ARMATURA

User Manual

Nergal-S4000 & Nergal-S4200

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If there is any issue related to the product, please contact us.

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About the Manual

This manual introduces the operations of **Nergal-S4000 & Nergal-S4200**.

All figures displayed are for illustration purposes only. Figures in this manual may not be exactly consistent with the actual products.

Features and parameters with ★ are not available in all devices.

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.

Symbols

Convention	Description
	**Dangers:** Follow these safeguards to prevent serious injury or death.
	**Cautions:** Follow these precautions to prevent potential injury or material damage.

Dangers:

- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region.
- The equipment must be connected to an earthed mains socket-outlet.
- Shock hazard! Disconnect all power sources before maintenance.
- Do not touch the bare metal contacts of the inlets after the circuit breaker is turned off. Electricity still exists.
- To prevent possible hearing damage, do not listen at high volume levels for long periods.
- 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:

  a. Power off the fan to prevent the operator from getting injured accidentally.

b. Do not touch bare high-voltage components.

c. 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.
- 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.)
- The Terminal PE of the switch should be connected to a ground wire.

Cautions:

- Instructions must be read before installation. Please follow these instructions carefully, incorrect installation could affect gate operation.
- When mounting and positioning this product please ensure the power cable is unplugged.
- The motor cover will need to be removed to mount the motor to the mounting plate. Electrical-related operation of the main unit can only be made by a licensed electrician.
- To prevent injury, this equipment must be securely attached to the floor/base of the turnstile in accordance with the installation instructions.
- Keep straight down when moving or using the equipment.
- Never place the equipment in an unstable location. The equipment may fall, causing serious personal injury or death.
- 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

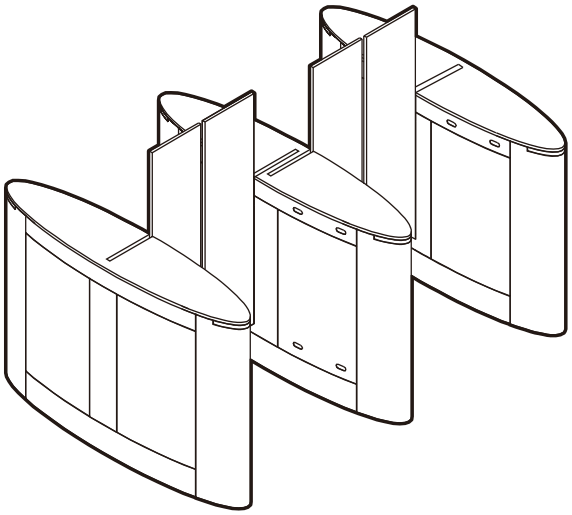
at the same time.

- 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.

Table of Contents

1. Overview

The Nergal-S4000 series from Armatura is a premium line of sliding gate barriers that combines advanced security features, modern aesthetics, and exceptional functionality. Designed for high-traffic environments such as commercial office buildings, airport boarding gates, and other premium facilities, this series delivers unparalleled reliability and adaptability. The Nergal-S4000 series is available in two versions to meet different deployment needs: the Nergal-S4000, a single-lane version ideal for standard access control setups, and the Nergal-S4200, a dual-lane version designed to provide greater throughput in high-traffic areas. A standout feature of this series is its ability to support barrier leaves up to 48.82 inches (1240 mm) in height, making it a robust and versatile solution for modern entrance control.



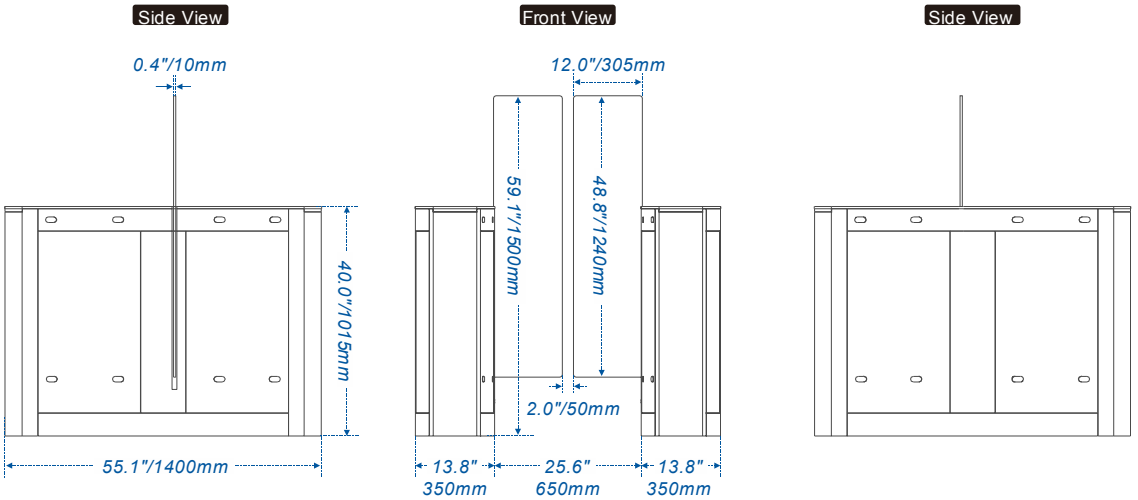
1.1 Features

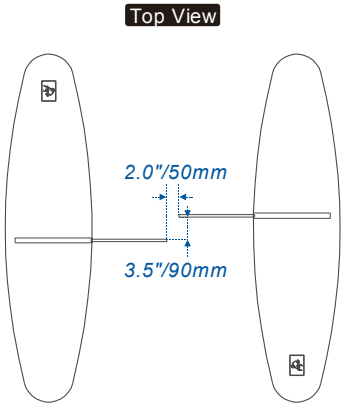
- Barrier Mechanism: The sliding gate barrier is made of acrylic and features a double leaf design. These double leaves move smoothly and quickly to open and close simultaneously, ensuring efficient passage.
- Access Control Methods: Sliding barrier turnstiles can be integrated with different access control systems such as RFID cards, biometric scanners (fingerprint, palm and facial recognition), or access codes. This allows for customized access management based on the specific requirements of the location.
- Visual Indicators: They often have visual indicators like LED lights to show the status of the turnstile (e.g., blue static light for standby; green static light for door opening; red flashing light for alarm). Also have audible signals for added user feedback.
- Advanced Detection: Equipped with infrared sensors. The dual array of 8 infrared sensor pairs for precise detection of tailgating, intrusion, and wrong-way entry. Also, it has infrared emitter and receiver sensor technology , ensuring accurate detection to protect users and prevent accidents.

1.2 Appearance

Nergal-S4000

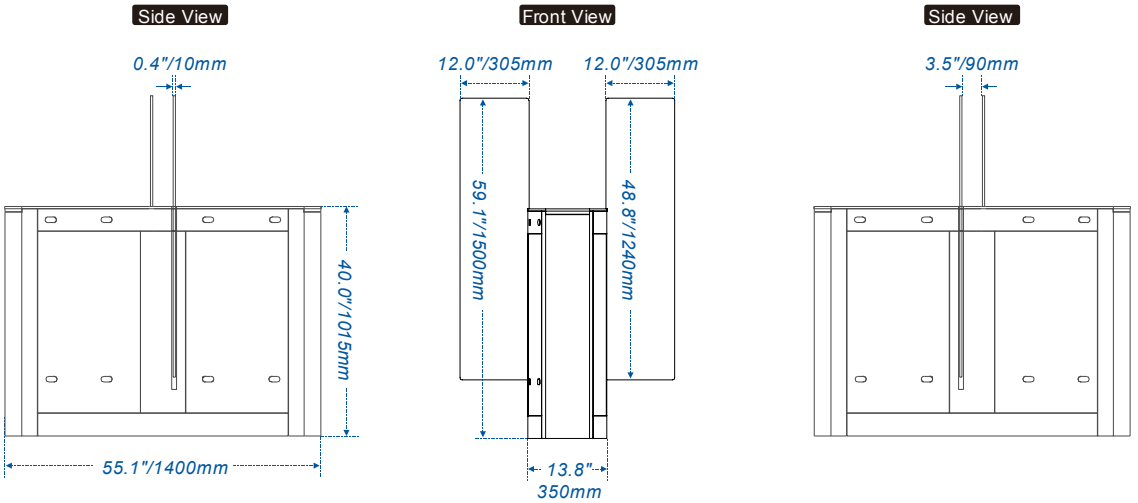
Unit: inch/mm

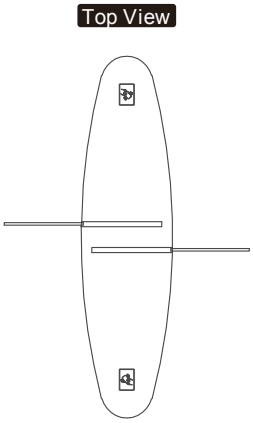




Nergal-S4200

Unit: inch/mm

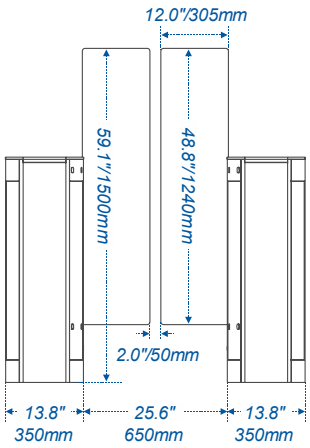




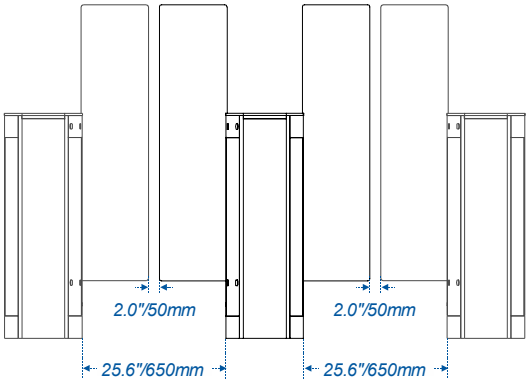
Door Leaf Specifications

The Nergal-S4000 and Nergal-S4200 can be combined to form a single, dual or multi-lane system, and users can choose the appropriate combination according to actual needs. It should be noted that Nergal-S4200 needs to be used in conjunction with Nergal-S4000.

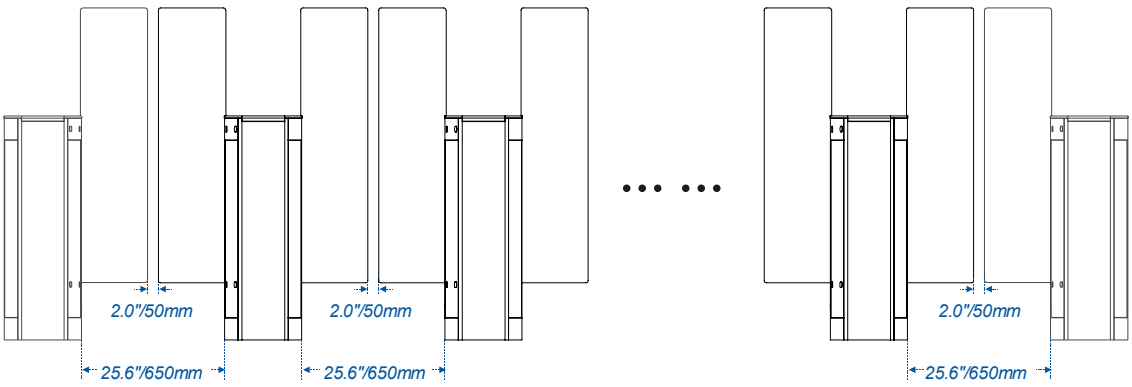
1. **Single-lane**



2. Dual-lane



3. Multi-lane



1.3 Technical Specifications

Model	Nergal-S4000	Nergal-S4200
Audio Indicator	Internal Buzzer	
Visual Indicator	LED Visual Indicators Blue (Static Light): Standby Green (Static Light): Door Opening Red (Flashing Light): Alarm	
Display	Optional (Available with integrated facial authentication systems)	
Lane Type	Single Lane	Dual Wings (for additional lane)
Lane Width	23.6" (600 mm) (Standard), Barrier Leaf Size (12.60"(320mm) x 48.8" (1240mm))	
Barrier Movement Type	Retractable Sliding Gates	
Motor	DC Brushless Motor	
Movement Speed	0.8 seconds per movement (open / close timing, depending on leaf size)	
Clutch	Mechanical clutch for anti-clamping / anti-collision	
Barrier Material	0.4"(10 mm) thick Acrylic (standard)	
Cabinet Material	SUS304 Stainless Steel (optional SUS316 for corrosion resistance)	
Lid Material	Durable Acrylic (standard)	

IR Sensors	8 pairs	
Motherboard Function	System configuration, anti-clamping, anti-tailgating, pass memory, safety logic, and more	
Motherboard Communication	Fire alarm port (Relay)1, RS485 port1	
Controller	Standard Turnstile Controller (Standard) Armatura Controller: AHDU-1260/ AHDU-1460 (Optional)	
Credential Options	Under mount RFID & QR code reader options: (support model: Armatura EP10C & Armatura EP20 Series & Armatura VG10CKQ Series); Under mount fingerprint reader: Armatura EP30CF Series; Under mount facial authentication terminal: coming soon; Under mount palm authentication terminal: coming soon; Top mount facial authentication terminal: OmniAC20 / OmniAC30/ FT10CMQ	
Flow Rate	RFID: 30 passengers per minute; QR Code: 30 passengers per minute; Fingerprint: 20passengers per minute; Face: 15 passengers per minute; Palm: 15 passengers per minute	
Accessibility	standard 23.6" (600mm) lane for pedestrians	
Power Supply	100-240 VAC, 50/60 Hz	
Power Rating	40 VA (Standby), 300 VA(Operation)	
Fire Signal	Input for voltage-free contact	
Noise Level	Less than 60 dB	
MTTR	Less than 60 minutes	
MCBF	5 million cycles	
Weight	Gross Weight: 220.4Lbs (100 kg) Net Weight: 176.4Lbs (80 kg)	Gross Weight: 176.4Lbs (80 kg) Net Weight: 143.3Lbs (65 kg)
Dimension (LxWxH)	55.12" x 13.78" x 40" (1400 x 350 x 1016 mm) (2 boxes)	55.12" x 13.78" x 40" (1400 x 350 x 1016 mm) (1 box)
Dimensions with Packing	59.06" x 14.57" x 47.24" (1500 x 370 x 1200 mm) (2 boxes)	59.06" x 14.57" x 47.24" (1500 x 370 x 1200 mm) (1 box)
Operating Temperature	5°F to 140°F / -15°C to 60°C	
Operating Humidity	20% to 95% RH (non-condensing)	

Certifications	CE, FCC coming soon
Ingress Protection Rating	N/A (For indoor use only, vandal-resistant)
Supported Software	Armatura One
Safety Features	Infrared Anti-Clamping, Power-Off Fail-Safe, Emergency Escape Function, Overforce Feedback Control, Safety Force Sensing, Accurate Presence Sensing
Security Features	Anti-Tailgating, Anti-Intrusion,Wrong Way Entry Alarm, Auto-Close Mechanism
Product Delivery	Pre-assembled for easy installation
Application Environment	Indoor
Site Preparation	Flat and level finished floor (base plate optional for unfinished floor)
Security Level	Middle
Emergency Mode	Door unlocks automatically during emergencies
Packing Material	Wooden Box

2. Installation

2.1 Installation Tools

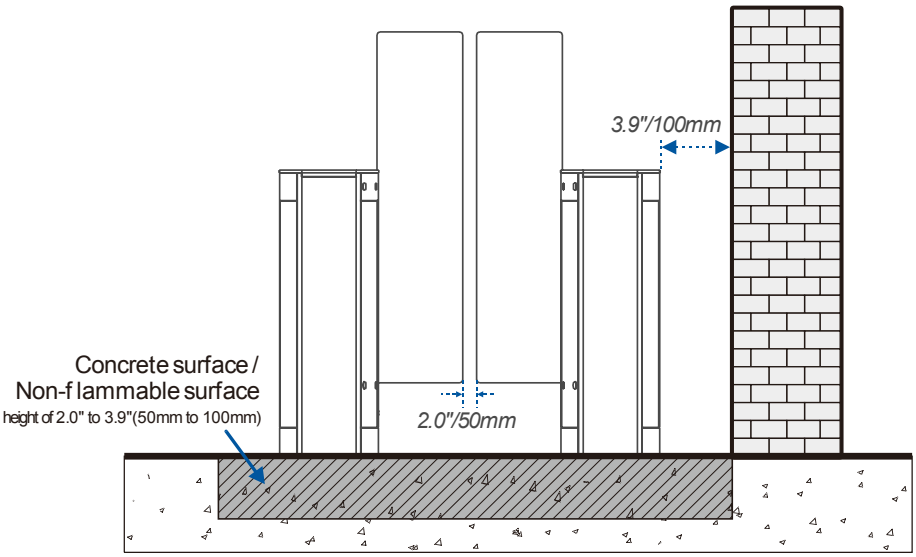
- Tapeline
- Marker Pen
- Pencil
- Percussion Drill
- Screwdriver
- Wrench
- Hex Wrench
- Cutting Machine

2.2 Installation Requirements

1. It is recommended that the turnstile must be installed on a horizontal solid platform with a height of 2.0" to 3.9"(50mm to 100mm).
2. It is recommended that the turnstile should not be used in the corrosive environment.
3. Make sure that the ground wire of the system is securely connected to avoid personal injuries or other accidents.
4. After installation, check if the connection has been done correctly at the connecting points of the ground wire, at the connector assemblies and wiring points of the circuits, as well as at each movable part of the turnstile. Any loose nuts, screws and other fasteners should be tightened in time to avoid any failures caused by long-time operations.

2.3 Installation Environment

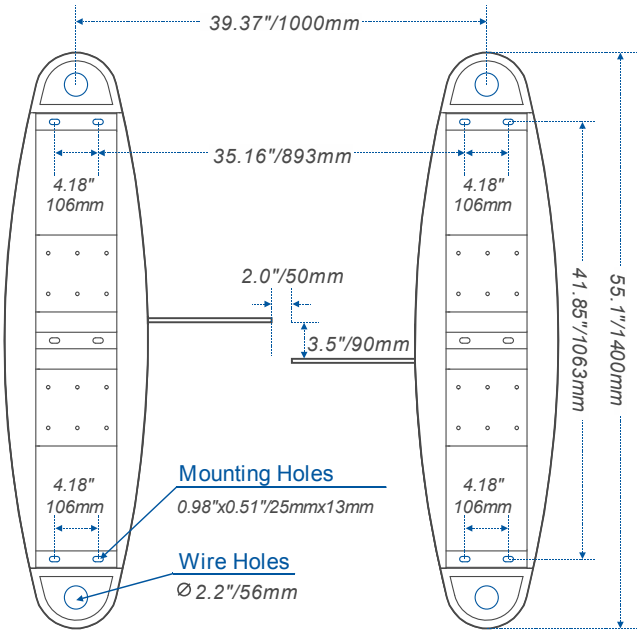
1. Before installation begins, prepare installation tools, check the device and the accessories, and clear the installation base.
2. Make sure that the appliance is mounted on a concrete surface or other non-flammable surfaces.
3. The installation position of the turnstile depends on its size. A distance of 3.9"(100mm) between the turnstile and the wall needs to be reserved for ease of opening the top lid of the turnstile to perform maintenance and adjustment. The reference figure is shown below:



2.4 Installation Cabinet

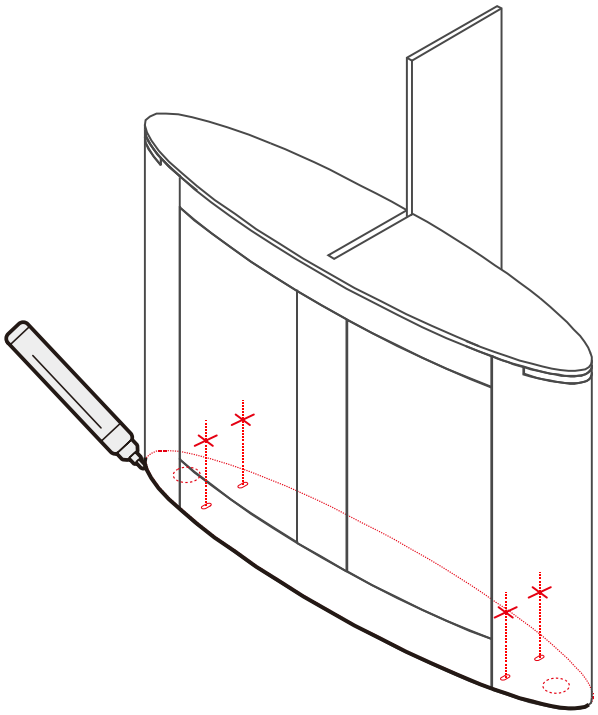
Step 1 Determine the mounting location

1. Use the key to open the cover of the cabinet and remove it.
2. Please refer to the user's manual and complete the power-on self test operation before installation.
3. Then place the cabinet according to the mounting distances shown in the diagram below. Take care to measure the distance between the bottom inside walls of the cabinets on the entrance side and exit side of the channel and make sure that the measurements are consistent.



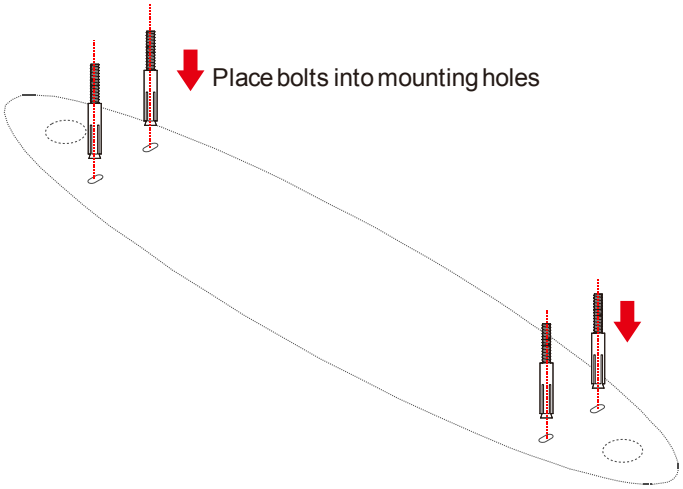
Step 2 Marker position

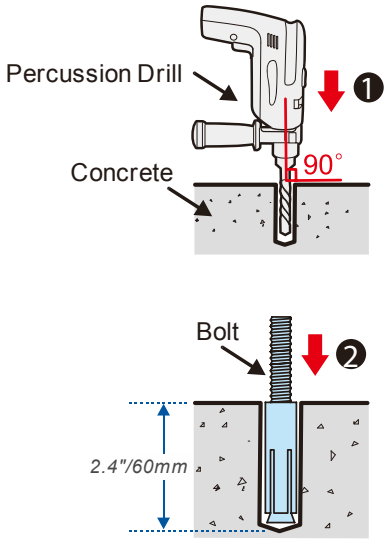
1. Draw the location of the cabinet with a marker and mark each location of the mounting holes. There will be a total four mounting holes and two wire holes per cabinet.
2. Remove the cabinets when finished.



Step 3 Drill holes and place bolts

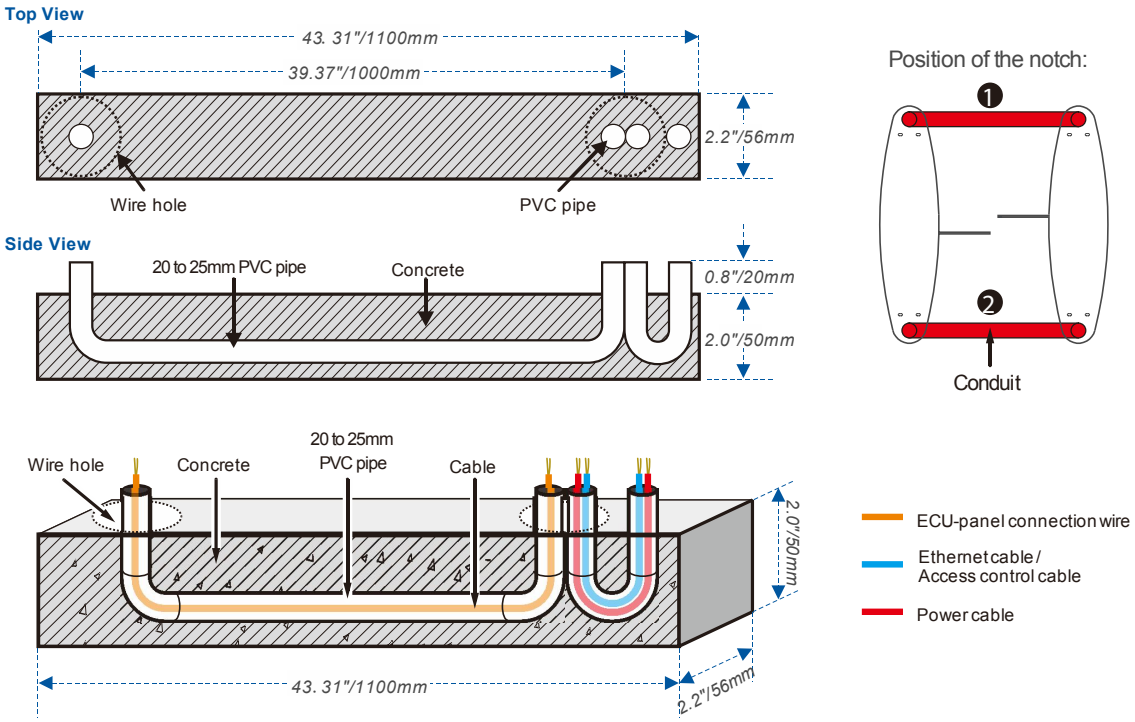
1. Using a concrete drill bit, drill the mounting holes 2.4" (60mm) in depth at the center of each marked location.
2. Then insert the bolts vertically into the mounting holes as shown at right.
3. Make sure the bolts are placed in place. Use a hammer to tap the bolts into place, if needed.





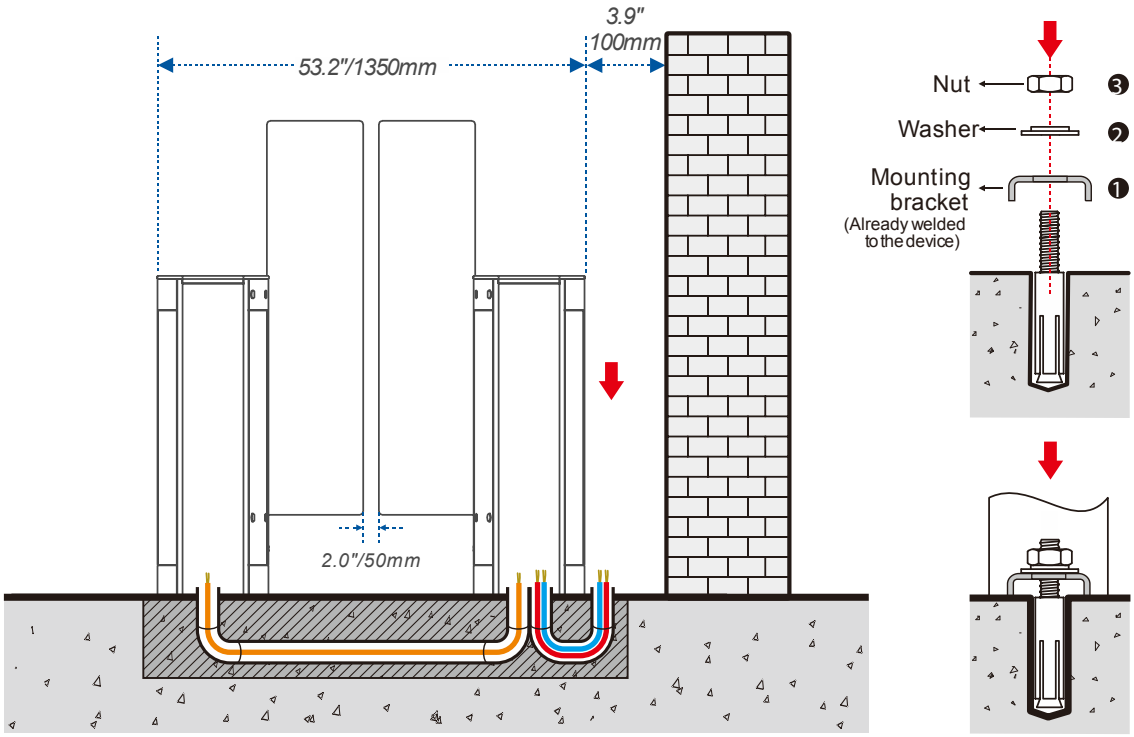
Step 4 Wireway laying

1. Dig a recess of 2.0" (50mm) depth between the wire holes on both sides of the channel with the dimensions shown below. Recesses can be dug at positions 1 and 2.
2. Then lay two 0.8" to 1.0" (20 to 25mm) diameter PVC pipes as shown below.
3. After threading the cable out of the PVC pipe, pour concrete to fix it in place.



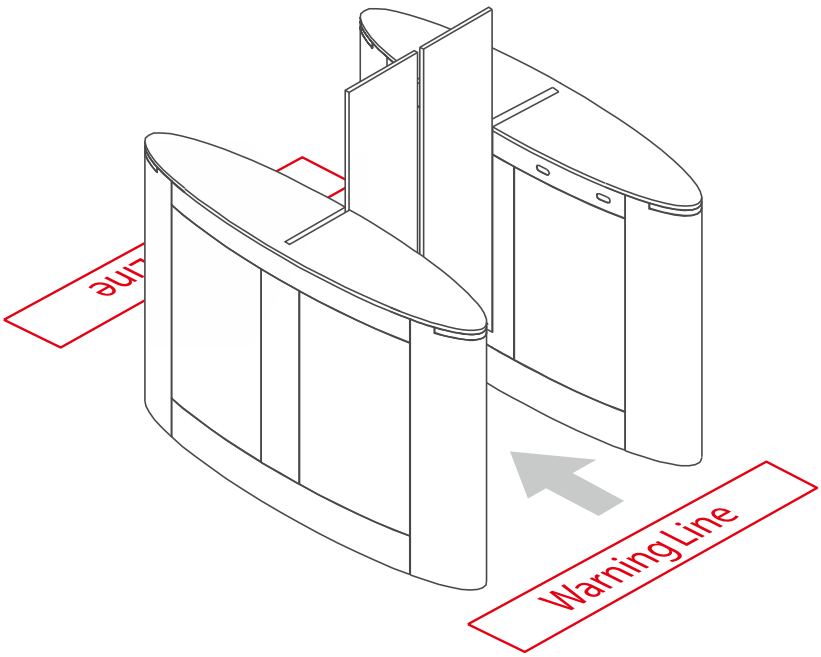
Step 5 Fixed cabinet

1. After laying the PVC pipe, place the cabinet alignment bolts back into the mounting position.
2. Then insert the eight washers and nuts into the bolts one by one.
3. Tighten the nuts to hold the cabinet in place. Don't tighten it completely until after you're sure it won't move anymore. The finished result is shown below:



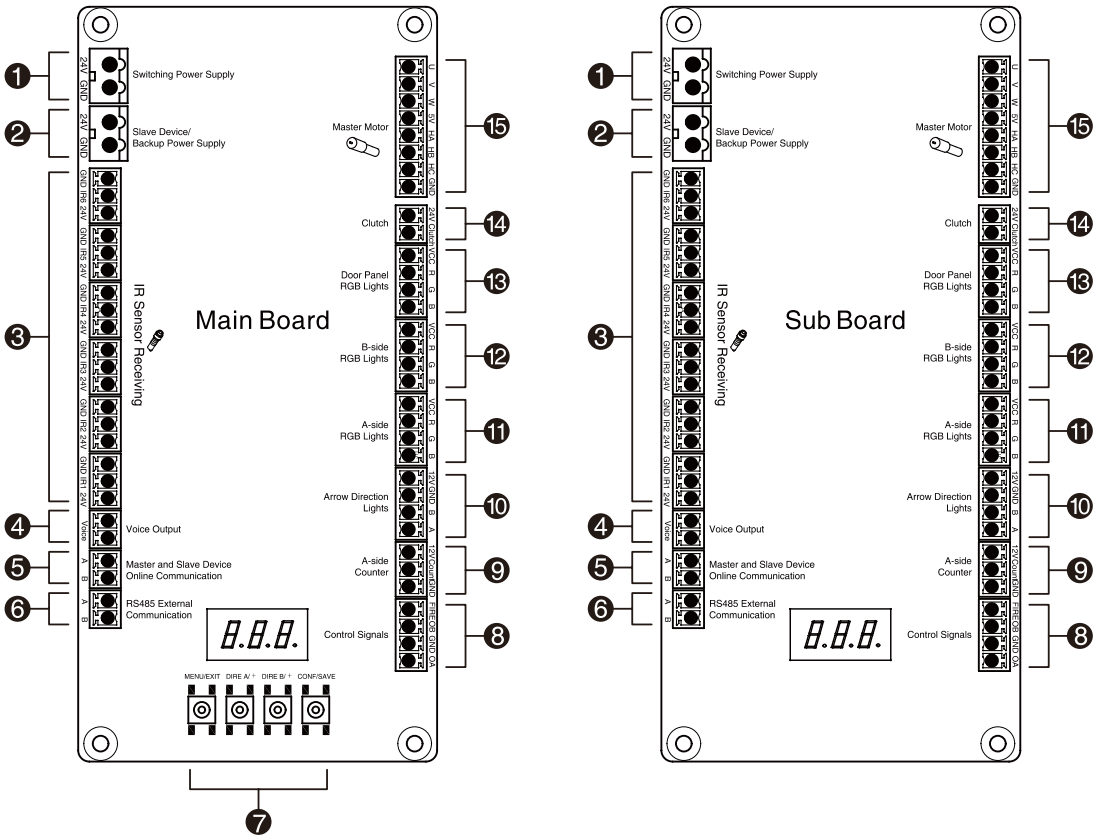
Step 6 Marking the warning line

1. It is recommended that warning lines be marked on the ground and used to alert users.
2. A warning line can alert users to wait outside the line until the previous user completes the verification process and passes through the turnstile.



3. Terminal Description

3.1 Main / Sub Board



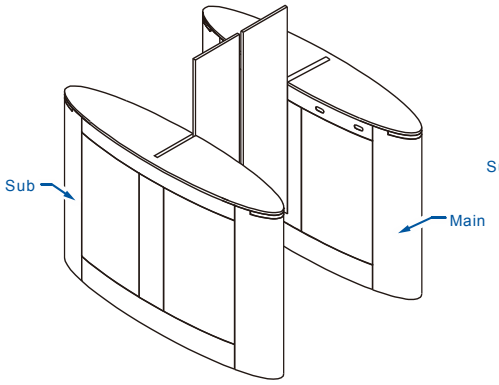
NO.	Terminal	Descriptions
1	24V, GND	24V infrared power supply
2	24V, GND	Sub Device / Backup Power Supply
3	GND, IR6 - 1, 24V	Infrared sensor receiving port
4	Voice	Voice Output port
5	A, B	Main and sub device online communication port
6	A, B	RS485 external communication port
7	MENU/EXIT, DIRE A / +, DIRE B / -, CONF/SAVE	Control buttons for setting menu parameters

8	FIRE, OB, GND, OA	Fire control signals port
9	12V, Count, GND	A-side counter
10	12V, GND, B, A	Arrow Direction Lights
11	VCC, R, G, B	A-side RGB Lights
12	VCC, R, G, B	B-side RGB Lights
13	VCC, R, G, B	Door Panel RGB Lights
14	24V, Clutch	Clutch
15	U, V, W, 5V, HA, HB, HC, GND	Main Motor

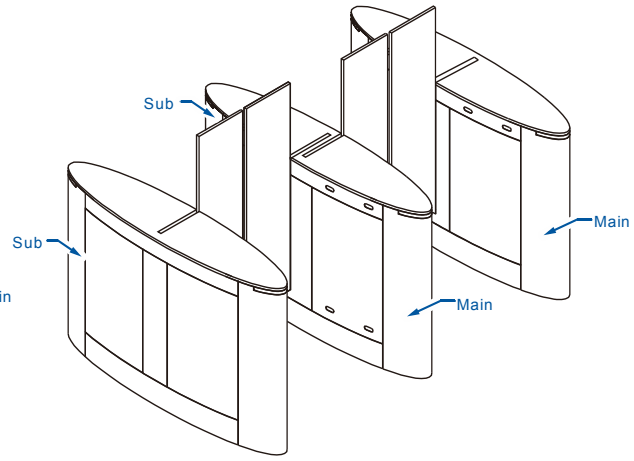
4. Wiring Instructions

The positions of the main and sub devices corresponding to single-lane, dual-lane and multi-lane are shown in the figure below.

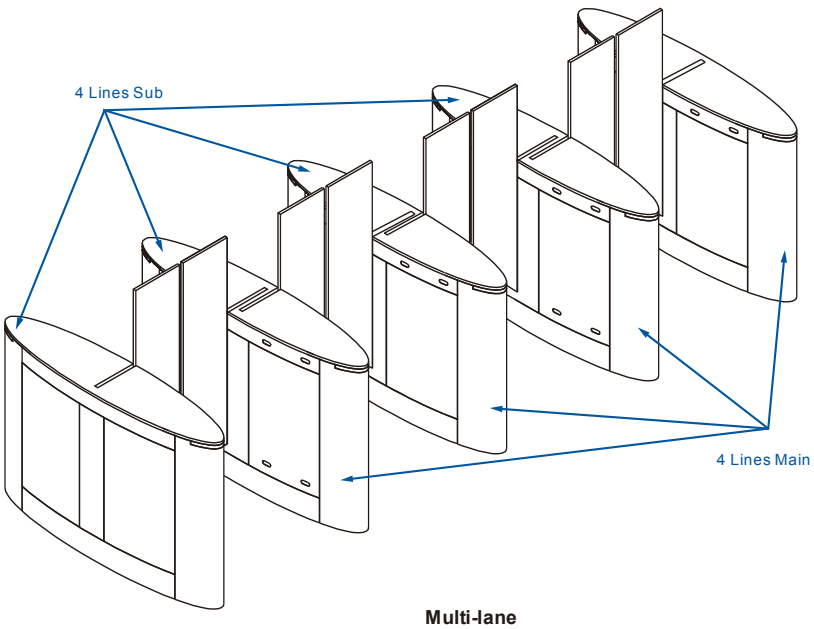
4.1 Main-Sub Location



Single-lane



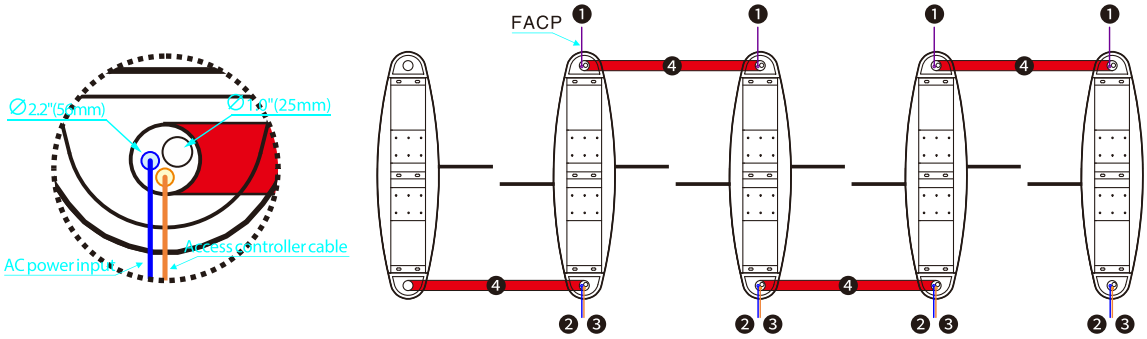
Dual-lane



Multi-lane

4.2 Slotting Position

For the different channels, the slotted locations are shown below.



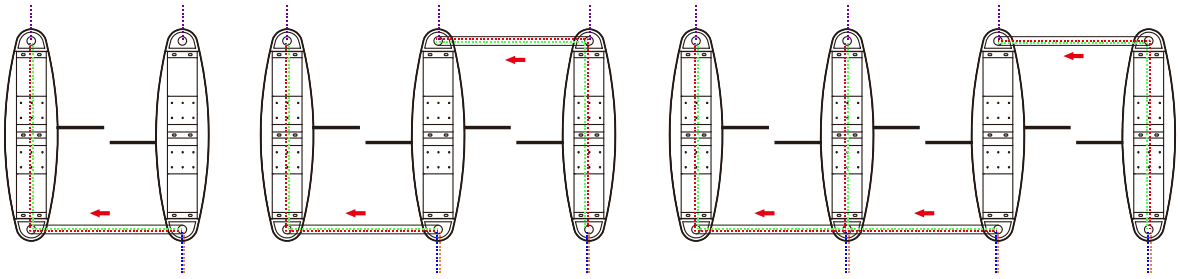
Conduit hole maximum can f it 1" conduit and 2 pcs $\frac{1}{2}$" conduits.

1. 8-core connecting wire and LAN cable through 1" conduit together.
2. Folded 8 pin connector during through conduit.

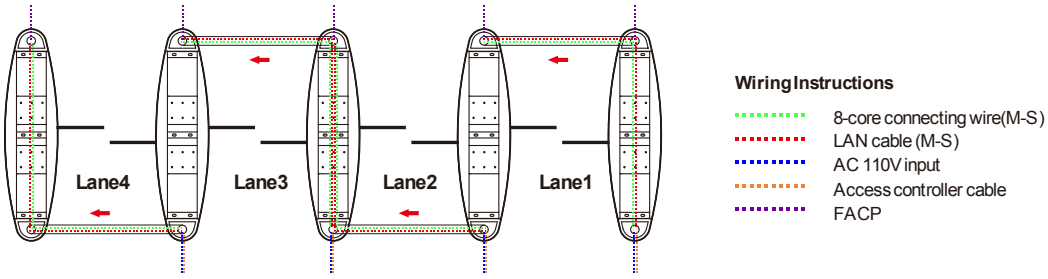
❶ $\frac{1}{2}$" conduit reserved for FIRE/Relay input
❷ $\frac{1}{2}$" conduit reserved for AC 110V input
❸ $\frac{1}{2}$" conduit reserved for reader/access controller wiring
❹ 1" conduit used for connection wire harness between M/S

4.3 Wiring Methods

The wiring principle is to connect the main device to the sub device and communicate via the ECU-panel connection wire. Each main device is then powered individually. The following diagram shows how the different channels are wired.



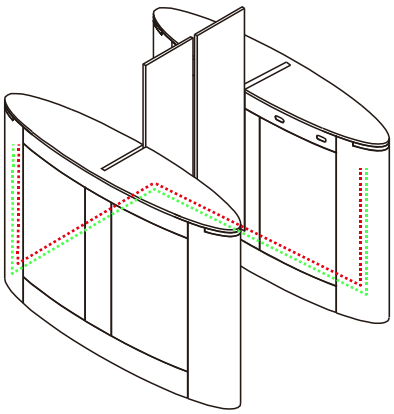
Single-lane **Dual-lane** **Multi-lane**



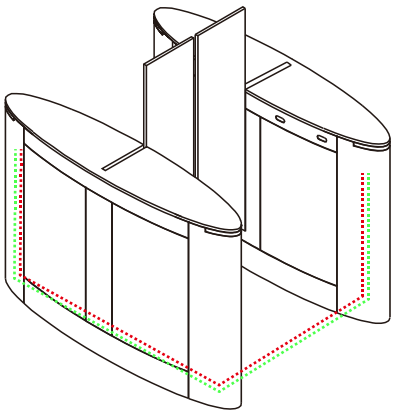
Multi-lane

Wiring Instructions

- 8-core connecting wire(M-S)
- LAN cable (M-S)
- AC 110V input
- Access controller cable
- FACP

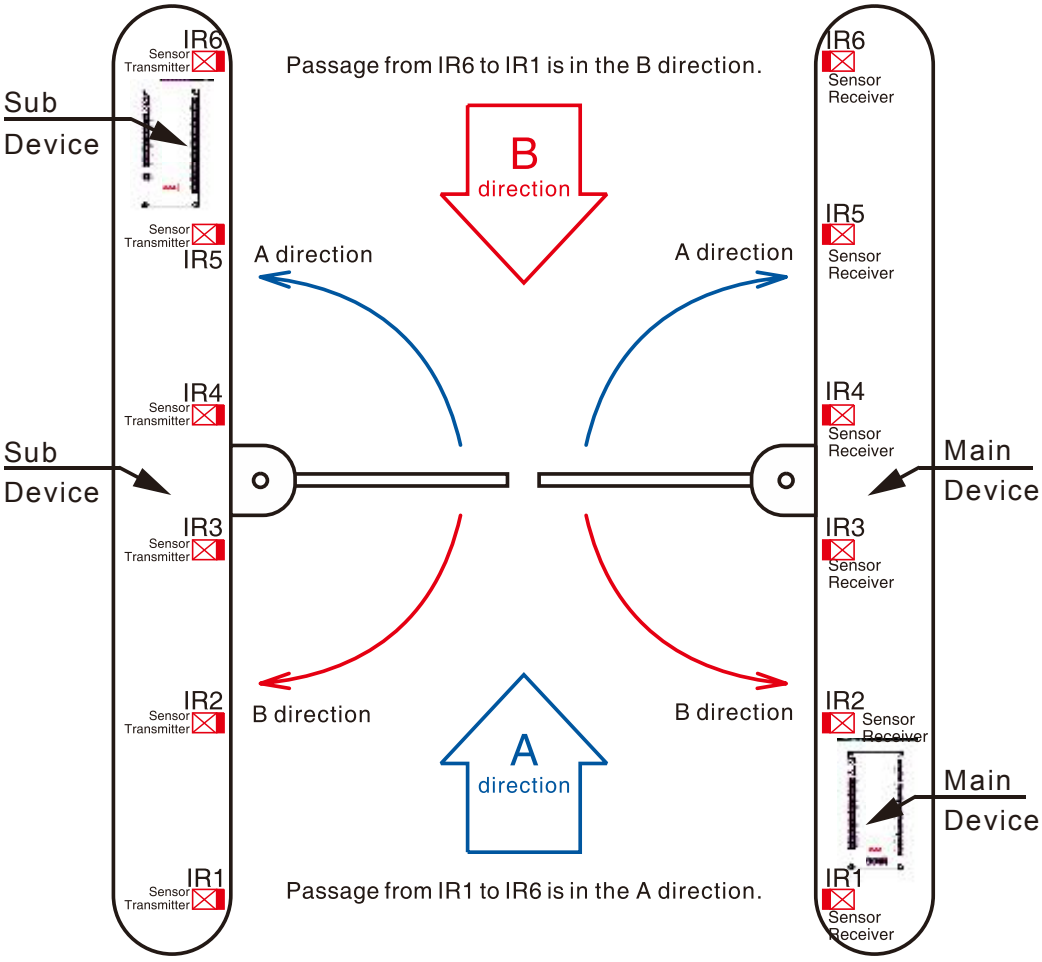


LANE1 & LANE3, Wiring connection between M/S device, as shown red/green dash lines

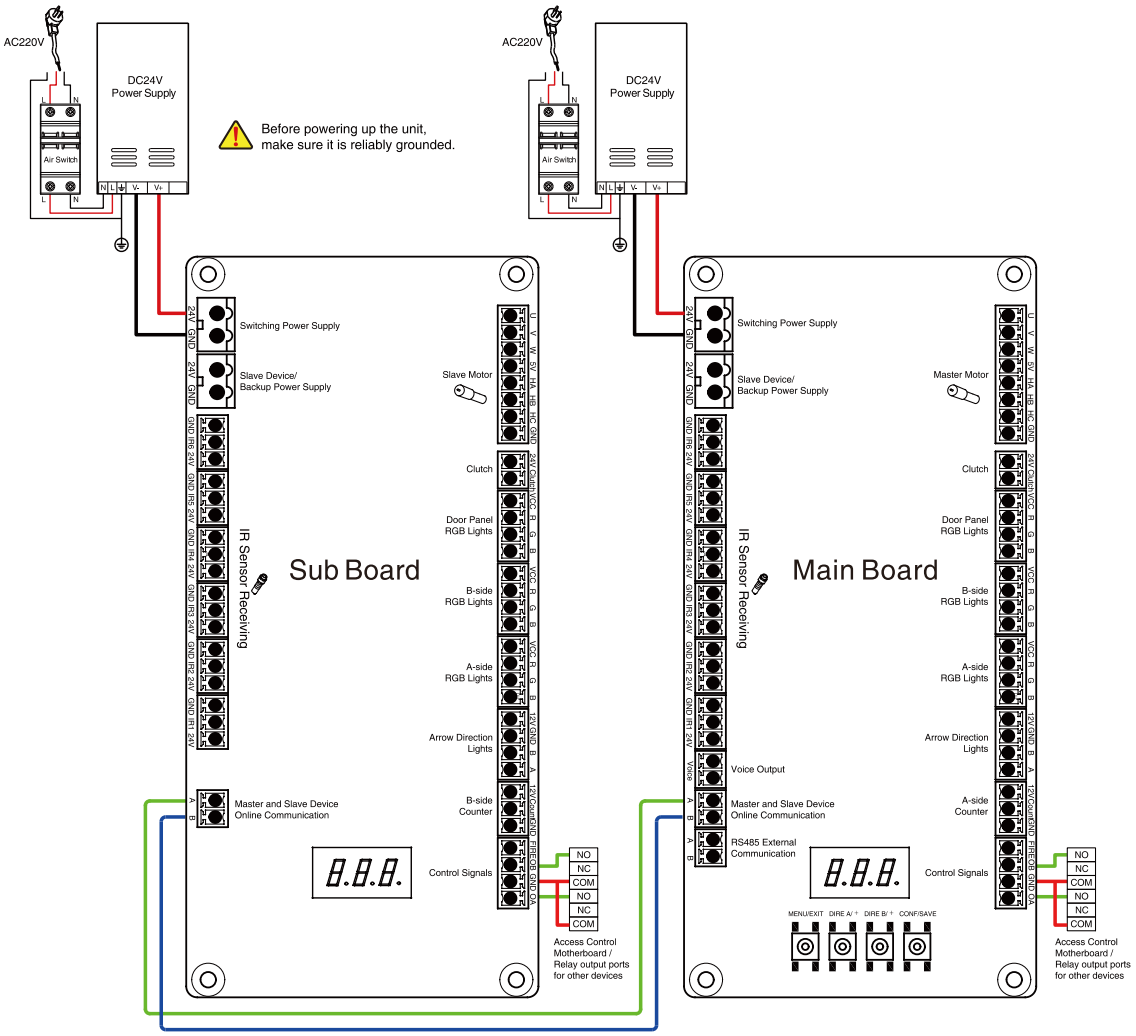


LANE2 & LANE4, Wiring connection between M/S device, as shown red/green dash lines

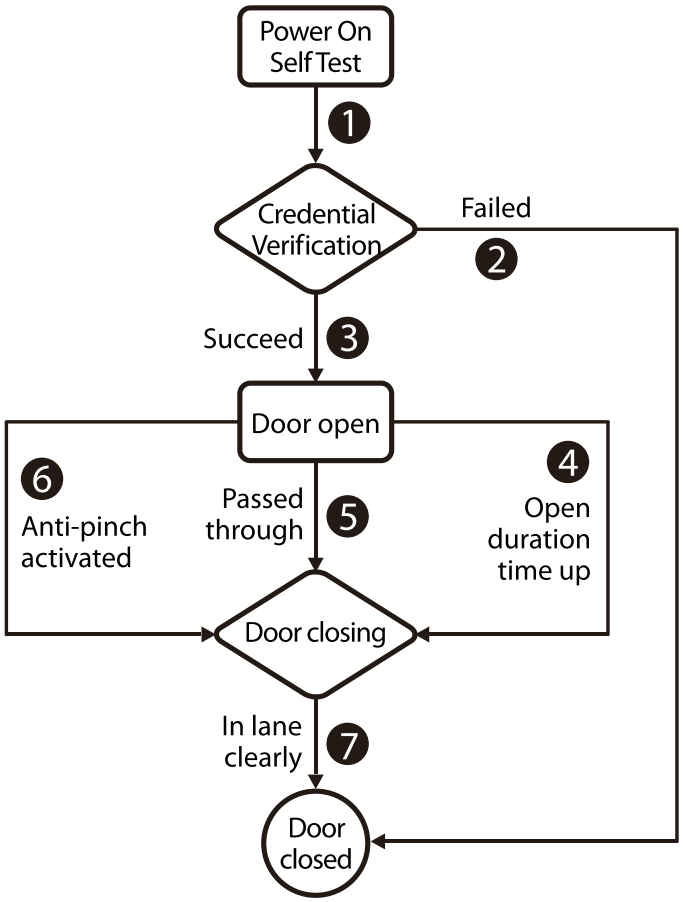
4.4 Infrared Sensor



4.5 System Wiring Diagram



5. Operation Process



1. POST (Power On Self Test)

When powering up the unit, wait 30 seconds for the system to perform a POST (Power On Self Test) procedure. If no problems are detected, the unit will operate normally. If a fault is detected, the system will display a relevant message on the LCD display so that the user can quickly understand and solve the problem.

Power and Air Switch Wiring: 120Vac and 240Vac primary power must be hard wired in place (Note: must be grounded). It is strongly recommended that a licensed electrician perform this procedure in accordance with applicable local codes.

2. Credential Verification

After the device power-on self-test is completed, it enters the standby state.

When the user places a valid card in the swipe area, i.e. the device recognizes a valid card. The LCD display will show success and a buzzer will give a positive audible indication to the pedestrian that it has been successfully validated. The card reader then sends a signal to the access controller requesting permission to pass through the channel. The access controller will send a signal to the revolving door control panel. After receiving the signal from the card reader

and the Infrared Sensor, the Turnstile Control Board will send valid control signals to the servo motor driver.

1) Verification Success

When the verification is successful, the door is opened.

2) Validation Failure

When verification fails, the door remains closed.

Note: At this time, if the system is in forbidden passing mode, the mode indicator light will turn red, and the Turnstile Control Board will not accept signals of card.

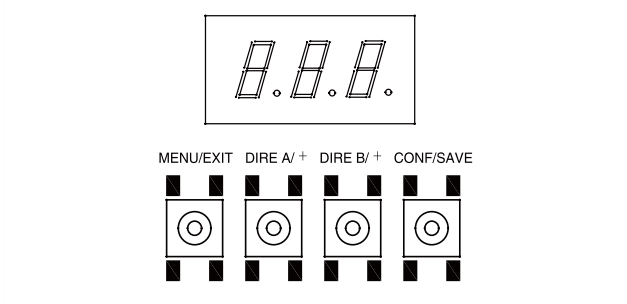
3. Passed Through

After the passenger passes the channel according to the opening direction of the swing arm, the Infrared Sensor will keep detecting the movement of the pedestrian throughout the passage and continue to deliver signals to the Turnstile Control Board until the pedestrian passes through the passage.

If the pedestrian enters the passage but forgets to verify identification, or if the card by the pedestrian is invalid, the system will prompt an audible alarm to warn the pedestrian to stop passing. The alarm signal will not be cancelled until the passenger retreats from the passage. The pedestrian can pass through the passage only after a valid card is successfully verified.

6. Machine Operation

6.1 Operation Buttons Description



There are 4 keys on the main motor driving controller, "MENU / EXIT", "DIRE A / +", "DIRE B / -" and "CONF / SAVE".

MENU / EXIT:

- Long press for more than **2 seconds** to enter the main menu interface.
- In menu item parameter setting interface, short press this key to return to the main menu. short press this key to exit the menu mode in the main menu interface.
- If you don't want to save the current parameters when setting the parameters in the menu item, short press this key to exit the current menu item without saving the parameters.

DIRE A / +:

- In normal operating mode, this key is the A-side gate open key.
- In menu mode, this key is the up and increase key.

DIRE B / -:

- In normal operating mode, this key is the B-side gate open key.
- In menu mode, this key is the scroll down and decrease key.

CONF / SAVE:

- In the main menu interface, press this key to enter the currently selected menu item.
- When in the menu item parameter setting interface, pressing this key will save the current change parameters, and at the same time automatically jump to the main menu and display the next menu item.
- **Special Function:** In normal working mode, long press this button for more than **2 seconds**, the gate will automatically open and keep the gate open, in order to facilitate the relevant staff to debug or maintain the gate. In the case that there is no one in the channel to block the infrared, then long press this button for more than **2 seconds**, the gate will be closed to return to the normal state.

6.2 Menu List Description

For the convenience of parameter setting, the controller menu is divided into two main parts: the core component parameter menu and the function parameter menu.

6.2.1 Core Component Parameters Menu and Setting Range

Menu	Parameter Definition	Range Value	Default Value
P00	Zero position setting	---	---
P01	A-direction door opening position setting	---	---
P02	B-direction door opening position setting	---	---
P03	Opening speed	000-100	070
P04	Closing speed	000-100	070
P05	Opening deceleration angle	000-075	030
P06	Closing deceleration angle	000-075	030
P07	Smoothness of open door operation	000-030	003
P08	Smoothness of closing operation	000-030	003
P09	Main machine speed fine-tuning	-30--+30	000
P10	Smoothness of gate in place	000-100	092
P11	Motor direction	000-001	000
P12	Reserved parameters	---	000
P13	Reserved parameters	---	000
P14	Clutch lock mode	0: Motor countermeasures 1: Push gate clutch lockout 2: Break gate clutch locking 3: Zero position clutch lockout	000
P15	Rebound mode	0: Return in case of obstruction 1: Stop in case of obstruction	000
P16	Clutch operating angle	005-030(Unit: degrees)	005

P17	Clutch reset time	001-030 (Unit: s)	005
P18	Confrontation strength	010-100	050
P19	Overload protection current	001-010 (Unit: A)	001
P20	Zeroing speed	001-050	001
P21	Anti-pinch sensitivity	000-020	015
P22	Reserved parameters	---	000

6.2.2 Function Parameters Menu and Setting Range

Menu	Parameter Definition	Range Value	Default Value
F00	Parameter storage	---	---
F01	Parameter loading	1: Load default motor parameters 2: Load default function parameters 3: Load factory setting parameters 10: Load all default parameters	000
F02	Working mode	0: Controlled in both directions 1: A to controlled B to free 2: A to free B to controlled 3: Free in both directions	000
F03	Gate closing timeout durationclosure	001-030 (Unit: s)	005
F04	Gate Closing Delay Time	001-100 (Unit: 0.1s)	001
F05	Infrared Overlay Duration	001-300 (Unit: 0.1s)	010
F06	Waiting time after anti-pinch	002-100 (Unit: 0.1s)	010
F07	A-side pass voice	0-99 phonetic indexing	008
F08	B-side pass voice	0-99 phonetic indexing	009
F09	Illegal intrusion alarm voice	0-99 phonetic indexing	001
F10	Tailgating alarm voice	0-99 phonetic indexing	003
F11	Retrograde alarm voice	0-99 phonetic indexing	004
F12	Stranded alarm voice	0-99 phonetic indexing	002
F13	Language	0: Chinese 1: English	000

F14	Volume setting	000-015	005
F15	Voice test	---	---
F16	Infrared type	0：PNP 1：NPN	000
F17	IR logical sequence	0: Positive order 1: Reverse order	000
F18	Number of IR	4: 4 pairs 6: 6 pairs	004
F19	Gate closing position	0：Close the gate after the last pair of infrared 1：Close the gate after passing the infrared anti-pinch.	000
F20	Anti-tailgating mode	0: Passageway is occupied, leave the door open 1: Anti-Tailgating	000
F21	Retrograde breaking options	0: Do not close the gate 1: Close the gate 2: Repeat opening the gate after exiting	000
F22	Gate Opening Memory	0: No memory 1: Memorize the number of gate openings	000
F23	Power failure opening direction	0: A direction 1: B direction	
F24	Device Working Mode	0: Sliding barrier 1: Single barrier(Unavailable here)	
F25	Communication baud rate		
F26	Communication address		
F27	Version Number		
F28	Aging Test	001-010 (Unit: s)	
F29	Is it allowed to swipe the card if there are people in the passageway?	0: The channel is occupied, allow swipe card 1: The channel is occupied, swiping is not allowed.	

6.2.3 Display Code Message Description

Code	Reason for error	Descriptions
E01	Main motor operation is blocked	Indicates that the main motor is obstructed or blocked during operation.
E02	Main motor not connected or faulty	Indicates that the main motor wires are not connected, loose, miswired, or that the Hall sensor is faulty.
E03	Main motor overcurrent	Indicates an overcurrent condition during main motor operation.
E04	Main and sub communication failure	Indicates that there is a fault in the previous communication between the main and the sub.
E05	Self-test fault	Indicates that the gate self-test was unsuccessful and there is a malfunction.
E06	Submotor operation is blocked	Indicates that the submotor is blocked during operation.
E07	Sub-motor not connected or faulty	Indicates that the submotor wire is not connected, loose, miswired, or that the Hall sensor is faulty.
E08	Sub-motor overcurrent	Indicates an overcurrent condition during operation of the submotor.
E09	Low supply voltage (power failure opening gate)	When the host computer detects a low power supply voltage, it displays the E09 code, and if the gate is connected to a backup power supply, the gate will open automatically (power failure opening gate).
E10	Gate is forced open by an external force	This fault code is displayed if the gate is forced open by an external force when the channel is closed in a controlled manner.
E11-E16	Corresponding infrared 1-6 are blocked	During self-test or operation, if any of the infrared 1-6 is blocked, the corresponding E11-E16 code will be displayed.

7. Maintenance

7.1 Chassis Maintenance

The chassis is made up of stainless steel or cold rolled sheet. If it is used for substantial period, then there may be rust stains on its surface. Regularly clean the surface with a clean cloth carefully. Coat the surface with anti-rust oil and do not cover the infrared sensor.

7.2 Movement Maintenance

Before doing maintenance, turn off the power. Open the door, wipe the surface dust, and apply lubricant for smooth movement.

7.3 Power Supply Maintenance

- Switch off the power supply before maintenance.
- Check the power plug connection, if found loose, fix it properly.
- Do not change any connection position randomly.
- Check the external power supply insulation periodically.
- Do periodic check for any kind of leakage.
- Check if the technical parameters of interface are normal.
- Check the service life of the electronic components and replace accordingly.

Caution: All the above-mentioned maintenance methods for sliding gate barriers must be carried out by a professional technician, especially the movement and the electric control part. For ensuring operational safety, first switch off the power supply when the barrier is not in use. Perform the safety check on a weekly basis to ensure that the turnstile is safe and ready for user operation.

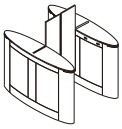
8. Troubleshooting

No.	Failure Descriptions	Analysis and Solution
1	The mode indicator light does not respond or the indication is incorrect.	Check that the control panel mode indicator wiring is correct or that the contact is poor.
2	After swiping the card, there is only a speed gate unlocked.	Check the mode setting of the main and sub devices and the 8-core, 2-core connection lines. See the wiring diagram for the specific connection circuit.
3	The barrier doesn’t close when the opening delay time is ended.	Check to see if the opening delay time is too long or whether the IR sensor is covered.
4	When the gate is self-tested, the wing arm is not in the normal closing position!	In the process of self-test, there are obstacles, please remove the obstacles, restart the self-test after power-on!

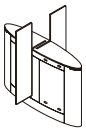
9. Packing List

The package consists of the following items:

Nergal-S4000

	Nergal-S4000 (Main and Sub)	2
	Power Cable	1
	Card	1
	Expansion Screw M12*100	8
	Washer	8
	Expansion Screw Washers	8
	Stainless Steel Maintenance Wipes	1
	Hex Wrench	1

Nergal-S4200

	Nergal-S4200	1
	Power Cable	1
	Card	1
	Expansion Screw M12*100	4
	Washer	4
	Expansion Screw Washers	4
	Stainless Steel Maintenance Wipes	1
	Hex Wrench	1

Revision History

Revision	Date	Author	Reviewer	Description
V1.0	10/16/2024	Julia.Huang		Original Document
V1.0	03/17/2025	Julia.Huang		Change the product model to Nergal-S4000/Nergal-S4200.

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