6) Faults Comparison Table:

Phenomenon of Fault	Faults Analysis
No response in RX (LED)	Cables no connection; or control box no power; or cables were snapped
LED green light in RX is flashing slowly and regularly	System is in status of timeout; or the broken diode will be ignored.
The light curtain is not obstructed, but both the LED green and red lights in RX are on.	Check if there are other infrared equipments around; if the windows of TX and RX are dirty; if the windows are shined by glare; if the cables are bad, or the light curtains damaged.
LED lights in RX are normal, but the door doesn"t open although the light curtains are obstructed.	Wrong connection of control box, or relay output is damaged, or the triode in RX is damaged.
Red indicator light in Control box is off.	Wrong connection in control box, or no power; or connection is not tigtt; or control box damaged.
When the door is closing, the doors jump and re-open.	Not reasonable when wiring; or conductive earth of the control box is not well

7) Packing List:

Item number	Item Name	Quantity
1.	Control box	1 PC
2.	Cable (4m)	2 PC
3.	Transmitter (TX)	1 PC
4.	Receiver (RX)	1 PC
5.	Instruction book	1 PC
6.	25mm X 25mm cable clip	6 PC
7.	M3 X 25 Screw	10 PC
8.	M3 Nut	10 PC
9.	90mm Nylon ties	6 PC

OPERATING MANUAL FOR DOOR SENSOR

1) Specification of Transmitter (TX) and Receiver (RX):

Model	E-2000
Scanning beams	154 beams
Detecting	0 ~ 4000mm
Response time	< 90ms
Displacement at 0mm	Vertical: $\pm$20mm; Horizontal: $\pm$3mm
Adaptive environment	Light immunity $\geq$ 100000 lux
Size (mm)	9 X 24 X 2000
System Hint	1. The green LED on the Receiver indicates the normality of the sensors. Slow flashing means it is in condition of timeout. 2. The red LED light in the Receiver indicates the states of the sensors. If it is off, that means the sensor is normal; If it is on or flashing, that means the light curtain is obstructed or it arises errors.

2) Specification of Control Box (Power Supply):

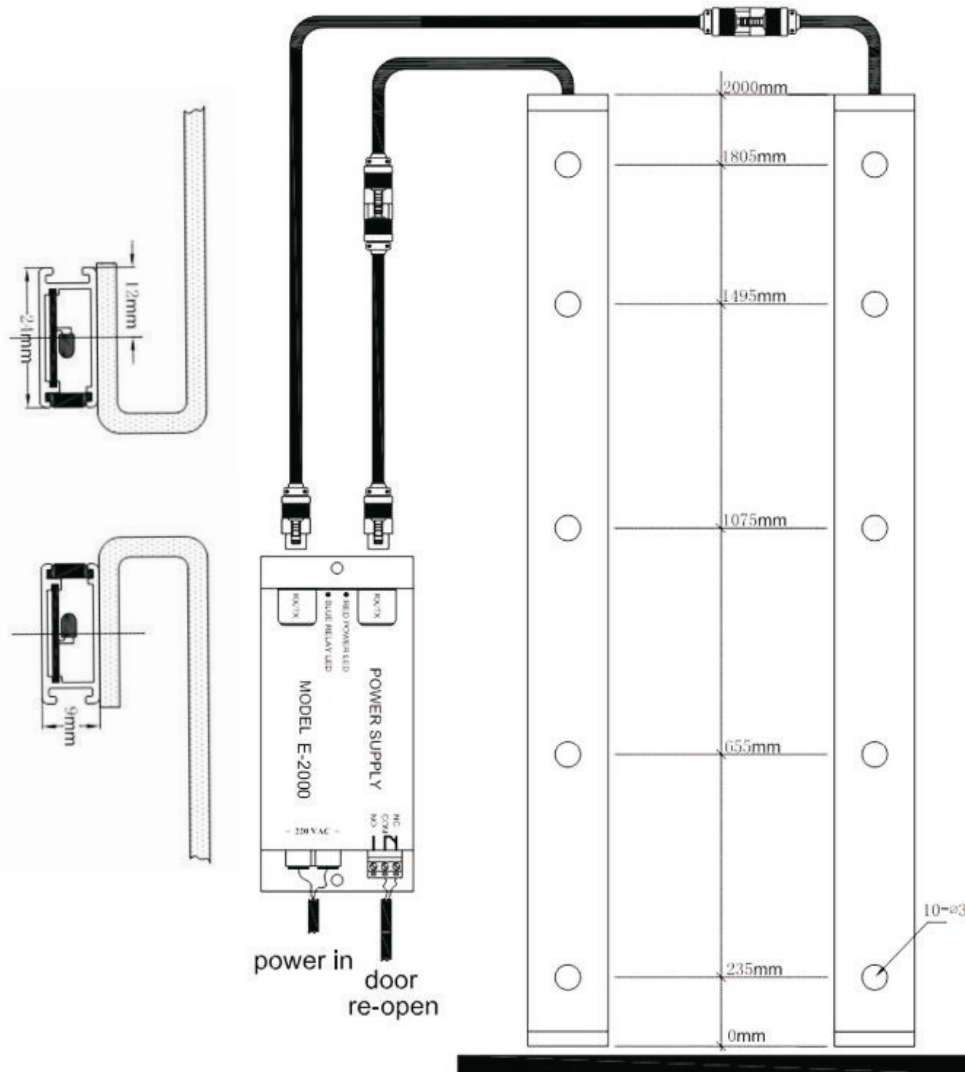| Control Box	P220-S (With Buzzer)
External Dimension	178mm X 67mm X 39.5mm
Material	Steel & Aluminium
Input Voltage	185-300V AC, $\pm$ 10%, 50/60 Hz
Relay Output Type	COM, 1NO, 1NC
Power Consumption	4VA
Relay Contact Rating	250VAC, 7A or 30VDC, 7A
Lifetime of Relay	$\geq$ 1000000 times
Short Circuit Protection	YES
System Hint (Buzzers are optional)	Give buzzer sound once interrupted.

3) Door Sensor Model E-2000 INSTALLATION

POWER SUPPLY UNIT:
MODEL P20 : INPUT 220V AC

CONNECTION:
4/6: POWER INPUT
1/3: N/C COM
2/3: N/O COM

LED STATUS :
RED LED   : POWER INDICATION
GREEN LED : STATUS INDICATION
OFF   : OBSTRUCTED OF ERROR
ON   : NORMAL SCANNING

4) The states of indicator lights on Receiver (RX):
The RX detector has two LED lights for troubleshooting:

Green LED	Red LED	Possible Cause
ON	OFF	Normal Scanning
OFF	OFF	No power, check power supply and cables.
Fast Flashing	OFF	TX / RX Connection Open Circuit
Slow Flashing	OFF	Some diodes have been timed out
OFF	FLASHING	Cable Shot Circuit
FLASHING	FLASHING	First PCB beams broken
FLASHING	ON	Second PCB beams broken
ON	FLASHING	Third PCB beams broken
ON	ON	Fourth PCB beams broken

5) Installation Steps:

A. First, the Transmitter (TX) and Receiver (RX) should be fixed on the two sides fo the elevator door according to the standard fixing kit we provide. The RX had better been fixed on the side that is less affected by sunshine.

B. The control box should be fixed on the top of the elevator cabin. The TX and RX be joined with the control box by two signal cables, and the cables should be fixed firmly and properly with Cable clips. When wiring the cables, redundant cables could be packaged into loops with the Nylon ties, please keep them away from other cables to avoid possible electromagnetic interfere.

C. After correct installation, the system can be turned on the power to run. When the light curtain is not obstructed by some object, both the green and red LED light in RX are on or flashing, meanwhile, the relay loop will be no power.

D. Daily Maintenance:
1) Please keep the external surface of the light curtain clean, especially keep the light filter plats clean and avoid attaching eyewinker on it, which will influence the receiving of the infrared lights.
2) Frequently inspect the connection status of cables, Cable clips, power wires and signal wires.
3) Please avoid putting water into light curtains.