MSD INSTALLATION INSTRUCTIONS

Digital RPM Activated Window Switch
PN 8969

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Parts Included:
1 - Digital Window Switch, PN 8969
1 - Parts Bag

OPERATION

The MSD Digital RPM Activated Window Switch accepts a variety of input signals from sources such as a coil negative terminal (factory inductive ignitions), a CD ignition tach-output such as an MSD 6 or 7 Series Ignition, an output from an ECU, or a 5-400 volt signal from an MSD Tach Adapter.

The PN 8969 can be programmed for use on nearly every engine with a spark ignition or tachometer signal. The rpm values are adjustable in 100 rpm increments from 200 - 15,000 rpm (The rpm is shown x100). There must be a difference of at least 300 rpm between the two activation points for correct operation. Changes can be made while the engine is running.

Note: There is a 200 rpm safety range built into the activation and deactivation points. This means that the rpm must drop 200 rpm below the activation point to turn the circuit off. Conversely, the rpm must drop 200 rpm below the deactivation point in order to turn the circuit back on. This is to prevent the circuit from 'chattering on and off'.

This switch is also capable of activating a circuit at a *higher* rpm than the Off rpm.

PROGRAMMING THE RPM

The engine application and rpm activation points are easily selected through push buttons on the LED panel (Figure 1). This Switch can be programmed for a variety of engine and ignitions as shown in the following chart.

1-Cylinder	This program is used for individual coil per cylinder systems (such as GM LS-1 engines, or '99-Up Mustangs).
2-Cylinder	This is for ignitions with coil packs that fire two cylinders at the same time (waste spark systems).
2-Cyl. Odd	Use on coil pack ignitions that are on odd-fire engines such as a Viper V-10 or Harley-Davidson motorcycle.
4-Cylinder	Typical 4-cylinder engines with a distributor.
6-Cylinder	Typical 6-cylinder engines with a distributor.
6-Cyl. Odd	Typical 6-cylinder odd-fire engines with a distributor.
8-Cylinder	Typical 8-cylinder engines with a distributor.

The rpm activation points and cylinder select are programmed through the push buttons on the LED panel (Figure 1). Press the Mode button, and notice that the indicator light above the On RPM lights. When that point is on, you can scroll the rpm value up or down with the arrows on the left of the panel. Once your On rpm is set, push the Mode button until the Off RPM point lights, then set the Off rpm point. Note that if the rpm point is not changed within 2-seconds, the screen returns to the current rpm reading (zero when the engine is not running). After setting the On and Off points, press the Mode button to program the Cylinder Select Valve (default is for 8-cyl.).

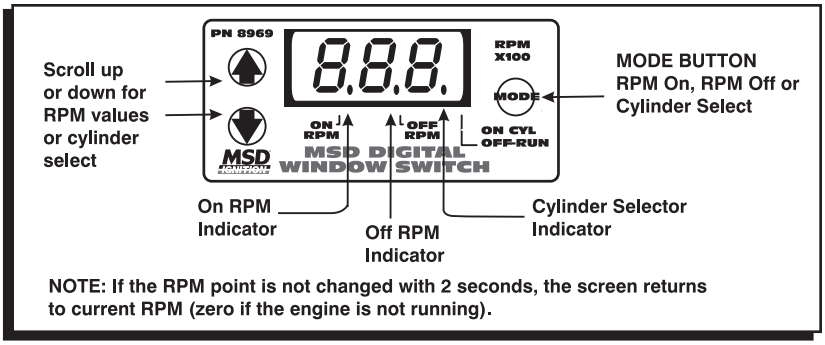


Figure 1 Programming the Digital Switch.

WIRING	
RED	This is the On/Off wire. Connects to switched 12 volts.
BLACK	Connects to a good ground source.
WHITE	Signal Input. Provides the trigger signal from a tach input, +5-12 volt signal from an ignition tach output terminal, ECU output or coil negative terminal.
OUTPUT WIRES	
GRAY	Normally Closed. This wire will remove the ground source at your desired On rpm, and complete the ground circuit at the set Off rpm.
YELLOW	Normally Opened. This wire will provide a ground source at your desired On rpm, and remove the ground at the set Off rpm.
Note: The output wires are capable of a switch load of 2.5 amps, continuous. The operating input voltage of the Switch is 9-18 volts.	

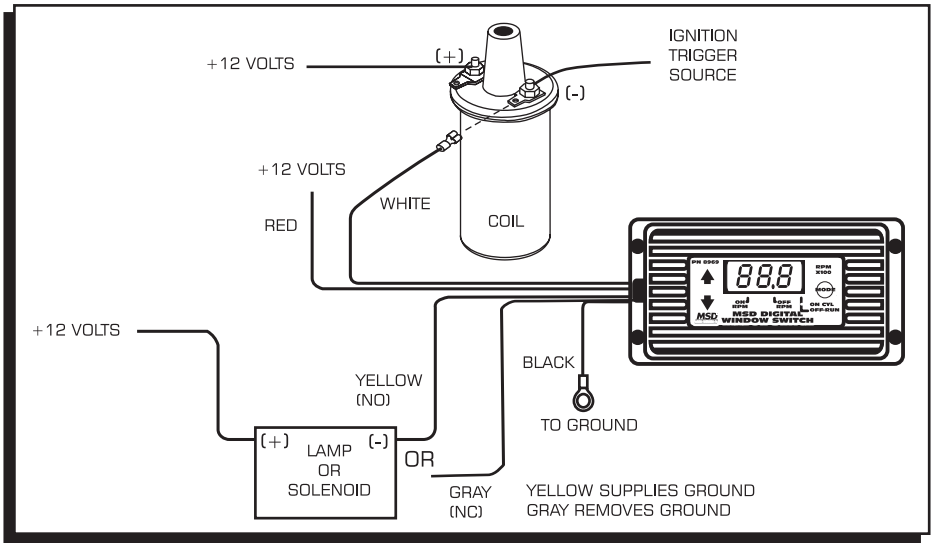


Figure 2 Wired to a Stock Inductive Style Ignition at the Coil Negative Terminal.

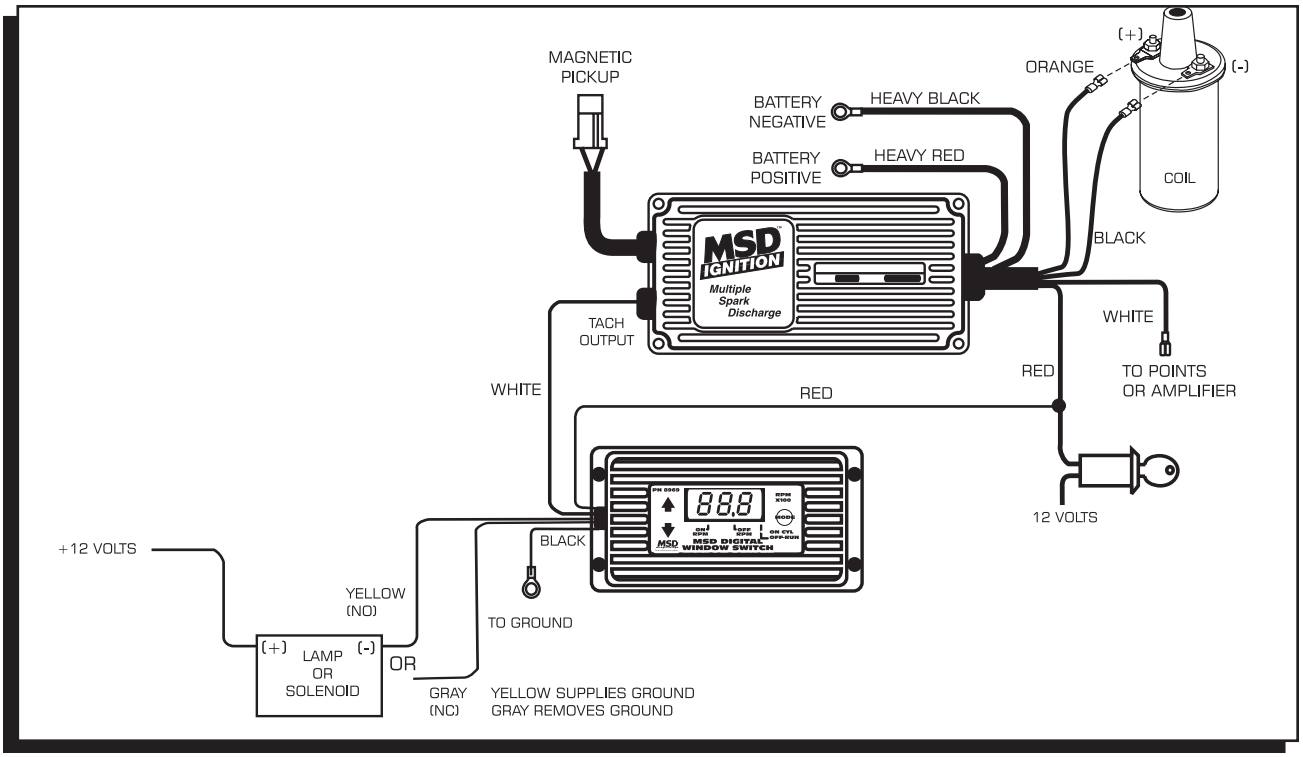


Figure 3 Wired to an MSD 6, 7, 8 or 10 Series Ignition Control.

PROGRAM THE CYLINDER SELECT TO 2-CYLINDER

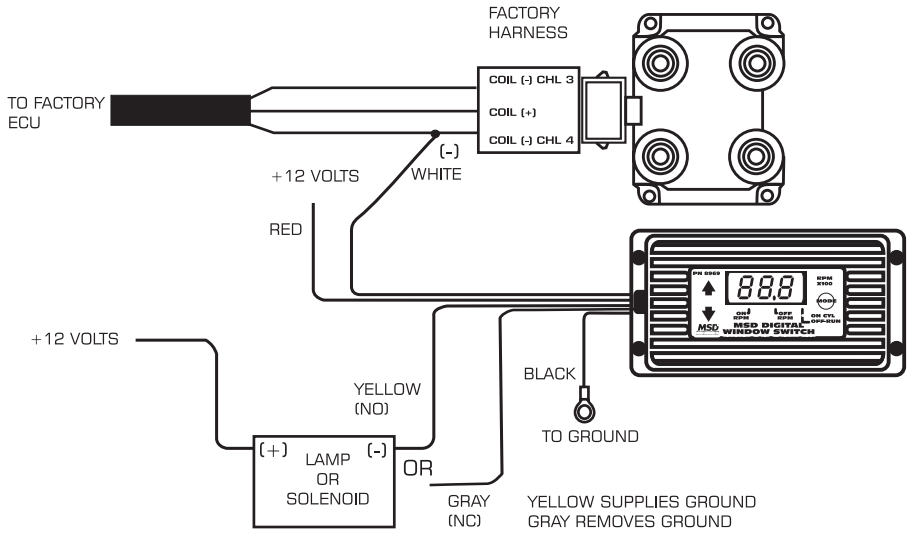


Figure 4 Wired to a GM or Ford Coil Pack (Waste Spark).

5 VOLT CONVERSIONS AND PIN LOCATIONS

On many DIS applications, you can connect the White wire to the ECU Tach Output. Following are suggested Pin locations. It is recommended to have your vehicle's factory service manual or wiring schematic.

Corvette

'97-'98 Pin 35 White wire of computer on right side of engine compartment below the battery tray.

'99-'03- Pin 10 White wire of computer right side inner fender well.

Camaro-Trans Am-Firebird

'98 Pin 35 White wire of computer behind right strut tower.

'99-'03 Pin 10 White wire of computer behind right strut tower.

Trucks-Suburban-Tahoe

'99-'03 4.8, 5.3, 6.0 and 8.1 engine's Pin 10 White wire of computer left front of engine compartment.

NOTE: It is recommended to have your vehicle's service manual to determine the trigger output wire.

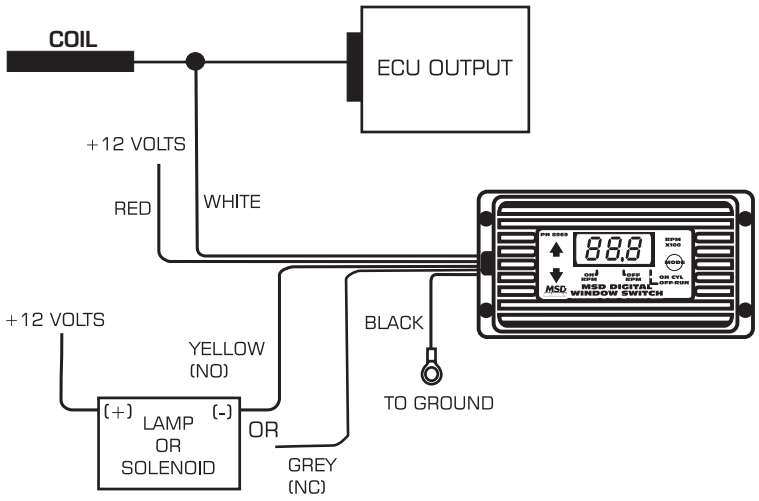


Figure 5 Wired to an ECU Output.

Service

In case of malfunction, this MSD component will be repaired free of charge according to the terms of the warranty. When returning MSD components for warranty service, **Proof of Purchase** must be supplied for verification. After the warranty period has expired, repair service is based on a minimum and maximum fee.

All returns must have a Return Material Authorization (RMA) number issued to them before being returned. To obtain an RMA number please contact MSD Customer Service at 1 (888) MSD-7859 or visit our website at www.msdperformance.com/rma to automatically obtain a number and shipping information.

When returning the unit for repair, leave all wires at the length in which you have them installed. Be sure to include a detailed account of any problems experienced, and what components and accessories are installed on the vehicle. The repaired unit will be returned as soon as possible using Ground shipping methods (ground shipping is covered by warranty). For more information, call MSD at (915) 855-7123. MSD technicians are available from 7:00 a.m. to 5:00 p.m. Monday - Friday (mountain time).

Limited Warranty

MSD warrants this product to be free from defects in material and workmanship under its intended normal use*, when properly installed and purchased from an authorized MSD dealer, for a period of one year from the date of the original purchase. This warranty is void for any products purchased through auction websites. If found to be defective as mentioned above, it will be repaired or replaced at the option of MSD. Any item that is covered under this warranty will be returned free of charge using Ground shipping methods.

This shall constitute the sole remedy of the purchaser and the sole liability of MSD. To the extent permitted by law, the foregoing is exclusive and in lieu of all other warranties or representation whether expressed or implied, including any implied warranty of merchantability or fitness. In no event shall MSD or its suppliers be liable for special or consequential damages.

*Intended normal use means that this item is being used as was originally intended and for the original application as sold by MSD. Any modifications to this item or if it is used on an application other than what MSD markets the product, the warranty will be void. It is the sole responsibility of the customer to determine that this item will work for the application they are intending. MSD will accept no liability for custom applications.

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