



INTEGRATED 3D DOOR DETECTOR WITH POWER SUPPLY

USER MANUAL

WECO

Version UM.G5.3D3.206.L21.V1



Please follow the instructions in this manual carefully before use and keep it for future reference. Installation must be performed by qualified professionals.

1. BRIEF INTRODUCTION

WECO's integrated 3D monitoring system consists of two independent infrared detecting systems (2D and 3D). The system is based on a traditional set of 2D detectors, but with an additional 3D function, which monitors the entrance area of the elevator doors. The unit is preprogrammed and will automatically work once affixed to the car doors.



DEFAULT SETTING: The default door detector factory setting is for medium sensitivity and permanent 3D activity.

2. INSTALLATION STEPS

2.1 Securely fix the transmitter (TX) and receiver (RX) to the car doors through the fixing holes using the bolts provided. Both the TX and the RX should be installed a minimum of 5mm above the level of the sill.

2.2 Ensure that the labels on the door detectors are facing outwards. When installed correctly, the TX will be on the left hand side and the RX on the right hand side when facing the elevator from the landing.

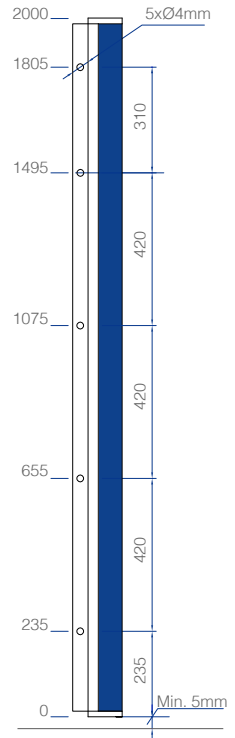
2.3 Install the door detectors as close as possible to the edge of the doors, to avoid the 3D beams being interrupted by the landing doors.

2.4 Ensure that both the receiver and the transmitter are at the same level.

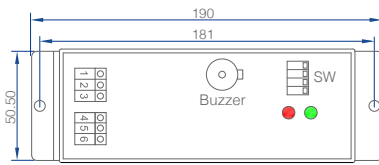
2.5 Fix the power supply to the top of the car. Ensure that the steel cover is grounded.

2.6 Connect the power supply to the input terminals. Connect the output signals to the output terminals.

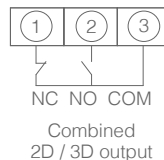
2.7 Connect the cables from the receiver and the transmitter to the input terminals of the door controller. Ensure that both cables can be easily and smoothly bent.



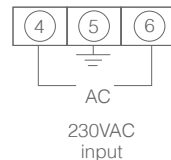
POWER SUPPLY



Power supply 03.G5.PWS.MD



Combined
2D / 3D output



230VAC
input

3. DIP SETTING

3.1 SETUP

MANUAL SETUP (when required by site conditions)

DEFAULT SETTING - 3D CONFIGURATION

1. Switch off the power supply box.
2. Switch SW1 to ON and all other switches to OFF.
3. Make sure there are no obstacles between the 2D door detectors, nor in the 3D zone.
4. Switch on the power supply box. The continuous beeping of the power supply will confirm that the device is in 3D manual configuration mode. Open and close the doors manually 5 times without interrupting the 2D beams nor the 3D zone.
5. Switch SW1 to OFF and allow the door detectors to revert to normal operation.



NORMAL OPERATION

Switch all switches to OFF and the door detector will revert to normal operation.



RESETTING

1. Switch off the power supply box.
2. Switch SW4 to ON and all other switches to OFF.
3. Switch on the power supply box and wait for 2 seconds.
4. Switch SW4 to OFF and the door detectors will revert to factory settings.



3.2 SENSITIVITY

HIGH 3D

1. Switch off the power supply box.
2. Switch SW2 to ON and all other switches to OFF.
3. Switch on the power supply box and wait for 2 seconds.
4. Switch SW2 to OFF and the door detectors will revert to normal operation, with high 3D sensitivity.



MEDIUM 3D

1. Switch off the power supply box.
2. Switch SW3 to ON and all other switches to OFF.
3. Switch on the power supply box and wait for 2 seconds.
4. Switch SW3 to OFF and the door detectors will revert to normal operation, with medium 3D sensitivity.

This is the default factory setting.



LOW 3D

1. Switch off the power supply box.
2. Switch SW2 and SW3 to ON, and SW1 and SW4 to OFF.
3. Switch on the power supply box and wait for 2 seconds.
4. Switch SW2 and SW3 to OFF and the door detectors will revert to normal operation, with low 3D sensitivity.



3.3 3D MODES

PERMANENT 3D OPERATION - DEFAULT SETTING

1. Switch off the power supply box.
2. Switch SW2, SW3 and SW4 to ON, and SW1 to OFF.
3. Switch on the power supply box and wait for 2 seconds.
4. Switch all switches to OFF and the door detectors will revert to normal operation.



i In this mode, the 3D function will be enabled after the 2D detectors are interrupted 5x times.

ANTI-NUISANCE FUNCTION (ANF)

1. Switch off the power supply box.
2. Switch SW2 and SW4 to ON, and SW1 and SW3 to OFF.
3. Switch on the power supply box and wait for 2 seconds.
4. Switch all switches to OFF and the door detectors will revert to normal operation.



The ANF will now activate if the 3D function is triggered more than 5 times in sequence, without the 2D function being triggered. It will temporarily disable the 3D function, leaving only the 2D function active to allow the smooth operation of the elevator.

AUTO RESET

3D auto reset: The 3D function will automatically reset when the 2D beams are subsequently broken or the door panels come within 200mm of each other.

TECHNICAL FEATURES

Protection range	2D: 0-3000mm 3D: 350-1000mm	Protection height	2D: 20-1855mm 3D: 40-1420mm
Response time	<100ms	Light immunity	100,000lux
Input voltage	220VAC±15%, 50/60Hz	Signal output	Relay contact 1 NO & 1 NC
Power consumption	4W	Capacity of signal output	1A/120VAC or 1A/24VDC
Tolerance	Vertical: ±15mm (5°) Horizontal: ±3mm (5°)	Working temperature	-20°C to 65°C
Protection rating	IP54	Class of insulation	≥1500V

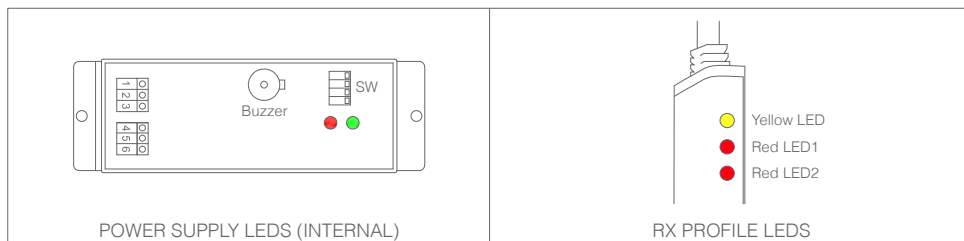
LED INDICATORS AND BUZZER

Yellow LED in RX	Power indicator	Green LED in power supply	Power indicator
Red LED1 in RX	Flash: 3D activated On: Beams interrupted in 3D zone Off: 3D is inactive	Red LED in power supply	On: Beams interrupted or system fault
Red LED2 in RX	On: Beams interrupted in 2D or 3D zone, or system fault	Buzzer in power supply	Intermittent beeping: 3D function is being configured

TROUBLESHOOTING

Neither LED in the receiver is lit.	The cable is broken or not connected.
Both the yellow and red LEDs in the door detector are lit without interruption between the RX and TX.	The plastic filter is too dirty. Other infrared equipment is nearby. The ambient light is stronger than allowed. There is a system fault.
The LEDs of the door detector are lit correctly when interrupted, but the car door doesn't open.	Wrong connection with NC/NO contacts. The output relay is broken. Check the wiring.
The green LED in the power supply is not lit.	The power supply wires are broken or incorrectly connected. The terminal connection is too loose. The power supply is broken and needs to be replaced.

LED INDICATORS



PACKING LIST

Power supply	1 piece	Receiver (RX)	1 piece
Connecting cable	2 cables	User manual	1 copy
Transmitter (TX)	1 piece	Bag of installation accessories	1 set



- This equipment should only be installed by qualified professionals.
- Carefully follow the instructions in this manual.
- Do not drill through the PCB.

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