



# **POWER** **GRID**<sup>TM</sup> IGNITION SYSTEM



THE  
PINNACLE OF  
PROGRAMMABLE  
POWER!



# POWER GRID

MSD set the standard in programmable ignition systems. In fact, every NHRA Pro Stock championship in the last few years has been with an MSD Programmable 7. Drag radial, twin turbo outlaw cars and 10.5" tire classes all rely on the advanced programming of MSD's Programmable 7 ignitions.

The Power Grid Ignition System is the next evolution of our Programmable 7-Series Ignition Controls. The Grid incorporates an efficient 32 bit microcontroller and an all new software program, called MSD View, and is USB compatible. The Windows based software is designed with tabs to help racers easily select different programming windows and parameters. Also, race data is recorded on a micro SD card for ease of storage and reviewing.

The Power Grid Ignition incorporates CAN-Bus technology which reduces the amount of wiring and simplifies the addition of accessory modules. The CAN-Bus is a common harness that accessory controls are connected to and easily brought into the programming library of the View Software. With this technology, racers can also connect the Power Grid system directly into their Racepak Data Recorder to share ignition data.

The Power Grid Controller, **PN 7730**, is the brains behind the entire system and can be used with any MSD Ignition or the Pro Mag to provide advance ignition tuning capabilities. While it is compatible with all MSD boxes, the new Power Grid System Controller has been specially designed to mount to the Power Grid-7 Ignition. This new Ignition, **PN 7720**, packs higher output than the current programmable units!

The Power Grid Controller is supplied with the View Software, wiring harness, micro-SD card and mounting hardware. The ignition, available separately, is supplied with the harness and mounting hardware.



## POWER GRID IGNITION SYSTEM™:

**CONTROLLER - PN 7730\***

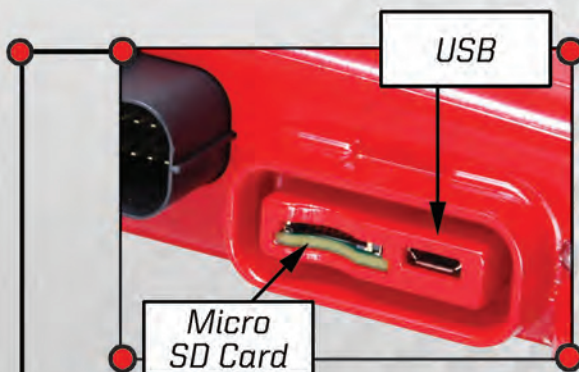
**IGNITION - PN 7720\***

**PRO POWER HVC II COIL - PN 8261\***

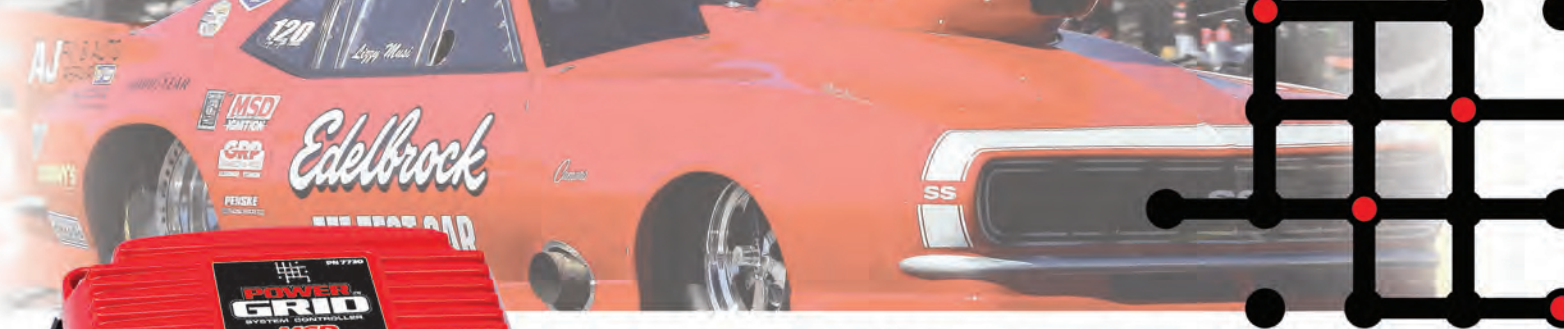
## OPERATING SPECIFICATIONS

<b>SPARK ENERGY:</b> 200-220 mJ Per Spark
<b>PRIMARY VOLTAGE:</b> 545-570 Volts
<b>SECONDARY VOLTAGE:</b> 50,000 Volts plus
<b>SPARK SERIES DURATION:</b> 20° Crankshaft Rotation
<b>RPM RANGE:</b> 15,000 RPM with 14.4 Volts
<b>VOLTAGE REQUIRED:</b> 12-18 Volts, Negative Ground
<b>CURRENT DRAW:</b> 1.3 Amp per 1,000 RPM
<b>WEIGHT &amp; SIZE:</b> 2.9 lbs., 7.5"L x 5"W x 2.25"H

\*Not legal for sale or use on pollution controlled vehicles



The Controller features a single wiring harness routed through a durable, locking connector. Next to it is a sealed cover that protects the micro-SD card and the USB connection. That's right, the Power Grid uses a USB connection for easier connections and power up during programming!



## PROGRAMMING FEATURES

- USB connection for ease of programming
- Timing based on engine rpm, gear value, and/or time
- Advanced individual cylinder timing based on gear or time
- Five retard stages for nitrous
- Four steps of rpm limits for burnout, spool, launch and overrev
- Output switch set on rpm, pressure or time
- Shift light settings for each gear
- Ignition data acquisition accepts multiple runs

The Controller is designed to mount on top of the PN 7730 Ignition housing. This keeps wiring and required space at a minimum.

## ACCESSORY MODULES:

Adding accessories is simple due to the CAN-Bus technology. Each module plugs into the Power Grid and the software recognizes the module's features and operation.

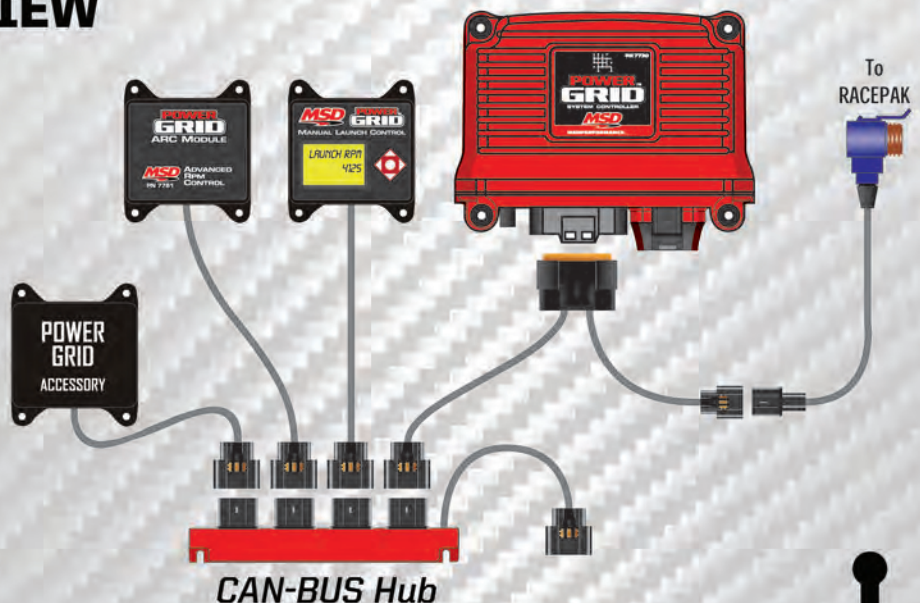
<b>Launch Control Module</b>	<b>PN 7751</b>
<b>ARC Module</b>	<b>PN 7761</b>
<b>Boost Retard Module</b>	<b>PN 7762</b>
<b>Boost Control Module</b>	<b>PN 7763</b>
<b>4-Bar, up to 43.5 PSI</b>	
<b>Boost Control Module</b>	<b>PN 77631</b>
<b>6-Bar, up to 75 PSI</b>	
<b>Power Module</b>	<b>PN 7764</b>

## POWER GRID ACCESSORIES:

<b>4-connector CAN-Bus Hub</b>	<b>PN 7740</b>
<b>Termination Cap</b>	<b>PN 7741</b>
<b>Replacement Harness</b>	<b>PN 7780</b>
<b>2' Extension Harness</b>	<b>PN 7782</b>
<b>4' Extension Harness</b>	<b>PN 7784</b>
<b>6' Extension Harness</b>	<b>PN 7786</b>
<b>Adapter Harness (7730 to Digital 7)</b>	<b>PN 7789</b>

## WIRING OVERVIEW

The Power Grid System consists of a central Controller and an Ignition. The Controller is the brains of the system, while the Ignition is a high output CD ignition (or use your existing MSD ignition). To add accessories, such as a Boost Retard Module, or a Manual Launch Shift Light Control, simply plug the new Module into the CAN-Bus bridge connector - that's it! Also, notice the separate connector that plugs directly into a RacePak Data System. The Power Grid is designed to share its ignition information to Racepak's data!



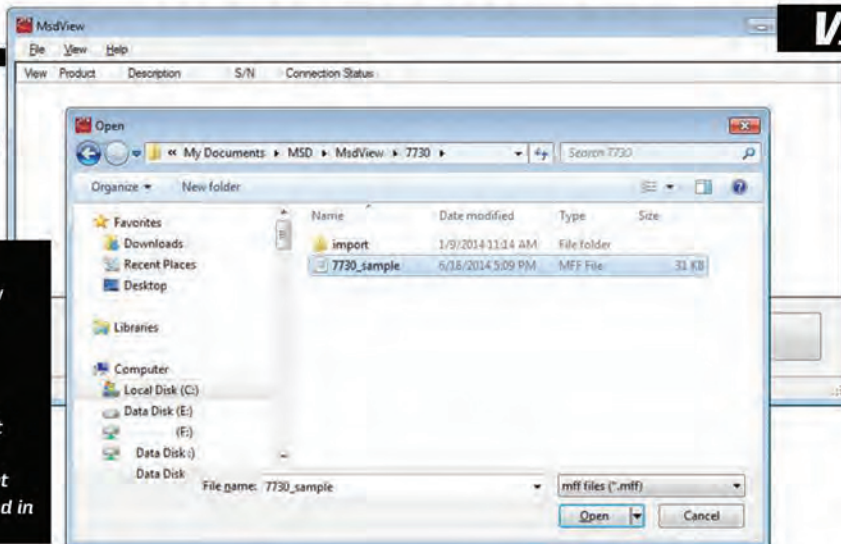
# ALL NEW VIEW SOFTWARE

## VIEW - FREE DOWNLOAD

The new View software was designed with racer input to improve navigation and help ease programming. See for yourself at [msdignition.com](http://msdignition.com) to download the software FREE!

Once you have downloaded the software you can open one of our sample data files to see exactly how the program would work with the ignition you are interested in before you buy; it's like a test drive without an annoying salesperson.

- To get samples:
- Cancel MSD View
  - Connect
  - Go to file
  - Click Open
  - Select the part number you want to learn about
  - Open the data set you are interested in



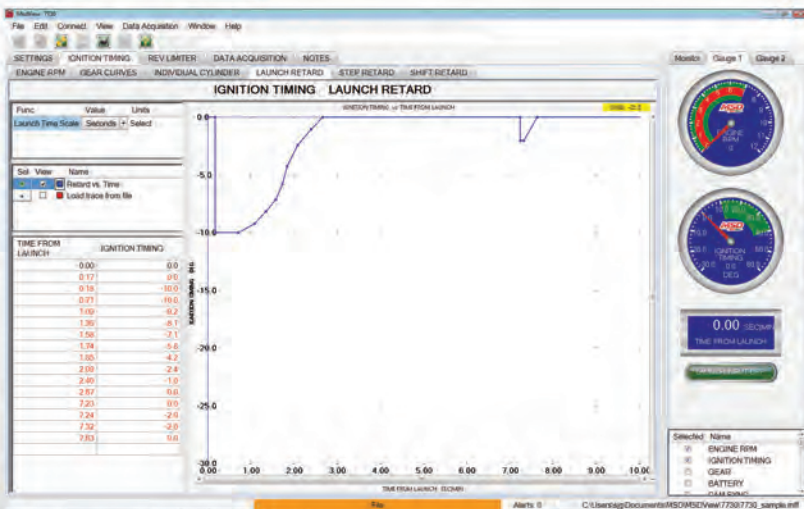
## LAUNCH RETARD

The Launch Retard Graph allows the user to control ignition timing based on time from launch. This feature is typically wired into the trans-brake, clutch or brake pedal switch which allows the timer to start at the exact moment that the run starts (Launch). The graph can be modified with up to 32 points (Dots) in order to modify ignition timing at any time during the run. Controlling ignition timing by time rather than RPM allows for more consistent control. Timing by time enables the user to soften the hit at launch, compensate for bumps on the track, help control engine RPM creep while on the throttle stop and much more. The graph can be configured to seconds or minutes, making it ideal for both drag racing and land speed applications.

- Consistent control of ignition timing regardless of engine RPM.
- Control engine power based on track conditions.
- Adjustable graph with up to 32 user defined points.
- Timing is recorded and can be viewed in MSD ReView or Racepak DataLink after the run.
- Time graph can be set for seconds or minutes.

## MSD TO RACEPAK DATA REVIEW

The Power Grid improved to multiple run data acquisition capabilities using a removable SD card. For Racepak users it gets even better as ignition data can be seamlessly sent to the RacePak system so that all the run data is easily viewed in one program. The Power Grid will record engine rpm and timing, rev-limits, step retard wire activation, and more. Using the included V-net connector the Power Grid plugs directly into the Racepak CAN-Bus system so the install can be done in minutes.



UPGRADE TO GREATNESS