

## INSTALLATION INSTRUCTIONS

A guide for qualified electricians



**Pack contents:**

1 x Base  
1 x Diffuser

Model:

**SQPRISMW / SQOPALMW**  
**CIRPRISMW / CIROPALMW**

**IP65 LED Utility Fitting With Multi-Function Sensor**

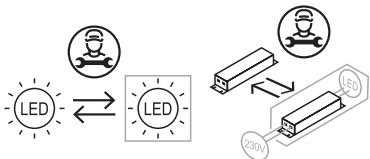
These instructions are provided as a guideline to assist you.

**PLEASE READ THESE INSTRUCTIONS BEFORE INSTALLATION  
AND RETAIN FOR FUTURE REFERENCE**

**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/GA0248QZ.

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.



See website for more information on  
replacability and recycling

**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](mailto:sales@eterna-lighting.co.uk) / [technical@eterna-lighting.co.uk](mailto:technical@eterna-lighting.co.uk)

Visit our website: [www.eterna-lighting.co.uk](http://www.eterna-lighting.co.uk)

Made in China

## 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.

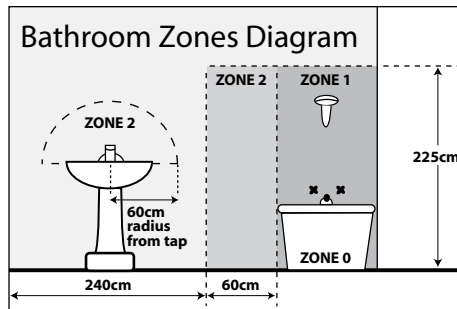
This product is designed and constructed according to the principles of the appropriate British Standard and is intended for normal domestic service. Using this fitting in any other environments may result in a shortened working life, for example where there is prolonged periods of use or higher than 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 outdoor use.

This product is suitable for use in living areas, Bathroom Zone 2 and outsid es 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 must be connected to earth termination.

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:

The LED utility 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.

## LAMP REPLACEMENT:

**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:

Isolate mains and lock off.

Choose the location for your new fitting according to the conditions listed opposite.

- 01) Unscrew gear tray screw and allow the gear tray to rest on its hinge.
- 02) Drill holes in the back of your fitting for your fixing screws, take care and drill gently to ensure a clean hole through. Use a drill bit sized appropriately to your fixing screws (not supplied).
- 03) Using the back of your fitting as a template, mark the position of your fixing holes on your mounting surface.
- 04) Prepare the holes in your mounting surface as appropriate for your fixings.
- 05) Pierce the rubber grommet in the back of your fitting making a hole just large enough to make a tight fit around the incoming mains cable.
- 06) Thread the cable through the grommet and offer the fitting to the ceiling / wall.
- 07) 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.
- 08) Check that the grommet is still correctly fitted in the cable entry hole and around the incoming cable.
- 09) Make the electrical connections according to the symbols, adjacent to the connector block, Brown to live (L) Blue to neutral (N) and earth green & yellow (E).
- 10) Set the multi-function sensor. (See "understanding the controls" instructions on next page).
- 11) Offer the diffuser and decorative trim onto the top of the fitting and turn clockwise until they are held securely.
- 12) Restore the power and switch on.

## MULTI-FUNCTION SENSOR SPECIFICATIONS:

Model number	MLC16C-P
Operating voltage	220-240Vac, 50/60Hz
Output constant current	300mA / 350mA, set via DIP switch
Output voltage	28-48Vdc
Efficiency	≥80%
Power factor	≥0.9
HF system	5.8GHz ± 75MHz, ISM wave band
Transmitting power	<0.5mW
Detection zone max.	16m (D) x 6m (H)
Detection sensitivity	10% / 50% / 75% / 100%
Hold time	5s / 90s / 3 min / 10 min
Corridor function	0s / 30s / 10 min / Disable
Daylight sensor	5lux / 15lux / 50lux / Disable
Standby dimming level	10% - can be customised
Mounting height	6m Max.
Motion detection	0.5~3m/s
Detection angle	150° (wall installation) 360° (ceiling installation)

## UNDERSTANDING THE CONTROLS:

Refer to the table (fig. 1) 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 AREA:

This determines the effective range of the motion detector and is set up by DIP switches at the sensor, refer to fig. 2 opposite. 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%

### HOLD TIME:

This determines the time the fitting remains at 100% level on motion detection and is set with DIP switches at the sensor, refer to fig. 2 opposite. 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 - 3 minutes
- IV - 10 minutes

### 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 fig. 2 opposite.

The following settings are available:

- I - Photocell disabled
- II - 50 lux twilight operation
- III - 15 lux twilight operation
- IV - 5 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.

### CORRIDOR FUNCTION:

This setting determines how long the fitting should operate at 10% output after the hold time has elapsed and is set by DIP switching at the sensor, refer to fig. 2 opposite.

**NOTE:** Setting at 0s disables this function; setting at + ∞ leaves it permanently at 10% output until activated again.

The following settings are available:

- I - 0s
- II - 30s
- III - 10 minutes
- IV - + ∞

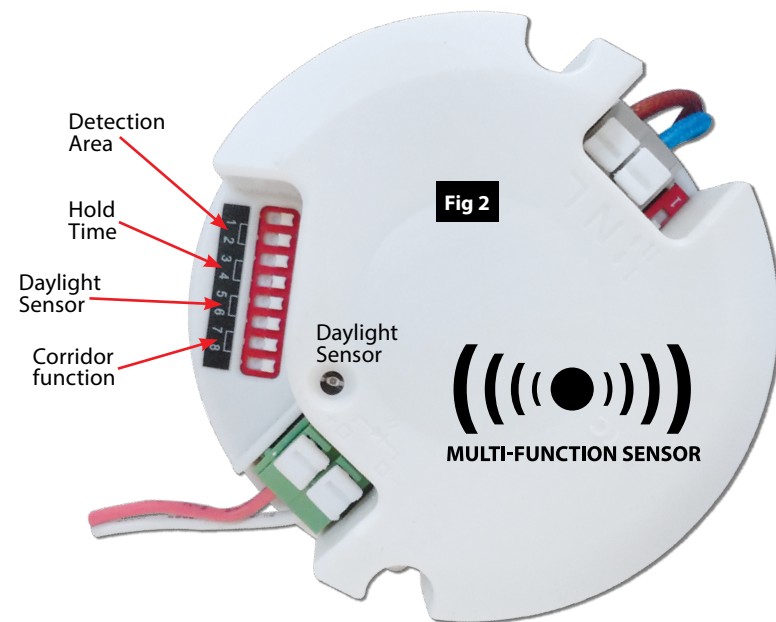


Fig 1

Fig 1

<div>ON</div> <div><div></div></div> <div></div> <div></div> <div>OFF</div>	Detection Area				Hold Time				Daylight Sensor				Corridor Function			
		1	2			3	4			5	6			7	8	
	I	ON	ON	100%	I	ON	ON	5s	I	ON	ON	Disable	I	ON	ON	0s
	II	-	ON	75%	II	-	ON	90s	II	-	ON	50Lux	II	-	ON	30s
	III	ON	-	50%	III	ON	-	3min	III	ON	-	15Lux	III	ON	-	10min
	IV	-	-	10%	IV	-	-	10min	IV	-	-	5Lux	IV	-	-	+ ∞

**RED DIRECTIVE**

Eterna Lighting Ltd

**Microwave Occupancy Sensor**

Full declaration available at [www.etera-lighting.co.uk](http://www.etera-lighting.co.uk)

LED LAMP SPECIFICATIONS:	
Luminaire lumens (opal)	<b>1400 lm</b>
Luminaire lumens (prismatic)	<b>1600 lm</b>
Lumens from chip (no diffuser)	<b>1750 lm</b>
Rated Wattage	18W
Rated luminous flux (Opal)	1350 lm
Rated luminous flux (Prismatic)	1550 lm
Nominal life time of the lamp	35,000 hrs
Colour temperature	4000K
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
LED array dimensions SQUARE	(L) 215 x (H) 215mm
LED array dimensions CIRCLE	240mmØ
Nominal beam angle	120°
Rated power	18W
Rated lamp lifetime	35,000 hrs
Displacement factor	Opal: 0.95 Prismatic: 0.90
Lumen maintenance factor at end of nominal life	≥0.70
Starting time	<0.1s
Colour rendering	80 Ra
Colour consistency	Within 6 step Macadam ellipse
Rated peak intensity	520cd
Rated beam angle	120°
Voltage / Frequency	240V~50Hz
Not suitable for accent lighting	

