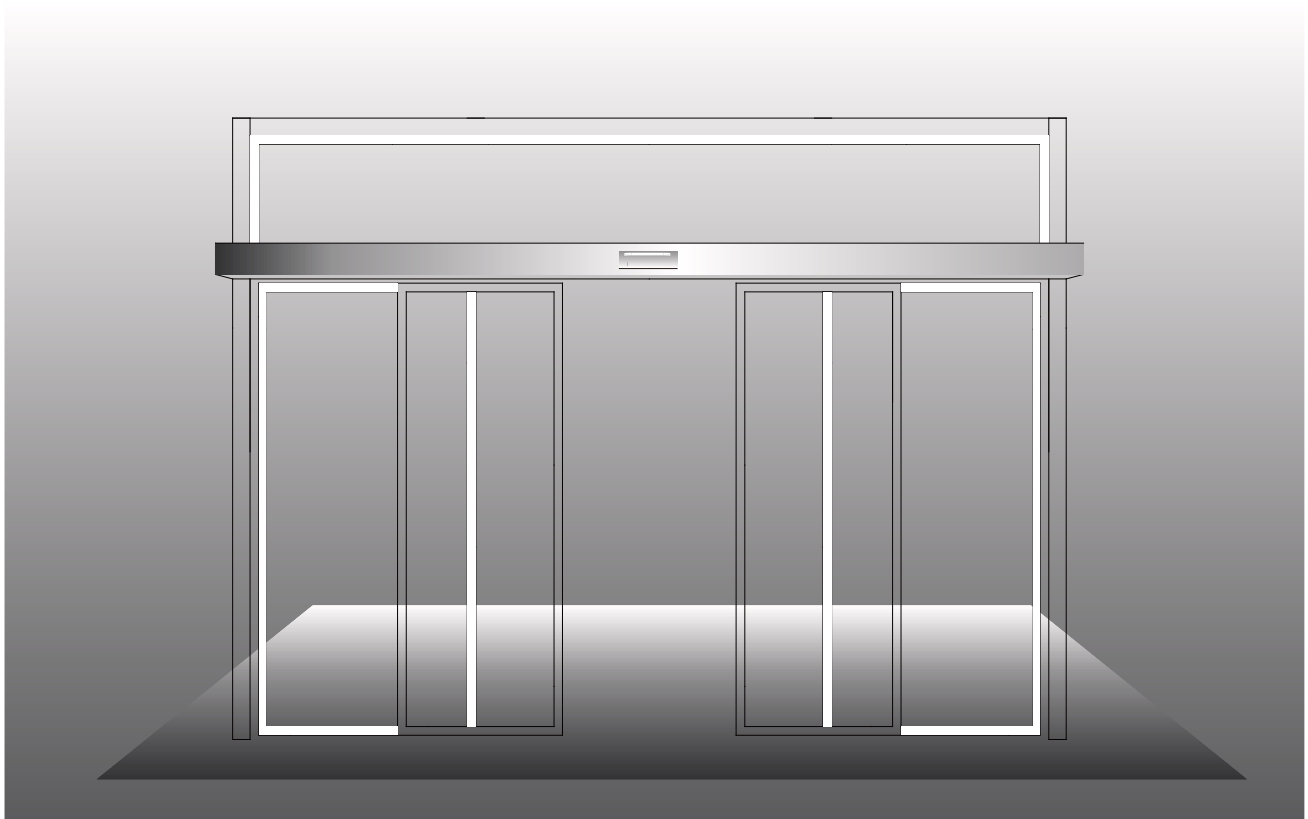


AUTO DOOR

Installation Manual

DSL- 200



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Chapter 1 Summary

1.1 Manual instruction

- Before product installation must read this installation manual and abide by relevant safety instructions.
- It provides installer with detailed description of product installation, adjustment and maintenance.
- Installation instructions of standard configuration and optional accessories.
- The unit of all unmarked dimension is “mm”.
- The manufacturer reserves the right to modify the product without notice in advance.

1.2 Safety attentions

- Declaration

To abide by the safty instruction can ensure to avoid occuring electric shock, fire, injury ect. serious accidents.

To abide by the safety instructions can ensure the product working long-time and safely,and assure the driving parts are working in a good condition.

The manufacturer won't undertake any responsibilities for issues or damage that caused by improper operation or using the product in an unsafe environment.

- Warning

Please use correct voltage and frequency power supply, if not it may cause an electric shock and fire.

Please do not use a loose or bad power connector, otherwise it may cause an electric shock and fire.

Use the correct grounding, if not there may be an electric shock and product damage.

Please don't remould the standard parts,otherwise there may be an electric shock and product damage.

If use sensors, the detection range must be not too small or left dead area for avoiding that pedestrian is knocked or pinched by the door and cause injury.

Be sure to use the infra-red safety sensor, otherwise pedestrian may be knocked or pinched by the door and cause injury.

Please stick the “auto door” mark on door leaves, otherwise the pedestrian may knock on the door carelessly and cause injury.

The following marks appear in the manual are dangerous and important symbols!



Warning:

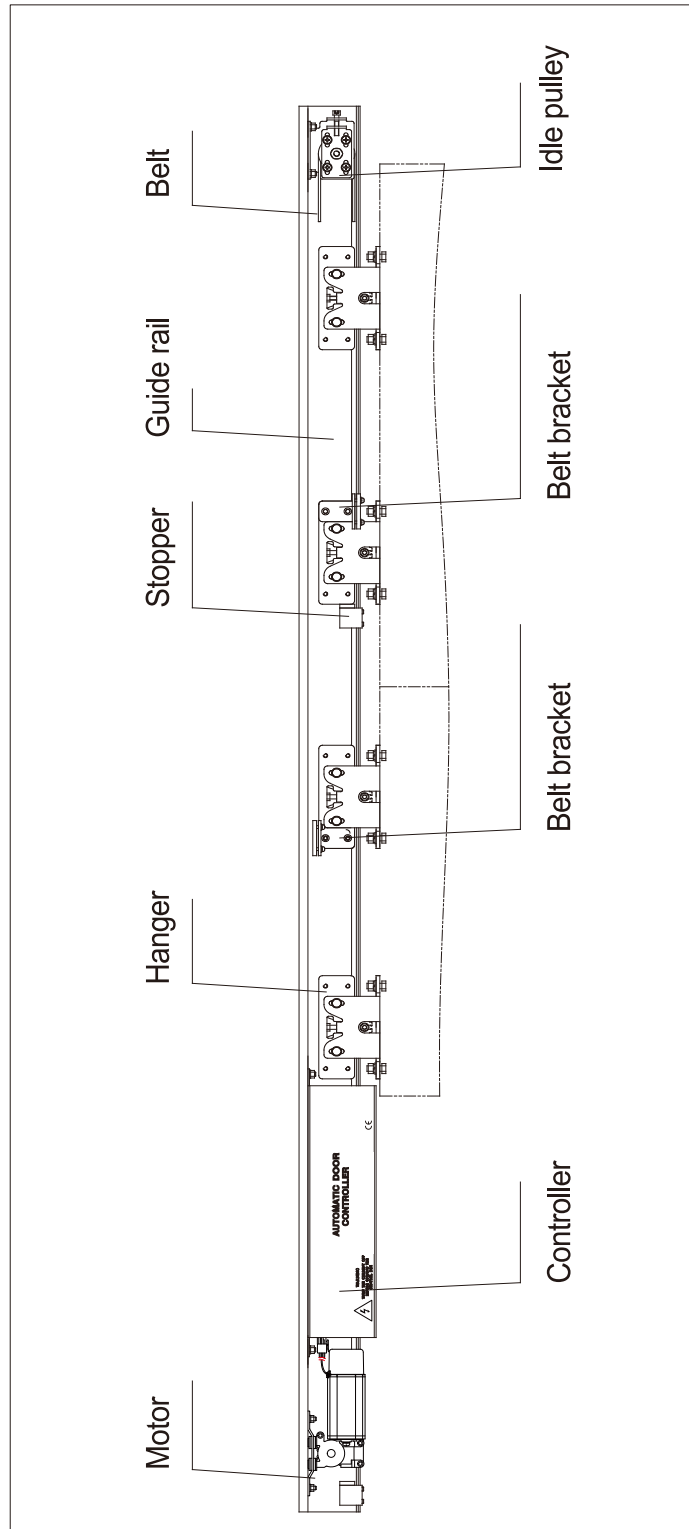
Life-threatening and life safety



Caution:

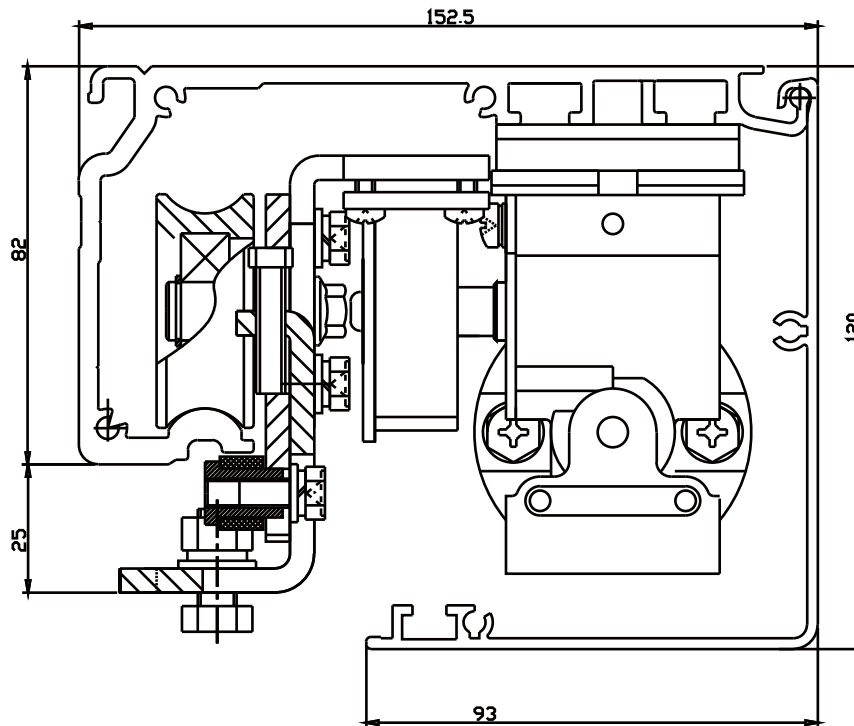
May cause parts damage or function failure

1.3 Product description



Component positions in the guide rail

Side view of the guide rail



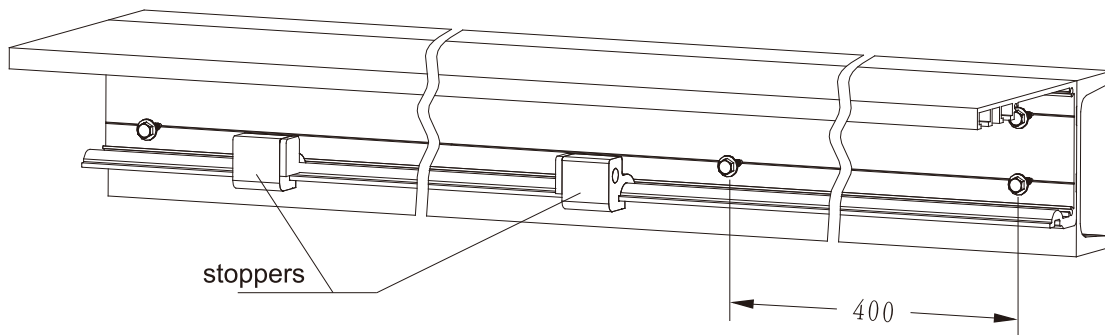
1.4 Technical data

- Electrical data :
 Supply voltage : 200V~240V 50~60Hz 2A
 Rated power consumption : 65W
- Clean opening width :
 Double door leaf 1000-3000
 Single door leaf 600-1800
- Door leaf sliding speed :
 Opening speed : 20-50cm/s
 Closing speed : 20-50cm/s
- Door leaf weight :
 Double door leaf Max. 2×120Kg
 Single door leaf Max. 1×150Kg
- Environment condition :
 Temperature range : - 20°C ~ + 50°C
 Humidity range : < RH85%

Chapter 2 Installatinn of guide rail and components

2. 1 Installation of guide rail and stoppers

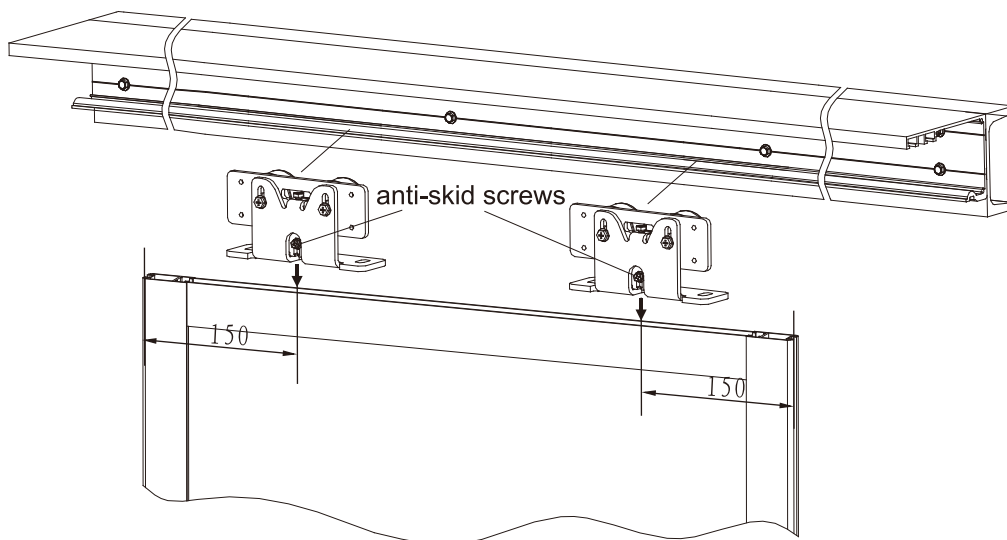
- * Infrastructure requirements the installation surface must be smooth and firm, concrete walls must be able to be connected with M8 expansion pipes, structural steel beam must be able to be fixed with M8 screws.
- * Cut the guide rail according to the door design requirements, and fix the guide rail onto the wall or steel structure with M8 screws flatly and firmly.
- * Before guide rail installation. The stoppers must be fixed on the sliding rail of the guide rail, because if there no gaps at both ends of the guide rail, the stoppers can not be put onto the guide rail.



2, 2 Installation of hangers

Position the door hangers as follows

Loosen the anti-skid, screws the anti-skid device to the bottom, hang the roller hangers with a door leaf onto the sliding rail, then adjust the anti-skid device to the top and fix it.



After above installation must clean sliding rail surface, if not there will be noise when door sliding

Adjustment of door leaf

- Adjustment of door leaf height and gradient

Loosen the fixed screws.

Rotate the adjustment screws(in two hangers) to the same direction for aligning door leaf height, until the gaps between door leaf and ground meets required size.

Rotate the adjustment screws(in two hangers) to the opposite direction for aligning gradient, until the middle frames of two leaves are paralleled.

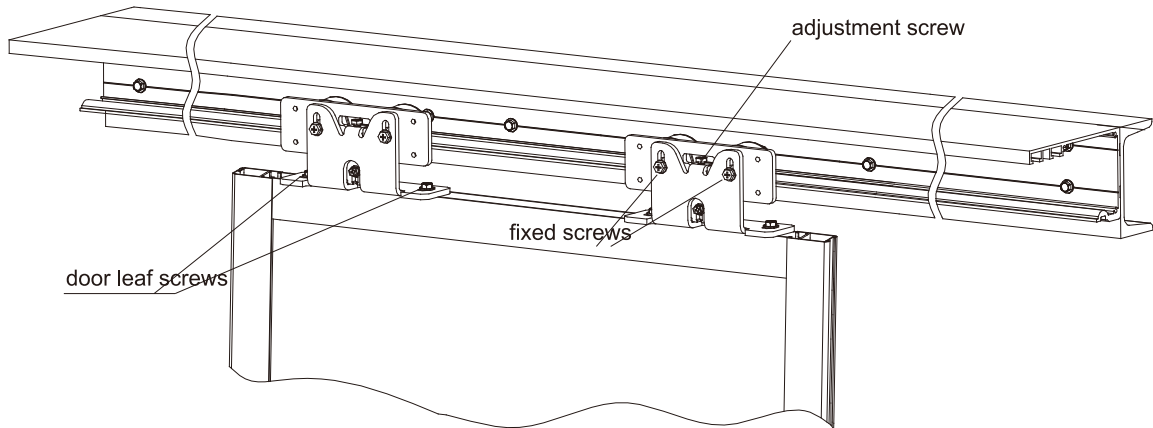
Tighten the fixed screws.

- Adjust the gaps between active door leaf and fixed door leaf

Loosen the door leaf screws,

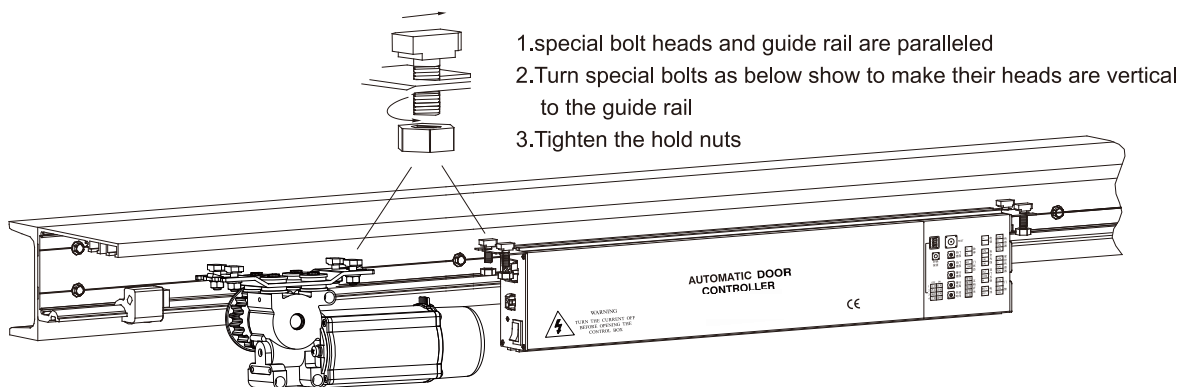
Adjust the active door leaf until the gaps between it and fixed door are same.

Tighten the door leaf screws.



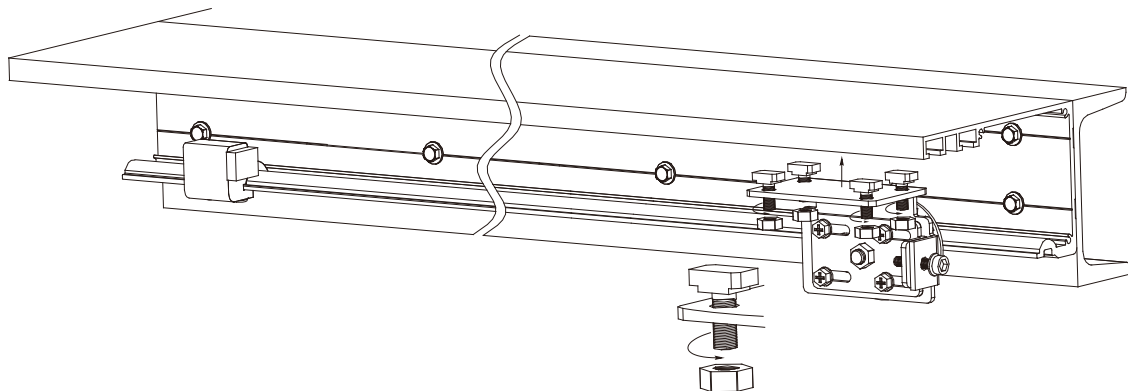
2.3 Installation of motor and controller

Rotate the special bolts into the guide rail as below show, fix motor and controller onto the guide rail.



2.4 Installation of idle pulley

Install bolts of the idle pulley into guide rail, rotate the bolts as follows, hang the the idle pulley on th guide rail, final fixation should be done after belt installation.



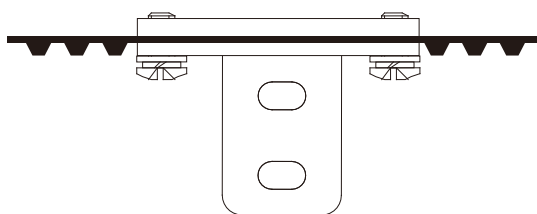
2.5 Installation of belt

- Fixation of belt brackets

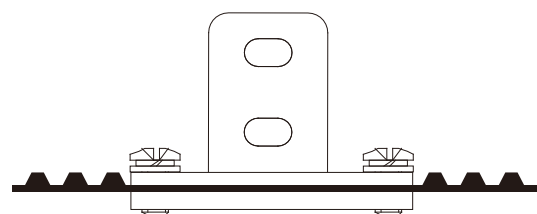
According to actual need to cut belt, insert the belt into two belt brackets, one belt bracket connects the both ends of belt make a belt circle, put belt onto the gear motor pulley and idle pulley, move the idle pulley to the nearer end of the guide rail, straighten the belt, tighten the bolts of idle pulley.

- Adjustment of belt tension

Using a wrench to turn adjustment screws until the belt tension is proper (it's appropriate that hanging 500g makes belt drop down 10-20mm), and tighten the fixed screws.



left leaf

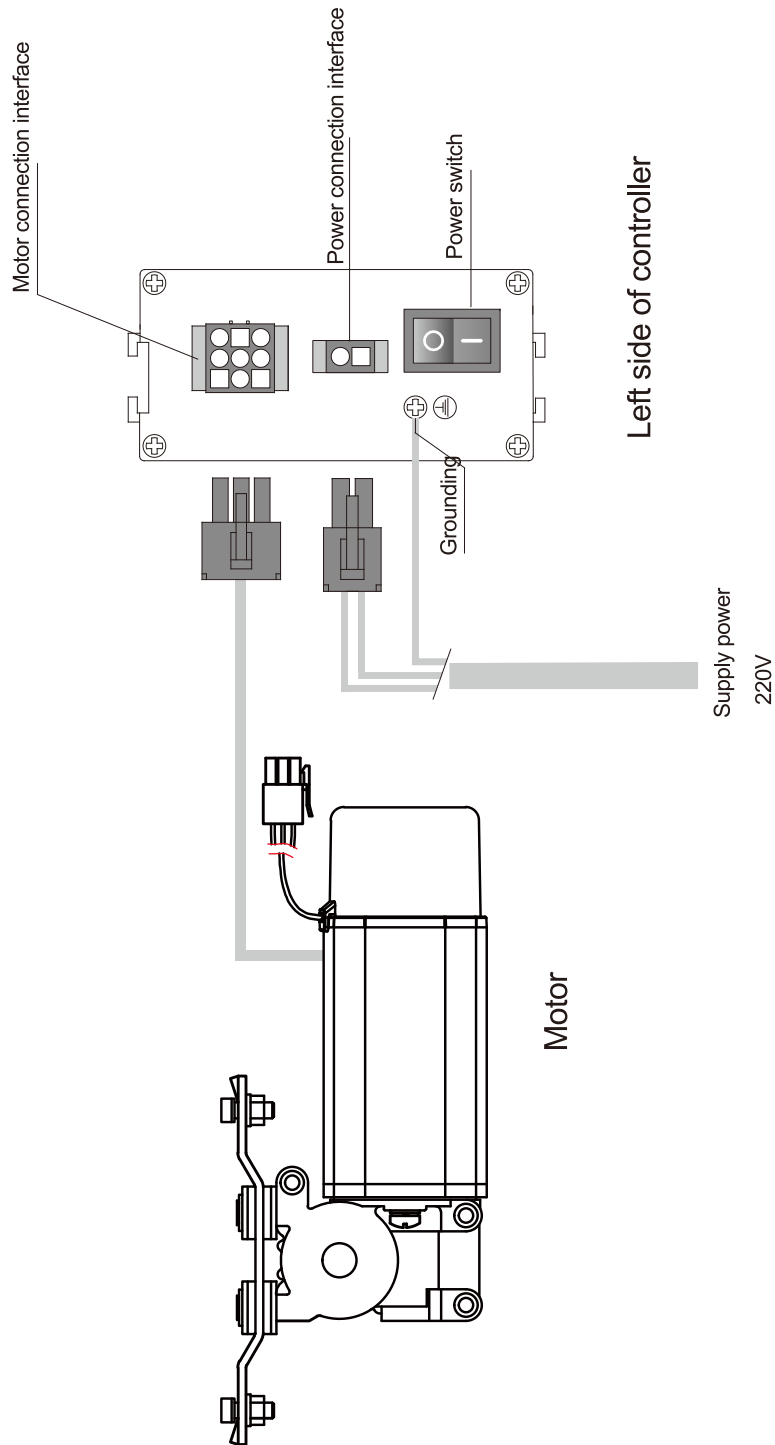



right leaf

The installation positions of belt brackets is left up, right down (single opening door fixed the down bracket), if not, the door will keep open.

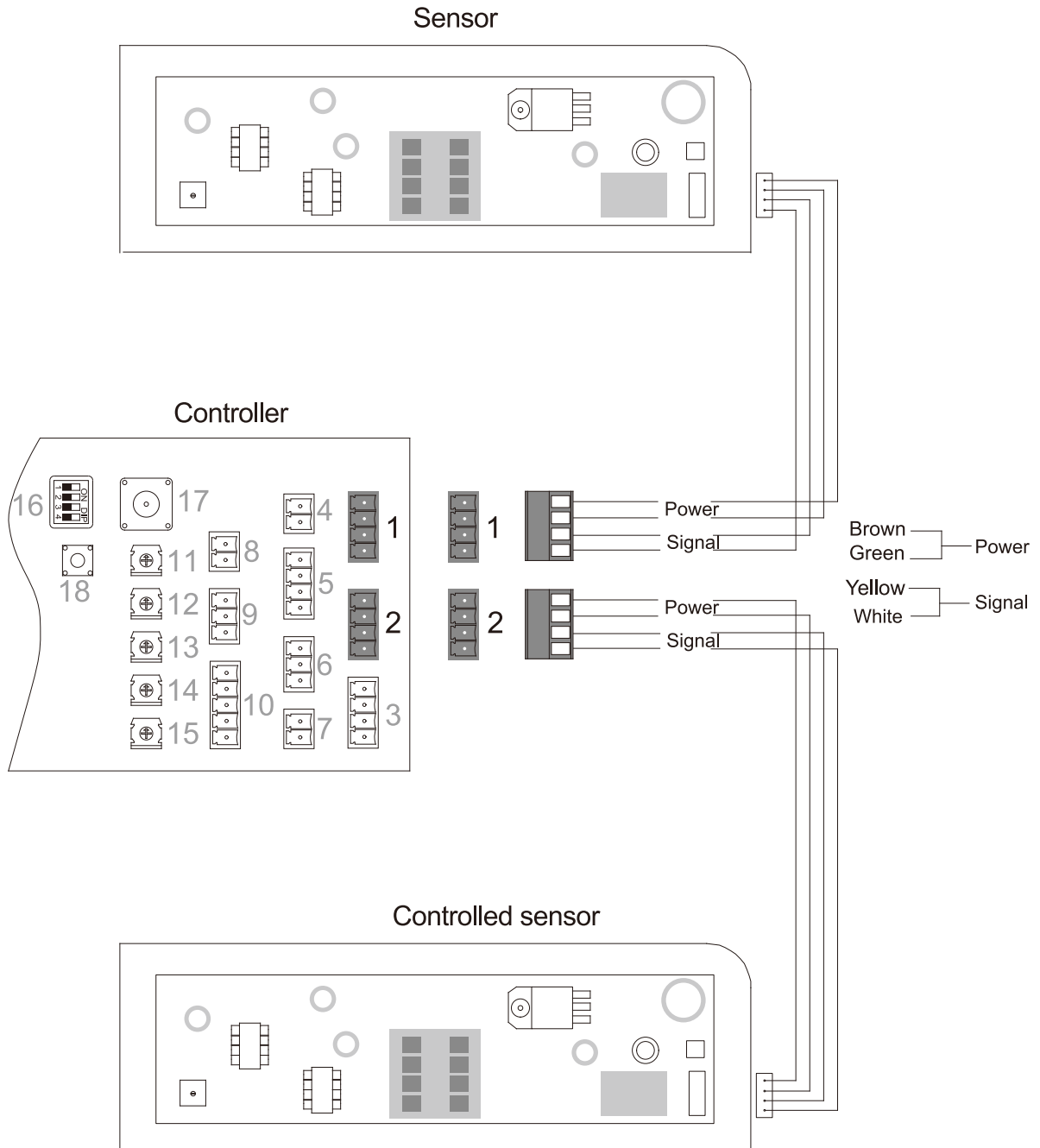
Chapter 3 Electrical connection

3.1 Connection of motor, power supply and controller



 Power supply must be reliably grounded.

3.2 Connection of sensor

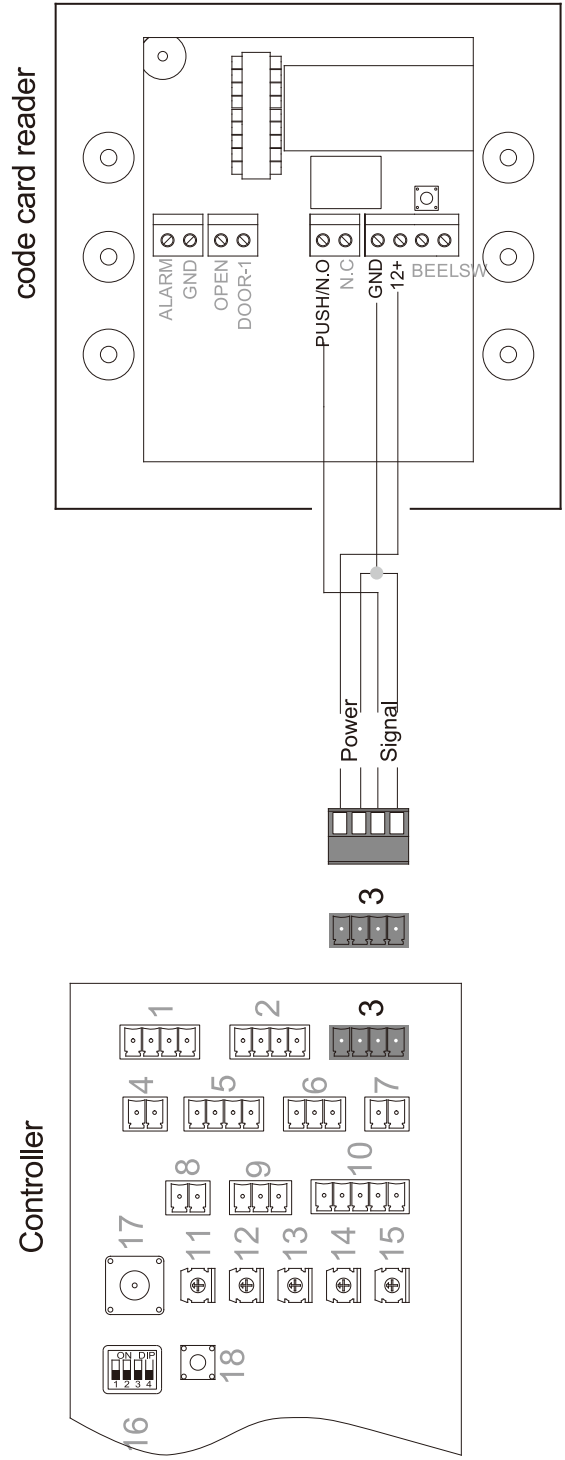


When use the one-way function, the controlled sensor signal is cut off.



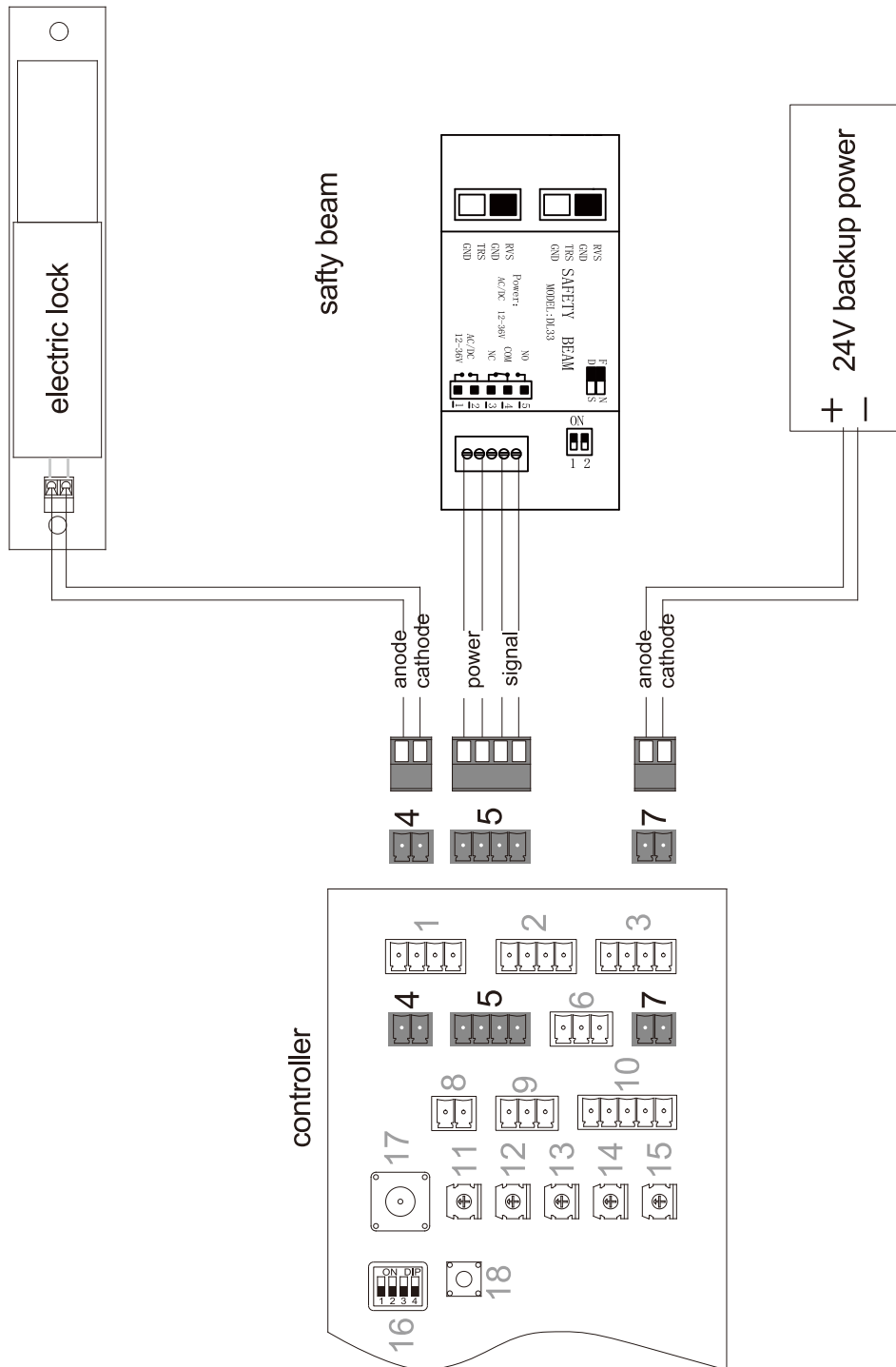
The connection should be conducted with power disconnected.


3.3 Connection of access controls



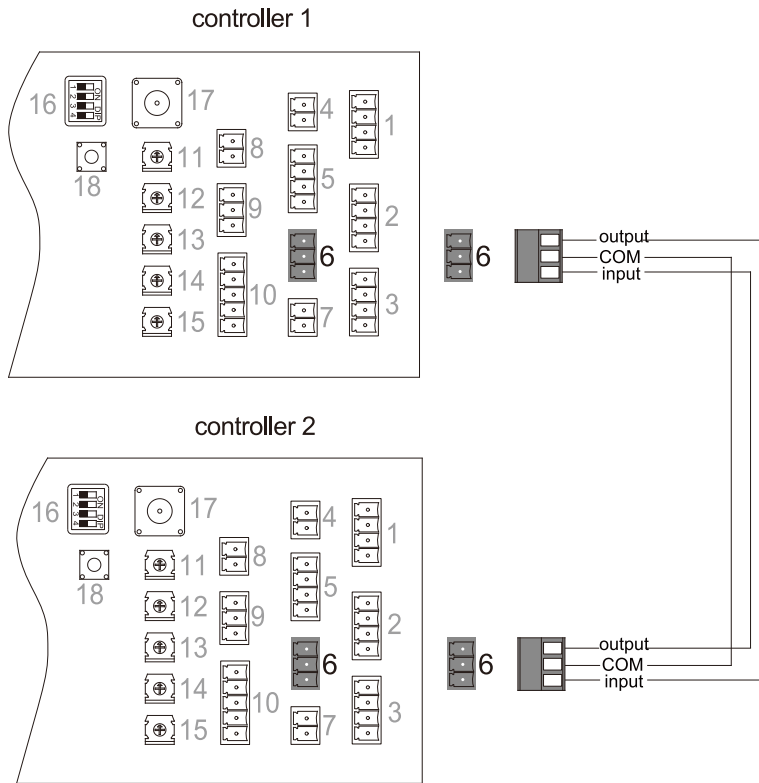
 Externally auxiliary control systems should be passive.

3.4 Connection of safty beam, electric lock and backup power



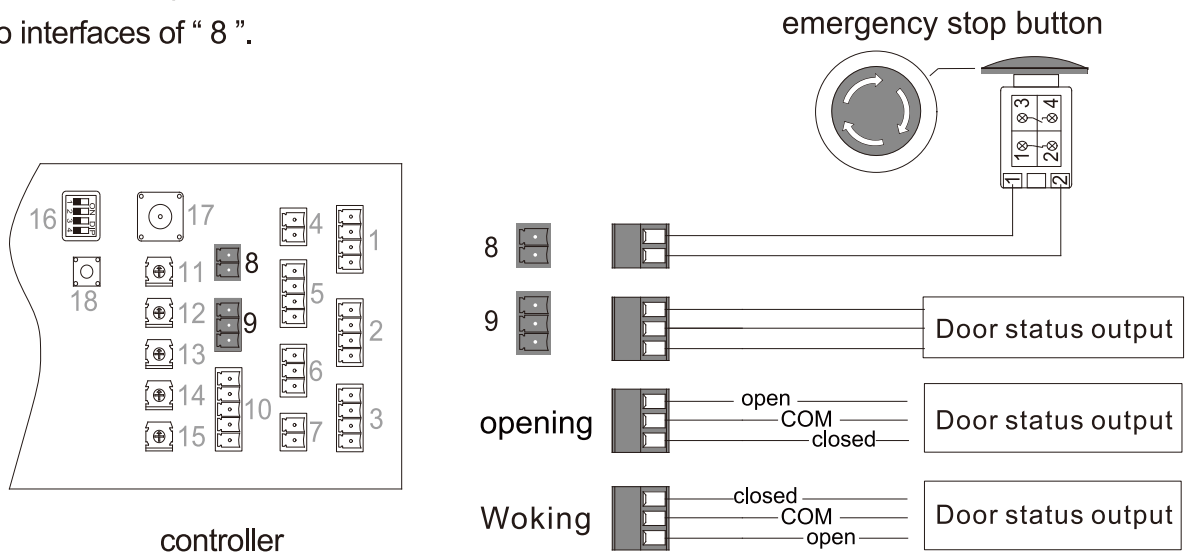
 The electrical connection must be according to the electrical connection diagram and accessory instructions.

3.5 Connection of two-door interlocking



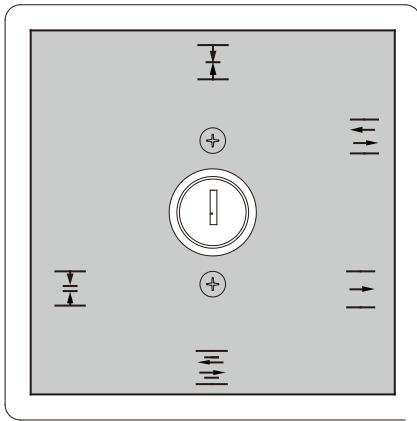
3.6 Connection of emergency stop switch

- In an emergency situation, press the emergency stop switch, the door will stop immediately, door leaf can easily be opened by hand and stop in a required position.
- Without this stop switch, it's need to short circuit two interfaces of " 8 ".

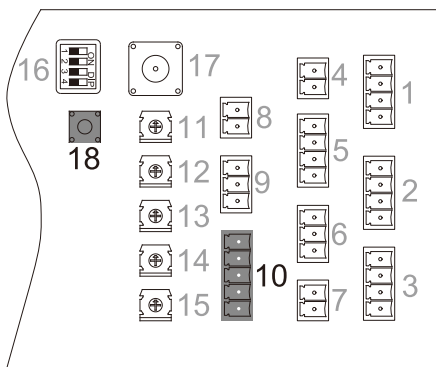
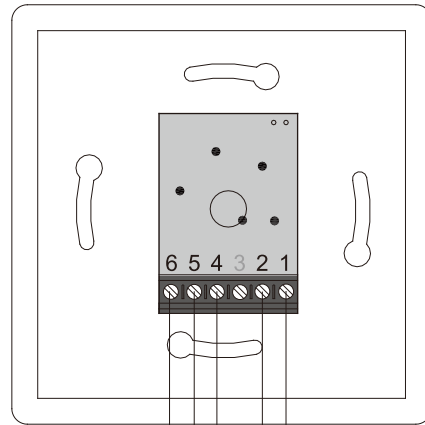
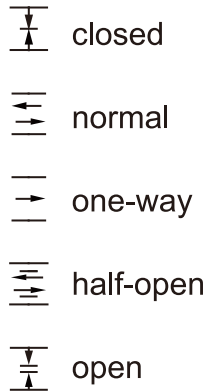


3.7 Connection of functional switch and remote control

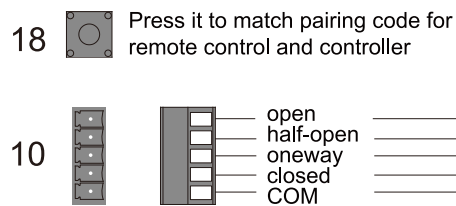
- Five-function key switch



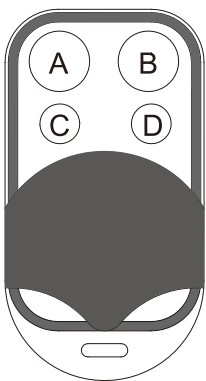
key switch



controller



- Remote control



Remote control and controller

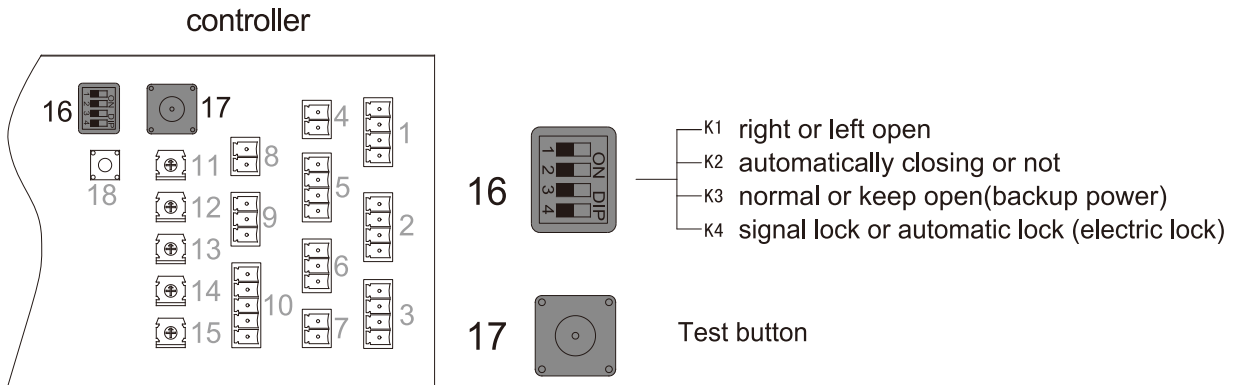
1. Clearance: Long press button "18" until the "LED" changes from yellow to green or no buzzer sounds, loosen the button.
2. Matching: Press button "18", "LED" changes from green to yellow, it's buzzing. Then press any button on the remote control, buzzer stops sounding, "LED" changes from yellow to green, means matching pairing code is successful.
3. Caution: When use remote control, "LED" is flashing, buzzer "beep" twice, it means the pairing code matching is unsuccessful. Please repeat above step 2.

One controller can connect one signal receiver of remote control, at most ten signal senders of remote control can be used.

A closed B open
C half-open D automatic

Chapter 4 Function setting and parameter adjustment

4.1 Instruction of four-gear dip switch in controller



K1 “ON” position: right open and double open; “OFF” position: left open.

K2 “ON” position: After the door open, it will close automatically; “OFF” position: a signal given will make door close.

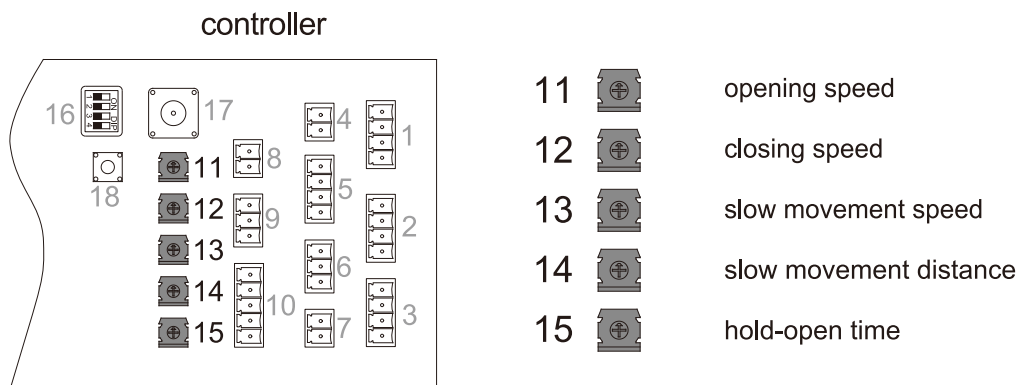
K3 Backup power supplying, “ON” position: the door will normally work; “OFF” position : door will keep open.

K4 Use electric lock, “ON” position: perss button “A” (closed) of remote control or button “ \overline{I} ” of key switch to lock the door; “OFF” position:the door will be locked once it is closed.

1.Factory setting is on “ON” position.

2.After adjusting functional switch, it’s need to restart the controller for effect.

4.2 Instruction of potentiometer turning buttons in controller :



Turning these buttons clockwise will increase speed/distance while counterclockwise will decrease the speed/distance.

Chapter 5 Maintenance and troubleshooting

5.1 Safety responsibility

At least one time maintenance and inspection every year is critical to ensure the door work safely and reliably.

Maintenance must be done by trained person.

If there was no one made maintenance or the maintenance was done by unauthorized person and caused damage or adverse consequences, manufacturer will not undertake any responsibility for it. Any subsequent interventions and changes of the automatic door must be done by trained person.



Warning:

All operations should be done with disconnected power .

5.2 Maintenance

Professional persons do periodical or occasional maintenance and inspection.

Maintenance components: structure, motor, controller, signal, safty factors.

Maintenance contens : inspection, cleaning, adjustment, replacement.

Period	Parts	Maintenance
Every six month	Guide rail	Check the guide rail is clean or not, when necessary please clean it, especially when the sliding rail surface has excessive wear, the guide rail must be replaced.
	Rollers	Check the rollers are clean or not, smoothly operation or not, abrasion and damamge or not. When necessary please clean them; If has abrasion, replace it.
	Belt	Check belt is abrasion and aging or not, when necessary replace it. Check belt is tight or not, when necessary, adjust the tension again.
	Controller	Check the functions of the controller are good or not. Starting is stable or not, when necessary, do adjustment.
	Cable	Check the cable is fixed or not, when necessary, fix it again. Check the cable is damaged or not, replace it when necessary.

5.3 Troubleshooting

Symptoms	Inspection	Causes	Remedies/Solutions
Door doesn't work	Power switch Emergency stop switch Emergency stop terminals (it's active or not)	Switch off Pressed, door stop at "emergency" position Emergency stop terminal "8" is not short-circuited	Switch on Release emergency stop switch Connect emergency stop terminal "8"
Door doesn't close.	Functional switch or remote control Detect signal wire Safe beam	Setting on "open" position Signal wire was short-circuited. Connection error, or malfunction	Turn to "Automatic" position Change signal wire. Connect properly or replace
Door doesn't open.	Power switch Electrical connection Functional switch or remote control Two-door interlocking Power off check door resistance	Switch off Electrical connection is poor Setting on "closed" position Big resistance	Switch on. Connect again Turn to "Automatic" position Wait till the other door is closed.
Door keeps opening and closing with no stop.	Sensor Check the detection area Door moving status	Sensor misoperate There is some movable objects in the detection area. There is fluorescent in the detection area. There is strong wave in the detection area Big resistance	Replace Remove the movable object from the detection area Close the fluorescent wave Remove the strong wave Increase the slow movement speed Decrease the slow movement distance
Door comes into great collision	Door moving status	Significant speed reduction, but with a great collision No speed reduction when door opening No speed reduction when door closing Belt is loose	Decrease the slow movement speed Increase the opening slow movement distance Increase the closing slow movement distance Adjust belt tension

Every maintenance and repair should record on the inspection book.

