

INSTALLATION INSTRUCTIONS

A guide for qualified electricians



Pack contents:
1 x Base
1 x Diffuser

Model:

PRSQMW / PRCIRMW
OPSQMW / OPCIRMW

Power & Colour Temperature Selectable
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.

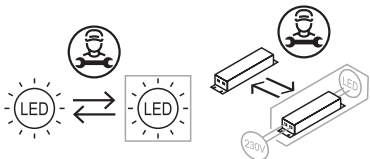
CLEANING:

Clean this fitting only with a soft dry cloth.

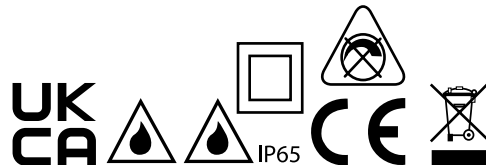
Do not use any chemical or abrasive cleaners.

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.



See website for more information on replacability and recycling



Email: sales@eterna-lighting.co.uk / technical@eterna-lighting.co.uk

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.

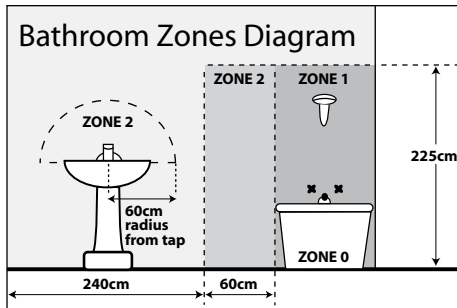
This product is designed and constructed according to the principles of the appropriate British Standard and is intended for normal domestic service. Using this fitting in any other environments may result in a shortened working life, for example where there is prolonged periods of use or higher than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

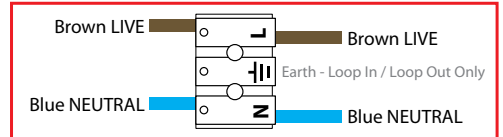
Brown to live (L)
Blue to neutral (N)
- 10) Set power to the desired option by selecting appropriate switch setting on the driver:

9W / 14W / 18W options
- 11) Set colour temperature to the desired option by selecting appropriate switch setting on the driver.

DL	Daylight	6500K
CW	Cool White	4400K
WW	Warm White	3000K

- 12) Set desired settings on the microwave.
- 13) Replace gear tray and secure in position.
- 14) Offer the diffuser onto the top of the fitting and tighten securely making sure the gasket is correctly fitted in place.
- 15) Restore the power and switch on.

An Earth connection is not required for the operation of these Class II luminaires. The addition of the Earth terminal provides a loop-in/loop out facility which allows connectivity through to other Class I luminaires in the same lighting circuit.



NOTE: In warm white (3000K) and daylight white (6500K) operation only one set of LEDs will illuminate, in cool white (4400K) both sets of LEDs will illuminate.

UNDERSTANDING THE CONTROLS:

REFER TO STEP DIM MICROWAVE SENSOR PICTURE OPPOSITE:

The motion detector can turn on the light based on movement. With this detector built in, light is automatically on when needed and dimmed to preset level before it is totally off.

SENSITIVITY / DETECTION RANGE

Sensitivity can be adjusted by selecting the combination on the DIP switches for different applications.

	1	
I	ON	100%
II	OFF	50%

HOLD-TIME

Hold-time refers to the time period that the light remains 100% on if no more movement is detected.

	2	3	
I	ON	ON	5sec
II	ON	OFF	90sec
III	OFF	OFF	180sec
IV	OFF	ON	10min

DAYLIGHT SENSOR / THRESHOLD

Daylight threshold can be preset on DIP switches. Light will always turn on upon movement if daylight sensor is disabled.

	4	
I	ON	Disable
II	OFF	10Lux

CORRIDOR FUNCTION / STAND-BY TIME

This is the time period that the light remains at a low level before it is completely turned off.

	5	6	
I	ON	ON	0Sec
II	ON	OFF	10Sec
III	OFF	ON	10Min
IV	OFF	OFF	+∞

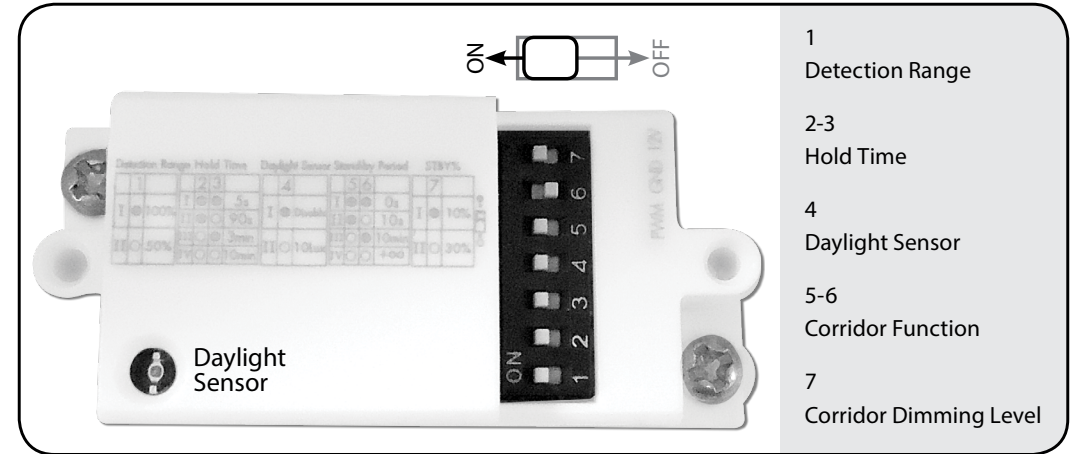
CORRIDOR DIMMING LEVEL / STAND-BY DIMMING LEVEL

Light can be dimmed to different levels after hold-time.

	7	
I	ON	10%
II	OFF	30%

STEP DIM MW SENSOR SPECIFICATIONS:

PRODUCT TYPE	STEP DIM MICROWAVE MOTION SENSOR
Operating Voltage	220-240VAC 50/60Hz
HF System	5.8GHz
Transmission Power	<0.2mW
Detection Angle	150° Max
Power Consumption	<0.3W
Detection Range	Max. 6m adjustable
Detection sensitivity	50% / 100%
Hold time	5s / 90s / 180s / 10 min
Corridor function	0s / 10s / 10 min / Disable
Corridor Dimming Level	10% / 30%
Daylight sensor	10 lux / Disable
Mounting	Indoors, ceiling and wall
Light Control	10lux, disable
Working Temp	-20 to +60 degree
Rated Load	400W (Inductive load) 800W (Resistive load) 270W (LED)



- 1 Detection Range
- 2-3 Hold Time
- 4 Daylight Sensor
- 5-6 Corridor Function
- 7 Corridor Dimming Level

Eterna Lighting Ltd
RED DIRECTIVE - Microwave Occupancy Sensor
 Full declaration available at:
www.etera-lighting.co.uk/red-declaration

CIRCULAR OPAL			
LED LAMP SPECIFICATIONS:	9W	14W	18W
Luminaire lumens (with diffuser): Warm White, Cool White, Daylight White	3000K - 1090 lm 4400K - 1160 lm 6500K - 1130 lm	3000K - 1610 lm 4400K - 1770 lm 6500K - 1700 lm	3000K - 1970 lm 4400K - 2190 lm 6500K - 2080 lm
Lumens from chip (array): Warm White, Cool White, Daylight White	3000K - 1220 lm 4400K - 1300 lm 6500K - 1270 lm	3000K - 1810 lm 4400K - 1990 lm 6500K - 1900 lm	3000K - 2210 lm 4400K - 2470 lm 6500K - 2350 lm
Useful lumens (array): Warm White, Cool White, Daylight White	3000K - 980 lm 4400K - 1050 lm 6500K - 1020 lm	3000K - 1450 lm 4400K - 1600 lm 6500K - 1520 lm	3000K - 1770 lm 4400K - 1970 lm 6500K - 1880 lm
Rated Wattage	9W	14W	18W
Rated luminous flux	3000K - 980 lm 4400K - 1050 lm 6500K - 1020 lm	3000K - 1450 lm 4400K - 1600 lm 6500K - 1520 lm	3000K - 1770 lm 4400K - 1970 lm 6500K - 1880 lm
Nominal life time of the lamp	50,000 hrs	50,000 hrs	50,000 hrs
Colour temperature	3000/4400/6500K	3000/4400/6500K	3000/4400/6500K
Number of switching cycles before premature lamp failure	≥15000	≥15000	≥15000
Warm-up time up to 60% of the full light output	Instant full light	Instant full light	Instant full light
Dimmable	No	No	No
Nominal beam angle	120°	120°	120°
Rated power	9W	14W	18W
Rated lamp lifetime	50,000 hrs	50,000 hrs	50,000 hrs
Displacement factor	0.97	0.97	0.97
Lumen maintenance factor at end of nominal life	≥80	≥80	≥80
Starting time	Instant full light	Instant full light	Instant full light
Colour rendering	≥0.8	≥0.8	≥0.8
Colour consistency	Within 6 step Macadam ellipse	Within 6 step Macadam ellipse	Within 6 step Macadam ellipse
Rated peak intensity	3000K - 243cd 4400K - 260cd 6500K - 252cd	3000K - 361cd 4400K - 396cd 6500K - 378cd	3000K - 441cd 4400K - 492cd 6500K - 468cd
Rated beam angle	120°	120°	120°
Voltage / Frequency	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz
Lumen efficacy	3000K - 121 lm / W 4400K - 129 lm / W 6500K - 126 lm / W	3000K - 115 lm / W 4400K - 126 lm / W 6500K - 121 lm / W	3000K - 109 lm / W 4400K - 122 lm / W 6500K - 116 lm / W
This product contains a Light Source of Energy Efficiency Class F			
Not suitable for accent lighting			

CIRCULAR PRISMATIC			
LED LAMP SPECIFICATIONS:	9W	14W	18W
Luminaire lumens (with diffuser): Warm White, Cool White, Daylight White	3000K - 1180 lm 4400K - 1270 lm 6500K - 1230 lm	3000K - 1715 lm 4400K - 1890 lm 6500K - 1780 lm	3000K - 2055 lm 4400K - 2270 lm 6500K - 2180 lm
Lumens from chip (array): Warm White, Cool White, Daylight White	3000K - 1220 lm 4400K - 1300 lm 6500K - 1265 lm	3000K - 1810 lm 4400K - 1990 lm 6500K - 1890 lm	3000K - 2210 lm 4400K - 2460 lm 6500K - 2350 lm
Useful lumens (array): Warm White, Cool White, Daylight White	3000K - 1140 lm 4400K - 1225 lm 6500K - 1190 lm	3000K - 1630 lm 4400K - 1790 lm 6500K - 1690 lm	3000K - 1950 lm 4400K - 2160 lm 6500K - 2070 lm
Rated Wattage	9W	14W	18W
Rated luminous flux	3000K - 1140 lm 4400K - 1225 lm 6500K - 1190 lm	3000K - 1630 lm 4400K - 1790 lm 6500K - 1690 lm	3000K - 1950 lm 4400K - 2160 lm 6500K - 2070 lm
Nominal life time of the lamp	50,000 hrs	50,000 hrs	50,000 hrs
Colour temperature	3000/4400/6500K	3000/4400/6500K	3000/4400/6500K
Number of switching cycles before premature lamp failure	≥15000	≥15000	≥15000
Warm-up time up to 60% of the full light output	Instant full light	Instant full light	Instant full light
Dimmable	No	No	No
Nominal beam angle	120°	120°	120°
Rated power	9W	14W	18W
Rated lamp lifetime	50,000 hrs	50,000 hrs	50,000 hrs
Displacement factor	0.97	0.97	0.97
Lumen maintenance factor at end of nominal life	≥80	≥80	≥80
Starting time	Instant full light	Instant full light	Instant full light
Colour rendering	≥0.8	≥0.8	≥0.8
Colour consistency	Within 6 step Macadam ellipse	Within 6 step Macadam ellipse	Within 6 step Macadam ellipse
Rated peak intensity	3000K - 398cd 4400K - 428cd 6500K - 415cd	3000K - 570cd 4400K - 627cd 6500K - 592cd	3000K - 683cd 4400K - 754cd 6500K - 722cd
Rated beam angle	120°	120°	120°
Voltage / Frequency	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz
Lumen efficacy	3000K - 131 lm / W 4400K - 141 lm / W 6500K - 137 lm / W	3000K - 122 lm / W 4400K - 135 lm / W 6500K - 127 lm / W	3000K - 114 lm / W 4400K - 126 lm / W 6500K - 121 lm / W
This product contains a Light Source of Energy Efficiency Class F			
Not suitable for accent lighting			

SQUARE OPAL			
LED LAMP SPECIFICATIONS:	9W	14W	18W
Luminaire lumens (with diffuser): Warm White, Cool White, Daylight White	3000K - 1080 lm 4400K - 1150 lm 6500K - 1120 lm	3000K - 1630 lm 4400K - 1770 lm 6500K - 1700 lm	3000K - 1980 lm 4400K - 2200 lm 6500K - 2070 lm
Lumens from chip (array): Warm White, Cool White, Daylight White	3000K - 1210 lm 4400K - 1290 lm 6500K - 1260 lm	3000K - 1830 lm 4400K - 1995 lm 6500K - 1900 lm	3000K - 2220 lm 4400K - 2470 lm 6500K - 2330 lm
Useful lumens (array): Warm White, Cool White, Daylight White	3000K - 970 lm 4400K - 1040 lm 6500K - 1010 lm	3000K - 1460 lm 4400K - 1600 lm 6500K - 1530 lm	3000K - 1780 lm 4400K - 1980 lm 6500K - 1870 lm
Rated Wattage	9W	14W	18W
Rated luminous flux	3000K - 970 lm 4400K - 1040 lm 6500K - 1010 lm	3000K - 1460 lm 4400K - 1600 lm 6500K - 1530 lm	3000K - 1780 lm 4400K - 1980 lm 6500K - 1870 lm
Nominal life time of the lamp	50,000 hrs	50,000 hrs	50,000 hrs
Colour temperature	3000/4400/6500K	3000/4400/6500K	3000/4400/6500K
Number of switching cycles before premature lamp failure	≥15000	≥15000	≥15000
Warm-up time up to 60% of the full light output	Instant full light	Instant full light	Instant full light
Dimmable	No	No	No
Nominal beam angle	120°	120°	120°
Rated power	9W	14W	18W
Rated lamp lifetime	50,000 hrs	50,000 hrs	50,000 hrs
Displacement factor	0.97	0.97	0.97
Lumen maintenance factor at end of nominal life	≥80	≥80	≥80
Starting time	Instant full light	Instant full light	Instant full light
Colour rendering	≥0.8	≥0.8	≥0.8
Colour consistency	Within 6 step Macadam ellipse	Within 6 step Macadam ellipse	Within 6 step Macadam ellipse
Rated peak intensity	3000K - 223cd 4400K - 239cd 6500K - 223cd	3000K - 338cd 4400K - 368cd 6500K - 353cd	3000K - 411cd 4400K - 456cd 6500K - 432cd
Rated beam angle	120°	120°	120°
Voltage / Frequency	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz
Lumen efficacy	3000K - 120 lm / W 4400K - 128 lm / W 6500K - 124 lm / W	3000K - 116 lm / W 4400K - 126 lm / W 6500K - 121 lm / W	3000K - 110 lm / W 4400K - 122 lm / W 6500K - 115 lm / W
This product contains a Light Source of Energy Efficiency Class F			
Not suitable for accent lighting			

SQUARE PRISMATIC			
LED LAMP SPECIFICATIONS:	9W	14W	18W
Luminaire lumens (with diffuser): Warm White, Cool White, Daylight White	3000K - 1150 lm 4400K - 1250 lm 6500K - 1200 lm	3000K - 1730 lm 4400K - 1870 lm 6500K - 1830 lm	3000K - 2100 lm 4400K - 2360 lm 6500K - 2200 lm
Lumens from chip (array): Warm White, Cool White, Daylight White	3000K - 1200 lm 4400K - 1300 lm 6500K - 1260 lm	3000K - 1830 lm 4400K - 2000 lm 6500K - 1910 lm	3000K - 2220 lm 4400K - 2470 lm 6500K - 2330 lm
Useful lumens (array): Warm White, Cool White, Daylight White	3000K - 1100 lm 4400K - 1200 lm 6500K - 1160 lm	3000K - 1640 lm 4400K - 1760 lm 6500K - 1670 lm	3000K - 2000 lm 4400K - 2240 lm 6500K - 2100 lm
Rated Wattage	9W	14W	18W
Rated luminous flux	3000K - 1100 lm 4400K - 1200 lm 6500K - 1160 lm	3000K - 1640 lm 4400K - 1760 lm 6500K - 1670 lm	3000K - 2000 lm 4400K - 2240 lm 6500K - 2100 lm
Nominal life time of the lamp	50,000 hrs	50,000 hrs	50,000 hrs
Colour temperature	3000/4400/6500K	3000/4400/6500K	3000/4400/6500K
Number of switching cycles before premature lamp failure	≥15000	≥15000	≥15000
Warm-up time up to 60% of the full light output	Instant full light	Instant full light	Instant full light
Dimmable	No	No	No
Nominal beam angle	120°	120°	120°
Rated power	9W	14W	18W
Rated lamp lifetime	50,000 hrs	50,000 hrs	50,000 hrs
Displacement factor	0.97	0.97	0.97
Lumen maintenance factor at end of nominal life	≥80	≥80	≥80
Starting time	Instant full light	Instant full light	Instant full light
Colour rendering	≥0.8	≥0.8	≥0.8
Colour consistency	Within 6 step Macadam ellipse	Within 6 step Macadam ellipse	Within 6 step Macadam ellipse
Rated peak intensity	3000K - 425cd 4400K - 459cd 6500K - 447cd	3000K - 628cd 4400K - 675cd 6500K - 640cd	3000K - 767cd 4400K - 860cd 6500K - 805cd
Rated beam angle	120°	120°	120°
Voltage / Frequency	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz
Lumen efficacy	3000K - 128 lm / W 4400K - 139 lm / W 6500K - 133 lm / W	3000K - 124 lm / W 4400K - 134 lm / W 6500K - 131 lm / W	3000K - 117 lm / W 4400K - 131 lm / W 6500K - 122 lm / W
This product contains a Light Source of Energy Efficiency Class E			
Not suitable for accent lighting			