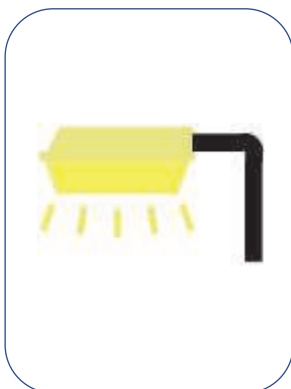
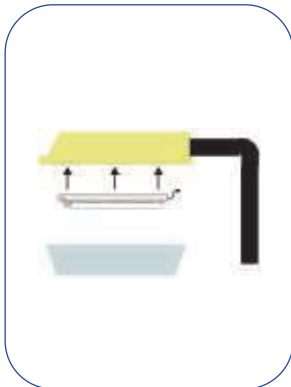


RITHERDON



LED Conversion Gear Trays for Street Lighting



RITHERDON

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Ritherdon LED Conversion Trays for Street Lights

Ritherdons have taken an innovative approach to the switch to LED street lighting which combines the big energy savings and improved quality of LED lighting with the extra cost and environmental benefits of upgrading existing lanterns.

Based on a local, Lancashire invention (see back page), we have developed an LED conversion gear tray which is flexible enough to fit into an expanding range of SOX lanterns, improving light quality and reducing electricity consumption by over 50%*.



Advantages over conventional street lighting

1. **Energy** - ~ 60 % energy saving.
+ full power instantly - switch on ~10 min later.
2. **Carbon footprint** - ~ 85 kg CO₂ emissions per year per lamp.
3. **Light quality** - colour rendition index (CRI) of 70-80.

Advantages over other LED systems

1. **Fraction of the cost of complete LED lanterns**
2. **Combine carbon footprint initiatives with maintenance** - stay on target for CO₂ reduction in times of tight budgets.
3. **Fit perfectly into refurbishment programs**
4. **No direct beams of powerful light** - see back page.
5. **No extra weight load for existing columns** - 3 kg.



* 22 W gear tray replacing 35 W SOX - Elexon codes for 35 W SOX: standard ballast = 58-65 W.



Ritherdon LED Conversion Trays for Street Lights

To upgrade: Philips MI 26 (FGS103) and Thorn Beta 5 lanterns

White light output equivalent to yellow (SOX) light at S6 lighting class, but with less than half the electricity consumption and a design life of around 50,000 hours[†].

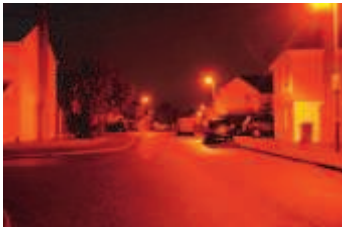
One gear tray will fit either make of lantern. Fixing brackets, are chosen and can be attached on site (only pliers are required). Even at the top of a cherry-picker, the whole process of replacing the SOX gear tray only takes about 10 minutes.



Gear Tray	5 m elevation 40 m spacing		Equivalent		Annual Energy Saving			
	Ē lux	E _{min} lux	Lamp	Watts	Power	Cost**	CO ₂ ***	
2x8 LED 22 W	*1.6	*0.1	35W SOX	58	62 %	158 kWh	£16	85 kg

* measurements on individual, stand-alone lights
 ** 10 pence per kWh, 4380 hours per year
 *** grid rolling average 2006 = 0.537 kg CO₂/kWh

BEFORE



Street trials around the UK

Ritherdon & Co have developed the LED Conversion Gear Tray by working closely with several councils around the UK.

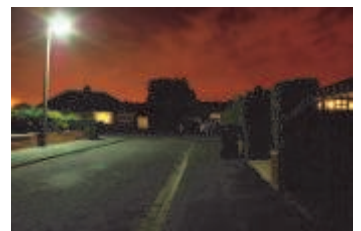
AFTER



Trials on eight roads around the country have demonstrated the product's impressive performance in terms of light quality, fitting and very high cost-effectiveness.



Feedback from the trials generated some more ideas for small design improvements and now the UMSUG power consumption code should soon be available.



[†] Philips Luxeon LED performance data



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Ritherdon LED Conversion Trays for Street Lights

The Rod-Lite



The patented Rod-Lite design produces a radically different kind of LED light in that the LEDs themselves do not shine directly out of the lamp. Total internal reflection within a transparent rod means that the light is diffused before being reflected out in a very controllable way to form anything from a narrow strip to a broad band of light.

The difference in light quality is immediately obvious as there is no dazzling glare from the individual LEDs. This makes the Rod-Lite particularly suitable for street lighting where this glare can be a distraction for drivers and unpleasant for pedestrians. Also as LED technology evolves, light output will be increased safely without the risk of eye damage from narrow points of light.

[Contact our sales team now for further information](#)

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