



# Swing Barrier

Quick Start Guide

## **Quick Start Guide**

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This manual applies to swing barrier.

<b>Product Name</b>	<b>Model</b>	<b>Description</b>
Swing Barrier	DS-K3B601-L Series	Left Pedestal
	DS-K3B601-M Series	Middle Pedestal
	DS-K3B601-R Series	Right Pedestal
	DS-K3B601A-L Series	Left Pedestal
	DS-K3B601A-M Series	Middle Pedestal
	DS-K3B601A-R Series	Right Pedestal

**Note:** L represents left pedestal, M represents middle pedestal, and R represents right pedestal.

It includes instructions on how to use the Product. The software embodied in the Product is governed by the user license agreement covering that Product.

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### **Support**

Should you have any questions, please do not hesitate to contact your local dealer.

## Regulatory Information

### FCC Information

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

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

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

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

### FCC Conditions

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

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

### EU Conformity Statement



This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the RE Directive 2014/53/EU, the EMC Directive 2014/30/EU, the RoHS

Directive 2011/65/EU.



2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see:

[www.recyclethis.info](http://www.recyclethis.info)



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

designated collection point. For more information see: [www.recyclethis.info](http://www.recyclethis.info)

### Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (B)/NMB-3(B) standards requirements.

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

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

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

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

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

Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.

### 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 **Warnings** and **Cautions**:

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

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

	
<b>Warnings</b> Follow these safeguards to prevent serious injury or death.	<b>Cautions</b> Follow these precautions to prevent potential injury or material damage.



### Warnings

- 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.
- 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.

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# Chapter 1 Overview

## 1.1 Introduction

The swing barrier with two barriers and 12 IR lights is designed to detect unauthorized entrance or exit. By adopting the swing barrier 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

- Permissions validation and anti-tailgating
- Remaining open/closed mode selectable
- Bidirectional (Entering/Exiting) lane

The barrier opening and closing speed can be configured according to the visitors flow

- The barrier will be locked or stop working when people are nipped.
- Anti-forced-accessing

The barrier will be locked automatically without open-barrier signal. It can bear the force of up to 120 Nm.

- Self-detection, Self-diagnostics, and automatic alarm
- Audible and visual alarm will be triggered when detecting intrusion, tailgating, reverse passing, and climbing over barrier.
- Remote control and management
- Online/offline operation
- LED indicates the entrance/exit and passing status.

- Barrier is in free status when powered down; If the device is installed with lithium battery (optional), the barrier remains open when powered down

- Fire alarm passing

When the fire alarm is triggered, the barrier will be open 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

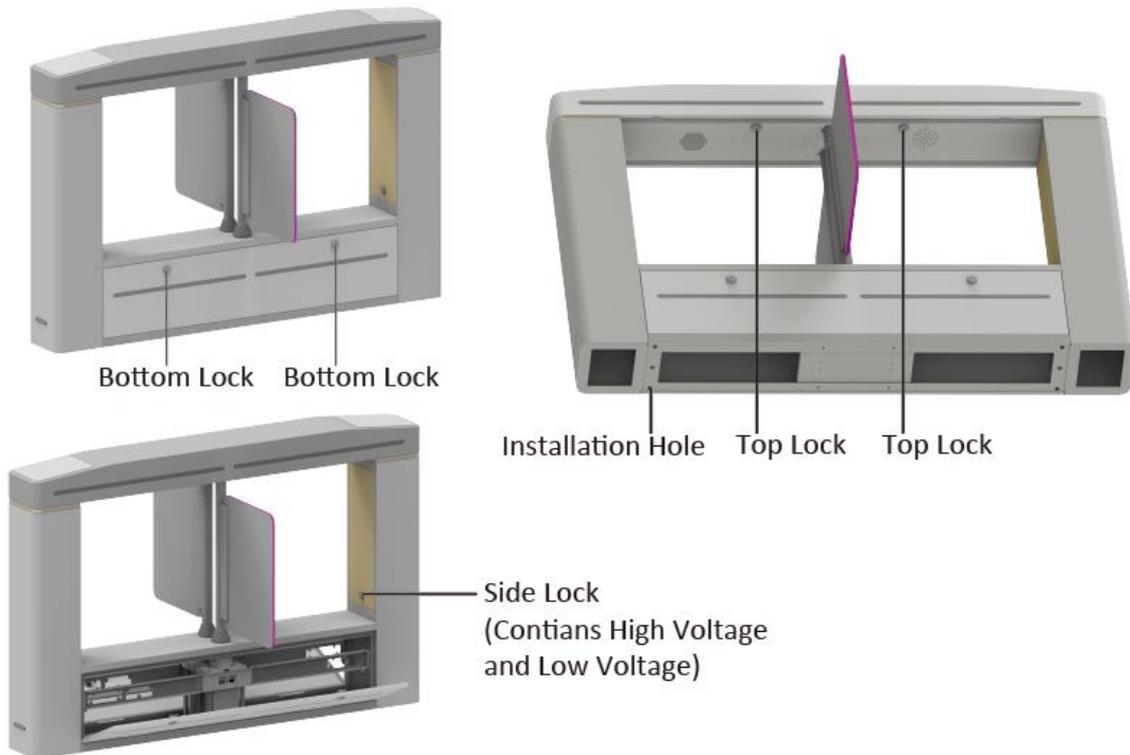
## Chapter 2 Installation

### 2.1 Disassembling Pedestals

**Purpose:**

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

View the pictures below to find the locks and installation holes.



### 2.2 Installing Pedestals

**Before you start:**

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

**Notes:**

- The device should be installed on the concrete surface or other non-flammable surfaces.
- If the installation area is too close to the wall, make sure the distance between the pedestal and the wall should be no more than 120 mm, or you cannot open the pedestal's top panel.

**Steps:**

1. Draw a central line on the installation surface for installing the center pedestal.
2. Draw another two parallel lines on each side of the central line for installing the other two pedestals.  
**Note:** The distance between the nearest two line is  $L+200$  mm.  $L$  represents the lane width.
3. Drill holes on the ground according to the installation holes on the pedestals and insert the expansion sleeves.
4. Bury interconnecting cables for pedestal communication.

**Note:** For detailed information about burying and wiring interconnecting cables, see 3.3 *Wiring Interconnecting Cable*.

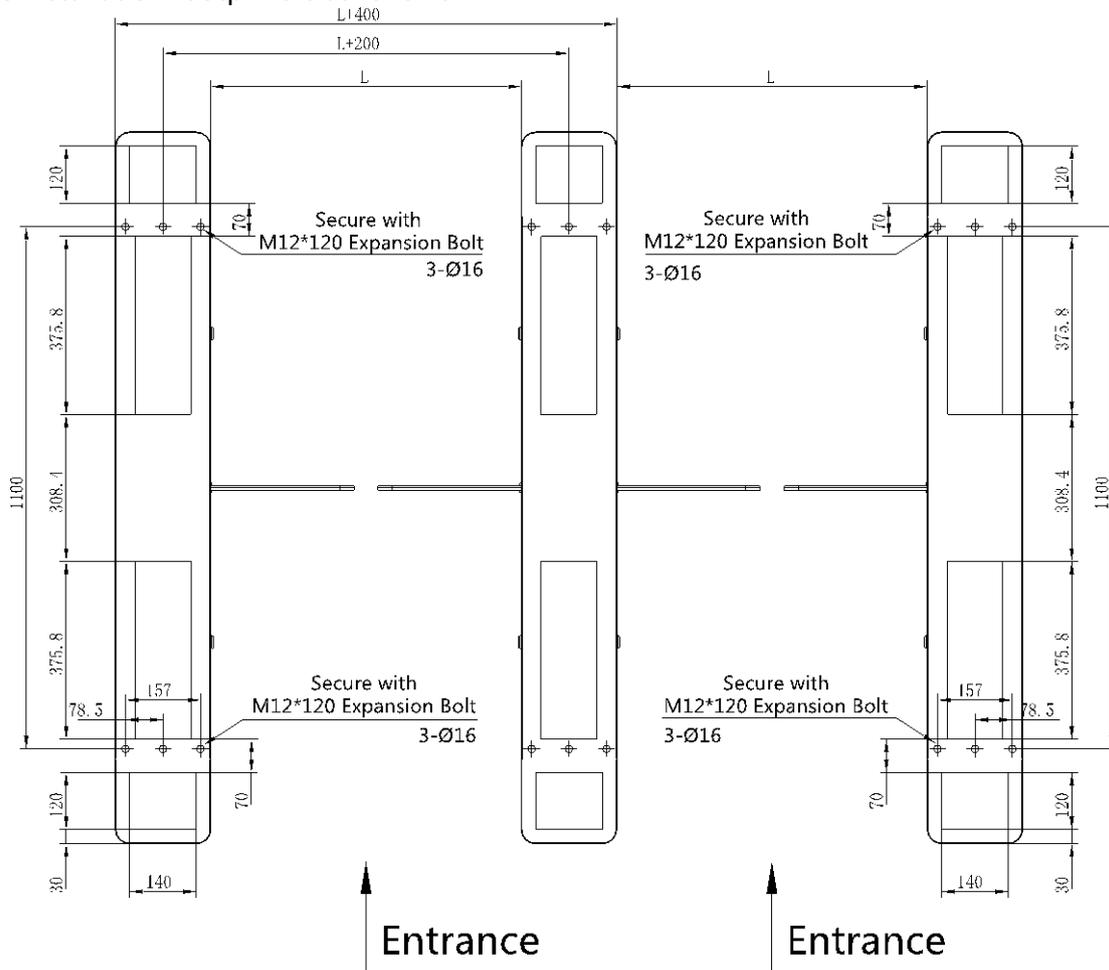
- According to the entrance and exit marks on the pedestals, move the pedestals to the corresponded positions.

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

- Secure the pedestals with expansion bolts.

**Note:** Do not immerse the pedestal in the water. In special circumstances, the immersed height should be no more than 10 mm.

The installation footprint is as follows:



# Chapter 3 Wiring

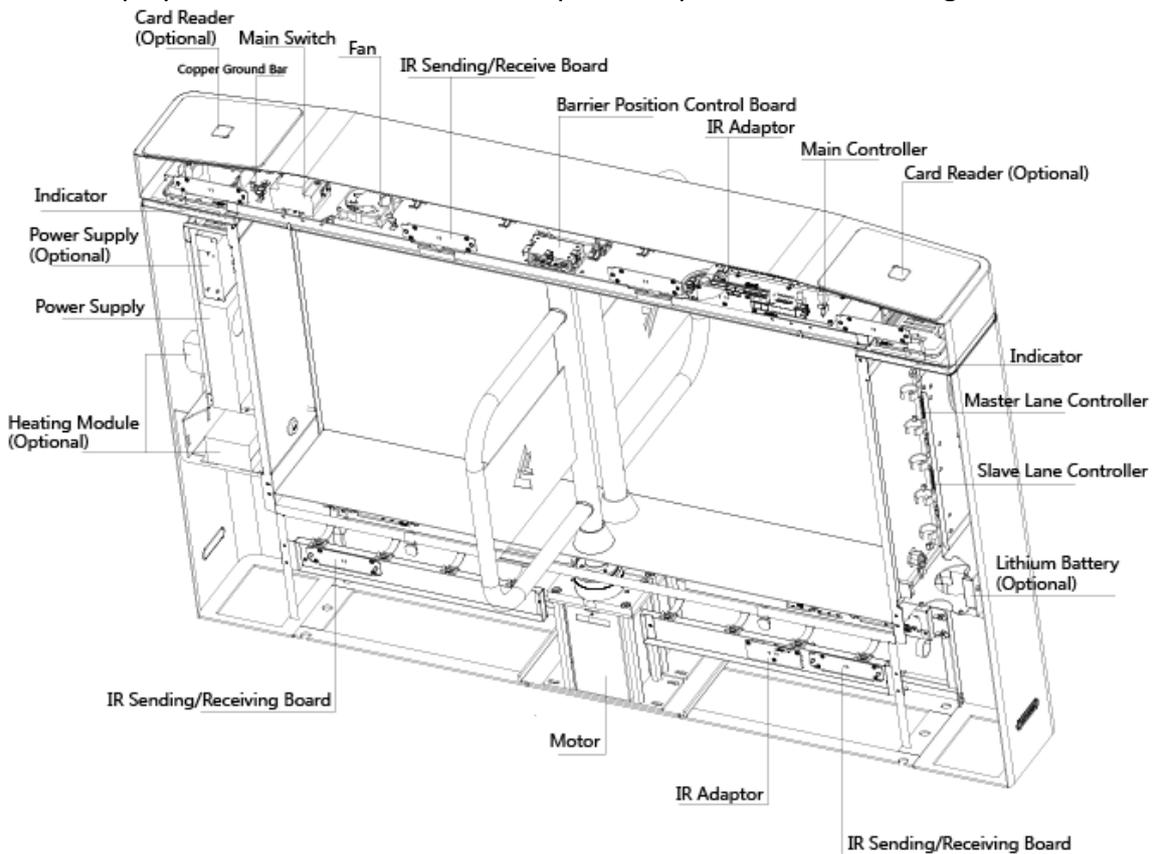
## 3.1 Components Introduction

**Purpose:**

By default, basic components of the swing barrier are connected well. You should wire the pedestals together for communication and wire the swing barrier to the AC electric supply.

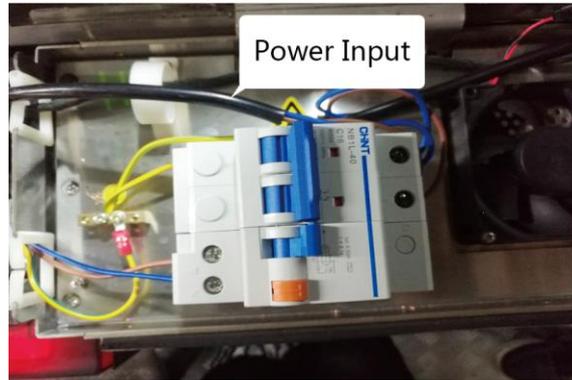
**Note:** The voltage fluctuation of the electric supply is between 100 VAC and 220 VAC, 50 to 60 Hz.

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



## 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).

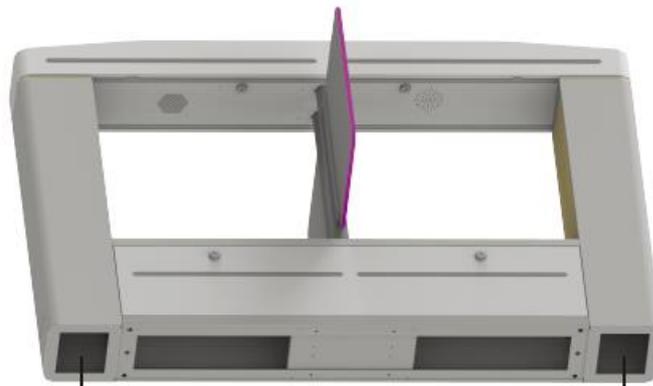


### 3.3 Wiring Interconnecting Cable

***Purpose:***

You should use interconnecting cables to connect the master lane board and the slave lane board for components communication.

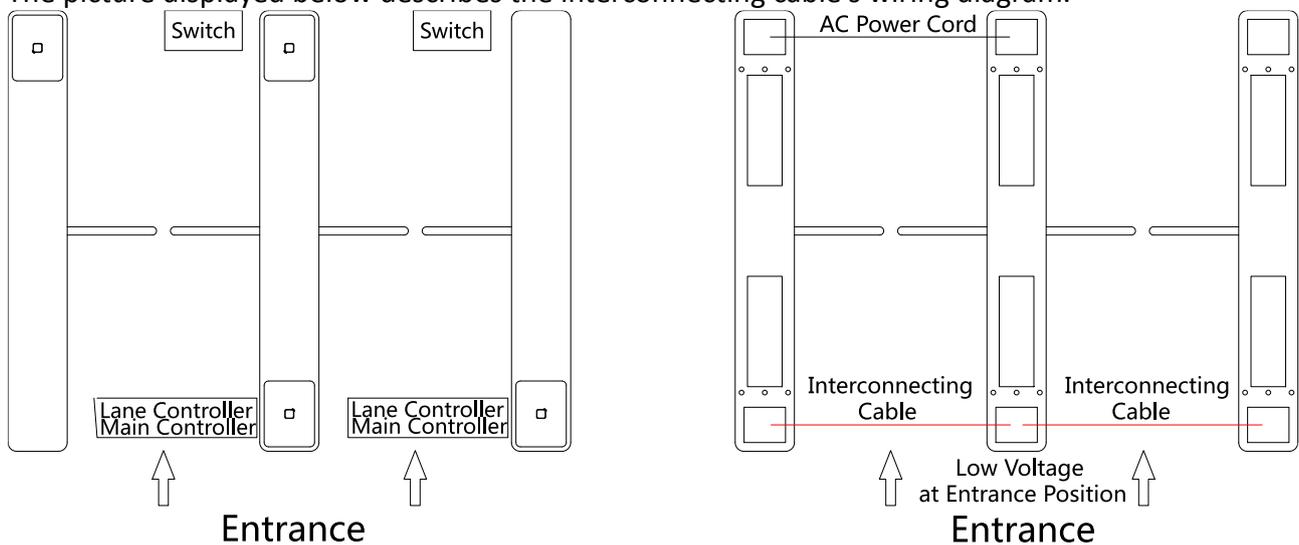
The picture displayed below describes the interconnecting cable hole's position on the pedestals.



Interconnecting Cable Hole

Interconnecting Cable Hole

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



**Notes:**

- The supplied interconnecting cable length is 3.75 m. If you need a longer one, ask our technique supports or sales and purchase 5.5 m interconnecting cables.
- The inner diameters of the low voltage conduit and the high voltage conduit should be larger than 30 mm. If there is a high-power peripheral (for authentication) installed on the left pedestal (according to the picture displayed above), you should increase the inner diameter of the high voltage conduit.
- General burying method: Bury one network cable and one AC power cord for the right pedestal and bury one network cable and one AC power cord for the central pedestal before installation. If no AC power cord buried independently, you should bury an AC power cord between the right pedestal and the central pedestal.
- If you want to bury both of the AC power cord and the low voltage cable at the entrance side, the two cables should be in separated conduits to avoid interference.
- If all wires of the interconnecting cable have connected with peripherals and more peripherals are required to connect, you should increase the conduit diameter or bury another conduit for the external cable.
- The external AC power cord should be double-insulated.

### 3.4 Terminal Description

**Purpose:**

The lane controller contains master lane controller and slave lane controller, which controls the IR beams, motor, and other components work.

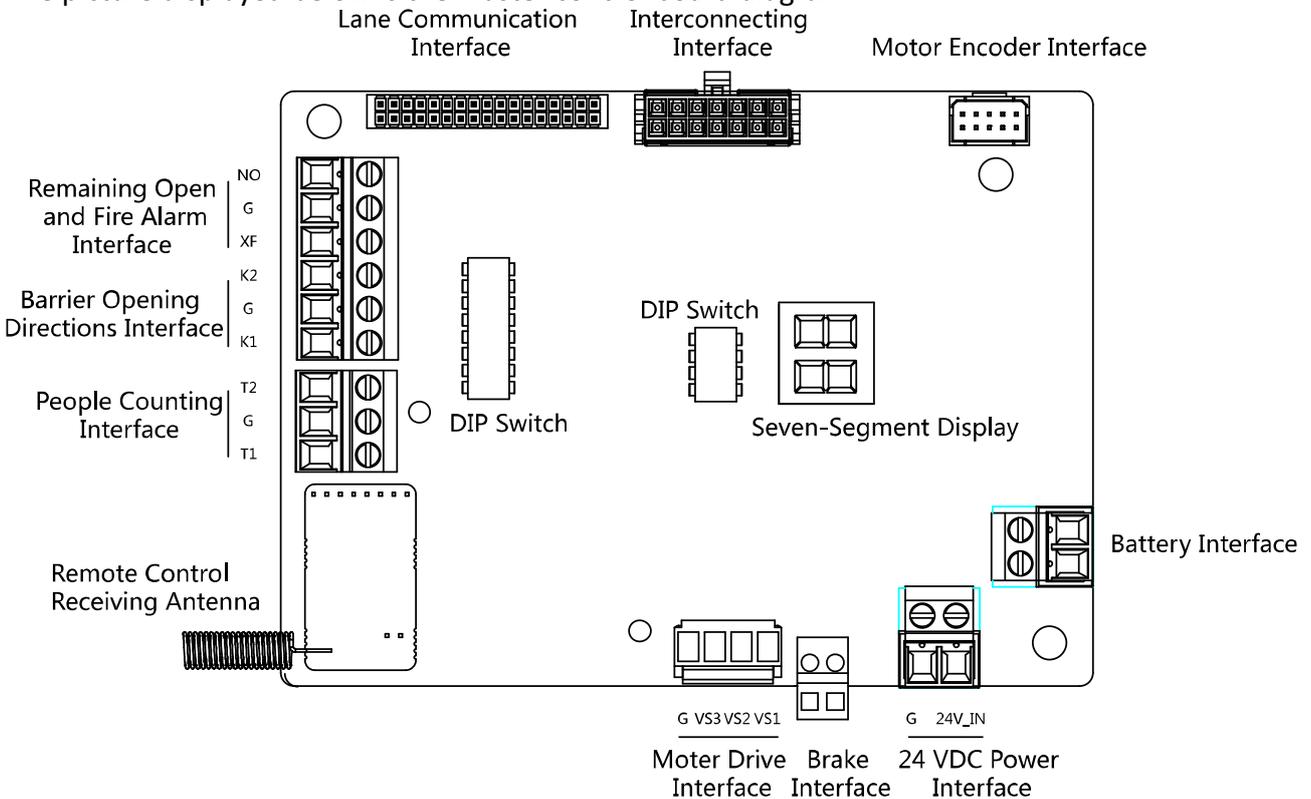
#### 3.4.1 Master Control Board Terminal Description

**Purpose:**

The master lane control board contains lane communication interfaces, interconnecting interface, motor encoder interface, remaining open and fire alarm interface, barrier opening directions interface, people counting interface, remote control receiving antenna, motor drive interface, brake interface, power interface, battery interface, DIP switch, and seven-segment display.

**Note:** For detailed information about the DIP switch, see *Appendix A DIP Switch Description*.

The picture displayed below is the master control board diagram.



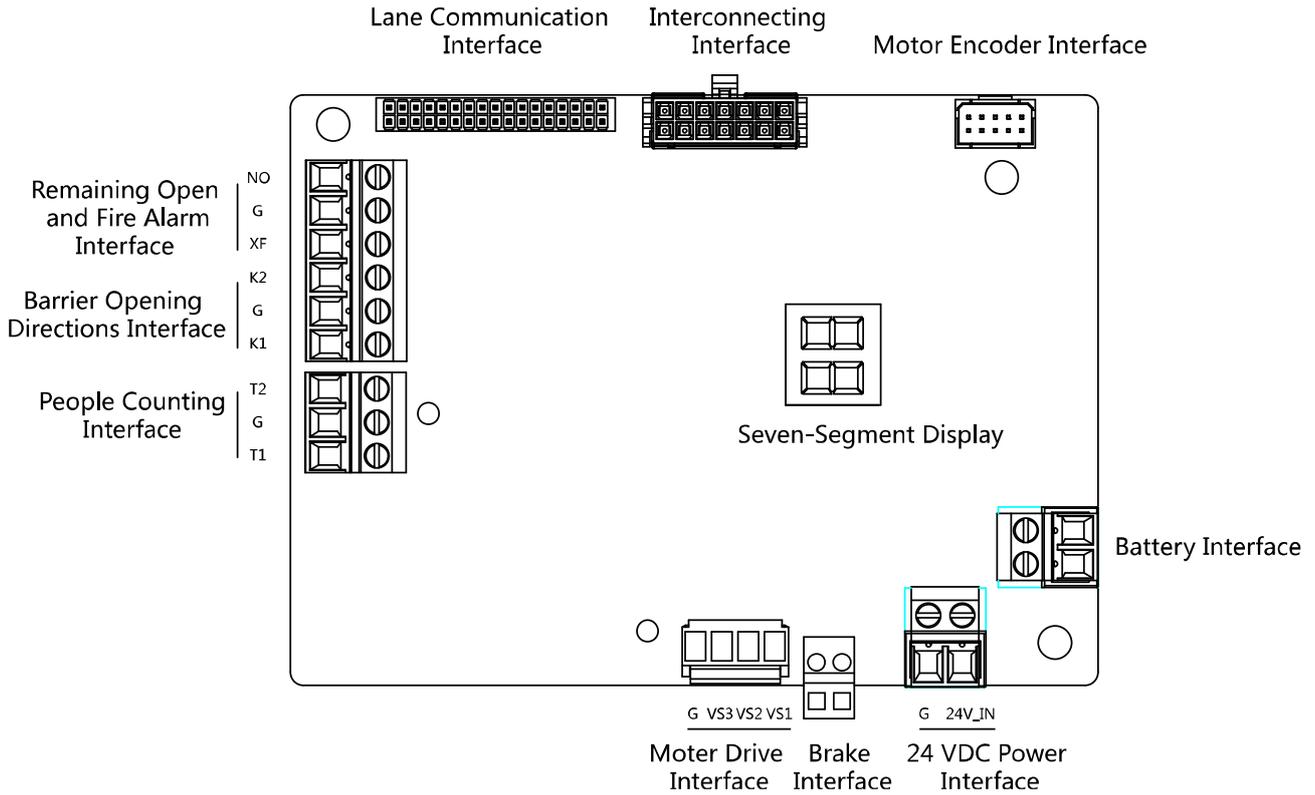
#### 3.4.2 Slave Control Board Terminal Description

**Purpose:**

The slave lane control board contains lane communication interfaces, interconnecting interface, motor encoder interface, remaining open and fire alarm interface, barrier opening directions interface, people counting interface, motor drive interface, brake interface, power interface, battery interface, and seven-segment display.

The picture displayed below is the slave control board diagram.

# Swing Barrier ▪ Quick Start Guide



## 3.4.3 Main Control Board Terminal Description

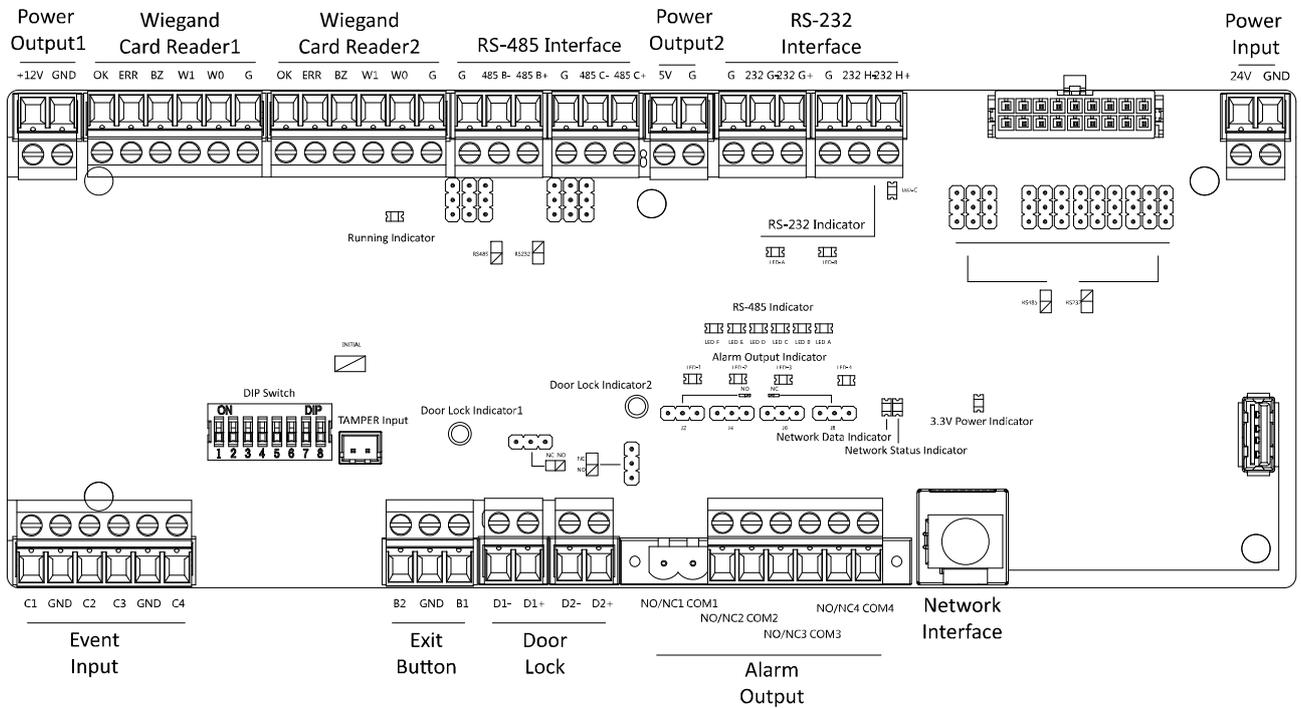


Table 3-1 Main Control Board Terminal Description

Main Controlling Board Terminal Description		
Power Output1	+12V	Grounding
	GND	Power Output
Wiegand Card Reader1	OK	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	OK	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
RS-485 Interface	GND	Grounding
	RS-485 B-	Connect to Card Reader RS485-
	RS-485 B+	Connect to Card Reader RS485+
	GND	Grounding
	RS-485 C-	Connect to Card Reader RS485-
	RS-485 C+	Connect to Card Reader RS485+
Power Output2	5V	5 VDC Power Output
	GND	5 VDC Grounding
RS-232 Interface	GND	Grounding
	RS-232 G-	Connect to Card Reader RS232-
	RS-232 G+	Connect to Card Reader RS232+
	GND	Grounding
	RS-232 H-	Connect to Card Reader RS232-
	RS-232 H+	Connect to Card Reader RS232+
Power Input	+12V	12 VDC Power Input
	GND	12 VDC Grounding
Event Input	C1	Event Alarm Input 4
	GND	Grounding
	C2	Event Alarm Input 3
	C3	Event Alarm Input 2

Main Controlling Board Terminal Description		
	GND	Grounding
	C4	Event Alarm Input 1
Exit Button	B2	Door 2 Signal Input
	GND	Grounding
	B1	Door 1 Signal Input
Door Lock (Relay)	D1-	Door 1 Relay Output(Dry Contact)
	D1+	
	D2-	Door 2 Relay Output(Dry Contact)
	D2+	
Alarm Output	NO/NC1	Alarm Output Relay 1(Dry Contact)
	COM1	
	NO/NC2	Alarm Output Relay 2(Dry Contact)
	COM2	
	NO/NC3	Alarm Output Relay 3(Dry Contact)
	COM3	
	NO/NC4	Alarm Output Relay 4(Dry Contact)
	COM4	
Network Interface	LAN	Network Accessing

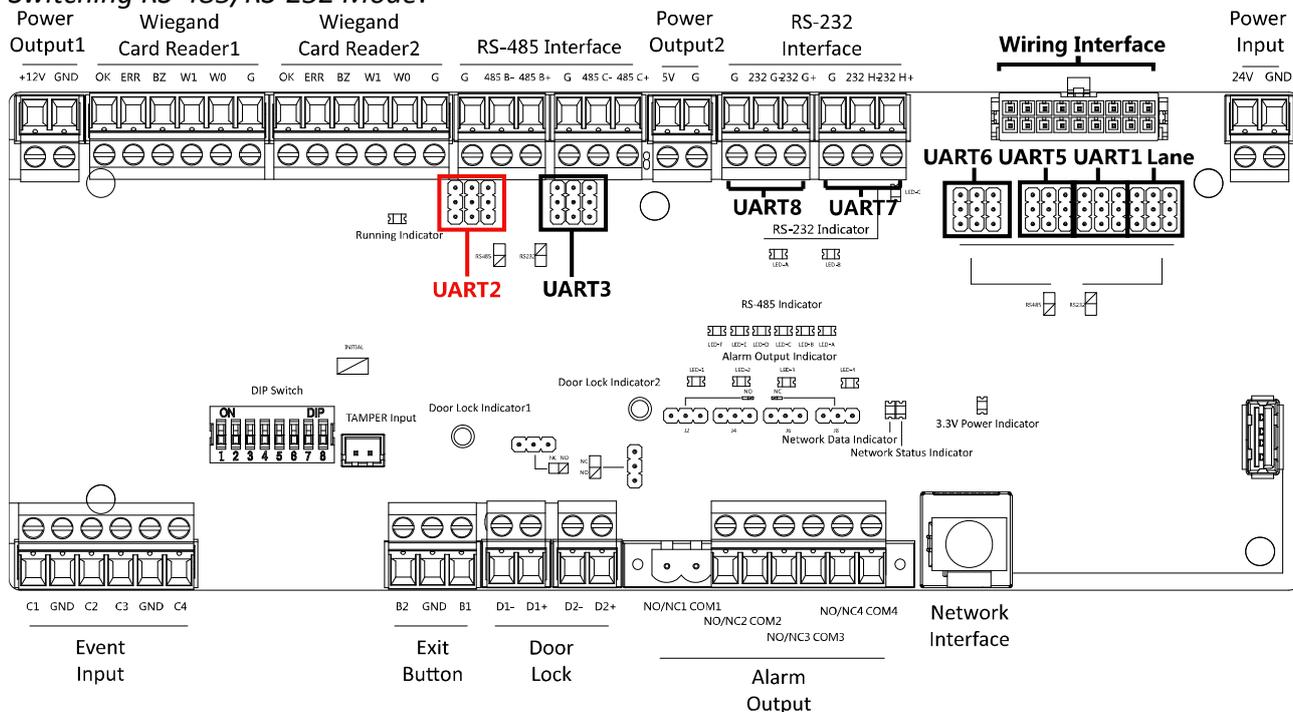
**Notes:**

- 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 network camera accessing.
- For any requirements, the door lock can control the door barrier status of the third party. D1 controls the barrier opening for entrance, while D2 controls the door opening for exit. For details, see *4.5.1 Barrier Control Relay Output Mode*.
- C3 and C4 in the event input can also be people counting interface. C3 controls people counting for entrance, while C4 controls people counting for exit. When the main control board detects signals in C3 and C4, the people number will be accumulated. For detailed information about people counting and people number, see *Configuring People Counting Parameters in User Manual of iVMS-4200 Client Software*.

### 3.4.4 Main Control Board Serial Port ID Description

**Purpose:**

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 4.4 *Switching RS-485/RS-232 Mode*.



According to the picture above, the RS-485 serial port corresponds to UART2 and UART3. RS-232 serial port is corresponded to UART7 and UART8. Wiring Interface is corresponded to UART1, UART4, UART6, UART6, and Lane.

The main control board descriptions are as follows:

**UART2/UART3 Jumper Cap:** Reserved serial port. 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.

**UART6 Jumper Cap:** Use the jumper cap to switch the serial port communication mode with the slave lane controller. You can switch between the RS-232 communication mode and the RS-485 communication mode. By default, it is in RS-232 communication mode.

**UART5 Jumper Cap:** Use the jumper cap to switch the serial port communication mode with the slave lane controller. You can switch between the RS-484 communication mode and the RS-232 communication mode. By default, it is in RS-485 communication mode.

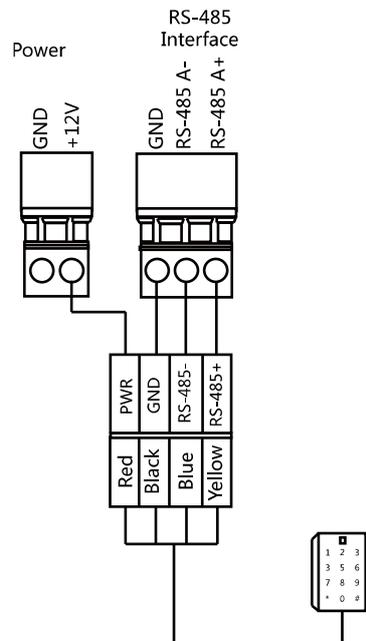
**UART1 Jumper Cap:** Use the jumper cap to switch the serial port communication mode with the master lane controller. You can switch between the RS-484 communication mode and the RS-232 communication mode. By default, it is in RS-485 communication mode.

**Lane:** Use the jumper cap to switch the serial port communication mode with the lane controller. By default, the interface is wired and it is in RS-485 communication mode.  
If wiring other controllers (compatible with Hikvision communication protocol), use the jumper cap to switch between RS-485 and RS-232 communication mode.

**UART4:** The serial port is in the wiring interface according to the picture above, which has a fixed RS-232 communication mode to communicate with the master lane controller. It contains no jumper cap and cannot change the communication mode.

**UART7/UART8:** Reserved serial port. The serial port has a fixed RS-232 communication mode. It contains no jumper cap and cannot change the communication mode. It can connect QR code scanner, card recycler, and text screen.

### 3.4.5 RS-485 Wiring



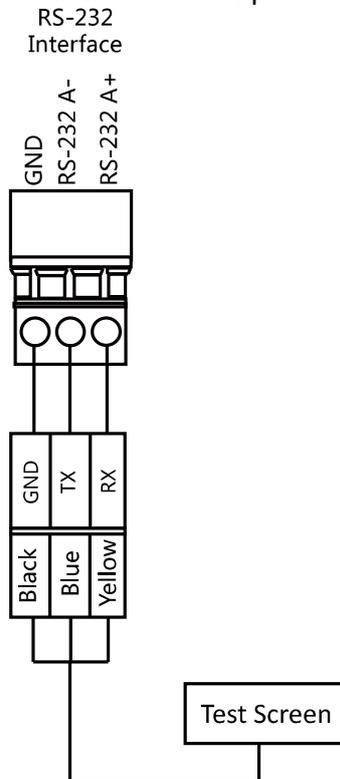
**Notes:**

- There are five 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 Client Software*.

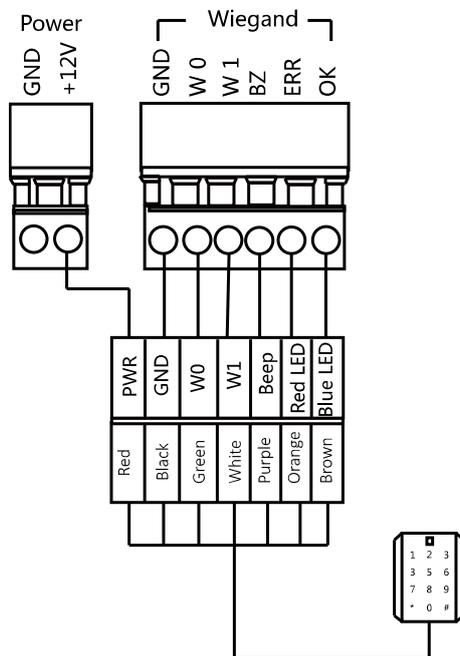
### 3.4.6 RS-232 Wiring

**Note:** There are three RS-232 interfaces (UART4, UART7, and UART8). UART7 and UART8 can connect QR code scanner, card recycler, and text screen, while UART4 can connect QR code scanner, card recycler, text screen, and face recognition terminal. For details about text screen, see *Configuring Screen Parameters* in *User Manual of iVMS-4200 Client Software*.

Take the wiring of face recognition terminal as an example.



### 3.4.7 Wiegand Wiring



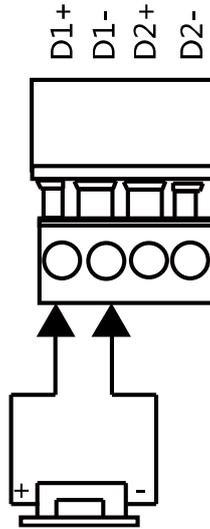
**Note:** You must connect the OK/ERR/BZ if using access controller to control the LED and buzzer of the Wiegand card reader.

### 3.4.8 Barrier Control Wiring

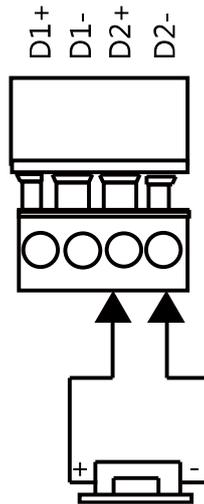
**Purpose:**

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

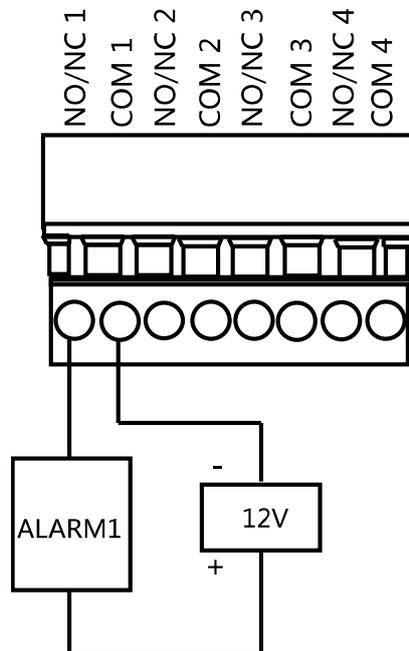
**Entering Wiring**



**Exiting Wiring**



### 3.4.9 Alarm Output Wiring



**Note:** For details about changing the relay output status via the jumper cap, see 4.5.2 *Alarm Relay Output Mode (NO/NC)*.

## 3.5 Wiring Lithium Battery (Optional)

### **Purpose:**

The lithium battery supplies power for master lane control board and slave lane control board when the device is powered off.

The battery interface position is as follows:

### **Before you start:**

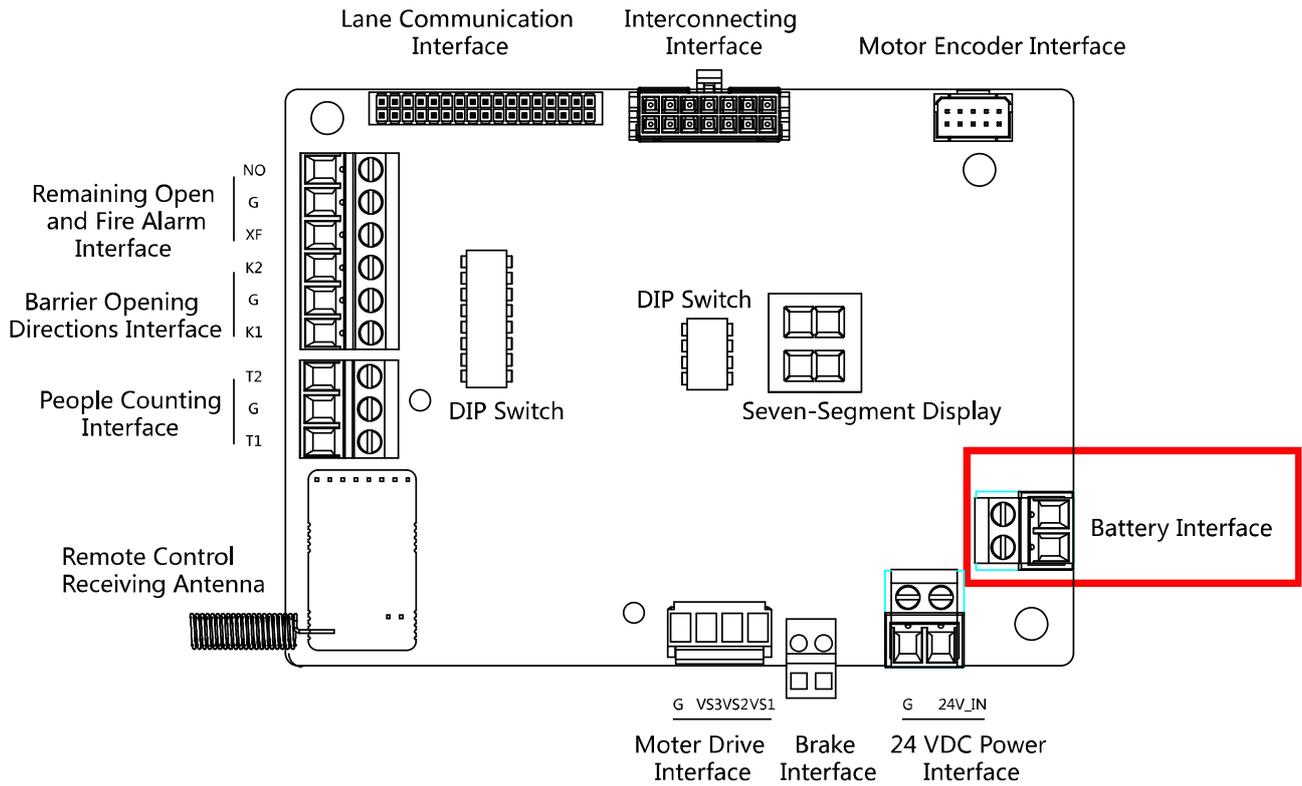
Ask our technique support and sales and purchase for the lithium battery.

### **Steps:**

1. Install lithium batteries.
  - 1) Remove the screws on the battery component to disassemble the battery component.
  - 2) Put the lithium battery inside the component.
  - 3) Secure the components on the device by the screws.
2. Insert the battery connector to the battery interface on the lane control board.

**Note:** There are battery interfaces on both of the master lane control board and slave lane control board.

# Swing Barrier ▪ Quick Start Guide



# Chapter 4 Device Settings

## Purpose:

After installation and wiring completed, you should set the barriers closed position (study mode) before entering the working mode.

You can also set the passing mode and memory mode, pair the remote control, 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.

- **Study Mode:** The barrier will learn the closed position.
- **Normal Mode:** The device will work properly. The barrier position configured in study mode is the closed position when the device is working normally.
- **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 swiped and authenticated, it allows multiple persons passing through the lane. When it counts the passing people number is equal to the card swiped times, or no person passing through the lane after the last person passing, the barriers will be closed.

**Note:** You can also set the DIP switch to control the action of swiping card to open the barrier in alarm area, entrance and exit controlling type, remote control pairing, etc. For details about the DIP switch value, see *Appendix A DIP Switch Descriptions*.

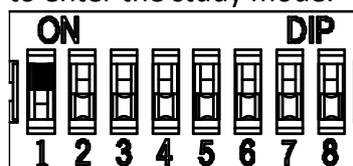
## 4.1 Setting Closed Position

### Purpose:

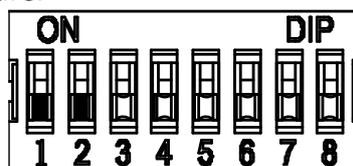
Enter the study mode through DIP switching to set the closed position of the device barrier.

### Steps:

1. Set The No.1 and No.2 switches of the 8-digit DIP Switch on the master lane controlling board by referring the following figure to enter the study mode.



2. Adjust the closed position of the barrier.
3. Power on the device.  
The device will remember the current position (closed position) automatically.
4. Power off the device.
5. Set the No.1 and No.2 switches of the 8-digit DIP Switch on the master lane controlling board by referring to the following figure.



6. Power on the device again.

The barrier will open automatically and turns back to the closed position. At this circumstance, the device enters the normal mode.

Note: For details about the DIP switch value and meaning, see *Appendix A DIP Switch Description*.

## 4.2 Pairing Remote Control (Optional)

### **Purpose:**

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

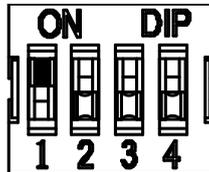
**Note:** for details about the remote control's operations, see the related user manual.

### **Before you start:**

Ask our technique supports or sales and buy the remote control.

### **Steps:**

1. Power off the swing barrier.
2. Set the No.1 switch of the 4-digit DIP Switch on the master lane control board according to the figure below.



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

### **Notes:**

- You can also pair the remote control via the client software. For details, see *Managing Remote Control* in *User Manual of iVMS-4200 Client Software*.
- Only one swing barrier can pair the remote control. If multiple swing barriers are in the pairing mode, the remote control will select only one of them to pair.
- For details about DIP switch value and meaning, see *Appendix A DIP Switch Description*.

## 4.3 Initializing Device

### **Steps:**

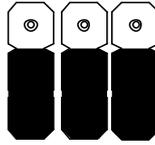
1. Remove the JP11 jumper cap.
2. Disconnect the power and reboot the device. The device buzzer buzzes a long beep.
3. When the beep stopped, plug the jumper cap back.
4. Disconnect the power and reboot the device.

**Note:** The initializing of the device will restore all the parameters to the default setting and all the device events are deleted.

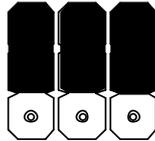
## 4.4 Switching RS-485/RS-232 Mode

Take the UART2 and UART3 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.



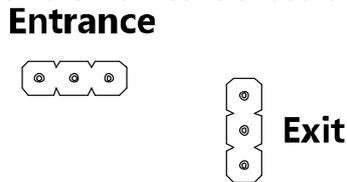
If the Jumper cap's position is like the picture displayed below. (The black part is the jumper cap.) The serial port is in RS-232 communication mode.



## 4.5 Switching Relay Output Mode (NO/NC)

### 4.5.1 Barrier Control Relay Output Mode

The pins of the barrier control relay on the main control board is as below:



The jumper cap's position of barrier opening for entrance (NO) is as below:



The jumper cap's position of barrier opening for exit (NO) is as below:



The jumper cap's position of barrier closing for entrance (NC) is as below:



The jumper cap's position of barrier closing for exit (NC) is as below:



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

Alarm Relay Output Mode (NO):

**Alarm1 Alarm2 Alarm3 Alarm4**



Alarm Relay Output Mode (NC):

**Alarm1 Alarm2 Alarm3 Alarm4**



# Chapter 5 Device Activation

## Purpose:

You are required to activate the terminal first before using it.

Activation via SADP, and activation via client software are supported.

The default values of the control terminal are as follows.

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

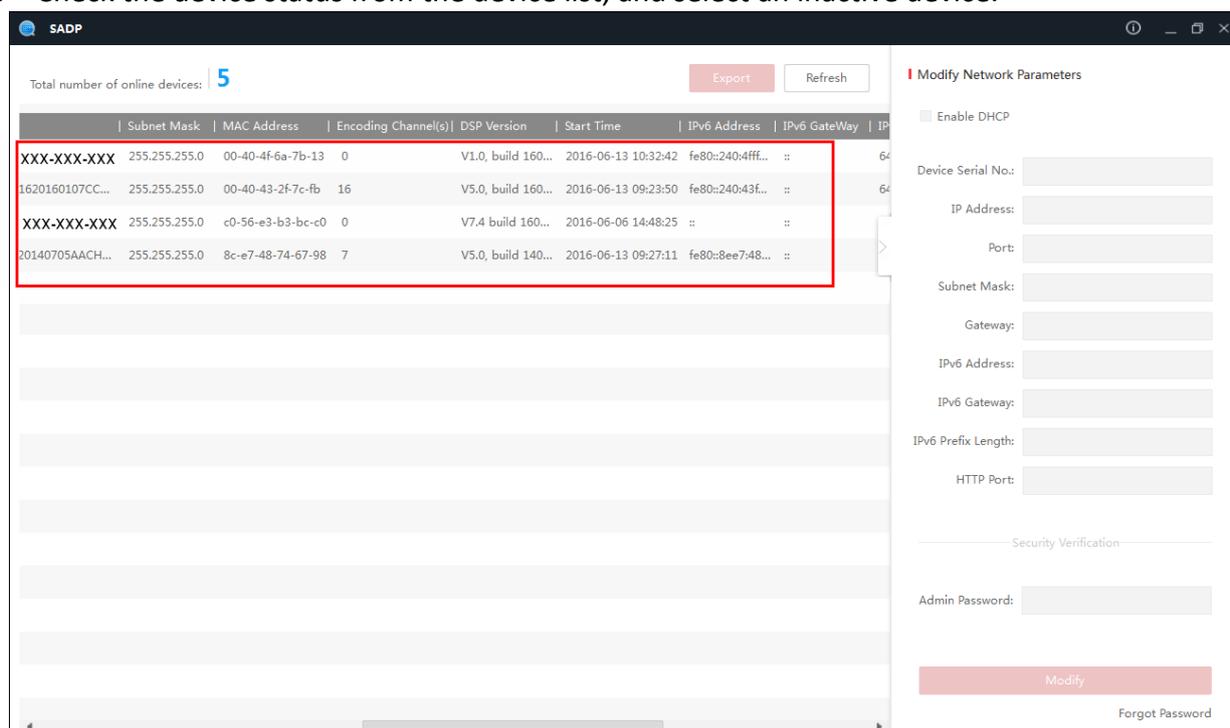
## 5.1 Activating via SADP Software

SADP software is used for detecting the online device, activating the device, and resetting the password.

Get the SADP software from the supplied disk, and install the SADP according to the prompts. Follow the steps to activate the control panel.

### Steps:

1. Run the SADP software to search the online devices.
2. Check the device status from the device list, and select an inactive device.



3. Create a password and input the password in the password field, 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 save the password.
5. Check the activated device. You can change the device IP address to the same network segment with your computer by either modifying the IP address manually or checking the checkbox of Enable DHCP.

Modify Network Parameters

Enable DHCP

Device Serial No.:

IP Address:

Port:

Subnet Mask:

Gateway:

IPv6 Address:

IPv6 Gateway:

IPv6 Prefix Length:

HTTP Port:

Security Verification

Admin Password:

[Forgot Password](#)

6. Input the password and click the **Modify** button to activate your IP address modification.

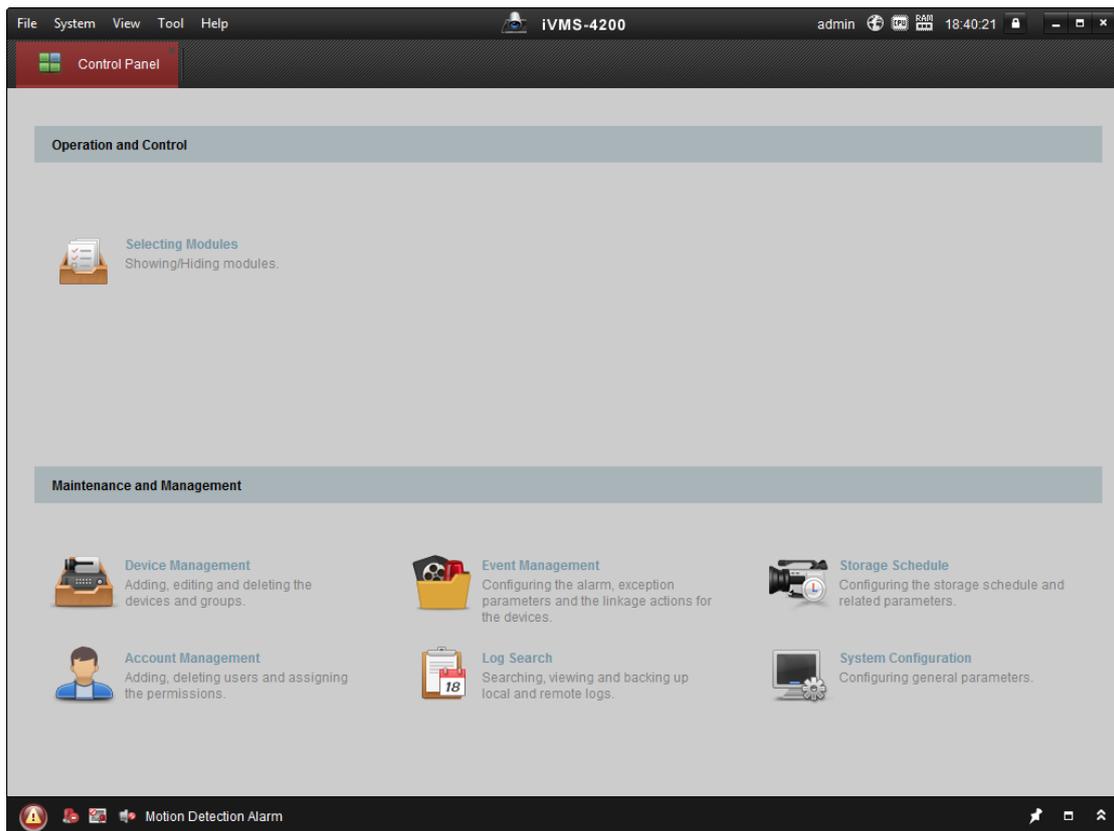
## 5.2 Activating via Client Software

The client software is versatile video management software for multiple kinds of devices.

Get the client software from the supplied disk, and install the software according to the prompts. Follow the steps to activate the control panel.

### Steps:

1. Run the client software and the control panel of the software pops up, as shown in the figure below.



2. Click **Device Management** to enter the Device Management interface.
3. Check the device status from the device list, and select an inactive device.

Online Device (19) <span style="float: right;">Refresh Every 60s</span>						
IP	Device Type	Firmware Version	Security	Server Port	Device Serial No.	Start Time
192.0.0.64			Active	8000		2017-01
192.168.1.64			Inactive	8000		2017-01

4. Check the device status from the device list, and select an inactive device.
5. Click the **Activate** button to pop up the Activation interface
6. In the pop-up window, create a password in the password field, 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.

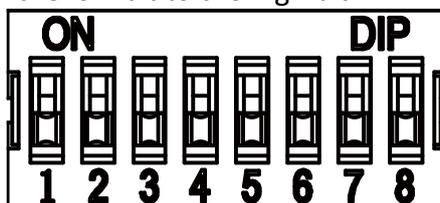


7. Click **OK** button to start activation.
8. Click the **Modify Netinfor** button to pop up the Network Parameter Modification interface.
9. Change the device IP address to the same network segment with your computer by either modifying the IP address manually.
10. Input the password and click the **OK** button to save the settings.

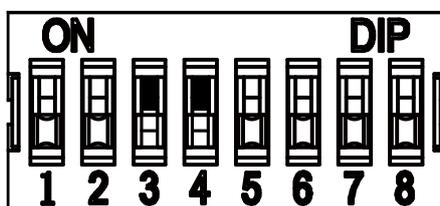
# Appendix A DIP Switch Description

## DIP Switch Introduction

There are two groups of DIP switches on the master lane control board. Take the 8-bit DIP switch as an example; 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.



## DIP Switch Corresponded Functions

The 8-bit DIP switch corresponded functions on the master lane control board are as follows:

Bit	Function	Decimal Value	Binary Value
1 to 2	Normal Mode	0	00
	Study Mode	1	01
	Test Mode	2	10
3	Enable Memory Mode	0	0
	Disable Memory Mode	1	1
4	Allow Opening Barrier by Swiping Card in Alarm Area	0	0
	Prohibit Opening Barrier by Swiping Card in Alarm Area	1	1
5 to 8	Controlled Bi-direction	0	0000
	Controlled Entrance and Prohibit Exit	1	0001
	Controlled Entrance and Free Exit	2	0010
	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	

The 4-bit DIP switch corresponded functions on the master lane control board are as follows:

Bit	Function	Decimal Value	Binary Value
1	Normal Mode	0	0
	Remote Control Paring Mode	1	1
2~4	Reserved		

## Appendix B Table of Audio Index Related Content

Index	Content
1	Authenticated.
2	Card No. does not exist.
3	Card No. and fingerprint mismatch.
4	Climbing over the barrier.
5	Reverse passing.
6	Passing timeout.
7	Intrusion.
8	Force accessing.
9	Tailgating.
10	No permissions.
11	Authentication time out.
13	Authentication failed.
14	Expired card.

## Appendix C Error Code Description

The swing barrier will display the error code on the seven-segment display if error occurred. Refer to the table below to find the description of each number.

Error Reason	No.	Error Reason	No.
Normal Working	00	IR Board 2 Offline	14
The First IR Beam on IR Board 1 Triggered	01	IR Board 3 Offline	15
The Second IR Beam on IR Board 1 Triggered	02	IR Board 4 Offline	16
The First IR Beam on IR Board 2 Triggered	03	IR Board 5 Offline	17
The Second IR Beam on IR Board 2 Triggered	04	IR Board 6 Offline	18
The First IR Beam on IR Board 3 Triggered	05	Light Board Offline (Entrance)	19
The Second IR Beam on IR Board 3 Triggered	06	Light Board Offline (Exit)	20
The First IR Beam on IR Board 4 Triggered	07	Adapter Offline (Up)	21
The Second IR Beam on IR Board 4 Triggered	08	Adapter Offline (Low)	22
The First IR Beam on IR Board 5 Triggered	09	CAN Bus Exception	23
The Second IR Beam on IR Board 5 Triggered	10	Not Studying	24
The First IR Beam on IR Board 6 Triggered	11	Obstruction	25
The Second IR Beam on IR Board 6 Triggered	12	Exceeding Studying Range	26
IR Board 1 Offline	13	Motor Exception	27

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See Far, Go Further