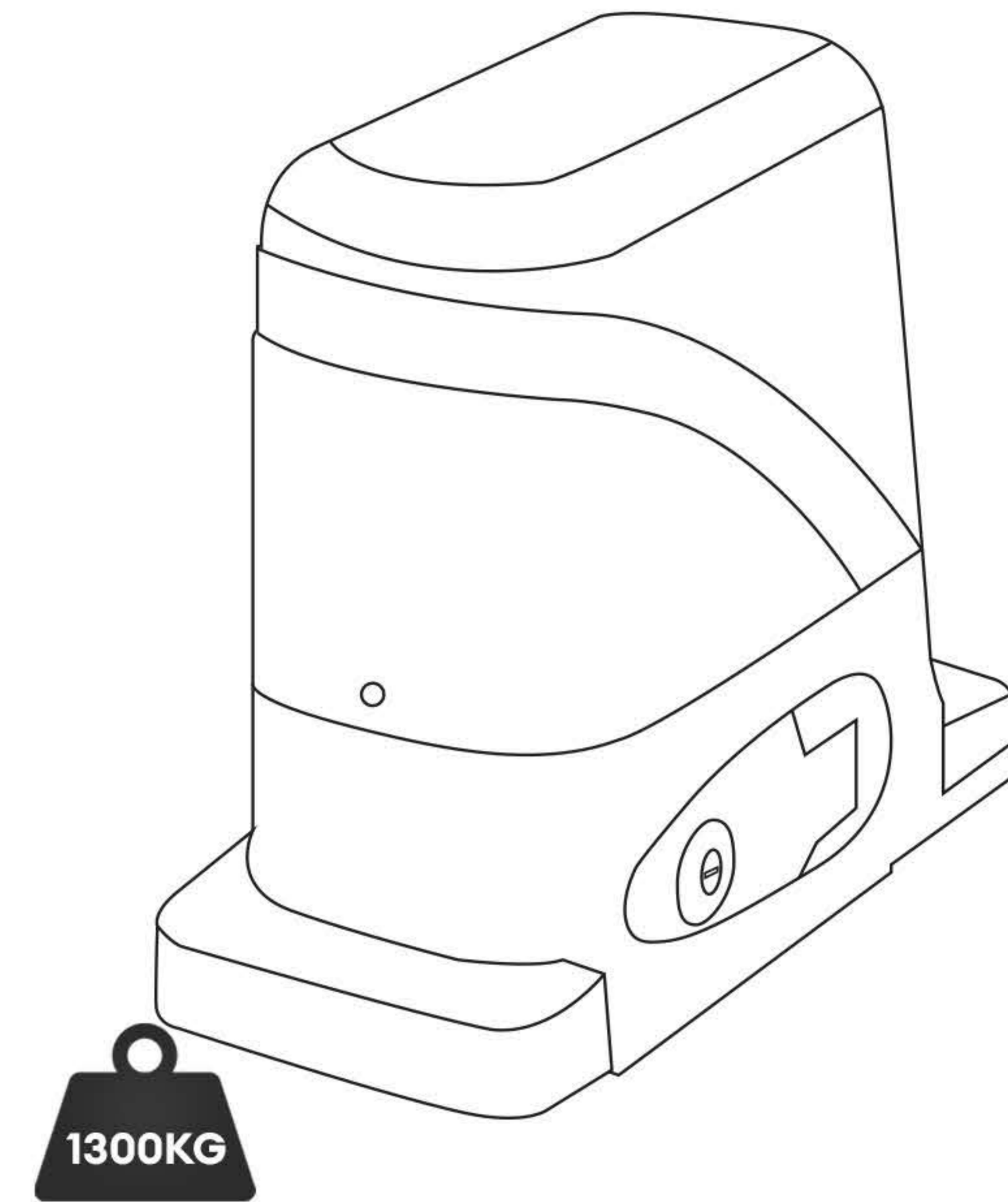




YOUR KEY TO AUTOMATION ↔



SL-22013 W/G

AUTOMATIC SLIDING GATE OPENER
USER MANUAL

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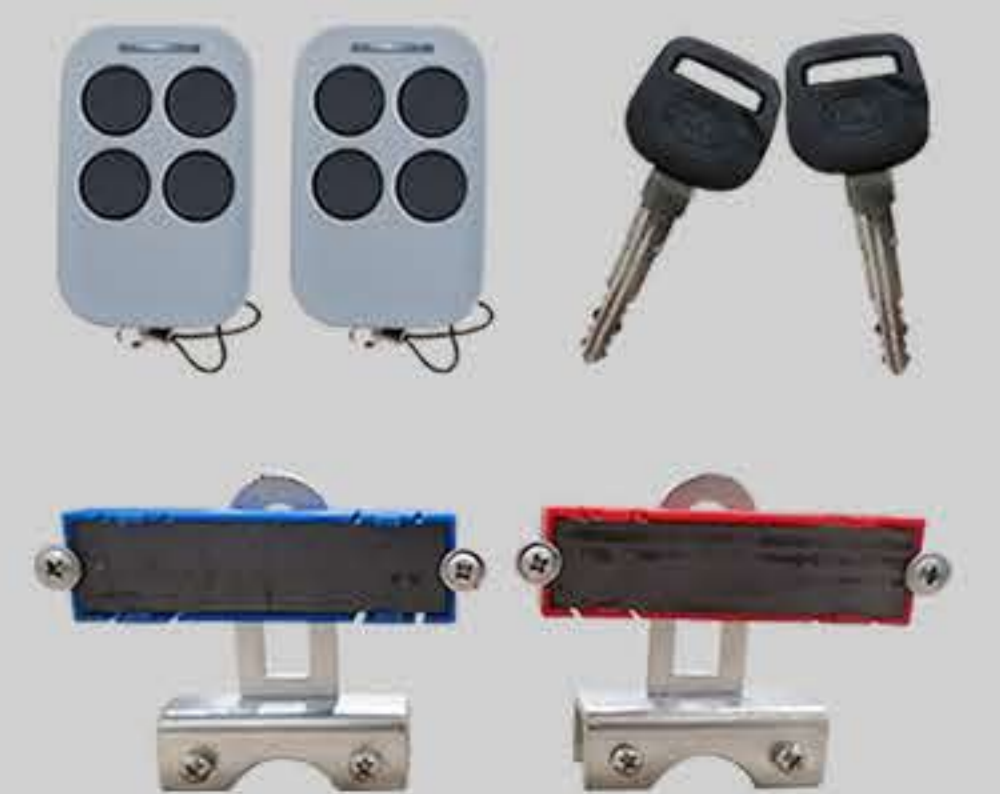
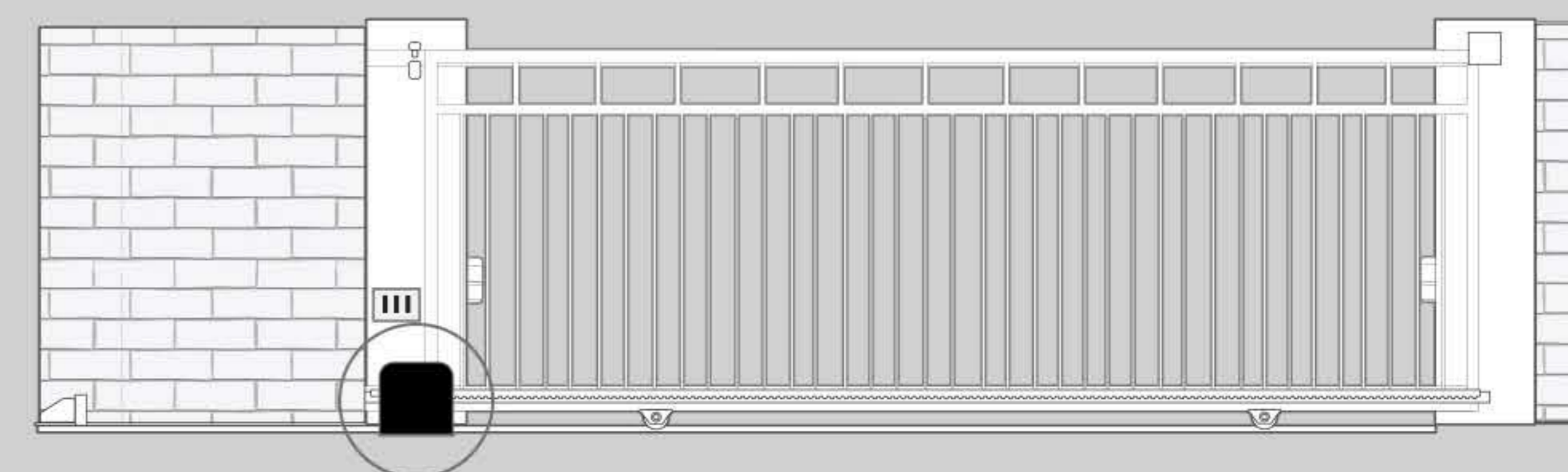


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NOTES



I. Important Safety Information:

- * The gate operator should be installed by qualified technician; otherwise, serious personal injury or property damage may occur.
- * When opening or closing the gate, do not attempt to walk or drive through the gate.
- * Children should not be allowed to play near or operate automatic gates.
- * Install the gate operator on the inside of the property. Do NOT install it on the outside of the property where the public has access to it.
- * Be careful when in close proximity to moving parts where hands or fingers could be pinched.
- * The operator should be switched off before repairing it or opening its cover.

II. Sliding Gate Opener Main Functions:

The gate operator is used to drive the sliding gate. It is featured with powerful starting strength, capable of overload in a short time. When overloaded, it will be protected electrically. In the event of power failure, an emergency release key allows you to operate the gate manually.

- * Totally integrated electrical mechanical system (excludes racks)
- * Single button control circularly /three buttons control can be chosen
- * Control board interface for optional impact-proof infrared photocells
- * Alarm lamp interface
- * Automatic delayed closing
- * Pedestrian mode
- * Adjustable resistance sensitivity
- * Gate will auto stop and re-open when an obstacle is encountered
- * Wireless remote control or wired remote control are optional

III. Technical Specifications:

Power Supply: AC110V/220V± 10v,50-60Hz	Motor Speed: 1400rpm
Gate Moving Speed: 12m/min	Output Torque: >18N.m
Limit Switch: Magnetic	Gross Weight: 11KG
Environment Temperature: -25°C - +55°C	Loading weight: 1300 KG
Remote control: custom rolling code, max 100pcs.	
Frequency: 433.92Mhz	Smart mode: WiFi, 4G(LTE), Bluetooth&2.4G

IV. Preparing The Installation Site:

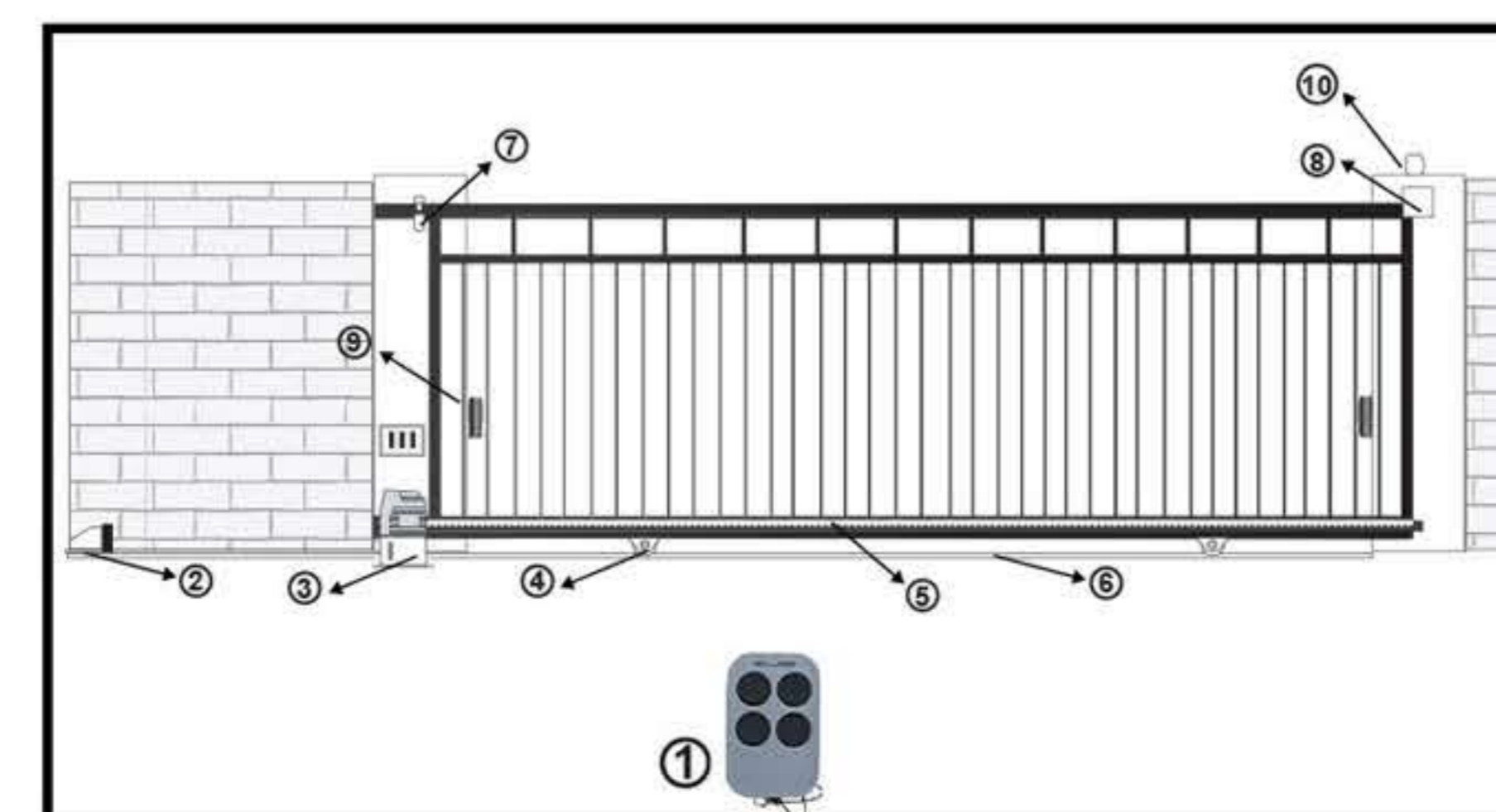


Figure 1

1. Remote Control
2. Rubber Stopper
3. Sliding Gate Opener Motor
4. Roller
5. Gear Rack
6. Ground Track
7. Guide Bracket
8. End Catcher
9. Photocell Sensor (optional)
10. Flashing Light (optional)

V. Working Principle and Main Structure

The dimension is shown in Fig. 2. The gate operator is composed of a single-phase motor and worm gear. The main shaft of the motor rotates the worm with the clutch engaged, the worm rotates the worm gear and output gear, which pushed racks attached to the sliding gates, thus moving the gate.

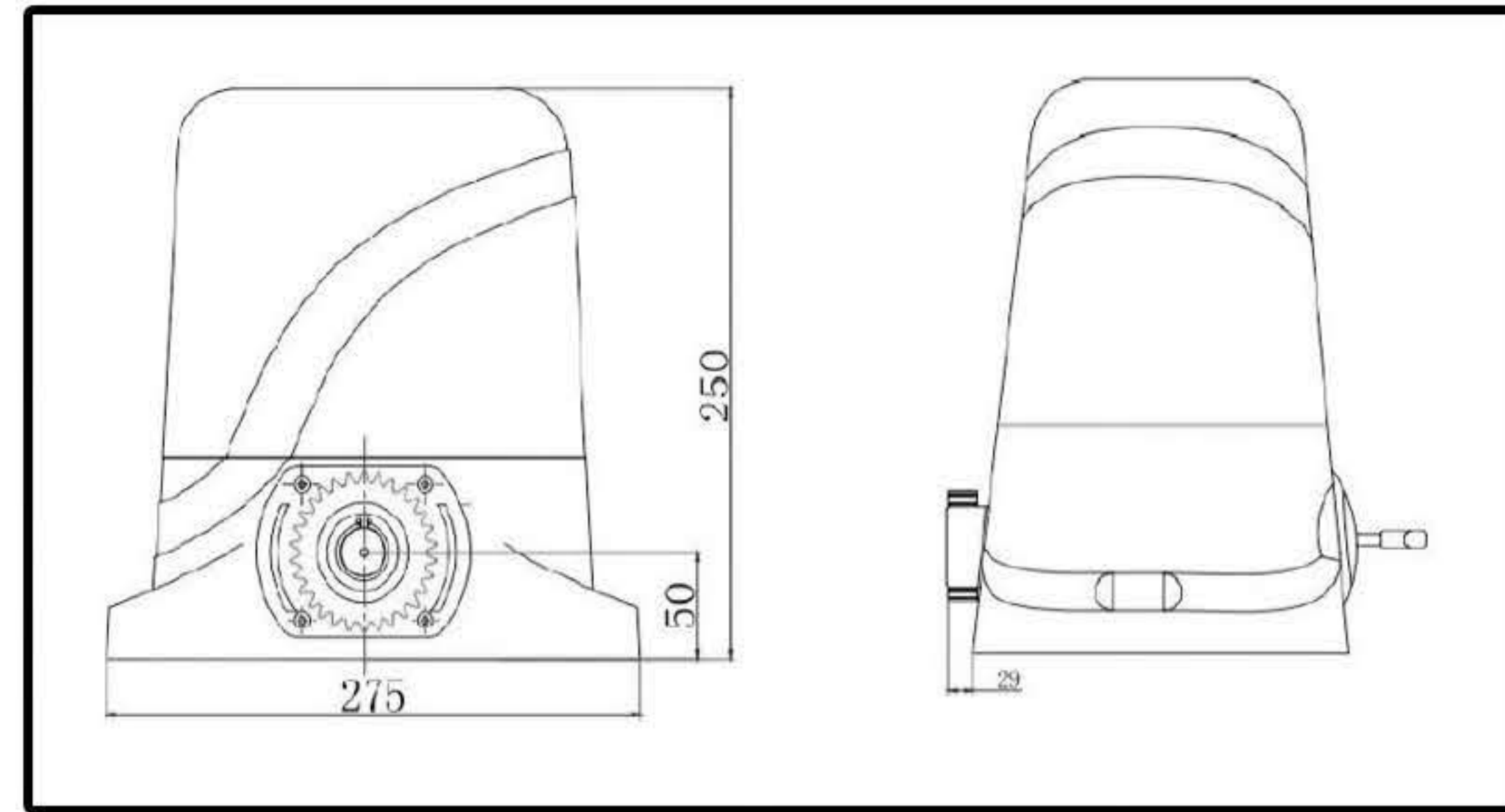


Figure 2

VI. Installation

6.1 Installation of Motor Base Plate

1. Depending on the installation size of the motor and mounting height of racks, after the installation position of the motor base plate, first let the bolt embedded or use expansion bolt make base plate fixed on watering good cement foundation. See Fig 3

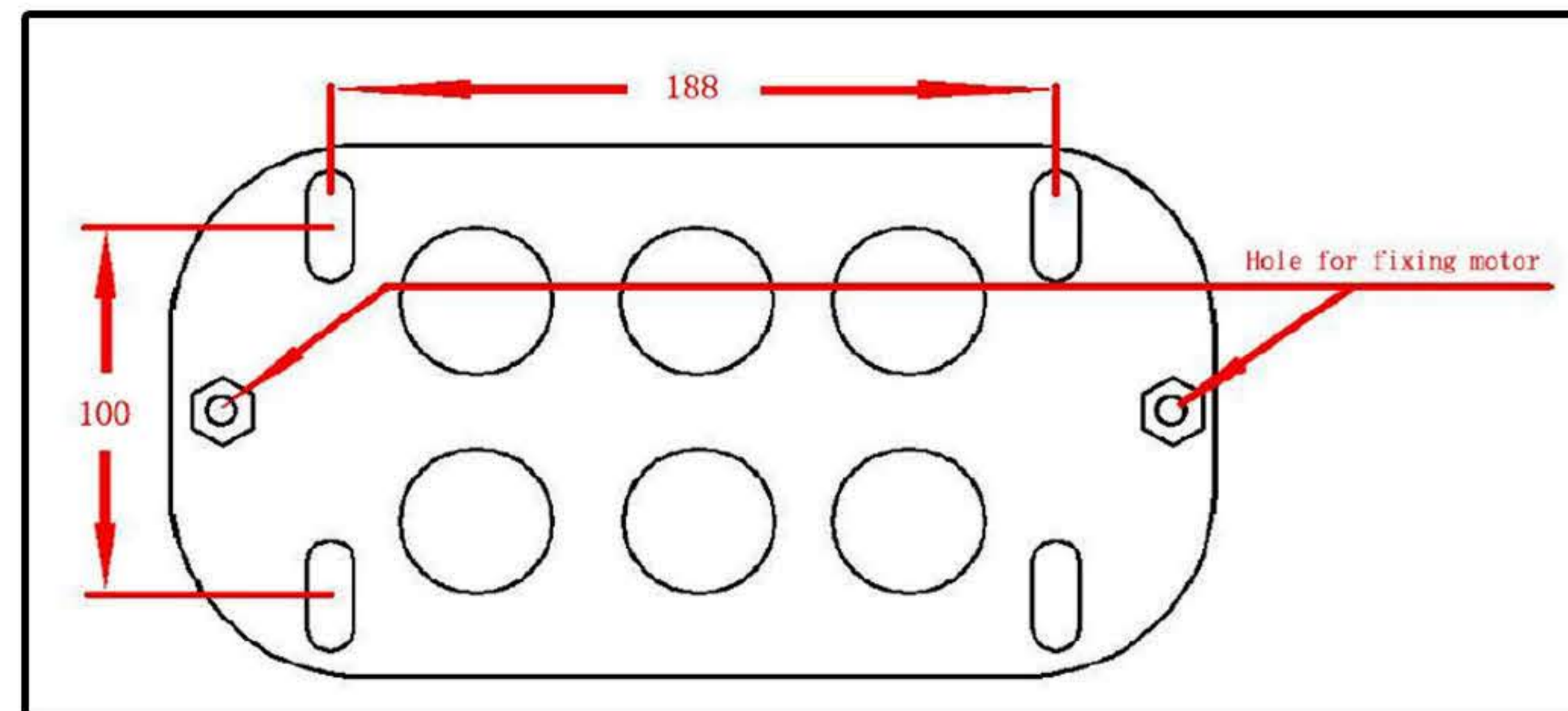


Figure 3

2. If the rack has been installed on the door, the motor can be fixed on the base plate. use an Allen key rotation to the clutch "off" position, the motor and the gear rack so as to better determine the position of the motor base plate, then remove the motor and fixed base plate.

6.2 Installation of Gate Opener

1. Let the sliding gate opener put on the base plate. use a random matching hexagon screw make the motor fixed on the base plate.
2. Unscrew the motor cover, and then remove the motor cover. according to the electrical wiring diagram connected the power cord. Adjust in a good position, then install cover and use screws

OPTIONAL ACCESSORIES FOR YOUR AUTOMATIC GATE

FLASHING LIGHTS

-  AL-03
FLASHING LIGHT
-  AL-04
FLASHING LIGHT W/ BUZZER
-  AL-06
FLASHING LIGHT W/ ANTENNA

RECEIVERS

-  JS-092
INDOOR RECEIVER
-  JS-084
OUTDOOR RECEIVER
-  JS-093
INDOOR EXTERNAL RECEIVER
-  SGC-01
WIFI GATE RECEIVER CONTROLLER

REMOTE CONTROLLERS

-  RC-12G
REMOTE CONTROL
-  SM-24LT
REMOTE CONTROL WITH CLIP
-  HPRC-10
LONG DISTANCE RC TRANSMITTER
-  RC-12BG
REMOTE CONTROL
-  RC-12C
REMOTE CONTROL CLIP HOLDER
-  ST-03
WIRELESS WALL MOUNTED TOUCH SWITCH

SAFETY AND SECURITY

-  WPC-01
WIRELESS WATERPROOF KEYPAD
-  HW-06
INFRARED PHOTOCCELL SENSOR

ALTECH

6. Running speed	high speed (without slow speed)	Two speeds (with slow stop)
7. Switch limit direction	Install motor at right side of gate	Install motor at left side of gate
8	No use now	

6.3 Installation of Racks

1. After the motor is installed, the racks teeth the down ,then put the gear on the motors. and final connected with screws and gate. push the door with hand. so can let door sliding it and can move it without any problem .after confirmed, fixed the racks.
2. In order to avoid gate run jitter or jam, rack and joint clearance must be corrected. As suggested, see Fig 4. With a small correction, after connecting right with racks 1 and racks 2 ,then fixed racks 1 and 2.

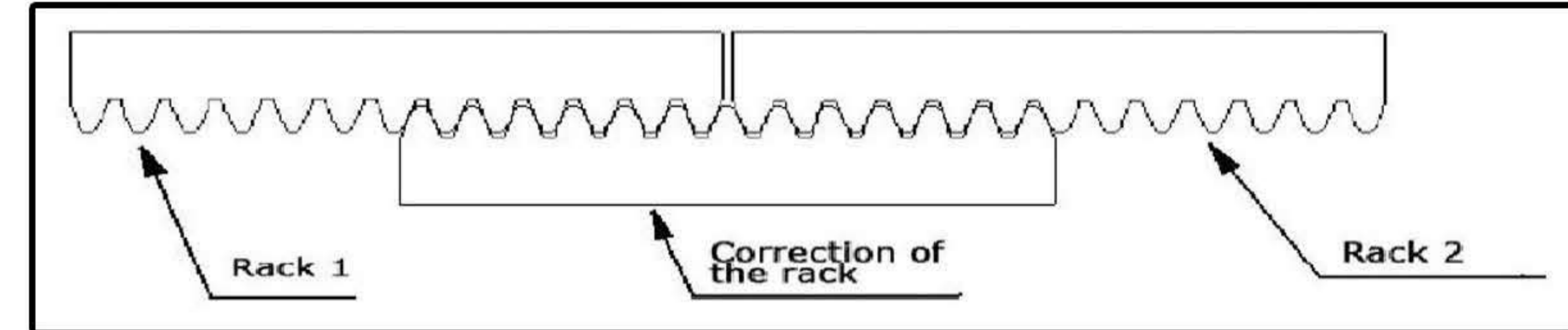


Figure 4

6.4 Installation of Limit Magnet

There are 2 limit magnet supplied. Note there is a left hand and a right hand magnet. The magnet should be installed one at either end of the rack. See Fig 5

To install the magnet in the correct position, open the clutch door and press the 'CLOSE' button on the remote, the motor will run but will not drive the gate. Close the gate manually and adjust the limit magnet to contact the toggle switch and switch the motor off at the desired gate position. To adjust the stop position to of the gate when it is open, press the 'OPEN' button, manually open the gate and adjust the other limit magnet to contact the toggle switch and switch the motor off.

When you are satisfied the limit magnet are in the correct positions, tighten the screws in the limit magnet to clamp them to the rack, close the clutch door and using the remote control check the gate opens and closes to the desired positions. Adjust the limit magnet if necessary.

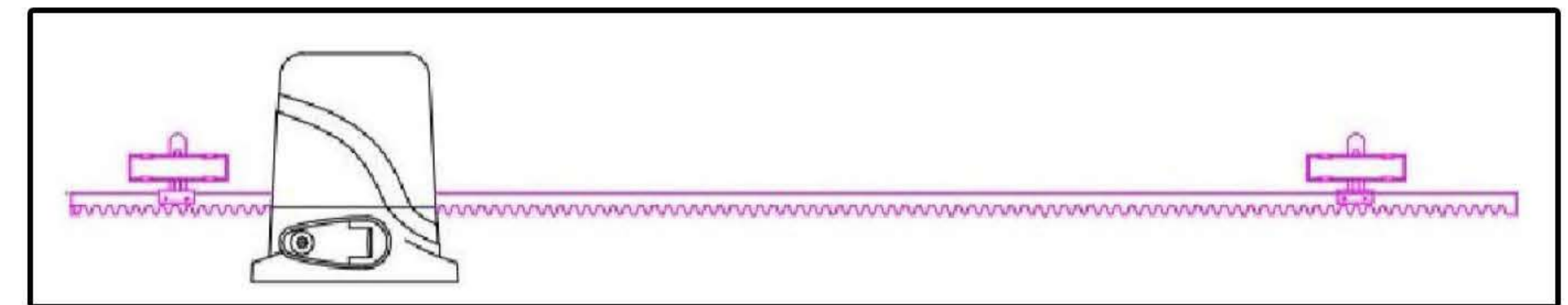


Figure 5

6.5 Function of clutch

When the clutch is opened to the open position, you can manually push the door; when closing the clutch, electric door can run on, off, when touching limiting the bezel will stop automatically.

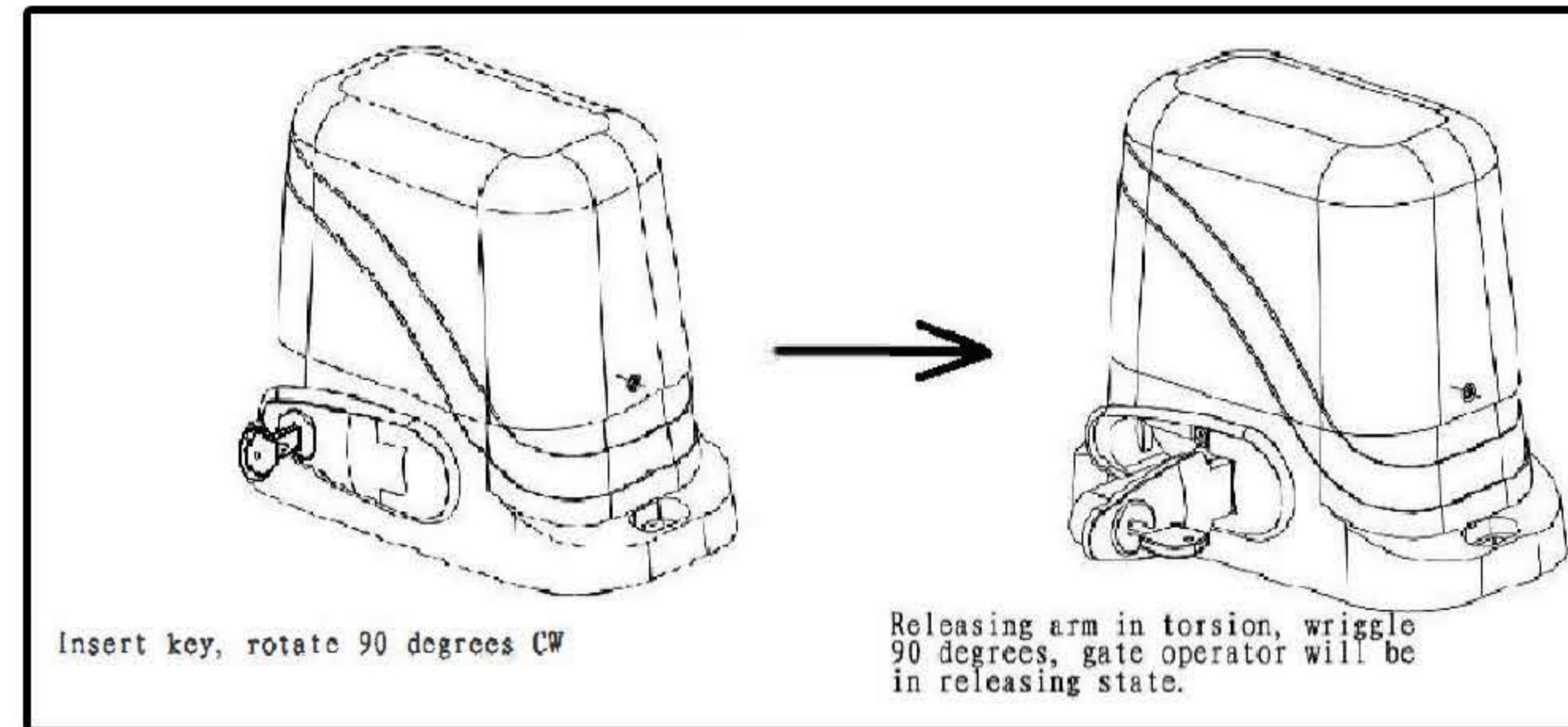
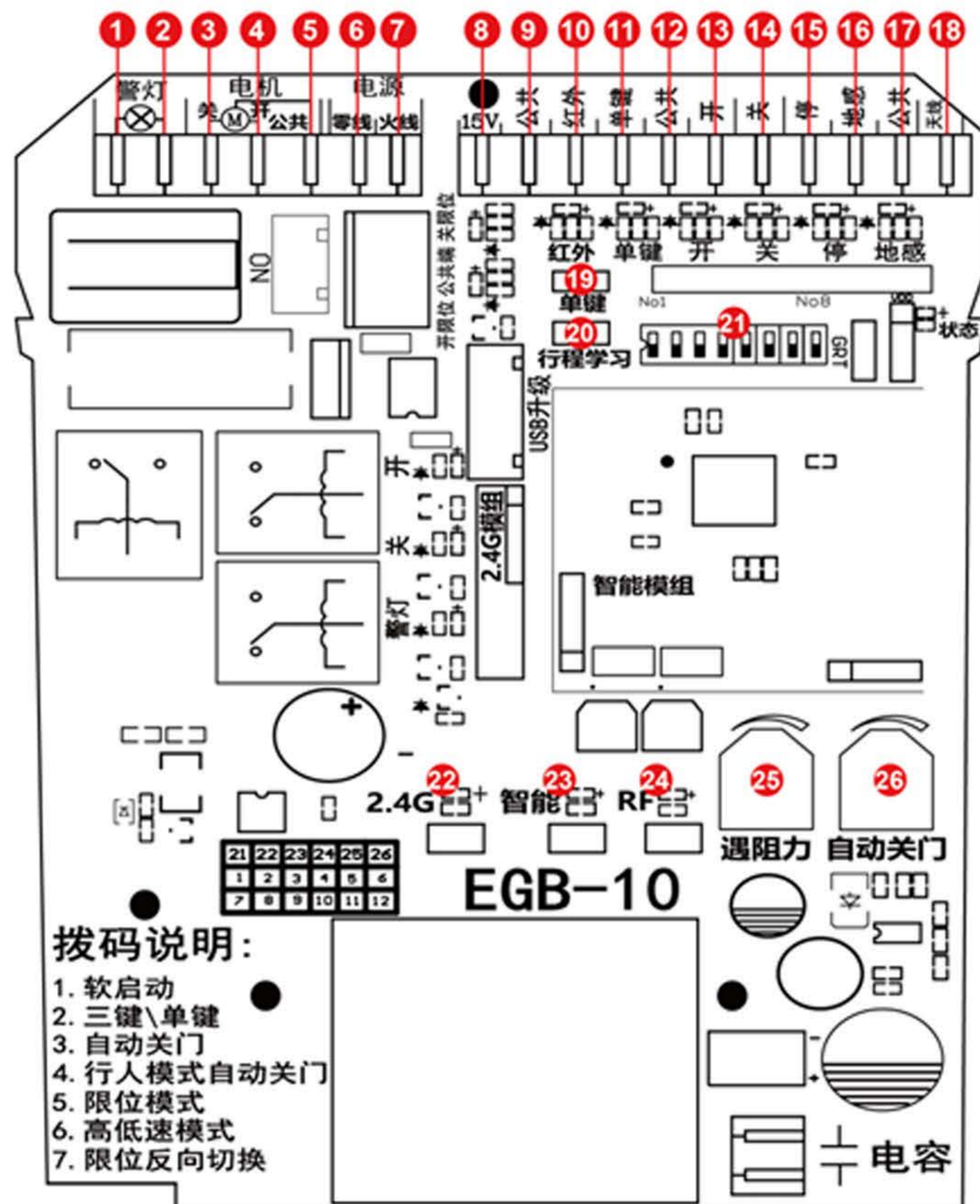


Figure 6

Control board details



	2.2.4G control: When the module receives a learned 2.4G remote control signal, it will trigger one time gate open
	3. Add Bluetooth device: (1) Open XHOUSE IOT - APP to enter the Add Device page and select Bluetooth device. (2) Select the correct Bluetooth device and click Add.
	4. Bluetooth control: There are three buttons on the app: Open, close, stop
	5. Initialize Bluetooth: Press and hold the 2.4G button for 5 seconds, and when the buzzer sounds twice, release the button to complete Bluetooth initialization.
	6. Factory reset: Press and hold the 2.4G button for 10 seconds, and release the button when the buzzer sounds for a long time. After recovery, the module will clear all 2.4G remote control information and initialize Bluetooth.

8-bit DIP switch

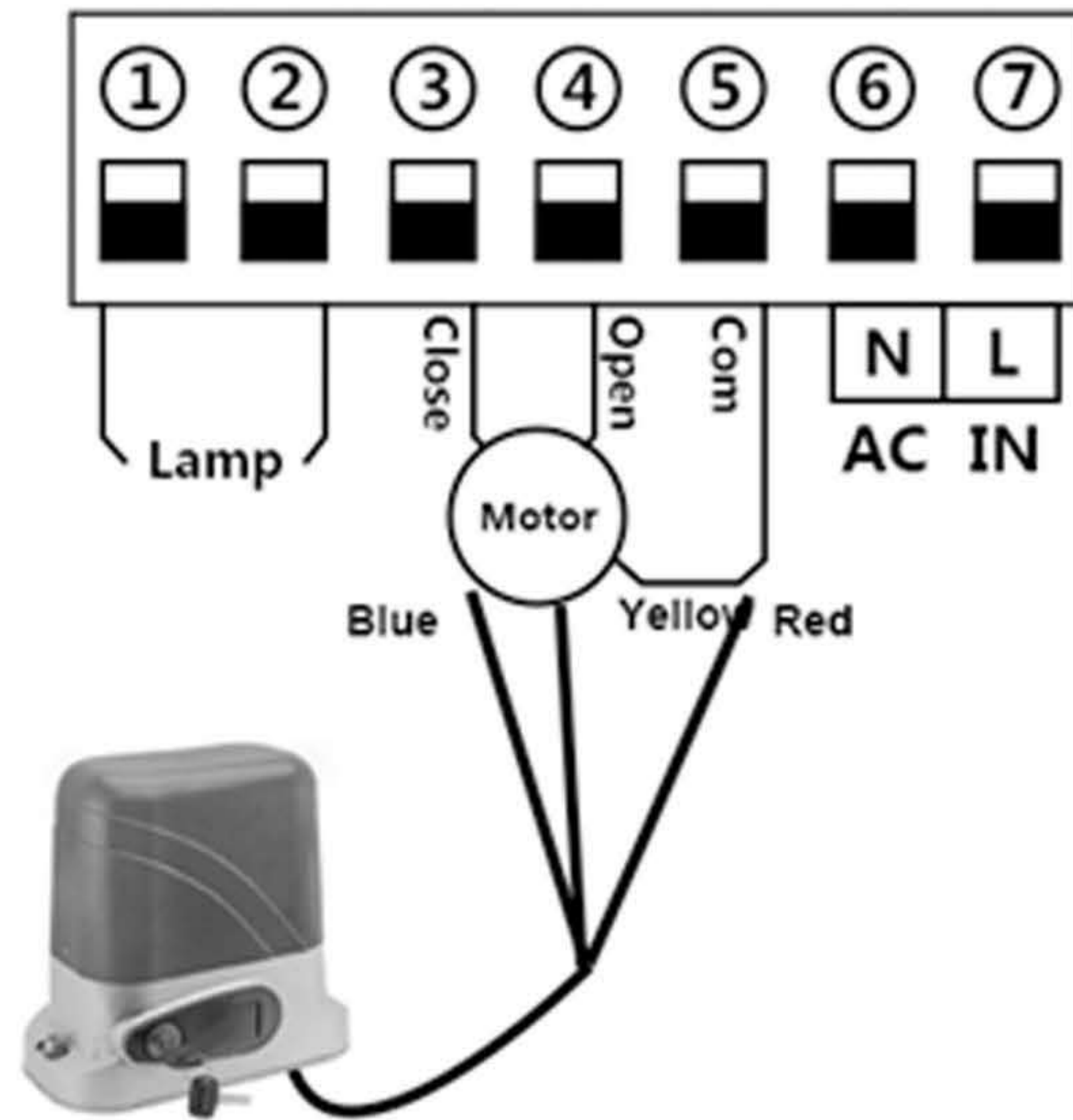


FUNCTION	OFF	ON
1. Soft start	Turn off soft start	Turn on soft start
2. Remote control mode	Three buttons control separately	Single button cyclically control
3. Auto close function	Auto close function disabled	Auto close function activated
4. Auto close function of PED	Auto close function OF PED disabled	Auto close function of PED activated
5. Limit switch mode	Normally closed mode	Normally open mode (factory setting)

Maximum motor working time protection	If motor works continuously more than 90s, motor will stop running for protection
Smart mode function	<p>The system supports four types of smart modules: Wi-Fi, 4G (LTE) , Bluetooth&2.4G. Bluetooth&2.4G as standard and the remaining two options available.</p> <p>Wi-Fi module:</p> <ol style="list-style-type: none"> 1. WIFI fast connection distribution network addition: Press and hold the Smart button for 5 seconds, the buzzer will sound a long beep, the indicator light will flash quickly, and the WiFi module will enter the WIFI fast connection distribution network mode. 2. AP distribution network addition: Press and hold the Smart button for 10 seconds, the buzzer will short beep twice, the indicator light will enter fast and slow flashing mode, and the WiFi module will enter AP distribution network mode. 3. Control: work with the XHOUSE IOT - APP, it can achieve functions such as open/close, timing, countdown, and monitor gate status <p>4G(LTE) module:</p> <ol style="list-style-type: none"> 1. Initialization: Press and hold the Smart button for 5 seconds, and the buzzer will sound once, indicating successful initialization 2. Control: work with the XHOUSE IOT - APP, it can achieve functions such as open/close, timing, countdown, and monitor gate status <p>Bluetooth&2.4G module (this module combines 2.4G and Bluetooth functions):</p> <ol style="list-style-type: none"> 1. Learn 2.4G remote control: short press the 2.4G button, the buzzer will sound once, and the indicator light on to enter the 2.4G transmitter learning mode. Press 2.4G remote control. If the indicator light flashes twice and remains on, it indicates successful learning. If the learning is not successful, it will automatically exit after 8 seconds.

- 1&2. Lamp: used for connecting with flashing light, output voltage is AC 220V.
- 3&4&5. Motor: used for connecting with sliding gate motor's wire.
- 6&7. AC IN: used for connecting with AC 220V power.
8. Vcc: DC 12V output used for connecting with external devices, max 200mA.
9. Com: used for connecting with COM terminal or GND.
10. IR: used for connecting with the photocell sensor.
11. Start: It is a single button control mode switch for controlling the gate by "open -stop-close - stop - open" cyclically.
12. Com: used for connecting with COM terminal or GND.
13. Open: used for connecting with any external devices that will operate to open the gate.
14. Close: used for connecting with any external devices that will operate to close the gate
15. Stop: used for connecting with any external devices that will operate to stop the gate.
16. Loop: used for connecting with loop detector etc device.
17. Com: used for connecting with COM terminal or GND.
18. ANT: antenna connection.
19. Start button: single button control mode switch for controlling the gate by "open -stop-close - stop - open" cyclically.
20. Auto button: for auto travel learning program to assign high speed and low speed
21. Dip switch: for make some control board setting
22. 2.4G button: for program APP(When with 2.4G + bluetooth mode)
23. Smart button: for program APP(When with wifi mode+ lte mode)
24. RF button: RF learning button
25. Over load adjust: for setting motor force sensitivity
26. Auto close: for setting auto close time

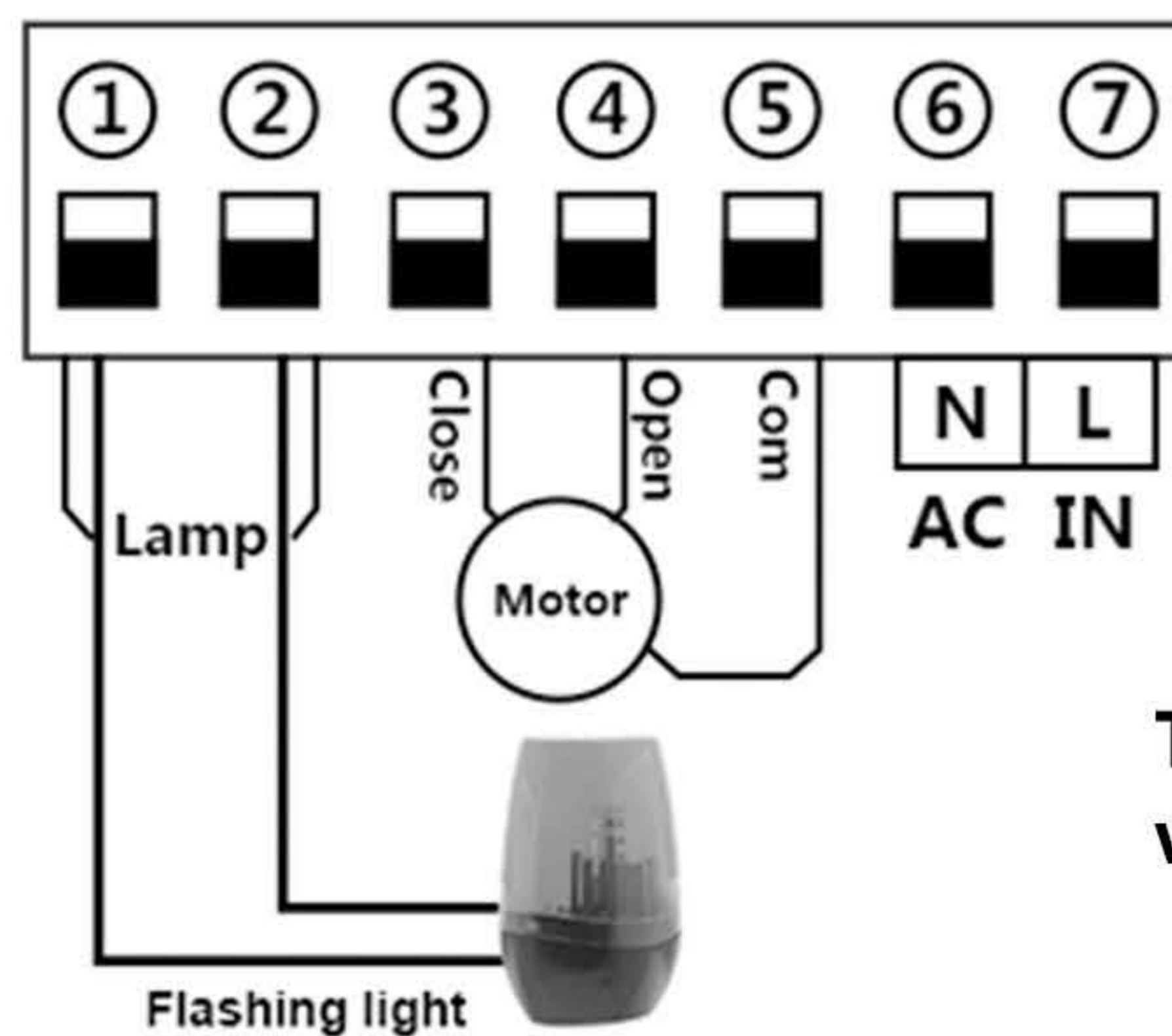
6.3 Control board wire diagram Connect with sliding gate opener :



Terminal ③, ④ determines the forward and backward direction of the motor
Terminal ⑤ is for connecting with **Com(GND)**

Please note : Our factory setting is install motor on the right of gate!
When you want to install motor at the left of gate ,please exchange 3 and 4 motor wire .

Connect with flash lamp



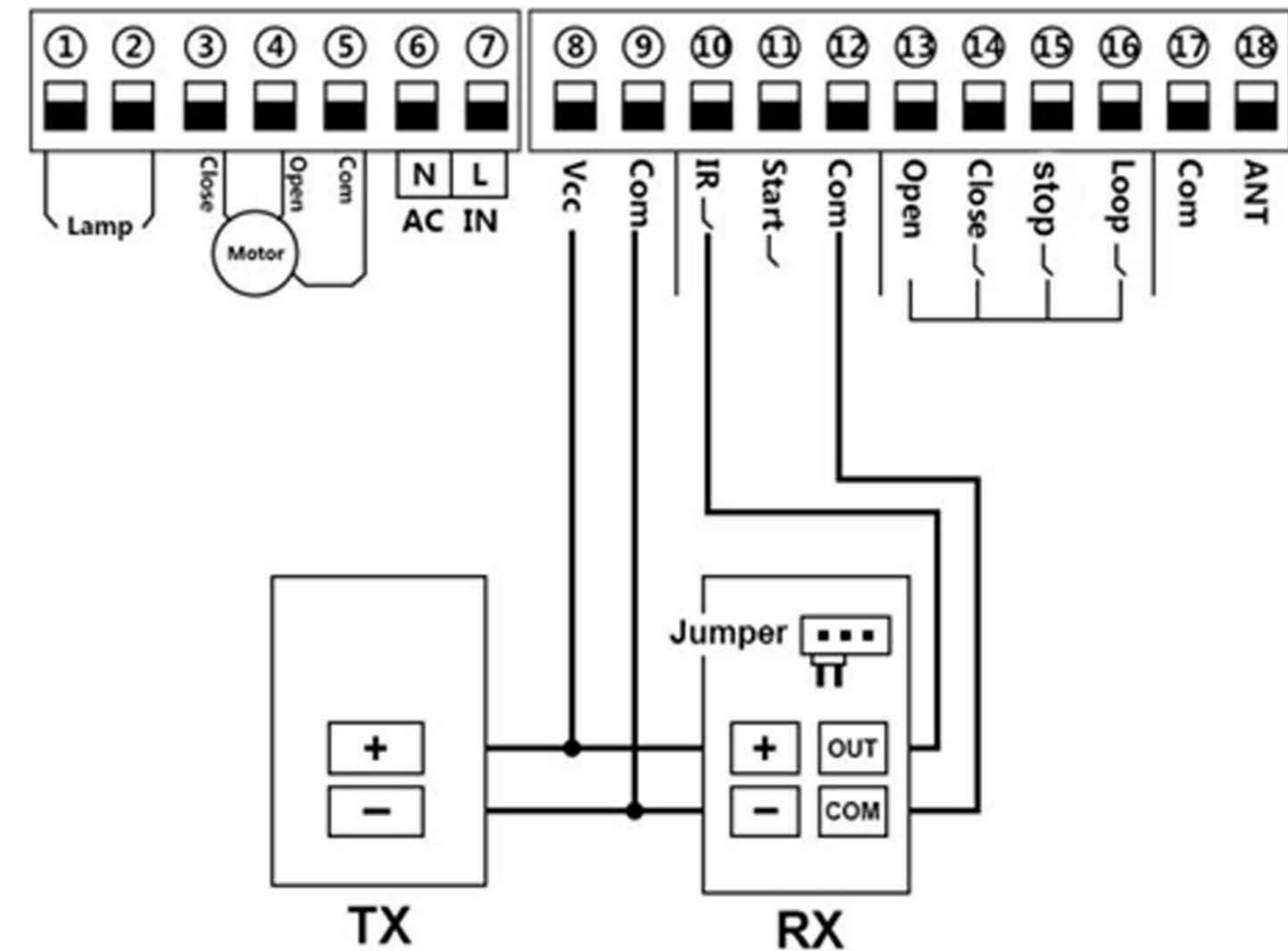
Terminal ① and ② is for connecting with the flash lamp .

	<p>the auto close function of PED. then the motor will enter auto close countdown and close gate after time end.</p> <p>While user activate the PED mode, the gate open time and auto close count down time can set through Dip switch dial 4</p> <p>OFF--Auto close function of PED disabled (Factory setting)</p> <p>ON-- Auto close function of PED activated</p> <p>Noted: : Only when motor is full close (stop at open limit), pedestrian mode can be triggered</p>
Loop function	<p>When the gate is opened fully or opening, if user trigger the loop device, the motor will automatic close after loop signal disappear 3s.</p> <p>When the gate is closing, if user trigger the loop device, the motor will reopen the gate at once. And after the loop signal disappear 3s, then the gate starts to close.</p>
Soft start function	<p>Soft start can be set though dip switch dial 1</p> <p>OFF--turn off soft start function (Factory setting)</p> <p>ON-- turn of soft start function</p>
Running speed	<p>Running speed can be set through dip switch dial 6</p> <p>OFF-- High speed (without slow <u>speed</u>)(Factory setting)</p> <p>ON -- Two speeds (with slow stop)</p>
Auto travel learning	<p>Auto travel learning use for assign high speed and low speed</p> <p>Dial 6 must set ON</p> <p>Motor should be at close position (the red light off)</p> <p>Long press Auto button 3seconds. Then the motor will auto start running a complete cycle of open/close to memorize the working time, which will be used to allocate high and low speeds for later work</p> <p>Noted: When motor at auto travel learning, remote control can't use for motor. And any interruption happen during the auto travel learning process will cause the failure.</p>

Control board function description

	Description
Power on	After the control board powered on, the status indicator LED lit up.
Open/close gate indicator LED	While the gate opener work normally, opening the gate will turn on blue, close the gate will turn on red.
Lamp indicator LED	While the lamp is working, the LED will light on, and the lamp port will output AC power.
Resistance functions	The resistance function can achieve an anti-smashing car. While the gate motor is opening, it meets obstruction and will stop. If the gate motor is closing and meets the obstruction, the gate will be reopened. Motor sensitivity can be set by over load
Limit function	While the gate moves to the open or close position, the motor will auto-stop running. The limit mode can be set by Dip switch Dial 5, has NC and NO mode for optional. OFF:NC mode ON:NO mode
Infrared resistance function	While the gate is closing, if the infrared is triggered, the gate will rebound to open, till to open fully. If board set auto close, after obstacle leave <u>gate</u> , it will auto close .
Auto close	The auto-closing function is only activated after the open limit switch is enabled. When auto-close start to countdown, the STATE LED will flash. Auto close time can be set through by Dip switch dial 3 OFF--Auto close function disabled (Factory setting) ON-- Auto close function activated, auto close time can be set by Auto close potentiometer (5-120seconds optional)
Pedestrian mode PED	The remote 4 th button can trigger the PED mode. When user trigger the PED mode, the gate will be open 6 seconds and auto stop; At the moment, if user also activate

Connect with photocell sensor

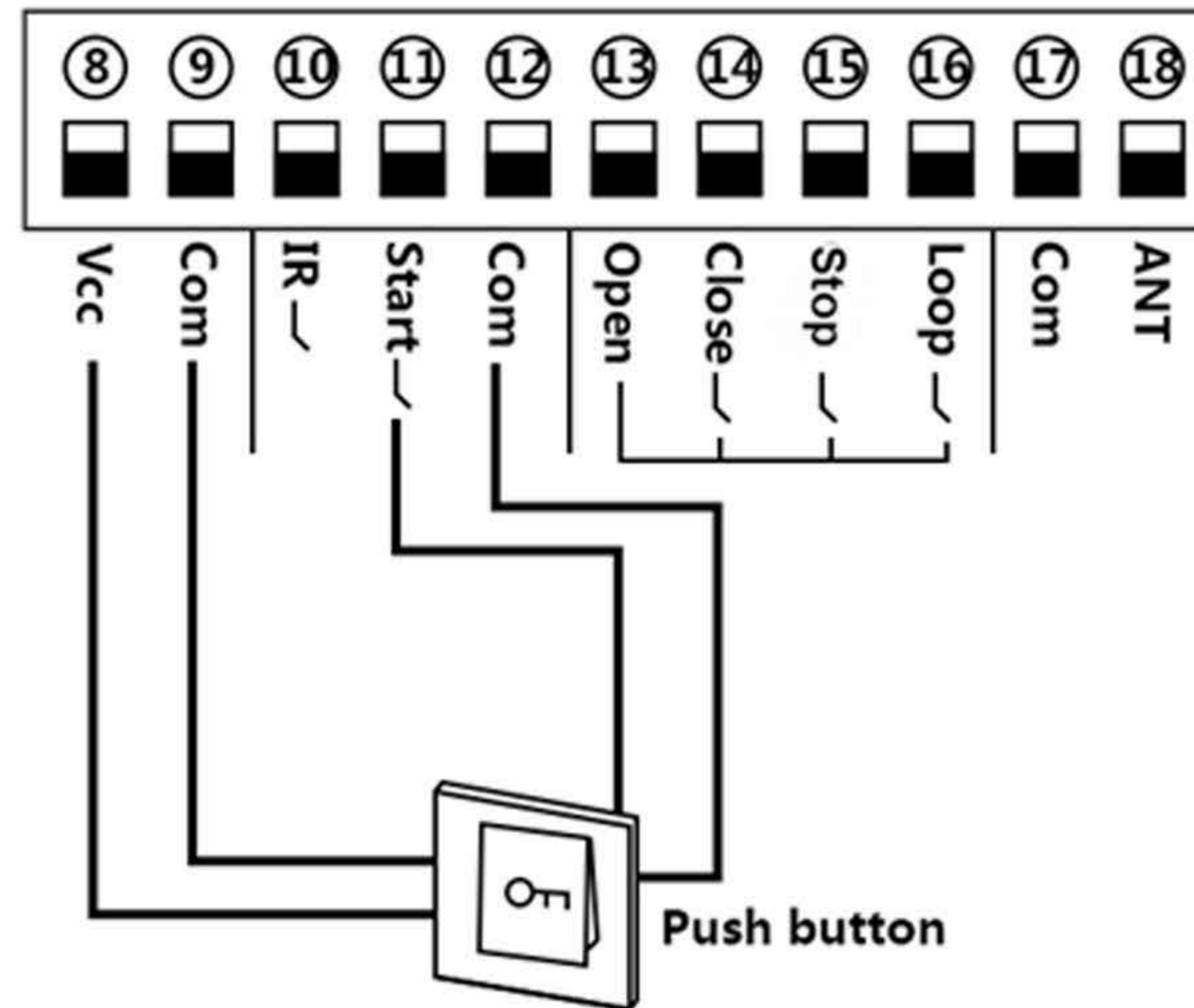


Connect terminal ⑫ with the “COM “ of photocell RX.
 Connect terminal ⑩ with the “OUT “ of photocell RX.
 Connect terminal ⑧ with the “+ “ of photocell RX and TX.
 Connect terminal ⑨ with the “- “ of photocell RX and TX.

Connect with push button

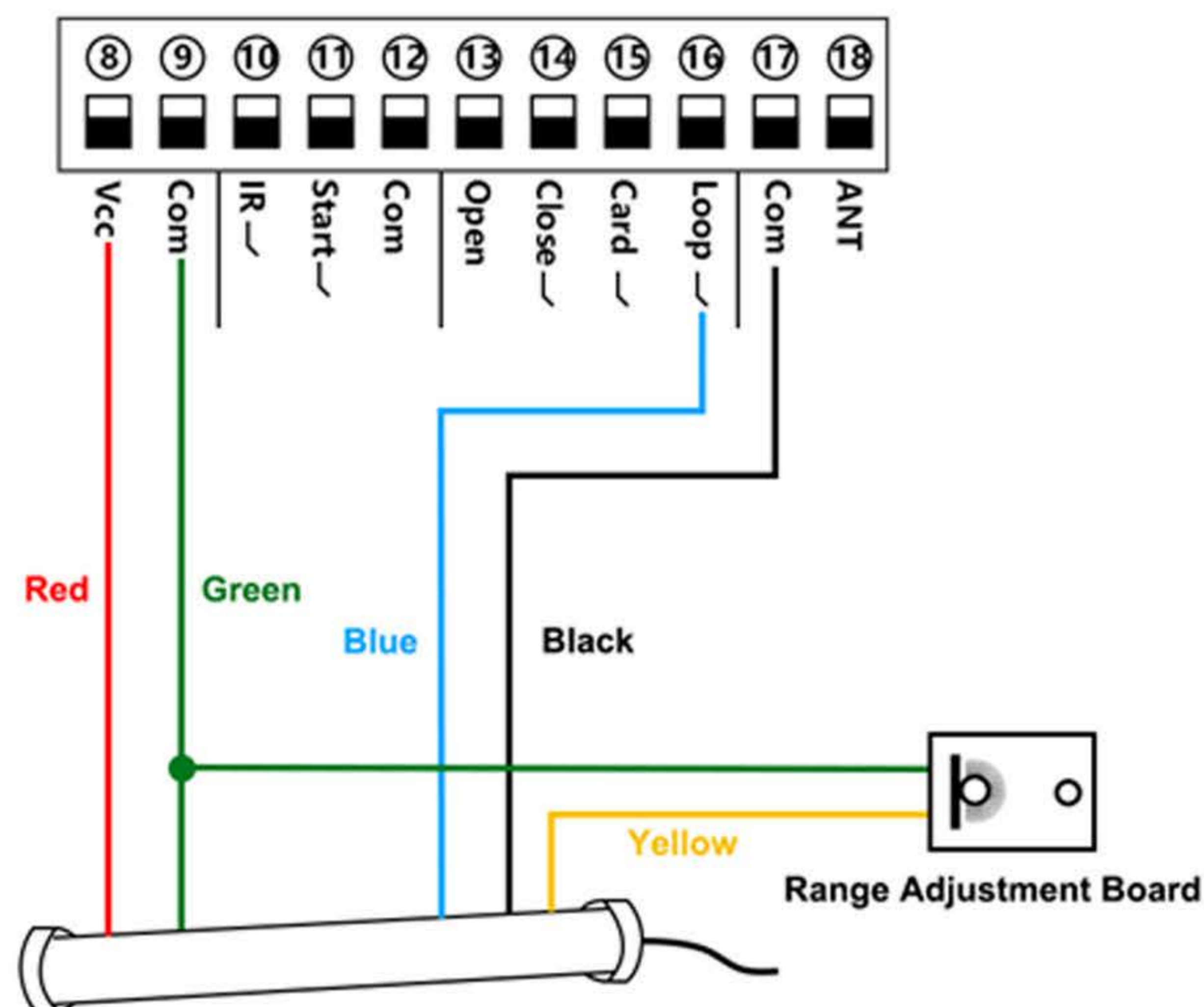
Start terminal is used for connecting with some external devices , such push button, wired keypad, receiver etc.

Control gate by “ open-stop-close-stop-open ” mode



Terminal ⑧ and ⑨ is for supplying the power to the push button.
Terminal ⑪ and ⑫ is for connecting with the push button.

Connect with Loop detector



Loop detector wire information:

Definition of the 5-core cable:

RED →Input Voltage (+)

GREEN →Ground/Common (-)

BLACK →Relay's Common

BLUE →Relay's Normally Open

YELLOW →Range adjustment potentiometer (POT)

Red wire: connect with terminal ⑧.

Black wire: connect with terminal ⑫.

Green wire: connect with terminal ⑨ and range adjustment board.

Blue wire: connect with terminal ⑫.

Yellow wire: connect with range adjustment potentiometer.

How to program or erase the remote

- Program the remote: Click and release RF learn button, the LED indicator will light on. Then within 5 seconds click any button on the remote control, the buzzer will beep, which means the code learning is successful. After the user presses the learn button, within 8 seconds, if the controller doesn't receive the signal from the remote, the controller's LED indicator will turn out and exit the code learning statute.

Max capacity: 120pcs remote. If the digital LED show “- -” with a buzzer short beep 5 times, then means can not learn more remotes.

- Erase the remote: Press and hold the learning button for 5 seconds, with a buzzer short beep 5 times, Now all remotes can not control the gate.

How to use the remote to operate your gate opener

Each remote has 4 buttons, there are two remote control modes for optional. The factory setting is a three-button control mode. If you want to change to use single button control model, please set dip switch Dial 2 to ON

Dial 2--OFF: Three-button control mode: remote 1st button to control gate open, 2nd button to control gate close, 3rd button to control gate stop. 4th button to control gate PED mode.

Dial 2--ON: Single button control mode: the remote button 1st is used to control the gate as “open-stop-close-stop”, 4th button is used to control the PED mode.