

*Smartpower*

## Retractable Sliding Gate Operation manual

[www.Smartpower.co.in](http://www.Smartpower.co.in)

### **Product performance and character**

Our company's automatic extension gates all use the imported materials, all accessories use the advanced technology, product looks elegant, noble, beautiful lines, has the following characteristics:

- 1. motor used a **balanced technology****, the motor has high-power output, stable movement, reliable performance.
- 2. the doors have a strong wind resistance installations** to ensure that the doors will not be affected under the strong winds also can run as usual.
- 3. **clutch function****, when the power failure, we can only use the clutch keys insert the special hole, easily rotate 180°, it can converted to the manual operation state.
- 4. **line fine-tuning devices****, it can adjust the minor deviations to ensure the door go straight when it is moving.

**5.** the wheels use the high-strength, wear-resistant materials.

After taking 10-meter trip through the 200,000-load running also has no significant wear, and it has no impact after the sand storms

**6.** hidden wiring, so that the entire doors are concise, generous.

**7.** large-rolling LED display, and rich enough , more clearly, the content can be based on your need, if you have the need, we can also send you the software, you can replace the ad content at will.

**8.** the intelligent bump-defending devices, it can be automatically returned when encountered the vehicles or the person about 30-50 cm, it can protect the safety of pedestrians and vehicles.

**9.** soft-start electronic and mechanical buffer devices used in the door ,when the motor start ,it is not shaking, noise-free.

**10.** the doors of the "mechanics" and "aesthetic" the best design programs to ensure that the fashionable appearance, reliable performance, the use of more human.

## **The safe use and maintenance**

**1.**Before installed, you must check the power and voltage are consistent with the product, AC220V, 50HZ, for taking into account the existence of under-voltage phenomenon in some areas, the company's products in voltage as low as AC180V, can still maintain a reliable performance.

**2.** clutch function, when the power failure,it will be converted into the manual state.

**3.** connect the power, start the door row, and check the normal protective function of the doors.

4. control boxes should be placed in ventilation dry place to ensure the stability of its performance, extending product life.
5. the need to open the door,press the control box or the remote controller for the "open" button, the door will run automatically until after the gate stay in place.
6. the need to close the door, press the the control box or the remote controller for the "close" button, the door will run automatically until after the gate stay in place.When you want to stop,press the "stop" button to stop running.
7. when the extension door meet the other debris and stopped, you should press the "stop" button or cut off the power supply, and then clear the debris in order to avoid unnecessary losses.
8. when power failure, we can use the clutch key to make the motor by manual, calls on the first step after the operation in accordance with the opposite direction of rotation to clutch reduction. Then resume normal operation of motor status.
9. for all kinds of electrical lines should be regular maintenance.
10. when you buy a product with remote control function, the control box on the functions can be completed in the remote controller,the remote control distance of between 20-80 meters (see the scene of the case may be), to your convenience of the use, such as the remote distance is more near than normal (or lights dimmed), please replace the batteries.

**11.** if you buy the product has the bump-defending function, when the doors close automatically, it can be automatically returned 50 - 100cm when encountered the vehicles or the person about 30-50 cm, it can protect the safety of pedestrians and vehicles., greatly improving the product safety, reliability.

**12.** frequently check the road and track has debris or not, clean it timely, to prevent the door block, serious times will make the door get out of the track..

**13.** when the doors opened, prohibit touch the row, avoid being trapped.

**14.** door should always wipe to keep the door clean, beautiful, prohibit use the hard goods to clean the door, so as to avoid harm the row surface, affect the appearance.

**15.** we should lubricate the chain of motor usually, make the chain operate flexibility and to prevent rust.

## **Installation and operation**

**1. guide track installation:** guide track is the basis of the Orientation of door and wind-defending, the smooth road is the key points of the life of moving, the straight guide track and smooth road have the higher level.

**2. install guide track:** before you install the guide track, you should mark the standard height fo track and location (the guide track of the installation after column from the direction of the distance of 42-52 cm), and then dig the fixed-pole, straightening by the standard height and location of the guide track, welding the guide track and fixed pile.

**Here is two kinds of track:**

**And the two track laying picture:**

### **Track length calculation**

**3. location:** standard by the guide track, mark the centre location of door row by the line, mark the straight line on the ground, determine the door row fixation distance from the wall, determined the location of fixed board.

### **4. the installation of doors and the installation of limit**

#### **1.1 Two kinds of installation method:**

#### **1.2 the installation of limit.**

**A, closing limit:** all the doors will be closed, buried the magnet under Magnetic switches which is at the bottom of the motor away from the clutch, the length is from the wall or, in the location of 5-8 cm,(magnet buried in concrete About 1-2cm) .

**B, opening limit:** all the doors will be closed ,move 10-15 cm for the gap from the direction of the closure, and then buried the magnet under the magenetic switches which is at the bottom of the motor,

**C, infrared anti-collision limit:** close the door,motor in front of the place (away walls or columns, about 80-150 cm), the specific distance from the scene as the case may be, and then buried the magnet under on the motor.

## 5.operation

after the installation procedure of the above steps,and then operate it, the specific methods are as follows:

- 1). with clutch dedicated keys, in the bottom of the motor insert the clutch key into the clutch hole, according to the clockwise direction rotate 180°, so that the clutch separation, and then hand to push and pull the motor, the door row, To confirm whether the normal operation manually.
- 2). make the controller work ,operate the "open" and "close" and "stop" button on the controller repeatedly, to observe and listen the motor in the empty situation, whether normal.
- 3). close the clutch (the first step in the opposite direction rotating clutch keys) then repeatedly operate the "open and "close" and "stop" button to observe whether the normal operation of motor, Magnetic switch in place.

4). anti-collision test, when the doors open after the close button, and then running in the direction of the front head with their hands or objects blocking the infrared probe to test the infrared device, the normal time (when there are objects blocking the infrared) will return to the gate.

5). repeatedly open and close the door to watch cable whether there is a stuck phenomenon and whether the head in place.

# WJ series single motor description

## 1. Performance

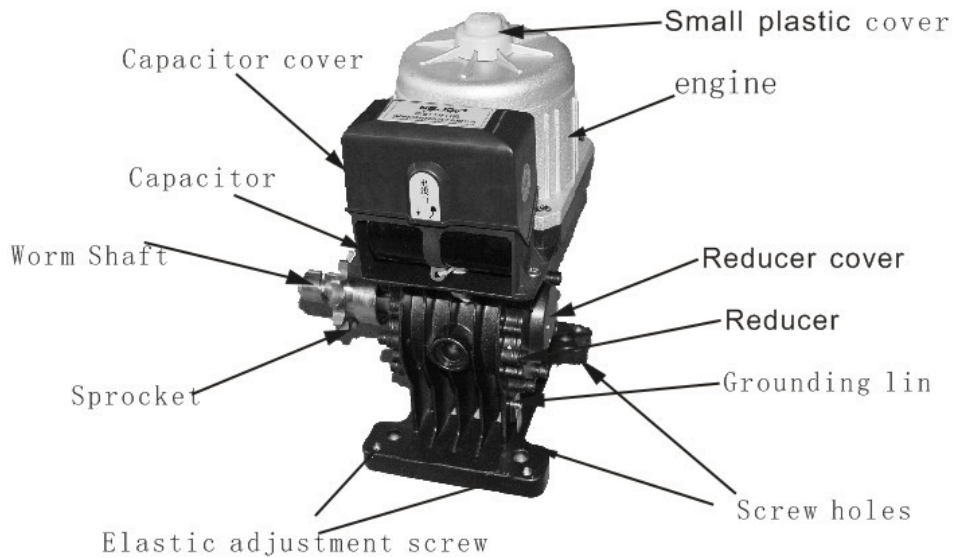
- ( 1 ) Compact structure, stable performance.
- ( 2 ) Strong power.
- ( 3 ) To adapt to frequent positive inversion.
- ( 4 ) Low noise design, comply with environmental requirements.
- ( 5 ) New structural design to ensure the life of a single motor.
- ( 6 ) In the power failure state, can be converted manually open ,close.
- ( 7 ) -25 °C to work under low temperature environment.
- ( 8 ) Precision aluminum die-casting box,high precision and good heat dissipation.

( 9 ) Adjustable starting time.

## 2. Specifications

- ( 1 ) Voltage frequency : 220V/50HZ
- ( 2 ) rated Current : 2A
- ( 3 ) Rated output power : 350W
- ( 4 ) working temperature : -25℃~+110℃
- ( 5 ) Insulation class : B level
- ( 6 ) Reducer output speed : 45 rev/min.

## 3. WJ single motor structure picture , the following :

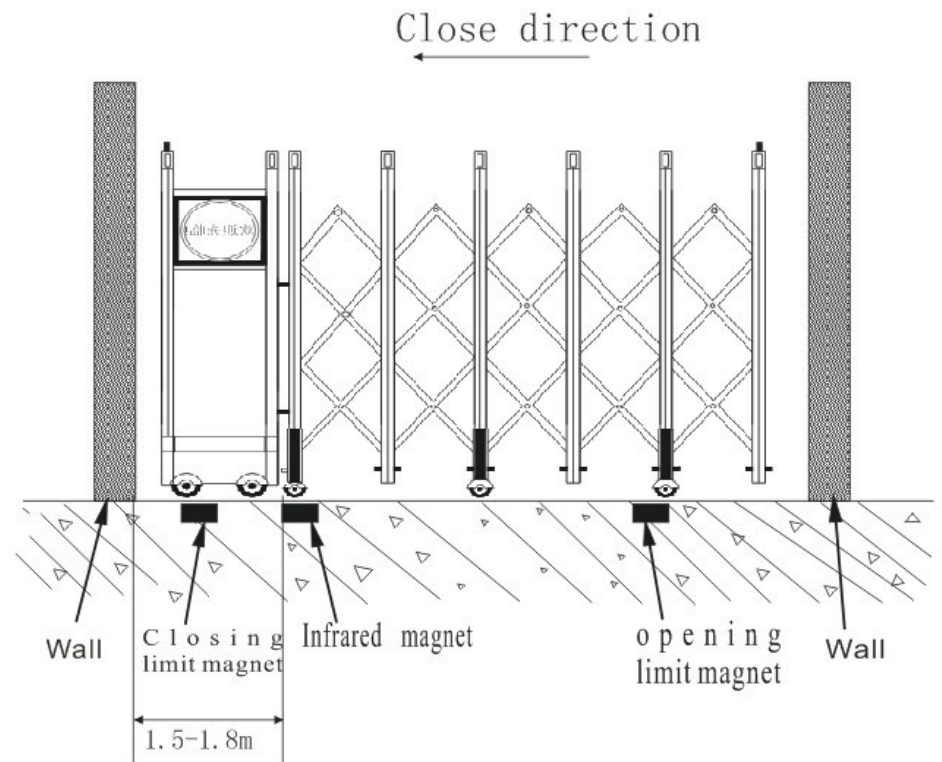


#### 4. Debug instruction

1. before start, please carefully check the power supply voltage and frequency is consistent with this model demand, and check the grounding is good, the controller part of the wiring is correct.
2. using the clutch turn it to the separation position, the head should be moving freely; turn to the combination position, the head should be fixed.

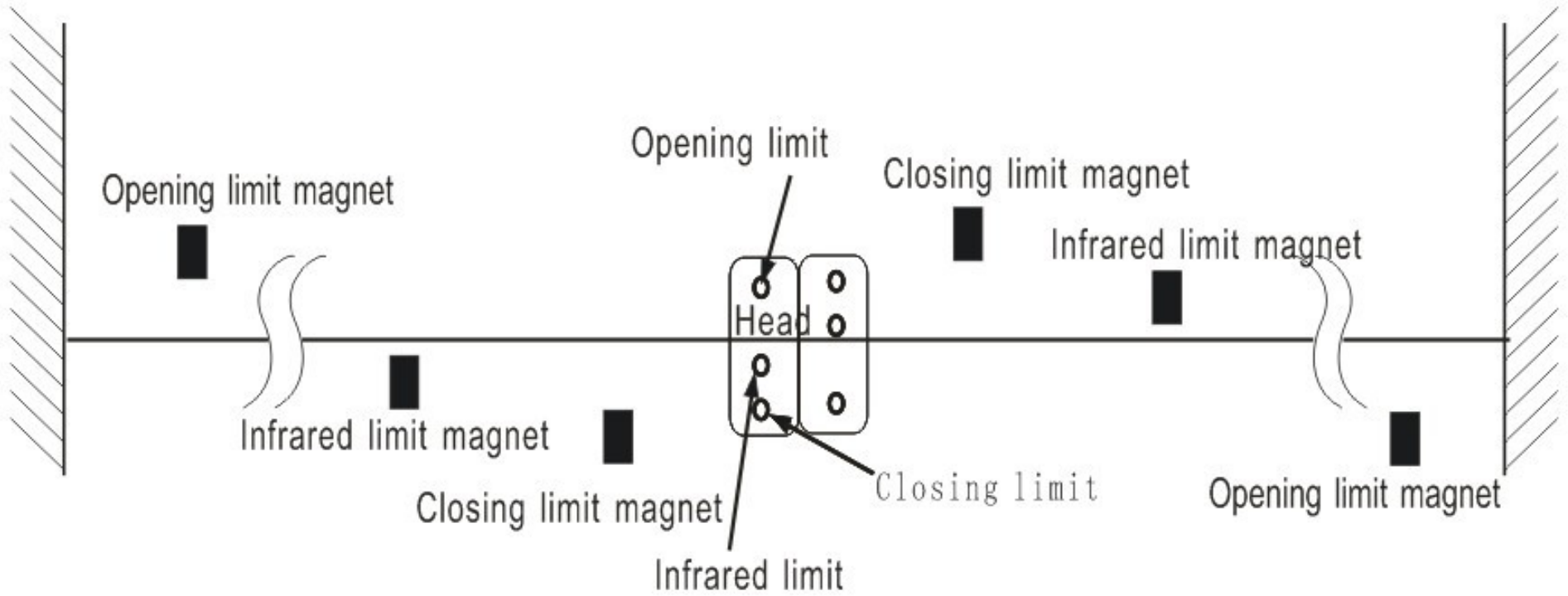
3. connected to power supply, controller power indicator light, press the open, close, stop button, the head can be run properly.

#### 5. the installation drawing of the WJ single motor:





## WJ single track installation drawing



## WJ single track two opening installation drawing

# WJ series double motor description

## 1. the major accessory:

### 1、 Product Configuration Understanding system



## 2. Performance:

1. Microcomputer control system, safe, reliable and powerful.
2. Intelligent corrective devices to ensure accurate driving the head in place.
3. Full remote control signal transmission used ,easy to use.
4. Infrared anti-collision devices to ensure the safety of vehicles.
5. Slow the start of electronic devices, to ensure a smooth head start, not shaking.
6. Infrared anti-climbing device can be created to ensure the safety of indoors.
7. Display power supply, the direction of signal interface for easy installation screen, and to extend the display life.
8. Self-locking device, up wind, can meet wind resisting and anti-theft dual effect.

### 3. Specifications

( 1 ) Voltage frequency : 220V/50HZ

( 2 ) Rated output power : 450W

( 3 ) working temperature : -25℃~+75℃

( 4 ) Remote distance : ≥30M, open land: ≥50M

### 4.installation, debug and use

#### (1).the installaion of magnet:

1.Before the installation,you should first prepare a percussion drill and 25mm、 10mm drill that used to drilling hole magnets installed on the ground. Magnet Specifications: diameter × height = 22mm × 22m.

2.Ready to install, gate placed first in the local setting line, that is the centerline of the door when traveling (such as the magnetic component of the overall map of the "predetermined routes").

3.after setting the line, based on the drawing size,first fixed the

guide device.

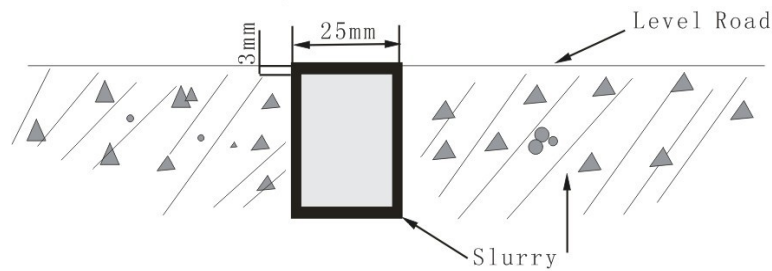
4.And then perform the following steps in sequence: □ fixed the opening limit magnet position; □ fixed the locking device position,□ fixed the closing limit magnet positon, □ fixed the moving magnet position,□ fixed the infrared limit position.The positioning of all the magnets should use 10mm drill, in order to improve the accuracy of size,and then re-use 25mm drill expand it.

5.After drill the magnet position hole,first clean up the hole debris, and irrigate slurry in it,and then put magnet into the hole according the "magnet buried sections".set the location,and then smeared the magnets surface with cement.

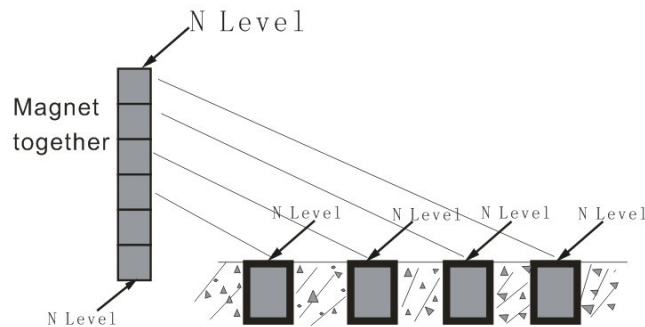
6.magnet buried depth,Please refer to a "magnet buried depth diagram."

7.The polarity of the buried magnet: magnet's laying (including the infrared limit magnet, opening, closing limit magnet and guide

magnet) should guarantee the polarity of magnets in the same direction. please refer to "magnet buried sections."



Schematic diagram of magnet buried depth



Magnets buried sections

## (2).system debug

1.Ensure that the installation of the electrical parts, magnets, gate is correct, you can begin debugging; first of all check the internal functions of the head circuit and the remote control transmitter

have power.

2. Pressing the remote transmitter or remote control handles the opening and closing, stop button, check the system is working.

3.The gate in a contraction state (i.e, open state), press the close button, gate will move in the set routes, in a moving process, if hand block the anti-collision probe, the gate will return; if gate traveled over anti-collision limit magnet,the anti-collision device no longer works; when closed in place, the gate will automatically stopped.

4.the gate in the extended state (i.e, close state) pressing the open button,the gate will continue to shrink (i.e, open) until the gate stop in place.

5.when the gate is in opening or closing state, press the stop button, the gate will stop running.

## 5. the installation drawing of robot engine

