APPLICATION		REVISIONS			
NEXT ASSY	USED ON	REV	DESCRIPTION	DATE	APPROVED
		B	ECN 301	3/17/09	JWM

CONTRACT NO.		**QUAD TRON, INC.**				
APPROVALS	**DATE**	**MICRO PCM ENCODER SERIES, MODEL MI_EXC3**				
DRAWN MJC	09/05/07	**2 CH. VOLTAGE EXCITATION MODULE**				
CHECKED RHM	09/05/07	SIZE	FSCM NO.	DRAWING NO.		REV **B**
ISSUE JWM	09/05/07	**A**	**OBPE4**	**57-2568**		SHEET 1 OF 3

MICRO PCM ENCODER SERIES

MODEL MI_EXC3

TWO (2) CHANNEL VOLTAGE EXCITATION MODULE

The 2-channel independently programmable voltage excitation (>35 mA per channel) module provides excitation voltages for the Quad Tron 2 channel signal conditioning module or for Quad Tron 6 channel passive bridge completion module for full bridge completion or 1 to 3 arm bridge completion. The unit provides independent programmable high resolution voltage steps from 0Vdc to ±5.0 Vdc (0V to 10V excitation.) The channels are programmed via the PCM base unit with Windows based software– Single Point Programming.

Electrical Specifications:

Dual Bridge Voltage Excitation Provided: Each bipolar programmable with independent programmable high resolution voltage steps from 0 Vdc to ±5.0 Vdc (1V to 10V excitation).

More than 15,000 steps provided from 0V to 10V.

Excitation Accuracy: ±0.05%, -40 degree C to +85 degree C.

Excitation: Bipolar.

Environmental:

Operating Temperature:	-40°C to +85°C
Storage Temperature:	-55°C to +125°C
Humidity:	Relative humidity of 85% for two hours at 65°C.
Altitude:	Unlimited
Vibration:	20g's RMS from 5 to 2000Hz in each major axis.
Acceleration:	Constant acceleration of 100g's in each axis.
Shock:	100g's for 10m second in each major axis.

Mechanical:

Size: 2 Channel Voltage Excitation Module:

Length: 3.50 inches; Width: 1.25 inches; Height: 0.240 inches.

Engraving:

MI EXC3

Connecting Module Straps:

The module address is programmed via three straps at the connector. They are STP0 (pin 8), STP1 (pin 9) and STP2 (pin 10). Valid modules addresses are 1 through 7. The base unit defaults to module address 0. All three straps are pulled high. To obtain a binary 1, leave unconnected. Connect to DGND (pin 11) to obtain a binary 0. STP0 is the least significant bit. Avoid module address conflicts by assigning a unique module address to each module attached to a base unit.

J1 pin connections

Connector P.N.: Nanonics # SSM015M6HN; TYCO # 2-1589469-5

Mate P.N.: P.N.: Nanonics # SSM015PC2DC024N; TYCO # 9-1589455-3

1. EXC_OUT1+	Bipolar Excitation +, Channel 1
2. EXC_OUT1+	Bipolar Excitation +, Channel 1
3. EXC_OUT1-	Bipolar Excitation -, Channel 1
4. EXC_OUT1-	Bipolar Excitation -, Channel 1
5. AGND	Analog Ground
6. AGND	Analog Ground
7. STP0	Strapping Pins For Card Address, Pulled High. Connect To DGND For Binary 0.
8. STP1	Strapping Pins For Card Address, Pulled High. Connect To DGND For Binary 0.
9. STP2	Strapping Pins For Card Address, Pulled High. Connect To DGND For Binary 0.
10. DGND	Digital Ground
11. AGND	Analog Ground
12. EXC_OUT2-	Bipolar Excitation -, Channel 2
13. EXC_OUT2-	Bipolar Excitation -, Channel 2
14. EXC_OUT2+	Bipolar Excitation +, Channel 2
15. EXC_OUT2+	Bipolar Excitation +, Channel 2