Description of Option

The 'D' option is a data protocol and RS422 serial output port that provides position and tachometer data to AMCI's 6101 remote displays or other intelligent devices.

Inputs 4, and 5 are non functional.
Multi-turn position data is not saved on power down.

Data Protocol

The serial data frame is ten bits long.

- 1 Start bit
- 7 Data bits
- 1 Parity bit which always equals 0.
- 1 Stop bit

The serial data is sent continuously with a fixed baud rate of 9600 baud. All data is ASCII characters. The serial data sequence is shown below.

@00nnn@00nnn@00nnn@00nnn...@Txxxx@00nnn....

00nnn = scaled binary position data 00000 to 003FF maximum.
xxxx = binary tachometer data.
'@' and T are 7 bit ASCII characters.
The hexadecimal data numbers '0,1,2,3,4,5,6,7,8,9,A,B,C,D,E,F' are 7 bit ASCII characters.

The position data '@00nnn" is transmitted at 9600 baud at 10 mSec intervals. At 500 mSec intervals, the tachometer data '@Txxxx' is transmitted in place of the position data.

RS422 Connections

The RS422 compatible +Tx and -Tx signals are available on the following pins of various AMCI products.

	J1 Connector or IM Interface Module	RB-1Y	MRB-1Y
+Tx	Pin 18	TB8 - Pin 3	TB9 - Pin 3
-Tx	Pin 20	TB8 - Pin 4	TB9 - Pin 4