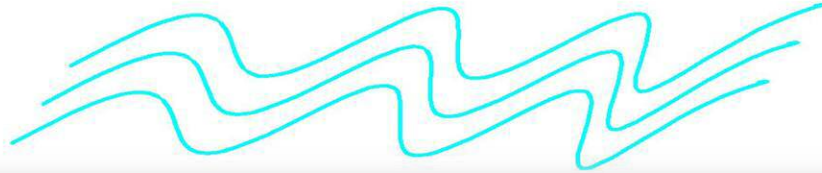


# ***SEA-TRONICS SERVICES INC.***



## ***SPEED MONITOR BOARD PROVIDING PROPORTIONAL 4-20 mA OUTPUT FOR MIN AND MAX SPEED***

### ***General Information:***

- *Monitor RPM using a proximity sensor/proximity-direction sensor*
- *Monitor speed up to 3000 RPM*
- *Operate on 12 or 24 VDC power*
- *Provides proportional 4-20 mA signal*
- *Provides bidirectional 4-20 mA signal*
- *Fine adjustment for both RPM limits*
- *Watch dog monitoring circuit.*

### ***Possible Use:***

- *Engine speed monitoring*
- *Engine speed display panel*
- *Gear speed/direction*
- *Shaft speed/direction*
- *Engine speed to a PLC*
- *Shaft bidirectional speed to a DP system*
- *Dry contact output at specific speed*
- *Monitor speed of rotating equipment*
- *Custom solution can be provided.*

*Boards are manufactured in Vancouver, B.C., Canada. Boards carry one year warranty from the date of purchase.*

*Please provide min and max RPM, number of pulses per revolution and specific requirements.*

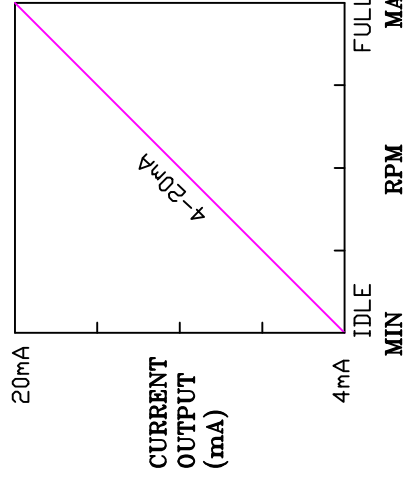
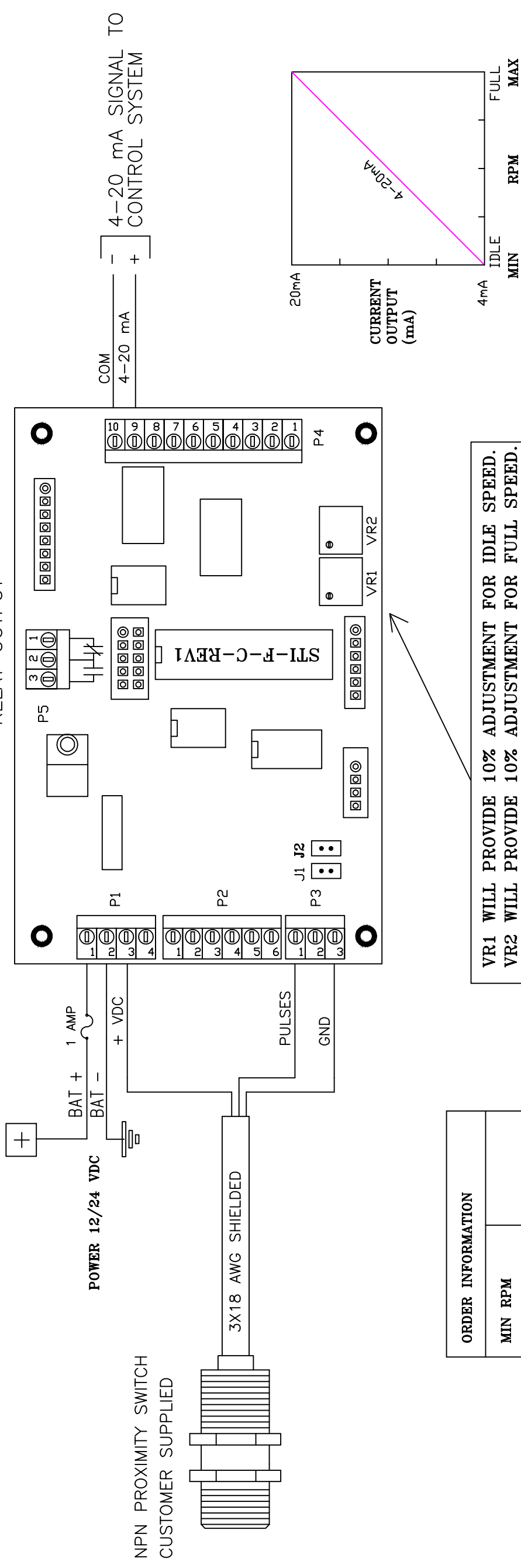
*If a specific function is required and is not covered under the above specifications, Sea-Tronics Services Inc. is willing to custom design the software for this board to provide a solution for your application. Please contact Sea-Tronics Services Inc. with your specific requirements.*

*Sea-Tronics Services Inc. 11176 Huff Boulevard, Delta, B.C., V4E 1M2*

***[www.seatronicsservices.com](http://www.seatronicsservices.com), email: [seatronicsservices@gmail.com](mailto:seatronicsservices@gmail.com) or by phone at 778-552-9392.***

**SPEED MONITOR BOARD  
FREQUENCY TO 4-20 mA**

WATCH DOG  
RELAY OUTPUT



VR1 WILL PROVIDE 10% ADJUSTMENT FOR IDLE SPEED.  
VR2 WILL PROVIDE 10% ADJUSTMENT FOR FULL SPEED.

ORDER INFORMATION	
MIN RPM	
MAX RPM	
# PULSES PER REVOLUTION	

**NOTE:**  
THIS BOARD WILL MONITOR THE SPEED SENSOR OF THE ENGINE AND PRODUCE 4-20mA, 4mA WILL BE PRODUCED FOR IDLE SPEED AND 20mA FOR FULL SPEED.  
THE CARD WILL BE PROGRAMMED BASED ON THE IDLE SPEED, FULL SPEED AND THE NUMBER OF PULSES PER ROTATION.  
A WATCH DOG RELAY OUTPUT IS AVAILABLE AT P5 TO INDICATE THE STATUS OF THE CARD.  
THE BOARD REQUIRES 12 OR 24 VDC POWER, FOR PROTECTION USE A 1 AMP FUSE.  
MOUNT THE BOARD IN A JUNCTION BOX TO PROTECT IT FROM THE ELEMENT.

**SEA-TRONICS SERVICES INC.**



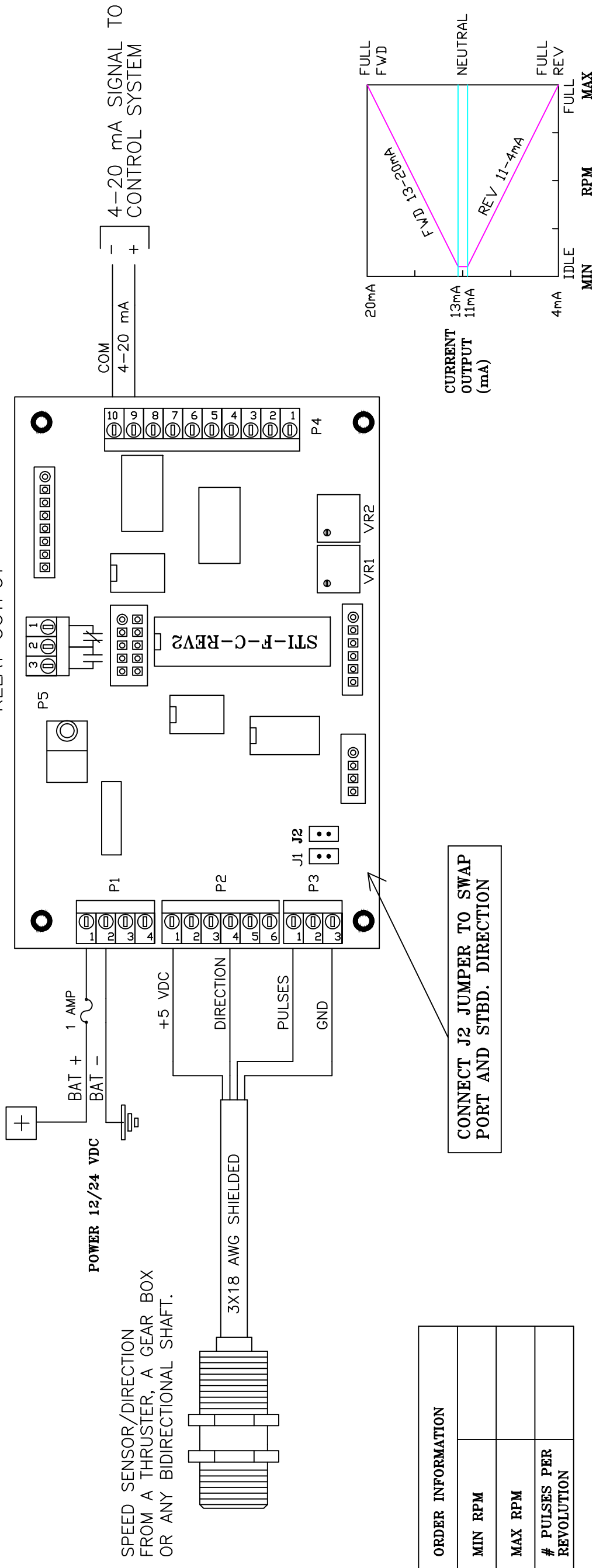
www.seatronicsservices.com.

**TITLE**  
FREQUENCY/RPM TO 4-20mA  
CONVERTER SYSTEM BLOCK  
DIAGRAM

CUSTOMER		PROJECT		CONTRACT #	
N/A		FREQUENCY TO 4-20mA		N/A	
DD	MM	YY	PART #	SCALE	N/A
19	08	19	ST1-F-C-REV1	1/2	
CHECKED	H.A.	19	08	19	
	H.A.				

**BIDIRECTIONAL SHAFT SPEED MONITOR BOARD  
FREQUENCY TO 4-20 mA**

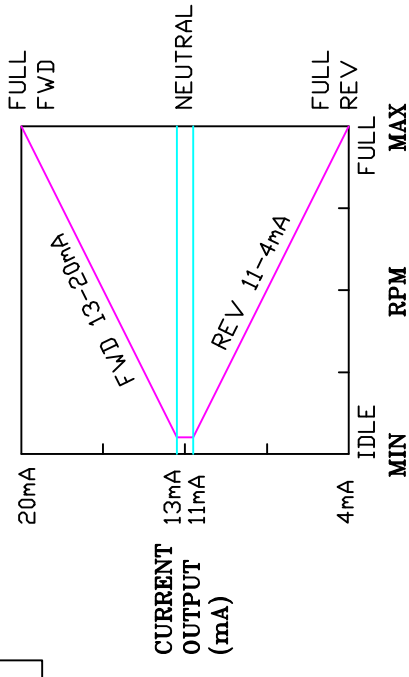
WATCH DOG  
RELAY OUTPUT



ORDER INFORMATION	
MIN RPM	
MAX RPM	
# PULSES PER REVOLUTION	

**NOTE:**  
THIS BOARD WILL MONITOR THE SPEED SENSOR OF ANY BIDIRECTIONAL SHAFT AND PRODUCE 4-20mA AT A MAXIMUM OF 3000 RPM. PLEASE PROVIDE MIN AND MAX RPM AND NUMBER OF PULSES PER REVOLUTION. 12 mA WILL BE PROVIDED WHEN THE THRUSTER IS STOPPED, 11 mA TO 4 mA WILL BE PRODUCED FOR MINIMUM TO MAXIMUM SPEED IN ONE DIRECTION, AND 13 mA TO 20 mA FOR MINIMUM TO MAXIMUM SPEED IN THE OPPOSITE DIRECTION.  
JUMPER J2 IF INSTALLED WILL ALLOW SWAPPING THE DIRECTION OF THE mA SIGNAL.  
A WATCH DOG RELAY OUTPUT IS AVAILABLE AT P5 TO INDICATE THE STATUS OF THE CARD.  
THE BOARD REQUIRES 12 OR 24 VDC POWER, FOR PROTECTION USE A 1 AMP FUSE.  
MOUNT THE BOARD IN A JUNCTION BOX TO PROTECT IT FROM THE ELEMENT.

CONNECT J2 JUMPER TO SWAP  
PORT AND STBD. DIRECTION



**SEA-TRONICS SERVICES INC.**



www.seatronicservices.com.

**TITLE**  
FREQUENCY/RPM TO 4-20mA  
CONVERTER SYSTEM BLOCK  
DIAGRAM

CUSTOMER		PROJECT		CONTRACT #	
N/A		FREQUENCY TO 4-20mA		N/A	
DRAWN	H.A.	DD	MM	YY	PART #
CHECKED	H.A.	19	08	19	ST-F-C-REV2
		19	08	19	SCALE
					N/A
					SHEET
					2/2
					REVISION
					A