


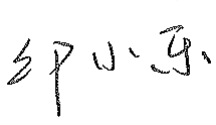
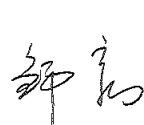
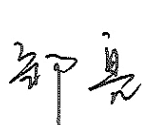
SPECIFICATION

Product Name: Sensor DIM LED Driver

Model No.: MLC40C-M

Issue Date: November 29, 2017

CUSTOMER APPROVED

PRODUCT DIRECTOR APPROVED	SALES CHECKED	R&D CHECKED	PREPARED
			

Shenzhen Merrytek Technology Co.,Ltd

Add: 2nd and 3rd floor, NO.3 Building, 380 Xiangshan Avenue, Luotian, Yanluo, Baoan, Shenzhen, 518127, China

Tel: +86 (0)755-2305 7253

Fax: +86 (0)755-2786 3012

Website: www.merrytek.com

1. Features



1. Built-in occupancy motion sensor for small movement detecting
2. Flicker-free for health lighting
3. Multi-output current from 700mA to 1050mA option.
4. Built-in SYNC port for wiring group networking
5. All sensor Parameters can be set by DIP switch

2. Parameter

Input	Operating voltage range	198-264V AC 50Hz
	Rated voltage	220-240V AC 50Hz
	Input Current	260mA Max
	Input Inrush Current	6A (50% I _{peak} , t _{width} =30uS, 230Vac full load, cold start);
	Total harmonic distortion	≤20% (@230Vac, 40W full load)
	Power Factor	≥0.9
	Stand-by Power	≤1W
	Working efficiency	≥88% (@230VAC full load)
	Surge test	L N: 1KV
Output	Operating mode	Constant current
	Load type	LED
	Type of Load	44W Max.
	Flicker requirements	<input checked="" type="checkbox"/> Flicker free (Ripple requirement: <2%) <input type="checkbox"/> Flicker
	No-load output voltage	<55V DC
	Load output current	700mA/750mA/800mA/850mA/900mA/950mA/1000mA/1050mA
	Load output voltage	30-42V DC
	Constant current/voltage accuracy	Constant current ±5%
Dim Interface	Micro-motion trigger synchronization control	SYNC+, SYNC+, SYNC-, SYNC-
Sensor Parameters	Operating frequency	5.8 GHz ±75 MHz, ISM wave band.
	Transmitting power	0.5mW Max.
	Hold Time	5S/5min/15min/+∞
	Stand-by dim Level	10% / 35%
	Stand-by Period	0S/10min/30min/+∞
	Detection Area	100% / 50%
	Daylight Sensor	50Lux/150Lux /300Lux /Disable
	Detecting radius	Full brightness: 0.5-2m The light turns off: 0.5-3m

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		Half brightness after dimming: < 4m
	Mounting height	2.5-6m
	Detecting angle	360° (Ceiling mounted)
Abnormal Protection Requirements	Output overload protection	Yes, self-recovery
	Output idle load protection	Yes, self-recovery
	Output short circuit protection	Yes, self-recovery
Operating Environment	Operating temperature/humidity	-25℃...+45℃
	Storage temperature/humidity	85℃
	Case Max. Temp(Tc)	-40℃...+80℃ humidity: 85% (Non-condensing)
Certificate Standards	Withstand voltage	3750V AC 5mA 60S (Input“L N”– output“SEC+ SEC- ”)
	Safety standard	EN61347-1, EN61347-2-13
	EMC standard	EN55015, EN61547, EN61000-3-2, EN61000-3-3
	Environmental protection requirements	Compliant to RoHS
	Certification	CE
Others	Input/output(terminal/wiring) type	0.75-1.5mm ²
	IP rating	IP20
	Protection class	Class II
	Installation type	Independent installation
	Installation dimension	L:110mm*W:92mm*H:40.5mm
	Package	Bubble bags+ Clapboard +Outer Carton (K=A)
	Net weight	234g
	Lifespan	5 years warranty@Ta 230V full load

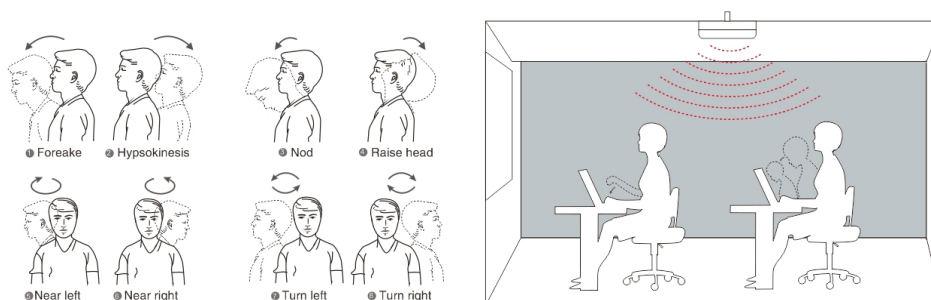
Note:

1. “N/A” means not available.

2. Detection area is affected 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.

2. Function

People's normal working life in the body gentle motion sensing, in non-sleep conditions to achieve approximate human presence detection.



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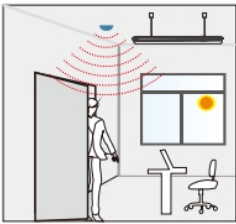
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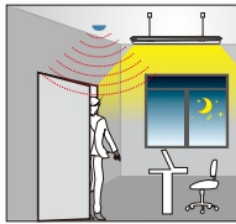
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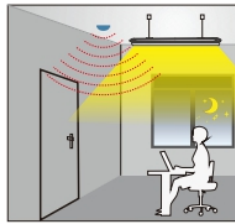
1) On/OFF function (Stand-by period set at '0S')



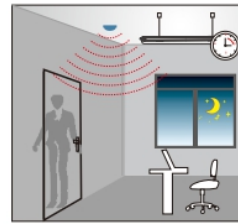
① When the ambient light is sufficient, the light will not turn on even if the moving signal is detected.



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

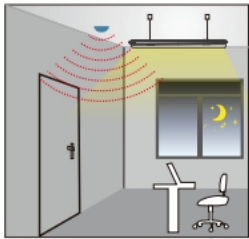


③ The body, head and other small movements in normal work can be detected, and the light is always on.

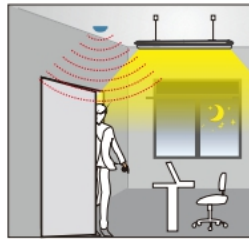


④ When the sensor fails to detect movement and inching signal, the light will automatically turn off after the delay time.

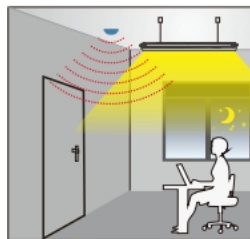
2) 2-step dimming function (Stand-by period set at '+∞')



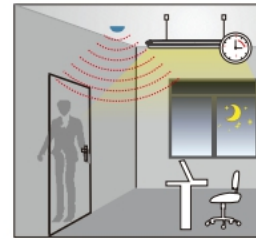
① When the sensor does not detect the movement signal, the light remains low bright.



② When the moving signal is detected, the light will turn on automatically.

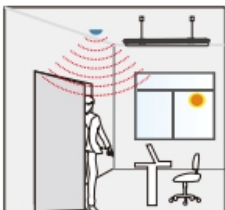


③ The body, head and other small movements in normal work can be detected, and the light is always on.

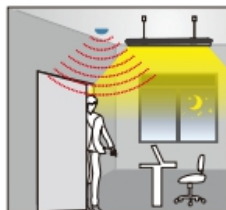


④ When the sensor does not detect movement and inching signal, the light will automatically turn on low after the delay time.

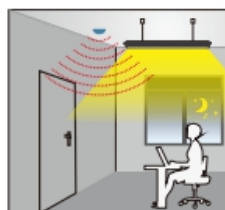
3) 3-step dimming function (Stand-by period set at '10min/30min')



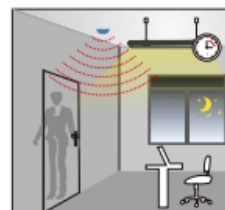
① When the ambient light is sufficient, the light will not turn on even if the moving signal is detected.



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.

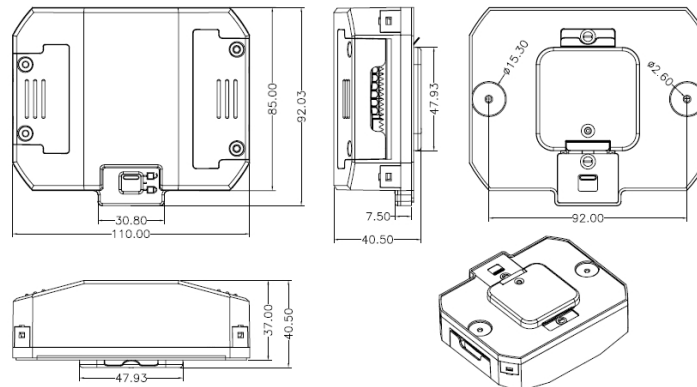


④ When the sensor does not detect movement and inching signal, the light will automatically turn on low after the delay time.

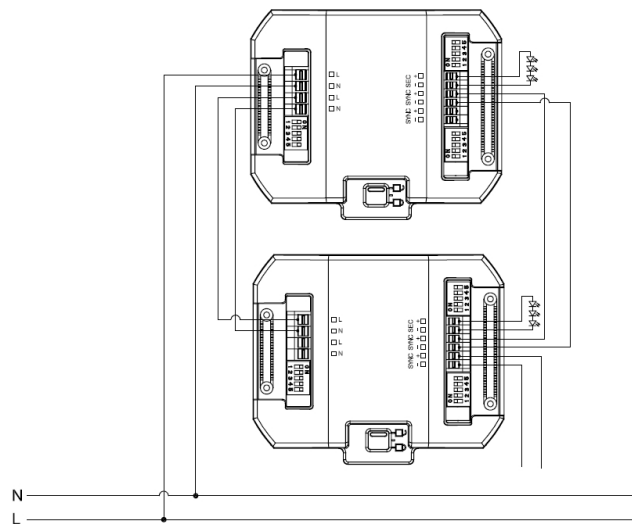


⑤ After the waiting time, there is still no moving signal detected, and the light will automatically turn off.

4. Dimension (mm)

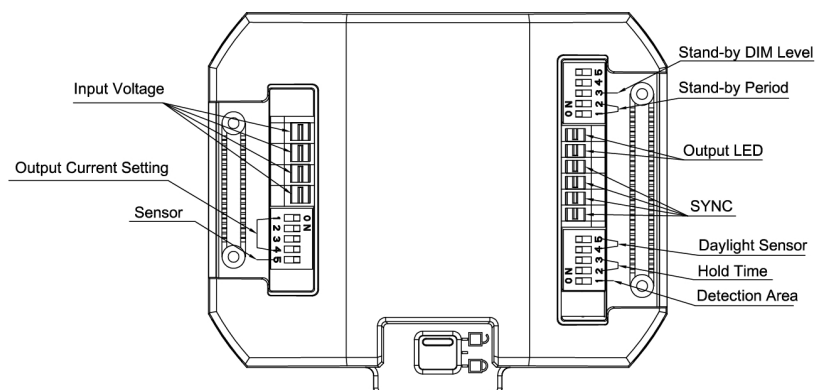


5. Wiring



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

6. Structure



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7. Installation

1) The magnet installation



① Preparation: sensor ,panel light with hole.



② Put the sensor in center of the hole ,and make sure the magnet attach to the cover firmly .



③ The product is installed.

2) The lock installation



① As shown,inserting the product into the panel light opening.



② The product has been correctly inserted into the panel lamp.



③ Use a screwdriver to pull the shrapnel into the lock position.



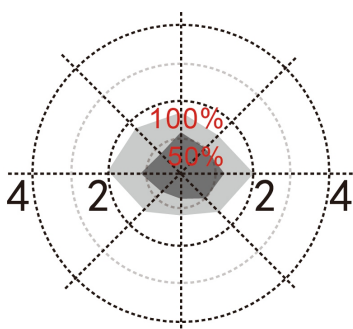
④ Installation is completed when the product is locked.

7. Radiation Pattern

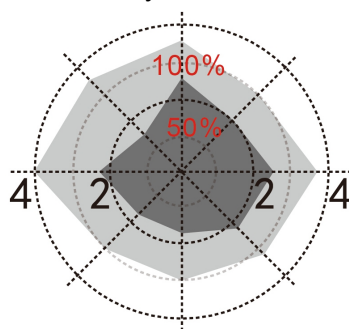
Ceiling mounting

Ceiling mounted height: 3m

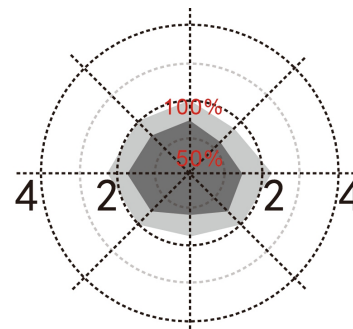
Sensitivity:100%/50%



Normal moving (Speed:1m/s)



Slow moving (Speed: 0.3m/s)



Slight moving

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8. DIP Switch Setting

- Detection Area (Sensitivity)

	1	
I	ON	100%
II	-	50%

- Hold Time

	2	3	
I	ON	ON	5S
II	ON	-	5min
III	-	ON	15min
IV	-	-	+∞

- Daylight Sensor

	4	5	
I	ON	ON	50Lux
II	ON	-	150Lux
III	-	ON	300Lux
IV	-	-	Disable*

*Disable means the daylight sensor does not work. The sensor will turn on light once motion is detected regardless of ambient light level.

- Stand-by Period

	1	2	
I	ON	ON	0S
II	ON	-	10min
III	-	ON	30min
IV	-	-	+∞

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● Stand-by DIM Level

	3	
I	ON	10%
II	-	35%

● Output Current Setting

1	2	3	4	
ON	ON	ON	ON	1050mA
ON	ON	ON	-	1000mA
-	ON	ON	-	950mA
ON	-	ON	-	900mA
-	-	ON	-	850mA
-	ON	-	-	800mA
ON	-	-	-	750mA
-	-	-	-	700mA

● Sensor

	5	
I	ON	Disable*
II	-	Active*

*When set as "Active ",The lamp will work with sensor function.

*When set as "disable", the lamp will work as normal lamp without sensor function to keeps bright on all time.

9. 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

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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.

10. Factory Setting

Detection Area: 100%, Hold Time: 5S, Daylight Sensor: Disable, Stand-by Period: 0S, Stand-by DIM Level: 10%;
Output Current Setting : 1050mA; Sensor: Active

11. Application Notice

- 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 sensor which installed in the plastic and glass lampshade will reduce the sensitivity. For every 3mm increase in thickness, the sensitivity will be reduced by 20%.
- 3) 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.
- 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.
- 5) Do not place the sensor close to high-density objects such as metal, glass, concrete walls, etc, false triggering could happen. When the sensor is installed in a metal lamp, 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.
- 6) Please ensure that there are no moving signals around the sensor, such as fan, DC motor, sewer pipe, air outlet, etc., the sensor may generate false trigger.