



# Clarius LT<sup>®</sup> User Guide



www.qjd.co.uk | info@qjd.co.uk | +44 (0) 1706 363 998  
 Unit 2 Birch Business Park, Whittle Lane, Heywood, Lancashire, OL10 2SX







## DESCRIPTION

Entry level infrared illuminators for CCTV, featuring state of the art technology and installation friendly design.

- Energy efficient, low voltage operation for quick and easy installation
- Latest high efficiency SMT **Dual Core LEDs<sup>®</sup>** with advanced electronic control circuitry deliver improved thermal management, long life and low cost of ownership
- **CleanLITE<sup>®</sup>** self cleaning lens coating technology
- Semi covert
- Built in photocell

## Specification

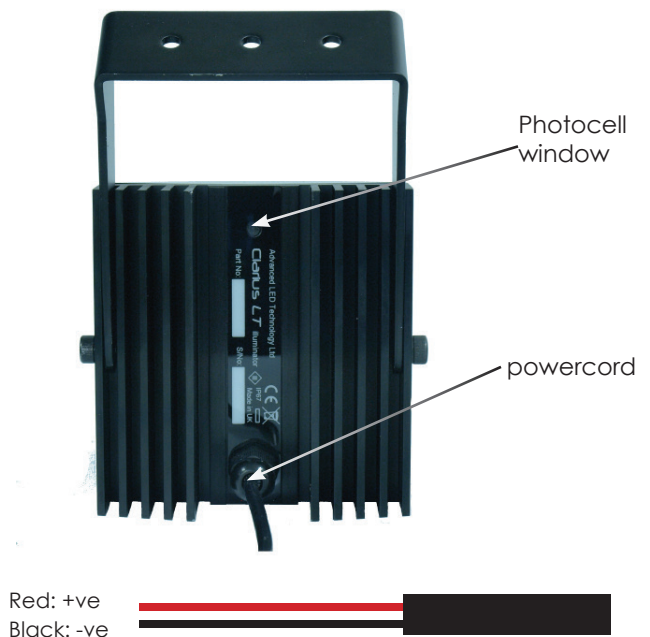
<b>Electronics</b>	High efficiency surface mount <b>Dual Core LEDs<sup>™</sup></b> with advanced current limited integral control circuitry
<b>Beam Angles</b>	30° or 90° models available
<b>Lens/Beam Pattern</b>	The illuminator should be matched to the scene and the camera lens focal length
<b>Wavelength</b>	850nm
<b>Expected Life</b>	10 years
<b>Consumption</b>	Clarius IS / 10W Clarius IM / 20W
<b>Input Voltage</b>	12-32V DC
<b>Operating Temp.</b>	-50° to 50°C (-58° to 122°F)
<b>Environmental</b>	IP67
<b>Construction</b>	Robust high quality aluminium extrusion
<b>Front Window</b>	Polycarbonate high transmittance (Vandal-proof) with <b>CleanLITE<sup>®</sup></b> technology
<b>Dimensions</b>	Clarius IS / 68 x 110 x 78mm Clarius IM / 114 x 110 x 78mm
<b>Weight</b>	Clarius IS / 750g (1.65lbs) Clarius IM / 1.05Kg (2.3lbs)
<b>Power Cable</b>	3m (9ft).
<b>Mount</b>	Black powder coated stainless steel wall mount. Adjustable via M6 Allen Key (included)

## Installation

**Note:** The illuminator is low voltage 12-32V DC

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
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 or GRADUALLY tilt the lamp upwards until the far part of the required field of view is illuminated correctly on the monitor.



## Power Connections

### Photocell

The photocell is designed to automatically switch the lamps on at a dusk and turn of at dawn. A high degree of hysteresis is incorporated to void on/off switching in marginal conditions. The unit is factory set at approximately 30 Lux On and 70 Lux Off.

### Disabling the photocell

To disable the photocell, cover the rear photocell window. This will make the lamp turn on at all times.

### 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 1.8m.

## Trouble Shooting

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

### Step 1: Basics

- Check power connection
- Ensure power is 12-32V DC
- Check the photocell is working - cover photocell, light should turn on
- Ensure power supply is suitable rated to product - check the specifications

### Step 2: Lamp Test

- Check current draw of lamp corresponds to specification
- Check current of lamp - see instructions for correct current settings

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

## Certifications

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

<b>Safety:</b>	EN60598-1:2008 Electrical Safety EN60825-1:2007 LED/Laser Eye Safety
<b>EMC:</b>	EN61000-6-1:2007 EN61000-6-3:2007 EN61000-3-2:2006 EN61000-3-3:1995 AMD1 & AMD2
<b>FCC:</b>	FCC CFR Part15. 107 and 15.109
<b>IP:</b>	IP67 in accordance with EN 60529:1992 AMD1 7643,1993 AMD2 10931,2000
<b>WEEE:</b>	Waste Electrical & Electronic Equipment European directive 202/96/EC
<b>RoHS:</b>	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.

## ACCESSORIES

### SMB1

- 'L' Wall mount bracket for single illuminator
- Compatible with all Clarius infrared & white light illuminators
- Allows up to 180 degrees rotation
- Fully adjustable (left, right, up & down)



### DMB1

- Dual illuminator mounting bracket compatible with all Clarius infrared & white light illuminators
- Doubles the angle of illumination
- Increases illumination distance by a factor of 1.4x when using two equivalent illuminators



### TMB1

- Triple illuminator mounting bracket compatible with all Clarius infrared & white light illuminators
- Triples the angle of illumination
- Increases the illumination distance by a factor of 1.7x when using three equivalent illuminators



### PMB1

- Pole mounting bracket compatible with all Clarius infrared & white light illuminators including SMB1, DMB1 and TMB1
- Supplied with straps to fit 7.5 to 20cm diameter pole



### Recommended PSU1

- Model: ALT-30-24
- Output: 24V DC / 1.25A Max
- Input: 100-250 V AC / 0.45A 50/60Hz
- Ratings: IP67
- Dimensions: 200 x 20 x 29mm

