

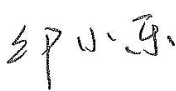

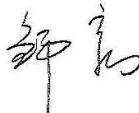

# SPECIFICATION

Product Name: HUMAN SENSE DETECTOR

Model No.: MC093S

Issue Date: Dec 27, 2019

CUSTOMER APPROVED

PRODUCT DIRECTOR APPROVED	SALES CHECKED	R&D CHECKED	PREPARED
			

## 1.Features



- 1) Built-in daylight sensor and human sensor, which can automatically switch on/off based on ambient light and human motion.
- 2) Using the latest human detection technology to detect small movements such as shaking head, turning around and etc. suitable for office field.
- 3) Patented low impedance antenna design, anti air conditioning, ventilator and other interference;
- 4) Support for different kind of application way.
- 5) Override sensor function by switch on and off power 3 times
- 6) DIP Switch design, users can configure the parameters according to their needs.
- 7) 5 years warranty

## 2.Parameter

<b>Input</b>	Operating Voltage	198-264V AC 50Hz
	Rated Voltage	220-240V AC 50Hz
	Stand-by Power	≤0.5W
	Surge Test	Between L and N: 1KV
<b>Output</b>	Working Mode	ON/OFF
	Type of Load	Resistive or Inductive
	Load Capacity	800W (Resistive) or 400W (Inductive)
	Max. Surge Capacity	30A (50% Ipeak, twidth =500uS, 230Vac full load, cold start) 60A (50% Ipeak, twidth =200uS, 230Vac, full load, cold start)
<b>Sensor Parameters</b>	Operating Frequency	5.8 GHz ±75 MHz.
	Transmitting power	0.3mW Max.
	Hold time	5S/30S/60S/3Min/5Min/10Min/20Min/30Min (adjust by 3 DIP Switches)
	Detection Area	100%/75%/50%/25% (adjust by 2 DIP Switches)
	Daylight Sensor	25lux/50lux/100lux/300lux/Disable (adjust by 4 DIP Switches) (Diffusion state)
	Detecting Radius	4-6M (mounted at 3M height) (see Note 2)
	Mounting Height	Supportable installation height: 2.5-6m maximum induction distance installation height: 2.5m
	Detecting Angle	Ceiling mount 150°
<b>Operating Environment</b>	Operating Temperature	-25℃...+60℃
	Storage Temperature	-40℃...+80℃; Humidity: 10%-95% (non-condensing)
<b>Certificate Standards</b>	Safety standards	EN61058-1
	EMC standards	EN300440 EN301489-1 EN55015 EN61547 EN61000-3-2

		EN61000-3-3 EN62479
	Environmental Requirement	Compliant to RoHS
	Certificate	CE RED
<b>Others</b>	Input/output terminal	screw terminal block Wire diameter:0.75-1.5mm <sup>2</sup>
	IP Rating	IP20
	Protection Class	Class II
	Installation	Built-in installation
	Dimension	65*65*28mm
	Package	Bubble bag + partition + outer box (K=A)
	Net Weight	59±2g
	Lifetime	5 years warranty @Ta 230V full load

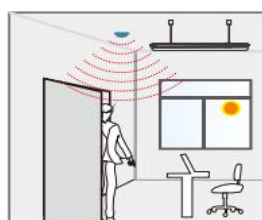
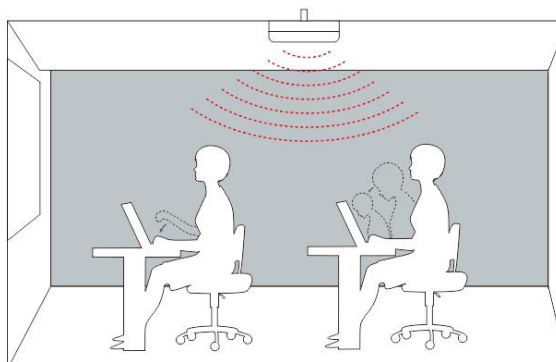
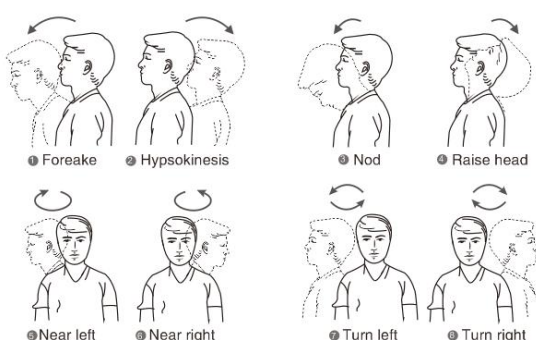
**Note**

1. "N/A" means not available.

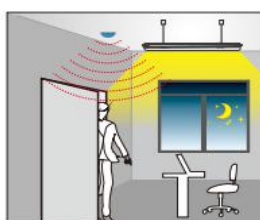
2. the induced distance is related to the moving speed and volume of moving objects. This data is obtained from the personnel test of 170 cm high moving speed of 0.3 m/s.

### 3.Function

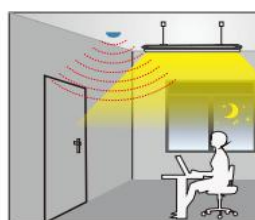
#### 1) On/OFF Function



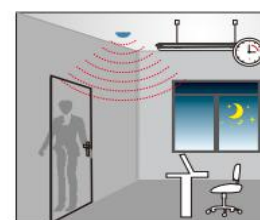
**1** When the ambient light is sufficient, the light will not turn on even if the moving signal is detected.



**2** When the ambient light is insufficient, a moving signal is detected and the light will turn on automatically.

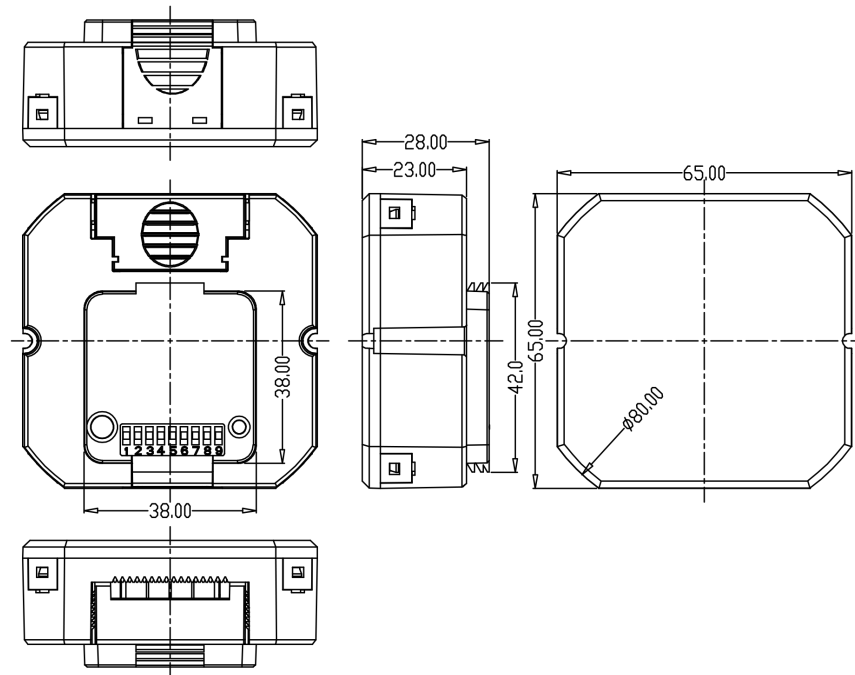


**3** The body, head and other small movements in normal work can be detected, and the light is always on.



**4** When the sensor fails to detect movement and inching signal, the light will automatically turn off after the delay time.

## 4.Dimension (mm)

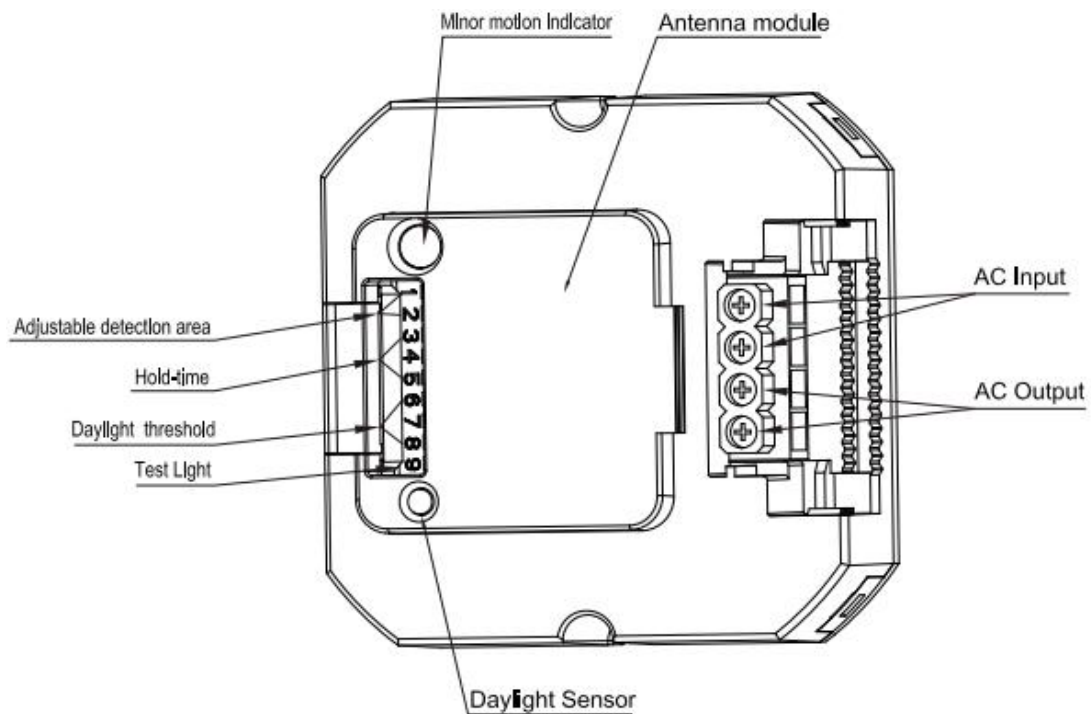


\*The sensor is designed for connect one load only. Connect more than one loads may damage the sensor.

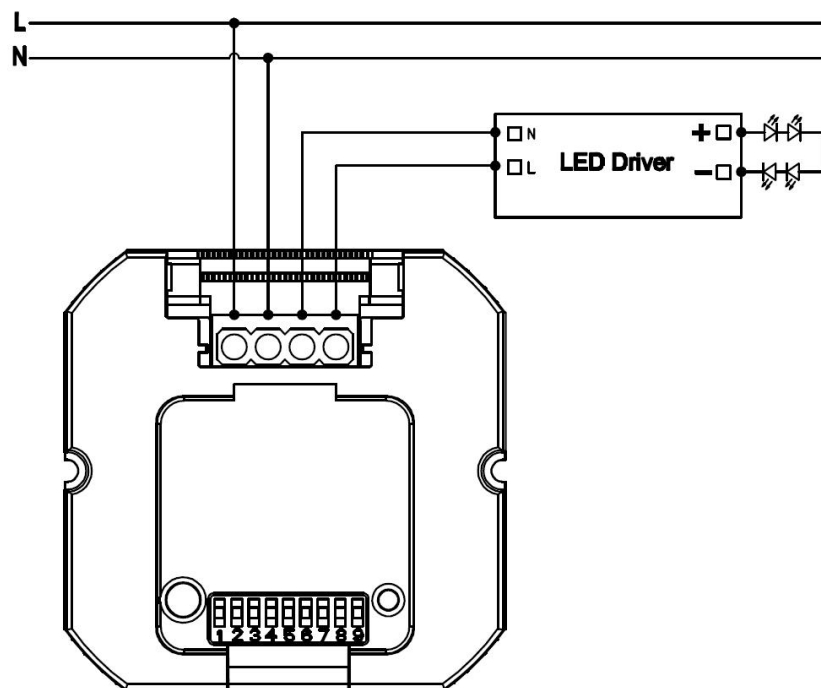
## 5.Installation guide:

For panel light (cut size of 40*40mm)	For ceiling lamp
<p>Diagram showing the cut size of 40*40mm for panel light installation. The cut size is 40.0mm by 40.0mm, with a radius of R5.00.</p>	<p>Top mounting (cut size of 40*40mm)</p>
	<p>Base mounting</p>

## 6.Function diagram



## 7.Wiring

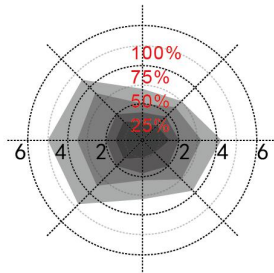


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## 8. Radiation pattern

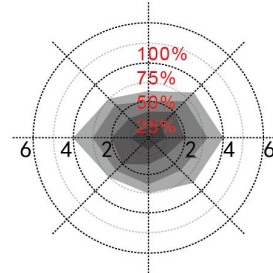
### 1) Ceiling mounting

Ceiling mounting: 3m  
Range: 100%/75%/50%/25%

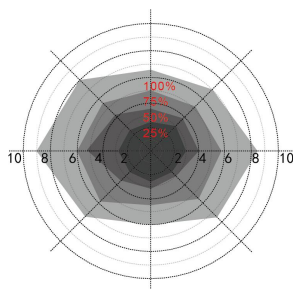


Movement (speed: 1m/s)

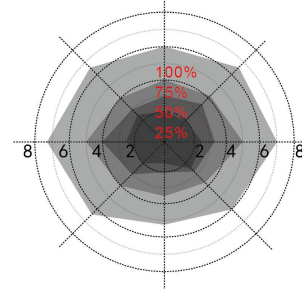
Ceiling mounting: 6m  
Range: 100%/75%/50%/25%



Movement (speed 1m/s)

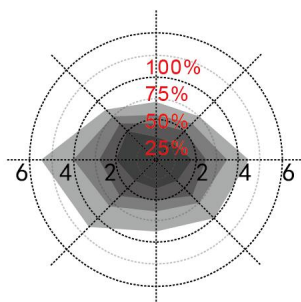


Movement (speed 0.3m/s)



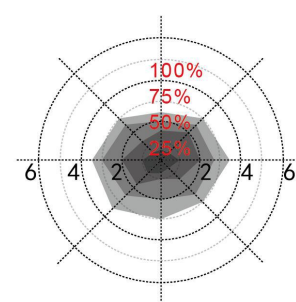
Movement (speed 0.3m/s)

Ceiling mounting: 3m  
Range: 100%/75%/50%/25%



Minor motion

Ceiling mounting: 6m  
Range: 100%/75%/50%/25%



Minor motion

## 9. DIP switch

### 1) Detection Area

	1	2	
I	ON	ON	100%
II	-	ON	75%
III	ON	-	50%
IV	-	-	25%

### 2) Hold Time

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

\* Note: For better minor motion detection ,it's recommend to set the hold time above 3 min

### 3) Daylight Sensor

	6	7	8	
I	ON	ON	ON	25Lux
II	ON	ON	-	50Lux
III	ON	-	-	100Lux
IV	-	ON	ON	300lux
V	-	-	-	Disable

#### 4) Minor motion indicator

	9	
I	ON	Turn on
II	-	Turn off

\* Note: The indicator light is for test only ,when normal use ,pls set it on turn off mode

## 10. Cancel sensor function

Sensor function can be canceled by switch on /off power 3 time in 2s, Turn on the power again, sensor function come back .

## 11. Initialization

After power on, the sensor automatically turns on light at 100% brightness. After 30sec, it turns off the light. During the initialization, the sensor is not able to detect movement.

## 12. Default Settings

Detection area: 100%, Hold time: 3min, Daylight sensor: Disable , Minor motion indicator:Turn off

## 13. Notes for Application

- 1) The sensor should be installed by a professional electrician. Please turn off the power before installing, wiring, changing the setting of the DIP switch.
- 2) The light sensitivity threshold is in a sunny environment, no shadow and ambient light diffuse reflection. Ambient lux level could be different in different environment, weather, climate, time-of-day and season.
- 3) The parameters of the sensor may need to be reconfigured in different installation environments.
- 4) This sensor is for indoor use only. It will affect the waterproof effect for outdoor use. Wind, rain, and moving objects around will cause false triggering.