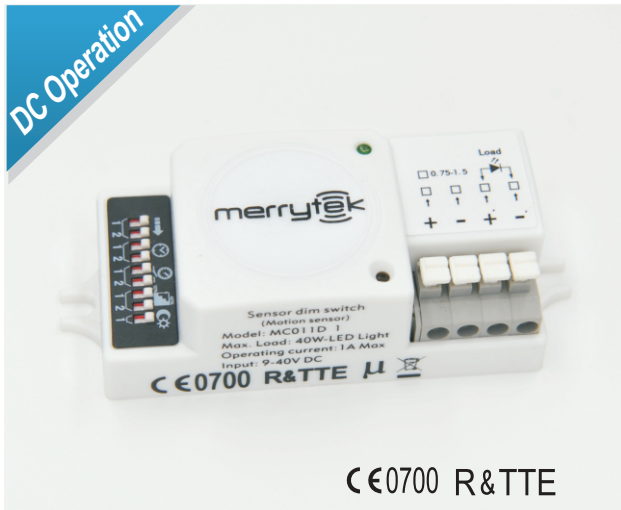


MC011D1 (DC9-40V)
 MC011D2 (DC25-100V)
 DC Operation - High Frequency Version



Introduction

- Automatic switching and dimming based on light level and motion.
- 4-hole press-in terminal (+, -, +', -'), easy assembly.
- Compact size, suitable to fix within most luminaires.
- Sensor data can be simply set via DIP switch.
- Wide detection area, range up to 16m in diameter.

MC011D1 and MC011D2 are innovation and active motion detectors with HF system 5.8GHz. Motion can be detected through plastic, glass and thin non-metal materials. MC011D1 and MC011D2 has the same specification, except the different DC input range.

The sensors provide a simple and cost-effective dimming solution. With DC operation voltage from LED driver, no need extra power from power line. Without DALI or 1-10V dimmable LED drivers, they are suitable for most common LED drivers and achieve 2-step dimming function. Particularly suitable for price sensitive luminaires.



Max.8M



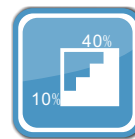
Light Sensor



Hold Time
10s~10min



Mounting Height
6m Max.



Automatic
Dimming



5 Years
Guarantee

Function and Options

ON-OFF Function

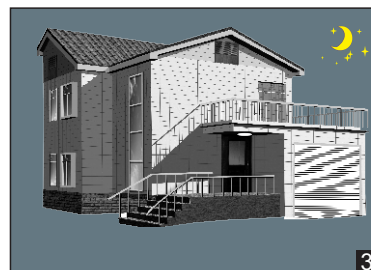
With DC operation voltage from LED driver, the sensors can match up with most common LED drivers and achieve automatic switching based on motion and ambient light level.



With sufficient ambient light, the sensor does not switch on the lamp.



With insufficient ambient light, the sensor switches on the lamp when motion is detected.



After hold time, the lamp gradually dims down if no motion is detected.

3-step Dimming Function

When used in combination with common constant current LED drivers, the sensors can achieve 3-step dimming function, 100%---> low light--->off. It is perfect for use in some areas that requires a light change notice before totally switch off.



With sufficient ambient light, the sensor does not switch on the lamp.



With insufficient ambient light, the sensor switches on the lamp when motion is detected.



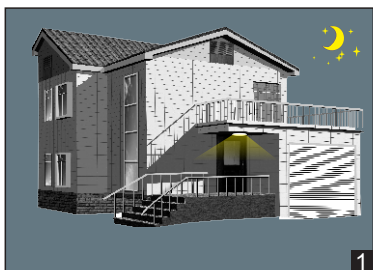
After hold time, the lamp gradually dims to a low light level if no movement is detected.



No new motion is detected after stand-by period, the lamp switches off.

2-step Dimming Function

When used in combination with common constant current LED driver, the sensors can achieve 2-step dimming function, 100%---> low light (Never turn off). They are particularly suitable for use in corridors, stairwells and underground passages where low light levels are maintained until motion is detected.



No motion detected, the lamp remains at a low light level all the time.

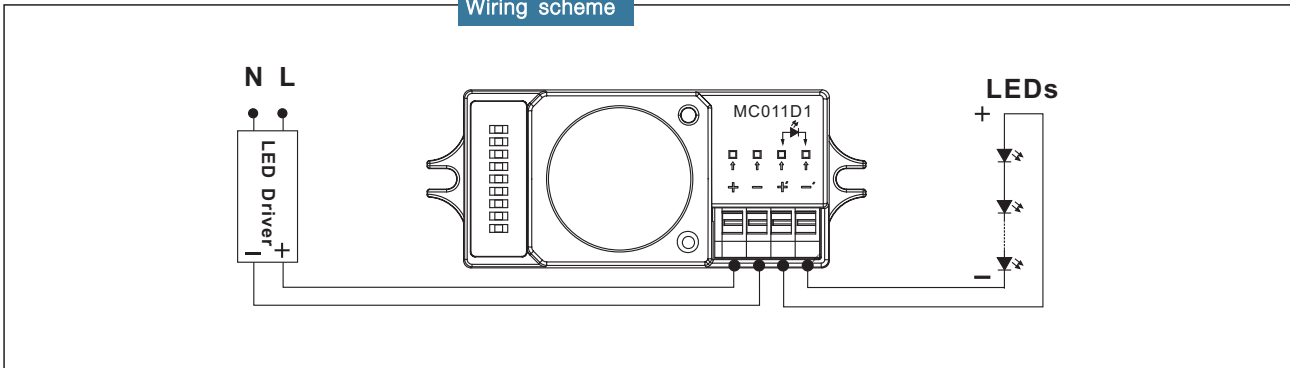


With insufficient ambient light, the sensor switches on the lamp when motion is detected.

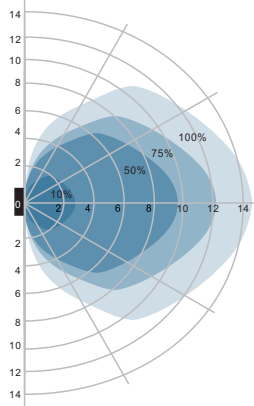


After hold time, the lamp gradually dims to a low light (preset in the sensor) if no motion is detected.

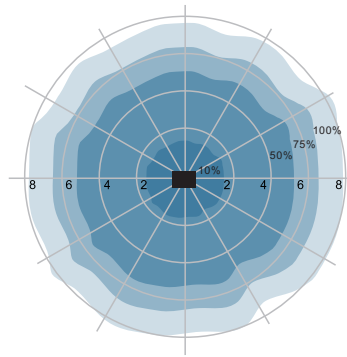
Wiring scheme



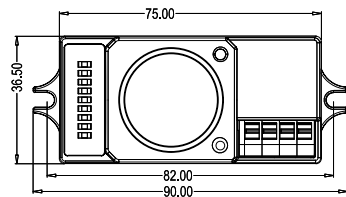
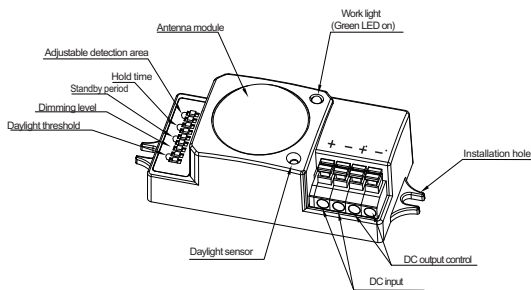
Detection Pattern



Wall mounting pattern (Unit: m)
Suggested installation height: 1-1.8m



Ceiling mounting pattern (Unit: m)
Suggested installation height: 2.5-6m



MC011D1 / MC011D2

Operating voltage	9~40Vdc(MC011D1) 25~100Vdc(MC011D2)
Rated load	Max. 40W LED light(MC011D1) Max. 100W LED light(MC011D2)
Operating current	1A max
HF system	5.8GHz±75MHz, ISM wave band
Transmitting power	<0.5mW
Power consumption	≤0.5W(standby), <1W(operation)
Detection zone	Max.(D x H): 16m x 6m
Detection sensitivity	10% / 50% / 75% / 100%
Hold time	10s / 90s / 3min / 10min
Daylight sensor	30lux / Disable
Dimming level	10% / 20% / 30% / 40%
Stand-by period:	0s, 5min, 30min, disable
Dimming mode	Step dimming
Mounting height	6m Max.
Motion detection	0.5~3m/s
Detection angle	150°(wall installation) 360°(wall installation)
Operating temperature	-20℃ ~50℃
IP rating	IP20

Setting

By selecting the combination on the DIP switches, sensor data can be precisely set for each specific application.

ON		1	2	
↑	I	●	●	100%
↓	II	○	●	75%
○	III	●	○	50%
OFF	IV	○	○	10%

Detection area

Detection area can be reduced by selecting the combination on the DIP switches to fit precisely each application.

ON		1	2	
↑	I	●	●	10s
↓	II	○	●	90s
○	III	●	○	3min
OFF	IV	○	○	10min

Hold time

Refers to the time period the lamp remains at 100% illumination after no motion detected.

ON		1	2	
↑	I	●	●	10%
↓	II	●	○	20%
○	III	○	●	30%
OFF	IV	○	○	40%

Stand by Dimming

The low light level you would like to have after the hold time in the long absence of people.

ON		1	2	
↑	I	●	●	Disable
↓	II	○	●	30min
○	III	●	○	5min
OFF	IV	○	○	0s

Stand-by period

Refers to the time period the lamp remains at a low light level before it completely switches off in the long absence of people.

When set to Disable mode, the low light is maintained until motion is detected.

ON		1	
↑	I	●	Disable
↓	II	○	30Lux
OFF			

Daylight sensor

The sensor can be set to only allow the lamp to illuminate below a defined ambient brightness threshold.

When set to Disable mode, the daylight sensor will switch on the lamp when motion is detected regardless of ambient light level.

30lux: Twilight operation only.

Note that daylight sensor is active only when lamp totally switches off.