

# Parking Barrier Gate Installation Instructions





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# **Chapter 1, Barrier Gate Installation**

#### 1. Tools

Tool preparation: impact drill, adjustable wrench, hammer, needle nose pliers, hexagonal wrench, screwdriver, torx wrench (included with the machine), etc.



### 2. Base and box installation

Remove the four screws shown in the picture from the box and take out the base. See below





Pay attention to opening the wire trough in advance to the center area of the base.

The opening of the base is downward. After determining the position, fix it with  $M10 \times 120$  expansion screws.

Place the chassis on the base and tighten the four screws that were initially removed to complete the chassis installation.

The gate base is shown in the picture below.



#### 3. Gate rod installation and removal

3.1. Install the brake lever: The original brake lever and the lever head are integrated. When installing, be sure to align the flat key on the spindle with the keyway opening of the handle head, gently tap the handle head in, and tighten the center screw.





3.2. Plug in and connect the power cord of the light strip.

3.3. Disassemble the brake lever: First use the supplied torx wrench to remove the screw in the middle of the lever handle head, and then insert and tighten the supplied M8\*60 hexagon socket screw. Use a little force to remove the brake lever (including the lever handle head). (see picture below)





# **Chapter 2, Control Board**

1. Mainboard peripheral configuration product requirements

1.1. Power supply  $24V/4 \sim 10A$ ;

1.2. Motor 24V DC brushless motor.

2. Mainboard wiring diagram and mainboard button function description diagram











#### 3. Motherboard operation

3.1. Barrier self-inspection learning switch limit process:

Step 1: The motherboard starts normally (displays "190") and long press the "key" of the motherboard for 2 seconds. When the barrier gate runs in the closing direction, the value displayed on the main board decreases. When the motor reaches the closing limit, the display on the main board changes back to "190". At this time, the closing self-test is completed. Step 2: After the self-test is completed, press and hold the "on" button on the motherboard for 2 seconds. The barrier gate runs in the direction of opening, and the value displayed on the main board increases. When the motor runs to the opening limit, the main board buzzer makes a long sound. At this time, the opening self-test is completed, and the gate can operate normally.

3.2. Mainboard button operation steps:

Step 1: Press and hold the mainboard menu key until L-1 is displayed. Step 2: Press the "On" or "Key" key on the motherboard to select the menu directory. If you need to enter this directory, press the "Menu" key on the motherboard once to enter.

Step 3: If you need to change the entered directory parameters, after entering the menu directory, use the "On" and "Off" keys to increase or decrease this menu parameter. After the change is completed, if you need to change other directory parameters, press the "Menu" key once to return. Go to the main menu directory and follow the second step to continue changing. If you no longer want to change other parameters, you can



directly press the "Confirm" key on the motherboard to save and exit the menu.

English	Value	Function	Default	Parameter
menu	menu		parameters	range
L-1	L01	Gate opening speed: the larger the value,	65	20-95
		the faster the speed		
L-2	L02	Gate closing speed:	65	20-95
		the larger the value,		
		the faster the speed		
L-3	L03	Smoothness in place: The smaller the value, the more stable it is. If it is too small, it may not be able to close in place.	12	8-15
L-4	L04	Anti-car smashing sensitivity: The smaller the value, the more sensitive it is. If it is too small, it may automatically raise the bar.	30	15-30
L-5	L05	Velocity and Menu: The higher the value, the greater the velocity. Odd numbers: alphabetical menu, even numerical menu	70	70-90
L-6	L06	Horizontal adjustment: The smaller the	20	3-90
		value, the smaller the gate lever angle.		
L-7	L07	Aging test mode: 0: Manual 1: Automatic, 1-5 is the automatic running time interval, 1 is the fastest, 5 is the slowest, 6 is half-stroke operation	0	0-6
L-8	L08	Gate opening counting function: 0: without counting, 1: with counting, 4: peak mode (after the gate is opened in place, press the remote control stop button to open, and to close, press the remote control closing button)	0	0-1-4
L-9	L09	Vertical adjustment: The smaller the value, the smaller the opening angle.	20	3-90
L-L	L10	The first section of the gate opening and deceleration stroke: the smaller the value, the smaller the opening and deceleration stroke.	55	20-90

3.3. Parameter function table



L-b	L11	The first section of the closing deceleration stroke: the smaller the value, the smaller the closing deceleration stroke.	55	0-255
L-c	L12	Anti-smashing strength: The larger the value, the greater the anti-smashing strength. If the value is greater than 100, the anti-braking will be cancelled.	50	0-101
L-d	L13	Barrier gate movement forward and reverse mode: 0/3: left and right running direction of the same motor; 1/2: left and right running direction of the same motor	0	0-3
L-E	L14	Self-check running speed in the closing direction: The larger the value, the faster the speed. It is only used to adjust the self-check speed in the closing direction when the motherboard is powered on and self-checked.	30	0-49
L-F	L15	Remote control learning and clearing	0	0-255
L-H	L16	The second stage of gate opening and closing deceleration stroke: the parameters are set within the first stage of deceleration stroke.	0	0-20
L-P	L17	Power-off and brake-starting function: What is the parameter setting? When the voltage is lower than the set parameter, the power-off and brake-starting function takes effect (need to add a battery)	0	0-21
L18	L18	Relay output mode when the switch is in position: 0 traffic light mode; 1 in position detection state mode; 3 light sensor mode	0	0-3
L19	L19	Ground pressure delay gate time setting: Set the value as the delay gate time (seconds) 000 means not to enable this function	0	0-255
L20	L20	Automatic gate closing time setting after opening: Set the value to the automatic gate closing time after opening to the position (seconds) 000 means not to enable this function	0	0-255
L21	L21	Communication machine number setting: Set the value to the machine number during communication. Only when the machine number matches the communication can normal communication be achieved.	70	0-255
L22	L22	Running reverse buffer setting: When the gate rod is running, the sudden reverse buffer time setting, each number represents 0.1 seconds	30	0-59
L23	L23	Light sensitivity setting: The smaller the value, the more sensitive the light source is.	50	0-255
L19 L20 L21 L22 L23	L19 L20 L21 L22 L22 L23	Ground pressure delay gate time setting: Set the value as the delay gate time (seconds) 000 means not to enable this function Automatic gate closing time setting after opening: Set the value to the automatic gate closing time after opening to the position (seconds) 000 means not to enable this function Communication machine number during communication. Only when the machine number matches the communication can normal communication be achieved. Running reverse buffer setting: When the gate rod is running, the sudden reverse buffer time setting, each number represents 0.1 seconds Light sensitivity setting: The smaller the value, the more sensitive the light source is.	0 0 70 30 50	0-25 0-25 0-25 0-5 0-25



L-24	L-24	Gate opening reverse self-test running speed: the larger the value, the faster the speed. It is only used to adjust the gate	30	0-49
		opening direction self-test speed when the motherboard is powered on and self-tested.		

#### 3.4. Remote control learning and clearing

#### 3.4.1 Remote control matching

Step 1: Press and hold the "Menu" key to enter the menu, select the L-F option, click the "Menu" key to display 000, and then enter the remote control settings

Step 2: Press "any key" on the remote control. The motherboard will beep once and the display will change to "L-F". Matching remote control is successful.

Step 3: Press the "OK" button to save and the configuration is completed.

3.4.2. Remote control clearing

Step 1: Press and hold the "Menu" key to enter the menu, select the L-F option, click the "Menu" key to display 000, and then enter the remote control settings

Step 2: Set the parameters to 253. At this time, the mainboard display will automatically return to the L-F interface. At this time, the remote control clearing is successful.

3.5. Restore factory settings

Press and hold the "Confirm" button on the motherboard, wait for the buzzer to beep three times and then release the button. At this time, all parameters will be restored to factory default values.



# Chapter 3, Frequently Asked Questions and Solutions

1. In the event of a power outage, you can slowly lift the gate lever manually to open the gate.

2. The automatic function cannot lift the gate lever. You can turn off the power and slowly lift the gate lever manually according to the above paragraph to open the barrier.

3. The self-test is unsuccessful and the gate is not operating normally.

Solution: Check whether the left and right rotation mode of the L-d motor matches the current motor. You can restart the motherboard and re-self-test by changing the parameters.

4. The vertical or horizontal position of the gate pole is not in place Solution: Adjust the L-9 or L-6 parameters of the mainboard menu (please refer to the parameter table for menu functions)

5. How to correctly judge whether the gate is really switched in place? Solution:

5.1. Set the L-18 parameter of the main board to 1. If the relay is fully opened (or fully closed), the relay will act once, which means it is fully opened (or closed).

5.2. Pay attention to observe whether the motor stops when the barrier rod is opened/closed in place, which means it is in place. If the barrier rod is in place and the motor is still running, you need to change the L-6 or L-9



parameters.

6. The rebound function fails when encountering resistance.

Solution:

6.1. Check whether the L-C parameter will turn on the rebound when encountering obstacles (the motherboard parameter is greater than 100, and the rebound function when encountering obstacles will be disabled)

6.2. After the motherboard self-test is successful or after entering the menu and exiting, the motherboard needs to be opened and closed twice respectively before the rebound function will work when encountering resistance.

7. The barrier suddenly runs in the opposite direction during normal operation.

Solution: Increase the value of the L-C rebound function parameter when encountering resistance.

8. The direction of the barrier gate can be replaced: just install the limit plate on the output shaft of the reducer in the opposite direction (see illustration)





#### **Chapter 4, Precautions and Product Warranty**

#### 1. Things to note:

1.1. Ambient temperature: -30~60°C

1.2. External power supply: 220V±10%, 50/60Hz

1.3. Check whether the motor wire is connected correctly. If the

connection method is incorrect, it will not operate.

1.4. Whether the functional parameters are set correctly. Incorrect settings may cause the gate to work abnormally.

## 2. Product warranty:

2.1. This product has a one-year warranty.

2.2. Product failures caused by the following conditions are not covered by the warranty:

2.2.1. Product failure caused by improper usage conditions or environment, such as unqualified power supply and ambient temperature exceeding the product's endurance range.

2.2.2. Product failure or damage caused by human accidents, misoperation or disassembly.

Note: Dimensions of barrier gate:



