

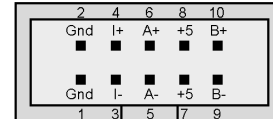
## Description:

The TTL outputs of our incremental encoders can sink (pull down) less than 4mA and source (pull up) less than 200uA. This is not always adequate. For long cables (6 to 1000 feet) or noisy environments, one of these tiny plug-in driver boards will provide additional drive. They are so small, they fit between the two wire loops on either side of the 5-pins of the encoder as shown in the drawings to the right.

The **PC2** is our first generation RS-422 cable driver board designed to attach to our incremental encoders. The **PC2** is available for our customers who have designed it into their products. However, the **PC4** is highly recommended in place of the **PC2**.

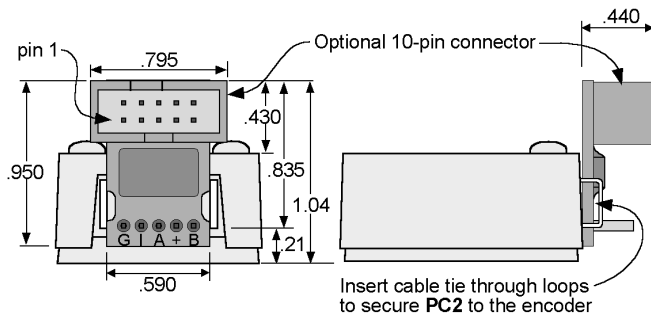
## Pinout:

Pin	Name	Description
1	GND	Ground.
2	GND	Connected to pin 1.
3	I-	Differential index lines.
4	I+	
5	A-	Differential A channel.
6	A+	
7	+5	+5 VDC power supply.
8	+5	Connected to pin 7.
9	B-	Differential B channel.
10	B+	



## PC2

shown mounted on an E2 encoder



## Electrical Characteristics:

Parameter	Min	Typ.	Max.	Units	Notes
Supply voltage (PWR)	4.5	-	5.5	Volts	
Supply current (26LS31)	-	35	60	mA	
Supply current (26C31)	-	1	2	mA	
Output high voltage	2.5	-	-	Volts	I <sub>OH</sub> = 20 mA
Output low voltage	-	-	0.5	Volts	I <sub>OL</sub> = 20 mA
Propagation time	-	-	15	ns	

**Note:** For implementations with long cables the supply voltage at the host should be appropriately higher to compensate for voltage losses in the wires. Consider the power requirement of the encoder, the **PC2** module and the optional termination resistors.

## Absolute Maximum Ratings:

Parameter	Min.	Max.	Units
Storage temperature	-40	100	°C
Operating temperature	-40	85	°C

Technical Data, Rev. 08.23.00, August 2000  
All Information subject to change without notice.

## Ordering Information:

**Price:**  
\$13.00 / 1  
\$12.00 / 100  
\$11.00 / 500  
\$10.50 / 1K

**PC2 -**

**1** = no connector  
**A** = 26LS31 driver instead of 26C31