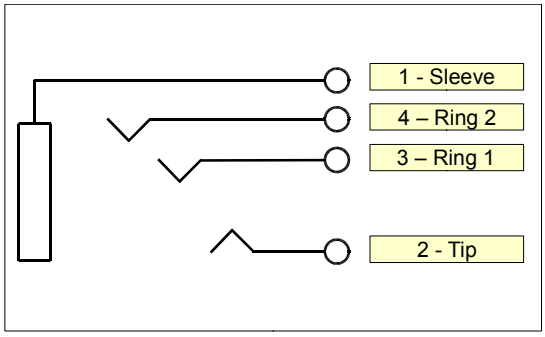
Appendix

USB Connector

The 3-Space Sensor has a 5-pin USB Type-B jack and can be connected via a standard 5-pin mini USB cable.

RS232 Connector

The RS232 connector provides a means to communicate with the 3-Space Sensor via standard RS232 signals. The RS232 connector is a standard 2.5mm 4-conductor phone jack with the following pinout:



Where the signals are assigned as follows:

Signal Number	Signal Location	Signal Description
1	Sleeve	+5vdc (Serial Power Input)
2	Tip	TxD (Transmit output from unit)
3	Ring 1	RxD (Receive data to unit)
4	Ring 2	Gnd (Shared power and signal ground)

Mating plugs are available from Yost Engineering, Inc. or from other electronics vendors. One such option for a mating 2.5mm 4-conductor phone plug is Kobiconn part #: 171-7425-E

Note that the RS232 power input is provided as a convenient way to provide power along with communications via a single connector. Thus, the +5vdc input is only required when the unit is not being powered via USB or the External Power Connector option.

External Power Connector

The external power connector is a standard EIAJ-1 (0.70mm ID, 2.35mm OD) with the center pin positive. The power requirements are nominally +5vdc at at least 100mA. While the system is designed for +5vdc, it can be powered from any input voltage in the range +3.6vdc to +10vdc.

+5vdc AC adapters with EIAJ-1 connectors are commonly used for cell phone charging and are readily available. A suitable AC adapter is the Audiovox or UTStarcom model CNR4 or equivalent and is available from Yost Engineering, Inc. or from other retailers.

Note that the external power connector is only required when the unit is not being powered via USB or the RS232 input jack power option.