuring Screen Parameters* in *User Manual of iVMS-4200 AC Client Software*.

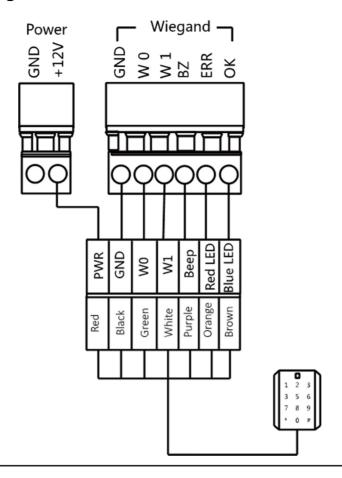
### 3.4.4 RS-232 Wiring

# **i**Note

- The RS-232 interfaces can connect QR code scanner, card recycler, and text screen.
- For details about text screen, see *Configuring Screen Parameters* in *User Manual of iVMS-4200 AC Client Software*.
- Take the wiring of text screen as an example.



### 3.4.5 Wiegand Wiring



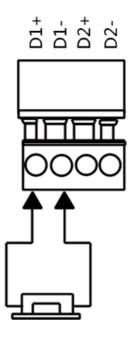
**i** Note

Connect the OK/ERR/BZ if the access controller should control the LED and buzzer of the Wiegand card reader.

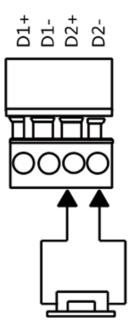
### 3.4.6 Barrier Control Wiring

By default, the barrier has connected with the main control board. If possible, the device can connect with a third party control board to control the third party barriers. Interface D1 controls barrier opening for entrance, while interface D2 controls barrier opening for exit.

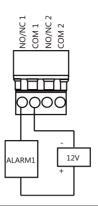
### **Entering Wiring**



### **Exiting Wiring**



### 3.4.7 Alarm Output Wiring



<u>i</u>Note

For details about changing the relay output status via the jumper cap, see **Alarm Relay Output Mode (NO/NC)** .

### 3.4.8 Fire Alarm Module Wiring

You can view the fire alarm module wiring diagram.

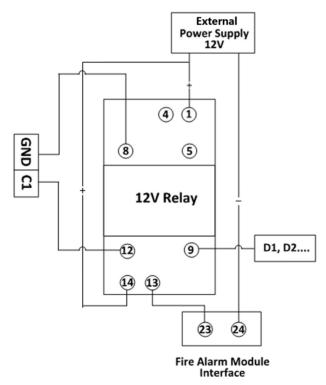


Figure 3-5 Fire Alarm Module Wiring

# **Chapter 4 Device Settings**

You can also set the turnstile to passing mode and memory mode, pair the keyfob, initialize the hardware, switching between RS-485 communication mode and RS-232 communication mode, and view relay output NO/NC diagram by setting the DIP switch on the main control board.

- Normal Mode: The device will work properly.
- Passing Mode: There are 9 passing modes, including controlled bi-direction, controlled entrance and prohibited exit, controlled entrance and free exit, free bi-direction, free entrance and controlled exit, free entrance and prohibited exit, prohibited bi-direction, prohibited entrance and free exit.
- Memory Mode: By default, the memory mode is enabled. When multiple cards are presented and authenticated, it allows multiple persons passing through the lane. When it counts the passing people number is equal to the card presented times, or no person passing through the lane after the last person passing, the barriers will be closed.



You can also set the DIP switch on the main control board to control the entrance and exit controlling type, keyfob pairing, etc. For details about the DIP switch value, see **DIP Switch**.

### 4.1 Pair Keyfob (Optional)

Pair the remote control to the device through DIP switch to open/close the barrier remotely.

### **Before You Start**

Ask our technique supports or sales and purchase the keyfob.

#### **Steps**

- **1.** Power off the turnstile.
- **2.** Set the No.4 switch of the 8-digit DIP Switch on the main control board according to the figure below.



- **3.** Power on the turnstile and it will enter the keyfob pairing mode.
- 4. Hold the Close button for more than 10 seconds.
  The keyfob's indicator of the will flash twice if the pairing is completed.
- **5.** Set the DIP switch as OFF, and reboot the turnstile to take effect.

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

- You can also pair the keyfob via the client software. For details, see *Managing Keyfob* in *User Manual of iVMS-4200 AC Client Software*.
- Only one turnstile can pair the keyfob. If multiple turnstiles are in the pairing mode, the keyfob will select only one of them to pair.
- For details about DIP switch value and meaning, see **DIP Switch**.

### 4.2 Initialize Device

#### **Steps**

1. Remove the jumper cap of initialization pin on the main control board.

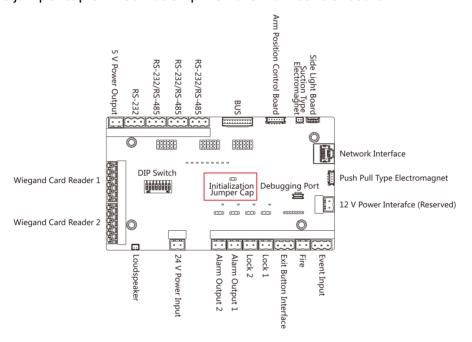


Figure 4-1 Initialization Jumper Cap

- 2. Disconnect the power and reboot the device. The device buzzer buzzes a long beep.
- **3.** When the beep stopped, plug the jumper cap back.
- 4. Disconnect the power and power on the device again.



The initialization of the device will restore all the parameters to the default setting and all the device events are deleted.

Note

Make sure no persons are in the lane when powering on the device.

### 4.3 Switch to RS-485/RS-232 Mode

Take the Serial Port 4 and on the main control board as an example. If the Jumper cap's position is like the picture displayed below. (The black part is the jumper cap.) The serial port is in RS-485 communication mode.

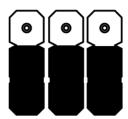


Figure 4-2 Jumper Cap Status of RS-485 Interface

If the Jumper cap's position is like the picture displayed below. (The black part is the jumper cap.) The serial port is in RS-232 communication mode.

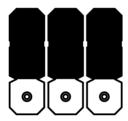


Figure 4-3 Jumper Cap Status of RS-232 Interface

### 4.4 Alarm Relay Output Mode (NO/NC)

Alarm Relay Output Mode (NO):



Alarm Relay Output Mode (NC):



# **Chapter 5 Activation**

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

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

The default values of the device are as follows:

• The default IP address: 192.0.0.64

The default port No.: 8000The default user name: admin

#### 5.1 Activate via SADP

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

#### **Before You Start**

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

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

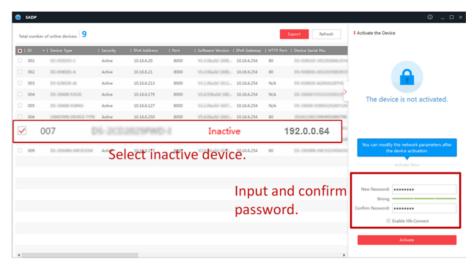
#### **Steps**

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



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

4. Click Activate to start activation.



Status of the device becomes Active after successful activation.

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

### 5.2 Activate Device via Client Software

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

#### **Steps**



This function should be supported by the device.

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

The searched online devices are displayed in the list.

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



The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least

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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.

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

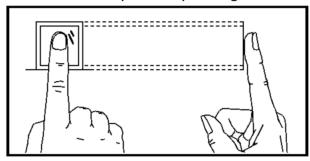
# **Appendix A. Tips for Scanning Fingerprint**

### **Recommended Finger**

Forefinger, middle finger or the third finger.

### **Correct Scanning**

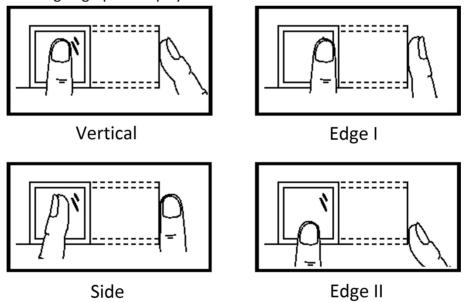
The figure displayed below is the correct way to scan your finger:



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.

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### **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. DIP Switch**

# **B.1 DIP Switch Description**

The DIP switch is on the master lane control board. No.1 to No 8 is from the low bit to the high bit.



When the switch is towards ON, it means the switch is enabled, otherwise, the switch is off. If you set the DIP switch like the figure displayed below, its binary value is 00001100, and its decimal value is 12.



### **B.2 DIP Switch Corresponded Functions**

The 8-bit DIP switch corresponded functions on the main controller are as follows:

Bit	Device Mode	Function	Decimal Value	Binary Value
1 to 2	Work Mode	Normal Mode	0	00
3	Memory Mode	Enable Memory Mode	0	0
		Disable Memory Mode	1	1
4	Keyfob Paring Mode	Enable Keyfob Paring Mode	1	1
		Disable Keyfob Paring Mode	0	0
5 to 8	Passing Mode	Controlled Bi- direction	0	0000
		Controlled Entrance and Prohibit Exit	1	0001
		Controlled Entrance and Free Exit	2	0010

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Bit	Device Mode	Function	Decimal Value	Binary Value
		Free Bi-direction	3	0011
		Free Entrance and Controlled Exit	4	0100
		Free Entrance and Prohibit Exit	5	0101
		Prohibited Bi- direction	6	0110
		Prohibit Entrance and Controlled Exit	7	0111
		Prohibit Entrance and Free Exit	8	1000

# **Appendix C. Event and Alarm Type**

Event	Alarm Type
Passing Timeout	None

# **Appendix D. Table of Audio Index Related Content**

Index	Content
1	Authenticated.
2	Card No. does not exist.
3	Card No. and fingerprint mismatch.
4	Passing timeout.
5	No permissions.
6	Authentication time out.
7	Authentication failed.
8	Expired card.

# Appendix E. Communication Matrix and Device Command

### **Communication Matrix**

Scan the following QR code to get the device communication matrix.

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



Figure E-1 QR Code of Communication Matrix

### **Device Command**

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



Figure E-2 Device Command

