

Specification

Product series: High-mounting PIR motion sensor (DALI2.0 version)

Product model: MSA059D IR

Product version: V1.0

Version	Release/ change Date	Publishing
V1.0	2024.07.15	Jacky

【Product description】

MSA059D IR is a high-mounting PIR motion sensor with daylight detection function and DALI2.0 output. Combined with the unique software algorithm of Merrytek, it can accurately detect human movements in almost all high-mounting scenario to trigger smart scene application in warehouse,lobby,workshop etc.

【Product Feature】

- PIR motion detection
- DALI2.0 output
- Complaint with 101,103,303,304 DALI standard
- Daylight sensor detection available
- Detection area,hold time can be set by remote
- Max detection range: 8-10m in diameter
- 8m max mounting height
- Warehouse,workshop and lobby motion detection highly recommended
- Flush mounting and surface mounting available



【Dimension】

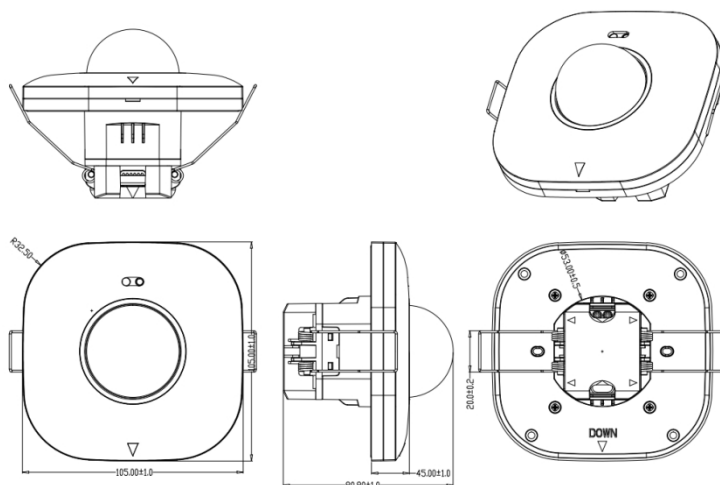
- Product size: 105x105x90.8mm(flush mounting)、 105x105x65.8mm(surface mounting)
- Connection interface: 4-pin terminal

【Parameter】

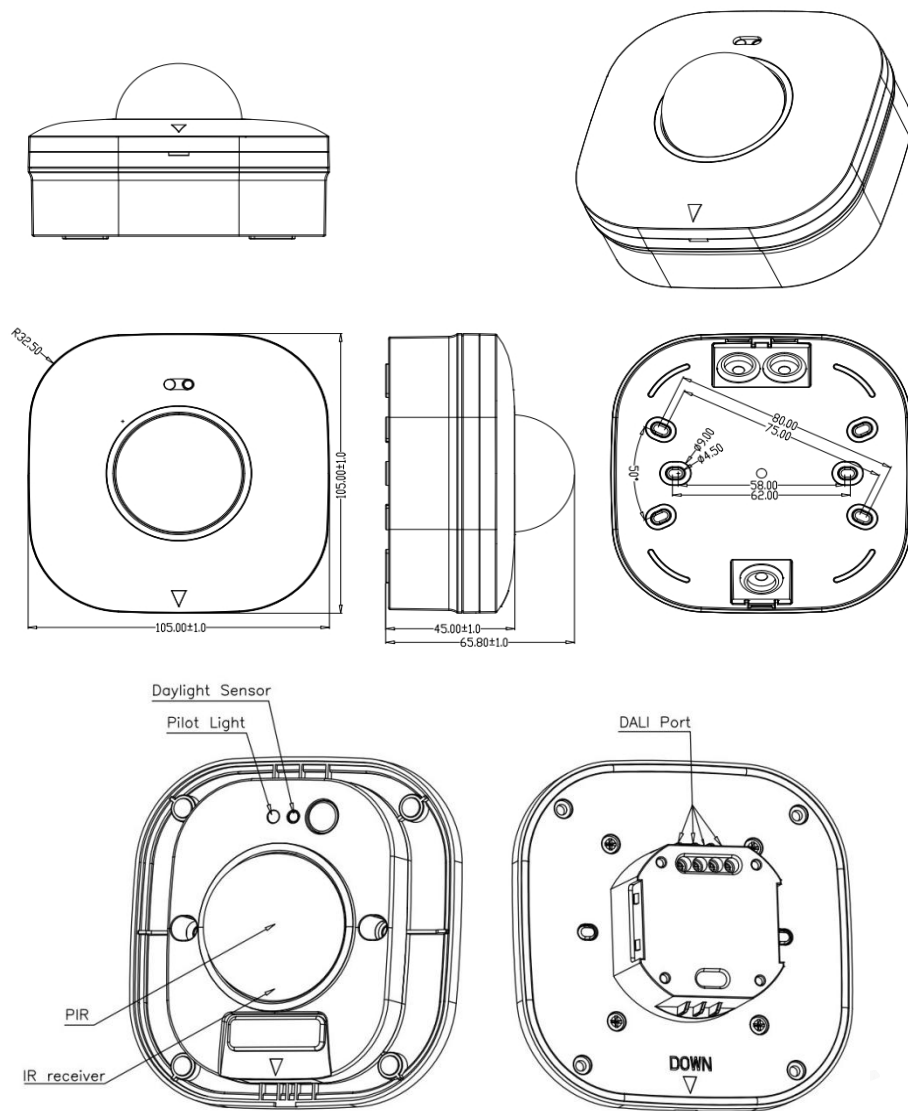
Input/Output	Input voltage	9.5-22.5V DC (DALI BUS power)
	Working current	20mA max
	Power consumption	≤0.5W @12/24V DC
	Output signal	DALI2.0
Sensor parameter	Function	PIR motion detection+ daylight sensor
	Detection Area	DIP or remote setting: 100%/75%/50%/25%
	Hold Time	MH10 remote: 5s/30s/1min/3min/5min/10min/20min/30min
	Daylight measurement	2-65000Lux
	Radius detection range(based on 100% sensitivity)	4-5m@25℃ based on 6m mounting height
	Remote control	Available
	Mounting height	2-8m, typical value:6m
Application environment	Drill hole	Φ65-70mm
	Working temperature	-25℃...+50℃(detection range might differ based on different temperature)
	Storage temperature	-40℃~+80℃
	Warranty	3 years (available based on product quality problem)
Certificate Standard	Certificate	Compliant to CE
	Environmental requirements	Compliant to RoHS
	IP rating	IP20
"N/A" means not available		

【Dimension and Function diagram】

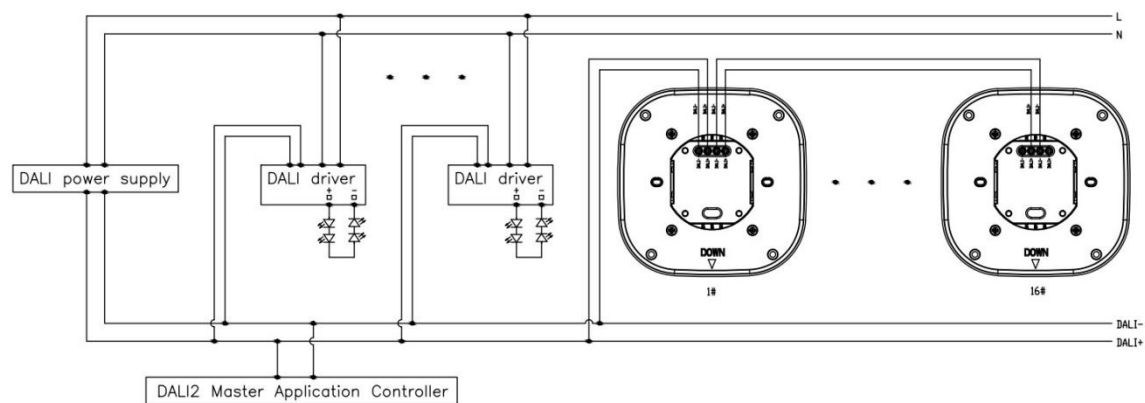
Flush mounting



Surface mounting



【Wiring instruction】



Wiring layout suggestion:

1. In dali bus circuit,we suggest wire layout shall not exceed 300m,and dali driver device not exceed 64pc, our sensor not exceed 16pc to guarantee normal communication

【Initialization】

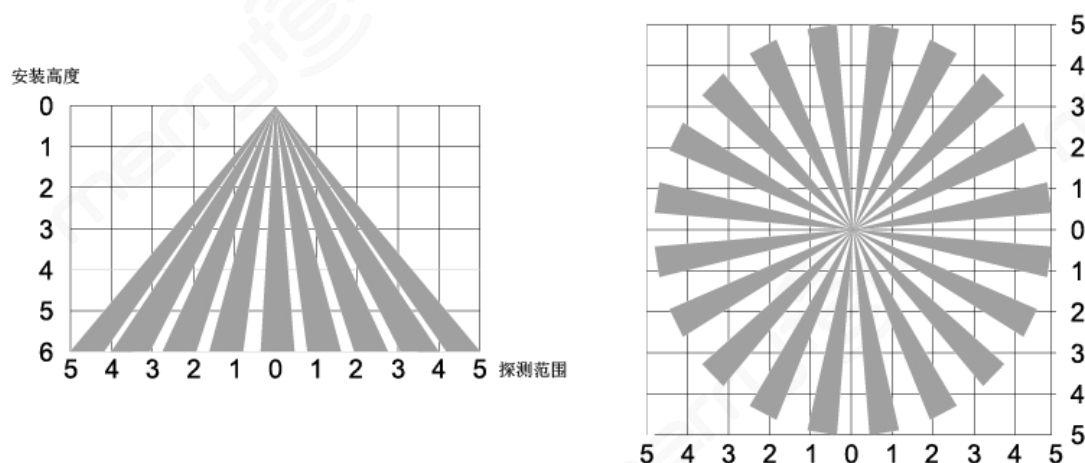
When powered on,sensor indicator will turn off after flashing for 10S and will not detect moving signal during this time. After 10S,you can use our MH10 remote or dip switch to adjust detection area、hold time and daylight sensor etc parameter.

【Factory setting】

Detection Area:100%, Hold Time: 5s

【Detection radiation】

MSA059D IR is highly recommended ceiling flush mounting and its detection radiation is as below shows:

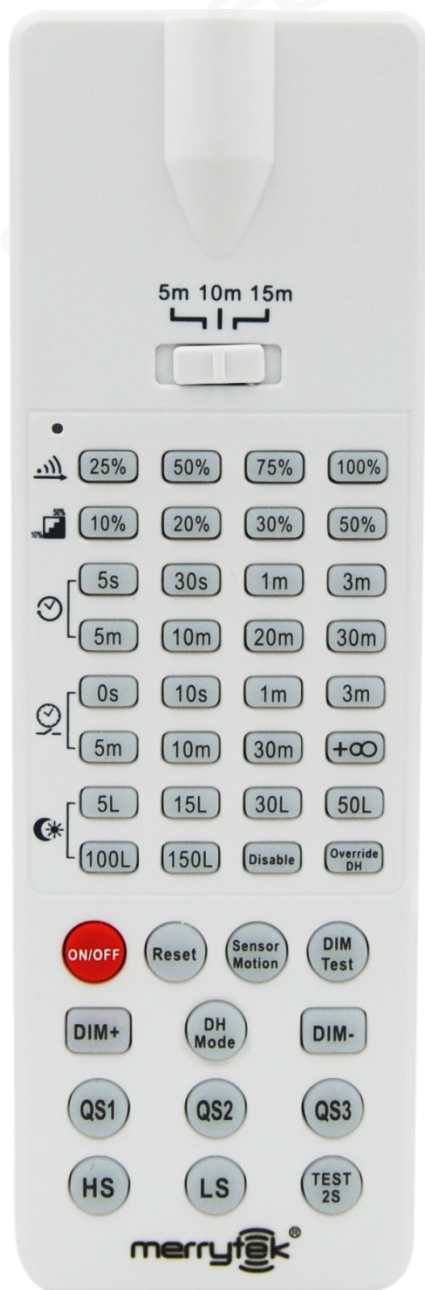


【Detection Signal】

The product detects human moving signals and below is a description of the moving signals:

- **Moving signal:** detect the human significant moving (walking) in the detection area.

【Remote manual】



Detection range: 25%/50%/75%/100%

Hold time: 5s/30s/1min/3min/5min/10min/20min/30min

Daylight threshold: 5lux/15lux/30lux/50lux/100lux/150lux/Disable

ON/OFF: disable sense function

Sensor motion: enable sense function

Reset: all parameter back as factory setting

HS: turn on indicator

LS: turn off indicator

【Disclaimer】

Due to the complexity of product technology and differences in application environment, it is difficult to guarantee a completely accurate or complete description, so this specification is only for user reference. We will reserve the right to make changes to the product specifications without notifying the user, and do not make any commitments and guarantees in the legal sense. At the same time, our company encourages users to supplement or modify the contents of our specifications after using our products.