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Security at Fingertips

HG-BDC-600

INSTALLATION MANUAL

PLEASE READ THE MANUAL CAREFULLY BEFORE INSTALL AND USE

WARNING FOR INSTALLERS AND USERS

1) CAUTION! For personal safety it is important to follow all the instructions carefully. Incor - rect 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 poten - tial 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 acces - sory).

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.

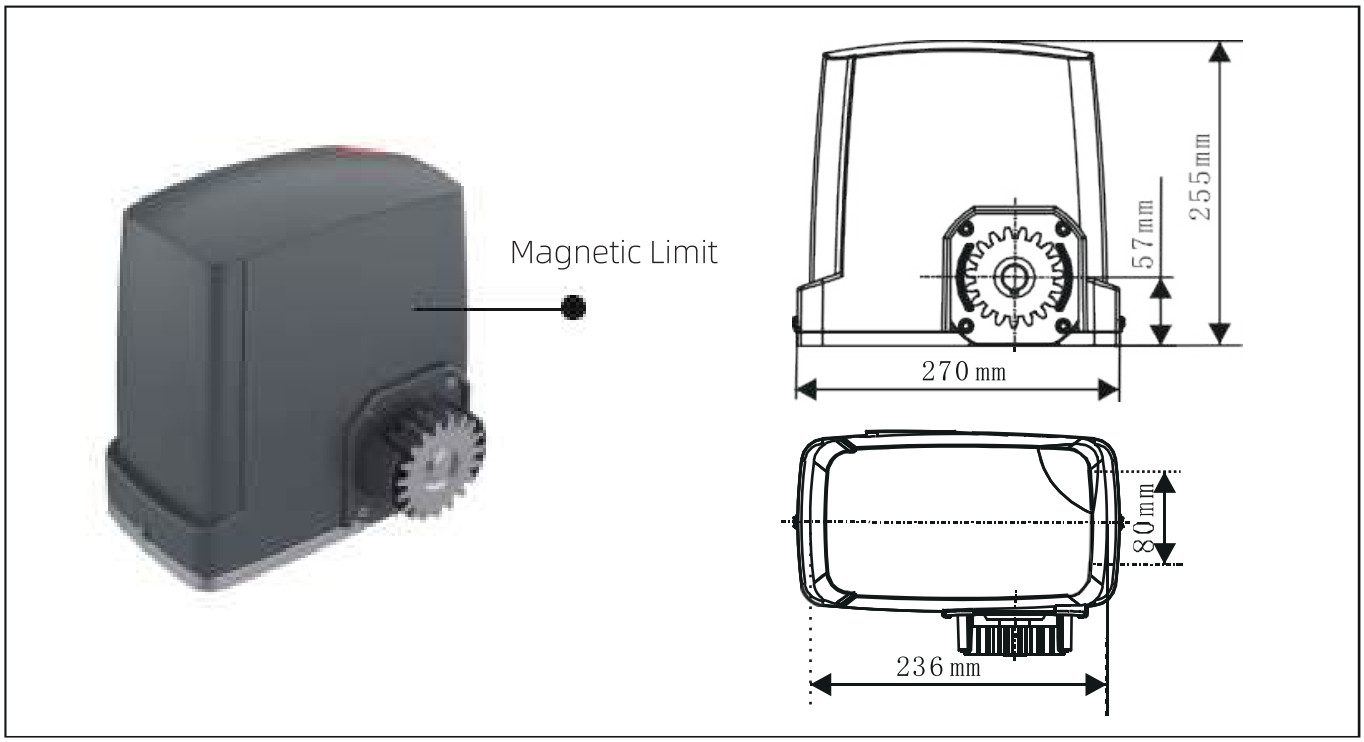
10) Keep transmitters away from children to prevent the machine from being activated acciden - tally.

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

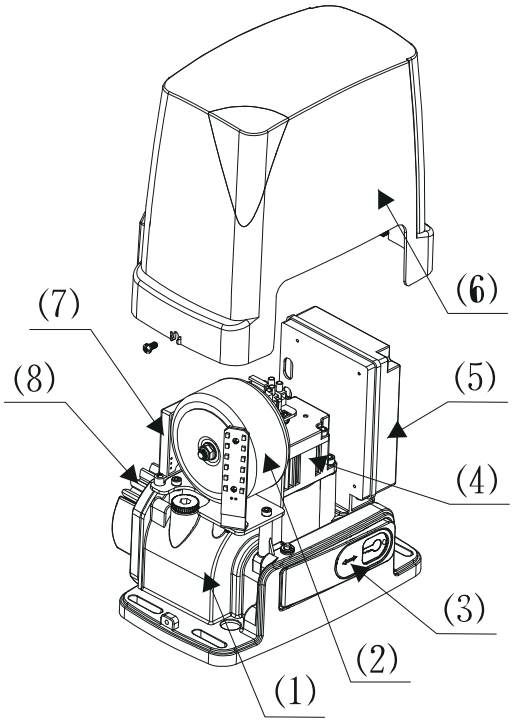
1.1 Description

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

1.2 Dimension



1.3 Main Parts



(1) Gear Reducer
(2) Transformer
(3) Clutch
(4) DC Motor
(5) Control Board
(6) Cover
(7) Limit Switch
(8) Output Pinion

1.4 Technical Specifications

Model	F-Slider
Type	DC motor
Input voltage	220V±10% 50Hz
Motor voltage	24VDC
Motor power	120W/150W
Output rotational speed	50r/min
Operate speed	12m/min
Max weight of gate	600Kg/800Kg
Working temperature	-30°C~+60°C
Remote range	≥30m

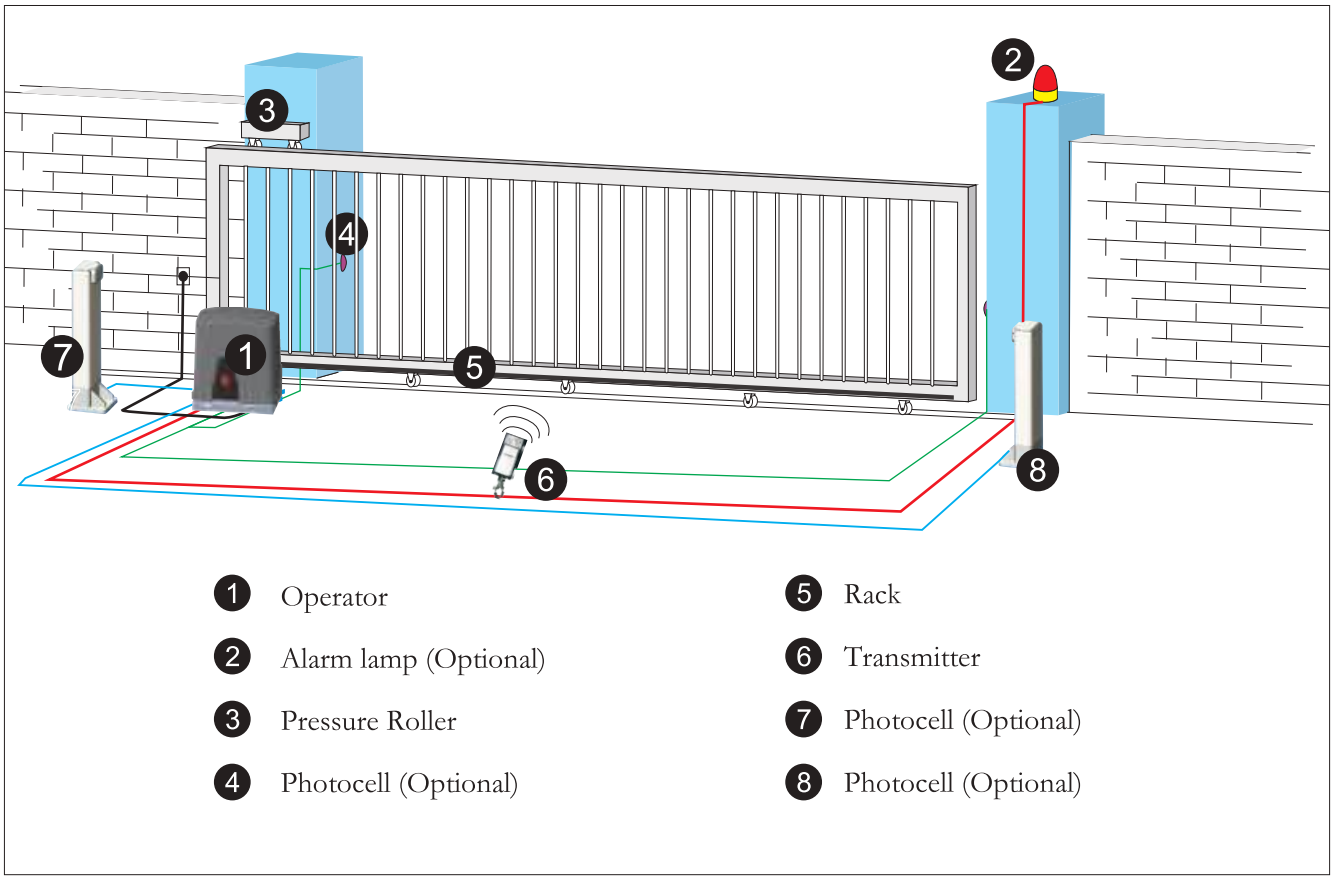
1.5 Feature

1. Equipped with a quick clutch. During power outages, pull the clutch handle horizontally 90°, then the gate can be moved 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

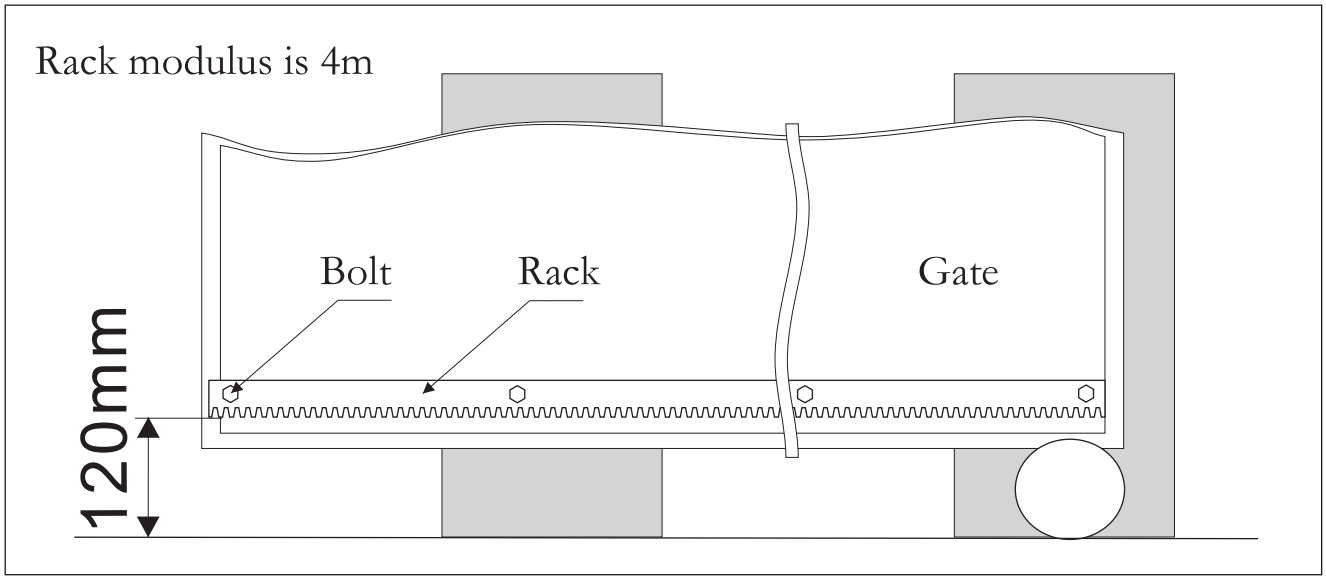
* Before using the Gate Operator, check power supply, grounding, voltage, etc.
* Check whether it is connected according to the instruction of wiring diagram.
* The gate should be pulled easily and smoothly manually when the clutch are released .
* The clutch will be coupled before power on.
* The product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

2.1 Example of an automatic sliding gate



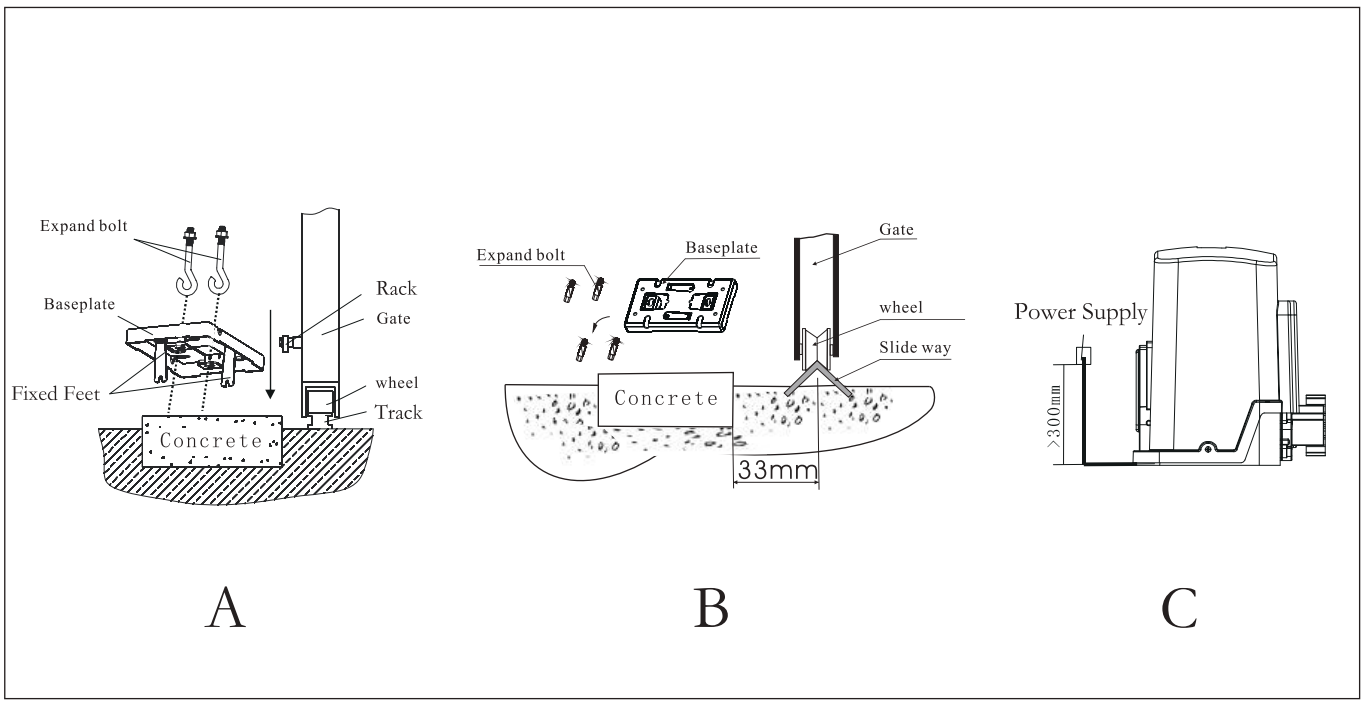
2.2 Installation of Rack

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.

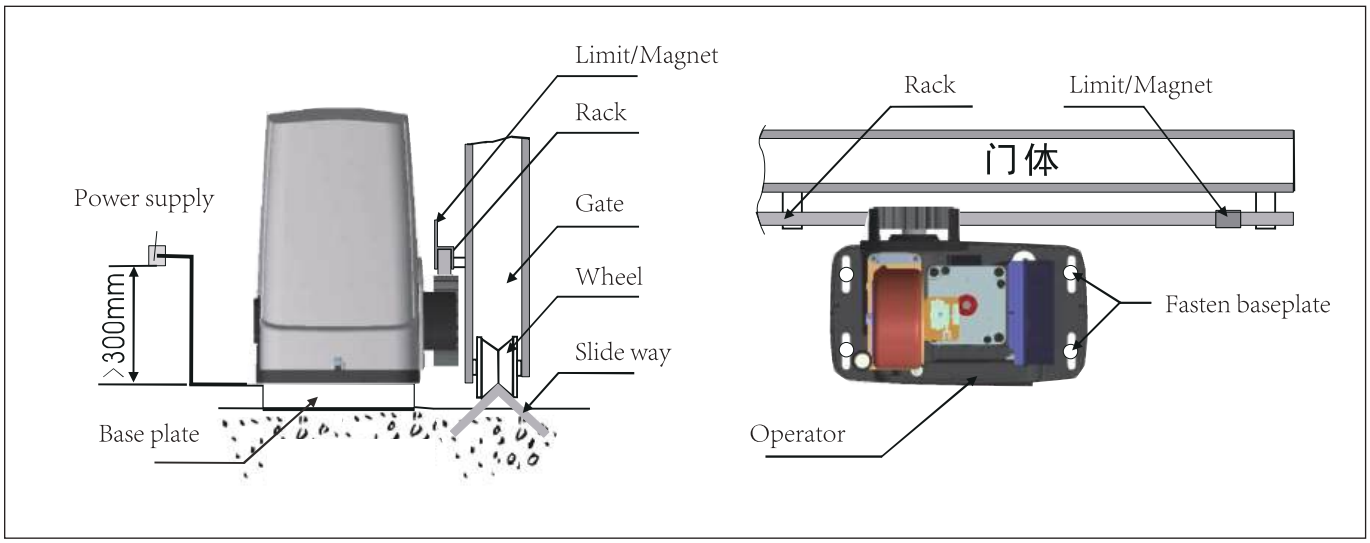


2.3 Installation and adjustment

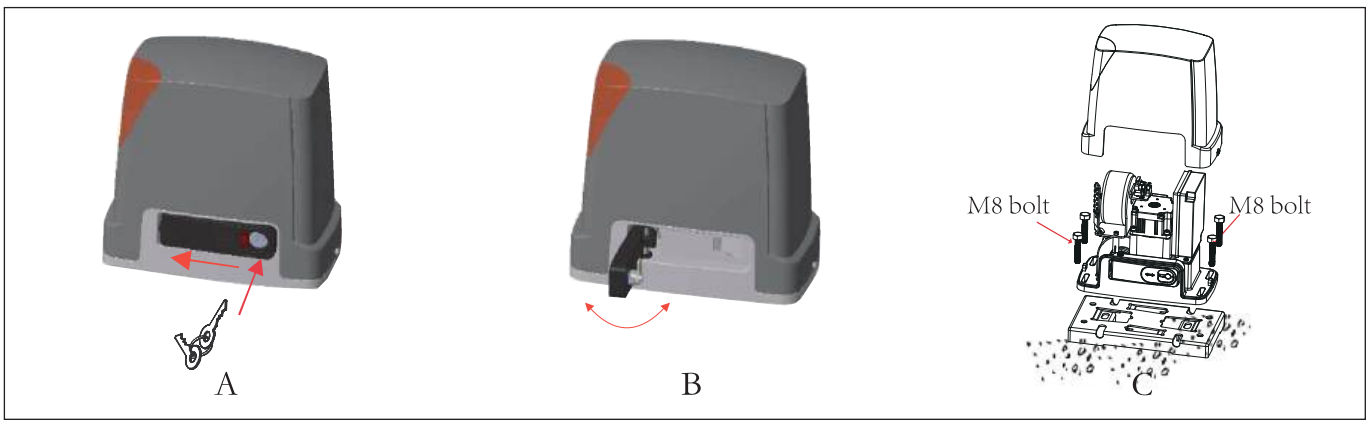
Install baseplate on the ground, then, fasten the sliding operator on the baseplate.
Key: Ensure baseplate on level position.



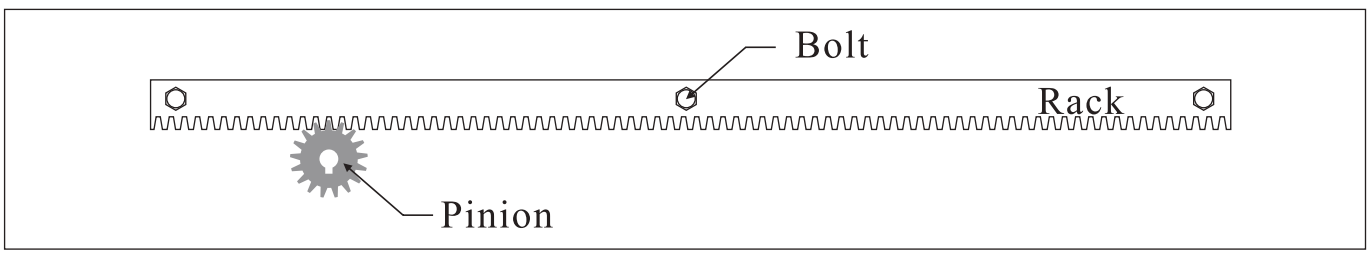
2.4 Fix the limit magnets at proper position on the steel rack.



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.

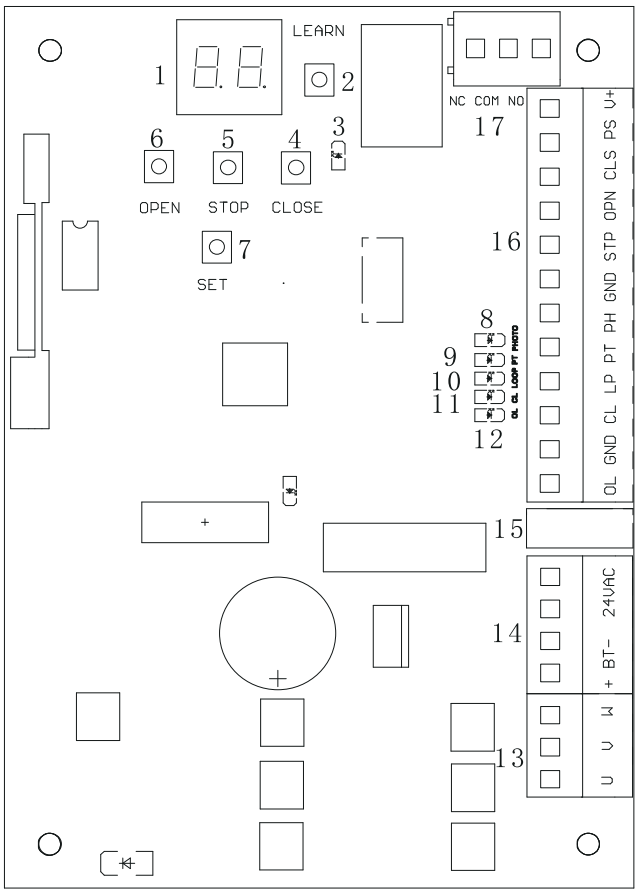


Move the gate manually to the open limit and close limit, mark the points on the Rack, then, fix the limit Stoppers or Magnets at the limit points on the Rack.



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

3. Layout of Control Board



1.LED display light

2.Learn for code with transmitter

3.LED of Learn

4.Close/decrease

5.Stop/exit

6.Open/increase

7.Set

8.Photocell LED

9.Pressure wave switch LED

10.Loop detector LED

11.Close limit LED

12.Open limit LED

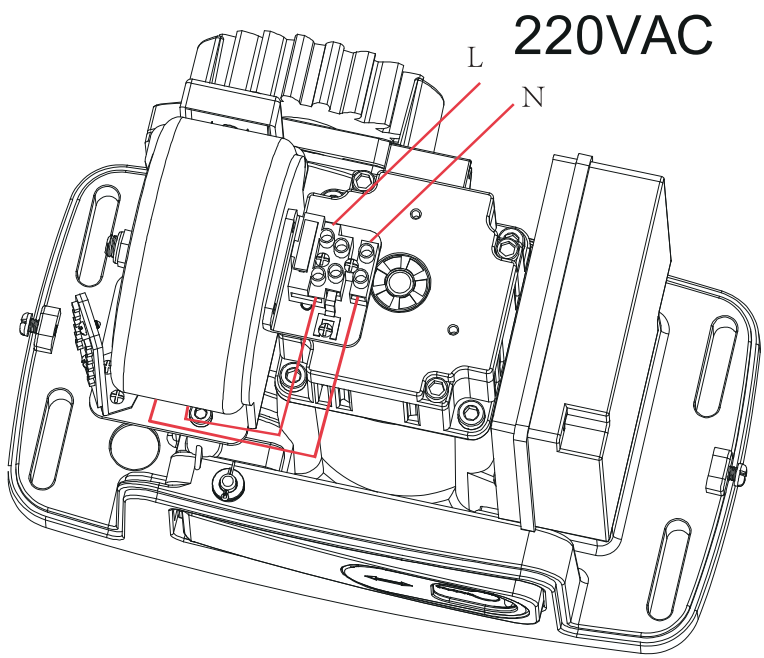
13.Motor interface

14.24VAC input and backup battery interface

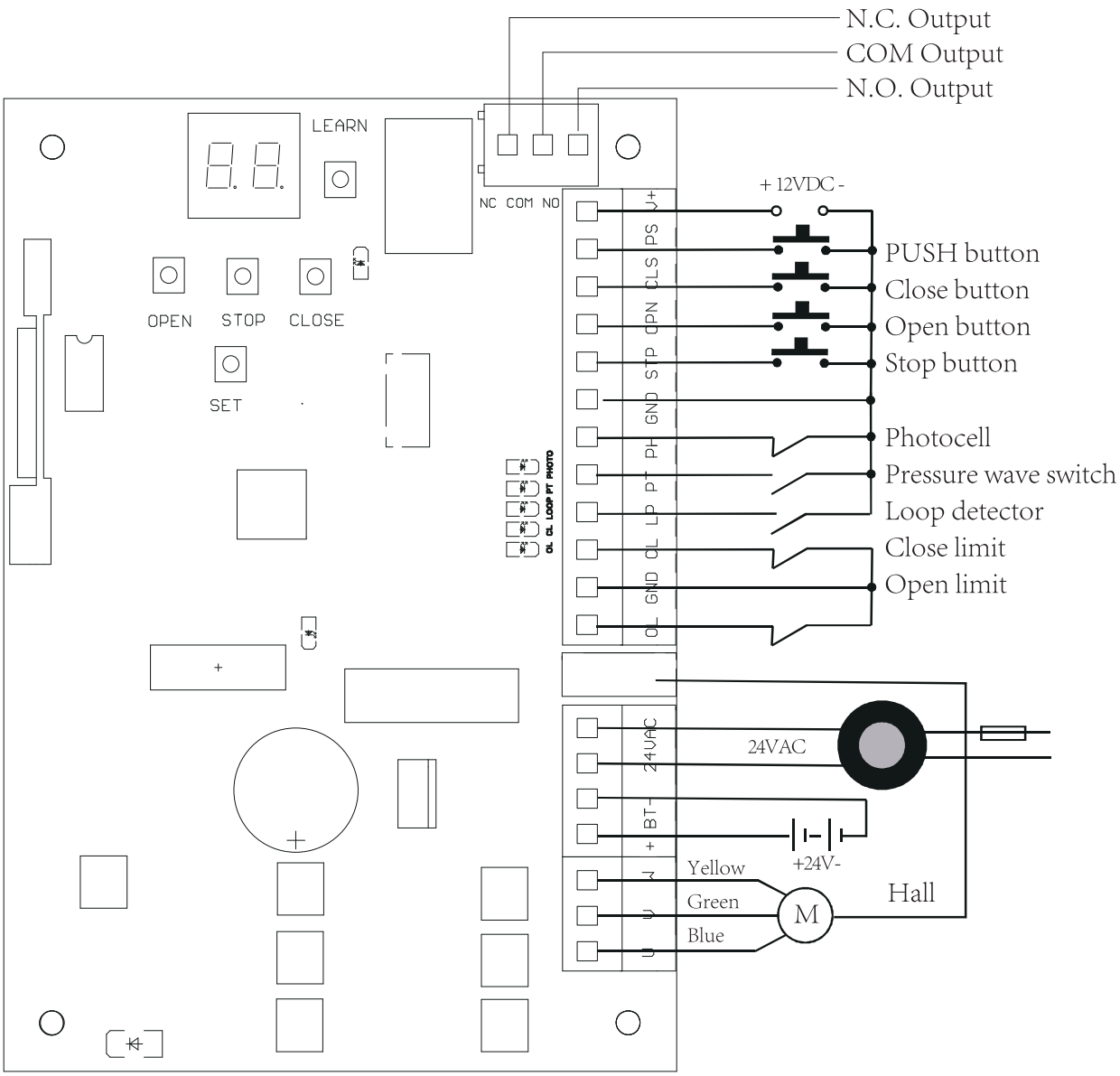
15.Hall interface

16.Signal input interfaces

17.Relay input interface



4. Wiring Diagram

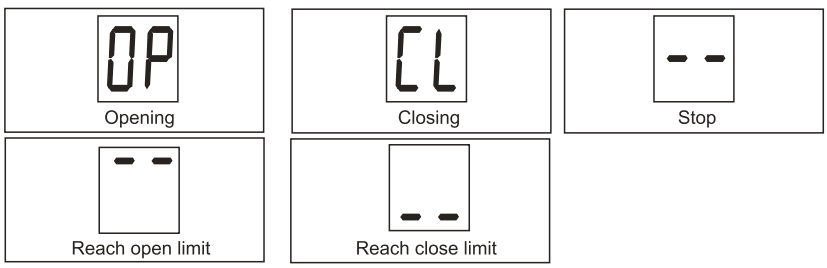


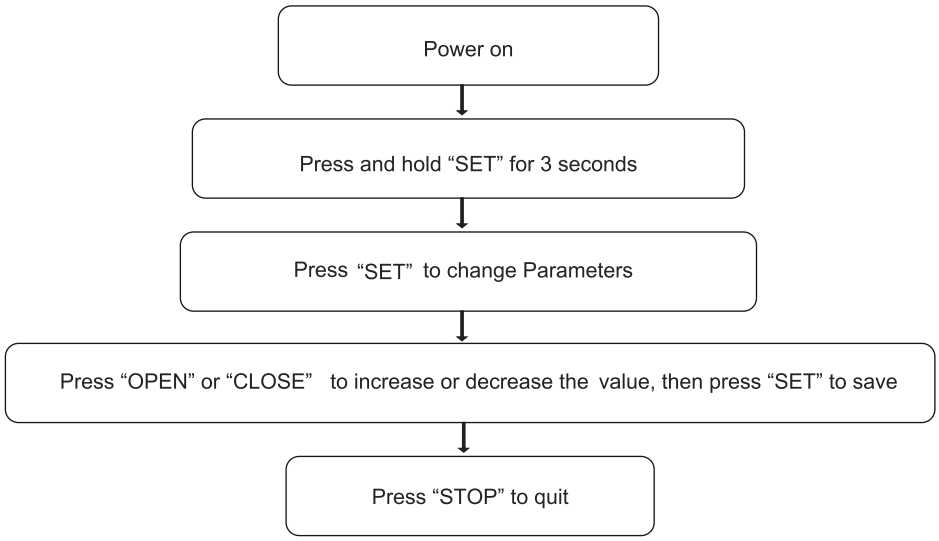
1.If the motor rotate in opposite direction, change the parameter of P6 (refer to the parameters setting sheet)
2.The photocell interface is NC, and has been short-circuited with a wire. If you want to connect photocell, you need to remove the short-circuit wire.
3.The operating mode of the single button: open-stop-close-open.

5.1 Parameters Setting

No	Parameter	Description	Parameter
1	P1	Single run time:0--99	30
2	P2	Operator speed: 1--8 ,Min=1, Max=8	6
3	P3	Operator speed when the first time after power on: 1--8 ,Min=1, Max=8	3
4	P4	Reduce speed distance: 0-15	10
5	P5	Sensitivity of reverse when meeting obstacle: 0-30	15
6	P6	Switch the running direction of the motor, Positive direction=0, Negative direction=1	0
7	P7	Auto close delay time: 0-99, 0=no Auto close	0
8	P8	Soft stop reduce speed 1-5, 1=slowest, 5=fastest	1
9	P9	NO need to change	0
10	L0	Default value is 0, and it displays the operating status	0
11	L1	Test mode, default value is 0, there is no need for adjustment	0
12	L2	Relay function,Alarm lamp mode = 0, open limit =1, close limit =2	0
13	L3	The braking coefficient, there is no need for adjustment	15

Running state display:





4.2 Running Stroke Setting

Power on, press "OPEN" button to drive the gate to the open limit point. Then press "CLOSE" button to drive the gate to the close limit point, LED will displays 'YS'. This indicates running stroke setting finished.

4.3 Erase Running Stroke Setting

If the factory-set stroke doesn't match with the gate's length, make the gate station - ary, then press and hold "STOP"&"OPEN" buttons simultaneously for over 3s, until the alarm beeps three times and LED displays "CLR". This indicates running stroke setting is erased.

4.4 Transmitter's Code Setting

Press the "LEARN" button for 1s, the "LEARN" LED will light up. Then press and hold any button on the transmitter, until the "LEARN" LED flashes several times and then goes out. This indicates code setting is finished.

4.5 Erasing transmitter's code

Press and hold the "LEARN" button for about 8s until the "LEARN" LED goes out. This indicates all codes of transmitters are erased.

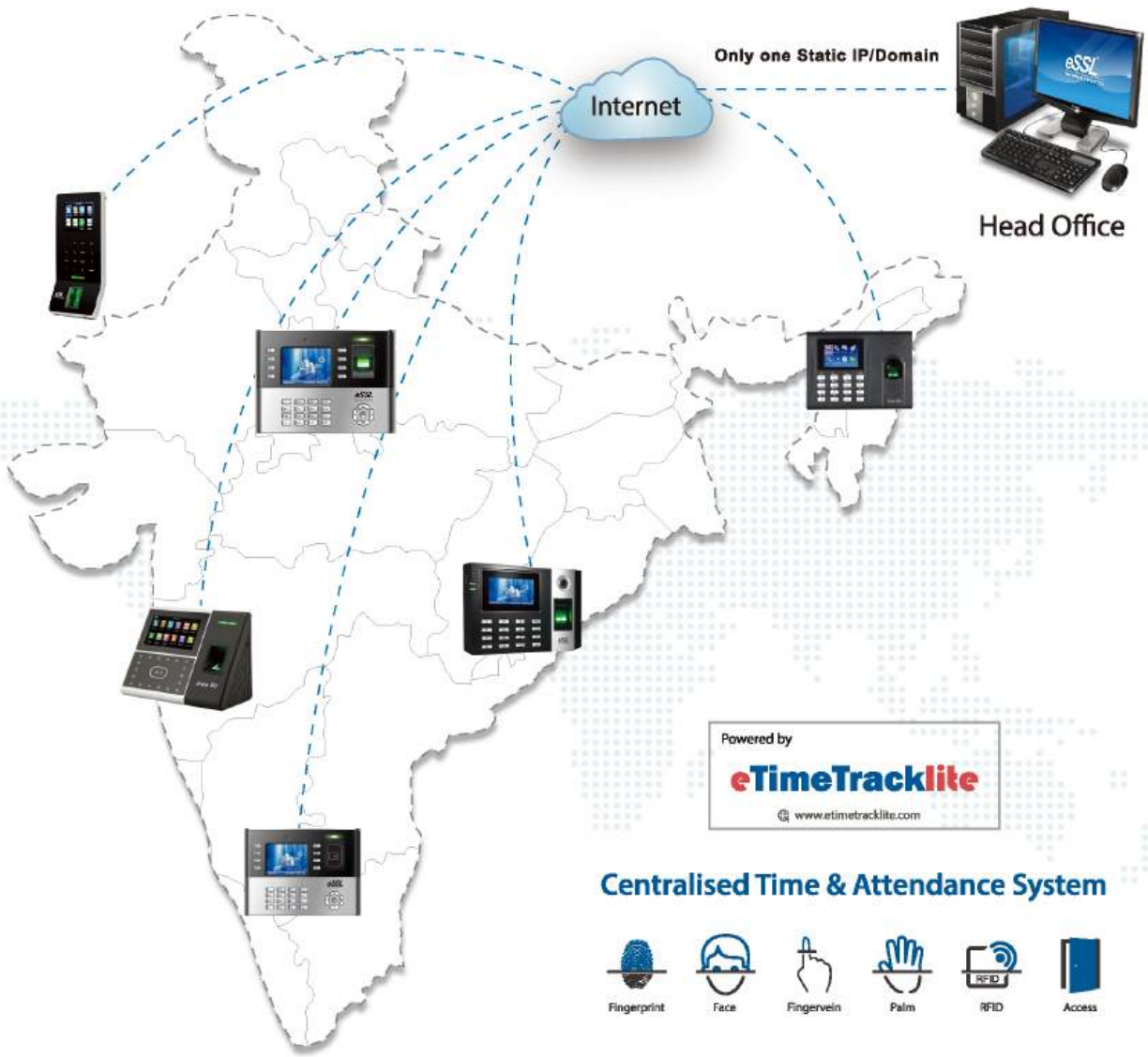
5. Trouble Shooting

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 decrease the weight of gate 2.Increase P
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

Error Codes

No	Code	Meaning	Solution
1	E1	Operator running beyond the set time limit	Set the P1 according to actual running time
2	E2	incorret parameter setting	Reset the control board
3	E3	Operator locked rotor	Check operator wires connectors
4	E4	Operator is ressisted	Move away the obstacle or adjust the reverse level
5	E5	Photocell is triggered	Remove the object that block the photocell
6	E6	Motor current is over	Remove the obstacle orcheek the motor
7	E7	Main chip is fault	Restart or change the control board
8	E8	Motor Driver Chip Failure	Restart or change the control board
9	EH	No hall sensor singnal during operation	Check the hall connectors, or change the motor

Manage Time & Attendance for all your Branches from Head Office



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