Technical Advisory

Options for connecting USB Computers to an ISU

IRIDIUM

Summary: Iridium has evaluated many options to allow a PC or laptop without a native RS-232 interface to connect to an Iridium Subscriber Unit [ISU] for use with Circuit Switched Data or Direct Internet Services. This Advisory recommends several options to connect an ISU to a computer with a Universal Serial Bus [USB] interface.

Background: The continued evolution of personal computing technology has resulted in the removal of RS-232 interfaces from many personal computers and laptops. [Collectively described here as PCs.] The RS-232, or serial interface, has been replaced by the Universal Serial Bus or 'USB interface.' ISUs, such as the 9505 handset and value added products, provide a RS-232 interface, but not a USB interface.

Recommendations: Iridium recommends the following options to connect an ISU to a PC without a RS-232 interface:

(1) Add a Serial Interface to the PC:

Purchase a PCMCIA Serial Interface Adaptor for a laptop equipped with a PCMCIA interface slot. PCMCIA to serial adapters are widely available and have performed very well in tests conducted by Iridium. Although most brands of PCMCIA adapters should work, Iridium recommends the **Socket Communications Serial I/O PC Card Product #: SL0700-004.** Information on this product is available here: http://www.socketcom.com/product/SL0700-004.asp . Specific technical questions and requests for support on this product should be directed to its manufacturer and not Iridium. Support is available from http://www.socketcom.com/support/ or +1-510-744-2720.

(2) USB to Serial RS-232 Adapter - 'Commercial Off The Shelf':

USB to serial adapters are widely available from a variety of vendors. However Iridium's testing has shown that the architecture and implementation of the interface is driver dependant and in testing, many USB-to-serial adapters are not suitable for use with Iridium Data Services.

Iridium has successfully tested a device from the Edgeport series of USB to serial adapters manufactured by Digi Corporation. Iridium recommends the **Edgeport adaptor with Part Number 1P 301-1001-15 H** More information can be found at http://www.digi.com/products/usb/edgeport.jsp. Specific technical questions and requests for support on this product should be directed to its manufacturer and not Iridium. Support is available from http://www.ionetworks.com/support/techhelp.jsp or Inside Out Networks at +1-952-912-3456.

(3) USB to Serial RS-232 Adapter - 'Customized':

Iridium has successfully tested the following device: **"Iridium USB Data Cable"** available from: http://store.yahoo.com/satphonestore/irusbdaad.html . Note that this device directly connects to the 9500 and 9505 handsets preventing the AC Adapter or Car Adapter from being connected at the same time. The 9505A uses a different connector for power. You should consider this when selecting which option to use. Specific technical questions and requests for support on this product should be directed to its manufacturer and not Iridium. Support is available from http://www.satphonestore.com/Contact/Contact.htm or Atlantic RadioTelephone: +1-305-633-9636.

It is possible that other PCMCIA cards and USB to serial adapters also work. However, the purpose of this Advisory is only to provide information on products that Iridium has successfully tested. Iridium has no direct affiliation with any of these vendors other than having tested their products for use with Iridium data services.

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