# HAISEN



# 12VDC 可拆卸高空微波感应器 PLUG & PLAY 12VDC HIGHBAY MICROWAVE SENSOR

HD06VCRH 3

**ROHS** C E In Accordance With

- 微波感应, 最高15M安装高度 ●独特的可拆卸式设计 ●三段式调 光; 光感优先功能 •遥控设置
- Microwave Sensor for max 15M Height Plug & Play Design
- Bi-level Dimmable, Daylight Priority Remote Control

On/Off Control 开/关功能



**Detection Area** 探测范围设置



Daylight Sensor 日光阀值设置





Stand-by period 守候时间设置



Stand-by dimming level 守候亮度设置





≦∏ 15M Highbay 15m高安装



Remote Control 遥控设置

# Technical Data 参数规格

工作电压 Operating Voltage 10.5-15V DC	守候亮度设置Stand-by dimming level 10%/20%/30%/50%	安装高度Mounting Height <b>Max. 15m/49.2ft 吸顶安装</b> Max. 15m/49.2ft Ceiling Mounted	
工作电流 Operating Current <b>30mA±5%</b>	探测范围设置Sensitivity Setting 100%/75%/50%/25%	探测范围 Detection Range Max,ø14m/45.92ft 吸顶安装 Max,ø14m/45.92ft Ceiling Mounted 运动检测速度Motion Detection 0.5~1.5m/s	
输出信号 Output DIM 0-10V	延时时间设置Hold Time 5s/30s/1min/3min/5min/10min/20min/30min		
待机功率 Stand-by power ≤ <b>0.5W</b>	守候时间设置Stand-by Period 质保 Warranty 0s/10s/30s/1min/5min/10min/30min/+∞ 5年		
微波频率 Microwave Frequency 5.8GHz±75MHz	日光阀值设置Daylight Threshold 2Lux/10Lux/30Lux/50Lux/80Lux/120Lux/Disable	IP等级 IP Rating <b>IP65</b>	
微波功率Microwave Power <b>&lt;0.3mW</b>	工作温度 Operating Temperature -20°C~+60°C		

出厂默认设置: 探测范围100%, 延时时间5s, 日光阈值"Disable"/守候时间0s/守候亮度10%。可按客户要求更改出厂设置 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.

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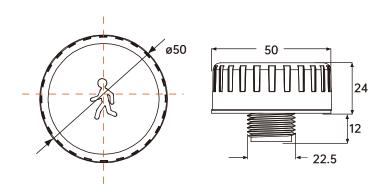
# Mechanical structure 尺寸图

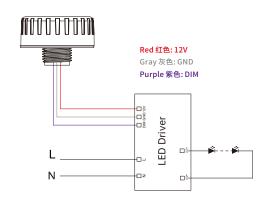
Unit:mm

# Wiring Diagram 接线图

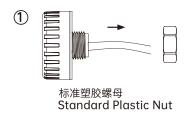
线长330mm 外露310mm左右。

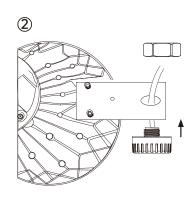
Wire length 330mm, shown-part length about 310mm.

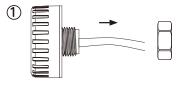




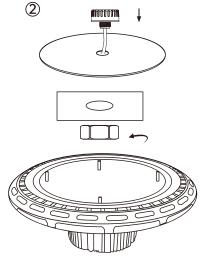
# Installation Method 安装方式

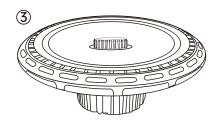






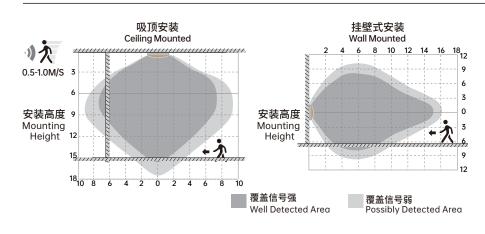
标准塑胶螺母 Standard Plastic Nut







# Detection Patterns 探测范围图

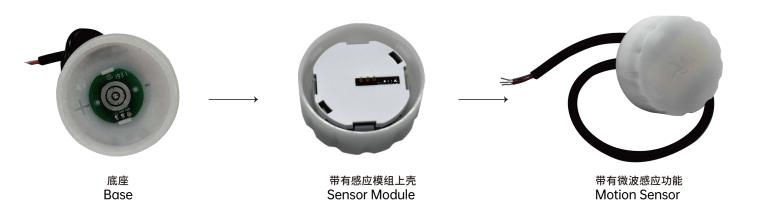


此图表示探测范围为100%时检测距离的参考图。

Highest mounting height is 15m

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







没有感应功能 No sensor



有微波感应功能 Motion Sensor

使用安装案例: 此产品可外置安装, 具有 IP65 防水等级, 如果该灯具需要有微波感应功能, 换有微波感应功能的上壳, 如果不需要微波感应功能, 则换上空上壳, 即满足不同的客户需求也不影响灯具产品的外观。帮助减少您的库存。

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.



# 光感优先功能 Daylight Priority

#### 光感优先功能:

产品采用双 PD 自动区分自然光和人造灯光,当环境自然光照度小于设定值时灯自动亮起,环境光大于设定值时灯自动熄灭。

#### 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.

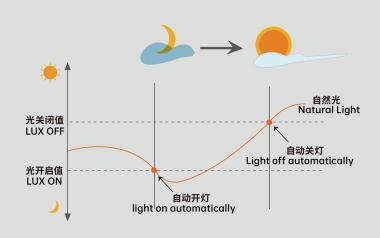
#### Precondition of Daylight priority:

- 1. Standby period is +∞;
- 2.Standby dimming level is on 10% 20% or 30%;
- 3. Daylight threshold is on 2Lux, 10Lux or 50Lux

#### 光感优先功能要满足以下条件:

- 1. 守候时间为+∞;
- 2. 守候亮度为 10%, 20%、30%;
- 3. 日光阀值为 2Lux, 10Lux, 50Lux.

此款产品是采用光感优先功能,它可以自动检测环境光,当外界亮度低于预设值时,灯开启;外界环境亮度超过预设值(不需要灯光)时,灯关闭。



## Performance 功能图示

# 1.Application——Lux on/off 应用场景——光开 / 关功能



当环境亮度小于预设光的开启值 时,自动亮起。

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



感应器检测到有人走动,灯 100% 全亮。

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



延迟时间结束后,感应区再没有人 走动,灯的亮度变暗进入守候时间 状态,直到再次检测到有人走动时 灯全亮,依此循环。

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



当环境光亮度大于光关闭值时, 灯自 动熄灭。

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



# 2.Automatically ON/OFF function 自动开/关功能



环境光亮度充足时,即使检测到运动,感应器也不亮灯。

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



当环境光亮度不足时, 检测到运动 后, 感应器自动亮灯。

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



感应器检测不到运动后,自动进入 延时时间,延时时间后自动关灯。

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

# 3.Daylight Disable 光感不受控功能

当自然光阈值设定为disable时, 即完全不考虑自然光亮度, 感应器检测到运动即亮灯。

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



检测到运动后, 感应器自动亮灯。

The sensor turns light ON when motion gets detected.



感应器检测不到运动后,自动进入 延时时间。

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



延时时间后自动关灯。

The sensor turns OFF light automatically after the holdtime.

# 4.Corridor Function, Bi-level Dimmable 三段式调光功能



环境光亮度充足时,即使检测 到运动,感应器也不亮灯。

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



当环境光亮度不足时, 检测到 运动后, 感应器自动亮灯。

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



感应器检测不到运动后,自动进入延时时间;延时时间 段内灯亮100%。

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



延时时间后,感应器自动进入守候时间,保持守候亮度。

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



守候时间结束后,感应器自 动灭灯。

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





# Attention 注意事项

- 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.
- 1、使用本产品前请仔细阅读使用说明,并妥善保管以便所有使用者随时参阅。
- 2、感应器应由专业的电工安装,并确保在安装前,切断电源。
- 3、我们将保留对任何错误文字或图像以及必要的技术参数做出修改的权利。
- 4、未经授权不得擅自修改感应器,否则一切签约保证将立即失效。

# Installation precautions 安装注意事项

- 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.

- 1、除全金属壳灯具外,微波感应器可内置安装在其它 任意灯具内。
- 2、微波感应面不能有金属物体遮挡。
- 3、开孔安装时,确保微波模块应完全裸露在外,否则 会导致灯常亮或不灭。
- 4、感应模组探测面应面对检测区安装, 否则会导致无感应或灯常亮。
- 5、应与驱动保持距离,否则会产生干扰,导致灯闪。
- 6、须严格按照接线图接线,否则会导致感应器短路。

#### Application Environment 应用环境

- 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.
- 1.适用于室内安装, 以免外界因素如下雨、刮风或树木 摆动而误触发微波感应器。
- 2.避免安装在四面都有金属遮挡物,且空间狭小的地方(如铁皮房),以免造成灯常亮等自激现象。
- 3.避免悬挂式安装,以免灯具自身摇晃引起的误触发。
- 4. 避免安装在大型运作的机器旁(如抽风机 / 吊扇),以免机器震动引起误触发。

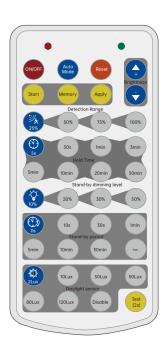
#### User Notes 用户须知

- 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.
- 1.除金属外, 微波可穿透墙壁或玻璃 (<20mm), 但会有衰减。
- 2. 驱动电压需稳定,不能超出或低于工作电压 ±10%
- 3.微波感应器会受安装环境、灯具、测试人员身形和速度的影响,探测范围会有所差异。
- 4. 测试所得的 Lux 值会受灯具安装方式和灯罩材料的 影响, 建议在没有灯罩的晴天进行测试。



# REMOTE FOR DIMMABLE SENSORS WITH MEMORY FUNCTION

# 支持设置记忆与一键发送 配合调光功能感应器



Remote Keys <sup>遥控按键</sup>	Function 按键功能	Performance 按键介绍
ON/OFF	ON/OFF 开/关功能	1. "ON/OFF" key only functions as a switch of the light. 2. If press this button to turn off the lamp before it's short-circuited, the lamp will remain off after power-on again. 1. 开 / 关灯常亮长灭模式; 2. 关闭微波感应模式
Auto Mode	Auto Mode 自动模式	Press "Auto Mode" button, the sensor starts to work and all settings remain the same before the light gets switched on/off.  "此键为模式切换, 在 ON/OFF 模式下按此键切换到感应模式, 且保留进入 ON/OFF 模式之前的感应设置参数。
Reset	Reset 重置/复位	1.Press "Reset" button, change brightness to max level.  2.Press "Reset" 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.  此键为复位键, 返回出厂默认设置(默认值为探测范围 100%, 延迟时间 5s, 无守候时间, 光感不受控), 如果产品带有拨码即返回拨码设置的状态。
00	+/-调光按键	1. To adjust brightness 10-100% in on/off mode. 2. To adjust highest brightenss 60-100% in sensor mode. 此键可以调灯光亮度, 在开关模式下调节范围为 10-100%; 在感应模式下调节范围为 60-100%。
Stort	Start 开始设置键	Press "Start" to customize scene, users can change detection range, daylight threshold, holdtime, standby dimming level and standby period.  1. Press "Memory" to save all the settings.  2. The settings remained as the last time if not get resetted values.  1. Press "Apply" to deliver the saved setting.
Memory	Memory 存储/保存键	2. Press "Apply" without "memory" will make all the setting one-time operation.
Apply	Apply 发送指令键	3. Settings should be done within 30S, otherwise it exits memory mode.  先按 start 键开始自定义场景存储, 按了此键开始设置探测范围 / 延时时间 / 守候亮度 / 守候时间 / 光感阀值的设置, 设置完成再按 Memory 键保存, 应用该存储模式时, 按 Apply 按键一键发送功能。 注意:设置时有时间限制,在开始设置之后, 按键与按键设置之间的时间间隔是 <30s, >30s 就会自动退出该设置模式。
<b>2</b>	Detection area 检测范围	Detection area (Press to define detection area 100%/75%/50%/25%) 即检测区域大小或探测灵敏度强弱的设置, 分别为: 25%/50%/75%/100%。
<b>③</b>	Hold time 延迟时间	Hold time (Press to define holdtime 5s/30s/1min/3min/5min/10min/20min/30min) 指人离开感应区后灯亮度保持不变的时间设置, 分别为: 5s/30s/1min/3min/5min/10min/20min/30min。
	Daylight Threshold 守候亮度	Stand-by dimming level (Press to define stand-by dimming level 10%/20%/30%/50%.) 守候亮度是与守候时间结合同时使用的, 在守候时间时的亮度设置, 分别为:10%/20%/30%/50%。
	Stand-by period 守候时间	Stand-by period (Press to define stand-by period 0s/10s/30s/1min/5min/10min/30min/+∞.) Note: "0s" means no standby period; "+∞" means unlimited standby period. 即延时时间结束灯的亮度变暗进入等候的这段时间为守候时间,为别是: 0s/10s/30s/1min/5min/ 10min/30min/+∞。(注意:"0"指的无守候时间; "+∞"指的是守候时间为无穷大)。
	Stand-by dimming level 日光感应	Daylight threshold (Press to define daylight level 2Lux/10Lux/30Lux/50Lux/80Lux/120Lux/Disable.) Note: Disable means light will be turned on once sensor detects movement, regardless of the ambient lux. 也叫光敏阀值,指检测环境的亮度值,分别为: 2Lux/10Lux/30Lux/50Lux/80Lux/120Lux/Disable。(注意: 选择Disable 时,即光感关闭,运动感应优先,有人来灯即亮,光感不工作)。
Test (2s)	Test mode 测试模式	The button "Test (2s)" is for testing purpose after commissioning. Pressingthis button, the sensor goes to test mode ( hold time is only 2s ) 测试 2s 按键为测试模式, (探测范围为 100%, 延迟时间 2s, 守候亮度10%, 守候时间 0s, 光感不受控)。此键无记忆。



#### How to Use HD03R

# **Sensor Programming:**

# For singla 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 programing 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.

## HD03R 遥控使用步骤

#### 感应设置

- 1、ON/OFF键开灯
- 2、RESET键进入感应设置
- 3、选择各个功能区不同的数值参数进行设置(依次分别是灵敏度,延时时间, 守候亮度,守候时间与光感阀值)
- 4、设置完成,自动保存在遥控器内。感应器即执行操作

#### 以上方法通用于测试或者单独几个感应器时的操作;

如果是对全部感应器进行设置,建议使用此遥控器的特色功能"一键存储与发送",步骤如下:

#### 遥控器对准第一个感应器做如下操作:

- 1、ON/OFF键开灯
- 2、 RESET键进入感应设置
- 3、START键开启设置记忆功能
- 4、选择各个功能区不同的数值参数进行设置(依次分别是灵敏度,延时时间,守候亮度,守候时间与光感阀值)
- 5、设置完成按MEMORY键
- 6、APPLY键直接发送设置
- 7、设置完成

#### 操作第二、三台和后面的感应器时做如下操作:

- 1、ON/OFF键开灯
- 2、RESET键进入感应设置
- 3、APPLY键直接发送设置
- 4、设置完成

#### 手动调光

- 1、ON/OFF键开灯
- 2、按右上角+-键自动加减调光;常亮状态下的最低亮度60%,最高亮度100%