

# Alpha II USB Adapter Setup Instructions

(addendum 1 of 1)



## **Connecting Your Alpha II Radon Monitor To a Computer Using a USB Adapter**

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These instructions are written for a computer running the Windows XP operating system. However, the steps should be similar for Windows 2000 and ME. Please note that you must have at least one interval of radon data saved in the Alpha II monitor in order to test the USB connection.

### **Installing the USB-to-Serial Adapter Drivers**

Your USB-to-Serial adapter comes packaged with the manufacturer's installation CD. Do not throw away this CD! The software on the CD must be installed to tell your computer how to use the adapter. Windows XP does not have any pre-installed drivers for this device.

When you attach the adapter, Windows will locate the new hardware and ask for an installation CD. If Windows does not find the new hardware automatically, go to Start > Control Panel. Double click the Add New Hardware icon in the Control Panel. Follow the instructions to locate the device. Load the CD and follow the installation instructions (including restarting the computer if necessary).

### **Verifying the USB-to-Serial Adapter Installation**

To verify that the adapter has been installed properly, plug in the adapter to any available USB port. (The adapter does not have to be connected to the Alpha II radon monitor to verify proper installation in the following steps.) Go to Start > Control Panel. Double-click on the System icon. The system properties dialog box will appear. Click on the Hardware tab at the top of the dialog box. Under the Hardware section of the box, you will be offered several choices. Click on Device Manager.

The Device Manager shows all of the hardware currently connected to your computer. Somewhere on the list you will see "Ports (COM / LPT)". Click on the "+" to the left of "Ports (COM / LPT)". This should list your adapter by the manufacturer's name. It may also list which COM Port is used by this adapter.

If your adapter is not shown, uninstall the adapter software, restart your computer, and reinstall the software. Repeat all of the steps above to see if your device is listed in the Device Manager. If your adapter is still not shown, you should go on-line to the adapter manufacturer's website and download the most recent driver for your adapter. If this does not solve the problem, you may need to contact the manufacturer to resolve this issue.

### **Determining the Adapter's Assigned COM Port**

Once you see your adapter listed in the Device Manager, you will need to determine which COM Port has been assigned by your computer to the adapter. This is very important because the Hyper Terminal program we will use to receive the radon data from the monitor will need to be

set to match this COM Port number.

If the COM Port number is not listed next to the adapter name in the Device Manager, double-click on the adapter name. A dialog box for the adapter will be shown. The COM Port number should be listed at the top of the adapter dialog box. **Write down the COM Port number** for later reference once you have found it. Close the Device Manager, System Properties dialog box, and the Control Panel.

## Creating a Hyper Terminal Connection

The Hyper Terminal program, which comes pre-installed in Windows XP, is perfect for receiving the radon data from the Alpha II monitor. However you must configure this program properly to receive this information. It is important to remember that the monitor is a stand alone device designed to print directly to a stand alone printer. By connecting the monitor to a computer using a USB cable, you are merely “printing” to the computer. In essence, the computer is just listening to the data stream. It is not actively communicating with the Alpha II.

To create a Hyper Terminal connection, go to Start > All Programs > Accessories > Communications. Click on Hyper Terminal. When the Hyper Terminal Connection Description window opens, type in a name for your connection program (for the purposes of this guide we’ll call it “Alpha II Radon Monitor Connection”) and select an icon from the many choices. Click OK. The Connect To dialog box will appear. Ignore the area code and phone number boxes. In the Connect Using drop down box, select the COM Port number that matches your adapter’s COM Port number that you found in the previous section. (For more information about locating this number, see **Determining the Adapter’s Assigned COM Port Number** above.) Click OK when you have selected the appropriate COM Port. A COM dialog box will appear. Set each of the blanks to the following:

Bits Per Second: 1200  
Data Bits: 8  
Parity: none  
Stop Bits: 1  
Flow Control: Hardware

When finished, click OK. Your Hyper Terminal connection is nearly complete. In the Hyper Terminal window, select File > Properties. The Properties dialog box will appear. Select the Settings tab. Under the Emulation drop down box, select ANSI. For Backscroll Buffer Lines, reset the number to zero (0). Select ASCII Setup. The ASCII Setup dialog box will appear. There should be a check in the box next to “Append line feeds to incoming line ends”. If not, click on the box to enable this function. Click OK to return to the Settings dialog box. Click OK to return to the Hyper Terminal window. Now that you have completed programming your Hyper Terminal to receive data from your Alpha II radon monitor, you will need to save the program to a location where you can access it easily. Select File > Save As...

If “Alpha II Radon Monitor Connection” is not already filled in, type it in the name blank. Click Browse and select Desktop. Click Save. Close the Hyper Terminal window. If it asks if you want to disconnect, select Yes.

### **Transferring the Radon Test Data**

You must have at least one interval of radon data stored in the Alpha II in order to test the installation in the following steps. Connect your Alpha II monitor to your computer using your adapter cable. Double click on “Alpha II Radon Monitor Connection” icon on your desktop. Select Transfer > Capture Text...

A dialog box will appear asking where you want to save the incoming text information. For the purposes of this guide, name the text file “Test Radon Data”. Click Browse and select Desktop. Click Save.

***When saving files in the future, DO NOT attempt to save the text file (ex: Test Radon Data) in a folder containing a text file of the same name (ex: Test Radon Data). The original file WILL NOT be overwritten and the captured data will be lost. If you must save the file with the same name as one already in the folder, delete the original file or move it to another folder before attempting to save the new file.***

Following the instructions that came with your radon monitor, select “Y” to Print Interval and set the monitor to printing. The incoming radon data will show on the Hyper Terminal window. All of this text information is automatically saved in “Test Radon Data” file on the Desktop (where we chose to save it in the above steps). Once the monitor is finished printing, shut down Hyper Terminal. It will ask if you want to disconnect. Select Yes.

Now find the “Test Radon Data” text file on the Desktop and double click on its icon. When Notepad opens, verify that the text matches what was shown (“printed”) on-screen in the Hyper Terminal window. To print a hard copy of the radon data, go to File > Print.

Congratulations! You are now ready to record all of your Alpha II radon report data using your computer.

## Troubleshooting

Error Message: *“Unable to open COM6 [or other COM number]. Please check your port settings.”*

Computers automatically assign COM Ports on a first come first serve basis as USB devices are added. This means that if you setup Hyper Terminal with only the Alpha II USB cable connected, you may receive an error message later if you connect other USB devices to your computer **before** connecting the Alpha II USB cable. Basically your computer reassigned the COM Ports on you. For example, if your computer assigned COM Port 3 to the Alpha II USB connection originally, it may later assign COM Port 3 to your USB printer when it is connected first and then COM Port 5 to the Alpha II USB cable and so forth.

This problem can be resolved in one of three ways:

- 1) Select a new COM Port for your original Alpha II Hyper Terminal connection. This may or may not work depending on your version of Windows and Hyper Terminal. In the Hyper Terminal window, go to File > Properties. Under Connect Using, reset the COM Port to whatever the newly assigned COM Port may be. We have not had good luck with resetting Hyper Terminal's COM Port. Hyper Terminal is a very simple program. Earlier in this guide we mentioned that it will not overwrite a text file of the same name which is very unusual compared to most Windows programs. Similarly, Hyper Terminal will indicate that it is using the reset COM Port, but in reality it is not.
- 2) Disconnect all USB devices and connect the Alpha II USB cable before connecting any other USB cables. Your computer should follow procedure and assign the same COM Port to the Alpha II USB cable that it originally assigned to it when you first setup Hyper Terminal.
- 3) Repeat the Hyper Terminal creation instructions in this guide and create a new Hyper Terminal Connection set to the newly assigned COM Port. If you do this each time the problem occurs, you will eventually have an Alpha II Hyper Terminal connection setup for any COM Port that may be assigned to your Alpha II (ex: Alpha II COM Port 3, Alpha II COM Port 5, etc.). You will not end up with many Alpha II Hyper Terminal connections because there are a very limited number of COM Ports available for USB connections.

If you have any further questions, please contact:

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