

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

### **INSTALLATION GUIDE**

LED Digital Multi-Function Programmable Tachometer Part Number: M9003



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.

# INSTALLATION (default setting is 8-cylinder)



If you do an LS engine swap, pick up the tach signal wire from the ECM/ECU and then set the tach switch to 4-cylinders. You may also need to order the INTELLITRONIX LS Series 1, 2 and 3 Engine Swap Adapter Kit (Part # 8014LS).

**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.

Grey, Wire to the ground side of the device you want your RPM switch to activate.



## The tachometer requires a minimum 9VDC square wave signal.

#### Green:

- > **Ignition Coil**, Run wire to the negative (-) side of the coil or the wire that goes to the points or electronic ignition module.
- > **GM HEI ignition**, Run wire to the terminal marked 'TACH' or, on some systems, a single white wire with a spade terminal.
- > After-Market Ignition and CDI Box Most systems offer a 12 VDC Square Wave TACH output terminal. Refer to those system instructions for setup.
- > Magneto system, connect the tach signal wire to the negative side of the coil. Do not connect the tach terminal to the positive (+ or high voltage) side of the ignition coil. Many tachometers, shift lights or RPM-activated switches will not read directly from a Magneto, so your installation may need a Magneto Signal Converter to function properly.
- ➤ **Diesel,** The tachometer will not work correctly for a diesel engine without the use of a diesel tachometer adapter (Intellitronix does not sell this part).



A vehicle's engine can generate a large amount of electromagnetic interference. To ensure that the ignition system does not interfere with dashboard functions check to ensure the following conditions are met.

- Do not run tachometer wire alongside other senders or input wires.
- > Do not use solid core spark plug wires with this dashboard system.
- > Do not run wires close to the alternator.
- Check for cracked spark plug wires and boots.
- Use of Dielectric grease on connectors and in distributor is recommended.
- > Use of grounded tin-plated copper sleeving can help to remove EMI.
- Use of ferrite tape and beads can help to remove EMI.

M9003 Intellitronix rev. 08062025 <u>www.intellitronix.com</u>



## **❖ Programming**:

- > **A Blue LED** (at top of gauge) designates shift light.
- > A Green LED (at bottom of gauge) indicates that ground switch has been activated.
- > Left Button, Scrolls through menu categories.
- Right Button, Changes category settings.
- 1. Sets RPM increments, press button to change to: (hundreds) 8800, (tens) 8880, or (ones) 8888
- 2. Sets # of cylinders, press button to change to: 1, 2, 4, 6, 8, 10, or 12.
- 3. Sets the thousands digit between 1b-9b to define the red line (full sweep) RPM desired.
- 4. Sets the Hundreds digit between 1b-9b to define the red line (full sweep) RPM desired
- 5. Sets the thousands digit between 1s-9s to define the shift light display at desired RPM.
- 6. Sets the Hundreds digit between 1s-9s to define the shift light display at desired RPM.
- 7. Sets the thousands digit between 10-90 to define the RPM desired to activate ground switch.
- 8. Sets the Hundreds digit between 10-90 to define the RPM desired to activate ground switch.
- 9. Returns to home screen..
- > Gauge will also return to home screen after 8 seconds of inactivity
- When you have finished programming, you must turn off the power to save the settings.

#### Hi-RPM Recall

Recalling the highest RPM that your vehicle has obtained since it was last reset. Press the right button to display the recall value.

M9003 Intellitronix rev. 08062025 <u>www.intellitronix.com</u>