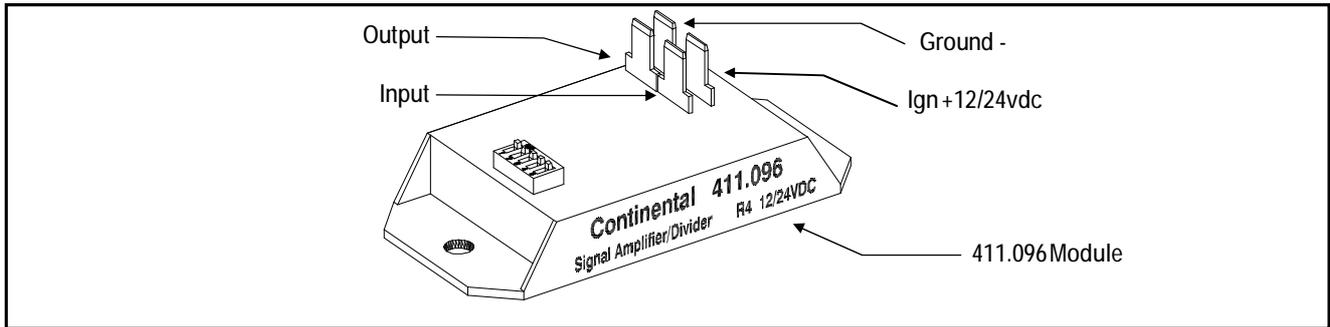


# 411.096 - SIGNAL AMPLIFIER/DIVIDER – 12/24VDC



## GENERAL

The 411.096 is a general purpose module designed to work with most standard automotive or diesel speedo's and tachometers as used in marine, automotive, and commercial vehicles, tractors, generator sets, etc. These are usually driven by a magnetic pickup, alternator AC connection or electronic ignition auxiliary signal.

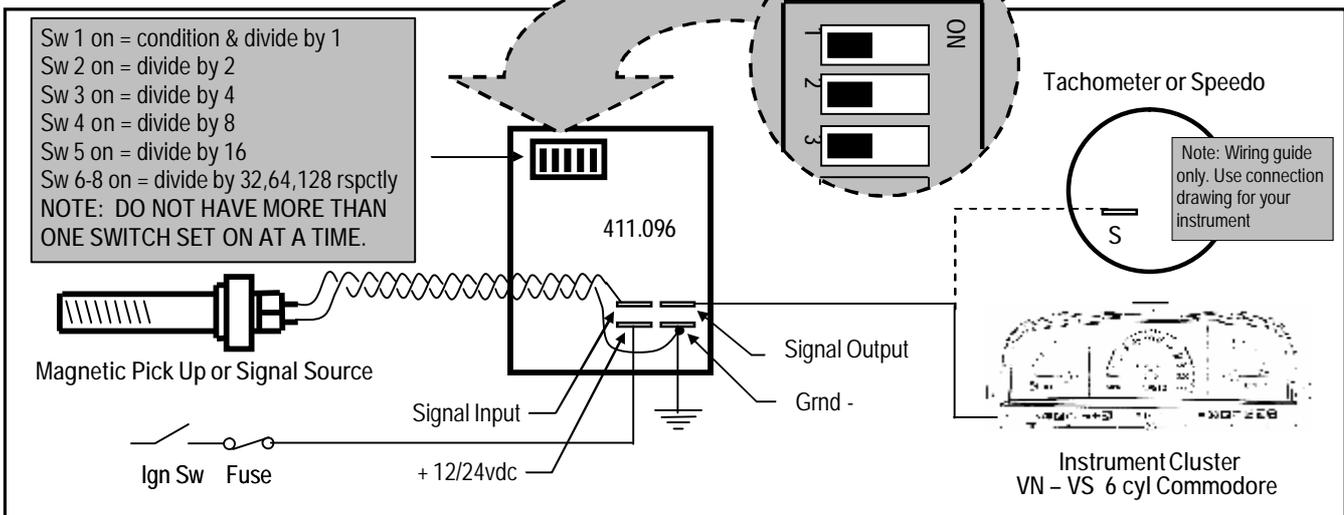
This unit will take the weaker signals often received from these systems and boost them to a 12v p-p square wave suitable for most inputs. The signal may also be reduced in frequency by a factor of 1, 2, 4, 8, 16, 32, 64 or 128 so as to allow easier adjustment of the driven instrument.

We recommend this unit be fitted by a qualified automotive electrician or instrument technician. Whilst every care has been taken to ensure this is a universal signal processor and will work trouble free with as many systems as possible, it may not suit all applications. VDO is not responsible for incorrect fitting or damage caused by or during the fitting of this module.

## FITTING INSTRUCTIONS

1. Locate a convenient mounting place in the instrument panel and mount the 411.096 control module. Double sided tape or a neutral cure silicone sealant are acceptable fixing products. Orientation is not critical.
2. Connect "IGN+" to a switched ignition supply line preferably via a 2 Amp fuse.
3. Connect "GND" to a good ground or earth connection.
4. Connect "INPUT" to the signal source, usually the active wire of the magnetic pickup or signal source.
5. Connect "OUTPUT" from the 411.096 to the signal terminal, or input, on your instrument.

## WIRING DIAGRAM



## SPECIFICATIONS

1. Dimensions: Approximately 58 x 42 x 23mm overall.
2. Voltage: 12/24 Volt DC Negative Ground systems
3. Input Range: Signal amplitude 2+v p-p, sine or square wave. Frequency at 0 – 10KHz
4. Output Rating: Square wave at ~10.4v p-p, rise time  $\geq 40\mu\text{s}$ . Switch at divide input freq. by 1,2,4,8,16,32,64 or 128