



**Sliding Gate Opener
SLG5400XAC/SLG5550XAC/SLG5750XAC
User Manual
(With control board SL07X0)**



Dear users,

Thank you for choosing this product. Please read the manual carefully before assembling and using it. Please do not leave out the manual if you send this product to a third party.

1. Safety Instruction




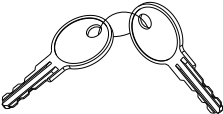
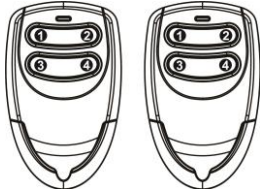
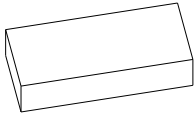
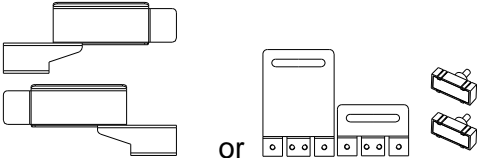
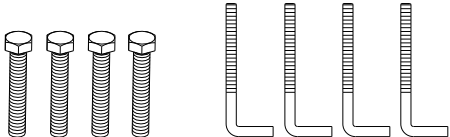

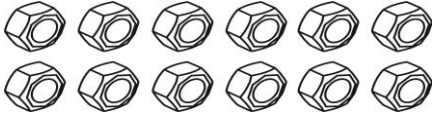
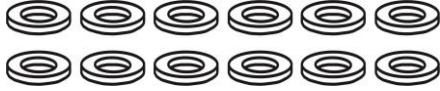
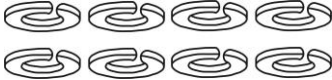
Please ensure that the using power voltage matches with the supply voltage of gate opener (AC110V or AC220V); kids are forbidden to touch the control devices or the remote-control unit.

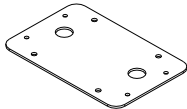
The remote-control unit is controlled by a single button mode or three button mode (please refer to the instructions of the remote control in accordance with the actual gate opener type). The indicator light on the remote-control unit will flicker when the button on it is pressed. Main engine and gate can be unlocked by disengagement wrench and the gate can move with manual operation after disengagement.

Please ensure that no one is around the main engine or gate when the switch is operated and it is usually demanded to examine the stability of installation. Please temporarily stop using if the main engine needs repairing or regulation.



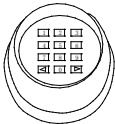
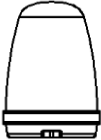
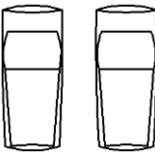
The installation and maintenance of the products must be carried out by professionals.

2. Packing List (standard)

No.	Picture	Name	Quantity
1		Main engine	1
2		Manual release key	2
3		Remote control (Model optional)	2
4		Spring limit switch accessories box / Magnetic limit switch accessories box	1
4-1		Spring limit switch block / Magnetic limit switch block	1
4-2		Outer hexagon bolt M10X60 Foundation bolt M10	4 4
4-3		Spring limit switch block mounting screw M6X10 / Magnetic limit switch block mounting screw M6X18	4
4-4		Nut M10	12
4-5		Flat washer Ø10	12
4-6		Spring washer Ø10	8

No.	Picture	Name	Quantity
5		Mounting plate	1piece

Packing list (Optional)

No.	Picture	Name	Quantity
1		Metal rack	1m/pc
2		Nylon rack	1m/pc
3		Keypad (different models are optional)	1pc
4		Flash lamp (different models are optional)	1pc
5		Photocell (different models are optional)	1pair

3. Technical parameters

Model	SLG54001	SLG54002	SLG54003	SLG54004
Power supply	110VAC/50Hz	110VAC/50Hz	220VAC/50Hz	220VAC/50Hz
Motor power	400W	400W	400W	400W
Gate moving speed	11-13m/min	11-13m/min	11-13m/min	11-13m/min
Maximum weight of gate	1000Kg	1000Kg	1000Kg	1000Kg
Remote control distance	≥50m	≥50m	≥50m	≥50m
Remote control mode	Single button mode /Three button mode	Single button mode /Three button mode	Single button mode /Three button mode	Single button mode /Three button mode
Limit switch	Magnetic limit switch	Spring limit switch	Magnetic limit switch	Spring limit switch

Noise	≤60dB	≤60dB	≤60dB	≤60dB
Output torque	22N.m	22N.m	22N.m	22N.m
Output shaft height	50mm	50mm	50mm	50mm
Frequency	433.92 MHz	433.92 MHz	433.92 MHz	433.92 MHz
Working temperature	-20°C - +70°C	-20°C - +70°C	-20°C - +70°C	-20°C - +70°C
Package weight	16Kg	16Kg	16Kg	16Kg

Model	SLG55505	SLG55506	SLG55507	SLG55508
Power supply	110VAC/50Hz	110VAC/50Hz	220VAC/50Hz	220VAC/50Hz
Motor power	550W	550W	550W	550W
Gate moving speed	11-13m/min	11-13m/min	11-13m/min	11-13m/min
Maximum weight of gate	1500Kg	1500Kg	1500Kg	1500Kg
Remote control distance	≥50m	≥50m	≥50m	≥50m
Remote control mode	Single button mode /Three button mode	Single button mode /Three button mode	Single button mode /Three button mode	Single button mode /Three button mode
Limit switch	Magnetic limit switch	Spring limit switch	Magnetic limit switch	Spring limit switch
Noise	≤60dB	≤60dB	≤60dB	≤60dB
Output torque	32N.m	32N.m	32N.m	32N.m
Output shaft height	50mm	50mm	50mm	50mm
Frequency	433.92 MHz	433.92 MHz	433.92 MHz	433.92 MHz
Working temperature	-20°C - +70°C	-20°C - +70°C	-20°C - +70°C	-20°C - +70°C
Package weight	17Kg	17Kg	17Kg	17Kg

Model	SLG57501	SLG57502	SLG57503	SLG57504
Power supply	110VAC/50Hz	110VAC/50Hz	220VAC/50Hz	220VAC/50Hz
Motor power	750W	750W	750W	750W
Gate moving speed	11-13m/min	11-13m/min	11-13m/min	11-13m/min
Maximum weight of gate	2000Kg	2000Kg	2000Kg	2000Kg
Remote control distance	≥50m	≥50m	≥50m	≥50m

Remote control mode	Single button mode /Three button mode	Single button mode /Three button mode	Single button mode /Three button mode	Single button mode /Three button mode
Limit switch	Magnetic limit switch	Spring limit switch	Magnetic limit switch	Spring limit switch
Noise	≤60dB	≤60dB	≤60dB	≤60dB
Output torque	42N.m	42N.m	42N.m	42N.m
Output shaft height	50mm	50mm	50mm	50mm
Frequency	433.92 MHz	433.92 MHz	433.92 MHz	433.92 MHz
Working temperature	-20°C - +70°C	-20°C - +70°C	-20°C - +70°C	-20°C - +70°C
Package weight	18Kg	18Kg	18Kg	18Kg

4. Installation

SLG5400X, SLG5550X, SLG5750X sliding gate opener is applicable to gate weight less than 1000kg/1500kg/2000kg, and length of the sliding gate should be less than 12m. The drive mode adopts the gear and rack transmission. This gate opener must be installed inside the enclosure or yard for protection.

4.1 Installation drawing

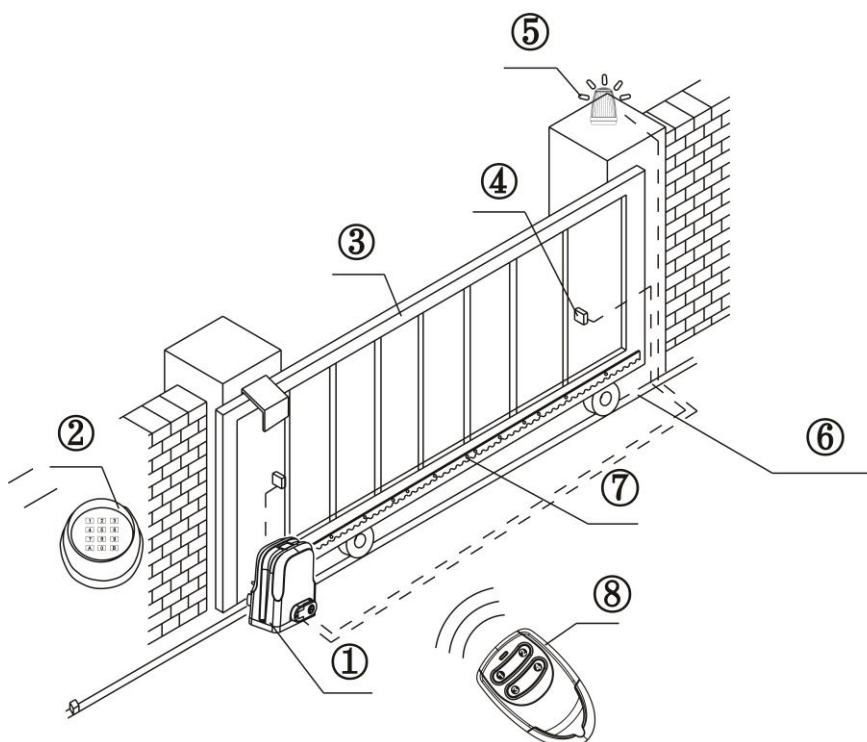


Figure 1

- ① Gate opener; ② Wireless keypad ; ③ Gate; ④ Infrared sensor;
 ⑤ Alarm lamp; ⑥ Safety stop block; ⑦ Gear rack; ⑧ Remote control;

4.2 Size of main engine and accessories

4.2.1 Size of main engine

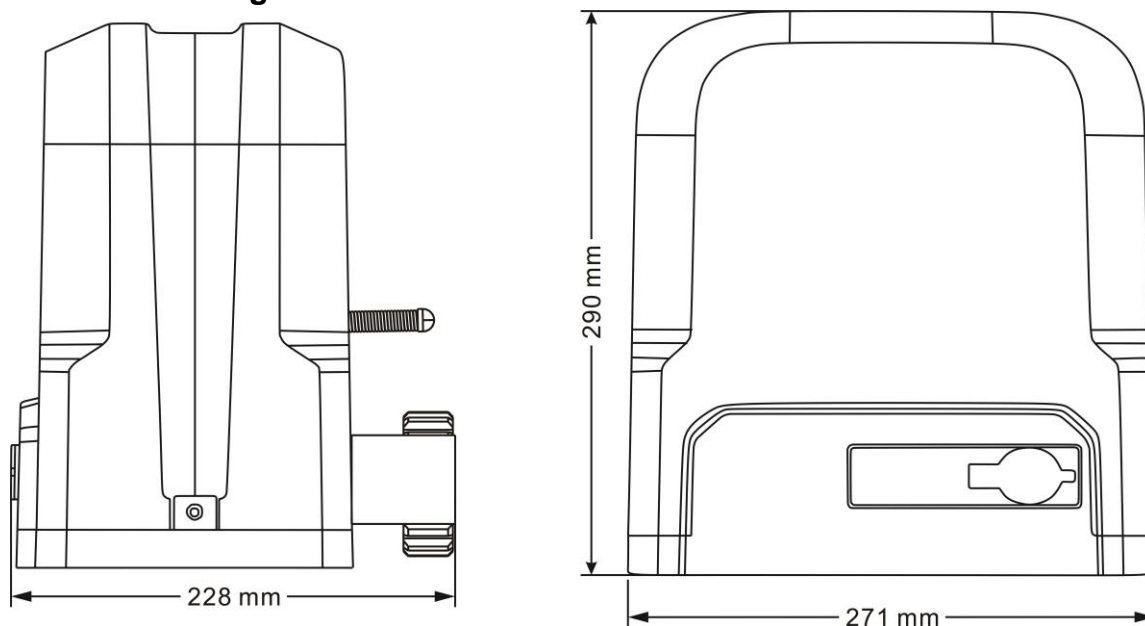


Figure 2

4.2.2 Size of mounting plate

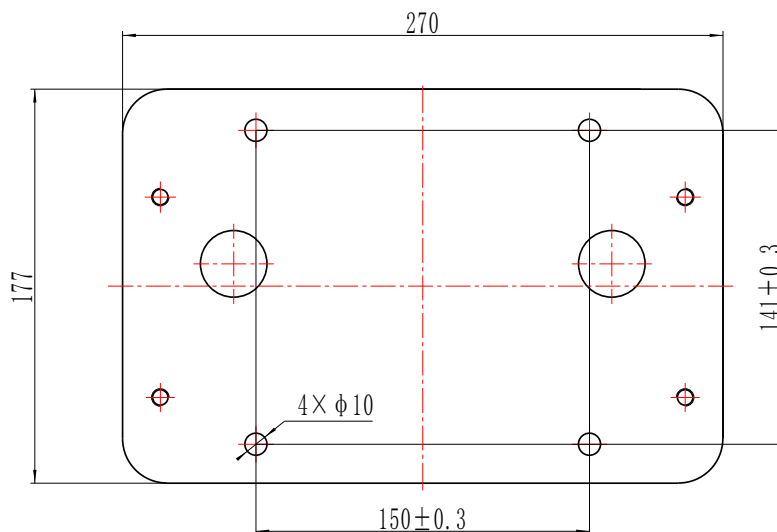


Figure 3

4.3 Installation procedures

4.3.1 Preparation work before installation

Please ensure that the sliding gate is correctly installed, the gate rail is horizontal, and the gate can glide back and forth smoothly when moved by hands before installing the gate opener.

Cable installation

Please bury the motor & power cable and controlling cable with PVC tube, and use two PVC tubes to bury (motor & power cable) and (controlling cable) separately, so as to guarantee normal operation of the gate opener and protect the cables from damages.

Concrete pedestal

Please cast a concrete pedestal with the size of 500mm x 300mm and depth of 250mm in advance, so as to firmly install SLG5400X, SLG5550X, SLG5750X gate opener. **Please verify whether the distance between the gate and gate opener is suitable before casting the pedestal.**

Embedded screws

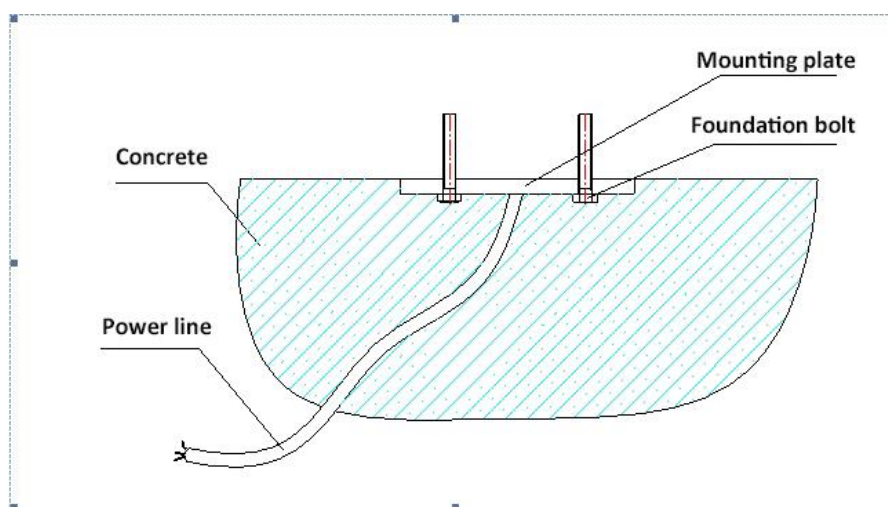


Figure 4

4.3.2 Main engine installation

- Dismantle the plastic housing on the main engine before installation and keep relevant fasteners properly;
- Please prepare the power line for connecting mounting plate and main engine (the number of power supply cable core shall not be less than 3 PCS, the sectional area of cable core shall not be lower than 1.5mm² and the length shall be determined by users according to the field situation) due to different installation environments;
- Please unlock the main engine before installation, the unlock method is: take out the key cover, insert the key, and open the manual release bar till it rotates by 90° as shown in Figure 5. Then turn the output gear and the gear can be rotated easily;

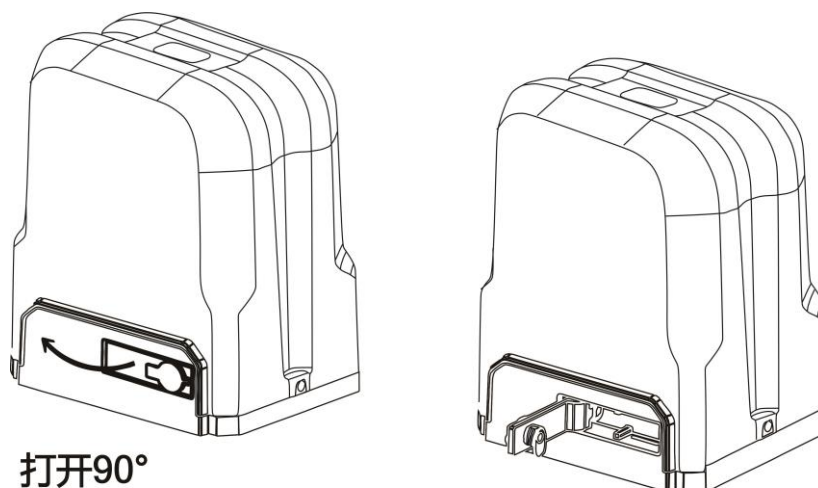


Figure 5: Turn on 90°

4.3.3 Gear rack installation

- Fix the mounting screws to the rack.
- Put the rack on the output gear, and weld the mounting screw to the gate (each screw with one solder joints firstly).
- Unlock the motor and can pull the gate smoothly.
- Please check whether there is a fit clearance between rack and output gear, as shown in Figure 7.
- Weld all the mounting screws to the gate firmly.
- Make sure that all racks on the same straight line.
- Pull the gate after installed, make sure the entire trip is flexible no stuck.

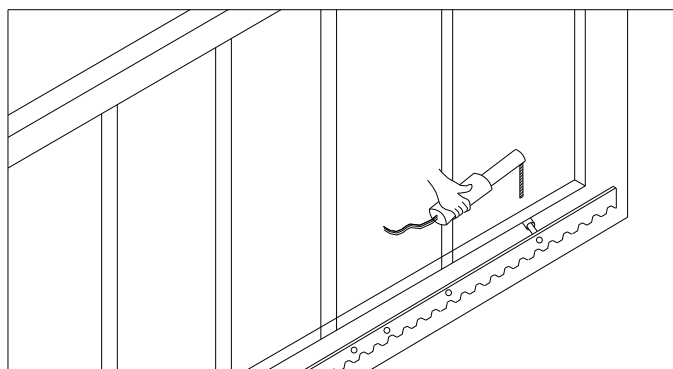


Figure 6

The fit clearance of output gear and rack is shown in Figure 7 below:

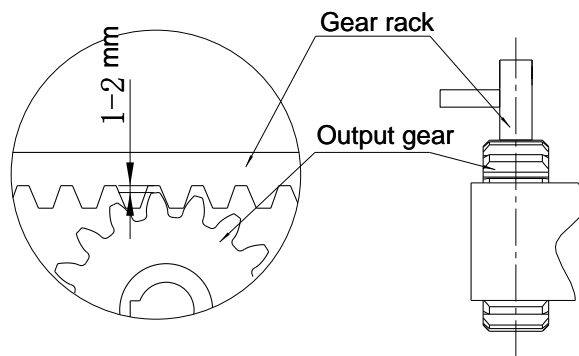


Figure 7



Warnings

- To ensure safety, install safety stop blocks on both ends of the rails to prevent the gate out of the rail. Before installing the main engine, make sure that the safety stop blocks are in place and whether it has the function of preventing the gate from moving out of the rail and out of the safety range.
- Please ensure that the main engine and its components have good mechanical properties, and the gate can operate flexibly when moved by hands before installing the main engine.
- In this product, one control can drive one main engine only, otherwise, the control system will be damaged.
- Earth leakage circuit breaker must be installed where the gate movement can be seen, and the minimum mounting height is 1.5m to protect it from being touched.
- After installation, please check whether the mechanical property is good or not, whether gate movement after manual unlocking is flexible or not, and whether the infrared sensor (optional) is installed correctly and effectively.

4.3.4 Limit switch adjustment

Spring limit switch - The installation site of spring limit switch is shown in Figure 8:

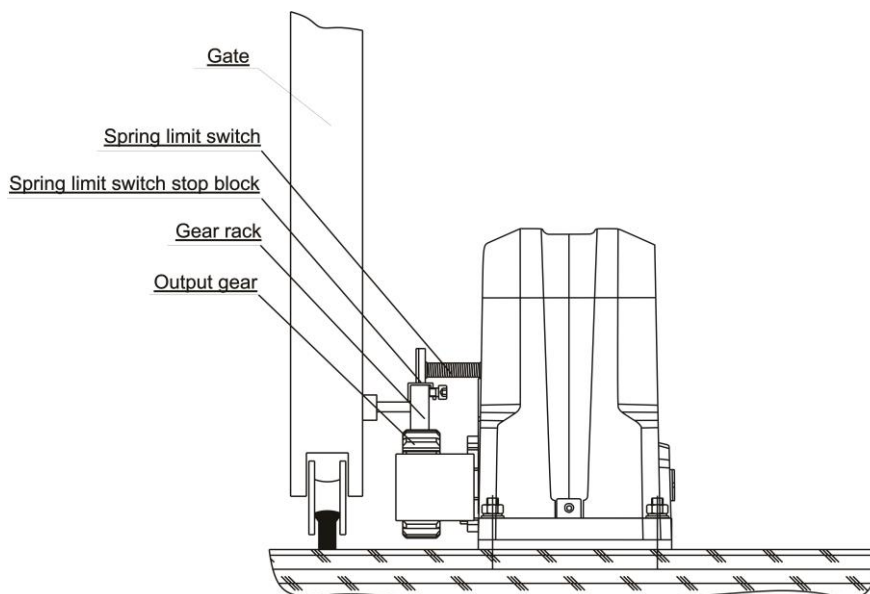


Figure 8

The installation of spring limit switch stop block is shown in Figure 9:

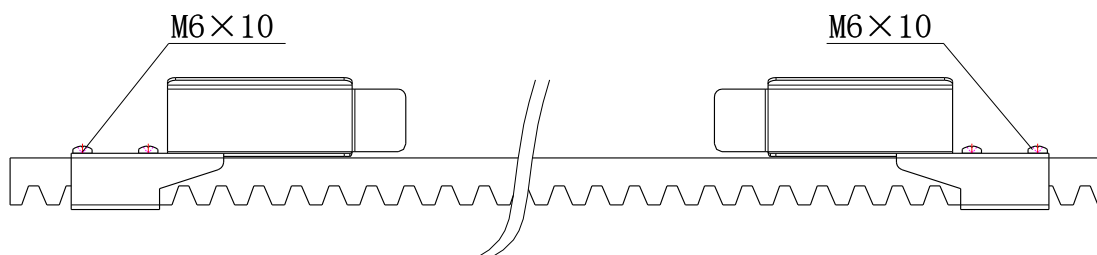


Figure 9

Magnetic limit switch - The installation site of magnetic limit switch is shown in Figure 10:

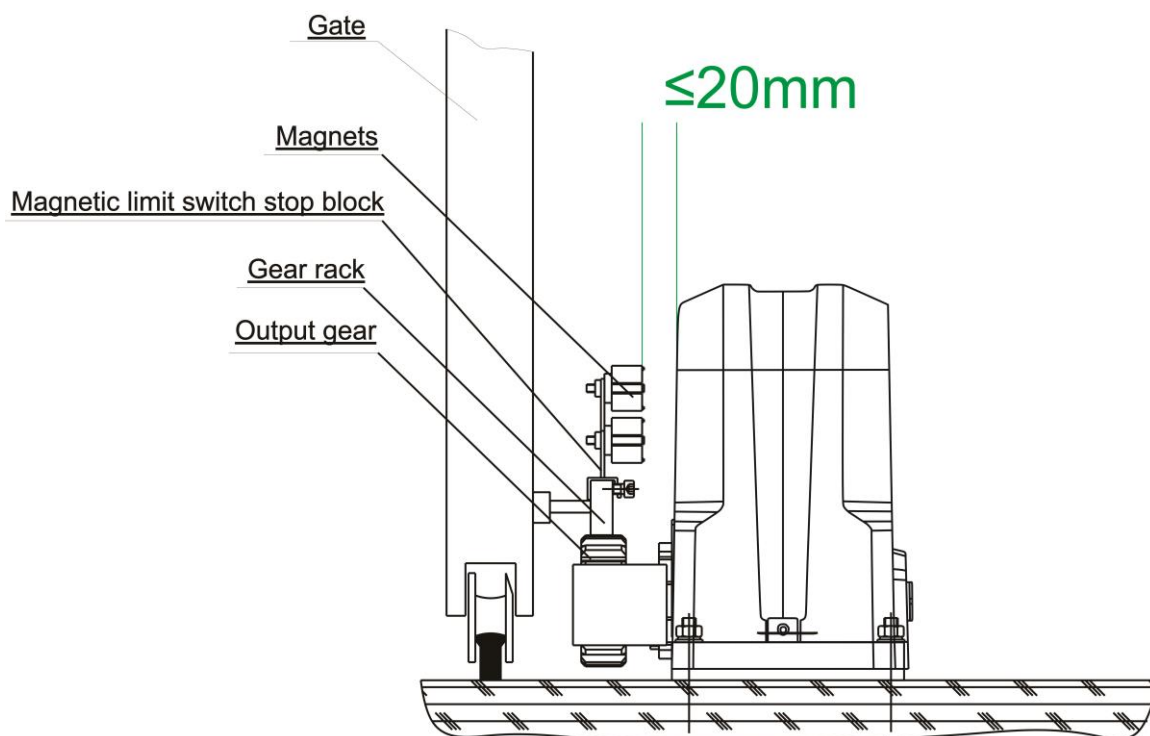


Figure 10

The installation of magnetic limit switch block is shown in Figure 11:

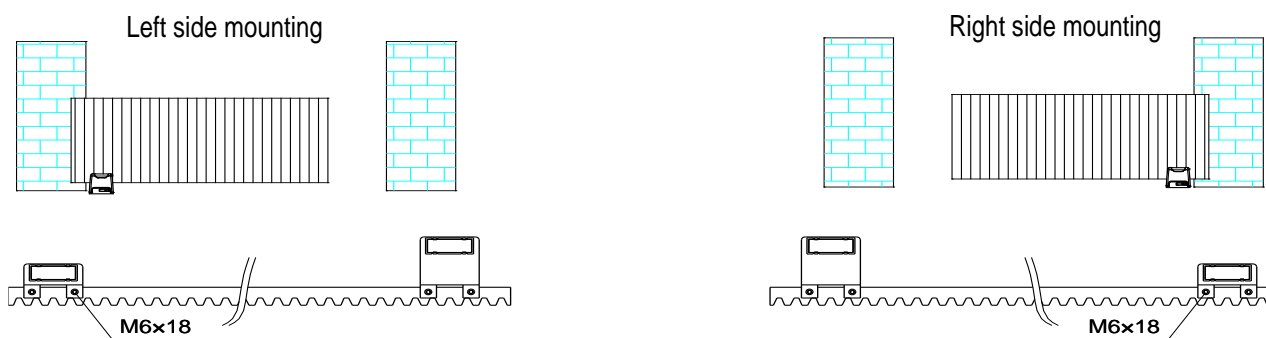


Figure 11

Note: The default setting is right side mounting. (According to actual situation, please refer to the “Note” of section 5.1 to adjust.)

5. Control board wiring

- 5.1 The opener should be install on the left side of the sliding door because it is set as clockwise when delivery. If needs to install on the right side of the sliding door, the DIP switch 3 should be changed into the opposite side.
- 5.2 Disconnect the power and connect the wires by professionals
- 5.3 Open the top cover of the motor, and connect the wires according to the following figure (user just connects the interfaces of AC input, flash lamp, external control switch, photocell and 24VAC output), then install the top cover again after debugging.

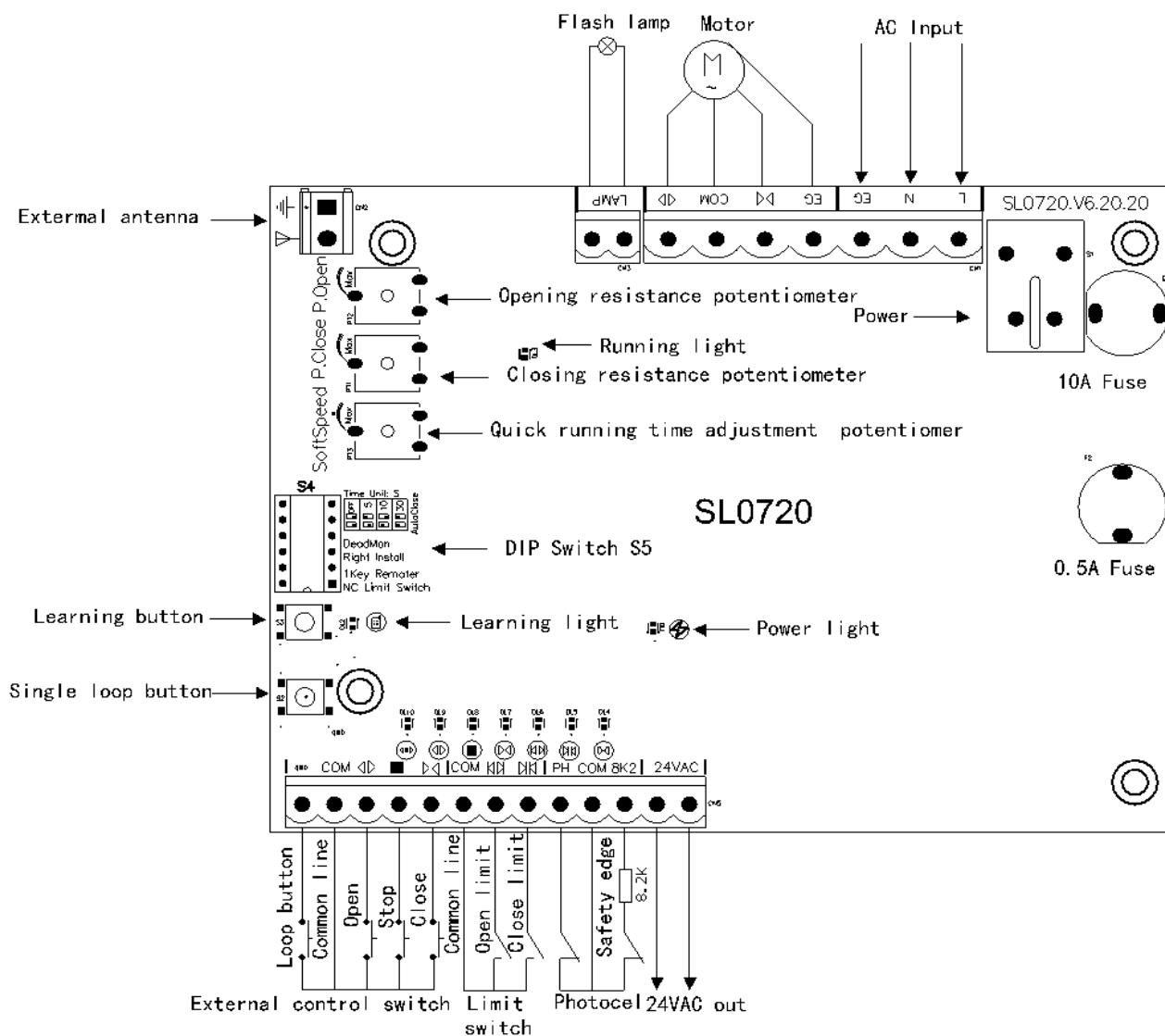



Figure 12

5.4 Controller wiring instructions

5.4.1 Flash lamp interface: for connecting the flash lamp (220VAC), it only work during operation.

5.4.2 The Photocell switch interface: for connecting the infrared

protection switch (infrared switch NC contact) and 24VAC can be used as power supply. If

you do not use the infrared protection interface, then you need to make the terminal  shorted connect (Shorted in factory).

5.4.3 External control (COMMAND) interface: control switch connects normally open switch.

5.4.4 External safety edge interface (8K2): safety edge interface. If you don't need to install it, you need to connect an 8.2KΩ resistor between the 8K2 interface and the COM (it has been connected at the factory).

5.4.5 Dip switch settings:

DIP5	DIP6:	Auto close time	DIP4:	Latch and non-latch	DIP3	Left/right installation
OFF	OFF :	No Auto close	ON:	Deadman, latch	ON :	In left side
OFF	ON :	5S	OFF:	Non-latch	OFF:	In right side
ON	OFF :	10S				
ON	ON :	30S				
DIP2: Single/three button			DIP1: External limit NC/NO switch			
ON : Single button control			ON: External limit NC switch			
OFF: Three button control			OFF: External limit NO switch			

6. Set process

6.1 Learning and erasing transmitters: Press the learning button S3 in the board, LED DL2 is on, enters into the learning process; Press the same button twice, LED blinks for several times, then off. The learning process is successful. Press the learning button, continue pressing for 8s until LED turns off; Release learning button, LED will be on (about 1s) and then off; the erasing process is successful. (Ignore this step if transmitter already matches the opener before delivery).The board can learn 30pcs transmitters max.

Tip of Remote control self-learning function: Use the transmitter that already has been learned as old transmitter, press button 1 and button 2 at the same time and then press button 2 to let it enters into the learning process .In this way , new transmitter can be learned without press the learning button on the control board.

6.2 Opening/closing limit adjustment: Remote control the door (or move the door manually) , adjust the position of limit device to make sure the door would touch the limit switch when open or close the door .LED LD6/DL5 in the controller will be off when limit device touches limit switch(Limit switch is NC).

6.3 Resistance adjustment: Adjust potentiometer P.Open/P.Close to change the opening/closing resistance. Resistance increases when adjust it C.W .Make a resistance to door after the adjustment in order to check if it is appropriate.

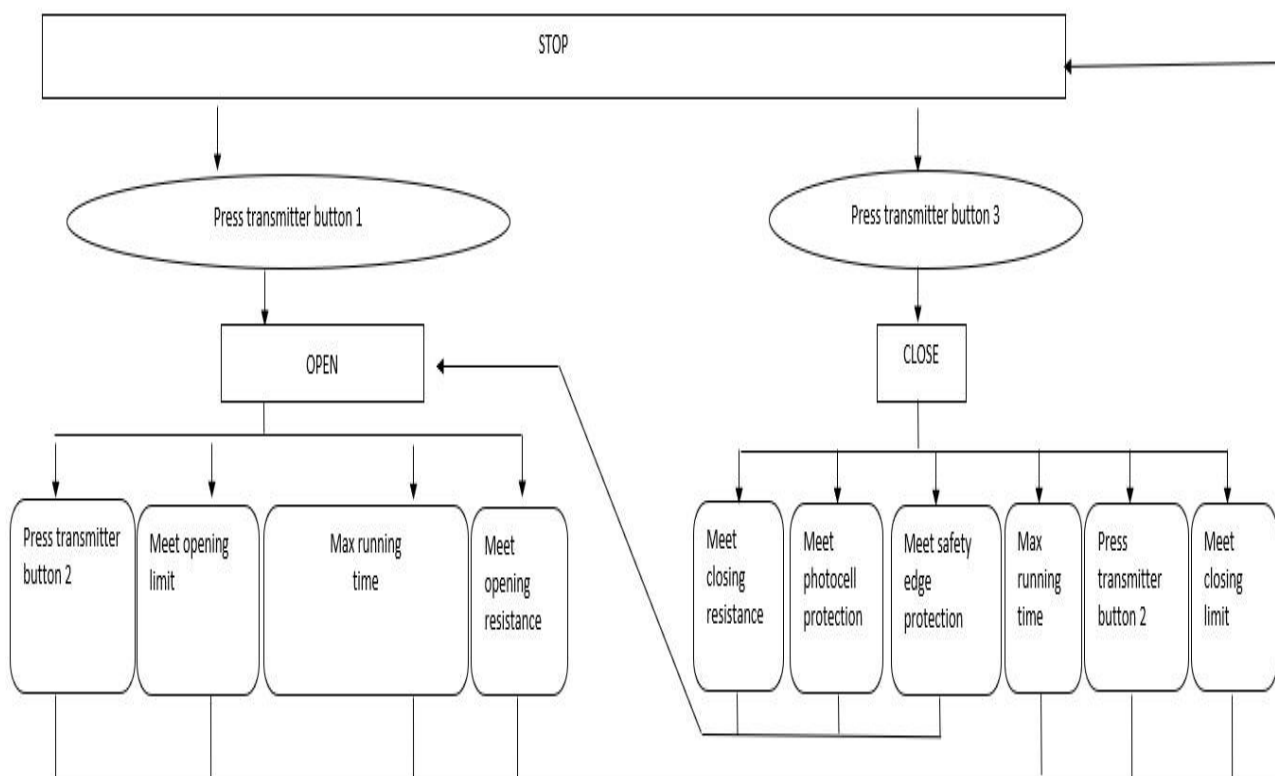
6.4 Motor quick running time setting: Adjust PT3 to change the quick running time(3-120S adjustable), time increase when clockwise to adjust, time reduce when anticlockwise to adjust. Max motor running time=quick running time +slow running time=127S. Motor quick running speed is about 1/5M/S, slow running speed is about 1/17M/S.

6.5 External infrared switch: Photocell connector connects the NC contact of photocell switch , DL4 LED turn on after the connection, And DL4 LED turn off when blocking out the transmit or receive signal of photocell artificially. Infrared sensor doesn't react when door opening and the door will reverse to limit point if photocell signal disconnect when door closing. If no need of using photocell protection, make the connector of photocell short circuit with terminated line(the connector is short circuit when leave factory).

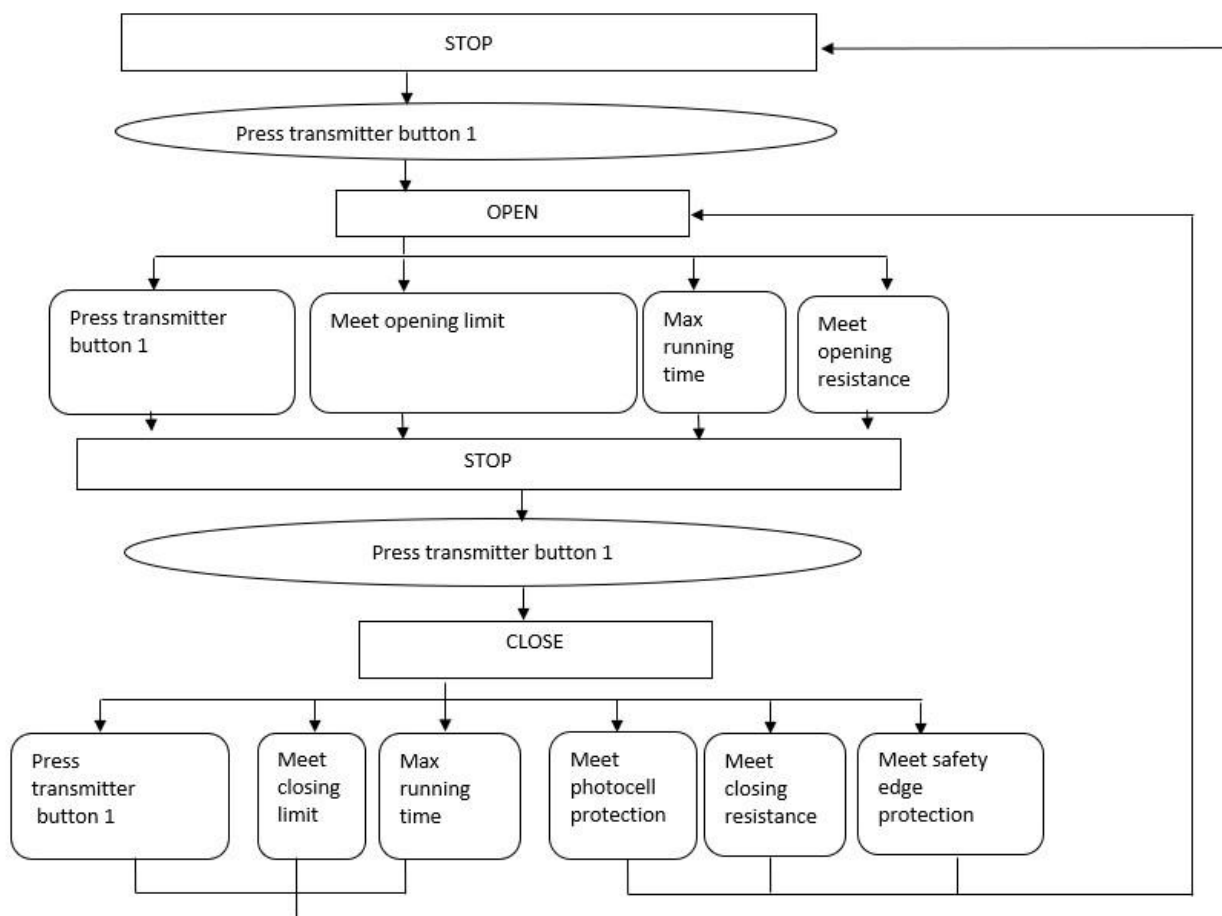
6.6 Safety protection function detection (if the safety protection switch is not installed, this step is omitted): In the process of closing the door, if the safety edge protection switch is touched manually, the sliding gate opener should stop immediately and run in the reverse direction to the door opening limit.

7. Operational processes

7.1 Three button control process (DIP 2 at OFF position)



7.2 Single button control process (DIP 2 at ON position)



Description:

Single button control , press-open-press-stop-press-stop; Only the learned button is effective in the transmitter, original button is not effective any more when a new button has been learned in the same transmitter (For example, button 1 was learned firstly, button 2 or 3 has been learned of the same transmitter afterwards , then button 1 was not effective any more)

7.3 Pedestrian Mode: The NO4 button is for Pedestrian Mode, press No4 button when the motor is in the closing limit and not working, the motor will open and run for 10 seconds, then stop about 1.4 meters. (soft start 1 second, quick running 6 seconds, soft stop 3 seconds). (Pedestrian Mode is only for 4keys transmitter).


8. Maintenance

8.1 Check the door once a month to see if door is running properly.

8.2 Check reverse when meets resistance feature once a month, if not working well then must be re-adjust.

8.3 In order to be safe, it is recommended that each door install with infrared protection device and checked on a regular basis.

9. Exception handling

Problem	Possible causes	Solutions
Door cannot open or close, LED is not working	<ol style="list-style-type: none"> 1. Power off 2. Fuse burned 	<ol style="list-style-type: none"> 1. turn on power 2. replace the fuse
Door only can open and cannot close.	<ol style="list-style-type: none"> 1. Infrared protection switch is blocked. 2. If interface is reliable shorted when infrared switch protection switch is not installed.  3. Losing efficacy when touching the safety edge. 4. Whether the short-circuited 8.2K ohm resistor is not connected properly. 	<ol style="list-style-type: none"> 1. Remove the blocking. 2. shorted infrared switch interface, the DL2 LED lamp light as normal. 3. Untouch the safety edge. 4. Reconnect the resistor.
Remote control problem	<ol style="list-style-type: none"> 1. remote control is not learned 2. remote control battery is low (remote control battery life 6-12 months, depending on frequency of use) 	<ol style="list-style-type: none"> 1. learn remote control again 2. replace the remote control batteries
Limit switch does not work	<ol style="list-style-type: none"> 1. If door limit switch cable is opposite 2. If magnet on the door has reached the magnetic limit-free parts 3. dip switch in the controller and did not make to the OFF side 	<ol style="list-style-type: none"> 1. replace limit switch connections 2. adjust the position limit magnets 3. set the dip switches to the OFF side
Door stops or reverse when working	<ol style="list-style-type: none"> 1. the door was stuck by something 2. resistance potentiometer setting too low or changes after long time 	<ol style="list-style-type: none"> 1. remove the resistance 2. reset the resistance potentiometer

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