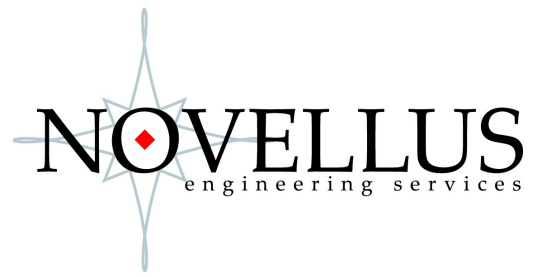


CANALOG



Description:

This tool connects to any CAN or CAN FD network. The tool will use the input configuration and convert the selected CAN channels into analog or PWM outputs. Both the analog and PWM channels can be scaled using a $Y=MX+B$ slope and offset formula.

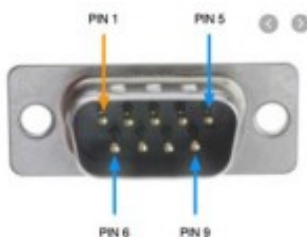
Basic Operation:

This device can convert CAN or CAN FD signals into 4 analog and/or 4 PWM signals. Using the Windows based setup utility, the CAN channel can be converted. Each channel can be scaled with an algebraic formula of $Y=MX+B$. The analog channel outputs are 0 to +10VDC with a conversion time of less than $20\mu s$ with options of 12, 14 or 16 bit accuracy. The PWM channel outputs have a duty cycle of 5% to 95% with a base frequency of 100Hz to 1000Hz. The output current capabilities are 20mA (more output current capability is possible if requested) per channel at 25°C. Output current protection is provided to protect against shorted outputs. At zero volts there will be less than 5mV peak to peak of noise. Optional output pullup circuitry is provided for the analog channels and is provided via dip switches.



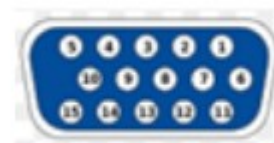
DB9 Input connector pinouts:

- | | |
|----------------|-----------------|
| (1) NC | (6) GND |
| (2) CAN FD LOW | (7) CAN FD HIGH |
| (3) GND | (8) NC |
| (4) NC | (9) +12V INPUT |
| (5) NC | |



DB9 Input connector pinouts:

- | | |
|----------|------------|
| (1) GND | (9) GND |
| (2) PWM0 | (10) VOUTA |
| (3) PWM1 | (11) VOUTB |
| (4) GND | (12) GND |
| (5) PWM2 | (13) VOUTC |
| (6) PWM3 | (14) VOUTD |
| (7) NC | (15) GND |
| (8) GND | |



DB9 Signal Specification:

Signal Name	Pin Number	Signal Description
+12V	9	Pin 9 is supply voltage, typically battery voltage + 7 VDC to +20VDC
GND	3 & 6	Ground
N\C	1, 4, 5 & 8	No Connection
CAN LOW	2	CAN Low Output
CAN HIGH	7	CAN High Output

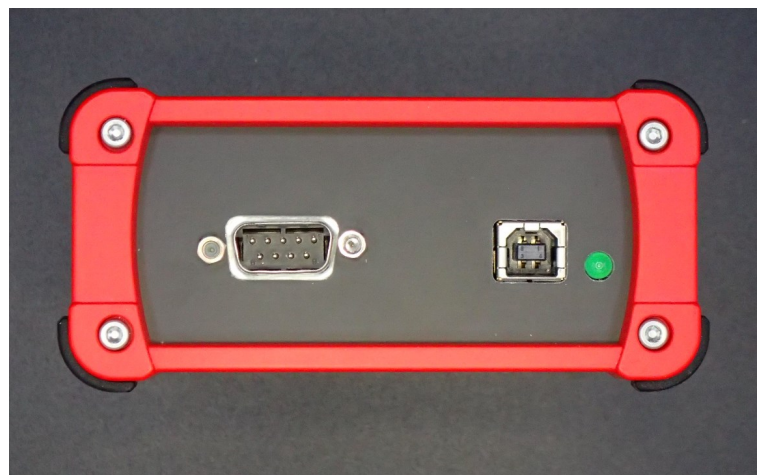
DB 15 Signal Specification:

Signal Name	Pin Number	Signal Description
VOUTA	10	Analog Voltage out Channel A
VOUTB	11	Analog Voltage out Channel B
VOUTC	13	Analog Voltage out Channel C
VOUTD	14	Analog Voltage out Channel D
PWM0	2	Pulse Width Modulation output 0
PWM1	3	Pulse Width Modulation output 1
PWM2	5	Pulse Width Modulation output 2
PWM3	6	Pulse Width Modulation output 3
GND	1, 4, 8 & 9	Grounds
NC	7	No Connections

Electrical Specifications:

Signal	Minimum	Typical	Maximum
Input Supply Voltage	+7.0 VDC	+12.7 VDC	+20 VDC
Input Supply Current		30 mA	100 mA
Analog Output Voltage	0 VDC		+10 VDC
PWM Output	5%		95%
Base Frequency	100Hz		1000Hz
Operational Temperature (Sensor)	-40°C		+85°C
Operational Temperature (Processor)	-40°C		+85°C
Output Drive Capability			20 mA

Dimensions LxWxH: (130x116x56)mm



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