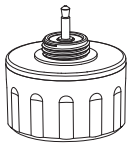
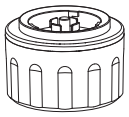
merryfek®

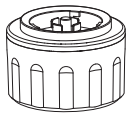
High Mounted Sensor User's Manual



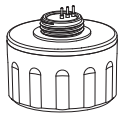
MC079D 99 DI



MC079D 99 Z



MC079D 99 ZB



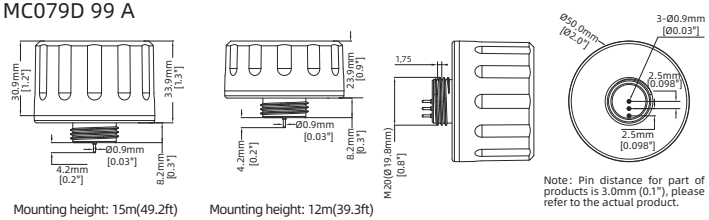
MC079D 99 A

c UL us LISTED CE III

EN
Instruction
MI250702A0

DIMENSION(mm)

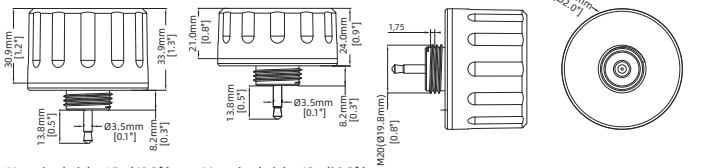
MC079D 99 A



Note: Pin distance for part of products is 3.0mm (0.1"), please refer to the actual product.

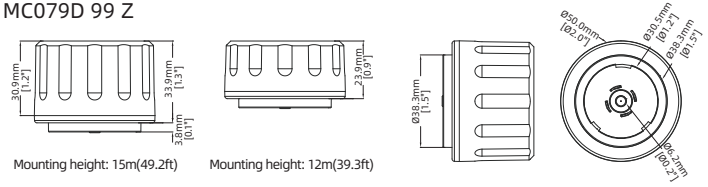
Mounting height: 15m(49.2ft) Mounting height: 12m(39.3ft)

MC079D 99 DI



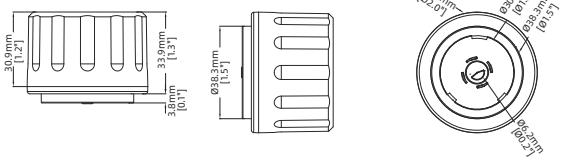
Mounting height: 15m(49.2ft) Mounting height: 12m(39.3ft)

MC079D 99 Z



Mounting height: 15m(49.2ft) Mounting height: 12m(39.3ft)

MC079D 99 ZB

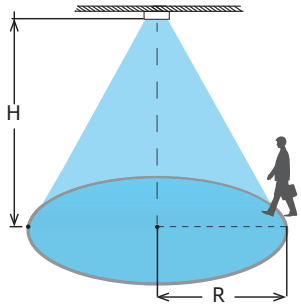


SPECIFICATIONS

Model	MC079D 99 DI	MC079D 99 Z	MC079D 99 ZB	MC079D 99 A
Interface	Earphone	zhaga book18	zhaga book18	Thimble
Rated voltage	12±1Vdc			
Rated current	<30mA			
Working mode	0 -10VDC dimming signal			
Transmitting Power	3mW Max.			
Detection mode	Microwave doppler radar			
Operating frequency	5.8GHz ±75MHz, ISM band			
Daylight sensor	5lux/15Lux/30Lux/50Lux/100lux/150lux/Disable			
Daylight harvesting (see note 1)	200Lux/300Lux/400Lux/500Lux/600Lux/700Lux			
Daylight priority (see note 1)	ON	5Lux/15Lux/30Lux/50Lux	100Lux	150Lux
	OFF	150Lux	200Lux	300Lux
Stand-by DIM Level	10%/20%/30%/50%			
Detection area	≥9.84ft(3m) @ceiling mounting height 32.8ft (10m)			
Mounting height	19.7ft-49.2ft(6m-15m), typical 39.3ft (12m)			
Operating temperature	-35℃~+60℃			
Storage temperature	-40℃~80℃, humidity ≤85% (non-condensing)			
IP Rating	IP65 (INDOOR USE ONLY)			
Installation requirements	Plug in installation			
Warranty	5 years warranty @Ta, indoor use only			

Note 1: Daylight priority or daylight harvesting function is not included in all models, which only can be required by customer before leaving factory.

DETECTION AREA

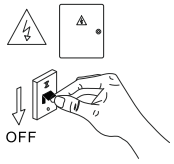


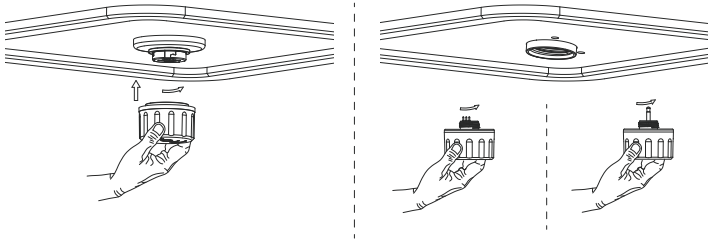
Detection area (R)				
Detection sensitivity / Mounting height (H)	100%	75%	50%	25%
6m(19.6ft)	≥5m(16.4ft)	≥3.5m(11.4ft)	≥2m(6.5ft)	≥1m(3.2ft)
8m(26.2ft)	≥6m(19.6ft)	≥4m(13.1ft)	≥3m(9.8ft)	≥2m(6.5ft)
10m(32.8ft)	≥6m(19.6ft)	≥4m(13.1ft)	≥3m(9.8ft)	No detection
12m(39.3ft)	≥6m(19.6ft)	≥4m(13.1ft)	≥3m(9.8ft)	No detection
15m(49.2ft)	≥5m(16.4ft)	≥3.5m(11.4ft)	No detection	No detection

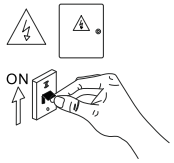
INITIALIZATION

1. On/Off function/3-Step dimming function: the sensor turns on the light at 100% brightness, and will be turned off after 10 seconds. During initialization, the sensor is not able to detect movement.
2. 2-Step dimming function: the sensor turns on the light at 100% brightness. After 10 seconds, it dims the light to low light level (the brightness set by stand-by dim level). During initialization, the sensor is not able to detect the movement.

INSTALLATION







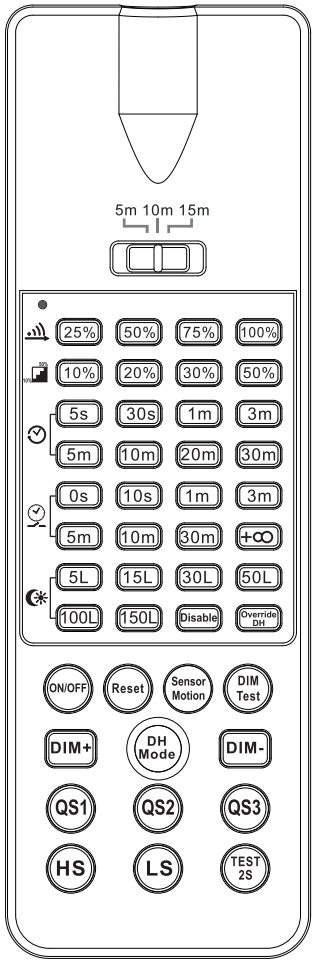
CAUTION

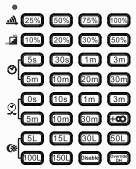
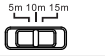
1. The installation work, maintaining work and electrical wiring etc., and these must be done by qualified person(s), or the equivalent.
2. Please refer to wire diagram before wiring, cut off power before wiring.

APPLICATION NOTICE

1. Sensor should be installed by a professional electrician. Please turn off power before installing or wiring.
2. The distance is related to factors such as the moving speed of the moving object, the size of the moving object, the installation height, the installation angle, whether the installation environment is open, and the material of the reflector. The detection distance given in the specification is a typical value, it is 165cm/65kg people who walks in an open indoor environment.
3. The daylight threshold is in a sunny environment, no shadows, and ambient light diffuse reflection conditions. In different periods, climates, and environments, the daylight value detected by the light sensor may be different.
4. Sensor parameters may need to be reconfigured in different installation environments, please refer to the following instructions or contact the manufacturer.
5. This sensor is only for indoor use, outdoor use may be false triggered by wind and rain, and surrounding moving objects.
6. The installation height of the sensor product cannot exceed 15(49.2ft) meters, and the suitable height is 10(32.8ft) meters; the distance between the two sensors should be greater than 3(9.8ft) meters.
7. When the sensor is installed in a metal lamp, on a metal reflective surface, or in a narrow closed environment, the microwaves will be reflected multiple times and cause false triggering. Please reduce the sensor sensitivity or contact the manufacturer for technical support.
8. Sensor is compatible with different 0-10V driver but dimming effect will be different.
9. DC regulated power supply with stable output voltage and low ripple coefficient must be used. The ripple of the power supply should be less than 100mV ; the load current should be greater than 100 mA.

Remote Control Setting



Function	Button	Remarks
Reset	Reset	Short press to reset the sensor, and light flash once, restoring the sensor parameters to the default factory settings
Parameters & configuration		Set the corresponding parameters according to the icons, and the light will flash once upon successful setup (see Figure 1 for more details).
Enable high/ low sensitivity mode	HS LS	Short press “LS” to enable Low Sensitivity Mode, the lamp will flash once upon successful setup. This mode can be applied in highly reflective environments where the sensor is unable to turn off the light. Short press “HS” to enable High Sensitivity Mode, the lamp will flash once upon successful setup.
Enable daylight priority mode	DH Mode	Long press to enable Daylight Priority Mode, the lamp will be turned on when the lux level is below pre-set turn-on value and turned off when lux level exceeds the pre-set turn-off value (see Figure 2).
Override daylight priority mode	Override DH	Press Override DH to override daylight priority mode, and sensor parameters will be the last configured settings.
Quick setting	QS1 QS2 QS3	Short press QS1, QS2, or QS3 (QS: Quick Setting) to quick set multiple parameters of the light (as shown in the table below). The light will flash once upon successful setup.
Dim level	DIM+ DIM-	Short press DIM+ to increase the dim level (see Figure 1) by 2% each time. Long press to continuously increase the brightness. Short press DIM- to decrease dim level by 2% each time. Long press to continuously decrease the brightness, with a minimum brightness of 50% (The minimum brightness of some products can be adjusted to 15%. Please refer to the actual product for specific details.)
Disable sensor mode/ light permanently on/ off	ON/OFF	Short press ON/OFF to turn off the sensor function. The light can be controlled to stay permanently on or off. In permanently on mode, the light stays permanently on after reconnecting power. And in permanently off mode, the light turns on for 2 seconds and then stay off after reconnecting power.
Enable sensor mode	Sensor Motion	Short press to restore the sensor function. The light will flash once after successful setting, and sensor parameters will be the last configured settings.
Factory test mode	TEST 2S	Press to enter Factory Test Mode. The light will flash once upon successful setting
Dim test	DIM Test	Short press this button, and the light will automatically dim and return to trigger brightness. This button can be used to check if the dimming function of the light is working properly.
Remote distance		Toggle button to set the remote distance of the remote control. For example, it can be set to 15m for warehouses.

Icons	Parameter Items	Options
	Detection Sensitivity	25%/50%/75%/100%
	Stand-by Dim Level	10%/20%/30%/50%
	Hold Time	5s/30s/1min/3min/5min/10min/20min/30min
	Stand-by Period	0s/10s/1min/3min/5min/10min/30min/+∞ (+∞: stand-by period +∞)
	Daylight Sensor	5Lux/15Lux/30Lux/50Lux/100Lux/150Lux/Disable (Disable: daylight sensor disable)

Options	Light ON below	Light OFF exceeds
5Lux/15Lux/30Lux/50Lux	5Lux/15Lux/30Lux/50Lux	150Lux
100lux	100lux	200Lux
150lux	150lux	300Lux

Note: Daylight priority is not available for sensors with 12m Max. mounted height version.

Quick Setting	Dection Area	Hold Time	Stand-by period	Stand-by dim level	Daylight Sensor	High/ Low sensitivity
QS1	100%	5min	10min	10%	30Lux	HS (High sensitivity)
QS2	100%	10min	30min	10%	Disable	HS (High sensitivity)
QS3	100%	20min	30min	10%	Disable	HS (High sensitivity)

Press to enter Factory Test Mode. The light will flash once upon successful setting

Detection Area	Hold Time	Stand-by Period	Stand-by Dim Level	Daylight Sensor
100%	2S	0S	N/A	Disable

Fig.1

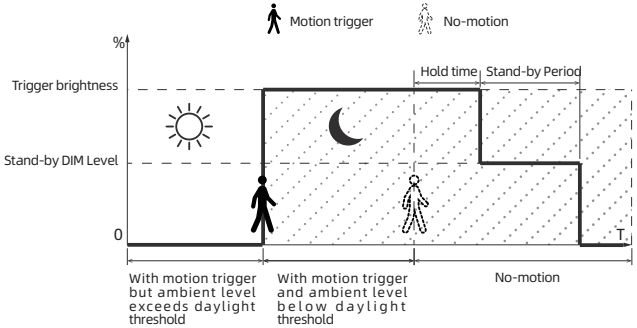
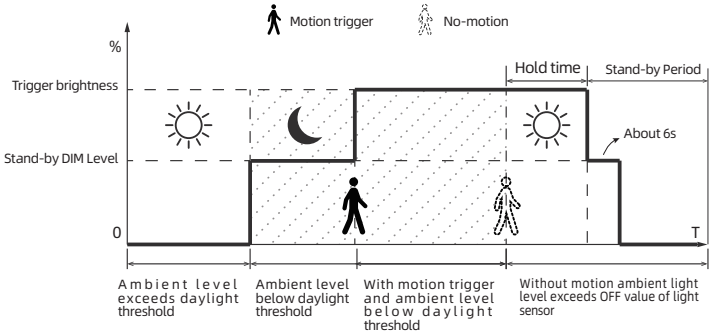
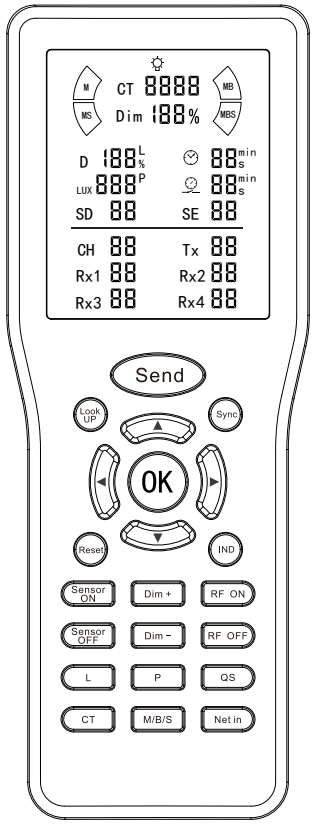


Fig.2



Remote Control Setting



Function	Button	Remarks
Screen wake-up	Send	Short press to wake the screen when off
One-click transmission of all parameters		Short press to transmit the parameters displayed on the screen. The transmission will take 3-5 seconds, during this period, make sure the remote control is aimed at the sensor. The lamp will flash once if transmit successfully.
Transmit a single parameter	OK	Short press to transmit the flashing parameter on the screen, and the light will flash once after successful transmission
Parameters & configuration	▲ ◀ ▶ ▼	Press " ▲▼ " button to select parameter items, and press " ◀▶ " to choose desired gear or value. 1. General parameters (see Figure 1) Icons / Parameter Items / Options: D / Detection Sensitivity / 100%/75%/50%/25% LUX / Daylight Sensor / 5lux/15lux/30lux/50lux/100lux/150lux/999 (999: daylight sensor disable) SD / Stand-by Dim Level / 15%/20%/30%/50% Hold time / 5s/30s/1min/3min/5min/10min/20min/30min Stand-by Period / 0s/10s/1min/3min/5min/10min/30min/99 (99: stand-by period +∞) 2. Other parameters Icons: Tx / Rx1 Rx2 Rx3 Rx4 / SE / CH Not applicable
Enable low sensitivity mode	L	Short press to enable low sensitivity mode for a single product, the screen will display "L" and the lamp will flash once after successful setting. This mode can be applied in highly reflective environments where the sensor is unable to turn off the light
Enable daylight priority	P	Short press and the screen display "P" to enable daylight priority mode, the lamp flashes once after successful setting. The lamp will be turned on when the lux level is below pre-set turn on value and turned off when lux level exceeds the pre-set turn off value(see Figure 2). Short press "P" to quit daylight priority mode. The lamp flashes 1 time. "P" will not displayed on the screen. Setting / Light ON below / Light OFF exceeds: 5Lux/15Lux/30Lux/50Lux / 5Lux/15Lux/30Lux/50Lux / 150Lux 100lux / 100lux / 200Lux 150lux / 150lux / 300Lux Note: Daylight priority is not available for sensors with 12m Max. mounted height version.
Dim level	Dim + / Dim –	Short press Dim + to increase the dim level by 2% each time. Long press to continuously increase the brightness. Short press Dim – to decrease dim level by 2% each time. Long press to continuously decrease the brightness, with a minimum brightness of 50%(Some of version can dim to 15%, please refer to the actual product).
Quick setting	QS	Long press to save parameters displayed on the screen to the QS (Quick Setting) mode. When need to quickly set parameters for a single lamp, briefly press this button to recall the stored parameters, then short press Send to quickly configure each parameter, the light will flash once after successful setting.
Disable sensor mode/ light normally OFF	Sensor OFF	Short press to turn off the sensor function. The light will flash once after successful setting. If multiple products are in the same group, briefly press to turn off the sensor function for all products in the same group. Long press to turn off the light, which can be controlled to permanently OFF. If there are several lights in the same group, all lights will be OFF.
Enable sensor mode/light normally ON	Sensor ON	Short press to restore the sensor function. The light will flash once after successful setting, and sensor parameters will be the last configured settings. If multiple products are in the same group, briefly press to turn on the sensor function for all products in the same group. Long press to turn ON the light, which can be controlled to permanently ON. If there are several lights in the same group, all lights will be ON.
Reset	Reset	Briefly press to reset the sensor, and light flash once, restoring the sensor parameters to the default factory settings.
Turn the screen backlight on/off	IND	Long press to turn the screen backlight on/off. Short press to turn the sensor indicator on/off (if available).

Enable wireless settings options/ wireless networking function	RF ON	Not applicable
Disable wireless settings options/ wireless networking function	RF OFF	
Look up	Look UP	
Synchronize	Sync	
Network pairing	Net in	
Color temperature control	CT	
Switch sensor mode	M/B/S	

Fig.1

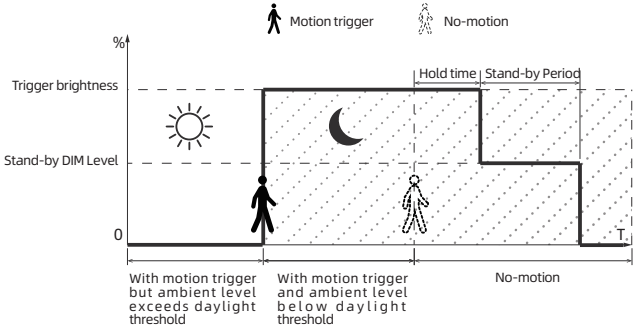
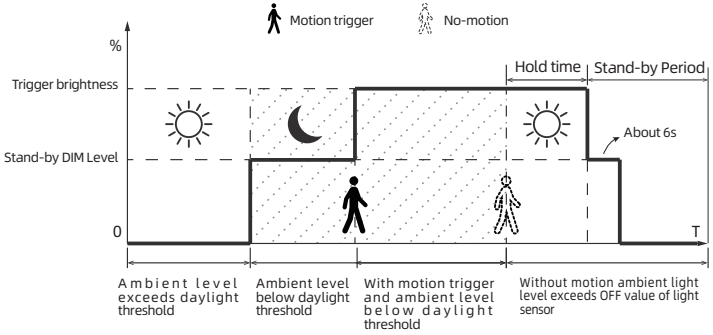
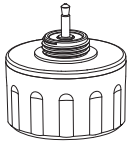


Fig.2

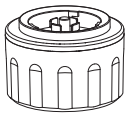


merryfek®

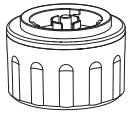
高安装感应器用户手册



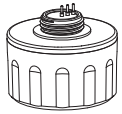
MC079D 99 DI



MC079D 99 Z



MC079D 99 ZB



MC079D 99 A

c UL us LISTED CE III

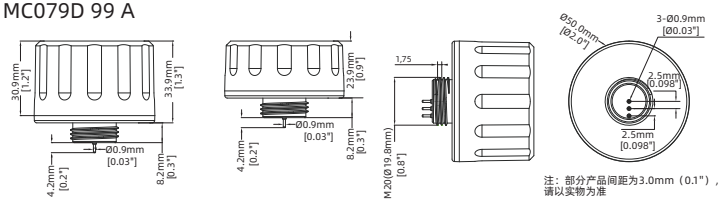
CN

使用说明书

MI250702A0

尺寸 (mm)

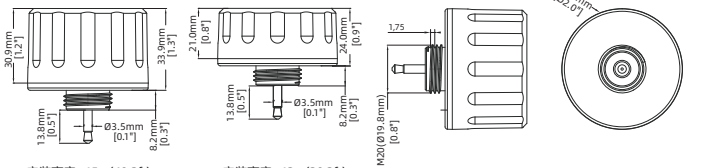
MC079D 99 A



安装高度 : 15m(49.2ft)　安装高度 : 12m(39.3ft)

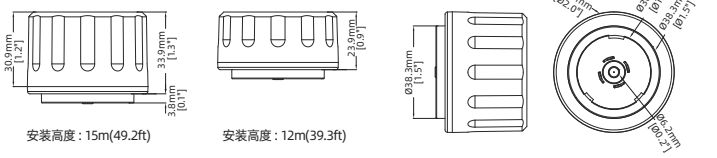
注：部分产品间距为3.0mm（0.1"），请以实物为准

MC079D 99 DI



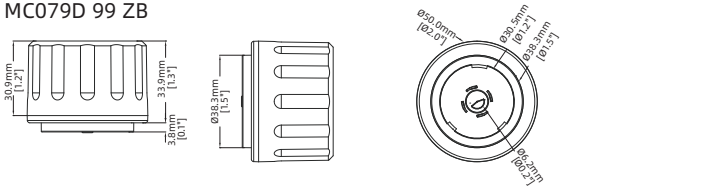
安装高度 : 15m(49.2ft)　安装高度 : 12m(39.3ft)

MC079D 99 Z



安装高度 : 15m(49.2ft)　安装高度 : 12m(39.3ft)

MC079D 99 ZB

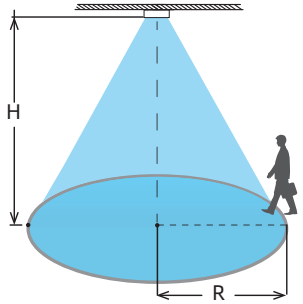


参数

型号	MC079D 99 DI	MC079D 99 Z	MC079D 99 ZB	MC079D 99 A
接口	耳机接口	zhaga book18	zhaga book18	三针接口
额定工作电压	12±1Vdc			
额定电流	<30mA			
工作模式	0-10Vdc 调光信号			
传输功率	3mW Max.			
检测模式	微波多普勒雷达			
工作频率	5.8GHz ±75MHz, ISM band			
光感阈值	5lux/15Lux/30Lux/50Lux/100lux/150lux/Disable			
光控自适应（见注 1）	200Lux/300Lux/400Lux/500Lux/600Lux/700Lux			
光控优先（见注 1）	开启值	5Lux/15Lux/30Lux/50Lux	100Lux	150Lux
	关闭值	150Lux	200Lux	300Lux
调光比例	10%/20%/30%/50%			
感应范围	≥9.84 英尺 (3m)@ 吸顶安装高度 32.8 英尺（10 米）			
安装高度	19.7 英尺 -49.2 英尺（6 米 -15 米），典型值 39.3 英尺（12 米）			
工作温度	-35℃~+60℃			
储存温度	-40℃~80℃, 湿度≤85%（不凝结）			
防护等级	IP65（仅限室内使用）			
安装要求	插拔快接安装			
质保	5 年质保 @Ta，仅限室内使用			

注 1： 并非所有型号都包含光控优先或光控自适应功能，请在出厂前备注需求，具体功能以实物为准。

感应范围

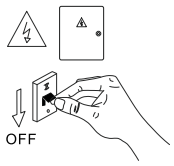


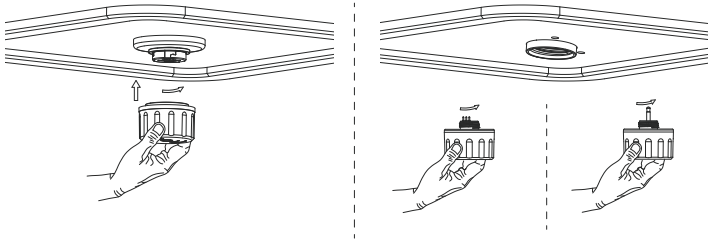
感应范围 (R)				
感应灵敏度 / 安装高度（H）	100%	75%	50%	25%
6m(19.6ft)	≥5m(16.4ft)	≥3.5m(11.4ft)	≥2m(6.5ft)	≥1m(3.2ft)
8m(26.2ft)	≥6m(19.6ft)	≥4m(13.1ft)	≥3m(9.8ft)	≥2m(6.5ft)
10m(32.8ft)	≥6m(19.6ft)	≥4m(13.1ft)	≥3m(9.8ft)	无感应
12m(39.3ft)	≥6m(19.6ft)	≥4m(13.1ft)	≥3m(9.8ft)	无感应
15m(49.2ft)	≥5m(16.4ft)	≥3.5m(11.4ft)	无感应	无感应

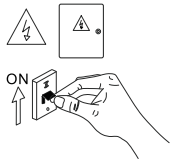
初始化

1. 开关功能 / 三段调光功能：上电后进入初始化，灯亮 10 秒后关闭。在初始化过程中，传感器不检测移动。
2. 两段调光功能：上电后进入初始化，灯亮 10 秒后调暗至低亮度（预设的低亮度）。在初始化过程中，传感器不检测移动。

安装







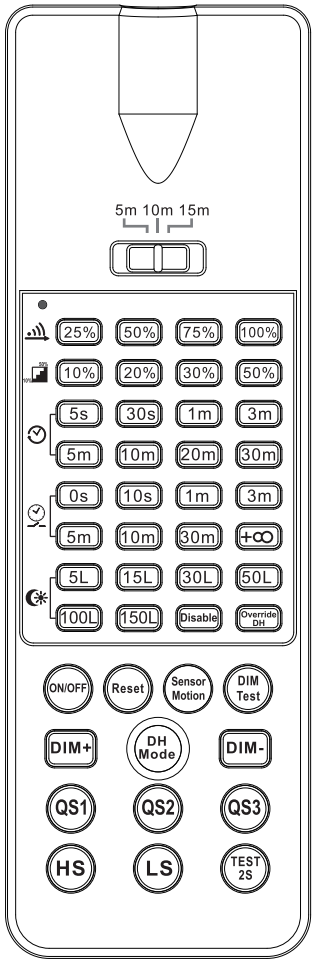
警告

1. 安装工作、维护工作和电气接线等，必须由专业人员完成。
2. 安全及接线前请参考接线图，安装、接线前请先断电。

注意事项

1. 本感应器应有专业电工安装，在安装，接线等之前请先断电。
2. 感应距离与移动物体的移动速度、移动物体大小、安装高度、安装角度、安装环境是否空旷、反射物材质等因素相关。说明书中给出的探测距离均为典型值，为 165cm/65kg 测试人员，在室内空旷环境测试所得。
3. 光感阈值、恒光功能测试是在晴天、自然光照条件充足时完成，实际应用时可能受天气、灯罩、灯光通量的影响。
4. 感应器的参数在不同的安装环境下可能需要重新配置，请参考本说明书或者联系生产商。
5. 本感应器仅限室内使用，户外风雨，及周围移动物体会带来误触发。
6. 感应器产品安装高度不可以超过 15 米，最佳高度为 10 米；两只感应器之间的距离要大于 3 米
7. 当感应器安装在金属灯具内，金属反射面，或者狭小封闭环境，微波会被多次反射并产生误触发，请降低感应灵敏度或者联系生产商提供技术支持。
8. 感应器的调光效果与 LED 驱动相关，最小调光亮度由 LED 驱动决定。
9. 须使用输出电压稳定及纹波系数低的直流稳压电源，供电电源纹波应小于 100mV；负载电流应大于 50mA。

遥控设置



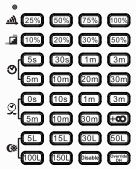
功能	按键	功能描述
重置感应器	Reset	短按重置感应器，感应参数恢复到默认出厂设置，灯具闪烁一次。
参数选择及设置		根据图标按对应所需参数，设置成功灯具闪烁一次(各参数功能见图 1) 图标 | 参数项目 | 档位 感应灵敏度(Detection Sensitivity) | 25%/50%/75%/100% 低亮亮度(Stand-by Dim Level) | 10%/20%/30%/50% 延时时间(Hold Time) | 5s/30s/1min/3min/5min/10min/20min/30min 守候时间(Stand-by Period) | 0s/10s/1min/3min/5min/10min/30min/+∞ (+∞: stand-by period +∞) 光感阈值(Daylight Sensor) | 5Lux/15Lux/30Lux/50Lux/100Lux/150Lux/Disable (Disable: daylight sensor disable)
开启高感 / 低感模式	HS LS	短按 LS 打开低感模式 （Low Sensitivity Mode）， 设置成功灯具闪烁一次； 强反射环境下感应器不能关灯可开启该模式； 短按 HS 打开高感模式（High Sensitivity Mode），设置成功灯具闪烁一次。
开启光控优先模式	DH Mode	长按此键开启光控优先模式(Daylight Priority Mode)；环境光低于设置的开启照度值开灯，高于设置的关闭值关灯，功能见图 2 档位选择 | 开启照度值(ON) | 关闭照度值(OFF) 5Lux/15Lux/30Lux/50Lux | 5Lux/15Lux/30Lux/50Lux | 150Lux 100lux | 100lux | 200Lux 150lux | 150lux | 300Lux 注： 对于最大安装高度为 12m 的传感器，光控优先功能不可用。
退出光控优先模式	Override DH	按 Override DH 可退出光控优先模式，光感值设置恢复到上一次设置。
快速设置参数	QS1 QS2 QS3	短按 QS1, QS2 或 QS3 (QS : Quick Setting) 一键设置该灯的多项参数 (如下表)，设置成功灯具闪烁一次 快速设置 | 感应灵敏度 | 延时时间 | 守候时间 | 低亮亮度 | 光感阈值 | 高/低感 QS1 | 100% | 5min | 10min | 10% | 30Lux | HS(高感) QS2 | 100% | 10min | 30min | 10% | Disable | HS(高感) QS3 | 100% | 20min | 30min | 10% | Disable | HS(高感)
亮度调节	DIM+ DIM-	短按 DIM+ 调亮灯具有人触发亮度（见图 1），每次调亮 2%，长按此键可连续调亮； 短按 DIM- 可调暗灯具亮度， 每次调暗 2%， 长按此键可连续调暗， 最小可调至 50%（部分产品最小亮度可调至 15%，具体请以实际产品为准）
关闭感应模式 / 灯常开或常关	ON/OFF	短按 ON/OFF 关闭感应功能， 同时可控制灯具常亮或常灭； 灯具常亮时断电， 重新上电初始化状态后灯具常亮，灯具常灭时断电，重新上电灯亮 2 秒后常灭；
恢复感应模式	Sensor Motion	短按恢复感应功能，设置成功灯具闪烁一次，感应器参数为最后一次设置的参数。
工厂测试模式	TEST 2S	按下此键进入工厂测试模式，灯具闪烁一次代表设置成功。 感应灵敏度 Detection Area | 延时时间 Hold Time | 守候时间 Stand-by Period | 低亮亮度 Stand-by Dim Level | 光感阈值 Daylight Sensor 100% | 2S | 0S | N/A | Disable
检查调光功能是否正常	DIM Test	短按此键, 灯具自动调光并恢复到触发亮度, 此按键可检查灯具调光功能是否正常。
遥控距离设置		拨动开关壳设置遥控器的发射距离，如仓库可设置为 15m

图1

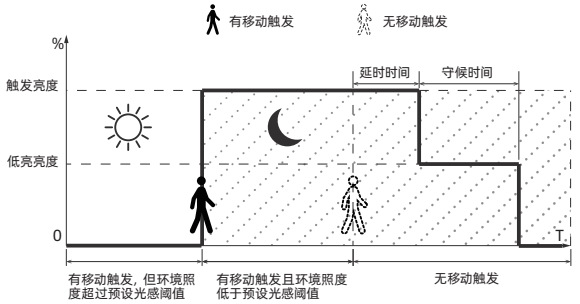
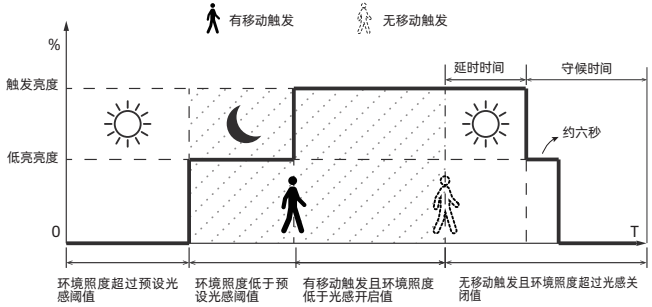
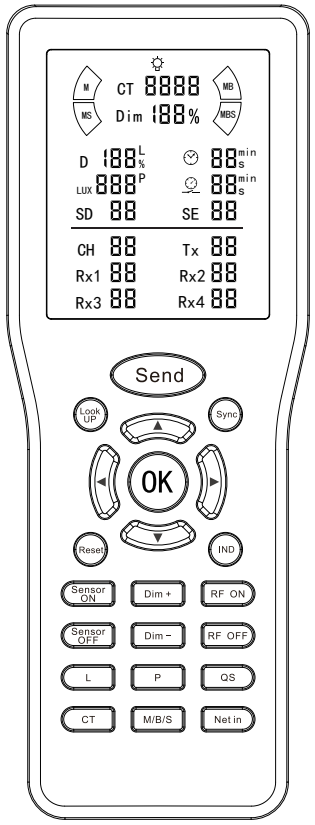


图2



遥控设置



功能	按键	功能描述
屏幕唤醒	Send	熄屏时，短按唤醒屏幕。
一键发射全部参数		短按发射屏幕显示的参数，发射需要 3-5 秒，期间需确保遥控对准感应器，发射成功灯具闪烁一次。
发射单个参数	OK	短按发射屏幕上正在闪烁的参数，发射成功灯具闪烁一次。
参数选择及设置		按“▲▼”上下方向键所需设置的参数项目，按“◀▶”左右方向键选择想要设置的具体档位或数值： 1. 常规参数（见图 1） 2. 其他参数
开启低感模式	L	短按打开单个产品低感模式（Low Sensitivity Mode），设置成功屏幕显示“L”，灯具闪烁一次；强反射环境下感应器不能关灯时可开启该模式。
开启或关闭光控优先	P	短按并在屏幕显示“P”开启光控优先模式（Daylight Priority Mode），设置成功屏幕灯具闪烁一次。低于设置的开启照度值开灯，高于设置的关闭值关灯（见图 2）； 短按“P”退出光控优先模式，灯具闪烁一次，屏幕不显示“P”。
亮度调节	Dim + / Dim –	短按 Dim + 调亮灯具亮度，每次调亮 2%，长按此键可连续调亮； 短按 Dim – 可调暗灯具亮度，每次调暗 2%，长按此键可连续调暗，最小可调至 15%（部分产品仅支持调整为 50%，具体以实物为准）
快速设置参数	QS	长按可将屏幕显示的感应参数存储到 QS（Quick Setting）模式中）； 需要快速设置单个灯具参数时，可短按此键调出已存储的参数，再短按 Send 键快速设置各项参数，设置成功灯具闪烁一次。
关闭感应模式 / 灯常关	Sensor OFF	短按关闭感应功能，设置成功灯具闪烁一次；如有多个产品在同一组，短按可关闭同组产品感应功能； 长按关灯，灯具常灭。
打开感应模式 / 灯常开	Sensor ON	短按恢复感应功能，设置成功灯具闪烁一次，感应器参数为最后一次设置的参数；如有多个产品在同一组，短按可开启同组产品感应功能； 长按开灯，灯具常开。
重置感应器	Reset	短按重置感应器，感应参数恢复到默认出厂设置，灯具闪烁一次。
开 / 关屏幕背光灯 开 / 关感应器指示灯	IND	长按打开 / 关闭屏幕背光； 短按打开 / 关闭感应器工作指示灯（如有）

开启无线设置选项 / 开启无线组网功能	RF ON	本产品不适用
关闭无线设置选项 / 关闭无线组网功能	RF OFF	
查询感应器参数	Look UP	
同步感应器参数	Sync	
进入配网状态	Net in	
切换色温	CT	
切换感应模式	M/B/S	

1. 常规参数（见图 1）

图标	参数项目	档位
D	感应灵敏度(Detection Sensitivity)	100%/75%/50%/25%
LUX	光感阈值(Daylight Sensor)	5lux/15lux/30lux/50lux/100lux/150lux/999(999: daylight sensor disable)
SD	低亮亮度(Stand-by Dim Level)	15%/20%/30%/50%
⏲	延时时间(Hold time)	5s/30s/1min/3min/5min/10min/20min/30min
⏲	守候时间(Stand-by Period)	0s/10s/1min/3min/5min/10min/30min/99(99: stand-by period +∞)

2. 其他参数

图标	Tx	Rx1 Rx2 Rx3 Rx4	SE	CH
	不适用			

图 1

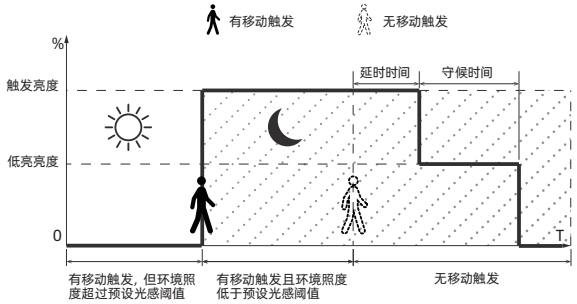
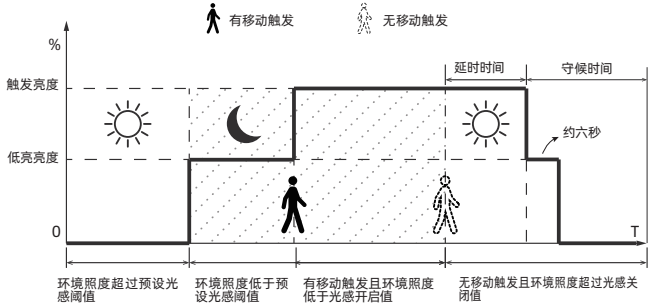



图 2