



EC-34 Two Quadrature Encoder to Analog Converter



Features:

- Converts any incremental encoder into an analog position sensor
- 16 bits analog resolution
- 0 to 4.095V or 0 to 10V unipolar output voltage operation
- 4.095 or 10V bipolar output voltage operation
- Reset can be configured to zero or mid-range voltage
- Simple DIP switch and defined programming
- Rack mounting are available

Applications:

Description:

The EC-34 converts the A and B quadrature output of an incremental encoder into a voltage that is proportional to the encoder position. The output from the encoder causes an internal 12-bit counter to count up or down. The output of the counter is fed into a 16-bit DAC that converts the 16-bit position count value to an analog voltage.

Eight DIP switches are provided to select various options. The user can choose unipolar output mode with 0 to 4.095V or 0 to 10V output, bipolar output mode with $\pm 4.095V$ or $\pm 10V$ output, 1X or 4X counting, reset on index, reverse rotation, midrange reset and range limit counting. Full scale output in 10V mode is actually 9.962V.

The EC-34 has an internal counter that may be reset in one of three ways: by pressing the reset button, power cycling the unit or enabling the reset on encoder index. The reset may be configured to either mid-range or zero volts.

The EC-34 also provides with a TTL logic level output bit, which changes state to indicate direction of a rotary encoder shaft rotation or travel direction of linear encoder.



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1-3

Specification:

- Voltage Out to Encoder 5.0 Volts Under 100 mA load
- Input Supply Voltage 110/220 VAC, 50/60 Hz
- Full Scale Output Error -Analog Output 0.02% full scale
- Output range 0~5V / 0~10V / $\pm 5V$ / $\pm 10V$
- Manual Reset
- Z Phase Or External Reset
- Quadrature Encoder Inputs*
- Analog Output Load Impedance 100 Ω

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