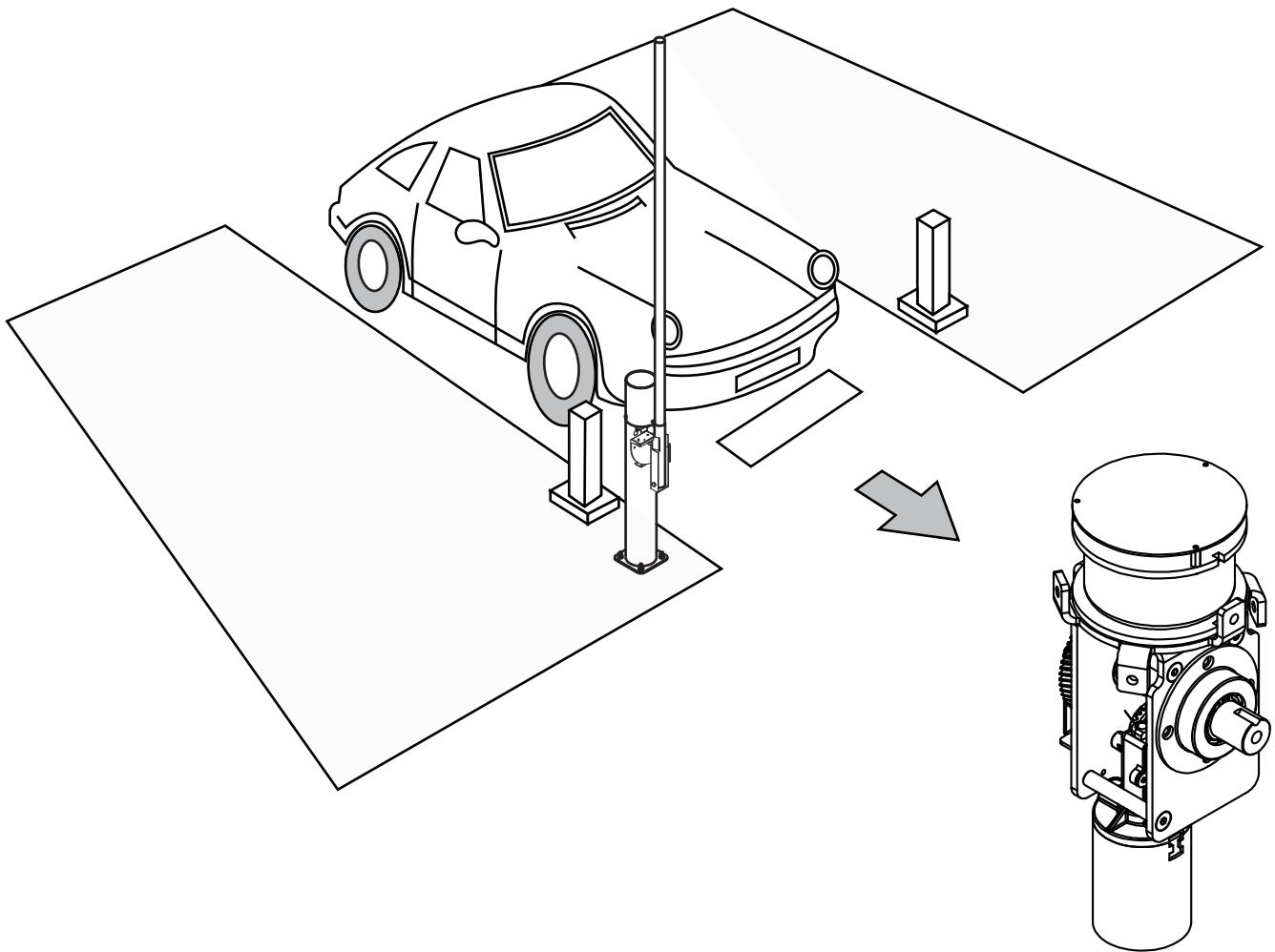


High Speed Boom Barrier System

KSDZ-12V



Installer and user's manual

Automatic boom gates are not for pedestrians



Automatic Barrier Gate Opener System is powerful while working. It may cause serious body injury or death to pedestrians if they walk through/around the automatic barrier inappropriately. Should have other separate walkway for pedestrians.

1. Before starting installation and operation or maintenance, cut off power supply.
2. The product must be earthed, and an earth leakage is necessary on the power supply.
3. Do not change the original inside wiring.
4. If power failure, please switch off the power supply first, then open the door and rotate the handle on the motor manually to open the boom completely.
5. Keep the automatic control (push-button, remote control, etc) out of the reach of the children. The control system must be installed at a minimum height of 1.5m from the ground surface.
6. Use transmitters or button only where you can see the gate clearly.
7. Never open the door or the cover of the cabinet when the machine is working.
8. Don't permit children to play on or around a gate.

1. Technical Specifications:

Power Supply	DC 12V
Working Temperature	-20°C ~ 60°C
Max. Boom Length	2.5M
Remote Control Distance	≤50M
Time of Up/Down	3s-5s

2. Products Configurations:

Products and accessories list

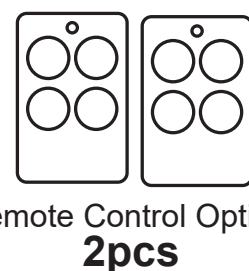
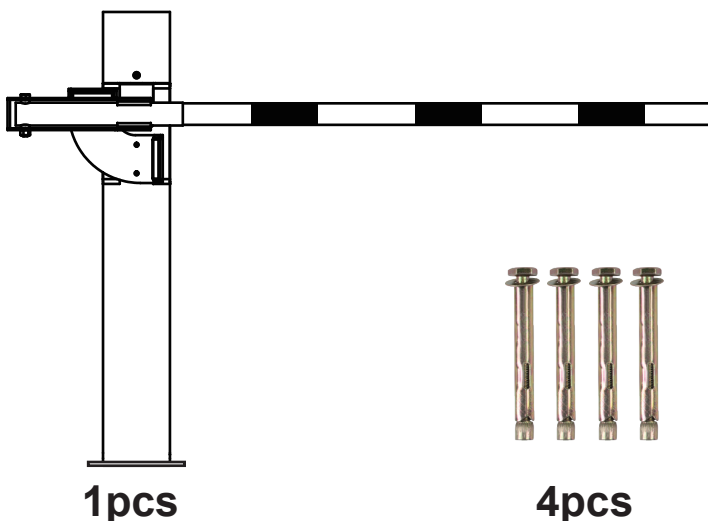
1×Boom barrier machine

2×Remote controls

4×M10*100 expansion bolts

1×2.5 meters barrier arm

4×M8*10 hexagon bolt



3. Installation Steps

- (1) Before installation, please make sure there is no any obstacle within 2.5 meters of installation field. Please refer to the Figure 1.

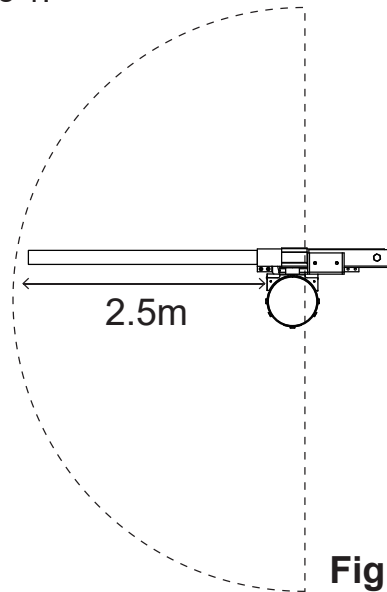


Figure 1

- (2) Put the boom barrier on the ground, usually use the pen to mark out the position of 4 pieces expansion bolts. Drill holes with electric drill based on the marked position of 4 pieces expansion bolts. After drilling holes, put the 4 pieces bolts into the holes, or strike the bolts into holes with hammer carefully. Then fasten the bolts well. Please refer to the Figure 2.(Step 1-Step 5)

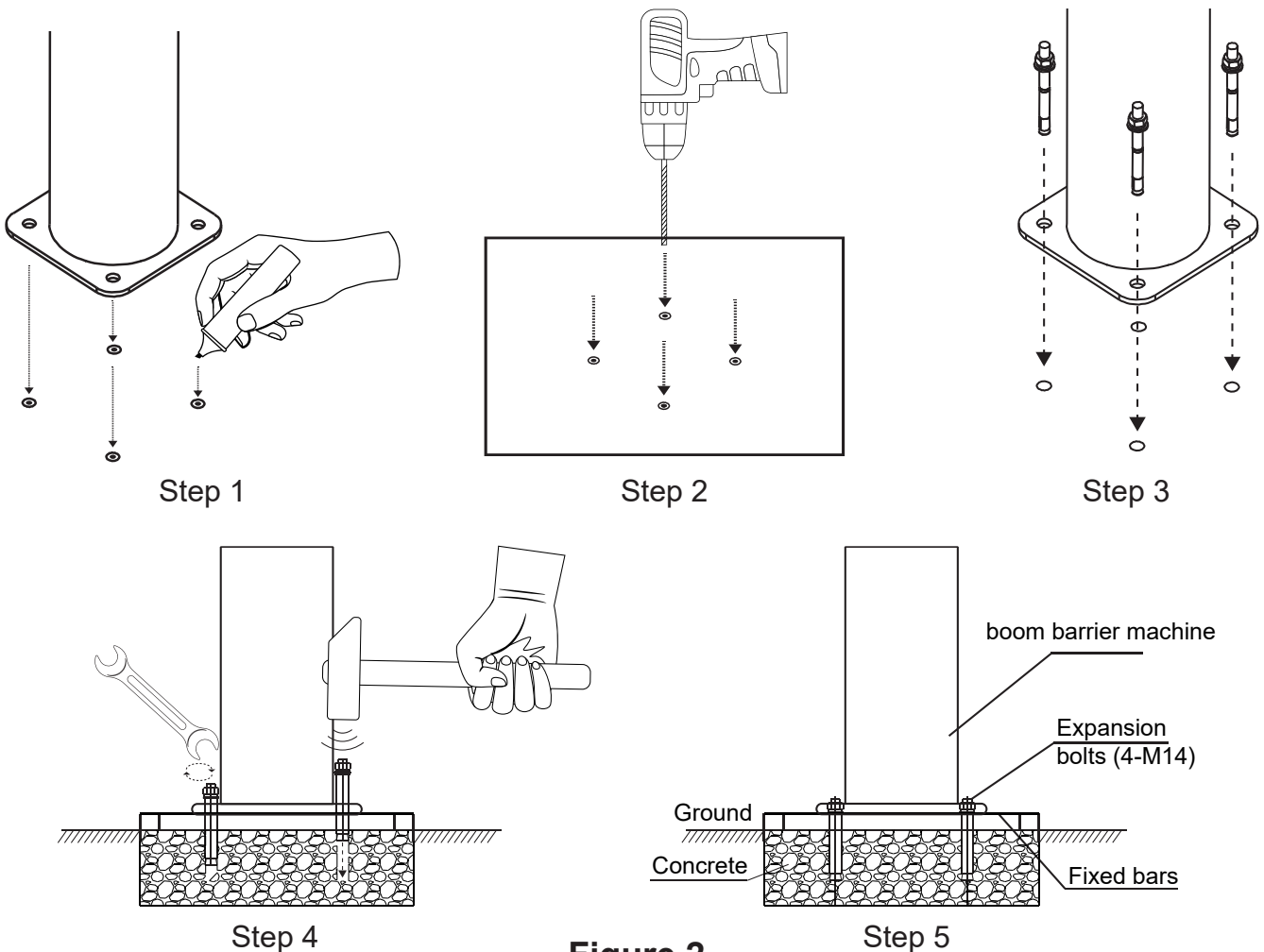


Figure 2

- (3) Assemble the 2.5 meters boom arm into the shell of rod that is on boom barrier motor. Then fasten the bolts on the shell as the Figure 3.

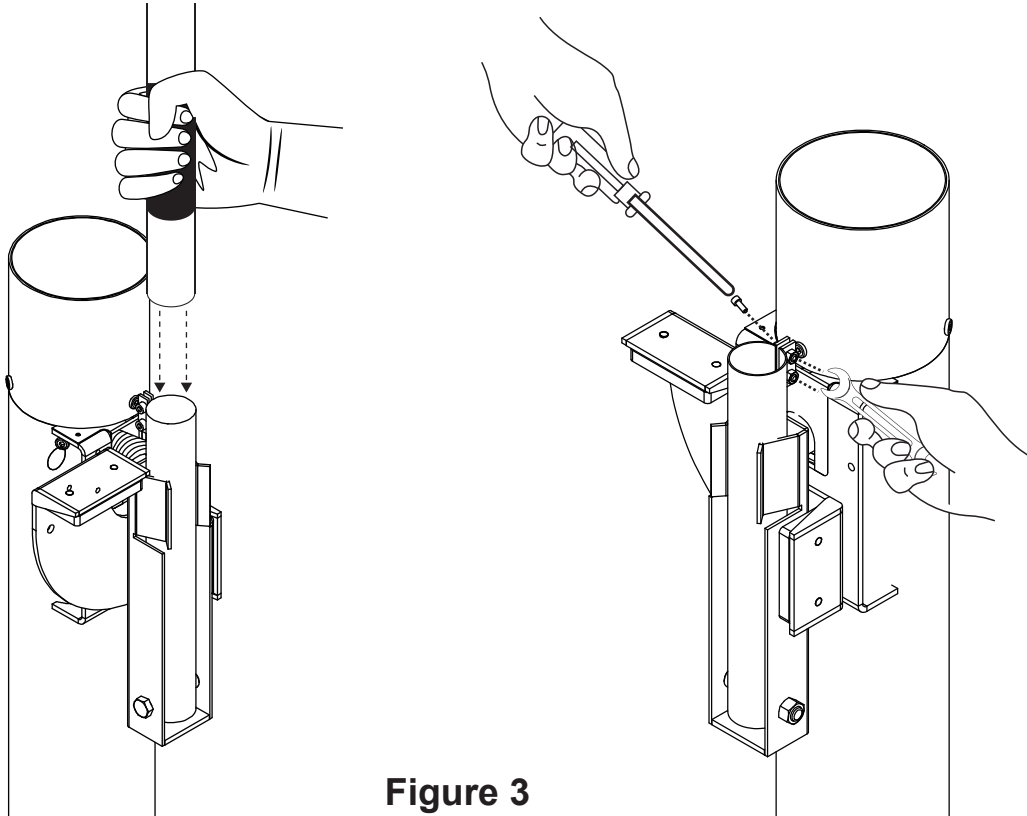


Figure 3

- (4) Connection of power cable, press the remote control to test if it is working normally as the figure 4.

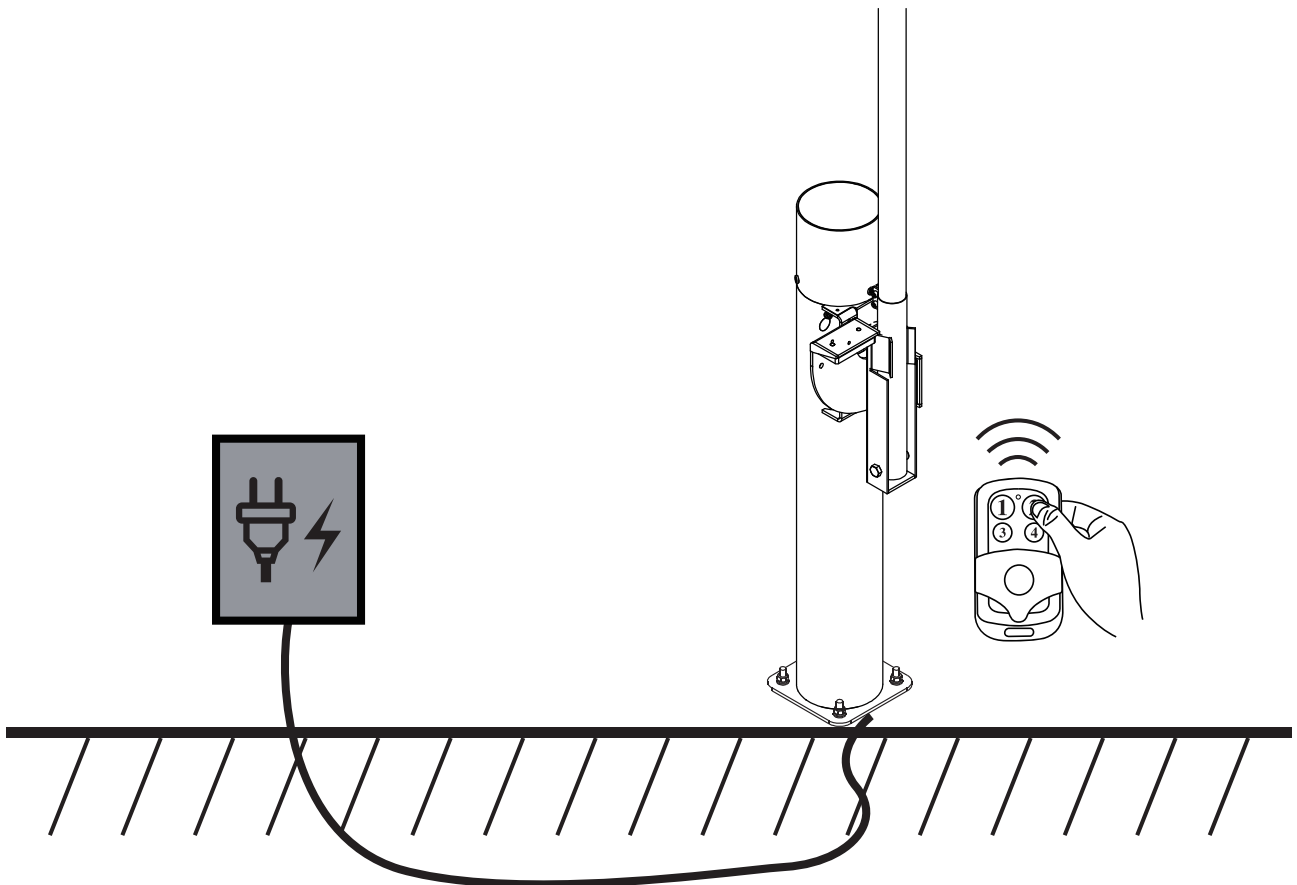


Figure 4

4. Manual Release

Directly push the rod out. Then manual release could be unlocked. Figure 5 shows manual release unlock way when boom barrier is in open final position, Figure 6 shows manual release unlock way when boom barrier is in close final position.

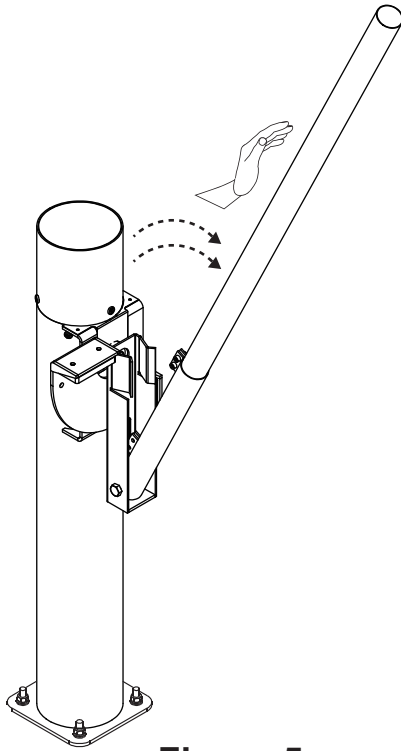


Figure 5

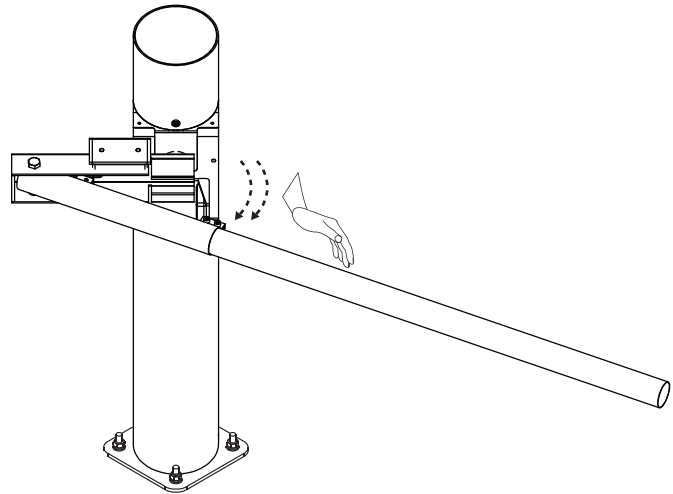


Figure 6

5. Angle adjustment of boom arm / Adjust the vertical and horizontal line of barrier boom.

Loose 3 fixed bolts on the outer shell, disassemble the shell, then you could see the control board. Refer to the figure 7.

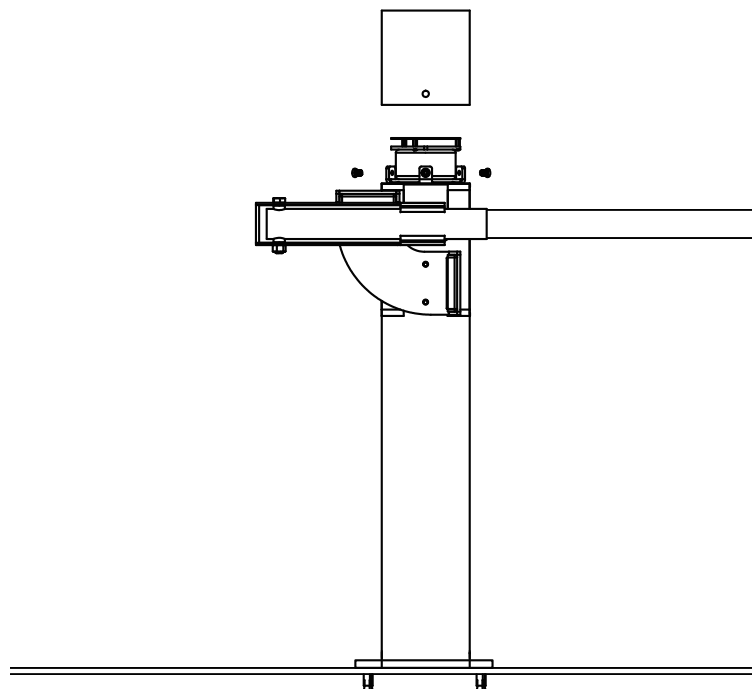


Figure 7

Long press the “AUTO” button 3 seconds, buzzer will have a long beep and indicator light will flash quickly, that means control board is entering the travel learning mode. Please refer to Figure 8.

At this moment, press the button “START”, boom barrier motor will run to close. Release the button “START”, motor will stop running until the motor closes to the position that you need. Press the travel button “AUTO” one time to confirm the position of close correctly; Then keep to press the button “START”, motor will run to open until the position that you need. Press the travel button “AUTO” one time to confirm the position of open correctly. Please refer to Figure 8.

At this moment, buzzer will beep long, that means adjustment is completed.

Note: The correct procedure of angle adjustment is that control board must run to close in advance, and then it will run to open. If the running becomes to open firstly, please exchange the motor wires (The limit setting have been adjusted well before out of factory. If customer side don't change angle limit sensor , then don't need do any setting on limit.)

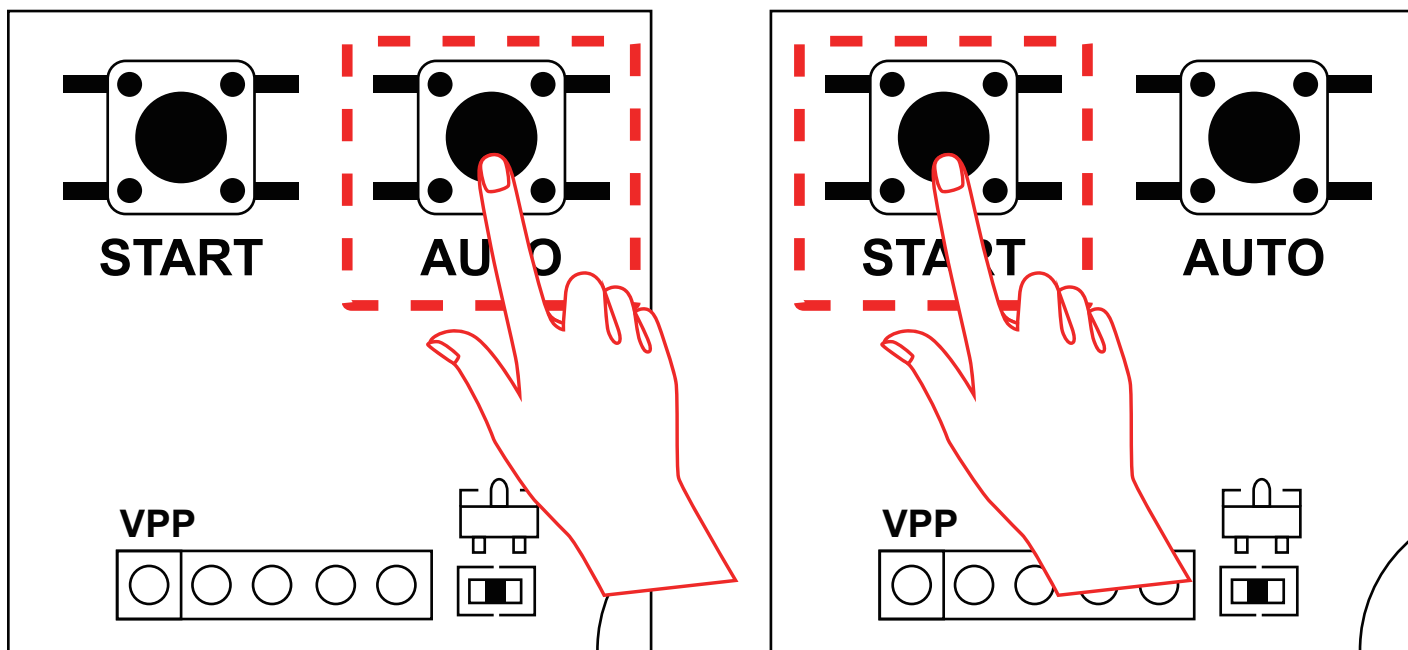


Figure 8

6. Direction interchange of the barrier boom

Left and right directions

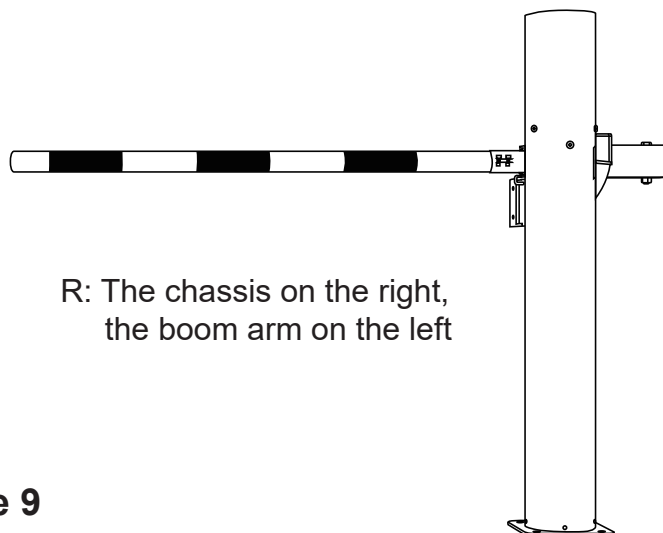
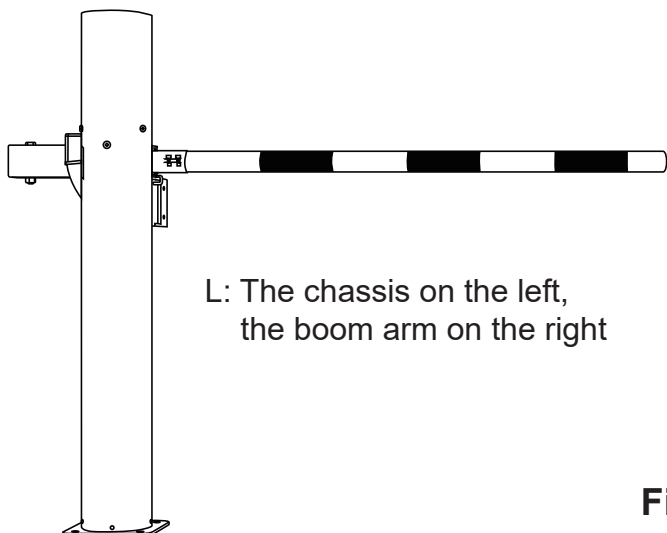


Figure 9

For example, when L is changed to R, the operation steps are as follows:

Step 1. Turn off the power, and remove two screws on the mechanical limited block, as shown in the figure 10.

Step 2. Make the barrier boom is in a vertical state, and then remove the last screw on the mechanical limited block, as shown in the figure 11.

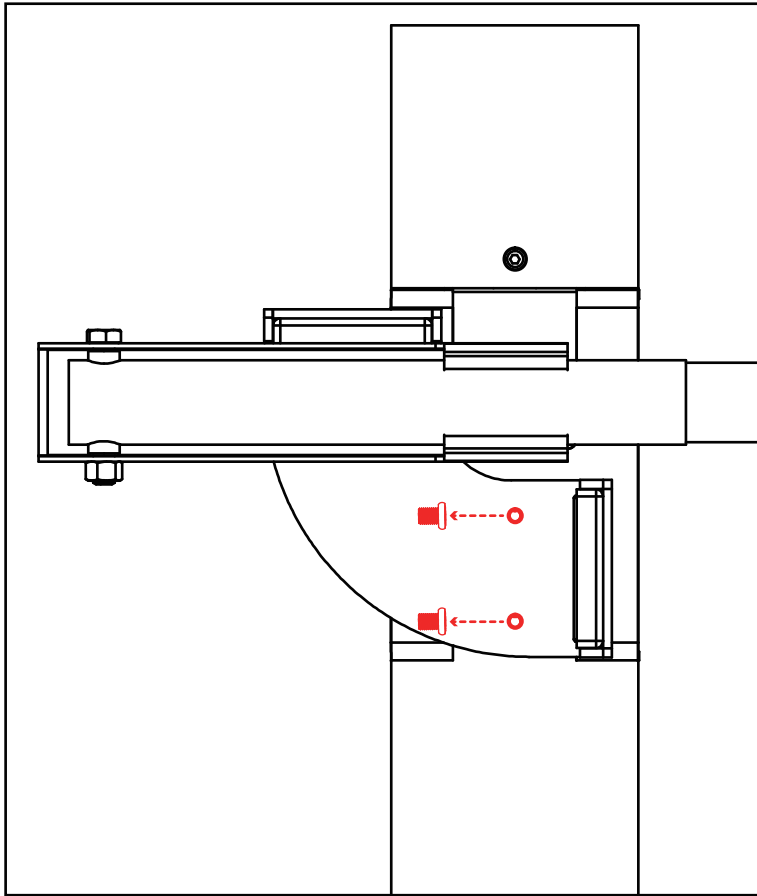


Figure 10

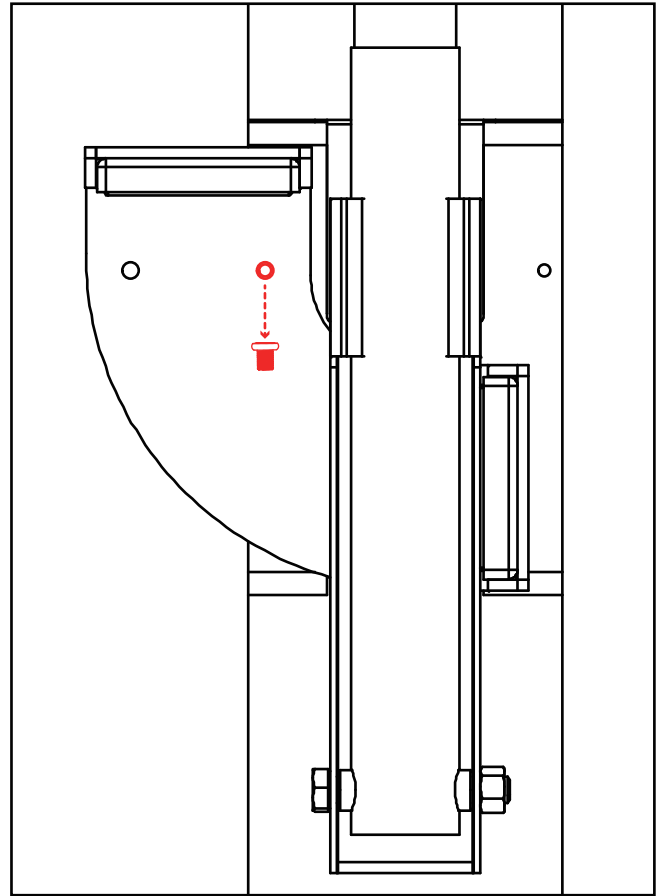


Figure 11

Step 3. Manual release the boom barrier as shown in the figure 5.

Step 4. Move the mechanical limit block from left to right direction, as shown in the figure 12.

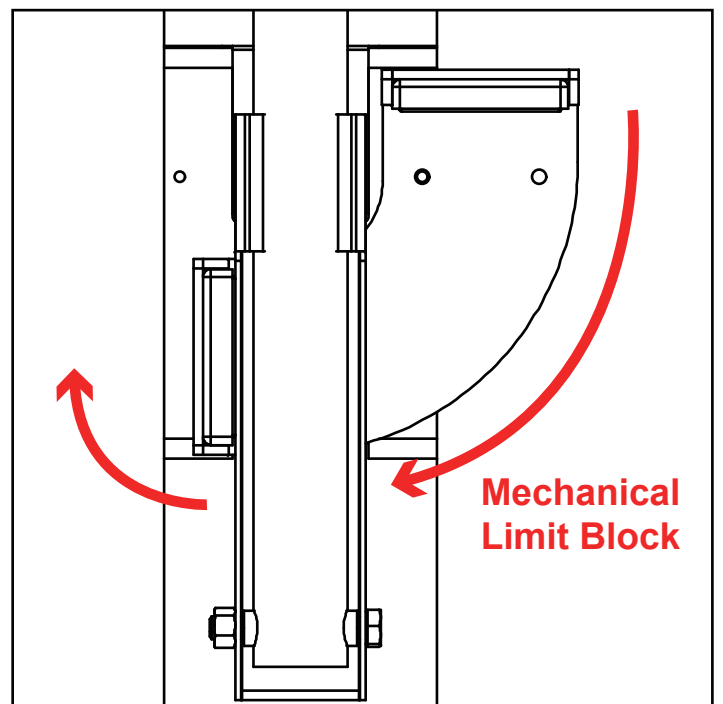
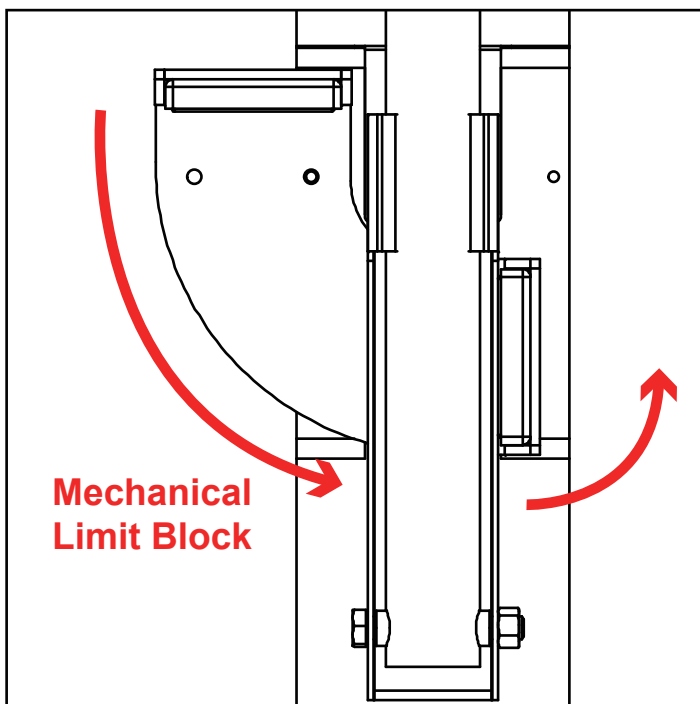
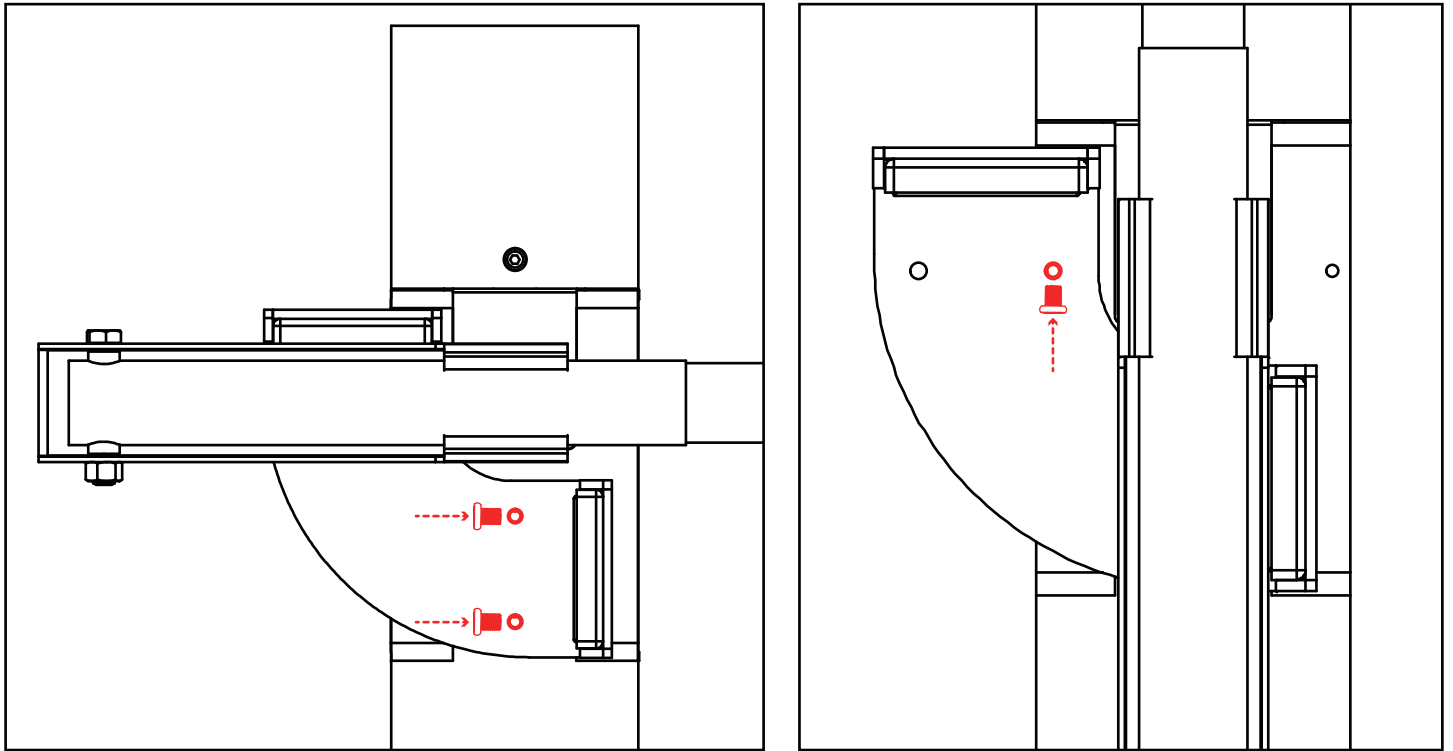
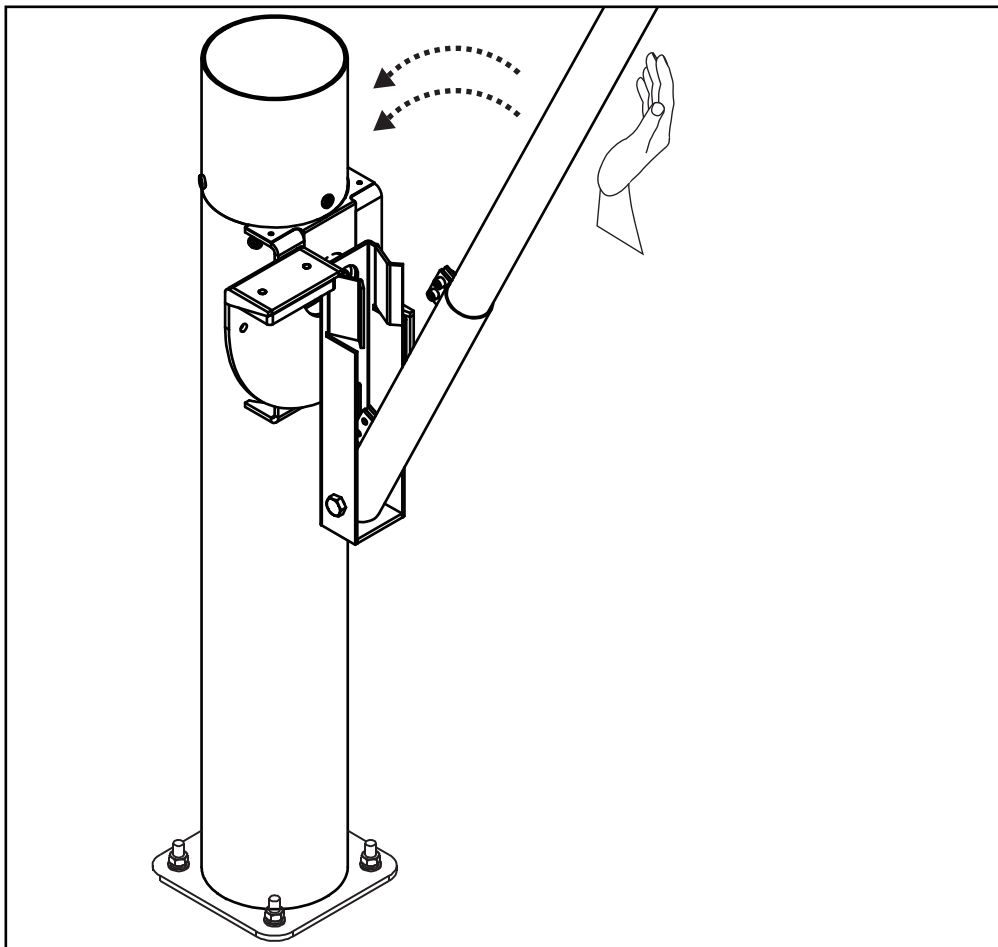


Figure 12

Step 5. Tighten three screws on the mechanical limited block, as shown in the figure



Step 6. Assemble the boom barrier.



Step 7. Please operate the “Angle adjustment of boom arm / Adjust the vertical and horizontal line of barrier boom” again. Refer to the page 4 & 5.

7. Control board Program.

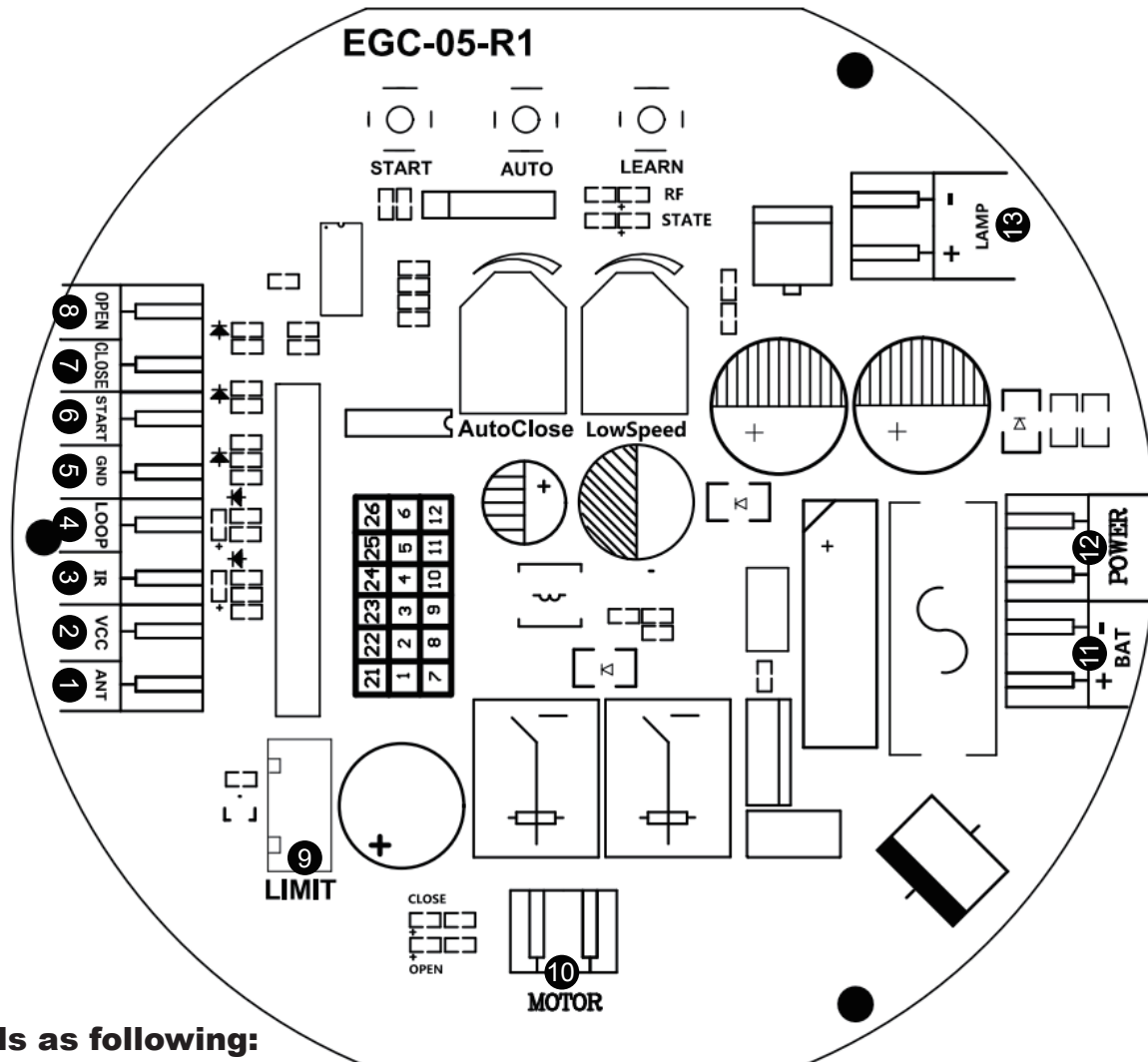
(1) Technical specification :

Power supply: DC 12V

Static current: <6mA

Remote control memory: Maximum 128 pcs remote control can be programmed

(2) Terminal, buttons and indicator light instruction:



Terminals as following:

- ① ANT terminal is for antenna.
- ② VCC terminal is power terminal for loop ,photocell and other external device DC12V, max current 200mA.
- ③ IR terminal is for photocell sensor.
- ④ LOOP terminal is for loop detector.
- ⑤ GND terminal is for connecting the “ground” of external devices.
- ⑥ START terminal for signal input of control circularly.
- ⑦ CLOSE terminal for close only.
- ⑧ OPEN terminal for open only.
- ⑨ LIMIT terminal for 6 PIN angle limit sensor.
- ⑩ MOTOR terminal for motor cable connection.
- ⑪ BAT terminal is for 12V battery.
- ⑫ POWER terminal for DC 12V.
- ⑬ LAMP terminal is for connecting with flash lamp.

Buttons as following.

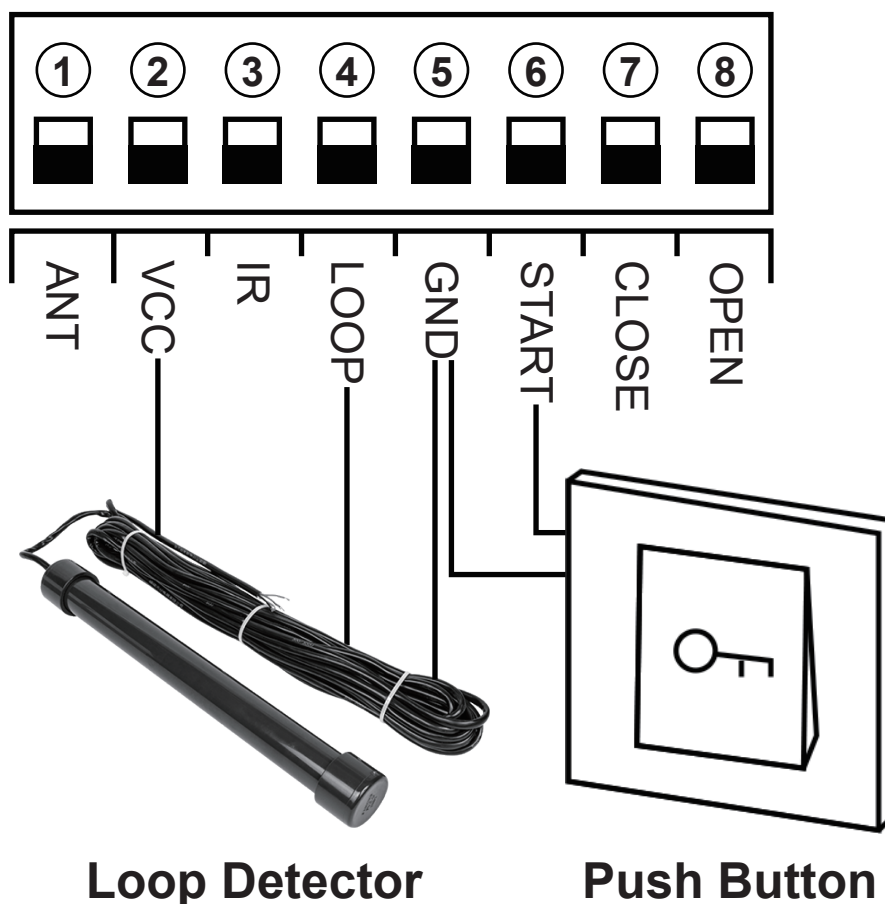
1. Autoclose potentiometer for adjusting auto close time, 5-30S auto close time adjustable. Rotate right direction, time increase, oppsite, time decrease. Rotate it into right, the autoclose function will be closed.
2. LowSpeed potentiometer for adjusting when gate slow speed, the close running speed time. Rotate right direction, time increase, opposite, time decrease.
3. START button is to control barrier to open-stop-close-stop-open circularly.
4. AUTO button is for system travel learning.
5. LEARN button is for code learning and deleting.

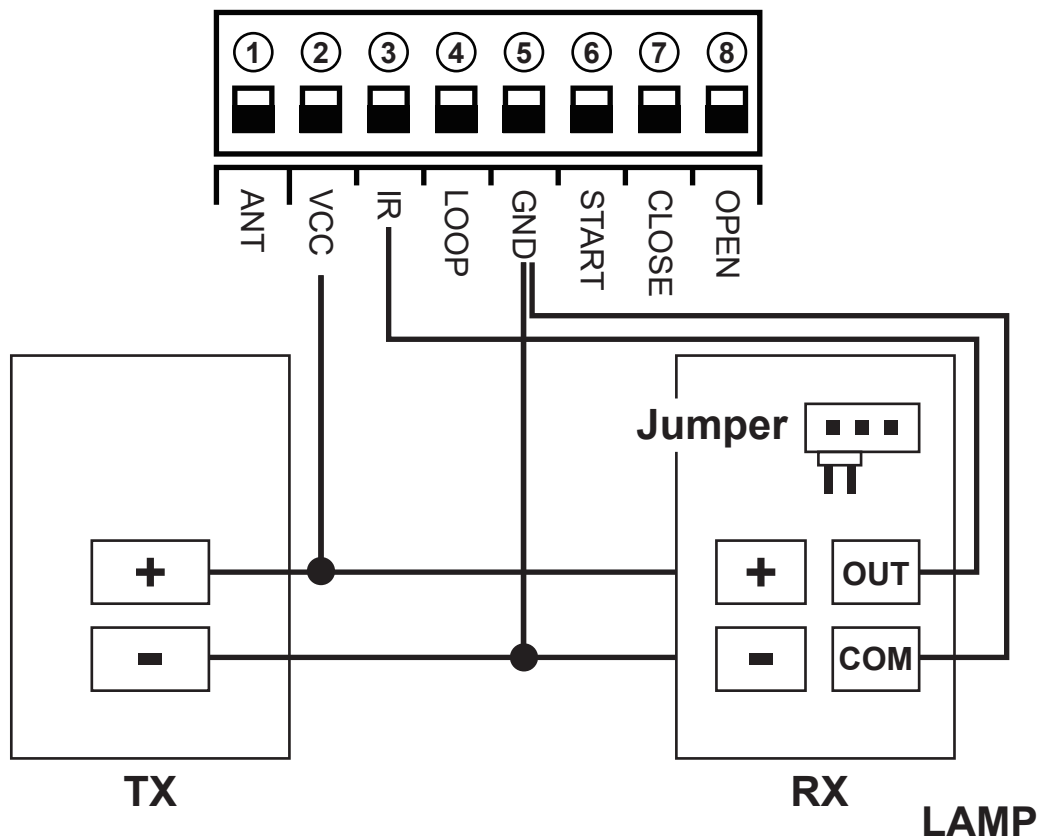
Some external device wire connection diagram

The factory default that loop detector and photocell sensor are set Normal Close mode, so there has one copper wire was connected with the terminal LOOP and GND , and another copper wire was connected with the terminal IR and GND.

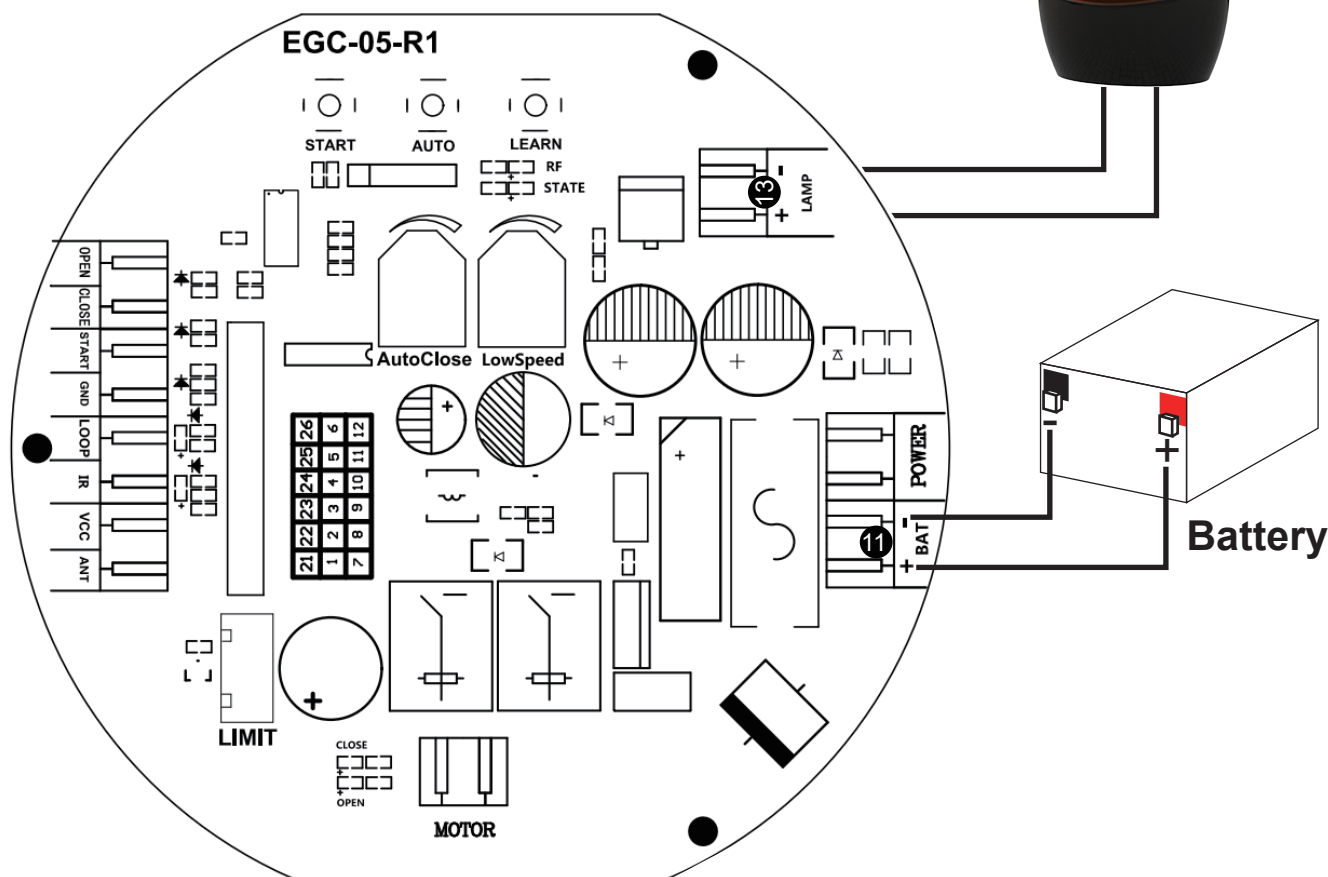
- 1.If you only want to connect the loop detector with the opener, please only remove the wire from terminal LOOP and GND. Don't remove another wire from terminal IR and GND.
- 2.If you only want to connect the photocell sensor, please only remove the wire from terminal IR and GND. Don't remove another wire from terminal LOOP and GND.
- 3.If you want to connect the loop dector and photocell sensor with the opener, please remove two copper wires from the terminal.

Push button wires to 5 and 6. Loop detector/exit wand/infrared sensor wires to 2.4 and 5





LAMP



(3) Remote control programmed.

Short press the “LEARN” button, indicator will be on. And press any button of remote control until buzzer has a short beep. That means remote control had been programmed into the control board. Extra remote controls also could be programmed as same as the way. It could program up to Maximum 100pcs remote control. Within 8 seconds, if control board does not receive the signal from remote control transmitter, indicator light will be off and sign out learning code mode. First button to control gate open, second button to control gate close, third button to control gate stop.

(4) Remote control code removing.

Press and hold “LEARN” button about 5 seconds until buzzer has a long beep, then release “LEARN” button. now all the programmed remote control transmitters are removed.

(5) Control board featured function.

A. Auto close function.

When barrier opens to the position, it will activate the auto close function. The indicator light will flash to warn the auto close is entering countdown. We could use Autoclose potentiometer to adjust auto close time from 5 to 30 seconds. Rotate it to right, that means to increase the time. Rotate it to left, that means to decrease the time. When rotate it into the right maximum, auto closefunction will be inactivate.

B.Low speed running time adjustment.

The user can adjust the low speed running time for closing the gate through rotating the LowSpeed appropriate. Turn right to increase the time; turn left to decrease the time.

C. Flash lamp function.

When the gate is in opening or moving state, the flash lamp will keep flashing. While the gate is closed, the lamp will turn off.

D. Photocell sensor function.

While the gate is closing, if the infrared is triggered, the gate will rebound to open. If the photocell sensor signal is always present, the gate cannot be closed.

E. Loop detector function.

When barrier is in opening state, once loop detector detects the signal that car is passing through, barrier will close after the loop signal disappears 3 seconds; when barrier is in closing state, once loop detector detects the signal that car is passing through, barrier will rebound and open after the loop signal disappears 3 seconds.

F. Back-up battery function.

In order to avoid the power failure, user can connect with a 12VLead-acid battery as back-up battery. Normally the control board will trickle charge the battery, which takes a long time. The backup battery cannot be used as the main power supply for a long time to prevent the battery from running out.

NOTE: right motor function condition should be like: when gate opening, blue indicator LED lit up; when gate closing, red indicator LED lit up. Only the gate on the right function direction, then could realize the swipe card, infrared, PED mode etc function.