



IP Testing



Application Note HOWTOPIP-1

xDSL



HOW TO SET AN IP PING TEST RUNNING

PING testing on the 10 base T port to a PC or other data terminal

One of the simplest tests for checking IP routing is a PING test. The Aurora Presto will run multiple PING generation via the ADSL or 10 base T Ethernet port. The simplest application of this function is to PING a PC or terminal on the 10 base T interface.

To start this test the Aurora Presto must be connected to the PC or IP enabled terminal by connecting an Ethernet cross-over cable (Trend part: 437353) between the PC Ethernet card and the 10 base T interface on the tester. Figure 1 illustrates this.

Setting up the Aurora Presto

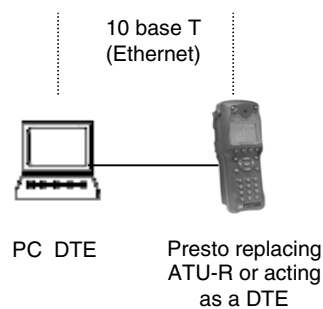
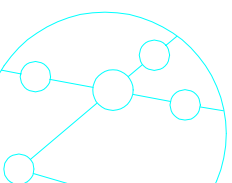


Figure 1 Aurora Presto tester to PC PING test configuration

1. Start the Aurora Presto and select the first menu headed **Select Test Mode**. From this menu select the option **Other Tests**.



2. From the second **Select Test Mode** screen choose **Ping Test** and press the 'Enter' key.



- This will select the **Ping Test** menu. There are three function keys available. **F1** (Start test), **F3** (IP settings) and **F4** (Ping test settings).



It is required to set up both the IP and the Ping test settings. This is now described.

Setting up the IP settings

- Press F3 to show the IP Setup screen (see below). Each parameter may be selected using the arrow keys and the 'enter' button and then altered. The Src or Source address must be changed to for example 001.001.001.002 (different from the PC -see later). The default gateway DGW must be set to all zeros and the Subnet Mask, Msk must be set to 255.255.255.000. The IP Type or physical layer can be set to IEEE or DIX but DIX is more common so this is recommended initially. When the settings have all been changed press the ESC button to return to the **Ping Test** screen.



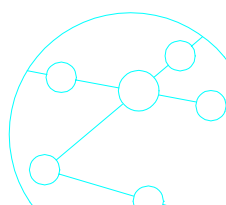
Setting up the PING Test

- Press F4 to show the Setup Ping Test screen (see below). Each parameter may be selected using the arrow keys and the 'Enter' button and then altered. Further parameters than those shown on the screen to the right may be viewed by scrolling down or up using the UP/DOWN arrow keys.



Recommended settings are provided in the list below:

- Pings: 0 (continuous)
- Timeouts: 500 (leave as default)
- Ping Length: 100
- Dst: (destination address = the IP address of the PC to be PINGed)
- Pause (mSec): 50 (leave as default)



IP Testing

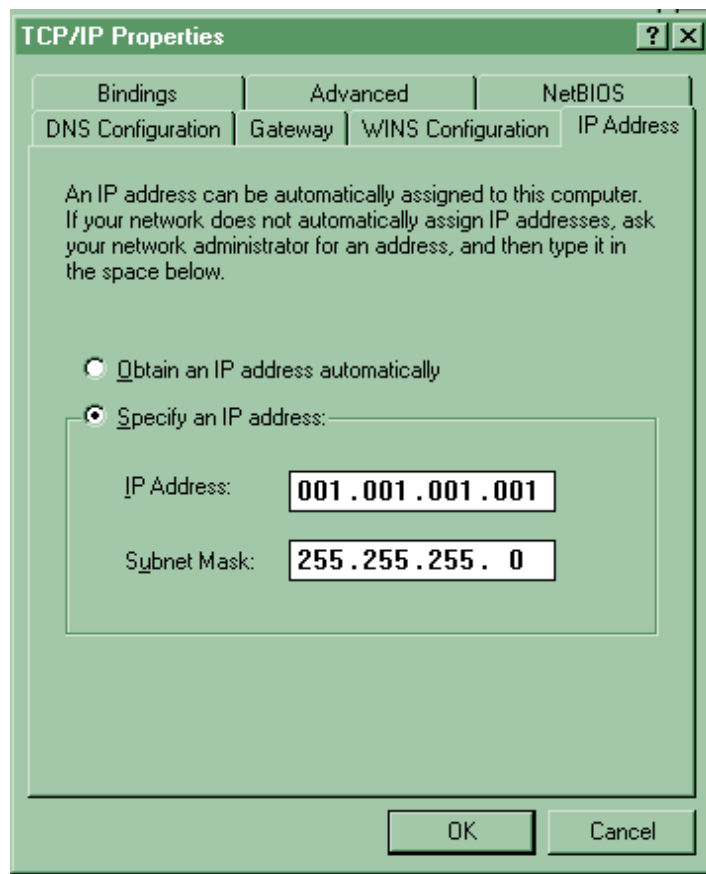
Setting up the PC (when using MS Windows™ 95/98)

When the settings have all been changed press the ESC button to return to the **Ping Test**.

The set-up of the Aurora Presto is now complete. Now the PC or device to be PINGed must be set up.

SETTING UP THE PC (WHEN USING MS WINDOWS™ 95/98)

1. From Windows Control Panel select the Network ICON.
2. Select the TCP/IP properties to show a dialogue box similar to that shown in the diagram below.



3. Select the option 'Specify an IP address'.
4. Enter an IP address for example 001.001.001.001
5. Enter a Subnet Mask of 255.255.255.0
6. Click on the OK button and answer YES to the option to restart the computer.

7. It is a good idea to power down and re-boot both the PC and the Aurora Presto once this procedure is complete to prevent any glitches causing the 10 base T interfaces to lock up.
8. From the START button on the Windows screen select RUN and enter the command: ping 001.001.001.002 -t (where this is the IP address of the tester).
9. You should now see a DOS window with the ping results.

The PING test from the Aurora Presto may now be activated by pressing the F1 or Start key from the Ping Test window. The tester will continue to run the Ping test until the F1 or Stop button is pressed.

Notes:

- The results if the PING test may be captured by starting a capture session prior to running the PING test. Please refer to the user guide for information on starting a session.
- It is often necessary to re-boot devices with 10 base T interfaces after cable disconnection to free interface lock-up problems.
- It is not necessary to allocate the 10 base T interface on the Aurora Presto since this is automatically selected as a PING port by the MAC learning bridge inside the Aurora Presto.
- Testing through a HUB will require a straight through type 10 base T cable between the Aurora Presto and the HUB.

