



PLUG & PLAY 12VDC HIGHBAY MICROWAVE SENSOR HD06VCRH 3

  In Accordance With

- Microwave Sensor for max 15M Height
- Plug & Play Design
- Bi-level Dimmable, Daylight Priority
- Remote Control

 On/Off Control

 Detection Area

 Daylight Sensor

 Hold Time

 Stand-by period

 Stand-by dimming level

 15M Highbay

 Remote Control

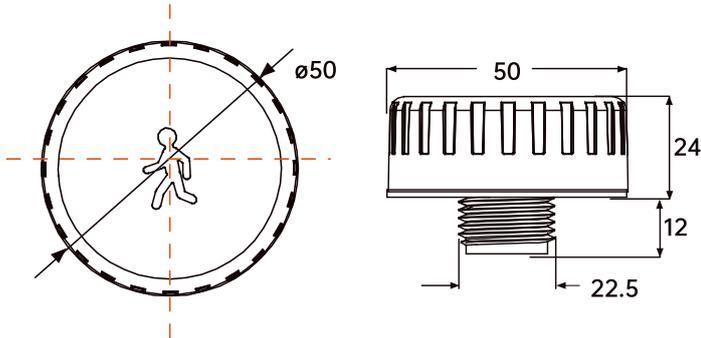
Technical Data

Operating Voltage 10.5-15V DC	Stand-by dimming level 10%/20%/30%/50%	Mounting Height Max. 15m/49.2ft Ceiling Mounted
Operating Current 30mA±5%	Sensitivity Setting 100%/75%/50%/25%	Detection Range Max,ø14m/45.92ft Ceiling Mounted
Output DIM 0-10V	Hold Time 5s/30s/1min/3min/5min/10min/20min/30min	Motion Detection 0.5~1.5m/s
Stand-by power ≤0.5W	Stand-by Period 0s/10s/30s/1min/5min/10min/30min/+∞	IP Rating IP65
Microwave Frequency 5.8GHz±75MHz	Daylight Threshold 2Lux/10Lux/30Lux/50Lux/80Lux/120Lux/Disable	
Microwave Power <0.3mW	Operating Temperature -20°C~+60°C	

Factory Default Setting: Detection area 100%/ Hold time 5s/ Daylight threshold Disable/Stand-by period 0s/ Stand-by dimming level 10%. Can be customized default programming.

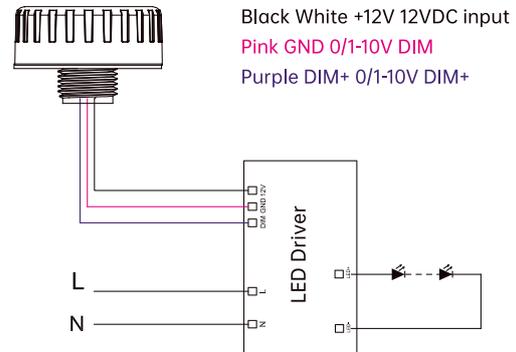
Mechanical structure

Unit:mm

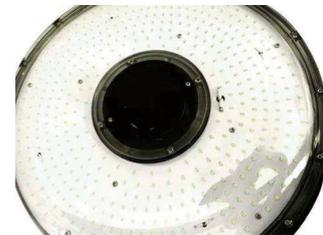
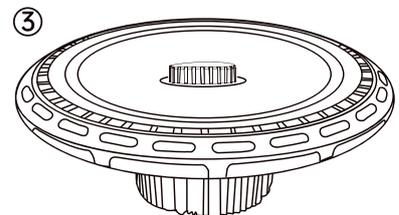
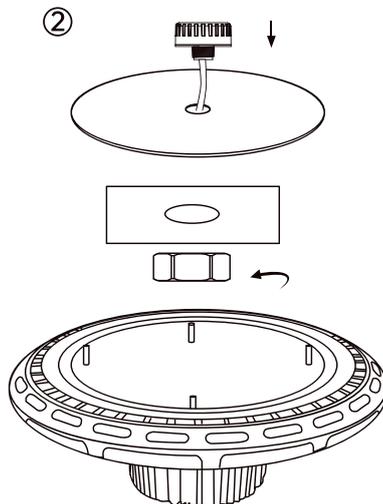
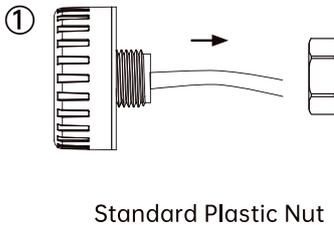
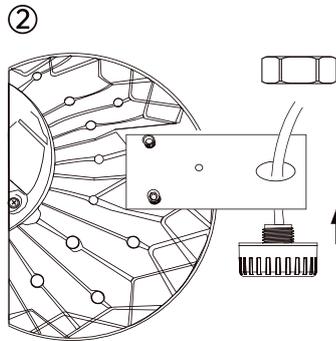
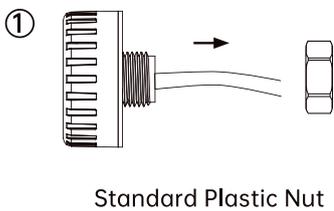


Wiring Diagram

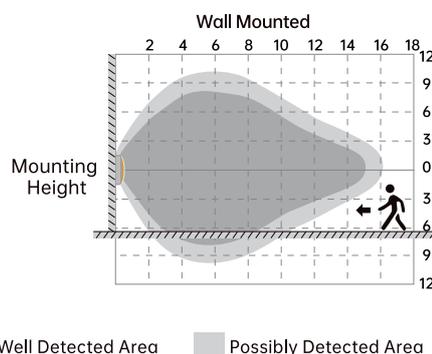
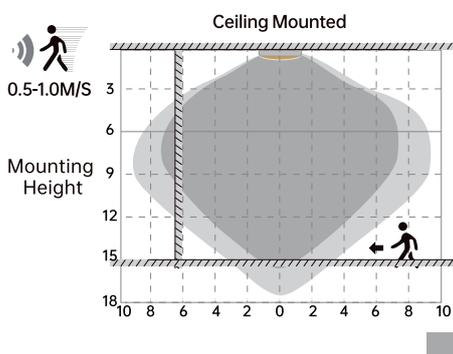
Wire length 330mm, shown-part length about 310mm.



Installation Method



Detection Patterns



Well Detected Area Possibly Detected Area

Highest mounting height is 15m

This figure indicates the maximum distance at the highest mounting height with 100% sensitivity.

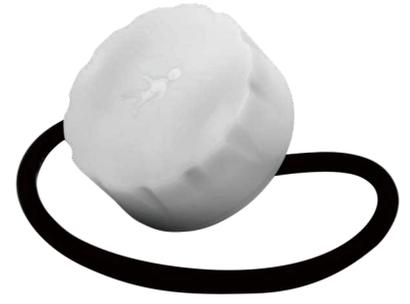
Plug & Play



Base



Empty Cover



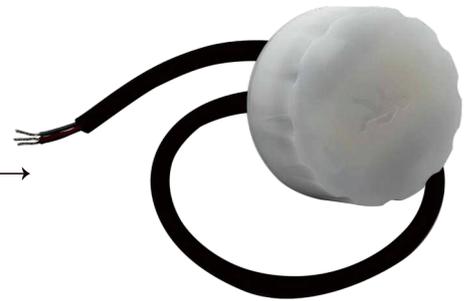
No Sensor



Base



Sensor Module



Motion Sensor



No sensor



Motion Sensor

The bottom part will be always on the lighting fixtures; if the function is needed, the module will be placed inside; if no function needed, the module will be removed. It doesn't hurt the looking of the whole pack.

Daylight Priority

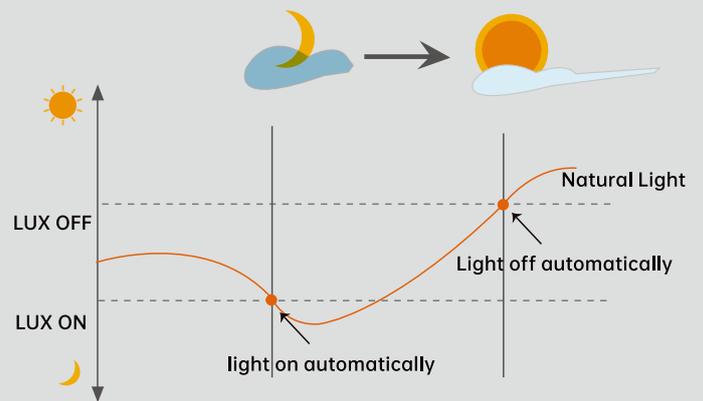
Dusk/Dawn sensor:

Dual-PD technology brings a fully automatic dusk/dawn sensor which can tell the difference between natural light and LED light, to ensure the light will be off when needed.

With Daylight priority function, HD06VCRH 3 is able to differentiate artificial light brightness from natural light after installed inside the fixture, and automatically turn off light when ambient brightness exceeds preset lux level.

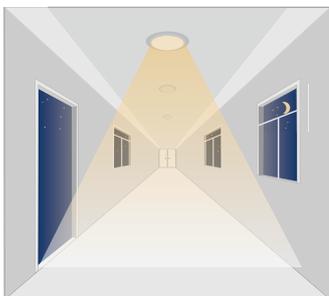
Precondition of Daylight priority:

1. Standby period is $+\infty$;
2. Standby dimming level is on 10%, 20% or 30%;
3. Daylight threshold is on 30Lux, 50Lux, 80Lux or 120Lux.

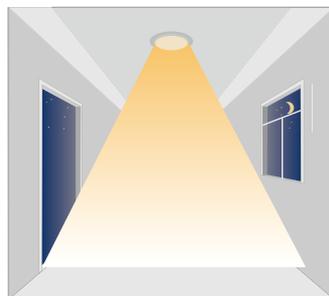


Performance

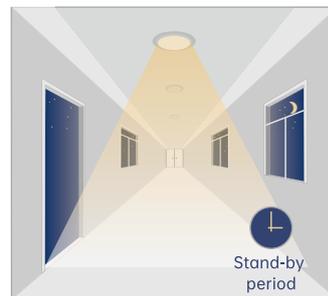
1. Application ☒ ☒ Lux on/off



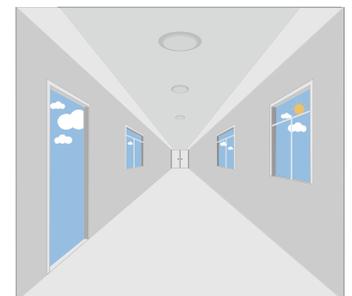
Light automatically on when ambient brightness is lower than preset lux level.



With insufficient ambient brightness, light dims to 100% when motion detected



Light dims to standby level if no motion detected after holdtime.

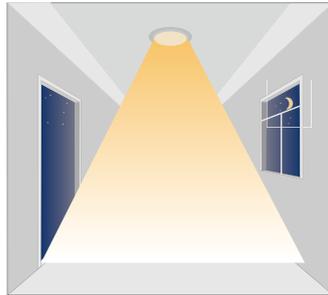


Light off when ambient lux level is higher than preset lux amount.

2. Automatically ON/OFF function



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



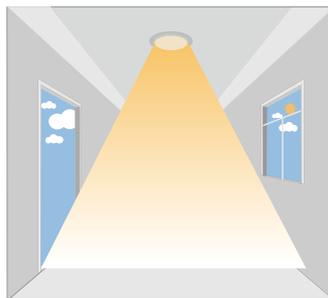
With insufficient daylight, the sensor turns light ON when motion gets detected.



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

3. Daylight Disable

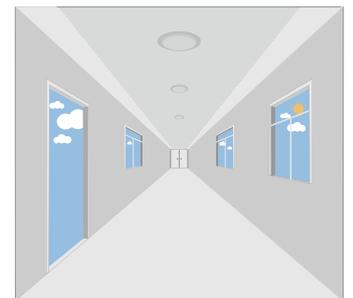
When daylight threshold is preset as "disable", the sensor turns light ON when motion gets detected, and OFF after hold-time.



The sensor turns light ON when motion gets detected.

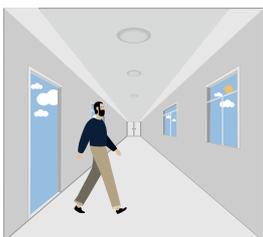


The sensor keeps light ON for holdtime period after motion leaves.

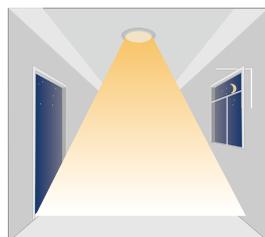


The sensor turns OFF light automatically after the holdtime.

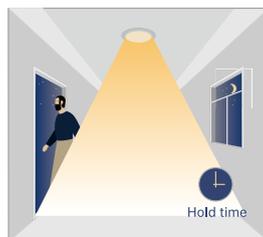
4. Corridor Function, Bi-level Dimmable



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.



Attention

1. Please read the instructions carefully before using this product and keep it well for all users to read at any time.
2. The sensor should be installed by qualified electrician and ensure power is off before the installation.
3. We reserve the right to modify any incorrect text, image 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 the one with 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 shall be installed facing the detection area.
5. Should be kept away from the driver to avoid interference generation and lamp flashing.
6. Wiring must be strictly in accordance with the wiring diagram to avoid short circuit.

Application Environment

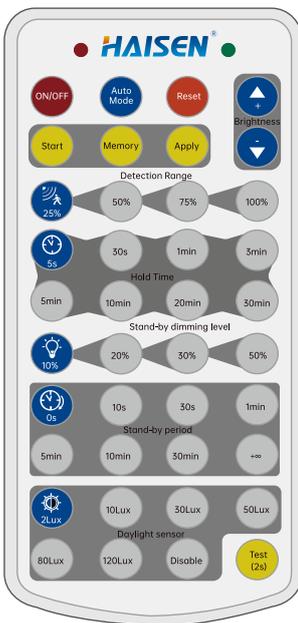
1. Suitable for indoor installation to avoid false triggering due to external factors such as rain, wind or tree swing.
2. Shall not be installed in the place with all four metal shelters and small space (such as galvanized-iron roof).
3. Shall note be mounted installation, so as to avoid false trigger caused by the lamp itself shaking.
4. Shall not be installed next to large operating machines such as ventilator/ceiling fan to avoid false triggering caused by machine vibration.

User Notes

1. Microwave can penetrate walls or glass thinner than <20mm and attenuate if thicker than <20mm.
2. The driver voltage shall be stable and float within 10%.
3. Detection area will be affected by speed of motion, mounting height and movement volume.
4. Conduct test on sunny days without the lampshade which will affect the tested lux value.

REMOTE FOR DIMMABLE SENSORS WITH MEMORY FUNCTION

Model: HD03R



Remote Keys	Function	Performance
	ON/OFF	<ol style="list-style-type: none"> "ON/OFF" key only functions as a switch of the light. If press this button to turn off the lamp before it's short-circuited, the lamp will remain off after power-on again.
	Auto Mode	Press button, the sensor starts to work and all settings remain the same before the light gets switched on/off.
	Reset	<ol style="list-style-type: none"> Press "Reset" button, change brightness to max level. Press button, products with DIP switch will be controlled by DIP switches; otherwise all the setting will be just initial, that is 100% detection range, hold time 5S, no stand-by time and daylight threshold disabled.
	+/-	<ol style="list-style-type: none"> To adjust brightness 10-100% in on/off mode. To adjust highest brightenss 60-100% in sensor mode.
	Start	<p>Press "Start" to customize scene, users can change detection range, daylight threshold, holdtime, standby dimming level and standby period.</p> <ol style="list-style-type: none"> Press "Memory" to save all the settings. The settings remained as the last time if not get reseted values.
	Memory	<ol style="list-style-type: none"> Press "Apply" to deliver the saved setting. Press "Apply" without will make all the setting one-time operation. Settings should be done within 30S, otherwise it exits memory mode.
	Apply	
	Detection area	Detection area (Press to define detection area 100%/75%/50%/25%.)
	Hold time	Hold time (Press to define holdtime 5s/30s/1min/3min/ 5min/10min/20min/30min)
	Daylight Threshold	Stand-by dimming level (Press to define stand-by dimming level 10%/20%/30%/50%.)
	Stand-by period	<p>Stand-by period (Press to define stand-by period 0s/10s/ 30s/1min/5min/10min/30min/+∞.)</p> <p>Note: "0s" means no standby period; "+∞" means unlimited standby period.</p>
	Stand-by dimming level	<p>Daylight threshold (Press to define daylight level 2Lux/ 10Lux/30Lux/50Lux/80Lux/120Lux/Disable.)</p> <p>Note: Disable means light will be turned on once sensor detects movement, regardless of the ambient lux.</p>
	Test mode	The button is for testing purpose after commissioning. Pressing this button, the sensor goes to test mode (hold time is only 2s)

How to Use HD03R

Sensor Programming:

For single sensor testing purpose

1. ON/OFF button to turn on the light
2. RESET button so start programming
3. Choose necessary functional buttons of all the zones: detection area, holdtime, standby dimming level, standby period and daylight threshold
4. Done and leave it; the program has been well kept in the remote now

For project programming purpose

@the 1st sensor

1. ON/OFF button to turn on the light
2. RESET button so start programming
3. START button
4. Choose necessary functional buttons of all the zones, detection area, holdtime, standby dimming level, standby period and daylight threshold
5. MEMORY button to keep the program inside the remote
6. APPLY button to deliver the kept program
7. Done and leave it

@the rest sensors

1. ON/OFF button to turn on the light
2. RESET button so start programming
3. APPLY button to deliver the kept program

Manually dimming:

1. ON/OFF button to turn on the light
2. Press + - Buttons on the right top corner to manually dim up or down the light.
3. Press TEST(2S) button to test if the sensor has been well connected; it will keep light ON for 2S only.