Analog to PWM Controller



Description:

Analog to PWM Controller is designed to convert a 0 to 5Vdc analog input voltage to a PWM output proportional to the input voltage.

Basic Operation:

The 0 to 5 voltage analog input signal is compared to a 200Hz triangular wave form.

The output of the comparator is then buffered and conditioned to an open drain output. The output is jumper selectable for either (0Vdc to 5Vdc, Min to Max PWM) or (5Vdc to 0Vdc, Min to Max PWM).

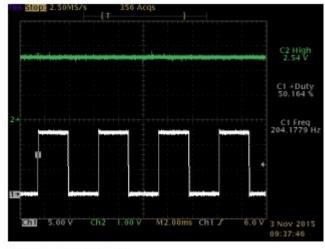
Soft shutdown option for slow return to zero position can be used with devices like throttle bodies to prevent damage.

Other Uses:

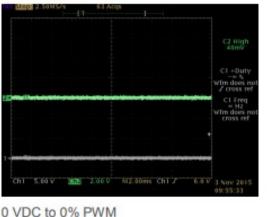
Fuel pump control

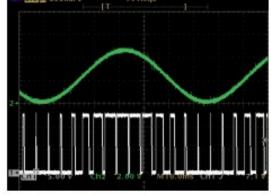
Throttle control

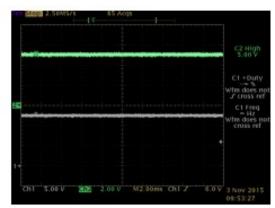
LED brightness control



2.5VDC to 50% PWM







Sine wave to PWM

5 VDC to 100% PWM

DB9 Input connector pinouts:

(1) V_BAT (9) NC

(2) NC (10) NC

(3) GND (11) NC

(4) NC (12) NC

(5) IGN (13) NC

(6) V_IN (14) NC

(7) NC (15) PWM OUT

(8) NC



Electrical Specifications:

Signal	Minimum	Typical	Maximum
Analog Input Range *	-0.7 VDC		+8.2 VDC
PWM Output max voltage	0 VDC		40 VDC
Recommended PWM Output Range**	2%	5% - 95%	98%
Frequency ***	150 Hz	200 Hz	300 Hz
Input Supply Voltage	+10.0 VDC	+12.7 VDC	+20.0 VDC
Input Supply Current		50 mA	3A
Operational Temperature	-25°C		+85°C

- * PWM output valid from 0 VDC to 5 VDC
- ** PWM % less than 2% or greater than 98% may be unstable
- *** Factory adjustable

Dimensions LxWxH: (111x67x27)mm