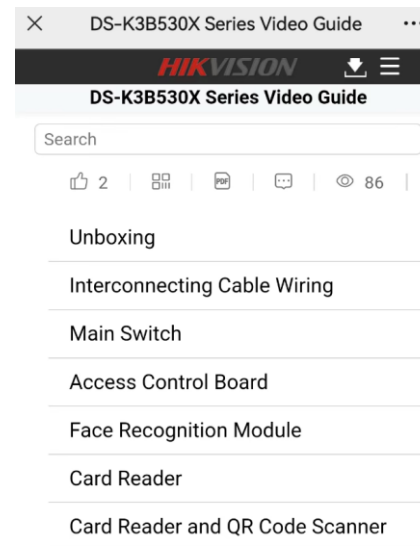


DS-K3B530X Series Swing Barrier

Delivery Guide

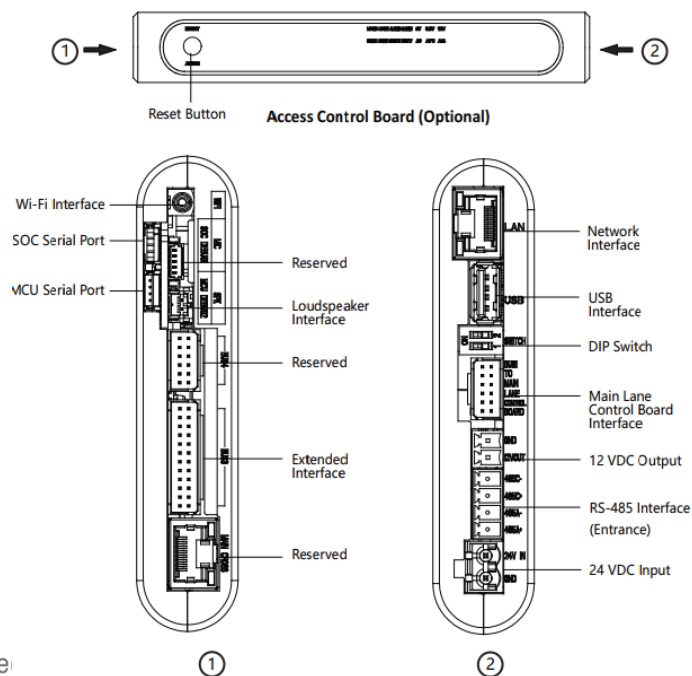
Scan the QR code to view the video guide.



Components Introduction

Access Control Board Terminal Description

Access control board is mainly used for authority identification in places with high security levels such as public security or judicial place, external device accessing, and communication with the upper platform and lane controller.



- SOC and MCU serial port are for debugging and maintenance use only.
- Hold the reset button for 5 s, the device will beep for 3 s and start restoring to factory settings.
- RS-485A corresponds to port 5 on web and is for QR code scanner connection at entrance by default; RS-485C corresponds to port 7 on web and is for card reader connection at entrance by default.
- The DIP switch is for study mode settings and keyfob pairing. Refer to the user manual for details.

1. SOC and MCU serial port are for debugging and maintenance use only.

2. Hold the reset button for 5 s, the device will beep for 3 s and start restoring to factory settings.

The DIP switch is for study mode settings and keyfob pairing. Refer to the user manual for details.

3. RS-485A corresponds to UART 5 on web and is for QR code scanner connection at entrance by default; RS-485C corresponds to UART 7 on web and is for card reader connection at entrance by default.

4. RS-232A is on the extended interface of BUS3. RS-232A corresponds to UART 1 on web and is for fingerprint module connection at entrance by default.

5. The DIP switch is for study mode settings and keyfob pairing. Refer to the user manual for details.

Initialize Device

Steps

1. Hold the initialization button on the access control board for 5 s.

Figure 5-6 Initialization Button Position

2. The device will start restoring to factory settings.
3. When the process is finished, the device will beep for 3 s.

Caution

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.

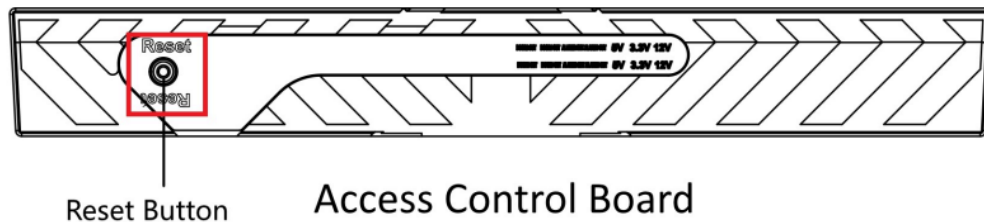
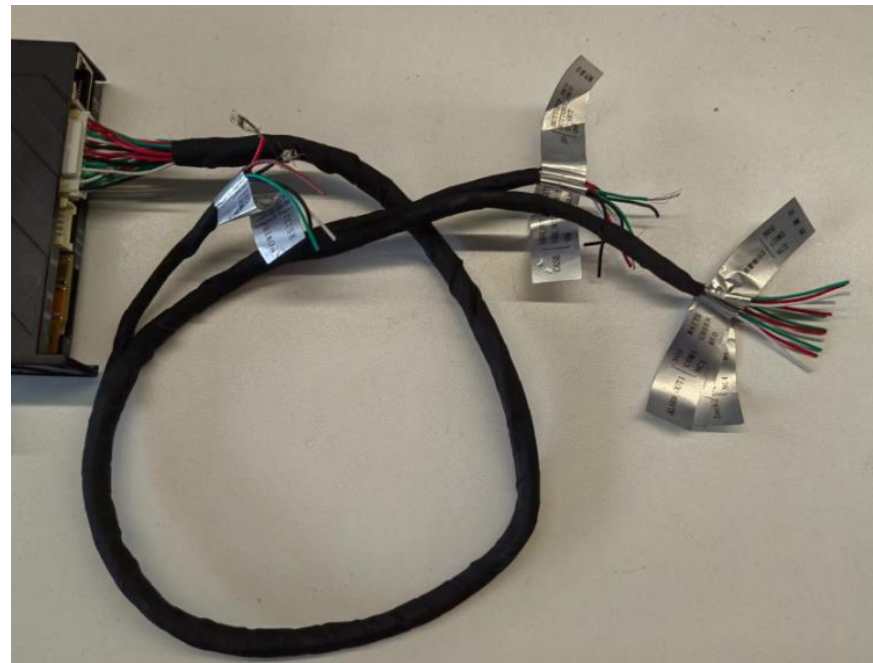
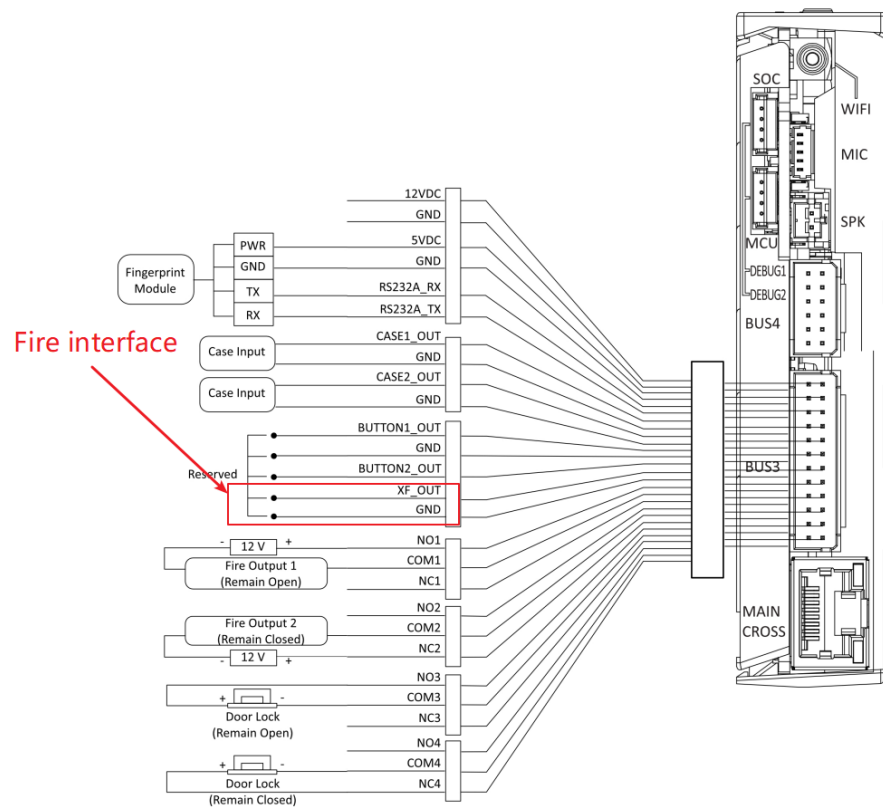


Figure 5-6 Initialization Button Position





Exit button

parameter configuration button



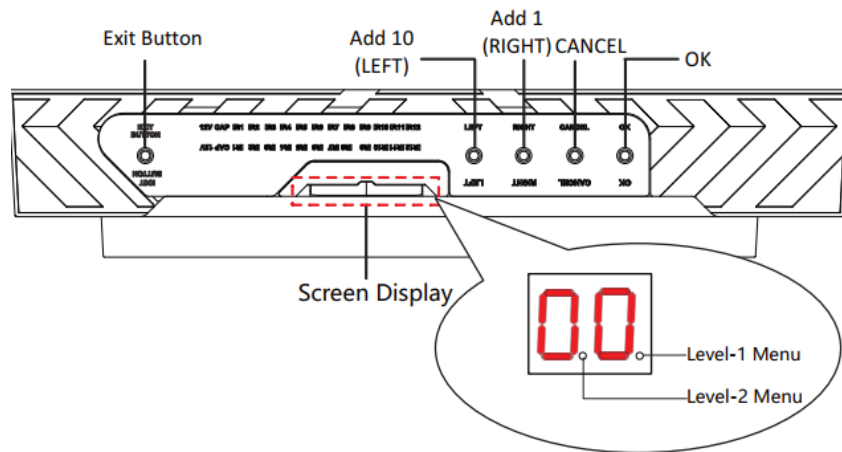
Diagram of the control panel for the 1000 Series. The panel includes an Exit Button, a Screen Display, and four buttons labeled Add 10 (LEFT), Add 1 (RIGHT), CANCEL, and OK. A callout shows the screen display showing '00', with labels for Level-1 Menu and Level-2 Menu.

only main lane control board
have configuration button

Number represents the parameters of a configuration item:



Button Description



Exit Button

Single press to open from the entrance position.

Double press to open from the exit position.

Parameter Configuration Button

Configuration data: Configuration data is displayed by two digital tubes

LEFT: Press this button to add ten to configuration data

RIGHT: Press this button to add one configuration data

CANCEL: Return to the level-1 menu, or exit the configuration from the level-1 menu.

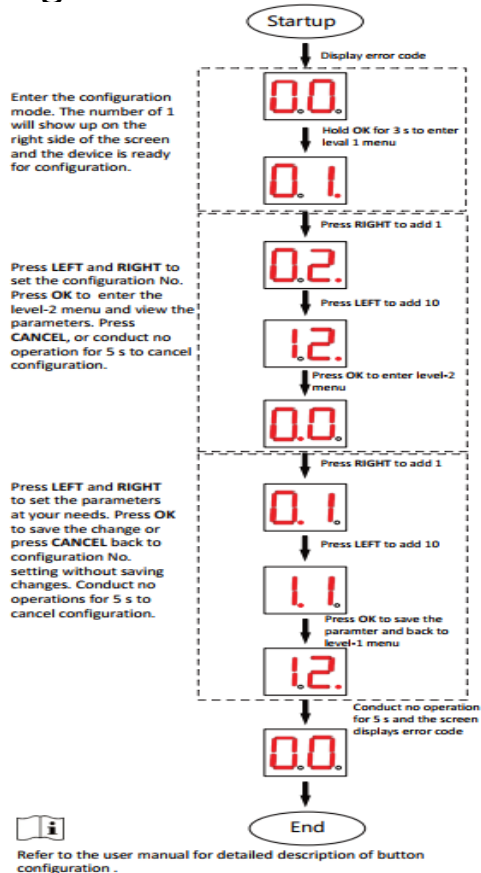
OK: Confirm the data, or enter configuration mode, or enter the submenu.

Level-1 Menu: If the decimal point on the right is on, it indicates the level-1 menu. The number represents the configuration item number.

Level-2 Menu: if the decimal point in the middle is on, it indicates the level -2 menu. The number represents the parameters of a configuration item.

Components Introduction

Button Configuration Process



level -1 menu



level -2 menu



level1 menu

leve2 menu

No.	Description	Default Value	Parameters	Notes
1	Normal/Study Mode	1	1-Normal Mode 2-Study Mode	
2	keyfob Pairing	1	1-Normal Mode 2-Pairing Mode	
3	Passing Mode	1	1-Both sides under control 2-Entrance under control; exit prohibited 3-Entrance under control; exit on inductive mode 4-Both sides on inductive mode 5-Entrance on inductive mode; exit under control 6-Entrance on inductive mode; exit prohibited 7-Both sides prohibited 8-Entrance prohibited; exit under control 9-Entrance prohibited; exit on inductive mode	
4	Memory Mode	2	1-Disable 2-Enable	

Study mode:

hold OK for 3s, enter leve-1 menu and select 1, then press OK, go to level-2 menu and select 2, then press OK again.

Passing mode(3-entrance under control; exit on induction mode):

hold OK for 3s, enter leve-1 menu and select 1, then press OK, go to level-2 menu and select 3, then press OK again.

Note :

About other button function, please refer to Appendix B.

Sub Lane Control Board Terminal Description



sub lane control board dont have
cognition button



Wiring

Method 1: Face recognition terminal RS485 cable wiring

UART on Web (Exit):
RS-485: UART 4, UART 6
RS-232: UART 2

UART on Web (Entrance):
RS-485: UART 5, UART 7
RS-232: UART 1

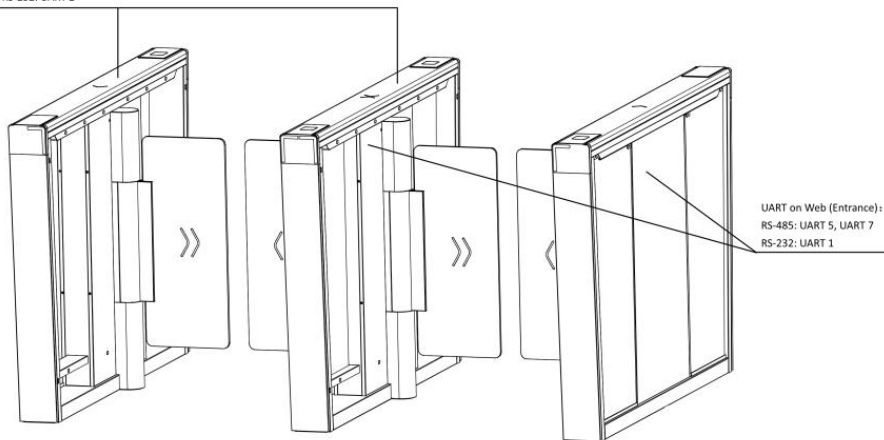
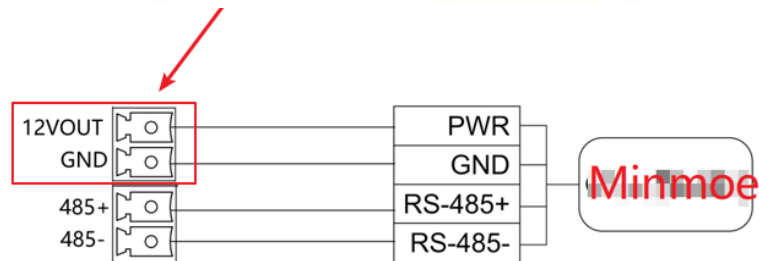


Figure 4-1 Serial Port



Face recognition terminal wiring and configuration

Wiring

Access control board 485 serial port configuration

HIKVISION®

Overview System Person Management

Authentication Settings Door Parameters **Serial Port Configuration** Wiegand Settings Terminal Parameters

Serial Port Type RS485

No. 4

HIKVISION®

Overview System Person Management Network Event Configuration Access Control Turnstile Configuration Card Settings Security

Authentication Settings Door Parameters **Serial Port Configuration** Wiegand Settings Terminal Parameters

Serial Port Type RS485

No. 7

Baud Rate 19200

Data Bit 8

Stop Bit ☒ 1 ☐ 2

Parity ☒ None ☐ Odd Parity ☐ Even Verification

Peripheral Type ☒ Card Reader ☐ Card Receiver ☐ QR Code Scanner ☐ Disable

External Device Model None

Peripheral Software Version None

Save

Minmoe 485 serial port configuration

HIKVISION®

Overview Local System Person Management Event Search Device Management Configuration Maintenance and Security

Authentication Settings Door Parameters Elevator Control Parameters **RS-485** Wiegand Settings Terminal Parameters

Enable ☒

Peripheral Type Access Controller

RS-485 Address 2

Baud Rate 19200

Data Bit 8

Stop Bit 1

Parity None

Flow Control None

Communication Mode Half-Duplex

Output Type ☒ Card No. ☐ Employee ID

Save

2 for entrance minmoe
3 for exit minmoe

Method 2: Face recognition terminal button wiring

The face recognition devices are powered via 12 VDC power output interface of the main and sub lane control board.

- Barrier open at the entrance: connect to BTN1 and GND.
- Barrier open at the exit: connect to BTN2 and GND.

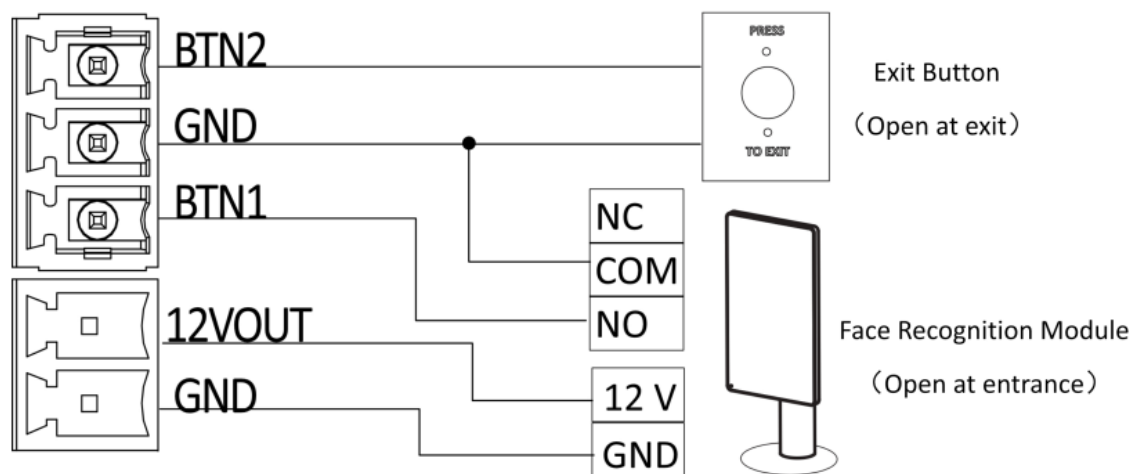


Figure 4-18 Exit Button Wiring

Face terminals connected to switch.



Appendix B. Button Configuration Description

Refer to the table below for device configuration via button on the main lane control board.

Level-1 Configuration No.	Description	Level-1 Configuration No. and Functions	Notes
1	Study Mode	1-Exit Study Mode/ Normal Mode 2-Study Mode  Note By default, 1 will be displayed on the display screen.	If the device is equipped with access control board, you can only set via DIP switch.
2	keyfob Pairing Mode	1-Normal Mode 2-Pairing Mode  Note By default, 1 will be displayed on the display screen.	If the device is equipped with access control board, you can only set via DIP switch.
3	Passing Mode	1-Both sides under control  Note By default, 1 will be displayed on the display screen. 2-Entrance under control; exit prohibited 3-Entrance under control; exit on inductive mode 4-Both sides on inductive mode	

Level-1 Configuration No.	Description	Level-1 Configuration No. and Functions
		5-Entrance on inductive mode; exit under control 6-Entrance on inductive mode; exit prohibited 7-Both sides prohibited 8-Entrance prohibited; exit under control 9-Entrance prohibited; exit on inductive mode 10-Entrance under control; exit remaining open 11-Entrance under control; exit on free mode 12-Entrance on inductive mode; exit remaining open 13-Entrance on inductive mode; exit on free mode 14-Entrance prohibited; exit remaining open 15-Entrance prohibited; exit on free mode 16-Entrance remaining open; exit under control 17-Entrance remaining open; exit on inductive mode

Level-1 Configuration No.	Description	Level-1 Configuration No. and Functions	Notes
		18-Entrance remaining open; exit remaining open 19-Entrance remaining open; exit on free mode 20-Entrance remaining open; exit prohibited 21-Entrance on free mode; exit under control 22-Entrance on free mode; exit on inductive mode 23-Entrance on free mode; exit remaining open 24-Entrance on free mode; exit on free mode 25-Entrance on free mode; exit prohibited	
4	Memory Mode	1-Disable 2-Enable  Note By default, 2 will be displayed on the display screen.	
5	keyfob Remote Control	1-one to one 2-one to multiple  Note By default, 2 will be displayed on the display screen.	

Appendix B. Button Configuration Description

Level-1 Configuration No.	Description	Level-1 Configuration No. and Functions	Notes
6	Barrier Opening Speed	1-1, 2-2, ...10-10  Note By default, 5 will be displayed on the display screen.	
7	Barrier Closing Speed	1-1, 2-2, ...10-10  Note By default, 5 will be displayed on the display screen.	
8	Card Reading on the Alarm Area	1-Do not open 2-Open  Note By default, 2 will be displayed on the display screen.	
9	Enter Duration	5-5s, 6-6s, 7-7s, ..., 60-60s  Note By default, 5 will be displayed on the display screen.	
10	Exit Duration	5-5s, 6-6s, 7-7s, ..., 60-60s  Note By default, 5 will be displayed on the display screen.	
11	IR Sensing Duration	0-0s, 1-1s, 2-2s, ..., 25-25s	

Level-1 Configuration No.	Description	Level-1 Configuration No. and Functions	Notes
		 Note By default, 0 will be displayed on the display screen.	
12	Intrusion Duration	0-0s, 1-1s, 2-2s, ..., 20-20s  Note By default, 0 will be displayed on the display screen.	
13	Overstay Duration	0-0s, 1-1s, 2-2s, ..., 20-20s  Note By default, 0 will be displayed on the display screen.	
14	Delay Time for Barrier Closing	0-0s, 1-1s, 2-2s, 3-3s, 4-4s, 5-5s  Note By default, 0 will be displayed on the display screen.	
15	Control Mode	1-Button Configuration 2-DIP Switch on Access Control Board  Note By default, 1 will be displayed on the display screen.	
18	Lane Number	1-Dual Lanes	Unable to change

Level-1 Configuration No.	Description	Level-1 Configuration No. and Functions	Notes
		2-Single Lane  Note By default, 1 will be displayed on the display screen.	
19	Motor Rotation	1-Clockwise 2-Anticlockwise  Note By default, 1 will be displayed on the display screen.	Unable to change
21	Volume	1-0, 2-1, 3-2, 4-3, 5-4  Note By default, 2 will be displayed on the display screen.	The device will be muted when set to "1".
22	Authenticated Passing	1-Disable 2-Enable  Note By default, 1 will be displayed on the display screen.	Unable to change via button
23	Invalid Card No.	1-Disable 2-Enable  Note By default, 1 will be displayed on the display screen.	Unable to change via button

Appendix B. Button Configuration Description

Level-1 Configuration No.	Description	Level-1 Configuration No. and Functions	Notes
24	Fingerprint Unmatched	1-Disable 2-Enable  Note By default, 1 will be displayed on the display screen.	Unable to change via button
25	Climbing over Barrier	1-Disable 2-Enable  Note By default, 1 will be displayed on the display screen.	
26	Reverse Passing	1-Disable 2-Enable  Note By default, 1 will be displayed on the display screen.	
27	Exceeding Passing Duration	1-Disable 2-Enable  Note By default, 1 will be displayed on the display screen.	
28	Intrusion Alarm	1-Disable 2-Enable  Note By default, 1 will be displayed on the display screen.	

Level-1 Configuration No.	Description	Level-1 Configuration No. and Functions	Notes
29	Forced Passing	1-Disable 2-Enable  Note By default, 1 will be displayed on the display screen.	Unable to change via button
30	Tailgating Alarm	1-Disable 2-Enable  Note By default, 1 will be displayed on the display screen.	
31	Unauthorized Passing	1-Disable 2-Enable  Note By default, 1 will be displayed on the display screen.	Unable to change via button
32	Exceeding Authentication Duration	1-Disable 2-Enable  Note By default, 1 will be displayed on the display screen.	Unable to change via button
33	Failed Authentication	1-Disable 2-Enable  Note By default, 1 will be displayed on the display screen.	Unable to change via button

Level-1 Configuration No.	Description	Level-1 Configuration No. and Functions	Notes
34	Expired Credential	1-Disable 2-Enable  Note By default, 1 will be displayed on the display screen.	Unable to change via button
35	Overstaying Alarm	1-Disable 2-Enable  Note By default, 1 will be displayed on the display screen.	
36	Barrier Material	1-Acrylic 2-Stainless Steel 3-Glass	
37	Barrier Length	1-550 2-600 3-650 4-700 5-750 6-800 7-850 8-900 9-950 10-1000 11-1100 12-1200 13-1300 14-1400	

Appendix B. Button Configuration Description

Level-1 Configuration No.	Description	Level-1 Configuration No. and Functions	Notes
		 Note By default, 8 will be displayed on the display screen.	
38	Motor Inspection	1-Disable 2-Enable on Main Lane 3-Enable on Sub Lane  Note By default, 1 will be displayed on the display screen.	
39	Brightness of Light	0-0, 1-1, 2-2, ..., 10-10  Note By default, 3 will be displayed on the display screen.	The higher the value is, the brighter the light will be.
40	Self-check Voice Prompt	1-Disable 2-Enable  Note By default, 2 will be displayed on the display screen.	
41	Study Mode Voice Prompt	1-Disable 2-Enable  Note By default, 2 will be displayed on the display screen.	

Level-1 Configuration No.	Description	Level-1 Configuration No. and Functions	Notes
42		4-4, 6-6, 8-8,  Note By default, 4 will be displayed on the display screen.	Unable to change via button
43	Application Mode	1-Wind-proof 2-Indoor By default, 1 will be displayed on the display screen.	
44	Barrier Recover Duration	1-Normal Speed 2-Fast Recover By default, 1 will be displayed on the display screen.	
45	Brake	1-Disable 2-Barrier Position Exception 3-Intrusion By default, 2 will be displayed on the display screen.	
46	Brake Angle	1-5° 2-10° 3-15° By default, 1 will be displayed on the display screen.	
47	IR Sensing	1-Single Triggered 2-Triggered Simultaneously	

Level-1 Configuration No.	Description	Level-1 Configuration No. and Functions	Notes
		By default, 1 will be displayed on the display screen.	
48	Fan	1-Disabled 2-Enabled By default, 2 will be displayed on the display screen.	
49	Barrier Height	1-700 2-1200 3-1400 4-1600 5-1800 By default, 5 will be displayed on the display screen.	
99	Restore to Default	1- Default 2- Start  Note By default, 1 will be displayed on the display screen.	

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	Code	Error Reason	Code
The First IR Beam Triggered	01	The Thirteenth IR Beam Triggered	13
The Second IR Beam Triggered	02	The Fourteenth IR Beam Triggered	14
The Third IR Beam Triggered	03	Authentication Indicator Board (Entrance) Offline	49
The Fourth IR Beam Triggered	04	Authentication Indicator Board (Exit) Offline	50
The Fifth IR Beam Triggered	05	IR Adapter Board Offline	51
The Sixth IR Beam Triggered	06	Interconnecting Exception	53
The Seventh IR Beam Triggered	07	Not Studying	54
The Eighth IR Beam Triggered	08	Obstruction	55
The Ninth IR Beam Triggered	09	Exceeding Studying Range	56
The Tenth IR Beam Triggered	10	Encoder Exception	57
The Eleventh IR Beam Triggered	11	Motor Exception	58
The Twelfth IR Beam Triggered	12	Extended Interface Board Offline (If the board is not installed, the error code of "49" will appear but the device functions normally)	59

P.05

Q & A

Trouble Shooting

Q1: The door wings do not move in swing barrier learning mode?

Reasons: The channel board is damaged; the motor is damaged; the three-phase winding wire of the motor and the encoder wire are not plugged in properly.

Solution: Cross test, replace with other spares or other channels board.

- (1) If the channel plate is burnt or damaged, replace the channel plate directly;
- (2) If the three-phase winding wire and the encoder wire are not plugged in properly, connect the three-phase winding wire of the motor and the encoder wire of the motor;
- (3) If the channel board is faulty, replace the channel board; if the motor is faulty, replace the motor.

Q2: The door wing occasionally pauses and then closes again?

Reasons: Maybe the Infrared light is broken or trigger.

Solution: Cross test, replace with other spares or other channels corresponding Infrared light. Transmitting lights and receiving lights need to be distinguished.

Trouble Shooting

Q3: Face terminal certification passed, but the door did not open?

Reasons: Whether the face terminal is online, and whether the personnel is sent to the controller of swing barrier.

Solution: Check the wiring and 485 configuration, and re-issue the card number information.

- (1) If not online, please check 485 parameter configuration and physical wiring;
- (2) If the card number is not found on the controller, the personnel card number will be sent to the controller and face device;
- (3) If the channel board is faulty, replace the channel board; if the motor is faulty, replace the motor.

Q4: The door wing keeps turning and can't stop?

Reasons: Maybe the position detector is broken.

Solution: Cross test, replace with other spares or other channels board.