

Diode Pointer

Emits a visible red laser for convenient laser beam alignment.

Eliminates cumbersome IR viewing instruments such as thermal image plates and ultraviolet lights.

- Emits a visible red laser to serve as an accurate alignment tool when co-aligned with a CO₂ laser
- Easily mounts to the faceplate of any Synrad CO₂ laser 100 watts and below
- Easy 4-step installation process, and 5-step alignment process
- Adjustable for establishing far-field and near-field coincidence between the CO₂ laser and the diode beams
- Near-field distance ~ 30 cm; far-field distance ~ 3 - 10 m.
- Added safety benefit - enables the user to clearly monitor the location of the laser beam



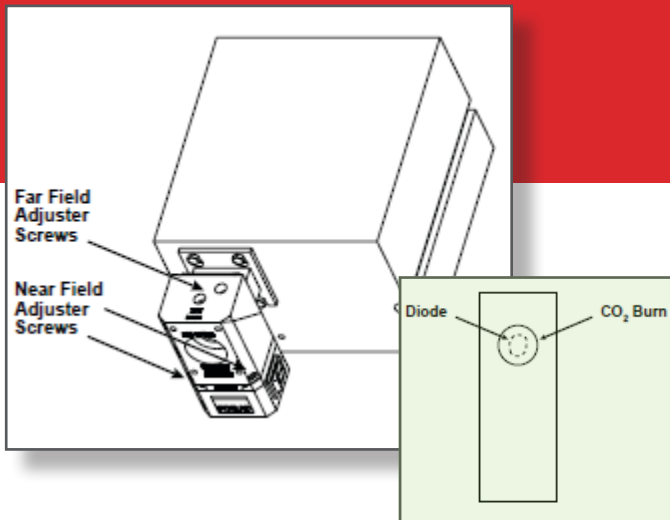
Specifications

Operational Specifications	
Operational Voltage	3 to 5 VDC
Operational Current	< 50 mA
Optical Power Output	< 5 mW
Laser Diode Output (Power, max.) Wavelength	5 mW
Beam Wavelength	650 nm ± 10 nm
Beam Diameter	3 mm
Maximum CO ₂ Beam Power	150 W
Divergence	<2 mrad
Optics	Aspheric plastic lens
Ellipticity	1.2:1
Physical Specifications	
Length	3.5 in. (88.9 mm)
Width	1.8 in. (45.7 mm)
Height	2.85 in. (72.4 mm)
Weight	13.00 lbs. (5.9 kg)

Note - Copper case not grounded. Reverse polarity protected.

Beam Delivery Set-Up

The Diode Pointer, when properly mounted to the laser, produces a beam centerline shift of 1 mm from its original exiting point on the laser. The direction of this offset is dependent upon the orientation of the Diode Pointer to the laser (see reverse side). The CO₂ laser beam leaving the Diode Pointer is centered to the exiting bore of the pointer, however the beam centerline itself has shifted in relation to any beam delivery components not directly mounted on the pointer. Make necessary adjustments to your beam delivery setup in order to compensate for this 1 mm offset. When mounting components directly to the Diode Pointer, the CO₂ laser beam is centered and no additional adjustments are required.



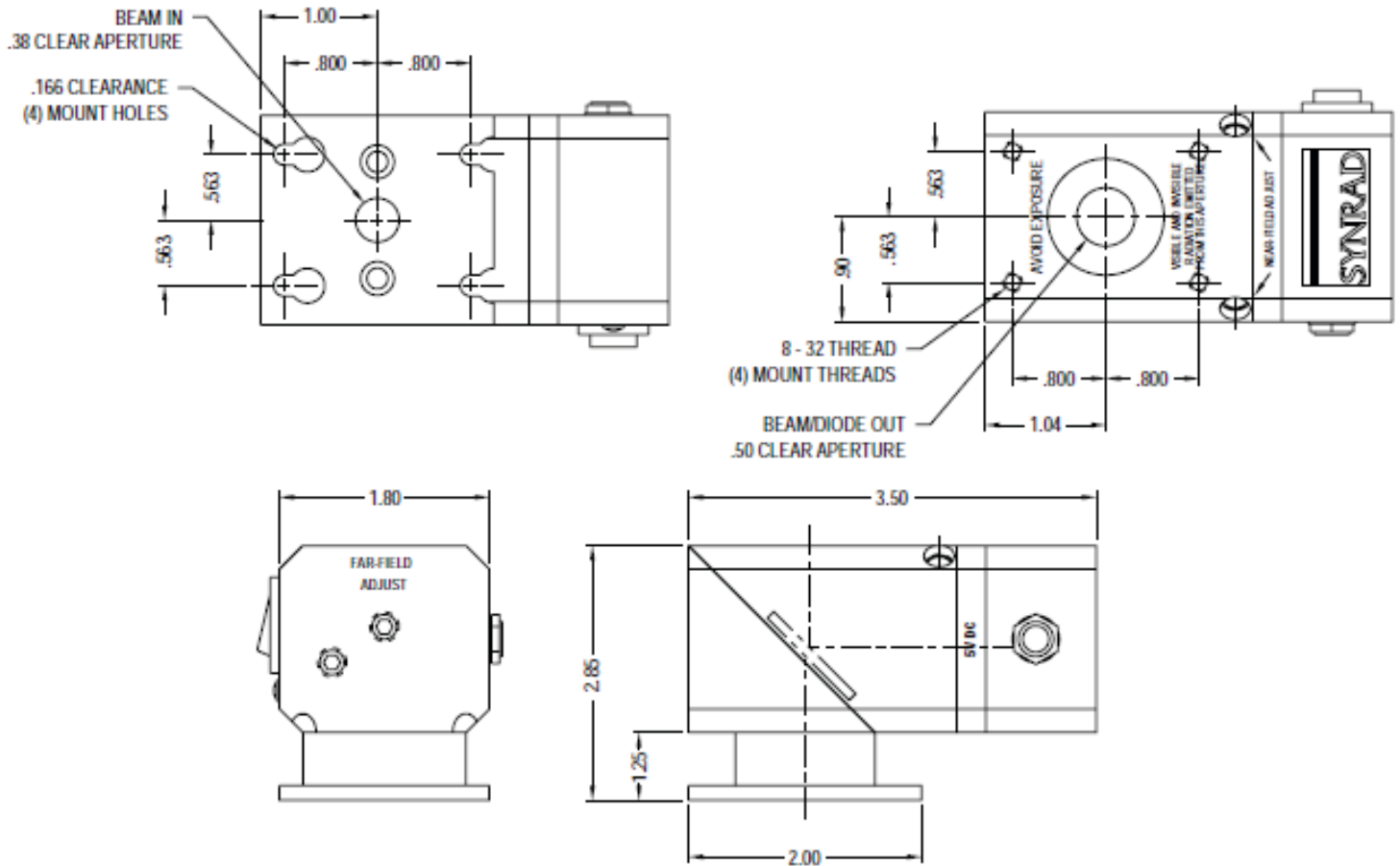
Quick adjustment for far-field and near-field make alignment fast and easy.

Make fine adjustments to the diode beam by manually adjusting screws the appropriate screws for either far-field or near-field. Recommended near field distance is approximately 30 cm, and far-field distance is 3 - 10 meters. Take adequate safety precautions to restrict access to the area where the CO₂ laser beam will be projected. Ensure that all necessary laser safety precautions are taken to avoid injuries to persons and ignition of combustible items by the invisible CO₂ laser beam.

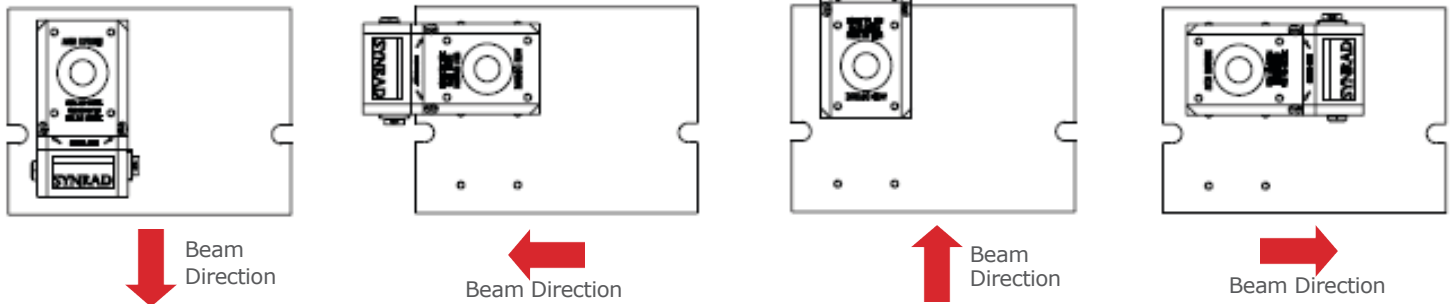
SYNRAD
A Novanta Company

Diode Pointer

Technical Illustrations dimensions are in inches



Direction of beam centerline shift
for Diode Pointer orientations



Contact Us

synrad.com

Americas

Synrad
4600 Campus Place
Mukilteo, WA 98275

P (425) 349.3500
F (425) 349.3667

synrad@synrad.com

Europe, Middle East, Africa

Novanta Europe GmbH
Division Synrad Europe
Muenchner Strasse 2a
82152 Planegg, Germany

P +49 (0)89 31707 0
F +49 (0)89 31707 222

sales-europe@synrad.com

China

Synrad China Sales and Service Center
2401-J, Bak Building, Hi-tech Park, Nanshan District
Guangdong, PRC 518057

P +86 (755) 8280 5395
F +86 (755) 8672 1125

sales-china@synrad.com

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A Novanta Company