

Automatic Sliding Door Series SM150





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.

FAQ







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

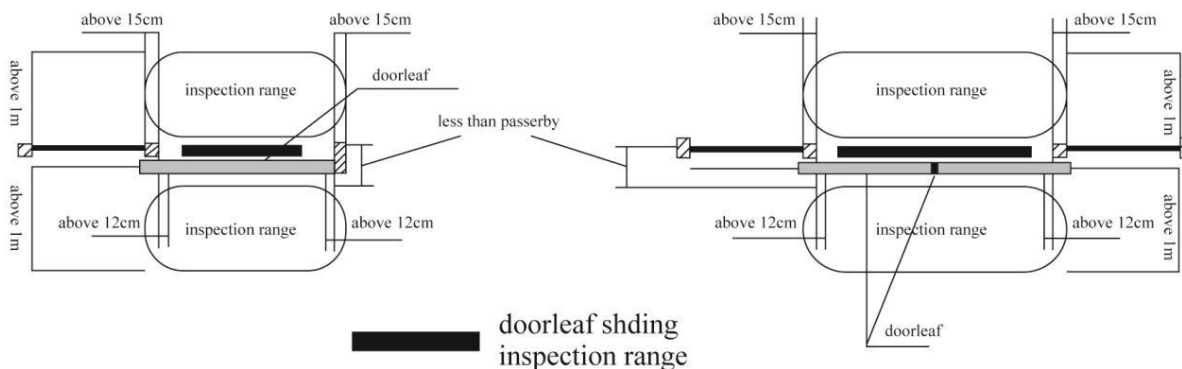
Attention


User must comply with the following content:

-  Caution
-  Attention
-  Forbiddenn
-  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.
-  djust sensor to make sure inspection range cover all valid area.
-  lease install safety beam for automatic door.



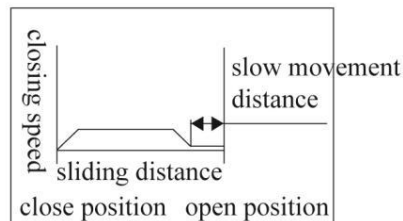
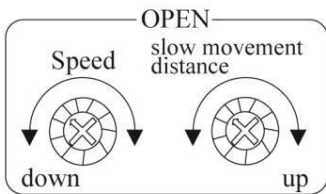
-  If inspection range cannot confirmed, please place the potted restrictions on movement , and make an explanation for owner.

FAQ

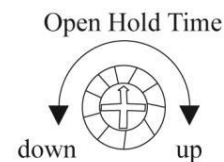
Fault	Reason	Answer	Solution
Door Leaf sliding Not smoothly	Open speed or close speed too slow. Slow movement distance value too large Artificial collision when closing Sliding resistance too strong	Confirm the speed Confirm the slow movement distance There is obstacle Check damper is broken	Adjust speed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

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

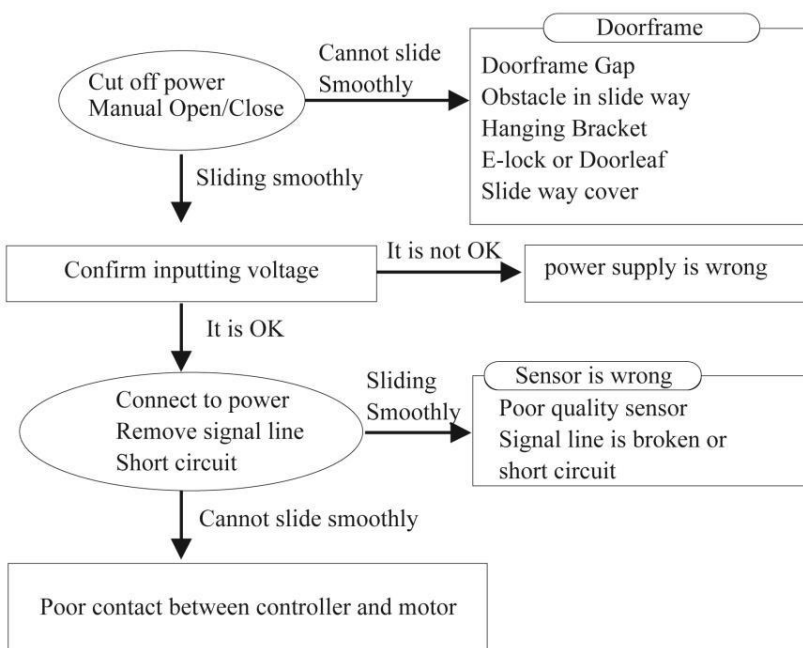
Press "TEST" button on controller, adjust door hold open time when door is opening.
Note: when using electric bolt lock, must unlock the electric bolt lock, then adjust it.



7.Adjust Door Open Hold Time



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

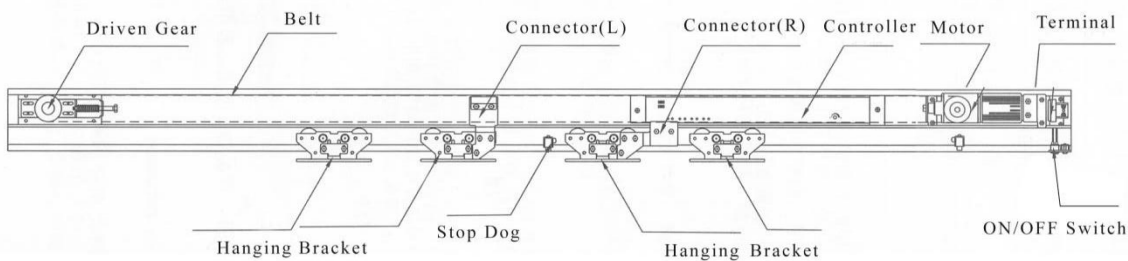
1. Please use it after charging 24Hour.
2. Temperature for battery: 0~40°C
3. Check the battery condition every half year

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

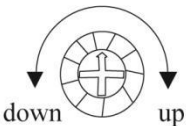
Component



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.

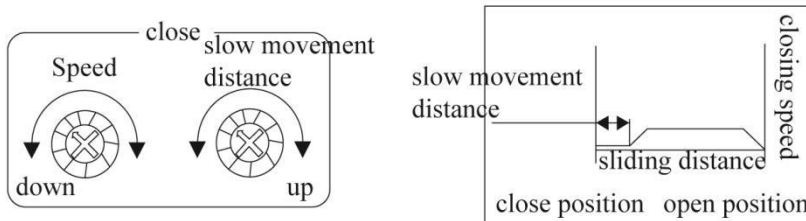
slow movement speed



- 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.

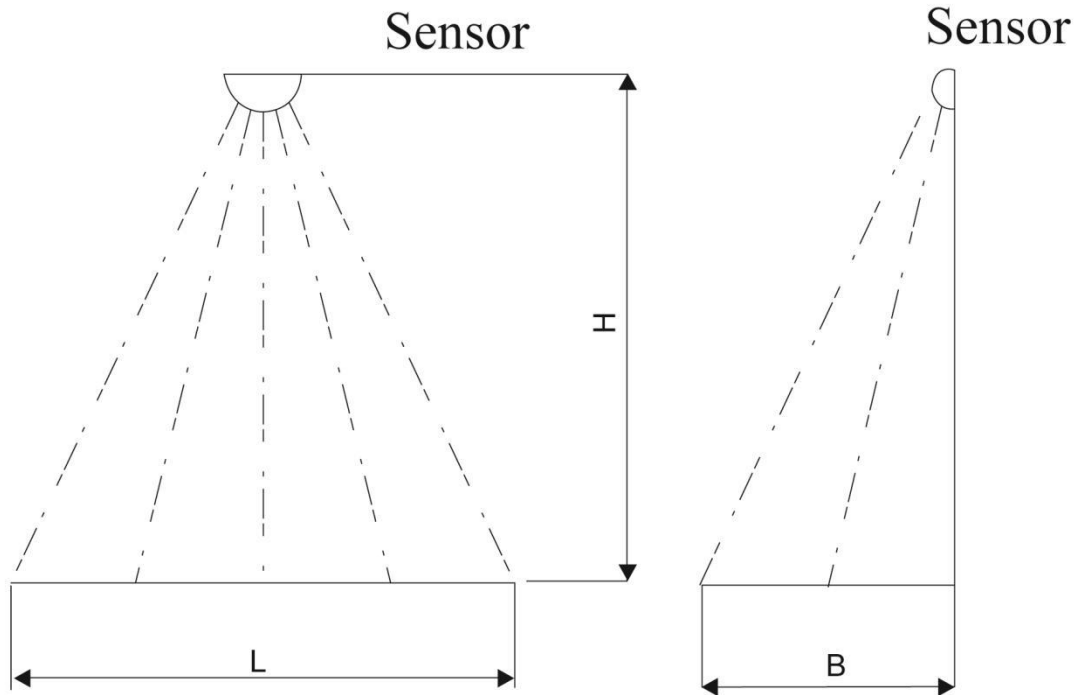
2. Confirm there is not person go through when adjusting.

3. Open slow movement distance should be more than 5CM

Sensor Installation

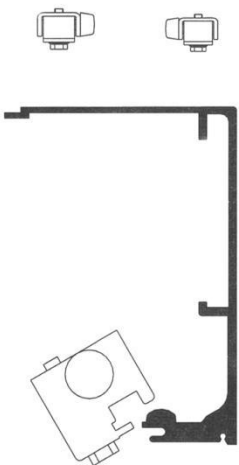
Microwave sensor should be installed above the door-leaf in the middle.

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.

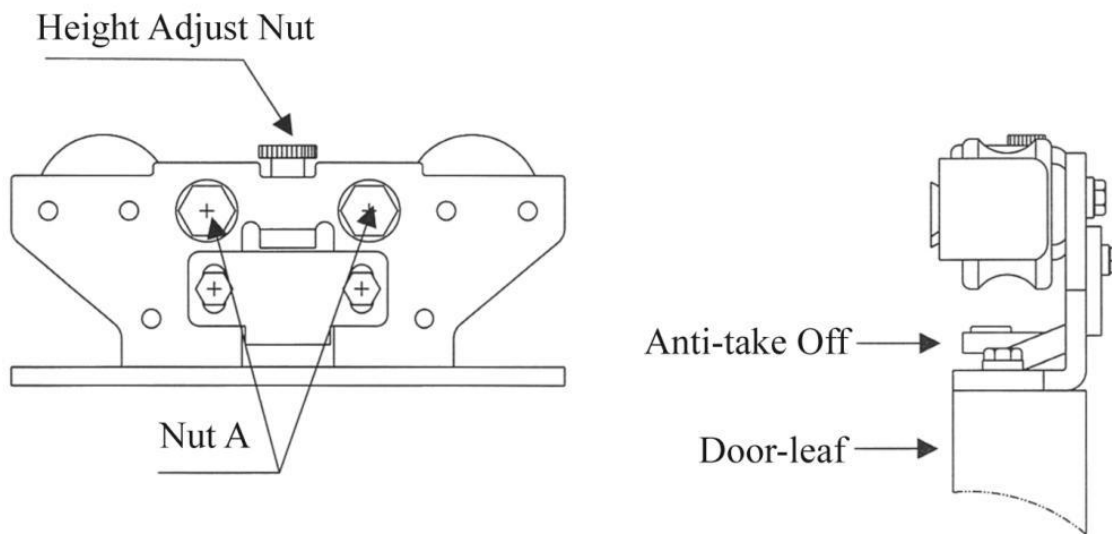
Stop Dog Installation



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

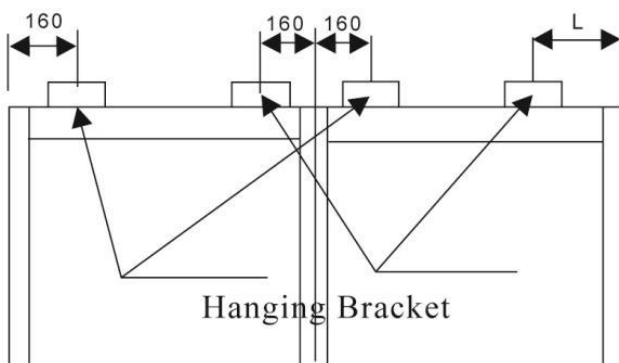
1. Loosen the Nut A of hanging bracket, remove the anti-take off device from hanging bracket.
2. Use equipped hanging bracket bolt (M8*20) fix hanging bracket on corresponding place on door-leaf.
3. Hanging door-leaf on slide way.
4. Install the anti-take off device.



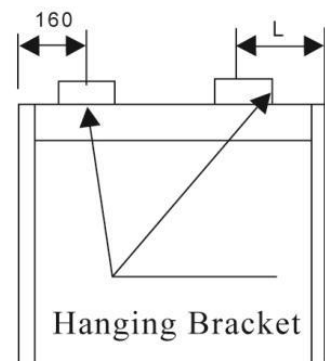
Hanging Bracket Installation

Hanging Bracket Position

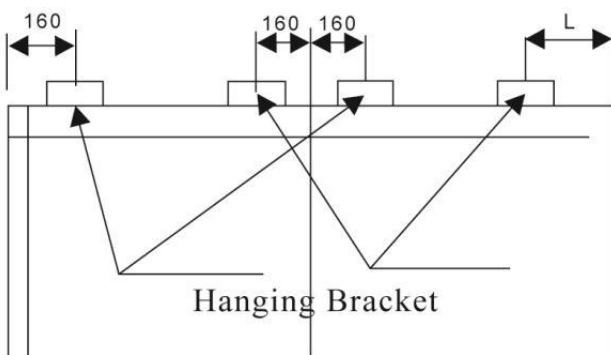
Double-leaf Door with Frame



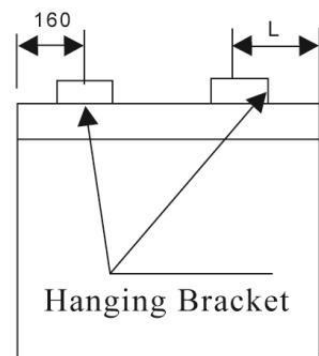
Single-leaf Door with Frame



Double-leaf Door without Frame



Single-leaf Door without Frame

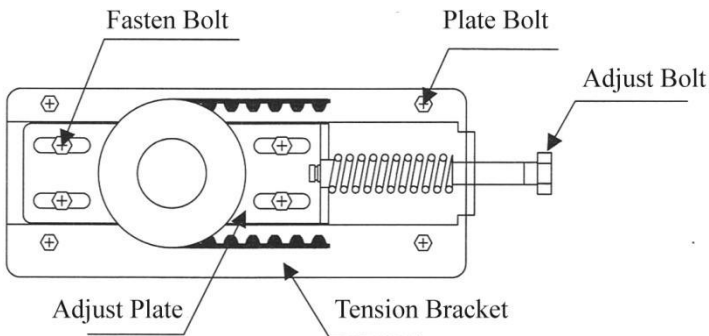


Note:

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

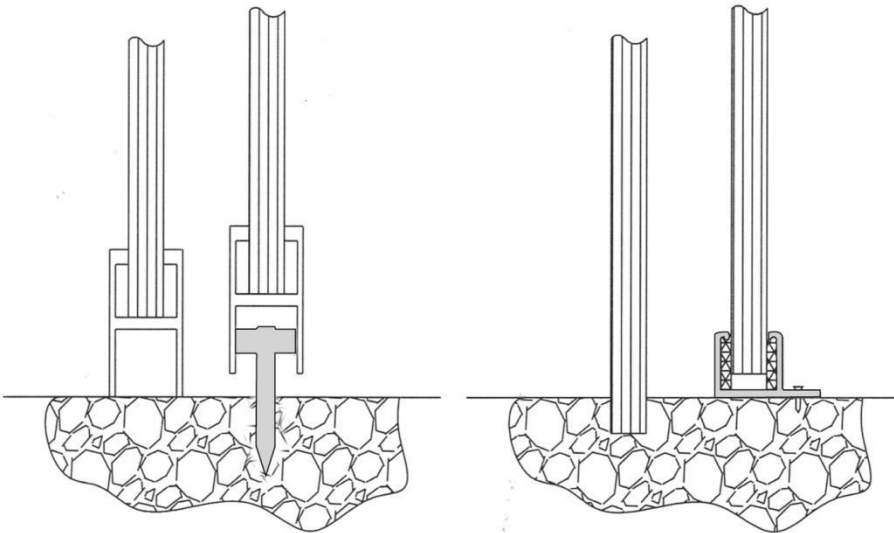
1. Pull driven gear to the left side and keep the belt uptight, then fasten 4 plate bolts.
2. Loosen 4 fasten bolts.
3. Clockwise turn adjust bolt and make adjust plate move to left side, then tension of belt will become strong, when it is up to suitable tension, fasten 4 fasten bolts again.



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



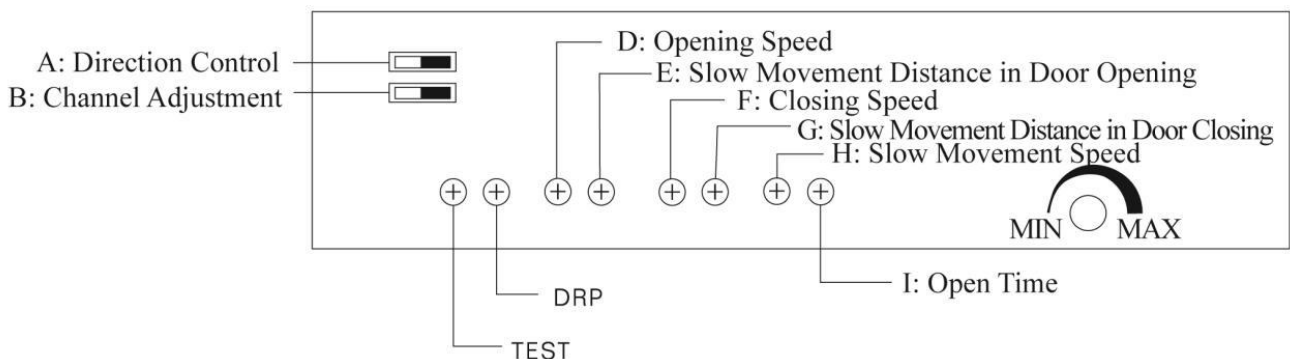
Suitable for door with frame

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.

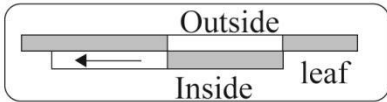
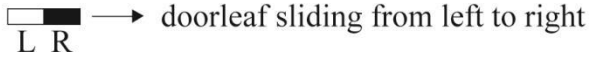
Right: Door will close automatically after opened each time.

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 confirm the door leaf can sliding smoothly)



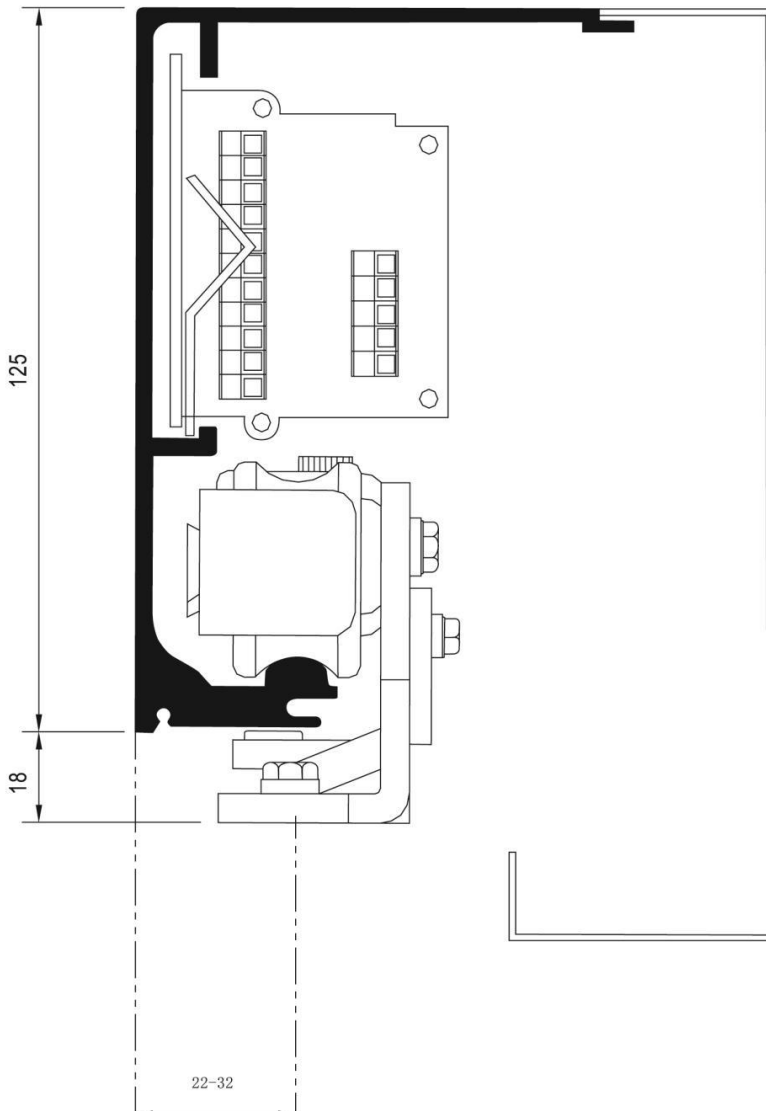
Please jude the direction from inside. when door is double-leaf, set switch to "Right"

2.Set Up Channel Adjust Switch.

Set up according to user specific requirement.

3.Sliding door to close status, initial setting

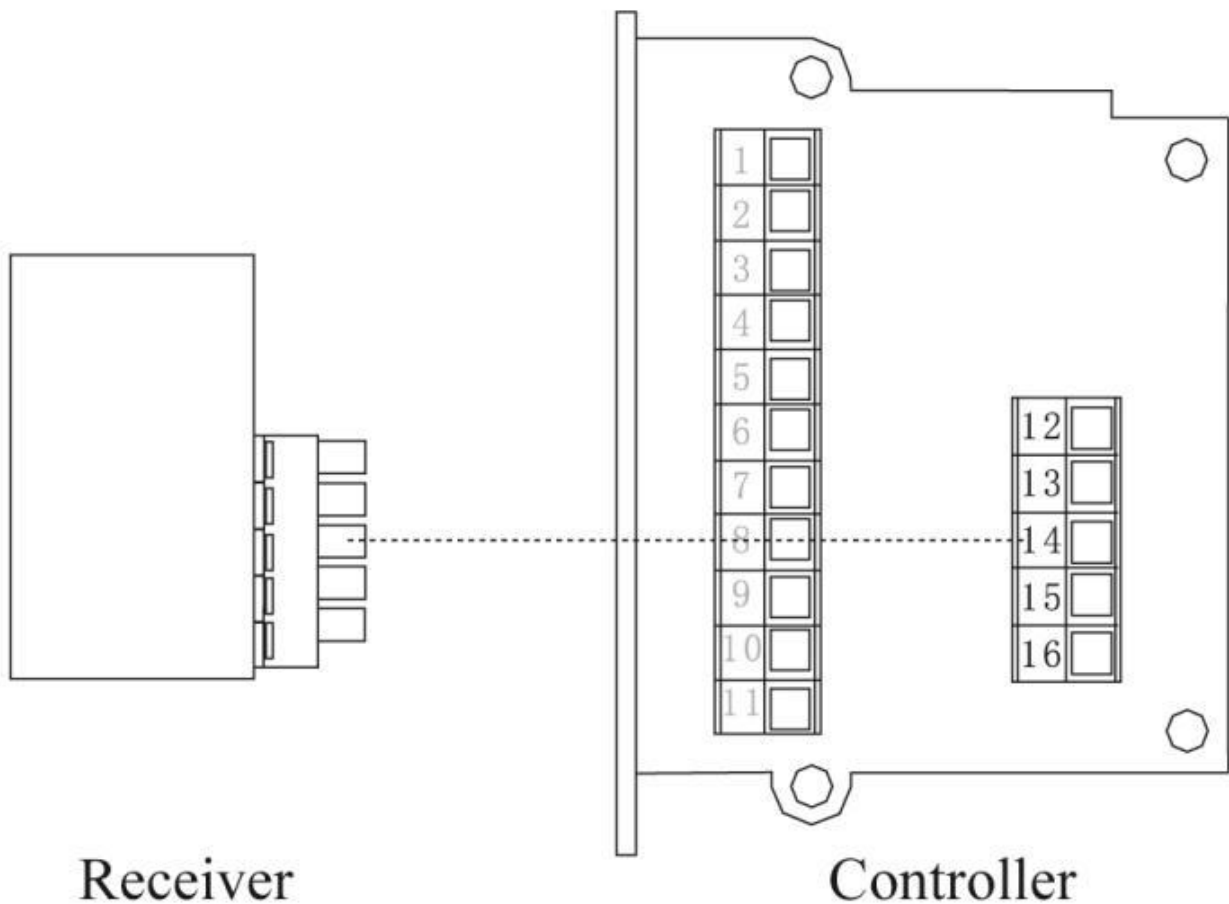
Sectional View of Slide Way & Hanging Bracket



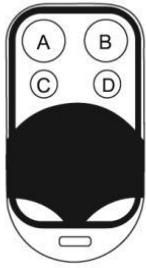
Installation Procedure

Preparation
↓
Foundation Construction
↓
Main Construction
↓
Electrical Wiring Construction
↓
Auto Door
Door Frame 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.

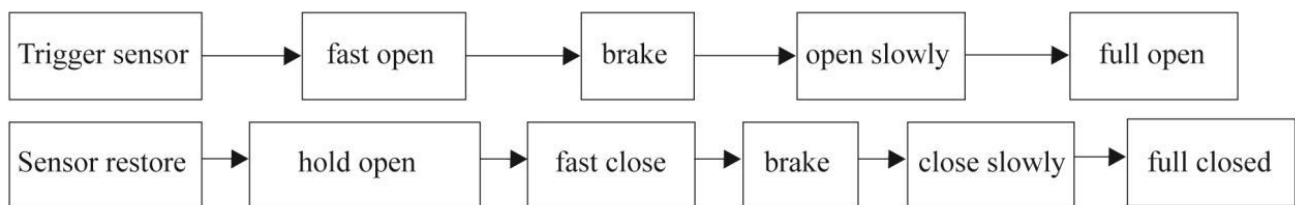


Transmitter

Note: All operation must be done under condition of power off.
 A:NC B: NO C: Half Open D: Normal

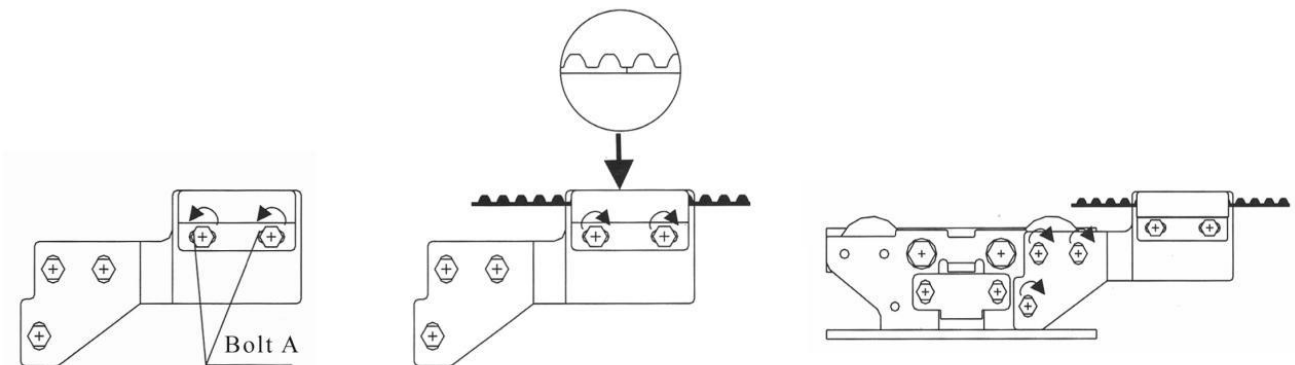
Action Instruction

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.



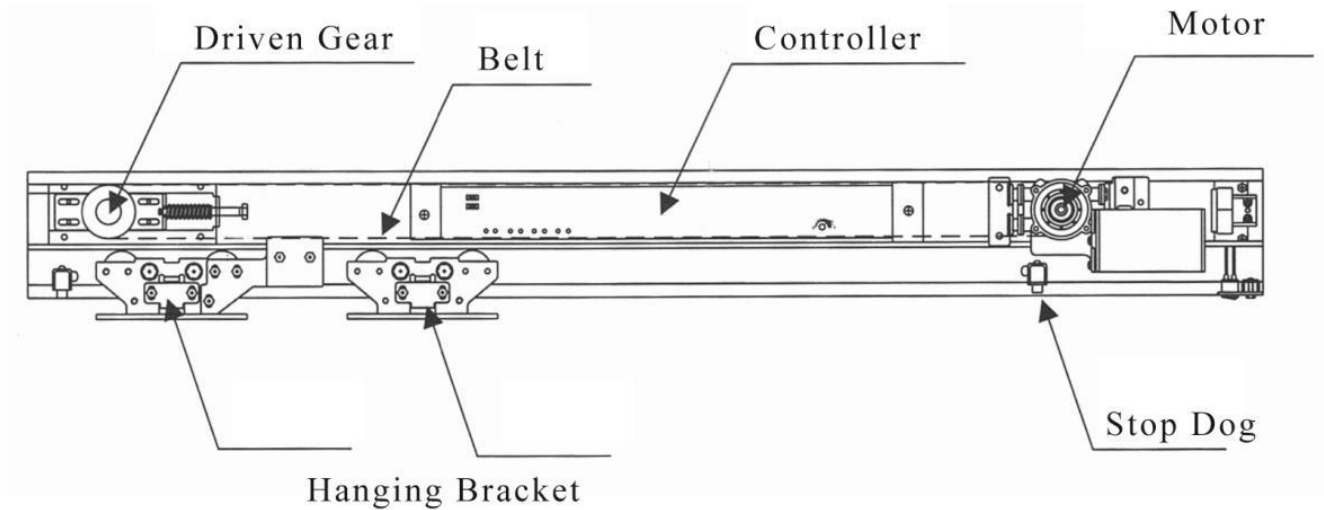
Note: When install electric lock to automatic door, we can set different open methods on multifunctional controller.

Belt Installation for Single-leaf Door



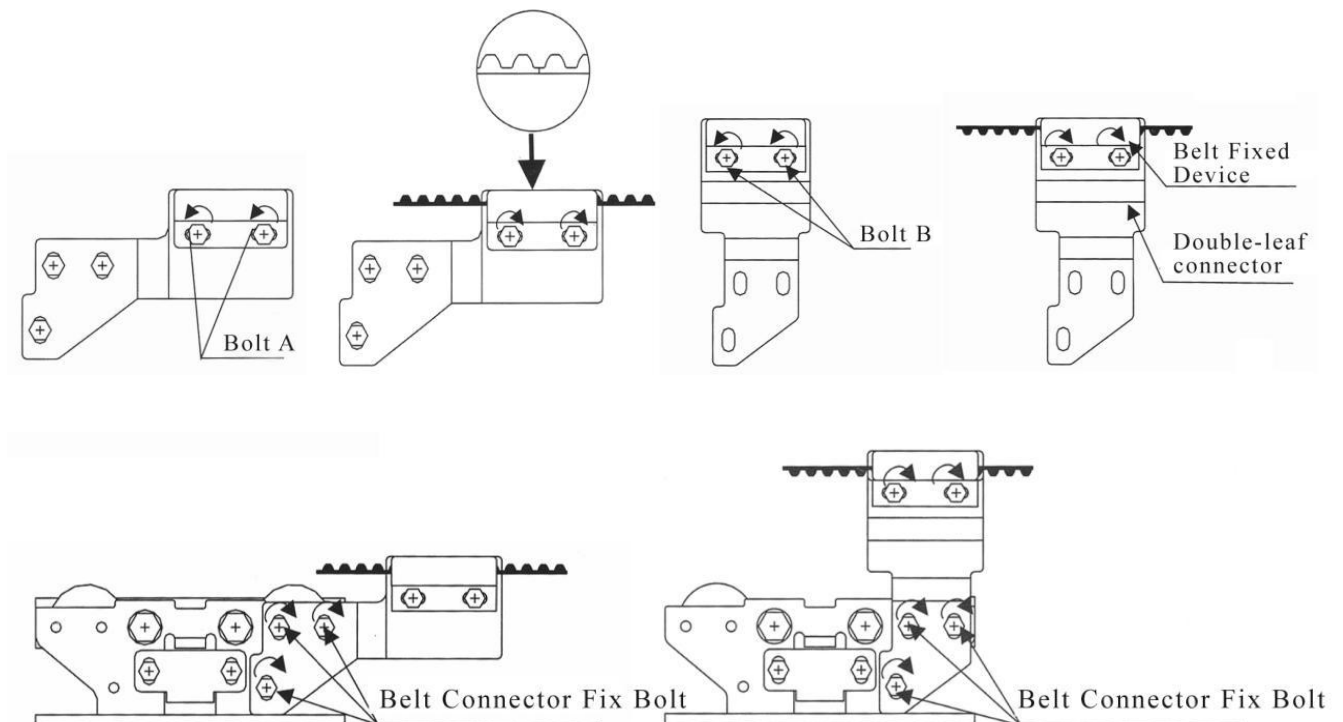
1. Uninstall Bolt A, remove belt fixed device from belt connector.
2. Cut the belt, refer to belt length parameter form.
3. Put two ends of belt into belt fixed device fully. Don't make belt twist.
4. Install belt fixed device on belt connector. Pay attention to direction.
5. Hang one end of belt on motor gear, then hang the other end of belt on driven gear.
6. Fasten Bolt.

Belt fixed Device Installation (Single-leaf)

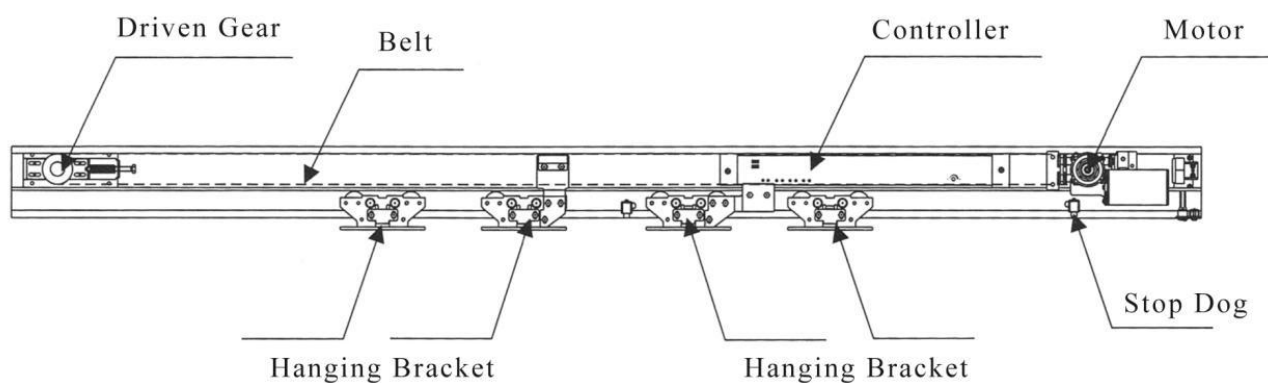


Belt Installation for Double-leaf Door

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

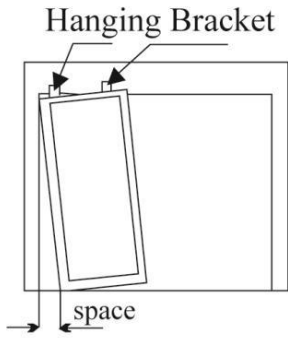
If it is hard to install door-leaf horizontally, we can hang the door-leaf first, then adjust it accordingly.

1. Loosen the fixed nut of hanging bracket.
2. Adjust height by adjust bolt
 Clockwise---> Up
 Anti-Clockwise---> Down
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.

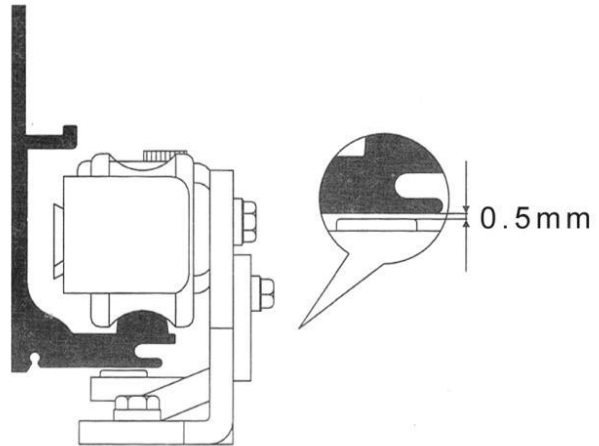
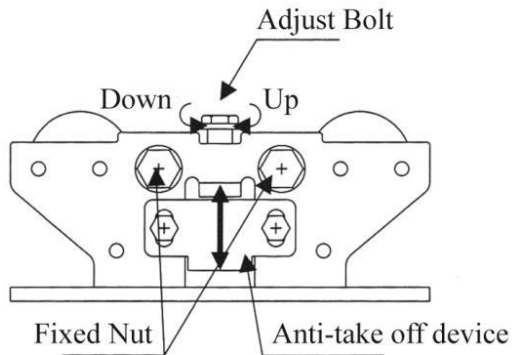
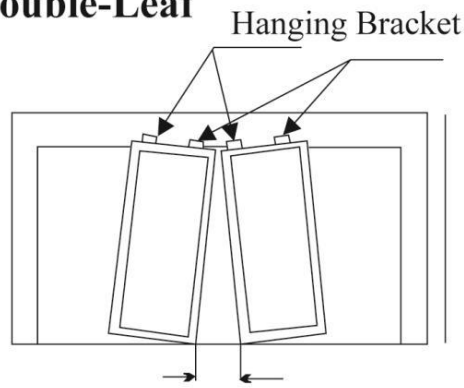
If door-leaf cannot slide smoothly, please confirm the following

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.

Single-Leaf

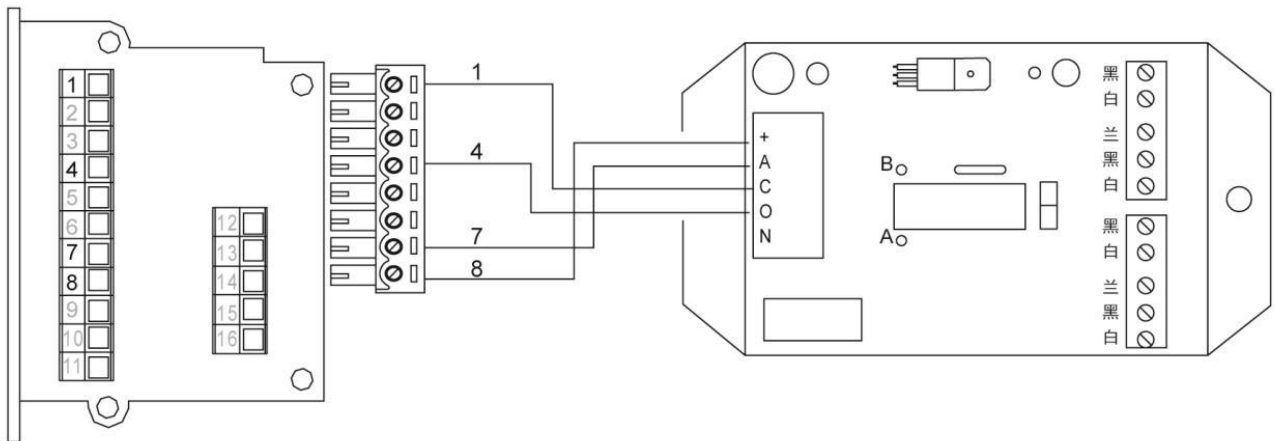


Double-Leaf



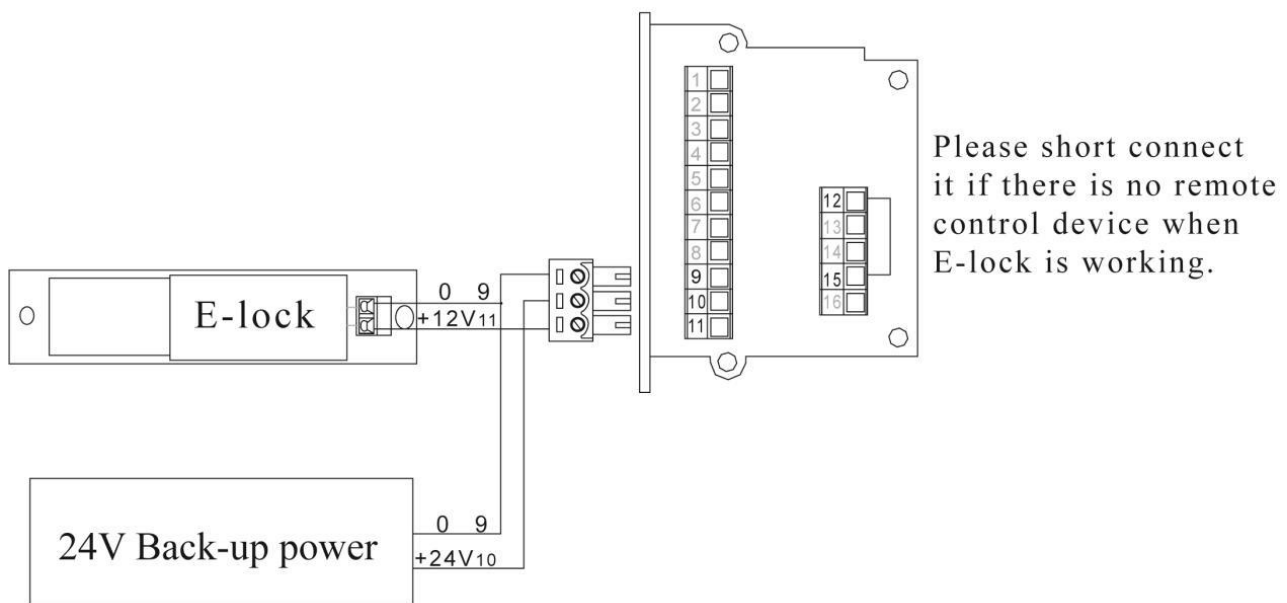
Safety Beam Connection

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.



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.

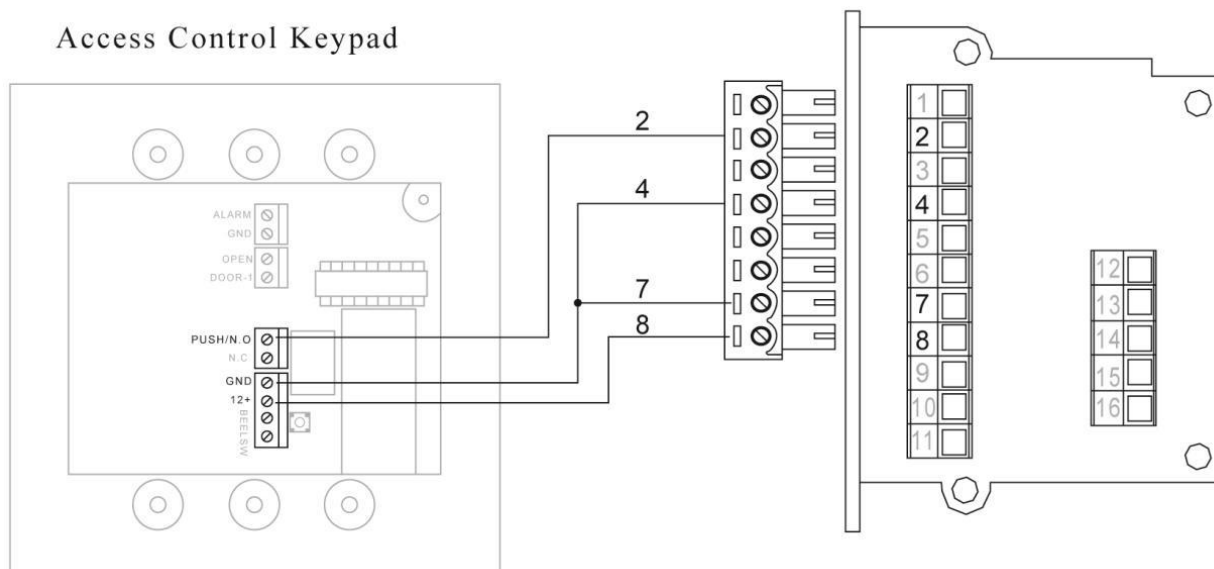
Specification

Specification	Series	
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	AC90~240V, 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°C~50°C	
Weight	10.58kg	

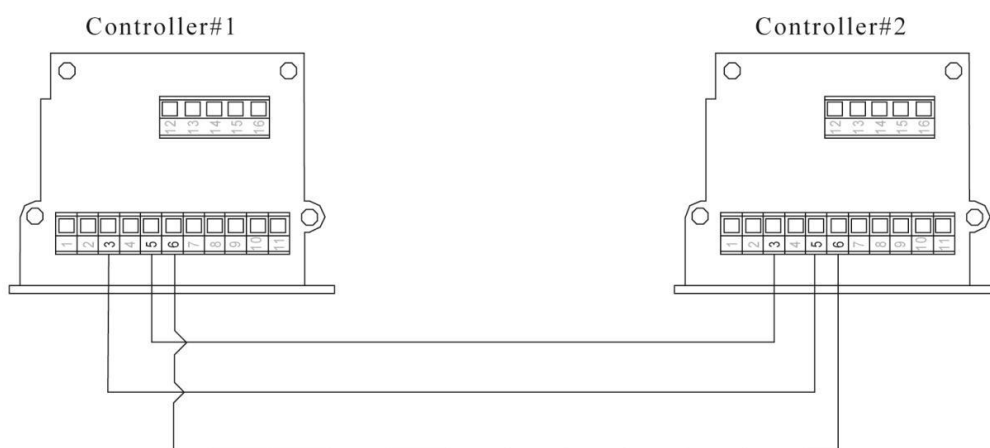
Access Control Keypad Connection

- 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. .

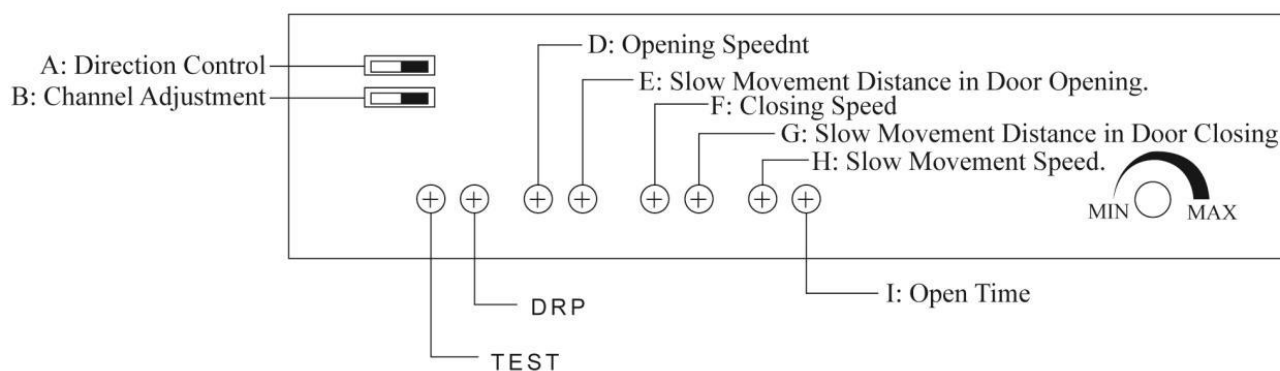
Access Control Keypad

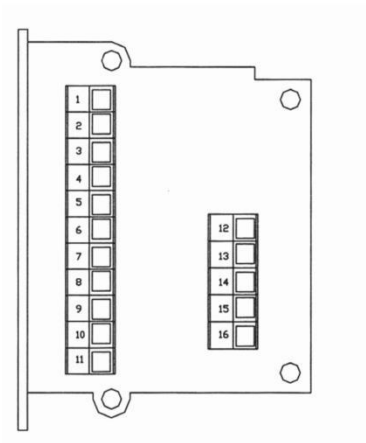


Interlock Connection



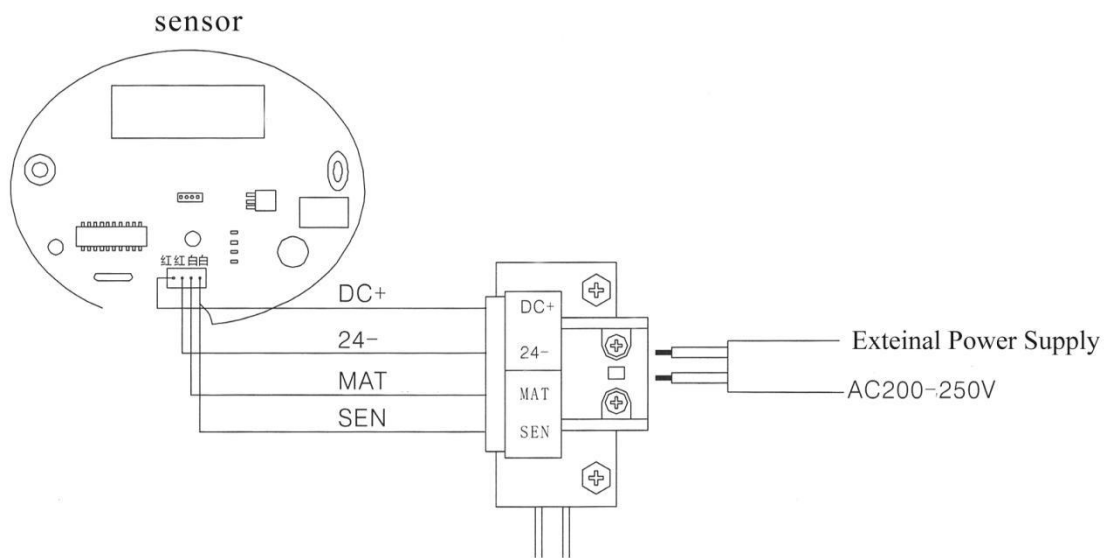
Controller Connection





- 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

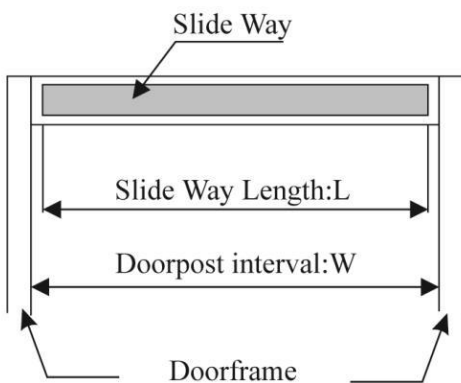
Sensor Connection



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

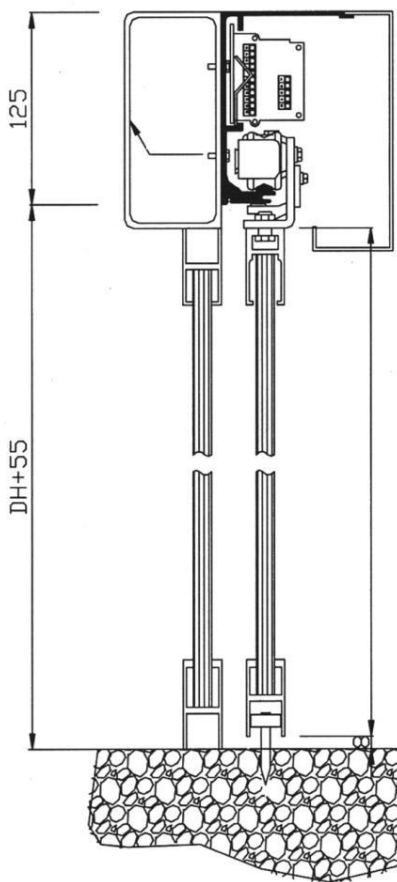
1. Drill holes on slide way and steel structure or wall.
2. Use spirit level to test both ends of slide way.
3. Use two screws to fix two ends of slide way on steel structure or wall temporarily.
4. Revise the level again, then use screw to fix slide way on steel structure or wall finally.

Note:

Must keep slide way horizontal.

DH means the height of swing door-leaf

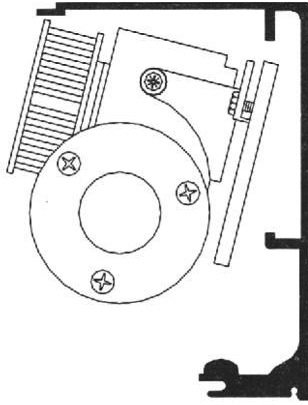
The height above the slide way is more than 50mm



Motor Installation

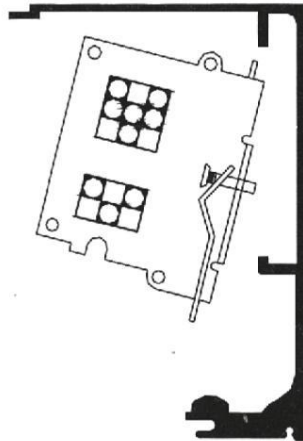
1. Put cable with termina to the motor position.
2. Embed Motor into slide way.
3. Slide motor to right end of slide way.
4. Use Bolt to fix motor on slide way.
5. Make the cable go through from top of motor.

Attention do not make the cable dropping within slide way



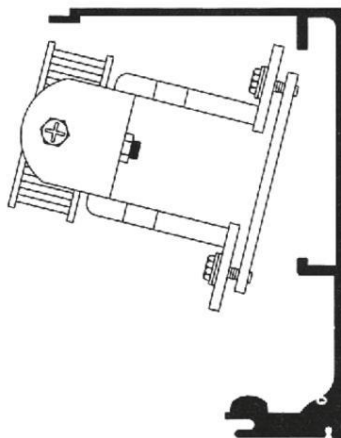
Controller Installation

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.



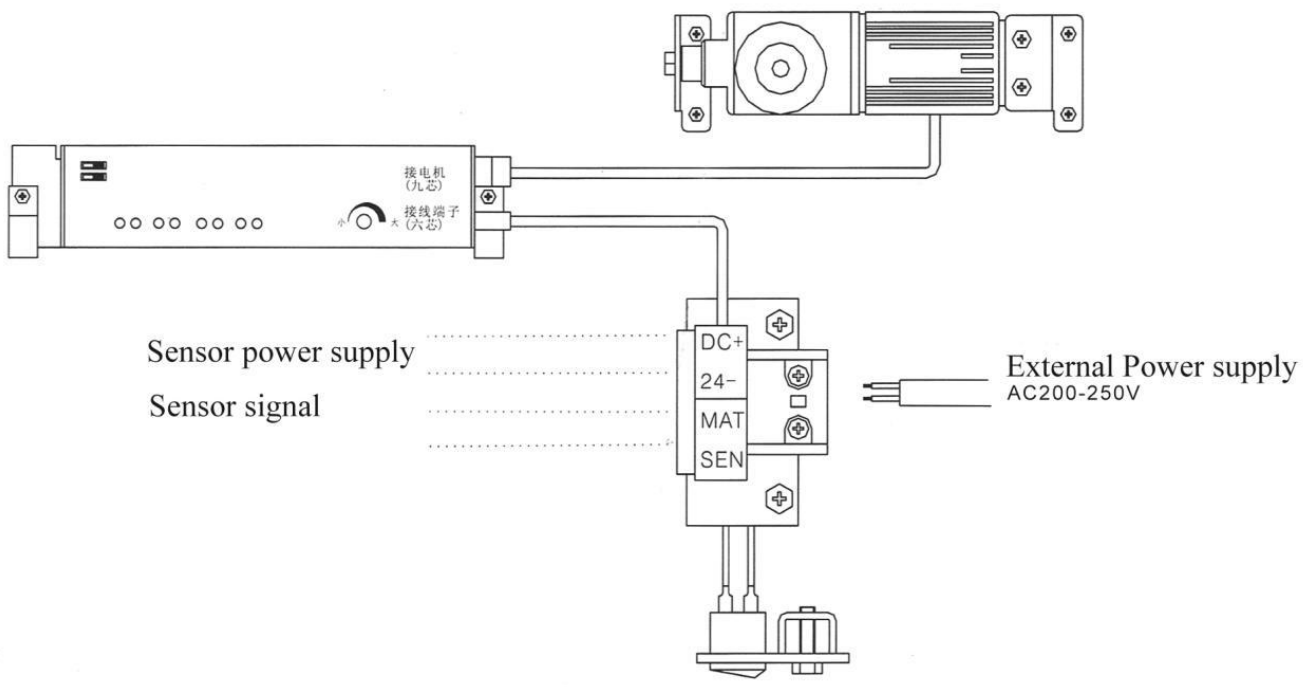
Driven Installation

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.



S4A Industrial Co., Limited

Address: The 2nd floor, Jinmin'an Industrial Zone, #529, Bulong Rd.
Bantian St. Longgang Dist. Shenzhen, PRC.. CN 518131



Tel: +86 755 29450011

www.s4a-access.com