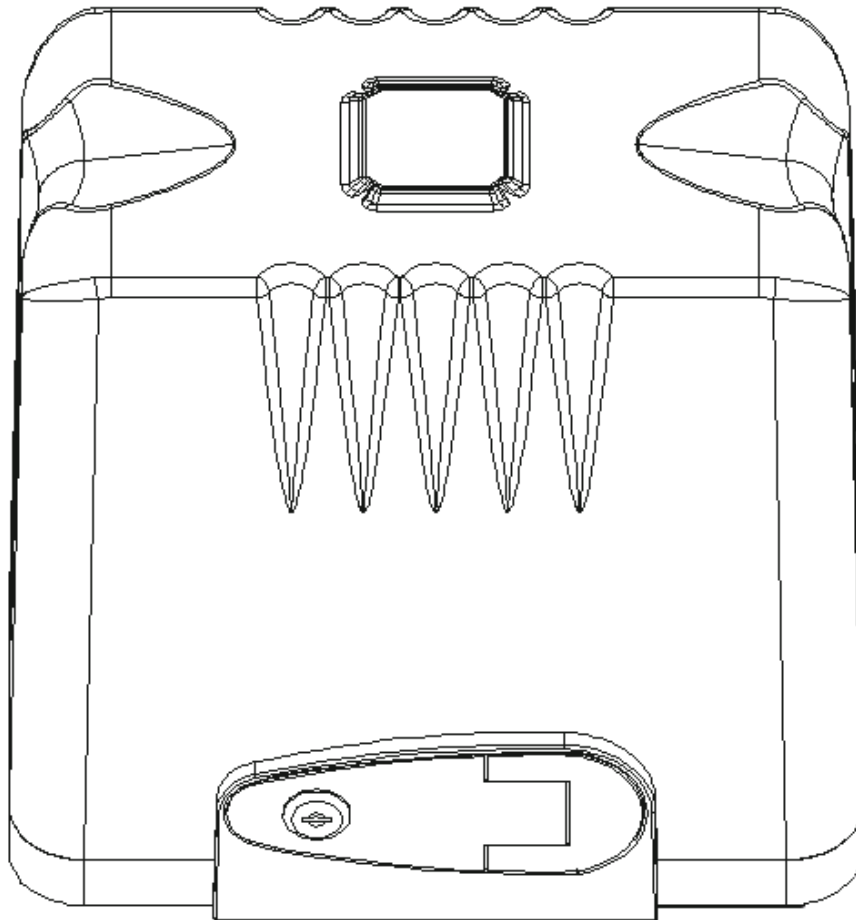


# Sliding Gate Opener User's Manual



- Thank you for purchasing the sliding gate opener.
- Please read and follow all warnings, precautions and instructions before installation and using.
- Periodic checks of the opener are required to ensure safe operation.
- Please keep the manual for future reference.

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# 1. General Safety

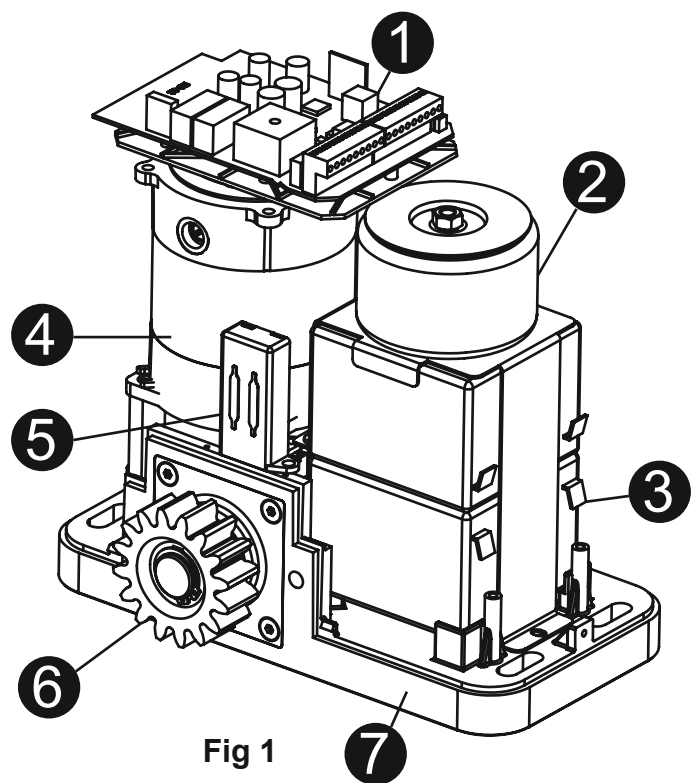
**WARNING:** An incorrect installation or improper use of the product can cause damage to persons, animals or properties, should always request the assistance of qualified personnel.

- This product was exclusively designed and manufactured for the use specified in the present documentation. Any other use not specified in this documentation could damage the product and be dangerous.
- The factory declines all responsibility for any consequences resulting from improper use of the product, or use which is different from that expected and specified in the present documentation.
- Do not install the product in explosive atmosphere or where there is any danger of flooding.
- To AVOID damaging gas, power, or other underground utility lines, contact underground utility locating companies BEFORE digging.
- Disconnect the electrical power supply before carrying out any work on the installation or maintenance.
- Please ensure that the using power voltage matches with the supply voltage of gate opener (AC220V $\pm$ 10% 50Hz ).
- To ensure safety, before installing the motor, all potential hazards and exposed pinch points of the gate must be eliminated or guarded prior, and make sure Gate End Stop and a Gate Stopper mounted at each end of the rail to prevent the gate travelling off the track.
- Never mount any device that operates the gate motor where the user can reach over, under, around or through the gate to operate the controls. These must be placed at least 1.8m from any moving part of the moving gate.
- Keep remote control and other control devices out of children's reach, in order to avoid unintentional activation.
- If required, install infrared photocells ( sold separately) to detect obstructions and prevent injury or damage.
- Instruct all users about the control systems provided and the manual opening operation in case of emergency.
- Anything which is not expressly provided for in these instructions is not allowed and will void warranty.
- Only use original parts for any maintenance or repair operation. We decline all responsibility with respect to the automation safety and correct operation when other supplier's components are used.

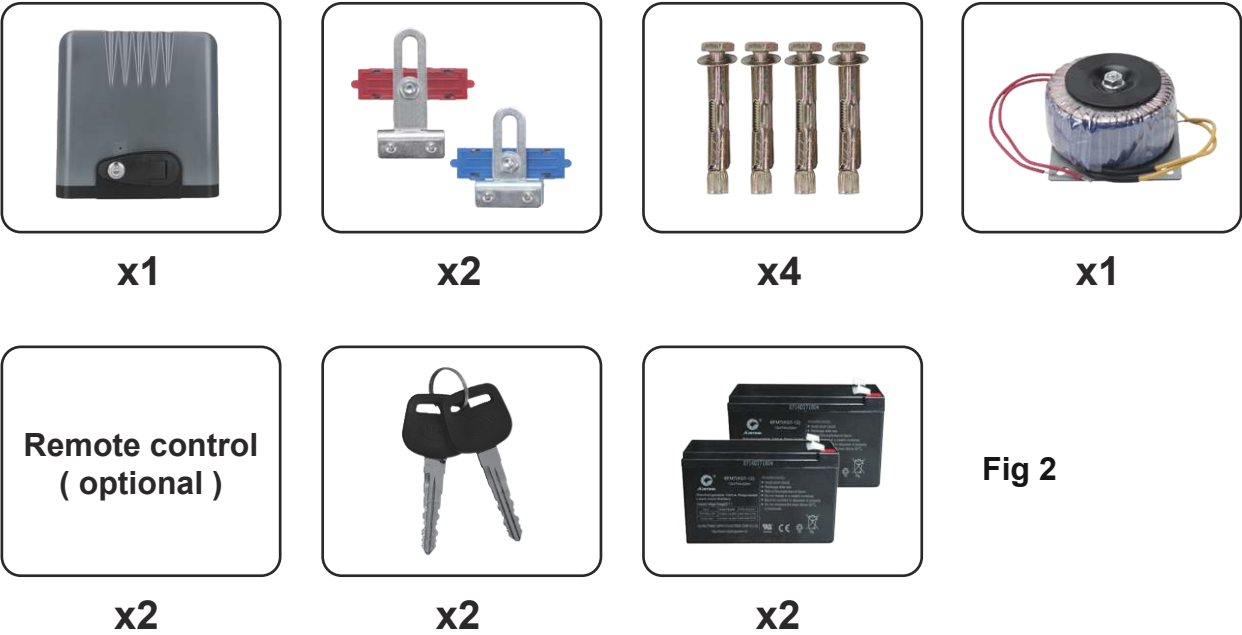
# 2. Product Description

The PYM-B024 motor was designed as a device for moving sliding gates. The way of the gear works prevents the gate from moving when the motor is turned off, so there is no need to use an electric lock. Avoid a power failure, user can use the override key to unlock the clutch to manual open or close the gate.

2.1 Part List



- |                     |                   |                       |
|---------------------|-------------------|-----------------------|
| ① Control Board     | ④ Motor           | ⑥ Output Gear         |
| ② Transformer       | ⑤ Magnetic Sensor | ⑦ Aluminum alloy Base |
| ③ Lead-acid Battery |                   |                       |



Sliding Gate Motor x 1	Magnet Limit Switch x 2	Expansion Bolt x 4
Transformer x 1	Remote Control x 2	Override Key x 2
Acid Battery 12V 5AH x 2		

## 2.2 Optional Accessories Parts List (Available at Giant Store)

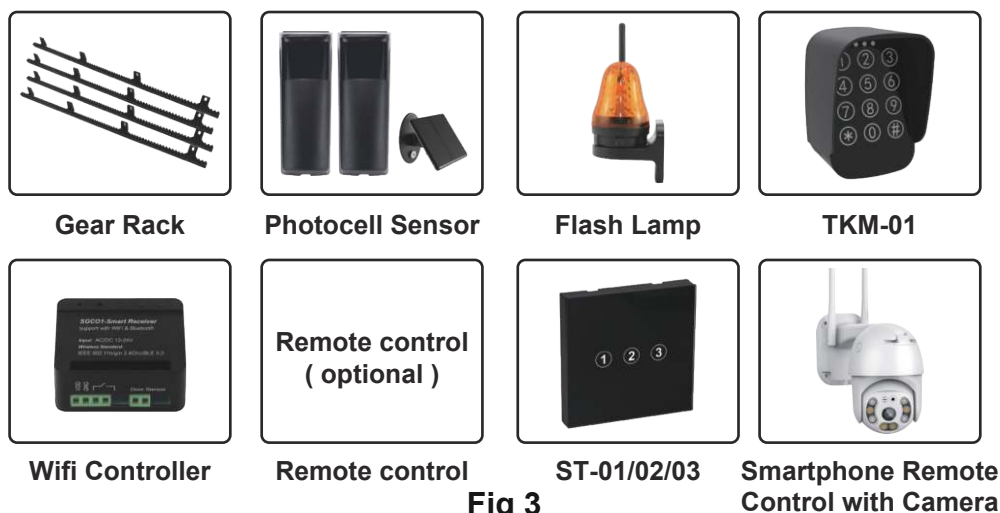


Fig 3

## 2.3 Technical Specifications

Specifications	
Power supply	AC 110V/220V±10% 50Hz/60Hz
Motor power	DC 24V
Maximum load	1000KG
Rated power	130W
Gate moving speed	26 cm/second
Output gear module	M=4
Output gear number	Z=16
Remote control distance	≤30 meters
Working humidity	≤85%
Noise	≤55dB
Protection Class	IP44
Working temperature of motor	-25℃ ~ +50℃
Packing	In a standard carton

Fig 4

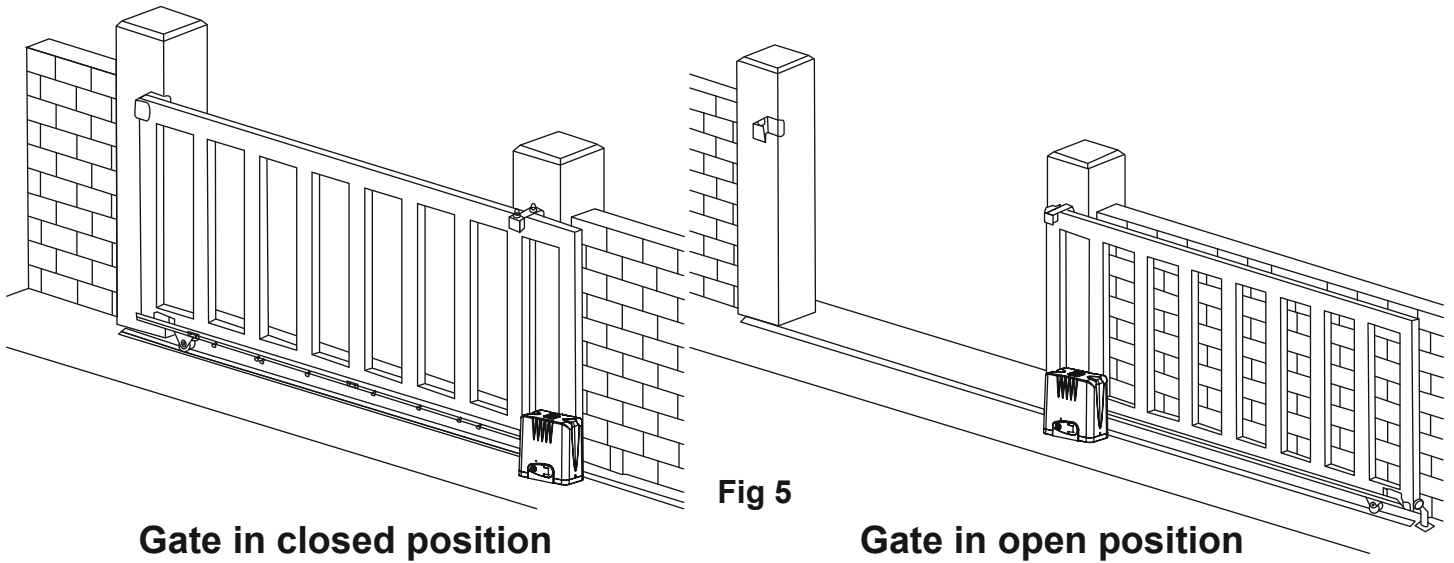
## Features of Sliding Gate Opener:

- Soft start and slow stop.
- Automatic closing timer adjustable from 0 to 99 seconds.
- Thermal protection against engine overheating.
- Anti-pinch protection in case of meeting an obstacle.
- Signaling the current operating status of the machine on the digital display menu.
- Ability to support up to 128pcs remote controls.
- Possibility to assign one of 6 functions to 4 buttons on the remote control.
- Possibility to connect external buttons and control devices (e.g.push button, wifi controller, radioreceiver etc).
- Possibility of partial opening of the gate, without the need to perform the full scope of work.
- Manual release of the gate in the event of a lack of 110V or 220V mains voltage.
- Add smart module for WiFi, Bluetooth & 2.4G Bluetooth control (optional).

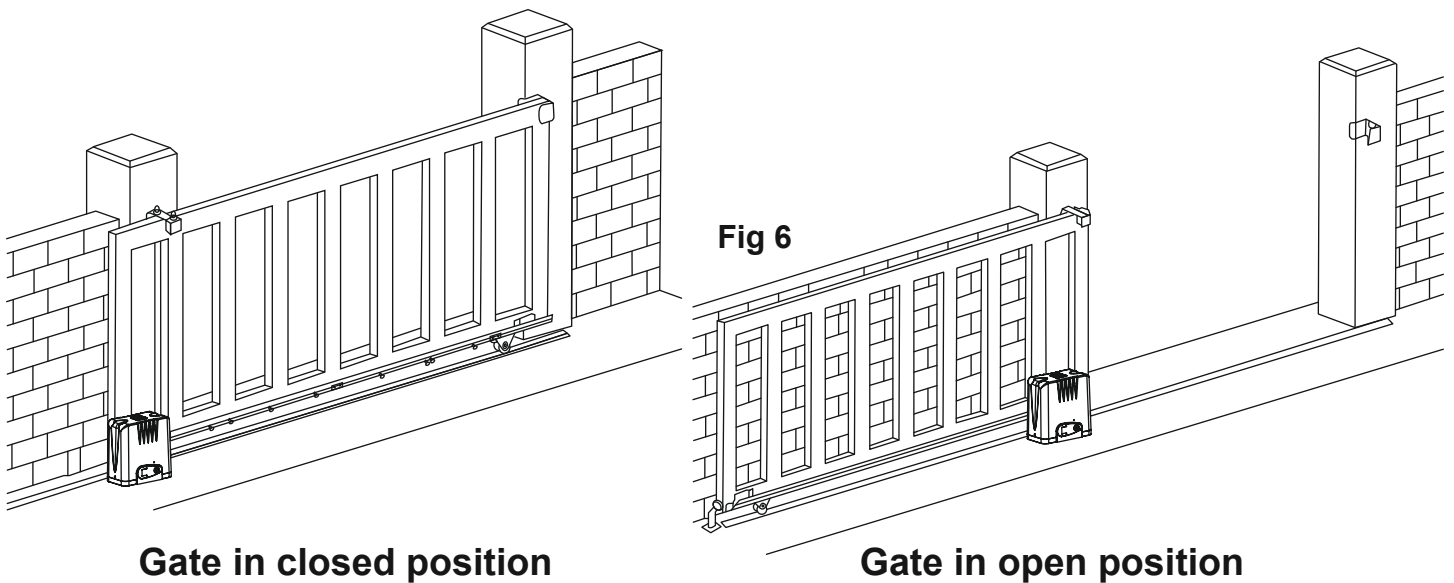
### 3.Installation Overview

#### 3.1 Gate Opening Default Setting Information

The gate motor will open the gate to the right-hand side as its default setting (Refer to fig 5)



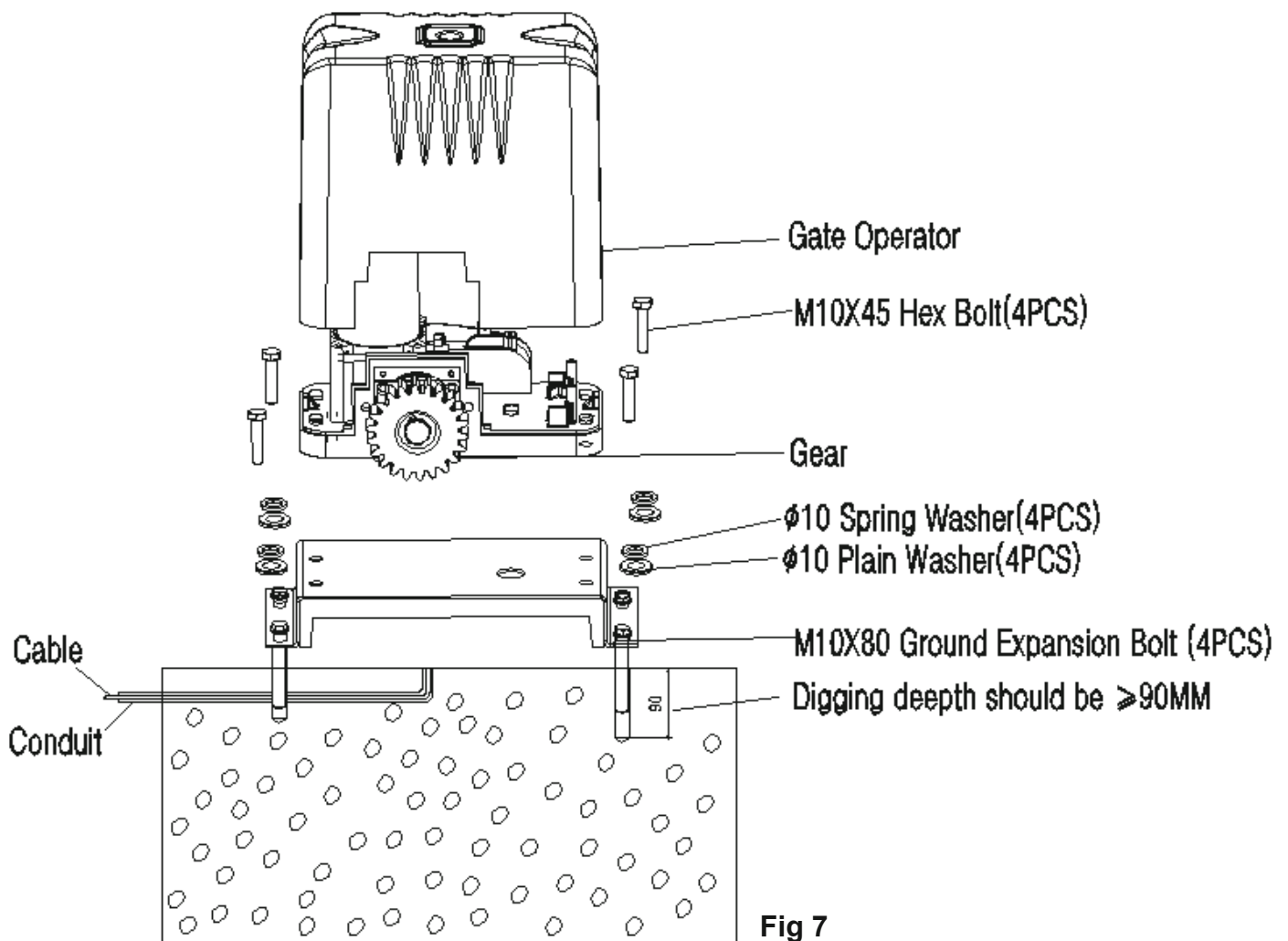
If your gate needs to open from the other direction (to the left, refer to Fig 6 ) your motor needs to be mounted on the left-hand side as shown, you will need to switch 2 wires of motor (Fig 15) at random. And swap over two magnets positions (Fig 10).



**Any works done to the motor must be completed while the power is off, and the motor is unplugged.**

## 3.2 Installation The Motor

1. The limit default setting is for the gate in a close position. Before installation, please make sure the gate is closed.
2. Prepare one or more conduits for the electrical cables. Cable conduits have to pass through the hole in the base plate.
3. Pour concrete and before it starts to harden, check that it is parallel to the gate leaf and perfectly level.
4. The four anchor bolts must be set into the concrete when it is poured, make sure the position of anchor bolts are placed according to the position of mounting holes on the base plate before the concrete becomes hardened.
5. Mount the base plate to the concrete pad.
6. Place the opener onto the base plate. Check that it is perfectly parallel to the gate, and then screw the four bolts and washers supplied. It's only a temporary installation. Further adjustment will be required when installing the rack.



### 3.3 Manual Release The Clutch

The opener comes with an easy operating manual release. It brings the easiest manual release operation just in case of any emergency.

- ◆ Insert the manual release key supplied in package to release lock, then turning the key clockwise 90 degrees.
- ◆ Pull out the release lock part to be more than 90 degrees, now the gear and shaft are disengaged Refer to the figures below(Fig 10)



Open ↻



Release ↻

Fig 8

### 3.4 Installation of The Gear Rack

- 1.Start with gate in closed position
- 2.Gear rack length depend on gate length, each gear rack is 1 metre. Put one end of rack on the output gear of motor as a temporary support.Make the rack horizontal and mark the rack mounting holes (three holes) on the gate .(Fig 11)
- 3.Weld the rack nut on the gate as mark and connect the rack to the gate using the bolt provided. Before weld, please keep 1.0mm space between the rack and the gear to avoid the weight of the gate effect on the opener.

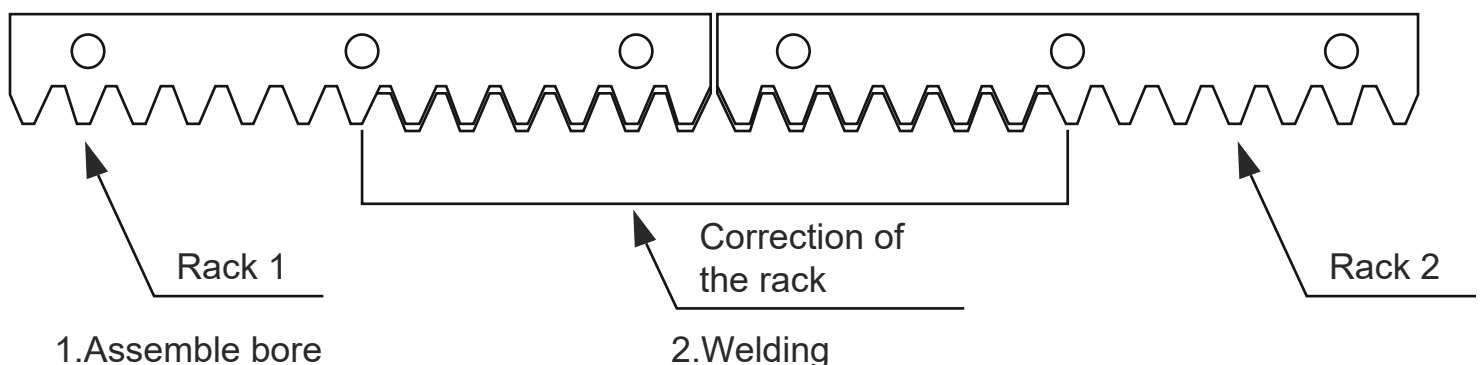


Fig 9



### 3.5 Installation of Magnet Limit Switch

- 1.To ensure motor auto stop correctly, it is recommended to install limit magnet at both ends of rails to prevent gate run out of rails. The rails must be installed horizontally.
- 2.Two limit magnets supplied.
- 3.Release the clutch with manual key and push the sliding gate manually to predetermine position, fix the magnet to gear rack and then tighten the clutch with key. Power on control board ,running the motor with remote control,adjust magnet to proper position until the gate can auto stop at its correct position when full open or full close .

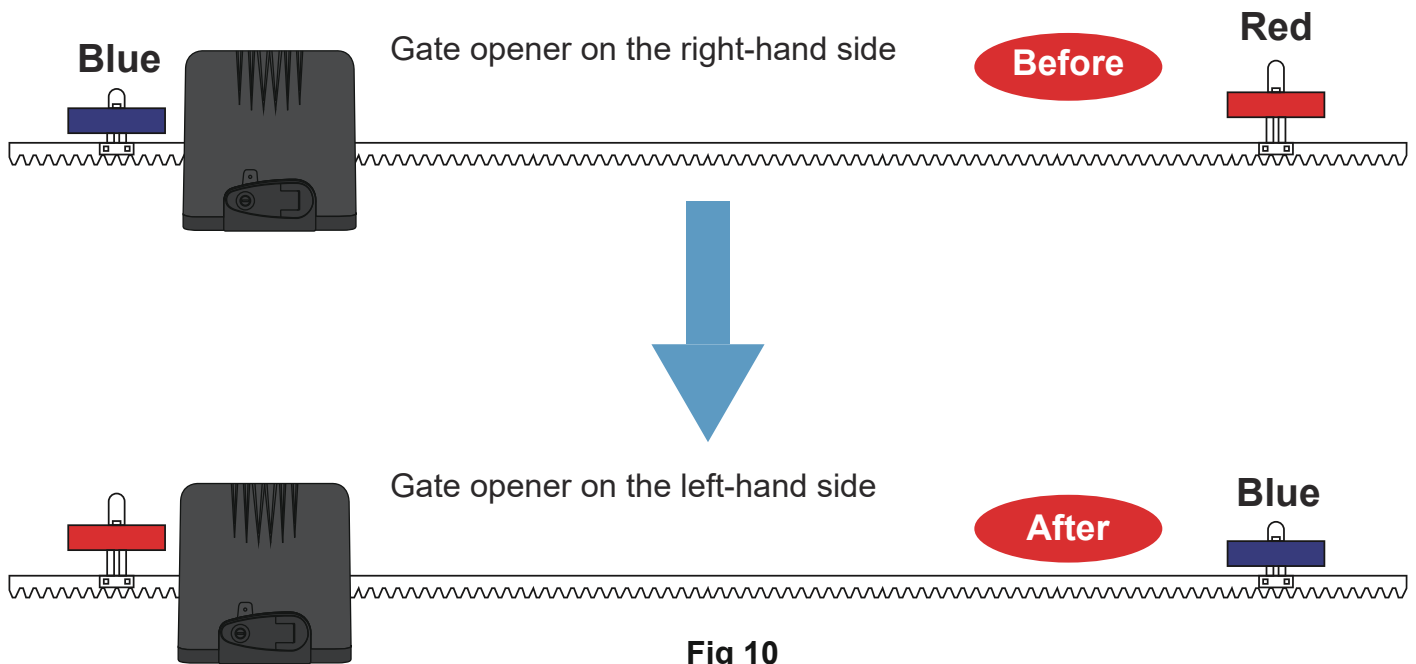


Fig 10

#### Important:

- 1.Check that the gear rack teeth engages with the gear teeth throughout the full distance. If not, adjust the position of the opener and/or place a few shims between the rack and gate.
- 2.Manually slide the gate leaf to ensure the rack is properly installed on the gear of the gate opener.
- 3.The gear rack length must be longer than the actual travel distance of the gate. Cut away any excess gear rack not needed.

## 4.Control Board

### 4.1 Technical Parameters

1. Board power supply: DC 24-28V or AC 19.6-24V
2. Battery power supply: DC 24V
3. Remote control: Giant customized rolling code, max support 128pcs.

### 4.2 Connection of The Power Supply

**! WARNING: NEVER** connect the gate opener to the power outlet before all the installations have been done.

- 1.If batteries are chosen as the power source, the batteries should be waterproof type, or be placed in waterproof circumstances.
2. 2PCS 12VDC batteries can be connected in series to function as 24VDC.  
The following diagram shows how to connect 2 PCS batteries in series.
- 3.Please note that the wire connection of the power supply system is very important.  
An incorrect wire connection will damage the control board.

**Power Mode 1. By AC electricity and transformer, only use AC transformer to supply the power**

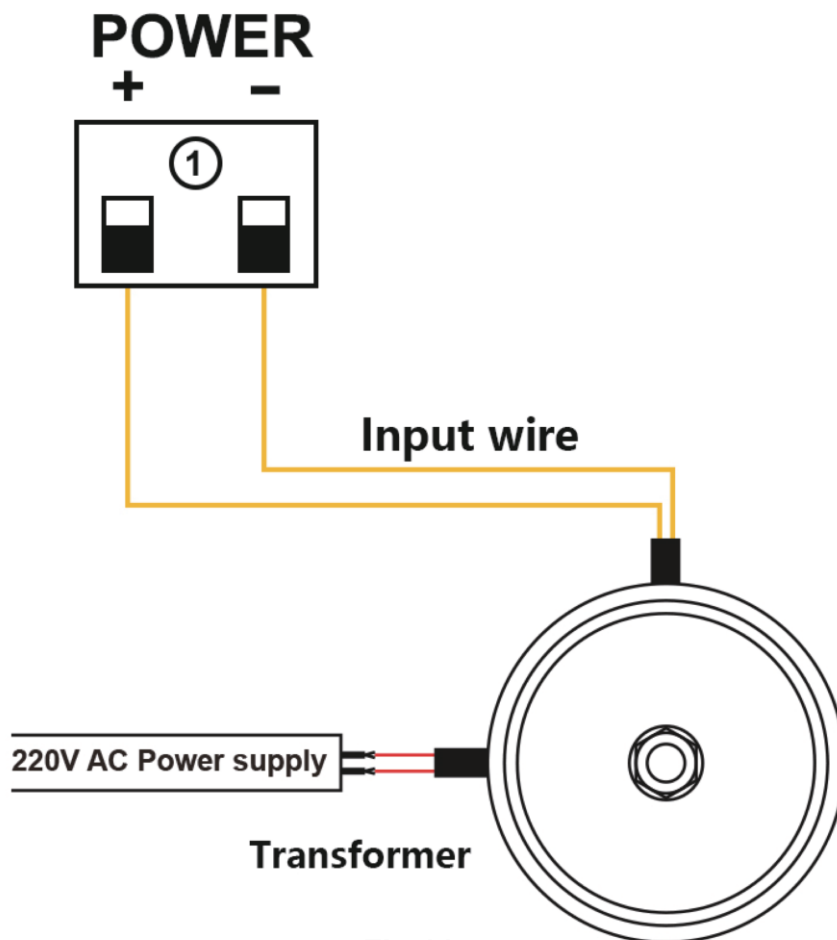


Fig 11

**Power Mode 2. Only use the batteries as the power source, use the solar panel and power charger receiver to charge the batteries.**

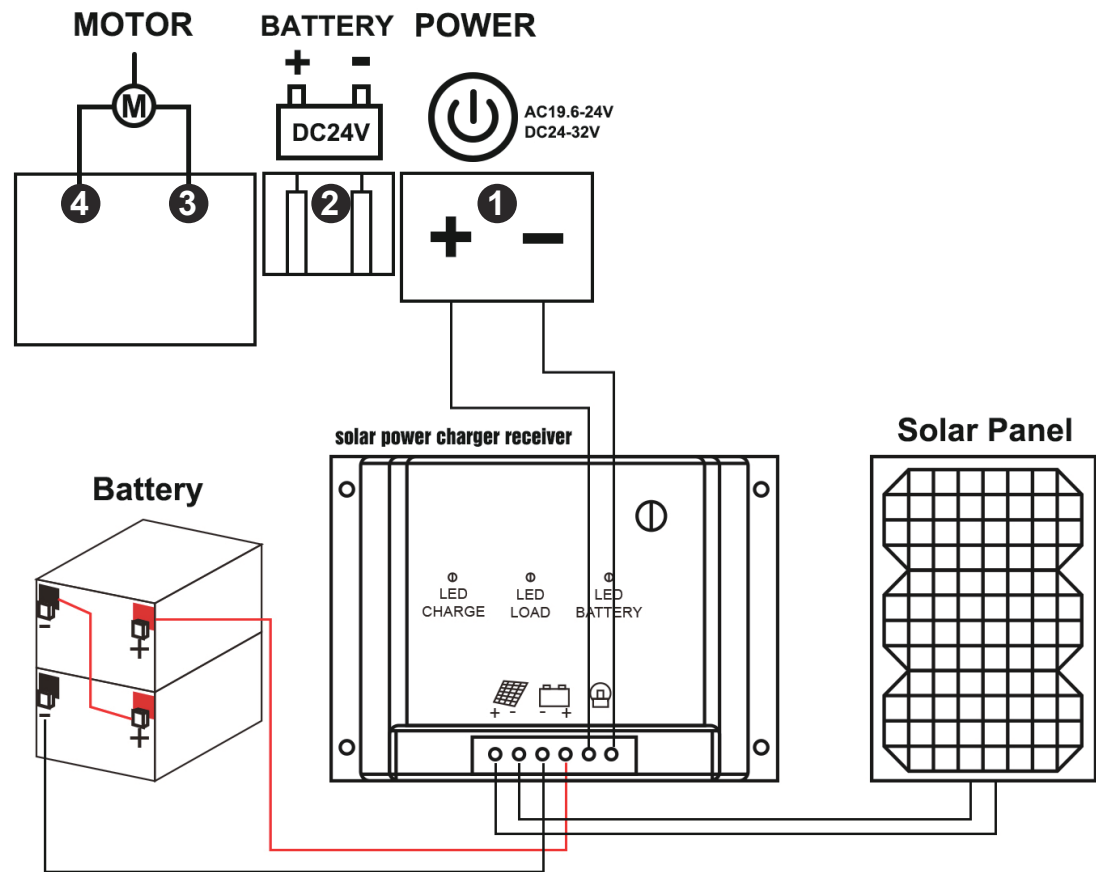


Fig 12

**Power Mode 3. By AC electricity and back-up batteries, only use the AC transformer to charge the batteries**

If AC electricity failure happens rarely (less than 8 hours per day), then you can use a minimum of 2\*12V DC batteries as a back-up power source in case of AC power failure.

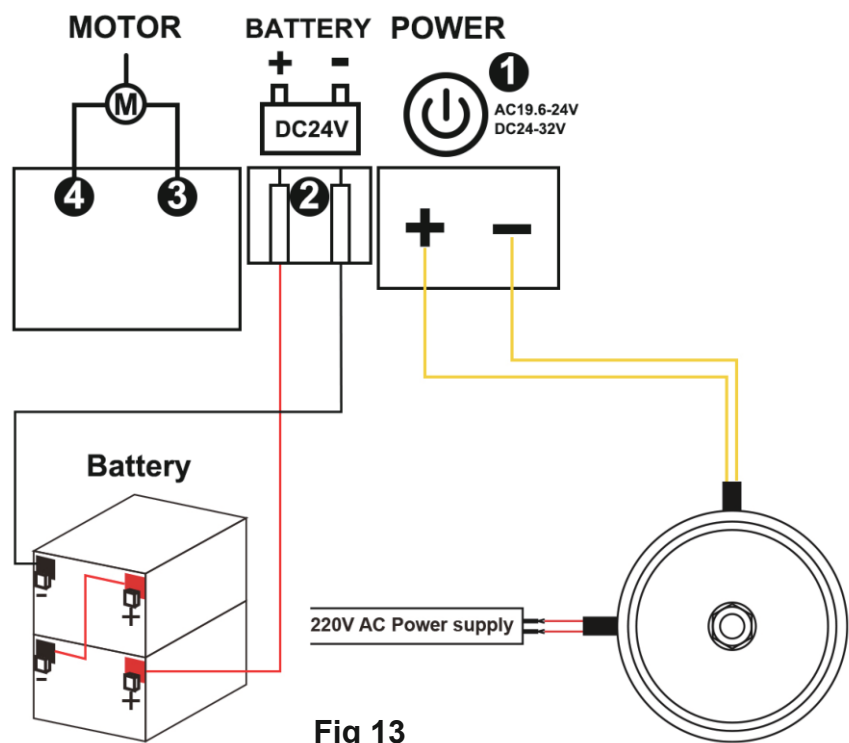
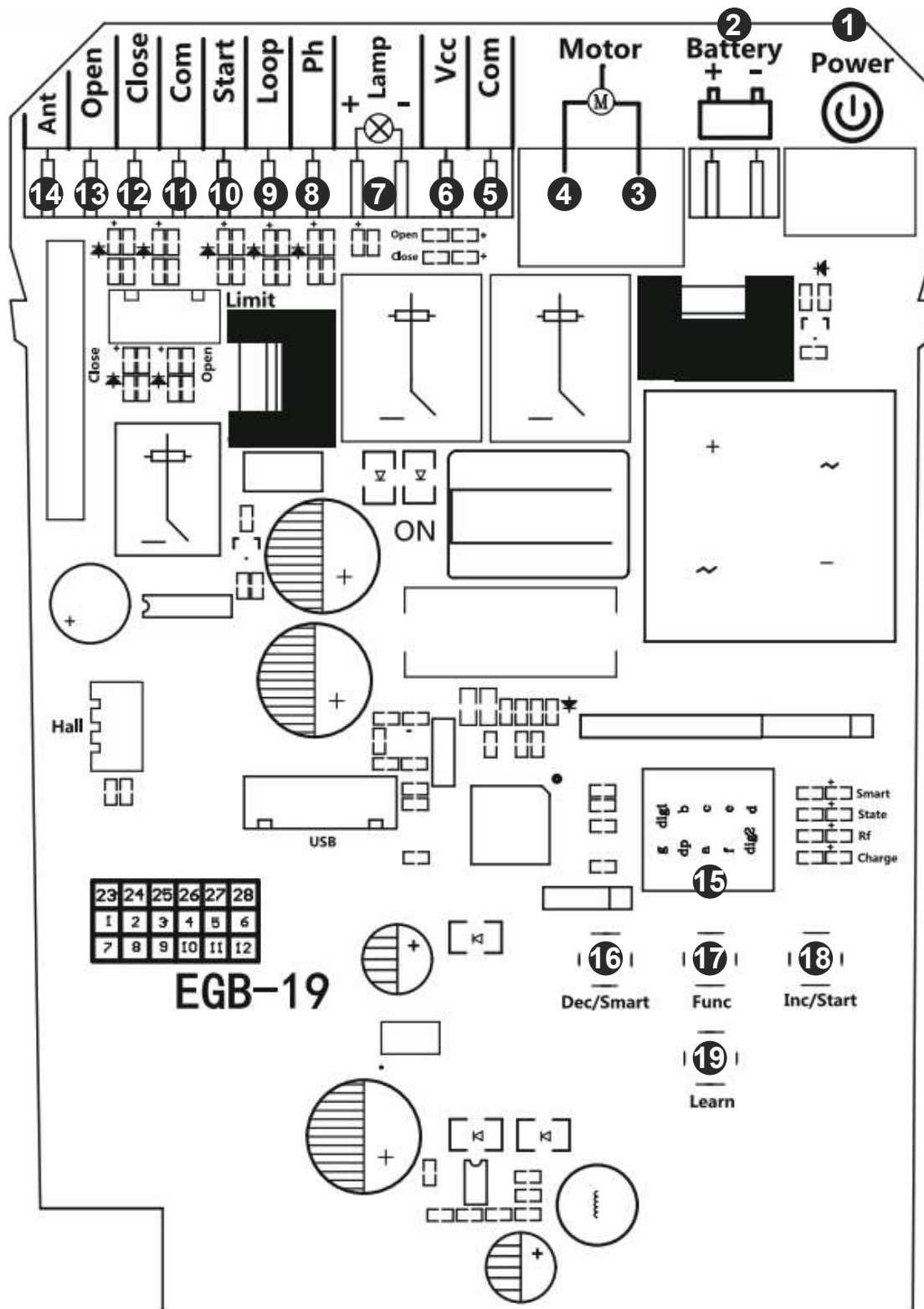


Fig 13

### 4.3 Terminal and Buttons Instruction



**Fig 14**

1. POWER: used for connecting with DC 24-28V or AC 19.6-24V.
2. BATTERY: used for connecting with the DC 24V battery.
- 3&4. Motor: used for connecting with DC 24V sliding gate motor.
5. COM: used for connecting with COM terminal or GND.
6. VCC: DC 24-28V output is for connecting to an external device.  
(such as photocell sensor).

7. Lamp +/-: used for connecting with flashing light, output voltage is DC 24V.
8. Ph: used for connecting with the photocell sensor.
9. Loop: used for connecting with loop detector etc device.
10. Start: control the gate by “open - stop - close - stop - open” cyclically.
11. COM: used for connecting with the “ground” of external devices.
12. Close: used for connecting with any external devices that will close the gate.
13. Open: used for connecting with any external devices that will open the gate.  
PED: user also can switch to pedestrian mode function through the menu.
14. ANT: antenna connection.
15. Digital display: used for showing you the setting data.
16. DEC/SMART: used for figure decreasing of setting the data or operating the smart module.
17. FUN: used for storing data.
18. INC/START: used for figure increasing of setting the data or control gate  
“open-stop-close...”
19. LEARN: used for programming/erasing the remote control.

#### 4.4 Wire Diagram of Motor and Accessories

##### • Motor wire diagram

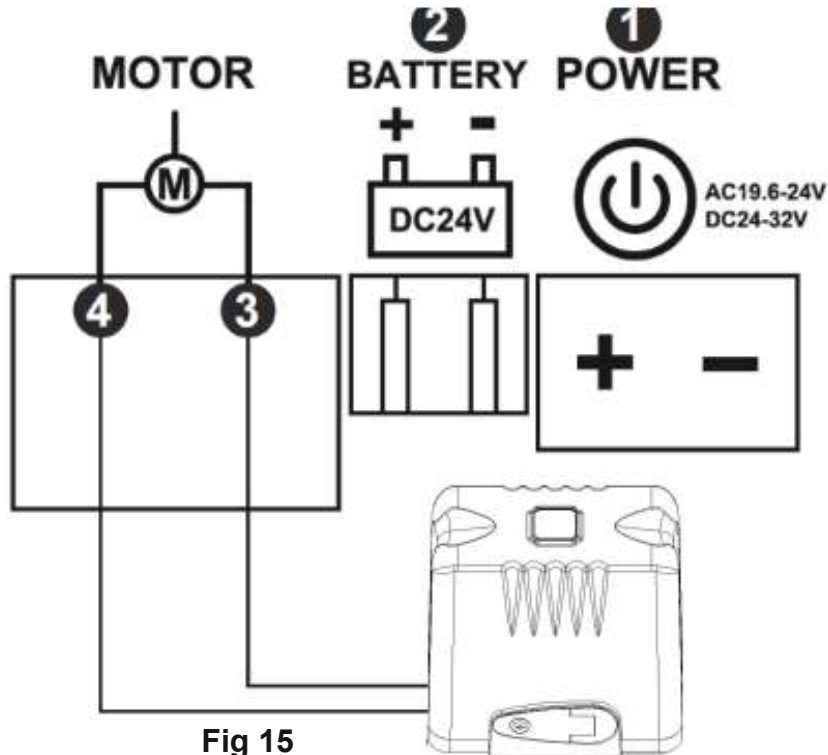
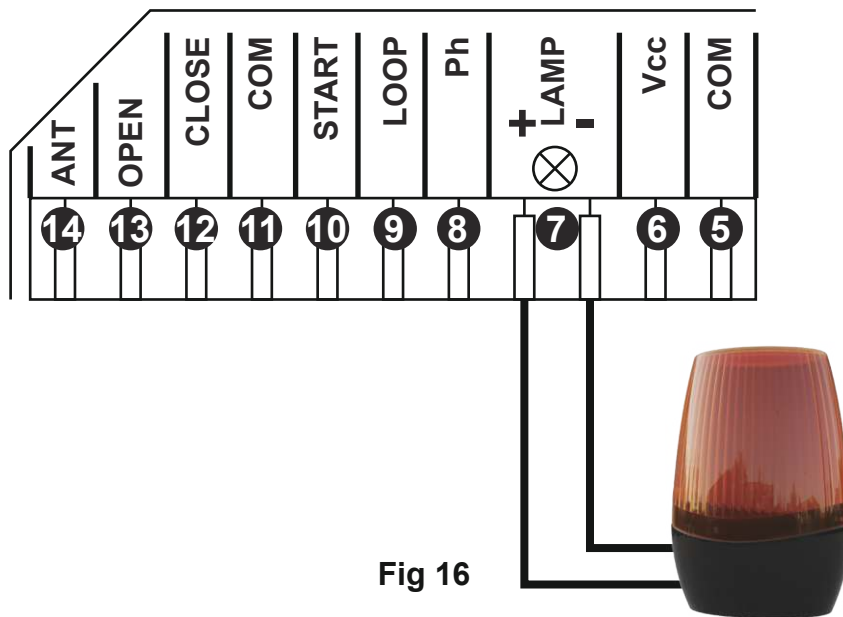


Fig 15

Connect terminal ③ and ④ with the motor.

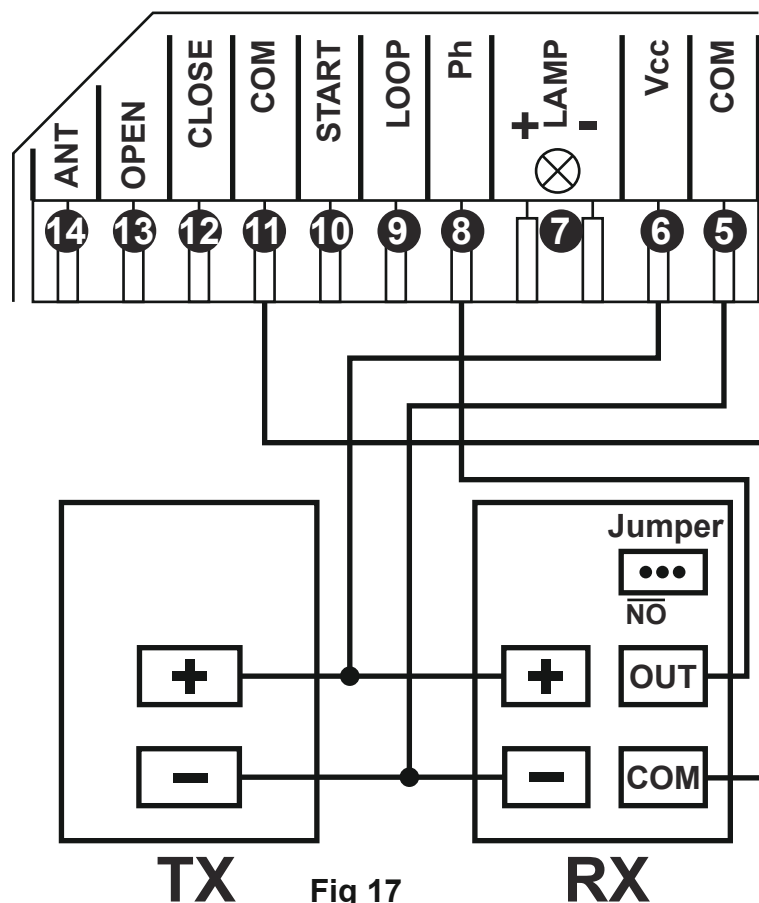
**Please note :** Our factory setting is to install the motor on the right-hand side of the gate! When you want to install motor on the left-hand side, please exchange 3 and 4 motor wire.

- Flash lamp wire diagram



Connect terminal ⑦ lamp +/- with the flash lamp.

- Photocell sensor wire diagram



Photocell sensor use for gate meeting resistance:

Connect terminal with the “COM “ of photocell RX.

Connect terminal ⑧ with the “OUT “ of photocell RX.

Connect terminal ⑥ with the “+ “ of photocell RX and TX.

Connect terminal ⑤ with the “- “ of photocell RX and TX.

- **Connect with start terminal**

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**

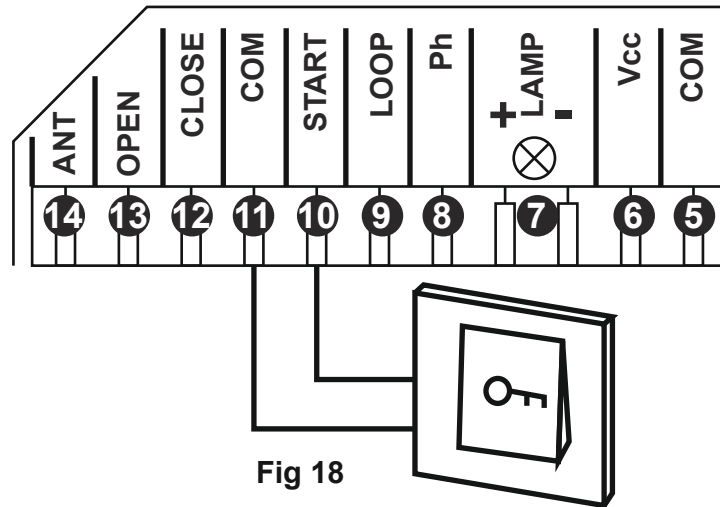


Fig 18

Terminal ⑩ and ⑪ are for connecting with the push button.

Note! If you connect the swipe card or wired keypad, etc devices, please also connect with ⑥ Vcc and ⑤ Com to get the power supply.

- **Loop detector wire diagram**

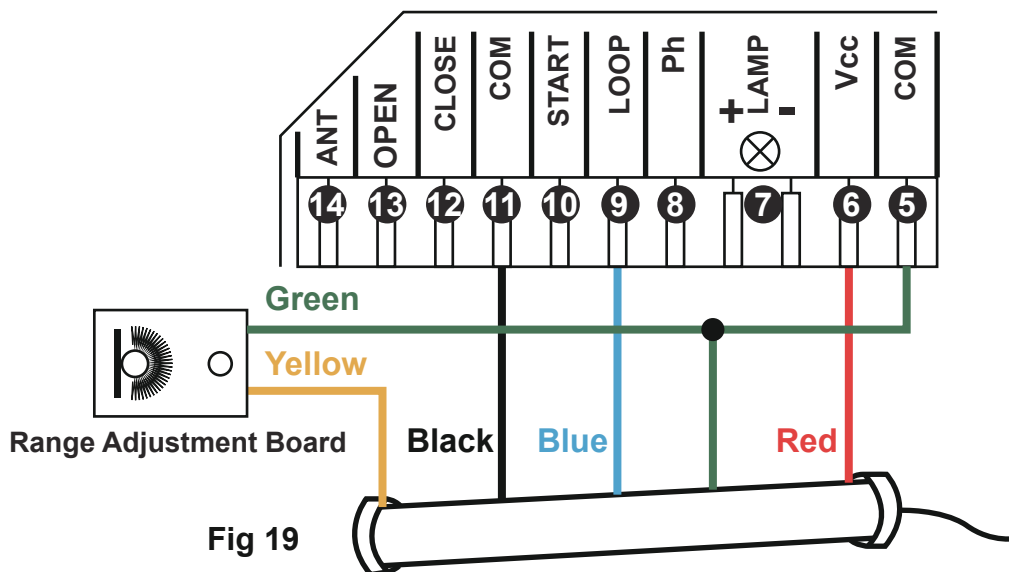


Fig 19

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 ⑥.

Green wire: connect with terminal ⑤ and range adjustment board.

Black wire: connect with terminal ⑪.

Blue wire: connect with terminal ⑨.

Yellow wire: connect with range adjustment potentiometer.

## 5. How to Program or Erase The Remote

- **Program the remote:** Short press the learn button and then release, the LED indicator will light on. Now user needs to press the button on the remote control, with the buzzer short beep, which means the remote code learning is successful, and the digital LED will show the quantity of that remotes were learned.

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. Note: Due to the digital display only can show two words, if the controller already learned more than 99pcs remote, from the 100th remote, the digital display will show A to replace the ten and hundred digits. Such as the 100th remote will show A0, and the 101st remote will show A1. If the controller already learned more than 109pcs remote, from the 110th remote, the digital display will show b to replace the ten and hundred digits. Such as the 110th remote will show b0.

**Max capacity:** 128pcs remote. If the digital LED shows “-” 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, while the user hears the buzzer with a long beep, release the button, and the digital display shows “00”. Now all remotes can not control the gate.

## 6. How to Operate The Gate Opener

Each remote has 4 buttons, can set them with different work mode independently through the digital display menu L1, L2, L3 and L4,

0: No function. 1: Open-Stop-Close... 2: Pedestrian mode. 3: Open only. 4: Close only. 5: Stop only. 6: Turn auto close off via remote.

## 7. Control Board Function Description

Item	Description
Power on	After the control board powered on, the buzzer will sound, and the digital display will show model number and version, and the state indicator LED will lit up.
Open / Close LED indicator	While the gate opener work normally, opening the gate will turn on blue, close the gate will turn on red.
Auto travel learning	<p>The newly installed motor needs to operate the auto travel learning once before the high and low speeds can be normally allocated.</p> <p>After the auto travel learning completed, the gate motor will automatically allocated the high and slow speed. The high and slow speeds for opening and closing can be set through the digital display menu.</p> <ol style="list-style-type: none"><li>1. Before starting the auto travel learning, the gate must be fully closed.</li><li>2. Enter the menu, select Pr, set 5, and confirm to start the auto travel learning</li><li>3. The gate will automatically open and close to remember the travel time.</li><li>4. Setting Motor slow speed running time for opening and closing separately through the menu. The larger the value, the more slow speed running time.</li></ol> <p>During the auto travel learning process, if any control occurs, such as RF control, Pedestrian terminal trigger, safety beam trigger, etc., the auto travel learning will be interrupted and the learning operation needs to be restarted. If the auto travel learning fails halfway, the buzzer will sound twice, and the learning will be long once if the learning is successful.</p>



Setting slow speed running time	After completed the auto-travel learning, the gate opener will automatic set the slow speed running time for opening and closing from 0 - 5 levels. The bigger the value is, the more slow speed running time. 0 means No slow speed running time.
Setting running speed for opening and closing	The gate opener can set the high speed and slow speed for opening and closing from 0 - 5 levels. The bigger the value is, the higher speed running. If adjust the running speed, please operate the auto-travel learning again.
Overcurrent	<p>The overcurrent function can achieve an anti-smashing car.</p> <p>While the gate is opening, it detects the overcurrent and stop.</p> <p>If the gate is closing and detects the overcurrent, the user can set different response modes through the digital display menu.</p> <p>0: reverse back to the opened position.</p> <p>1: reverse to open the gate for 1 second.</p> <p>2: reverse to open the gate for 3 seconds.</p> <p>3: stop. Setting overcurrent for opening and closing the gate through the digital display menu.</p>
Limit switch mode	<ol style="list-style-type: none"> <li>1. When the gate is fully opened/closed, and trigger the limit switch, the motor will auto stop.</li> <li>2. The control board support to work with NO and NC limit switch, and can set the limit switch mode of NO and NC mode through the digital display menu.</li> <li>3. The control board can switch the limit direction through the digital display menu.</li> </ol> <p>When the digital display show “Lr” means the limit switch detect a bug (limit error). Please check whether the limiter is damaged or in poor contact, or whether the normally open and normally closed mode (menu F0) set by the system does not match the actual limit switch type.</p>
Setting of Loop terminal	<p>The loop detector have 2 function for optional, set them by the digital display menu:</p> <p>Mode 0: When the gate is opened or opening, trigger the loop terminal, when the loop signal is gone, will auto close immediately.</p> <p>When the gate is on closing, trigger the loop terminal, the gate will rebound to open right now. And after the loop signal is gone, then the gate will auto close immediately.</p> <p>Mode 1: When the gate is opened or closing, triggered the loop terminal, the gate will rebound to open right now. After the gate is opened, will enter the auto close timer countdown, set the timer by the digital display menu.</p>
Safety beam mode	<p>The safety beam mode can be be selected by menu, the default mode is 0, it is normal open mode.</p> <ol style="list-style-type: none"> <li>1. While the gate is closing, if the Ph terminal is triggered, the gate will reverse back to open.</li> <li>2. If set the auto-closing timer after fully opening, after the safety beam signal is gone, the gate will be auto-closed.</li> <li>3. If the safety beam signal exists, the gate closing action will not be executed and the auto-closing timer after fully opening will always be reset.</li> </ol>
Auto-closing timer for fully opening	<ol style="list-style-type: none"> <li>1. The auto-closing function is only triggered after the gate is fully opened.</li> <li>2. Auto-closing timer for fully opening can be set through the digital display menu.</li> <li>3. When auto-closing timer start to countdown, the STATE LED will flash one time each second.</li> <li>4. When the gate is fully opened and in the countdown for closing, if there is a button on the remote control is used to cancel the auto-closing command, the user can operate it to cancel the auto-closing timer. Note: Cancellation only cancels this time, and the gate can be auto-closing next time when it is fully opened.</li> </ol>

Flash Lamp Mode	<p>The digital display menu can set the lamp work mode.</p> <p>Mode 0: Flashing light and motor will operate and stop at the same time.</p> <p>Mode 1: Flashing light will turn off 30 seconds after the motor stop.</p> <p>NOTE: No matter you choose the mode 0 or mode 1, when the gate is on the auto-closing timer countdown statue, the lamp also will light on.</p>
Motor protection	<p>As soon as the motor runs continuously for more than the 120s, the motor will automatically stop working to protect the motor.</p>
Setting of start terminal	<p>The start terminal can be setting with different function through the digital display menu.</p> <p>0: Open-Stop-Close.....(factory default)</p> <p>1: Pedestrian Open-Stop-Close.</p> <p>2: Open only.</p> <p>3: Close only.</p> <p>4: Stop only.</p>
Setting of open terminal	<p>The open terminal can be setting with different function through the digital display menu.</p> <p>0: Open-Stop-Close...</p> <p>1: Pedestrian Open-Stop-Close...</p> <p>2: Open only.(factory default)</p> <p>3: Close only.</p> <p>4: Stop only.</p>
Setting of close terminal	<p>The close terminal can be setting with different function through the digital display menu.</p> <p>0: Open-Stop-Close...</p> <p>1: Pedestrian Open-Stop-Close....</p> <p>2: Open only.</p> <p>3: Close only.(factory default)</p> <p>4: Stop only.</p>
Pedestrian mode	<p>The remote button and Pedestrian terminal can trigger the Pedestrian mode, the gate will partially open then stop, not fully open. This mode is convenient for users walking in and out. The pedestrian mode work with “ open-stop-close-stop...”</p> <p>The Pedestrian mode timer and auto-closing timer after Pedestrian mode can set through the digital display menu.</p>
Smart charging function	<p>When the battery voltage is lower than <math>26V \pm 1</math>, the control board will active the smartcharging function. When the battery voltage exceeds <math>28V \pm 1</math>, the charging circuit is automatically disconnected to prevent overcharging. Note: The main power supply needs to be connected properly before the battery can be charged.</p>
Upgrade control board	<p>Before you upgrade the system, please confirm the U disk document is FAT32 or not. If not, please format the U disk as FAT32.</p>
system by USB device	<p>Copy the upgrade file into the root directory of the U disk and name it EGB-19.bin</p> <p>Insert the U disk into the upgrade module, and then connect the upgrade module to the USB port. Enter the menu, select PU, select 5 for the value, and start the upgrade after confirmation.</p>

Smart Module (optional)	<p>1. Program the 2.4G transmitter: short press DEC/SMART button once, the buzzer will short a beep, and the LED indicator will light on, enter the programming mode. Transmit a signal from the 2.4G transmitter, if the LED flash twice and keep lighting on, means the programming operation is successfully. Otherwise, after 8s exit the programming mode.</p> <p>2. 2.4G control mode: While the module receive the 2.4G signal, it will trigger to open the gate once.</p> <p>3. Add the Bluetooth device:          ① Open the XHouse app, enter the add device page, select the Bluetooth device.          ② Select the correct Bluetooth device, press the add button. (The Bluetooth device modename is XHOUSE_092BLE_XXXXXX, XXXXXX is its serial number)</p> <p>4. Bluetooth device control mode: The app page have 3 buttons include open, close, stop.</p> <p>5. Initialize Bluetooth device: Hold press DEC/SMART button about 5s, the buzzer will sound short beep twice, release the button, the operation is successfully.</p> <p>6. Reset Bluetooth device: Hold press DEC/SMART button about 10s, the buzzer will sound long beep, release the button, the module will clear all 2.4G transmitters and initialize the Bluetooth device.</p>
-------------------------	---

## 8. Control Board Digital Display Menu Setting

- Press and hold the [FUN] button for 3 seconds, and the digital display will indicate "A0", then release the button, now the menu can be set to [INC/START] and [DEC/SMART] for increasing and decreasing numbers or values.
- After adjusting the value, press the [FUN] button to store the data, and the buzzer will beep one time to show the store successfully.
- After the menu setting is finished, press the [LEARN] button to exit the menu setting and close the display.

Item	Function description	Value	Factory set	Explanation
A0	Opening overcurrent setting in high speed	0~20 level	10	Opening overcurrent setting in high speed, the bigger the value is, the harder the motor to stop. Setting value from 0-20.
A1	Closing overcurrent setting in high speed	0~20 level	10	Closing overcurrent setting in high speed, the bigger the value is, the harder the motor to stop. Setting value from 0-20.
A2	Opening overcurrent setting in slow speed	0~20 level	10	Motor 2 opening overcurrent setting in slow speed, the bigger the value is, the harder the motor to stop. Setting value from 0-20
A3	Closing overcurrent setting in slow speed	0~20 level	10	Motor 2 closing overcurrent setting in slow speed, the bigger the value is, the harder the motor to stop. Setting value from 0-20
A8	Overcurrent sensitivity	0~3 level	0	The bigger the value is, the longer the overcurrent sensing time is. Setting value from 0-3.

Item	Function description	Value	Factory set	Explanation
A9	Overcurrent reaction	0~3	0	Setting overcurrent reaction of gate: 0: Reverse back to the end. 1: Reverse back 1 second and stop. 2: Reverse back 3 seconds and stop. 3: Stop.
B0	Setting slow speed running time for opening	0-5 level	2	Used for setting the slow speed running time of the gate opening, gate will run in slow speed within this setting, then change to high speed with its rest travel. Setting from 0-5 seconds.
B1	Setting slow speed running time for closing	0-5 level	2	Used for setting the slow speed running time of the gate closing, gate will run in slow speed within this setting, then change to high speed with its rest travel. Setting from 0-5.
C0	Auto-closing timer for fully opening	0-99 seconds	0	Setting from 0-99 seconds, 0 means No auto-closing for fully opening.
D0	Speed of high speed for opening	0-5 level	5	Setting speed of high speed for opening, setting from 0-5
D1	Speed of high speed for closing	0-5 level	5	Setting speed of high speed for closing, setting from 0-5
D2	Speed of slow speed for opening	0-5 level	2	Setting speed of slow speed for opening, setting from 0-5
D3	Speed of slow speed for closing	0-5 level	2	Setting speed of slow speed for closing, setting from 0-5
E0	Pedestrian mode	0-15 seconds	6	0 means No pedestrian mode.
E1	Auto closing timer for pedestrian mode	0-99 seconds	0	0 means No auto-closing for pedestrian mode
F0	Limit switch mode	0-1	1	0: NC mode. 1: NO mode.
F1	Switch the limit direction	0-1	0	0: Default direction. 1: Switch direction.
F2	Safety beam mode	0-1	1	0: NC mode. 1: NO mode.
F3	Flash Lamp Mode	0-1	0	0: Flashing light and motor will operate and stop at the same time. 1: Flashing light will turn off 30 seconds after the motor stop.
F4	Setting of Loop terminal	0-1	0	0: When gate closing, triggering the terminal, gate will reverse back to open, when the loop signal is gone, will auto close immediately. When gate is opened, triggering the terminal, when the loop signal is gone, will auto close immediately. 1: Loop is only used to open the gate.

Item	Function description	Value	Factory set	Explanation
F5	Auto closing timer of loop terminal	0-99 seconds	0	Setting from 0-99 seconds, 0 means No auto-closing for loop terminal.
G0	Setting of start terminal	0-4	0	0: Open-Stop-Close... 1: Pedestrian mode open-stop-close... 2: Open only. 3: Close only. 4: Stop only.
G2	Setting of open terminal	0-4	2	0: Open-Stop-Close... 1: Pedestrian mode open-stop-close... 2: Open only. 3: Close only. 4: Stop only.
G5	Setting of close terminal	0-4	3	0: Open-Stop-Close... 1: Pedestrian mode open-stop-close... 2: Open only. 3: Close only. 4: Stop only.
J2	Switch the motor operation direction	0-1	0	0: Default direction. 1: Switch direction
L1	Button A function (Remote control)	0-6	1	0: No function. 1: Open-Stop-Close... 2: Pedestrian mode. 3: Open only. 4: Close only. 5: Stop only. 6: Cancel the auto-closing function once.
L2	Button B function (Remote control)	0-6	0	0: No function. 1: Open-Stop-Close... 2: Pedestrian mode. 3: Open only. 4: Close only. 5: Stop only. 6: Cancel the auto-closing function once
L3	Button C function (Remote control)	0-6	0	0: No function. 1: Open-Stop-Close. 2: Pedestrian mode. 3: Open only. 4: Close only. 5: Stop only. 6: Cancel the auto-closing function once.
L4	Button D function (Remote control)	0-6	0	0: No function. 1: Open-Stop-Close. 2: Pedestrian mode. 3: Open only. 4: Close only. 5: Stop only. 6: Cancel the auto-closing function once.
Pr	Trigger auto travelling learning	0-10	0	Setting from 0-10. Set 5 will trigger the auto travel learning. 0 means No auto travel learning.
PU	Upgrade the system by USB device	0-10	0	Setting from 0-10. Set 5 will trigger to upgrade the system. 0 means No upgrade the system.
Po	Factory reset	0-10	0	Setting from 0-10. Set 5 will trigger to reset operation. 0 means No reset.

## **9.Control Board Digital Display Menu Information Show**

1. When the gate is start to open, the digital display will show 1S “OP”
2. When the gate is start to close, the digital display will show 1S “CL”
3. After the gate stop moving, the digital display will show 1S“--”
4. When the gate moves to the full open limit, the digital display will show 1S“LO”
5. When the gate moves to the full close limit, the digital display will show 1S“LC”
6. When the motor reaches max working time, the digital display will show 1S“EC”
7. After the motor trigger the overload protection, if the motor run with high speed and the digital display will show 1S“OH”, otherwise, the digital display will show 1S“OL”.
8. After the photocell is activated, the digital display will show 1S “PH”
9. After the loop is activated, the digital display will show 1S“LP”
10. When the PED mode is activated, the digital display will show 1S“Pd”
11. When the limit switch broken or has a bug, the digital display will show “Lr”
12. Cancel the auto-closing, the digital display will show "CC"

## **10. Maintenance**

1. The rack and drive gear should be kept clean. Do not attach any objects to the gate that may interfere with the rack or drive gear.
2. Should frequent clean the sundries on the magnet limit.
3. Lubricate all moving parts every 3 months.
4. If the control circuit board is fitted with an optional back up battery, check the condition once a month and replace if necessary.
5. Check power cables and conduit have not been damaged.
6. During heavy rainfall or light flooding ensure the motor housing has had no ingress of water.