

Sliding Gate Opener



2. Packing List (standard)

No.	Picture	Name	Quantity
1		Main engine	1
2		Manual release key	2
3	According to the model already choose	Remote control	2
4		Spring limit switch accessories box / Magnetic limit switch accessories box	1
4-1	or occool	Spring limit switch block / Magnetic limit switch block	1
4-2		Foundation bolt M10	4
4-3		Spring limit switch block mounting screw M6X10 / Magnetic limit switch block mounting screw M6X18	4
4-4	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Nut M10	8
4-5	9999 9999	Flat washer Ø10	8
4-6	8888	Spring washer Ø10	4

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
6		Mounting plate	1piece

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

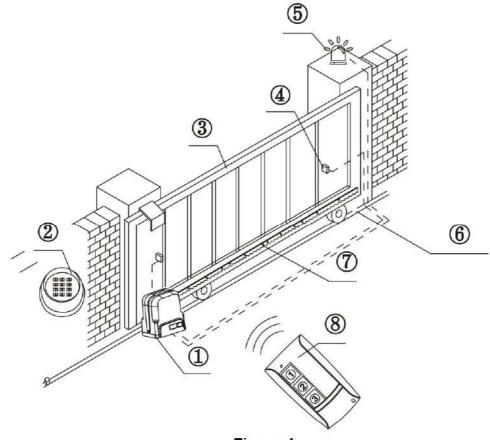
Output torque	22N.m	22N.m	22N.m	22N.m
Output shaft height	50mm	50mm	50mm	50mm
Frequency	433.92 MHz	433.92 MHz	433.92 MHz	433.92 MHz
Working temperature	-20°C - +70°C	-20°C - +70°C	-20°C - +70°C	-20°C - +70°C
Package weight	16Kg	16Kg	16Kg	16Kg

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		
Remote control mode	Single button mode / Three button mode	Single button mode / Three button mode / Three button mode mode		Single button mode / Three button mode	
Limit switch	Magnetic limit switch	Spring limit switch Magnetic lim switch		Spring limit switch	
Noise	≤60dB	≤60dB	≤60dB	≤60dB	
Output torque	32N.m	32N.m	32N.m	32N.m	
Output shaft 50mm 5		50mm	50mm	50mm	
Frequency	Frequency 433.92 MHz 433.92 MHz		433.92 MHz	433.92 MHz	
Working -20°C - +70°C -20°C - +70°C		-20°C - +70°C	-20°C - +70°C		
Package weight	17Kg	17Kg	17Kg	17Kg	

4. Installation

SLG5400X, SLG5550X sliding gate opener is applicable to gate weight less than 1000kg/1500kg, 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.

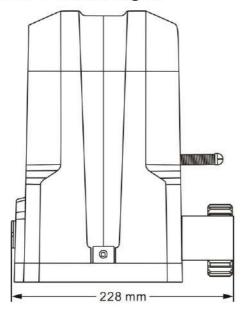
4.1 Installation drawing



- 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



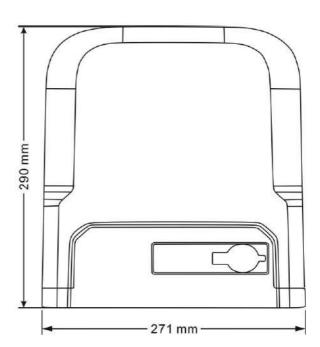


Figure 2

4.2.2 Size of mounting plate

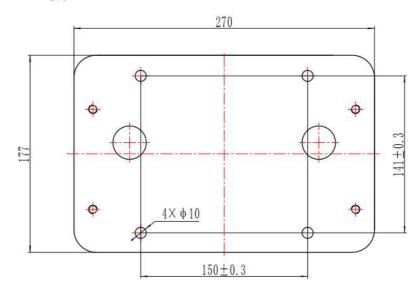


Figure 3

4.3 Installation procedures

4.3.1 Preparation work before installation

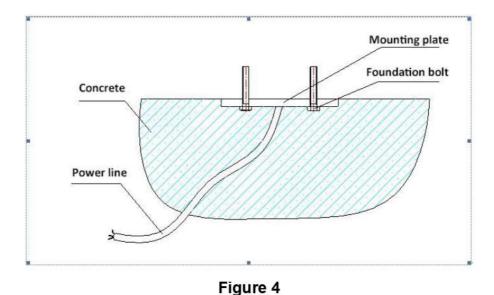
Please ensure that the sliding gate is correctly installed, the gate rail is horizontal, and the gate can glide back and forth smoothly when moved by hands before installing the gate opener.

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 gate opener. Please verify whether the distance between the gate and gate opener is suitable before casting the pedestal. Embedded screws



4.3.2 Main engine installation

- a) Dismantle the plastic housing on the main engine before installation and keep relevant fasteners properly;
- b) 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;
- c) 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;

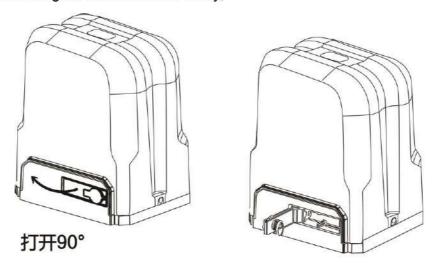


Figure 5: Turn on 90°

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.

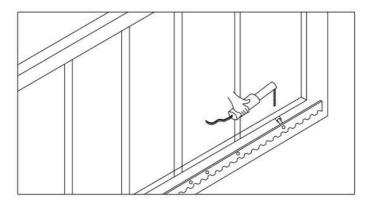


Figure 6

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

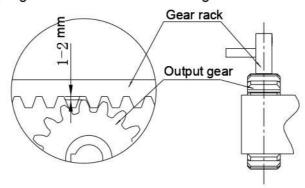


Figure 7



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:

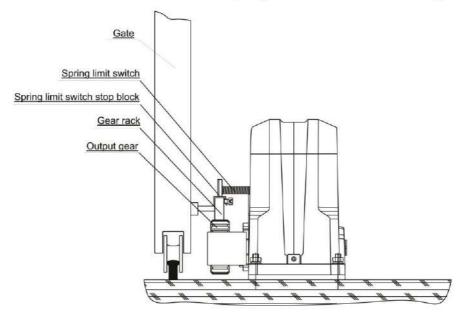


Figure 8

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

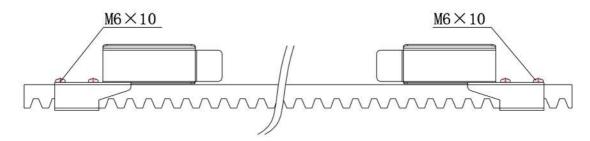
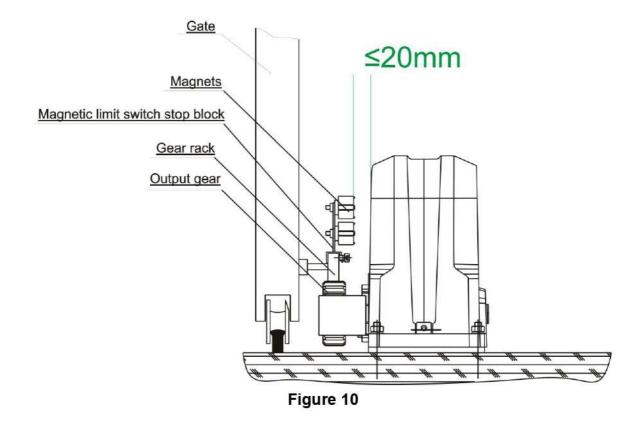


Figure 9

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



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

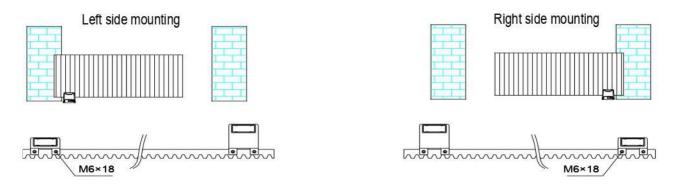


Figure 11

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.

I Safety Instruction

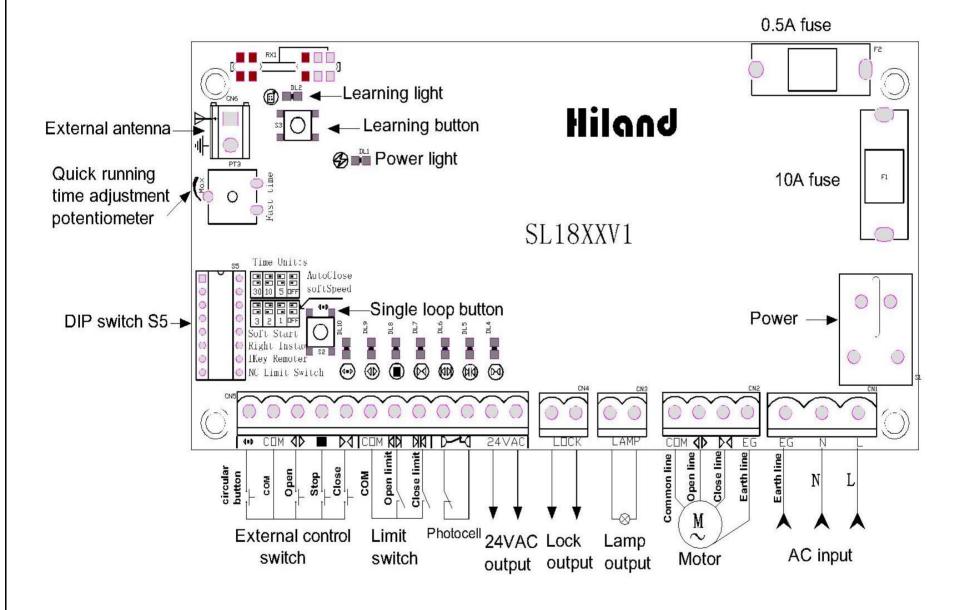
- 1.1 For security, please read instructions carefully before initial operation; making sure that the power is off before connection.
- 1.2 Please clear the memory before initial operation. (Ref.: Erasing ALL learned/memorized Transmitters
- 1.3 Do not learn the remote control when motor is operating in order to avoid mis-operation.
- 1.3 The received signal may be interfered by other communication devices. (e.g. the wireless control system with the same frequency range)
- 1.4 This product is only used for the equipment which will not cause life or property hazards when a breakdown happens or its security risks have been already eliminated
- 1.5 It should be applied in dry indoor place or in the electric appliance place.

II Technical Index

- 2.1 Working voltage: 220VAC/110VAC,50Hz/60Hz
- 2.2 Temperature range: -20° C to 60° C
- 2.3 Loading capacity: 1 HP 220VAC; 0.5 HP 110VAC
- 2.4 Built-in fuse: electric circuit(0.5A); Motor(10A), Please exchange
- appropriate fuse accoding to loading capacity
- 2.5 Soft-start time:1S. Soft-stop time = 127s quick running time
- 2.6 Qucik running time: Adjustable from 3s to 120s ----PT3 is to set up
- 2.7 Frequency: 433.92MHz
- 2.8 Transmitter stored: 30PCS
- 2.9 Output voltage: AC24V
- 2.10 Output with electric lock: normally-closed contact

- 2.11 Output with flash lamp: AC220V/AC110V
- 2.12 External switch (open, stop, close in a loop)
- 2.13 External limit (DIP8 to select NO and NC)
- 2.14 External infrared (NC contact)
- 2.15 Auto close time is adjustable: (5S,10S,30S are optional by using DIP1,DIP2)
- 2.16 Soft start function is optional by DIP5
- 2.17 Installation at left or right side is optional by DIP6.
- 2.18 Single / three button control is optional by DIP7
- 2.19 Size: 155*77*38mm
- 2.20 Weight: 333g

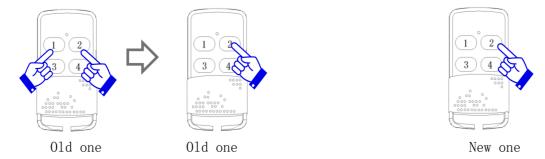
III Wire connection



IV Set up

4.1 Learning and erasing transmitters by receiver: 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.

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. Press the same button on the new transmitter twice. The learning process done. In this way, new transmitter can be learned without pressing the learning button on the control board.



4.2 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).

- **4.3 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 openning 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).
- **4.4 Quick running time set up:** It is adjustable from 3s to 120s. Adjust potentiometer PT3 (FastTime) to adjust the quick running time of motor. It increases the time when adjust it Clockwise, reduces the time when anti-Clockwise
- 4.5 Motor max running time = Quick running time + Soft stop time = 127 seconds

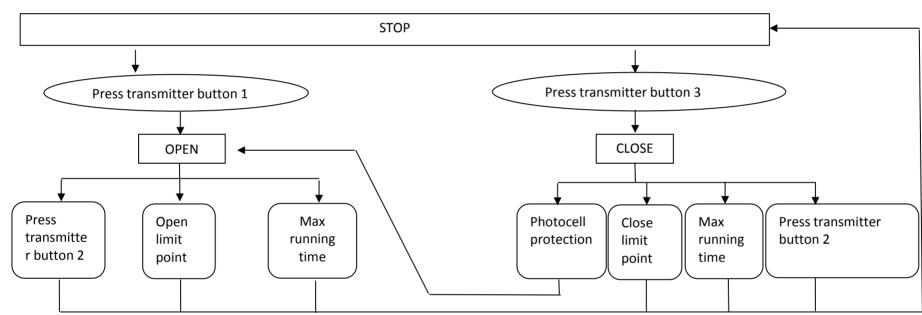
 Speed of quick running time is about 0.2 meter per second. Speed of soft stop running time is about 0.06 meter per second.
- 4.6 Flash lamp: It keeps lighting when open or close the door . After door is fully closed, it will keep lighting for 90 seconds.

4.7 DIP switch S5 logic function:

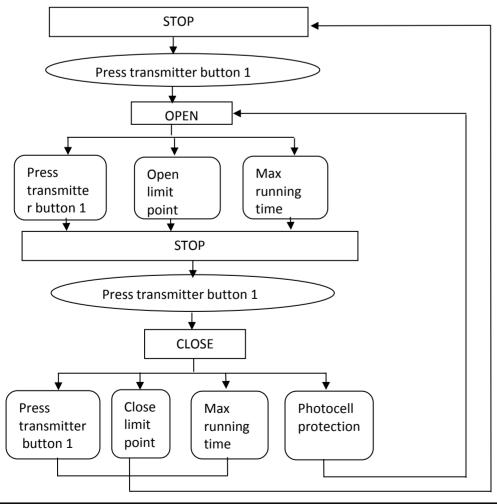
DIP1 OFF OFF ON ON	DIP2 OFF ON OFF ON	Auto close time No auto close 5S 10S 30S	DIP3	DIP4	Function Cancel	DIP5 ON OFF	Soft start function Turn on soft start function Disable soft start funtion
DIP6	Right/left	side installation	DIP7			DIP8	
ON		F can change the	ON	Single b	utton control	ON	External limit NC switch
OFF		ent operating tion of motor	OFF	Three bu	tton control	OFF	External limit NO switch

V Operation Instruction

5.1 Three button control process (DIP 7 at OFF position)



5.2 Single button control process (DIP 7 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)

VI Notes

6.1. Photocell protection switch shall be examined regularly.

Model	Working voltage	Transmitter stored (pcs)	Model	Working voltage	Transmitter stored (pcs)
SL1800	220VAC	30	SL1898	220VAC	30
SL1801	220VAC	300	SL1894	220VAC	300
SL1820	110VAC	30	SL1896	110VAC	30
SL1821	110VAC	300	SL1892	110VAC	300
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