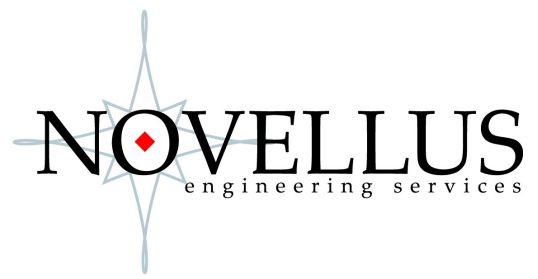
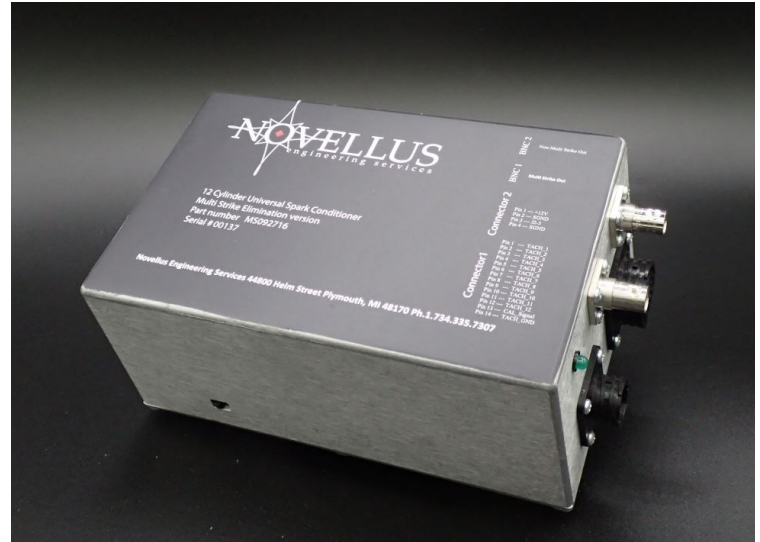


Universal Spark Conditioner with Multi-Strike Elimination



Description:

The Universal Spark Conditioner is designed to condition +12V coils primary or low voltage spark signals. This conditioner takes up to all 12 signals and outputs them onto one pulse train. It allows the monitoring/recording of those signals with a variety of data acquisition tools or control systems. Multi-strike elimination output gives the only the first firing of each combustion cycle. Selection of leading or trailing edge is provided through a switch on the side of the module.



Basic Operation:

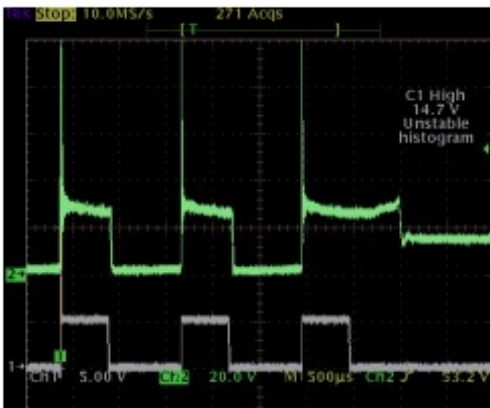
The unit has the ability to select between leading or trailing triggers. There is a one-shot 500µs pulse per spark event. This unit works for high or low voltage spark inputs. There is one Transistor to Transistor Logic (TTL), +5V output with multiplexed pulse representing all 12 channels. A second output with multi-strike elimination will output the first strike for each cylinder firing.

Selectable options:

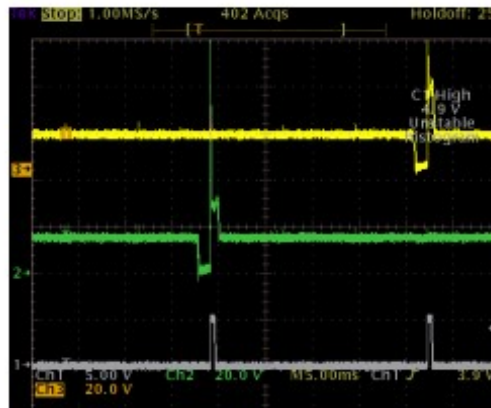
Leading and Trailing edge trigger switch

Other Uses:

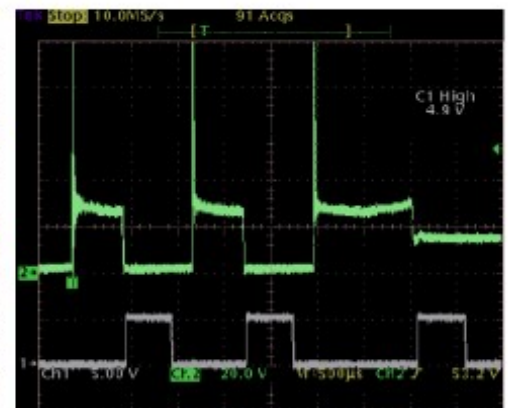
Data collection from any type coil firing event, like solenoids.



Multi Strike Leading Edge Detection



Single Strike Leading Edge Detection

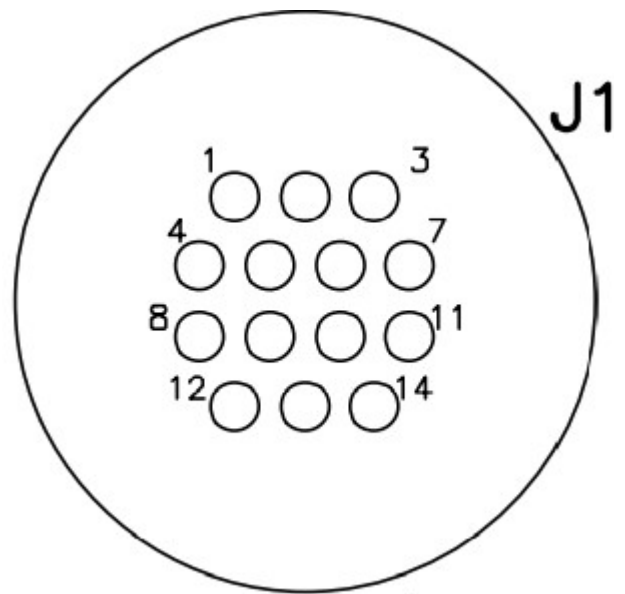


Multi Strike Trailing Edge Detection

Novellus Engineering Services Inc. 44800 Helm Street Plymouth, MI 48170
(734)335-7307
info@novelluseng.com

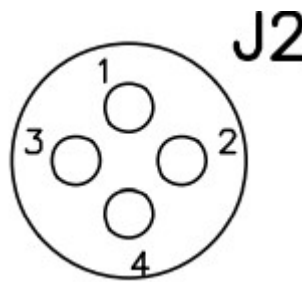
14 Socket Female Connector:

- | | |
|------------|-----------------|
| (1) TACH_1 | (8) TACH_8 |
| (2) TACH_2 | (9) TACH_9 |
| (3) TACH_3 | (10) TACH_10 |
| (4) TACH_4 | (11) TACH_11 |
| (5) TACH_5 | (12) TACH_12 |
| (6) TACH_6 | (13) CAL_SIGNAL |
| (7) TACH_7 | (14) TACH_GND |



4 Pin Male Connector:

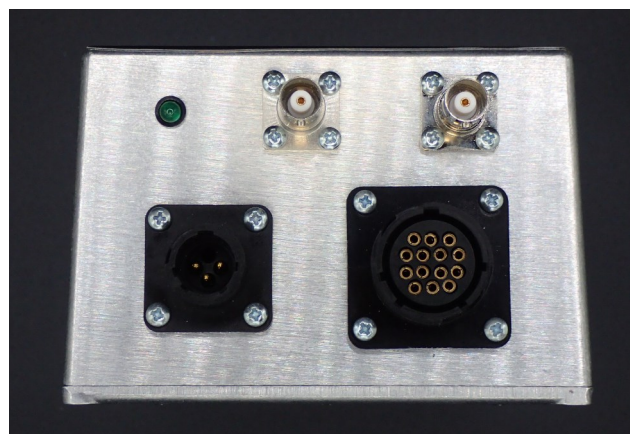
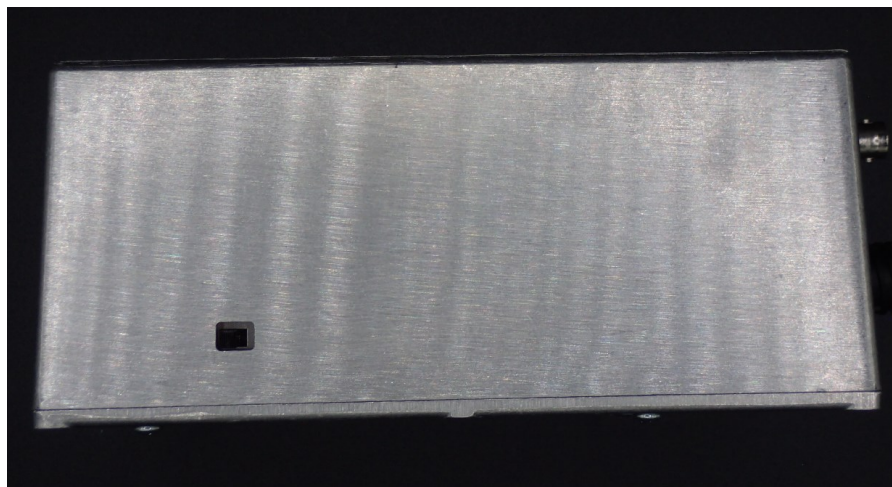
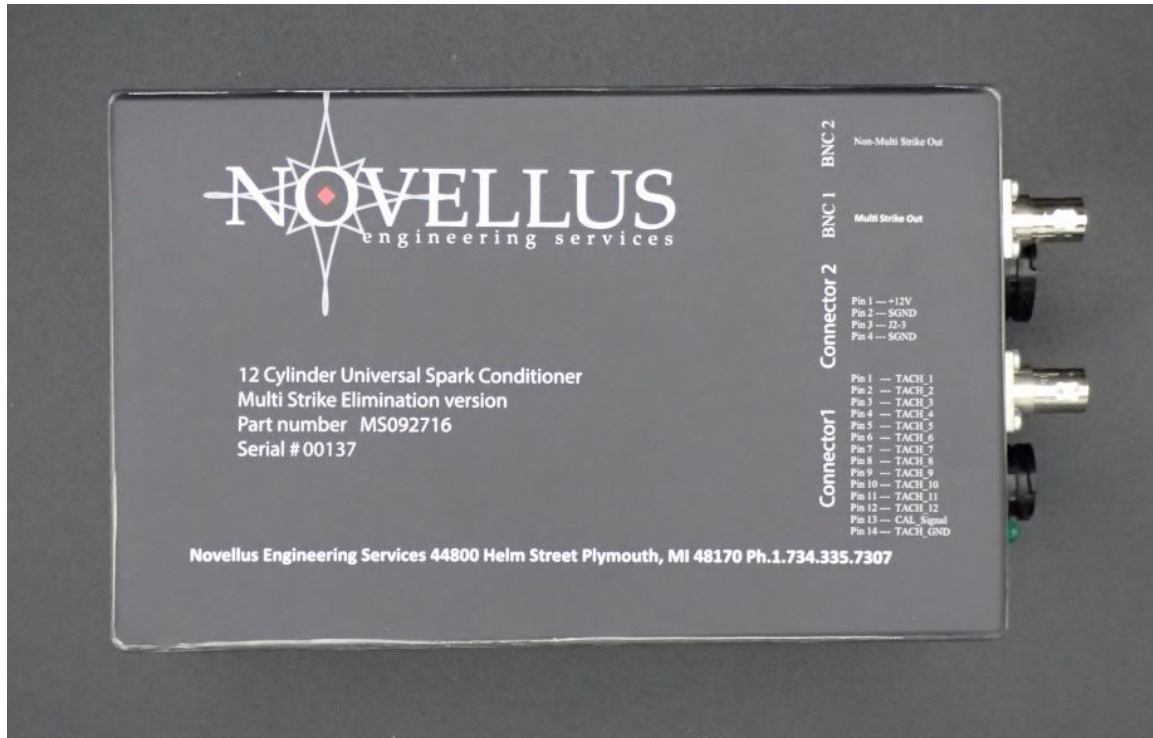
- (1) +12V
- (2) SGND
- (3) J2-3
- (4) SGND



Electrical Specifications:

Signal	Minimum	Maximum
Signal Input Voltage Range	+4 VDC	+400 VDC
Channel Count	1	12
Output Signal Voltage	0.5 VDC	4.75 VDC
Output Signal (Per Event)	475 μ s	525 μ s
Multi-strike window	150 μ s	5 ms
Input Supply Voltage	+6 V	+20 V
Input Supply Current		50 mA
Operating Temperature	-25°C	+85°C

Dimensions LxWxH: (200x114x84)mm



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