

SLIDING GATE OPERATOR **INSTRUCTION**



BS-SZ-AC






**PLEASE READ THE MANUAL CAREFULLY
BEFORE INSTALLATION AND USE**

WARNING FOR INSTALLERS AND USERS

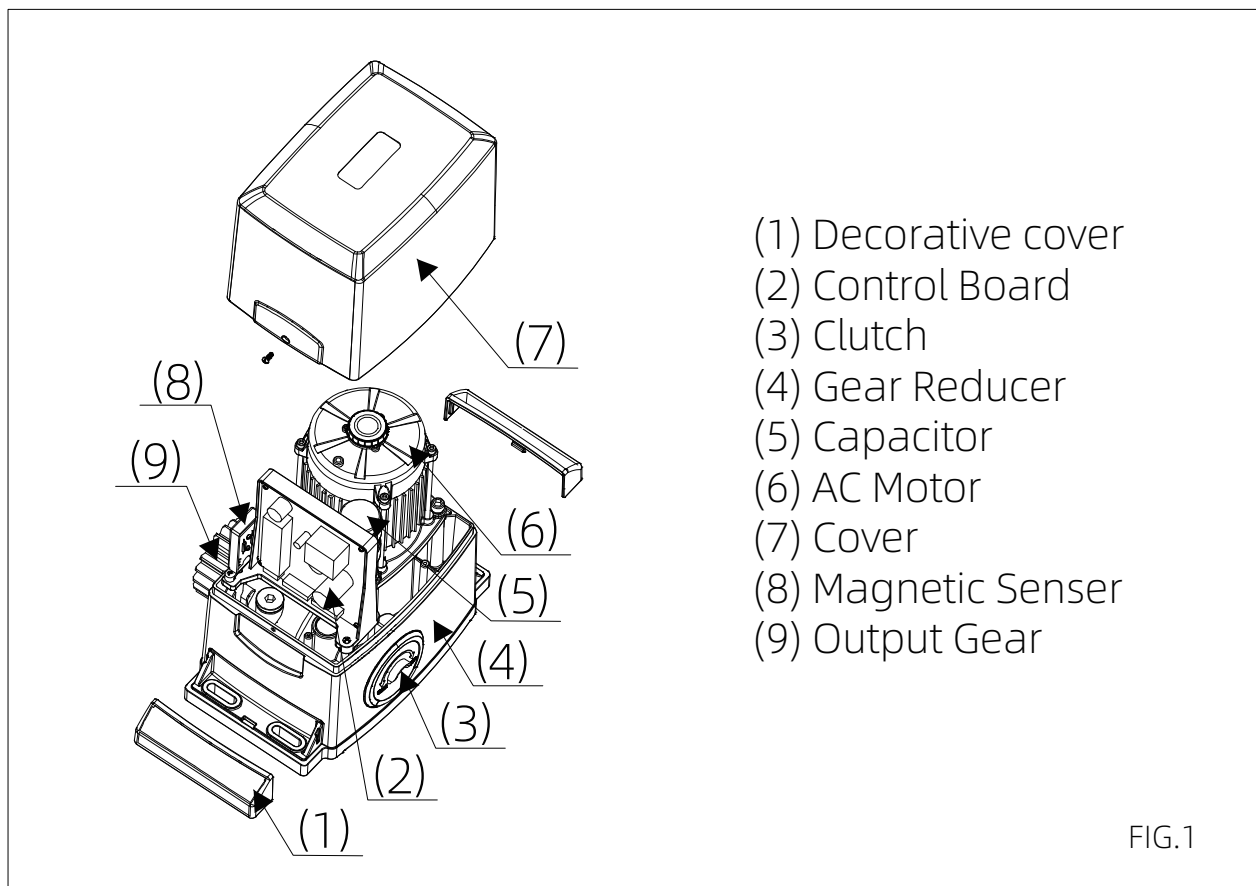
- 1) CAUTION! For personal safety it is important to follow all the instructions carefully. Incorrect installation or misuse of the product may cause serious harm to people.
- 2) Keep the manual in a safe place for future reference.
- 3) This product was designed and manufactured strictly for the use indicated in this Manual. Any other usage not expressly indicated in this manual, may damage the product or be a source of danger.
- 4) Installers shall be responsible for the consequences of improper installation.
- 5) Always disconnect power before maintenance.
- 6) The Safety devices(e.g. photocells,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.
- 7) Do not make any alterations to the components of the automatic system (operator and accessory).
- 8) Installers must supply full information regarding operation manual of the system in the event of any emergency and provide the system user with the "Manual" included with the product.
- 9) Do not allow children or other people to stand near any moving gate.
- 10) Keep transmitters away from children to prevent the machine from being activated accidentally.
- 11) Users must refrain from attempting to repair or adjust the system personally and should only contact professional personnel.

1. Introduction

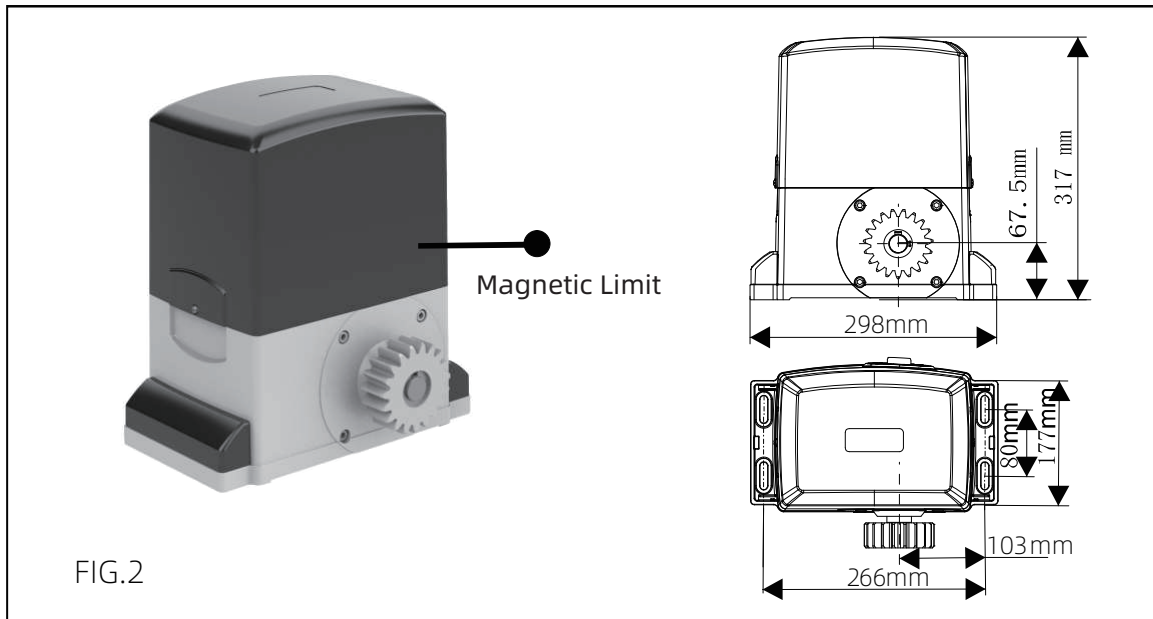
1. Description

BS-SZ-AC	 Transmitters	 Limit magnet / Bracket	 BS-SZ-AC
 Release key	 Base plate	 Accessories	

2. Main Parts



3. Dimension



4. Technical Specifications

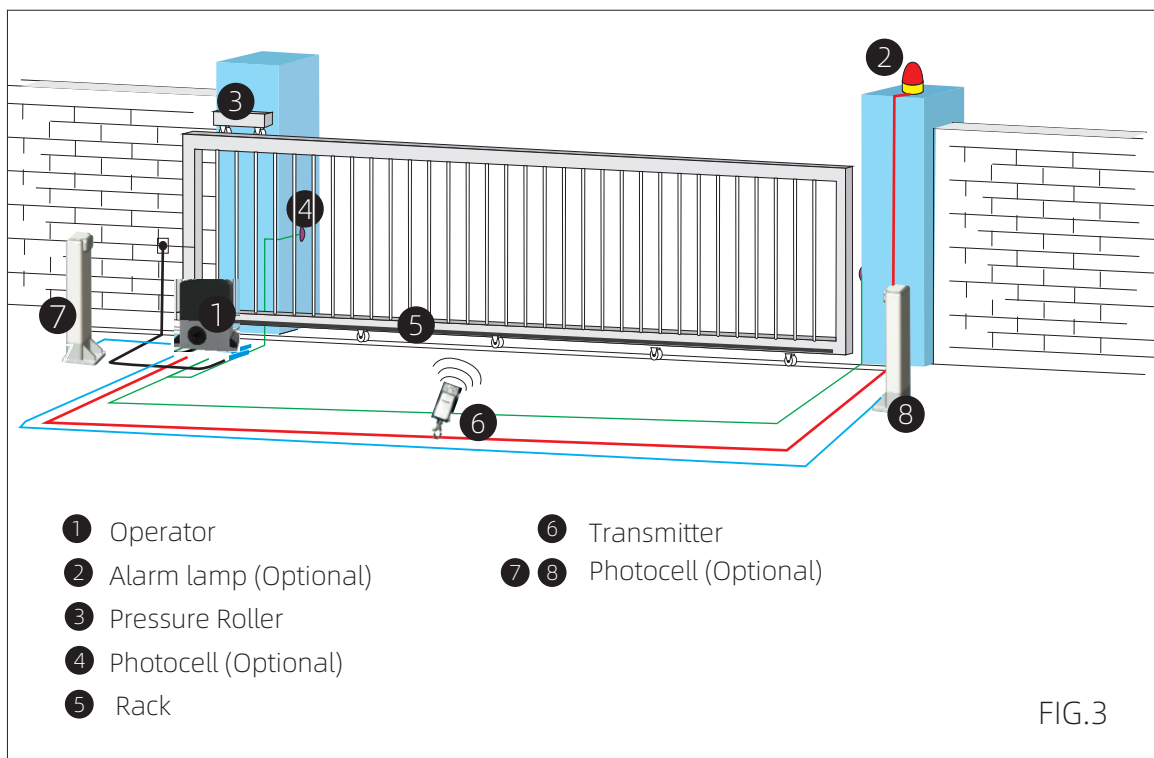
Model	BS-SZ AC
Power supply	220V±10% 60HZ
Power of Motor	500W
Motor rotational speed	1400r/min
Running Speed	12m/min
Max weight of gate	< 3000kg
Working environment	-20°C-55°C
Thermal protection on motor winding	130°C
Remote range	≥30m

5. Feature

- (1) Obstacle detection & automatic reverse.
- (2) Soft stop for precise limit positioning.
- (3) Operate manually in case of power failure.
- (4) Multi-functional access (IR sensor, warning light, etc.)
- (5) Auto-close with time adjustable.
- (6) Thermal protection (shuts down at 130°C)

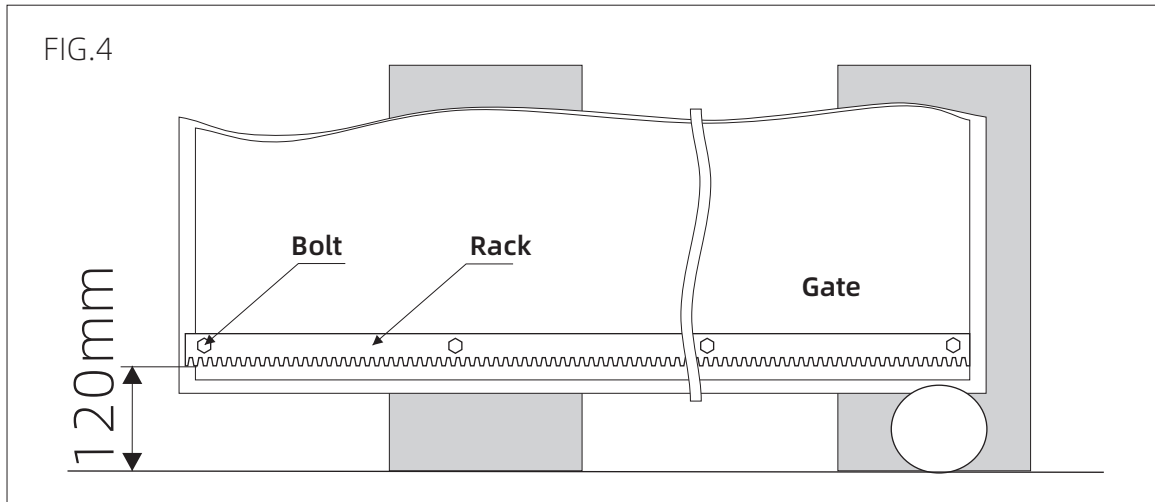
2. Installation

1. Example of an automatic sliding gate



2. Installation of Rack

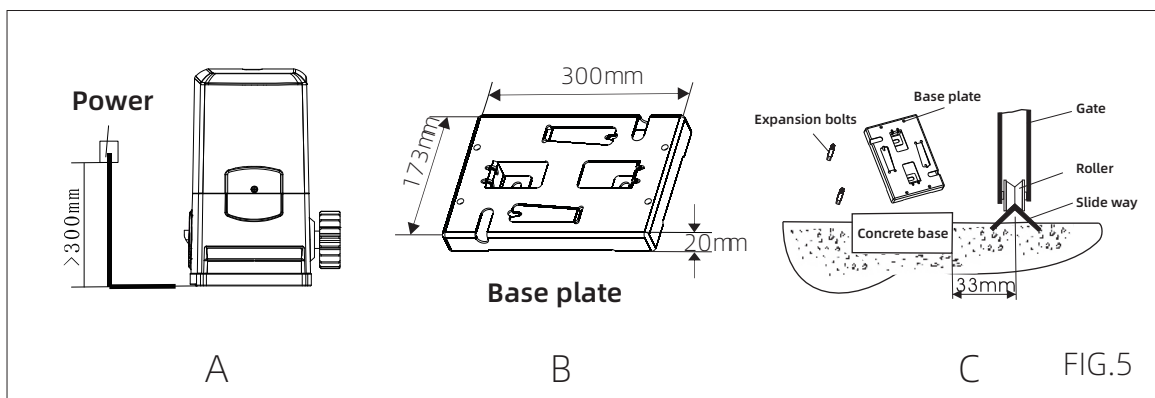
Racks shall be mounted on the Gate that can be smoothly pushed. The rack's bottom edge is more than 120 mm above the ground.



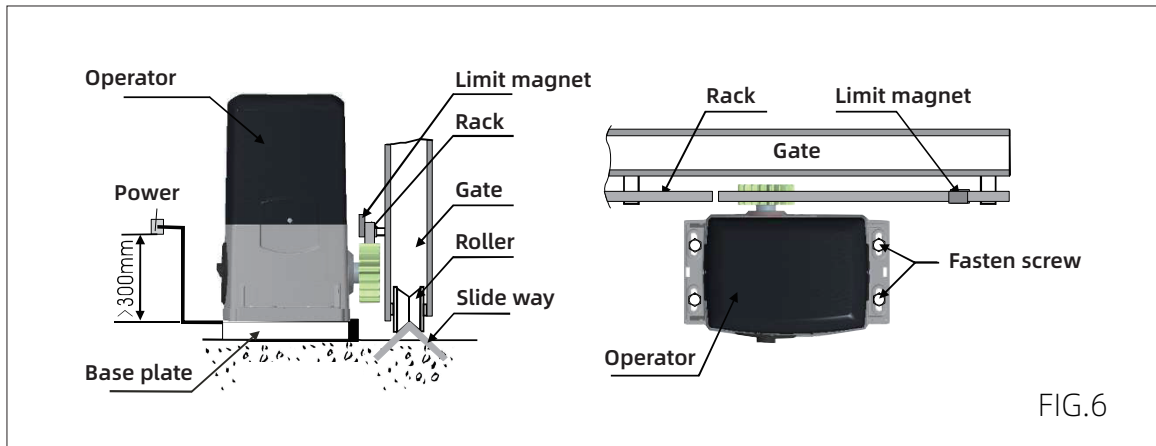
3. Installation of Base Plate



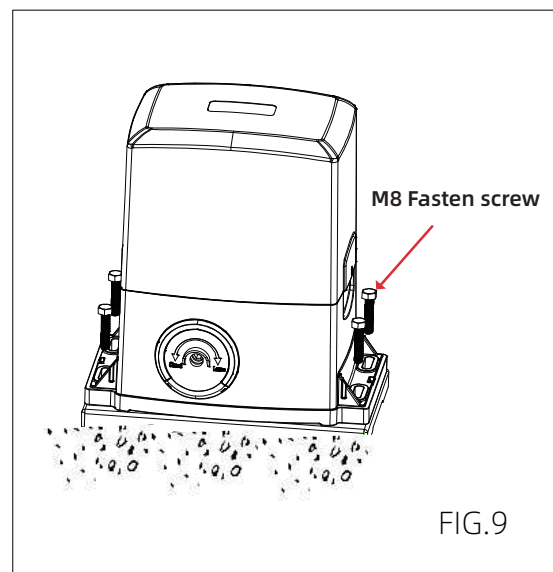
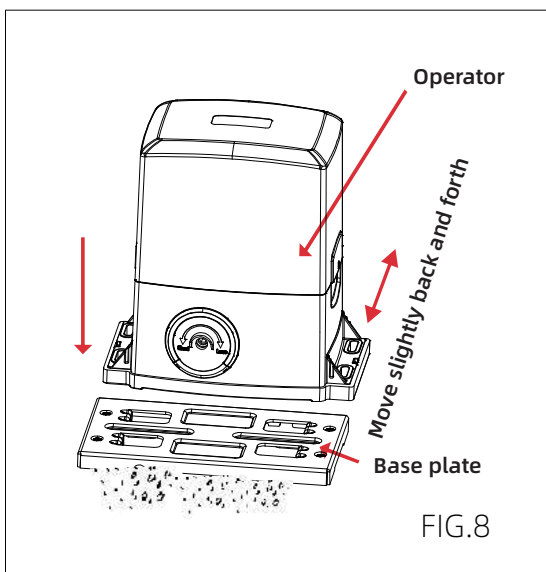
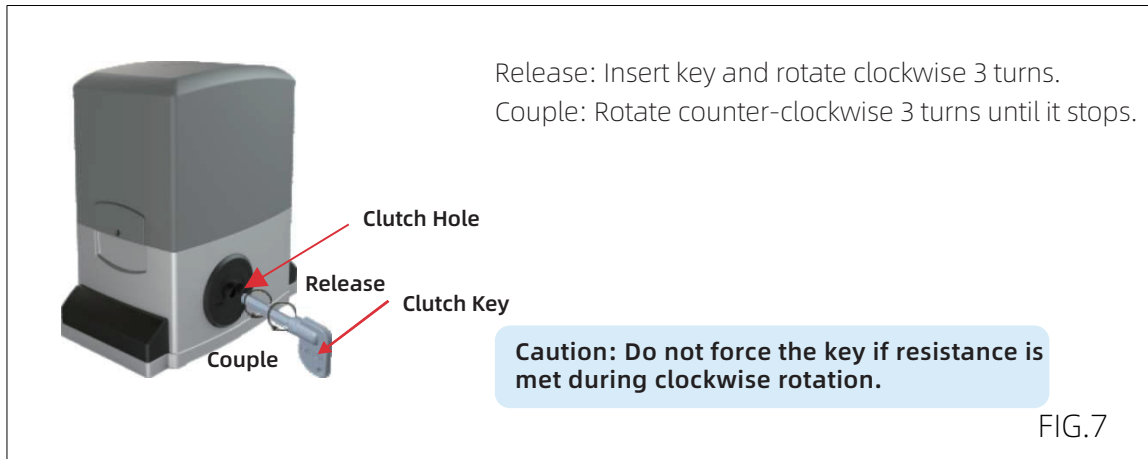
Install the base plate on the concrete foundation and ensure it is level. Then mount the sliding door operator onto the base plate, adjust it to the proper position, and secure it with bolts.

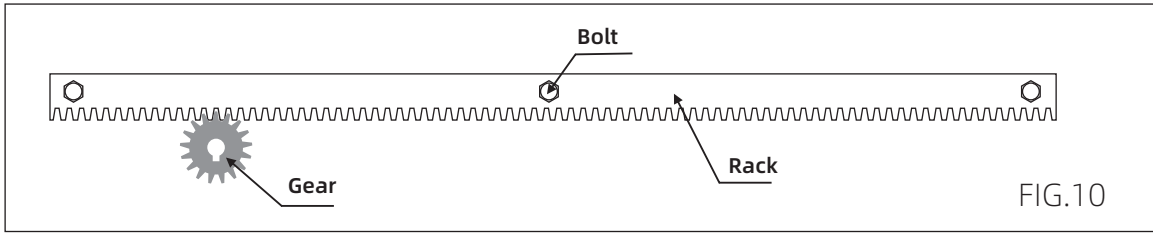


4. Installation and adjustment



Before place the limit magnets on the rack, the clutch (Gears) of the operator must be released.

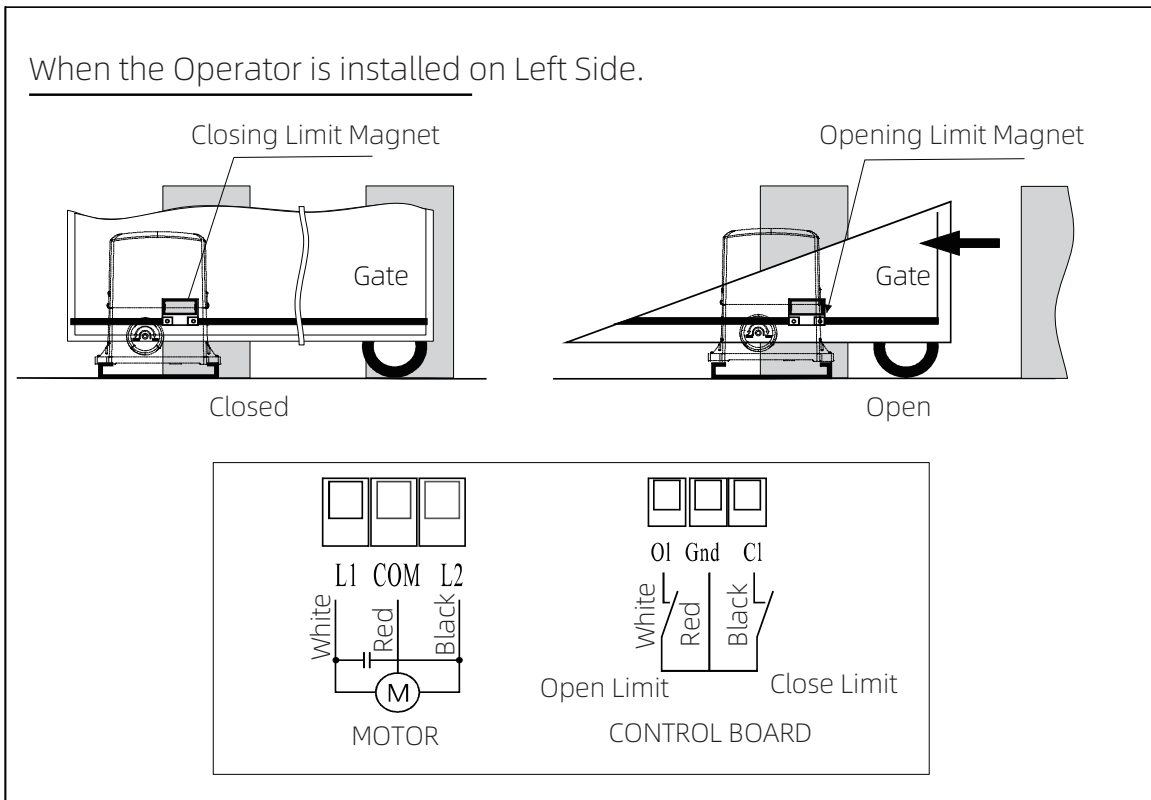


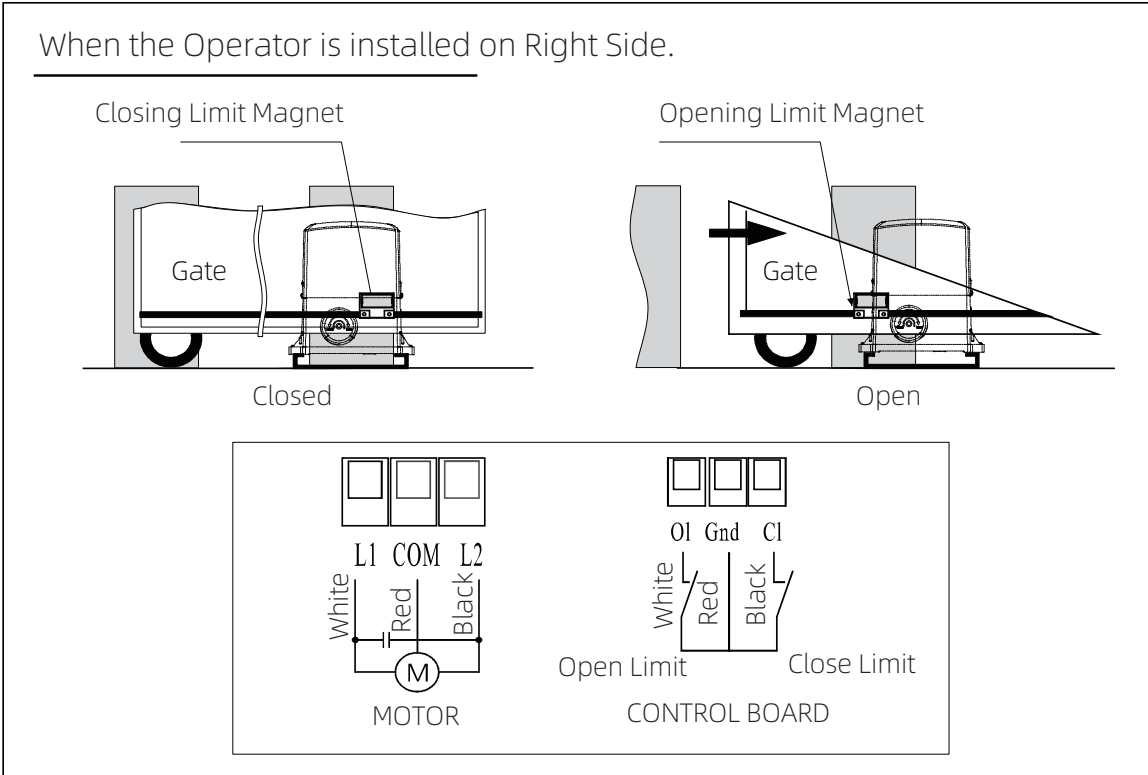


(Note: The mesh gap between the Rack and the Pinion of the operator should be at least 1mm.)

⚠ The product must be installed by professional personnel.

3. Install and adjust the Magnetic Limits



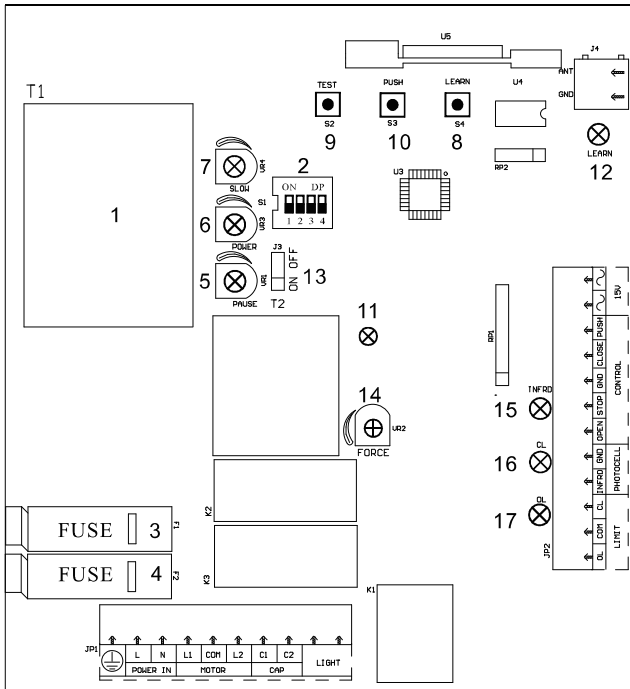


4. Control Board Layout and Settings

1. Control Board Technical Specifications

Voltage	230V 60HZ
Peripheral power	AC15V 3W Max
Working environment	-20°C ~ +55°C
Pause time	0 ~ 100S
Remote frequency	433MHZ

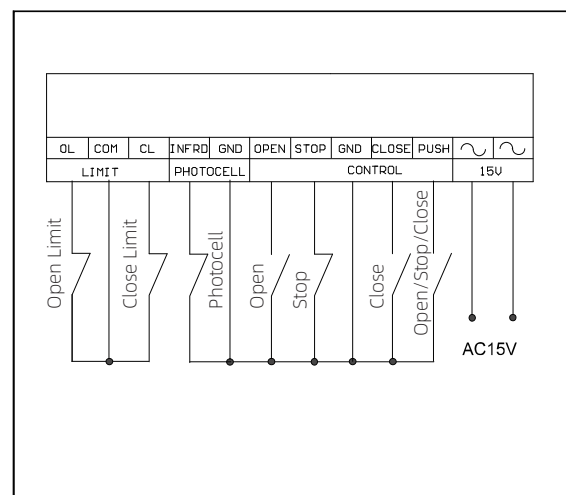
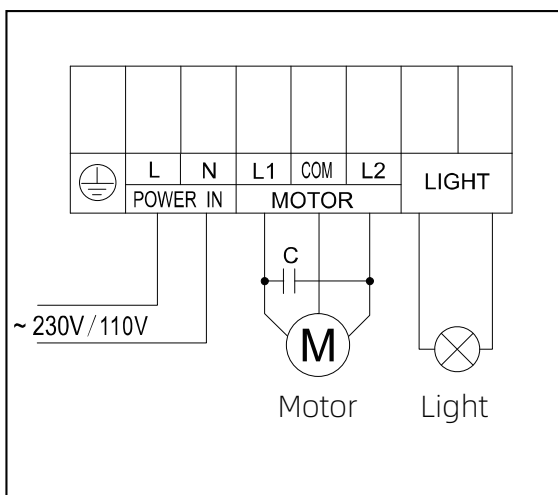
2. Control Board Layout and Definition











Main Components

1. Transformer
2. Dip
3. Fuse (0.2A)
4. Fuse (5A)
5. Trimmer for closing pause time
6. Trimmer for Power
7. Trimmer for slowing power
8. Learn button
9. Test button
10. Cycle button
11. LED of operating
12. LED of learn
13. Switch for Reverse function
14. Trimmer for resistance force
15. Photocell LED
16. Close limit LED
17. Open limit LED

3. Wiring Diagram



4. 4.DIP Switch and Trimmer Settings

	Enable auto close		Disable auto close
	Enable soft start		Disable soft start
	Enable soft stop		Disable soft stop
	Step by step mode		NO use

5. Soft Stop Travel Setting

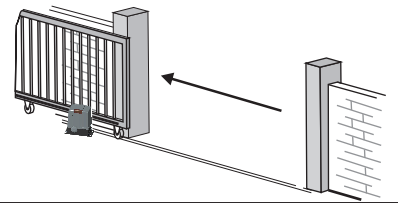
Clear the Travel data, start the Travel setting function

Press and hold "TEST" until the "STATUS" flashes, the operator starts to open the gate.



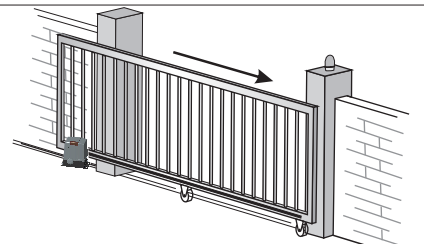
Find the open limit

The operator stops when the gate opens at the open limit point.

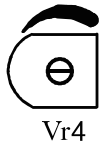


Find the close limit

The operator automatically reverses to close the gate and stop at the close limit point. Now, set the DIP3 ON to enable Soft Stop.



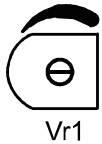
6. Fine Tune Settings



Vr4: Trimmer of power adjustment during slow down.



Vr3: Trimmer of motor power adjustment.



Vr1: Trimmer of pausing time for Auto-closing at Open Limit.

Motor Power Adjustment

Motor power is adjusted by the trimmer: clockwise to decrease, counterclockwise to increase.

Reverse Function Setting

Adjust the resistance force trimmer to ensure normal motor operation and stop when encountering obstacles.

7. Transmitter's code setting

1. Step-by-Step Mode (Open-Stop-Close-Stop)

Briefly press the LEARN button on the control board; the LEARN LED lights up.

Press and hold the desired button on the transmitter until the LEARN LED flashes and turns off.

2. Open Mode (Single Press to Open)

Briefly press the LEARN button twice; the LEARN LED flashes twice.

Press and hold another button on the transmitter until the LEARN LED flashes and turns off.

Repeat the above steps to pair more transmitters.

Clear All Transmitter Codes

Press and hold the LEARN button until the LEARN LED lights up and then turns off.

All previously learned transmitter codes are now cleared.

5. Trouble Shooting

Number	Trouble	Cause	Shooting
1	motor can not work	*No power supply *Break fuse *Motor is damaged	*Check power supply *Change fuse *Change the motor
2	Can open but can not close	*Photocell is not connected properly *Photocell Beam is block off. *Photocell is broken.	*Connect the photocell properly *Clear out obstacle *Change a new device
3	Can open (close) but can not close (open)	*Position of limit switch is not correct *Limit switch is damaged	*Adjust position *Change limit switch
4	can not locate accurately	*Distance of limit switch is too large *Limit switch is wrong *Magnetic-steel's position is wrong	*Adjust position of limit switch *Change limit switch *Re-adjust the position
5	Release device	*Operating handle is broken *Worm gears are jammed	*Change the handle *Rotate the pinion
6	Push the "open" button but the gate close	(DC)Whether "+MOTOR-" wires are connected wrong (AC)Whether "L1" and "L2" wires are connected wrong	*Connect correctly according to wiring diagram
7	Motor can turn but can not work	*Clutch is released *Compression spring of clutch is dead	* Use the key to couple the clutch *Change the spring