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Maintenance Bureau Specification 2001-11 for LED Directional Light Assembly

(28 January 2011)

This document describes the features and specifications for a "LED Directional Light Assembly" (Traffic Advisor).

1.0 Features:

- 1.01 Each unit shall include all necessary mounting and installation hardware and appropriate length cable from power connection to control unit.
- 1.02 Mounting hardware shall be available to allow the 'LED Directional Light Assembly' to be attached to an existing lightbar or as a stand-alone device.
- 1.03 Each unit shall consist of a minimum of six (6) yellow (amber) LED modules mounted horizontally, not to exceed 10 LED modules. The end LED modules can be special arrow modules or the same as the interior modules. Each module shall be replaceable from the front of the assembly.
- 1.04 Each LED module shall have its own independent, impact-resistant, polycarbonate, amber, lens.
- 1.05 Each LED module shall be housed in a heavy-duty, extruded aluminum housing that is front-side serviceable.
- 1.06 Each unit or LED module may have an optional horizontal visor that covers and extends beyond the edge of the reflector dome to improve effectiveness during daylight hours. Exception to this is when the unit is installed in the front grill of a vehicle.
- 1.07 The maximum amperage draw per LED module shall not exceed 0.5 amps @ 12 VDC.
- 1.08 The controller for the unit shall be capable of producing, at a minimum, the following four patterns: Left to Right sequential, Right to Left sequential, Split-Out from center, and Cautionary Flash.
- 1.09 The controller shall be separate from the display unit and capable of being mounted inside the vehicle.
- 1.10 The controller shall contain a switch for selecting the above patterns, as well as a LED status display to visually imitate the pattern being shown on the unit.

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1.11 The controller shall produce, at a minimum, twenty pattern cycles per minute for any of the above listed patterns.

- 1.12 The unit shall be capable of operating from a 12 VDC power source.
- 1.13 Unit shall come complete with all applicable mounting hardware for either grill mount, surface mount, or track/rack mount options. Also, with sufficient cable lengths to power and operate the unit.
- 1.14 Unit shall include one (1) set of installation and operation instructions, in English.

2.0 General:

- 2.01 Upon award of contract ALDOT may require; 1) independent testing at Awardee's expense to verify specifications have been met or 2) having the Awardee provide a sample unit for review/evaluation that may be returned at the Awardee's expense and direction. Failure to comply shall be grounds for sacrifice of award. Sacrifice of award may not be limited to single line, but rather, the entire group if applicable to contract format.
- 2.02 All successful bidders shall be either an authorized distributor for the manufacturer or the manufacturer of the product line with sufficient quantities of new units to remedy warranty and purchase requests and offer accessories and service parts to maintain the needs of the vehicle fleet within seventy-two (72) hours after call.
- 2.03 The unit model number shall be included on the bid document.
- 2.04 Bid shall also include documentation such as unit specifications, cut-sheets, certifications, etc. that show item meets this specification. Failure to provide documentation with bid shall disqualify the bid without notice.
- 2.05 The unit specified shall be warranted by the manufacturer, from the date of receipt or installation, to be free of defects of material or workmanship for a period of one (1) year and the LED components shall be warranted for a period of five (5) years. Written proof of this warranty shall be provided with bid.