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# **Emergency Evacuation Door**

## **Manual**

**(2022 version)**

table of contents

table of contents

	1
2、 Technical Parameters	2
3. Structural illustrations	3
4. Construction requirements	6
5. Installation steps	7
6、 Product debugging	11

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# Products

## Emergency evacuation automatic doors (escape doors)

Emergency evacuation door has all the functions and features of the automatic smooth door, where the emergency push-open function has been added, which is mainly characterized by the fact that in the event of an emergency, the fixed fan and movable fan can be pushed outward to obtain the maximum passage space.

At present, more people focus on security, automatic doors in public places have a push-open function greatly improves the safety and reliability, I believe that this feature will gradually become the mainstream of the product.

This product provides emergency escape and large passage width, suitable for building access, shopping malls, hotels, hospitals, airports, railway stations, automobile 4S stores and so on.

### Product Advantage:

1. The dual-cavity design of the track is strong enough to support maximum doorway width requirements.
2. The track is equipped with a special light strip, which can support illumination or colorful light strip decoration, and can also be set up

For the warning light, to protect the safety of entrances and exits. **(Patented products, independent research and development)**

3. Door hook enterprise breaks the traditional hardware hook interlocking mode, the profile comes with a hook edge, the appearance of the ornamental greatly improved.
4. Can be smoothed and pushed open to provide emergency escape and greater passage width.
5. The maximum thickness of the profile wall reaches 5.0mm, the hardware is precise, and the door body is sturdy and durable.
6. Three installation modes for floor rails:
  - (1) It can be trenched and buried with the surface flush with the ground;

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(2) The rails can also be placed on the ground at a height of only **13 mm** above the floor (the full-length rails are equipped with special profiles on both sides to prevent pedestrians from tripping over them)

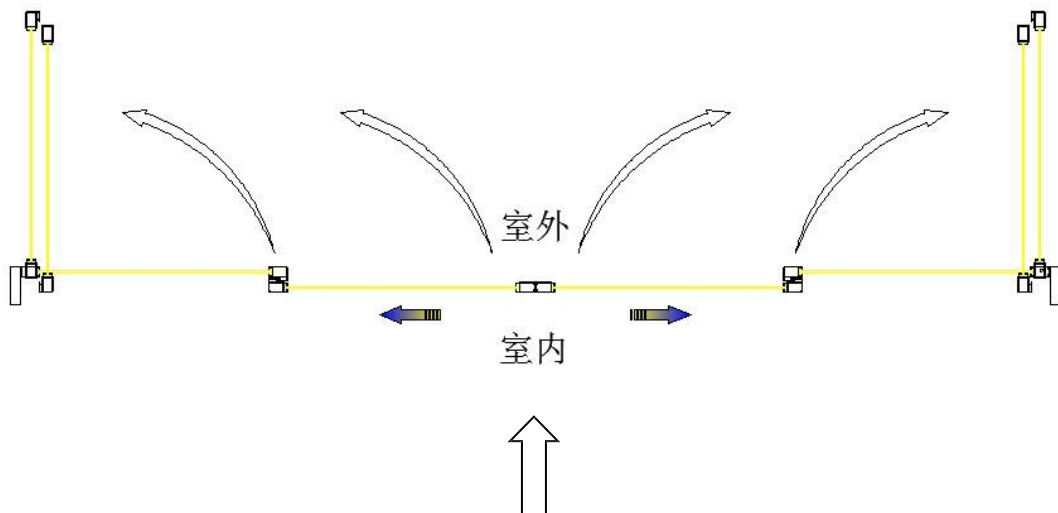
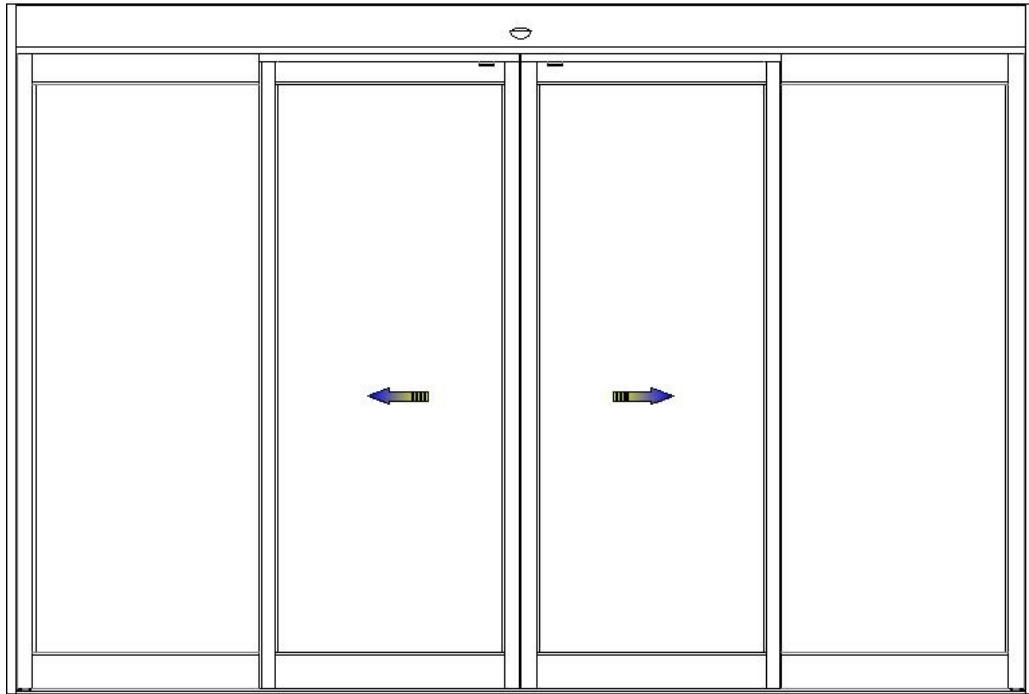
(3) The underestimation of the floor track is placed only under the movable door leaf, with a simple and elegant appearance.

**Technical parameters:**

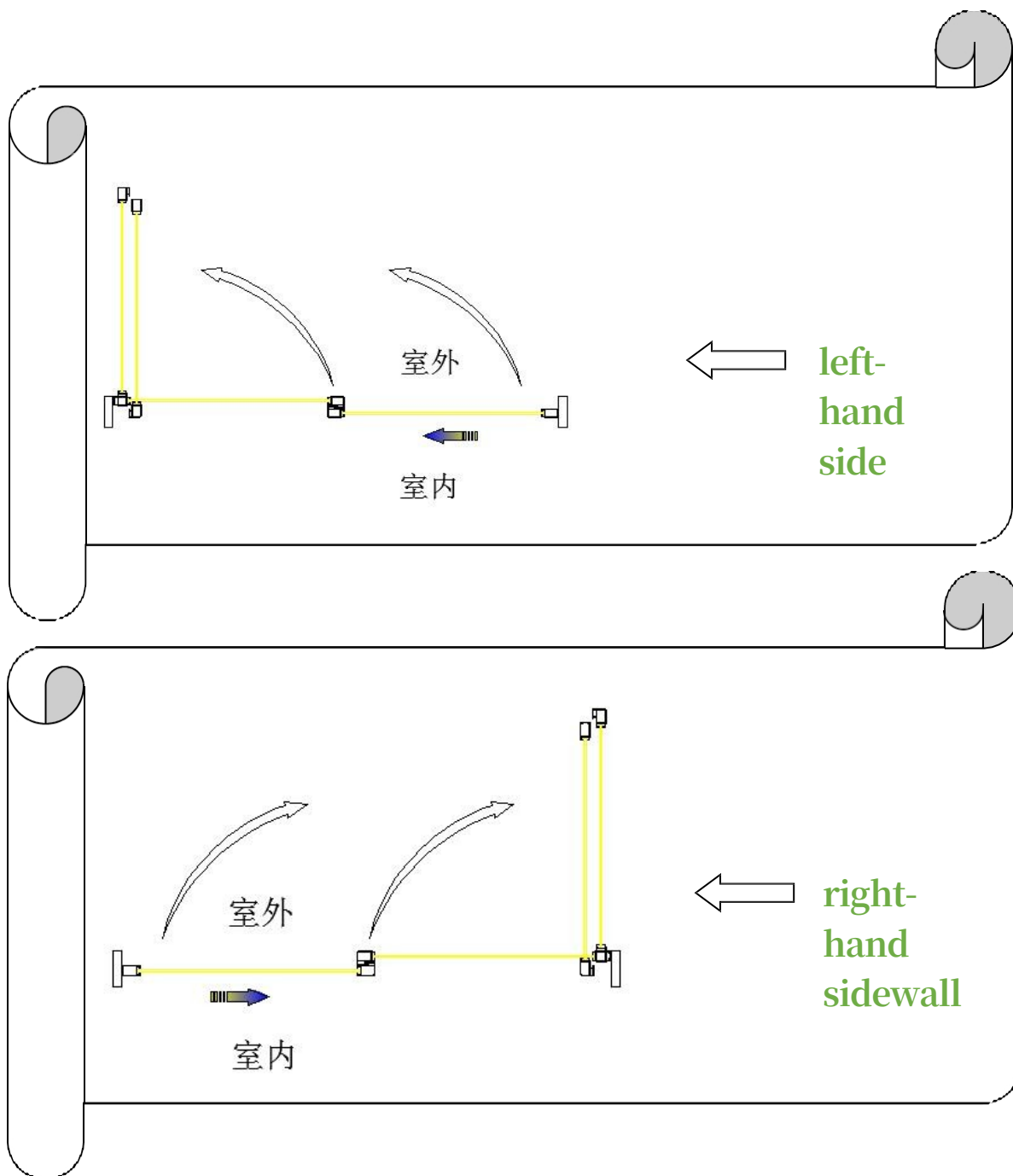
1. Net passing width: **1200-2600mm** (folio), **600-1300mm** (single)
2. Net passing height: **2800mm** (recommended)
3. Maximum weight of door: **2X120Kg** (opposite opening) **1X130Kg** (single opening)
4. External dimension of rail section: **160X190mm** (standard)
5. Opening speed: **250--550mm** (adjustable)
6. Motor power: **75W**
7. Motor voltage: **220V**

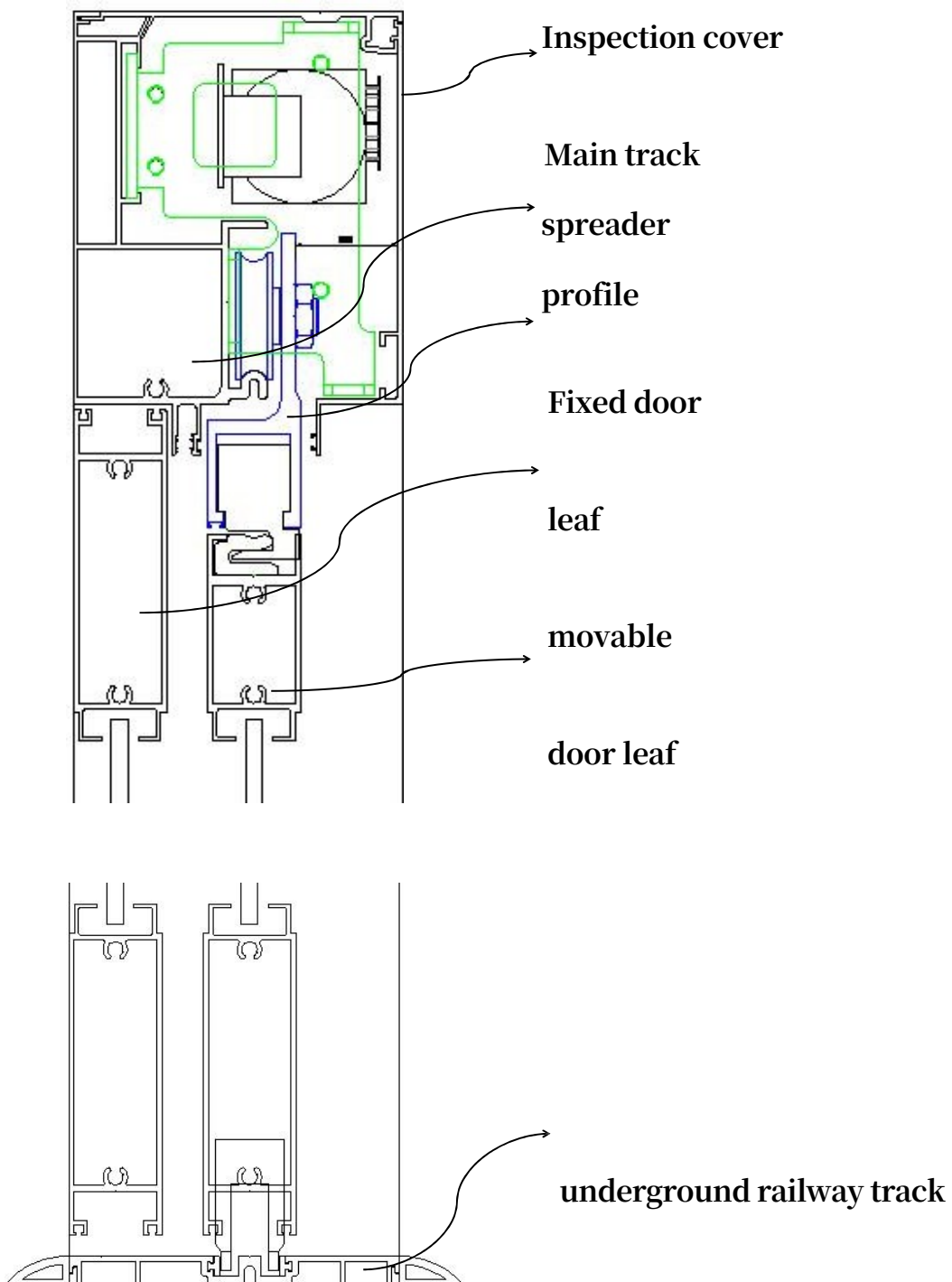
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## structural illustration



double expulsion mode





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## construction requirements

1. The floor is required to be level, with a leveling error of no more than 2mm.
2. There are no water, electrical or other plumbing lines in the elevation walls.
3. Door body indoor upper right part, leave the power cord, utility 220V, wire diameter not less than 1.5.
4. **When the ground rail is buried in the installation mode;**  
The floor grooving width is not less than 160mm and depth is not less than 13mm, **when the floor rail is placed on the floor installation mode;**  
The floor does not need to be grooved, and the floor rail is fixed to the floor with screws and structural adhesive. 5. Side columns and walls are fixed with hard connections (e.g. expansion bolts)
6. Check the condition of the door body, no deformation, loss of profiles, etc.
7. When installing the door body, **strictly abide by the national safety construction terms**, wear safety helmet, safety rope, prohibit electrified work, prohibit cross work, strictly prevent falling objects from height, etc..



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## Installation steps

### 1. Fixing of floor rails

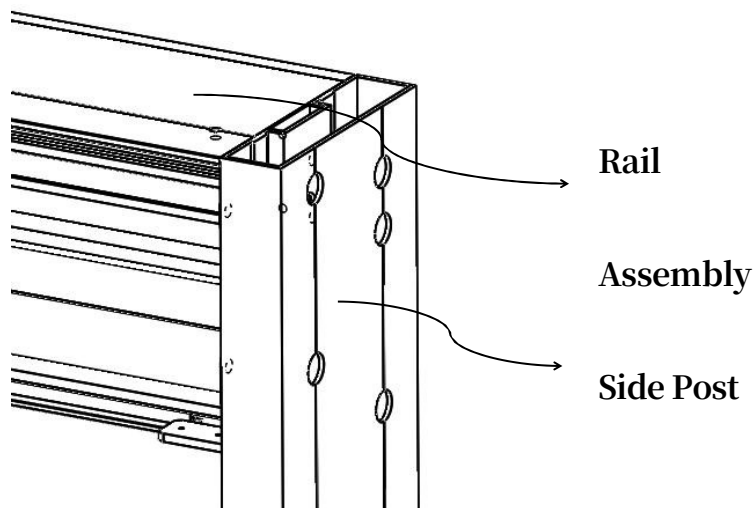
Measure the installation position of the ground rail and do the marking line, the ground rail accessories and the ground rail combination is completed, the components will be placed in the marking line (the ground in advance in the marking line placed in the structural adhesive) the upper surface of the ground rail with the marking line in the direction of the outdoor direction, the two ends and the middle part of the ground rail using the expansion of the screws will be fixed to the ground and the components (single door openings, the ground rail in the middle of the part of the screws, do not use the screws) the level of error is not greater than 2mm. the middle of the ground rail fastening with structural adhesive fixed. Structural adhesive can be fixed.

### 2. Glass installation

Place the door frame on top of the blanket, dismantle one of the verticals of the door and place the glass spacer in the glass channel of the profile. The glass is placed horizontally, put the frame into the glass (try to keep the bottom of the frame in contact with the glass) assemble the dismantled vertical material and fix it with glue, and the glass installation is finished. **Note:** When installing the glass, during the process of removing and installing the frame, it is forbidden to rub or knock to avoid the damage of the paint or glass of the profile. When installing the frame, it is required to keep the horizontal and vertical materials in the same plane.

### 3. Assembly and fixing of frames

Place the track assembly horizontally, place the side posts at both ends of the track assembly, screw the large holes outward (shown) thread the screws in to fasten them, make sure the track is aligned with the edge line of the side posts, and the frame is assembled.

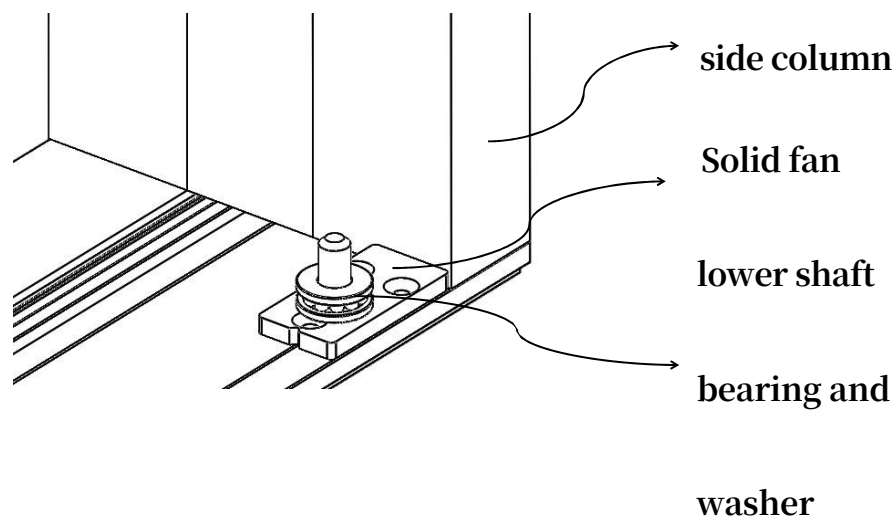


Stand the frame on top of the floor track, align the side columns with the side lines of the floor track plane, adjust the level and verticality, the error is not more than 2mm (track access cover for the indoor direction) And connect the reserved power line with the power line of the door unit (please do not energize) the frame installation is completed.

#### 4. Installation and commissioning of doors

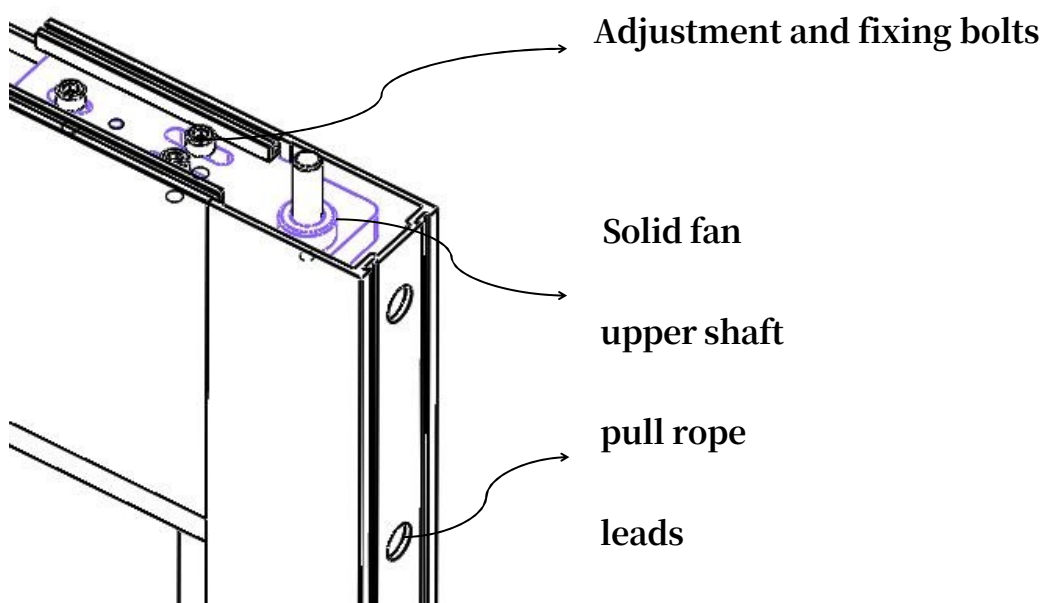
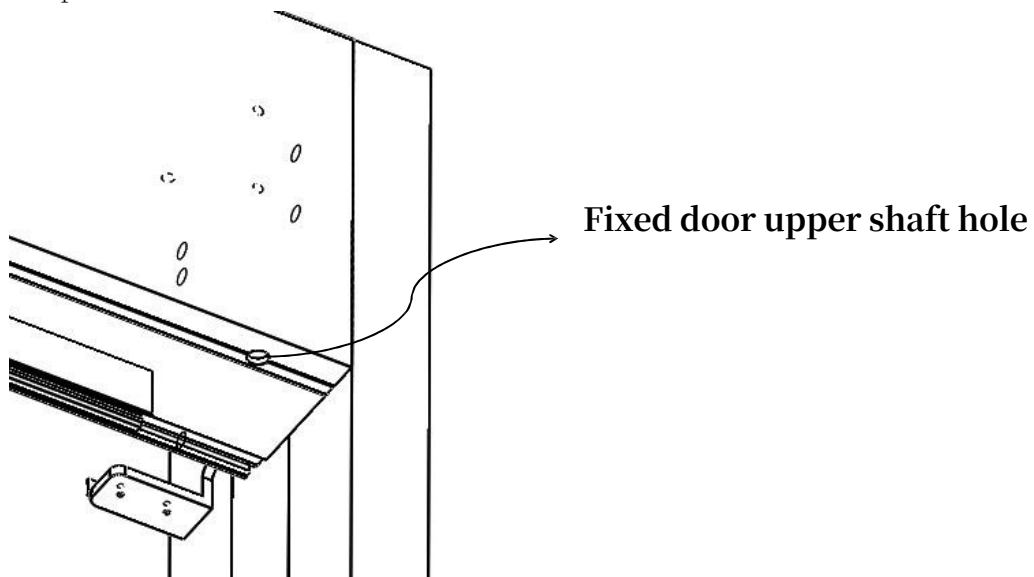
##### Installation and commissioning of fixed doors

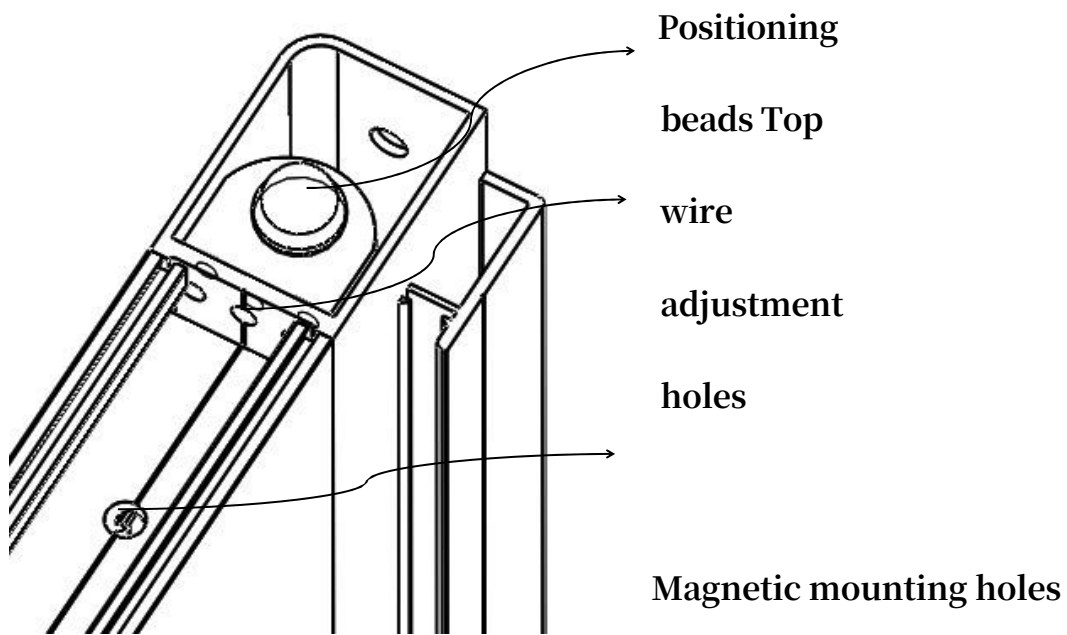
The solid fan lower shaft is placed at both ends of the floor rail, fitting to the side posts, with the cut-outs aligned with the floor rail profile markings, fixed with screws on top of the floor rail, and the thrust bearing and washer assembled with the floor shaft (illustrated) **Note:** The small ring of the thrust bearing is placed underneath and the washer is placed on top of the bearing.



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Combine the lower shaft hole of the fixed door fan with the ground shaft, tighten the upper shaft pull rope on the upper shaft, align the shaft hole on the track, and loosen the upper shaft pull rope on the fixed fan.

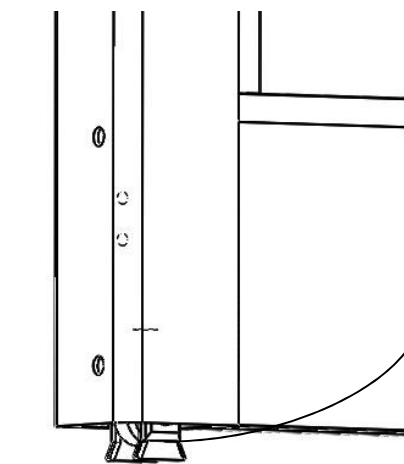




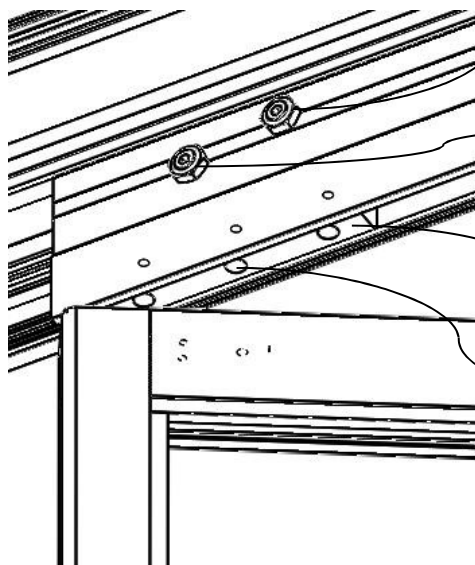
Fixed door installation is completed, you need to adjust the correct position of the positioning glass ball, loosen the top wire, manually rotate the positioning glass ball, observe the gap between the glass ball and the upper track positioning piece, until the door switch smoothly and door positioning strength is reasonable, and then tighten the top wire, insert the magnetic suction, so that the magnetic suction is flush with the upper surface of the horizontal material of the door, so that the fixed door installation is complete.

### **Installation and commissioning of movable doors**

Adjust the walking wheel and anti-dislodgement wheel of the movable door fan to a suitable position (the walking wheel is adjusted to the top, and the anti-dislodgement wheel is adjusted to the bottom) and the walking wheel and the anti-dislodgement wheel are eccentric shaft structure, which can be adjusted by rotating. Check the lower part of the movable fan to see that the stop wheel is in a flexible state, and there is no obstruction to the rotation and up and down expansion and contraction action.



balance wheel



Anti-

breakaw

ay wheel

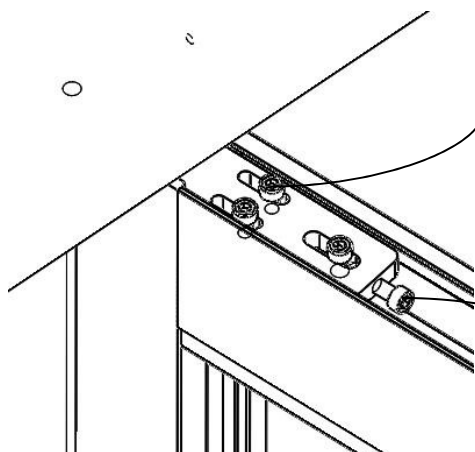
walking

wheel

Upper shaft seat of  
movable fan

Positioning

bolts



fastening

bolts

Adjustment bolts

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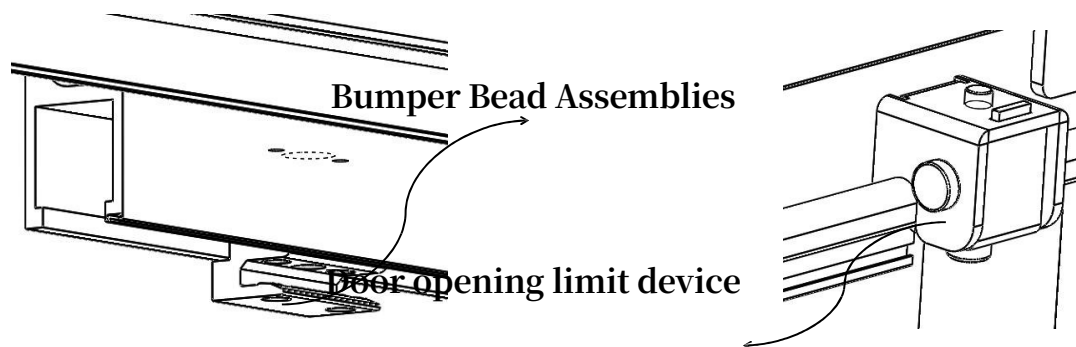
Hang the movable door above the track, adjust the traveling wheel to the vertical door, the gap is even. Then adjust the anti-dislodgement wheel to the upper part, and the upper part of the track clearance for the best 0.5mm. The lower shaft stop swing wheel card is placed in the groove of the ground track, and the movable door is hung.

**Adjustment of movable door sagging:** Push open the movable door, observe the sagging degree of the front stile part of the door, loosen the fastening screws, lift the front stile part of the door, rotate the adjusting bolts clockwise to the vertical door, and then lock the fastening bolts to close the door, and observe whether the door is smooth when it is closed. If there is a phenomenon such as jamming, then repeat the adjustment until the door push open and close the action is smooth. In this process, the movable door and spreader profile will produce displacement, need to loosen the positioning bolts into the

Adjust until the door is aligned with the end of the spreader profile.

**Adjustment of the strength of the movable door:** loosen the positioning bolts of the touch ball assembly in the spreader profile, remove the touch ball assembly, rotate the adjusting nut, and adjust the strength according to the need.

The door opening limiting device is adjusted to the best position for maximum opening of the live fan.



The door body is assembled, the profile bolt holes are fastened with hole plugs, other electrical accessories such as induction probes are installed, and the product debugging stage begins.

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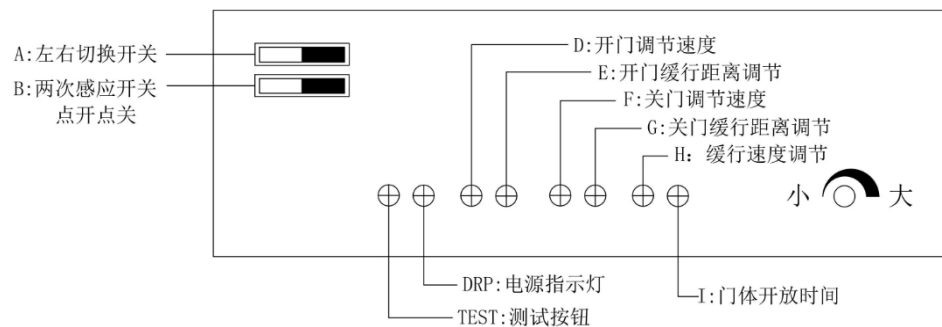
## Product Debugging

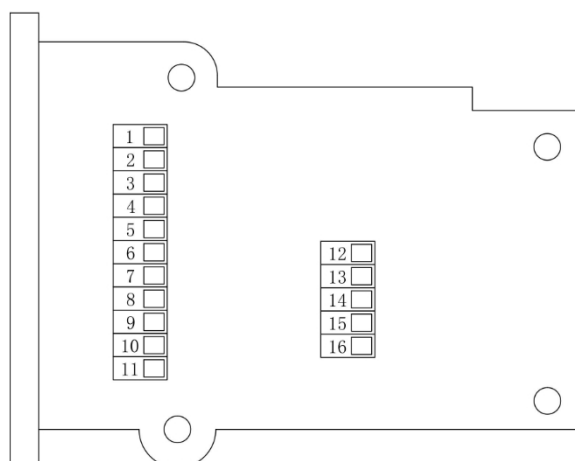
The unit is energized and the door body starts to enter the self-learning mode (close first and then open) During the operation of the door body, observe whether the door body operates normally, with or without noise and jamming phenomenon.

Push open function test, in the door running, outward push open the movable door fan, the fixed door fan with the generation of open, at this time the unit power supply is automatically cut off, the door stops running, the power supply of the light belt for the energized mode, in turn, close the fixed door fan, the movable door fan, all the doors closed, the unit is automatically energized to start a new self-learning mode, which is a normal phenomenon, the door can be operated normally.

### electronic connection

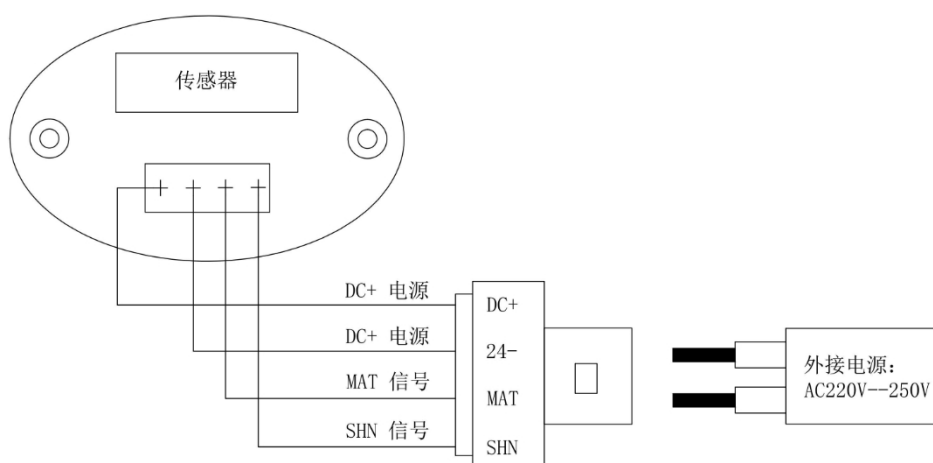
#### Introduction to Controllers and Terminal Blocks





- 1、安全光线的输入
- 2、门禁信号输入
- 3、互锁输入
- 4、公共端
- 5、互锁输出
- 6、公共端
- 7、0V
- 8、12V输出
- 9、0V
- 10、后备电源24V输入
- 11、锁控+12V输出
- 12-16、遥控接收器接口

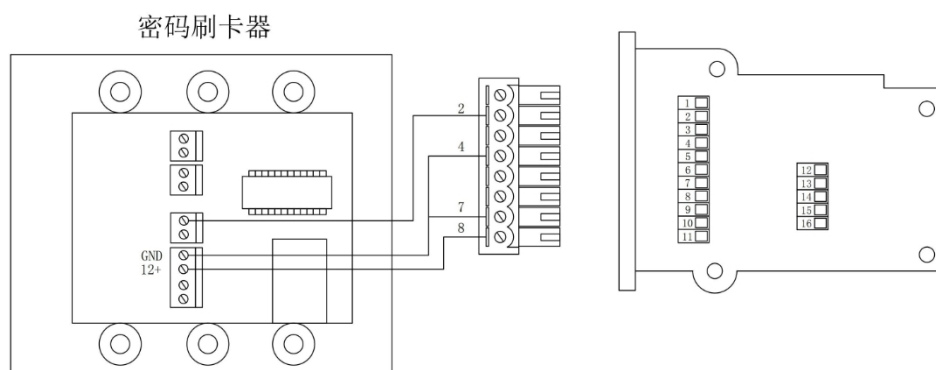
### Connection of the controller





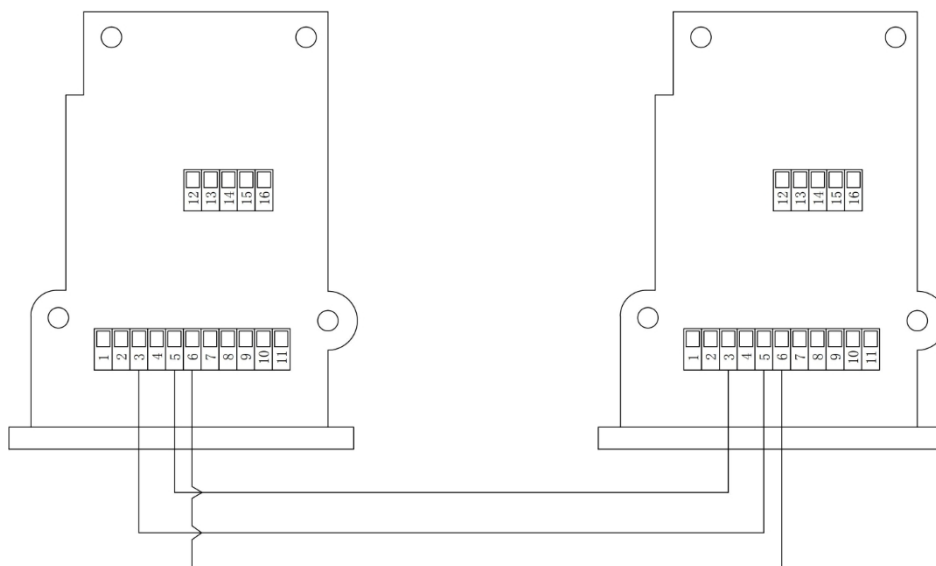
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### Connection of access control swipe card (optional)



**Note:** If the access power is greater than 2.4W, 12V DC power supply is required from the outside, do not take 12V power supply from the automatic door controller system, the load will cause damage to the controller.

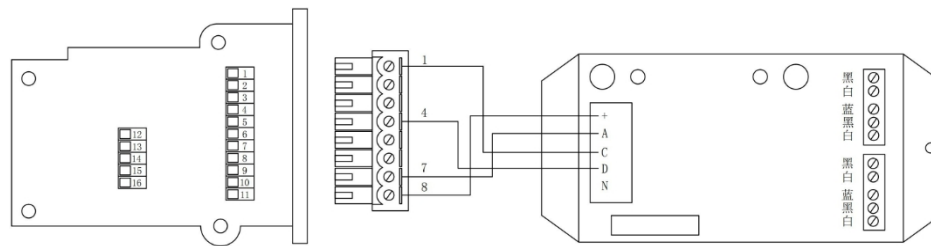
### Double door interlock



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### Connection of safety rays (optional)

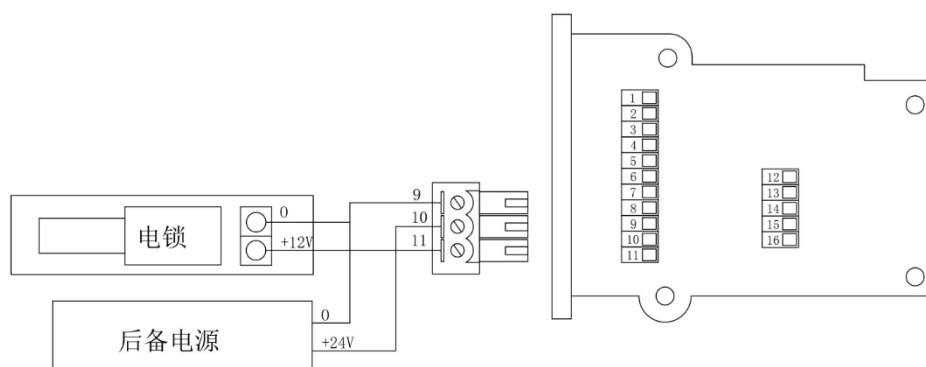
**Note:** All wiring operations are carried out under power failure.



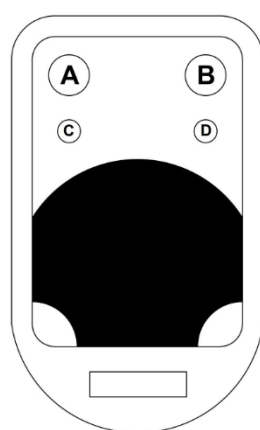
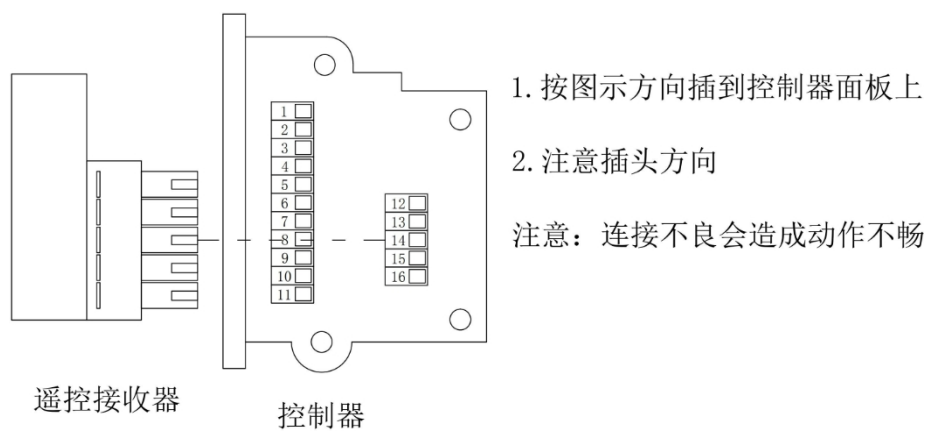
### Connection of the backup power supply to the electric lock (optional)

**NOTE:** All wiring operations are performed under power failure.

The working current of the electric lock is less than **200mA**, and the starting current is less than **200mA**. When connecting to the backup power supply, it is necessary to distinguish between positive and negative poles, and the specific operation is as follows.



## Remote control connection



遥控发射器

注意：所有接线操作必须在断电状态下进行。  
在通电前将遥控器插在遥控器专用插座上，  
注意方向。

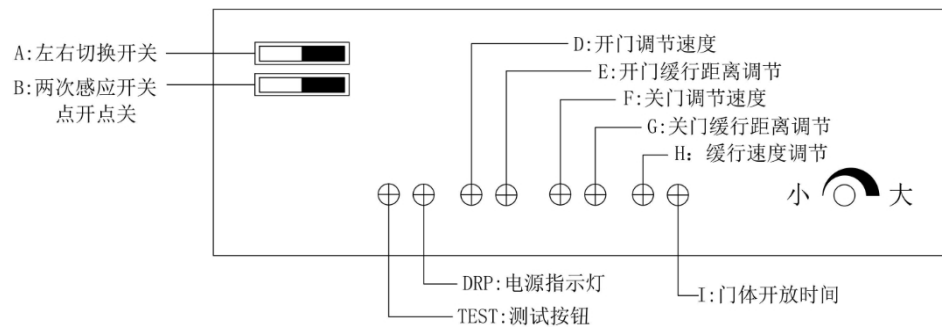
A：锁门    B：常开    C：半开

接触不良会造成运作不良

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## Adjustment of on and off parameters

Name and function of each part of the control unit



TEST: Press to complete a door opening action, used to adjust the parameters when installing,  
DRP: the light will be on for a long time when the power is on.

A: Single door: left is left direction, right is right direction. Open the door to the right: set the right.

B: Left position: the door is always open after opening and needs to give signal again to close the door. In right position, the door closes automatically.

D: Counterclockwise rotation decreases the opening speed, clockwise increases it.

E: Counterclockwise rotation decreases the opening jogging distance, clockwise increases. F: Counterclockwise rotation decreases the closing speed, clockwise increases it.

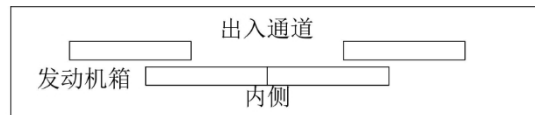
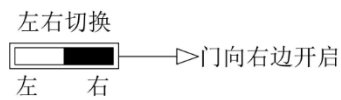
G: Counterclockwise rotation decreases the closing jogging distance, clockwise increases it. H: Counterclockwise rotation decreases the jogging speed, clockwise increases it.

I : Counterclockwise rotation decreases the door opening delay, clockwise increases it.

### • Adjustment steps

(For the adjustment procedure, open and close the door by hand several times to confirm that the door opens and closes smoothly and unobstructed.)

(1)A Setting left/right toggle switch



From the inside, set left or right depending on the opening direction of the door, for double opening, the switch is set on the right.

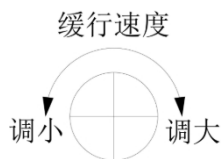
(2) B Set point open point close, according to the user needs to switch to the left iterative point switch, door open

The door will not close automatically, but needs to be signaled again before it closes.

(3) Push the door to the closed position and initially set.

It is recommended that the jogging speed, door opening speed, closing speed are in the middle position, the door opening jogging distance, closing jogging distance is large position, otherwise the phenomenon of door slamming may occur.

(4) Turn on the power, the door body opens the door slowly and closes the door when the stopper stops, and the door travel scan is initialized.



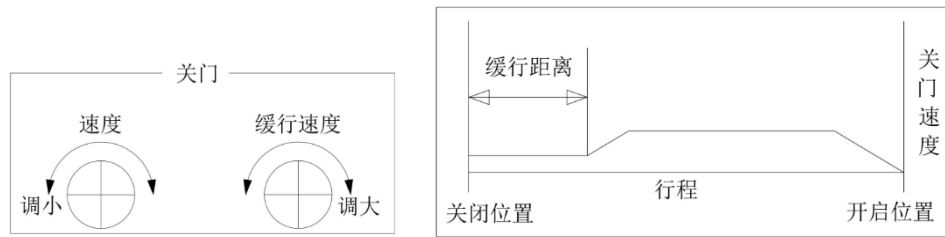
Press the test button on the control to adjust the jogging speed while opening and closing the door. **Note:** When using the electric lock please unlock it and use the test button.

**Note:** The slow speed should be adjusted so that the door opens and closes evenly and smoothly, and is not too heavy. **Note:** It is recommended to adjust the distance between the opening and closing of the door to 8-10cm for the first time.

**Note:** Each power failure should be greater than 10 seconds.

(5) When the door is closed, adjust the closing speed and the closing jogging distance as needed. **NOTE:** When using an electric latch, use the test button after unlocking.

**Note:** Please make sure there are no pedestrians around the door before adjusting it, otherwise it is easy to be injured.



- ① Adjust the door closing jogging distance to about 10cm.

**Note:** Please make sure to adjust slowly, if you turn the knob drastically, it will cause damage to the personnel or the door body.

- ② Adjust the closing speed.

③ After adjusting the closing speed of the door body, if necessary, then adjust the closing slow distance. **Note:** Please adjust the door slowly, if you turn the knob drastically, it may cause damage to the personnel or the door. **Note:** The door closing distance must be set at 6cm or more, otherwise it may cause damage to personnel or the door.

(6) Press the test button to adjust the door opening speed and door opening jogging distance. Press the test button on the control unit to open the door, adjust the opening speed and the opening jogging distance as required.

**Note:** When using the electronic lock, use the test button after unlocking.

**Note:** Please make sure there are no pedestrians around the door. Make the adjustment, otherwise it is easy to be injured. **Note:** The door opening jogging distance must be set to 5cm or more, otherwise it may cause injury or door breakage.

## opening time

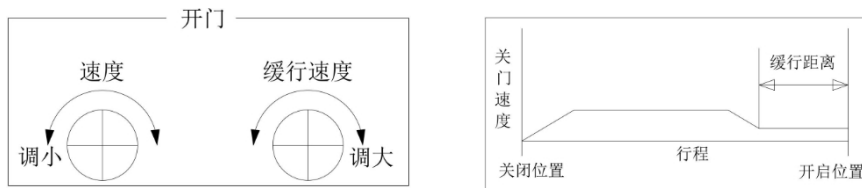
1. Adjust the door opening jogging distance and set it to 10cm.

**NOTE:** It is important that adjustments are made slowly, e.g., by turning the



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It can cause damage to people or the door.



2. Adjust the speed of opening the door.

3. After confirming the door opening speed of the door body, adjust the door opening jogging distance again if necessary.

**Note:** To make adjustments during door opening and closing, please do so slowly, if you rotate the knob drastically, it will cause injury to personnel or the door body.

#### (7) Regulating gate opening hours

Press the test button on the control to adjust the door opening time while opening and closing the door. **Note:** When using an electric lock, unlock the door and then use the test button.