SLIDING GATE OPERATOR

INSTRUCTION



Informal Version

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).

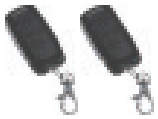
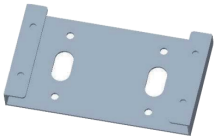
8) Installers must supply full information regarding operation manual of the system in the event of any emergency and provide the system user with the "Manual" included with the product.

9) Do not allow children or other people to stand near any moving gate.

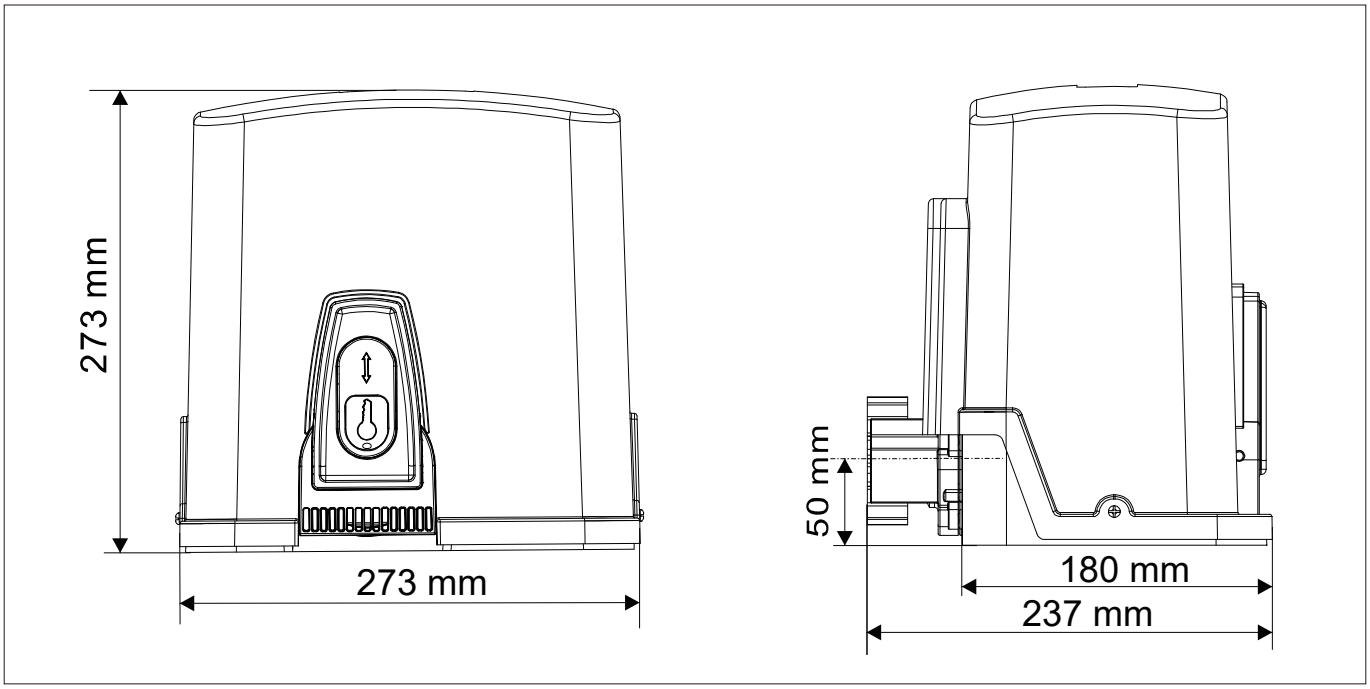
10) Keep transmitters away from children to prevent the machine from being activated accidentally.

11) Users must refrain from attempting to repair or adjust the system personally and should only contact professional personnel.

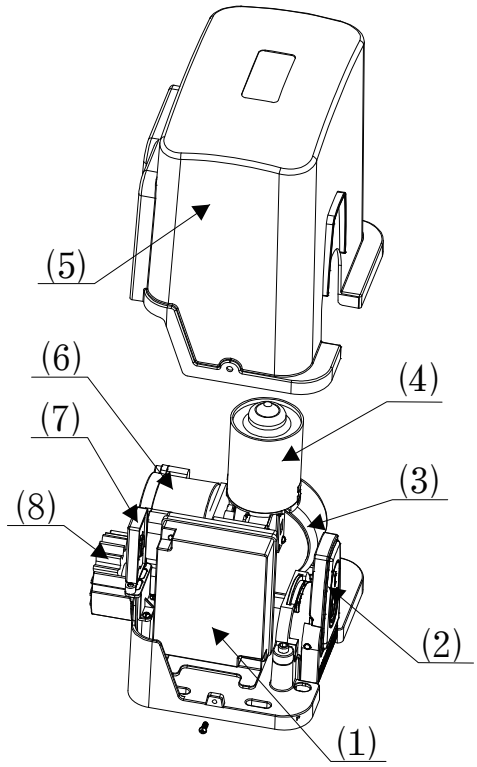
1.1 Description

E-Slider	 Transmitters	 Limit magnet/ Bracket	 E-Slider
 Release key	 Base plate	 Accessories	

1.2 Dimension



1.3 Main Parts



(1) Control Board
(2) Release clutch
(3) Transformer
(4) 24VDC Motor
(5) Cover
(6) Gear Reducer
(7) Magnetic Limit Sensor
(8) Output Pinion

1.4 Technical Specifications

Model	E-Slider-12DC	E-Slider-16DC	E-Slider-24DC
Type		DC Brush Motor	
Motor voltage		24VDC	
Motor Power		80W	
Output rotational speed	57r/min	75r/min	113r/min
Operate speed	12m/min	16m/min	24m/min
Max weight of gate	≤500Kg	≤400Kg	≤300Kg
Working temperature		-30℃~+60℃	
Remote range		≥30m	

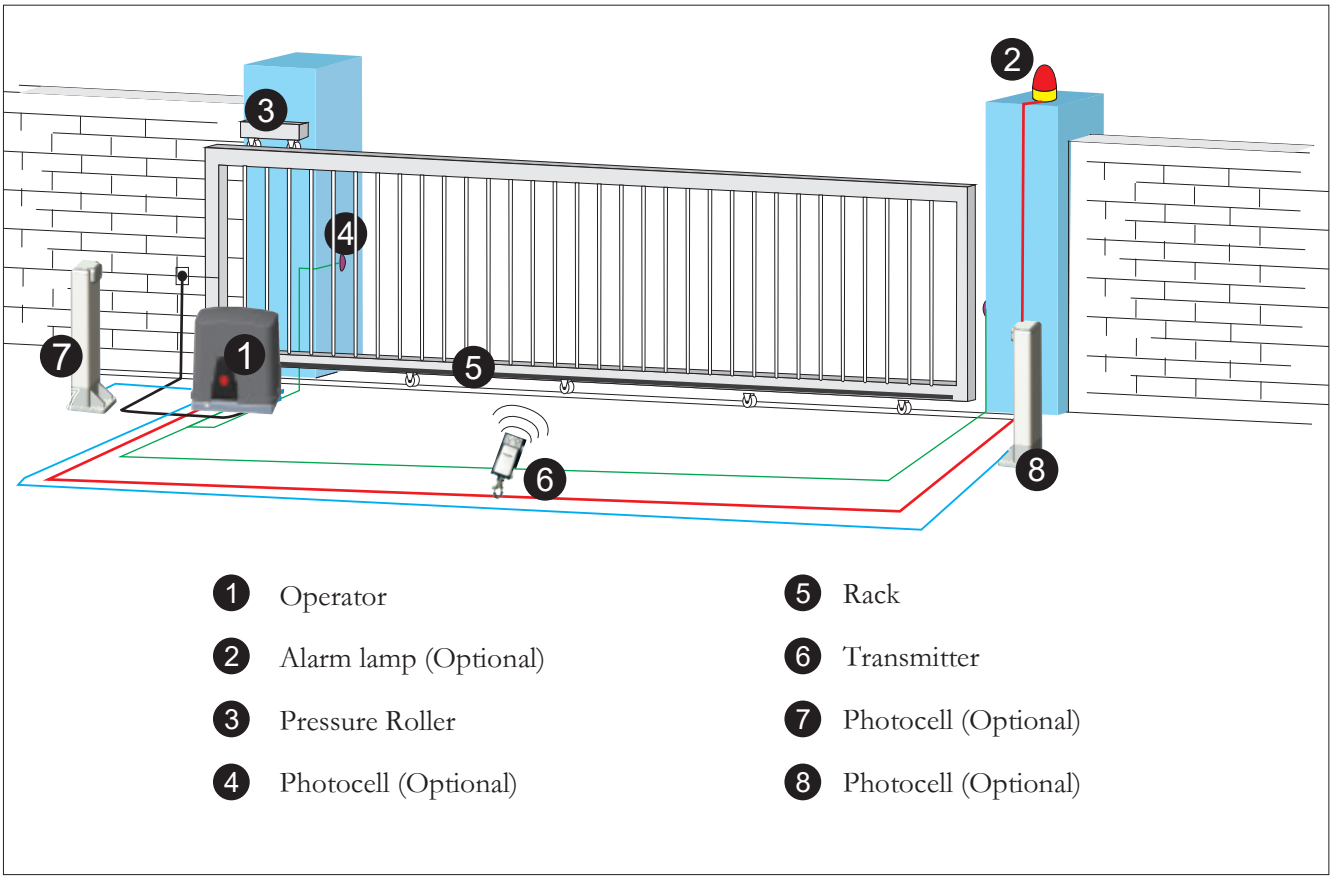
1.5 Feature

1. When the power is off, the clutch can be released to open the gate manually.
2. Soft start and soft stop.
3. Reverse or stop when meet obstacle.
4. Auto close delay function can be set.
5. Applicable to access control system.

2. Installation

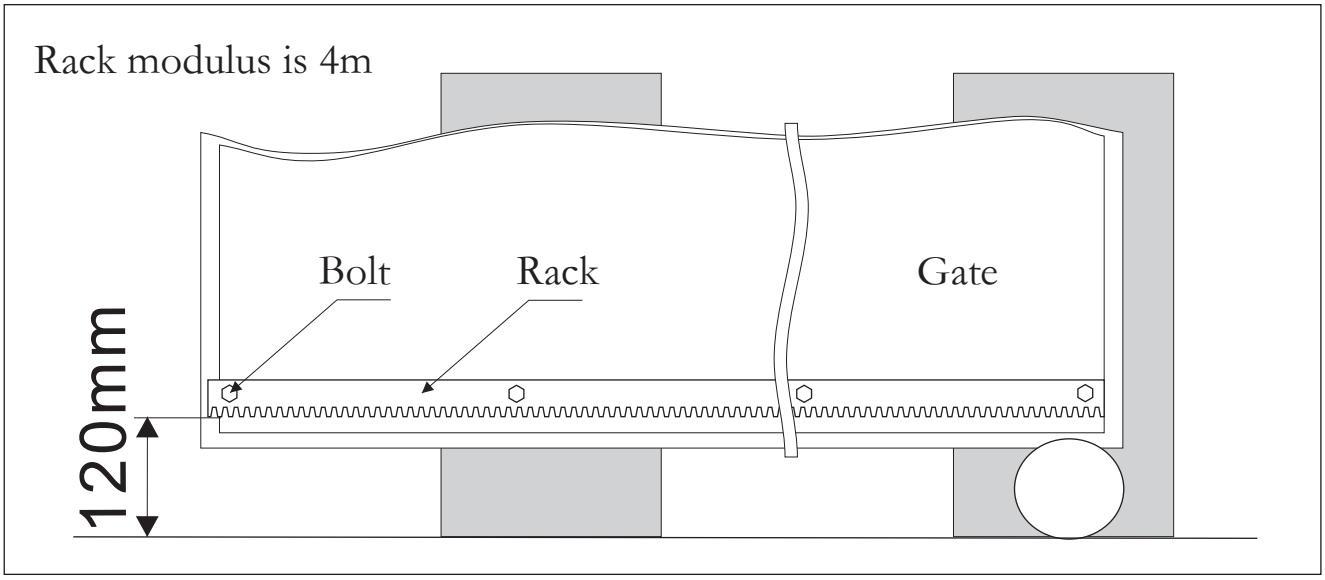
* Before using the Gate Operator, check power supply, grounding, voltage, etc.
* Check whether it is connected according to the instruction of wiring diagram.
* The gate should be pulled easily and smoothly manually when the clutch are released .
* The clutch will be coupled before power on.
* The product must be installed by professional personnel.

2.1 Example of an automatic sliding gate



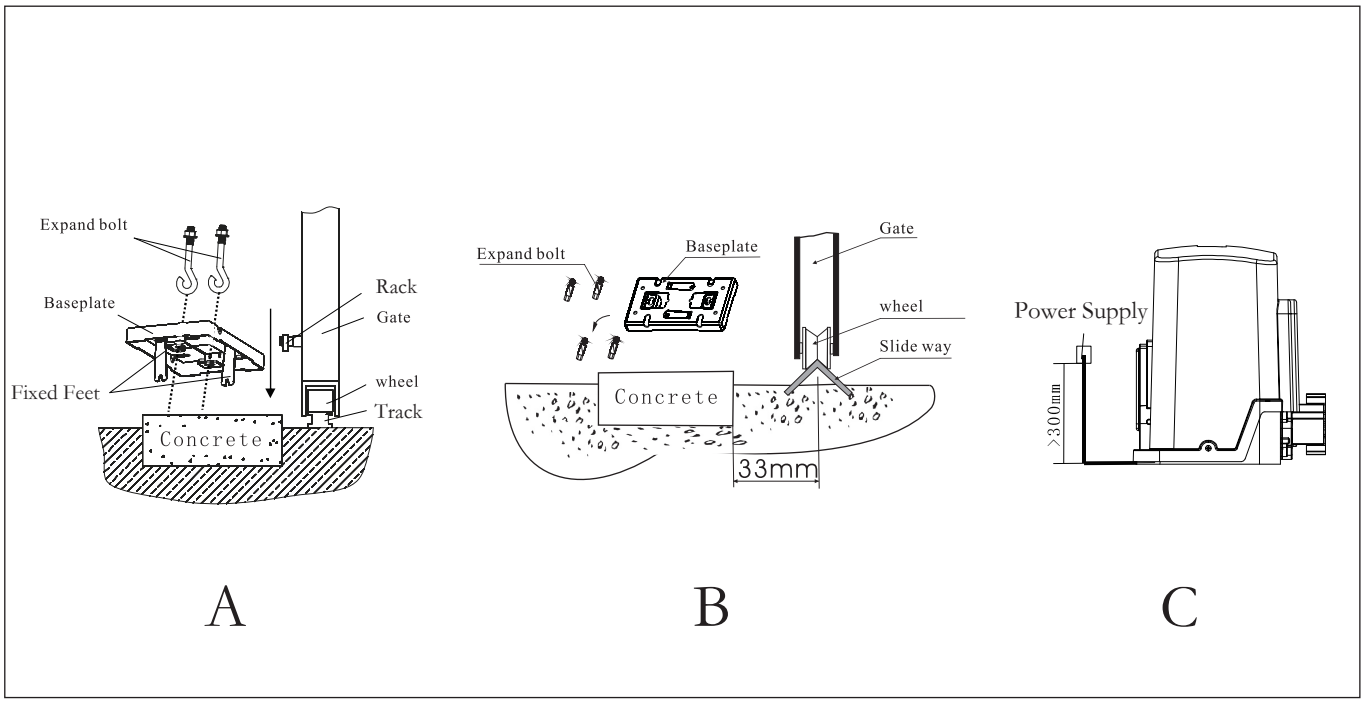
2.2 Installation of Rack

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.

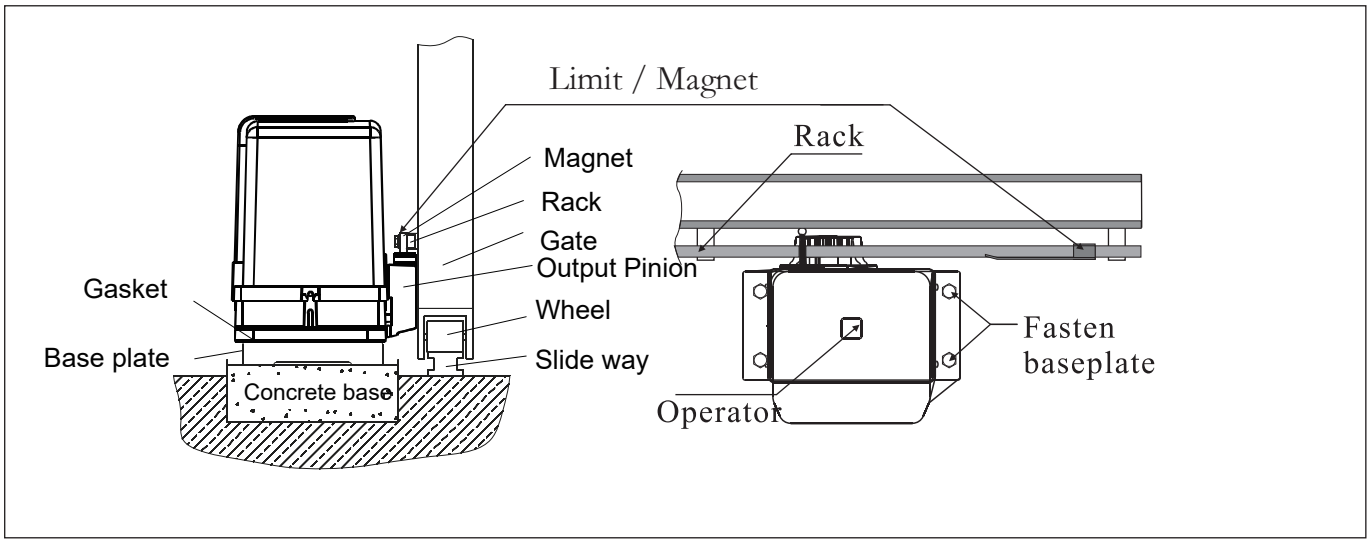


2.3 Installation and adjustment

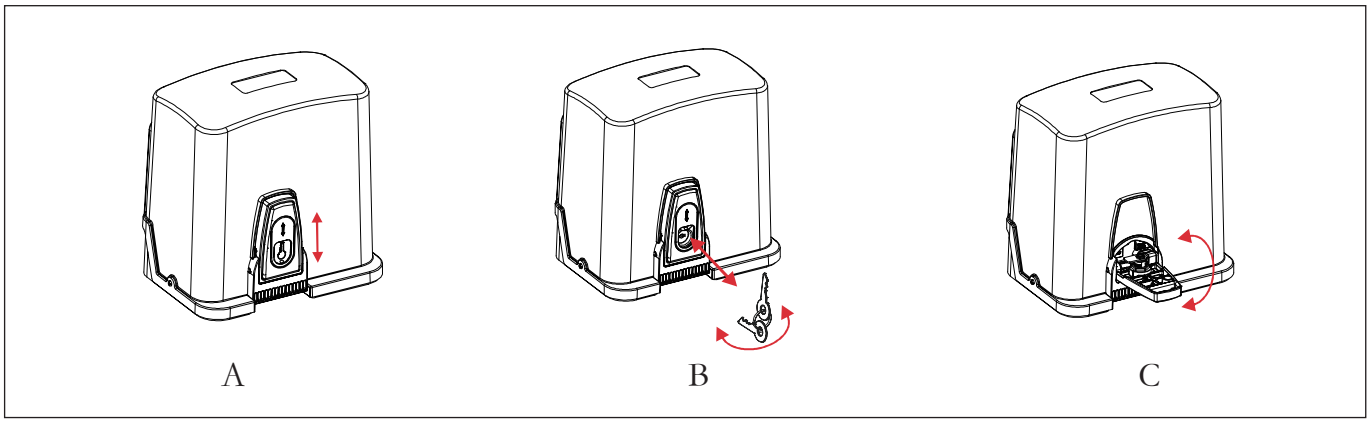
Install baseplate on the ground, then, fasten the sliding operator on the baseplate.
Key: Ensure baseplate on level position.



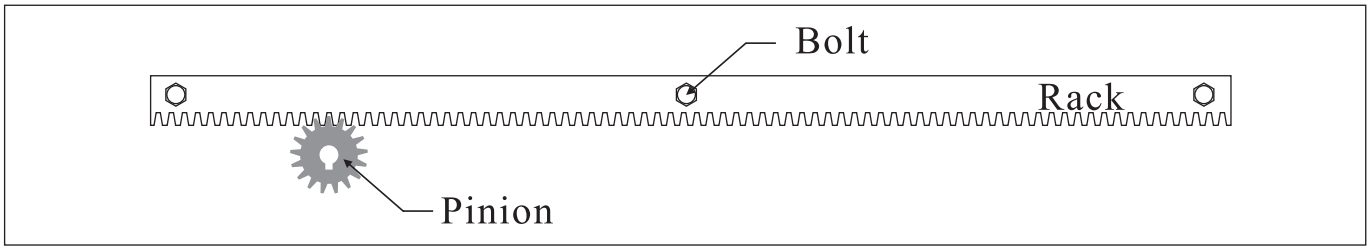
2.4 Fix the limit magnets at proper position on the steel rack.



Before place the limit magnets on the rack, the clutch（Gears）of the operator must be released. As per fig A or fig B, Use the key turn clockwise to release the gear.

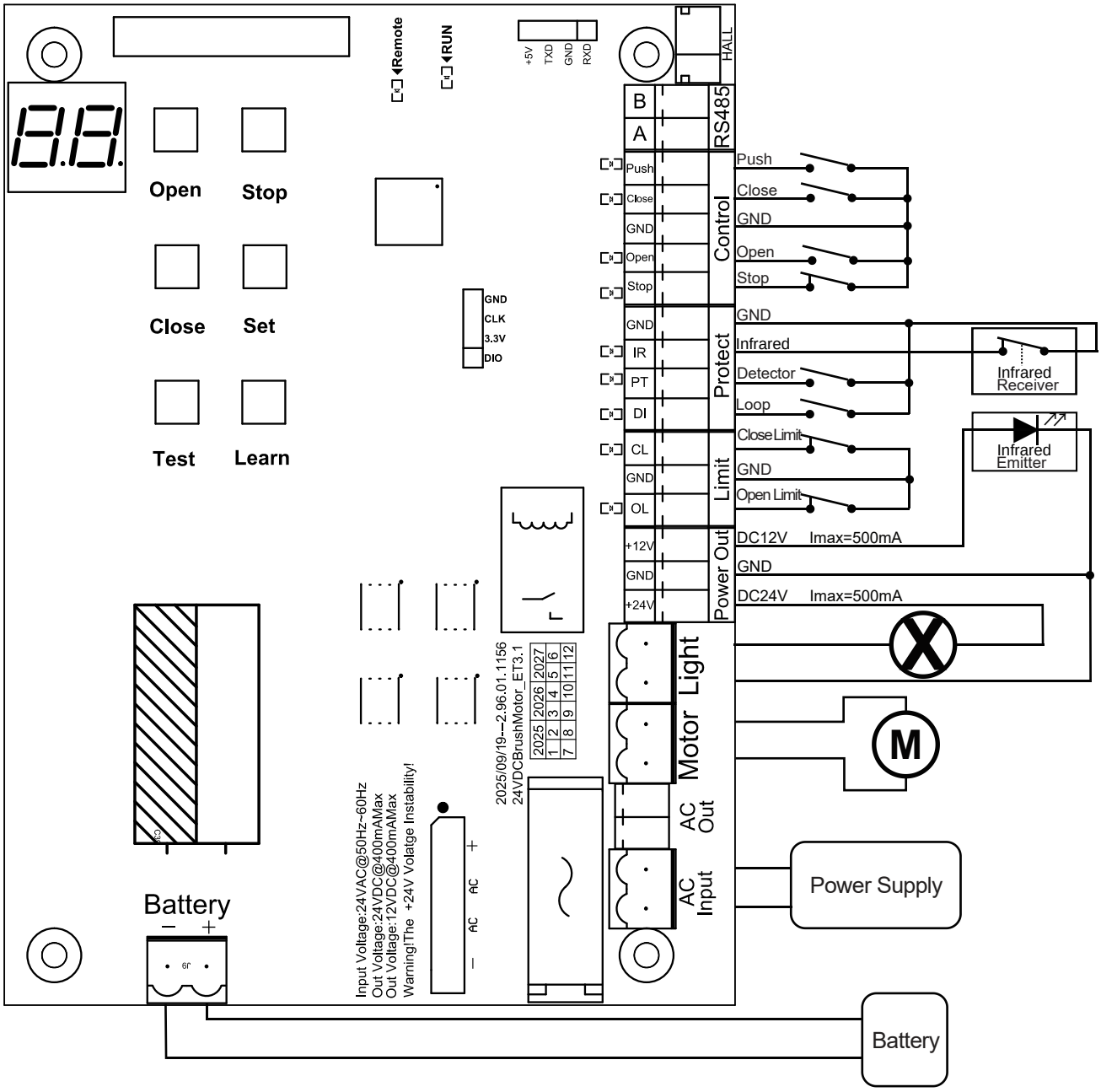


Move the gate manually to the open limit and close limit, mark the points on the Rack, then, fix the limit Stoppers or Magnets at the limit points on the Rack.



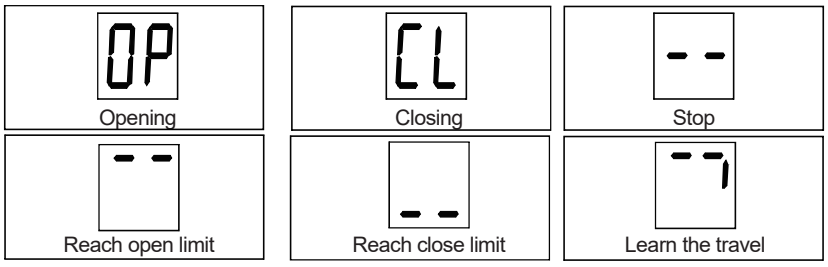
Note:The mesh gap between the Rack and the Pinion of the operator should be at least 1mm

3. Control Board Wiring diagram



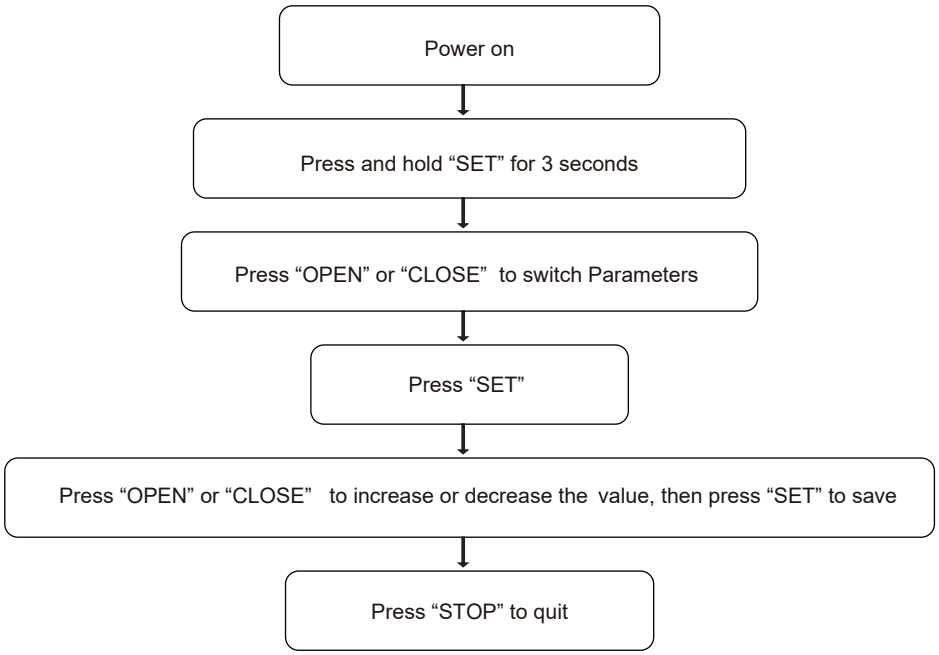
Function Description

Digital tube of operating status



3.1 Parameters Setting

No	Parameter	Description	Default
1	C0	Obstacle Sensing Threshold Sensitivity 1--20， Min=1, Max=20	15
2	C1	Operator max speed, 1(greater than C0)--10, can't be set	10
3	C2	Operator min speed, 1--10(less than C1)，can't be set	3
4	C3	Auto close delay time, 1--99s, 0=no Auto close	0
5	C4	Duration limit for continuous operation time, 1--99s, 0=no limit time	0
6	C5	Alarm light mode, 0=off this function, 1=No Flashing Mode,Keep working when the open /close limit signal triggered 2=No Flashing Mode,Keep working during runtime 3=No Flashing Mode,Keep working except when the open /close limit signal triggered 4=No Flashing Mode,Keep working except during runtime 5=Flashing Mode,Keep working when the open /close limit signal triggered 6=Flashing Mode,Keep working during runtime 7=Flashing Mode,Keep working except when the open /close limit signal triggered 8=Flashing Mode,Keep working except during runtime	0
7	C6	Remote control mode, 0=single button control, 1=three button control（T26） 2=three button control（T23）	0
8	C7	Display shows version number,exclusively for after - sales service reference	1
9	C8	Reset, back to factory set, erase all setting information	/



4.1 Control Function Describe

Open：Move the gate moves in the opening direction until another control signal is triggered. Close:Move the gate moves in the closing direction until another control signal is triggered. Stop:Slow down and stop. Push:Cyclic trigger signal, which will cycle between open->stop->close->stop

4.1 Protect Function Describe

IR(Infrared): When the infrared receiving signal is triggered, the door will open when closing, while other states remain unaffected.
PT(Press Test): When the pressure protection signal is triggered, the door will open when closing, while other states remain unaffected.
DI: When the signal is triggered, the door will open .And after the signal disappears, the door will close.
Obstacle Sensing Threshold Sensitivity: When encountering an obstacle while closing, decelerate and stop, then open the door. When encountering an obstacle while opening, stop.
Duration limit for continuous operation time: Due to the lack of overheat protection in the equipment and poor heat dissipation in its operating environment, to prevent damage to electronic components caused by prolonged operation-induced heat, users must limit the continuous operation time of the "C4" motor after device debugging. The recommended value is to increase the normal door opening/closing time by 2 seconds.

4.2 Soft Stop Setting

Move the gate to make the operator between the open and close limit points. Press the Test button for 3s until LED display changes. Then press Open or Close button, the operator will run automatically, trigger the two limit switches, and finally stop the gate between the two limit points. This indicates running stroke setting finished.

4.3 Factory Setting Resetting

If there is abnormal caused by any unpredictable errors, it could be reset by parame - ter"C8", then power off and restart.

4.4 Remote control data learning

Learning a button on wireless remote control operation:Press the button "LEARN" on the circuit board and hold it until the "Remote" light flashes,then release the button.If the circuit board receives any continuous remote control signal at this time, the flashing frequency of the indicator light will increase. When the continuous remote control signal disappears, the remote control data will be learned.
Attention! In environments with severe electromagnetic interference, ensure that the remote control button remains continuously pressed during this process to guarantee accurate remote learning data.
Warning! Due to certain remote control models where buttons intermittently send random commands when not fully pressed, and to minimize accidental triggering, the device requires a complete press action from the remote: hold the button for approximately 0.5 seconds before releasing to register a single command transmission.

4.5 Clear remote control data

Clear remote control data: Press button "LEARN " and hold on, until "Remote" LED stays on constantly. This means all remote control data has been cleared.

5. Trouble Shooting

No	Trouble	Possible Reason	Solution
1	Operator can not work	1. No power supply 2. Fuse is blown 3. Bad wiring or damaged wiring	1. Check power supply 2. Change fuse 3. Reconnect the wires
2	Operator is Working but gate does not move	Release clutch is unlock	Check the release clutch
3	Operator stops after opening 2s, or reverse after closing 2s	1.Obstacle or the gate is over weight 2.“Reverse parameter” is not proper	1.Remove obstacle, or adjust C0 2.Increase C0
4	Reverse when closing	1. There is obstacle in front of gate 2. Photocell is not triggered or damaged	1. remove the obstacle 2. Adjust or change the photocell
5	Operator is running even when gate reaches limit position	1. Limit magnet is broken 2. Limit magnet is not installed properly 3. The magnet pole is incorrect	1. Change limit magnet 2. Reinstall limit magnet 3. Adjust the magnet pole
6	After replacing the blown fuse, the main board works, but the fuse blows again as soon as it starts running	There is a high voltage input from the 12V power port	Replace D15, MOS, check and reconnect right input terminal
7	Relay continues to switch	1.The signal wire is loose 2.There are two signals with opposite actions at the same time	1.Check the connection of the signal wire. 2.Please check if there are any logical or timing errors between the control signals
8	During operation, E2 often occurs. When the clutch is lock, the door can be pushed by hand	The screw of motor drive rod is worn	Change the motor drive rod
9	After reboot, soft stop is unavailable .	The controller requires a limit signal to detect its position and initiate deceleration-to-stop	Verify the controller has memorized the travel distance and actuated a limit signal after power-up to initiate the soft-stop positioning function

Error Codes

No	Code	Meaning	Solution
1	E1	Excessive resistance during motor	1.Adjust reverse level. 2.Checking for obstacles on the operating track
2	E2	Abnormal motor running distance	1.Check if the open/close limit is loose 2.Open or close,the error code will disapear.
3	E3	Continuous operation time over the limit time set by user	Set the C4 according to actual running time.
4	E4	No hall sensor singnal during operation	Check operator wires connectors or hall sensor connectors.