

## Niobrara SD016 Adapter

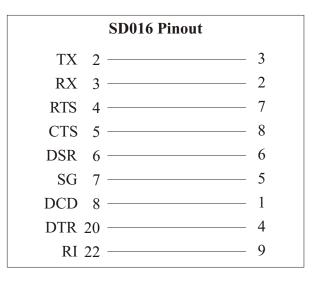
The Niobrara SD016 adapter is used to connect the NR&D Smart Cables, such as the SC902, to the 25-pin serial port of a personal computer.

## Installation:

Connect the 9-pin DB9 end of the adapter to the RS-232 end of the Niobrara Smart Cable and tighten the jackscrews of the cable end. Connect the 25-pin DB25 end of the adapter to a serial port (COM1: or COM2:) of the personal computer.

## **Pinout:**

The pinout for the SD016 is as follows:



Effective 27 November 2002

Specifications subject to change without notice.

If the pinout of the port is unavailable, the type can be determined by using the following procedure:

Power up the computer. Place the black probe of a voltmeter on pin 5 (signal ground) of the serial port connector and place the other probe on pin 2 of the same connector. Record the measured voltage. With the black probe still on pin 5, move the other probe to pin 3. Record this voltage.

TX voltage lies between -15V and -5V. RX voltage lies between -3V and +3V.

Therefore, if the measured voltage is more negative at pin 2, the serial port is **Type A**. If pin 3 is the more negative voltage, the serial port is **Type B**.

*Rewiring the Adapter:* 

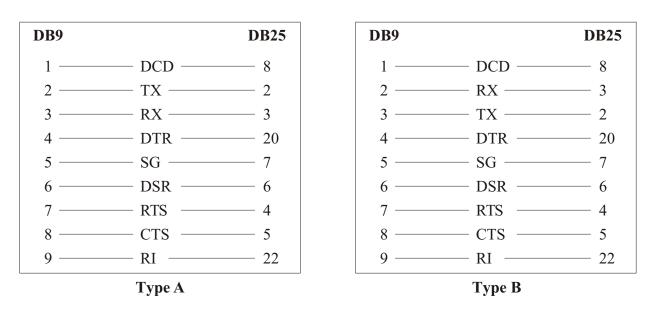
Loosen, but do not remove, the two threaded spacers on the connector face of the 25-pin DB25 backshell. Remove the two screws and nuts holding the backshell together and take both backshell halves off the connector.

Unsolder the orange and red wires from pins 2 and 3. Solder the orange wire to pin 3 and the red wire to pin 2. The SD034 is now configured as **Type A**.

Reassemble the backshell around the connector and attach it with the screws and nuts. Tighten the threaded spacer on each knurled screw. The re-configured SD034 may now be installed.

## **Internal Connections:**

Shown below are diagrams of the 9-pin (DB9) to 25-pin (DB25) connections within the SD034 in both its configurations:



2

