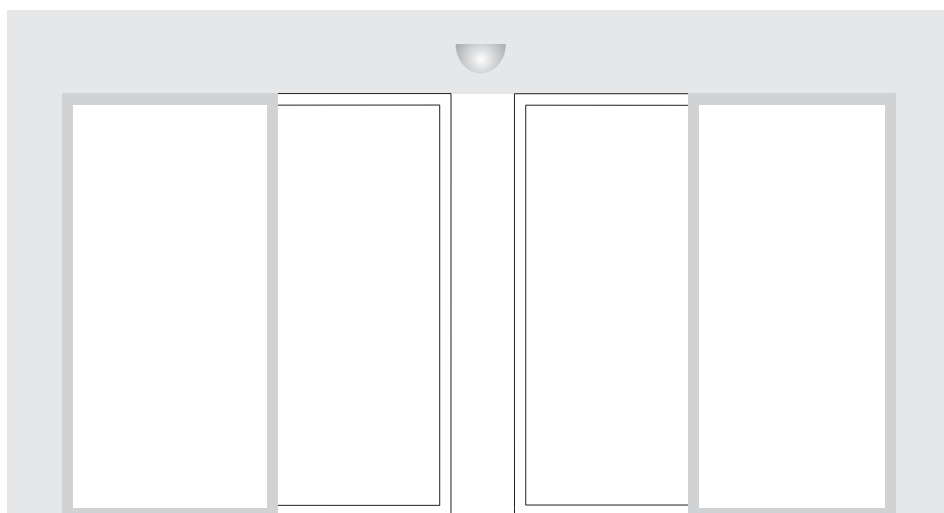


# CUMU

## INSTALLATION MANUAL

CMD-150BT



**AUTOMATIC SLIDING DOOR UNIT**



CUMU AUTOMATIC DOOR (CHANGZHOU) CO., LTD.

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# 1. Safety Precautions

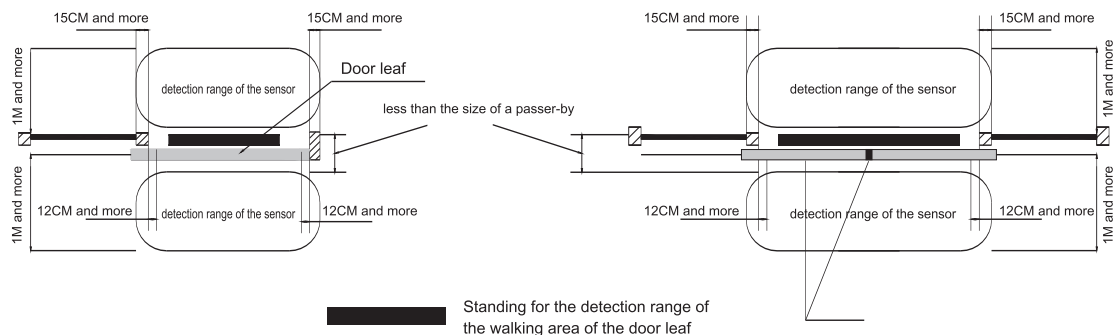
- The user must abide by contents and categories are presented and described by the following graphic expressions.

	Warning	Misoperation may result in injury even death to the operator.
	Caution	Misoperation may result in injury or physical loss to the operator.

	This stands for prohibited contents.		This stands for compulsory contents.
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## Warning

- ! Installation and adjustment must be carried out according to the Installation Manual. Carelessness in installation and adjustment may result in such accidents as fire, electric shocks or fall off.
- ! During the installation don't allow the pedestrians to pass through the automatic door or approach the work site. Because any tools or parts fall off during the installation may result in injury to the pedestrians.
- ⊘ Don't remodel the parts, otherwise fire, electric shocks or fall may occur.
- ⊘ Don't use the power beyond the stipulated voltage or frequency, otherwise fire or electric shocks may occur.
- ! The sensor should be set and adjusted to make sure that the opening area of the door is fully in the range of sensor detection without any blind area. If the detection range is too small or blind area is left, the passer-by may be collided or squeezed by the door, causing injury.
- ! Do fix up auxiliary safety beam sensor to ensure the detecting range for the walking area of the door leaf, otherwise the passers-by may be collided or squeezed by the door leaf, causing injury.



- ! If the above detection range is not guaranteed, to ensure the passer-by pass through the detection range, please restrict the passage by such as putting plants grown in a flowerpot with explanations given to the owners. Carelessness may make passers-by to be collided or squeezed by the door, result in injury.

## Caution

- ⊘ Don't use the door in a place subject to dampness, vibration or corrosive gas, otherwise it may cause such accidents as fire, electric shocks or fall.
- ⊘ Make sure that a space of more than 30 mm be available after the door is opened, otherwise user's fingers may be squeezed by the door leaf and upright column, causing injury.
- ⊘ Don't cut off power when the door is in operation, otherwise it may cause the passers-by be injured.
- ❗ Please stick the adhesive sticker on the door leaf firmly. If not, it may cause injury to the passer-by who didn't pay attention to the door leaf.
- ⊘ Don't connect an electric device with a capacity of over DC24V 300mA to the plug of the controller, otherwise it may cause fire.

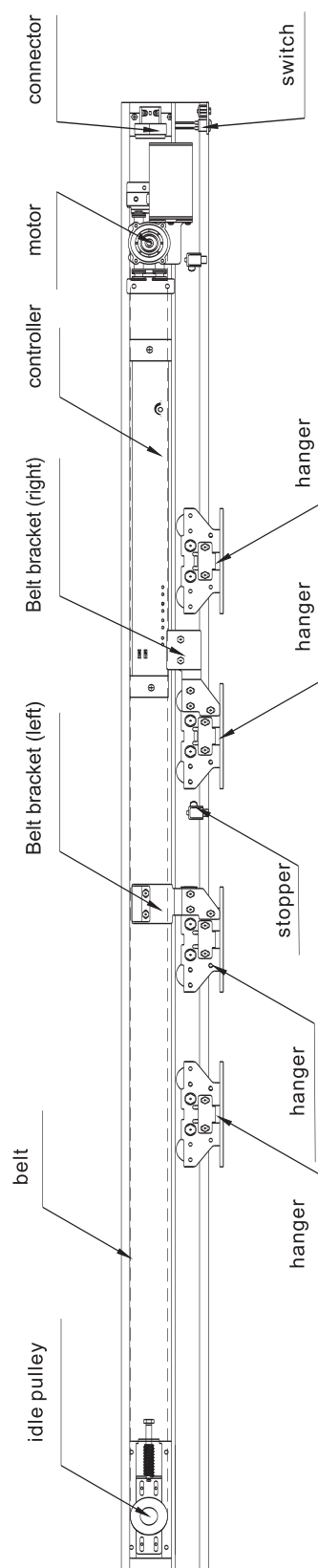
### Other precautions

- Don't use a door leaf that exceeds the specified weight, otherwise it will cause failure.
- If you chose the backup battery,
  - Please use the battery after charging for 24 hours.
  - The service life of battery lasts for 2-3 years at an ambient temperature of 0-40°C. The temperature beyond of above range will shorten the service life of battery.
  - If after charging 24 hours the battery still doesn't work when supply power is off, it means the service life of battery has expired. Replace it immediately.
  - Check the battery each half a year.
- If you chose the electromagnetic lock
  - Don't use it in an environment beyond an ambient temperature of 0-40°C, otherwise it will cause malfunction.
- The graphic drawings and specifications in this manual are for reference only. You should rely upon real objects. Products are subject to change without notice.

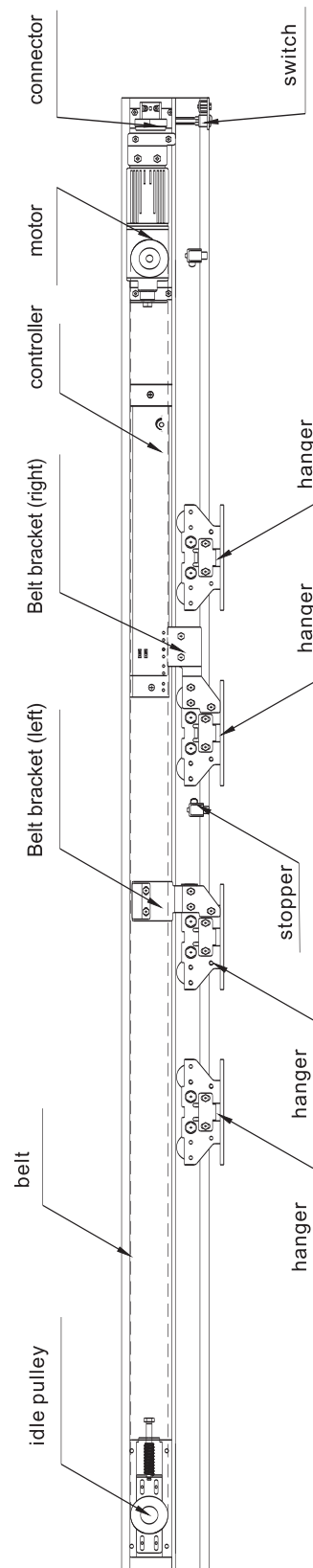
## 2. Positions of all components in the guide rail

### ● Name of components

CMD-150A



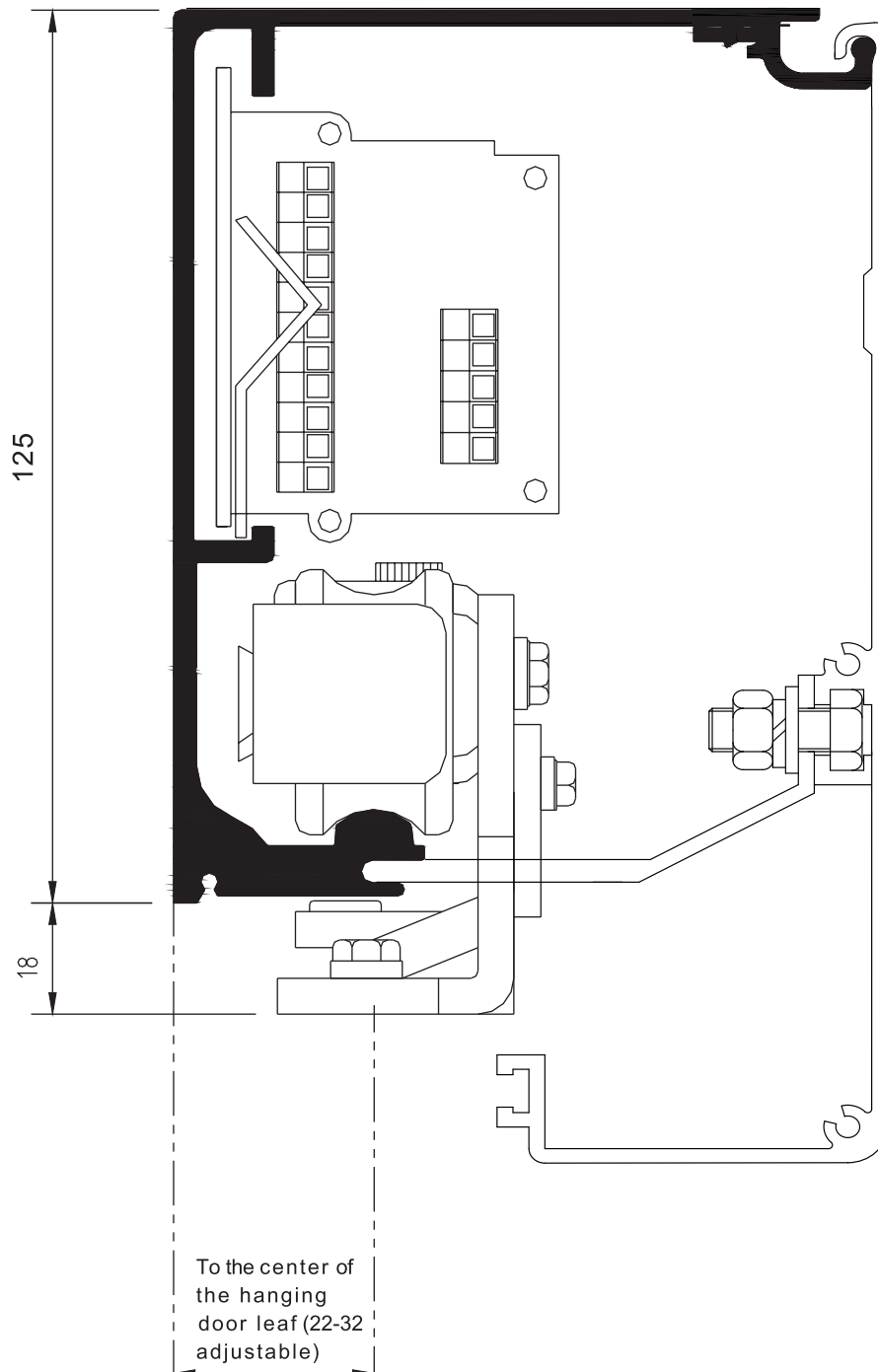
CMD-150BT



### 3. Side view of guide rail and hanger

#### ● Side view

Note: This view is not in a scale of 1:1.



## 4.1. Product features

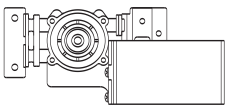
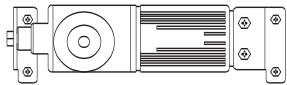
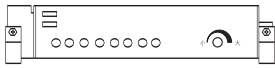
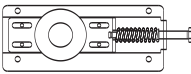

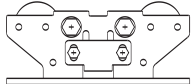

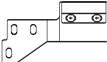


### Features of CMD-150BT

- Microprocessor control technology and advanced mechanical manufacturing
- Automatic adjustment of door leaf operation and manual adjustment when necessary.
- Opening and closing smoothly and low noise
- Brushless motor with a long service life
- Two-door interlocking and electric lock function with support multiple access control systems.
- Dual-purpose for light and heavy door leaves ,with a great load capacity
- Installation is simple

## 4.2. Technical specifications

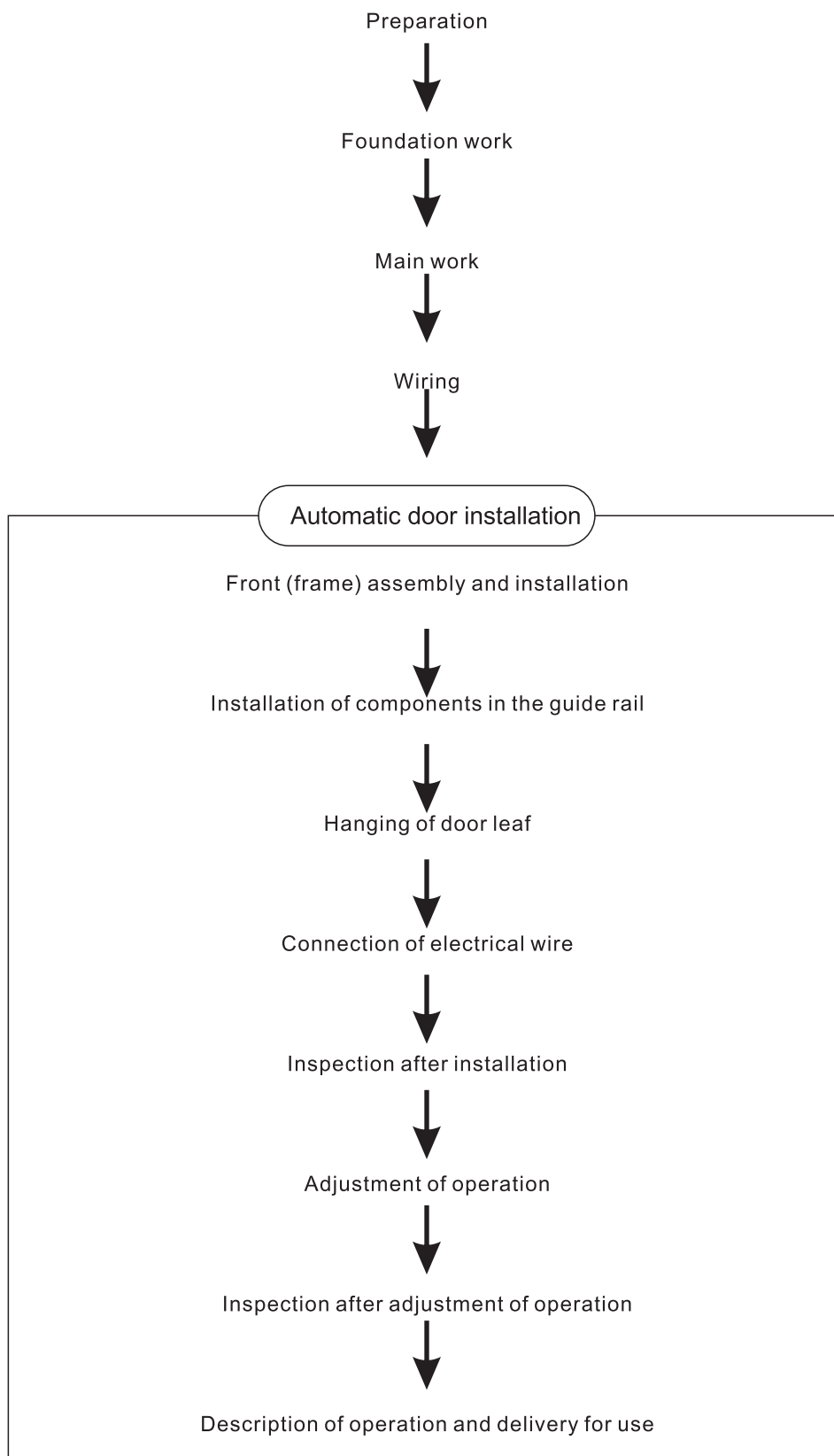
Model	CMD-150BT	
Door leaf	Single leaf	Double leaves
Weight of door leaf	Max. 150 kg	Max. 2X120kg
Width of door leaf	DW=750-1600mm	DW=650-1250mm
Width of door opening	W=1450-3100 mm	W=2500-5000 mm
Method of Installation	Surface Installation	
Supply power voltage	AC 110-220V±10%, 50/60 Hz	
Opening Speed	150-460mm/s (adjustable)	
Closing Speed	130-460mm/s (adjustable)	
Door hold-open time	0-8s (adjustable)	
Manual open/close force	< 40 N	< 50 N
Motor	DC 24 V, 60~70W(DC, brushless)	
Working Environment temperature	-20°C~50°C	

## 5. Components List

Description	Diagram	Quantity	
		Single leaf	Double leaves
CMD-150A		1	1
CMD-150BT		1	1
Controller		1	1
Idle pulley		1	1
Terminal switch		1	1
Hanger		2	4
Belt bracket (left)			1
Belt bracket (right)		1	1
Stopper		2 (left & right)	2 (left & right)
Toothed Belt		1	1
Fastenings		1 set	1 set'
Sticker		1 pair	1 pair
Installation Manual Product Certification Warranty card		1 set	1 set



## 6. Installation

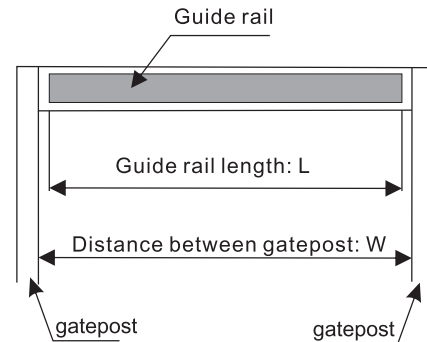


## 7. Cutting and installation of guide rail

### ● Cutting

Standard length of the guide rail is 2.1 m\*2/4.2m, 2.4m, 3m\*2/6m and other size should be customized.

Cut the guide rail as the following length  $L=W-10\text{mm}$ , “W” is the distance between gateposts.



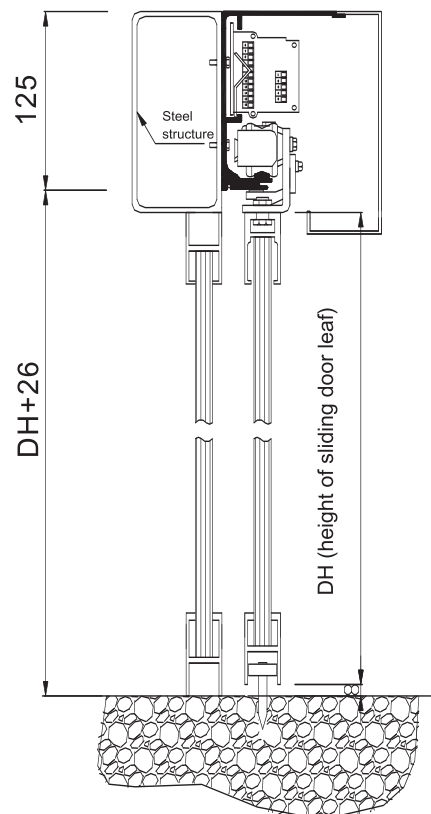
### ● Installation

Install the guide rail at a height of  $DH+26\text{mm}$  from the ground (measure from the bottom of the guide rail).

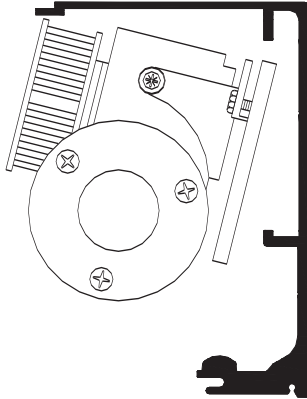
- (1) Drill holes on the steel structure (or wall surface) to install the guide rail.
- (2) Measure the levelness of both ends of the guide rail.
- (3) Each end of the rail is fixed onto the steel structure (or wall surface) with one self-tapping screw temporarily.
- (4) After recalibration of the levelness, fix the rail onto the steel structure (or wall surface) with self-tapping screws (or M8 expansion bolts).

Note:

- (1) The guide rail must be level.
- (2) The height of sliding door leaf is  $DH$ .
- (3) The clearance height above the guide rail should be more than 50mm.
- (4) The head of the screw/bolt must be fully sunk to avoid malfunction.



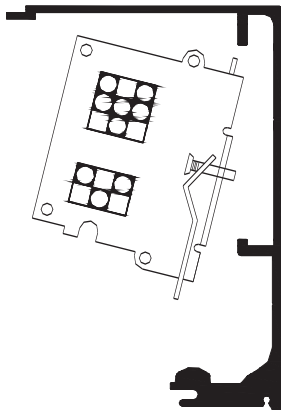
## 8. Installation of motor



1. Hold the motor cable in the front of the motor.
2. Insert the motor bracket top into the upper groove of the guide rail properly.
3. Then insert the motor bracket bottom into the below groove of the guide rail.
4. Move the motor to the right end of the guide rail.
5. Tighten the mounting bolts.
6. Make the motor cable pass through the top of the motor and come out from the left side.

Caution: Misoperation in step 2, 3, 5 may result in falling off.

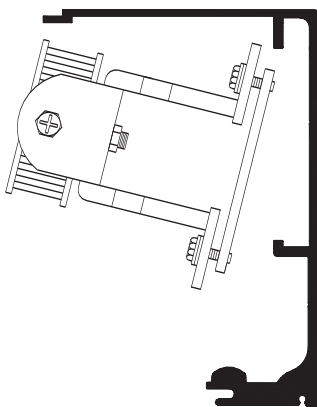
## 9. Installation of controller



1. Insert the controller top firmly into the upper groove of guide rail.
2. Insert the controller bottom into the below groove of guide rail firmly.
3. Move the controller to proper position for connecting with the motor cable and terminal switch cable.
4. Tighten the mounting screws .

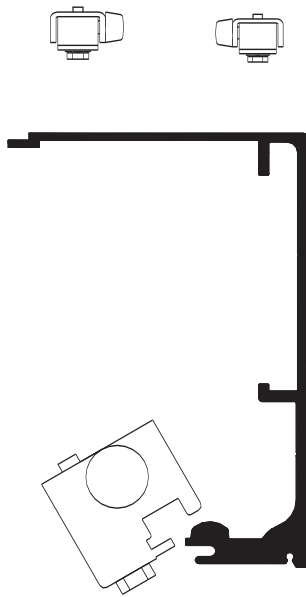
Note: Misoperation in step 1 and 2 may result in falling off.

## 10. Installation of idle pulley



1. Insert the idle pulley top firmly into the upper groove of the guide rail.
2. Then firmly insert the idle pulley bottom into the below groove of the guide rail.
3. Fix the idle pulley temporarily with a fixing screw make sure it can be moved easily.

## 11. Installation of stopper



1. Loosen the fixing bolt of the stopper with hexagon wrench.
2. Insert the stopper onto the bottom flat rail of the guide rail.
3. Determine the position of the stopper by aligning with the open and closed positions of the sliding door leaf.

Note: When setting the position of the stopper, the hanger should be stopped when it touch the rubber of the stopper.

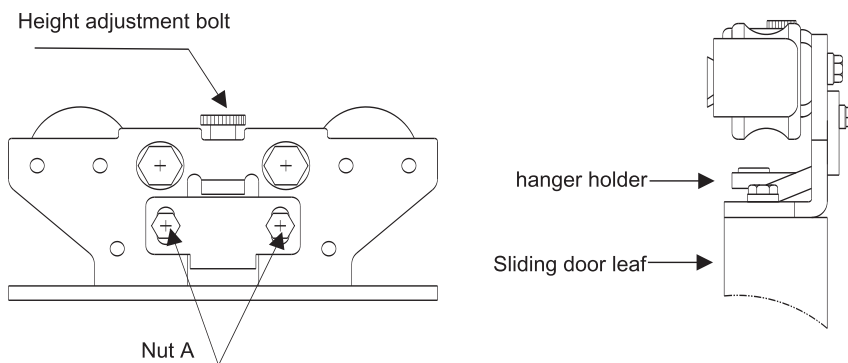
4. Tighten the fixing bolt firmly with the wrench.

Note: Carelessness may result in damage to the door.

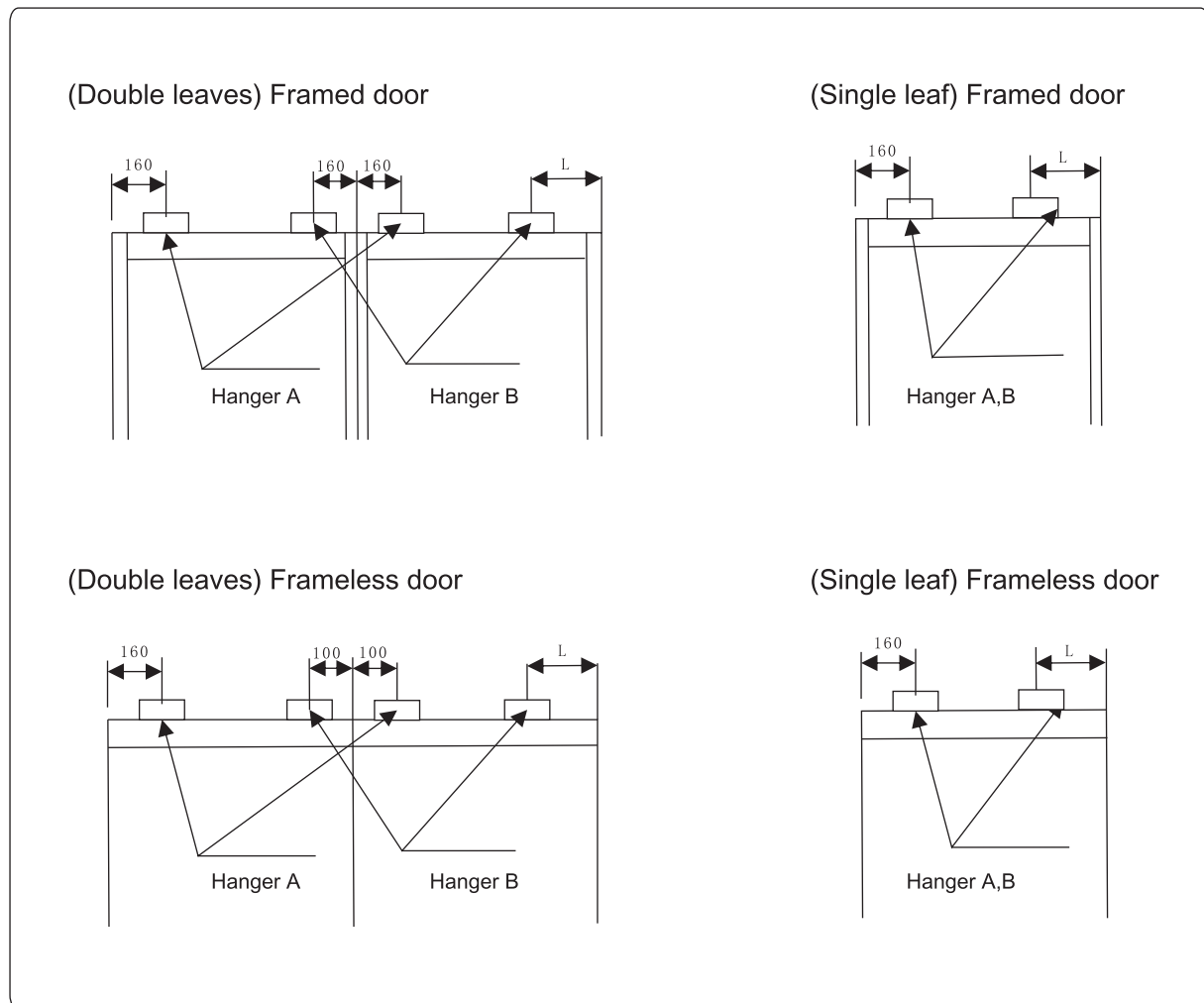
## 12. Installation of hanger

1. Loosen nut A of the hanger and remove the holder from the hanger.
2. Fix two hangers onto the top of each sliding door leaf at the correct position with bolts(M8\*20).
3. Hang the sliding door leaf on the bottom flat rail of the guide rail.
4. Resume the holder into the hanger, but don't tighten nut A.

Note: When fix above two hangers, make sure that both are flat with each other, and the sliding door leaf top and the white wheels of hanger are in parallel.



● Fixing position of hanger (see below drawing)



Note CMD-150A If sliding door leaf size is approximate to the fixed door leaf,  $L=300$ .

If there is no enough space for the requirement of  $L=300$ , please choose 125B.

If the sliding door leaf is narrower than the fixed leaf,  $L=190$  or more.

CMD-150BT\*  $L=190$

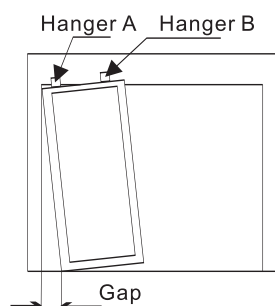
Note: 1. During installation the center of the hanger wheel should be in full parallel with the door leaf.

If not, the service life of the wheel will be shortened.

2. Don't collide the guide rail and components in it, otherwise, the components may be damaged, service life of the wheel will be shortened and there will be noise during door operation.

## 13. Installation and adjustment of door leaf

### Single leaf

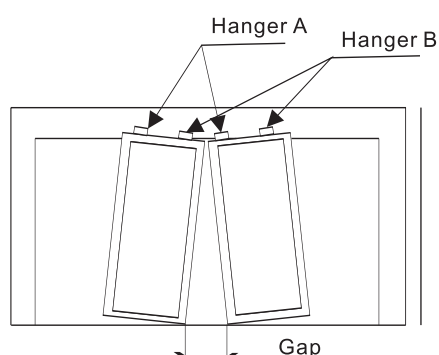


As is shown in the left diagram, if the door leaf can't be installed horizontally, it can be adjusted while hanging.

1. Loosen the fixing nut for fixing the hanger.

2. Adjust the height adjustment bolt.

### Double leaves



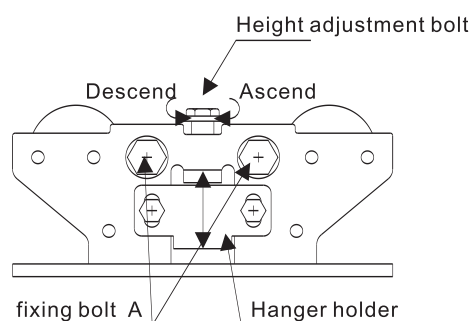
Turn clockwise the door will ascend.

Turn counterclockwise the door will descend.

3. Tighten fixing nut.

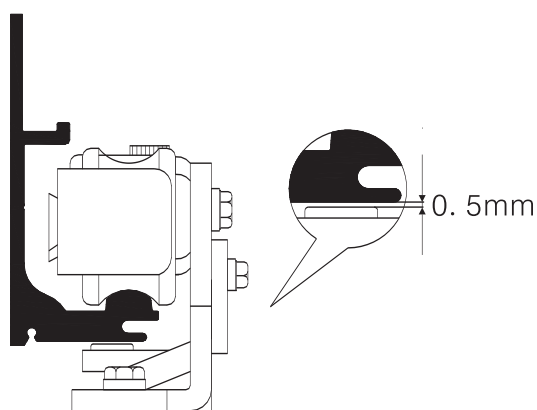
4. After confirming the gap between the guide rail bottom and the hanger holder is about 0.5mm (see the diagram), fix the hanger holder by tightening Nut A (see Page 10).

5. Check the friction during the operation.

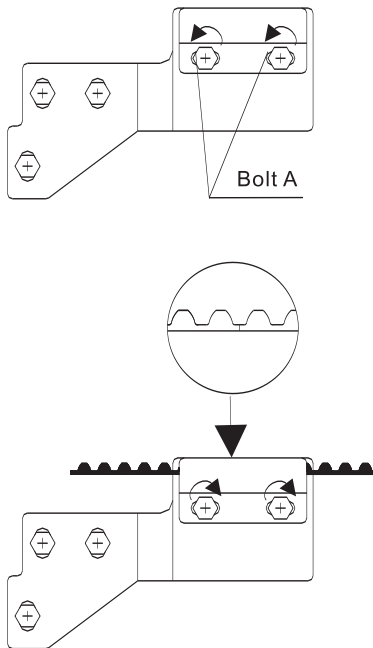


If it's hard to move the door leaf by hand, please check below items:

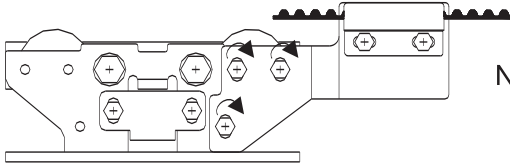
1. The hanger is fixed vertically on the leaf.
2. Any friction between the floor guide and the leaf bottom.
3. Any friction between the door leaf frame and gatepost.
4. Any friction between the hanger holder and the guide rail.



## 14.1. Belt Installation of single leaf



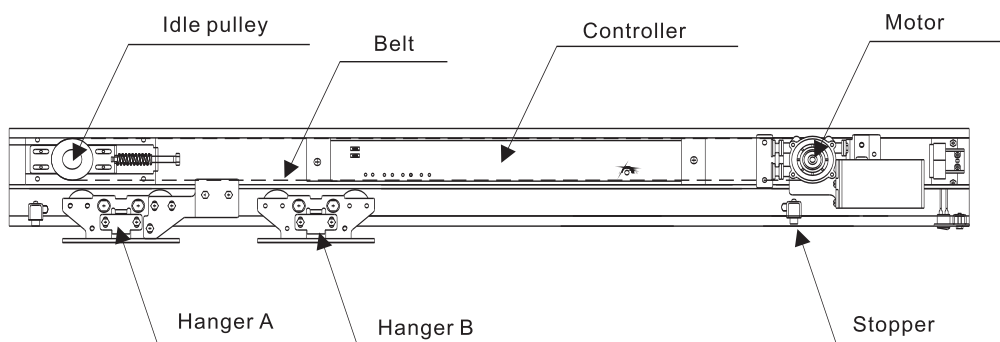
1. Remove the bolt A and take off the belt socket from the belt bracket.
2. Cut the belt with reference to the belt cutting table.  
Note: Cut the belt at the middle between two belt teeth.
3. Insert both ends of the cut belt into the belt socket and make this two ends meet in the middle of the socket.  
Note: The belt can not be twisted in above installation.
4. Fix the belt socket back to the belt bracket firmly.  
Note: the direction of the belt bracket.
5. Hang above belt onto the wheel of the motor and the wheel of idle pulley.
6. Fix the belt bracket onto hanger A firmly with bolt (M6\*12) and spring washer after adjusting the door leaf position.



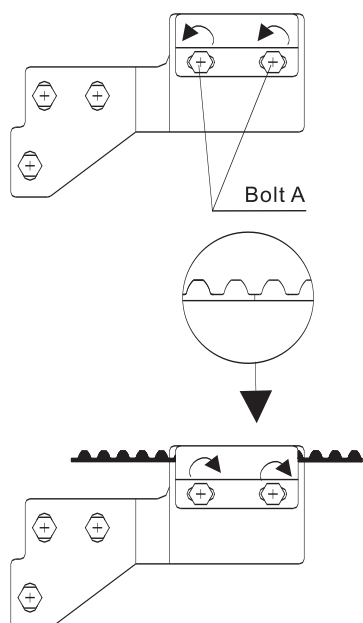
Note: Do tighten the bolts firmly.

## 14.2. Position of belt bracket (single leaf)

Take Model A as an example:



## 15.1. Belt Installation of double leaves



1. Remove the bolt A and take off the belt socket A from the belt bracket A.

2. Cut the belt with reference to the belt cutting table.

Note: Cut the belt at the middle between two belt teeth.

3. Insert both ends of the cut belt into the belt socket A and make this two ends meet in the middle of the socket.

Note: The belt can not be twisted in above installation.

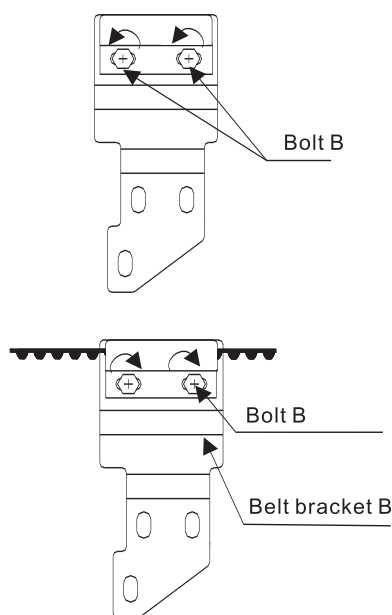
4. Fix the belt socket A back to the belt bracket A firmly.

Note: the direction of the belt bracket A.

5. Hang above belt onto the wheel of the motor and the wheel of idle pulley.

6. Fix the belt bracket A onto hanger A with bolt (M6\*12) and spring washer.

Note: Do tighten the bolts firmly.



7. Adjust the tension of belt refer to instruction(on Page 16).

8. Keep the two leaves closed.

9. Remove bolt B and take off the belt socket B from the belt bracket B.

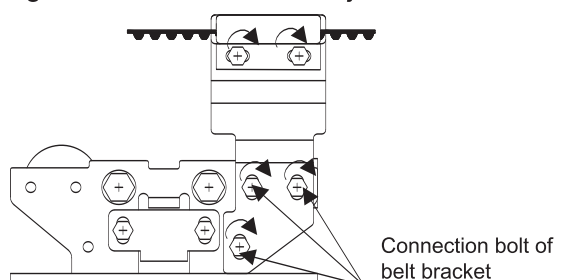
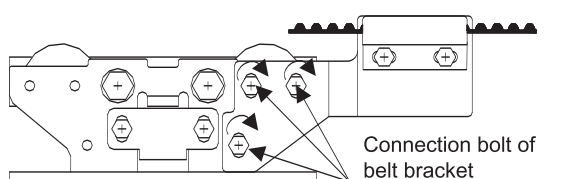
10. Insert the belt into the belt socket B at the correct position.

11. Fix the belt socket B back to the belt bracket B firmly.

Note: the direction of the belt bracket B.

12. Link the belt bracket B onto hanger B with bolt (M6\*12) and spring washer, adjust the door leaf position, then tighten Bolt B.

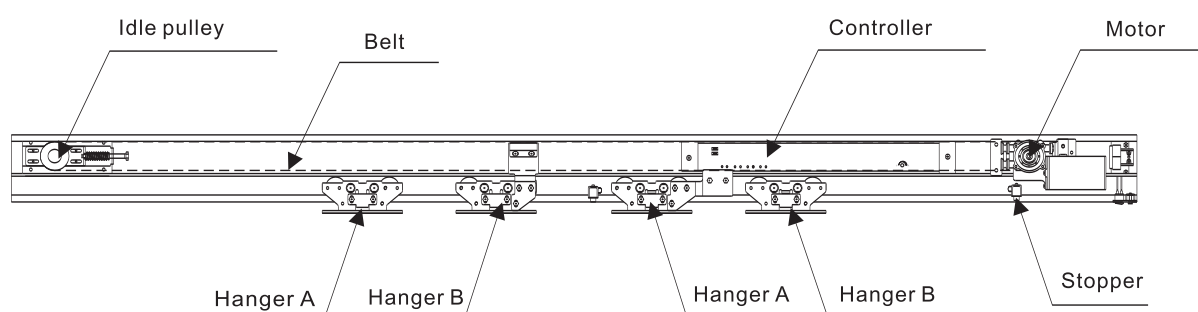
Notice: Do tighten the bolt B after adjustment.





## 15.2. Position of belt bracket (double leaves)

Take Model A as an example:



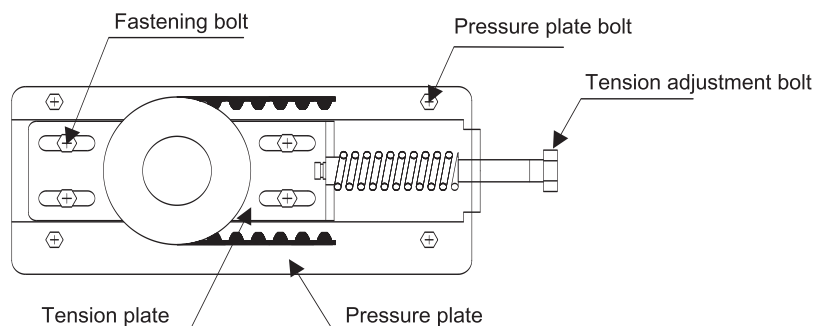
## 16. Belt Length table

Minimum length (for reference only)

Door width	Belt length
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

## 17. Adjustment of belt tension

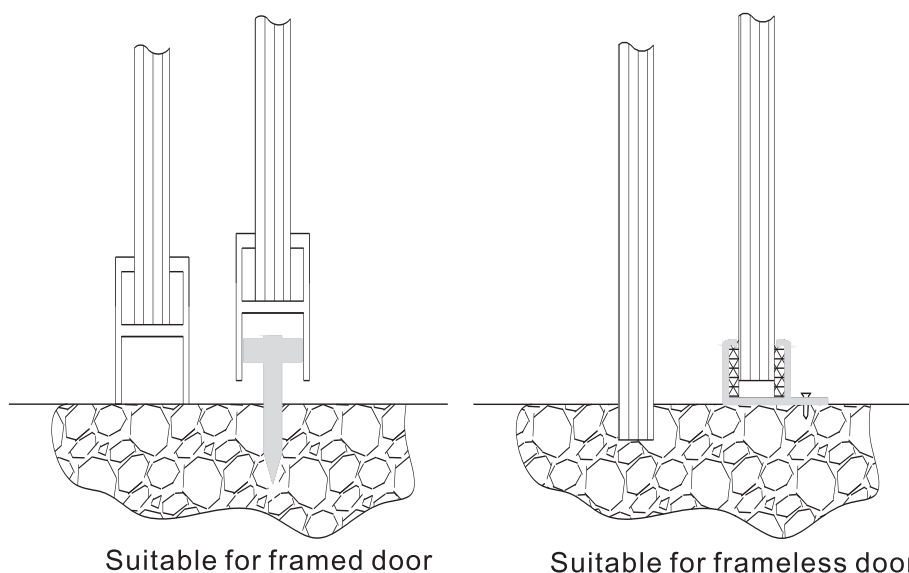
1. Move the idle pulley to the left end of the guide rail to keep the belt tightened and tighten the four pressure plate bolts.
2. Loosen the four fastening bolts.
3. Turn the tension adjustment bolt clockwise so that the tension plate will be moved to the left and the belt tension increased gradually. Adjust the belt tension until it's suitable, then tighten the four fastening bolts.



After use for some time the belt may stretch slightly and then the belt tension should be readjusted by repeating steps 1-3.

## 18. Installation of floor guide

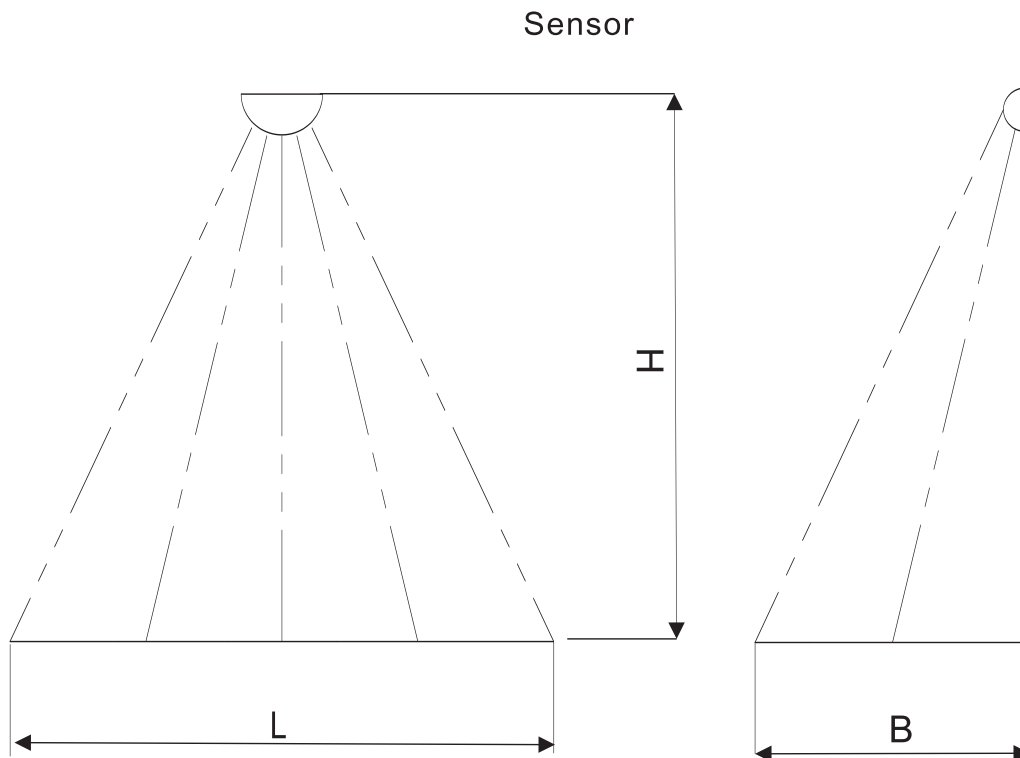
There are two kinds of floor guide as below:



- The floor guide should be installed in the center of the sliding door leaf with its axle center coinciding with the central line of the door leaf depth.
- The central distance between the two floor guides must be smaller than the total depth of this two sliding door leaves (2DW).

## 19. Installation of sensor

The sensor should be installed on the top center above the sliding door leaf properly at a correct height according to the chosen sensor. Normally the height(H) is 2.2 ~ 3.0 meters. Generally, two sensors are installed, one inside and the other outside of the room. For wiring please refer to the wiring diagram and more rules in details for installation refer to the installation instructions from the sensor manufacturer.

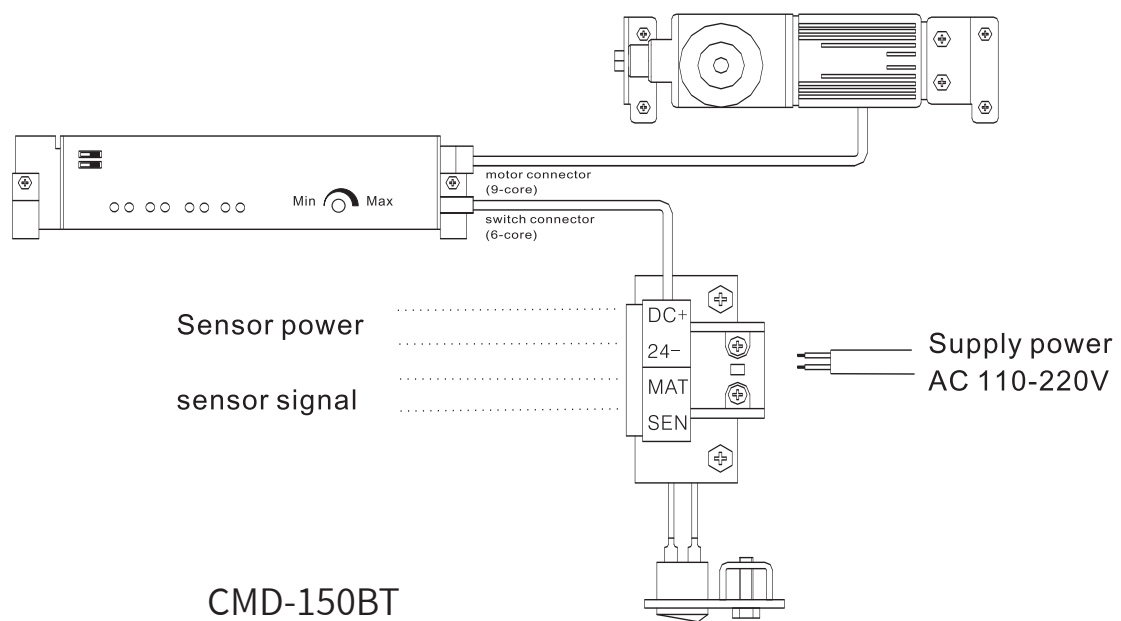
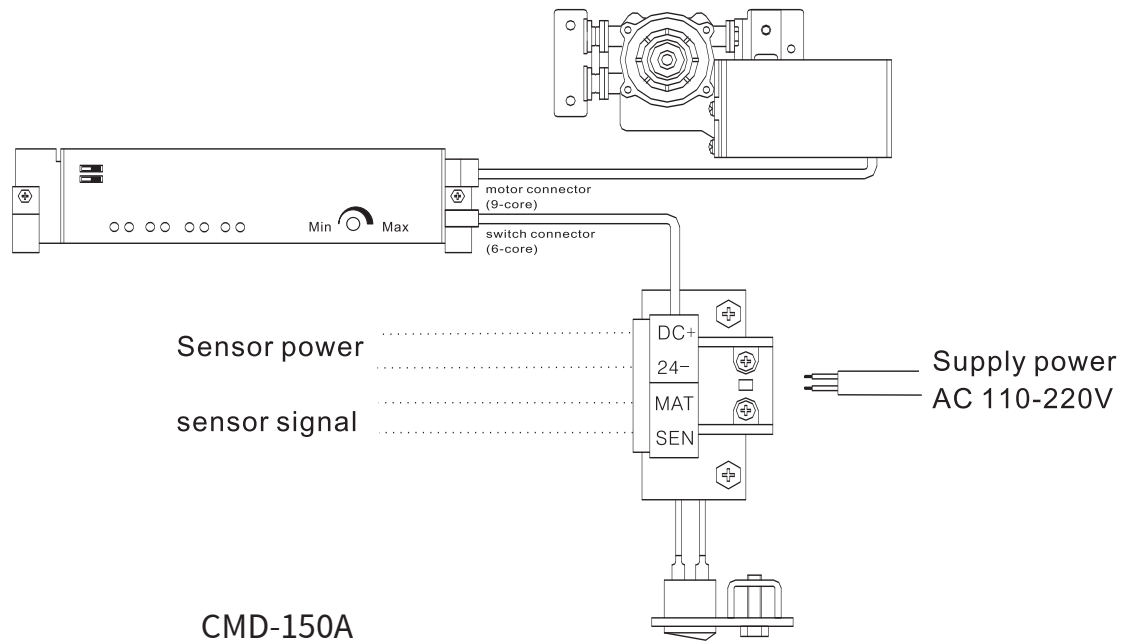


**Caution:** Because wiring voltage of the sensor is different among different manufacturers and models, please don't replace with each other at will!

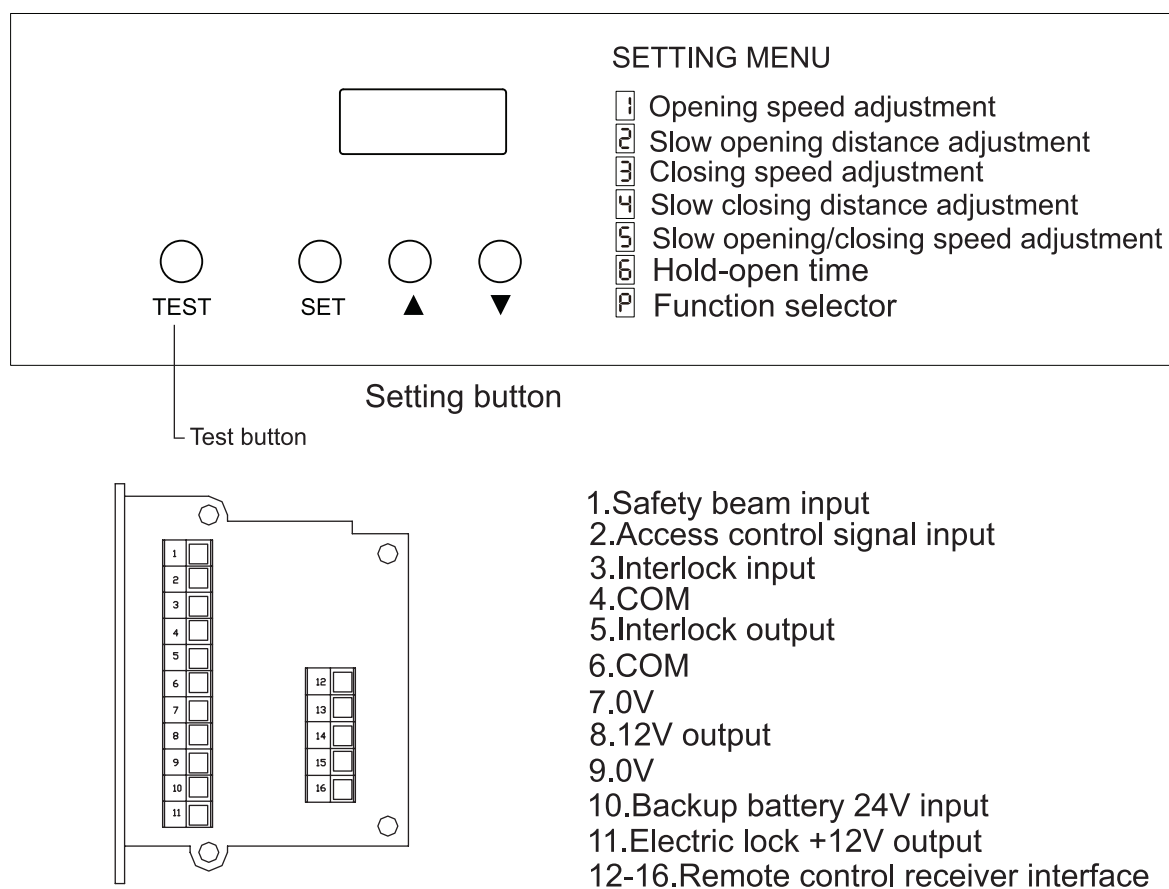
## 20. Electrical connection

Connection of controller, motor and terminal switch

Caution: All the connections should be done with the power disconnected.

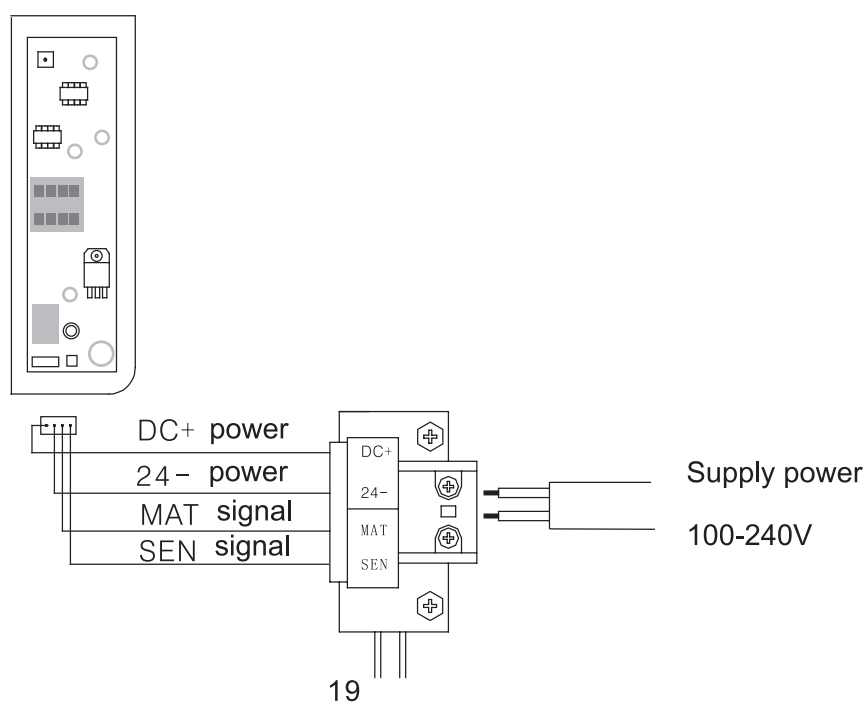


## 21. Description of controller and terminal switch



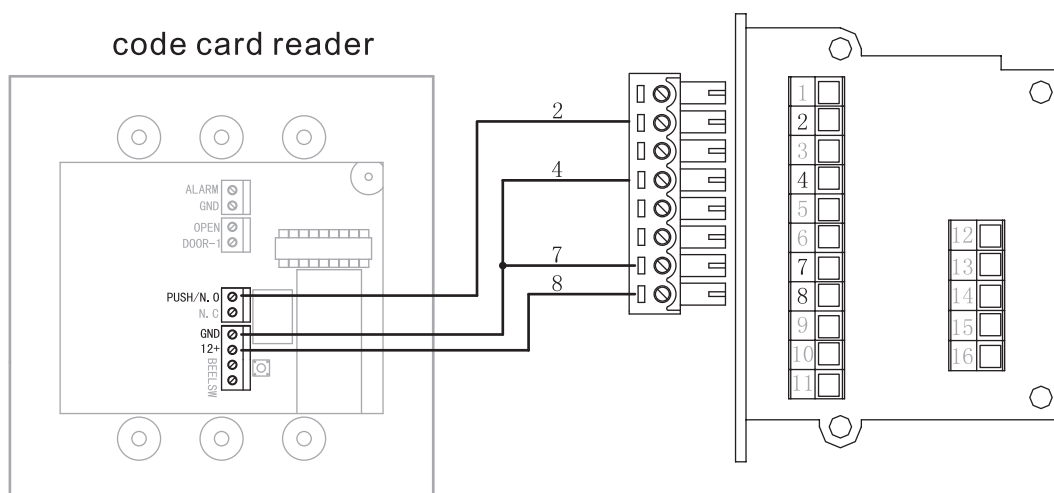
## 22. Connection of sensor(optional)

### SENSOR



## 23. Connection of code card reader (optional)

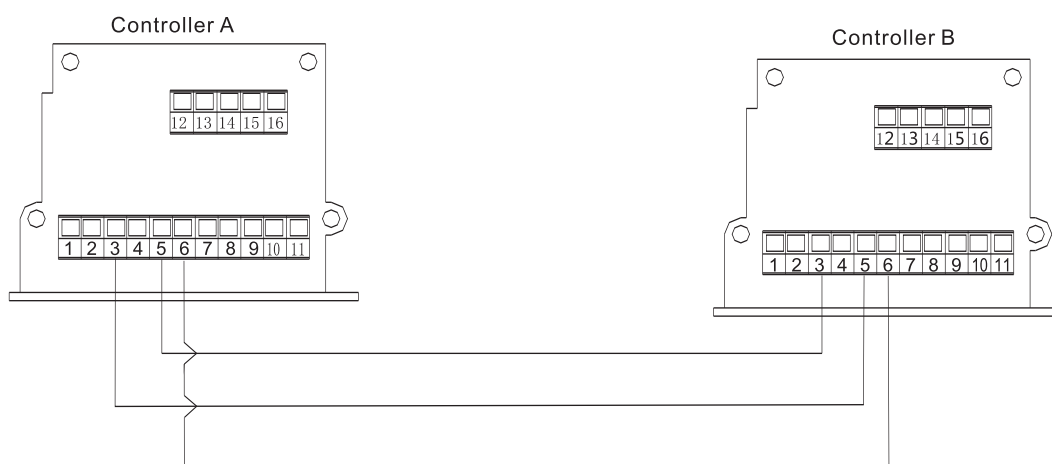
1. All the wiring connection should be done with the power disconnected.
2. Positive or negative polarity should be identified when the code card reader is connected.
3. The code card reader should be with passive output . If the code card reader is with active output, it should be changed to passive output.



Caution: If the access control(code card reader) power consumption is more than 2.4 W, it is necessary to supply 12V DC externally. Don't feed 12 V power from the automatic door controller because overload will burn the controller.

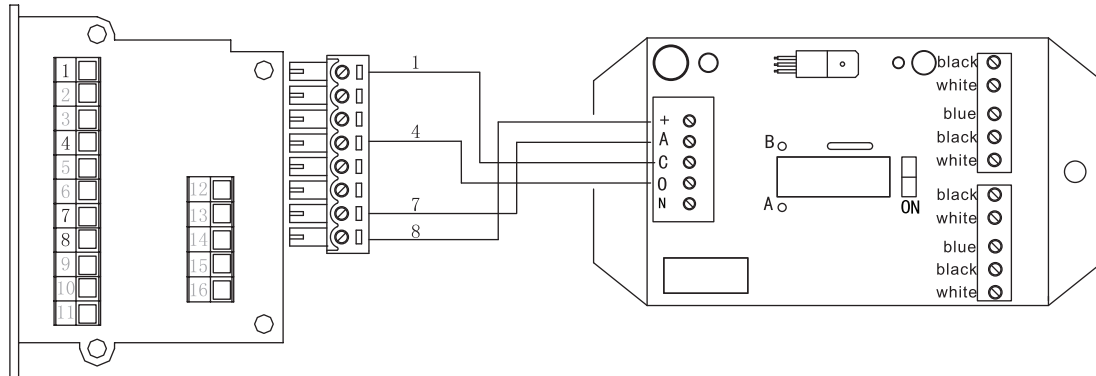
## 24. Connection of two-door interlocking

connection diagram



## 25. Connection of safety beam (optional)

Caution: All the connections should be done with the power disconnected.

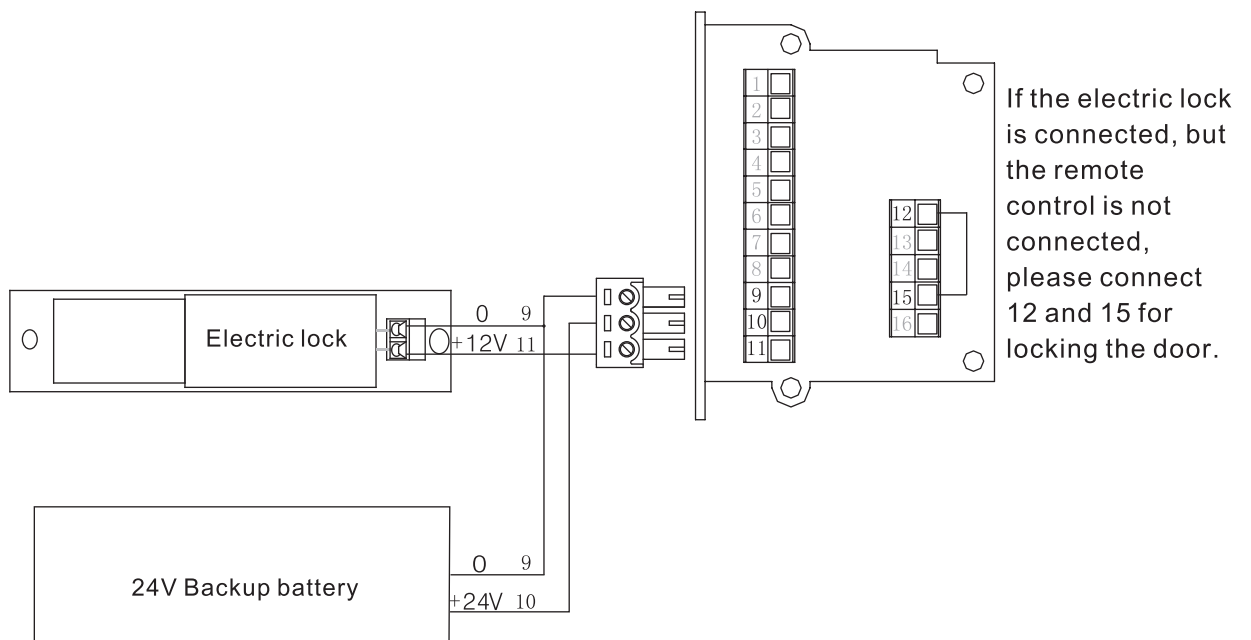


## 26. Connection of backup battery and electric lock (optional)

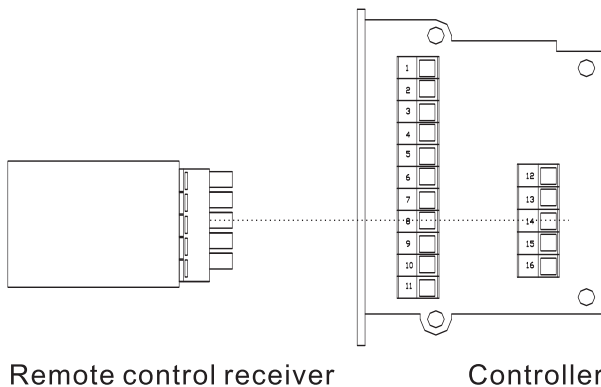
Caution: All the connections should be done with the power disconnected.

Working current of electric lock is less than 200mA and starting current less than 800mA.

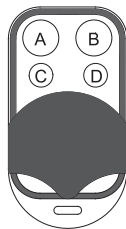
Note the positive and negative polarity in connection of backup battery and specific operation is shown as following diagram:



## 27. Connection of remote control (optional)



1. Insert the remote control into the interfaces 12~16 of main controller shown in the diagram.
  2. Note the direction of the plug.
- Note: Poor connection may result in malfunction.



Remote control transmitter

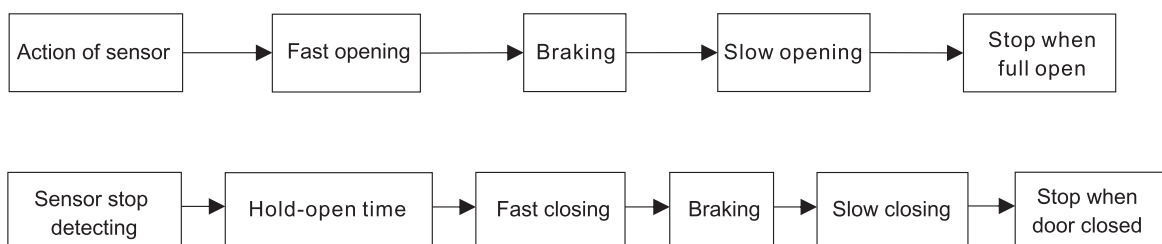
Caution: All the connections should be done with power disconnected.

A.Lock B. Keep open C. Half-open D. Automatic

Poor connection may cause malfunction.

## 28. Description of operation

1. After installation, push the door fully open by hand, power on, the system begins its initial program. The door will close at a low speed until the hanger is stopped by the stopper in the guide rail, this closing operation confirms the sliding route. The built-in micro-processor in the main controller will memorize this route.
2. The door works as the following sequence when normal operation:

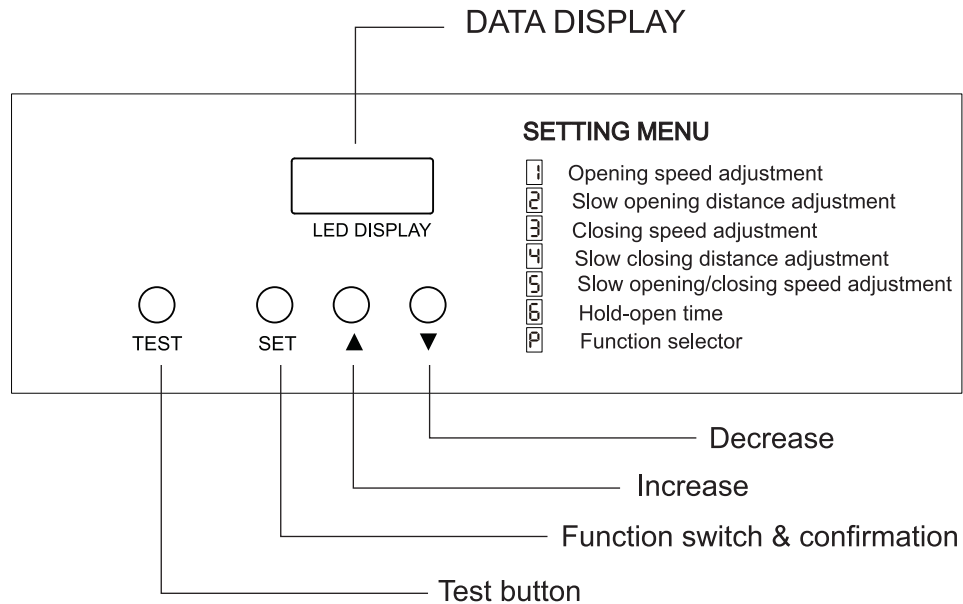


Note: When an electric lock is chosen, we advise the user to buy above multi-function remote control (optional) together.



## 29. Adjustment of opening and closing parameters

### ● Setting guide of the controller



### Adjustment introduction

1.Data display: This screen displays the data which user is adjusting

2.Function display:

- 1 Opening speed
- 2 Slow opening distance
- 3 Closing speed
- 4 Slow closing distance
- 5 Slow opening/closing speed
- 6 Hold-open time
- P Function selector

3.Increase operation: increase the data for each function

4.Decrease operation: reduce the data for each function

5.Function switch /confirmation:

Function switch: confirm the adjusted parameters and switch to the next one

Confirmation: After adjusting the parameters for each function, save the setting.

6.Test: After confirmation is done , test the adjusted operation status of the door.

## 29. Adjustment of opening and closing parameters

Parameters adjustment, function setting:

1. Power on , display screen shows the status of the door operation is “---”

a. Press “SET” button one time

Screen shows “1-X” (X shows initial data) , it is adjustment of opening speed , press button “▲” or “▼” to increase or reduce the speed, adjustment range is 0~9.

b. Press “SET” button twice

Screen shows “2-X” (X shows initial data) , it is the adjustment of slow opening distance , press button “▲” or “▼” to increase or reduce the distance, adjustment range is 0~9 .

c. Press “SET” button three times

Screen shows “3-X” (X shows initial data) , it is the adjustment of closing speed, press button “▲” or “▼” to increase or reduce the speed , adjustment range is 0~9 .

d. Press “SET” button four times

Screen shows “4-X” (X shows initial data) , it is the adjustment of slow closing distance, press button “▲” or “▼” to increase or reduce the distance , adjustment range is 0~9 .

e. Press “SET” button five times

Screen shows “5-X” (X shows initial data) , it is the adjustment of slow opening / closing speed, press button “▲” or “▼” to increase or reduce the speed, adjustment range is 0~9 .

f. Press “SET” button six times

Screen shows “6-X” (X shows initial data) , it is the adjustment of hold-on time , press button “▲” or “▼” to increase or reduce the time, adjustment range is 0~7 .

g. Press “SET” button seven times

Screen shows “p-c/ p-y” , press button “▲” or “▼” for choice ( p-c locked every time / p-y remote locking )

h. Press “SET” button eight times

Screen shows “p-r/ p-L” , press button “▲” or “▼” for choice ( p-r right / p-L left direction )

i. Press “SET” button nine times

Screen shows “p-1/ p-2” , press button “▲” or “▼” for choice (p-1 automatically closing / p-2 signal closing)

j. Press “SET” button ten times

Exit the setting menu , screen shows the operation status “---”

Display of door operation status

During operation , flashing display : “---”

Closing static status display : “-c-”

Opening static status display : “-0-”

During setting parameters , once door's operation direction is changed or induction way (once / twice) is changed , controller will automatically reset , automatically closing for relearning and enter into new working status .

## ● Adjustment steps

(Open and close the door manually for several times to confirm the door can be operated freely)

(1) Set parameters ( left/right direction), power on, door will close slowly, and stop when touch the stopper.

P-L : door will open to left direction

P-r : door will open to right direction



Seeing from inside, set left or right depends on the opening direction. Double opening door, set right open.

(2) Factory setting of closing: normally setting P-1, it also can be set to P-2, P-2 door will not close after opening , until another signal is given .

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

It is advised to adjust buffer ( slow opening / closing ) speed ,opening speed and closing speed is 5, slow opening distance and slow closing distance is 7, otherwise the collision may occur.

(4) Turn on the test button to adjust the buffer speed during the opening or closing process:

Note: when electric lock is used, test button only can be pressed after unlocking;

Adjust speed slowly, ensure the door can open and close easily;

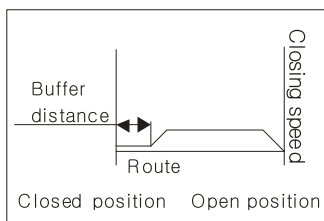
The first time for adjusting , the slow opening/closing distance should be 8-10cm;

The power off time should be longer than 10s every time.

(5) Closing speed and slow closing distance can be adjusted as required during closing time.

Note: when electric lock is used, test button only can be pressed after unlocking;

No pedestrain should be confirmed before adjustment, otherwise injury maybe caused



1. Adjust the slow closing distance at about 10cm

Note: Adjust slowly ,or injury maybe caused

2. Adjust the closing speed

3. Adjust slow closing distance again if necessary

Adjust slowly ,or injury maybe caused

Do adjustment slowly because turning the button too

fast may cause injury to people or damage to the door.

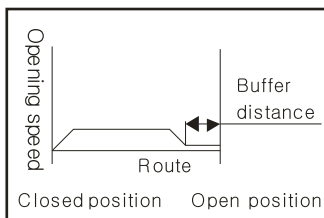
(6) Adjust opening speed and slow opening distance.

Adjust opening speed and slow opening distance as required .

Note: when electric lock is used, test button only can be pressed after unlocking lock

No pedestrain should be confirmed before adjustment, otherwise injury maybe caused

Slow opening distance should be better above 5cm, otherwise injury on people and damage on door maybe caused



1. Adjust the slow opening distance at about 10cm

Note: Adjust slowly ,or injury maybe caused

2. Adjust the opening speed

3. Adjust slow closing distance again if necessary

Note: Do not adjust during door's operating , please turn

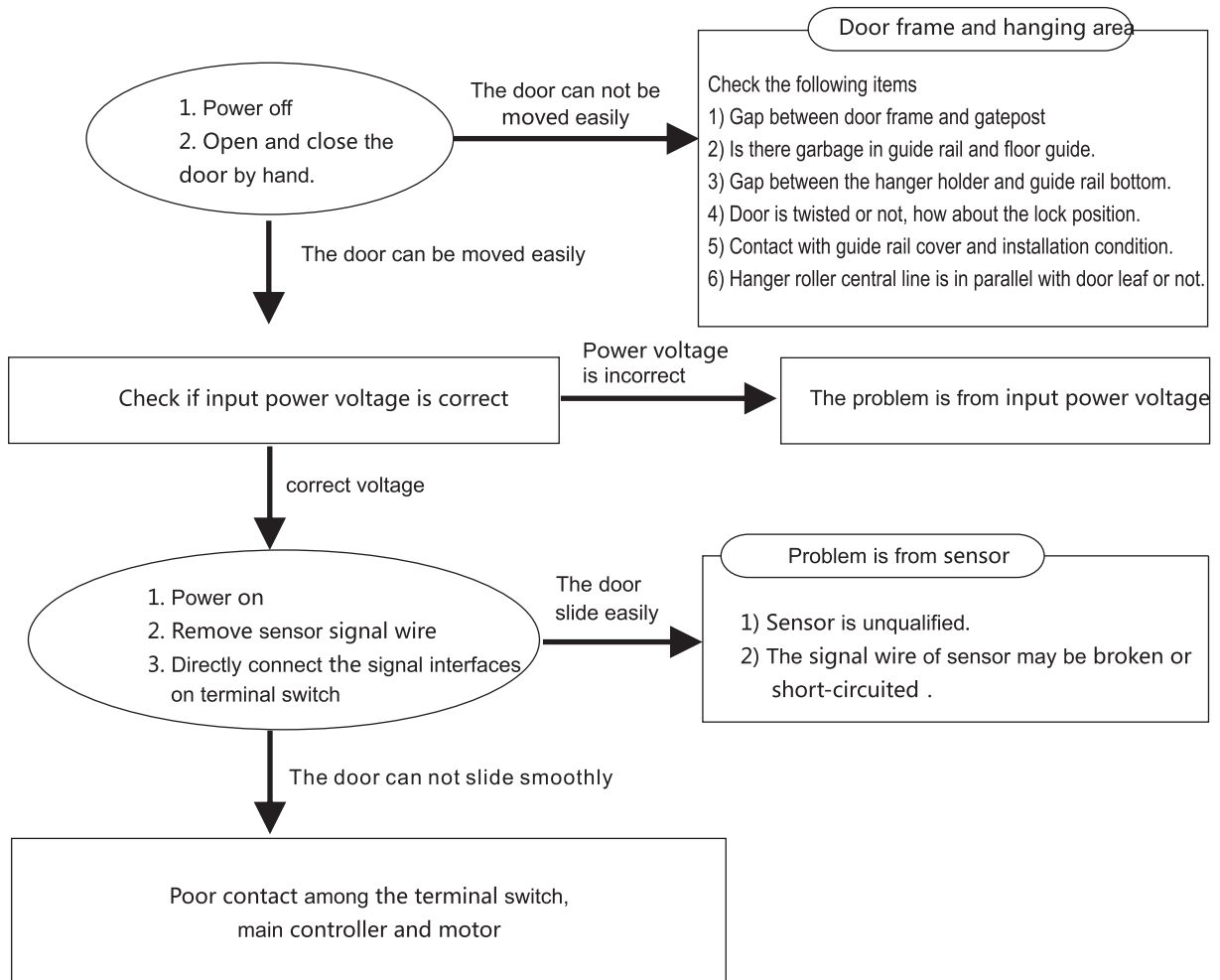
the botton slowly. If not, injury on people ,damage on door may be caused

(7) Adjust hold-open time

Press test button ,in the meanwhile ,adjust the hold open time of door .

Note: when electric lock is used, test button only can be pressed after unlocking lock

## 30. Troubleshooting



## Troubleshooting (continued)

Symptoms	Causes	Check	Solutions
Open and close is not smooth)	<ul style="list-style-type: none"> <li>● Opening/Closing speed is slow</li> <li>● Buffer distance is too long, visual slow</li> <li>● Someone is in touch with door leaf when closing, resulting in an abnormal mode.</li> <li>● Too much resistance</li> </ul>	<ul style="list-style-type: none"> <li>● Check opening and closing speed</li> <li>● Length of buffer distance</li> <li>● Power off and open the door manually</li> <li>● If any garbage in the guide rail.</li> <li>● If floor guide is damaged or loose.</li> <li>● If there is any obstacle.</li> </ul>	<ul style="list-style-type: none"> <li>● Reset the opening/closing speed</li> <li>● Reset the buffer distance</li> <li>● The one who touch the door left, it will be normal.</li> <li>● Remove garbage.</li> <li>● Install the floor guide properly.</li> <li>● Clear obstacle away.</li> </ul>
Door leaf over-tight	<ul style="list-style-type: none"> <li>● slow opening/closing speed is too fast</li> <li>● slow opening/closing distance is too short</li> </ul>		<ul style="list-style-type: none"> <li>● Decrease buffer speed</li> <li>● Increase buffer distance</li> </ul>
Door doesn't work.	<ul style="list-style-type: none"> <li>● power not switched on</li> <li>● door locked</li> <li>● garbage in the guide rail</li> <li>● poor electrical connection</li> <li>● two-door interlocking</li> <li>● Auto-door is under protection because of great resistance.</li> <li>● Slow opening/closing speed is too small.</li> </ul>	<ul style="list-style-type: none"> <li>● Check the power switch</li> <li>● Check if the door is locked.</li> <li>● Turn off power to check if the door can be moved by hand easily.</li> <li>● Something is wrong with the connectors between motor, controller and terminal switch</li> </ul>	<ul style="list-style-type: none"> <li>● Turn on power.</li> <li>● Open the door lock.</li> <li>● Remove garbage.</li> <li>● Check the connector.</li> <li>● Wait till the other door is closed.</li> <li>● Check door resistance after power off.</li> <li>● Screw the button "H" clockwise slowly.</li> </ul>
Door doesn't open fully	<ul style="list-style-type: none"> <li>● under half-open mode</li> </ul>	<ul style="list-style-type: none"> <li>● Check fully/ half-open mode(remote control).</li> </ul>	<ul style="list-style-type: none"> <li>● Change to fully-open mode use remote control.</li> </ul>

## Troubleshooting (continued)

Symptoms	Causes	Check	Solutions
Door doesn't close.	<ul style="list-style-type: none"> <li>• sensor keeps working.</li> <li>• safety beam keeps working.</li> <li>• sensor signal wire is short-circuited.</li> </ul>	<ul style="list-style-type: none"> <li>• There is object cause misoperation in the detection range</li> <li>• There is no object cause misoperation in the detection range</li> <li>• Check if the safety beam eye has any contaminant.</li> <li>• Optical axis is deviated.</li> <li>• Check if the door is closed after the signal wire removed.</li> </ul>	<ul style="list-style-type: none"> <li>• Clear away the moving object</li> <li>• Replace sensor.</li> <li>• Clear away the garbage.</li> <li>• Adjust optical axis.</li> <li>• Change signal wire.</li> </ul>
Door keeps opening /closing with no stop	<ul style="list-style-type: none"> <li>• Any movable object in the detection area</li> <li>• Intense electrical wave is emitted near the door.</li> <li>• Share the detection area with other sensor</li> <li>• Fluorescent lamp in the detection area</li> <li>• Unqualified sensor</li> </ul>	<p>Check</p> <p>Check</p> <p>Check</p> <p>Check</p> <p>Unqualified sensor</p>	<ul style="list-style-type: none"> <li>• Remove moving object from the detection area.</li> <li>• Remove the machine that emits intense wave.</li> <li>• Change the anti-interference switch</li> <li>• Remove fluorescent lamp from the detection area</li> <li>• Replace sensor</li> </ul>
Door comes into great collision	<ul style="list-style-type: none"> <li>• Significant speed reduction, but with great collision.</li> <li>• belt is loose.</li> <li>• No speed reduction when opening door.</li> <li>• No speed reduction when closing door.</li> </ul>		<ul style="list-style-type: none"> <li>• Turn button (H) slowly Anti-clockwise</li> <li>• Adjust belt tension</li> <li>• Turn button (E) slowly clockwise</li> <li>• Turn button (G) slowly clockwise</li> </ul>

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