

## MS01 Daylight Sensor



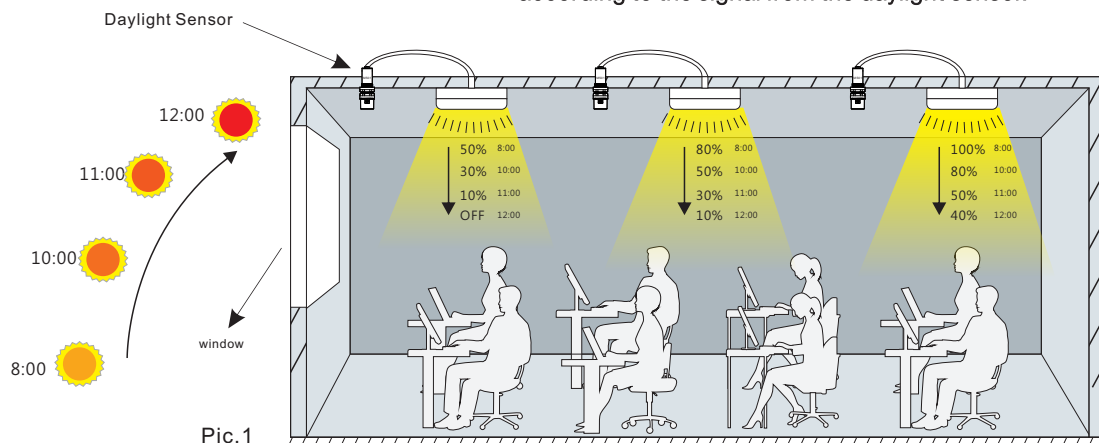
## Introduction

- Provides an energy saving without sacrificing visual comfort.
- With ambient light dependent control.
- Directly connected to 1-10V interface.
- Simple setting of the target light level by mean of potentiometer.

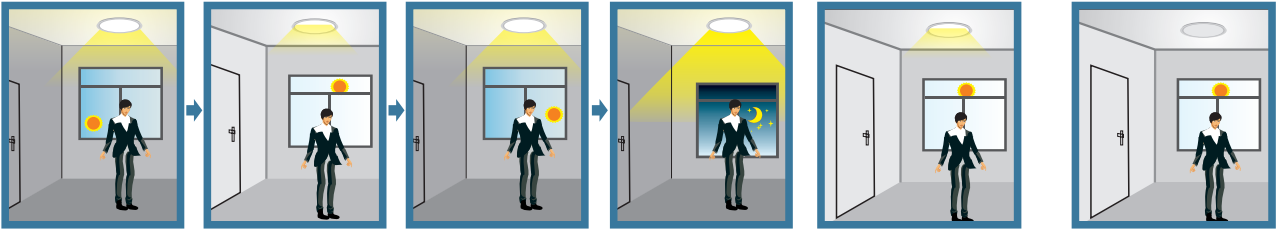
Faced with the skyrocketing cost of energy and environmental concerns, builders, architects and lighting experts are increasingly turning to daylighting as a primary source of illumination. and proper daylight can increase the comfort.

To take full advantage of daylight integration, buildings should have automated controls that either turn off or dim artificial light in response to the available daylight in the space. this is called 'daylight harvesting'.

Ms01 supplies a simple and effective solution for daylight harvesting. connecting to 1-10V interface and using photocell to measure ambient lux level and automatically calculate how much artificial light is needed, and then convert the amount of light to 1-10V dimmable control gears (ballasts or LED drivers). 1-10v dimmable control gears adjust the lighting output according to the signal from the daylight sensor.



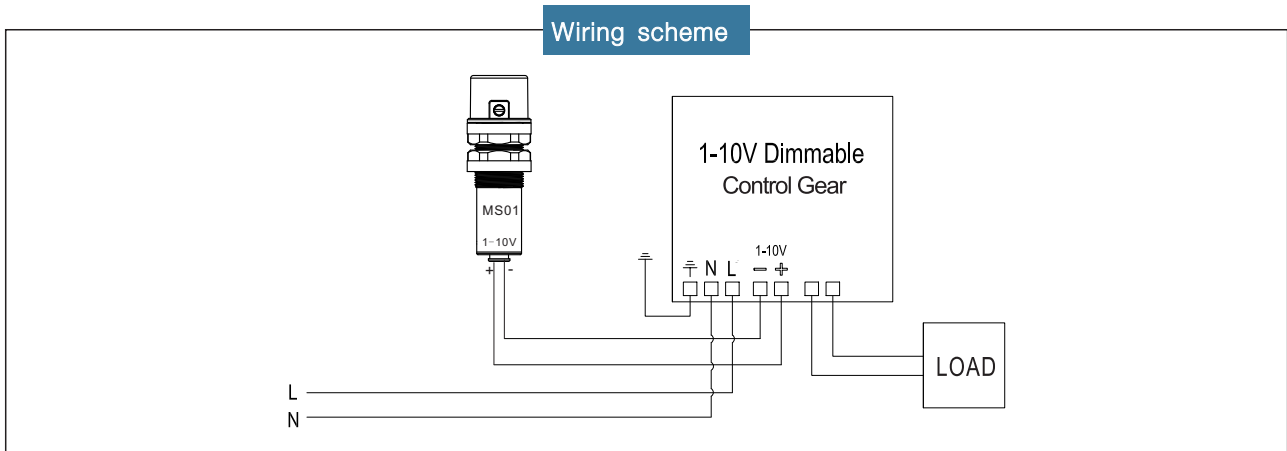
## Daylight sensor (MS01) + 1-10V dimmable ballast or LED driver (Any brand)



The lamp lights on 100% illumination or dims to maintain the preset illumination level against ambient light.

The lamp dims to minimum light level but never turn off even if with sufficient ambient light.

Users can switch off the light manually.



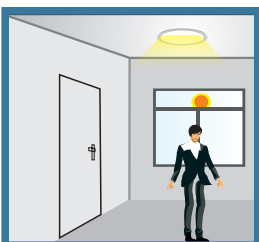
## ON-OFF function sensor (MC008S) + Daylight sensor (MS01) + 1-10V dimmable ballast or LED driver (Any brand)



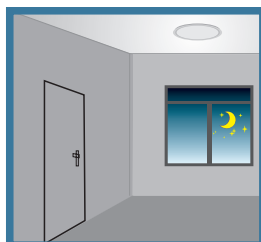
Ambient light larger than preset illumination level (Set by 1-10V daylight sensor), the lamp keeps off.

Ambient light below than preset illumination level, the lamp switches on when motion is detected.

The lamp lights on 100% illumination or dims to maintain the preset illumination level against ambient light.

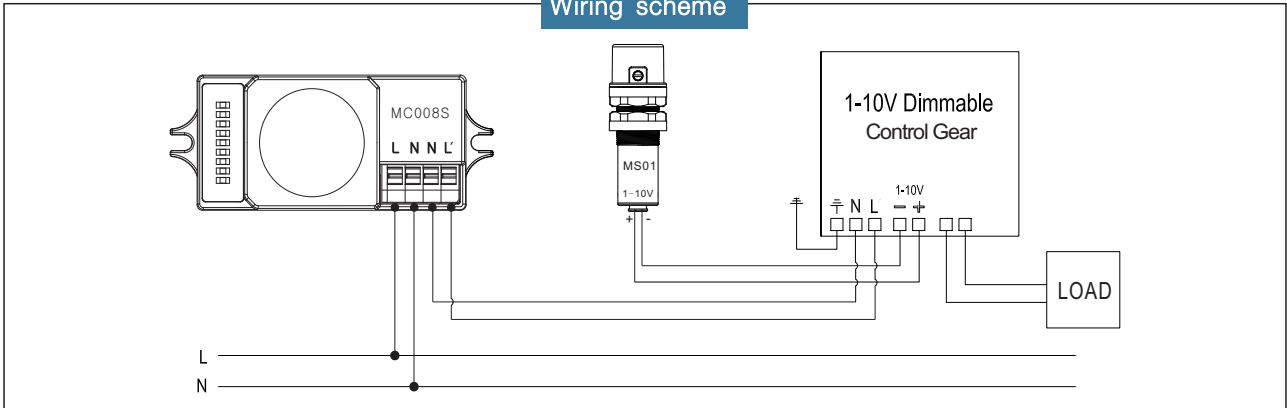


The lamp dims to minimum light level but never turn off even if with sufficient ambient light.



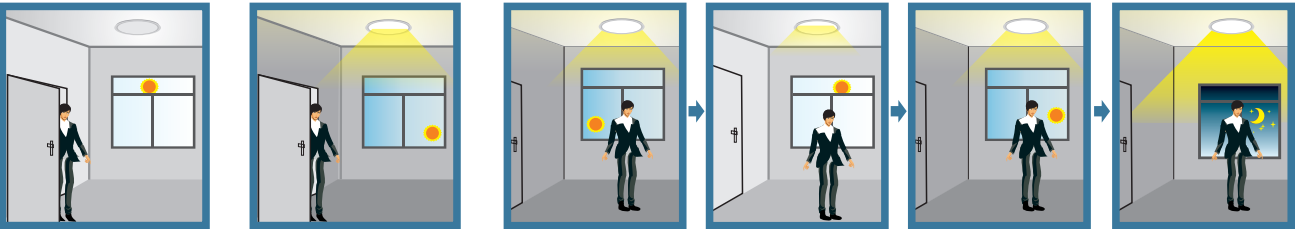
When no motion is detected, the lamp switches off after hold time.

### Wiring scheme



### Motion detector (MC003V) + Daylight sensor (MS01) + 1-10V dimmable ballast or LED driver (Any brand)

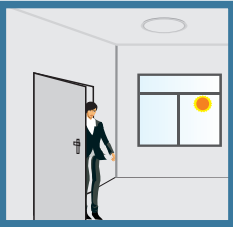
When used in Merrytek motion detector MC003V, the system has automated controls that either turn off or dim artificial light in response to the movement and available daylight in the space.



Ambient light larger than preset illumination level (Set by 1-10V daylight sensor), the lamp keeps off.

Ambient light below than preset illumination level, the lamp switches on when motion is detected.

The lamp lights on 100% illumination or dims to maintain the preset illumination level against ambient light.

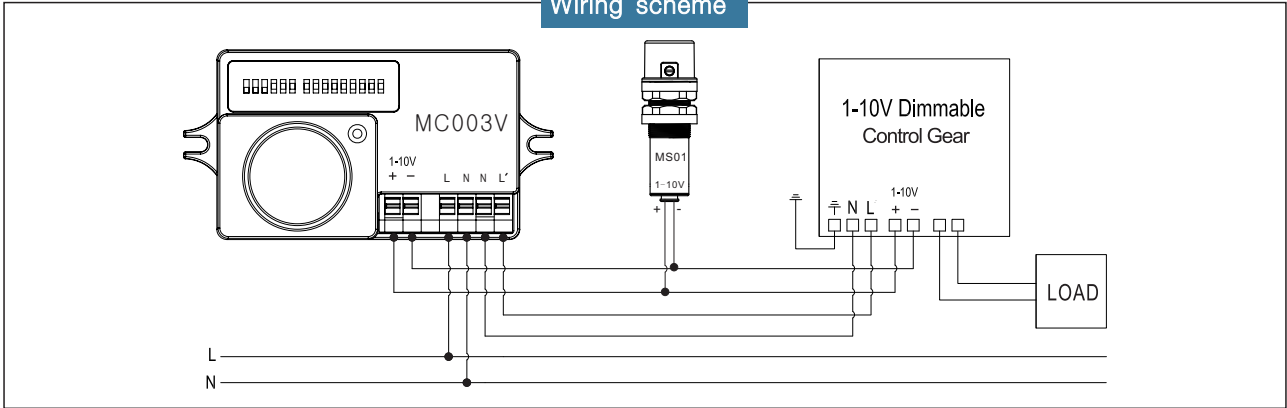


If with sufficient ambient light, the lamp turns off at once, even with motion trigger.

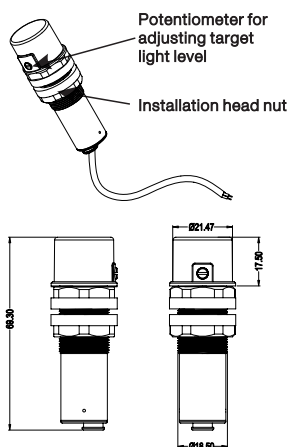


If with insufficient ambient light, the lamp dims to a stand-by dimming level (Set in the motion sensor) when no motion detected during hold time, and then switches off after stand-by period.

### Wiring scheme



## Technical Parameters



### MS01

Operating voltage	1~10Vdc
Max. current sink	50mA (Maximum rating)
Dimming range	1%-100%
Color coding of cable	Red +, Black -
Cable length	80cm
Detection angle	90°
Operating temperature	-0°C~45°C
IP rating	IP20

## Summary

		Function			
		Automatically switch on when motion is detected	Dimming Range	Dimming level at standby period	Automatically switch off
MS01	1-10V dimmable ballast or LED driver	N	1%~100%	N/A	N
MS01	ON-OFF function sensor (MC018S, MC008S, MC001S) + 1-10V dimmable ballast or LED driver	Y	1%~100%	N/A	Y
MS01	Dimming function sensor (MC003V or MC003V/C) + 1-10V dimmable ballast or LED driver	Y	1%~100%	Preset on sensor	Y

## Setting

For best result, target light level shall be 40%-80% of total lux of luminaries.

