Micro Control Systems

APPLICATION NOTE

APP-048

Connecting with MCS-Connect to a MCS-MAGNUM over Ethernet

Revision History

Date	Author	Description
02/07/2009	RBA	Create initial version

Introduction

One of the unique features of the Magnum is that in addition to being able to communicate with MCS-Connect over the RS-232 connector on the front keypad, you can also communicate over the built-in Ethernet port on the Magnum board itself. However, questions often arise as how to properly connect the Ethernet port on a Magnum to a LAN (Local Area Network) or how to create a simple connection between your computer and the Magnum if a LAN does not already exist. The purpose of this application note is to help explain this.

Setting Up Your Windows XP Computer With A Static IP Address

At your desktop, left-click on the **Start** button and then left-click on **Control Panel**. You should see the following:
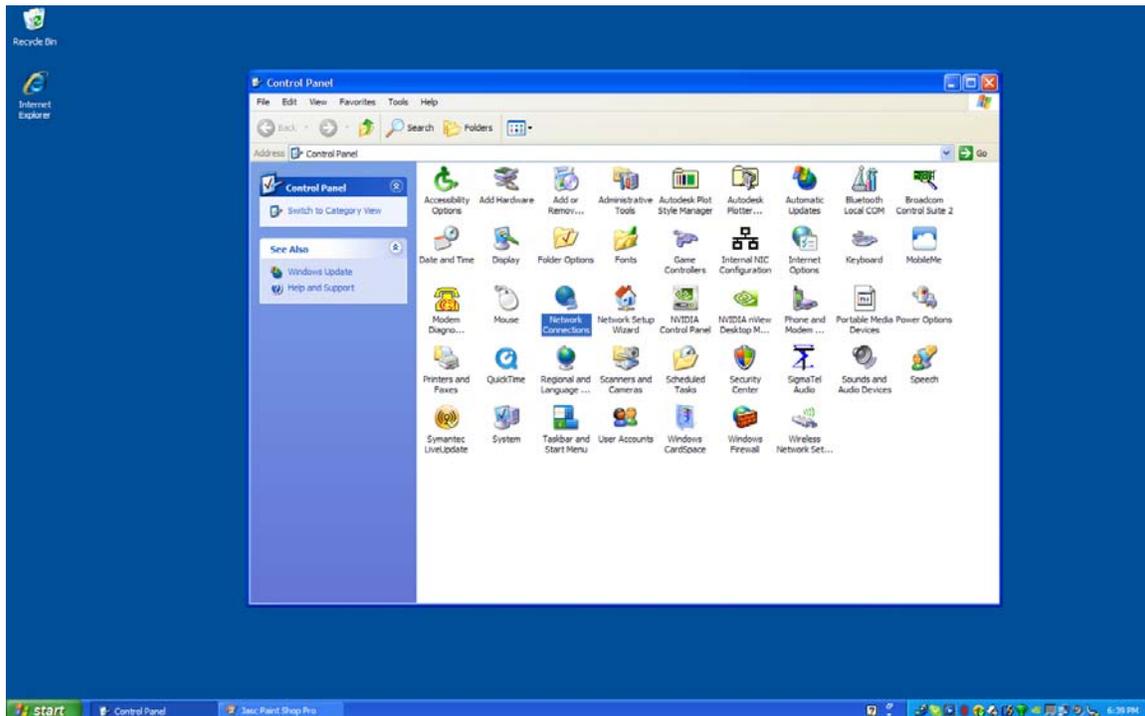
The Control Panel above is shown in the Classic view. If you are in the Category view you can easily switch over to the Classic view by left-clicking on **Switch to Classic View** on the left side of the Control Panel window.

Next, find the **Network Connections** icon and double left-click on it to open the Network Connections window. You should then see something similar to the following:
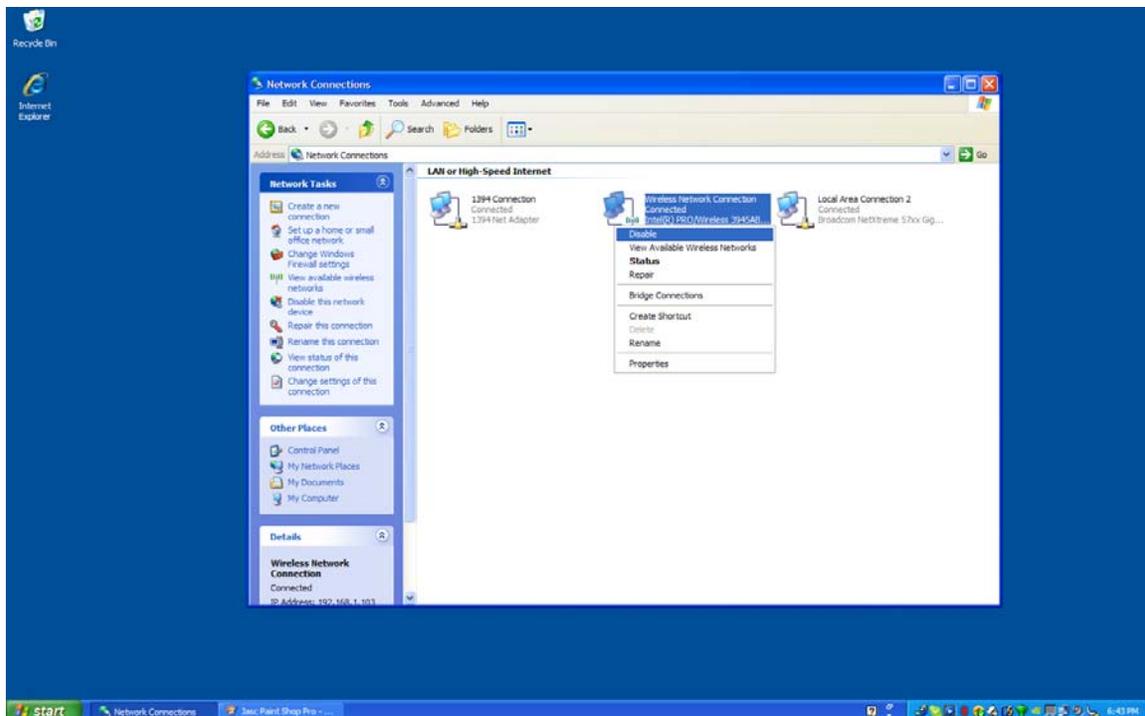
If you do not see icons you can change the view by left-clicking on **View** at the top of the Network Connections windows and then left-clicking on **Tiles**.

In the picture above you see, for example, three network connections under the heading **LAN or High Speed Internet**. Yours will probably be somewhat different. One is usually a 1394 Connection. You will also see a Local Area Connection icon, and if your computer has wireless capability you will also see a Wireless Network Connection icon.

The important thing to remember at this point when you are going to use MCS-Connect is to temporarily disable any wireless connection. Turning your wireless switch off is usually not enough. You need to disable it by right-clicking on the icon and then left-clicking on **Disable** as shown in the previous picture.

Next we need to make changes to the Local Area Connection. Simply right-click on the Local Area Connection icon and then left-click on Properties as shown in the next picture:
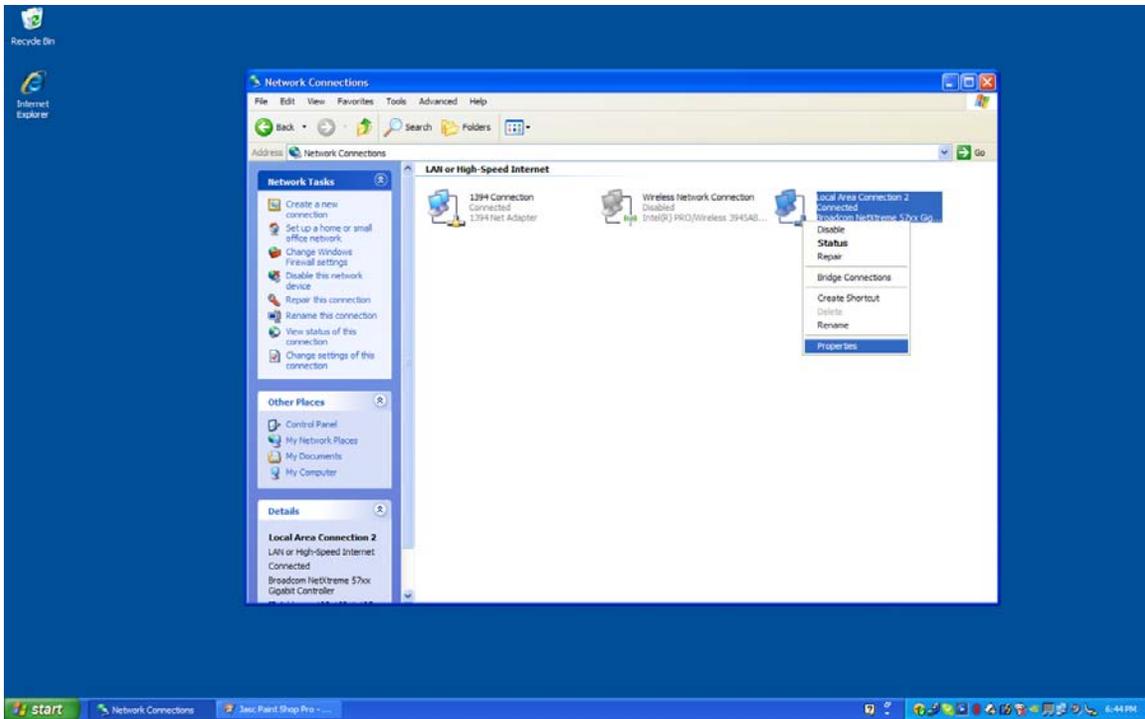
After left-clicking on Properties you should see the Local Area Connection Properties box as shown in the next picture:
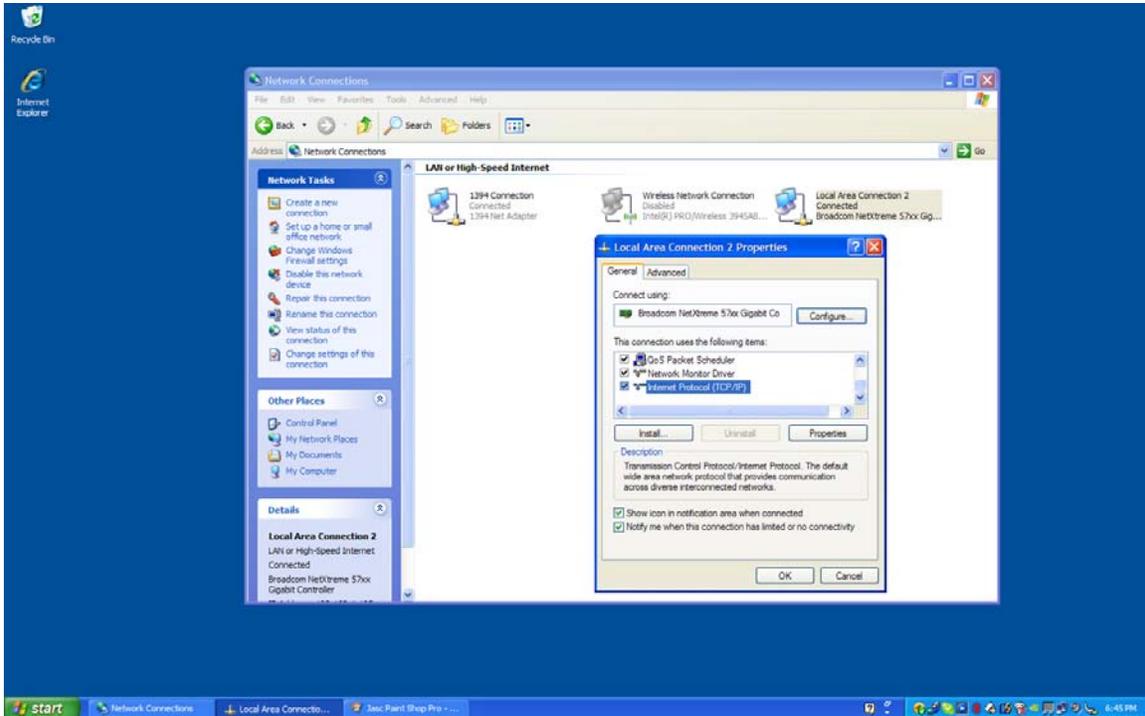
In the middle of this windows are a list of items you can scroll through. Scroll down to the last item, Internet Protocol (TCP/IP) as shown in the next picture:
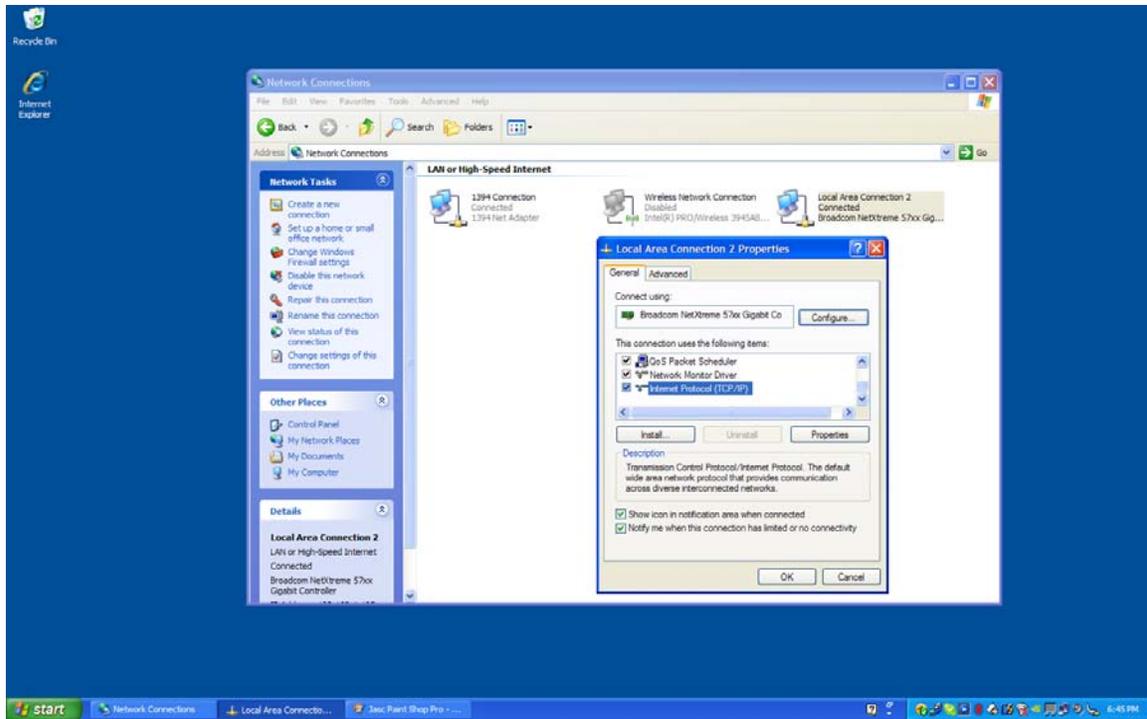
Next, double left-click on **Internet Protocol (TCP/IP)** to open the Internet Protocol (TCP/IP) Properties window as shown below:
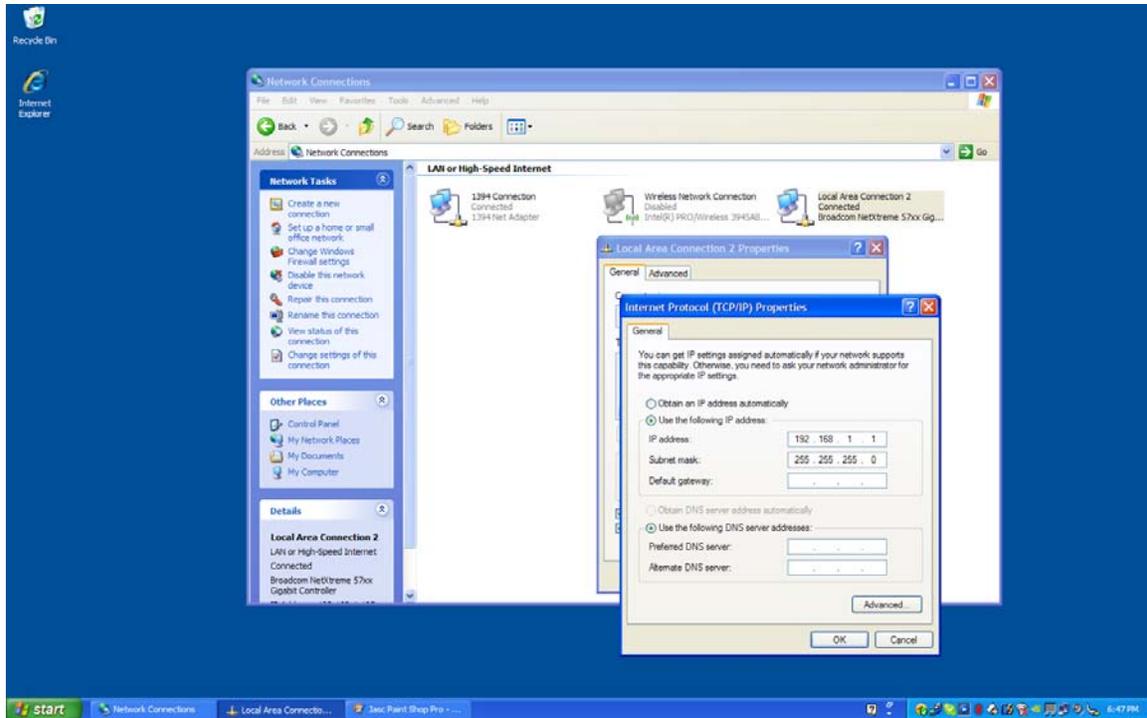
It is in this window that we enter the IP addresses that we need. First we need to left-click on **Use the following IP addresses** so that we can manually enter our

addresses.   Then you enter your IP address, Subnet Mask and, if necessary, your Default gateway address. Then left-click on **OK** to accept the changes and close out all the windows until you return to the desktop.