

RS-232 Communications guide for Terranova Model 990

The RS-232 serial port allows reading pressure and other parameters when requested by the terminal; it is not possible to modify stored parameters, e.g. Set Points, over the serial port. The interface is standard RS-232 format; 9600 bps, 8-bits, no parity, 1 stop bit. The interface is through the 15-pin D-sub accessory connector on the back of Terranova 1/8 DIN products, except Model 809, which has no serial interface. The serial port is only active in Measurement Mode.

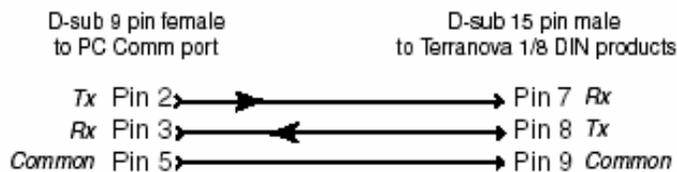
Initial Preparation

1. Terminal Software

HyperTerminal software is installed on the Windows operating system for most PC computers. This is a suitable terminal software for serial communication with Terranova 1/8 DIN products. In the event you need to install software for terminal emulation, **HyperTerminal Private Edition** is a free application and may be downloaded here: www.hilgraeve.com/hpte/download.html

2. Serial cable

The correct serial cable must be used. Please verify that your cable connections are as follows:



3. COM port selection

Make sure the PC end of the serial cable is connected to the COM port which is selected in the terminal software.

4. Sending and interpreting commands

The commands are a single character. There is no carriage return after the command character. The instrument returns "%Error" when an invalid (e.g. incorrect syntax) or unrecognized (e.g. wrong parity or baud rate) command is received.

Parameter	Command	Response Syntax	Response values
Pressure	"p" ASCII 112	090_val<cr>	msd.lsdE+/-exp nogauge; LO, HI
Units of measurement	"u" ASCII 117	Units<cr>	Torr, mBar, Pascal
Relay 1 status	"1" ASCII 49	SP1_hi, SP1_lo, status	msd.lsdE+/-exp msd.lsdE+/-exp 1=energized 0= Off
Relay 2 status	"2" ASCII 50	SP1_hi, SP1_lo, status	msd.lsdE+/-exp msd.lsdE+/-exp 1=energized 0= Off
Software version	"v" ASCII 118	Model, version	990, verX.XX
Degas status	"d" ASCII 100	Status<cr>	On, off
Turn degas ON	"o" ASCII 111	Status<cr>	OK or Er if ON or pressure out of range
Turn degas OFF	"f" ASCII 102	Status<cr>	OK or Er if OFF