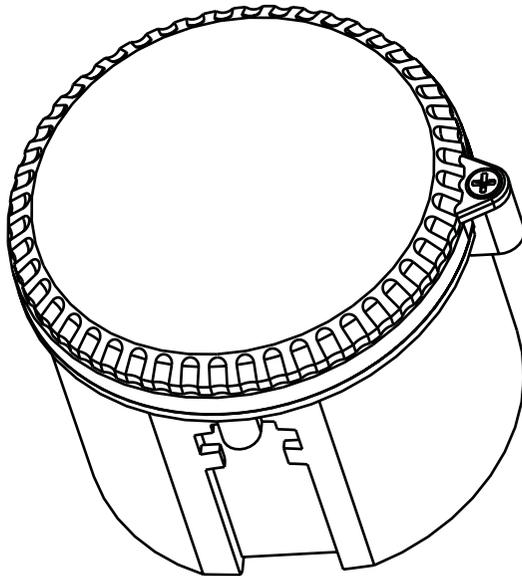


ENSA™

MICROWAVE MOTION SENSOR SWITCH

MODEL: ENSA-MS5



USER MANUAL



Introduction

- Automatic dimming when used in combination with 1-10V dimmable LED drivers or ballasts.
- Built-in adjustable daylight sensor.
- Detection area, time delay and daylight threshold can be precisely set via DIP switch.
- Wide detection area, range up to 16m in diameter and mounting height 15m Max. suitable for warehouse use.
- Optional mounting brackets for different application.

Specifications

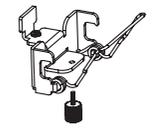
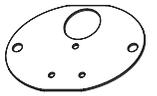
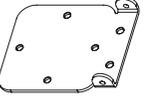
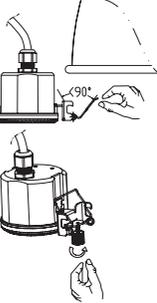
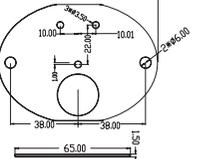
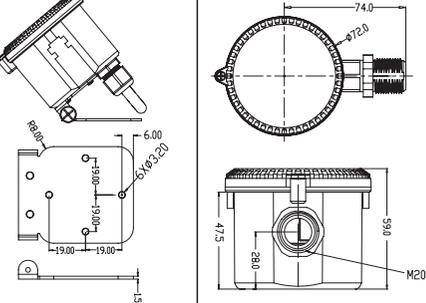
	Input voltage	120-277Vac 50/60Hz
	Rated load	400W@120-220Vac, 800W@220-277Vac(Inductive load) 800W@120-220Vac, 1200W@220-277Vac (Resistive load)
	Detection area	8m Max, adjustable
	Hold time	5s / 30s / 90s / 3min / 20min / 30min
	Daylight sensor	50lux / 100lux / 200lux / Disable
	Stand-by period	5s / 5min / 10min / 30min / 60min / +∞
	Stand-by dimming level	10% / 20% / 30% / 50%
	Sensor principle	Microwave motion detector
	Microwave frequency	5.8GHz±75MHz, ISM wave band
	Transmitting power	<0.5mW (1% of transmitting power for cell phone)
	Detection range	Max. (Φ x h): 16m x 15m
	Detection angle	150°(Wall installation), 360°(Ceiling installation)
	Motion detection	0.5~3m/s
	Operating temperature	-35°C~55°C
	IP rating	IP65

General Guidelines for Installation

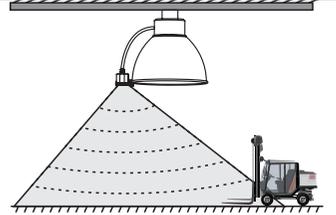
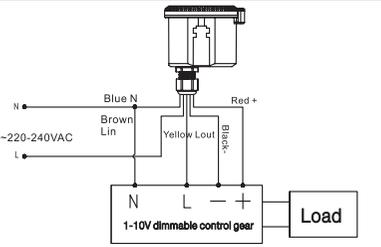
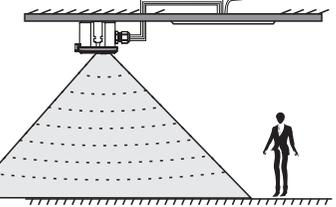
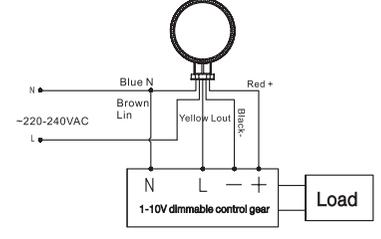
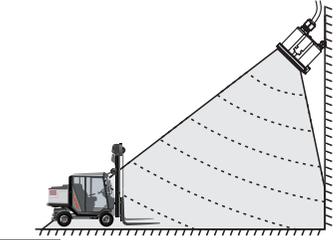
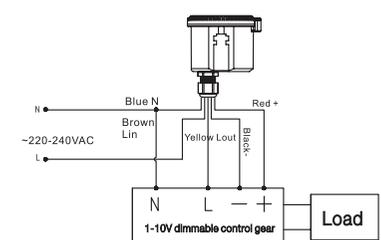


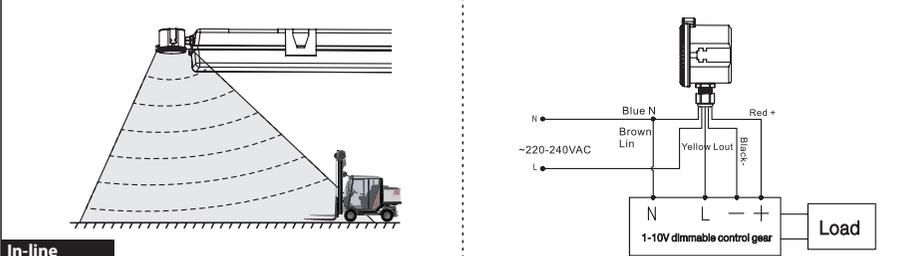
- 1, Please read the entire instruction manual before using the product and then save it for future reference. We reserve the right for any errors in text or images and any necessary changes made to technical data.
- 2, The power supply cord shall be connected to junction box. The sensor should be installed by a qualified electrician. And ensure that the electricity supply is switched off before installing or servicing the product.
- 3, The sensor should not be modified in any way. Any modifications made to this product will immediately invalidate any warranties issued.
- 4, The company does not accept responsibility for any consequences resulting from unauthorized modification of the product.
- 5, Microwaves cannot pass through metal or brick walls if thicker than 20cm. They will pass through thinner walls but there will be some attenuation.
- 6, The sensor is IP65 rated, weather resistant only. Protected install location recommended.

Installation

Metal Reflector Clip		Oval Surface Mounted Bracket		Rotatable Metal Bracket	
					
8X10+M3.0X8mm Screw	1X	M4.0X25mm Screw	2X	M3.0X8mm Screw	3X
		 96.00 10.00 10.01 38.00 38.00 65.00 1.65 2-M4.0		 74.0 47.25 59.0 38.0 47.5 19.00 19.00 6.00 M20 1.65	

Wiring



In-line

NOTE: If only need ON/OFF function, please ignore red and black wire

Settings

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

ON		1	
I	ON	100%	
II	-	50%	

	2	3	4
I	ON	ON	ON
II	-	ON	ON
III	ON	-	ON
IV	-	-	ON
V	ON	ON	-
VI	-	-	-

ON	5	6	7
I	ON	ON	ON
II	-	ON	ON
III	ON	-	ON
IV	-	-	ON
V	ON	ON	-
VI	-	-	-

ON	8	9
I	ON	ON
II	-	ON
III	ON	-
IV	-	-

ON	10	11	12
I	ON	ON	ON
II	-	ON	-
III	ON	-	-
IV	-	-	-

Detection area

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

Hold time

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

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 +∞ the low light is maintained until motion is detected.

Stand-by dimming level

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

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.

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

FAQ

Question	Cause	Remedy
The load will not illuminate.	Incorrect daylight sensor setting selected.	Adjust setting.
	Load has failed.	Replace load.
	Power is switched off.	Switch on
The load is permanently illuminated.	Continuous movement in the detection area.	Check detection area setting.
	The lamp (containing sensor) is installed in an area too close to reflective surfaces, i. e. metal, glass or concrete walls.	1. Make sure installation area suitable with at least 30cm space between lamp and surrounding reflective surfaces. 2. Reduce sensitivity (detection area).
The load will not illuminate despite movement.	Speed of moving object is not in the range of 0.5~3m/s or the detection radius is too small.	Check detection area setting.