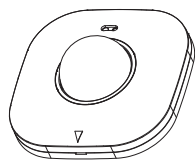


High-mounting PIR motion sensor (DALI+PUSH version)



User's Manual

Instruction
MI250801A0

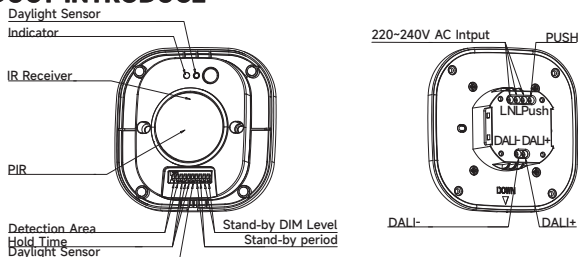
PRODUCT DESCRIPTION

MSA050 IR is a high-mounting PIR motion sensor with daylight detection function. Combined with the uniquesoftware algorithm of Merrytek, it can accurately detect human movements in almost all high-mounting scenario to control lighting automatic ON/OFF or dimming in warehouse, lobby, workshop etc.

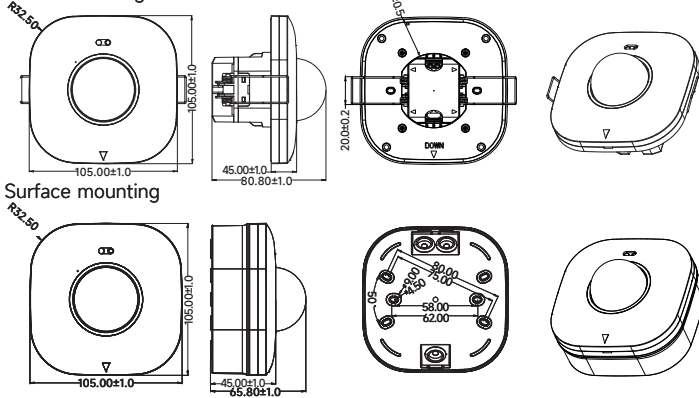
INITIALIZATION

When powered on, sensor indicator will turn off after flashing for 30s and will not detect moving signal during this time. After 30s , you can use our MH10 remote or dip switch to adjust detection area, hold time and daylight sensor etc parameter.

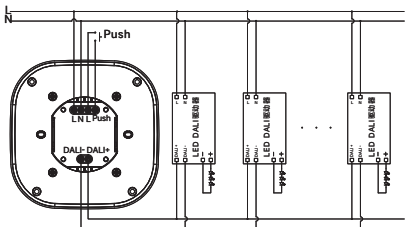
PRODUCT INTRODUCE



DIMENSION(mm)



WIRING INSTRUCTION



Wiring layout suggestion:

1. LN stands for AC input, DALI+DALI- stands for DALI output, PUSH stands for PUSH output, please wiring correctly
2. DALI terminal wiring length shall not longer than 300m and current not higher than 100mA; PUSH terminal wiring length shall not longer than 15m

PARAMETERS

Model	MSA050 IR
Input Voltage	220-240V AC
Rated Voltage	220V AC
Working Current	20mA max
Power Consumption	≤0.5W @220/230V AC
Output Signal	DALI+PUSH DALI terminal: DA+ DA- (Max wire length 300m,Max terminal current 100mA) PUSH terminal : manual dimming+on/off control (Max wire length 15m)
Max. Surge Capacity	1KV(L/N,EN61000-4-5)
Function	PIR motion detection+ daylight sensor
Daylight Harvesting	Available (when daylight harvesting mode is enabled,its dimming range is 10%-100%, and our sensor will automatically be disabled when environment lux is higher than 1000lux and recover enabled when environment lower than 120lux)
Detection Area	DIP /remote setting: 100%/75%/50%/25%
Hold Time	DIP /remote setting:5s/1min/5min/10min/20min/30min
Daylight Sensor	DIP /remote setting:50Lux/Disable
Stand-by dim Level	DIP /remote setting:10%/20%/30%/50%
Stand-by time	DIP /remote setting:0S/1min/10min/∞
Radius detection range (based on 100% sensitivity)	4-5m@25°C based on 8m mounting height
Remote Control	Available
Mounting Height	2.5-10m, typical value:8m
Drill Hole	Φ55mm
Working Temperature	-25°C...+50°C(detection range might differ based on different temperature)
Storage Temperature	-40°C--+80°C
Warranty	5 years (available due to product quality problem under indoor application)
Certificate	Compliant to CE
Environmental Requirements	Compliant to RoHS
IP Rating	IP20(flush mounting) IP54(surface mounting)

DETECTION AREA



- Major motion activates: detect the human significant moving (walking) in the detection area.

Detection sensitivity	100%	75%	50%	25%
Radius detection range based on 8m heigh	4.5-5.0m	3.5-4.5m	3.0-3.5m	2.0-3.0m

Tips: Above data is based on 1.6m height people tangential moving towards sensor by 0.3m/s velocity in 81 m² open area for reference. If any variate changes, the detetction range might be different.

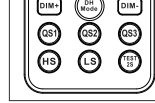
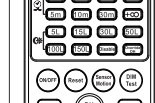
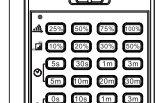
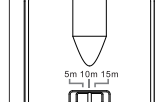
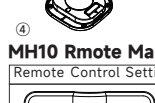
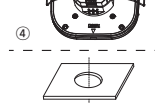
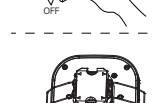
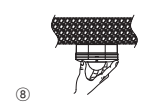
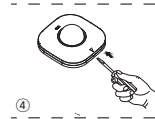
PARAMETER SETTING

ON OFF	Detection Area	100%  1 2	75%  1 2	50%  1 2	25%  1 2		
ON OFF	Hold Time	5s  3 4 5	1min  3 4 5	5min  3 4 5	10min  3 4 5	20min  3 4 5	30min  3 4 5
ON OFF	Daylight Sensor	50Lux  6	Disable  6				
ON OFF	Stand-by Period	0s  7 8	1min  7 8	10min  7 8	+∞  7 8		
ON OFF	Stand-by Dim Level	10%  7 10	20%  7 10	30%  7 10	50%  7 10		

Note:

- ① The upper position of the DIP switch is "ON" , and the lower position is "OFF" . The black square in the diagram indicates the switch is set to that side.
- ② Factory settings: Detection Area:100%; Hold Time: 5s, Daylight Sensor: Disable, Indicator: ON, Stand-by Time: 0s, Stand-by Dim Level: 10%

INSTALLATION



Plastic wall plugs M6x28mm	Self-tapping screws M3.5x26mm	Self-tapping screws M3.5x26mm	Self-tapping screws M3x8mm
①	②	③	④
⑤	⑥	⑦	⑧
⑨	⑩	⑪	⑫
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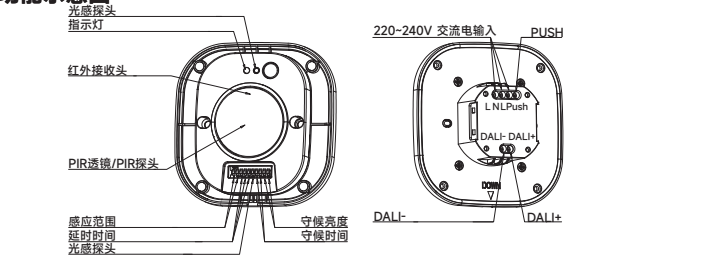
产品介绍

MSA050 IR 是迈睿自主研发的一款支持 10 米高空吸顶安装的智能感应设备。设备采用 PIR 红外探测技术, 可实时感知室内人员或宠物的移动信号, 同时内置光照传感器, 实时感知周围环境的光照强度, 为基于人体感应和环境光照的智能控制场景提供精准的传感信号输入。

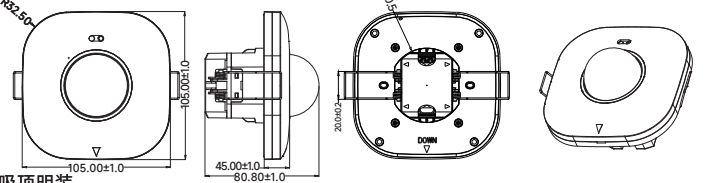
初始化

设备初次通电, 绿色指示灯闪烁 30 秒后关闭, 初始化期间不探测外界移动感应信号, 可通过遥控 / 拨码设置延时时间、探测范围(感应距离)等参数。

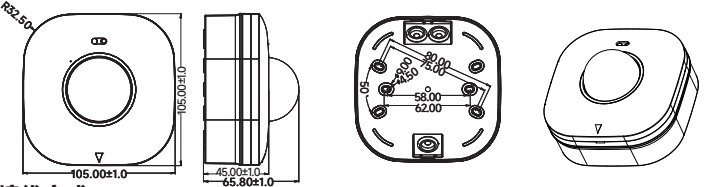
功能示意图



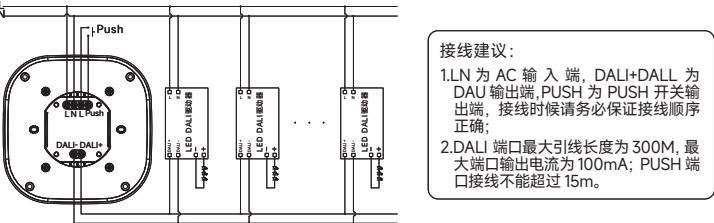
尺寸(mm)
吸顶嵌装



吸顶明装



接线方式



接线建议：
1.LN 为 AC 输入端, DALI+DALI- 为 DAU 输出端,PUSH 为 PUSH 开关输出端, 接线时请务必保证接线顺序正确;
2.DALI 端口最大引线长度为 300M, 最大端口输出电流为 100mA; PUSH 端口接线不能超过 15m。

参数

型号	MSA050 IR
电压范围	220-240V AC
额定电压	220V AC
工作电流	20mA max
工作功耗	≤0.5W @220/230V AC
输出信号	DALI+PUSH DALI 端口: DA+ DA- (最大引线长度为 300M, 最大端口输出电流为 100mA) PUSH 端口: 手动调光+开关 (设置最大工作亮度, PUSH 线不能超过 15 米)
雷击浪涌	1KV/L/N,EN61000-4-5
感应方式	PIR 红外热释电+光感探测
光补偿模式	支持 (光补偿模式下调光范围: 10%-100%, 当环境照度值超过约 1000Lux 感应器关闭, 感应器关闭后需要环境照度值低于约 120Lux 才可正常感应开启)
感应范围	拨码设置: 100%/75%/50%/25%
延时设置	拨码设置: 5s/1min/5min/10min/20min/30min
光感阈值	拨码设置: 50Lux/Disable
调光比例	拨码设置: 10%/20%/30%/20%
守候时间	拨码设置: 0s/1min/10min/∞
探测范围 (100%灵敏度, 半径)	移动 (8m高): 切向行走4-5m@25°C(人体径向运动时比切向运动的感应距离会更近)
遥控功能	支持
安装高度	2.5-10m 典型值: 8m
开孔尺寸	Φ55mm
工作环境温度	-25°C~+50°C (温度越低, 感应距离可能变远, 温度越高, 感应距离可能变近)
储存温度	-40°C~+80°C
质保年限	5年 (仅限产品本身质量问题)
符合认证	CE SAA
环保要求	符合欧盟 RoHS 要求
防护等级	IP20 (吸顶嵌装); IP54 (吸顶明装)

探测区域



- 移动信号: 检测到人体在探测区域内进行大幅度(行走)信号。

档位	100%	75%	50%	25%
安装 8 米高的感应半径(R)	4.5-5.0m	3.5-4.5m	3.0-3.5m	2.0-3.0m

注意: 以上测试数据基于 81 m² 开阔空间, 1.6m 高测试人员以 0.3m/s 切向走向传感器直至触发所得。在不同空间下, 不同体态的人以不同速度走向传感器的触发距离可能有所偏差。

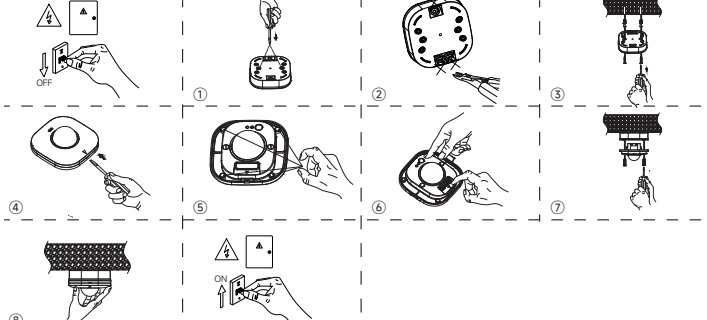
拨码设置

ON OFF	感应范围	100% 1 2	75% 1 2	50% 1 2	25% 1 2		
ON OFF	延时设置	5s 3 4 5	1min 3 4 5	5min 3 4 5	10min 3 4 5	20min 3 4 5	30min 3 4 5
ON OFF	光感阈值	50Lux 6	Disable 6				
ON OFF	守候时间	0s 7 8	1min 7 8	10min 7 8	+∞ 7 8		
ON OFF	调光比例	10% 9 10	20% 9 10	30% 9 10	50% 9 10		

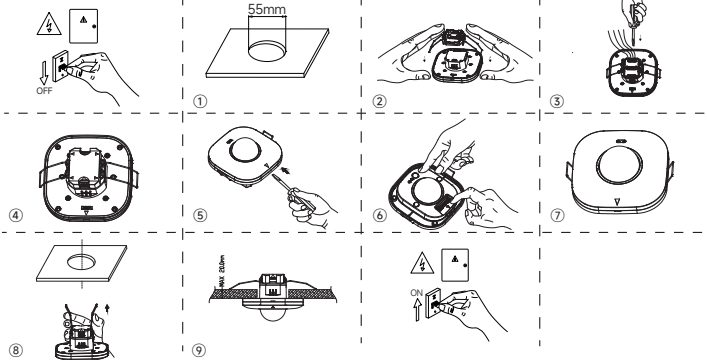
注意:
①拨码开关上方为 ON, 下方为 OFF, 图示黑色小方块代表拨码开关拨向该方向;
②出厂默认设置: 检测范围: 100%, 延时设置: 5S, 光感设置: Disable, 指示灯: 打开, 守候延时: 0s, 调光比例: 10%

安装方式

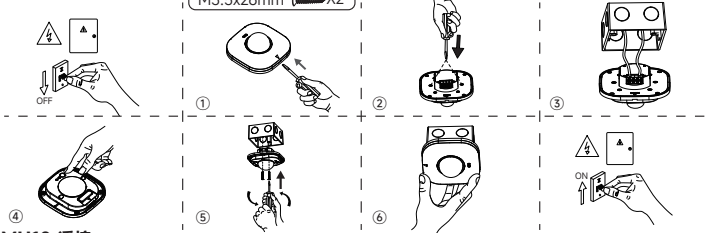
吸顶明装



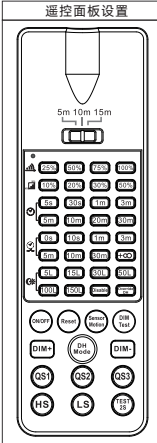
吸顶嵌装



86 盒安装



MH10 遥控

遥控面板设置	按键	功能说明
		感应范围: 25%/50%/75%/100%
		延时时间: 5s/30s/1min/3min/5min/10min/20min/30min
		光感阈值: 5Lux/15Lux/30Lux/50Lux/100Lux/150Lux/Disable (Disable: 光感阈值失效)
		短按感应器进入常亮状态, 感应功能失效
		感应功能恢复同时感应器参数恢复出厂设置
		短按恢复感应功能
		HS: 短按打开指示灯 LS: 短按关闭指示灯