Minimum Software/Firmware: V5 Build 120 is required to use the Pro 600 with Holley EFI

Overview:

The MSD Pro 600 has several unique features available when used with Holley EFI. The first is that the power output of the Pro 600 is adjustable via a table in the Holley EFI software. The second is that diagnostic data from the Pro 600 can be recorded in the Holley EFI for review. The only thing required to use these features is the CAN to be connected between the Holley EFI and MSD Pro 600.

Installation:

To enable the use of the Holley EFI features of the Pro 600 you will need to connect the Pro 600 to the Holley CAN using the supplied harnesses or with the addition of a CAN extension harness.

HOLLEY PART NUMBER	LENGTH
558-428	9 inches
558-424	4 feet
558-425	8 feet
558-426	12 feet

Software Setup:

The MSD Pro 600 has the ability to adjust its power level via the Holley EFI software when the CAN harness is connected between the Holley EFI and the MSD Pro 600. To setup the Holley EFI software for use with the Pro 600, start by configuring a Custom Ignition type with your Crank and Cam sensors.

Power Table:

Select the ignition output type "MSD Pro-600-8". You will then be able to select your axis for the ignition power table available on the left side selection pane.

	Back
ECU Configuration	CRANK SENSOR
Engine Parameters	Type 1 pulse/fire \checkmark Sensor Type DIGITAL FALLING \checkmark
Innitian Parameters	Inductive Delay 40.0 usec
Ignition Parameters	
Ignition Power	Reference Angle
Senser Stalingillarnings +	
Basic I/O +	
Closed Loop/Learn +	
DI Target Fuel Pressure	CAM SENSOR
Injector Phasing	Type Single Pulse - Ignore Cam After Start V Sensor Type DIGITAL FALLING V
Individual Cylinder	
Inputs/Outputs	
	OUTPUT SETUP
	Type MSD Pro 600-8 V V Enable Ignition Power Table
	Points Output Adjustable Dwell
	EST Output (5V active low)
	EST Output (12V) EST Output (12V active low)
	DIS Waste Fire DIS Waste Fire (active low)
	DIS Coil on Plug
	Commis Output Fixed Duty Cycle (MSD)

The Ignition power table has selectable axis to adjust the power output of the Pro 600. The table has a range of 30% to 105%. 100% is equivalent to 600mj and is the maximum recommended value for sustained use.

NOTE: The Pro 600 will accept a power level between 24% and 113% from Holley EFI. This is important to keep in mind if you are using advanced tables to modify the power output. The Pro 600 will use the last valid power level input sent to it.

SENSORS	~	l				_		199		-			,				
SYSTEM PARAMETERS	Graph						Ig	nitio	n Pov	ver [%	6]						
ECU Configuration																	
Engine Parameters	85.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0
Ignition Parameters	78.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ignition Power	72.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	59.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sensor Scaling/Warnings +	53.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Basic I/O +	6 47.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Closed Loop/Learn +	S 40.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DI Target Fuel Pressure	34.3	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
Injector Phasing	20.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
injector Pridoring	15.3	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
Individual Cylinder	9.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Inputs/Outputs	2.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
	-3.7	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
	-10.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
		500	1300	2100	2900	3700	4500	5300	6100	6900	7700	8500	9300	10100	10900	11700	12500
	RPM [RPM]																

Telemetry:

There is an IO ICF included in the software with each of the channels already set up. It is recommended to load this ICF either directly or via the comparison function to import the desired channels. Users can also directly setup channels in the IO ICF if desired.

Time Delay to Start	0.00 sec				
when	∨ is Enat	oled V			
when TPS	🀞 Choose Conf	ig File			Х
ctivate at 0%	Look in:	0	~	G 🦻 📂 🖽 -	
odify dwell time. A pr .0 0.0 0.0 0.0 .0 0.0 0.0 0.0 .0 0.0 0.0 0.0	Quick access Desktop Libraries	Name 2011-2014 Coyote Ti- 2015-2017 Coyote TI- Base Config - Blank.io Coyote CAN channels MSD Pro 600 CAN Cha	VCT CAN.io VCT CAN.io) s.io	Date modified 7/26/2019 4:21 PM 7/26/2019 4:25 PM 5/31/2018 2:06 PM 5/31/2018 2:06 PM 5/31/2018 2:06 PM 7/26/2019 4:49 PM 5/22/2019 2:45 PM	Type IO File IO File IO File IO File IO File IO File
	Network	< File name: Files of type: Holley El	FI ICFs (all)	~	> Open Cancel

CAN Channel name	Description
Current Temp	Internal temperature of the Pro 600
Battery	Battery voltage measured at the Pro 600
Converter Volt	This is the voltage measured at the capacitor
	and will be a function of the desired power
	level and available battery voltage
Converter Energy	This is the millijoule energy measured at the
	capacitor and will be a function of the desired
	power level and available battery voltage
Miss Counter 1-8	The miss counter looks for an open load
	condition and will increment each time the
	ignition detects an open load condition. An
	Open-Load condition occurs when the
	secondary voltage is unable to break the gap,
	and no secondary current occurs. This can
	usually be seen by a spark period that is
Spork Daried 1.9	The aparts paried in the length of time for the
Spark Fellou 1-0	first ignition ascillation. This ascillation will
	vary based on the coil and overall ignition
	load
	A deviation from the typical period
	(frequency) can indicate an issue with that
	channel.
	For example, a shorted coil causes the period
	to shorten (higher frequency) while an open
	load causes the period to increase (lower
	frequency).
Efficiency 1-8	The efficiency is the ratio of energy at the
	ignition capacitor before and after the first
	ignition cycle. Typically, this ratio is around
	60%, but it is dependent on the ignition coil
	used and spark load.

Fault Mask

The fault mask parameter is a decimal number representation of a series of bits that can be either 1 or 0. The easiest way to use this parameter is to use a decimal to binary conversion application, such as windows calculator.

D '/ 0	
Bit 0	Open Load 1
Bit 1	Open Load 2
Bit 2	Open Load 3
Bit 3	Open Load 4
Bit 4	Open Load 5
Bit 5	Open Load 6
Bit 6	Open Load 7
Bit 7	Open Load 8
Bit 8	Open Coil 1
Bit 9	Open Coil 2
Bit 10	Open Coil 3
Bit 11	Open Coil 4
Bit 12	Open Coil 5
Bit 13	Open Coil 6
Bit 14	Open Coil 7
Bit 15	Open Coil 8
Bit 16	Coil Shorted 1
Bit 17	Coil Shorted 2
Bit 18	Coil Shorted 3
Bit 19	Coil Shorted 4
Bit 20	Coil Shorted 5
Bit 21	Coil Shorted 6
Bit 22	Coil Shorted 7
Bit 23	Coil Shorted 8
Bit 24	Converter Shorted
Bit 25	Over Temperature
Bit 26	15V Supply

Other Considerations:

The dwell table offset in the advanced ICF will become the ignition power offset when switching to the MSD Pro-600-8 and vice versa when switching from the MSD Pro-600-8 to other styles of ignition output. There are several safeties in the software to prevent errors when switching between output types. However, it is still very important to check the advanced tables when changing ignition output types to avoid unwanted modifiers being applied.

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Table #1 🥑 Ta	able #2	Table #3	Table #4	Table #2	Table #3	Table #4	Tab
SETUP-							
🗸 Enable Table	:	Name	1D #1	:	Name AT	1D #1	
Table Type:	Dwell Time	Offset	~	Ignition P	'ower Offset	<	
X Axis:	Nitrous Sta Nitrous Sta Nitrous Sta	ge #2 Offset ge #3 Offset ge #4 Offset	^	Nitrous S Nitrous S Nitrous S	tage #2 Offset tage #3 Offset tage #4 Offset	^	
ACTIVATIO	Nitrous Sta Nitrous Sta Nitrous Sta Nitrous Sta	ge #5 Offset ge #6 Offset ge #7 Offset ge #8 Offset		Nitrous S Nitrous S Nitrous S Nitrous S Nitrous S	tage #5 Offset tage #6 Offset tage #7 Offset tage #8 Offset		ne Dela
Switched En	Cylinder #1 Cylinder #2 Cylinder #3 Cylinder #4	Timing Offset Timing Offset Timing Offset Timing Offset	- 1	Cylinder ‡ Cylinder ‡ Cylinder ‡ Cylinder ‡	wife Onset #1 Timing Offset #2 Timing Offset #3 Timing Offset #4 Timing Offset		
Advanced En	Cylinder #5 Cylinder #6 Cylinder #7 Cylinder #8 Cylinder #1	Timing Offset Timing Offset Timing Offset Timing Offset Fuel Multiplier		Cylinder # Cylinder # Cylinder # te at n Cylinder # Cylinder #	#5 Timing Uffset #6 Timing Offset #7 Timing Offset #8 Timing Offset #1 Fuel Multiplier		TPS teat
0 msec is t	Cylinder #2 Cylinder #3 Cylinder #4 O Cylinder #5 Cylinder #6	Fuel Multiplier Fuel Multiplier Fuel Multiplier Fuel Multiplier Fuel Multiplier		Cylinder ‡ dwellu Cylinder ‡ Cylinder ‡ 0.0 0 Cylinder ‡ Cylinder ‡	‡2 Fuel Multiplier ‡3 Fuel Multiplier ‡4 Fuel Multiplier ‡5 Fuel Multiplier ‡6 Fuel Multiplier		n pow).0 0
1.0 - 0.9 -	Cylinder #7 Cylinder #8	Fuel Multiplier Fuel Multiplier		Cylinder ‡	‡7 Fuel Multiplier ‡8 Fuel Multiplier		
0.8 -	Injector En Crashing F	d Angle Offset		Injector E	nd Angle Offset Fuel Multiplier		<u> </u>
0.7 -	Dwell Time	Offset #1 Evel Multiplier		Ignition P	ower Offset		
0.6	Injector Sel	#1 Fuel Multiplier #2 Fuel Multiplier : #3 Fuel Multiplier	v	Injector S Injector S	et #2 Fuel Multiplie et #3 Fuel Multiplie	r r V	
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