

# PROGRAMMABLE DIGITAL-7

# MSD IGNITION

## OPERATING SPECIFICATIONS

- SPARK ENERGY:** 190 MILLIJOULES/SPARK
- PRIMARY VOLTAGE:** 535 VOLTS
- SECONDARY VOLTAGE:** 40,000 VOLTS
- SPARK SERIES DURATION:** 20° CRANKSHAFT ROTATION
- RPM RANGE:** 12,500 RPM WITH 14.4 VOLTS
- VOLTAGE REQUIRED:** 12-18 VOLTS, NEGATIVE GROUND
- CURRENT DRAW:** 1.1 AMP PER 1,000 RPM
- WEIGHT AND SIZE:** 3 LBS., 9.5"L x 4.5"W x 2.2"H

TESTED WITH PRO POWER HVC COIL, PN 8251  
THE MSD PRO POWER HVC COIL, PN 8251 OR PN 8261, ARE THE RECOMMENDED COILS.



## PROGRAMMABLE DIGITAL-7 IGNITION OPTIONS

PN 7535, Pg. 30  
PN 7530T, Pg. 31  
PN 7530L, Pg. 31  
PN 7531, Pg. 32  
PN 75314, Pg. 32

TRIGGER INPUTS					
Magnetic Pickup	X	X	X	X	X
Square Wave (Points, 12V Sq.)	X	X	X	X	X
REV LIMITERS					
Over-rev Limiter	X	X	X	X	X
Launch Limiter	X	X	X	X	X
Burn Out Limiter	X	X	X	X	X
Spool Limiter (Turbo)	X		X	X	
Slew Rate Limiter (Per Gear)			X	X	
Auto Learning Limiter	X	X	X	X	X
RPM/Time Based Limiter Map			X	X	
Time Rev Limiter (NHRA Req.)		X	X		
Traction Control Detection		X	X		
TIMING					
Individual Gear Timing Map	X	X	X	X	X
Boost Timing Map	X		X	X	
Individual Cylinder Timing	X	X	X	X	X
RETARDS					
Start Retard	X	X	X	X	X
Launch Retard (based on time)	X	X	X	X	X
3-Step Retards (ramp on/off)	X	X	X	X	X
OUTPUTS					
Activation Switch					
by RPM	X	X	X	X	X
by Time	X	X	X	X	X
by PSI	X		X	X	
Sequential Shift Light	X	X	X	X	X
Staging Light	X	X	X	X	X
Tach Output Configurable to Trigger/Timing	X	X	X	X	X
Configurable Cam Sync or Limiter output	X	X	X	X	X
SENSOR					
Configurable 1, 2 & 3-Bar	X		X	X	
TUNING					
Real Time Graphical Display for Engine Monitor (W/Laptop)	X	X	X	X	X
DATA LOGGING					
Ignition Acquisition		X	X	X	

## PROGRAMMABLE DIGITAL-7 INTRODUCTION

When the Programmable Digital-7 was introduced to the racing community six years ago, racers couldn't wait to get their hands on its advanced programming capabilities. It also wasn't long before they started asking for even more programming controls. We've worked closely with drag radial racers, outlaw 10.5 crazies and professional pro stock teams to make the Programmable Digital-7-Series ignitions the best and only choice in programmable ignition systems.

Due to rules and different classes, there are now four main Programmable Digital-7 Ignition Controls. The Programmable with Boost Retard, PN 7535, is our base model with the Programmable Plus, PN 7531, being the top of the line due to the rpm/time based rev limiting map. These two ignitions are not legal in some professional racing sanctions, so we developed the PN 7530T which is legal in all NHRA competition. (This ignition has the Traction Control Detection, TCD, feature.) There is also the Programmable TA, PN 7530L, which offers ignition data acquisition along with the TCD technology. This ignition is accepted in all NHRA Sportsman categories. (There is also a high output 4-cylinder race-only ignition available, PN 75314. See page 32 for more information.)

All of these ignitions share the same power producing components so output levels are equal. They can also be used on 4, 6 or 8-cylinder engines, have the same dimensions and the primary wiring is the same so there is not much to change when upgrading or changing. To better understand what each ignition offers, we developed a chart that shows which units have the various features.

LATE MODEL COILS ALT/STARTERS DISTRIBUTORS CRANK TRIGGERS TIMING/RPM CONTROLS SPARK PLUG WIRES ACCESSORIES TOOLS MARINE EFI STREET FIRE PROMD