



ACS800

BIPOLAR VOLTAGE ANALOG INPUT

Note: These instructions assume all mechanical and electrical installation procedures, direction test, and tuning were completed using the ACS800 Hardware and ACS800 Firmware manuals.

Bipolar Voltage Analog Input Configuration using internal + - 10VDC power supplies.

1. Select and wire potentiometer; Remove power to the drive.
 - 2k ohm – 10k ohm acceptable resistance range
 - Connect Potentiometer across terminal X20 -10VDC Reference voltage Pin 1 and terminal X21 +10VDC Reference voltage Pin 1. Wiper connected to terminal X21 AI1+ Pin 3. Connect X21 GND Pin 2 to X21 AI- Pin 4
2. Program the Drive –Default control connections and parameter settings were tested using the Factory Macro
 - 10.03 REF DIRECTION Change to “Request”
 - 11.03 EXT REF 1 SELECT Change Parameter to “AI1 Bipolar”
 - 11.04 EXT REF 1 MINIMUM Leave at the default setting “0 rpm”
 - 11.05 EXT REF 1 MAXIMUM Change Parameter to desired rpm value for your application. Note this will be the REF MAX for both forward and reverse. Group 20 Limits also give scalability to motor rpm’s. (see ACS800 firmware manual for examples)
 - 13.01 MINIMUM AI1 Change to “Tune” (Be sure -10VDC is being applied to AI1) AI1 min will now be the applied voltage.
 - 13.02 MAXIMUM AI1 Change to “10V”
 - Any voltage between +-10vdc minimum and maximum values must be tuned to the appropriate voltage.

*Motor direction will follow the applied polarity of AI1 Positive Voltage = Fwd
Negative Voltage = Rev*

Documents or other reference material:

This document is to be used with the ACS800 Firmware Pub # 3AFE64527592 and ACS800 Hardware Pub # 3AFE64382101 Manuals.

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| Author: Paul Kasper RAE | | Date: 10-1-14 |
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