Specification

Product series: High-mounting PIR motion sensor (ON/OFF version)

Product model: MSA015S IR

Product version: V1.0

Version	Release/ change Date	Reason
V1.0	2024.02.02	Jacky

【Product description】

MSA015S IR is a high-mounting PIR motion sensor with daylight detection function. 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
- Accurate ON/OFF output
- Daylight sensor detection available
- Detection area,hold time and daylight threshold can be set by remote/DIP switch
- Max detection range: 8-10m in diameter
- 8m max mounting height
- Max loading capacity :800w resistive loading and 400w inductive loading
- Warehouse,workshop and lobby motion detection highly recommended
- Flush mounting and surface mounting available

【Dimension】

- Product size: φ85x56mm
- Connection interface: 4-pin terminal

【Parameter】

|		
Input/Output	Input voltage	100-240V AC
	Rated voltage	220V AC
	Power consumption	20mA max
	Output signal	≤0.2W @220V DC
	Load capacity	ON/OFF
	Power consumption	800w resistive loading or 400w inductive loading
Sensor parameter	Function	PIR motion detection+ daylight sensor
	Detection Area	DIP or remote setting: 100%/75%/50%/25%
	Hold Time	DIP: 5s/1min/3min/5min/10min/20min/30min MH10remote:5s/30s/1min/3min/5min/10min/20min/30min
	Daylight Sensor	DIP: 5Lux/50Lux/150Lux/Disable MH10remote: 5Lux/15Lux/30Lux/50Lux/100Lux/150Lux/Disable
	Radius detection range(based on 100% sensitivity)	4-5m 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℃
Certificate Standard	Certificate	Compliant to CE
	Environmental requirements	Compliant to RoHS
	IP rating	IP20
"N/A" means not available		

【Dimension and Function diagram】
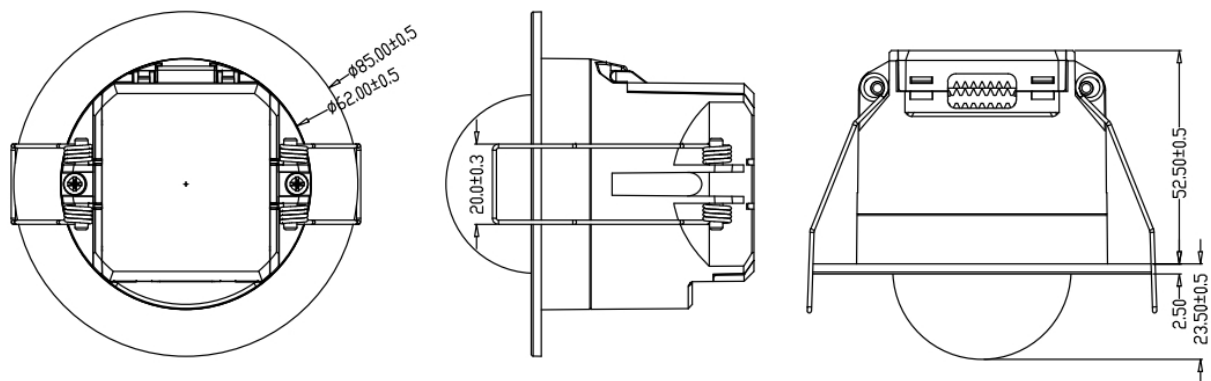
【Wiring instruction】
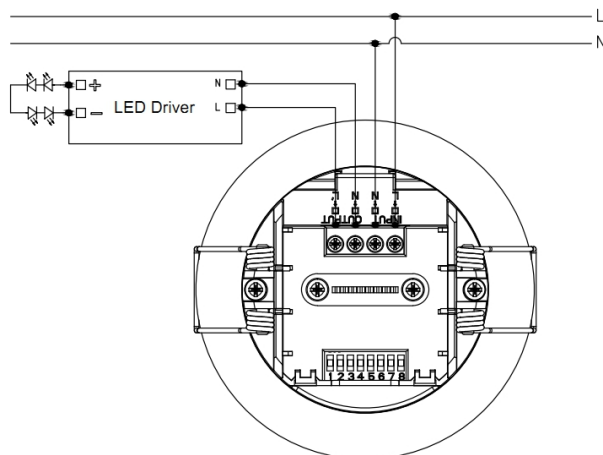
Wiring layout suggestion：

1. LN terminal stands for AC input, L'N' stands for AC output,please wiring correctly

2. One sensor's max loading capacity is 800w resistive loading and 400w inductive loading for one single load.if you want connect more load in one loop,we recommend to add an AC contactor in our output LN terminalto avoid momentary surge overload.

交流固态继电器接线图
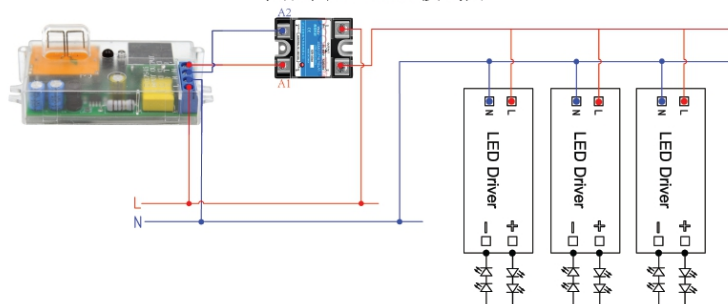
交流接触器接线图
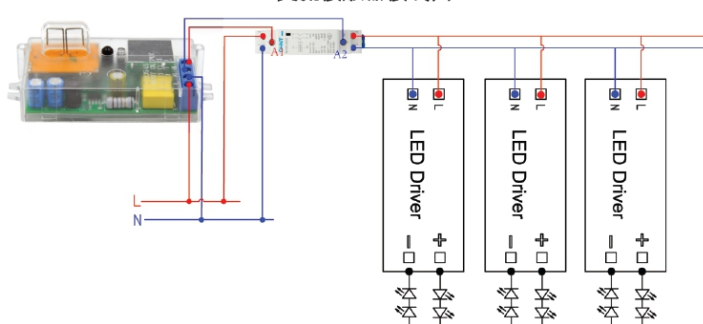
注：负载能力由交流固态继电器/交流接触器性能决定。

【Initialization】

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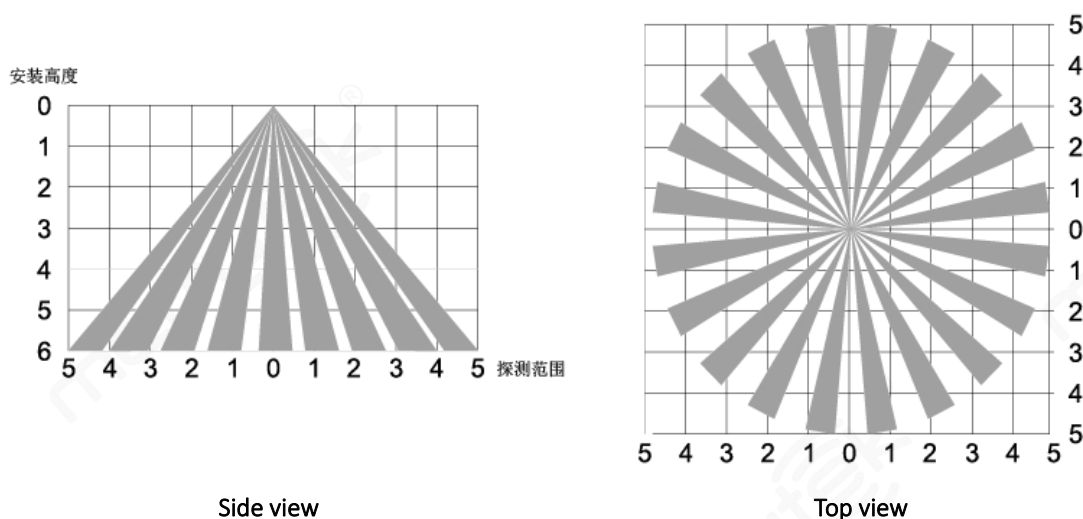
After 10S,you can use our MH10 remote or dip switch to adjust detection area、 hold time and daylight sensor etc parameter.

【Factory setting】

Detection Area:100%, Hold Time: 5s,Daylight Sensor: Disable

【Detection radiation】

MSA015S IR is highly recommended ceiling flush mounting and its detection radiation is as below shows:

Side view	Top view

【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.

【DIP switch setting】

Detection Area

	1	2
100%	ON	ON
75%	-	ON
50%	ON	-
25%	-	-

Hold Time

	3	4	5	6	
I	ON	ON	ON	ON	5S
II	ON	-	ON	ON	1min
III	ON	ON	-	ON	3min
IV	ON	ON	ON	-	5min
V	ON	ON	-	-	10min
VI	-	-	ON	ON	20min
VII	-	-	-	-	30min

Daylight Sensor

	7	8	
I	ON	ON	5Lux
II	-	ON	50Lux
III	ON	-	150Lux
IV	-	-	Disable

*Once daylight sensor set as Disable,our motion sensor will detect human movement regardless of environment lux

【Remote manual】

5m 10m 15m

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| .ₙₗ | 25% | 50% | 75% | 100% |
| 10% | 20% | 30% | 50% |
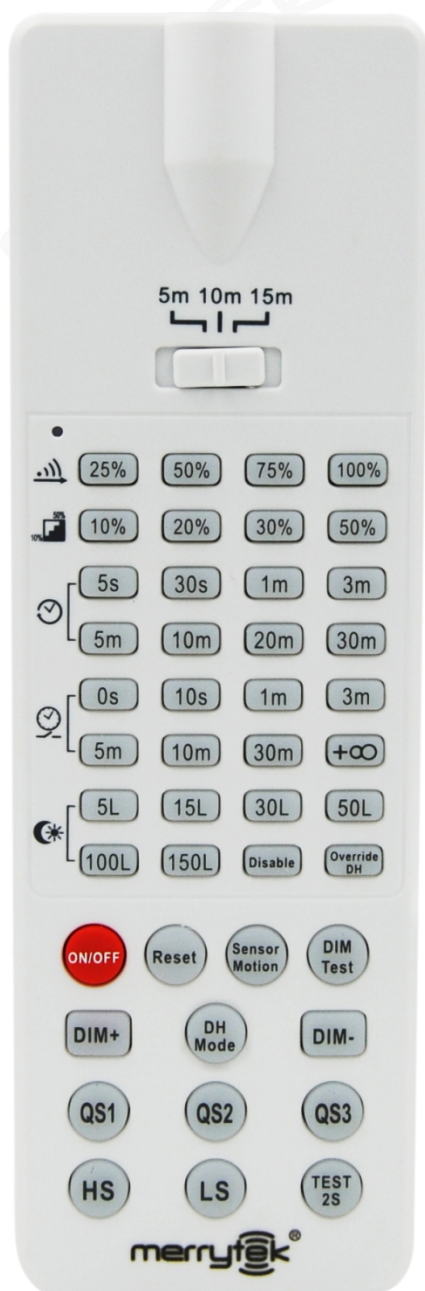
Detection range: 25%/50%/75%/100%

| ⏱ | 5s | 30s | 1m | 3m |
| | 5m | 10m | 20m | 30m |

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

| ⏱ | 0s | 10s | 1m | 3m |
| | 5m | 10m | 30m | +∞ |

| ☾ | 5L | 15L | 30L | 50L |
| | 100L | 150L | Disable | Override DH |

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

ON/OFF	Reset	Sensor Motion	DIM Test
DIM+	DH Mode	DIM-
QS1	QS2	QS3
HS	LS	TEST 2S

merrytek®

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.