

# **SPECIFICATION FOR PORTABLE SPEED DETECTION/DISPLAY UNIT**

## **Description**

The Portable Speed Detection/Display Unit described below is intended to be used at a variety of roadside locations to detect vehicle speeds by radar and to display the detected speed to drivers. This unit is intended to gain driver awareness of their speed and to reduce speed as needed to comply with the posted speed limit.

## **Materials and Function**

### General:

- The Portable Speed Detection/Display Unit shall employ state-of-the-art technology and solid-state electronic design.
- NTCIP compliant
- The unit shall be weather resistant and not allow water to enter the display unit, cabinet or controller.
- K Band radar detection is required.
- The unit shall be self contained and trailer mounted.
- Provisions for securing the unit against theft and vandalism are required.
- 12 volt power operating from AC land line and DC solar powered battery supply is required.
- The unit shall be durable, resistant to vibration and able to withstand wind gusts up to 80 MPH.

### Display:

- The display shall incorporate one or more of the following technologies:
  1. Back-lighted split-flap
  2. Fiber optic/shutter
  3. Light emitting diode
  4. Light emitting diode/shutter
  5. Flip disk
- The display must be light emitting and must not solely rely on reflected light.

- The display must consist of individually controlled pixels.
- The lowest portion of the display must be at least 7' above the roadway.
- The detected speed display shall be 51" wide X 24" high with two 24" high numeric characters. A display minimum of 5 MPH to a maximum of 99 MPH in 1 MPH increments is required. The message "your speed" or "your speed is" in minimum 6" high letters is required above the speed display. Clear non-glare material must be used to cover the display. The display must be visible from a minimum of 800' under daylight conditions.
- A standard 36" X 48" black on white speed limit sign shall be mounted above the speed display. Speed limit messages from 50 MPH to 70 MPH in 5 MPH increments are required and can be individual signs or overlay plaques.

#### Controller:

- Shall be constructed of metal, be weatherproof, vandal and tamper resistant, and control the function of sending the radar detected speed to the display.
- Local control shall be accomplished through user-friendly controls contained in the controller cabinet. The controller shall also have the capability to be remotely control through an optional cellular phone connection.
- The controller shall incorporate circuits to allow selection of violator speed. This feature allows the display to flash on and off and alerts the motorist of excessive speed over the posted speed limit.
- An adjustable detection setting range is required.
- The controller shall be capable of eliminating "flicker" by delaying the display as needed, dependent on traffic volume conditions.

#### Warranty:

- The unit shall be completely warranted for a minimum of 1 year on function and parts.