

USER GUIDE

DM Engineering Opto-Probe with Control Module LED and Visible Light Sensor

Version 1.0

DM Engineering

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Overview:

The DM Engineering "Opto-Probe" LED and visible light sensor consists of a visible light photo detector coupled with a Schmitt Trigger to provide a snap action, jitter, and bounce free operation. Action of the LED or light source being monitored is repeated to a LED located in the top of the sensor. The device has a ½ inch footprint and mounts with an attached adhesive pad. A 3 foot cable terminating in a 3.5mm stereo (R-T-S) connector is used for interfacing with the Control Module. The Control Module requires regulated or unregulated 9-12 VDC to operate. This voltage is applied to the screw terminal strip on the Control Module as marked. The supplied power module positive lead is marked with a white band. The relay output of the Control Module is form "C" configuration, (SPDT) and switches upon activation of the Opto-Probe.

Installation:

1. Assure that the mounting surface is clean and grease free using the supplied alcohol swab.
2. Install either the Velcro pad, or adhesive mounting square for a more permanent installation, to the rear of the Control Module and place in your desired location.
3. Connect the power supply leads to the Control Module as indicated on the label. The white band on the power lead is the positive polarity. Plug in the power supply to a 120VAC source.
4. Connect the Opto-Probe to the Control Module. Insure that the Opto-Probe is operating properly by exposing the light input port on the base of the device to a light source. The LED on the top of the device should be lit. Place your finger over the light input port on the bottom of the device. The LED on the top of the device should extinguish. The LED on the Control Module should follow the action of the LED on the Opto-Probe.
5. Remove the protective paper from the adhesive mounting pad on the base of the Opto-Probe and hold the device ABOVE the LED or light source to be monitored. Do not stick the Opto-Probe down at this time.
6. Activate the LED or light source and position the Opto-Probe over the light source while verifying the LED on the top of the device is activated. Press the Opto-Probe firmly down onto the mounting surface while maintaining proper positioning for LED activation.
7. Use the supplied cable guides to anchor the Opto-Probe cable.
8. Additional extension control cables may be ordered from DM Engineering or are available at your local Radio Shack, catalog number 42-2562.

Warranty Information:

The DM Engineering Opto-Probe is warranted for a period of one year from the date of purchase. This warranty covers materials and workmanship only. Any misapplication, physical or electrical damage from outside sources or by the customer is not covered. The customer must pay shipping costs to the factory, and DME will pay shipping costs to return the warranted equipment to the customer. Any priority shipping costs are to be the responsibility of the customer as ground service is standard. Please contact the factory for an RMA number prior to any returns. Items returned without an RMA may be sent back to the customer unopened.

Technical Support

If you have questions, experience difficulties with the product or require further information please contact DME at: 805-987-7881, toll free 800-249-0487, or E-mail technical support at: support@dmengineering.com, or visit www.DMEngineering.com for the latest User Guide.

Specifications:

Opto-Probe case dimensions: .5" dia. mounting base, .315 dia. Barrel, X .75" high

Opto-Probe case material and color: Black nylon body, clear styrene fresnel lens

Control Module dimensions: 2.5 x 1.375 x .6

Opto-Probe input connection method: 3 ft. black control cable with 3.5mm stereo male connector

DC input requirement: power supply 9-12 VDC, 100Ma maximum

Mounting: Velcro or adhesive pad for Control Module, adhesive wire clips for Opto-Probe lead

Operating temperature: 32 to 120F

Humidity: 0 to 95% non-condensing

Shipping Weight: 1 lb. (approximate)