

User Manual

CMP-200

Version: 1.0

Date: November 2019

Contents

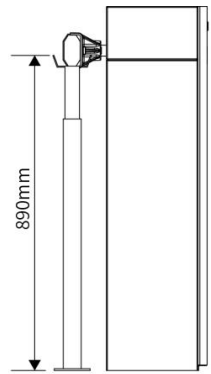
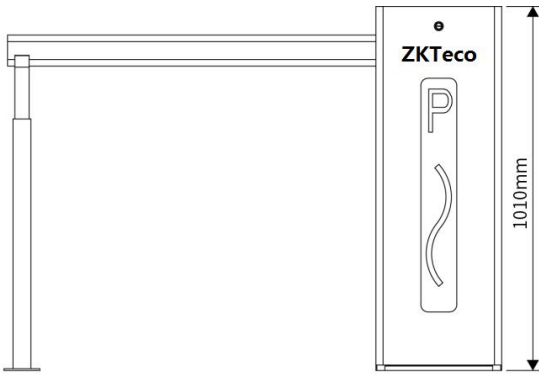
1 Product Introduction.....	1
2 Appearance and Dimensions.....	1
3 Parameters.....	2
4 Functions.....	3
5 Movement Transmission Structure.....	4
6 Control Board Wiring Installation.....	5
7 Commisioning Instructions.....	8
8 Instructions.....	10
9 Troubleshooting.....	11

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





3 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	433MHZ, Learning code
Chassis material	Cold gadolinium steel plate
Boom material	Aluminum
Working temperature	-25°C~+75°C

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	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

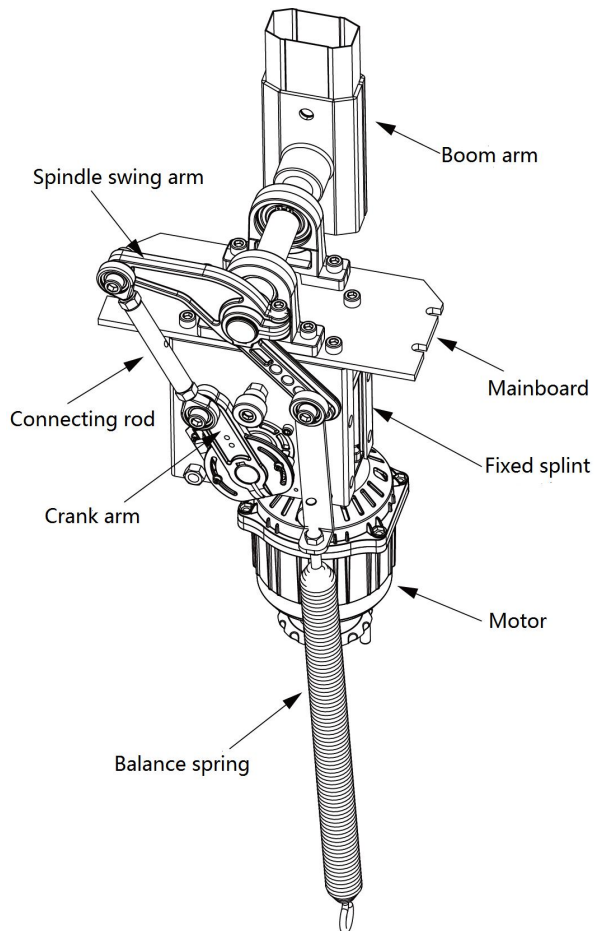
4 Functions

1. The opening and closing angle is $90^{\circ}\pm 2^{\circ}$.
2. Up, down and stop interfaces with standard switch input.
3. Anti-smash function: with loop detector, infrared detector and pressure wave functions, prevent car smashing.
4. Controller timeout protection: when the boom operation is abnormal and

exceeds the rise and fall time, the boom will stop operation automatically.

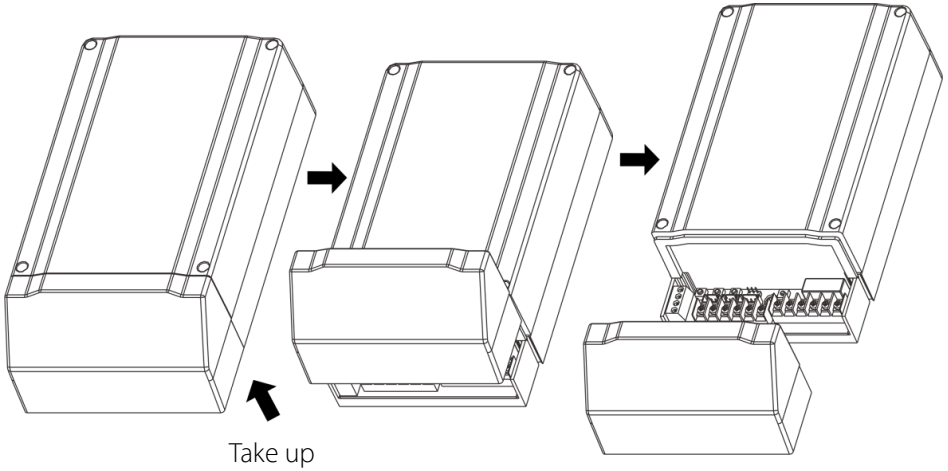
5. The barrier gate can be controlled by wireless remote control and wired control button to meet the needs of different field applications.
6. It supports traffic lights with AC voltage, and DC voltage of 5V or 12V.

5 Movement Transmission Structure

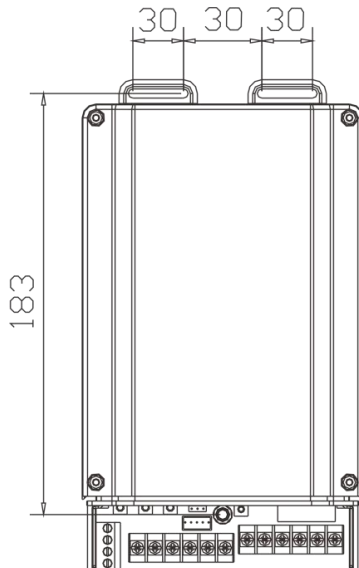


6 Control Board Wiring Installation

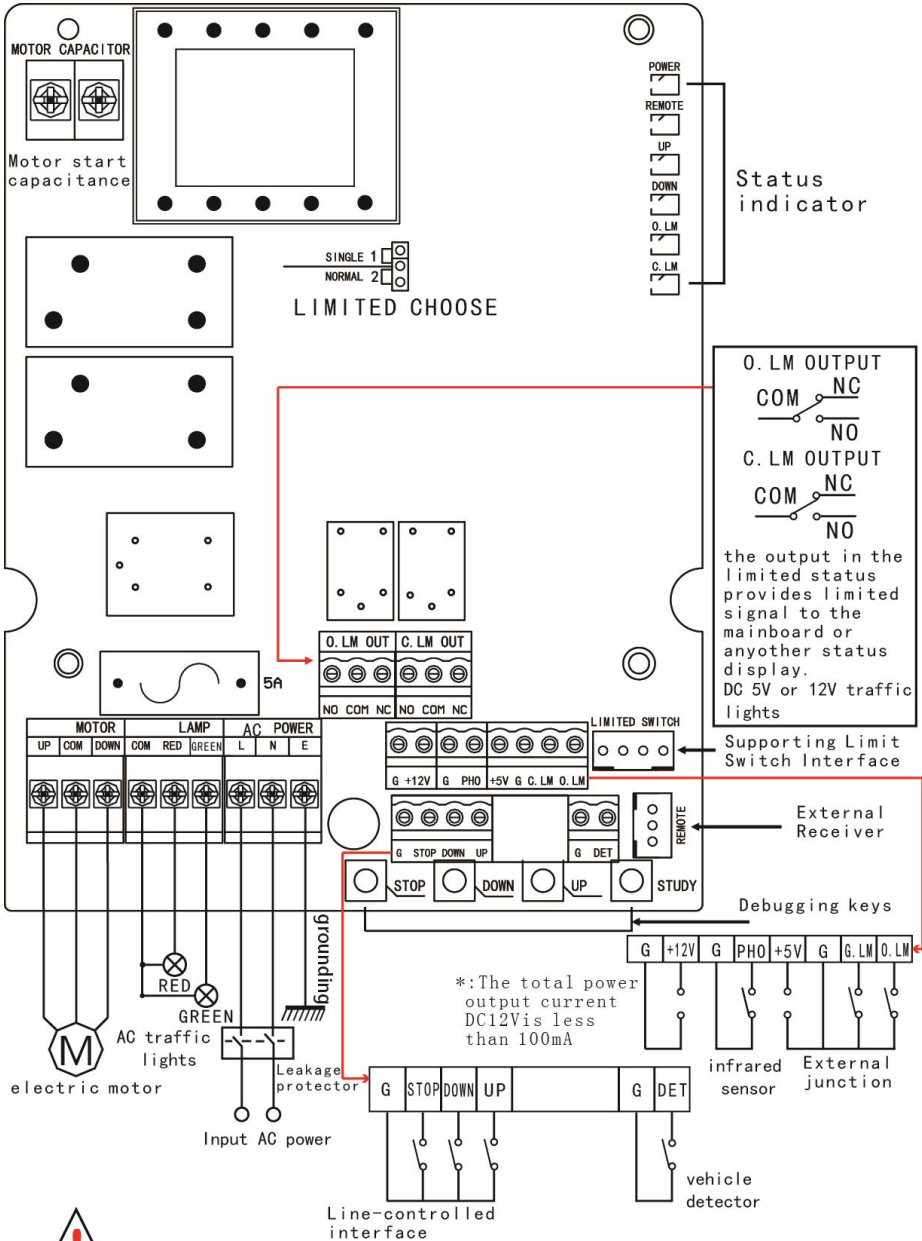
1. Remove the wiring cover of the barrier gate main controller. As shown below:



2. The installation size of the control board in the barrier gate chassis is as follows (unit: mm).



3. 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.)
4. After checking and confirming reliable wiring, install the wiring cover back.
5. 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.
6. The wiring diagram of the controller is as follows:



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

7 Commisioning Instructions

1. Check all the connections and make sure the connections are correct before connecting the power.
2. Press the "Up" button of the desktop remote control or "▲" on the remote control handle, the boom will rises and stops automatically after the rising limit. If the running direction is opposite, adjust the rise and fall wiring of the motor.
3. Press the "Down" button of the desktop remote control or "▼" on the remote control handle, the boom will falls and stops automatically after the falling limit. In the process of falling, press the "Up" button of the desktop remote control or "▲" on the remote control handle to rise the boom.
4. In the process of rising and falling, press the "Stop" button of the desktop remote control or "■" on the remote control handle to suspend the operation of the boom. **Warning: To avoid accidents, no one is allowed to stand under the boom during debugging.**
5. 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.
6. 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 other states (except the falling limit), short connect the loop detector and public interface, the boom will automatically fall to the limit.

7. 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.

Right direction: Master arm Left direction:

The diagram shows a top-down view of the Hall limit switch assembly. A central 'Circuit board' is connected to two 'Hall part' components. A 'Magnet' is positioned to interact with these parts. The assembly is shown in two states: 'Right direction' and 'Left direction', with a 'Master arm' moving between them. Green lines highlight the magnet's path and the hall parts.

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.

8. Left and right movement interchange method:

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

The diagram illustrates the process of interchanging the left and right movement of the barrier gate. It shows four stages: 1) The mechanism in its original 'Right' position. 2) The 'Exchange' process, where the master arm and magnet assembly are removed. 3) The 'Left' position, where the master arm and magnet assembly are reinstalled on the opposite side. 4) The final 'Left' position of the mechanism. Double-headed arrows indicate the transition between stages.

9. Barrier gate spring and boom length type matching:

CMP-200 Barrier gate spring hole selection:

Hole1	Straight boom 2sL≤3m (spring wire diameter 5.5)
Hole2	Straight boom 4sL≤4.5m (spring wire diameter 5.5)
Hole3	Straight boom 5sL≤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 Instructions

1. Up button

In the stop state, press the "Up" button of the desktop remote control or "▲" on the remote control handle to rise the boom. In the process of boom falling, press the "Up" button of the desktop remote control or "▲" on the remote control handle to immediately rise the boom.

2. Down button

In the stop state, press the "Down" button of the desktop remote control or "▼" on the remote control handle, and the boom will fall. In the process of boom rising, pressing the "Down" button of the desktop remote control or "▼" on the remote control handle is invalid.

3. Stop button

In the operation state of boom rising and falling, press the "Stop" button of the

desktop remote control or "■" on the remote control handle to stop the boom.

4. 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.)

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.	1. Recode. 2. Replace receiving module. 3. Change other

		3. Same frequency interference exists.	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.

ZK Building, Wuhe Road, Gangtou,
Bantian, Buji Town, Longgang District,
Shenzhen China 518129

Tel: +86 755-89602345

Fax: +86 755-89602394

www.zkteco.com

