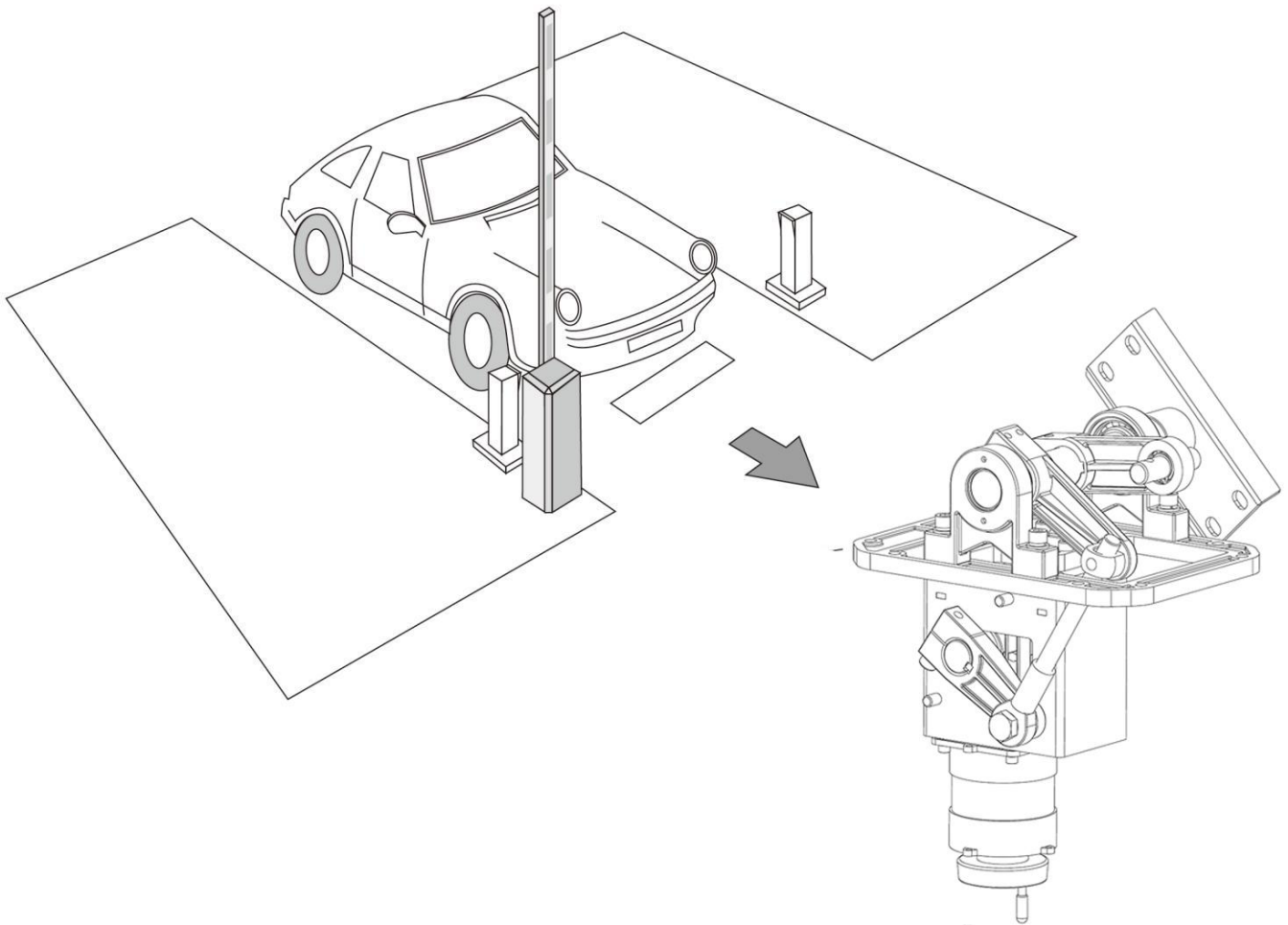


Automatic Boom Barrier System



Installer and user's manual



Automatic boom gates are not for pedestrians

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

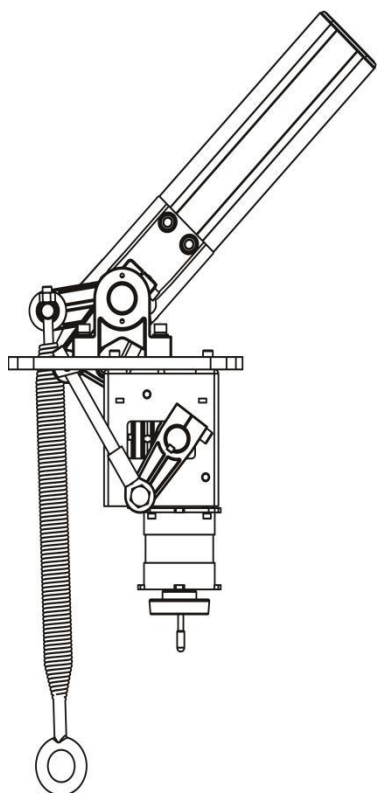
1. Before starting installation and operation or maintenance, cut off power supply.
2. The product must be earthed, and an earth leakage is necessary on the power supply.
3. As for electric cable type and section, we suggest to use the cable type of <HAR> with minimum section of 2.0mm².
4. Do not change the original inside wiring.
5. 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.
6. 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.
7. Use transmitters or button only where you can see the gate clearly
8. Never open the door or the cover of the cabinet when the machine is working .
9. Don't not permit children to play on or around a gate

1. Technical Specifications

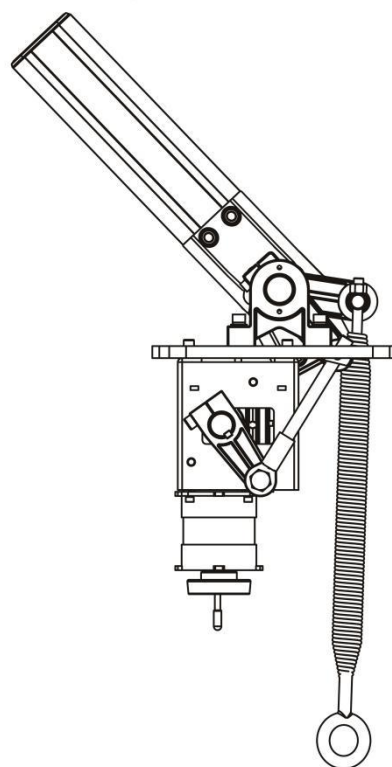
Power Supply	AC220V±10%50HZ/60HZ
Working Temperature	-20℃～55℃
Power of Motor	120W
Speed of Motor	1400r/m
Relative Humidity	≤90%
Max. Boom Length	6M
Remote Control Distance	≤50M
Time of Up/Down	5S

2. Mechanical structure

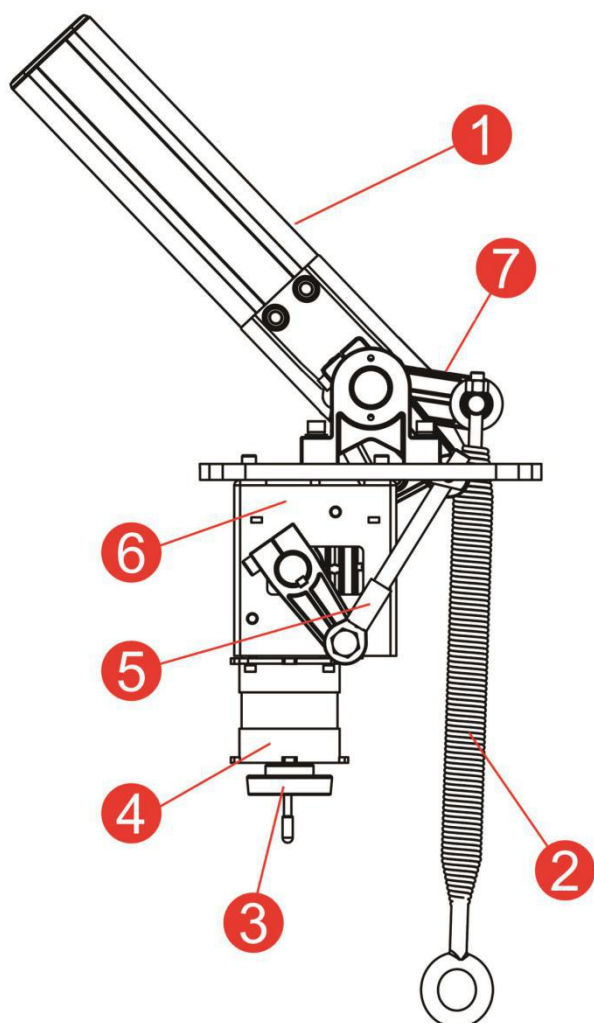
A.Boom direction:right side



B.Boom direction:left side



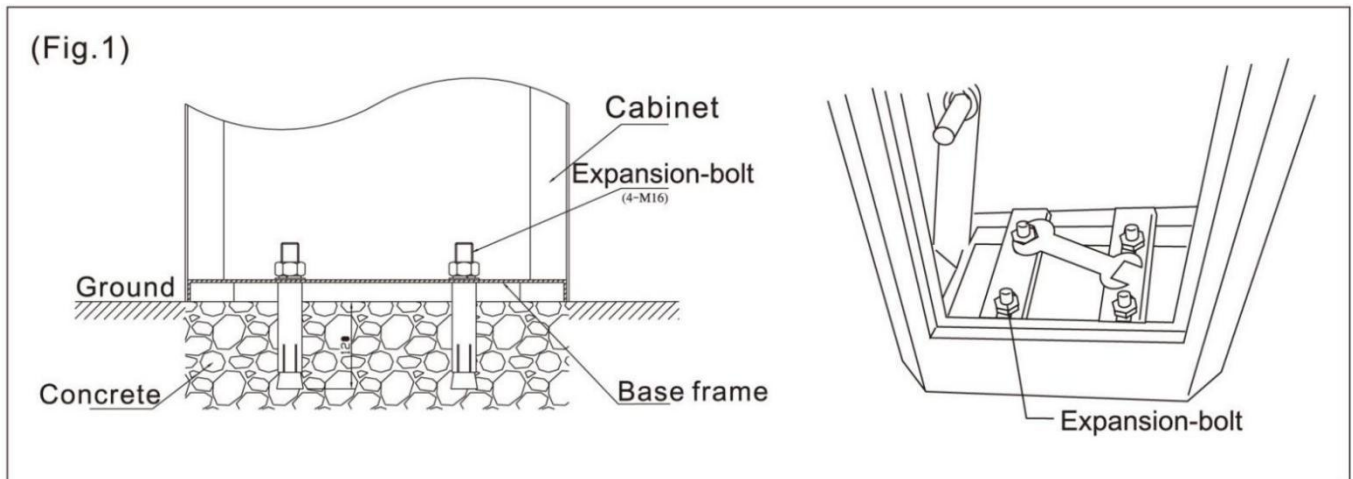
C. Components



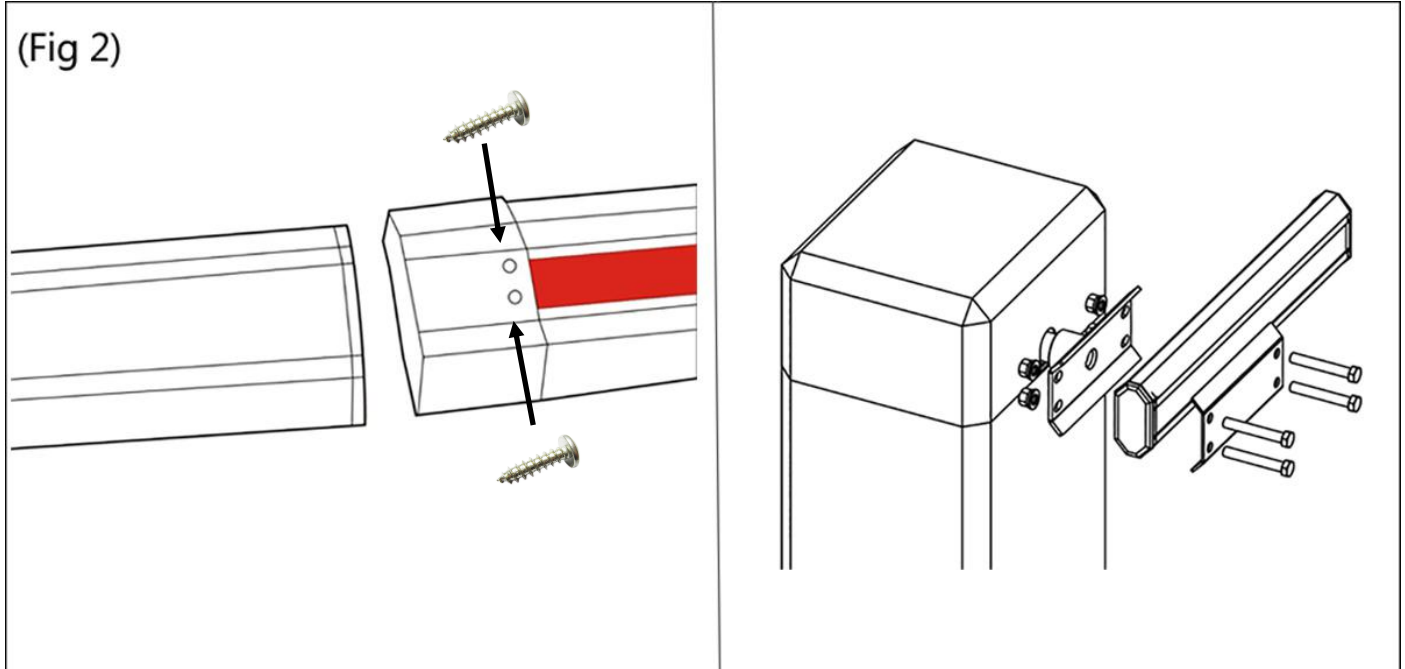
- 1. Barrier boom
- 2. Barrier spring
- 3. Rotate handle
- 4. Barrier motor
- 5. Connect rod
- 6. Gearbox
- 7. Swing arm

3.Installation

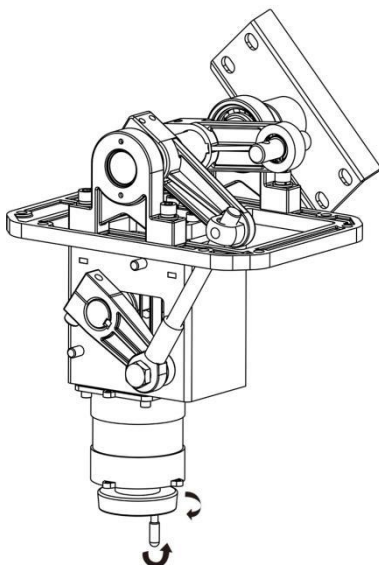
A.Install the machine on the ground.



B.Install boom



C.Adjust the vertical and horizontal line of barrier boom



If there is no power, push and turn the manual release knob clockwise until the knob reaches the end and not able to be move any more. Now it is in manual release mode, the boom can be moved up/down by hand.

If the power comes back, push and turn the manual release knob anti-clockwisely until the knob reaches the end and not able to be moved any more. Now it is back in normal operation.

Note: Adjust the balance of spring with boom

The springs have been already adjusted to the balance with the boom ,if the length of boom need to be changed , the springs should be re-adjusted .

Size of spring with boom's length

Boom length	Quantity of spring	Spring's size
< 3m	1	1xΦ4x440mm
3-4m	1	1xΦ5x440mm
4-5m	1	1xΦ6x440mm
5-6m	2	1xΦ6x440mm 1xΦ5x440mm

3. Control board Program

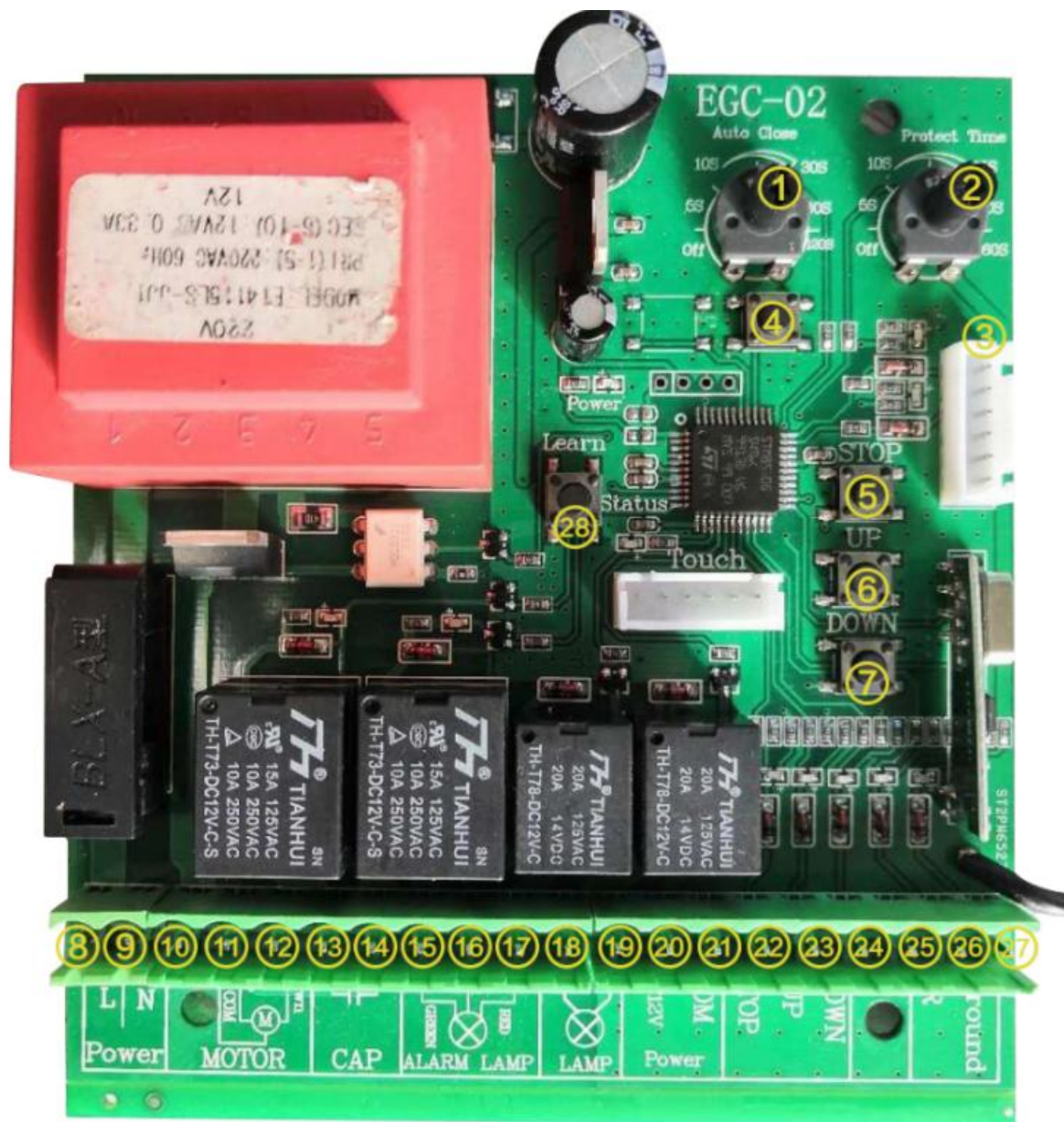
A. Technical :

Power supply: AC 220V/50HZ

Standby current: <10mA (AC 220V)

Remote control memory:30remote control can be added at most

B. Terminal and buttons instruction



- *1 Potentiometer for adjusting auto close time, 0-120S auto close time adjustable.
- *2 Potentiometer for adjusting motor protect time, 0-60S time adjustable.
- *3 Terminal for limit switch
- *4 Calibration button
- *5 Stop button
- *6 Up button
- *7. Down button
- *8 & 9 Terminal for 220V/110V Power supply
- *10,11&12 Terminal for Motor cable connection
- *13 & 14 Terminal for capacitor
- *15,16,&17 Terminal for alarm light
(The "green" terminal connect the light which works when the boom is opened, the "red" terminal connect the light which works when the boom is closed.)
- *18&19 Terminal for flashing light
- *20&21, 12V power terminal for external device
- *22,23&24, Terminal for external open device , such receiver , push button, card reader, etc
- *25 GND terminal
- *26 Terminal for Photocell

*27 Terminal for Loop detector

*28 Learn code button

C. Remote control programmed

Press "Code Learning" button for 1 second, the code-learning indicator goes off, then press any button of the transmitters which you are going to program till the code-learning indicator starts flashing. Now the transmitter has been programmed to the control board. Other transmitters can be programmed as same as this way. It can program up to 30 transmitters.

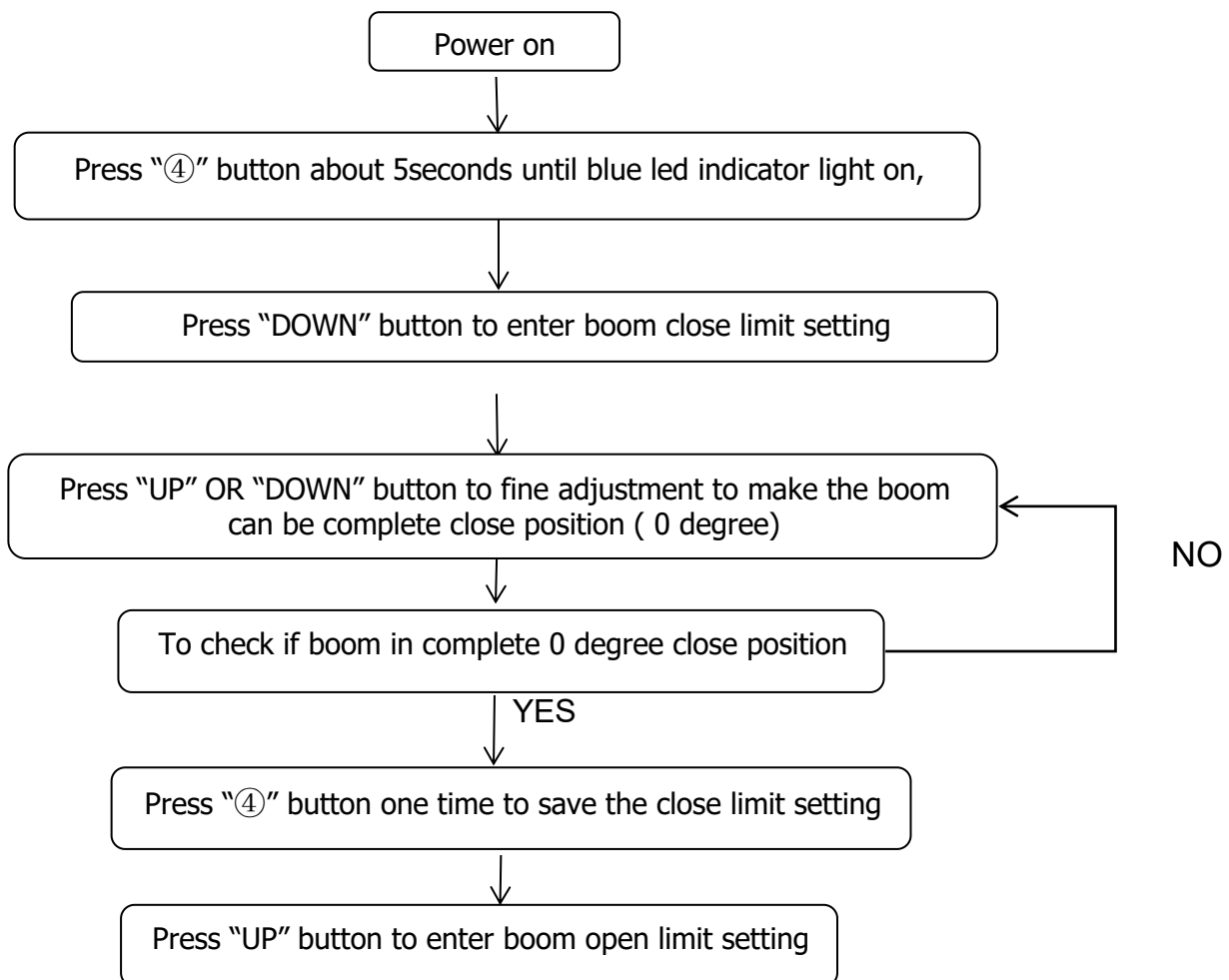
Remote control' code removing

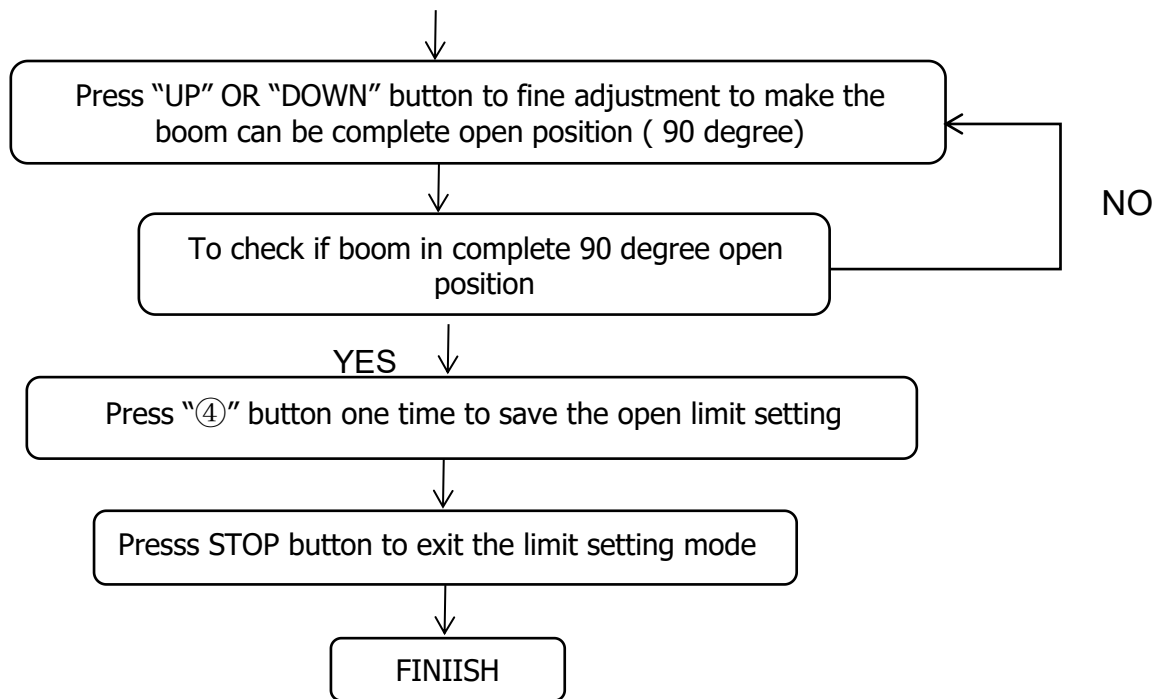
Press and hold code-learning button, the code-learning indicator goes off, after 5 seconds the indicator starts flashing 4 times, now all the programmed transmitters removed.

D. Control board function setting

NOTE: Only to handle the angle calibration first, then the barrier can normal limit:
(HAVE TO set 0 degree close limit then set 90 degree open limit)

How to do the Limit switch setting:



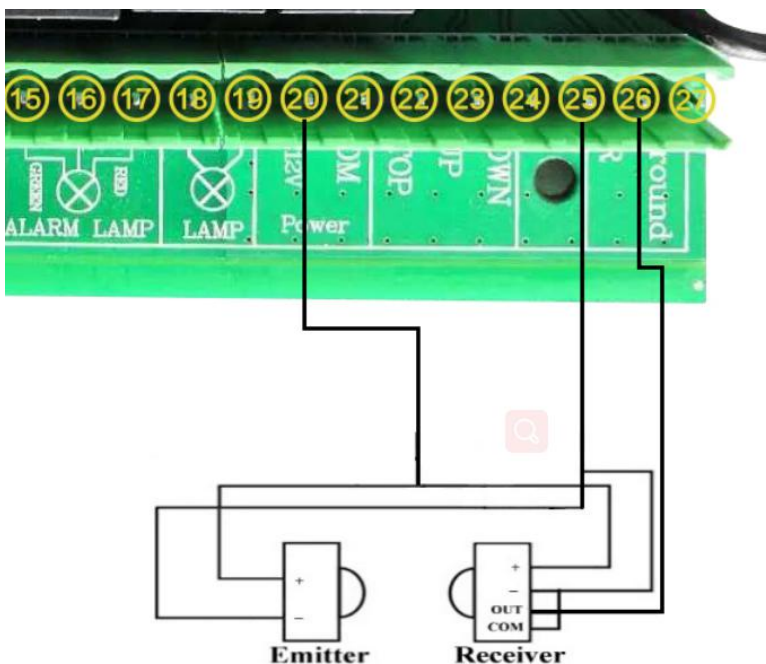


NOTE: if under angle calibration mode, without action within 5s, then the board will auto exit angle calibration mode.

E. Safety Device(Optional)

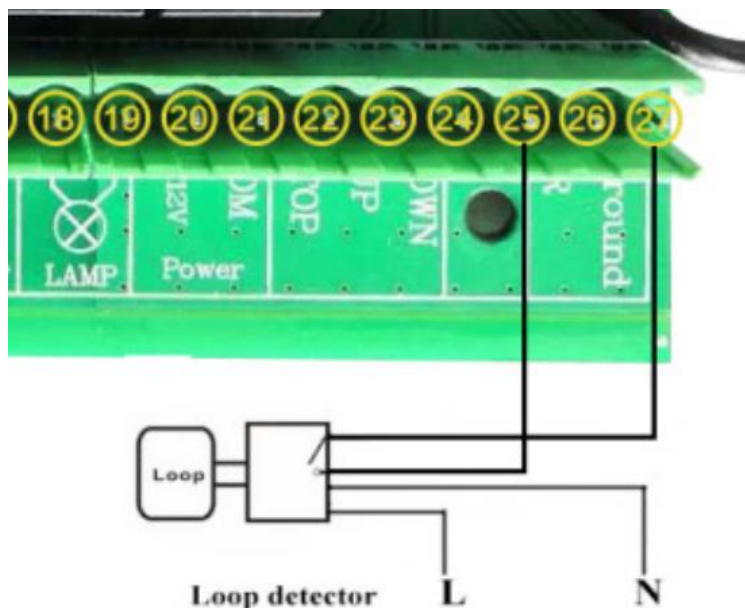
E1. Photocell

When the gate is close, if any objects or persons sensed in the sensing range of photocell, the gates will open immediately. After complete open 2s, barrier will automatic close. If barrier open fully and photocell signal still exist, barrier will automaitc lose after photocell signal disappear 2s.



E2. Loop detector

When barrier close, meet loop detector signal, barrier will reopen at once, after barrier stop open, if system with automatic close set, then barrier will according automatic close time to auto close.



5. Trouble Shooting

Problem	Possible causes	Repair method
Motor works but boom do not work	1.Check the motor wiring connection is correct or not 2.Check each limit connection is correct or not 3.Check the capacitor connect up or not.	1.Check the motor wiring is strong and reliable 2.Check the limit switch if connect or not 2. Connect two capacitor wiring with motor wiring for up and down.
Boom vibrates too much during falling.	1.Spring is out of balance 2.Boom screws is loose. 3.Barrier house do not been fixed well.	1. Please replace spring according spring list and adjust spring in a best level. 2. Fasten screws in the boom. 3.Fasten fang bolt for fixing barrier house
Boom stops in the middle during falling.	1.Limit not well adjusted 2.Spring is out of force	1.Check the wiring of limit switch then connect in a right place and adjust limit switch 2. Replace spring or adjust spring

		force.
Safety devices no function	Loop detector and photocell broken or no connection in a right place	Replace loop detector and photocell, Then connect the wiring carefully according wiring diagram
Boom is not in vertical or horizontal level when up and down	The limit well adjusted	Make the boom in vertical or horizontal level, then put the limit of barrier in the middle of the photoelectric limit switch since light is on during detection. Boom is going down in place when Red light is on, and going up in place when green light is on.