

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

Model	ESP 154	ESP 96
Scanning Beams	154 Beams	96 Beams
Detecting Distance	0 - 4000mm	0 - 4000mm
Response Time	< 80 ms	< 60 ms
Displacement at 0mm	Vertical: ± 20 mm; Horizontal: ± 3 mm	
Adaptive Environment	Light Immunity ≥ 100000 lux	
Dimension	11mm X 24mm X 2000 mm	
System Hint	Give Buzzer sound once interrupted in TX	
System Hints	1) The YELLOW 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 status of the sensors. If it is off, that means the sensor is normal; if it is on or flashing, that means the Door sensor is obstructed or it arises errors.	

2) Specification of Control Box (Power Supply):

Model	CB 220
Dimension (mm)	152 X 67 X 39.5 (H)
Material	Steel & Aluminum
Input Voltage	185 - 300V AC $\pm 10\%$, 50/60 Hz
Relay Output Type	COM, 1 NO, 1 NC
Power Consumption	4VA
Relay Contact Rating	250 VAC, 7A or 30 VDC, 7A
Lifetime of Relay	≥ 1000000

3) The Status of indicator Lights for troubleshooting:

LED STATUS			Indication and possible cause
	Yellow LED	Red LED	
RX UNIT	ON	OFF	Normal Scanning
	ON	ON	Interrupted or error (Check whether there is dust in the filter plate or not.)
	OFF	OFF	No Power (Check the cable connection)
TX UNIT	Yellow ON	/	Power Supplying to TX is normal
	Yellow OFF	/	No Power supplying to TX, or error
CONTROL BOX	Red ON	Green ON	Normal Scanning
	Red ON	Green OFF	Faulty Signal (Check the cable connection)
	Red OFF	Green OFF	No Power (Check the cable connection)

4) LIFT ELEVATOR LIGHT CURTAIN INSTALLATION

POWER SUPPLY UNIT:

MODEL P220 : INPUT 220V AC

CONNECTION:

POWER INPUT

N/C COM

N/O COM

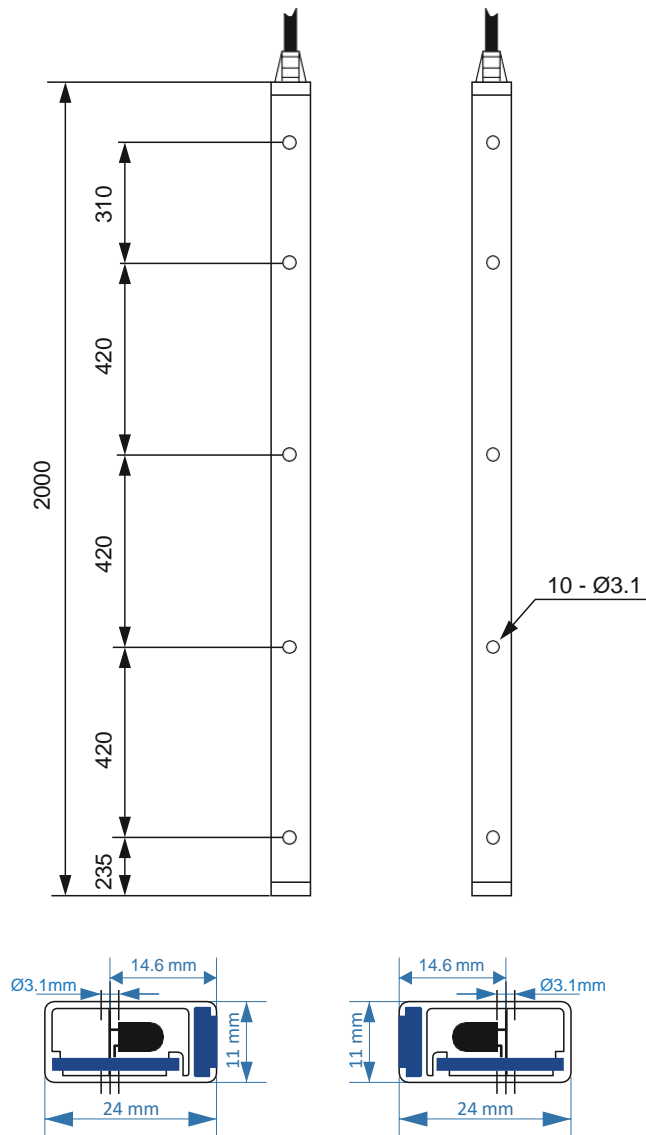
LED STATUS:

RED LED : POWER INDICATION

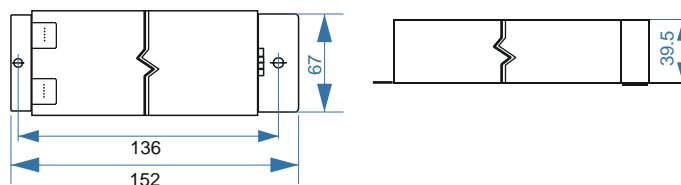
GREEN LED : STATUS INDICATION

OFF : OBSTRUCTED OF ERROR

ON : NORMAL SCANNING



POWER SUPPLY UNIT:



5) Installation Steps:

- A) First, the transmitter (TX) and Receiver (RX) should be fixed on the two sides for 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 interface.
- 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 plates 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.

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 Yellow 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 Yellow 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 tight; 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:

No.	Item Name	Quantity
1	Transmitter (TX)	1 PC
2	Receiver (RX)	1 PC
3	Cables	2 PC
4	Control Box	1 PC
5	Installation Kit	1 PC
6	User Manual	1 PC

Handling Instruction:

