Optimizing USB to Serial Port Settings

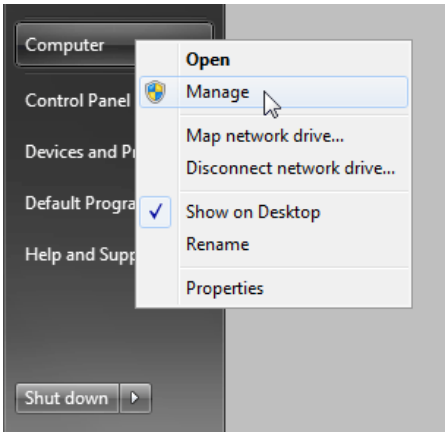
Digi interface boards and USB adapters use an FTDI Chip for the USB to serial conversion. The default configuration for FTDI's drivers are optimized for high speed serial devices. Digi RF radios operate at lower baud rates than are optimal for these drivers and can cause some communication problems when performing certain tasks. Performing a recovery or firmware update may fail unless the driver settings are modified.
The following procedure will show you how to reduce the USB transfer sizes and latency timing. While these instructions are specifically for USB devices that use FTDI Chip components, it's likely that similar options would be present on other USB to Serial adapters that are also experiencing communication problems.

Procedure

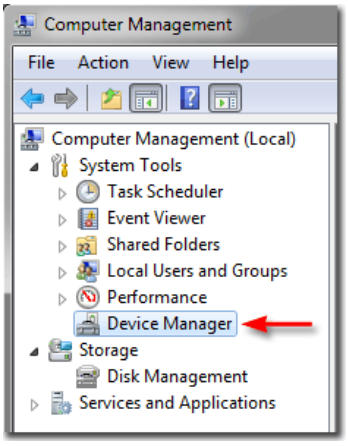
This guide assumes you have a Digi USB interface board (XBIB-U, XIB-U, XTIB-U) plugged into the computer and that the appropriate drivers have been installed.

1. Go to the **Windows Device Manager**

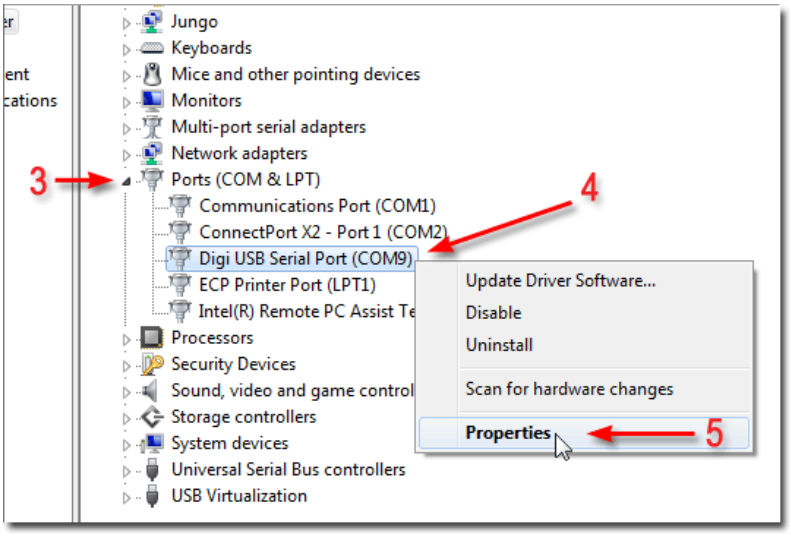
    a. Click on the Start / Windows button
    b. Find **My Computer** (Windows XP, 2000) or **Computer** (Windows 7, Vista)
    c. Right-Click on **My Computer / Computer**
    d. Select **Manage**



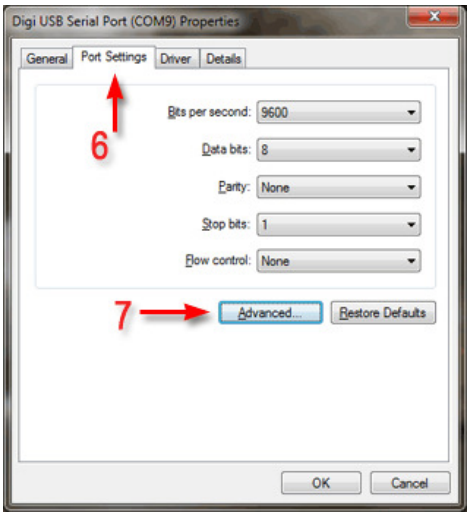
2. Select **Device Manager** from the left-hand column



3. Find the **Port (COM & LPT)** section in the right-hand column and expand it
4. Find and Right-Click on the **USB Serial Port** (this can be named a number of things, make sure it is the correct one for your radio)
5. Select **Properties**

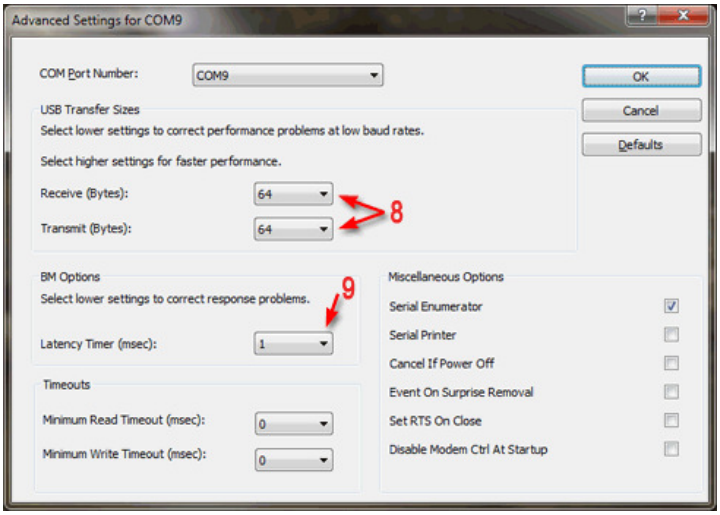


6. Click on the **Port Settings** tab
7. Click on **Advanced**



Change the following:

8a. **Receive (Bytes)**: from 4096 to 64
8b. **Transmit (Bytes)**: from 4096 to 64
9. **Latency Timer (msec)**: Change this to 1



10. Click **OK** on both windows and close the **Device Manager**. The driver is now optimized for use with Digi radios.

If the radio you are working with appears to be unresponsive after performing the above steps, you may need to perform a recovery. Please use the following link to go to our comprehensive recovery guide:

Recovery procedure for Digi RF products