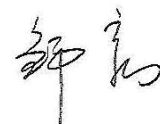# SPECIFICATION

Product Name: High installation sensor

Model No.:   MC083S RC

Issue Date: Mar. 10, 2020

CUSTOMER APPROVED

PRODUCT DIRECTOR APPROVED	SALES CHECKED	R&D CHECKED	PREPARED

Prime Light Electrical Ltd, 13 Gateway Trading Estate, London, NW10 6RJ
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1. Features

■ High installation, can support 12m mounting

■ Infrared remote control design, users can configure each sense parameter according to needs.

■ Support high-sensitivity and low-sensitivity mode (for metal ceiling, metal reflective surface installation environment)

■ New patented remote control to adjust the launch angle to avoid mis-operation

■ Override function

■ 5 years warranty

2. Parameter

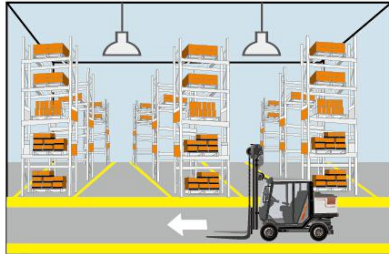|	Operating Voltage	108-305V AC 50/60Hz
Input	Rated Voltage	120/277V AC 50/60Hz
	Stand-by Power	≤1W
	Surge Test	L--N: 1kV
Output	Working Mode	ON/OFF functio
	Type of Load	Inductive or resistive Load
	Load Capacity	2A @120Vac ,3A@277Vac, 3A@220-240Vac
	Max. Surge Capacity	30A (50%Ipeak,twidth =500uS, 230Vac full load, cold start); 60A (50% Ipeak, twidth=200uS, 230Vac, full load, cold start)
Sensor Parameters	Operating Frequency	5.8 GHz ±75 MHz, ISM Band.
	Transmitting power	0.5mW Max.
	Hold time	5S/30S/1min/3min/20min/30min 5s/30s/1min/3min/5min/10min/20min/30min(remote control）
	Detection Area	100%/75%/50%/10% 100%/75%/50%/25% (Remote control）
	Daylight Sensor	5Lux/15Lux/30Lux/50Lux/100Lux/150Lux/Disable （Ambient light diffusion） 5lux/15lux/30lux/50lux/100lux/150lux/Disable （Remote control）
	Detecting Radius	See detection pattern
	Mounting Height	12m Max
	Detecting Angle	150°

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| Operating Environment	Operating Temperature	-25℃…+60℃
	Storage Temperature	Temperature:-40℃…+80℃; Humidity:10%-95% (non-condensing)
Certificate Standards	Safety standards	EN61058-1, UL60703-1
	EMC standards	EN300440; EN301489-1; EN55015; EN61547; EN61000-3-2; EN61000-3-3; EN62479
	Environmental Requirement	Compliant to RoHS
	Certificate	CE, RED,UL,FCC
Others	Input/output terminal specifications	Push-type terminal block; wire diameter: 0.75-1.5mm2
	IP Rating	IP20
	Protection Class	Class II
	Installation	Built-in installation
	Dimension	93.5*45*28.5mm
	Package	Bubble bag + partition + outer box (K=A)
	Net Weight	61.2G
	Lifetime	5 years warranty @Ta 230V full load

Note

1. "N/A"means not available.

2. Detection area is effected on volume of motion object and motion speed. The detection area is tested by a 165cm height person and walking speed is 0.5m/s.

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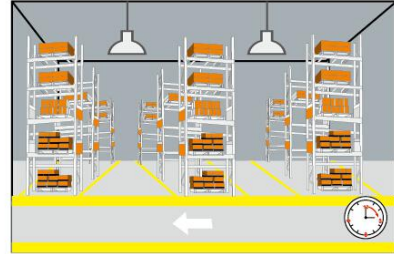
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3. Function

1) On/OFF Function (stand-by period be set to "0"s)

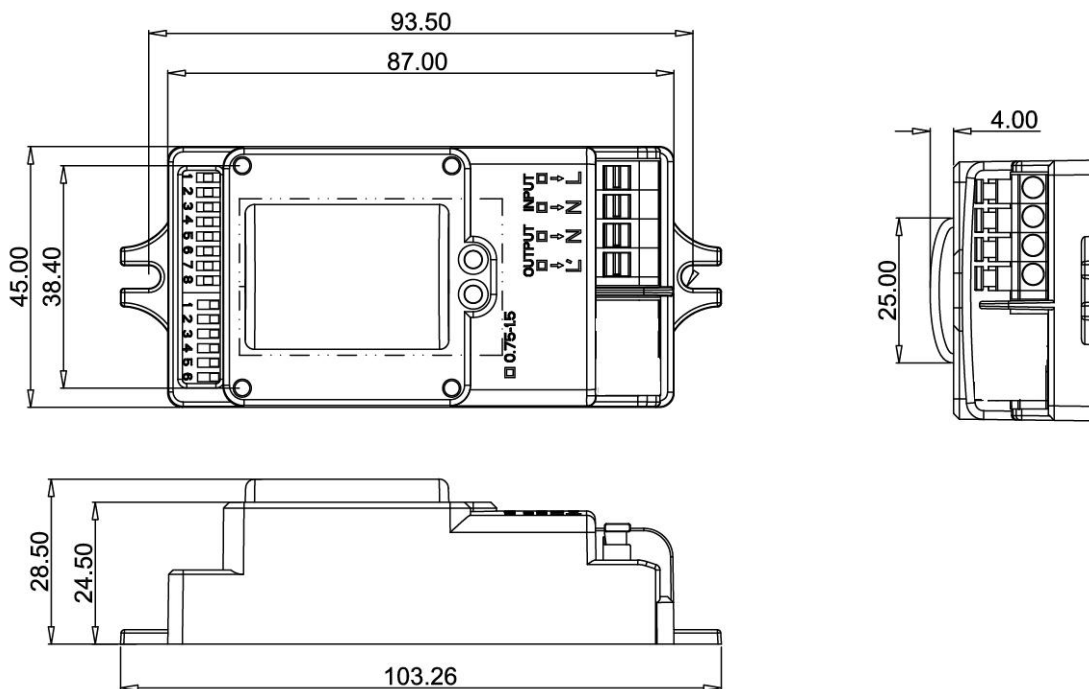① With sufficient ambient light, the light will not be switched on even if with motion signal.
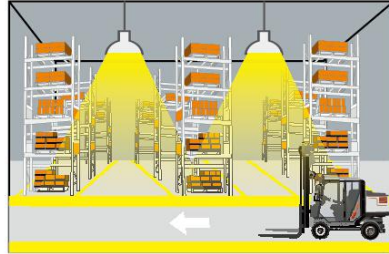
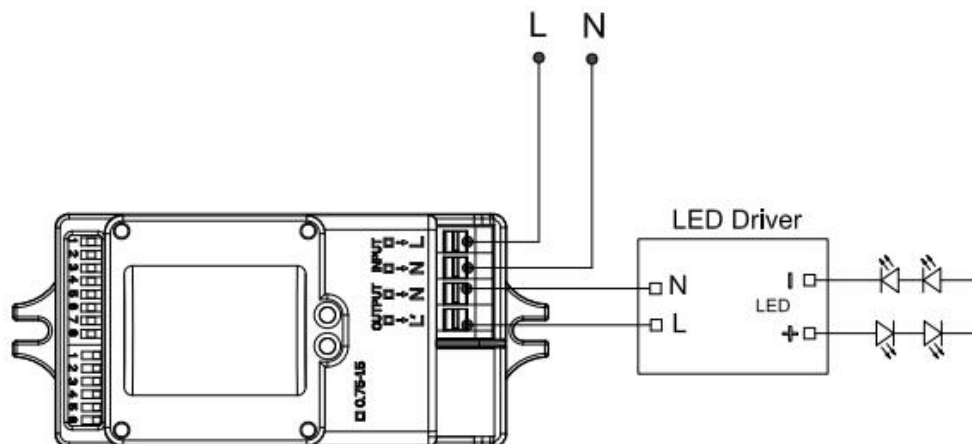② With insufficient ambient light, the sensor switches on the light when motion is detected.

③ After elapse of hold time, the sensor switches off the light when no motion is detected.
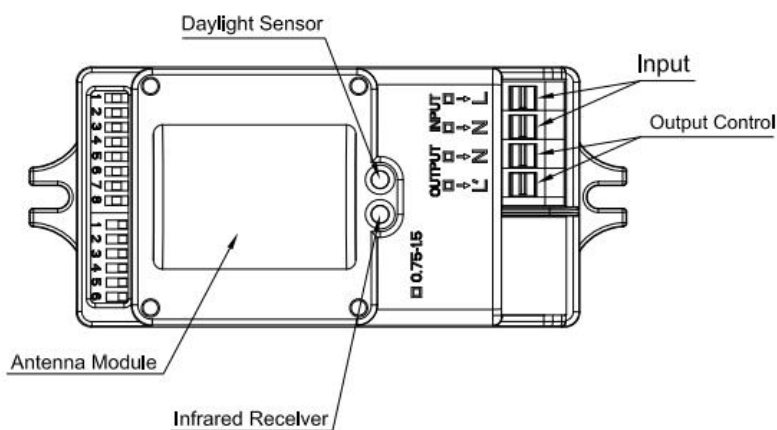
4. Dimension (mm)

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5. Wiring

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

6. Function Diagram

7. DIP Setting

1)   Detection Area

	1	2	
I	ON	ON	100%
II	ON	-	75%
III	-	ON	50%
IV	-	-	10%

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	-	20min
VI	-	-	-	30min

3) Daylight Sensor

	1	2	3	4	5	
I	ON	ON	ON	ON	ON	5lux
II	-	ON	ON	ON	ON	15lux
III	ON	-	ON	ON	ON	30lux
IV	ON	ON	-	ON	ON	50lux
V	ON	ON	ON	-	ON	100lux
VI	ON	ON	ON	ON	-	150lux
VII	-	-	-	-	-	Disable*

4) Detection mode

	6	
I	ON	HS
II	-	LS

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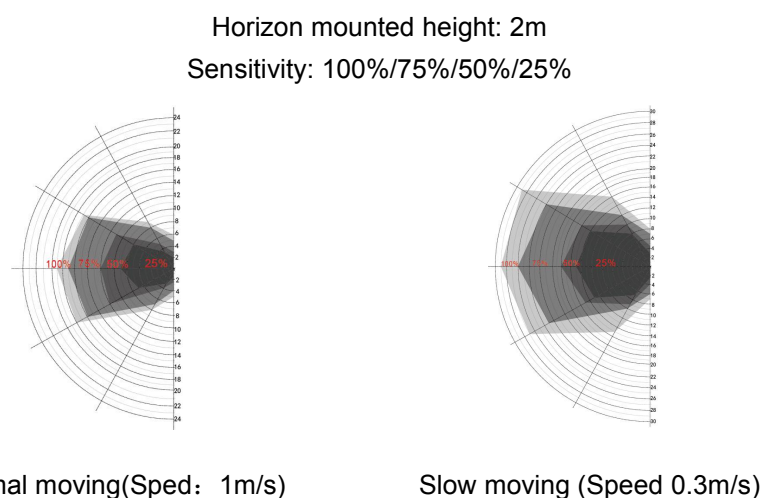Tel: 0208 968 2000 | Email: sales@primelight.co.uk | Website: www.primelight.co.uk

8. Radiation Pattern

Ceiling mounting

Ceiling mounted height: 3m Sensitivity: 100%/75%/50%/25%	Ceiling mounted height: 6m Sensitivity: 100%/75%/50%/25%	Ceiling mounted height: 9m Sensitivity: 100%/75%/50%/25%	Ceiling mounted height: 12m Sensitivity: 100%/75%/50%/25%	Ceiling mounted height: 15m Sensitivity: 100%/75%

Normal moving (Speed:1m/s) — for all five columns above

Slow moving (Speed 0.3m/s) — for all five columns below
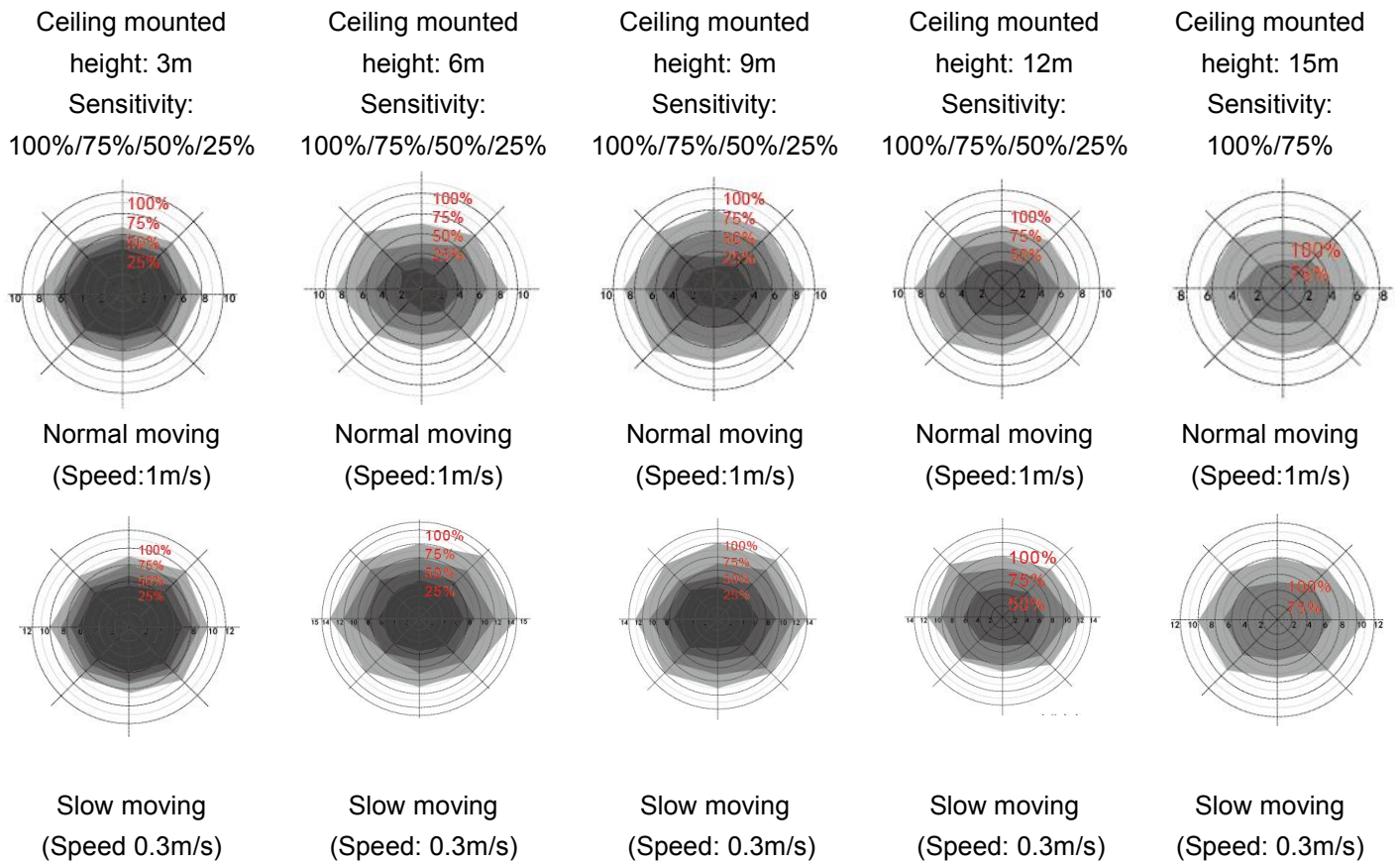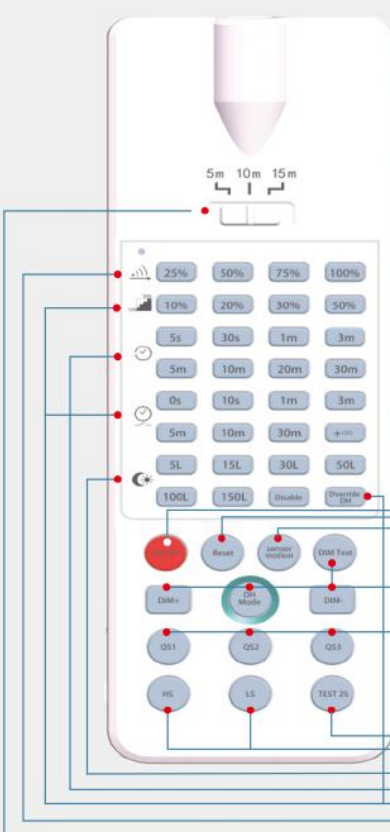
*Only 100%/75%/50% detection sensitivity is workable when installed at 10m & 15m mounting height. 25% sensitivity is not able to detect motion signal.

Wall mounting

Horizon mounted height: 2m
Sensitivity: 100%/75%/50%/25%

Normal moving(Sped：1m/s)   Slow moving (Speed 0.3m/s)

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9. Remote Control

Remote Control Setting	Button	Remarks
	ON/OFF	Press the "ON/OFF" button, the light goes to constant on/off mode, sensor is disabled. Press "Reset" or "Sensor Motion" to quit this mode and the sensor starts to work.
	Reset	Press "Reset" button, all parameters are same as default setting.
	Sensor motion	Press "Sensor motion" button, the light quits from constant on/off mode, and the sensor starts to work(the latest setting stays in validity)
	DIM+ DIM- DH Mode DIM Test	NA

Scene Options	Detection Area	Hold Time	Daylight Sensor	Induction mode
QS1	100%	5min	30Lux	Hs
QS2	100%	10min	Disable	Hs
QS3	100%	20min	Disable	Hs

Note: Detection area/Hold time/ Daylight sensor can be adjusted by pressing the corresponding button. The latest setting will stay valid.

	Button	Remarks
	Q1 Q2 Q3	(see table above)
	TEST 2S	Under any status, press the "TEST 2S" button, sensor enter into test mode, the parameters are as below: Detection Area is 100%, Hold time is 5s, Daylight sensor disable. This function is only testing. Quit this mode by pressing "RESET" or any other function buttons.
	HS LS	Press "HS" button to set the detection area to be high sensitive. Press "LS" button to set the detection area to be low sensitive. The adjustment bases on the "Detection Area" parameter you set.
	☾☀	Daylight Sensor Set up daylight threshold: 5Lux/15Lux/30Lux/50Lux/100Lux/150Lux/ Disable。
	⏱	Hold time Set hold time: 5S/30S/1min/3min/5min/10min/20min/30min
	Override DH	NA
	.⁍)))	Detection Area Set detection area: 25%/50%/75%/100%
	5m 10m 15m	Remote Distance Toggle button can set the remote distance between remote control and sensor

10. Initialization

1/ On/Off function /3-step dimming function:

After power on, the sensor automatically turns on light at 100% brightness. After 10sec, it turns off the light. During the initialization, the sensor is not able to detect movement.

2/ 2-step dimming function:

After power on, the sensor automatically turns on light at 100% brightness. After 10sec, it dims the light to a low light level (set by stand-by dim level). During the initialization, the sensor is not able to detect movement.

11. Factory Setting

Detection area: 100%, Hold Time: 5S,Daylight sensor: Disable, Detection mode: HS

12. Application Notice

1) The product can work with any kinds of control grear..

2) The sensor should be installed by a professional electrician. Please turn off the power before installing, wiring,

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changing the setting of the DIP switch.

3) The sensor mounted in a plastic, glass lampshade would reduce the sensitivity of the sensor. For every 3 mm increase in thickness, the sensitivity would reduce by 20%.

4) The sensing distance will be affected by the height of the sensor installation, the size of the object being detected, and the speed of movement.

5) Daylight the value is in a sunny environment with no shadows and ambient light diffuse reflection conditions. The values illumination detected by sensor may vary in different environment, at different times, in different seasons, and in different climates.

6) The parameters of the sensor may need to be reconfigured in different installation environments. Please refer to the following instructions or contact the manufacturer.

7) This sensor is for indoor use only. Outdoor use will affect the waterproof effect, wind and moving objects around would cause false triggering.

8) The distance between any inductive sensors should be greater than 3m.

9) When the sensor is installed in a metal illuminance , a metal reflective surface, or a narrow enclosed environment, the microwave will be reflected repeatedly and cause false triggering. Please reduce the sensitivity or contact the manufacturer for technical support.

10) Do not place the sensor close to high-density objects such as metal, glass, mixed-use walls, etc. The sensor may be triggered by mistake.

11) Please ensure that there are no moving signals around the sensor, such as fan, DC motor, sewer, air outlet, etc., the sensor may generate false triggers.

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