Ethernet Port Setup and Configuration

The Ethernet port must be configured with some drivers by the user. This section will cover assigning a static ip address to your device to allow users to connect to their device over their network.

Setting the Static IP Address of Your Device

This section covers how to assign your static ip to your device. These steps assume that someone (an IT person) has setup a static ip address, a network mask, and gateway that you can use to assign to the device. Follow the steps below to assign this information to your device.

1. Connect CAT5 Ethernet cable between local network and Ethernet connector on the wiring panel of the device.
2. Insert the supplied USB/Ethernet Driver CD (part 80328) into your PC. The following menu window should appear:

3. Click on the Ethernet Config button. The following screen will appear:

4. The “Select a Unit” box displays a list of available static IP addresses on the network. Units with a “DHCP” mean they need to be configured and units without the “DHCP’d”

means they have already been configured and you shouldn't change them unless you know where you are doing.

   a. Generally, when setting the device up for the first time, it will have an ip address of 0.0.0.0 and will be displayed in red as shown in the screen shot above.
   b. If your device isn't showing up in the list, confirm that you have enabled Ethernet in the device's setup screen (not all devices need this step).

5. Select from the unit list your device. It should be the ip address with a "DHCP'd" in it and an address of 0.0.0.0, because that unit is ready to be configured.
6. Type in your assigned static IP address in the IP window. Be sure to write this number down as you will need it later.
7. Type in a Network Mask in the Network Mask window, this may vary depending how your IT department has set up your network. Typical network mask is 255.255.255.0.
8. Set the gateway and DNS based on your company's network settings.
9. Set the baud rate to the unit's port baud rate. This can be adjusted in the device's settings.
10. Select your device from the unit list and press the Set→ button to change the IP address of your device.
11. If the device disappeared from your list, press the search again button until it appears again with your newly assigned ip address.
12. Select the unit from the list and press the launch webpage button. This will launch the Netburner's Ethernet configuration page.
13. At the top of the page, go to the Serial tab.

14. For Port 0, set the data port to RS-232, set the baud rate to match your device's baud rate, and the flow control to RTS/CTS.
15. For Port 1 set the dataport to DEBUG and match port 0 settings for the rest.
16. Press the 'submit new settings' button to save your changes. You should now be able to communicate with your device via Ethernet using your assigned static ip address and the set port number (default is 23).

17. To check the assigned port number, launch the Netburner Page and go to the Network tab. The Listening network port for Port 0 under incoming TCP Settings is where you can set the port number. For example, in the screen shot below the port is set to 10023.

Setting up a Virtual COM Port

A virtual COM Port allows users to designate a COM port for their existing Ethernet setup for a Met One device. This is not necessary to be able to talk to your device, this just creates an alternative method for connecting to your device if TCP/IP is not an option for some software applications. This section covers the drivers needed and the steps necessary to set up a virtual COM port for your device.

Setting up a Virtual COM Port

1. From the Drivers CD (shown above), click the Ethernet Drivers button. This will launch the Ethernet driver installation. If you downloaded the drivers from our website, run the VirtualCommPort-2.1.exe found in your zip file.
2. Press next to continue with the wizard.

3. Select your own installation path or use the default path: C:\nburn\VirtualCommPort

4. Select which operating system you are using.

5. Press Next to finish installing the Ethernet drivers.

6. Wait for installation to finish and press finish to complete the installation. NOTE: A PC reboot may be required for the Ethernet drivers to function correctly. We recommend restarting your PC after this step.
7. After restarting your PC, head to your installation folder and open NBVirtualCommPort.exe

8. Press the Add button
9. Select Client connection for the connection type.

10. Under Select serial port, choose the COM port you would like to assign to your device.

11. Under Connection name, enter a descriptive name for this virtual com port.

12. Make sure “Create as virtual port” is checked.

13. Enter your static ip address and port number into the Remote host name/port section.

14. Press Add to add this TCP/IP address.
15. Press Apply to add this virtual COM port

16. Now your setting should be displayed on the main page of the program. You can use the refresh button on the right hand side to refresh the status of the virtual port. As you can see in the image below, it found my settings to be 38400 baud, no parity, 8 databits, and 1 stopping bit. After talking to my device, I was able to refresh and see the amount of data sent/received.