

## **INSTALLATION INSTRUCTIONS**

### A guide for qualified electricians



## EVENTUALLY, YOU MAY WANT TO REPLACE THIS PRODUCT:

Regulations require the recycling of Waste from Electrical and Electronic Equipment (European "WEEE Directive" effective August 2005—UK WEEE Regulations effective 2nd January 2007). Environment Agency Registered Producer: WEE/ GA02480Z.

WHEN YOUR PRODUCT COMES TO THE END OF ITS LIFE OR YOU CHOOSE TO REPLACE IT, PLEASE RECYCLE IT WHERE FACILITIES EXIST - DO NOT DISPOSE WITH HOUSEHOLD WASTE.

#### **IF YOU EXPERIENCE PROBLEMS:**

If you believe your product is defective, please return it to the place where you bought it. Our Technical Team will gladly advise on any Eterna Lighting product, but may not be able to give specific instructions regarding individual installations.



Email: sales@eterna-lighting.co.uk / technical@eterna-lighting.co.uk
Visit our website: www.eterna-lighting.co.uk
Made in China

Model: MWSENSOR

Pack contents:

# **Microwave Sensor**

These instructions are provided as a guideline to assist you.

PLEASE READ THESE INSTRUCTIONS BEFORE INSTALLATION AND RETAIN FOR FUTURE REFERENCE

Issue 1120

#### **READ THIS FIRST:**

Check the pack and make sure you have all of the parts listed on the front of this booklet. If not, contact the outlet where you bought this product.

This product must be installed by a competent person in accordance with the current building and IEE wiring regulations.

As the buyer, installer and/or user of this product it is your own responsibility to ensure that this fitting is fit for the purpose for which you have intended it. Eterna Lighting cannot accept any liability for loss, damage or premature failure resulting from inappropriate use.

This product is designed and constructed according to the principles of the appropriate British Standard and is intended for normal domestic service.

Switch off the mains before commencing installation and remove the appropriate circuit fuse or lock off MCB.

This product is designed for permanent connection to fixed wiring: this must be a suitable circuit (protected with the appropriate MCB or fuse).

When making connections ensure that the terminals are tightened securely and that no strands of wire protrude. Check that the terminals are tightened onto the bared conductors and not onto any insulation.

## This product is double insulated. **DO NOT CONNECT ANY PART TO EARTH.**

This product is not intended to be used by children and persons with sensory, physical and/or mental impairments that would prevent them from using it safely.

You are advised at every stage of your installation to double-check any electrical connections you have made. After you have completed your installation there are electrical tests that should be carried out, these tests are specified in the current IEE wiring and building regulations.

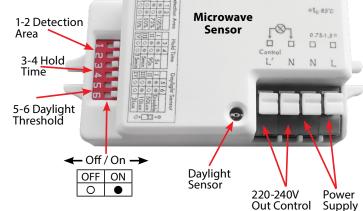
#### **INTRODUCTION:**

This is a microwave sensing device which continuously scans the operating zone and immediately switches the light on when it detects movement in that area. This means that whenever movement is detected within the range of the sensor the light will switch on automatically and illuminate the area you have selected to light. While there is movement within range of the unit the light will remain on.

A microwave sensor is an active motion detector emitting high-frequency electro-magnetic waves at 5.8GHz and receiving their echo. The sensor detects change in the echo pattern within its detection zone and the light is then triggered. The wave can pass through doors, glass and thin walls and will continually monitor the signal within the detection area.

#### **MICROWAVE SENSOR SPECIFICATIONS:**

PRODUCT TYPE	MICROWAVE MOTION SENSOR		
Operating Voltage	220-240VAC 50/60Hz		
HF System	5.8GHz CW radar		
Transmission Power	<0.2mW		
Detection Angle	30-150 Degree		
Power Consumption	<0.5W		
Detection Range	Max. 10m adjustable		
Time Setting	5s-15m		
Mounting	Indoors, ceiling and wall		
Light Control	2-50lux, disable		
Working Temp	-20 to +60 degree		
	800W (resistive load)		
Rated Load	400W (capacitive load)		
	270W (LED)		



#### **INSTALLATION:**

**RED DIRECTIVE** 

Microwave Occupancy Sensor

Full declaration available at www.eterna-lighting.co.uk

Eterna Lighting Ltd

Isolate mains and lock off.

 Connect mains and output as per below image, brown to live, blue to neutral on input and adjust control accordingly.

2) Restore the power and switch on.

#### UNDERSTANDING THE CONTROLS:

The sensor is an active motion detector: it emits a high frequency electromagnetic wave 5.8GHz and receives its echo. The sensor detects the change in echo from movement in its detection zone. A microprocessor then triggers the switch light ON command. Detection is possible through doors, panels of glass and thin walls.

#### **DETECTION RANGE:**

This determines the effective range of the motion detector and is set up by DIP switches at the sensor itself, refer to figure. Note that reducing the sensitivity will also narrow the detection range.

The following settings are available:

 I - Detection Range 100%
 I

 II - Detection Range 75%
 II

 III - Detection Range 50%
 IV

 V - Detection Range 10%
 V

DETECTION AREA							
	1	2					
Ι	•		100%				
	•	0	75%				
III	0		50%				
IV	0	0	10%				
KEY:	ON:	• (	DFF: O				

#### HOLD TIME:

This determines the time the fitting remains at 100% level on motion detection and is set with DIP switches at the sensor itself, refer to figure. The walk test setting is useful when installing the fitting to establish correct operation and range.

The following settings are available:

I - Walk test mode 5s II - 90s III - 5 minutes IV - 15 minutes

HOLD TIME					
	3	4			
- 1	•	٠	5s		
	•	0	90s		
	0	٠	5min		
IV	0	0	15min		
KEY: ON: ● OFF: O					

#### DAYLIGHT SENSOR:

This setting holds off the 100% light output should there be sufficient daylight and is set using DIP switches at the sensor, refer to figure.

The following settings are available:

I - Photocell disabled

II - 50 lux twilight operation

III - 10 lux twilight operation IV - 2 lux darkness operation only

\*In daylight setting the lamp(s) will always be on with motion detected and operate at 100% light output, even in bright daylight.

1	DAYLIGHT SENSOR						
		5	6				
	Ι	٠	٠	Disable			
	Π	٠	0	50 Lux			
	III	0	٠	10 Lux			
	IV	0	0	2 Lux			
1	KEY: ON: ● OFF: O						