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**INSTALLATION GUIDE**  
**LED Digital Master Programmable Tachometer**  
**Part Number: M9003**

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

**WIRING INSTRUCTIONS**

***Note: Automotive circuit connectors are the preferred method of connecting wires. However, you may solder if you prefer.***

**TACHOMETER INSTRUCTIONS**

**This Digital Tachometer requires a signal from your ignition system:** either the negative terminal of your coil or a direct tach output lead from the distributor or electronic control module. In order to isolate the signal wire from electrical noise interference, we recommend all tachometer wires be routed as far away from any other voltage or signal carrying wires as possible, especially spark plug wires.

***Ground – Black*** – Connect to the engine block ground.

***Power – Red*** Connect to a switched +12V source, such as the ignition.

***Dimmer – Purple*** Connect to the parking lights to dim the LEDs 50% when the headlights are on. However, do not connect to the headlight rheostat control wire; the dimming feature will not work properly. If you don't want your display to dim with the headlights, connect the wire to an engine ground.

***RPM Switch – Grey*** – This wire will be connected to the device governed by the RPM Switch. This is an optional device; if not using it for that purpose, connect the wire to the ground. There is a blue led light to indicate if this switch is engaged.

***Tachometer (memory capable) – Green***

If your vehicle has a separate ignition coil, connect the green wire to the negative (-) side of the coil – the wire that goes to the points or electronic ignition module.

To ensure that the ignition system does not interfere with any other dashboard functions, do not run the tachometer wire alongside any other sender or input wires. Do not use solid core spark plug wires with this instrument. Solid core ignition wires cause a great amount of electromagnetic and radio frequency interference which can disrupt the system's operation.

If your vehicle has a GM HEI ignition, connect to the terminal marked 'TACH', or, on some systems, a single white wire with a spade terminal.

If your vehicle has an after-market ignition – some systems will connect to the TACH output terminal.

If your vehicle has a computer controlled ignition system, consult the service manual for the wire color and location.

If your vehicle has a 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.

**Note:** *If doing an LS engine swap you will normally need to have the tachometer set at 4-cylinders. You may program the tach by following setting # 2. (see below.)*

This unit comes with a factory setting for an 8-cylinder engine, with activation at 5000 RPM *Normally Open*. The display will stay in Settings Mode until it receives a signal from the ignition system. To program the unit after starting the engine, shut the engine off and turn on only the ignition.

A blue LED (at top of gauge) will indicate when the shift light command is activated on the gauge. A green LED (at bottom of gauge) indicates that RPM settings have been activated.

**To change settings:** (a light tap on the left button will engage the menu system: the right button will then be used to adjust each specific setting.)

**1. Left button pressed:**

Set # of digits in RPM display, using right button, display shows: (hundreds) 9900, (tens) 9990, and (ones) 9999.

**2. Left button pressed again:**

Set # of cylinders using right button, display shows: 01\_C 02\_C 04\_C 06\_C 08\_C 10\_C 12\_C

**3-A. Left button pressed again:**

Set first digit on max RPM on gauge bar display (in thousands) using right button, display shows: 10\_\_B to 99\_\_B

**3-B. Left button pressed again:**

Set second digit max RPM on gauge bar display (in hundreds) using right button, display shows: 10\_\_B to 99\_\_B

**4-A. Left button pressed again:**

Set RPM first digit shift light threshold (in thousands) using right button, display shows: 10\_S to 90\_S

**4-B. Left button pressed again:**

Set RPM second digit shift light threshold (in hundreds) using right button, display shows: 19\_S to 99\_S

**5-A. Left button pressed again:**

Set first digit output switch RPM threshold (in thousands) using right button, display shows: 10\_o to 90\_o

**5-B. Left button pressed again:**

Set second digit output switch RPN threshold (in hundreds) using right button, display shows: 19\_S to 99\_o

**6. Left button pressed again**

Will return to normal mode, or if there is no new information to access, after 8 seconds, the gauge automatically returns to normal mode.

When you have finished programming the settings, turn off the ignition to retain them in the gauge's memory. Next time you turn on the ignition, your new settings will be the default.