USB TO SERIAL PORT ADAPTER

INTRODUCTION

Many of today's computers do not have dedicated serial ports that allow users to connect external devices. Instead, many computer manufactures have opted to include additional USB ports. By using a USB-to-serial adapter, it is possible to attach a serial port device to an available USB port on your computer. All RAE Systems monitors with datalogging capability and RAELink wireless modems require a serial port interface. When using an adapter, the USB to Serial interface is transparent to all RAE equipment and requires no firmware changes. In addition, USB ports offer advantages such as plug-and-play and hot swappability.

Figure 1. USB to Serial adapter

System Requirements (Driver Only – application software may have different requirements)

- 100 MHz CPU or higher or compatible system
- Available USB port
- CD-ROM or 3.5" floppy drive

Driver Installation

Follow the steps below to install Windows driver of the USB-Serial cable:

1. Power on your computer.

2. Insert the included driver CD ROM (or 3.5" floppy disk) into your computer's drive.

3. Plug the USB-to-serial adapter into an available USB port on your computer.

4. The Add New Hardware Wizard window should appear on your screen to assist you in setting up the new device. Click Next to continue.

5. Select "Search for the best driver for your device," and click "next" to continue.

6. Select "CD-ROM drive" (or floppy disk drive depending on your computer setup) and click Next.

7. Windows detects the driver on the appropriate drive and shows the USB HS Serial Converter. Click Next to continue installation.

8. Click Next to continue, and let Windows copy the needed files to your hard disk.

**9.** When Windows is finished installing the software, click Finish.

Note 1: There are frequently multiple USB slots on a computer. Depending on which version of the USB adapter is being used, the driver may need to be installed once for each USB slot. For example, in order to use three USB slots alternately, it may be necessary to install the driver three times, once for each USB slot. Different Com Port numbers may be assigned to each slot, depending on which brand of USB adapter is being used. However, this is not the case with all USB adapters, as some adapters remember the Com Port number, regardless of which USB slot is being used, in which case the driver only needs to be installed once. To simplify the issue, RAE Systems recommends always using the same USB slot for the USB adapter.

Note 2: In order to communicate with some of RAE Systems detectors, the Com port for the USB to Serial adapter must be set to Com 5 or higher. For this reason we recommend using the following instructions to check, and if necessary, change the Com port to Com 5 or higher.

How to Check the Com Port

Make sure your USB to Serial adapter is plugged into one of the USB ports on your computer

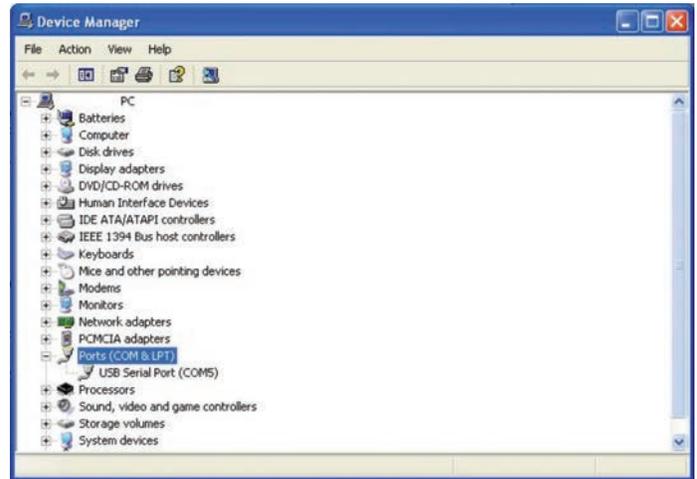**1.** From the Start menu, open the Control Panel:
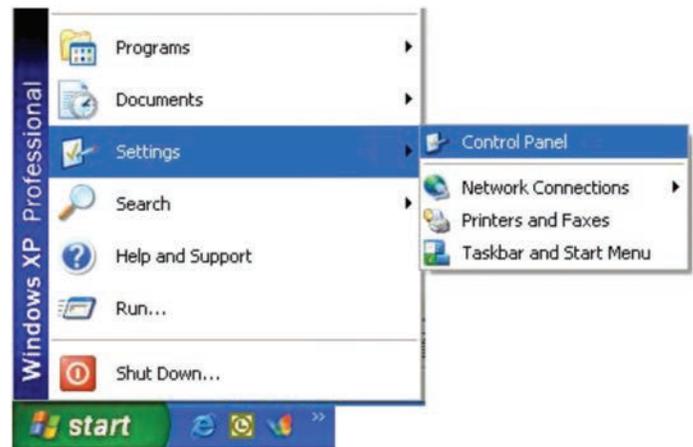
2. From the control panel, open the System window:

3. From the system properties window, go to the Hardware tab and click the Device Manager button.

4. From the Device Manager window, click Ports (Com&LPT). You should now be able to see which Com Port the USB adapter is assigned to.


If the Com Port is 5 or higher, you will be able to,connect to all of RAE Systems' Gas and Radiation detectors.

If the Com Port is 4 or lower, use the following instructions to change the Com Port to 5 or higher.

How to Change the Com Port

1. Follow the "How to check the Com Port",instructions to get to the Device Manager window.

2. From the Device Manager window, double-click on USB Serial Port (Com#). Click the Port Settings tab of the USB Serial Port Properties window, and then click the Advanced button.
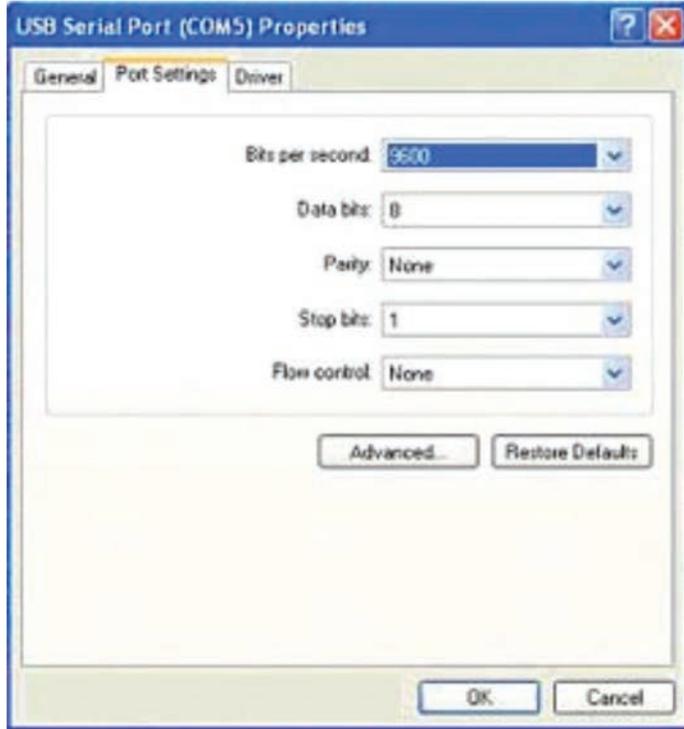
3. In the Advanced Settings window, use the scroll input to select a Com Port (select 5 or higher to be compatible with all RAE Systems detectors). Click the OK button.
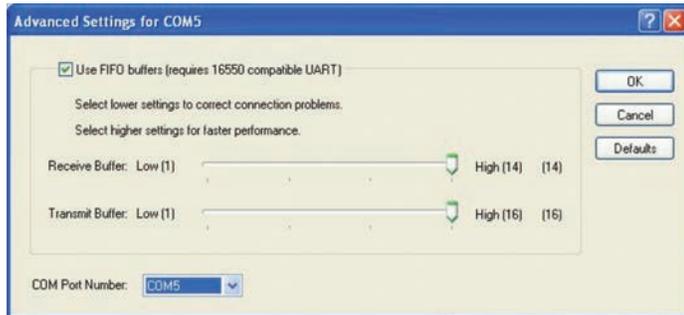
DISCLAIMER

Actual setup and configuration may vary according to computer manufacturers, models, operating systems, system hardware configurations, system software configurations, and application software. Refer to your computer hardware and software manuals for details.

UPDATES

Watch for updates of this Technical Note on the Internet at http://www.raesystems.com.