Intellitronix
Intelligent Electronics

Thank you for purchasing this instrument from Intellitronix. We value our customers!

INSTALLATION GUIDE
LED Digital Speedometer
Part Number: M9222

After completing all wiring reconnect battery and power up the unit. Test all gauges before reinstalling dash, bezels, and hardware to prevent having to remove it all for any future troubleshooting.

Always disconnect the battery before attempting any electrical work on your vehicle.

VERY IMPORTANT

INTALLATION

Black, Wire to the vehicle engine block ground. The engine block should have heavy ground cables connected to the battery, frame, and firewall.

Red, Wire to switched +12V power from the fuse panel or vehicle wiring harness. (Recommended to use at minimum a 3-amp inline fuse). This wire should have power when key-on and starting ignition.

Violet, Wire to the +12V side of the parking lights. This will dim the dash lighting 50% when your headlights turn on.

White Wire:
 Obtain your VSS signal using one of the 3 setups below that best fits your vehicle's configuration.
1. INTELLITRONIX SENDER, Disconnect the mechanical speedometer cable from the transmission and insert the new electronic sensor into the transmission. Follow this wiring for the Intellitronix speedometer sending unit:
    ➢ **White**, Wire white wire on sender to the white wire on the gauge.
    ➢ **Red**, Wire red wire on sender to a switched 12V ignition power.
    ➢ **Black,** Wire black wire on sender to engine block ground.

2. Computer-based engines using a PCM/ECM need to locate the correct pin for VSS out and run to the white wire on the INTELLITRONIX unit. (Consult vehicles factory manual for correct pin #)
3. Most vehicles built after 1984 have an electronic transmission sender. The electronic VSS will usually have two wires attached to it. One connects to the Signal wire on dash (we prefer this to be high output). The other wire (low output) grounds at the engine block. To find the high and low output wire color or pin location will need to be looked up by Vehicle VIN or Model and year and consult your factory Pinout Chart.

⚠ WARNING **Not every two wire VSS will work in this situation. If this is the case, there are two attachments you can purchase to resolve this issue.**

❖ Speed Interface Signal Box (Intellitronix does not carry this part)
❖ GPS Speed Sender (part # S9020)

⚠ WARNING **When using an LS engine swap, you will need to pick up the Speedometer signal wire from the PCM Pin 50 on the red connector. (This pin may Differ. Refer to your vehicle's pinout chart for accuracy).**

❖ **Trip Distance**
Tap the speedometer programming button once to display trip meter. A decimal point appears indicating trip mode. Holding in the programming button will reset the meter to zero. Tap the programming button again returning to the odometer.

❖ **Programming and Calibration**
1. Hold in programming button until you see "HI-SP" and release (This can only be done when showing the odometer display).

Intellitronix
Intelligent Electronics

2. The first three items to display are the last recorded performance information. It resets every time you cycle power on the dash panel.
   ➢ **"HI-SP",** Displays highest speed reached.
   ➢ **"0-60",** Displays time recorded to reach 60 MPH.
   ➢ **"1/4",** Displays time recorded to reach a quarter mile.
   ➢ **"SSP"** Allows you to change the max speed limit for the sweep. Can be set in increments of 5, between 30 and 200 miles per hour. (This function not available on Speedo/Tach combination units).
       ➢ **"ODO",** Allows you to enter vehicles current odometer reading. When "ODO" Displays tap the program button to enter the value of the farthest left digit in your current odometer reading. Then hold the program button to advance to the next digit. You enter them in order from left to right. When finished on the last digit wait for it to go past "CAL" (This will be completed in a separate step). and back to MPH screen. The data is now recorded.
   ➢ **"CYLS",** Allows you to change your number of cylinders to 1, 2, 4, 6, 8, 10, or 12
   ➢ **"CAL",** Allows you to calibrate your exact pulses per mile (para. 3 below).
   For Example: To enter the mileage reading 23456. Press 2 times and hold, press 3 times and hold, press 4 times and hold, press 5 times and hold, press 6 times and hold.

STOP **Read the next step completely to understand it before you begin.**

3. **"CAL",** Default Setting is 8,000 ppm (pulses per mile). Follow steps below to calibrate to the exact PPM for your vehicle.
   1. Choose a safe starting point to drive a designated mile or kilometer. This can be done using a mile marker or GPS on a phone or electronic device.
   2. Enter programming mode as explained above and wait for the screen to reach **"CAL"** mode.
   3. Tap the programming button again when the default 8,000 ppm shows. You will now see "0."
   4. Start driving until you reach the one (1) mile point and then tap the programming button again. You will now see **"CAP".**
   5. Wait until it returns to MPH screen (data is now recorded).

WARNING **If the Speedometer did not receive any data during this process the display will show "Err" (error). Recheck all connections and ensure the sender or computer is putting out the correct signal. The speedometer operates on at a minimum 3 VDC square wave.**