

IRL Series LED Illuminators

User's Guide



Overview

1. Description

A complete range of infra-red and white light illuminators for CCTV, the Visible and Invisible range feature state of the art technology and installation friendly design.

- Energy efficient, low voltage operation for quick and easy installation
- Latest high efficiency surface mount LEDs with advanced electronic control circuitry deliver improved thermal management, long life and low cost of ownership
- Semi covert, covert and visible white light versions
- Built in photo cell
- Easy integration with day/night cameras with relay contacts indicating if the built in photocell has activated the illuminator
- Remote telemetry input
- Easy access to power and photo cell adjust
- Pressure equalisation vent prevents thermal expansion and pressure cycling

2. Specification

Electronics	High efficiency surface mount high power LED's with advanced current limited integral control circuitry
Beam Angles	10, 30, 60, 120 degree
Lens/Beam pattern	The illuminator should be matched to the scene and the camera lens focal length
Wavelength	850nm and visible white light
Expected life	10 years

Consumption	26W
Input Voltage	12-32V DC or 24V AC
Operating Temp.	-58° to 140°F (-50° to 60°C)
Environmental	IP67
Construction	Robust high quality aluminum extrusion
Front window	Polycarbonate high transmittance protective (vandal-proof) IR filter
Dimensions	4.49" x 4.33" x 3.07" (114 x 110 x 78mm)
Weight	2.3lbs (1.05Kg)
Power cable	9ft (3m). Other lengths available to order
Mount	Black powder coated stainless steel wall mount. Adjustable via M6 Allen key (included)

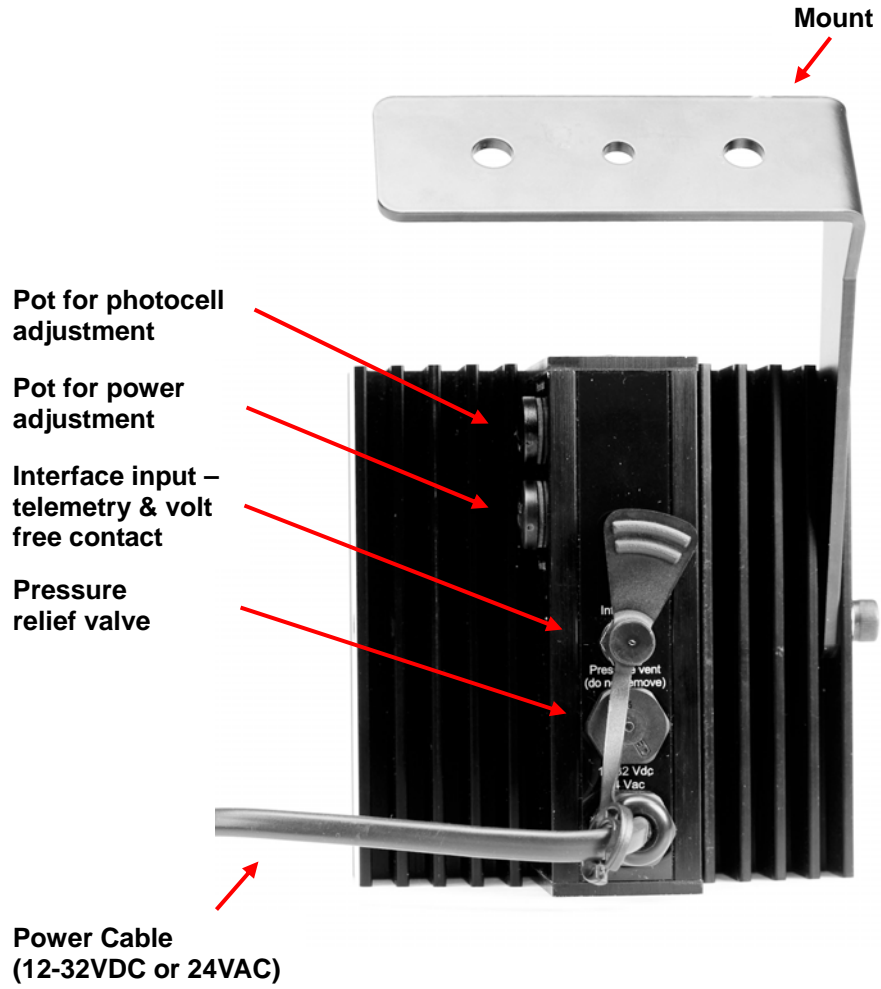
4. Installation

Note: The illuminator is low voltage 12-32V DC or 24VAC.

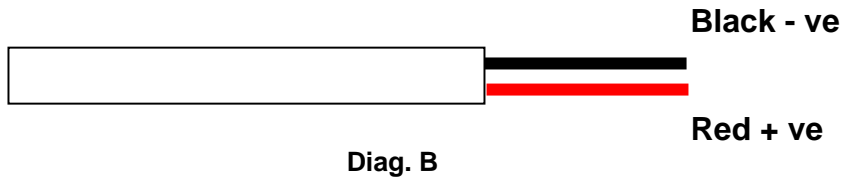
Optimum results are achieved by setting up at night and viewing the results on a monitor.

1. Attach the illuminator mount to pan/tilt unit, wall or camera housing
2. Connect the lamp to a suitable low voltage supply. Ensure that the polarity is correct (see Diag. B)
3. Commission the mains supply, camera and monitoring equipment
4. Adjust the pan angle of the illuminator to match the camera field of view
5. Adjust the vertical alignment by loosening the side bolts (one on each side of the main body) to maximise the results
6. Tilt the lamp downwards until the rear part of the required field of view is saturated with light, as viewed on the monitor
7. SLOWLY and GRADUALLY tilt the lamp upwards until the far part of the required field of view is illuminated correctly on the monitor.

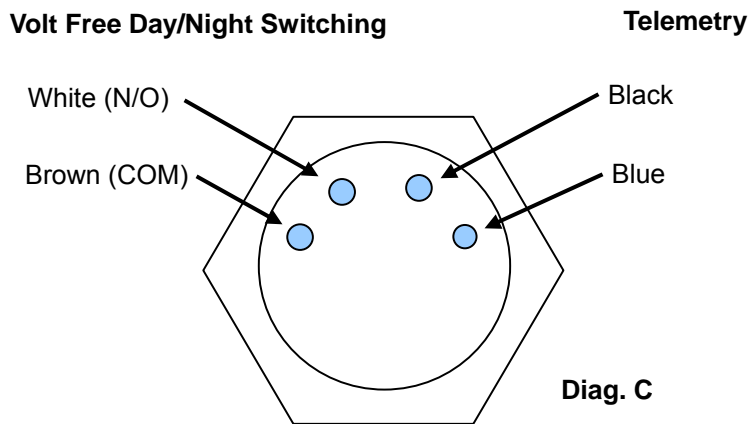
Diag. A – Back of Illuminator



Power Cable Connections



Interface Connector Pin-Out



Remote switching

The illuminator may be activated remotely by a volt-free contact latched across the telemetry pins (see Diag. C above)

Photocell following contact

Volt free relay contact - normally open (day) to normally closed (night). See Diag. C.

Power adjust

To adjust the power first unscrew the sealing cap, then adjust the power potentiometer clockwise to increase the power and counter clockwise to turn the down. The unit is factory set to maximum output.

Photocell

The photocell is designed to automatically switch the lamp s on at dusk and turn off at dawn. A high degree of hysteresis is incorporated to avoid on/off switching in marginal conditions. The unit is factory set at approximately 30 Lux On and 70 Lux OFF but can be adjusted.

Photocell sensitivity

To adjust the photocell sensitivity first remove the sealing cap, then adjust the potentiometer to turn the lamp on when lighting conditions are lighter or darker. Adjust counter clockwise to make the lamp turn on when it's lighter and clockwise when it's darker.

Disabling the photocell

To disable the photocell adjust the sensitivity fully counter clockwise. This will make the lamp turn on all the time.

Safety

WARNING: When the lamp is running it is hot to touch. Before touching switch off the illuminator and allow to cool for a minimum of 10 minutes.

Do not stare directly into the lamp at a distance of less than 6' (1.8m)

5. Trouble shooting

Ensure all tests are undertaken by a qualified, trained engineer.
Ensure safe working practices are followed at all times.

Step 1: Basics

- Check power connection
- Ensure power is 12-32V DC / 24V AC
- Check the photocell is working - cover photocell, light should turn on.
- Ensure power supply is suitably rated to product – check specifications

Step 2: Lamp Test

- Check current draw of lamp corresponds to specification
 - Check current of lamp – see instructions for correct current setting.
- To check lamp current remove +ve (red) lead from power supply and connect a multimeter (set to 10A) in line with the lamp. [One lead of multimeter in common (COM), other lead into 10A socket of multimeter; set multimeter to read Amps].
Refer to PSU Specifications for correct current settings.

Step 3: Set-up Camera, Lens and Illumination

- Check alignment of lamp
- Check camera lens – fully open at night & set correctly
- Check model number to performance specification to ensure required distance is achievable

Step 4: Call for further assistance

If the lamp is still not delivering the required performance, please contact Technical Support for further assistance

Note down:

- Model and serial number of illuminator
- Camera make and model
- Lens make and model

6. Certification



This product complies with the European Directive 89/336/EEC Electromagnetic Compatibility and 73/23/EEC Low Voltage Directive by meeting the following standards:

Safety:	EN60598-1:2008	Electrical Safety
EN60825-	1:2007	LED/Laser Eye Safety
EMC:	EN 61000-6-1:2007	
EN	61000-6-3:2007	
EN	61000-3-2:2006	
EN	61000-3-3:1995 AMD1 & AMD2	
FCC:	FCC CFR Part 15.107 and 15.109	
IP:	IP67 in accordance with EN 60529:1992 AMD1 7643,	
1993	AMD2 10931, 2000	
WEEE:	Waste Electrical & Electronic Equipment European directive	
	202/96/EC	
RoHS:	Restriction of Hazardous Substances European directive	
	202/95/EC	



This symbol on the product means that the electrical and/or electronic equipment to which it relates should be disposed of at the end of life separately from domestic household waste.

There are separate collection systems for recycling in the EU. For more information please contact the Local Authority or supplier of the product.