



Microwave Touchless Switch (ClearWave)

Instruction Manual

HOTRON LTD.

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	Power Supply : DC 12~30V, AC 12~24V
Microwave Module : 24.125GHz	Current Consumption : < 1.4W
Product Size : 85.9mm × 85.9mm × 20mm (W × L × H)	Output : Relay Contact (1A/24VDC)
Detection Range [Hand] : ±5~40cm	Output Hold Time : 1.2Sec. (PULSE mode)
Detection Mode : Motion (Bi-directional)	Operating Temp/Humidity : -20°C~+60°C/0~90%
Speed of Target : Min. ±3cm/s, Max. ±1.5m/s	International Protection : IP55

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.

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).

Min. 1s

Relay ON
Relay OFF

DOOR OPENS DOOR CLOSSES

Relay ON
Relay OFF

DOOR OPENS AND CLOSSES DOOR OPENS AND CLOSSES

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.