

# Vehicle & Pedestrian Signals

## 16-Inch LED Aluminum Ped Signal

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### What, exactly, is a signal?

A traffic signal is a signaling device that is positioned at road intersections, and other sites that control traffic. The signals are designed to ensure an orderly flow of traffic for vehicles, motorcycles, bicycles, and pedestrians by displaying colored lights in a sequence of phases. The colors signal the user to proceed (green), warn that a signal is changing to red (yellow) or prohibits any traffic from proceeding (red).

### Why do agencies use signals?

Traffic signals provide an opportunity for pedestrians or vehicles to safely cross an intersection from different directions. Traffic signals can also alleviate traffic capacity of an intersection or a given route which leads to lowering emissions from vehicles that are waiting in traffic.

### How do signals benefit the driving public?

Traffic signals increase the overall safety for all roadway users by reducing traffic collisions and providing efficient intersection operations. Traffic signals also provide a continuous movement of traffic at a defined speed along a given route which contributes to reducing commuting times.





## LED Specifications

- Voltage Range 80V to 135V AC; normal 120V AC (less than 10% variation in intensity)
- Power: Maximum 15W Hand; maximum 10W Pedestrian
- Operating Temperature: -40°C to +74°C
- Storage Temperature: -40°C to +93°C
- Power Factor Correction: >0.90
- Total Harmonic Distortion: <20%
- Dimensions: 18 in. x 16 in. x 4.5 in.
- Fuse and transient suppressor incorporated for line and load protection
- LEDs interconnected to minimize effect of LED string failure
- Meets or exceeds NEMA Moisture Resistance STD 250-1991 for Type-4 enclosures (ITE 6.4.6.2 Moisture Resistance)

## Field Terminal Assembly

The field terminal assembly includes a three-terminal pair (six-screw) type terminal block for termination of the three field wires for AC (+) for the HAND display, AC (+) for the PEDESTRIAN display, and AC (-). Connected to the opposite side of these terminals is a pigtail lead. The free end of each lead is terminated with an insulated female quick-disconnect socket that mates with the male lug, supplied on the message module. The field terminal assembly includes an aluminum base or back-plate that is bolted to the signal housing.

## LED Option

The LED module is a fully-encapsulated LED HAND/PEDESTRIAN module. The LED PC board is enclosed in a plastic module and is mounted to be impervious to shocks generated during shipping, handling, and installation. In order to facilitate installation and maintenance, the signal is designed so that the LED message module is removable and the field wiring terminals are readily accessible from the front by merely opening the signal door. The rear of the tray provides three male quick-disconnect lugs for connection of AC (+) for the HAND display, AC (+) for the PEDESTRIAN display, and AC (-). The tray is sealed with a 1/8-inch (3 mm) clear, UV-stabilized, refraction-type, 3/16-inch polycarbonate lens which is weather, craze, and heat resistant. The module is further sealed with a one-piece Ethylene Propylene Diene Monomer (EPDM) neoprene gasket fitted around the perimeter to provide positive protection of the enclosed LEDs and electronics from handling, weather, and moisture. Removal and insertion of the module does not require the use of tools.

## Basic Specifications

- Overall Dimension
  - 18" W x 16.5" H x 5" D (457 x 419 x 178 mm)
- Weight
  - The weight of the signal, excluding mounting hardware, is 23 pounds, maximum.
- Standard Colors Are:
  - Dark Olive Green (matches Federal Standard 595b-14056)
  - Yellow (matches Federal Standard 595b-13538)
  - Dull Black (matches Federal Standard 595b-37038)

Messages are displayed in the Portland Orange "HAND" and the Lunar White "PEDESTRIAN", illuminated by multiple configuration Light-Emitting Diodes. The "HAND" and "PEDESTRIAN" symbols are each a minimum of 12 inches in height and seven inches in width and are configured as shown in the Manual on Uniform Traffic Control Devices (MUTCD).

## Solar Screen Visor Option

The Solar Screen visor option is designed to eliminate sun phantom and minimize damage to the LED signal module.

The Solar Screen visor is installed parallel to the face of the "HAND/PEDESTRIAN" symbol. The Solar Screen visor assembly is held in place by the use of stainless steel screws.

The Solar Screen assembly consists of a minimum of 20 straight horizontal louvers and 21 zigzag pattern horizontal louvers.

## Warranty

The entire pedestrian signal, including LEDs, solid-state control, and polycarbonate parts, are warranted for one year from the date of original shipment against defects in workmanship and/or materials.

