

This option continuously outputs an analog current proportional to the tachometer value of Transducer A. This signal is brought outside the unit on the J1 Connector. this signal can be used in many different applications including remote displays and remote sensing of speed.

## Programming Additions and Changes

Programming additions and changes are made with this option. The standard iPLC Manual contains all programming instructions

## Hardware Connections

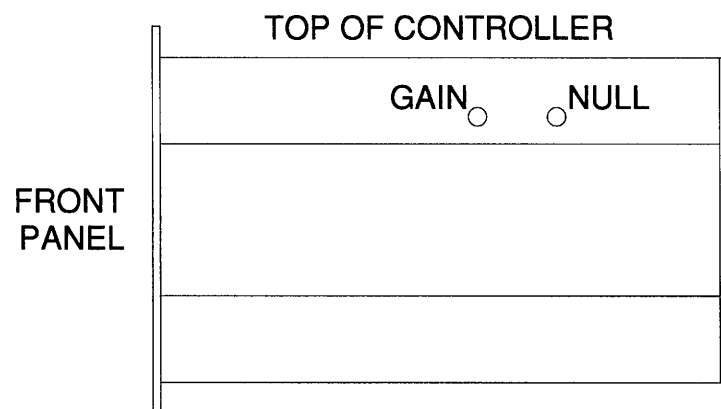
The analog output is available on Pins 24 and 22 of the 40 pin J1 Connector. the Analog output will drive an Equivalent Series Resistance of no more than 700Ω. The analog output should be carried by a twisted pair of wires.

The following table lists the pinout assignments of the Analog Signal and Analog Return on various AMCI products.

	J1 Conn.	IM-(x)	RB-1	MRB-1
Analog Signal	Pin 24	Pin 24	Pin 5 - TB8	Pin 4 - TB7
Analog Return	Pin 22	Pin 22	Pin 4 - TB8	Pin 3 - TB7

## Analog Output Adjustment

There are two adjustments available to control the levels of the analog output. These adjustments are called **NULL** and **GAIN**. Use the NULL adjustment to set the 4mA output and the GAIN to set the 20mA output once the NULL has been properly adjusted. Both of these adjustments are located on the side panel of the iPLC unit.



iPLC-4-V3 Controllers are factory configured for 20mA output at 800 RPM. Maximum allowable tachometer value for 20 mA output is 1024 RPM.

## iPLC-4 OPTION V3: Analog Output Tachometer

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### *Analog Output Adjustment (cont'd)*

To adjust the Analog Output:

- Attach a DC ammeter and a current limiting series resistor of no more than 700 $\Omega$  (470 $\Omega$  works well), to pins 24 and 22 of the J1 Connector or the pins of the Interface Module or Relay Boards as shown on the preceding page.
- Attach Transducer A to the iPLC-4. The transducer shaft must not rotate while adjusting the NULL potentiometer.
- Use a small screwdriver to adjust the NULL potentiometer until the ammeter reads 4mA.
- Rotate Transducer A at the systems' maximum speed, 800 to 1024 RPM.
- Use a small screwdriver to adjust the GAIN potentiometer until the ammeter reads 20 mA.
- Recheck the output current at 0 RPM. It should still be 4 mA.

CALIBRATION COMPLETE.

### *Model Number and EPROM Checksum*

Use the following keystrokes to display the iPLC-4-V3s' Model Number and Checksum. Note that the numbers are different from the ones given in the iPLC Manual.

PRESS	DISPLAY	COMMENTS
[PROGRAM]	"PROGRAM x"	x = Number of running program.
[NEXT]	"IPLC4-3V3,1"	Model and Revision Number
[NEXT]	"EPROM 867B"	Software Checksum