NetPort Quick Start Guide

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Introduction

This Quick Start is a brief familiarisation tool to allow you to get your NetPort connected and get your RS232 equipment on the network as quickly as possible. It will take you step by step through hardware setup and configuration and help you verify that everything is working.

Obviously there is much more to NetPort than we can show you in this guide, please ask if you need help.

Note: *This document covers NetPort device server versions AMC232LAN01 & AMC232LAN01-DVK but the same knowledge can be applied to all the AMC232LAN01-06 products.*

What's in the Box

AMC232LAN01-DVK	Description
AMC232LAN01	NetPort module with RS232 DTE cable fitted (DB9 plug)
AMC-DISK-AMC232LAN01	CDROM with data and utilities (including Device Installer and Redirector)
AMCPS046A	9VDC unregulated UK mains plugtop Power Supply.

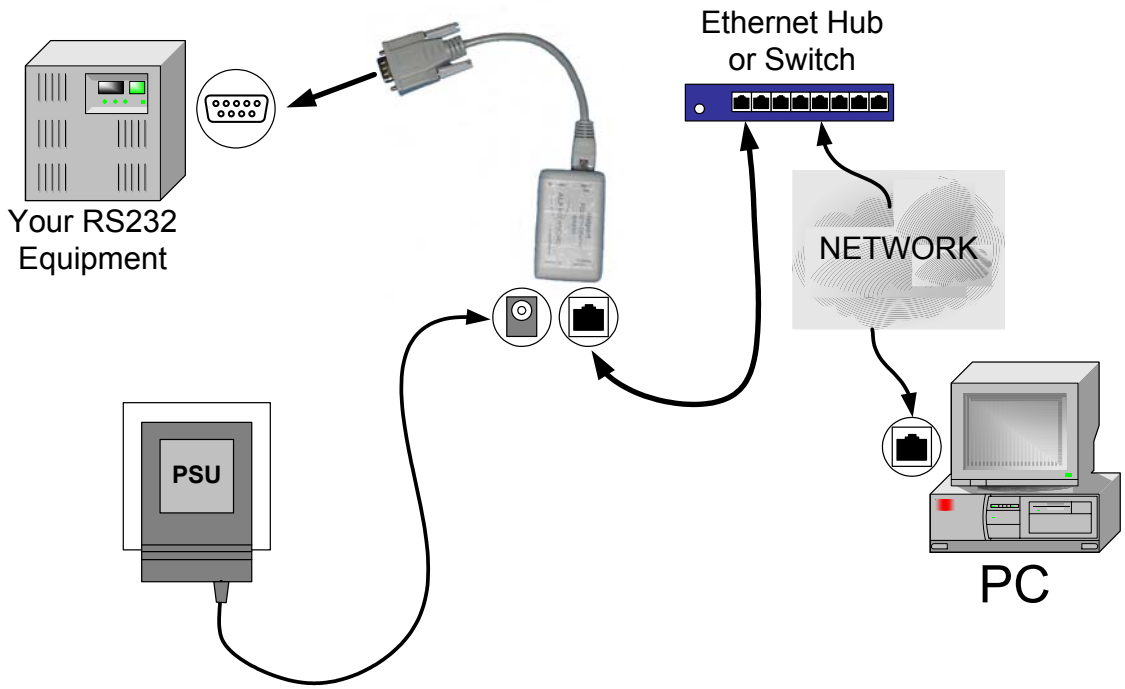
AMC232LAN01	Description
AMC232LAN01	NetPort module with RS232 DTE cable fitted (DB9 plug)

Connecting the NetPort

To get started, you must connect the NetPort to your network. Follow the steps below:

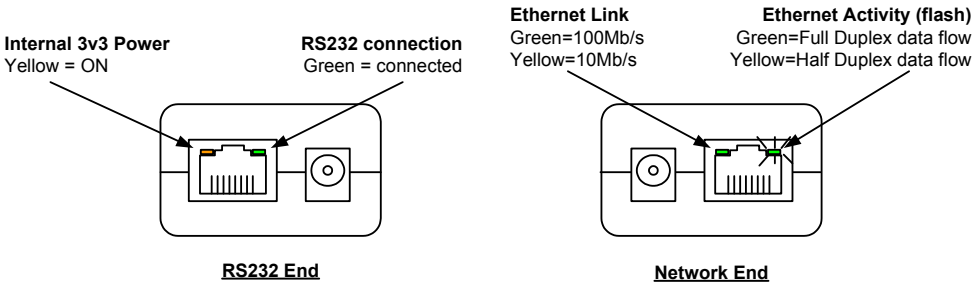
Note: *This procedure assumes that the PC is connected to the network. You may connect a crossover Ethernet cable directly between the PC and NetPort if a network is not available.*

The final setup should look like this:



Verification Check: If powered up correctly, the NetPort power LED will light yellow and remains on. This LED is on the RS232 port RJ45 socket.

Verification Check 2: If the Ethernet Port on NetPort has authenticated with the LAN successfully then the LED's will confirm the speed and connect mode according to the following table:



Configuring the NetPort

What You Need to Know Before you Start

IP Address

Your XPort must have a unique IP address on your network. The system administrator generally provides the IP address, subnet mask, and gateway or they will opt for it to be allocated by the DHCP Server dynamically each time it is powered up. The IP address must be within a valid range, unique to your network, and in the same subnet as your PC, check with your IT administrator for appropriate addresses.

IP Address: _____ _____ _____ _____

Subnet Mask: _____ _____ _____ _____

Gateway _____ _____ _____ _____

Hardware Address

You may need to know the unit's hardware address (also known as a MAC address). On later NetPorts this is printed on the white label which is fixed to the underside of the unit. Earlier NetPorts did not have this label so you may need to use Device Installer to detect this MAC address and write it down if required.

The format is: 00-20-4a-XX-XX-XX, where XXs are unique numbers assigned to the product.

You have several options for assigning an IP to your unit. We recommend that you connect the XPort to the network and assign the IP address using DeviceInstaller software, which is on the product CD. For information on other methods, see the *NetPort User Guide.*

Install DeviceInstaller

1. Install DeviceInstaller from the CD-ROM.

   If the CD does not launch automatically:

   - Click the **Start** button on the Task Bar and select **Run.**
   - Enter your CD drive letter, colon, backslash, **Launch.exe** (e.g., D:\Launch.exe).

2. Respond to the installation wizard prompts. You may be prompted to install .NET frameworks to bring your Windows installation up to date to be able to run DeviceInstaller.

Note: *For more information about DeviceInstaller, see the DeviceInstaller User Guide on the product CD and the DeviceInstaller help file.*

Running DeviceInstaller

The unit's IP address is normally set to 0.0.0.0 at the factory which means it is in DHCP Client mode and will attempt to obtain an IP address, Subnet & Gateway from a DHCP Sever. If your network does not have a DHCP Sever then XXXXXXXXXX

1. Click **Start\Programs\Lantronix\DeviceInstaller\DeviceInstaller.** If your PC has more than one network adaptor, a message displays. Select the adaptor that the NetPort will be attached to and click OK.
2. Press Search to detect NetPorts on the network. If the Search window reveals 'No Devices Found', press Search again until your NetPort is shown. You may need to wait for up to 30 seconds for all NetPorts to be shown, keep pressing Search.

Note: *If the unit cannot find a DHCP Server to obtain an address then it will default into AutoIP mode, assuming an IP address in the region 169.254.xxx.xxx and be shown in red. In some cases re-applying power to the Netport will allow it to enumerate on your network successfully. If the Network has no DHCP Sever then you will have to set the IP address manually . See section:* ***Assign IP Address Manually****.*

3. By selecting the relevent device you are then able to change the configuration via 3 methods, choose whichever suits you:

   - Telnet (ASCII menus over the network)
   - Web Config (via any web browser)
   - Device Installer fields (preferred for this document)

   See the NetPort User Manual for detailed descriptions of these.

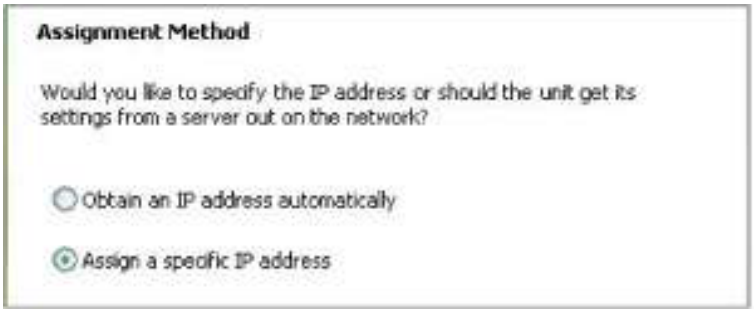
Note: *It is possible to configure NetPort via the RS232 port using an application such as HyperTerminal. See section:* ***Configuration via the Serial Port.***

Assign IP Manually

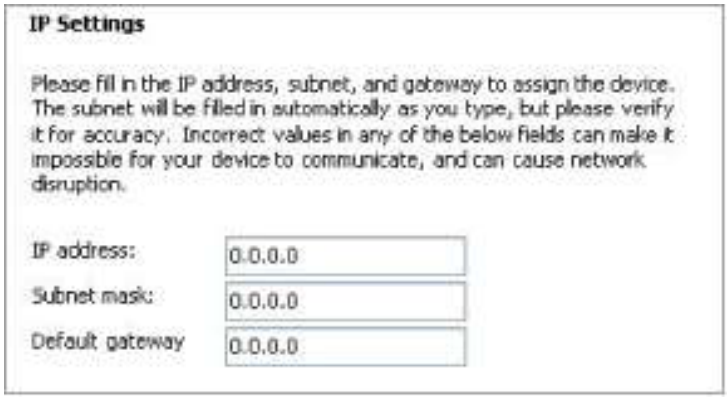
If the NetPort is NOT shown in DeviceInstaller:

1. Click the **Assign IP** icon .
2. When prompted, enter the hardware address in the format 00-20-4a-XX-XX-XX, where the XXs are unique numbers assigned to each individual product. Click **Next.**

4. Select Assign a specific IP address and click **Next**.

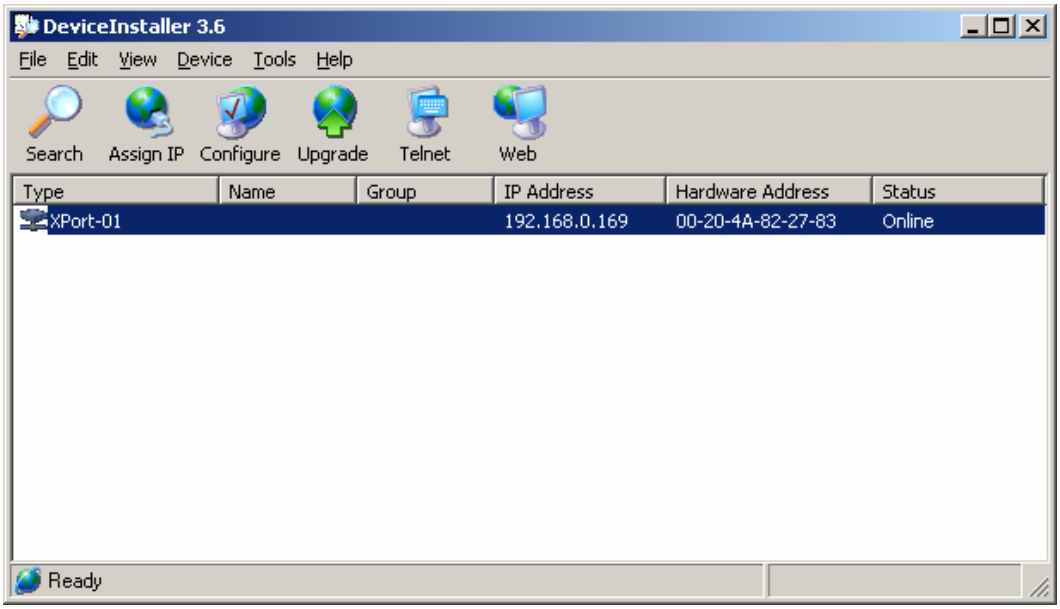


5. Enter the IP address. The Subnet mask displays automatically based on the IP address; if desired, you may change it. On a local network, you can leave the Default Gateway blank (all zeros). Click **Next**.

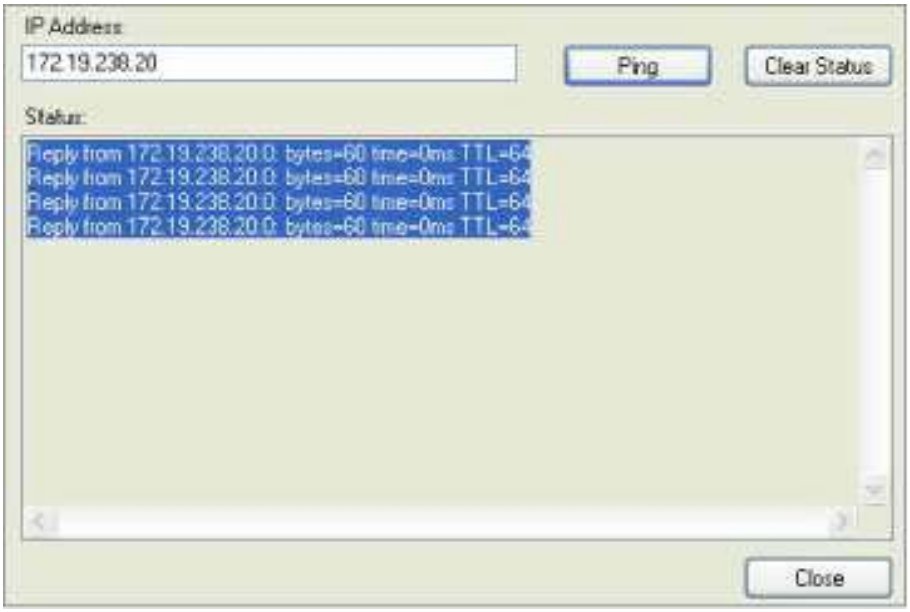


6. Click the Assign button and wait several seconds until a confirmation message displays. Click **Finish.**

6. You should see NetPort shown similar to this:



7. Select the NetPort from the main window list and click **Tools\Ping.** The results display in the Status area. Click the **Clear Status** button to clear the window so you can ping the device again.



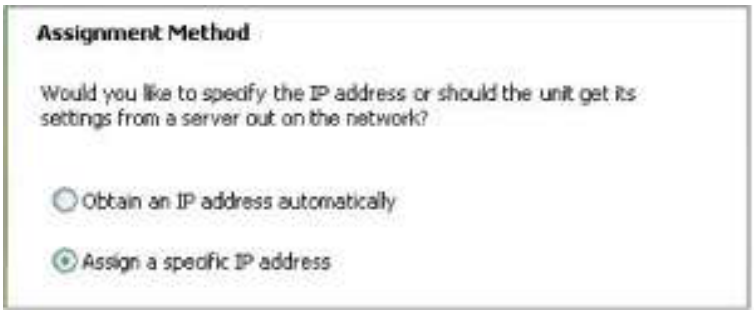
Note: *If you do not receive "Reply" messages, make sure the unit is properly attached to the network and that the IP address assigned is valid for the particular network segment you are working with.*

8. Click the **Close** button.

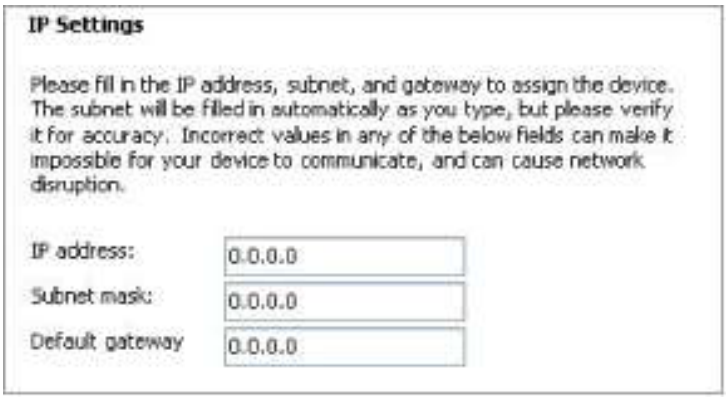
If the NetPort IS shown in DeviceInstaller:

You can follow the same procedure as above but there are a few shortcuts to help.

1. Select the NetPort in DeviceInstaller
2. Click on **Assign IP**
3. Select **Assign a specific IP address** and click Next.

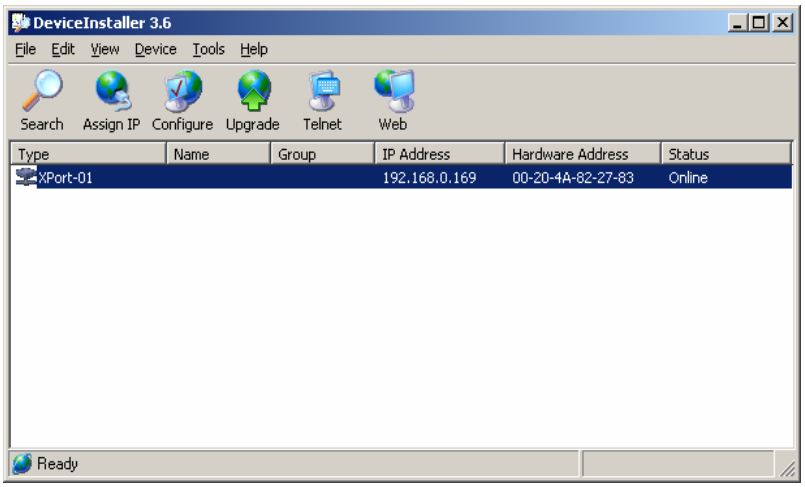


4. Enter the IP address. The Subnet mask displays automatically based on the IP address; if desired, you may change it. On a local network, you can leave the Default gateway blank (all zeros). Click **Next**.



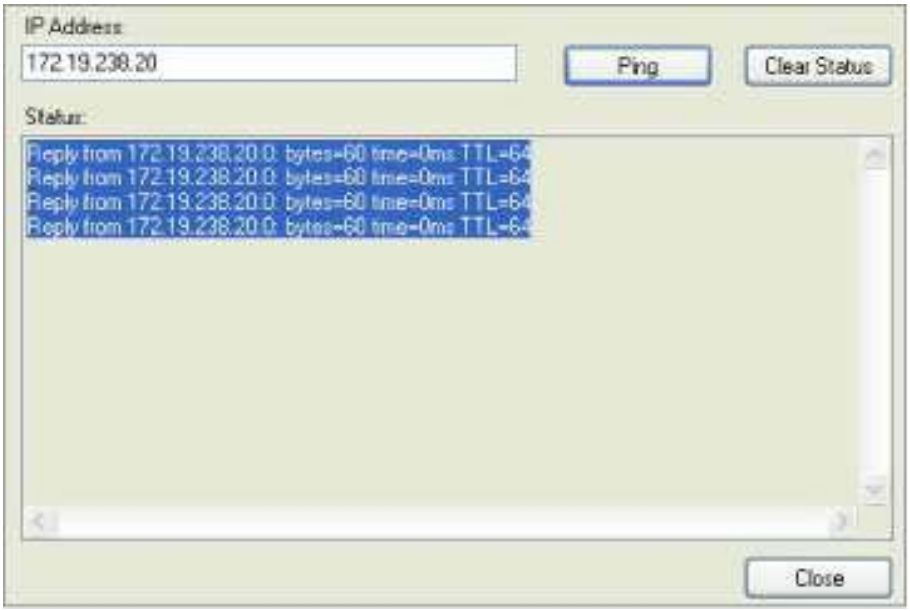
5. Click the **Assign** button and wait several seconds until a confirmation message displays. Click **Finish**.

6. You should see NetPort shown similar to this:



7. Select the NetPort from the main window list and click Tools-^Ping. The results display in the Status area. Click the Clear Status button to clear the window so you can ping the device again.

8. Note: If you do not receive "Reply" messages, make sure the unit is properly attached to the network and that the IP address assigned is valid for the particular network segment you are working with.



9. Click the **Close** button.

Sending/Receiving data

The NetPort is now enumerated on your LAN and can receive/send data according to it's standard serial settings:

- 9600b/sec, No parity, 8 bit data, 1 stop bit
- Handshaking set to CTS/RTS

If your RS232 equipment can communicate in this data format then all you need to do now is open an application on a networked PC to send/receive.

If you do NOT have an application which can talk to a "TCP/IP Socket"

You have 2 options without creating a specific software application:

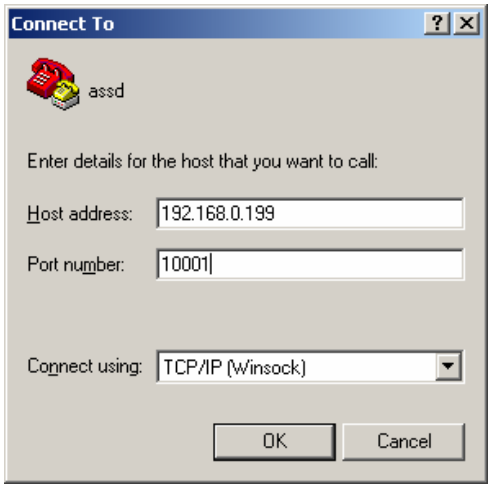
1. Use Redirector to assign a Virtual Com Port to the NetPort, you can then use your existing application software to communicate via COMx over the Ethernet without any TCP/IP knowledge. (where x is the Com Port number you have configured in Redirector)

Redirector Note: Install Com Port Redirector according to the User Guide for the software. When selecting the **TCPPort**, enter a value of 3001. This cross maps through the NetPort to its internal port 14001 due to an offset in legacy code.
NetPort is factory set to Port 14001.

2. Use HyperTerminal-32bit (included in Windows Xp & Windows 2000) in Winsock mode to connect over the Ethernet to the NetPort.

Note: Run HyperTerminal form the Accessories\Communications menu. Select **TCP/IP (Winsock)** mode from the pull-down menu.

Enter the IP Address of your NetPort and 10001 for the port number:



If HyperTerminal does not successfully connect, check that you have entered the IP addresss and Port number correctly. Additioanlly, check that the NetPort settings match the baud rate and port number you have entered in HyperTerminal.

If you have an application already which can talk to a "TCP/IP Socket"

You need to configure your Application to use Socket number 10001 and then change the corresponding socket inside NetPort to be 10001 as it is factory set to 14001.
To do this you can use:

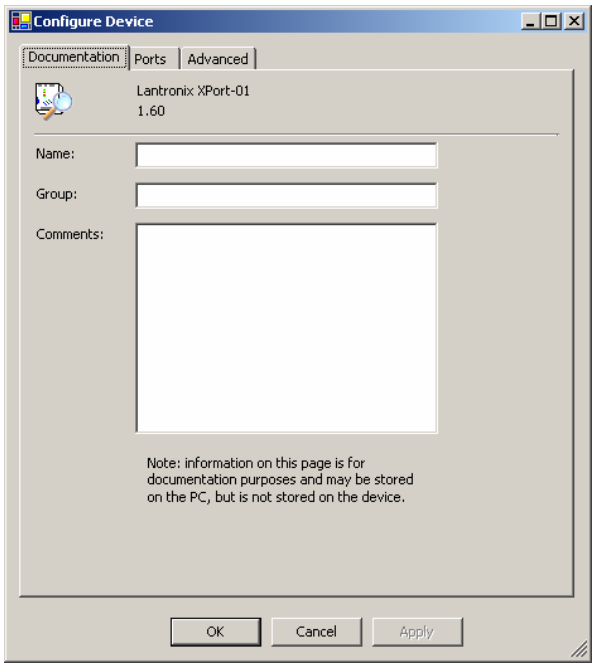
- Telnet (ascii menus over the network)
- Web Config (via any webrowser)
- Device Installer fields

See the NetPort User Manual for descriptions of these methods

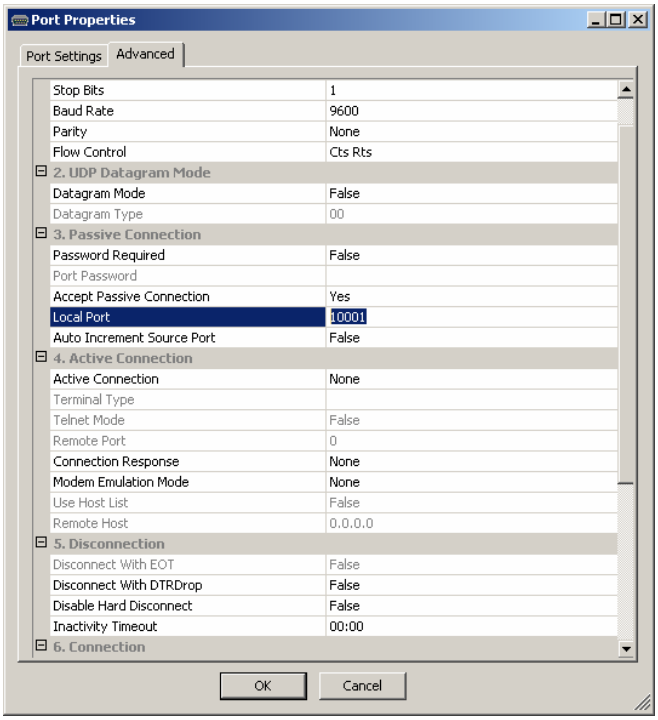
Note: *It is possible to configure NetPort via the RS232 port using an application such as HyperTerminal. See section: Configuration via the Serial Port.*

For speed we will check/change NetPort's settings via the DeviceInstaller Configuration Fields. To do this:

- Select the NetPort in DeviceInstaller
- Click on **Configure** and you will see the following:



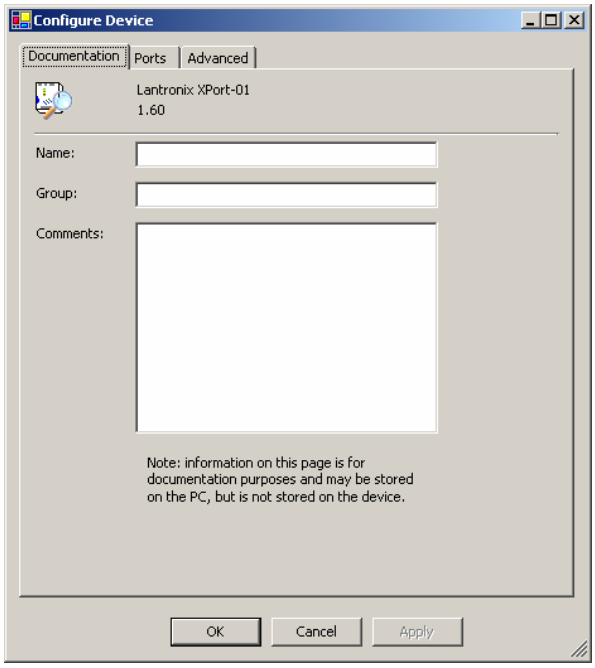
- Select the **Advanced Tab**:



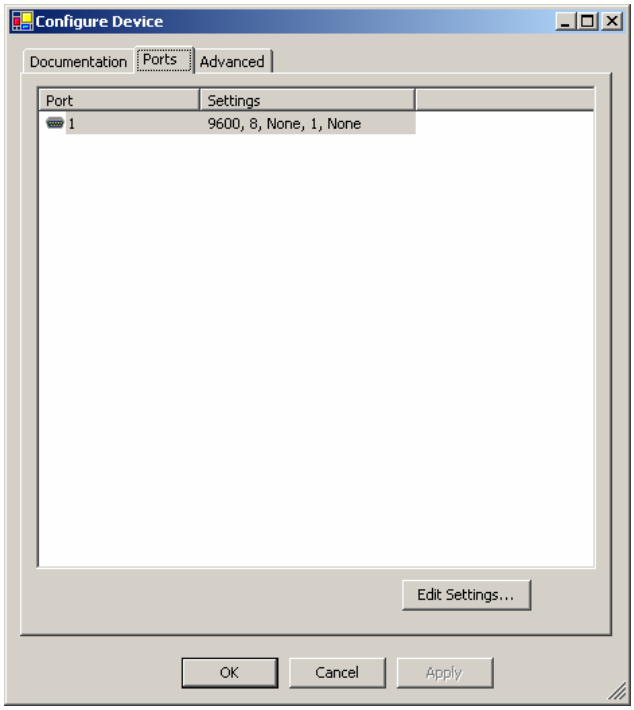
- Change the **Local Port** to 10001 and click on **OK**
- Click on **OK** in the **Edit Setitings** menu, also click on OK in the Ports menu.
- The NetPort will then reboot to save the settings and these will be stored in Flash Memory .
- NetPort is now ready to use with your equipment.

Changing NetPort's Serial Parameters to connect to your Equipment

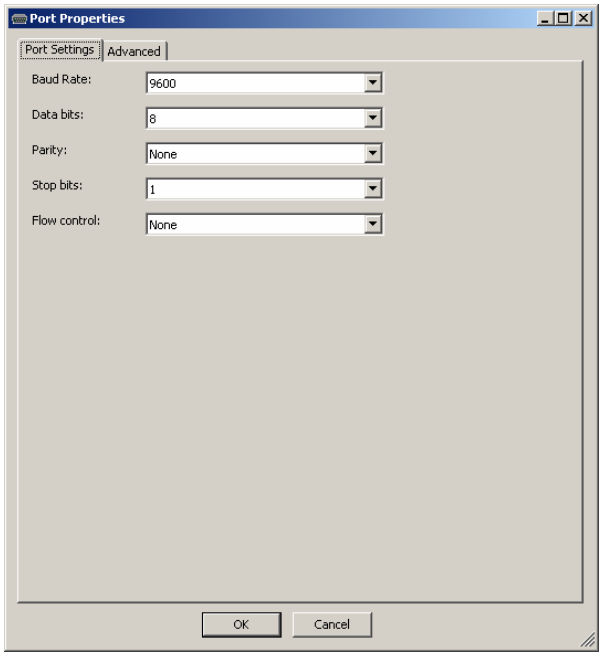
- Select the NetPort in DeviceInstaller
- Click on **Configure** and you will see the following:



- Select the **Ports Tab**:



- Click on **Edit Settings**:



- Here you can edit the basic serial settings, click on the **Advanced** tab for more.
- When you have made your changes, Click on **OK** in the **Edit Setitings** menu, also click on **OK** in the **Ports** menu.
- The NetPort will then reboot to save the settings and these will be stored in Flash Memory .
- NetPort is now ready to use with your equipment.