



covert formation lights

Bell series helicopters

Features

- Near Infra-Red diode technology
- Covert - Invisible to Naked Eye
- NVG Visible
- *Dim* mode for close formation (approx 30 feet)
- *Bright* mode for loose / tactical formation (1 to 2 miles separation)
- *Flash* mode available
- Cockpit switch selectable modes
- Small size, reliable, flight proven, in-service

Applications

- Suitable for Bell UH-1H, 212, 412 and other Bell series helicopters
- Multi-ship Night Vision Operations
- Covert signalling

Oxley has pioneered the design and supply of covert formation lights. Oxley items are in service on many aircraft types world-wide, including the Bell 212, and other Bell series helicopters. The lights are based on Near Infra-Red diodes, which provide light which is only visible to operators equipped with Night Vision Goggles (NVG). They are invisible to the naked eye – hence Covert.

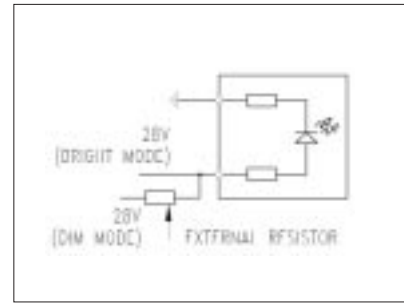
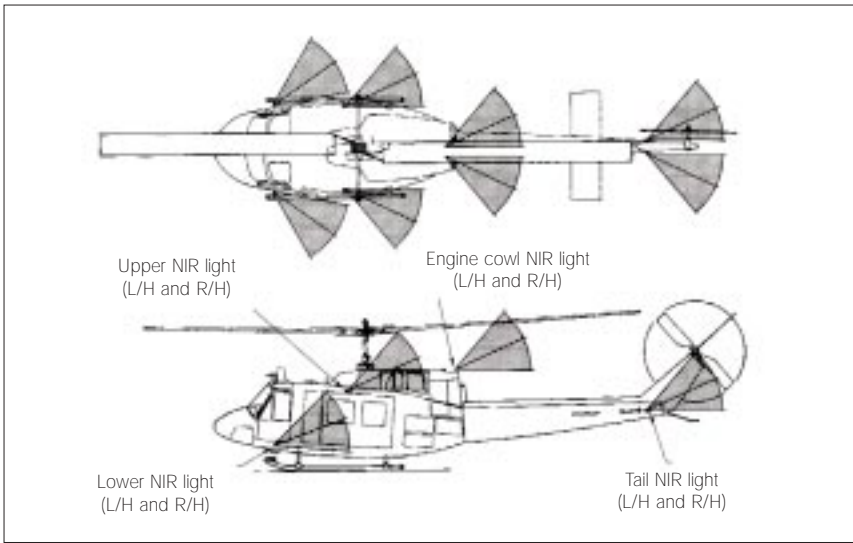


The IR diode assemblies are small (see figure on back of sheet) and are designed to mount directly onto the fuselage or appropriate panel. The recommended fit for UH-1H is 8 formation lights: one below each of the forward (pilot's) doors, one above each of the rear sliding doors, two on the engine cowl and one beside each tail light. Each diode projects a 30 degree cone of IR light in an upward and rearward direction. The light is intended not to

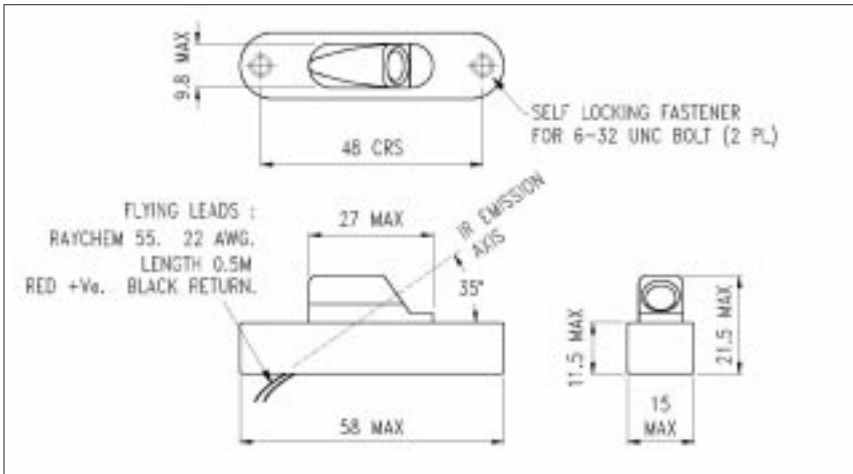
illuminate the aircraft panels.

Bright or *Dim* is switch selectable in the cockpit. Oxley offers a flasher unit to provide the option of "flash" and "steady" selection.

Flashing the entire covert formation light suite in synchronism is generally agreed to be better than having a point source "covert strobe". Aircraft aspect is much clearer due to the 3 dimensional pattern.



Typical electrical installation



For further information and to order please contact Oxley Avionics with your specific requirements

Part number:
OXL10:LH:TX2/IR/NR28

Company Approvals: BS EN 9001:1994 and OAS/34/61 REG No. FM 01759
CECC Approval No. M/0022, BS 9000
Approval No. 1048/M

©Copyright Oxley Developments Company Ltd

Characteristics and Max ratings of covert lights

	units	DIM mode	BRIGHT mode
operating voltage	V	suitable resistor must be placed in line with 28V supply for DIM operation.	28V
Forward current typ.	mA	10	35
Max. forward current	mA	100	
Peak wavelength λ_p	nm	880	
Operating & storage temperature	°C	-62 to 85	
Angular distribution $\theta_{1/2}$	degrees	30	
power output (total)	mW	0.5 to 1.5	5 to 10†
Luminous intensity	candela	0.001 max	
LED type		Hermetic GoA/As	

†Power output adjustable to suit individual mission needs

International and European patents

Oxley Avionics is a division of Oxley Developments Company Ltd

OXLEY AVIONICS

Priory Park, Ulverston, Cumbria,
LA12 9QG United Kingdom
telephone: +44 (1229) 483226
fax: +44 (1229) 580687
e-mail: avionics@oxleygroup.com

OXLEY INC.

25 Business Park Drive, PO Box 814,
Branford CT 06405 USA
telephone: +1 (203) 488 1033
fax: +1 (203) 481 6971
e-mail: avionics@oxleyinc.com

www.oxleygroup.com/avionics/