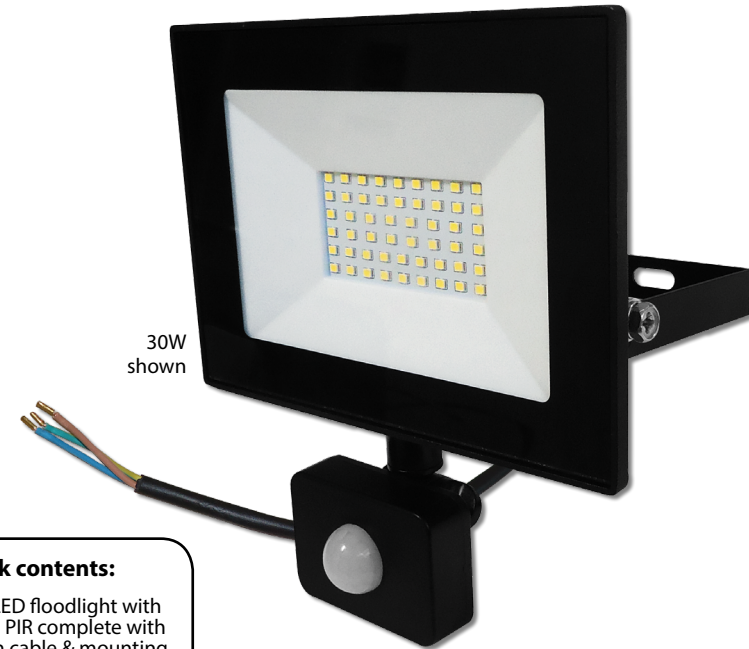


## INSTALLATION INSTRUCTIONS

A guide for qualified electricians



**Pack contents:**  
1 x LED floodlight with 120° PIR complete with 0.3m cable & mounting bracket

Model:

# VECOF10PIR / VECOF20PIR VECOF30PIR / VECOF50PIR


## Economy LED Floodlights With 120° PIR

These instructions are provided as a guideline to assist you.

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


**Eterna** VECOF\_PIR RANGE

This luminaire contains built-in LED lamps.



The lamps cannot be changed in the luminaire.

874/2012



LED LAMP SPECIFICATIONS:	10W	20W	30W	50W
Luminaire lumens (with diffuser)	850 lm	1700 lm	2500 lm	4250 lm
Lumens from chip (no diffuser)	1000 lm	2200 lm	3200 lm	5100 lm
Useful lumens	800 lm	1600 lm	2400 lm	4000 lm
Rated Wattage	10W	20W	30W	50W
Rated luminous flux	800 lm	1600 lm	2400 lm	4000 lm
Nominal life time of the lamp	25,000 hrs	25,000 hrs	25,000 hrs	25,000 hrs
Colour temperature	4000K	4000K	4000K	4000K
Number of switching cycles before premature lamp failure	≥15,000	≥15,000	≥15,000	≥15,000
Warm-up time up to 60% of the full light output	0.5s	0.5s	0.5s	0.5s
Dimmable	No	No	No	No
Nominal beam angle	120°	120°	120°	120°
Rated power	10W	20W	30W	50W
Rated lamp lifetime	25,000 hrs	25,000 hrs	25,000 hrs	25,000 hrs
Lamp power factor	>0.9	>0.9	>0.9	>0.9
Lumen maintenance factor at end of nominal life	70%	70%	70%	70%
Starting time	<0.5s	<0.5s	<0.5s	<0.5s
Colour rendering	≥80 Ra	≥80 Ra	≥80 Ra	≥80 Ra
Colour consistency	Within a six step Macadam ellipse	Within a six step Macadam ellipse	Within a six step Macadam ellipse	Within a six step Macadam ellipse
Rated beam angle	120°	120°	120°	120°
Voltage / Frequency	240V~50Hz	240V~50Hz	240V~50Hz	240V~50Hz

Not suitable for accent lighting



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

## INTRODUCTION:

The floodlight incorporates a PIR (Passive Infra Red) sensing device which continuously scans a preset 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 to illuminate the area you have selected to light. While there is movement within range of the unit the light will remain on.

## 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.

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

This unit is suitable for outdoor use.

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

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

Make sure that the fixings are strong enough to support the considerable weight of the fitting and hold it rigidly.

The lamp must be positioned so that there is at least 1M between the luminaire and any illuminated surface.

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.

## CLEANING:

- To avoid dust build-up and ensure proper functioning of the floodlight, please wipe the sensor lens lightly with a damp cloth every 3 months.
- Disconnect the power and clean the exterior only of this fitting with a moist (not wet) cloth.
- Do not use any chemical or abrasive cleaners.

## SPECIFICATIONS:

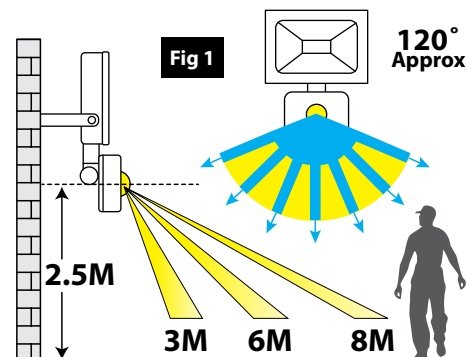
- Detection range: max. 8m at approx. 120° scan
- Duration time adjustment: (10±3) seconds to (10±3) minutes
- Weatherproof: IP44
- Lux adjustment: 10-2000 Lux

## WHERE TO FIT YOUR PIR FLOODLIGHT:

To achieve best results we suggest you take the following points into consideration:

Do not mount on a surface that has vibration.

Ideally the PIR flood light should be mounted 1.8 to 2.5 metres (6 to 8ft) above the area to be scanned (refer to fig.1 below).



To avoid damage to the unit do not aim sensor towards sun.

Avoid positioning the sensor unit adjacent to a bright light source which may prevent the unit from operating when the lux control is set to operate in dark conditions.

Avoid nuisance / false triggering by directing sensor away from:

- Trees and shrubs
- Reflective surfaces such as smooth white walls
- Swimming pools
- Heat sources such as boiler flues

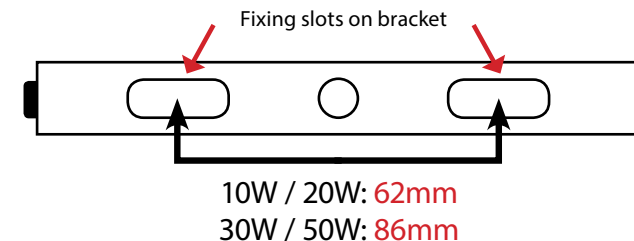
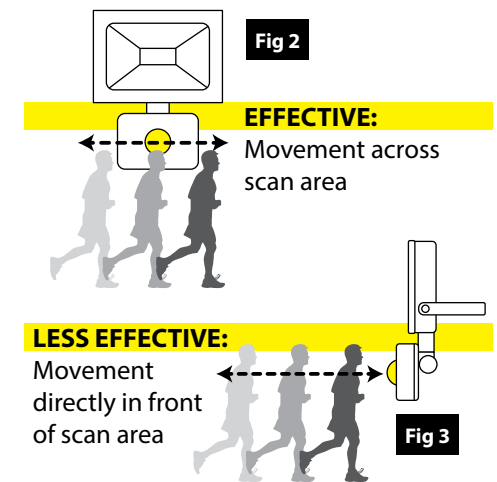
The PIR sensor scanning specifications (approximately 8 metres at 120°) may vary slightly depending on the mounting height and location.

The detection range of the unit may also alter with temperature change. Before selecting a place to install your PIR floodlight you should note that movement across the scan area is more effective than movement directly towards or away from the sensor. (Refer to fig.2 opposite).

If movement is made walking directly towards or away from the sensor and not across the sensor the apparent detection range will be substantially reduced (refer to fig. 3 opposite).

## LAMP REPLACEMENT:

The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire shall be replaced.



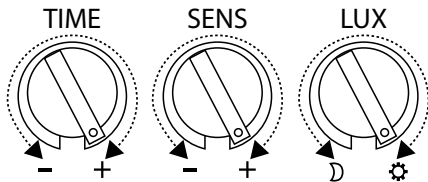
## INSTALLATION:

- 01) Switch off the mains before commencing installation.
- 02) Using the bracket as a template mark and then drill the appropriate fixing holes.
- 03) Secure the bracket with suitable fixings.
- 04) Slot the floodlight on to the bracket and secure the fixing bolts.
- 05) Terminate loose ends of wire to an appropriate IP rated junction box or similar, ensuring the below is observed.

Live - Brown / Red  
Neutral - Blue / Black  
Earth - Yellow / Green

- 06) Adjust the direction of the floodlight.
- 07) Restore mains power.
- 08) Adjust the PIR sensor floodlight to the desired settings.

Fig 5: PIR Controls



## UNDERSTANDING THE CONTROLS:

(Please refer to Fig. 5 below)

### ADJUSTING THE DURATION TIME:

The length of time the unit remains switched on after activation can be adjusted from (10±3) seconds to (10±3) minutes approximately. Rotating the TIME screw from (+) to (-) will reduce the duration time.

**Note:** Once the light has been triggered by the PIR sensor any subsequent detection will start the timed period again from the beginning.

### ADJUSTING THE LUX CONTROL LEVEL:

The Lux control module has a built-in sensing device (photocell) that detects daylight and darkness. The (☼) position denotes that the floodlights can work at day and night, and the (☾) position only work at night. You can set to operate the unit at the desired level by adjusting the LUX screw.

### SETTING THE CONTROLS - WALK TEST:

Turn the Lux control screw to light (☼) & ensure that the TIME control screw is set at the minimum duration time (-) position. The floodlight will now switch on and remain on for about 10 seconds after each detection.

- 01) Adjust time control to required setting.
- 02) To set the light level at which the floodlight will automatically switch "on" at night, turn the LUX control screw from daylight (☼) to night (☾). If the floodlight is required to switch on earlier, e.g. dusk, wait for the desired light level, then slowly turn the LUX control screw towards daylight while someone walks across the center of the area to be detected. When the floodlight switches on stop adjusting. You may need to make further adjustments to achieve your ideal light level setting.

### ADJUSTING THE SENSITIVITY:

The sensitivity means the maximum distance which PIR sensor can be triggered by movement - turning the SENS knob from (+) to (-) will decrease the sensitivity.

## TROUBLESHOOTING AND USER HINTS:

**Note:** all passive infra red detectors are more sensitive in cold and dry weather than warm and wet weather.

PROBLEM	POSSIBLE CAUSE	SUGGESTED REMEDY
Light does not switch on when there is movement in the detection area.	1. No mains voltage	Check all connections, and MCB Fuses / switches
	2. Nearby lighting is too bright	Relocate the unit
	3. Controls set incorrectly	Adjust Lux setting
	4. Wired incorrectly	Check wiring and confirm its wired as per the wiring instructions opposite
	5. Sensor positioned in wrong direction	Relocate the unit
Light switches on for no apparent reason (false trigger)	1. Heat sources such as air-con, vents, heaters, flues, other outside lighting, moving cars trees or shrubs are activating sensor	Relocate the unit
	2. Interference from on/off switching of electric fans or lights on the same circuit as your security floodlight.  (This problem does not always occur but a faulty switch or noisy fluorescent light may cause the security floodlight to switch on)	Should the false triggering become, troublesome, consider:  (a) Replacing a faulty switch  (b) Replacing noisy fluorescent tubes and/or starters  (c) Connecting the floodlight to a separate circuit (in most cases where one or more of the above suggestions have been carried out, false triggering has been reduced)
	3. Reflection from swimming pool, or reflective surface such as smooth white walls	Relocate the unit
Light remains on	Time is set too long	Reduce time
Light remains on at nighttime	Possible heat source in detection zone	Cover PIR sensor lens with a thick cloth, if the light turns off check detection area for heat or reflective source, reposition head and decrease the sensitivity setting if this control is available
Light switches on during daylight hours	LUX control screw is set to daylight position	Turn the LUX control screw to desired light level setting
When setting the lux controls in daylight the detection distance becomes shorter	Interference by sunlight	Re-test at night