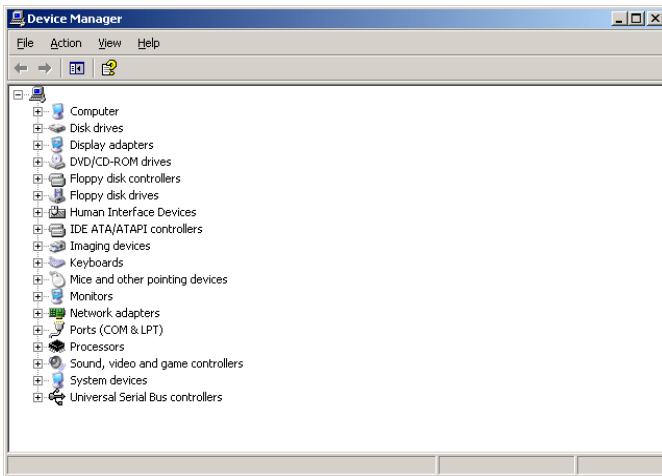


Installing the USB to Serial Adapter

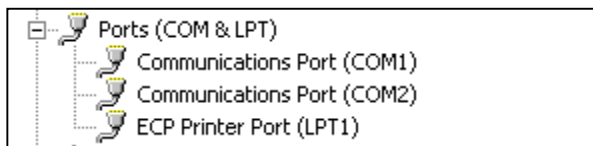
The DG-700, DG-500 and APT Data Acquisition Box (DAB) hardware utilize RS-232 serial communications to interface with TEC software (e.g. TECTITE for automated Blower Door testing, or TECLOG for data logging). If your computer does not have an available serial communication port, you will need to install a USB to Serial adapter in order to use the serial communications feature of your digital gauge or APT DAB.

1. Checking Your Computer for an Installed Serial Communication Port

To check if your computer already has an installed serial communication port, you will need to access the **Device Manager** in your Windows operating system. The **Device Manager** can be accessed on most computers by right-clicking on the **My Computer** icon on your desktop and selecting **Properties**.¹ This will cause the **System Properties** window to appear. To open the **Device Manager**, click on **Hardware** and then **Device Manager**. (Note: If you are running Win98, simply click on the **Device Manager** tab.)



From the **Device Manager** window (see figure above), open the **Ports** icon to show which COM (serial) and LPT (parallel printer) ports are currently installed on your computer. In the case illustrated below, the computer has 2 installed serial communication ports (COM1 and COM2) which can be used to interface with a TEC digital gauge or APT DAB. If no COM ports are listed (or a **Ports** icon does not exist), you will need to install the USB to serial adapter to provide a serial communication link using a USB port.



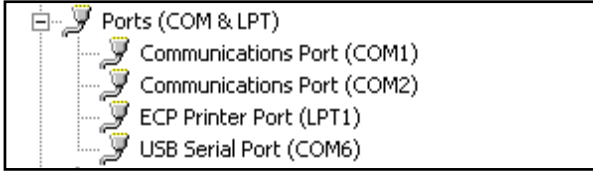
2. Installing the USB to Serial Adapter.

Follow the installation instructions provided with the USB to Serial Adapter. The USB to Serial adapter package includes a hardware installation CD (or mini CD) which contains special software drivers for this device. For most computers, the first step is to plug the USB to Serial Adapter into an open USB port on your computer. This will activate the Windows **New Hardware Wizard**. The **New Hardware Wizard** (along with the installation instructions) will guide you through the driver installation process. **Note:** Be sure to specify the hardware installation CD (or mini CD) as the source of the driver for this device.

¹ The Device Manager can also be accessed through the Control Panel, System icon.

3. Checking Installation of the USB to Serial Adapter.

To determine if your USB to Serial adapter has been installed properly, you will again need to access the **Device Manager** and open the **Ports** icon (see **Item 1** above for instructions on opening the **Device Manager**).



In the case illustrated above, the USB to Serial Port has been installed and has been assigned COM6. If a **USB Serial Port** icon does not appear in **Ports**, or a COM number does not appear to have been assigned, then try reinstalling the adapter (see **Item 2** above). **Note:** Be sure to specify the hardware installation CD (or mini CD) as the source of the driver for this device.

Remember which COM port has been assigned to your USB to Serial adapter (e.g. COM6 above) - this information is needed to set up the proper communication settings in your TEC software.

4. Setting the Designated COM Port in the TECTITE and TECLOG software.

In order for your TECTITE or TECLOG software program to establish a communication link with your digital gauge or APT DAB, the proper COM port must be designated in the program.

In TECTITE, use the **Options...COM Port Selection** menu item to set the designated COM port. TECTITE allows the user to select COM1 through COM6 as the designated communication port.

In TECLOG, use the **Configuration...Settings...Primary Comm Port** menu item to set the designated COM port. TECLOG allows the user to select COM1 through COM9 as the designated communication port.

5. Changing the Assigned COM Port for your USB to Serial Adapter.

If necessary, you can change the COM port assigned to your USB to Serial Adapter. For example, if COM7 has been assigned to your adapter, you will need to change the COM port assignment in order to use the TECTITE software (which only supports COM1 through COM6).

Follow these steps to change the assigned COM port:

- From the **Device Manager** window open up the **Ports** icon.
- Right-click on the **USB Serial Port (COMX)** icon.
- Click on **Properties**.
- Click on the **Port Settings** tab.
- From the **Port Settings** window click on the **Advanced** button.
- In the **Advanced Setting** window, use the **COM Port Number** field to change the assigned COM port.
- Click on **OK**.

Call The Energy Conservatory at 612-827-1117 for more information.