User Manual

CMP-200

Date: March 2020

Doc Version: 1.1

English

Thank you for choosing our product. Please read the instructions carefully before operation. Follow these instructions to ensure that the product is functioning properly. The images shown in this manual are for illustrative purposes only.

For further details, please visit our Company's website www.zkteco.com.

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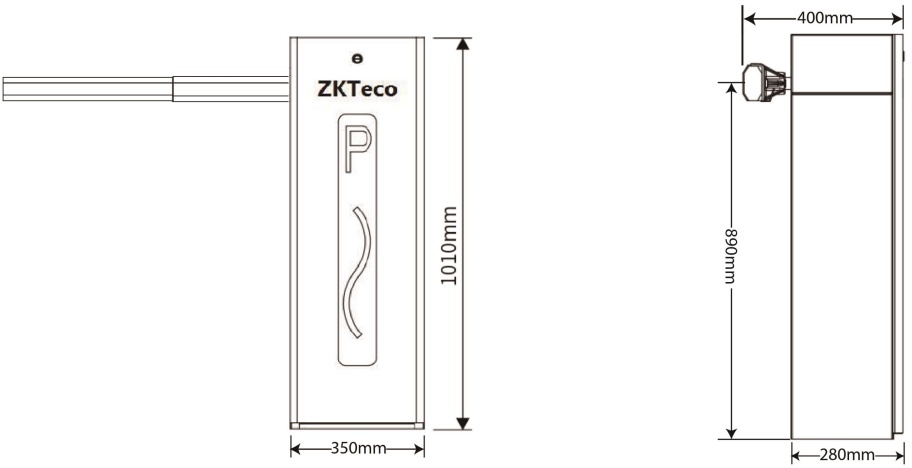
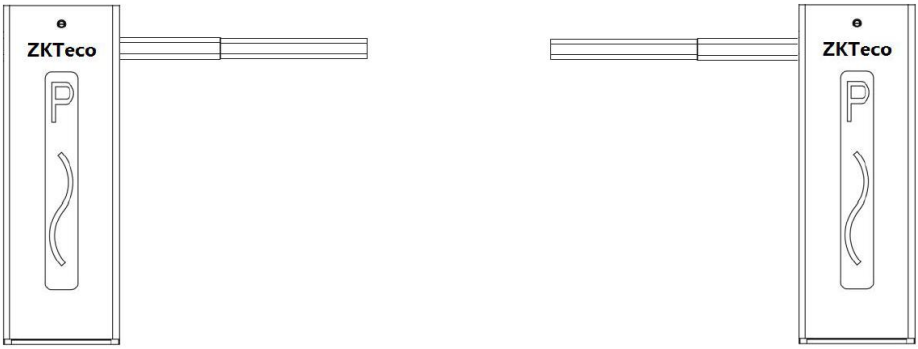
1 Product Introduction

CMP-200 series automatic barrier gate is a new barrier gate product combined with the practical application of automatic barrier gate products in the industry. Its appearance and structure design follows the needs of the market and industry, and the traffic light indication has the humanized experience. As an economical automatic barrier gate product, users can match the telescopic straight boom according to the actual needs to meet different application scenarios.

2 Appearance and Dimensions





L: The cabinet on the left

R: The cabinet on the right

3 Product Installation

3.1 Installation Precautions

1) Install the parking barrier on a level ground. If the ground is not solid and level, a cement base is needed before installation.

2) The boom can be cut, but cannot be increased. After cutting the boom length,

the spring balance needs to be set again to achieve new balance. Two plastic nuts lie in the bottom of the spring is designed for adjusting new balance.

3) Do not change the wire connection inside when power on.

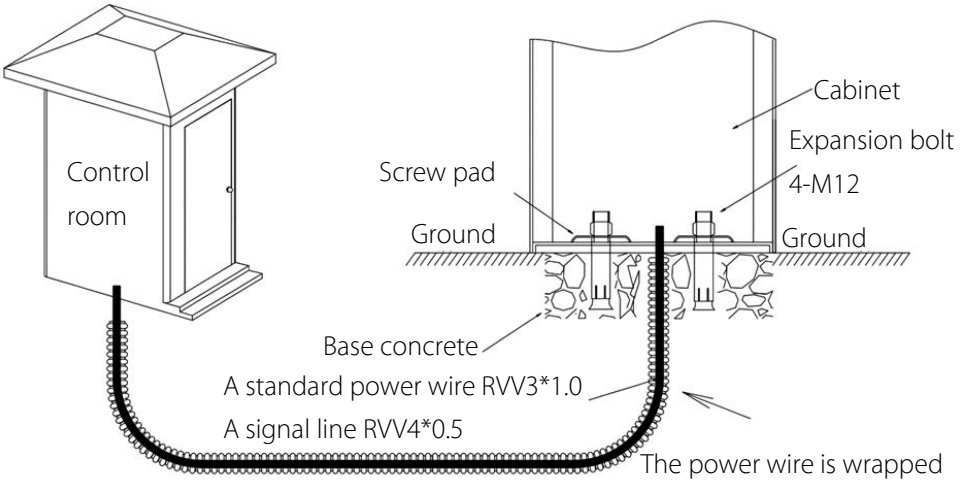
4) The GND should be connected to the cabinet for secure protection.

3.2 Cable Embedding

1) Prepare φ25 protective sleeve and cable in advance.

2) Route cables to be connected through protective sleeves.

3) Use a tool to open a cable tray on the ground.



The power wire is wrapped and protected using the wire sleeve when laid out under the ground (the strong current should be separated from the weak current)

3.3 Boom Installation

Boom Installation Procedure

1) Pull the vice boom out from the main boom, then fastened by 2 screws, as shown in Figure 1.

2) Installing the boom to the chassis, as shown in Figure 2.

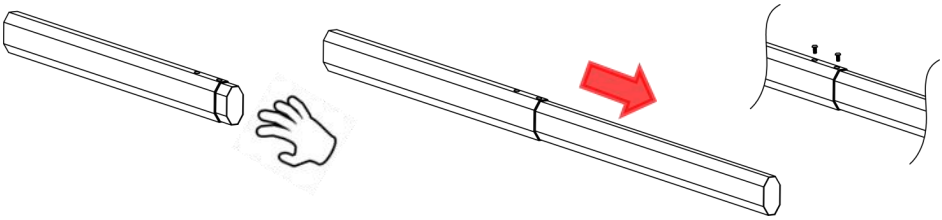


Figure 1 Connect the main boom with vice together by 2 screws

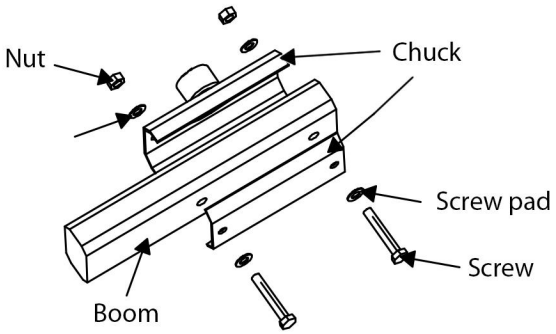


Figure 2 Installing the Boom to the Chassis

4 Parameters

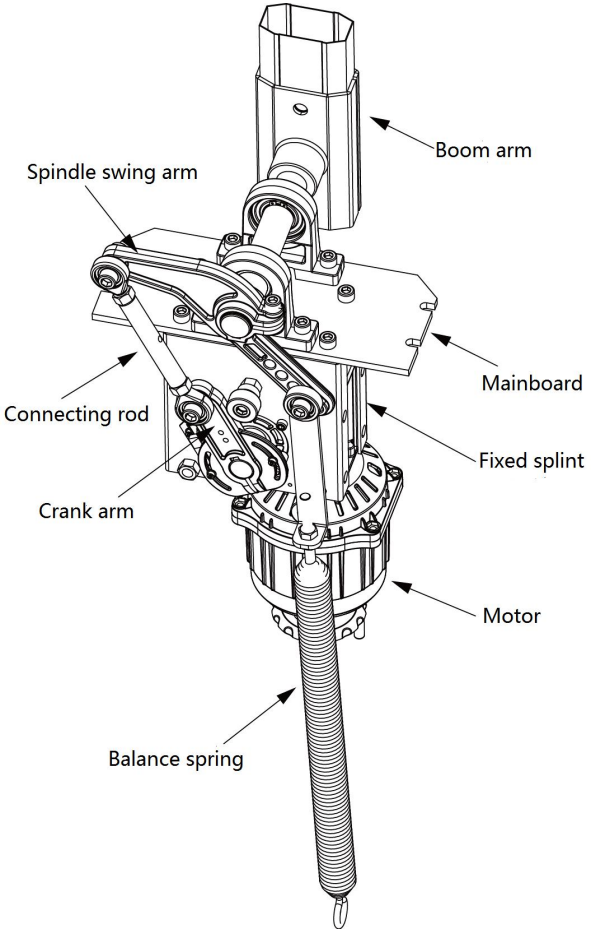
Power adaptability	Input voltage AC 220V/110V±20%, 50/60Hz
Rated power	100W
Max power	120W
Remote control distance	Open field≤30m
Remote control frequency	430MHZ, Learning code
Chassis material	Cold gadolinium steel plate
Boom material	Aluminum
Working temperature	-25℃~+75℃
Working humidity	<90%RH (no condensation)
Protection grade	IP54
Shell size (W*D*H)	1010*350*280 (mm)
Package size (W*D*H)	1100*375*430 (mm)
Chassis net weight	45KG

Chassis gross weight	47KG
Boom type (The mainboard is the same)	Telescopic straight boom, boom length≤4.5m, red and white color, the rise/fall speed is 3s
	Telescopic straight boom, boom length: 4.5m~6m, red and white color, the rise/fall speed is 6s

5 Functions

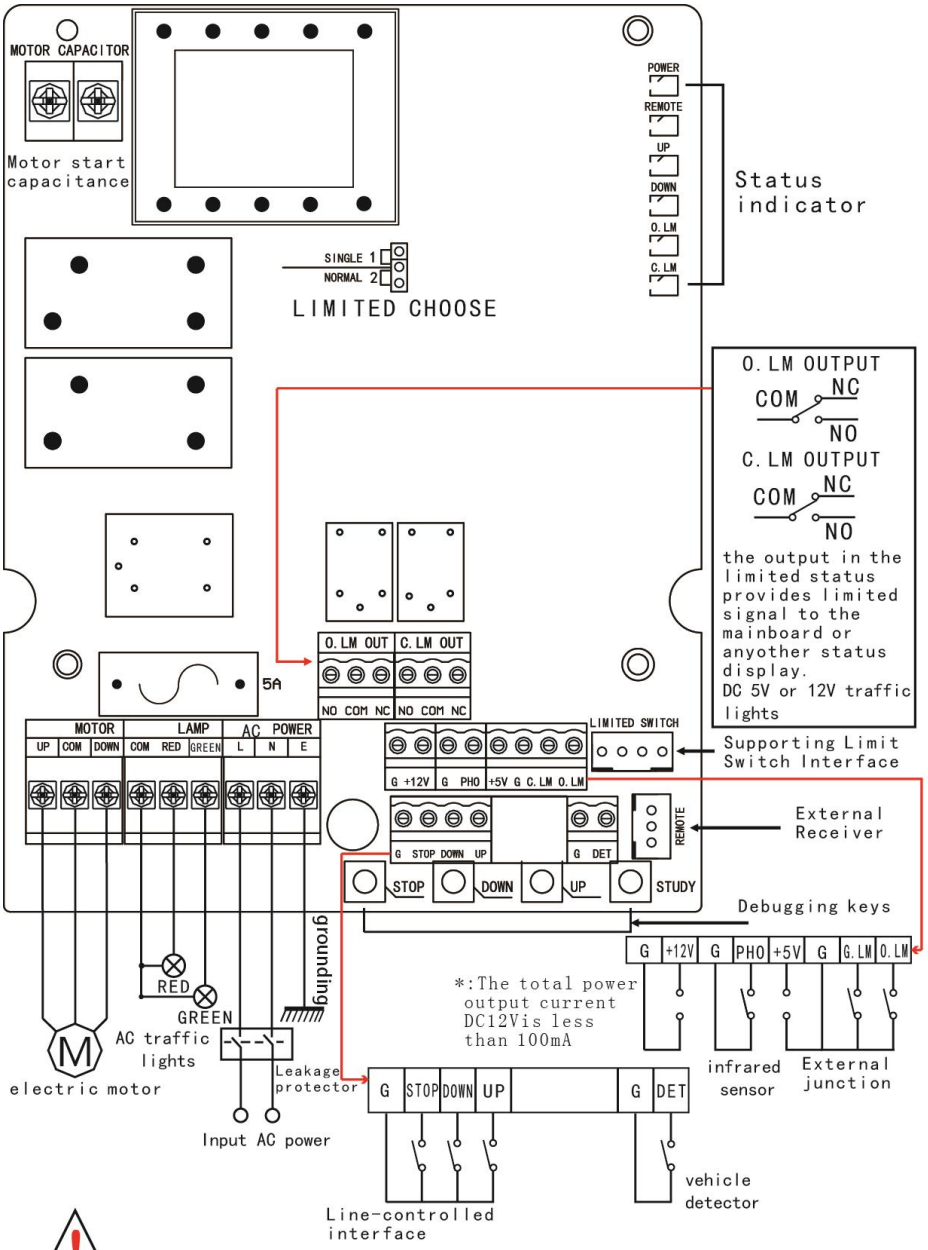
1. The opening and closing angle is 90°±2°.
2. Up, down and stop interfaces with standard switch input.
3. Anti-smash function: support loop detector, infrared detector and radar functions.
4. Controller timeout protection: when the boom operation is abnormal and exceeds the rise and fall time, the boom will stop operation automatically.
5. The barrier gate can be controlled by wireless remote control and wired control button to meet the needs of different field applications.
6. It supports traffic lights with AC voltage, and DC voltage of 5V or 12V.
7. Mainboard built-in fuse, overvoltage protection.
8. Support the connection of LPR, UHF reader controller and other devices to recognize and control the automatic door opening.

6 Movement Transmission Structure



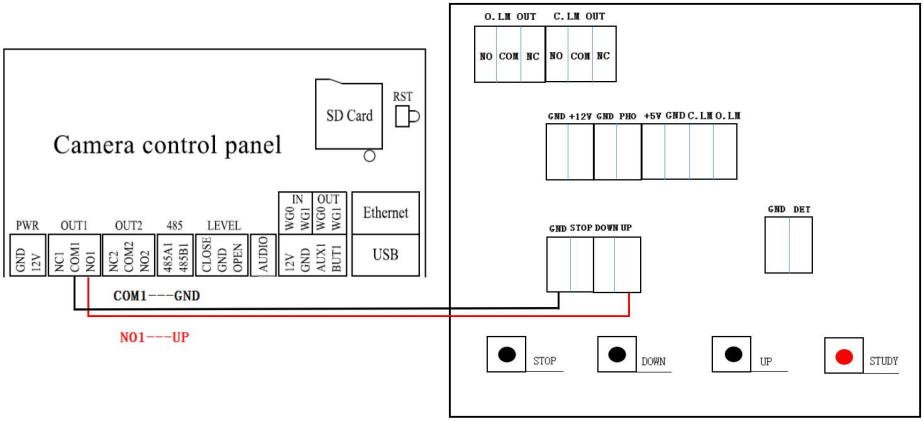
7 Control Board Wiring Installation

1. Remove the wiring cover of the barrier gate main controller.
2. Refer to the wiring diagram of the barrier gate controller and connect the lines one by one firmly. (Note: Power must be disconnected before installation or maintenance.)
3. After checking and confirming reliable wiring, install the wiring cover back.
4. Install the desktop remote control. Place the desktop remote control on the desk in the guard room or attach it to the wall and plug in power.
5. The wiring diagram of the controller is as follows:

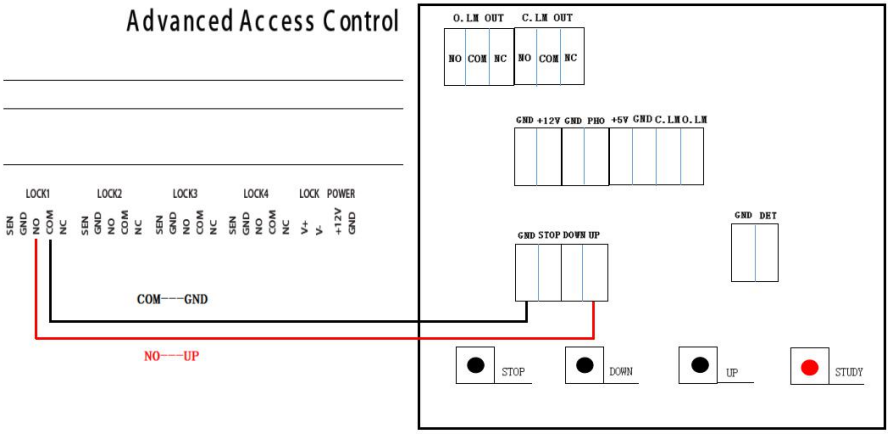


Cut off power before installation or repairation.
Notice the difference between 110V and 220V voltage input.

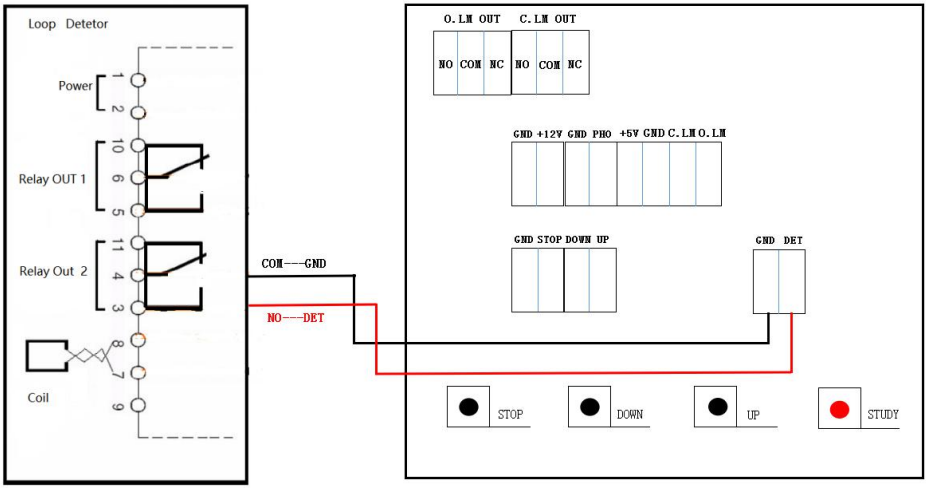
➢ Connection with LPR camera:



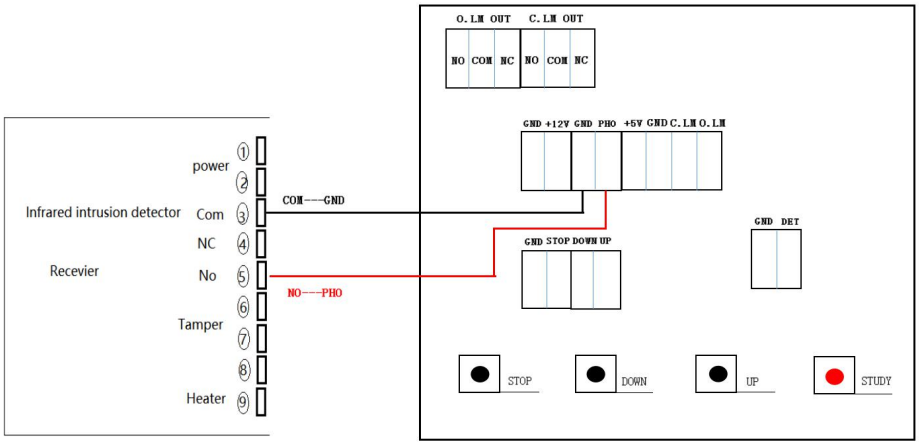
➢ Connection with UHF controller (**Note:** The Reader1 and 2 of inbio260 controller are corresponding to LOCK1, Reader3 and 4 are corresponding to LOCK2):



➢ Connection with loop detector:



➢ Connection with infrared detector:



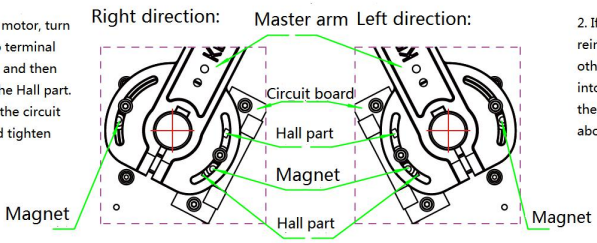
8 Commisioning Instructions

1. Check all the connections and make sure the connections are correct before connecting the power.
2. Please use the remote control or press the switch button on the mainboard to test whether the machine is running normally. **Warning: Be sure to install the corresponding length of boom before power-on test. To avoid accidents, no one is allowed to stand under the boom during debugging.**
3. In the process of boom falling, short connect the infrared detector and public interface, the falling boom is transferred to rising immediately, which will stop automatically after the rising limit.
4. In the process of boom falling, short connect the loop detector and public interface, the falling boom is transferred to rising immediately, which will fall automatically after the rising limit and stop automatically after the falling limit. In the process of boom rising, short connect the loop detector and public interface, the boom will fall automatically after the rising limit and stop automatically after the falling limit. In the open state, short connect the loop detector and public interface, the boom will automatically fall to the limit and stop.

5. Barrier gate Hall limit switch adjustment:

CMP-200 Barrier gate Hall limit switch adjustment:

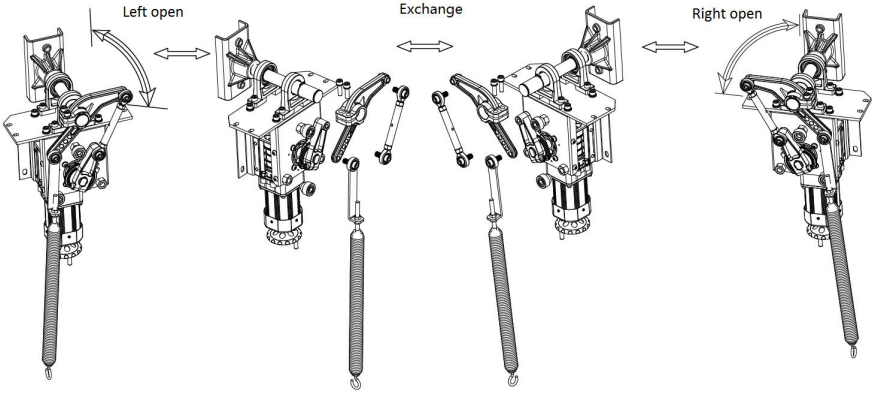
1. Manually shake the motor, turn the master arm to two terminal positions respectively, and then move the magnet to the Hall part. The indicator light on the circuit board shall prevail and tighten the magnet.



2. If switch left and right, please reinstall the circuit board on the other side and insert the wiring into the other end.Then adjust the magnet according to the above steps.

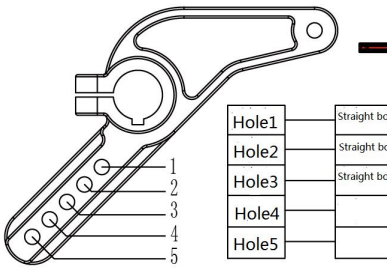
6. Left and right movement interchange method:

CMP-200 Barrier gate left and right movement interchenge: Please release the spring and remove the boom before replacing!

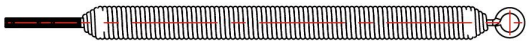


7. Barrier gate spring and boom length type matching:

CMP-200 Barrier gate spring hole selection:



Hole1	Straight boom 2≤L≤3m (spring wire diameter5.5)
Hole2	Straight boom 4≤L≤4.5m (spring wire diameter 5.5)
Hole3	Straight boom 5≤L≤6m (spring wire diameter 6.5)
Hole4	
Hole5	



Before leaving the factory, the boom of the machine has been adjusted to the balance state. If the boom length is changed or the spring is removed, the machine must be adjusted balance again. Debugging instructions: When the boom falls and shakes means that the spring is not elastic enough. Tighten the spring. When the boom rises and shakes means that the spring is too elastic. Loosen the spring.

8. Study/delete remote control code

Study code: In the stop state, press the "Study" button on the main controller until the REMOTE indicator is on then release it, press any button on the remote control, the REMOTE indicator is off, and the code studying is completed.

Delete code: In the stop state, press the "Study" button on the main controller until the REMOTE indicator is on, continue to press and hold the "Study" button until the REMOTE indicator is off, and the code deletion is completed. (Note: All codes are deleted.)

Note: One barrier can only study to 20 remote controls. The matching remote control has been learned, there is no need to learn again.

9 Troubleshooting

No.	Troubles	Fault cause	Solution
1	The POWER indicator is not on, the button is not responding.	1. The power supply is not connected. 2. The fuse blew.	1. Connect the power. 2. Replace the fuse.
2	The POWER indicator is on, no response by remote control.	1. Remote control code is wrong. 2. Poor receiving module. 3. Same frequency interference exists.	1. Recode. 2. Replace receiving module. 3. Change other frequency.
3	The POWER indicator is on, boom UP and DOWN indicator is normal, the motor is not running.	1. The motor wire is open or connected incorrectly. 2. Motor is stuck.	1. Connect the motor wire. 2. Manual release motor.
4	Unable to rise or fall boom to limit.	1. The limit line is misconnected. 2. Limit switch broken.	1. Reconnect the rising and falling limit line.

			2. Replace limit switch.
5	Remote control handle is not responding.	1. The battery of the handle is low. 2. Handle broken.	1. Replace battery. 2. Replace the handle.

10 Packing List

1) The barrier gate*1

2) The boom*1

3) The remote control*2

4) The barrier fixed screw*4

5) The boom fixed plate*1

6) The boom fixed screw*2

7) The key*2

8) The user manual*1

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