

# Instrumentation Northwest, Inc. (INW)

## APPLICATION NOTE

### USING AN AQUISTAR® DL2 WITH A USB SERIAL ADAPTER September 2004

#### Introduction

The Aquistar® DL2 data logger connects to a desktop or laptop PC via a 9-pin serial port. Many laptops today do not have any serial ports, only USB ports.

Purpose of this document is to describe how to use a USB port rather than a serial port with Aqua4 and the Aquistar® DL2 data loggers.

#### The Adapter

In order to use a USB port, you must have a USB Serial adapter. This adaptor has a USB connector at one end and a 9-pin serial connector at the other. These adapters are widely available. INW recommends the Belkin USB Serial Port Adapter, available from CompUSA and many sources on the Internet.



Typical USB Serial Adapter

#### Installation

Installation is straightforward – plug the adapter into your USB port and install the drivers provided with the particular unit. Typically, when you plug the adapter into your USB port, a wizard will pop up guiding you through the installation process. Most USB Serial adapters will work on Windows 98, ME, 2000, and XP. Windows 95 does not support USB.

#### Configuring the Adapter

The Aqua4 control software requires that the DL2 be connected on COM 1, COM 2, COM 3, or COM 4. When the adapter is installed, a COM port number is assigned to it. Often this port is COM 7 or COM 8. This must be remapped to a lower port number before the DL2 will work.

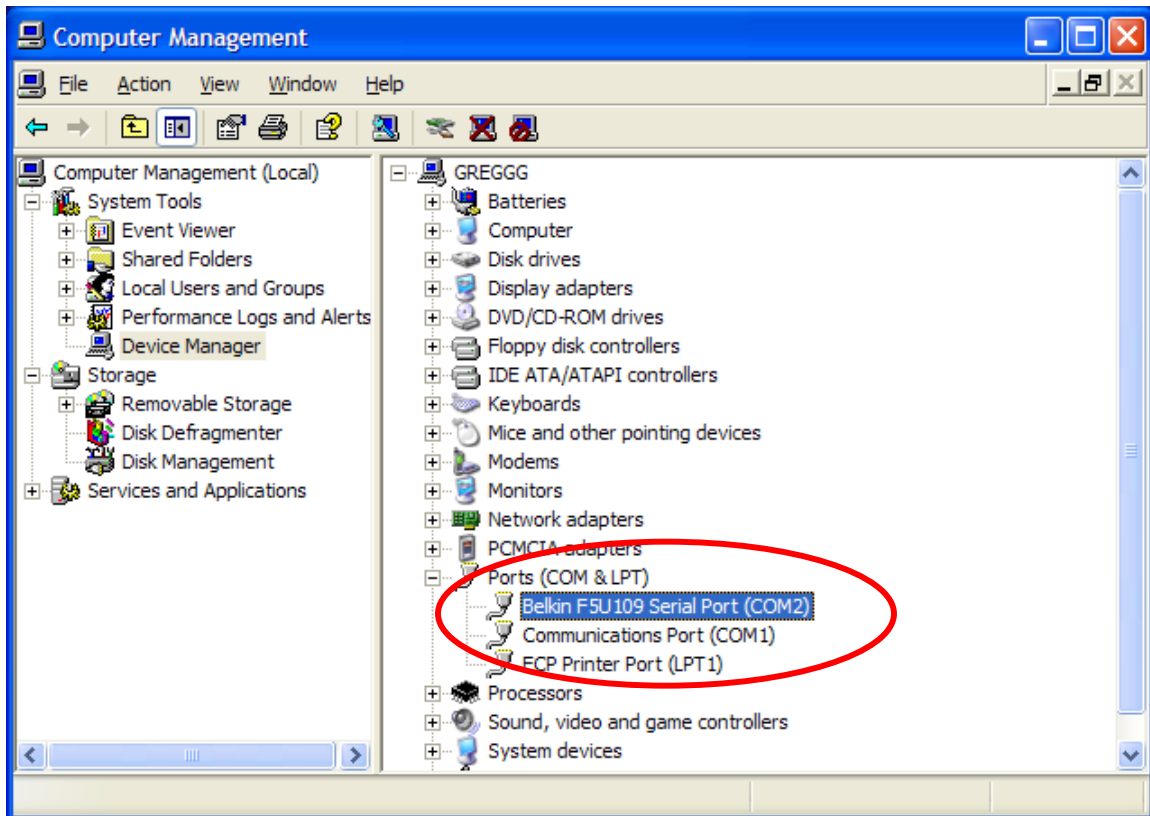
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Follow the steps below to configure your adapter for the DL2.

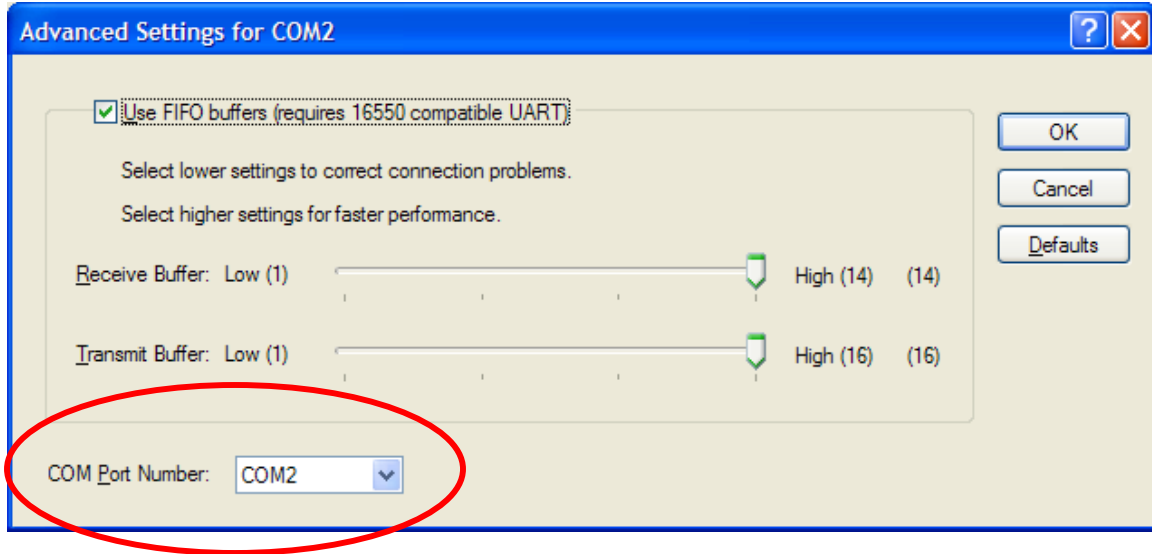
1. Right-click on **My Computer** (normally either on the desktop or on the Start Menu).
2. From the popup menu, click on **Manage**.
3. In the left panel, double-click on **Device Manager**.
4. In the right panel, double-click on **Ports**.

You should now see a window similar to the one below:



5. Locate your USB Serial adapter in the list. (The Belkin F5U109 Serial Port shows on the sample above.)
6. Note the COM number listed after the adapter – in this case COM 2. If this port is COM 1, COM 2, COM 3, or COM 4, skip to **Configuring Aqua4** on next page. To change the COM port, continue with step 7.
7. Double-click on your USB Serial adapter.
8. Click on the **Port Settings** Tab.
9. Click on the **Advanced** button.

You should now see a window similar to the one below:



10. From the **COM Port Number** drop-down box, select COM1, COM2, COM3, or COM4. If any of these are in use by the system, they will be so marked in the dropdown box. Select one that is not in use.
11. Click **OK** and close all the windows you just opened.

## Configuring Aqua4

1. Start the Aqua4 control program.
2. Click the **Configuration** menu, and then select **System**.
3. Click the **Data Logger** tab.
4. Click the COM port that is assigned to your USB Serial adapter.
5. Click **OK**.

To use your DL2, simply plug into the 9-pin connector on your adapter and run Aqua4.

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Instrumentation Northwest appreciates any comments you may have regarding this application note. Please contact:

**Instrumentation Northwest, Inc.**  
ATTN: Engineering  
8902 122<sup>nd</sup> Avenue NE  
Kirkland, WA 98033  
[www.inwusa.com](http://www.inwusa.com)  
(800) 776-9355 (425) 822-4434 FAX (425) 822-8384