

MSD IGNITION INSTALLATION INSTRUCTIONS

MSD Programmable Launch RPM Controller PN 7561 1

Parts Supplied

1 - Programmable Launch Rev Limiter, PN 75611	1 - Deutsch Harness
4 - Self Tapping Screws	1 - 9-Pin Computer Harness
1 - MSD Pro-Data+ Software 3.5" Disk	1 - 8860 Harness
	1 - Mag Pickup Y-splice

WARNING: During installation, disconnect the battery cables. When disconnecting, always remove the Negative cable first and install it last.

Note: Solid Core spark plug wires cannot be used with this component.

Note: Not for use with an MSD 7AL-3 Ignition Control or MSD 10 Series Ignition Controls.

The MSD Programmable Launch RPM Controller can only be used with MSD Ignition Controls with a Rev Limiter that is controlled by plug-in modules such as the 6AL, 6BTM, SCI-L, 7AL-2 and Pro Mags that use Points Boxes with Rev Limiters (a tach signal is also required). The external Rev Limiters, PN 8728, PN 8738, PN 8978, may also be used. It can be used on 4, 6 or 8-cylinder engines.

The MSD Programmable Launch RPM Controller allows you to program a launch rpm ramp based on rpm and time. The settings can easily be adjusted through a Windows based PC using the supplied MSD Pro-Data+ software or with the optional Hand Held Monitor, PN 7550 (Figure 1).

The Pro-Data+ software can easily be loaded into a PC operating with Windows 95, 98, NT, XP, 2000 or ME. All of the MSD's parameters can easily be reviewed, adjusted, saved and uploaded into the Controller. You can even view the engine rpm in real time to confirm your programs. For software updates go to the MSD website for free downloads at www.msdisignition.com.

The PN 8736 Launch Rev Limiter now supports the PN 75611. This Device connects to the 9-pin connector to allow changing the point 1, or zero time RPM, from 3,000 to 12,500 RPM with two rotary switches in 100-RPM steps. Also the LED's on the PN 8736 indicate Power ON LED-1, Reset LED-2, Armed LED-3 and Run LED-4. The PN 8736 also contains an ultra-bright LED array for the remote Mode indicator (Figure 1).

If you do not use a laptop or PC, the optional Hand Held Monitor connects to the Launch Controller through a 9-pin connector. It features an LCD display that allows you to walk through the Controller's menus as well as monitor its functions, alerts and more (Figure 1).



Figure 1 Optional Accessories.

Programmable Features

CylCnt	Cylinder Count. Select 4, 6 or 8-cylinder engines. Default is 8-cylinder.
StartUp RevLimit	This is the RPM Limit that will be active when the engine is started. Programmable in 100 rpm increments from 1,000 – 12,500 rpm. Default is 5,000 rpm.
Reset Sw Gnd	This selects the activation polarity source for the Reset (Lt Blue) wire. Select either Ground or +12 Volts for activation with a momentary switch. Default is Ground.
Launch Delay	Delay the activation of the RPM/Timer curve. Programmable from 0.050 – 1.0 second in 0.001 increments. Default is 0.05 second.
RevLim Pt 1	The first step of the RPM Limit curve. This is the active limit once the Light Blue wire is activated.
Ignition	This selects the Rev Limit type output of the Ignition or Rev Limiter that is being used. Default is for the MSD 7AL-2.
Monitored Items	
LaunchIn	Launch input timed RevLimit begin switch status.
RPM/TIME RevTime 0.00	This is the elapsed time of the rev limit. It is displayed in 0.00 second increments up to 12.5 seconds.
RevLim RPM	This is the current rpm rev limit.
ResetIn	Status of Launch Reset input wire from external switch.
LaunchIn	Status of Launch Start input wire from external switch.
RevPlug	Status of RevPlug connected to ignition.
TrigSrc	The input trigger source detected by the MSD product.

Display	Default	Range
CylCnt	8	4/6/8
Reset Sw Gnd	Sw_Gnd	Sw_Gnd/Sw_Pwr
StartUp RevLimit	5000	1000-12500 (100 rpm)
LaunDly 0.050	0.050	0.050-1.000 (0.001sec)
RevLim Pt 1	1	1-32 (1)
RevLim Time 0.00	0	0-12.50 (0.01 sec)
RevLim Rpm 6000	6000	1000-12500 (100 rpm)
AlertsPer 1	1	1-9 (1)
Ign	7AL2	6AL, SCI-L, 7AL2, (1) PRO MAG, 7ML2 PN 8728, PN 8938, PN 8978
Alert Messages	Led Blink	Code

Out Short		2
Rev Plug Lost		3

Figure 2 Default Setting Chart.

WIRING

Violet	On/Off power. Connect to a switched 12 volt source.
Black	Ground. Connect to battery negative or other good ground source.
Light Blue	Reset Input. Connects to a momentary +12 volts or ground to ARM rpm/time program.
Dark Blue	Launch input wire to +12 volts. When 12 volts is applied the program rpm/time program is active.
Orange/ Yellow	Remote Indicator. This wire will provide a ground to activate a light to show that the Controller is reset and active
RPM Module Connector (Yellow)	This plugs into the rev limit socket of the MSD. Note: This connector's polarity is correct only in one direction with the 7AL-2. The LED (Figure 3) will confirm that the polarity is connected correctly. With the wiring connected turn the ignition On. If the LED flashes a code 3 (three blink-pause sequences) the polarity is reversed. Turn the ignition Off, flip the rpm module connector 180° and repeat the test. The LED should remain on constant when the ignition is turned On and polarity is correct.
Violet/ Green 2-Pin	Magnetic pickup, 2-pin connector. Plugs into an MSD Distributor or Crank Trigger pickup. Violet is positive, Green is negative. Note: When this connector is used, the White wire is not connected. Typically y-spliced with Ignition Mag input.
White	Tach input. Connect to the MSD Ignition's tach output terminal. Note: When this wire is used, the magnetic pickup wire is not connected.
Gray	Tach output or to trigger a second source (see figure 5). This wire will provide 12 volt square wave tach signal.

LED

There is an LED on the side of the unit that has several uses. When the power is turned On, the LED will glow steady. Once the Reset Switch has been reset (Light Blue wire) it will blink rapidly to indicate that it is armed. When the Launch switch is activated (12 volts on the Dark Blue wire) the LED will go out indicating that the rpm/time sequence has begun.



Figure 3 LED Indicator.

Also, the LED will show fault codes. A code 2 (blink-pause-blink) indicates that the remote indicator wiring (Orange/Yellow) wire is shorted. The fault blink code will continue until the fault has been corrected.

The LED will show a fault code 3 indicating:

- The RPM plug is not connected in the right direction indicating wrong polarity.
- The Ignition is not On or it is programmed for the 7AL-2, ignitions which require correct polarity of the RPM limiter plug.

Note: The Revlimit Plug Output has polarity (positive and negative terminals) when connected to the 7AL-2.

- When the RPM Plug is connected in the correct polarity the LED will be on steady.
- When the RPM is not connected correctly the LED of the 75611 will blink a fault code (three blinks-pause-repeat). Either the ignition is not On or the RPM plug is not in the right direction (RPM Plug is backwards).

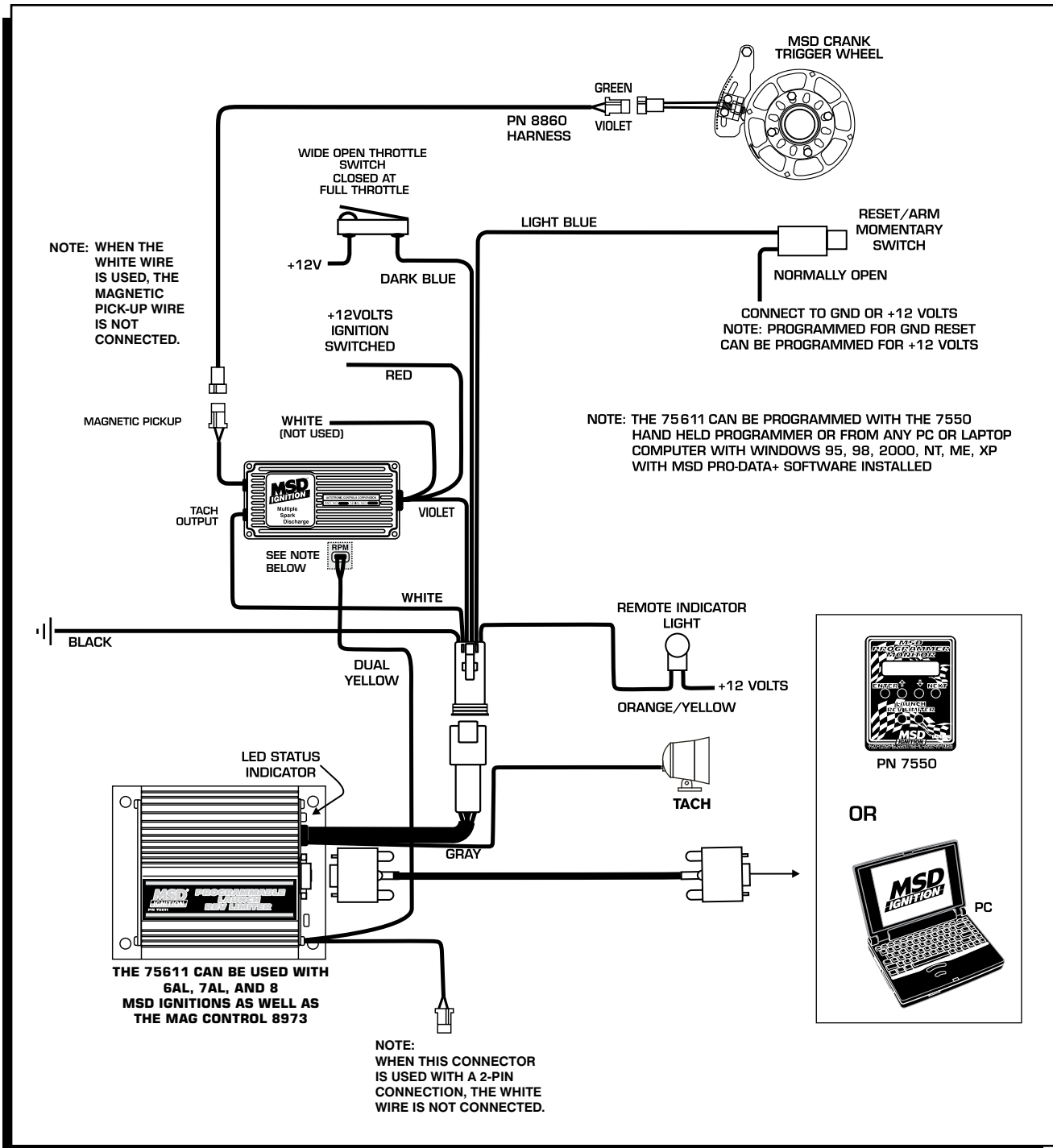


Figure 4 MSD 6 Series with Magnetic Pickup

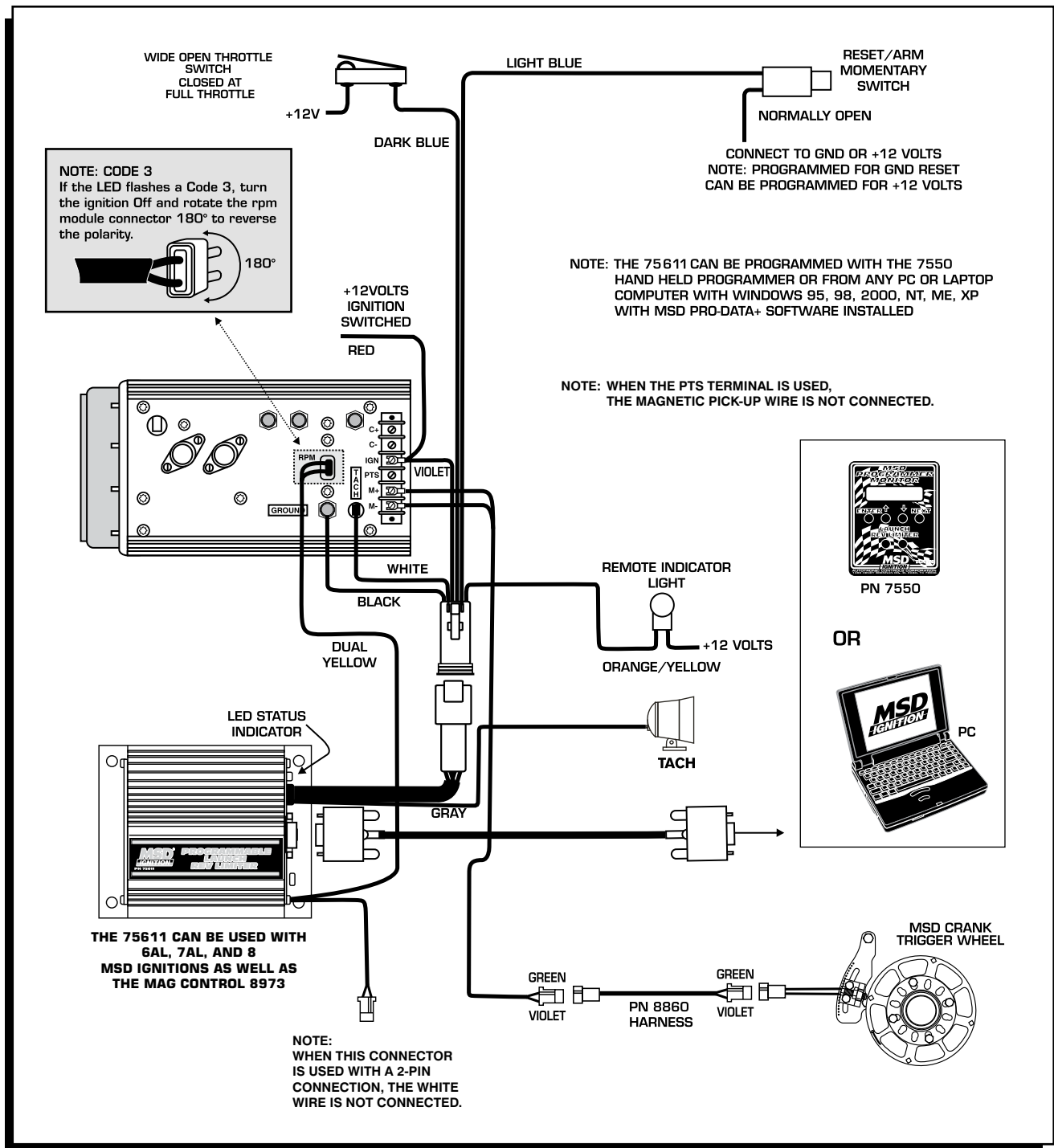


Figure 5 MSD 7 Series Ignition with Magnetic Pickup

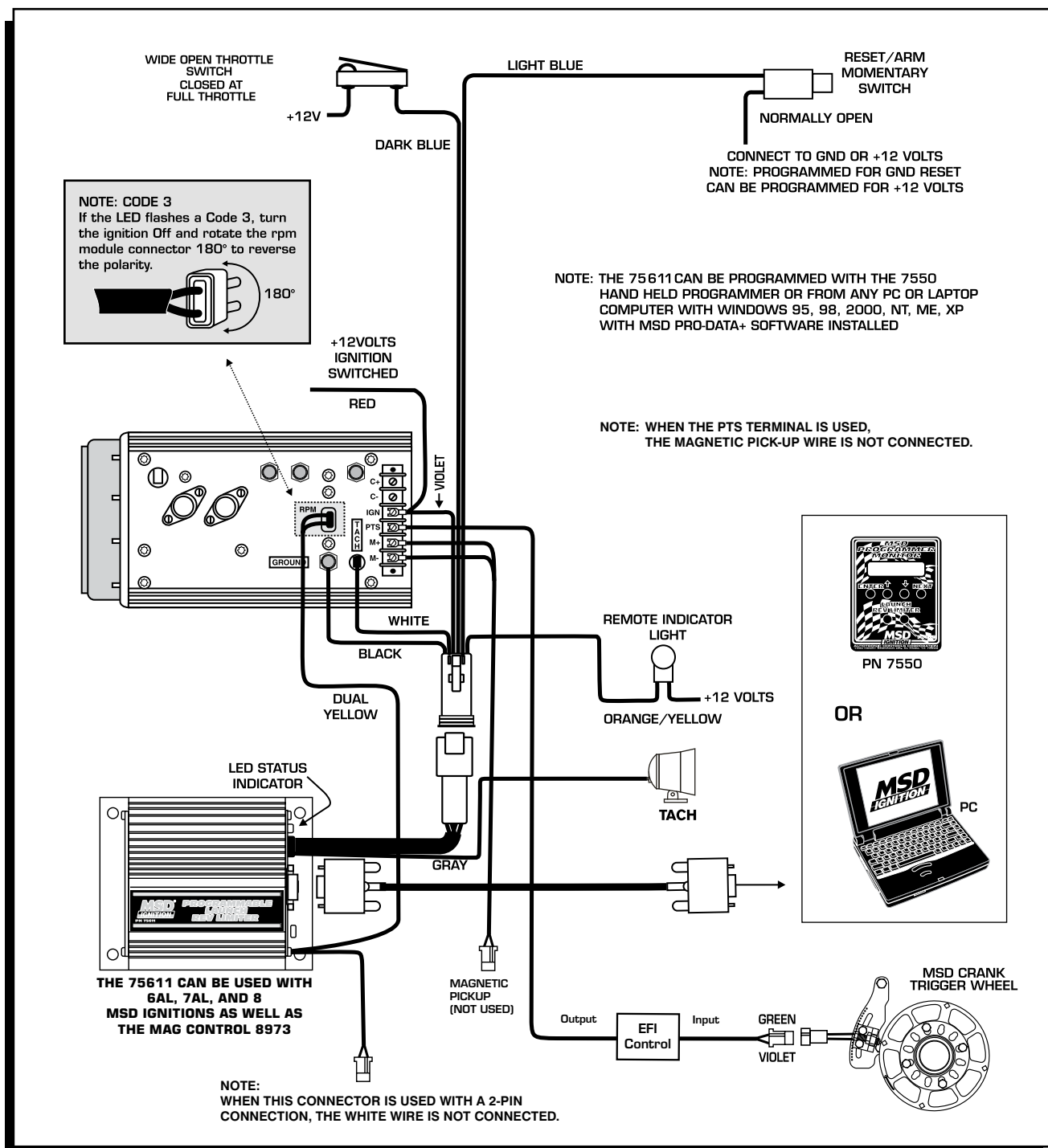


Figure 6 MSD 7 Series Ignition with Aftermarket EFI Control

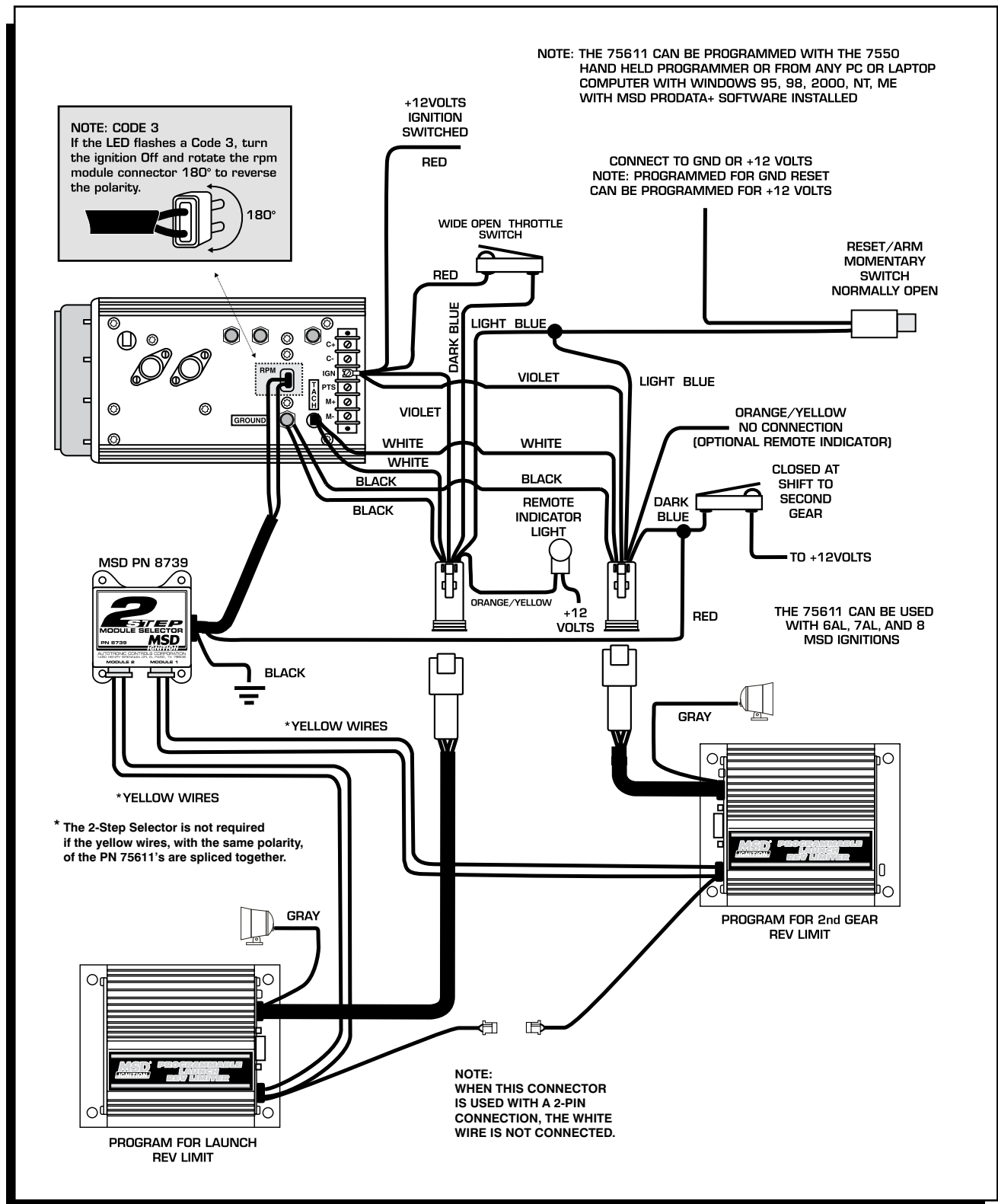


Figure 7 Dual Rev Limit Control Wiring for Launch and 2nd Gear

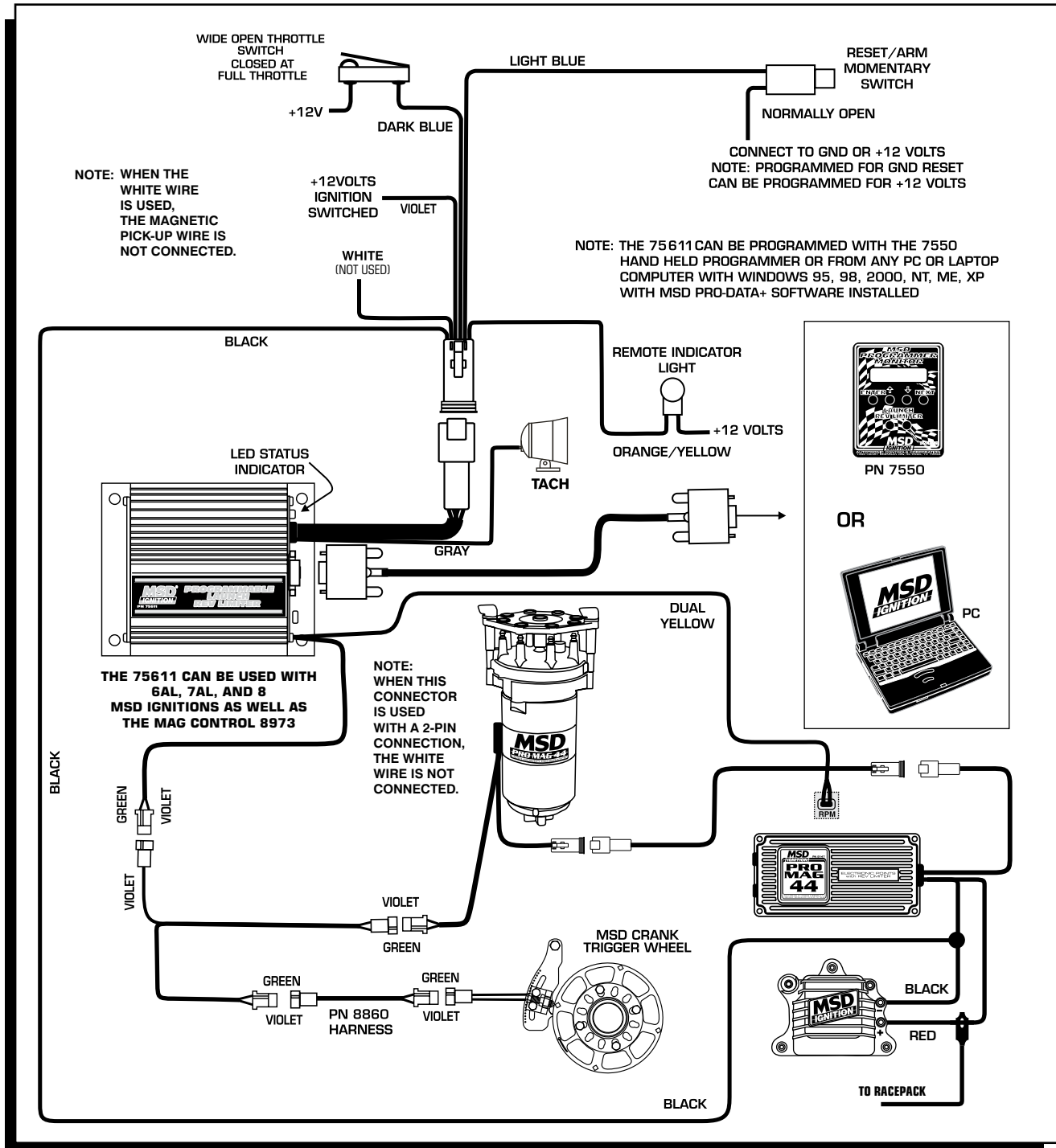


Figure 8 MSD ProMag with Single Magnetic Pickup

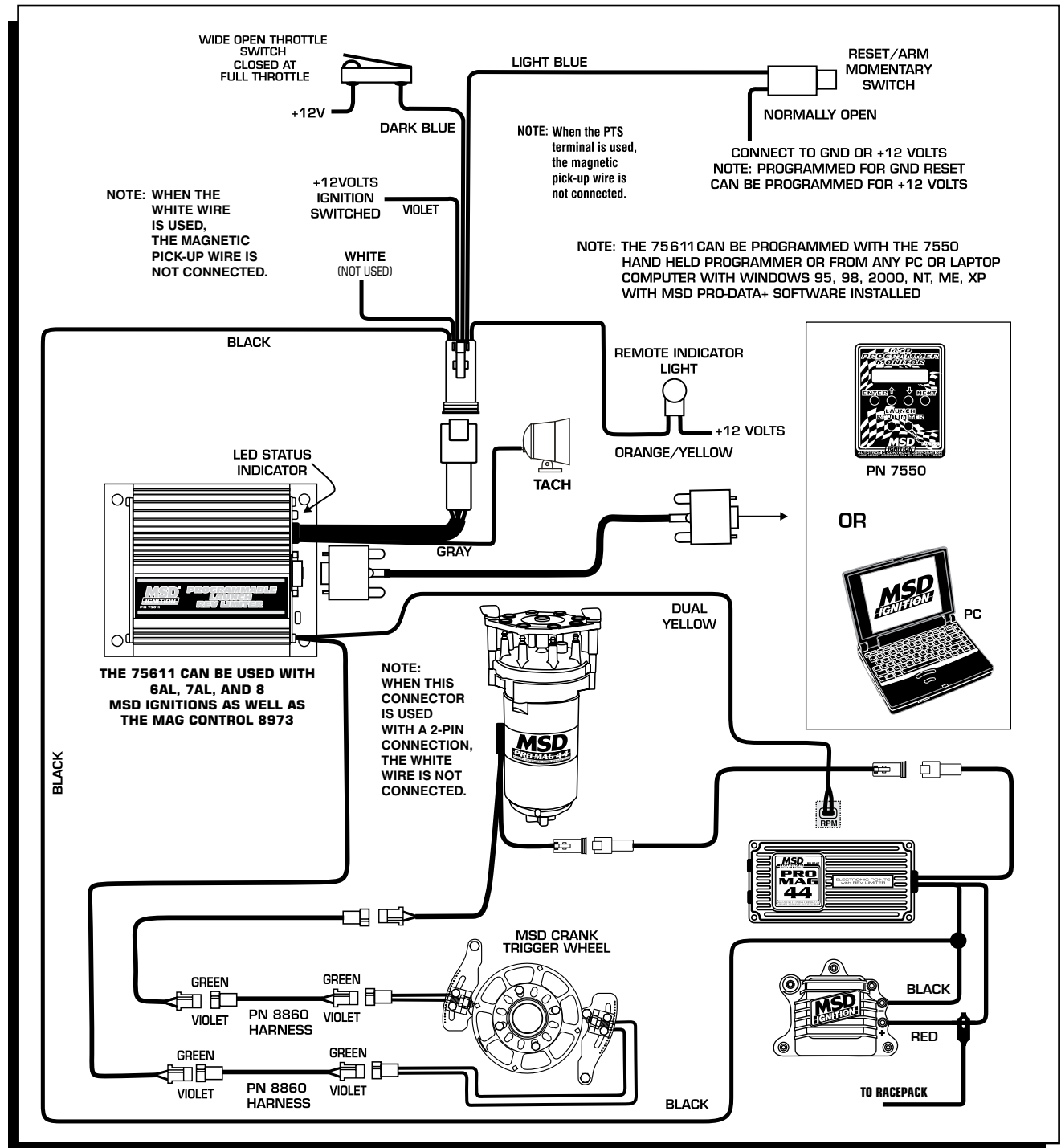


Figure 9 MSD ProMag with Dual Magnetic Pickup

Pro-Data+ Programming Instructions

INSTALLING THE SOFTWARE

1. Insert the installation disk.
2. In Windows click **Start** then select **Run**.
3. In the box type **A:\Setup** then press **Enter**.
4. Follow the on-screen instructions.
5. At this point there should be two MSD icons on your desktop.
6. Select the one that says **MSD Graph View**.
7. In the upper left corner of the screen select **File**.
8. Select the folder **75611**.
9. Select the file that says **75611vXX.IGN** (XX means the latest version such as 02).
10. Click on Open.

SAVES AND TRANSFERS

Whenever a change is made to a program it either must be saved to your PC as part of the file you are programming or it must be Saved/Transferred to the MSD Controller. The software gives you the choice of automatically transferring the change to the MSD or the PC.

Save to MSD: By saving the change right to the MSD, the new change is automatically put into the Controller.

Save to PC: This saves the changes on your PC screen only. The information still must be transferred to the MSD before it becomes active or saved to a file.

TACHOMETER

The tachometer on the monitor screen will show real time rpm and the timing retard when the engine is running with the laptop connected.

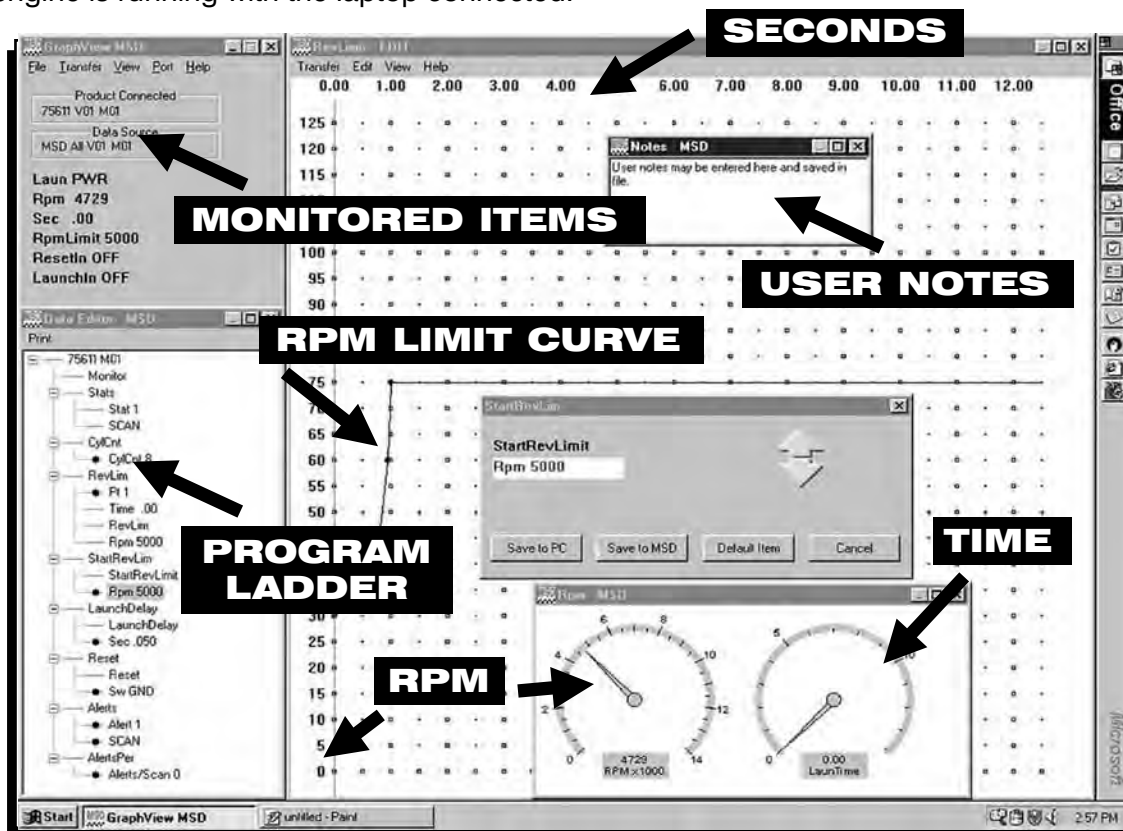


Figure 10 Pro-Data+ Software Screen.

HAND HELD MONITOR

If you are using the optional Hand Held Monitor to program this Controller, Figure 11 shows the complete menu screens.

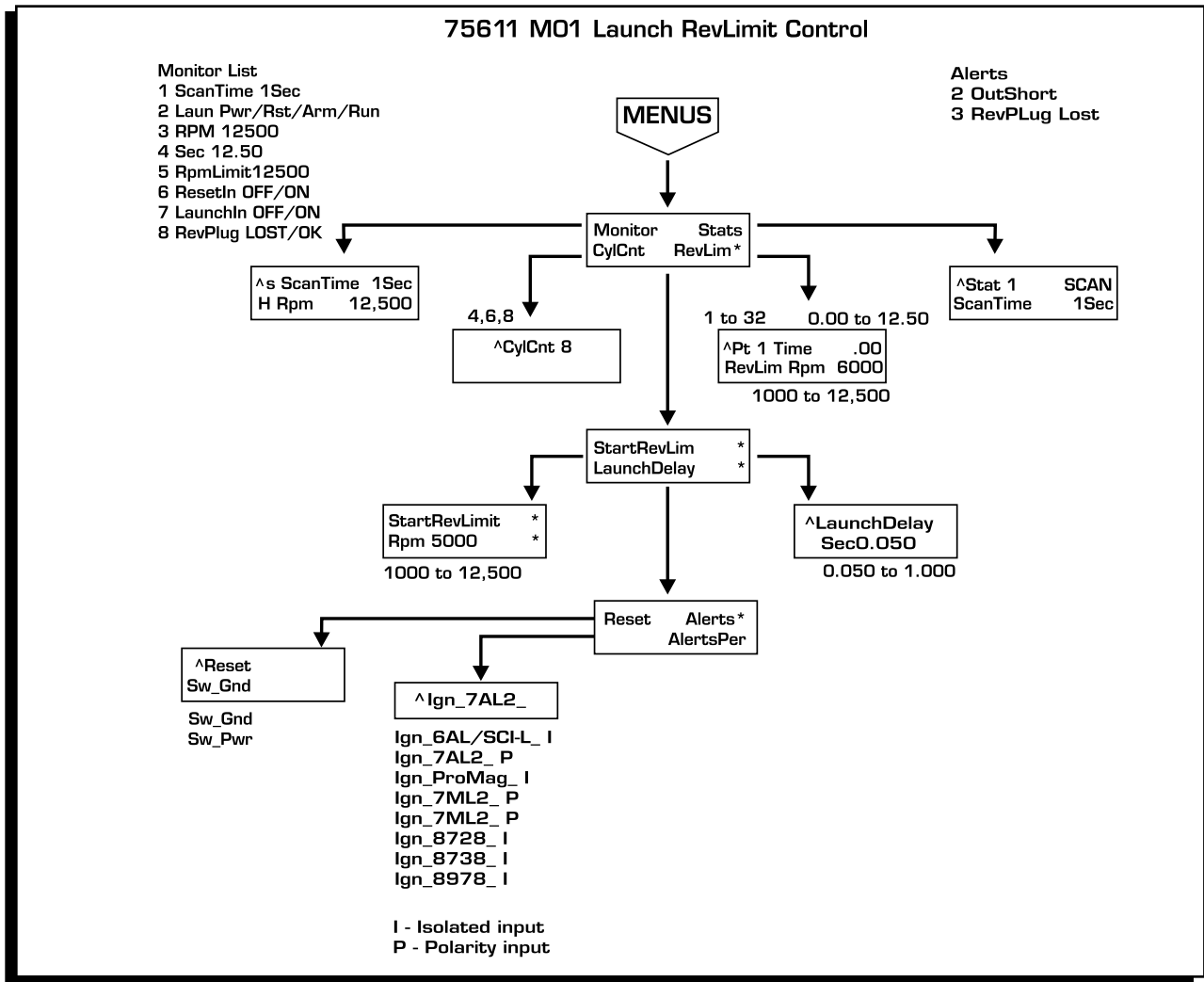


Figure 11 Hand Held Monitor Screen Menu.

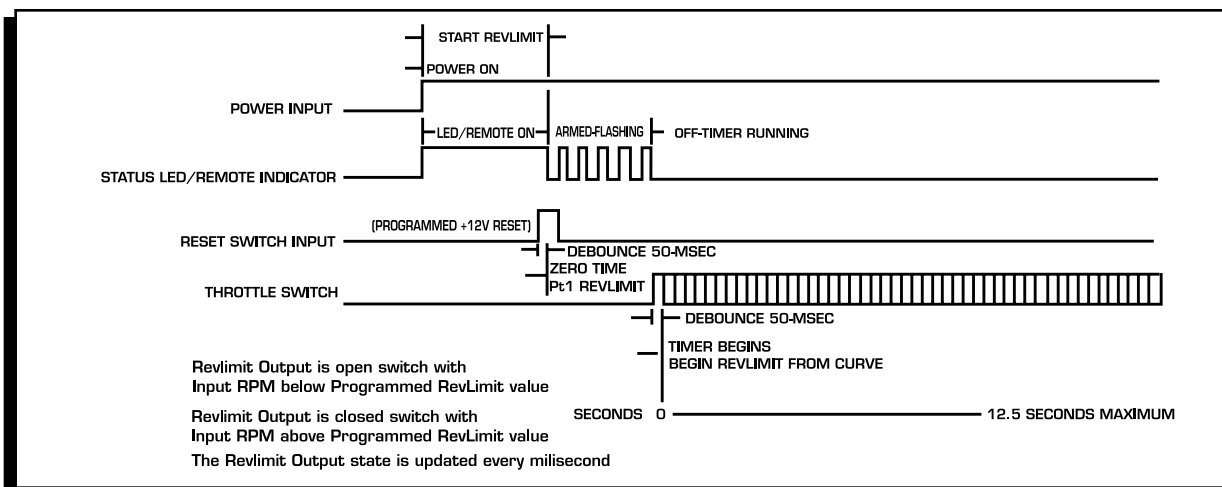


Figure 12 Time Line of Operation Sequence.

INSTALLATION INSTRUCTIONS

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 service, Proof of Purchase must be supplied for warranty verification. After the warranty period has expired, repair service is charged based on a minimum and maximum charge.

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 (915) 855-7123 or fax a request to (915) 857-3344. Send the unit prepaid with proof of purchase to the attention of: **MSD Ignition, Customer Service - RMA #, 12120 Esther Lama, Dock 5, El Paso, Texas 79936.**

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 after receipt, COD for any charges. (Ground shipping is covered by warranty). All units are returned regular UPS unless otherwise noted. For more information, call the MSD Customer Service Line (915) 855-7123. MSD technicians are available from 7:00 a.m. to 6:00 p.m. Monday - Friday (mountain time).

Limited Warranty

MSD IGNITION warrants MSD Ignition products to be free from defects in material and workmanship under normal use and if properly installed for a period of one year from date of purchase. If found to be defective as mentioned above, it will be replaced or repaired if returned prepaid along with proof of date of purchase. This shall constitute the sole remedy of the purchaser and the sole liability of MSD Ignition. To the extent permitted by law, the foregoing is exclusive and in lieu of all other warranties or representations whether expressed or implied, including any implied warranty of merchantability or fitness. In no event shall MSD Ignition be liable for special or consequential damages.