



Microwave Touchless Switch (ClearWave)

Instruction Manual

The ClearWave is a highly sensitive, high performance switch designed to activate automatic doors by detecting the movement of a person or object. For the safe and accurate use of this product, please read this instruction manual carefully.

1 Technical specifications

Technology : Microwave Motion Sensor
Microwave Module : 24.125GHz
Product Size : 85.9mm x 85.9mm x 20mm (W x L x H)
Detection Range [Hand] : ±5~40cm
Detection Mode : Motion (Bi-directional)
Speed of Target : Min. ±3cm/s, Max. ±1.5m/s

Power Supply : DC 12~30V, AC 12~24V
Current Consumption : < 1.4W
Output : Relay Contact (1A/24VDC)
Output Hold Time : 1.2Sec. (PULSE mode)
Operating Temp/Humidity : -20°C~+60°C/0~90%
International Protection : IP54

2 General Information

Label : A

Label : B

Label : C

Optional Labels

Disassemble Front Case

Use a screwdriver to remove the front case.

3 Installation Guide

1 Affix mounting template and drill holes

2 Waterproof pads are attached to the inner case.

How to remove the Clearwave cover after installation

1. Insert flat headed screwdriver.
2. Turn screwdriver gently anti-clockwise

3 Fix the case to the wall

4 Connect power and relay wires to the terminal block.

POWER DC 12~30V AC 12~24V COM NO NC

Caution

Do not supply power during installation.
 Do not disassemble or modify the device, it may cause fire or electric shock

4 Sensitivity Adjustment

Sensitivity is adjustable by setting the volume on the sensor body

Min.
5cm

Max.
40cm

5 Toggle mode / Pulse mode

Toggle mode : Recommended for Switch applications. In toggle mode, a detection activates the relay and a second detection deactivates it again. In door applications, the door stays open after the first activation.

Pulse mode : Recommended for automatic door applications. In pulse mode, a detection activates the relay for a short period of time (depending on the duration of the movement in front of the sensor).

Toggle mode: Shows a pulse when the door opens and a return to OFF when the door closes.

Pulse mode: Shows a short pulse when the door opens and closes.

6 Mounting Information

1 The sensor can be placed behind tiles, wood, plaster, plastic and glass.

2 Do not place the sensor behind metallic plates.

3 Do not place the sensor in the opening range of the door.

4 Avoid moving objects in front of the sensor