

Description

The **EADAPT** is an inline encoder signal converter which allows the user to invert or not-invert any of the A,B and Index encoder signals. This can be used to invert the encoder's rotation sense. The input quadrature signals can be single-ended or differential. Single-ended inputs can have amplitudes up to 30V. In addition, the index can be optionally gated by both the A/B channels going low to get an index pulse that is at most one quadrature state wide. This feature is useful when using encoders with a wide index pulse that spans multiple quadrature states.

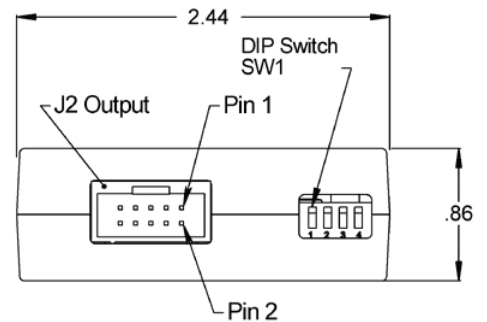
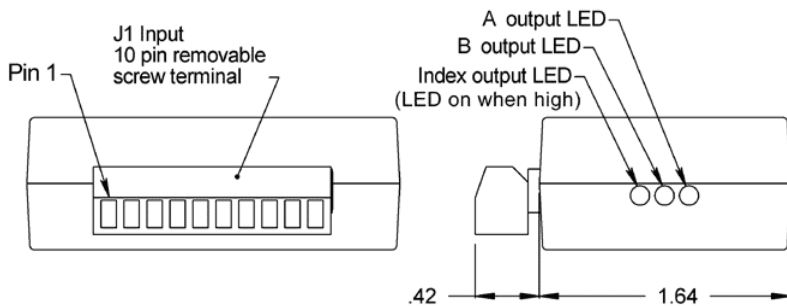
Encoder input signals enter through a 10-position pluggable screw terminal block. Single-ended encoders should be placed close (less than 2' preferably) to the **EADAPT** on the input side to limit noise. The **EADAPT** output is made through a 10-pin finger latching connector compatible with US Digital encoder interface products. The +5VDC supply voltage for the **EADAPT** is supplied from the J2 output connector. Three LEDs indicate when the associated A, B or Index outputs are high.



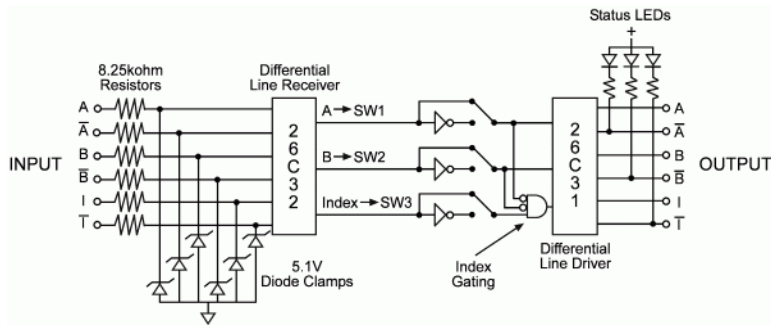
Features

- ▶ Single-ended or differential encoder inputs
- ▶ Encoder rotation sense reversal
- ▶ Index gating and polarity adjustments
- ▶ DIP switch programming
- ▶ Single 5V supply

Mechanical Drawing



Block Diagram



Operating Conditions

Parameter	Min.	Typ.	Max.	Units
Supply Voltage	4.75	5.0	5.25	V
Supply Current (no output load, LEDs off)		30		mA
Storage Temperature	-40		100	C
Operating Temperature	0		70	C
Humidity (non-condensing)	0		95	%

► For typical input voltage thresholds and output voltage levels, refer to the 26C31 and 26C32 IC datasheets.

DIP Switch Settings

Switch	Description
1	A channel polarity: switch down = non-invert switch up = invert
2	B channel polarity: switch down = non-invert switch up = invert
3	Index channel polarity: switch down = non-invert switch up = invert
4	no function

Pin-outs

J1 Input (Screw Terminal):

Pin	Description
1	+5V power (direct connection to J2 pins 7,8)
2	A+ channel
3	A- channel
4	B+ channel
5	B- channel
6	Index+
7	Index-
8	Ground
9	N/C
10	N/C

J2 Output (10-pin finger latching):

Pin	Description
1	Ground
2	Ground
3	Index-
4	Index+
5	A- channel
6	A+ channel
7	+5V power
8	+5V power
9	B- channel
10	B+ channel

 **Product Change Notifications**

Title	Date	Description	Download
PCN 1011	9/21/2011	The AD2B, AD4B, AD7, EADAPT, EDAC2, EDIVIDE, EPOT, EQUAD, ESUM, ESWITCH, ETACH2, SEI-USB, USB-232 currently utilizes a printed thermal transfer label. This label will no longer be used and will be replaced by laser marking directly onto the housing of the product. The purpose for this change is to create a more durable solution, and eliminate the possibility of the label being inadvertently removed from the housing.	Download

Ordering Information

EADAPT -

Mounting

D =Default

R =DIN rail (35mm wide)

Notes

- Cables and connectors are not included and must be ordered separately.
- US Digital warrants its products against defects in materials and workmanship for two years. See complete warranty for details.

Base Pricing

Quantity	Price
1	\$103.95
10	\$95.55

For volume discounts, please contact us at sales@usdigital.com or 800.736.0194.

- Add \$10.00 per unit for **Mounting** of DIN rail (35mm wide)