LED Optic Blank-Out Signs

Features

- Ideal for all standard traffic control applications.
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- Single or double face models.
- Cost-efficient layered message panel.
- Several messages per panel.
- Utilizes standard ITE colors.
- Fail-safe protection available.
- Exceptional message visibility and clarity.
- Complete blank out when not energized.
- Low power consumption.
- Easy to service.

1.0 General Description

1.1 Sign shall be capable of displaying one or multiple messages. These messages may be red, amber or bluish/green. These messages may be displayed on one side or two. The messages shall be formed by single or double rows of LED's.

2.0 Functional Description

2.1 All messages shall be clearly legible, attracting attention under any lighting condition. At full intensity, the signal will be highly visible anywhere within a 15 degree cone centered about the optic axis. 2.2 The sign shall consist of: a. Weatherproof housing and door. b. LED's. c. Transformers. 2.3 All LED's will be T-1 ¾ (5 millimeters). 2.4 LED's will have an expected lifetime of 100,000 hours. 2.5 All LED's will be high in optical power. They will be Agilent Technologies (HP) highest performance AlInGaP for the Red and Amber and Nichia's InGaN for the Bluish/Green and White. 2.6 Operating wavelengths will be: a. Red - 626 nm. b. Amber - 590 nm. c. Bluish/Green - 505 nm. 2.7 Transformers shall be used to reduce the incoming 120 volts AC to the design DC voltage. 2.8 The transformers shall contain Class A insulation and weatherproofing. 2.9 The sign shall be capable of continuous operation over a range in temperatures from -35F to +165F (-37C to +75C). 2.10 50% Pulse Width

Modulation Dimming available for improved nighttime visibility.

3.0 Aluminum Housing

3.1 Housings shall be constructed of extruded aluminum. A flat aluminum panel shall be welded into the housing back for one-way signs. 3.2 All corners and seams of one or two-way housings are heli-arc welded to provide a weatherproof seal around the entire case. 3.3 Continuous full-length stainless steel hinges shall connect the housing and the extruded aluminum door. 3.4 Signs shall have #3 stainless steel ¼ turn link-locks per door to tightly secure the door onto a gasket between it and the housing. Link-locks provide tool free access to the interior of the sign. 3.5 Door gaskets shall be 3/16" x 1" neoprene to provide a weatherproof seal. 3.6 The 0.125" extruded aluminum doors have one side removable to gain access to the sign face. 3.7 Sign face shall be 0.080" aluminum or equivalent, and have the entire LED assembly mounted to it. 3.8 Each door is fitted with a sun hood of 0.063" aluminum. Standard length is 6". 3.9 The sign face will be protected by a polycarbonate, matte clear, lexan faceplate. 3.10 Drainage shall be provided by four drain holes at the corners of the housing. 3.11 Finish on the sign housing shall be two coats of exterior enamel applied after surface material is acid-etched and primed with zinc-chromate primer.

4.0 LED Message Modules

4.1 The LED message module shall consist of the following components: a. A rigid aluminum message plate. b. High intensity LED's. c. LED drive electronics. 4.2 The LED's shall be mounted in panel via mounted fixing clips. 4.3 Each LED shall be individually serviceable with spares included from the same batch to assure color uniformity upon replacement. 4.3 Door panels shall be flat black to maximize legibility when activated. 4.4 Electrical connections shall be made via barrier-type terminal strip. 4.5 All fasteners and hardware shall be corrosion resistant stainless steel.