

IPCE1
OPTION V2
ANALOG OUTPUT OPTION 4 - 20 mAdc
Page 1 of 2

This option continuously outputs an analog voltage that is proportional to the position that is displayed on the iPCE unit. 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 position.

PROGRAMMING ADDITIONS AND CHANGES:

There are no programming additions or changes with this option.

HAREWARE CONNECTIONS:

The Analog Output is found on Pins 24 and 22 of the 40 Pin J1 Connector. The Analog Output will drive an Equivalent Series Resistance of no more than 700 Ω . The Analog Output should be carried outside the unit by a standard twisted pair of wires.

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

	J1 CONN.	IM1	RB1	MRB
SIGNAL	Pin 24	Pin 24	Pin 5 - TB8	Pin 4 - TB7
S.RETURN	Pin 22	Pin 22	Pin 4 - TB8	Pin 3 - TB7

ANALOG OUTPUT ADJUSTMENT:

There are two adjustments available to the user to adjust the levels of the analog output. These adjustments are called NULL and GAIN. Both of these adjustments are located on the side panel of the iPCE unit.

FRONT OF UNIT	TOP OF UNIT		
	GAIN []	[] NULL	

IPCE1
OPTION V2
ANALOG OUTPUT OPTION 4 - 20 mAdc
Page 2 of 2

ANALOG OUTPUT ADJUSTMENT: (con't)

To adjust the unit:

- 1] Attach a DC ammeter and a current limiting series resistor of no more than 700 Ω (470 Ω works well), to pins 22 and 24 of the J1 Connector or the pins of the Relay Boards or Interface Module as shown on the preceding page.
- 2] Set the position display on the iPCE unit to 000.
- 3] Using a small screwdriver, turn the NULL adjustment until the ammeter reads 4 mAdc.
- 4] Program the unit for 50 turns and a Full Scale Count of 16384. Set the position display on the iPCE unit to 16383.
- 5] Using a small screwdriver, turn the GAIN adjustment until the meter reads 19.996 mAdc.
- 6] Recheck the output current at position 000. It should still be 4 mAdc.
- 7] Calibration Complete.

MODEL NUMBER AND EPROM CHECKSUM:

To Display the units Model Number and checksum, use the following keystrokes. Note that the Model Number and Checksum are different from the ones shown in the iPCE1 manual.

PRESS	DISPLAY	COMMENTS
[PROGRAM]	"PROGRAM X"	X = Number of running program.
[NEXT]	"IPCE-1V -1"	Model and Revision Number.
[Next]	"EPROM 014D"	Checksum of Software.