

USER GUIDE

DM Engineering Opto-Probe 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 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 external circuitry. The Opto-Probe sensor requires regulated +5VDC to operate. This voltage is applied to the Tip of the connector. The output is a negative going logic level upon activation, and the output appears on the Ring of the connector. Ground is connected to the Sleeve of the connector. Device quiescent current is approximately 100ua while current when activated is approximately 10ma

Installation:

1. Assure that the mounting surface is clean and grease free using the supplied alcohol swab.
2. Connect the Opto-Probe to the controller or controlling circuitry. 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.
3. 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.
4. 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.
5. Use the supplied cable guides to anchor the Opto-Probe cable.
6. 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:

Case dimensions: .5" dia. mounting base, .315 dia. Barrel, X .75" high

Case material and color: Black nylon body, clear styrene fresnel lens

Input connection method: 3 ft. black control cable with 3.5mm stereo male connector

DC input requirement: 5VDC @ 10ma maximum

Mounting: Adhesive pad (supplied)

Operating temperature: 32 to 120F

Humidity: 0 to 95% non-condensing

Shipping Weight: 1 lb. (approximate)