

Automatic Door Systems

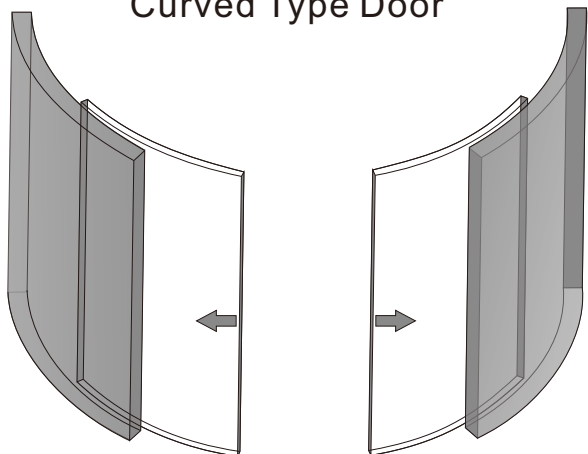
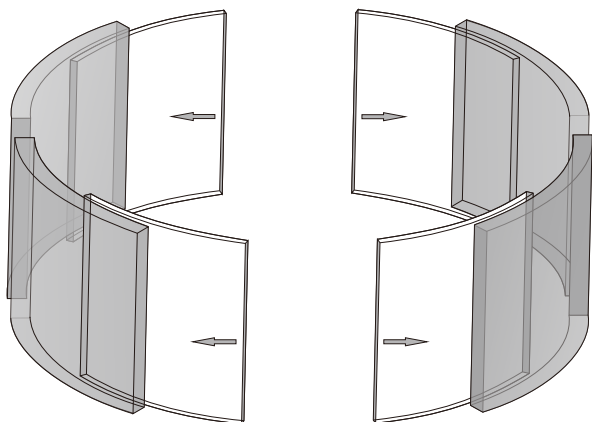


H-18B



<http://www.kth-automaticdoor.com/>
e-mail : kth@kthtw.com

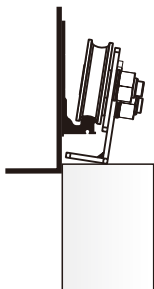
OPERATION INSTRUCTION



19

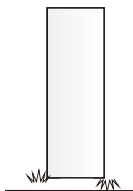
Door can't be opened or closed.

Cause 1
HANGING TWIN-WHEEL
is not at vertical position.



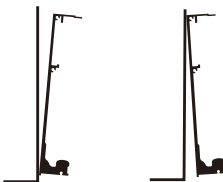
How to solve:
Readjust the
HANGING TWIN-WHEEL.

Cause 2
1. Door touches Ground Rail.
2. Ground Rail is dirty.



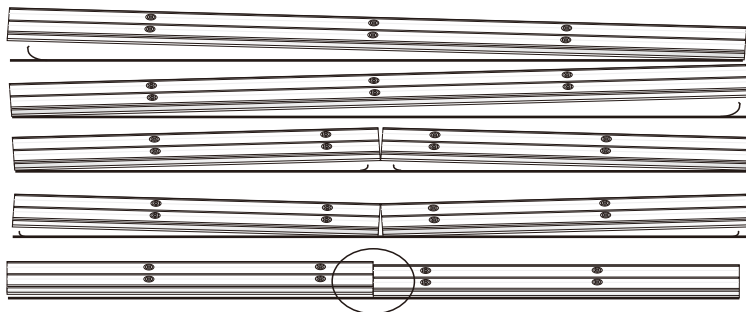
How to solve:
1. Readjust the distance between
Door and Ground Rail.
2. Clean up the Ground Rail.

Cause 3
ALUMINUM PROFILE is not
vertical.



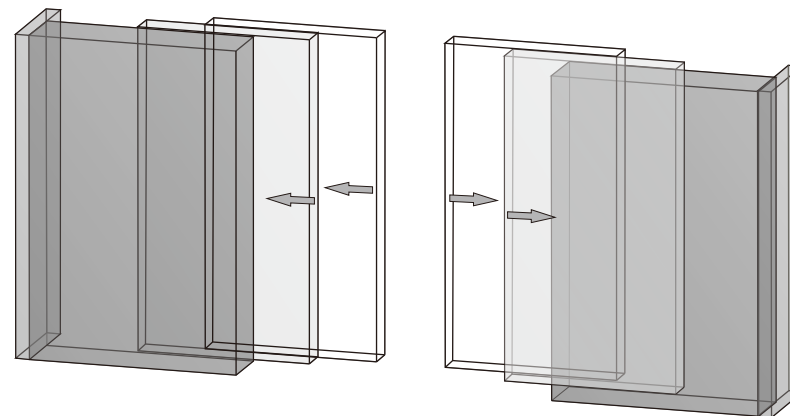
How to solve:
Readjust the vertical position of
the ALUMINUM PROFILE.

Cause 4
ALUMINUM PROFILE is not at vertical position.



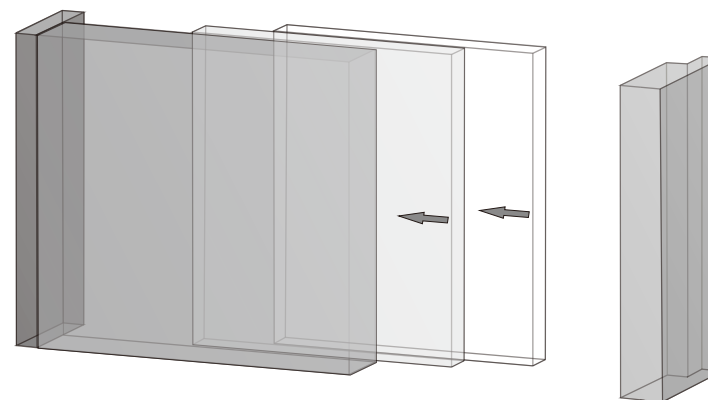
How to solve:
Readjust the level position of the ALUMINUM PROFILE.

Telescopic 4-winged Sliding Doors.



Installation: Please in accordance with the instruction of Telescopic 4-winged Sliding Doors.

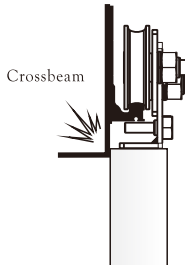
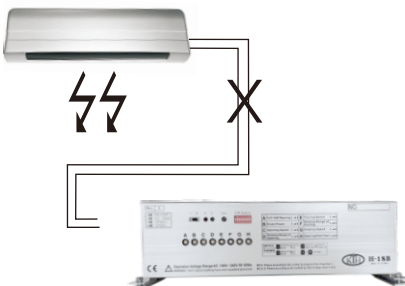
Telescopic 2-winged Sliding Doors.



Installation: Please in accordance with the instruction of Telescopic 2-winged Sliding Doors.

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Door can't be opened or closed.

Cause 1 Above the Door-Leaf touched with the crossbeam.  Crossbeam How to solve: Adjustment the interval between the Door-Leaf height and Crossbeam.	Cause 2 The Door-Leaf touched with the Ground Guide Rail.  How to solve: Adjust the Door-Leaf height.	Cause 3 Door-Leaf derails the ALUMINUM PROFILE.  How to solve: Put the Door-Leaf into the ALUMINUM PROFILE again.
Cause 4 Door-leaf is not vertical.  How to solve: Adjust the Ground Guide Rail/Wheel position.	Cause 5 SENSOR is broken or disconnects to the COMBINED TERMINAL BLOCK.  How to solve: 1.If SENSOR is broken please change a new one. 2.Check SENSOR whether it connects to the MICRO-CONTROLLER.	

PROBLEMS	REASONABLE	CHECK	HOW TO SOLVE
DOOR CAN'T BE MOVED.	1.No power.	Broken circuit.	Check the broken circuit position.
		The Power Switch is not opened.	Open the POWER SWITCH.
	2.The door is locked.	Door is locked and no movement action.	Open the DOOR LOCK.
		Signal light is WORKING.	Check the MICRO-CONTROLLER
SPEED	3.The sensor is broken.	Signal light is OUT OF WORKING.	Check the CIRCUIT OF SENSOR or change a new one SENSOR.
	1.Speed is too slow.	Check the Speed at KNOB of MICRO-CONTROLLER.	Adjust the Speed of Open/Closed Door.
	2.Door runs into the obstructor, then cause the Door moving slow.	Installation problem or dirty.	Reinstall or clean the ALUMINUM PROFILE.
	3.Door is difficult to move.	Turn off the power.Use hand to move the Door, besides,check the Ground Guide Rail whether it is dirty.	Clean the Ground Guide Rail.
		Check the HANGING TWIN-WHEEL whether it is broken.	Change a new one.
		Check the Door Bolt in the door bottom whether it is loosen.	Fix the Door Bolt.
		Check whether the Ground Wheel is broken.	Change a new Ground wheel.
DOOR CAN'T FULL OPEN.	In the Half-Open way.	Check the Knob/Switch.	Turn on to Full Open.
DOOR CAN'T CLOSE.	1.In the Full-Open way.	The SENSOR keeps working.	Check wiring or change a new SENSOR.
	2.The Door opens suddenly while it is moving to close .	The SENSOR probably is installed with something wrong.	Adjust the SENSOR or change a new one.



MICRO-CONTROLLER



BRUSHLESS DC MOTOR



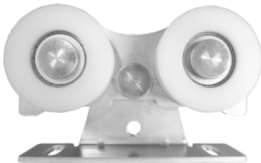
POWER SWITCH



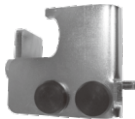
SENSORS (OPTIONAL DEVICE)



MOTOR HOLDER



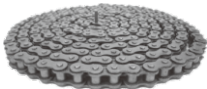
HANGING TWIN WHEEL-4PCS



STOPER -2PCS (IN PROFILE)



BELT ROLLER



ROLLER CHAIN



MEDIUM-10PCS



ACTIVE BRACE



PASSIVE BRACE



ACTIVE&PASSIVE SCREW

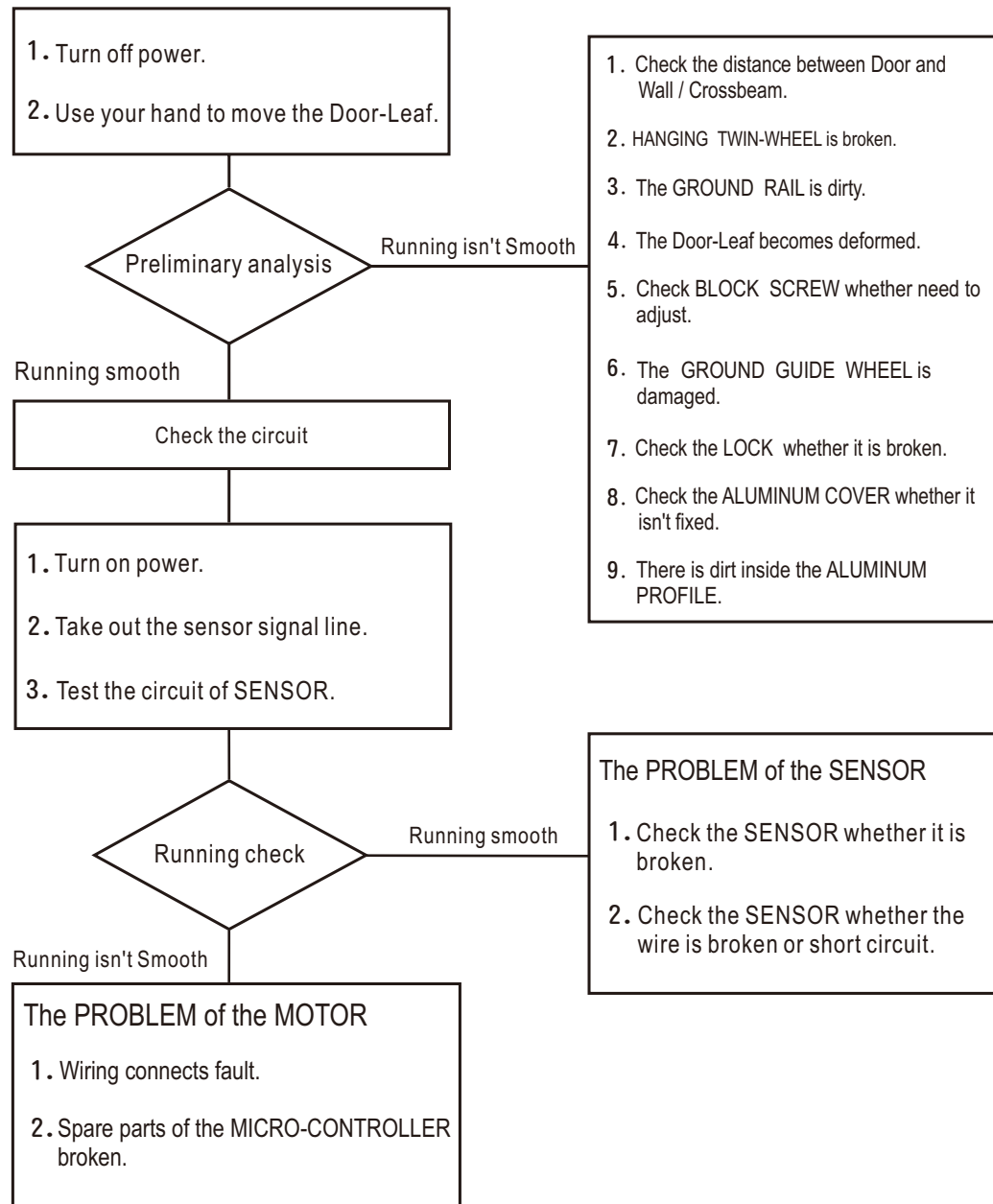


DOOR SCREW-8 PCS



CABLE TIE-5 PCS

TYPE	H-18B	
MODEL	SINGLE-WINGED	BI-PARTING
DOOR WEIGHT	1000kg X1 (door)	900kg X2 (door)
DOOR WIDTH	DW=500mm~6000mm	DW=500mm~6000mm
INSTALL WAY	Surface install	Surface install
MOTOR	DC24V 120W BRUSHLESS DC MOTOR	
CONTROL	STANDARD MICRO-CONTROLLER	
POWER CONSUMPTION	120W	
VOLTAGE	Either AC100V~240V	
ENVIRONMENTAL TEMPERATURE	-20℃~+50℃	
VOLUME	60decibel(max.)	
STARTING SPEED	55mm~120mm /second	
STARTING TIMES	0~64 sec. (regulable)	
TRANSMISSION IMPORTANT CONDITION	ROLLER CHAIN 40-1R	
OPENING DOOR RANGE	FULL/HALF-OPEN (regulable)	
PFC POWER EFFICIENCY	0.95(In AC100V Full load)	
TRACTION FORCE	WHEN POWER OFF THE DOOR CAN BE OPENED BY MANUAL	





A Full/Half opening

Adjust the RANGE of the HALF OPEN DISTANCE.
Higher number, wider range.



B Brake power

When the door leaf is opened, it can be adjusted for braking force.
It takes light force when the door leaf is light
It takes large force when the door leaf is heavy.
The braking force can be easily adjusted to the appropriate level.



C The opening speed of the door

Adjust the OPEN SPEED
Higher number, faster speed.
CAUTION: please adjust the number one by one from low to high.



D The slowing range of opening door

Adjust the SLOW RANGE of OPENING DOOR
Higher number, more range about the slow range at open door position.
CAUTION: please adjust the number one by one from high to low.



E The closing speed of the door

Adjust the CLOSED SPEED :Higher number, faster speed.
CAUTION: please adjust the number one by one from low to high.



F The slowing range of closing door

Adjust the SLOW RANGE of CLOSED DOOR
Higher number, more range about the slow range at open door position.
CAUTION: please adjust the number one by one from high to low.



G The slowing speed of the door

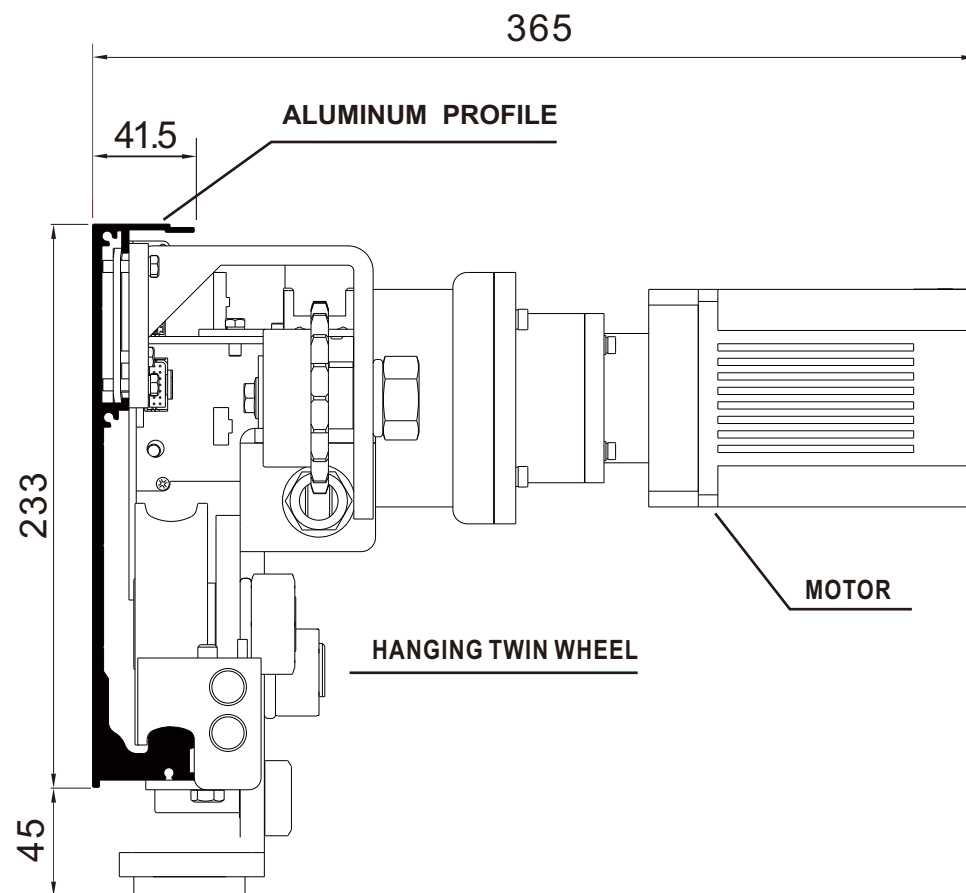
Adjust the SLOW SPEED
Higher number, faster speed.
CAUTION: please adjust the number one by one from low to high.



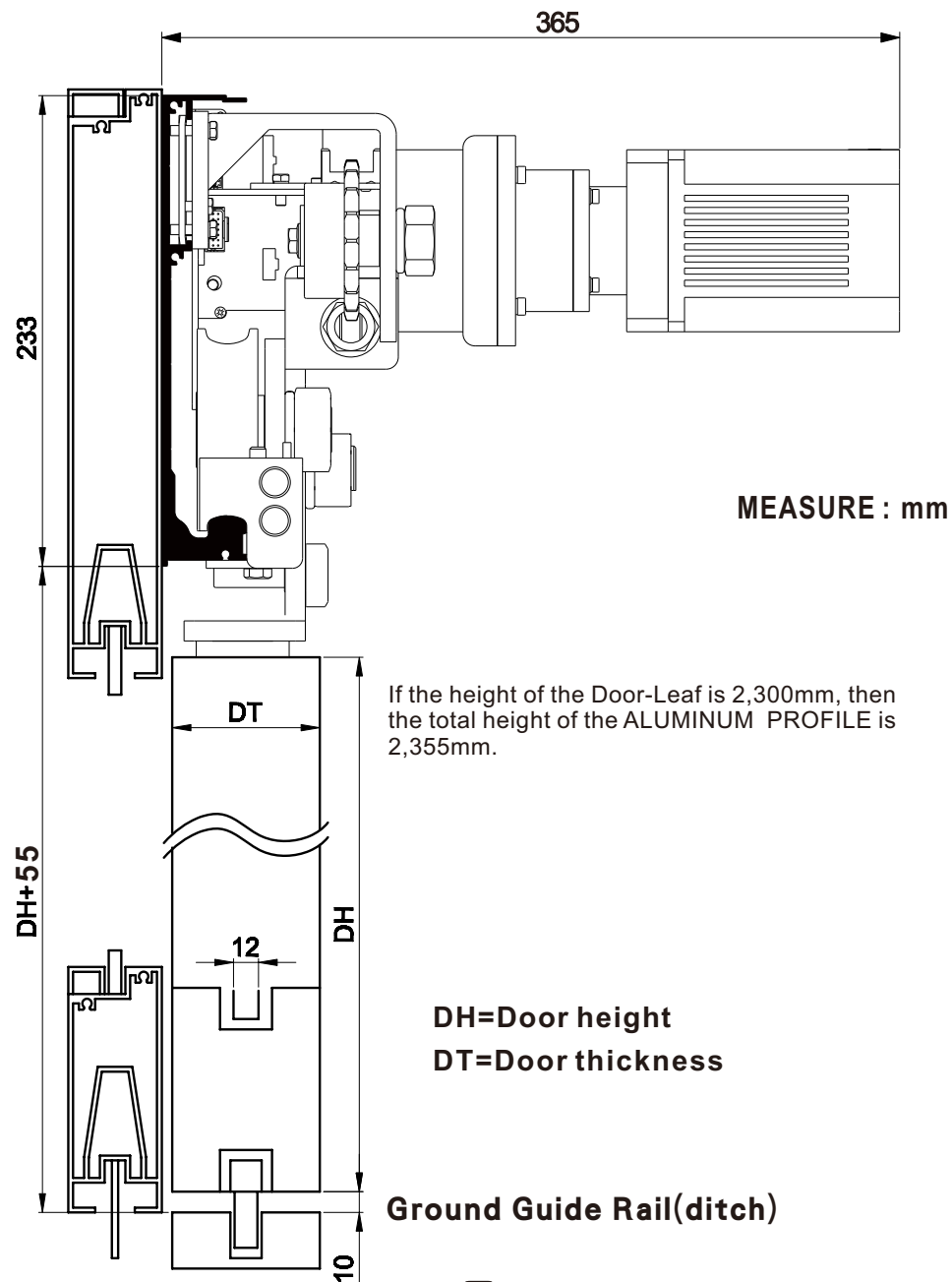
H Opening hold time

Adjust the HOLD OPEN TIME
Higher number, the hold time is longer.

NUMBER	0	1	2	3	4	5	6	7	8	9
SECOND	0	1	2	3	4	5	6	10	32	64



MEASURE : mm



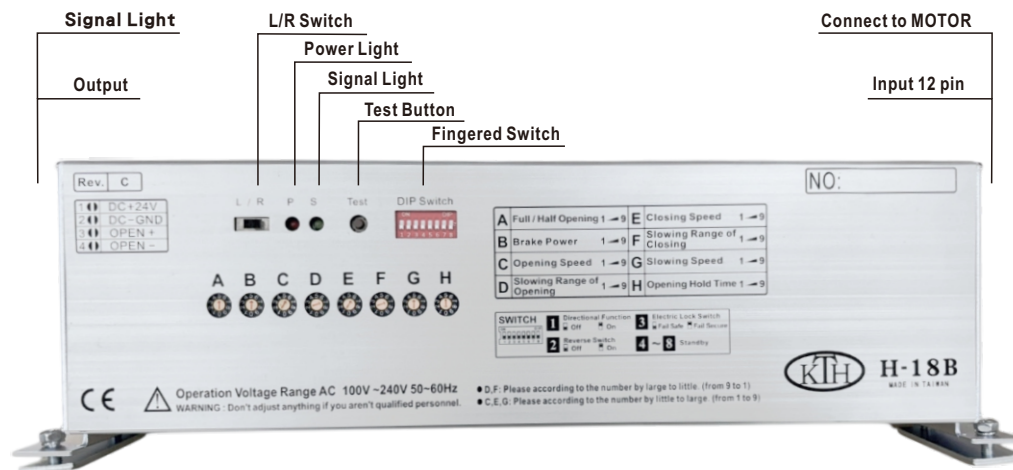
Before turn on the power, make sure the Door-Leaf can be smoothly moved, and the electric link is correct at first.

1. SYSTEM PROGRAM REMEMBER

After turn on the power, the MICRO-CONTROLLER will remember the distance and the range.

2. ADJUST

The FACEPLATE of MICRO-CONTROLLER



Red LED - Power is connected.

Green LED - Input the open door signal.

L / R switch - The direction of the door opening:right / lift (R / L).

DIP Switch- Pin 1- Directional Function

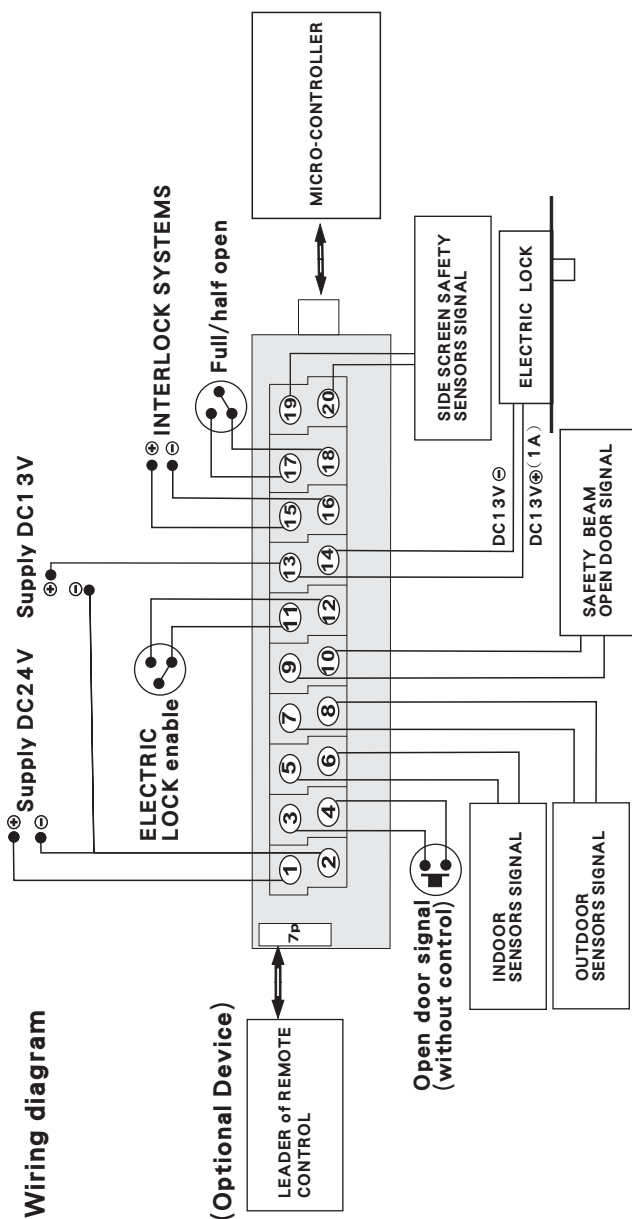
Operation $\left\{ \begin{array}{l} \text{OFF: Normal mode.} \\ \text{ON: push once , open the door. Push again,close the door.} \end{array} \right.$

DIP Switch- Pin 2- Reverse Switch: in order to control opening and closing direction of the Door -Leaf after power resumes.

Operation $\left\{ \begin{array}{l} \text{OFF: Normal mode, after power resumes, the Door-Leaf opens the door first.} \\ \text{ON: suitable for Security System, after power resumes, the Door-Leaf closes the door first.} \end{array} \right.$

DIP Switch- Pin 3 - Electric lock switch

☐ Fail Safe ☐ Fail Secure



(A) The FUNCTION of the ELECTRIC LOCK will work when ⑪ and ⑫ are short circuit, then ⑬ and ⑭ will output DC13V for ELECTRIC LOCK after the door closes. ⑬ and ⑭ will not output DC13V if ⑪ and ⑫ are not short circuit.

(B) The SIGNAL of the SAFETY BEAM is controlled by ⑨ and ⑩. When door is opening and running, ⑨ and ⑩ keep to accept the signal, then the SAFETY BEAM will be working. ⑨ and ⑩ will not work when the door is closed, then the SAFETY BEAM will lose efficacy when the door is closed.

(C) The signal of Side Screen Safety Sensor is controlled by ⑪ and ⑫. Side Screen Safety Sensors are placed at the rear end of the door to prevent collisions during the opening movement of the moving leaves. When the signal activates, the moving leaves will become slowly, till the door opens fully, then close normally.

1 Prepare

Should correct the height and the leveling of the ALUMINUM PROFILE



2

Cut and install the ALUMINUM PROFILE



3

Install the SENSORS



4

MOTOR



5

MICRO-CONTROLLER

6

Install the BELT ROLLER



7

Hang and adjust the Door-Leaf



8

Install and ROLLER CHAIN



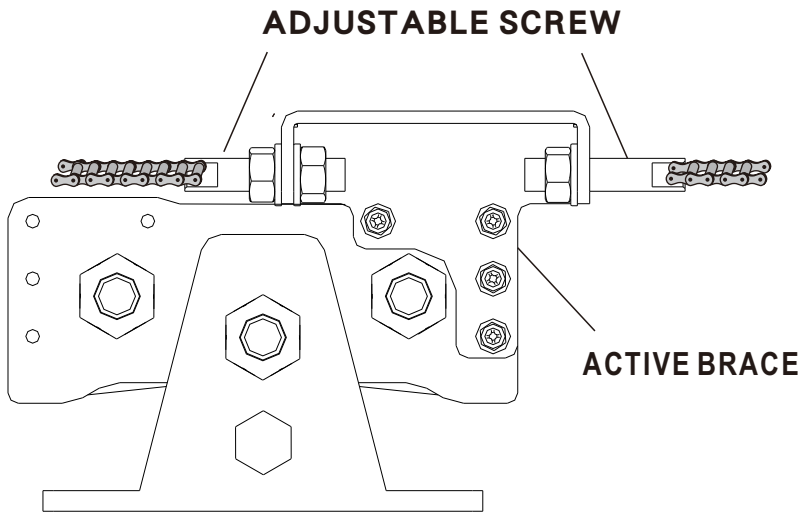
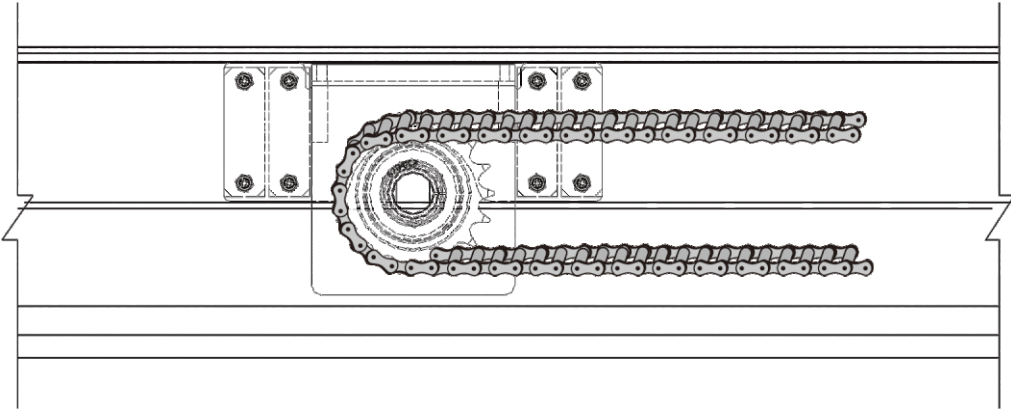
9

Power connect



10

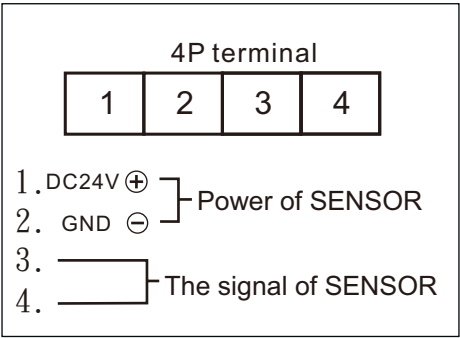
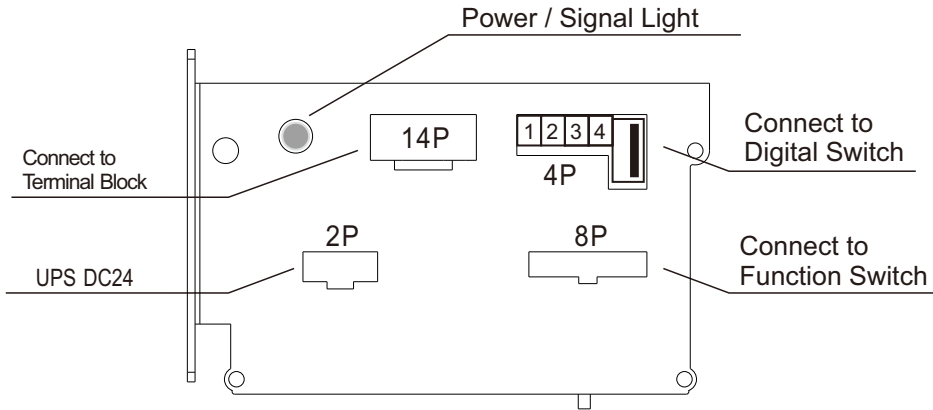
Test and adjust



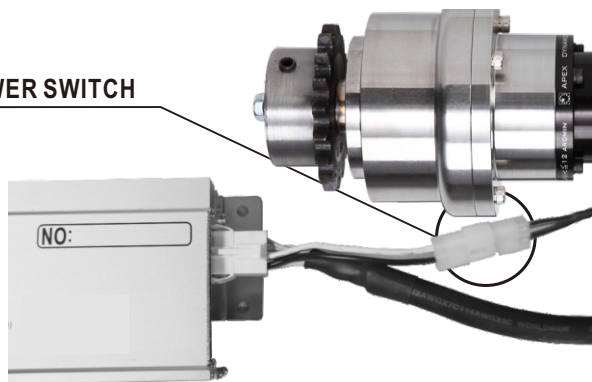
TENSION of ROLLER CHAIN can be adjusted by the ADJUSTABLE SCREW of ROLLER CHAIN.

MICRO-CONTROLLER

Output connect



To join the POWER SWITCH



The ILLUSTRATED of CONTROLLER and MOTOR.

Power supply (input)
Either AC100V~240V

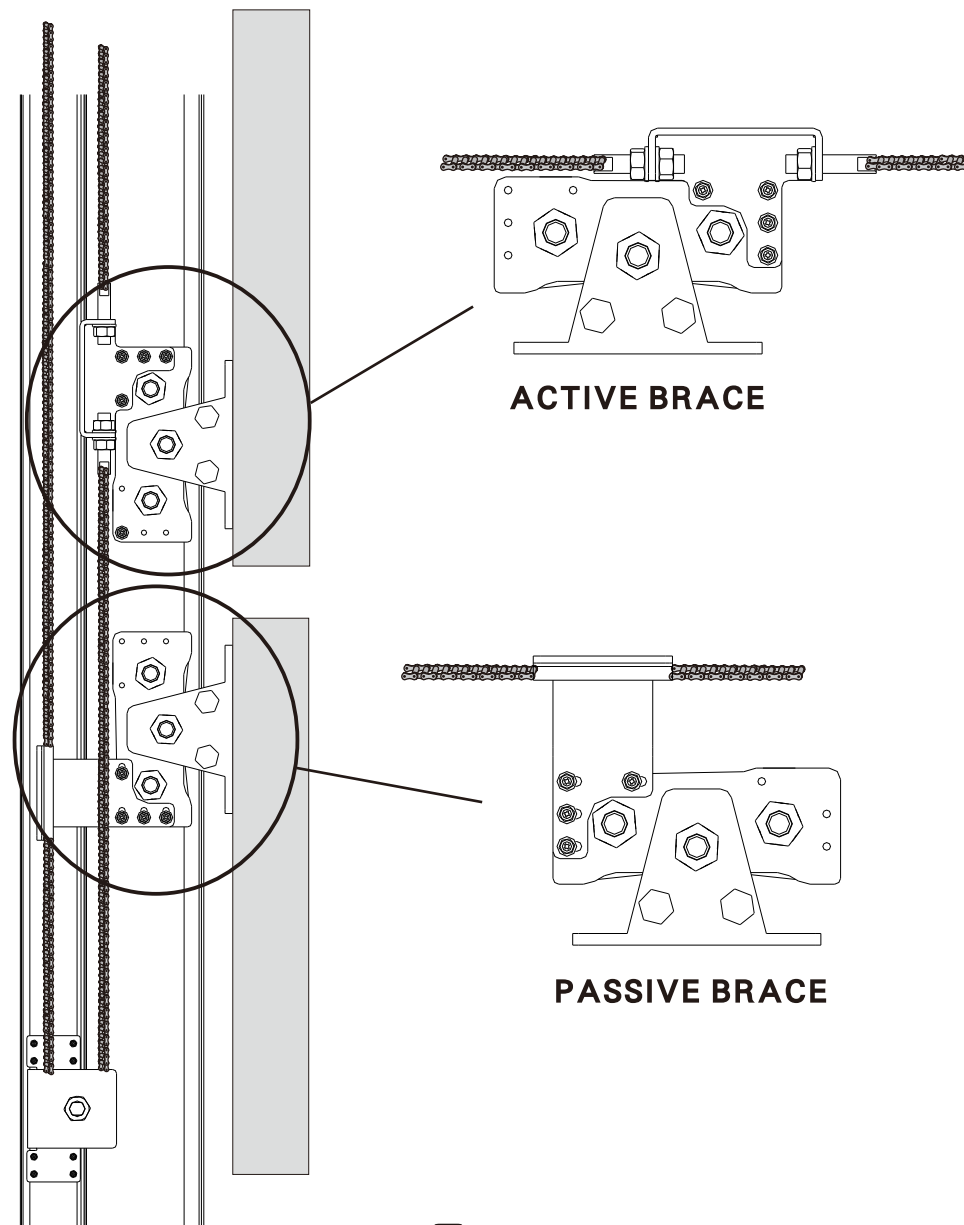
To join the MOTOR

POWER SWITCH



Warning

Please confirm WHETHER the SENSOR VOLTAGE is the same as the power supply. If different between them, need to add the TRANSFORMER, otherwise the SENSOR would be burned.



ACTIVE BRACE

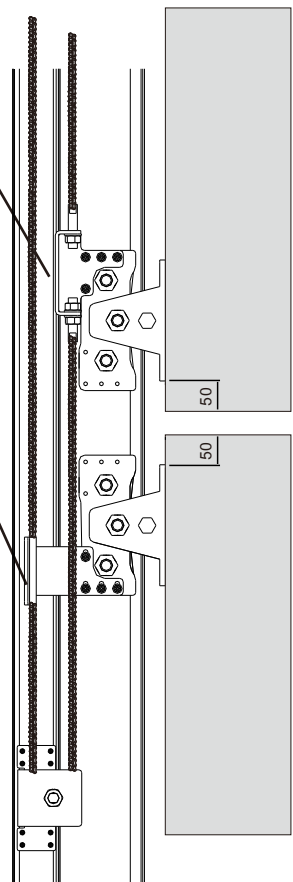
PASSIVE BRACE

MEASURE : mm

ACTIVE BRACE

PASSIVE BRACE

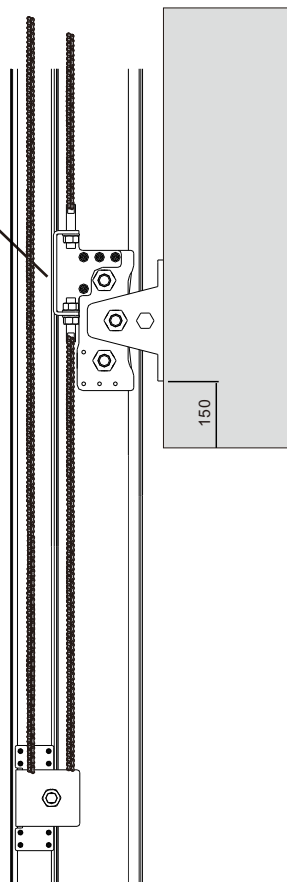
Bi-parting



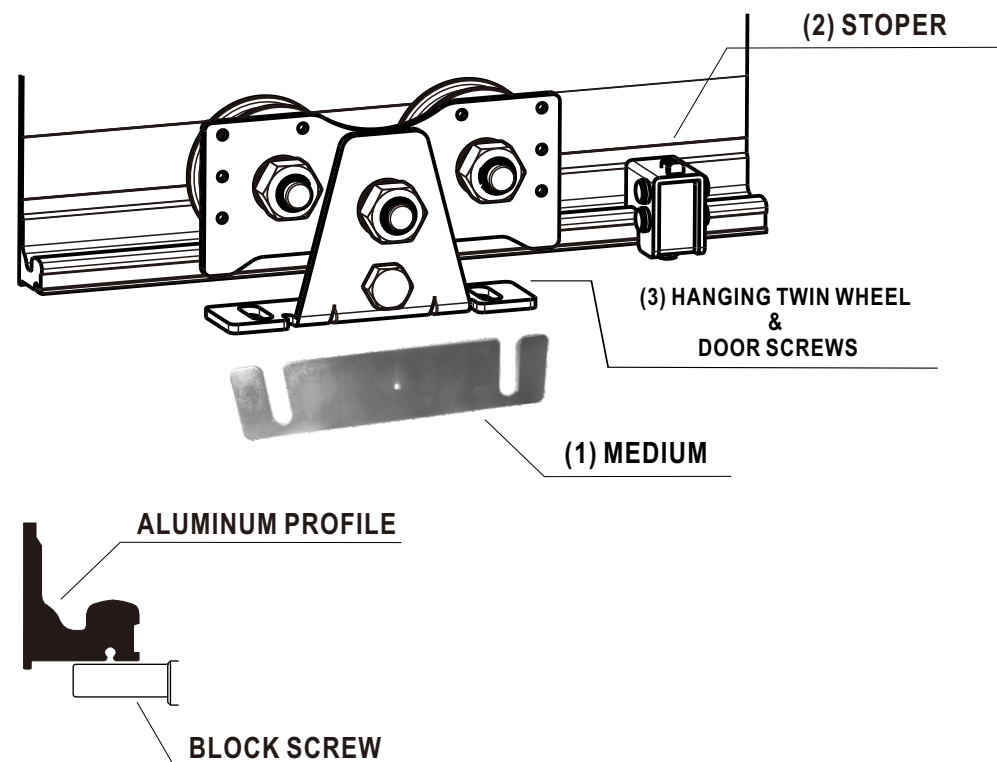
In order to open to the largest position. Please leave 50mm between the edge of door leaves and hangers

ACTIVE BRACE

Single-winged



In order to open to the largest position. Please leave 150mm between the edge of door leaf and left hanger.



- A** When Door-Leaf height and interval need to adjust, loose (3) at first, then put (1) to where you need to adjust.
- B** Need to fasten (3) after adjust **A** .
- C** Install above-mentioned (2) after make sure the DOOR OPEN POSITION.