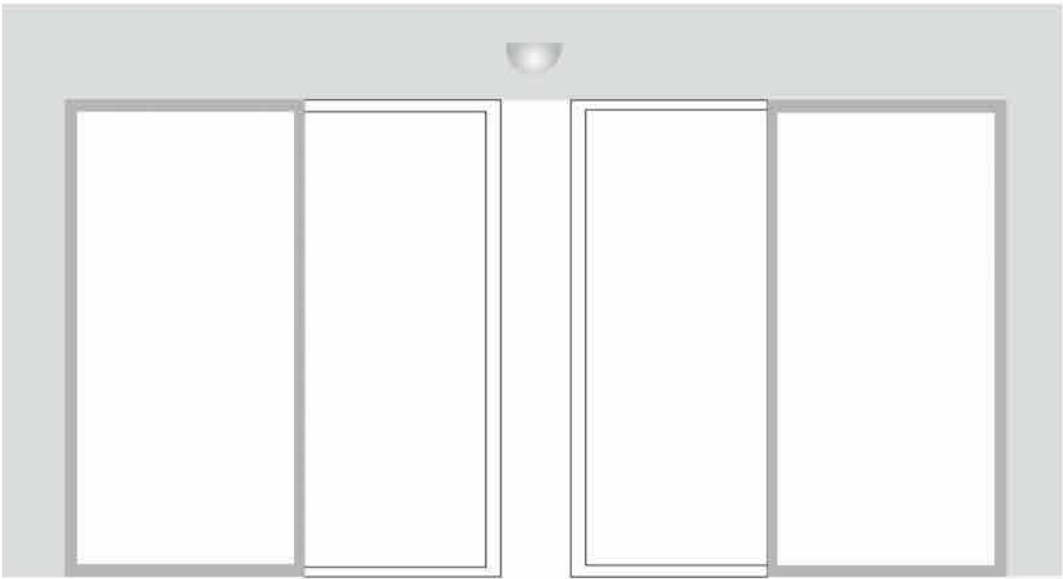


Installation Instruction

Automatic Sliding Door Series

SM 150

- 1. Non-professional skill person is not allowed to install automatic door.
- 2. Please read this manual carefully before installing.
- 3. Please keep this manual for later maintenance.



| Fault | Reason | Answer | Solution |
|--------------------------------------|--|---|--|
| Door Cannot Close | Sensor continue working | Check whether this is obstacle within sensor range to cause mis-operation | Clear obstacle or replace new sensor |
| | Beam sensor continue working | | |
| | Detect signal line short circuit | Disconnect the signal line to check whether can close the door. | Replace signal line |
| Door will open & close automatically | There is moving objects within sensor inspection range | Rebound phenomenon | Remove objects |
| | The strong radio wave, lighting | | Remove device with radio wave or lighting emission |
| | Sensor is broken | | |
| The door collision | Slow movement speed too fast | | Anti-clockwise adjust “H” button |
| | The belt is too loose | | Adjust belt tension |
| | Not slow down for opening & closing door | | Clockwise adjust “E”, “G” button |

| | |
|--|-------|
| Attention..... | 1-2 |
| Slide Way Layout Diagram..... | 3 |
| Sectional View of Slide Way & Hanging Bracket..... | 4 |
| Installation Procedure..... | 5 |
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| Motor, Controller, Driven Gear Installation..... | 9 |
| Stop Dog Installation..... | 10 |
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Attention

- User must comply with the following content:

⚠ Caution

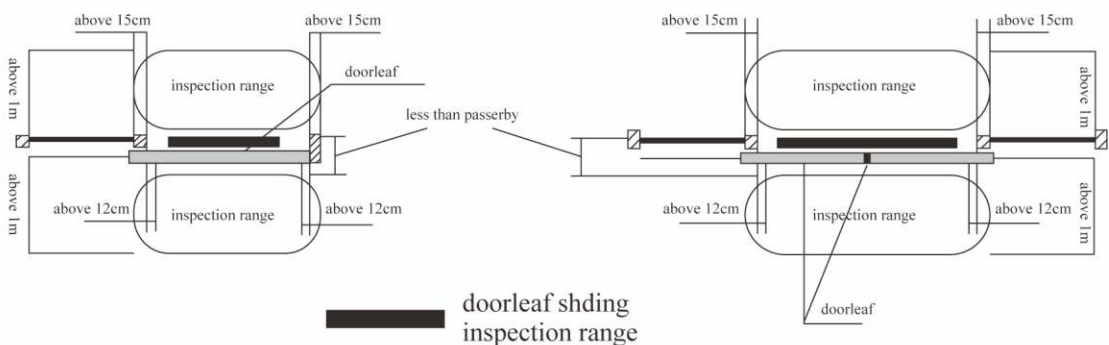
⚠ Attention

⊘ Forbidden

❗ Mandatory

⚠ Caution

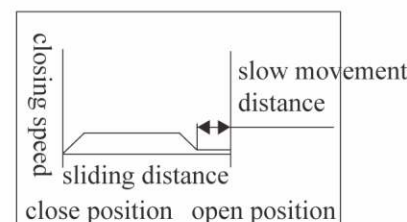
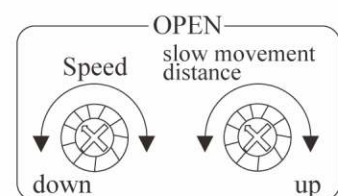
- ❗ Installing must strictly according to this instruction.
- ❗ Don't allow anyone to go through door when installing.
- ⊘ Forbid to change any component of whole device without permission.
- ⊘ Forbid to use other than the specified voltage and frequency of power supply.
- ❗ Adjust sensor to make sure inspection range cover all valid area.
- ❗ Please install safety beam for automatic door.



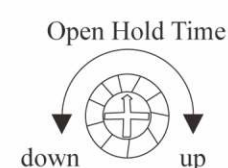
- ❗ If inspection range cannot confirmed, please place the potted restrictions on movement , and make an explanation for owner.

FAQ

| Fault | Reason | Answer | Solution |
|-------------------------------|--|------------------------------------|-----------------------------|
| Doorleaf sliding not smoothly | Open speed or close speed too slow. | Confirm the speed | Adjust speed |
| | Slow movement distance value too large | Confirm the slow movement distance | Adjust value |
| | Artificial collision when closing | There is obstacle | Clear obstacle |
| | Sliding resistance too strong | Check damper is broken | Replace check damper |
| Doorleaf is too tight | Slow movement speed is too fast | | Adjust speed |
| | Slow movement distance is too small | | Adjust distance |
| Door have not response | Power failure | | Check power |
| | Door is locked | | Unlock E-lock |
| | Obstacle in slide way | | Clear obstacle |
| | Poor contact | | Check connection |
| | Interlock mode | | Close the other door |
| | Resistance is too large | | |
| | Slow Movement speed is too large | | Clockwise adjust "H" button |
| Door cannot open fully | Be in half open mode | Check mode switch | Change to open mode |



7.Adjust Door Open Hold Time

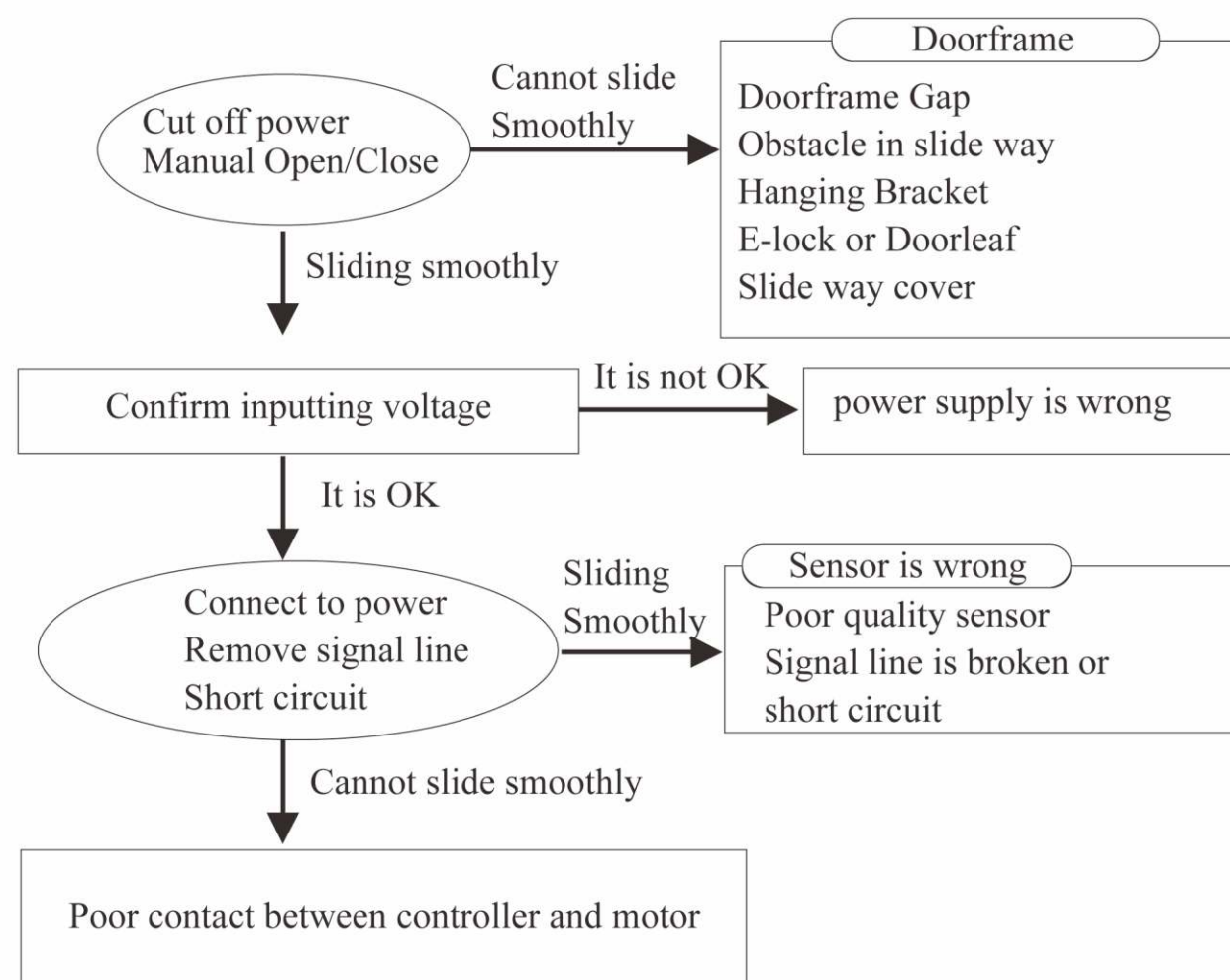


- 1、 Adjust open door slow movement distance: 10CM
- 2、 Adjust open speed
- 3、 After confirmed open speed, adjust slow movement distance once again.

Press “TEST” button on controller, adjust door hold open time when door is opening.

Note: when using electric bolt lock, must unlock the electric bolt lock, then adjust it.

Troubleshooting



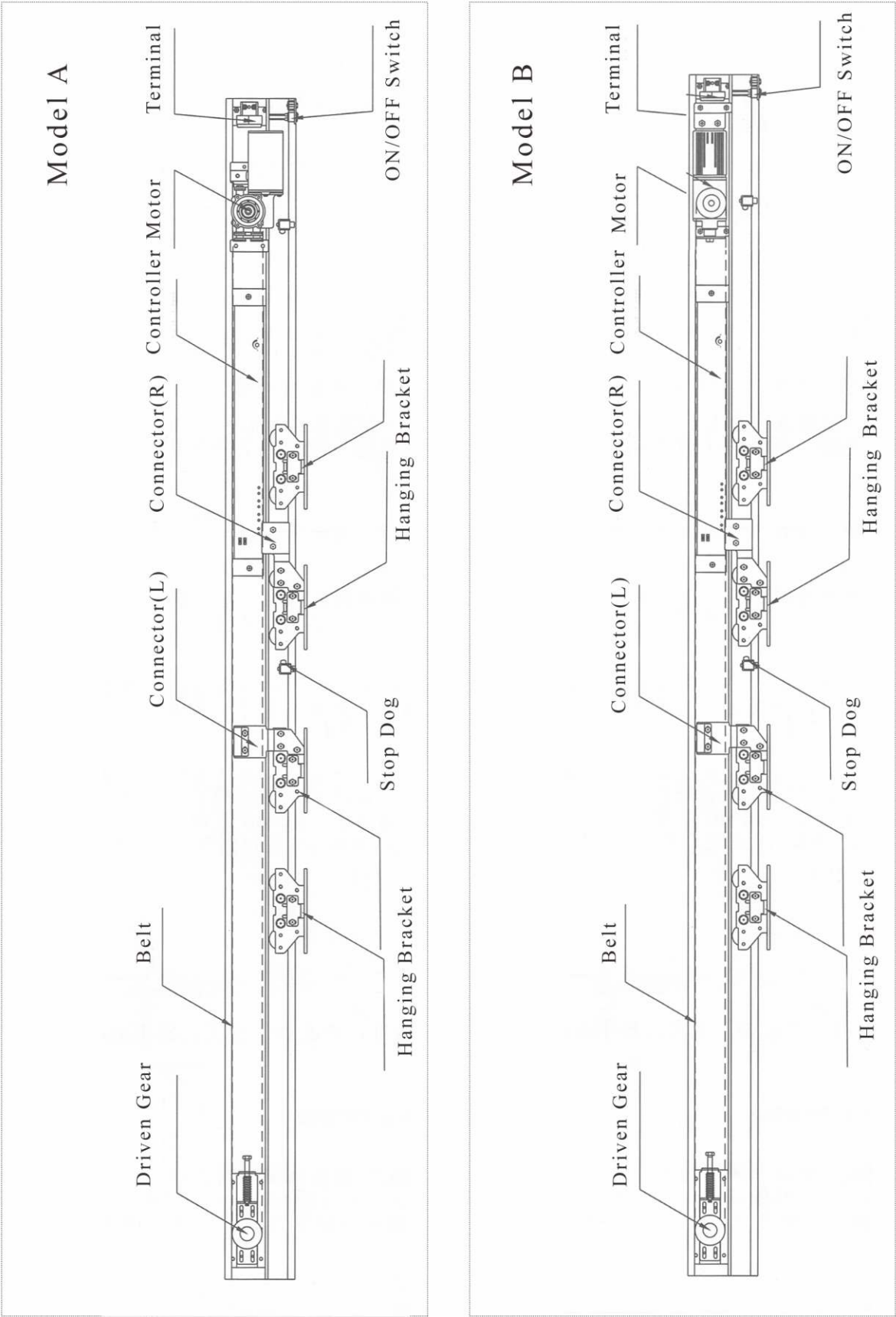
⚠ Attention

- ⊗ Do not install automatic door in damp, vibration, corrosive gases place, it may cause fire, electric shock, drop etc.
- ⊗ Leave at least 30mm distance after opening door.
- ⊗ Do not cut off power when door is sliding.
- ❗ Stick the direction indicator sticker on door-leaf.
- ⊗ Do not connect any electronic equipment which has power beyond DC24V,300mA.

- Do not install other than specified weight of door-leaf
- Back-up power supply
Please use it after charging 24Hour.
Temperature for battery: 0~40 °C
Check the battery condition every half year
- Electric Lock Option
- All pictures in manual only for reference, we retain right to modify the specification of product, and for parameter amendment of products, we shall not inform in advance.

Slide Way Layout Diagram

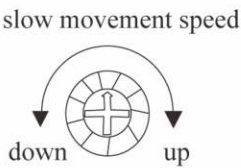
● Component



We strongly suggest to adjust the slow movement speed button, opening/closing speed button in the middle place, slow movement distance button in the middle right place.

- (4) Connect to power, door-leaf sliding slowly. It stops when reaching to stop dog.
Press “TEST” button, adjust slow movement speed when door-leaf is sliding.

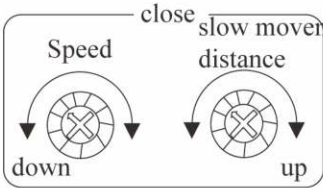
Note: 1. If install electric bolt lock, must unlock it first.



2. Confirm door-leaf sliding smoothly when adjusting.
3. For first time adjustment, slow movement distance should be 8~10cm
4. The power off time should be more than 10S each time.

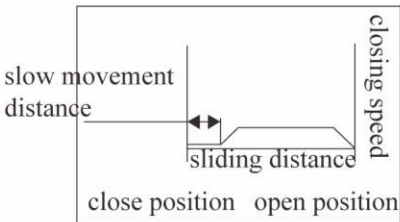
- (5) When door is closing, adjust closing speed and slow movement distance in door closing.

Note: 1. In install electric bolt lock, must unlock it first.
2. Confirm there is not person go through when adjusting.



1. Adjust close door slow movement distance: 10cm

2. Adjust close speed.



3. After confirmed close speed, adjust slow movement distance once again.

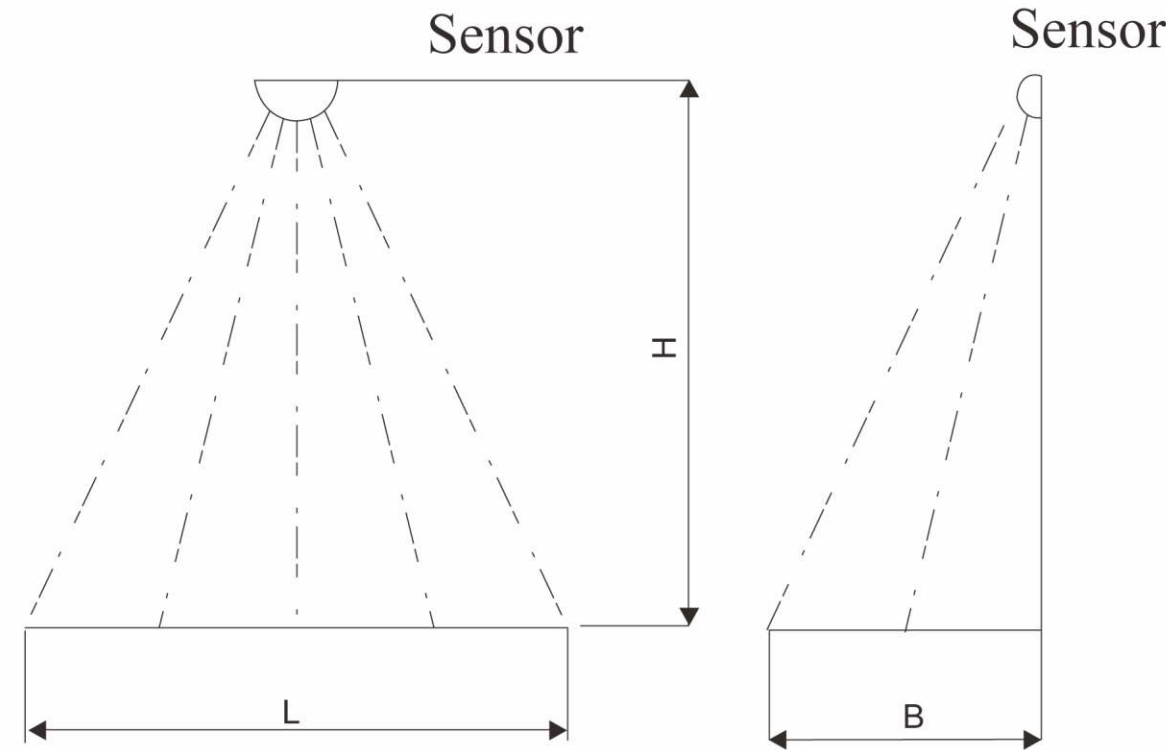
- (6) Press “TEST” button, adjust open speed and open slow movement distance.

Press”TEST” button on controller, adjust door open speed, open slow movement distance accordingly when door is opening.

- Note: 1. If install electric bolt lock, must unlock it first.
2. Confirm there is not person go through when adjusting.
3. Open slow movement distance should be more than 5CM

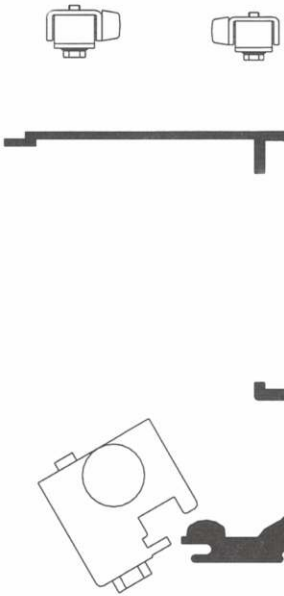
Sensor Installation

Microwave sensor should be installed above the door-leaf in the middle. The height should be less than 2.5M. Usually it need to install one sensor both inside and outside. For connection, please refer to sensor instruction.



Note: Sensor from different factory may have different voltage or connection, please do not replace it at random.

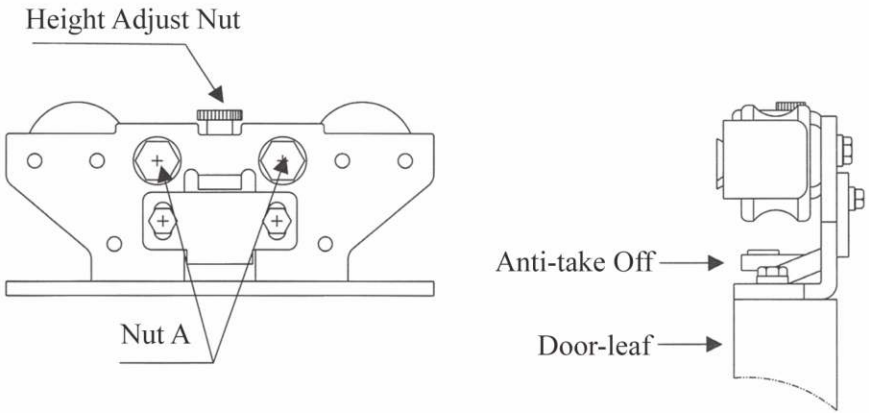
Stop Dog Installation



1. Loosen the installation bolt of stop dog.
2. Embed stop dog into the slide way
3. Manual moving door-leaf and confirm the position of stop dog.
4. Use hexagon wrench to fasten the bolt and fix stop dog.

Hanging bracket installation

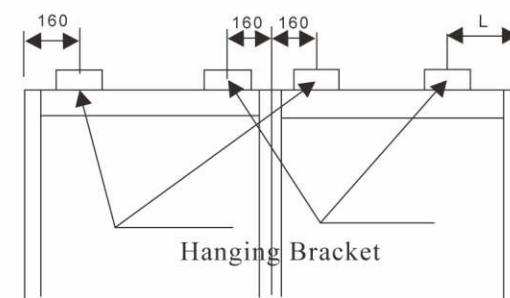
1. Loosen the Nut A of hanging bracket, remove the anti-take off device from hanging bracket.
2. Use equipped hanging bracket bolt (M8*20) fix hanging bracket on corresponding place on door-leaf.
3. Hanging door-leaf on slide way.
4. Install the anti-take off device.



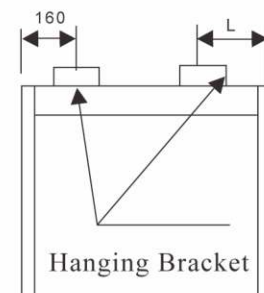
Hanging Bracket Installation

● Hanging Bracket Position

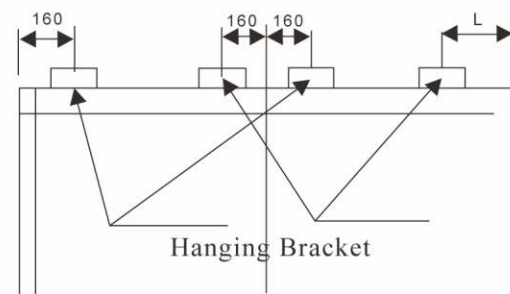
Double-leaf Door with Frame



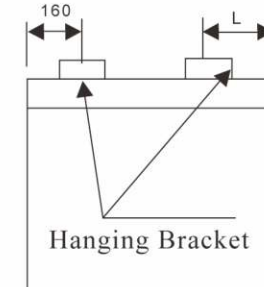
Single-leaf Door with Frame



Double-leaf Door without Frame



Single-leaf Door without Frame

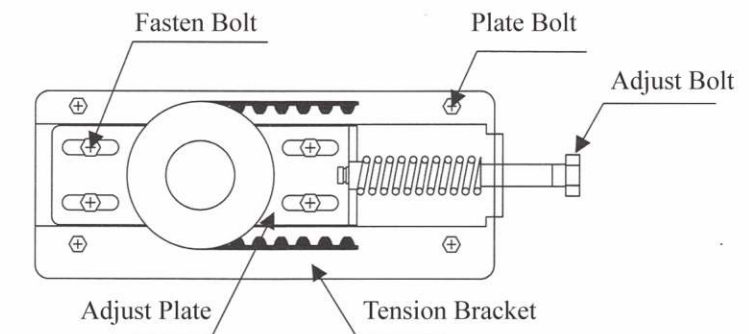


Note:

- 1.The center of hanging bracket pulley should be keep parallel to door-leaf.
- 2.Please do not crash slide way and its internal components.

Belt Tension Adjustment

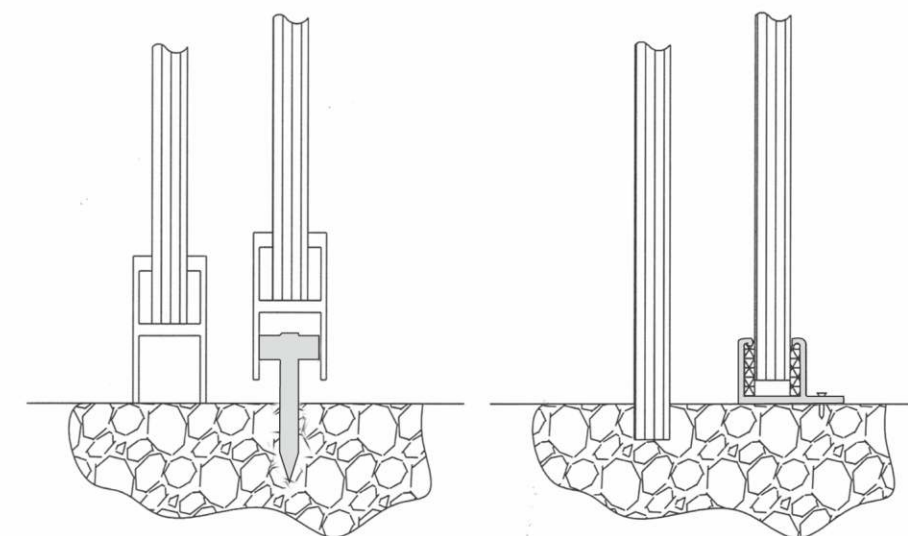
- 1.Pull driven gear to the left side and keep the belt uptight, then fasten 4 plate bolts.
- 2.Loosen 4 fasten bolts.
- 3.Clockwise turn adjust bolt and make adjust plate move to left side, then tension of belt will become strong, when it is up to suitable tension, fasten 4 fasten bolts again.



There is little stretch for belt over a period of time after it is used, it need to adjust it again at that time.

Check Damper Installation.

Two types check damper



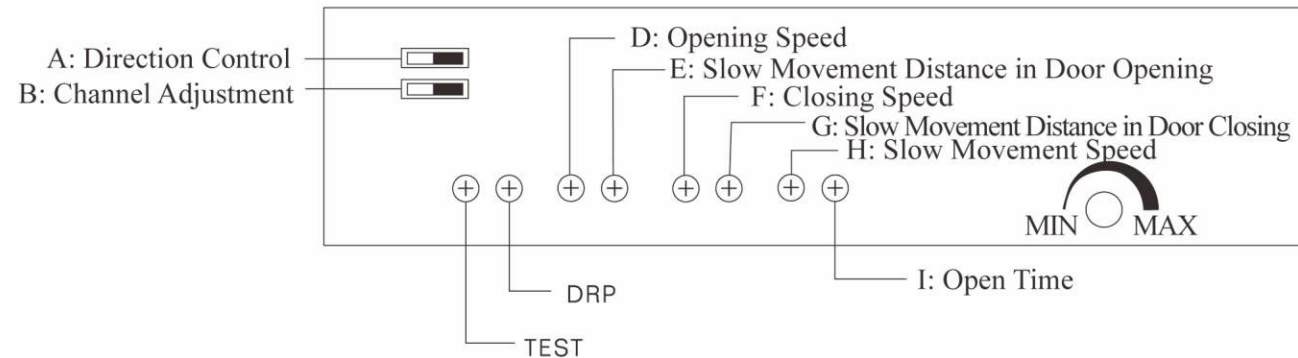
Suitable for door with frame

Suitable for door without frame

1. Check damper should be installed in the middle of swing leaf.
2. The distance between two check dampers should be less than the total width of two leaves.

Parameter Setup

● Controller Component Name



TEST: Press it, it will finish all actions one time, used to adjust parameters.

DRP: power indicator

A: Single-leaf Door: Left: sliding from right to left; Right: Sliding from left to right.

Double-leaf Door: Switch to "Right"

B: Left: Door will keep opening after opened each time. It need to get signal to close.

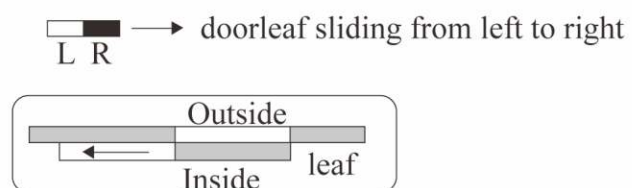
Right: Door will close automatically after opened each time.

D-I: Used to adjust opening speed, slow movement distance, closing speed, slow movement speed, hold open time, Clockwise adjust is increase, Anti-clockwise adjust is decrease.

● Adjust Steps:

1.Set Up Direction Control Switch

(Before adjusting, please manual sliding door serval time to confrm the doorleaf can sliding smoothly)



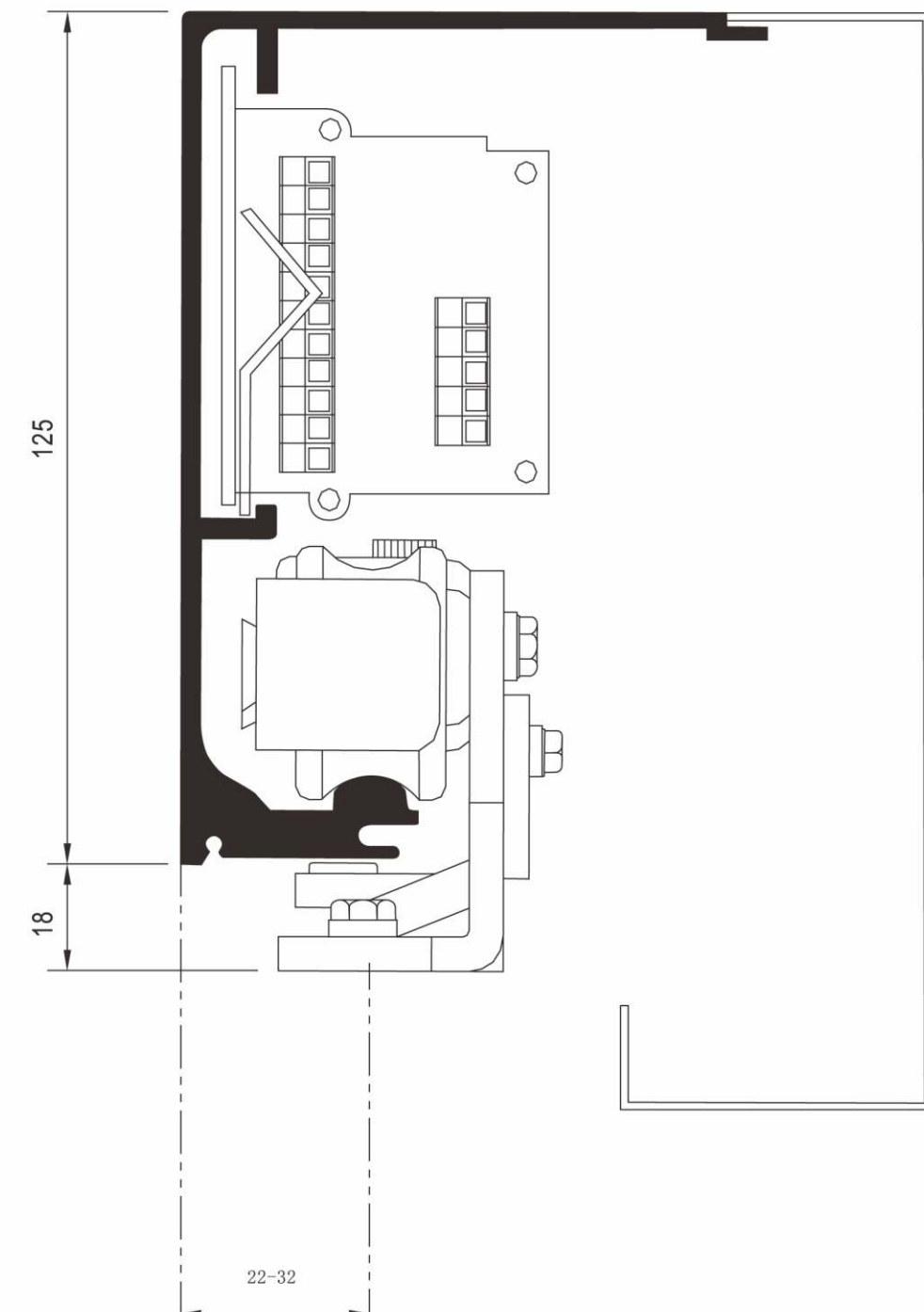
Please jude the direction from inside. when door is double-leaf, set switch to "Right"

2.Set Up Channel Adjust Switch.

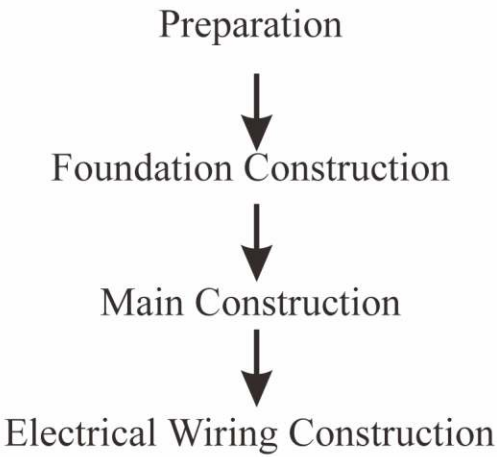
Set up according to user specific requirement.

3.Sliding door to close status, initial setting

Sectional View of Slide Way & Hanging Bracket



Installation Procedure



Auto Door

Doorframe Installation

Slide Way Installation

Door-leaf Hanging

Electric Wire Connection

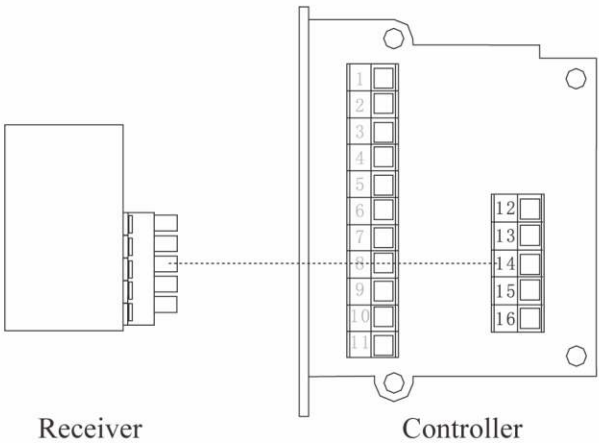
Check

Check---Adjustment

Check Again

Hand Over

Remote Controller



- 1.Insert remote controller receiver into controller.
 - 2.Pay attention to plug direction
- Note: Poor contact may cause action not smoothly.



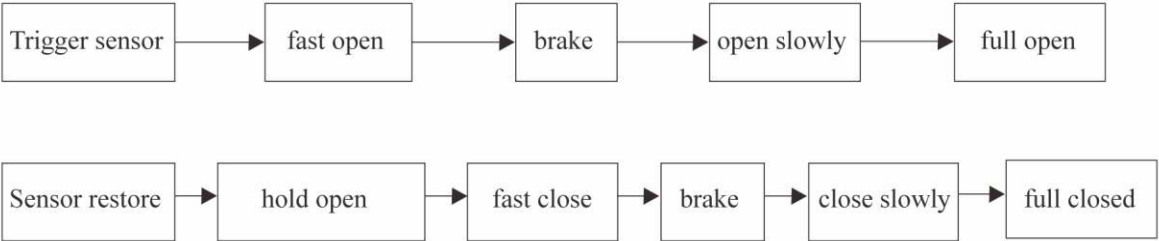
Transmitter

Note: All operation must be done under condition of power off.

- A: NC B: NO
- C: Half Open D: Normal

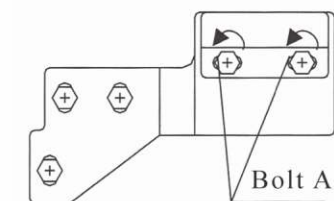
Action Instruction

1. Connect power, automatic door run initialize program in open status, door-leaf sliding to close status slowly, it will stop when reaching to stop dog.
2. All actions for normally running.



Note: When install electric lock to automatic door, we can set different open methods on multifunctional controller.

Belt Installation for Single-leaf Door

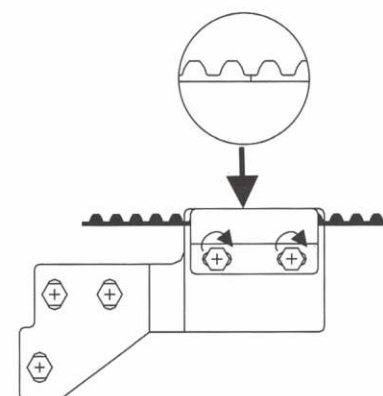


1. Uninstall Bolt A, remove belt fixed device from belt connector.

2. Cut the belt, refer to belt length parameter form.

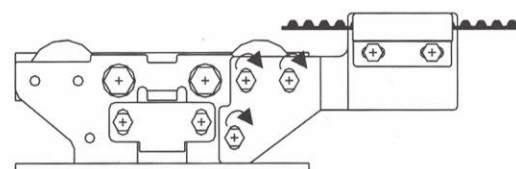
3. Put two ends of belt into belt fixed device fully. Don't make belt twist.

4. Install belt fixed device on belt connector. Pay attention to direction.

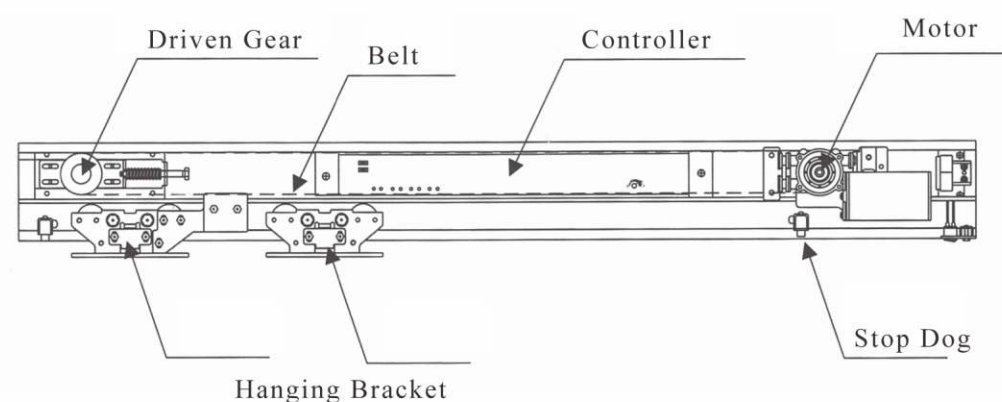


5. Hang one end of belt on motor gear, then hang the other end of belt on driven gear.

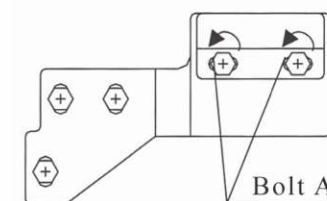
6. Fasten Bolt.



Belt fixed Device Installation (Single-leaf)



Belt Installation for Double-leaf Door

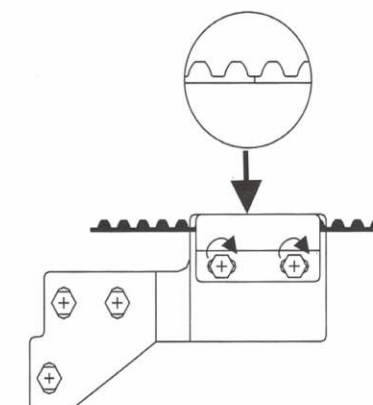


1. Uninstall bolt A, remove belt fixed device from belt connector.

2. But the belt. Refer to belt length parameter form.

3. Put two ends of belt into belt fixed device fully. Don't make belt twist.

4. Install belt fixed device on belt connector. Pay attention to direction.



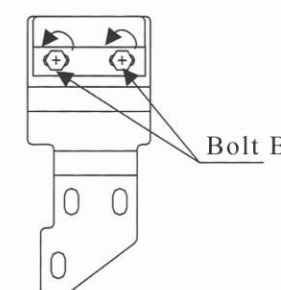
5. Hang one end of belt on motor gear, then hang the other end of belt on driven gear.

6. Fasten Bolt

7. Adjust Belt Tension

8. Sliding door-leaf to close status

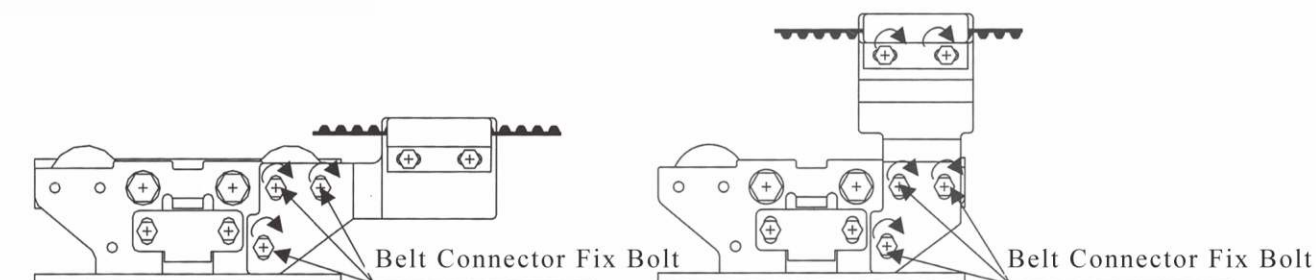
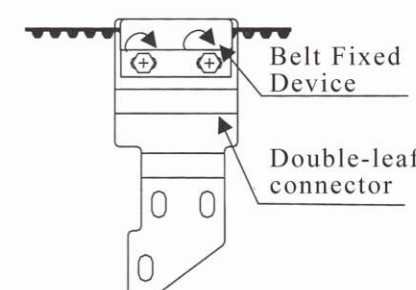
9. Uninstall Bolt B, Remove belt fixed device.



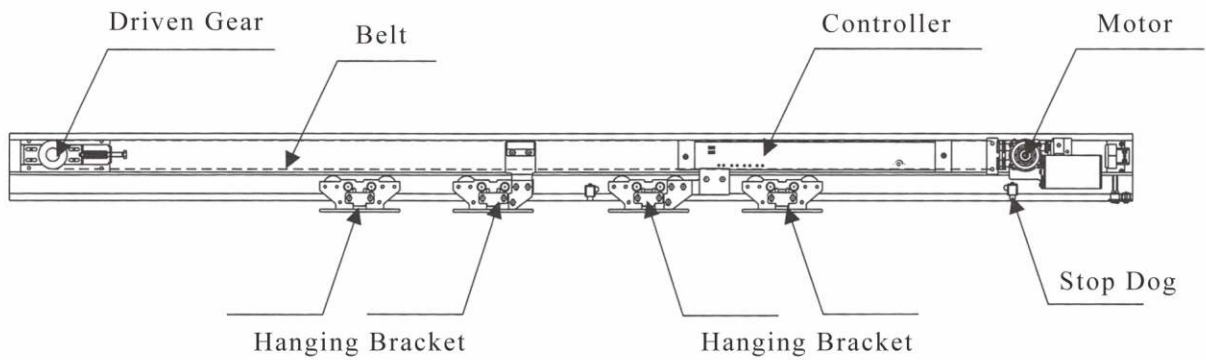
10. Fix belt fixed device on belt

11. Fix belt fixed device on belt connector again.

12. Adjust door position and fasten bolt B



Belt Fixed Device Installation (Double-leaf)



Belt Length Parameter Form

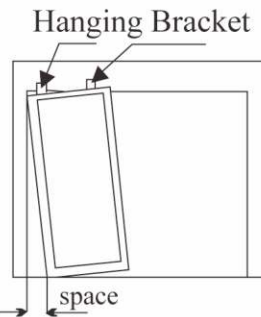
Remark: All Dimension in Millimeters.

| Width of door-leaf (DW) | length of Belt |
|-------------------------|----------------|
| 650 | 4100-4200 |
| 700 | 4400-4500 |
| 750 | 4700-4800 |
| 800 | 5000-5100 |
| 850 | 5300-5400 |
| 900 | 5600-5700 |
| 950 | 5900-6000 |
| 1000 | 6200-6300 |
| 1050 | 6640 |

Door-leaf Installation & Adjustment

Single-Leaf

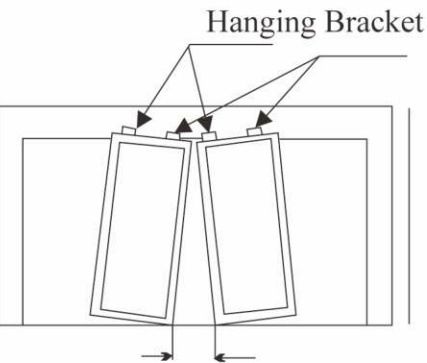
If it is hard to install door-leaf horizontally, we can hang the door-leaf first, then adjust it accordingly.



1. Loosen the fixed nut of hanging bracket.

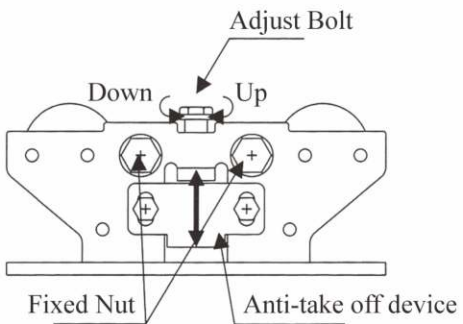
2. Adjust height by adjust bolt
Clockwise---> Up
Anti-Clockwise---->Down

Double-Leaf



3.Fasten the fixed nut of hanging bracket

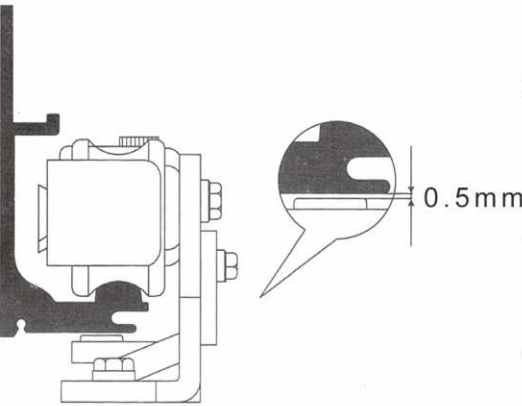
4.After confirmed the position, then install anti-take off device.



5.Confirm the resistance of sliding.

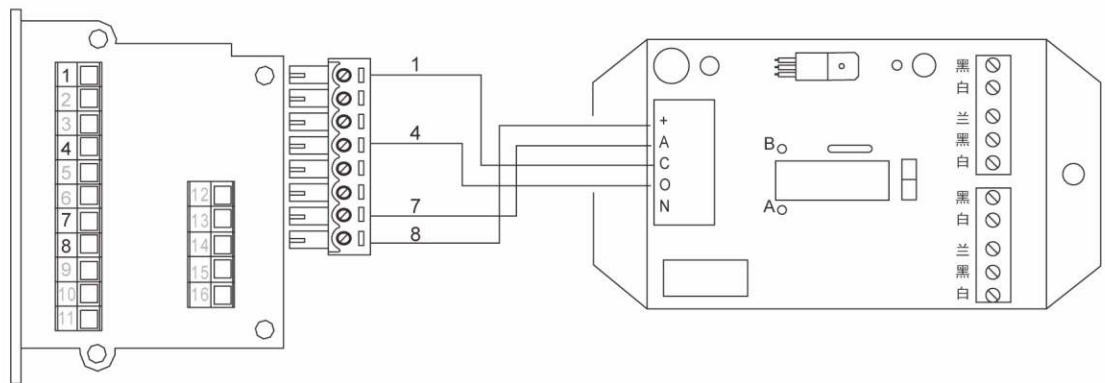
If door-leaf cannot slide smoothly, please confirm the following

- 1.Whether fix hanging bracket on door-leaf vertical.
- 2.Whether there is friction between check damper and the bottom of door-leaf.
- 3.Whether there is friction between door-leaf and doorframe.
- 4.Whether there is friction between slide way and hanging bracket or anti-take off device.



Safety Beam Connection

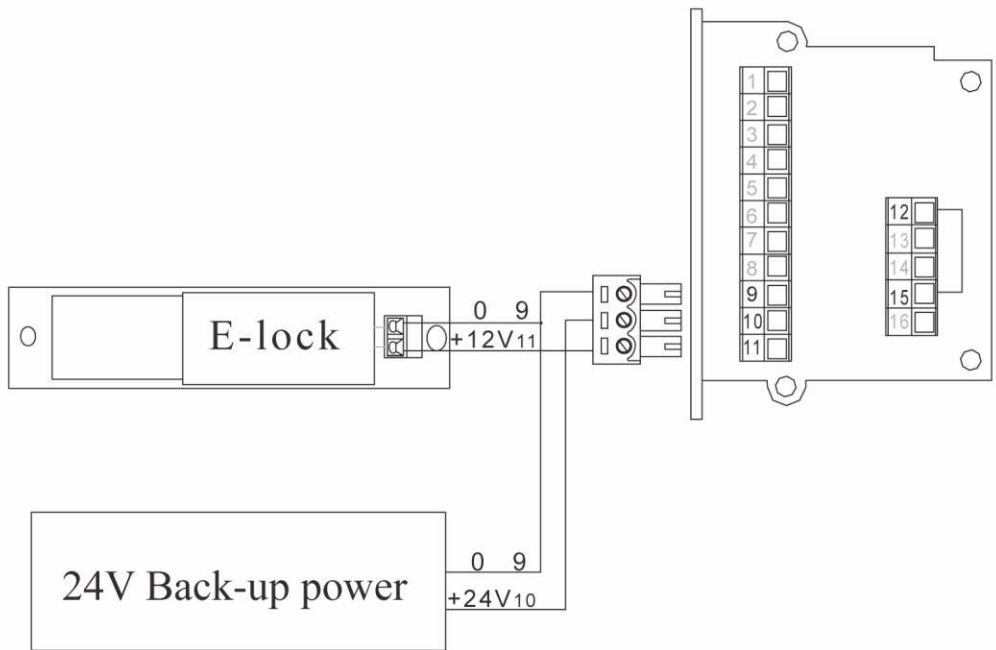
Note: All operation must be done under condition of power off.



Back-up Power Supply & E-Lock

Note: All operation must be done under condition of power off.
Working current for E-lock should be less than 200mA and starting current should be less than 800mA.

Pay attention to polarity when connect back-up power supply.



Please short connect it if there is no remote control device when E-lock is working.

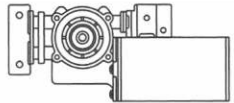
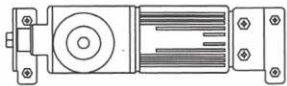

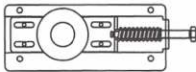

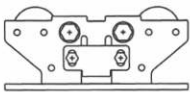

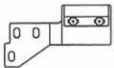


Feature

- Micro computer intelligent control, advance machinery manufacturing.
- Adjust door-leaf status automatically, can manual adjust it if necessary.
- Low noise,sliding smoothly.
- Brushless DC servo motor.long service life.
- Interlock; Electric Lock; Compatible with access control system.
- Can hold Max. 300KG Door-leaf
- Easy Installation.

Specification

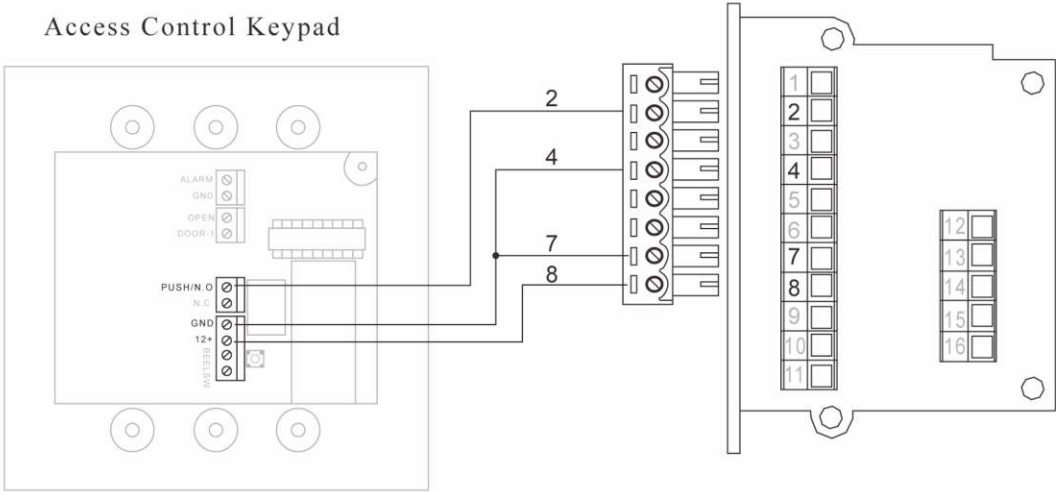
| Specification | Series | |
|---------------------|-----------------------------|-----------------|
| | Single-leaf | Double-leaf |
| Door-leaf Type | Single-leaf | Double-leaf |
| Door-leaf Weight | Max.150Kg | Max.150Kg *2 |
| Door-leaf Width | DW=750--1600mm | DW= 650--1250mm |
| Total Width | W=1500--3200mm | W= 2600--5000mm |
| Mounting Type | Surface Mounting | |
| Power | AC220V, 50HZ | |
| Opening Speed | 15~46cm/s (adjustable) | |
| Closing Speed | 13~46cm/s (adjustable) | |
| Hold-Open Time | 0~8S (adjustable) | |
| Manual Push Force | <40N | <50N |
| Motor | DC24V Brushless Servo Motor | |
| Ambient Temperature | -20 ~+50 °C | |

Packing List

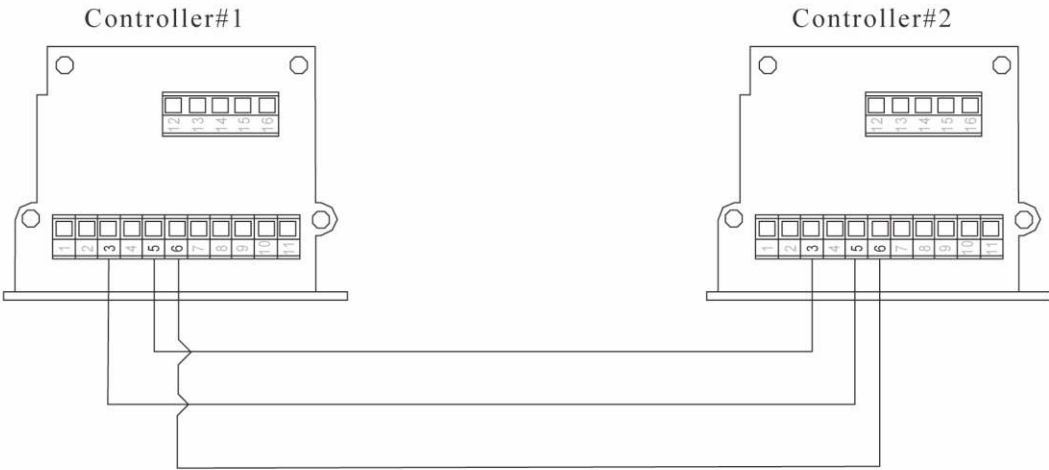
| Name | Schematic Diagram | QTY | |
|-----------------|---|-------------|-------------|
| | | single-leaf | double-leaf |
| Motor (round) |  | 1 | 1 |
| Motor (square) |  | 1 | 1 |
| Controller |  | 1 | 1 |
| Driven Gear |  | 1 | 1 |
| Terminal |  | 1 | 1 |
| Hanging Bracket |  | 2 | 4 |
| Connector(L) |  | | 1 |
| Connector (R) |  | 1 | 1 |
| Stop Dog |  | 2 (L/R) | 2 (L/R) |
| Belt |  | 1 | 1 |
| Fastener | | 1 | 1 |
| Sticker | | 1 | 1 |
| User Manual | | 1 | 1 |

Access Control Keypad Connection

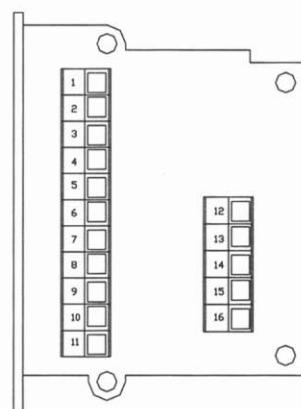
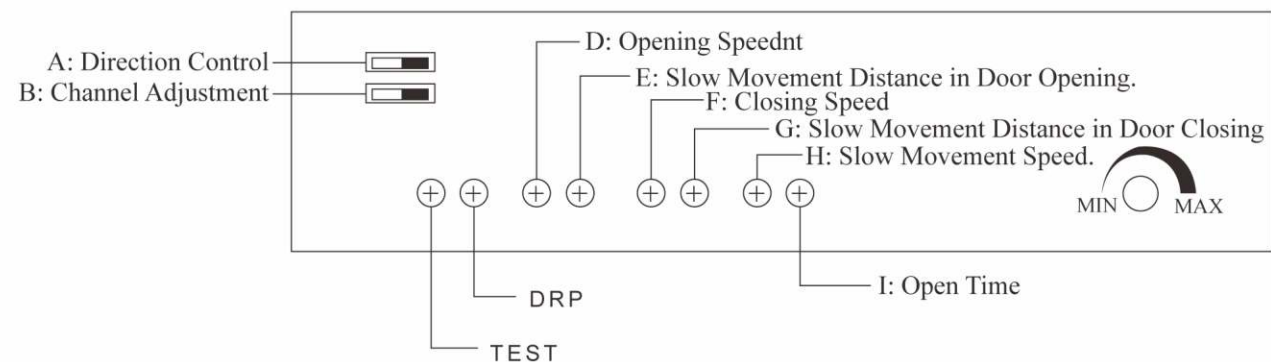
- 1.All operation must be done under condition of power off.
- 2.Pay attention to polarity when connect to access control keypad
- 3.Controller only need passive signal. If it is active signal, it needs to be changed to passive signal.



Interlock Connection

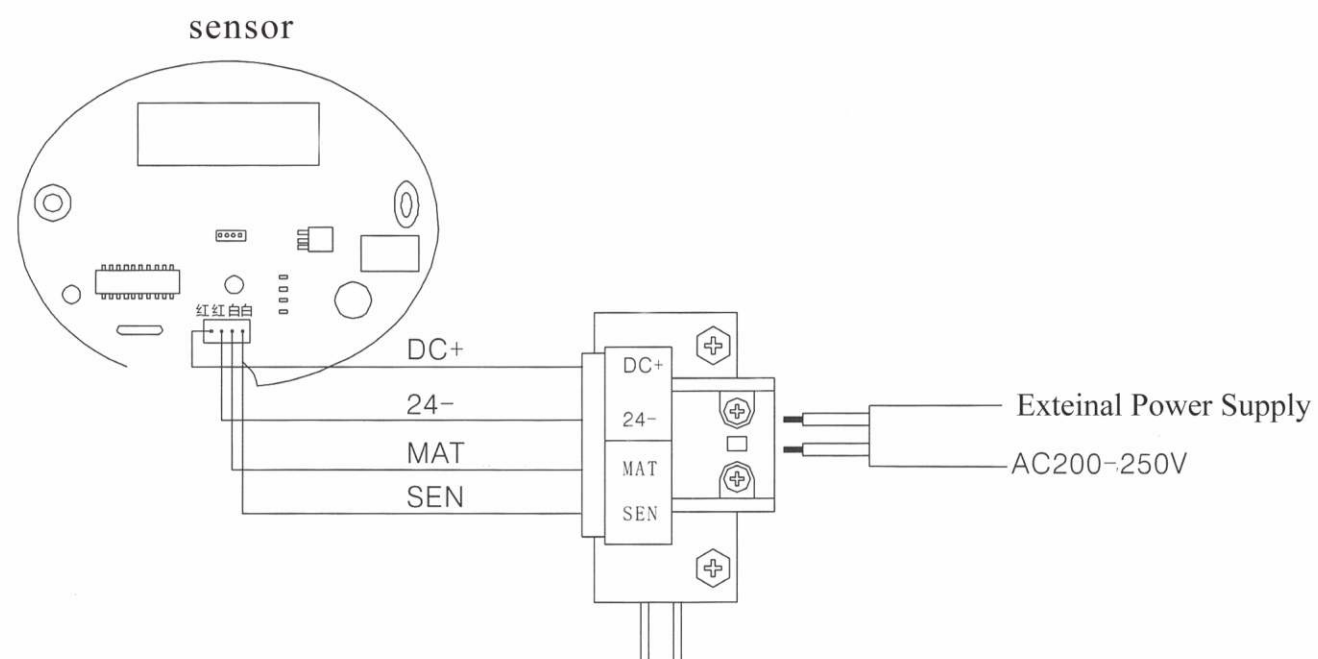


Controller Connection



- 1.Safety beam
- 2.Access Control Signal Input
- 3.Interlock Input
- 4.Common Line
- 5.Interlock Output
- 6.Common Line
- 7.OV
- 8.12V Output
- 9.OV
- 10.24V Back Up Power Supply
- 11.+12V Lock Output
- 12~16: Remote Controller Interface

Sensor Connection

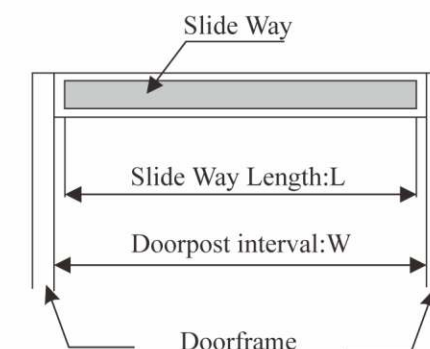


Slide Way Installation

● Cutting

Standard length for slide way is 2.1M *2. For longer requirement, it need to be customized.

Cutting slide way : $L=W-10\text{mm}$



● Installing

Fix slide way with DH+55mm height above the ground

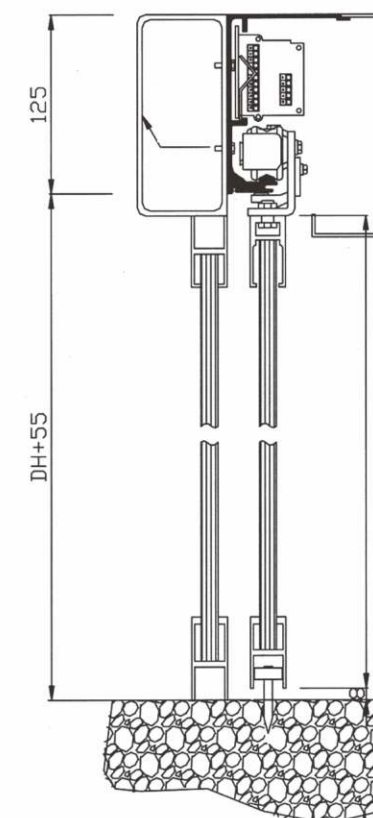
- 1.Drill holes on slide way and steel structure or wall.
- 2.Use spirit level to test both ends of slide way.
- 3.Use two screws to fix two ends of slide way on steel structure or wall temporarily.
- 4.Revise the level again, then use screw to fix slide way on steel structure or wall finally.

Note:

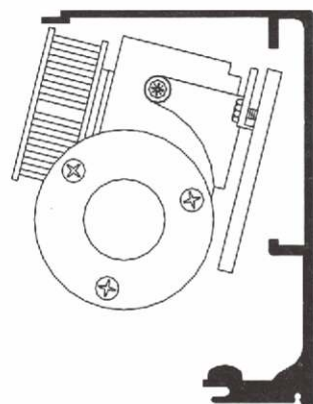
Must keep slide way horizontal.

DH means the height of swing door-leaf

The height above the slide way is more than 50mm

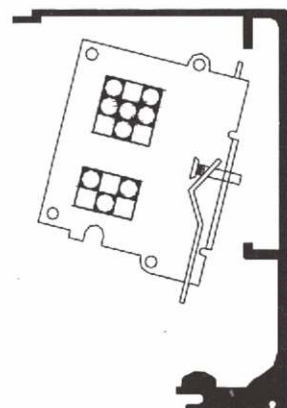


Motor Installation



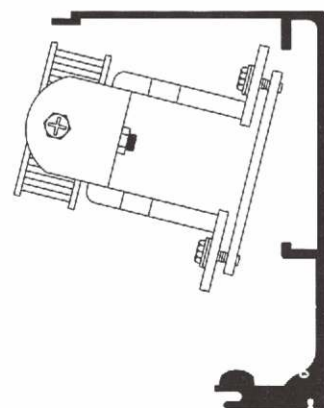
- 1.Put cable with termina to the motor position.
- 2.Embed Motor into slide way.
- 3.Slide motor to right end of slide way.
- 4.Use Bolt to fixmotor on slide way.
- 5.Make the cable go through frcm top of motor.
Attention do not make the cable dropping within slide way

Controller Installation



- 1.Embed Controller into slide way.
- 2.Put cable to controller terminal to confirm it can insert the plug.
- 3.Use bolt to fix controller on slide way.

Driven Installation



- 1.Embed driven gear device into the slide way.
- 2.Use bolt to fix it on slide way.

Connection

Note: All operation must be done under condition of power off.

Round Motor

