Project Name: _____

Schedule / Date: _____

Notes: _____

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Product: 12VDC IC Solution Microwave Sensor

Compact Design: Small transparent sensor module, ideal for strip lights and compact linear lighting applications.

Smart Motion Control: 5.8GHz microwave sensing technology provides reliable motion detection with adjustable detection range.

0-10V Dimming: Supports bi-level dimming and corridor function for energy-saving lighting control.

Remote Adjustable: Compatible with HAISEN HD03R remote control. Easily adjust detection area, hold time, daylight threshold, stand-by period, and dimming level.

Easy Wiring: 10–15VDC input with simple 3-wire connection: VCC, GND, and 0–10V control.

Applications: Strip lights / Linear lights / Cabinet lighting / Corridor lighting / Indoor commercial lighting.

Warranty: 5 Years Limited Warranty.

ORDERING GUIDE

SKU	CATEGORY	VOLTAGE	CONTROL	FUNCTION	REMOTE	WARRANTY
91-5501	Microwave Sensor	12VDC	0-10V	Motion Sensing / Daylight Control / Bi-level Dimming	HD03R Compatible	5 Years

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TECHNICAL DATA

ITEM	SPECIFICATION
SKU	91-5501
Product Type	12VDC IC Solution Microwave Sensor
Operating Voltage	10–15VDC
Control Method	0–10V
Operating Current	<30mA
Switching Capacity	<40mA
Wiring	VCC Black/White, GND Pink, 0–10V Purple
Microwave Frequency	5.8GHz ±75MHz
Microwave Power	<0.3mW
Detection Area	25% / 50% / 75% / 100%
Detection Range	Radius 3–7m / 9.84–22.96ft
Detection Angle	360° Ceiling Mounted / 150° Wall Mounted
Mounting Height	2.5–4.5m / 8.2–14.76ft
Hold Time	5s / 30s / 1min / 10min / 20min / 30min
Daylight Threshold	2Lux / 10Lux / 30Lux / 50Lux / 80Lux / 120Lux / Disable
Stand-by Period	0s / 10s / 30s / 1min / 5min / 10min / 30min / +∞
Stand-by Dimming Level	10% / 20% / 30% / 50%
Remote Control	44-33005-A
Operating Temperature	-35°C to +70°C
IP Rating	IP20
Warranty	5 Years Limited Warranty

Project Name: _____

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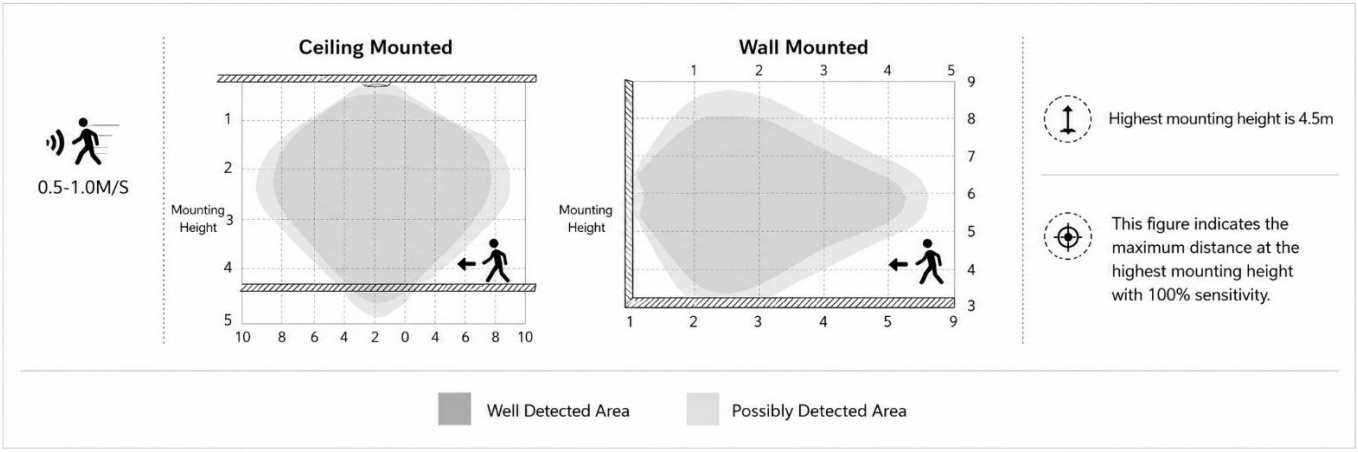
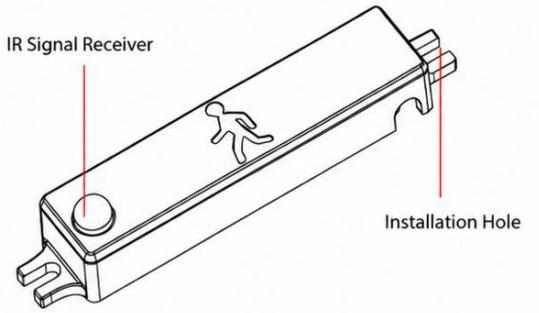
DETECTION PATTERNS

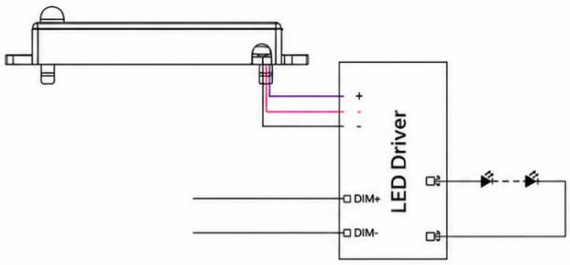


STRUCTURE, WIRING & INSTALLATION

MECHANICAL STRUCTURE



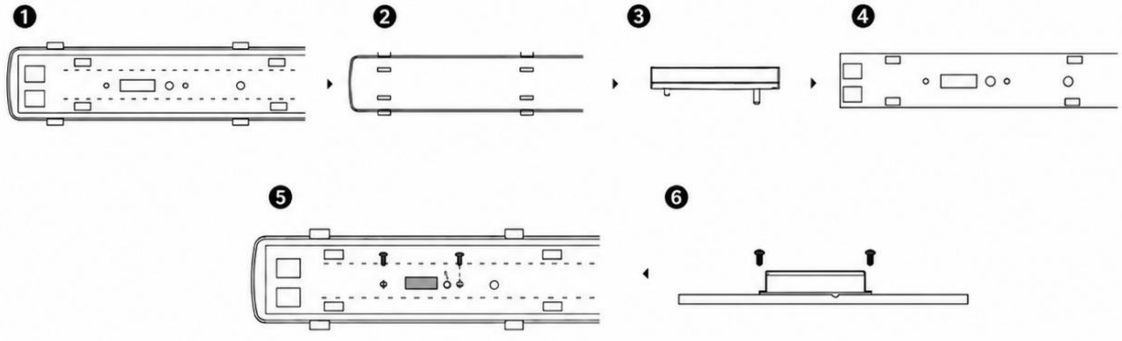
WIRING DIAGRAM



VCC (+)	Black/White
GND (-)	Pink
0-10V (DIM)	Purple

INSTALLATION METHOD

⚠ Please ensure no any metal is shielding the sensor antenna.



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Project Name: _____

Schedule / Date: _____

Notes: _____

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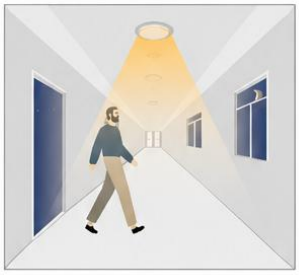
PERFORMANCE

1. Automatically ON/OFF Function

With sufficient daylight, even when motion detected, light remains OFF.



With insufficient daylight, the sensor turns light ON when motion gets detected.

The sensor turns OFF light automatically after the holdtime when there's no motion detected.

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2. Daylight Disable Function

When daylight threshold is preset as "disable", the sensor turns light ON when motion gets detected, and OFF after holdtime.

The sensor turns light ON when motion gets detected.

The sensor keeps light ON for holdtime period after motion leaves.

The sensor turns OFF light automatically after the holdtime.

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3. Corridor Function, Bi-level Dimmable

With sufficient daylight, the sensor keeps light OFF even motion gets detected.

With insufficient daylight, the sensor turns light ON when motion gets detected.

After there's no motion detected, the sensor keeps light ON 100% for holdtime.

After holdtime, sensor dims light to standby dimming level for standby period.

The sensor turns OFF light automatically after the standby period when there's no motion detected.

Hold time
The time period the light remains at 100% after no motion detected.

Stand-by period
The time period the light remains at standby dimming level before turning OFF.

Daylight threshold
The ambient brightness level at which the sensor turns the light ON.

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Attention

1. Please read the instructions carefully before using this product and keep them available for all users.
2. The sensor should be installed by a qualified electrician, and power must be switched off before installation.
3. We reserve the right to modify incorrect text, images, and necessary technical parameters.
4. Any unauthorized modification is forbidden; otherwise all guarantees will be immediately invalid.

Installation Precautions

1. Microwave sensor can be installed in any lamp except one with a full metal shell.
2. The detected surface cannot be shielded by metal objects.
3. Make sure the microwave module is completely exposed outside.
4. The detection surface of the sensor module should face the detection area.
5. Keep the sensor away from the driver to avoid interference and lamp flashing.
6. Wiring must strictly follow the wiring diagram to avoid short circuit.

Application Environment

1. Suitable for indoor installation to avoid false triggering from rain, wind, or tree movement.
2. Do not install in a small space surrounded by metal on all four sides, such as a galvanized iron roof structure.
3. Avoid suspended mounting to prevent false triggering caused by the lamp itself shaking.
4. Do not install next to large operating machines such as ventilators or ceiling fans to avoid false triggering caused by vibration.

User Notes

1. Microwave can penetrate walls or glass thinner than 20 mm, but performance attenuates with thicker materials.
2. Driver voltage should remain stable within ±10% of the operating voltage.
3. Detection area can be affected by motion speed, mounting height, and movement volume.
4. Lux testing is best conducted on sunny days without a lampshade, because the lampshade can affect the measured lux value.