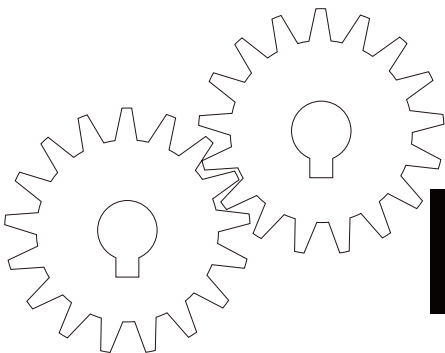
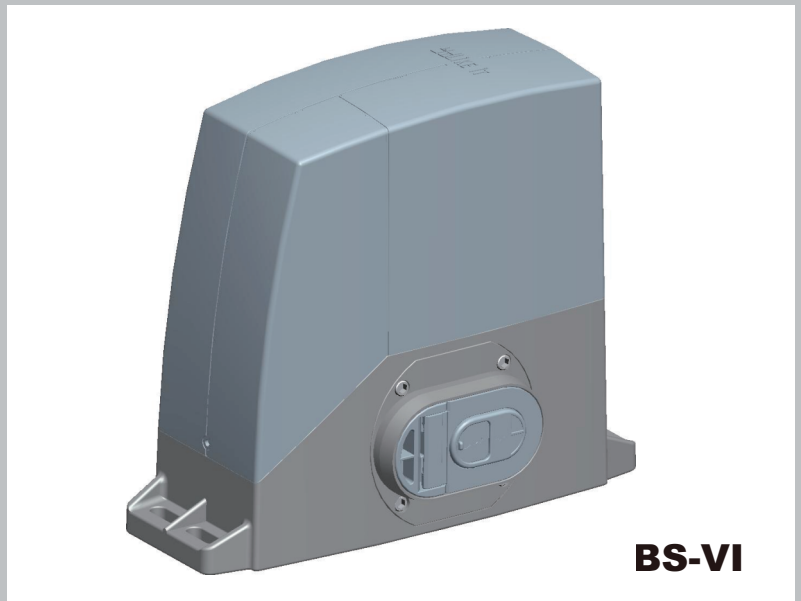


SLIDING GATE OPERATOR **INSTRUCTION**



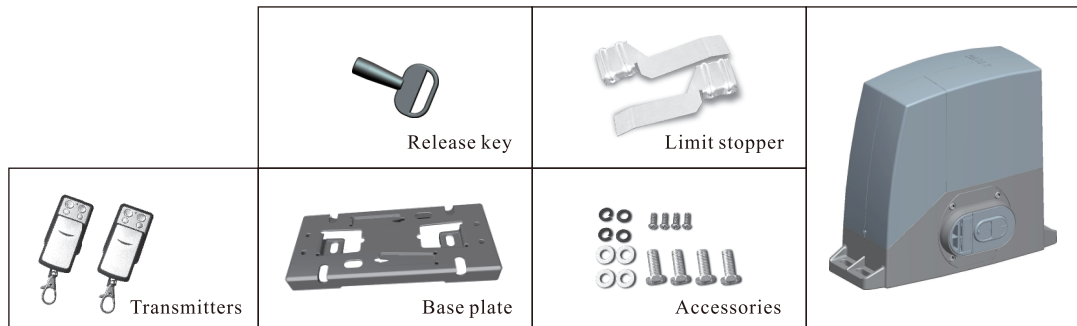
PLEASE READ THE MANUAL CAREFULLY
BEFO RE INSTALL AND USE

WARNING TO THE INSTALLER AND USER

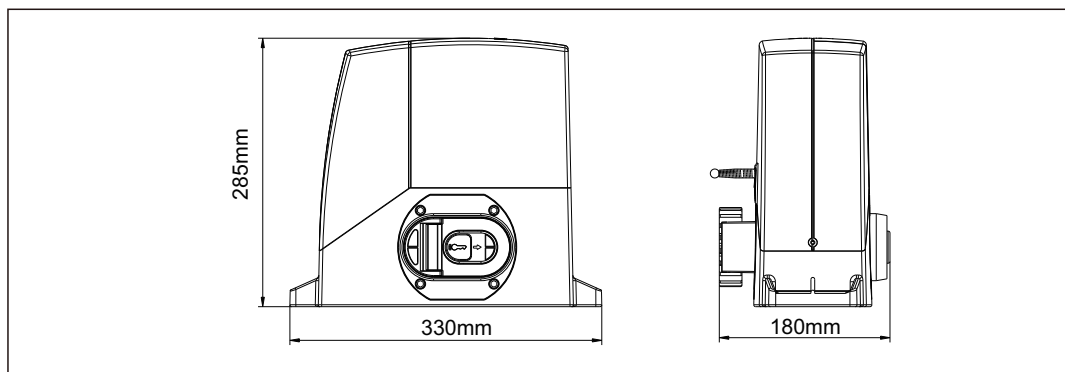
- 1) **CAUTION!** For personal safety it is important to follow all the instructions carefully. Incorrect installation or misuse of the product may cause serious harm to people.
 - 2) Keep the instructions in a safe place for future reference.
 - 3) This product was designed and manufactured strictly for the use indicated in this document. Any other usage not expressly indicated in this document, may damage the product and or be a source of danger.
 - 4) We accepts no responsibility due to improper use of the automatic machine (opener) or use other than that intended.
 - 5) Do not install the machine in an area subject to explosion hazard. In)ammable gasses or fumes are a serious safety hazard.
 - 6) We will not accept responsibility if the rules of good workmanship are disregarded in installing the closing elements to be motorized, if any deformation occurs during use of the said elements.
 - 7) Before carrying out any work on the system, turn off the electricity supply.
 - 8) The safety devices (e.g. photocell, sensitive edges, etc...) may be used to prevent any potential risk in dangerous areas where the moving mechanism is located , such as crushing, dragging, or shearing.
 - 9) We accepts no responsibility regarding safety and correct operation of the machine, should components made by manufacturers other than we be used in the system.
 - 10) Do not make any alterations to the components of the automatic machine (opener and accessory).
 - 11) The installer must supply full information regarding operation manual of the system in the event of any emergency and provide the system user with the “**INSTRUCTION**” included with the product.
 - 12) Do not allow children or other people to stand near to any moving part of the opener or door construction while in operation.
 - 13) Keep transmitters away from children to prevent the machine from being activated accidentally.
 - 14) The user must refrain from attempting to repair or adjust the system personally and should only contact professional person.
-

1. Product Introduction

1. 1) Complete kit



1. 2) Dimension



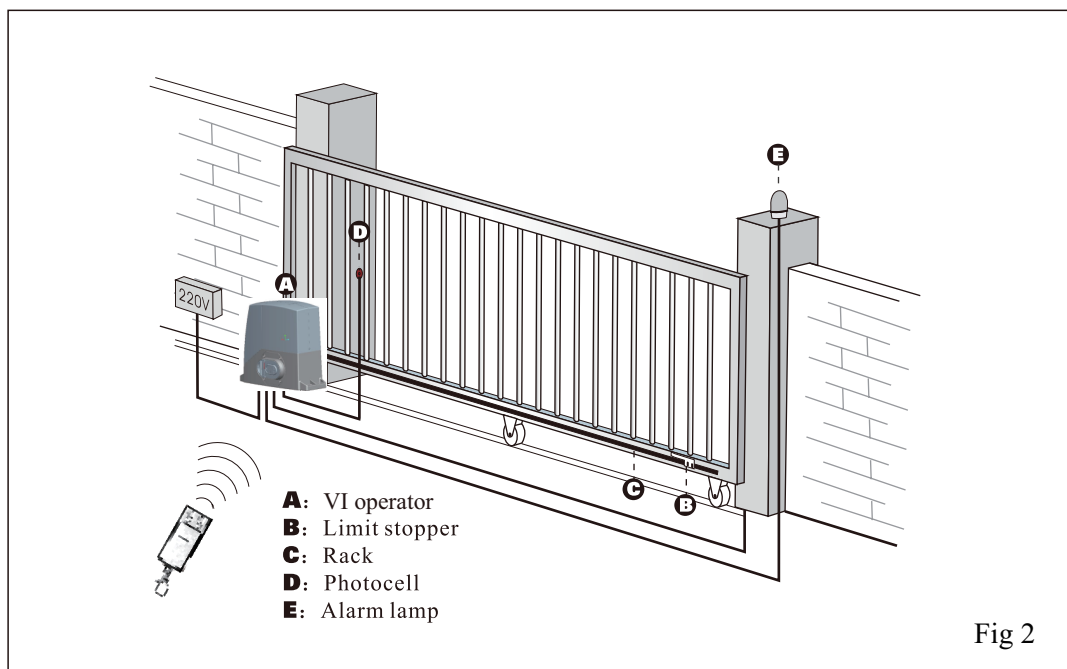
1. 3) Technical Specifications:

Modol	BS-PY420
Description	AC MOTOR
Power Supply	220V+10% 50Hz
Power of Motor	220VAC/250W
Motor Rotational Speed	1400r/min
Max weight of door	800Kg
Thermal protection on motor winding	110°C
Working Environment	-20°C-55°C
Frequency of remote control	433.92 MHz
Gate level movement speed	10. 5m/min

2. Main Function

- ① Thermal Protector installed inside.
- ② Soft Start function exits.
- ③ Reverse/ Stop when door meets any obstacle.
- ④ Soft-close is optional.
- ⑤ Closing delay is optional.
- ⑥ Open door Connector used to door control system.

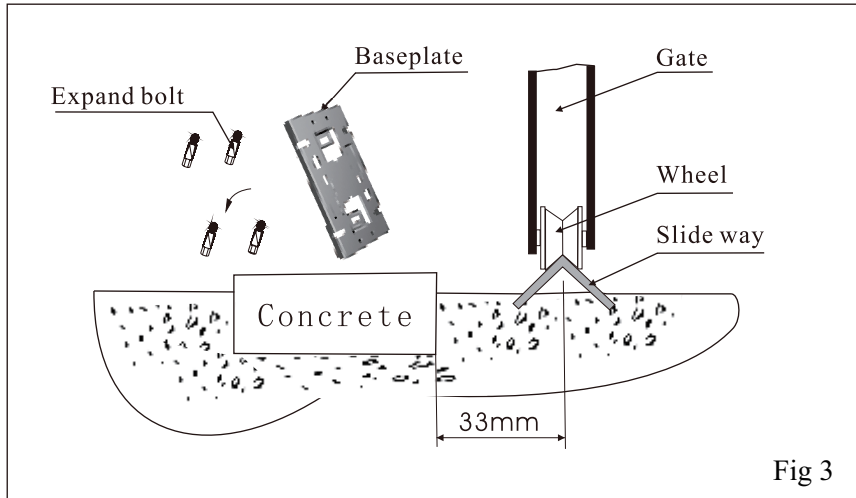
3. Example of an installed sliding gate



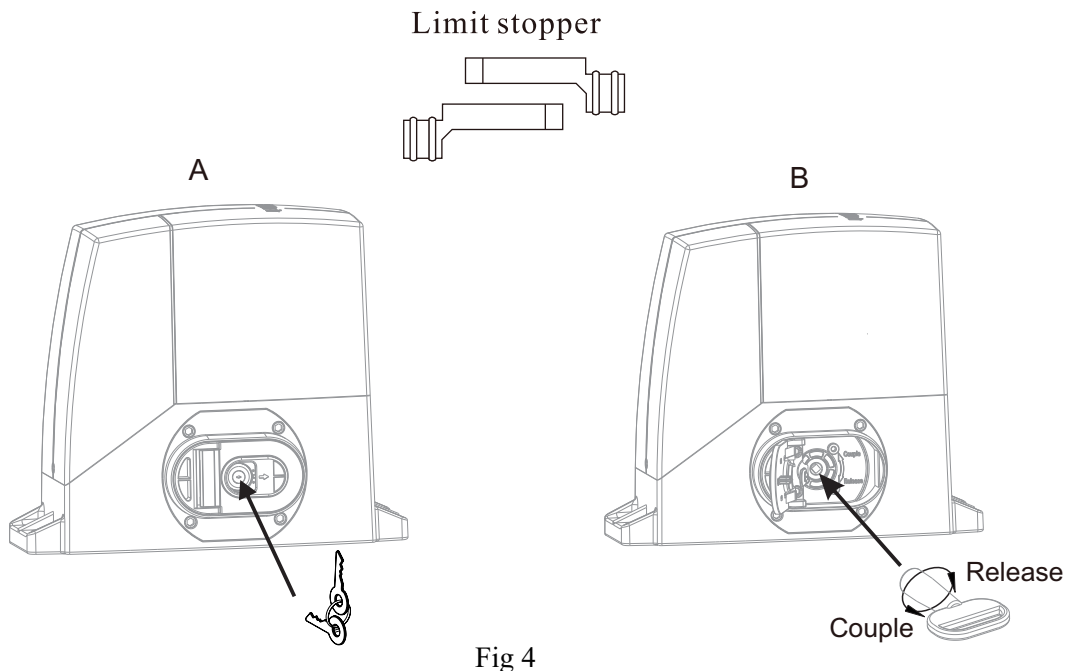
4. Installation and adjustment

4.1 Install baseplate on the ground, then, fix the siding motor on the baseplate.

Key :Ensure baseplate on level position

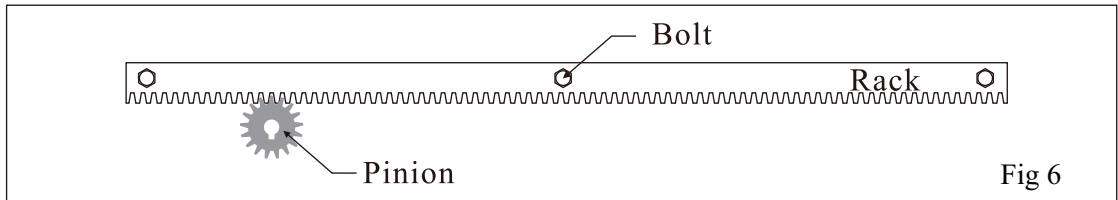
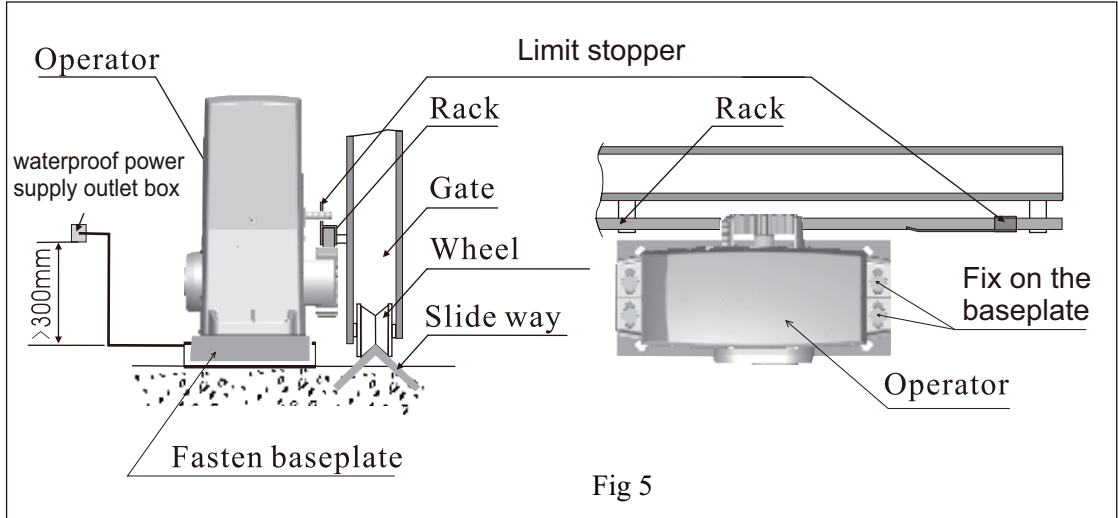


Before placing the limit stopper on the rack , the gear box of the operator must be released. As per Fig 4A and fig 4B, Use the key to release the gear by turning clockwise, and couple the gears by turning anticlockwise.



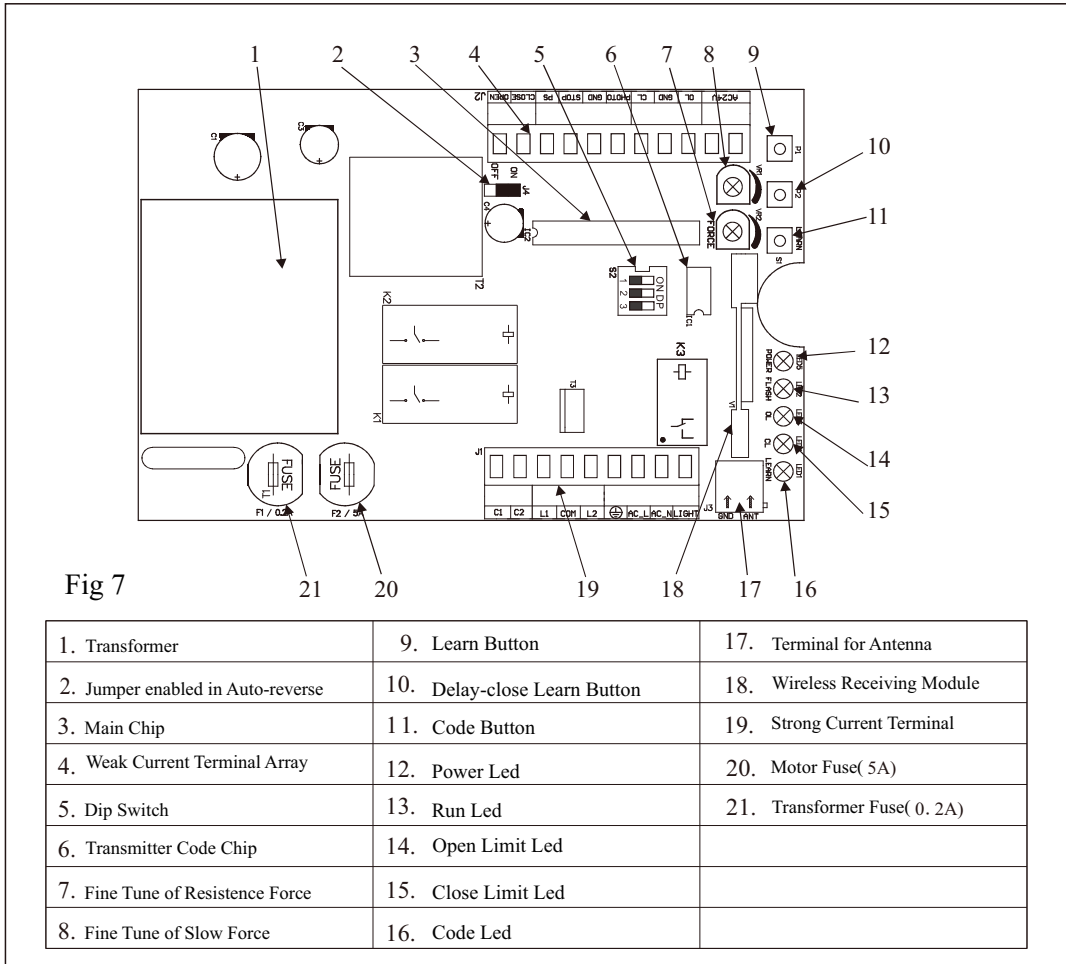
4.2 Install the limit stopper at proper position on the steel rack

Move the gate manually to the open limit and close limit, mark the points on the Rack , then , fix the limit Stoppers or Magnets at the limit points on the Rack .

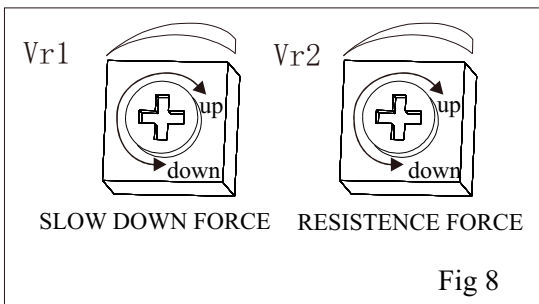


5.Adjustm ent and setting of motor electronic control s ystem

5.1 Diagram of PCB



5.2 Function of Fine Tune



- Slow Force Adjustment







Vr1: Trimmer for power adjustment of slowing status.

- Resistance Force Adjustment

Vr2 : Trimmer for sensitivity to block, when gate travels fast. Stop when open resistance;

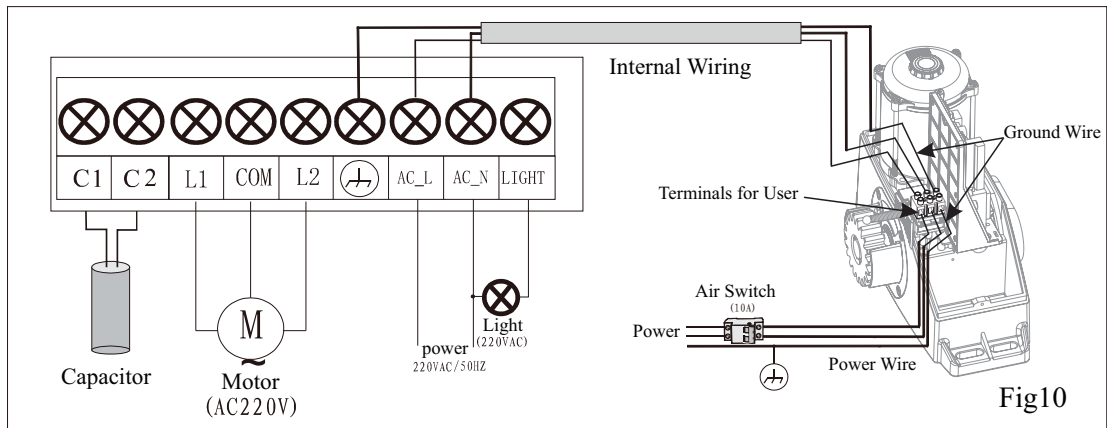
Reverse when close resistance. It's invalid when slow travel.

5.3 Dip Switch Setting

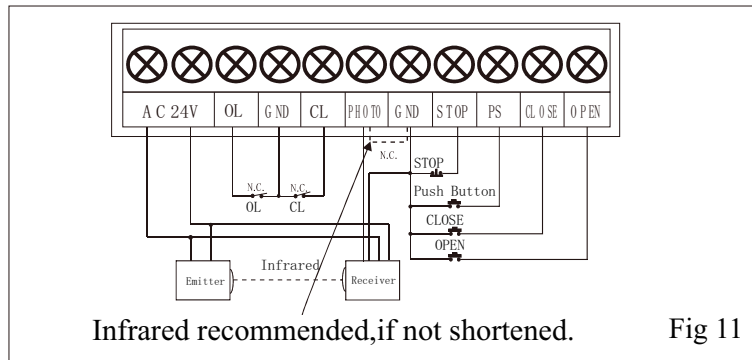
 <p>A 3-position dip switch labeled 'ON' at the top and 'OFF' at the bottom. The positions are numbered 1, 2, and 3. Position 1 is in the 'ON' position, while positions 2 and 3 are in the 'OFF' position.</p>	Delay Auto-close Invalid	 <p>A 3-position dip switch labeled 'ON' at the top and 'OFF' at the bottom. The positions are numbered 1, 2, and 3. Position 1 is in the 'OFF' position, while positions 2 and 3 are in the 'ON' position.</p>	Delay Auto-close Valid
 <p>A 3-position dip switch labeled 'ON' at the top and 'OFF' at the bottom. The positions are numbered 1, 2, and 3. Position 1 is in the 'OFF' position, position 2 is in the 'ON' position, and position 3 is in the 'OFF' position.</p>	Soft-close Invalid	 <p>A 3-position dip switch labeled 'ON' at the top and 'OFF' at the bottom. The positions are numbered 1, 2, and 3. Position 1 is in the 'OFF' position, position 2 is in the 'OFF' position, and position 3 is in the 'ON' position.</p>	Soft-close Valid
 <p>A 3-position dip switch labeled 'ON' at the top and 'OFF' at the bottom. The positions are numbered 1, 2, and 3. Position 1 is in the 'OFF' position, position 2 is in the 'OFF' position, and position 3 is in the 'ON' position.</p>	Soft-start Invalid	 <p>A 3-position dip switch labeled 'ON' at the top and 'OFF' at the bottom. The positions are numbered 1, 2, and 3. Position 1 is in the 'OFF' position, position 2 is in the 'OFF' position, and position 3 is in the 'ON' position.</p>	Soft-start Valid

6. Wiring Diagram of AC Control Board

6.1 Strong Current



6.2 Weak Current



6.3 Terminal Specification

1) External Control Port

GND: Common Port **PS:** Open/Stop/Close Push Button. Single button cycle operation

OPEN: Open Button **STOP:** Stop Button; N.C. **CLOSE:** Close Button

2) Infrared Terminal

AC24V: 24V AC Power

PHOTO: N.C.; Infrared trigger when close, door open reversely at once.

3) Limit Terminal

OL: Open Limit; N.C. **GND:** Common Terminal **CL:** Close Limit; N.C.

4) Motor, Capacitor Terminal

L1, COM, L2: DC Motor **C1/C2:** Set-up Capacitor

Note: When motor runs reversly, swap line L1 and L2.


5) Power Terminal

AC_L, AC_N: 220V Power Input **AC_N, LIGHT:** 220V Alarm Lamp Terminal

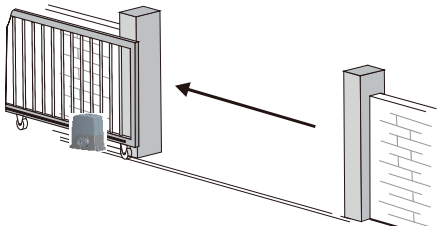
7.Travel Learning

Note: Before travel learning, adjust position of open/close limit

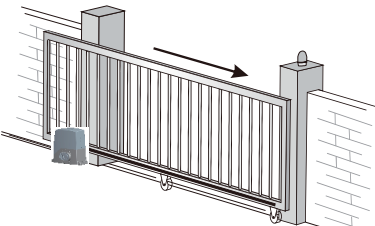
7.1 Start Travel Learning:

<p>Hold on "P1" for 3 seconds until "LED2" flashes. The gate starts to open.</p>	
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7.2 Find Open Limit Position:

<p>Start to open automatically to 6nd Open Limit Position, and then stop.</p>	
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7.3 Find Close Limit Position:

<p>Reverse automatically, to 6nd Close Limit Position, and then stop. Controller work out running time automatically and then save it. Finished.</p>	
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Note: If not position travel limit. Press "P1"utton instead of open/close limit, when gatetravel to open/close limit point. Travel learning again,once adjust position of travel limit. After program, push "DIP3" to "ON" Operate the gate to move by remote control, motor runs slowly nearly to limit position,then stop. Trim VR1 to increase power, if not enough.

8. Delay-close Time Learning

Hold on "P2" button for 3 seconds, "LED2" on, then start to remember Time...to delay- close time, press "P2" Button once. Learning finished. Time is the delay-close time.



Note: After learning, push "DIP1" to "ON", delay-close function starts.
No delay-close, push "DIP1" to "OFF"

9. Transmitter:

9.1 Transmitter's code learning:

Press "LEARN BUTTON", the "LEARN LED" light, then, press the button which you choose on the transmitter till the "LEARN LED" flash and go out, Now, the transmitter is coded. Other transmitters can be coded as this way

Specification maybe changed without a prior notification.

9.2 Erasing transmitter's code:

Erasing transmitter codes: Press "LEARN BUTTON" and hold on to make the "LEARN LED" light till go out. Now, all codes of transmitters which had been learnt are cleared.

9.3 Maintenance of transmitter:

- a. Transmitter fits DC12V, 23A battery, working life for 1 year. Note to change the battery. Don't damp, heat and bump. If change the code, please confirm the code of motor is the same as transmitter.
 - b. If remote control distance is too short. Please check if motor is covered with metal, or transmitter is out of power. Control distance is affected by weather. Control distance shortens in bad weather conditions such as rain, fog and snow. It's a normal phenomenon.
-

10. Trouble Shooting

Number	Trouble	Cause	Shooting
1	motor can not work	<ul style="list-style-type: none"> *No power supply *Break fuse * capacitor decay *Surpass load *Effected by the thermal protection 	<ul style="list-style-type: none"> *Check power supply *Change fuse *Change capacitor *Check if any barrier on track *Restart after 20 minutes
2	Can open (close) but can not close (open)	<ul style="list-style-type: none"> *Position of limit switch is not correct *Limit switch is damaged *whether L1\COM\L2 wires are connected wrong *Magnetic-steel dropped and position isn't right 	<ul style="list-style-type: none"> * Adjust position *Change limit switch *Connect correctly according to wiring diagram *Re- adjust magnetic-steel position
3	can not locate accurately	<ul style="list-style-type: none"> *Distance of limit switch is too large * limit switch is *whether COM、CLOSE、OPEN were connected *magnetic-steel' s position is wrong 	<ul style="list-style-type: none"> * Adjust position of limit switch *Change limit switch *Connect correctly according to wiring diagram *Re-adjust the position
4	Release device	<ul style="list-style-type: none"> *Operating handle is broken * Worm gears are jammed 	<ul style="list-style-type: none"> *Change the handle *Rotate the pinion
5	Push the “open” button but the gate close	<ul style="list-style-type: none"> * whether L1\L2wires are connected wrong 	<ul style="list-style-type: none"> *Connect correctly according to wiring diagram
6	Motor can turn but can not work	<ul style="list-style-type: none"> * Compression spring of clutch is dead * Gear box is released 	<ul style="list-style-type: none"> * Change the spring * Couple the worm gear

