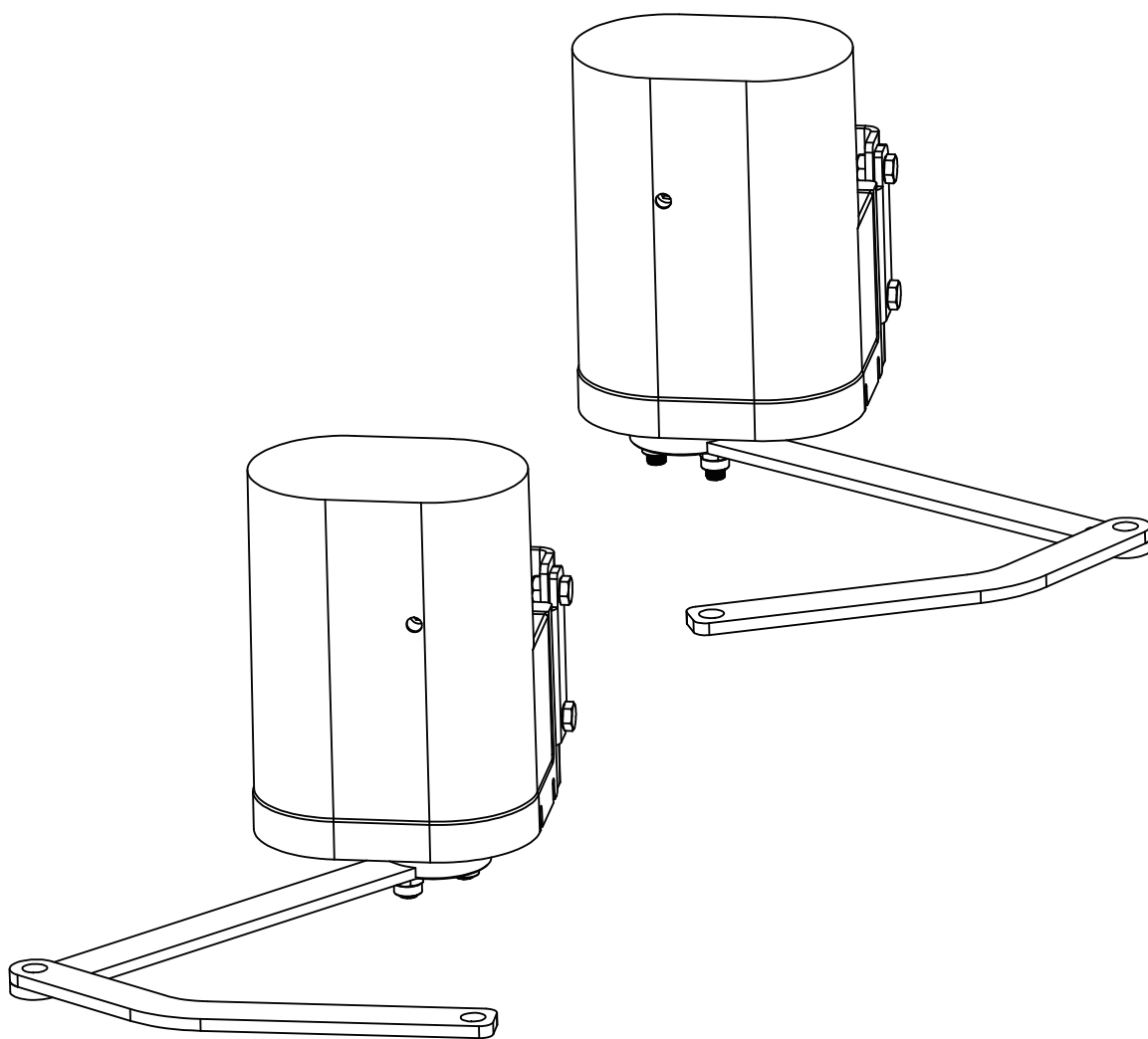


Articulated Arm Swing Gate Opener

PKM-B01 USER MANUAL

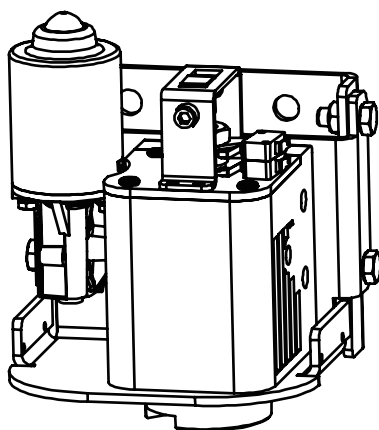


Parameter:

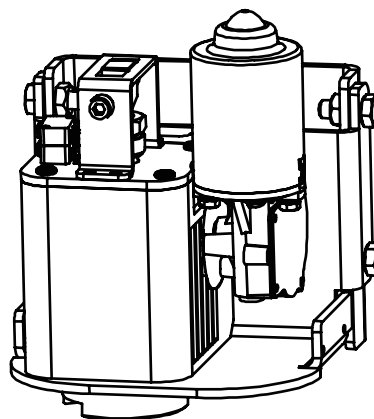
Working Voltage:	DC 24V
Rated Frequency:	50Hz or 60Hz
Rated Power:	80W*2
Max. Single Gate Weight:	250KGS
Max. Single Gate Width:	2.5M
Working Cycle Time:	11 Second (90°opening)
Working Current:	0.9A
Max. Opening Angle:	110°

The machine has left installation and right installation motor, so please choose the correct installation that you need.

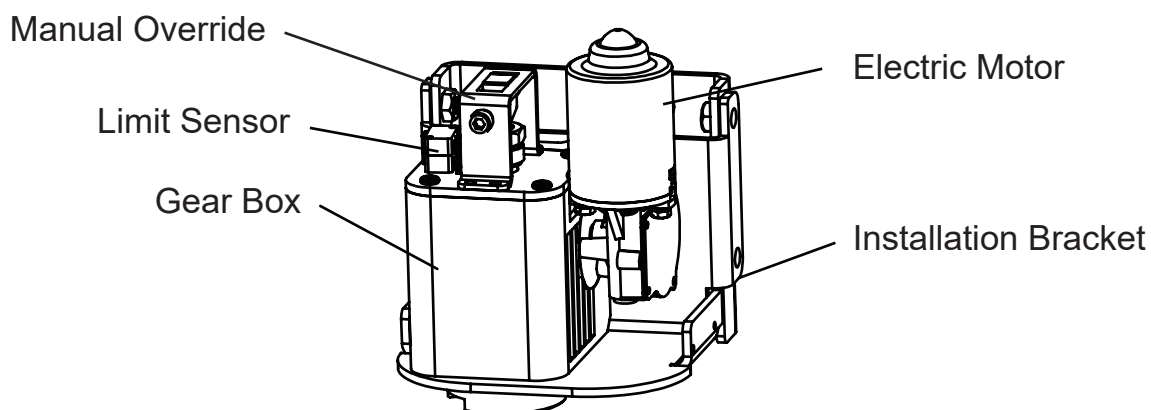
Taking the right installation machine as example in following instruction:

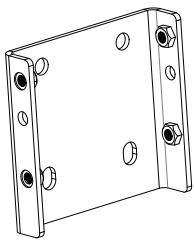


Left installation motor



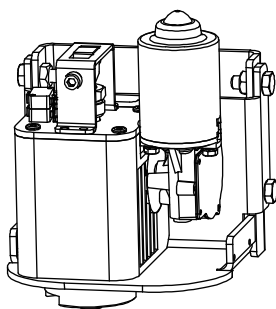
Right installation motor





Wall Mounting Plate

1



Gate Opener

2



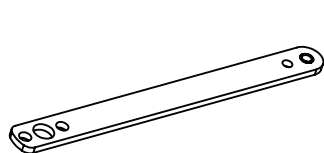
M10*80 Wall mounting
Expansion Bolt

3



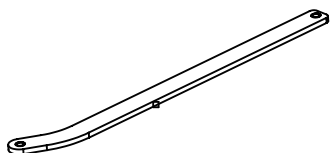
M10 Screw Bolt With Spring
Washer For Fixing Motor

4



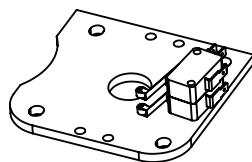
Straight Arm

5



Curve Arm

6



Limit parts

7



M12 Lock Nuts
For Straight Arm

8



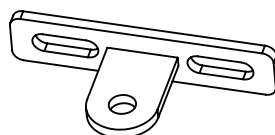
Fixing Bolts For
Articulated Arm Assembly

9



Lock Nut For Fixing Bolt Of
Articulated Arm Assembly

10



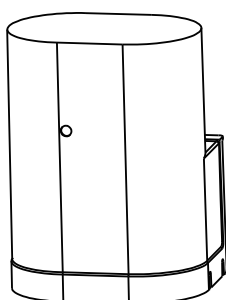
Gate Bracket

11



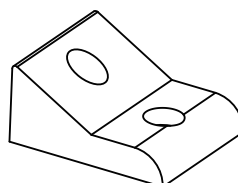
M5*10 Flange Bolts

12



Plastic Cover

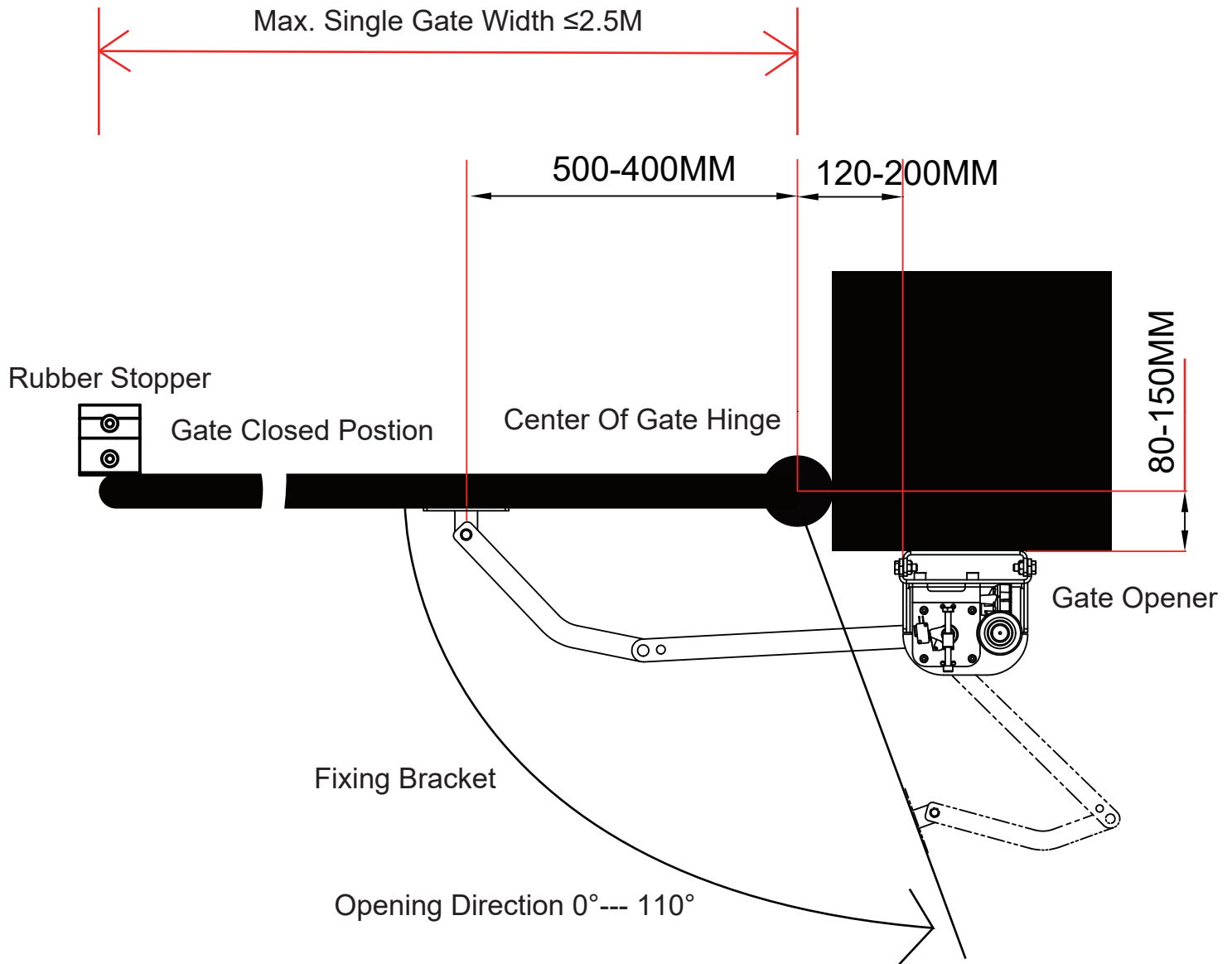
13



Rubber Stopper

14

Installation Of Swing Gate Opener

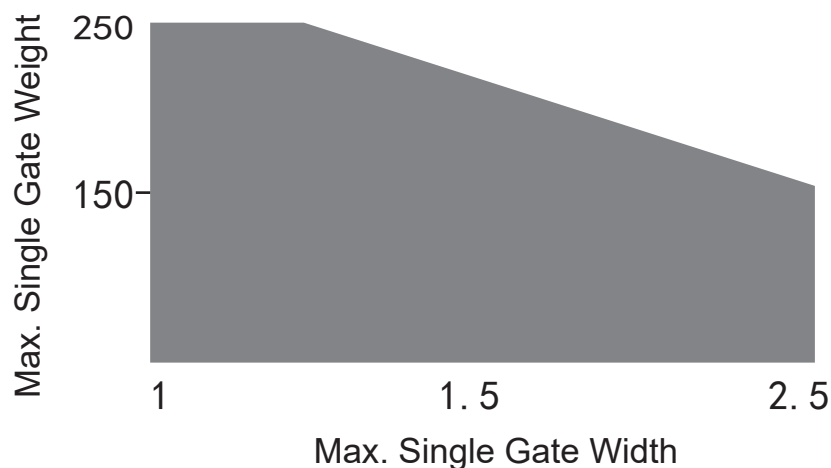


PULL TO OPEN -

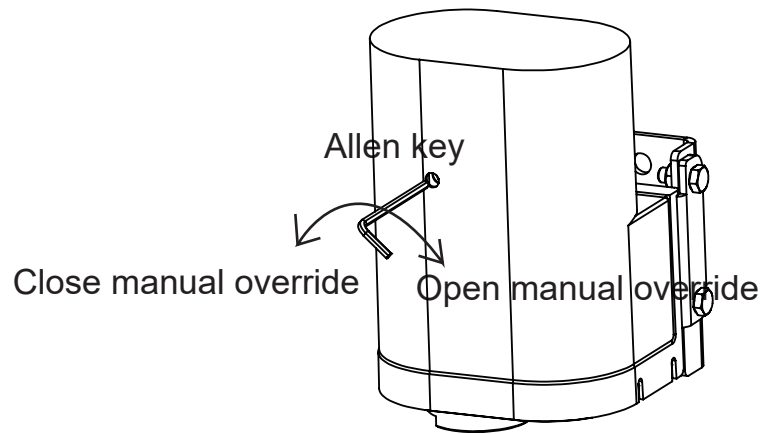
operation only. This means the gate operator is mounted on the inside of the property and pulls your gate in towards the property. Please make sure installation is done by referring the above measurement, otherwise it will cause the inaccurate limit stop.

Clockwise Direction is for opening of left motor.

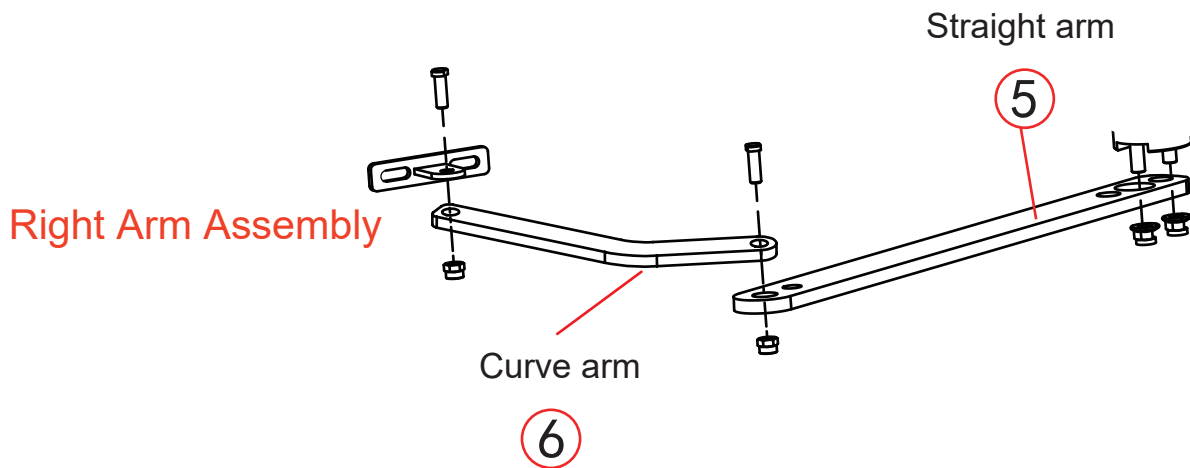
Counter Clockwise Direction is for opening of right motor.



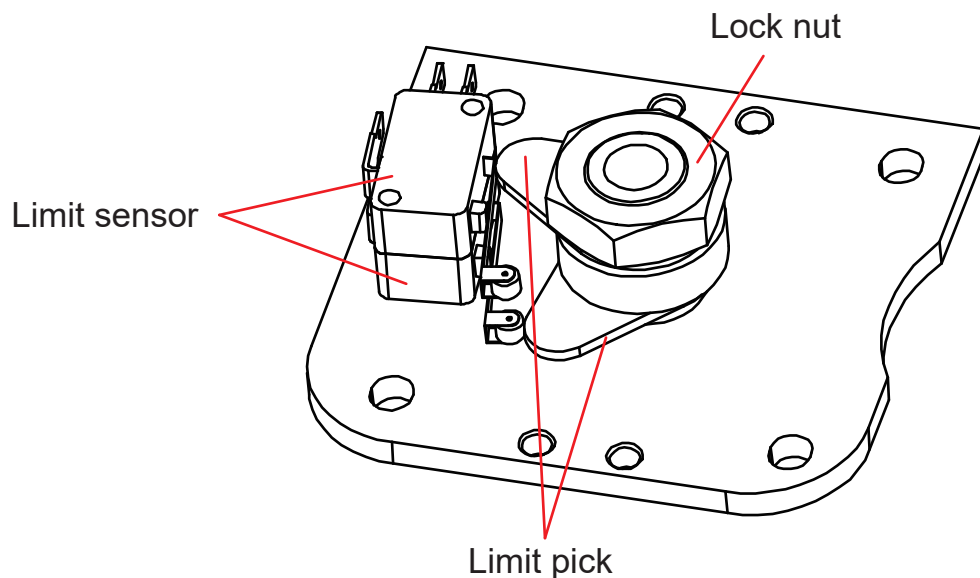
How to use manual override



Be Aware!!! Only open the manual override when the power is cut-off.
Rotate the 4-5 cycles with Allen key open the manual override.



How to adjust the limit position



When opening (closing) the door in final correct position, touch the corresponding limit sensor with each limit pick. Then tighten the lock nut.

How to install (right installation machine as example):

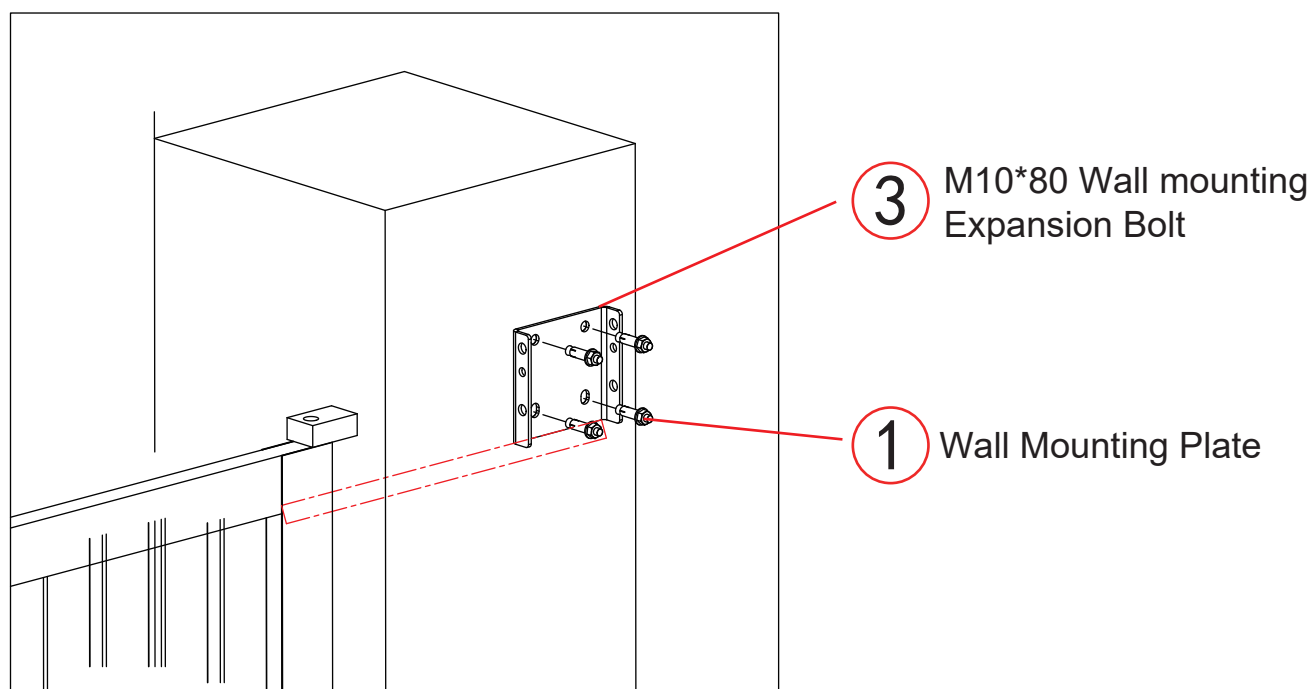


Figure 1

1. Install ① wall mounting plate with ③ M10*80 wall mounting expansion bolt. Refer to the Figure 1.

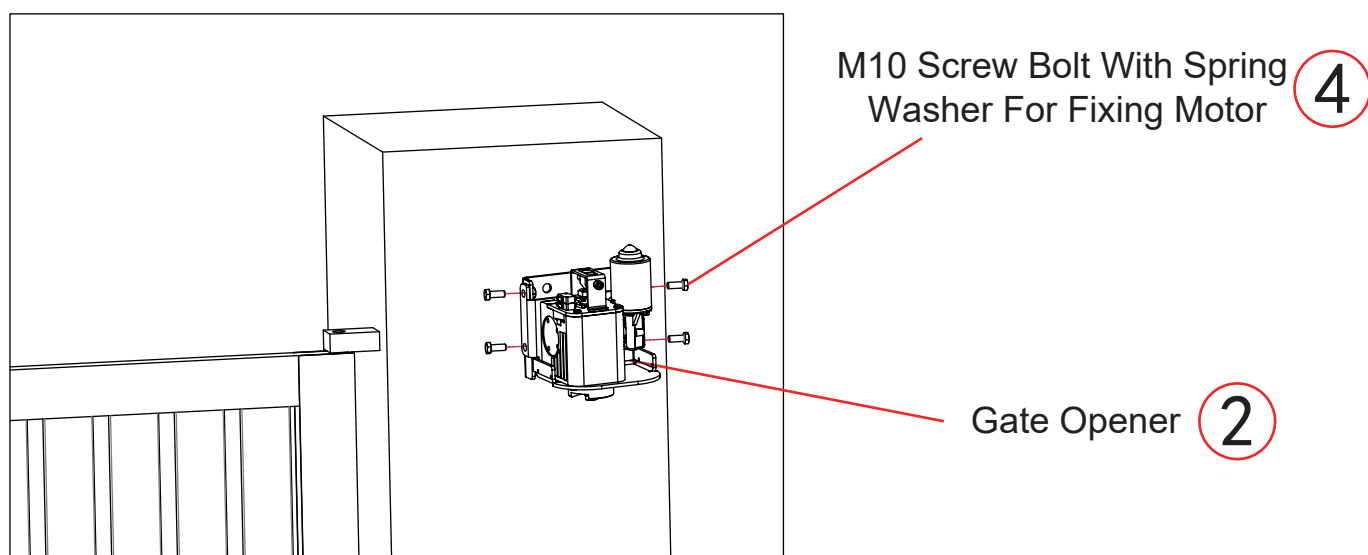


Figure 2

2. Fixing the ② gate opener with ④ M10 screw bolt with spring 4 washer. Refer to the Figure 2.

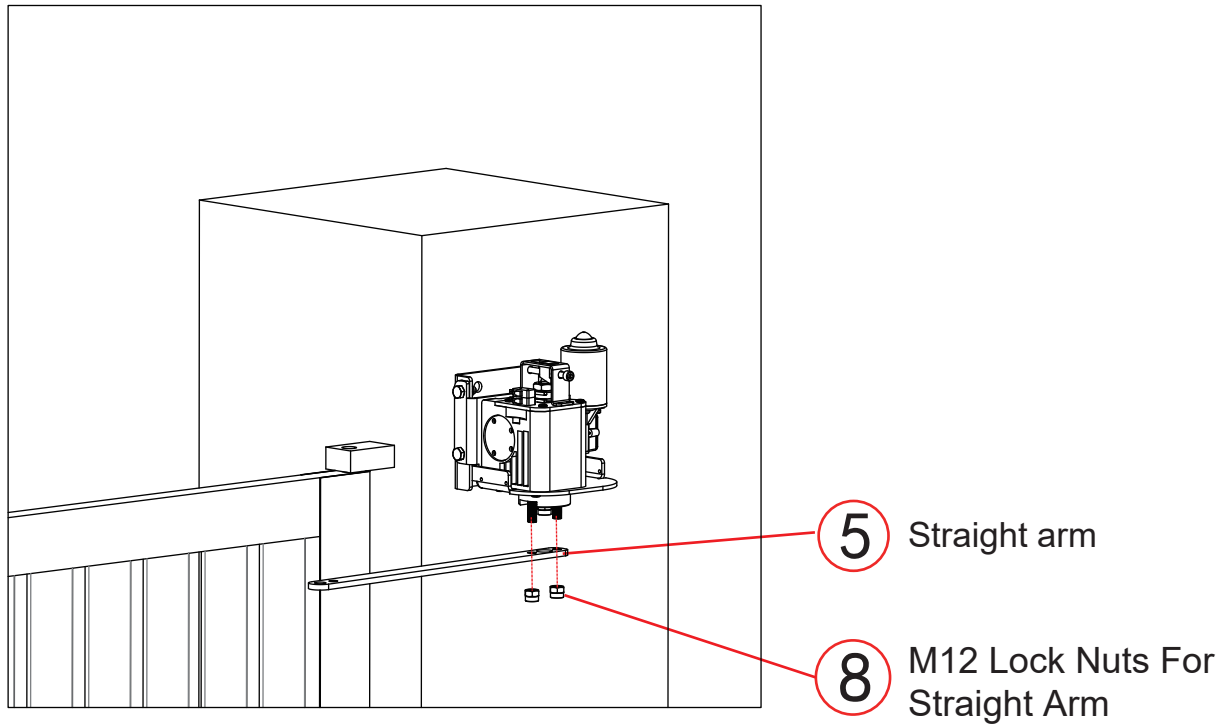


Figure 3

3. Fixing the ⑤ straight arm with ⑧ M12 lock nuts. Refer to the Figure 3.

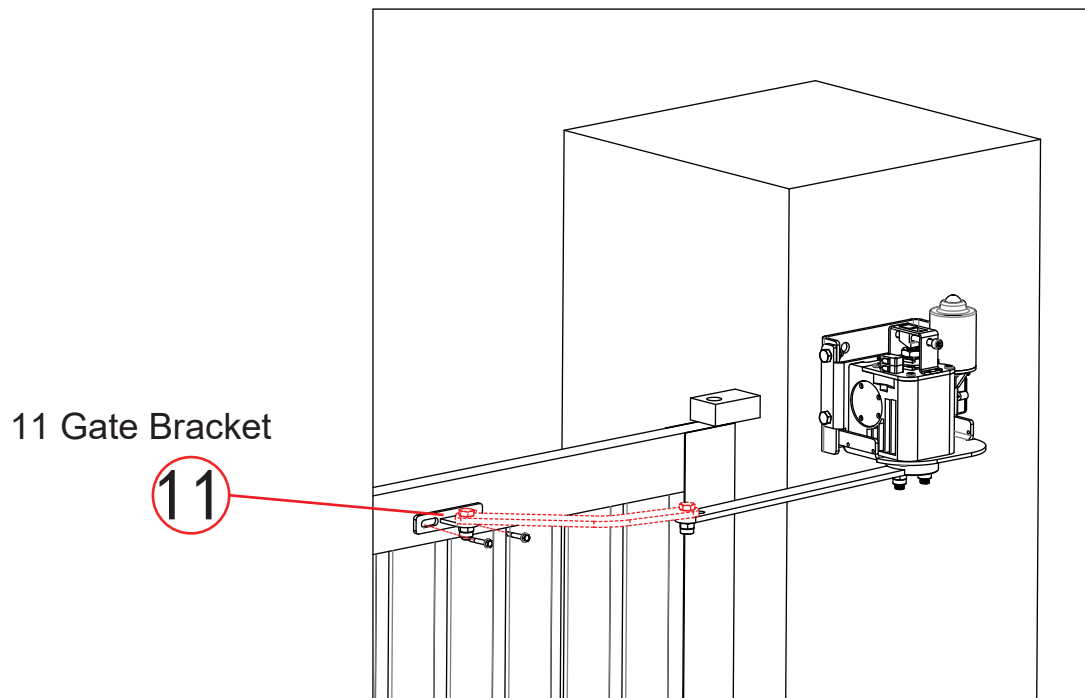
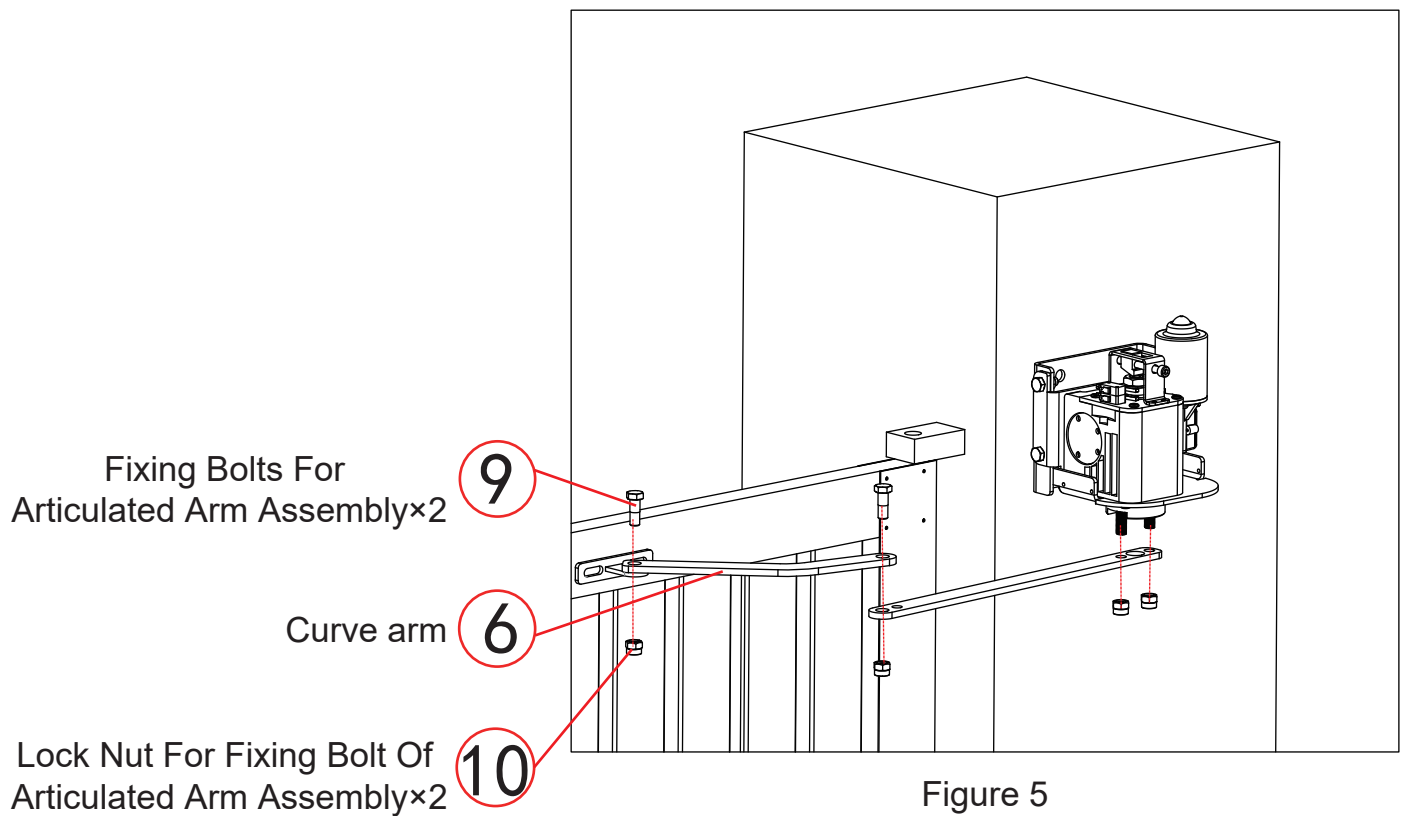


Figure 4

4. Install the ⑪ gate bracket. (the underside of curve arm must be levelled with the upside of the gate bracket). Refer to the Figure 4.



5. Install ⑥ the curve arm with ⑨ fixing bolts and ⑩ lock nuts. Refer to the Figure 5.

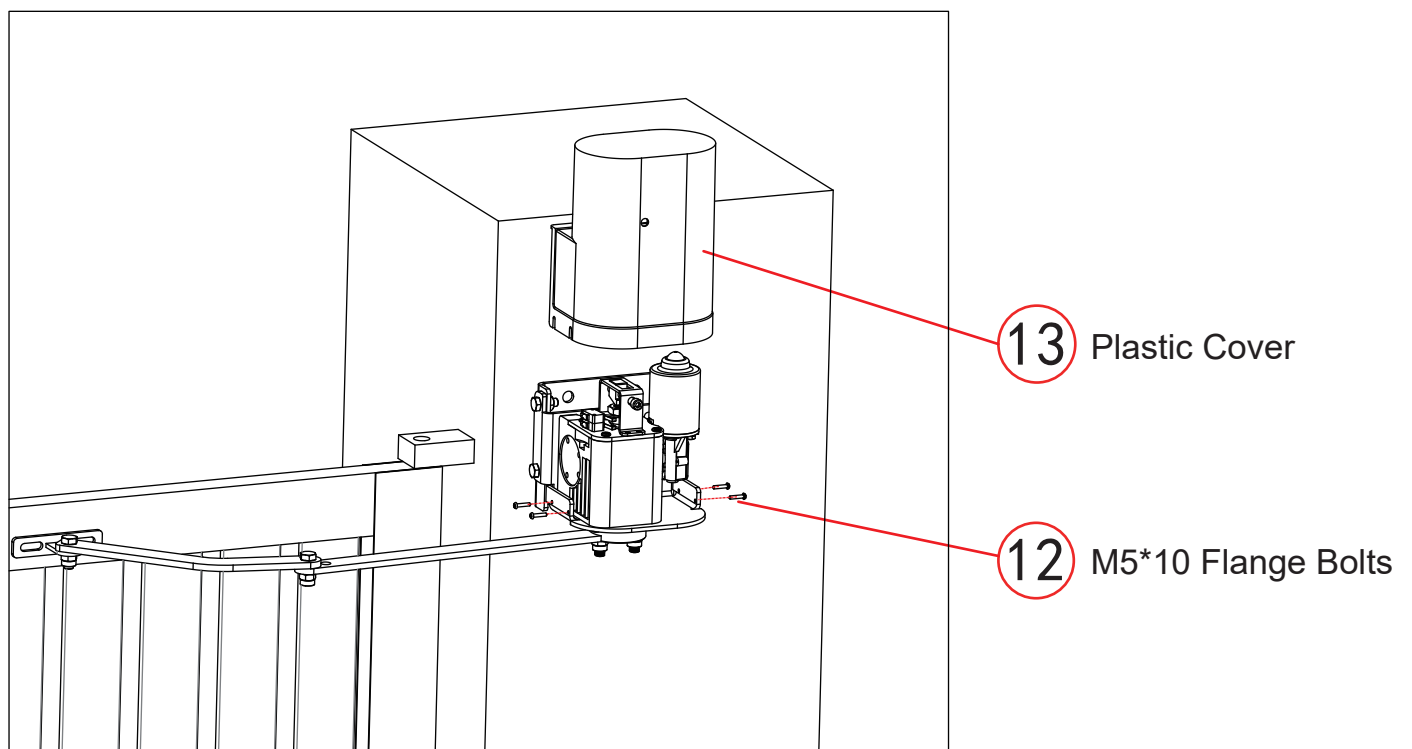


Figure 6

6. Put ⑬ the plastic cover on the machine and fix the ⑫ M5*10 flange bolts well for cover. Refer to Figure 6.

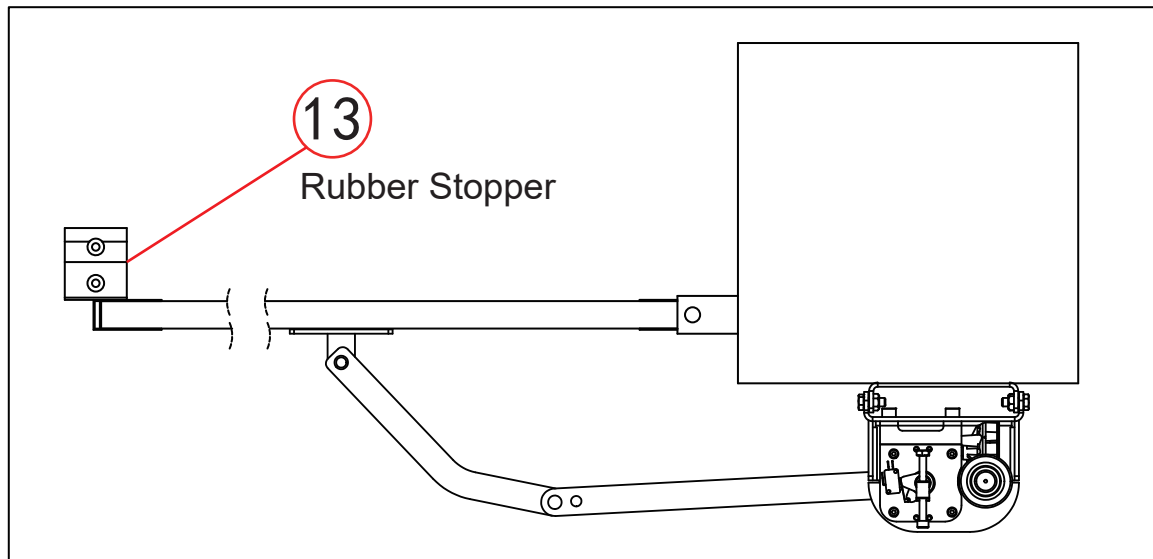


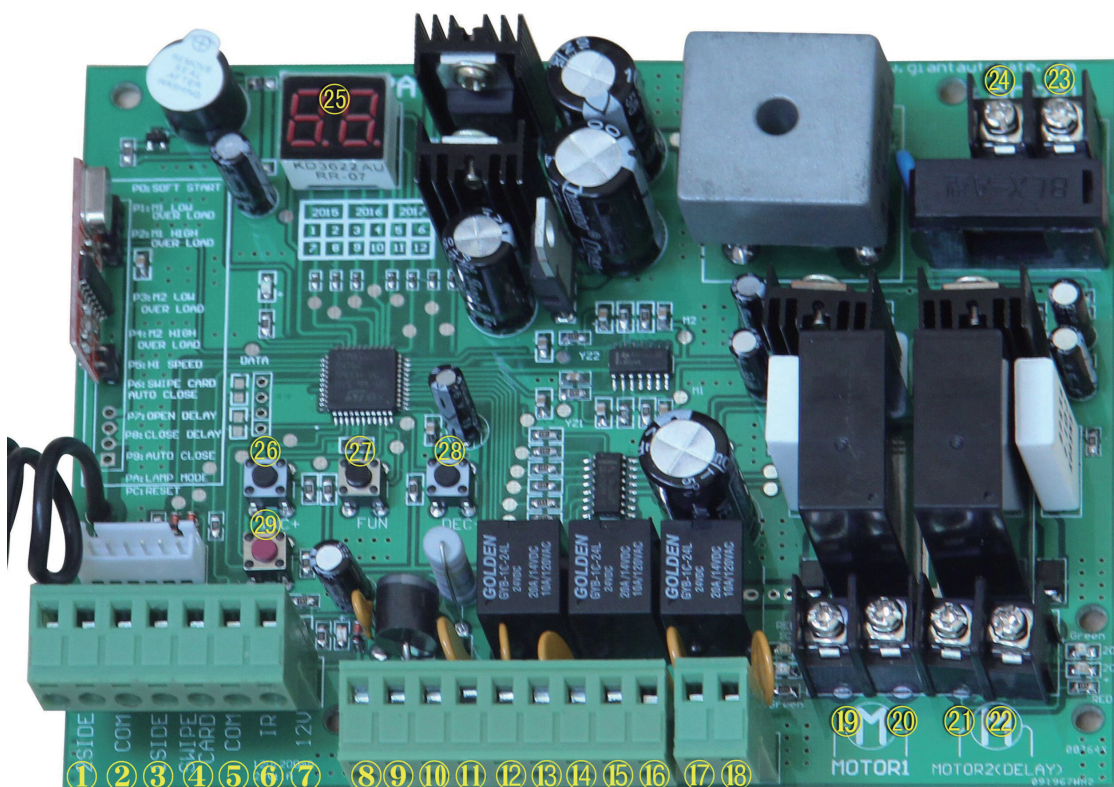
Figure 7

7. ⑬ Rubber stopper must be installed to make sure the closed gate tight. Refer to Figure 7 Rubber.

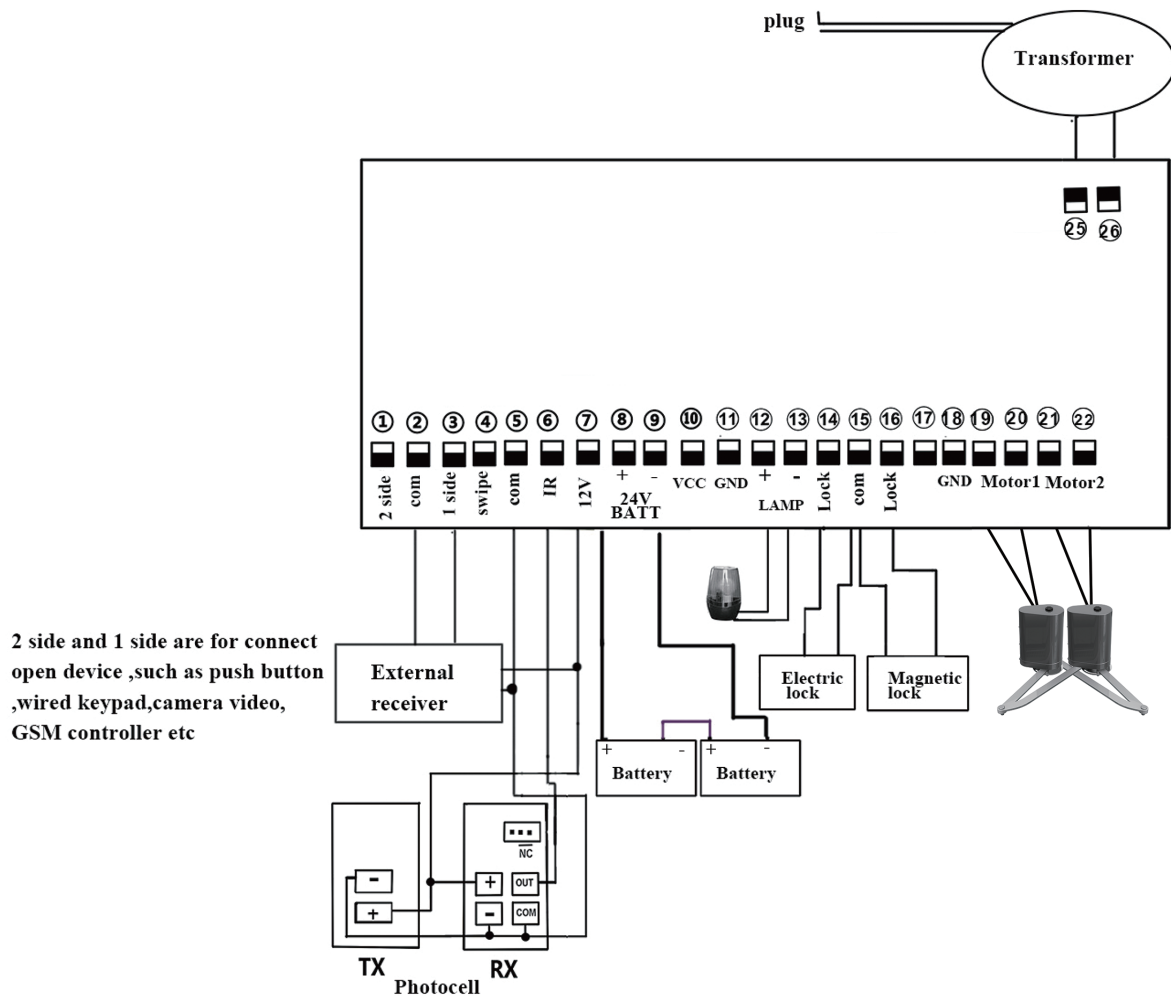
Control board wiring diagram:

1. Technical Parameters:

1. Control Panel Voltage: AC24V, available for 24 V back up battery.
2. Applicable Range: Suitable for double arms swing gate opener.
3. Encoder For transmitter: Our own customized rolling code.
4. Support remote control: Can memorize 120PCS transmitters at most
5. Motor character: 24V DC motor x2



1. 2 SIDE terminal is used for connecting any external device that operates double gate
 2. COM terminal is COMMON used for connecting the “ground” of external devices
 3. 1 SIDE terminal is used for connecting any external device that operates single gate
 4. Swipe Card terminal is used for connecting any external devices that will operate to open the gate
 5. COM terminal is COMMON used for connecting the “ground” of external devices
 6. Infrared terminal is used for connecting photo electric sensor
 7. 12V DC output is used for connecting photo electric sensor (Continuous output current $\leq 200\text{mA}$)
 8. 24V battery output is used for connecting the back up battery +
 9. 24V battery output is used for connecting the back up battery -
 10. 24V DC output is used for connecting external device. (such as photo electric sensor, max current output 1A)
 11. GND is used for connecting the “ground” of external devices
 12. 24V DC lamp output is used for connecting flash light +.
 13. 24V DC lamp output is used for connecting flash light -.
 14. 24V DC lock output—the NF terminal which used for connecting the electric lock
 15. COM is COMMON used for connecting the “ground” of lock
 16. 24V DC lock output—the NA terminal which used for connecting the magnetic lock
 17. 24V DC alarm output
 18. 24V DC alarm output
 19. Motor1 terminal is used for connecting the motor 1 installed on the gate that opens later and close first. This terminal connect 1st red wire (counted from your left hand side to right hand side).
 20. Motor1 terminal is used for connecting the motor 1 installed on the gate that opens later and close first. This terminal connect 2nd blue wire (counted from your left hand side to right hand side).
 21. Motor2 Delay terminal is used for connecting the motor 2 installed on the gate that opens first and close later. This terminal connect 1st blue wire (counted from your left hand side to right hand side).
- NOTE! If for single gate, the gate motor just can connect the Motor2 Delay terminal.**
22. Motor2 Delay terminal is used for connecting the motor 2 installed on the gate that opens first and close later. This terminal connect 2nd red wire (counted from your left hand side to right hand side).
 23. AC24V input is used for connecting the transformer
 24. AC24V input is used for connecting the transformer
 25. digital display is used for showing you the setting data
 26. INC+ is used for figure increase when setting the data
 27. FUN is used for store the data
 28. DEC- is used for figure decrease when setting the data
 29. Learning button is used for program/remove remote



2. Technical Parameters:

Button “1” depressed to operate single gate; button “2” depressed to operate double gate;

button “3” depressed for alarm output Program new remote control:

First step:

Press the LEARN button on the control board for about 1 second, the indicator LED would turn off, then now means have already enter learning Second step:

Press any button of the new remote control for about 2 second, then digital display would show the remote number while indicator LED on board starts flash four times with one buzzer sound then now means the learning successfully.

NOTE! After you press LEARN button, if not receive the new remote signal within 5s, indicator LED would turn on and exit learning.

Remove remote control:

Press and hold the LEARN button for about 5 second, if with one buzzer sound and indicator LED light on, then now means remove remote successfully.

Setting of the control board:

After power on, digital display will self-check from 00-99 with buzzer sound. If indicator LED light on, buzzer stop sound, it means the system is normal.

Basic operation method:

Press and hold the [FUN] button until the digital display shows PO. Now you enter the menu setting.

You could through adjust the [INC+] [DEC-] to increase or decrease the serial number or numerical value.

After data adjust well then press [FUN] to store the data. With one sound of buzzer, the store successfully.

After store the data, the digital display would still on the menu number you just set, if you need to enter next menu setting, please press [INC+] or [DEC-] to choose and confirm with [FUN] to enter the menu number you want to set. Such as after you store the P0 value and press [FUN] to store it, then now the digital display would still show the number P0, and if you want go further to adjust P1, please press one [INC+], then digital display show P1, later press [FUN] to enter the P1 setting. And if you not need to enter next menu setting, you could press [LEARN] button to exit the menu setting.

1. To set the soft start time:

When digital display indicate P0, the gate opener is on the soft start time setting. The soft start time adjustable from 0-6s, 0s means close the soft start time, max soft start time 6s. Each time you press and release the [INC+] button, the figure increase by 1; each time you press and release the [DEC-] button, the figure decrease by 1. Press the [FUN] button to store the data when the soft start time chosen, then the soft start time setting finished (Factory set 2s).

2. To set the level of stall force:

2a-- When digital display indicate P1, the gate opener is on Motor 1 low speed running stall force adjustment. There is 0-20 levels for optional, each time you press and release the [INC+] button, the figure increase by 1; each time you press and release the [DEC-] button, the figure decrease by 1. Press the [FUN] button to store the data when the stall force level chosen, then the stall force of Motor 1 low speed running stall force adjustment finished. (factory set 8 level)

2b-- When digital display indicate P2, the gate opener is on Motor 1 high speed running stall force adjustment. There is 0-20 levels for optional. Each time you press and release the [INC+] button, the figure increase by 1; each time you press and release the [DEC-] button, the figure decrease by 1. Press the [FUN] button to store the data when the stall force level chosen, then the stall force of Motor 1 high speed running stall force adjustment finished. (factory set 12 level)

2c-- When digital display indicate P3, the gate opener is on Motor 2 low speed running stall force adjustment. There is 0-20 levels for optional. Each time you press and release the [INC+] button, the figure increase by 1; each time you press and release the [DEC-] button, the figure decrease by 1. Press the [FUN] button to store the data when the stall force level chosen, then the stall force of Motor 2 low speed running stall force adjustment finished. (factory set 8 level)

2d-- When digital display indicate P4, the gate opener is on Motor 2 high speed running stall force adjustment. There is 0-20 levels for optional. Each time you press and release the [INC+] button, the figure increase by 1; each time you press and release the [DEC-] button, the figure decrease by 1. Press the [FUN] button to store the data when the stall force level chosen, then the stall force of Motor 2 high speed running stall force adjustment finished. (factory set 12 level)

3. To set the high speed running time:

When digital display indicate P5, the gate opener is on high speed running time setting. There is 0-33s for optional. 0s means without high speed running, gate opener would keep running in slow speed. Max high speed running time 33s. Each time you press and release the [INC+] button, the figure increase by 1; each time you press and release the [DEC-] button, the figure decrease by 1. Press the [FUN] button to store the data when the high speed running time chosen, then the high speed running time setting finished. (factory set 12s)

4. To set the auto close time after swipe card:

When digital display indicate P6, the gate opener is on auto close time setting (NOTE! this auto close time just means the auto close function which realize through external device-). There is 0-99s for optional. 0 means the gate opener would not auto close after swipe card. Max auto close time after swipe card 99s. Each time you press and release the [INC+] button, the figure increase by 1; each time you press and release the [DEC-] button, the figure decrease by 1. Press the [FUN] button to store the data when the auto close time after swipe card chosen, then the auto close time after swipe card finished. (factory set 10s)

5. To set the interval time:

5a. When digital display indicate P7, the gate opener is on open interval time setting. There is 0-10s for optional. 0s means double gates open simultaneously. "1" means the Motor 2 start to open 1 second before Motor 1 start to open. Max open interval time 10s. Each time you press and release the [INC+] button, the figure increase by 1; each time you press and release the [DEC-] button, the figure decrease by 1. Press the [FUN] button to store the data when the open interval time chosen, then the open interval time setting finished. (factory set 0s)

5b. When digital display indicate P8, the gate opener is on close interval time setting. There is 0-10s for optional. 0s mean double gates close simultaneously. "1" means the Motor 1 start to close 1 second before Motor 2 start to close. Max close interval time 10s. Each time you press and release the [INC+] button, the figure increase by 1; each time you press and release the [DEC-] button, the figure decrease by 1. Press the [FUN] button to store the data when the close interval time chosen, then the close interval time setting finished. (factory set 0s)

6. To set auto close time:

When digital display indicate P9, the gate opener is on auto close time setting. There is 0-99s for optional. 0s mean the gate opener would not auto close. Max auto close time is 99s. Each time you press and release the [INC+] button, the figure increase by 1; each time you press and release the [DEC-] button, the figure decrease by 1. Press the [FUN] button to store the data when the auto close time chosen, then the auto close time setting finished. (factory set 0)

7. To set lamp/alarm output control:

When digital display indicate PA, the gate opener is on lamp/alarm output control setting. There is 0-3 for optional. "0" means the alarm on monostability model and the lamp without voltage output after the gate total close 30s, other time with voltage output. "1" means the alarm on monostability model and the lamp would only flash when gate running. "2" means the alarm on bistability model and the lamp without voltage output after the gate total close 30s, other time with voltage output. "3" means the alarm on bistability model and the lamp would only flash when gate running. Each time you press and release the [INC+] button, the figure increase by 1; each time you press and release the [DEC-] button, the figure decrease by 1. Press the [FUN] button to store the data when the auto close time chosen, then the lamp/alarm output control setting finished. (factory set 0)

8. To set lock time:

When digital display indicate Pb, the gate opener is on lock time control setting. The lock control time means the time we could control the lock. There is 0-1 for optional. "0" means the lock control time is 0.5s, "1" means the lock control time is 5s. Each time you press and release the [INC+] button, the figure increase by 1; each time you press and release the [DEC-] button, the figure decrease by 1. Press the [FUN] button to store the data when the lock control time chosen, then the lock time setting finished. (factory set 0)

9. To choose single/double gate open:

When digital display indicate PC, the gate opener is on single/double gate open setting. There is 0-3 for optional. "0" means the gate could not open by remote, "1" means just can open one single gate, "2" means can just open two leaf gate, "3" means can open one single gate as well as two leaf gate. Each time you press and release the [INC+] button, the figure increase by 1; each time you press and release the [DEC-] button, the figure decrease by 1. Press the [FUN] button to store the data when the single/double gate open chosen, then the remote button setting finished. (factory set 3)

10. To choose photocell work in NC or NO

When digital display indicate Pd, you could choose the photocell work in NO or NC.
Value 00 means work in NO, value 01 means work in NC.

11. To reset:

When digital display indicate Po, the gate opener is on rest setting. After enter Po setting, press the [FUN] to store and then now the reset successfully.