

Retrofitting LEDs



Cost saving changes

In every aspect of design and manufacturing, we aim to produce the most environmentally responsible and cost-effective lighting solutions that stand the test of time.

Our LED products come with a standard 5 year guarantee which covers both the LED array and the driver (some LED products also come with full product warranties). However, with the increasing emphasis on reducing our carbon footprint and energy usage, we understand the need for upgrading existing fittings with the latest LED technology.

Designplan's retrofit LEDs offer a simple solution to meeting energy-reduction legislation and reducing overall costs. Our retrofit LEDs are already used successfully across the sectors we work in and the benefits of retrofitting include:

- ✓ **Reduced energy usage**
- ✓ **Improved luminous efficacy**
- ✓ **Low total cost of ownership**
- ✓ **Little or no maintenance**
- ✓ **Quick and simple to install**

With very low cost of ownership, the initial investment will pay for itself several times over before the LEDs need replacing, with usual pay backs of less than one year in some applications.

Example ownership savings*

Our **QuadRetro** service pack, detailed on pages 190 and 191, enables you to upgrade your existing Quadrant 2D luminaire to an LED version in a matter of minutes. The result is a lower total cost of ownership (TCO) achieved through reduced power consumption and less frequent lamp replacements and general maintenance. These savings include:

60% reduction in energy

30% reduction in maintenance

* Cost of ownership of a 1400lm **QuadRetro** service pack and a standard 2D lamp (28W) over a 5 year period.

TECHNICAL INFORMATION

Operational life: LED gear tray: 50,000 hours. 2D 28W lamp: 10,000 hours. **Total circuit watts:** **QuadRetro:**15W. 2D fitting: 38W (28W lamp).

PRODUCT COSTS

QuadRetro(1400 lm): £60*. 2D 28W lamp: Cost £6*.

* Prices correct at May 2016 (average cost for 2D 28W lamp).

ELECTRICITY COSTS

Assumed cost per unit £0.12p (May 2016).

ASSUMPTIONS

Average daily use: 11 hours (14 hours in autumn/winter and 8 hours in spring/summer). **5 year operation:** 20,075 hours (11 hours x 365 days x 5 years). **Maintenance call outs:** Cost to replace a light fitting (lamp not included) = £37. Source: Which: 20 July 2012 <http://local.which.co.uk/advice/cost-price-information-electricians>

CALCULATIONS

Maintenance: QuadRetro: 1 x gear tray, 0 replacements, 0 maintenance call outs.

2D 28W lamp: 2 replacements, 2 maintenance call outs.

Energy: Total circuit watts x operation hours x energy cost / 1000 = 5 year running cost.

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16 Kimpton Park Way, Sutton, Surrey, SM3 9QS
T: 020 8254 2020 W: www.designplan.co.uk

Retrofit packages available

We offer standard retrofit packages for a number of our most popular luminaires including:

- ✓ **Quadrant (see pages 190 and 191)**
- ✓ **Quadring**
- ✓ **Gemini**
- ✓ **Prison monitor**
- ✓ **Tuscan range**

We can also retrofit into many other Designplan fittings. All our retrofitted luminaires are BS EN 60598 compliant. You will also have the added peace of mind of knowing that all replacement parts have been specifically designed and tested by the original manufacturer.

Long lasting quality

We believe we offer the most efficient and well-engineered retrofit LED gear trays on the market. All fittings include optimum thermal management, as well as high quality LED and driver components. To ensure maximum results, additional diffuser options are also available for greater efficiency, less glare and improved light transmission and flashing.

Easy installation

Retrofit lighting from Designplan couldn't be easier. Our LED lamps can be simply installed into existing fittings – as simple as replacing a lamp, and achievable in just a few minutes.

Control systems

Additional savings can be made using our energy management solutions, please see pages 25 for an example and 269 for the lighting control options available.

For further information please go to www.designplan.co.uk or call us on +44 (0)20 8254 2020.



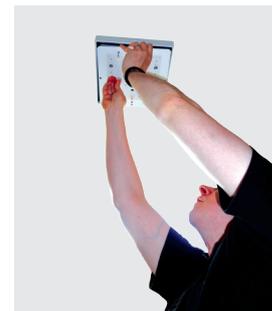
1. Isolate fitting and unscrew diffuser.



2. Remove diffuser.



3. Remove lamp.



4. Unscrew gear tray.



5. Unplug slip-plug and remove gear tray.



6. Connect new gear tray to slip plug.



7. Screw in gear tray.



8. Screw on diffuser.

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