

LED LAMP SPECIFICATIONS	:			
Luminaire lumens (with diffuser)	1100 lm			
Lumens from chip (no diffuser)	1300 lm			
Useful lumens	1050 lm			
Rated Wattage	13W			
Rated luminous flux	1050 lm			
Nominal life time of the lamp	35,000 hrs			
Colour temperature	4200K			
Number of switching cycles before premature lamp failure	>15,000			
Warm-up time up to 60% of the full light output	Instant full light			
Dimmable	No			
Nominal beam angle	120°			
Rated power	13W			
Rated lamp lifetime	35,000 hrs			
Lamp power factor	>0.85			
Lumen maintenance factor at end of nominal life	>0.7			
Starting time	<0.1s			
Colour rendering	>80			
Colour consistency	Within a six step Macadam ellipse			
Rated peak intensity	450cd			
Rated beam angle	120°			
Voltage / Frequency	240V~50Hz			
Not suitable for accent lighting				

## 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.

#### CLEANING:

Clean this fitting only with a soft dry cloth.

Do not use any chemical or abrasive cleaners.

#### **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



## **INSTALLATION INSTRUCTIONS**

### A guide for qualified electricians



# LEDOVAL / LEDOVALMW

## LED Oval Bulkhead Fitting & Microwave Version

These instructions are provided as a guideline to assist you. PLEASE READ THESE INSTRUCTIONS BEFORE INSTALLATION AND RETAIN FOR FUTURE REFERENCE

Issue 0417

#### **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.

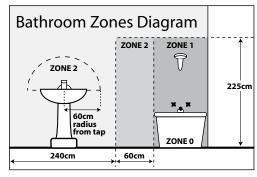
This product is designed and constructed according to the principles of the appropriate British Standard and is intended for normal domestic service. Using this fitting in any other environments may result in a shortened working life, for example where there is prolonged periods of use or higher than normal ambient temperatures such as lighting public or shared spaces or in nursing /care home facilities.

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

Suitable for indoor and outdoor use.

This product is suitable for use in living areas, and Bathroom Zone 2 and outsides of zones.

#### If being fitted in a bathroom a 30mA RCD must be used.



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

This product is suitable for installation on surfaces with normal flammability e.g. wood, plasterboard and masonry. It is not suitable for use on highly flammable surfaces (e.g. polystyrene, textiles).

Before making fixing hole(s), check that there are no obstructions hidden beneath the mounting surface such as pipes or cables.

The chosen location of your new fitting should allow for the product to be securely mounted (e.g. to a ceiling joist) and safely connected to the mains supply (lighting circuit).

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 safelv.

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.

#### The light source is designed to last the lifetime of the luminaire.

The light source contained in this luminaire shall only be replaced by the manufacturer, service agent or a similar qualified person. CAUTION, RISK OF ELECTRIC SHOCK.

#### **INSTALLATION:**

1) Unclip decorative trim, and undo screws to remove the diffuser.

2) Using the back of your fitting as a template, mark the position of your fixing holes on your mounting surface.

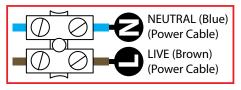
3) Prepare the holes in your mounting surface as appropriate for your fixings.

4) Thread mains cable through the cable entry and offer the fitting to the ceiling / wall.

5) Secure the fitting in place. Note, if protection against ingress of moisture is required, the heads of screws must be covered with a silicone or similar sealant.

6) Check that the incoming cable is fitted correctly in the cable entry hole with good seal around the incoming cable.

7) Make the electrical connections to the gear tray according to the symbols, adjacent to the connector block, Brown to live (L), Blue to neutral (N).



#### 8a) MICROWAVE VERSION ONLY:

Adjust microwave controls to the desired settinas.

8b) Replace the diffuser, screwing securely in place and offer the decorative trim onto the top of the fitting.

9) Restore the power and switch on.

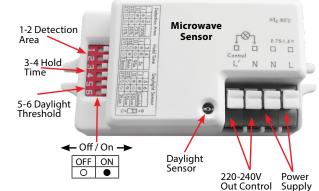
#### **LEDOVALMW INTRODUCTION:**

The ceiling / wall light incorporates 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.

#### **TECHNICAL 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	



#### UNDERSTANDING THE CONTROLS:

#### **REFER TO MICROWAVE SENSOR PICTURE BELOW**

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% II - Detection Range 75% III - Detection Range 50% IV - Detection Range 10%

1         2           I         ●         100%           II         ●         0         75%	DETECTION AREA		
II ● O 75%			
	Ι		
III ○ ● 50%			
IV O O 10%	IV		
KEY: ON: OFF: O	KEY:		

#### 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 ll - 90s III - 5 minutes IV - 15 minutes

	HOL	D TIN	1E
	3	4	
Ι	٠		5s
Ш	٠	0	90s
III	0		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.

DAYLIGHT SENSOR				ON
	5	6		
Ι	•	۲	Disable	$\square$
		0	50 Lux	
III	0	۲	10 Lux	
IV	0	0	2 Lux	
KEY	: ON:	•	OFF: O	OFF

