**Manuals+** — User Manuals Simplified.

PYM-A2201-CX-EGB-02
Automatic Sliding Gate
Opener

# GIANT PYM-A2201-CX-EGB-02 Automatic Sliding Gate Opener User Manual

## Contents

**GIANT PYM-A2201-CX-EGB-02 Automatic Sliding Gate Opener**

## Product Usage Instructions

- Place the sliding gate opener on the base plate and secure the motor using a hexagon screw provided.
- Remove the motor cover by unscrewing the fixed screws. Connect the power cord according to the electrical wiring diagram.
- Adjust the position and then reinstall the cover, securing it with screws.
- There are 2 limit magnets provided, one left-hand, and one right-hand magnet.
- Install one at each end of the rack as per Diagram 4.
- Open the clutch door and press the 'CLOSE' button on the remote.
- Manually close the gate and adjust the limit magnet to switch off the motor at the desired position.
- To adjust the open position, press the 'OPEN' button, manually open the gate, and adjust the other limit magnet to switch off the motor.

## Summary

- This equipment is one of the auto gate openers launched by our company adopting a new design and integrated control system.
- Our new sliding gate opener has many features such as: low noise, light weight, powerful starting torque, stability, reliability and is compact and stylish.
- The motor will still work for a short period of time using lower voltage. The control board has overload protection.
- When there is a power failure, the motor drive can be separated by the use of the clutch, by using the specified key the user has the ability to disconnect the clutch enabling the gate to be opened or closed manually.
- Using the optional infrared photocells the gate will automatically stop and re-open if an obstacle is sensed.
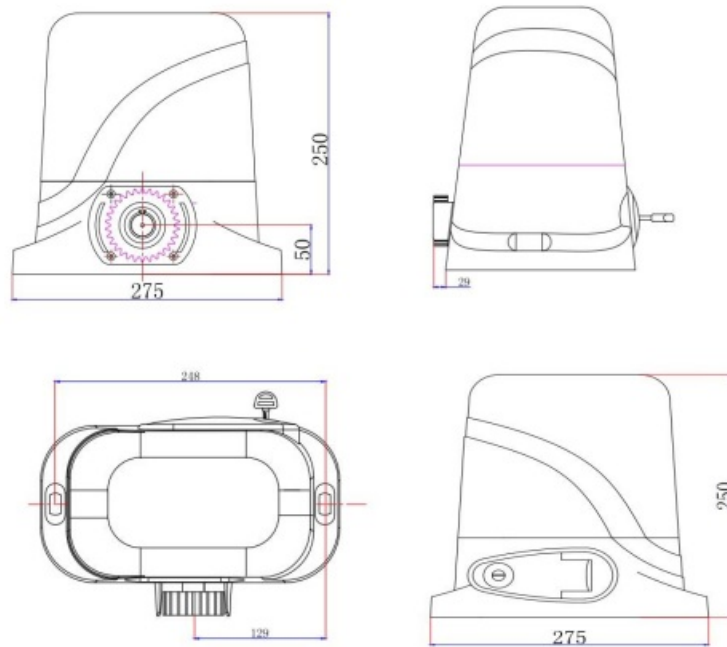
## Appearance and dimensions

Fig 1

## Parameters

1. Working temperature of motor -25°C  +55°C
2. Working humidity ≤85%
3. Power supply 220VAC±10%/110VAC±10% 50Hz/60Hz
4. Rated power 60W
5. Output gear module: M=4
6. Output gear number: Z=16
7. Output torque:16.0 N.m
8. Open(close) speed v=12m/min
9. Rated speed: 1400RPM
10. Maximum pull 1100N
11. Maximum load 600KG
12. Net weight 11KG
13. Remote control distance: ≤50meter
14. Packing: In a standard carton
15. Protection Class: B

## Features

### Features of sliding gate opener

1. Stylish appearance design and built-in control panel integrated inside the mechanism, no external controller or receiver needed.
2. Built-in limit switch allowing the motor to switch off once the cycle is finished
3. Built-in manual override with 2 supplied unique override keys in case of emergency or power failure.
4. The motor is constructed of all metal gears making it durable and long-lasting.

5. Pedestrian mode
6. Condominium mode.
7. Overcurrent value and auto-closing delay time adjustable
8. Stop/Reverse in case of obstruction during gate opening and closing.
9. Easy installation, firm and solid structure, stable and reliable driving, permanently lubricated, maintaining-free.
10. Single-phase self-lock, anti-pushing, anti-lifting, safe and reliable.

## Installation of mechanical parts

### Installation of motor

1. Depending on the installation size of the motor and mounting height of racks, after determine the installation position of the motor base plate. Install the motor on proper position ,and then fixed in that place.so that the motor can open the gate normally and operate.
2. If the rack has been installed on the door, the motor can be fixed on the base plate using 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.

### Installation of gate opener

1. Let the sliding gate opener put on the base plate.use a random matching hexagon screw to make the motor fixed on the base plate.
2. Unscrew the screws fixed the motor cover, and then remove the motor cover. According to the electrical wiring diagram,connected the power cord, after adjusting in a good position, Then installthe  cover and use screws to fix it. 5.3

### Installation of racks



Fig 2

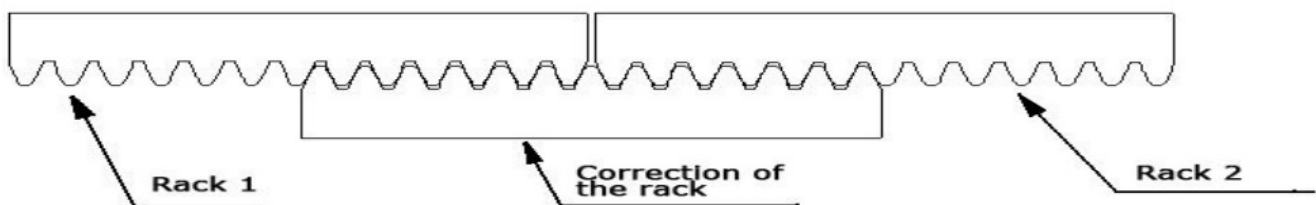### Installation of limit magnet

- There are 2 limit magnet supplied. Note there is a left-hand and a right-hand magnet.
- The magnet should be installed at either end of the rack. See Diagram 4To 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 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 is in the correct position, 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 position. Adjust the limit magnet if necessary.

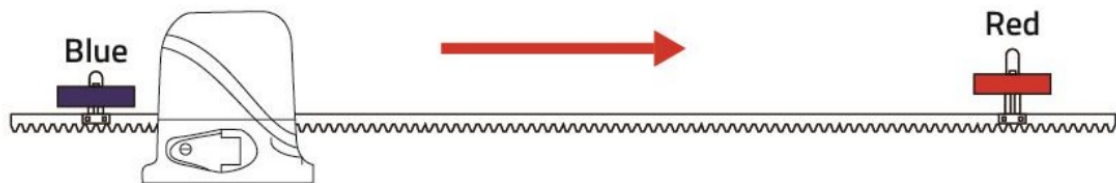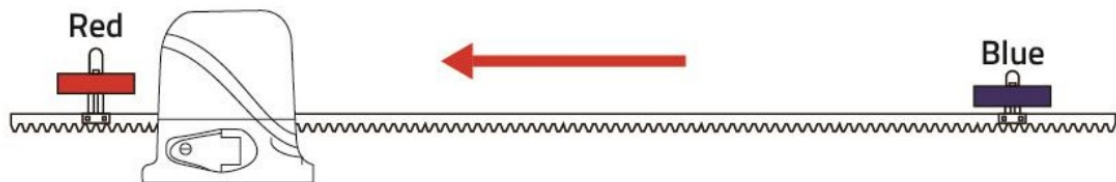**Install the motor on the right-hand of gate**

Fig 3

If you install the motor on the left of the gate, please adjust the blue and red limit magnet position as below picture show.
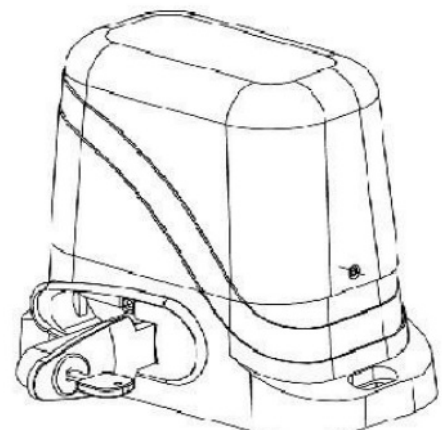
**Function of clutch**

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.
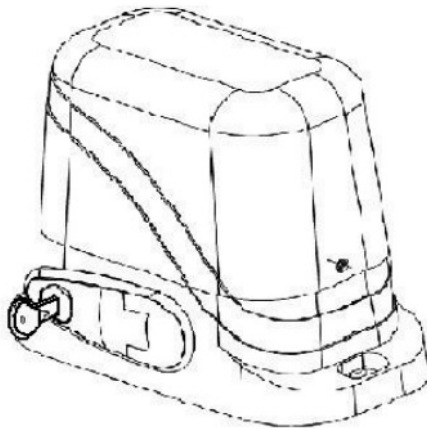
Insert key, rotate 90 degrees CW

Releasing arm in torsion, wriggle 90 degrees, gate operator will be in releasing state.
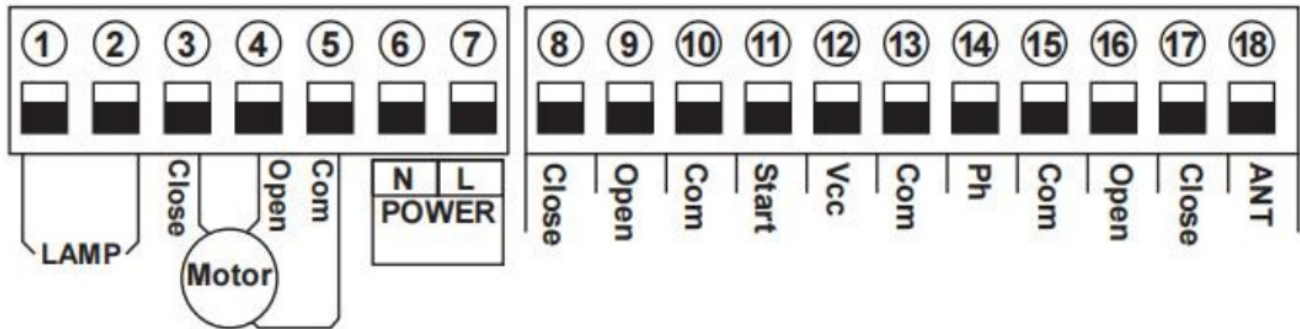
Fig 4

# Control board

**Technical parameters**

1. Power supply: 220VAC±10% / 110VAC±10%
2. Application: AC sliding gate opener

3. Remote control: Giant customized rolling code
4. emote control memory: max support 100pcs

**Terminal and Buttons instruction**



5. Lamp: used for connecting with flashing light, output voltage is AC 110V/220V. 3&4&5.
6. Motor: used for connecting with sliding gate motor's wire.
7. Power: used for connecting with AC 110V/220V power.
8. Close(Limit): used for connecting with extra gate closing direction limit signal.
9. Open(Limit): used for connecting with extra gate opening direction limit signal.
10. Com: used for connecting with COM terminal or GND.
11. Start: It is a single button control mode switch for controlling the gate by "open -stop-close – stop – open" cyclically.
12. Vcc: DC 12V output used for connecting with external devices, max 200mA.
13. Com: used for connecting with COM terminal or GND.
14. Ph: used for connecting with the photocell sensor.
15. Com: used for connecting with COM terminal or GND.
16. Open: connect with any external devices that will operate to open the gate.
17. Close: connect with any external devices that will operate to close the gate.
18. ANT: antenna connection.
19. LEARN button: It is for programming/removing the remote control.

**Control board wire diagram**
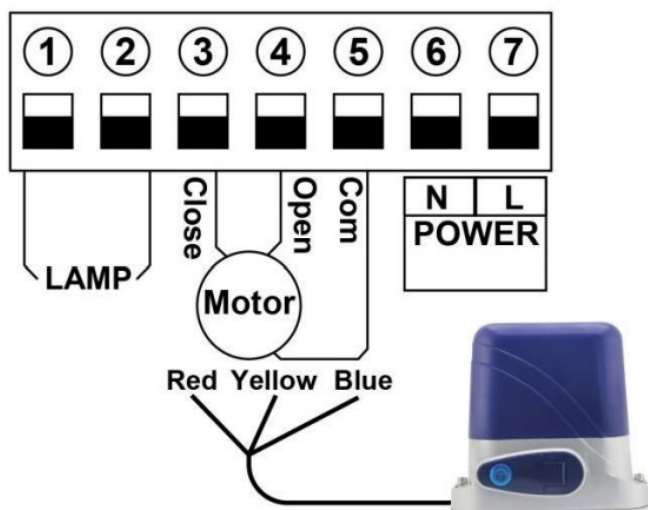
**Install the motor on the right-hand of gate**

Fig 5

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

**Install the motor on the left-hand of the gate**

When you want to install the motor on the left of the gate, please exchange ③ and ④ motor wires.
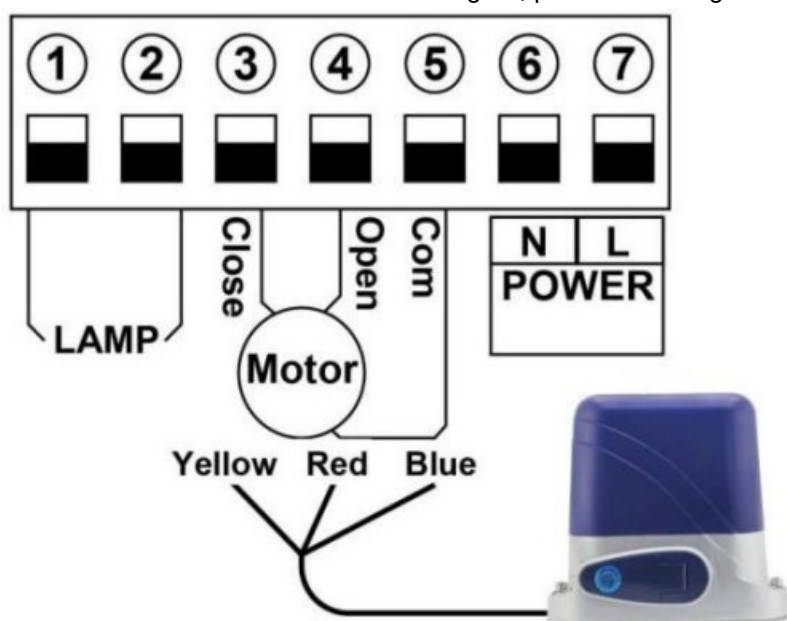


Fig 6
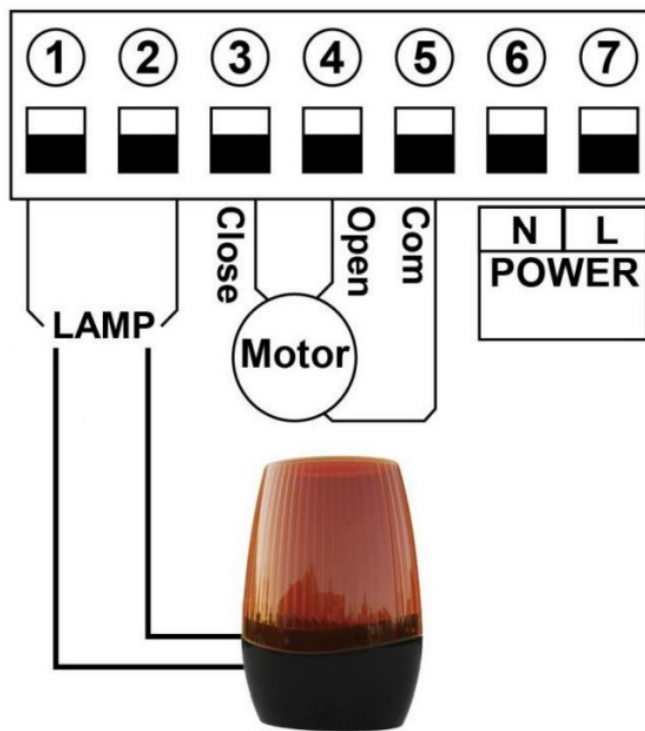
**Connect with flash lamp**

Fig 7

Terminals ① and ② are for connecting with the flash lamp.

**Connect with the safety beam**
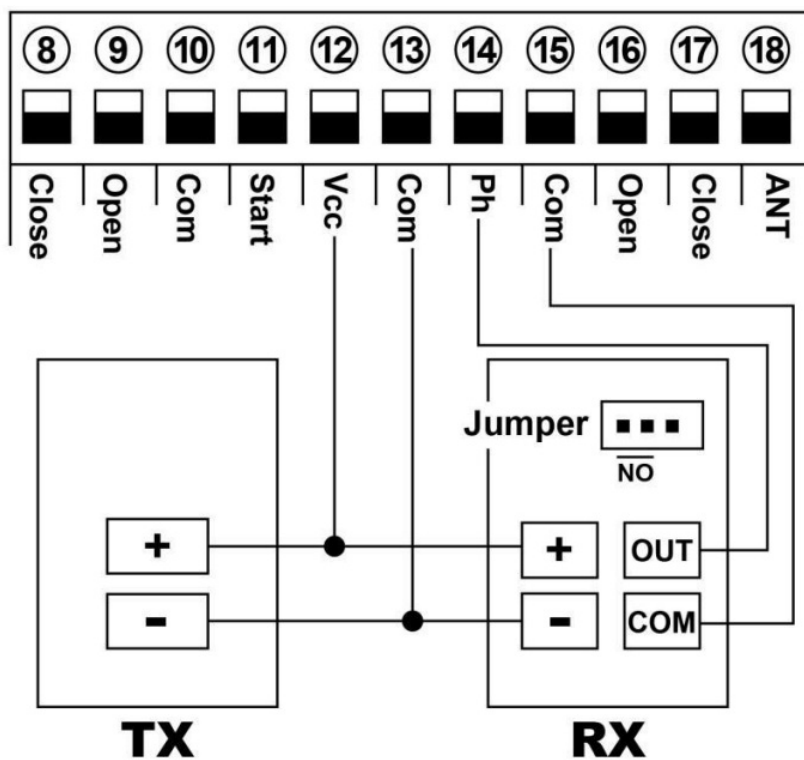


Fig 8

- Connect terminal   with the "COM " of photocell RX.
- Connect terminal   with the "OUT " of photocell RX.
- Connect terminal   with the "+ " of photocell RX and TX.
- Connect terminal   with the "- " of photocell RX and TX.

**Connect with start terminal**

The start terminal is used for connecting with some external devices, such as push buttons, swipe cards, wired keypad, receivers,etc.

**Control gate by " open-stop-close-stop-open " mode**
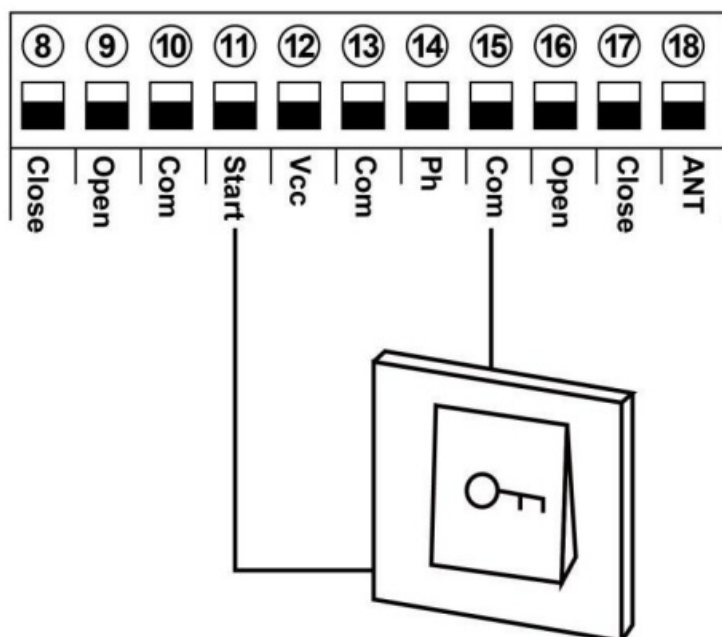


Fig 9

Terminal  and  are for connecting with the push button.

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

**Connect with open gate device (Loop detector, swipe card, etc)**
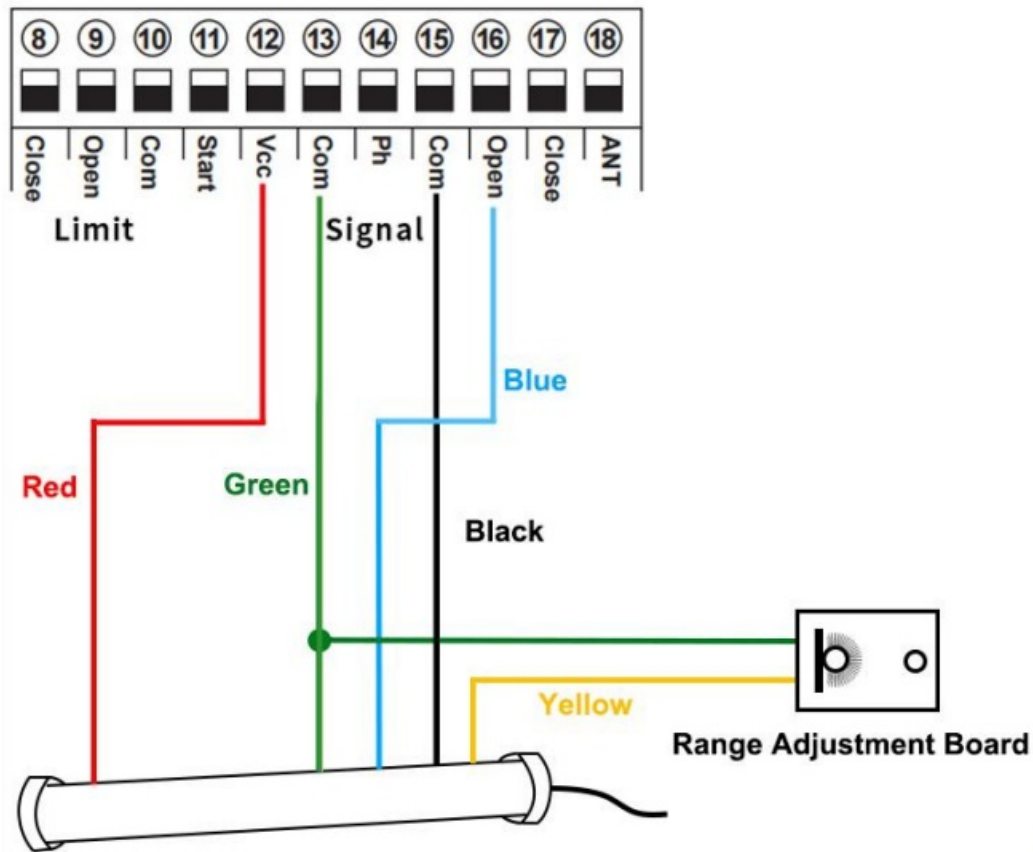
Fig 10

**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)

**Loop detector wire diagram:**

- Red wire: connect with terminal   .
- Green wire: connect with terminal    and range adjustment board.
- Black wire: connect with terminal   .
- Blue wire: connect with terminal   .
- Yellow wire: connect with range adjustment potentiometer

**Function testing**

7.7 Limit switch terminal stop detection

7.8 Power On/Off

7.9 USB upgrade the software system

7.6 Adjust limit switch direction

7.3 Dip switch of function setting

7.4 Program / Erase remote control

7.2 Close gate overcurrent setting

7.1 Open gate overcurrent setting

7.5 Motor start capacitors

**Open/Close gate overcurrent setting**
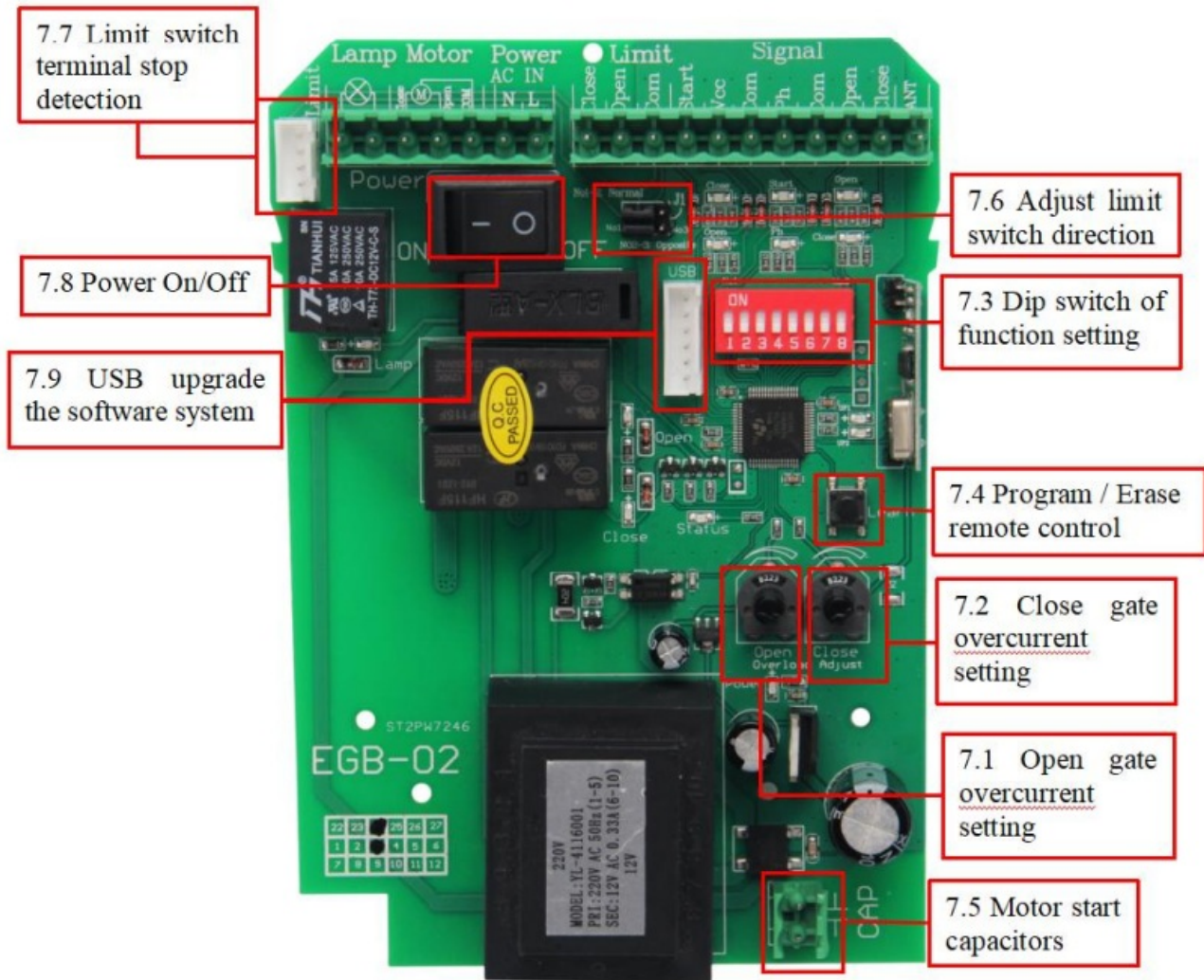


High overcurrent

Low overcurrent

Overcurrent invalid

There are 2 potentiometer for "OPEN/CLOSE overcurrent adjust to set the open and close overcurrent value separately. Rotate the potentiometer with a clockwise direction to increase the overcurrent value, and counter-clockwise to decrease the value.
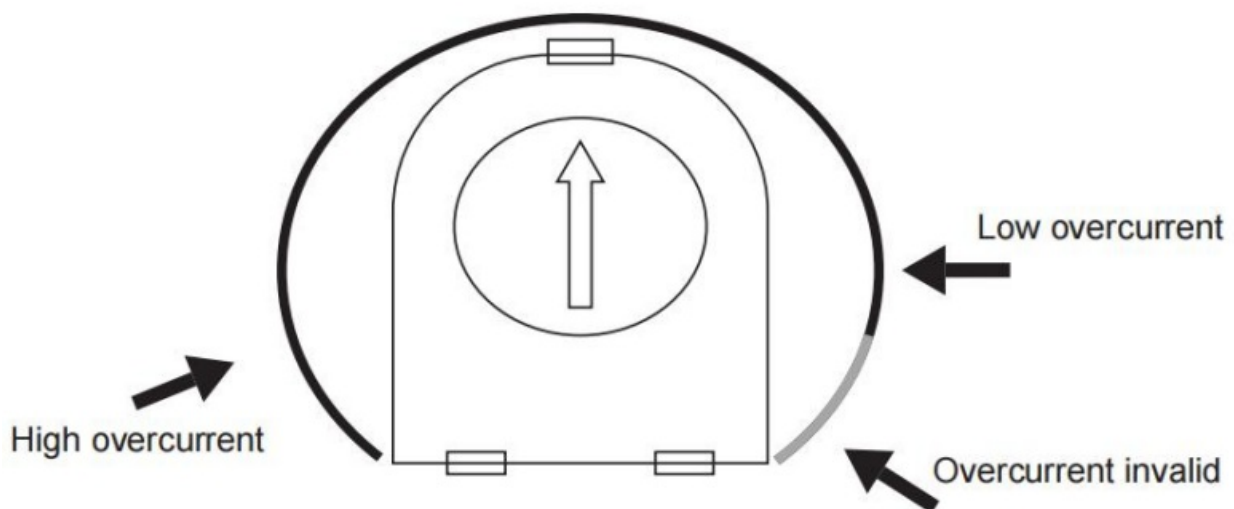
- High overcurrent: when the motor is running, will meet some minor overcurrent, then the control board will send a signal to let the motor stop.

- Low overcurrent: when the motor is running, will meet bigger overcurrent, then the control board will send a

signal to let the motor stop.

- As the picture shows, when the pointer rotates to the gray part, the overcurrent detecting is invalid.

**Note:**
If the overcurrent value is too low, the gate will stop or reverse very easily while there is no obstruction, or if there is additional overcurrent as strong wind, rain or snow. Otherwise, if the overcurrent value is setting too high, some impacts may not be detected, and injury or damage could occur.

**Function setting by dip switch**

- A. Dial-up 1: Limit mode optional
- OFF: NC mode
- ON : NO mode(Factory setting)

**Limit switch for opening and closing gate direction setting(J1):**

- Normal :Short circuit cap simultaneously No1 and No2 of J1 (Factory setting)

**Dial-up 2: Safety beam mode**

- OFF: NO mode(Factory setting)
- ON: NC mode
- Please don't remove the copper wire, if you don't install the safety beam, it will cause the gate can not be closed.
- If the gate connects with a safety beam, please remove the copper wire from the safety beam terminal in the control board.

While it meet obstacles during closing, it will stop and rebound to open. After the gate move to the open position, after 2 seconds the gate will auto close again if the obstacle signal disappear. If not , it will not auto close until the obstacle signal disappear.

**Dial-up 3 &4: Auto close time setting**

- Auto close function is activated after the gate completely opens to its place and stops by limit switch.
- Dial-up 3 &4, OFF-OFF: Auto close function disabled(Factory setting)
- Dial-up 3 &4, ON-OFF: 10S
- Dial-up 3 &4, OFF-ON: 30S
- Dial-up 3 &4, ON-ON: 60S

**Dial-up 5&6: Auto-closing timer for swipe card terminal triggering**

When the remote control triggers the pedestrian mode (remote control button 2 or 4), the gate will stop after open 6s. If the auto close function is activated, the gate will auto close after the gate opens to 6s. Auto close time setting is as follows

- Dial-up 5 &6, OFF-OFF: Auto close function disabled(Factory setting)
- Dial-up 5 &6, ON-OFF: 5S

- Dial-up 5 &6, OFF-ON: 10S
- Dial-up 5 &6, ON-ON: 30S

**Note:**

1. When the motor is running, the motor will stop immediately if triggers pedestrian mode
2. After triggering the pedestrian mode to open the gate for 6s, no mater it enters the countdown to close the gate or stop status, If triggered again, the gate will close the gate immediately.

**Dial-up 7: Condominium mode setting**

- OFF Condominium mode disabled(factory setting)
- ON: Condominium mode activated
- When the gate is opening, the trigger remote control and the start interface are invalid until the door is opened.
- When the gate is closing, trigger the remote control and the start interface, the gate will stop closing and auto open until the opening limit is reached (the remote control and the start interface are invalid when the gate is opening).

**Dial-up 8: Remote control buttons mode**

- OFF: Single button control circularly
- The first button control gate opening, stopping, and closing, second button is used for pedestrian mode ON: Three buttons control the First button control gate open, the second button controls the gate close the, third button controlsthe  gate stop, fourth button is for pedestrian mode
  **Not**: Please choose the remote control mode first before the remote control code clears to the control board

**Program and erase the remote control**

The control board can memory more than 100 pcs remote control.

- **Program the remote:** Press the learn button for at least 1 second and then release it, the LED indicator will light on. Now user needs to press the button on the remote control, with the learn button indicator LED flashing twice, which means the code learning is successful.
- After the user presses the learn button, within 6 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.
- **Erase the remote**: Press and hold the learning button for 6 seconds, while the learn button indicator LED lights on and flash twice, release the button. Now all remotes can not control the gate.

**Motor start capacitors**

- Capacitors are connected to the control board before use the motor, please confirm the interface of the capacitors is secure.

**Adjust the limit switch stop direction (J1)**

- A limit switch is used to switch the terminal stop detection interface, that direction of open and close the gate.

**Limit switch terminal stop detection**

- Terminal for connecting with the limit switch, such as spring limit or magnetic limit.

**Power switch**

- Switch on /off power stop when the user plans to adjust the parameters on the control board.

**Upgrade control board system by USB device**

- Power off the control board, set up the U disk and upgrade files as required, install the U disk upgrade module in the USB port on the control board, press and hold the Learn button, power on the system, and release the button after 3 seconds, the UP1 and UP2 indicators flash quickly to enter the program upgrade burning interface, and the system will automatically restart and enter normal operation after the upgrade is successful.

**Status indication description:**

1. The UP1 and UP2 indicators flash alternately, indicating that the firmware is being upgraded and written to the chip.
2. The UP1 light is always on and the UP2 light is off, indicating that the U disk mode initialization failed. Please check whether it is plugged in properly.
3. The UP1 light is off and the UP2 light is always on, indicating that the U disk reading failed. Please check whether the U disk is connected or re-plug the U disk.
4. The UP1 light is always on and the UP2 light is always on, indicating that the upgrade file reading failed. Please check whether the firmware file to be upgraded is stored, or the file naming does not match.
5. All upgrade files of this series are named EGB-02.BIN.

**Note:**

1. You must use our U disk module (EG-USB).
2. The USB flash drive used for the first time needs to be formatted as FAT32. After the upgrade, the original RF pairing data and menu setting data are still there.

**How to operate your gate opener**

Each remote has 4 buttons, there are two remote control modes for optional. The factory setting is a single-button control mode. If you want to change to use the three-button control mode, please reference the data set of dip switch 8.

- Single button control mode the 1st remote button is used to control the gate as "open-stop-close-stop", the 2nd button is used to control the PED mode.
  Then if needed, the 3rd and 4th button can be programmed into another gate opener controller, same function as the 1st and 2nd button.

- 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.

## 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 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.

## Troubleshooting

| Problem | Possible causes | Repair method |
|---------|-----------------|---------------|
| The gate fails to operate | 1. Check the clutch states,power-driven state or not. 2. Power no indication, and power trip. 3. The fuse has broken 4. Remote control failure or invalid 5. Damaged power cable 6. Remote control or motor problem | 1. Recovery 2. To restore power 3.Change the fuse 4. Detection or change 5.Detection and Repair 6.Detection and Repair |
| The working distance of the remote control reduced | 1. Low battery power or damaged 2. Interference from equipment using the same frequency 3. The receiver of the controller was damaged | 1. Replace battery 2. Wait to eliminate interference 3. Replace the control board |
| The gate fails to stop at the start or end position | 1. The terminal stop toggle switch is damaged or obstructed. 2. Limit the switch of the motor and the limit detection of the interface PCB board plug off. 3. The limit of open and closing is in the wrong position. | 1. Replace toggle switch or remove obstruction 2. Insert and fix it 3. Adjust of a limit switch(J1) |
| Press the open and close key of the motor, but cant work and operate | 1. The overcurrent value is set too high(set too big) 2. The gate has lifted off the track and disengaged the drive gear from the rack | 1. Decrease the overcurrent value,and check gear and racks can operate normally. 2. Maintenance and replace. |

# FAQ

- **Q**: **How do I adjust the auto-closing delay time?**
- **A**: The auto-closing delay time can be adjusted as per section 7.3 of the user manual.
- **Q: What should I do in case of a power failure?**
- **A:** In case of a power failure, use the supplied unique override keys for manual override as described in section 4 of the user manual.

## Documents / Resources

| | |
|---|---|
| Automatic Sliding Gate Opener<br>User's Manual<br> | **GIANT PYM-A2201-CX-EGB-02 Automatic Sliding Gate Opener** [pdf] User Manual PYM-A2201-CX-EGB-02 Automatic Sliding Gate Opener, PYM-A2201-CX-EGB-02, Automatic Sliding Gate Opener, Sliding Gate Opener, Gate Opener |

## References

- 🌐 **Hand.so is for sale**
- **S** **Domain Details Page**
- **User Manual**