



Robert Bentley
GOVERNOR

ALABAMA
DEPARTMENT OF TRANSPORTATION
MAINTENANCE BUREAU
1409 COLISEUM BOULEVARD
MONTGOMERY, ALABAMA 36130-3050

PHONE (334) 242-6272

FAX (334) 242-6378



John R. Cooper
TRANSPORTATION DIRECTOR

Maintenance Bureau Specification 2010-03
for
4 Corner-Remote LED Warning System

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This document describes the features and specifications for a “4 Corner, Remote LED Warning System”.

1.0 Features:

- 1.01 Each system shall consist of 4 light heads, a power and control system, and applicable wire/cabling and hardware for a complete install.
- 1.02 The system electronics, power supply and control, shall be solid state and utilize the most recent technology to provide reliable operation in heavy duty applications.
- 1.03 The system shall be able to operate at a voltage of 12 or 24 VDC, depending on the user application.
- 1.04 Unit shall include all mounting hardware required for installation based on the mounting option selected:
 - a. **Bezel/Flange:** This option mounts the light directly to surface, requiring a small hole for wiring and attaching to the side of a vehicles body.
 - b. **Insert:** This option requires the drilling of a hole into the existing vehicle light assembly to allow the insertion of the light head into the vehicle’s light assemble to utilize the existing housing and reflectors. The light head shall utilize some sort of gasket to seal the light head to the vehicle’s light assembly.
- 1.05 The system supply shall produce, at a minimum, a 70 flash per minute pattern, per head, along with other user selectable flash patterns.
- 1.06 The power source for this system shall be either a central power supply or an inline power supply system as follows.
 - a. **Central Power Supply:** A system that utilizes a central device that contains all components required to operate the light system, power and flash control. All the lights in the system are routed/connected solely to this component for power and control.
 - b. **Inline Power Supply:** A system that does not utilize a central device to power and control the light system. One or more lights can be connected to this device. Coordination shall be accomplished through the connection of the inline devices by a

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communication line for synchronization. The inline power supply components shall be fully encapsulated for moisture and vibration resistance.

- 1.07 The system shall provide for a controller device in the cab of the vehicle installed to allow control of the lights, programming and activation. The system shall be capable of operating only the front or rear lights independently in case only half the system is required for a given application.
- 1.08 Interconnect cables shall be a minimum of 20 feet in length with waterproof connectors.
- 1.09 Wires or connectors leaving the LED head shall be sealed to prevent moisture or dust from entering the LED head.
- 1.10 The system shall include 4, remote LED heads mounted on a metallic base to help dissipate heat and enclosed in a sealed lens of the required color specified by the user as follows: Either 4 yellow (amber) LED heads or 2 clear LED heads (vehicle front), and 2 yellow (amber) LED heads (vehicle rear).

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 model number of the item bid shall appear 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.