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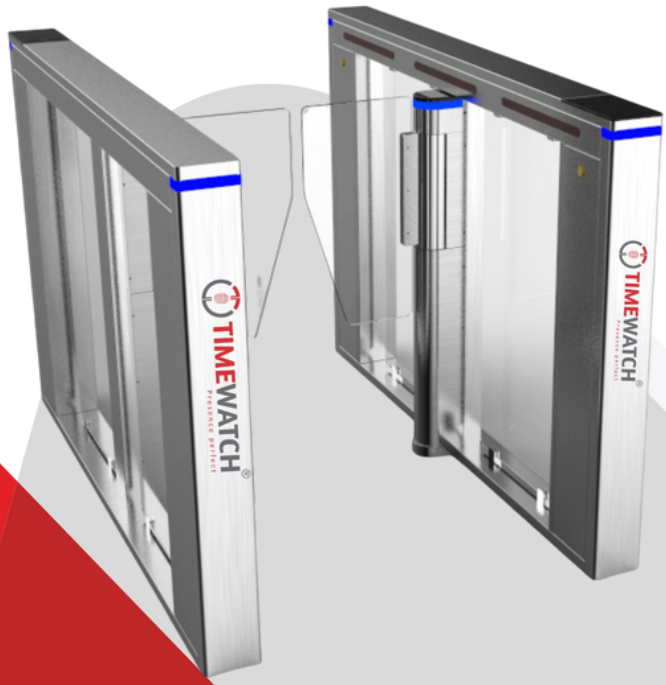


Manual

Swing Gate SG-2009

Catalogue

1. Product introduction of the channel gate

Channel gate is an intelligent channel management equipment developed and produced by our company for many years. The device organically integrates mechanical, electronic, microprocessor control and a variety of reading and writing technologies.

Equipment shape using stainless steel plate laser welding molding, beautiful shape, rust, durable, and external standard electrical interface, can easily bar code card, ID card, IC card and other card reader on the equipment, to provide civilized, orderly access, and prevent the illegal access; in addition, the system is specially designed to meet the requirements of fire function, in an emergency, to ensure the smooth channel, convenient personnel timely evacuation;

2. Channel gate function features

1) With zero self-inspection function for convenient maintenance of user and use;

2) Illegal entry has the alarm prompt function;

3) Anti-flushing function, when the opening signal is not received, the swing door will automatically lock or alarm;

4) Infrared anti-clip function;

5) With the overtime automatic reset function, after reading the valid card, if the pedestrian does not pass within the specified time of the system, the system will automatically cancel the pedestrian traffic permission;

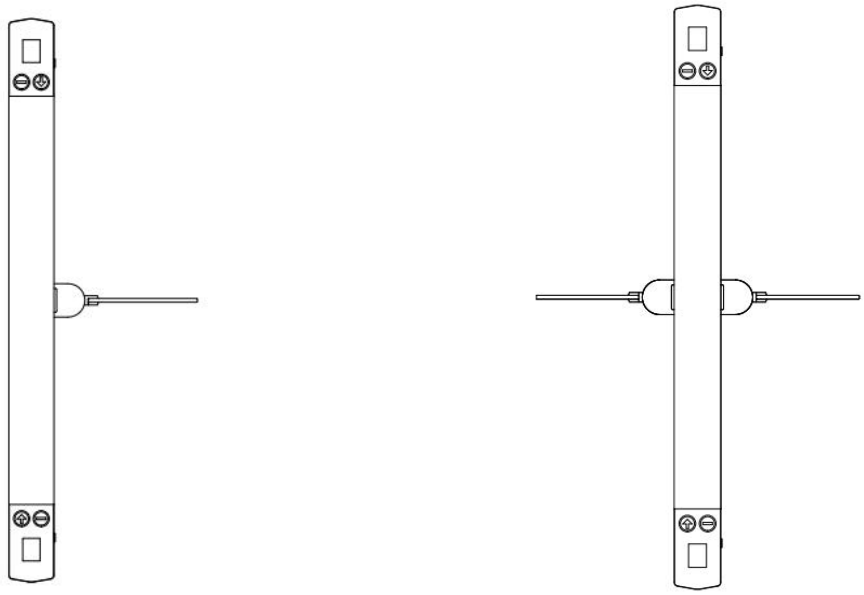
6) Unified standard external electrical interface, can be connected to a variety of card readers, and can achieve remote control and management through the management computer.

4. Product definition of the channel gate

4.1. Definition of the channel gate core

Single movement swing lock: a movement is installed in the chassis.

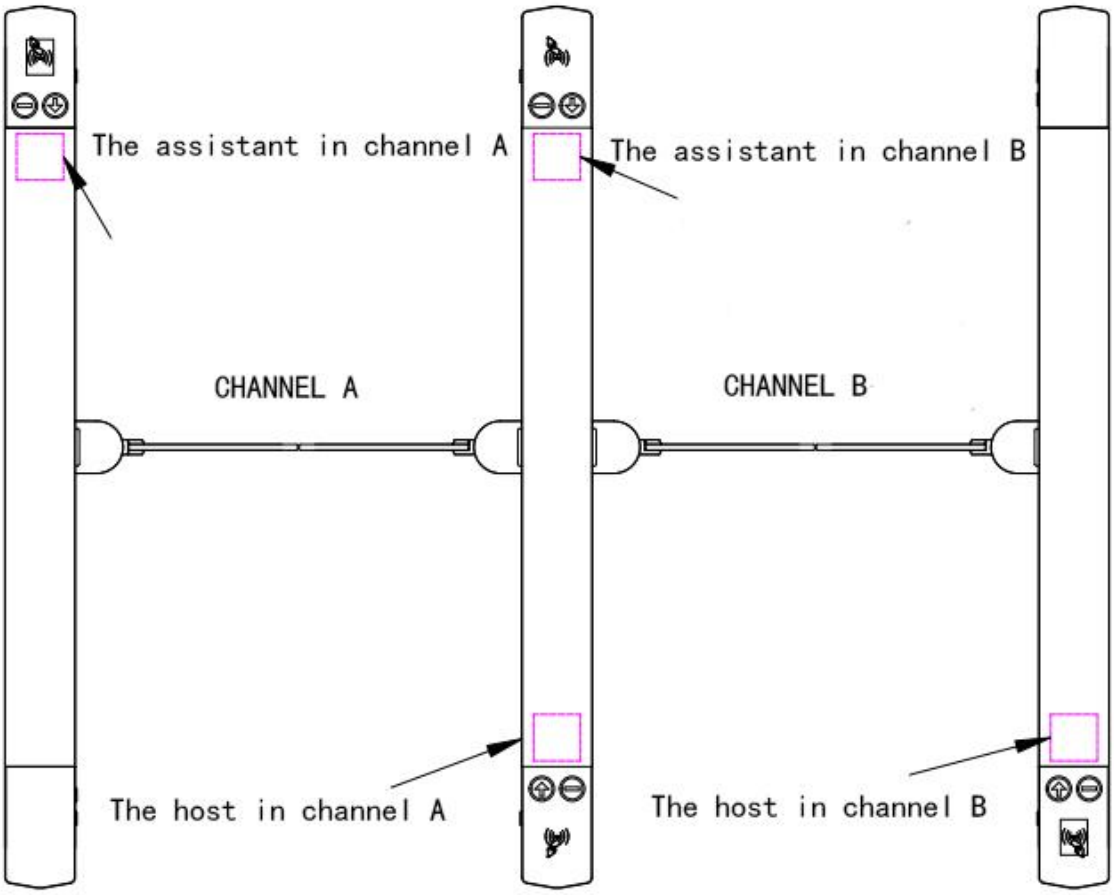
Double movement switch: two movements are installed in the chassis, as shown in the figure below.



Single movement, double movement

4.2. Definition of channel gate master and slave machine

The speed-pass door is used with the infrared sensor. The gate connecting the receiving end of the infrared sensor is the main engine, and the gate connecting the transmitting end of the infrared sensor is the slave.When there are double movements in the channel, the double movement swing gate is configured with 1 host and 1 slave. Note the direction during installation, as shown in the figure below.


The assistant in channel A
The assistant in channel B
CHANNEL A
CHANNEL B
The host in channel A
The host in channel B

. 4.3 Identification of the host and slave machine of the channel gate

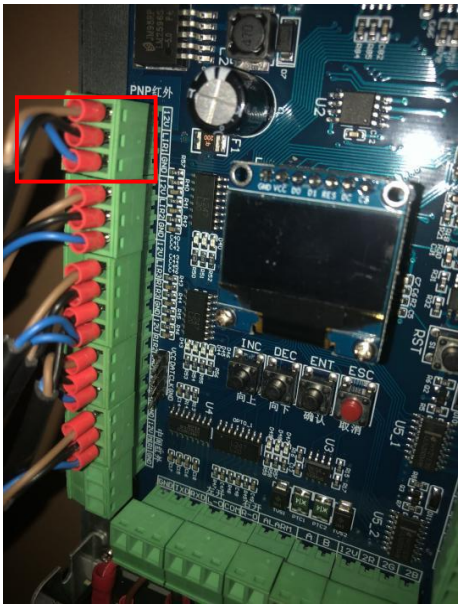
Open the gate door on the side of the gate, the first row on the motherboard LED displays (host), or the main machine is connected to the main infrared sensor of the 3-core wire, and the secondary infrared of the 2-core wire, 4.3.

Channel gate main and slave gate resolution

Open the gate door, the infrared three main lines of the motherboard shown in Figure 1 are the switch host, and the infrared two lines of the motherboard shown in Figure 2 are the switch slave.

Receive

brown ⟷ 12V
black ⟷ IR2
blue ⟷ GND

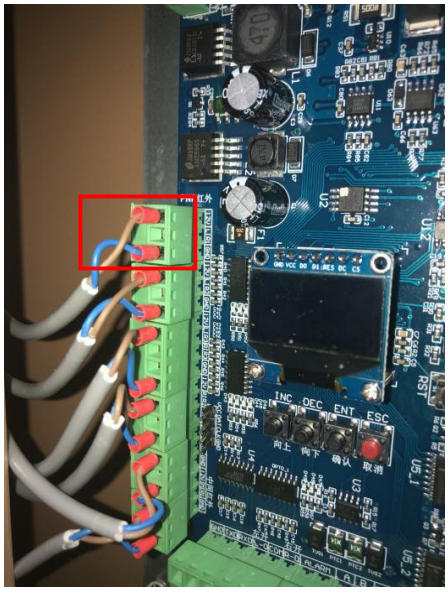


The Infrared three

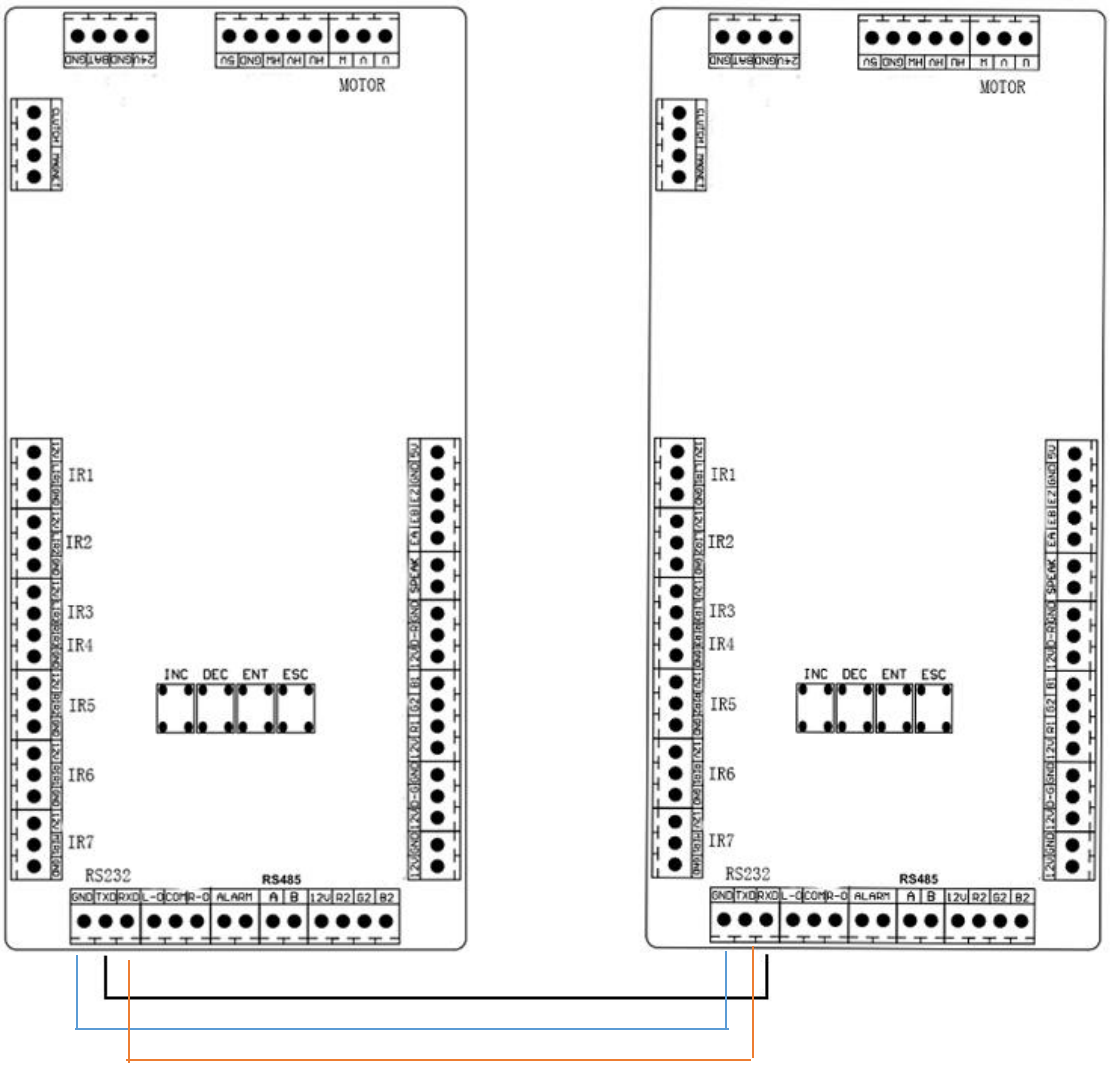
Figur

Launch

brown ⟷ 12V
blue ⟷ GND



The Infrared two



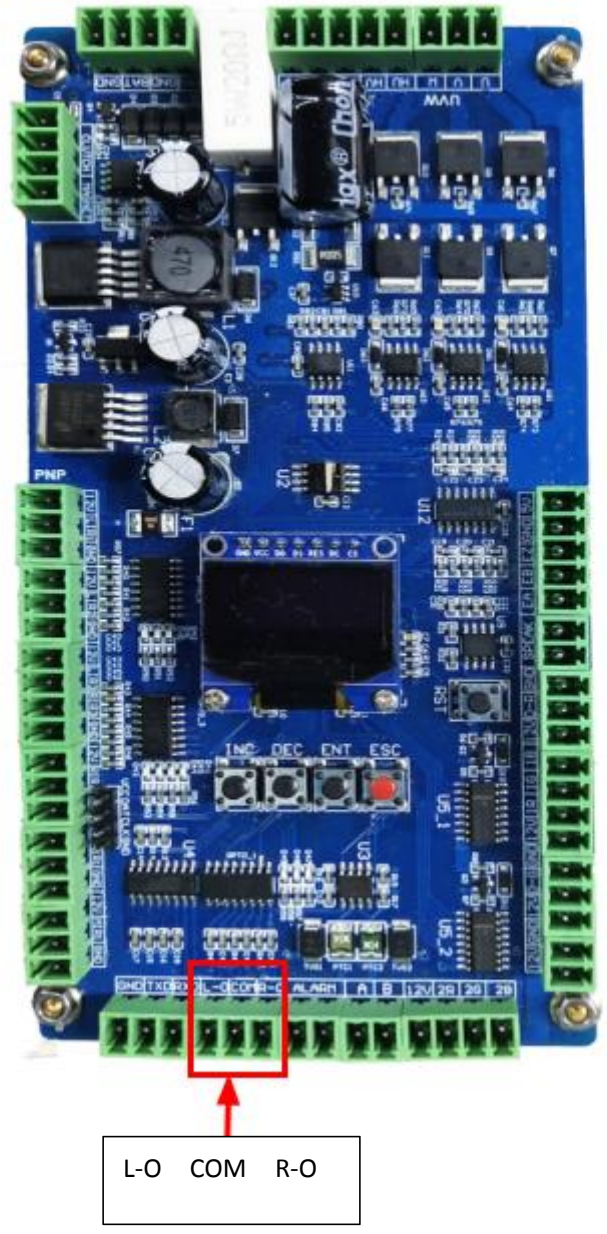
Synchronous line

GND—GND

TX — RX

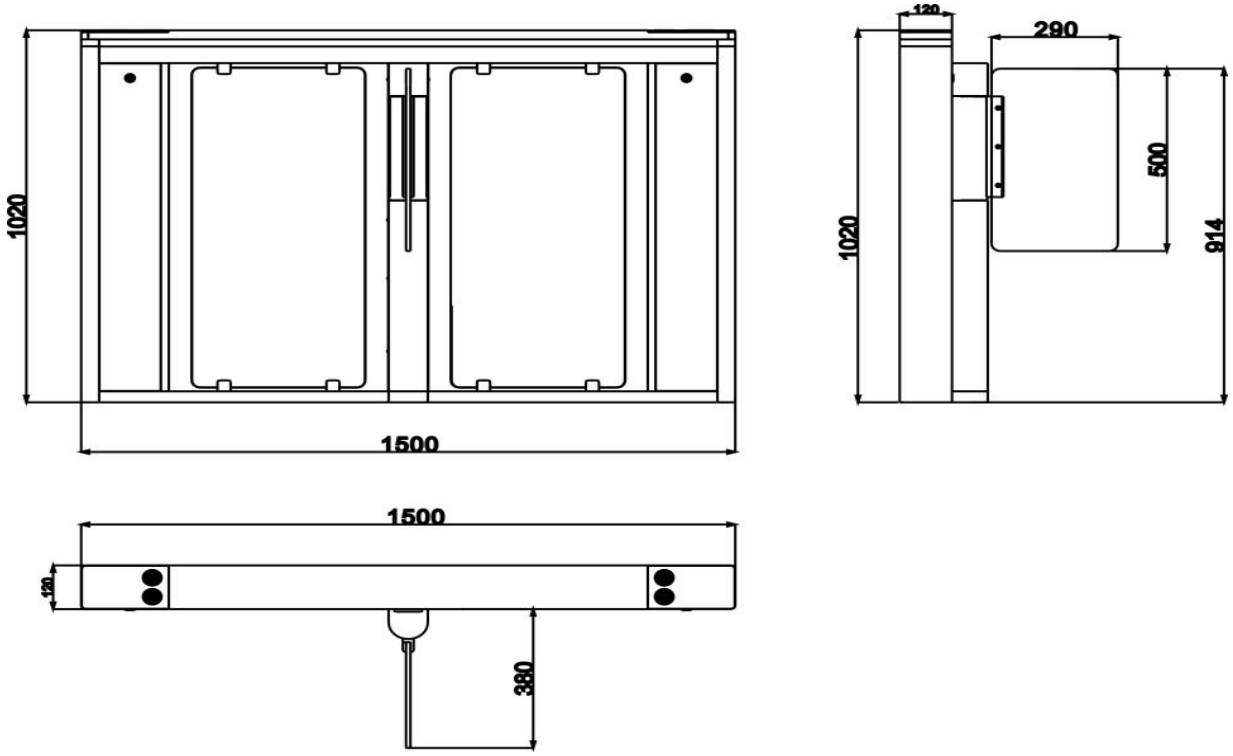
RX — TX

Host and slave use 3-core synchronous line, and use RS232 port connection, host GND, TX, RX respectively connect assistant board GND, RX, TX, we have a cable in the accessories list, you can directly connect to use



The L-O and COM connection of the motherboard is the left door signal input, and the R-O and COM connection of the motherboard is the right door signal input

4.4. Overall size of the channel gate equipment is ()



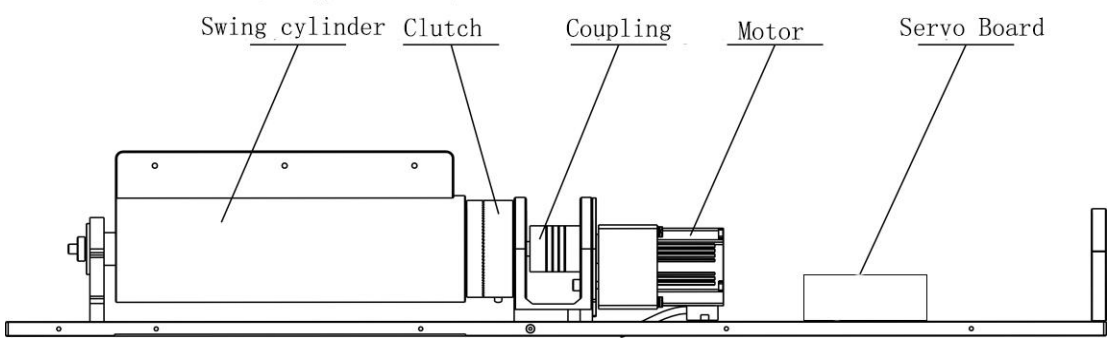
5. Composition and principle of the channel gate equipment

5.1. Product composition of the channel gate

5.1.1 Channel gate mechanical system

The channel gate mechanical system is divided into two parts: chassis and movement. Case as carrier, direction indicator, reading device, infrared sensor, including motor, frame, drive shaft and gate.

- Movement structure



5.1.2 Channel gate electrical control system

Electronic control system consists of access control system, main control board, infrared sensor, direction indicator board, alarm and transformer.

◆ access control system: after swiping the card or face recognition, send an application signal to the main control board (switch signal).

◆ console: the control center of the system that receives the card reader and infrared sensors and signals them After judging and processing, then issue the execution command to the direction indicator, motor, counter and alarm

◆ infrared sensor: detect pedestrian position and protect protection.

◆ direction indicator light: display the current traffic sign status of the passage, and guide pedestrians through the passage safely and orderly.

◆ alarm: when the system detects illegal pedestrian, send alarm prompt.

order	name	function
1	entrance guard system	IC / ID card access control, fingerprint machine, face recognition, QR code equipment, opening signal to the
2	control pulse	The control center of the system, which receives the signals from the card reader and the infrared sensor, and logically determines and processes these signals, and then issues the execution command to the direction indicator, motor, counter and alarm.
3	infrared	Test the pedestrian passage location and play a safety
4	indicator	Show the current traffic sign status of the passage, and
6	Alarm (horn)	When the system detects a pedestrian entering the passage
7	any	Drive movement operation
8	Switching Mode	Control board power supply

5.2. Operating principle of the system

The ◆ turns on the power supply and the system works after self-check.

When the ◆ card reader reads a valid card, the peak speaker will make a pleasant sound, prompt pedestrians to read the card successfully, judge and process the information read from the card, and send an application signal to the main control board.

The ◆ main control board receives the signal of the card reader and infrared sensor, and after comprehensive treatment, sends an effective control signal to the direction indicator and motor to turn the direction indicator to the green arrow passage sign, and the gate sends out the setting voice, the main control board motor runs, the gate opens, allowing pedestrians to pass.

After ◆ pedestrians pass through the passage according to the direction indicator sign, the infrared sensor senses the whole process of pedestrians passing through the passage, and constantly signals to the main control panel until the pedestrian has fully passed through the channel;

◆ If the pedestrian forgets to read the card or reads the invalid card to enter the channel, the system will prohibit the pedestrian passage, and issue a voice alarm until the pedestrian exits the channel; the valid card is allowed to pass.

6. Installation and commissioning of the channel gate equipment

6.1. Installation of channel gate equipment

◆ Prepare the tools for installing the equipment, and count the accessories according to the packing list.

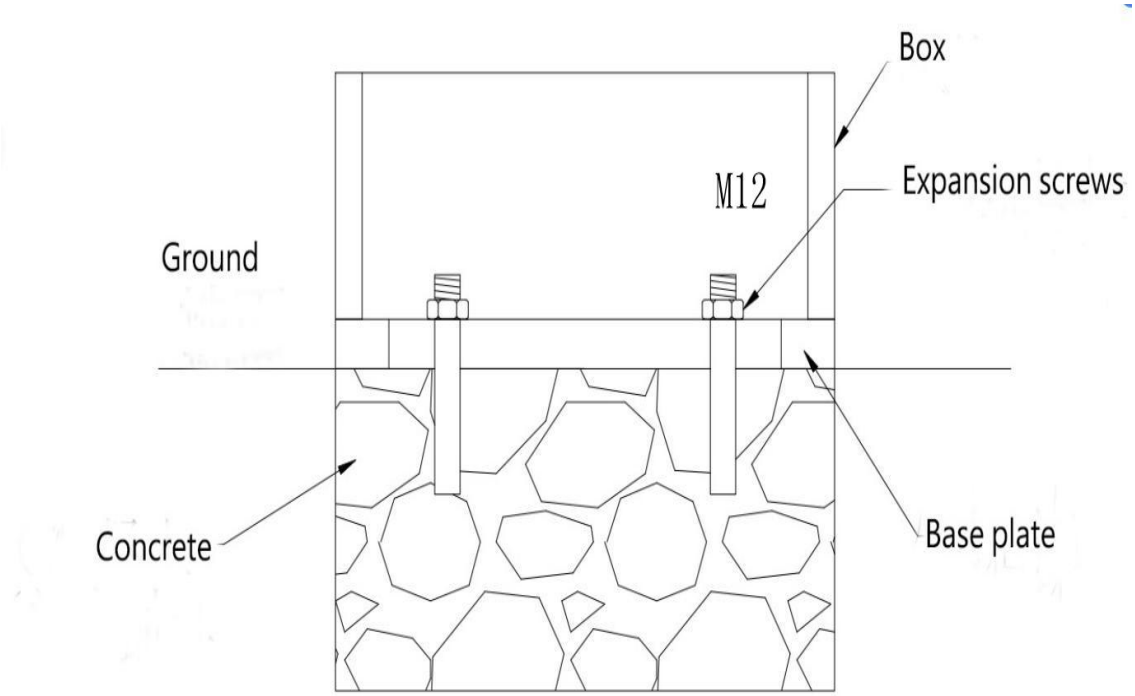
◆ After the foundation surface of the equipment, the equipment is arranged to ensure that the level of alignment between the equipment.

◆ After fixing the hole position, drill the hole and embed the anchor bolts or expansion bolts of M12.

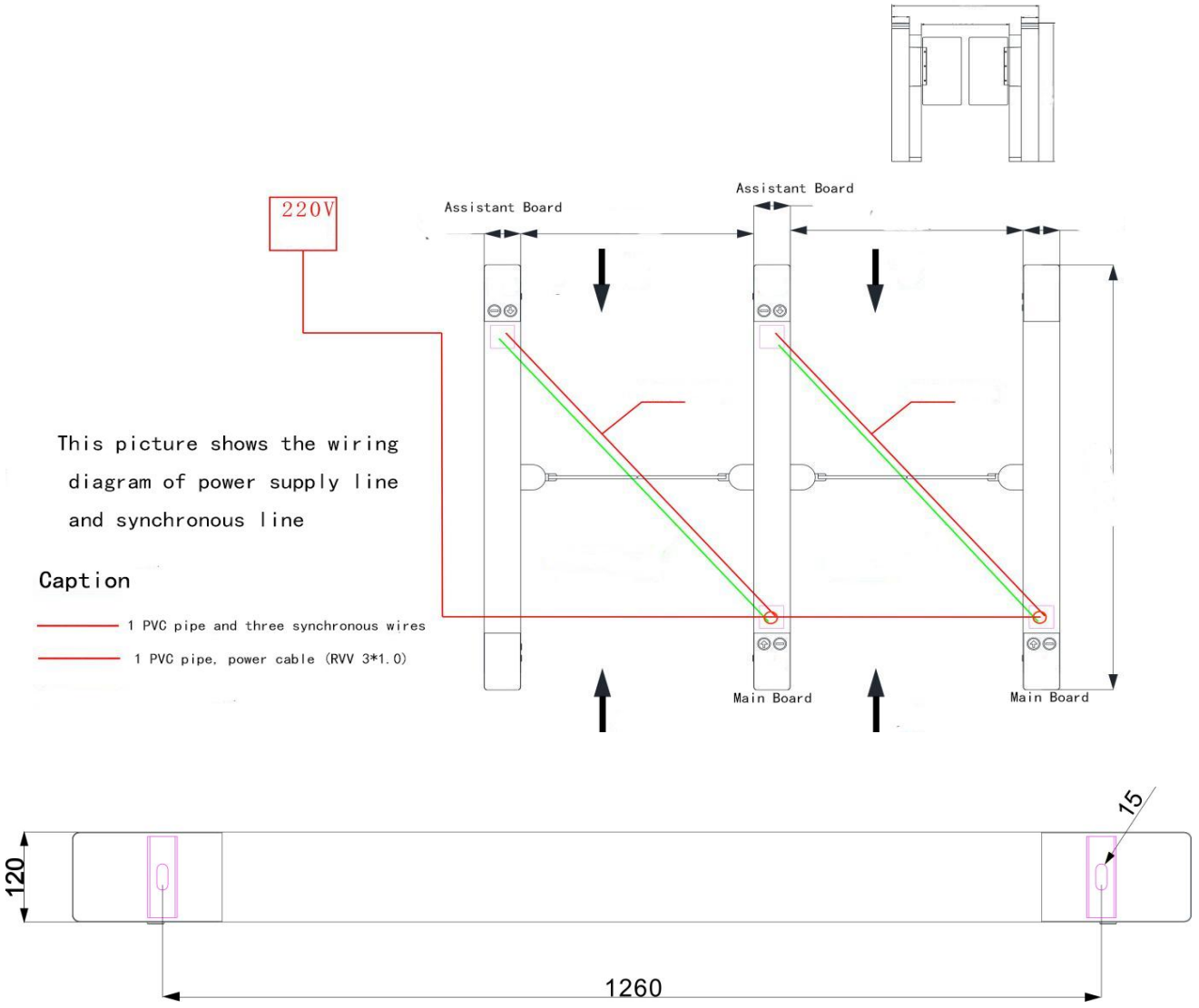
◆ Open a discharge slot, wear the strong electric cable and the factory-configured synchronous line, and provide the own synchronous network cable with 3 / 4 ″ PVC cable pipe respectively, and bury it in the corresponding position with cement.

- Put the equipment back to the installation position and fix the gate with factory pressure bars and expansion bolts.
- Refer to the wiring diagram, connect the power cord, synchronous line and synchronous network cable, and protect the system grounding wire.
- The following function debugging can be carried out only after the equipment status check is normal!

Check the mainwiring according to the wiring diagram, check the power wiring and other wiring of the whole equipment, and can be adjusted after confirmation.



Base mounting hole bitmap



6.2. Functional debugging of the channel gate equipment

(Note: Our brake machine has been adjusted in the workshop before leaving the factory, and is now installed as required without debugging. Please to the following parameters and contact after-sales guidance)

6.2.1 Key description

Up key- -select on the menu, select on the function.
Down down-select under menu, select under function.
Confirmation- -Menu Start- -is also OK.
Cancel Key- -The menu returns to the previous level, and cancels the settings.

6.2.2 Menu wake-up

When the display gate is idle, press "confirm" to enter the password input interface. The default password is: up and down. Enter the 6-bit password and press OK to enter the menu. After entering the menu, press "Up" and "Down" to select a function menu

and then press "confirm" to enter the function or value change interface, press the add or subtract button to select or adjust the required parameters, then press "confirm" to save, press cancel to exit.

6.2.4 Setting

- **Type of gate machine**

  0-> Wing lock, 1-> swing lock, 2-> three-roller lock, 3-> single swing lock

- **Operation mode of gate machine**

  0-> Left infrared right swipe card, 1-> left swipe card right infrared, 2-> all infrared, 3-> all swipe card.

- **Voice on the left**

Set up the gate machine left traffic voice

- **Voice on the right**

Set up the gate right passage voice

- **Opening time (in: seconds)**

  Hold time is set after opening the gate door, range 160

- **Entrance and exit memory function**

  0-> Left allowed right allowed, 1-> left allowed right allowed, 2-> all allowed, 3-> all allowed

- **Entrance and exit traffic configuration**

  0-> Left allowed right allowed, 1-> left allowed right allowed, 2-> all allowed, 3-> all allowed

- **Time-lapse closing time**

  After the person passes, execute the closing time, range 0-60, in seconds

- **Main motor running speed (maximum speed percentage)**

  The running speed of the main motor can be set, calculated as the percentage of the maximum speed, say 100 is the maximum speed value, range 10-100

- **Main motor deceleration Angle (Angle)**

  Adjust the stroke with Angangle, range 0-90.

- **Buffer distance of the main motor (number of pulses)**

  Fine-tune the deceleration stroke by pulse, range 0-200.

- **Brake distance of main motor (number pulses)**

Start performing the braking distance before being in place, range 0-200.

- **Zero-bit deviation value adjustment (number of pulses)**

When the gate is not aligned in the middle, adjust the range according to this parameter-126- + 126.

- **Left open door Angle position (Angle)**

Left-hand door Angle, range of 30-100.

- **Right open door Angle position (Angle)**

Right open door Angle, range 30-100.

- **Zero / place speed (in 10rpm)**

Gate change / position speed, range 10-90 in 10rpm

- **Wing gate closure setting**

0-> Over the last infrared closing, 1-> over the anti-clip infrared closing

- **Power opening direction**

0-> Left open, 1-> right open

- **Encoder type**

0-> None, 1-> 500 lines, 2-> 720 lines, 3-> 1000 lines

- **Is the clutch**

0-> No,1-> Yes

- **Set up the credit card when blocking the infrared**

0-> Prohibited, 1-> allowed

- **Infrared anticlip action setting**

0-> Stop, 1-> return

- **Blocking rebound mode setting**

0-> Stop, 1-> return

- **Reverse entry and closing setting**

0-> No No,1-> No

- **Motor type**

0-> Reverse left open (positive polarity), 1-> positive turn left open (positive polarity), 2-> reverse left open (negative polarity), 3-> positive turn left open (negative polarity)

- **Maximum strength**

  At the size of the gate, the smaller the value, the stronger the vibration, the smaller the value, the smaller the vibration, ranging from 0-50 (unit: 0.1A)

- **Resistance strength**

  When the main organ door is adjusted, the larger the value is, the faster the closing speed, the greater the vibration, the smaller the value, the closing speed is slower and smoother, the range from 0-50. (Unit: 0.1A)

- **Combat strength**

  When the gate is in the closed non-working state, push the gate open by force with external force. The greater the value, the range is 0-50. (Unit: 0.1A)

- **Infrared quantity**

  0-> 3 pairs, 1-> 4 / 5 pairs, 2-> 6 / 7 pairs (3,5,7 odd values)

- **Clutch suction time**

  1-99 Hold time after clutch suction, range 1-99 (in 0.1 seconds)

- **Clutch release time**

  Action time for clutch release, range 1-99 (in 0.1 seconds)

- **language selection**

  0-> Chinese, 1-> English

- **system initialization**

  0-> Equipment parameters (restore factory setting), 1-> opening times (clear opening setting)

- **Master from machine setting**

  0-> Host, 1-> slave

- **Equipment machine number**

  {0,31} (Equipment address)

- **Turbine test**

  Enter test mode

7. Common fault handling

.17. After swiping the card or face recognition, the door does not open the door, without any reaction;

- Re-check whether the open signal line wiring is correct, whether the wiring port is loose, whether the infrared number is correct, manually press the motherboard button or short connection to see whether the opening, if the manual is not opened, the need to replace the main board.

7.2. Do not open the door after the power failure;

- Use the multimeter to measure the battery, 1) whether the battery voltage is above 10V, 2) check whether the wiring is correct, 3) whether the terminal is loose, if the above items are normal, please test the motor and the main board.

7.3. After swiping the card, one door is open, and one door is not open;

- Re-check whether the synchronization line is connected to unplug the terminal and reconnect, check the corresponding motherboard main and slave mode setting, and check what prompts of the device display does not open.

7.5. After swiping the card, the gate opens, but it is not closed;

- Check whether all infrared sensors are normal, and the infrared indicator on the control motherboard is fully on. If there is an indicator, the infrared side is not aligned or faulty.

7.6. Failure to reset and swing back and forth:

- When confirming that all parameters are correct, 1) check whether the lock screw of the encoder or limit sensor is loose, 2) check whether the control motherboard encoder instruction is normal and fully bright, 3) replace the normal control motherboard test, if still not, more motor is needed.

7.7. Credit card or infrared induction when opening the door swing box situation;

- 1) Check whether the swing door is loose, 2) the opening Angle is reduced, 3) see whether the motor and movement assembly lock is loose or displaced, the above items should be replaced on the normal side.

7.8. Fast and slow situation when closing the door;

- According to the equipment function debugging parameters adjustment,

deceleration adjustment, channel speed and other values, check whether the swing door, movement, motor are loose.

7.9. Automatic restart of the gate door when the swing door is opened and closed;

- If the swing door is automatically reset within 3 minutes, it will automatically return to normal use to normal state, or for a long time, it is a failure.