

Laser Alignment System



658nm laser alignment system

The Laser Alignment System offers unrivalled performance and ease of use. The modules incorporate anti-surge, anti-static and reverse polarity protected electronics, interchangeable pre-aligned optics providing optimum laser beam performance, a scratch resistant glass window to protect the internal optics, 2.1mm jack socket to ease installation and replacement, and user adjustment of the laser intensity. It is contained in a 14mm diameter housing.

Adjustable mounting brackets, (with Allen key), wall plug power supply and power adjustment tool can be supplied with each laser module.

Key Features

- Interchangeable optic heads
- Pre-aligned optics - no user adjustment required
- Protective glass window
- User adjustable laser intensity
- 14mm diameter housing
- 2.1mm jack connector for easy installation and replacement

Key Applications

- Industrial alignment

Product Specifications

Output Power	0.1mW to 4.5mW (user adjustable)
Wavelength	658nm visible
Operating Voltage	3-6V DC
Operating Current	100mA Maximum
Operating Temp.	-10 ° C to +50 ° C
Storage Temp.	-10 ° C to +50 ° C
Lifetime	>10,000 hours MTTF at +25 ° C
Laser Class	3R / 3A (complies with IEC60825, CFR 21 1040.10)
Dimensions	14mm (0.551 inches) dia. x 78mm (3.070 inches)
Housing	Black anodised aluminium

Diffractive Options
Dot (D)
Cross (X)
Line (L)

Fan Angle(°)	
Line / Cross modules	58°
Line Modules only	88°

Accessories

Optional extras include a 4 outlet junction box which enables 4 laser diode modules to be powered from one wall plug, and 2 metre and 5 metre power extension leads. All interchangeable optic heads are available separately.



Interchangeable Optic Heads	
ALO - L - 88	88 ° Line Optic Head
ALO - L - 58	58 ° Line Optic Head
ALO - L - 58	58 ° Cross Optic Head

Mounting Bracket	
AMB - 1	Mounting Bracket

Power Accessories

Outlet Junction Box	
AJB - 4	4 Outlet Junction Box

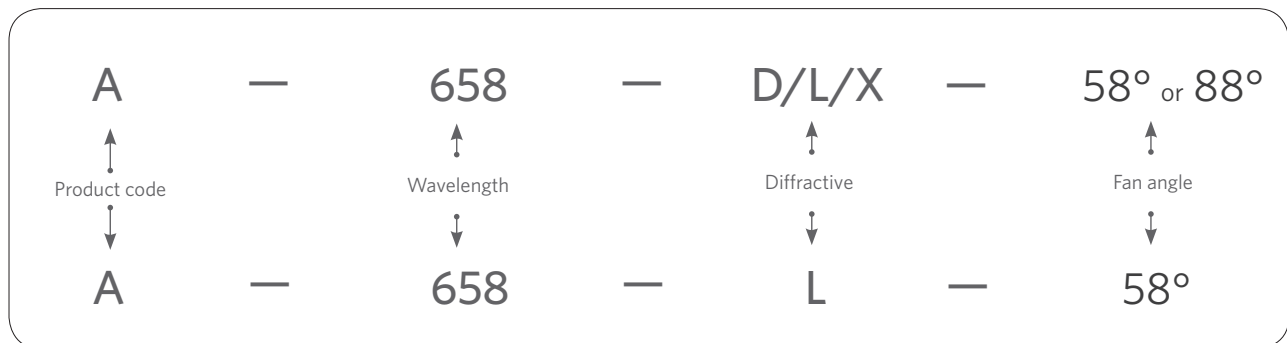
Extension Cables	
AEC - 2	2 Metre Power Lead
AEC - 5	5 Metre Power Lead

Wall Plug Adaptors	
AWP - US	110V AC/5V DC US Wall Plug Adaptor
AWP - EU	230V AC/5V DC Euro Wall Plug Adaptor
AWP - UK	240V AC/5V DC UK Wall Plug Adaptor

Part Numbers

To order your Laser alignment system use product code A - Select Wavelength (658) - Select Diffractive (D/L/X) and add fan angle (XX) for line optics only

e.g A-658-L-88

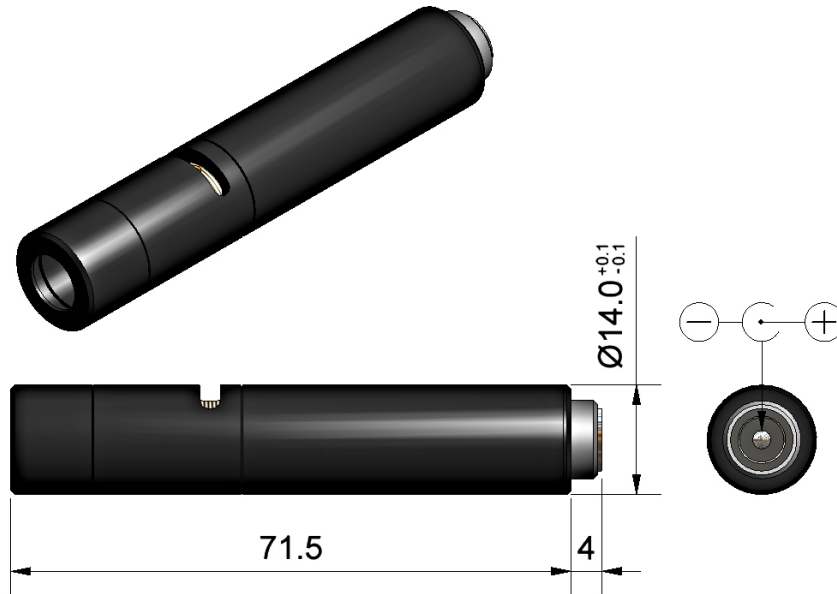


For elliptical beam modules use XX in place of Fan Angle

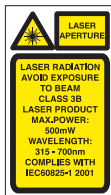
Cross Modules are only available with a 58° Fan Angle

Line Modules are available with 58° or 88° Fan Angle

Dimensional Diagram



Laser Safety



The light emitted from these devices has been set in accordance with IEC60825. However, staring into the beam, whether directly or indirectly, must be avoided. IEC60825 classifies laser products into three different categories depending on light emitted, wavelength and eye safety.

CLASS II

“Caution”, visible laser light less than 1.0mW. Considered eye safe, normal exposure to this type of beam will not cause permanent damage to the retina.

CLASS IIIIR

“Danger”, visible laser light between 1.0mW and 5.0mW. Considered eye safe with caution. Focusing of this light into the eye could cause some damage.

CLASS IIIB

“Danger”, infrared (IR), and high power visible lasers considered dangerous to the retina if exposed.

NB: It is important to note that while complying with the above classifications, unless otherwise stated, our laser diode products are not certified and are designed solely for use in OEM products. The way in which the device is used in the final product may alter its original design classification, and it is the responsibility of the OEM to ensure compliance with the relevant standards.

Heat Sinking

If the case temperature of the laser diode exceeds its maximum specification, premature or catastrophic failure may occur. To ensure the maximum life of the laser diode, it is recommended that an additional electrically insulated heatsink, of at least 35 sq. cm. be used, Thermal transfer cream can be used to improve contact and heat dissipation.

Do not restrict air circulation around the device. Specifications subject to change without notice. E&OE

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