Testing PCI/ISA/PCMCIA Serial Cards

Instructions on How to Use HyperTerminal to Test Serial Cards

Version: 1.0

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![brainboxes logo]

1. Introduction

This document describes how to use the Microsoft HyperTerminal application in order to prove that your Brain Boxes serial card is functioning correctly. This assumes that the card is correctly installed. Windows 2000 Professional is used in the example. However, the document also applies to Windows 9x, Millennium, NTx and XP.

In this example the card installed is a CC-257 RS232 2-port PCI card on "COM1" but it can be applied to any COM label.
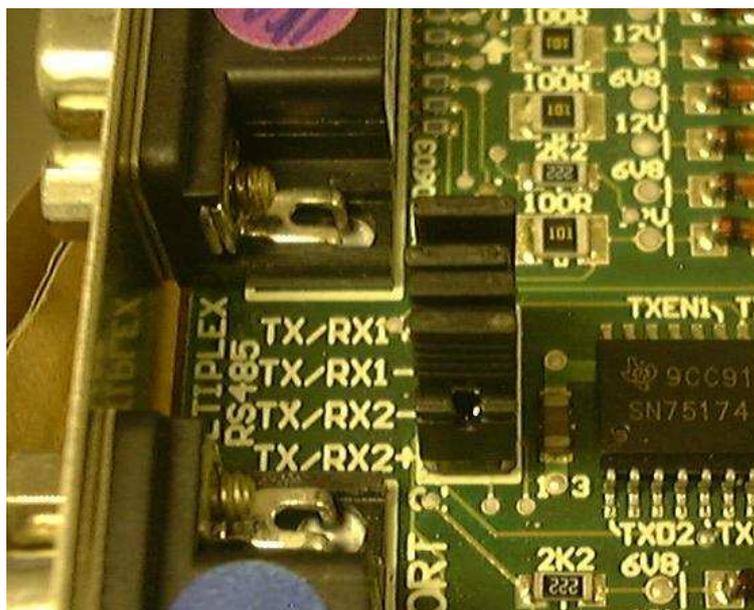
2. Loopback for RS232 serial cards

On the 'D' type connector, electrically short pins 2 and 3. This can be easily achieved by placing an electrical jumper over the pins. See below:
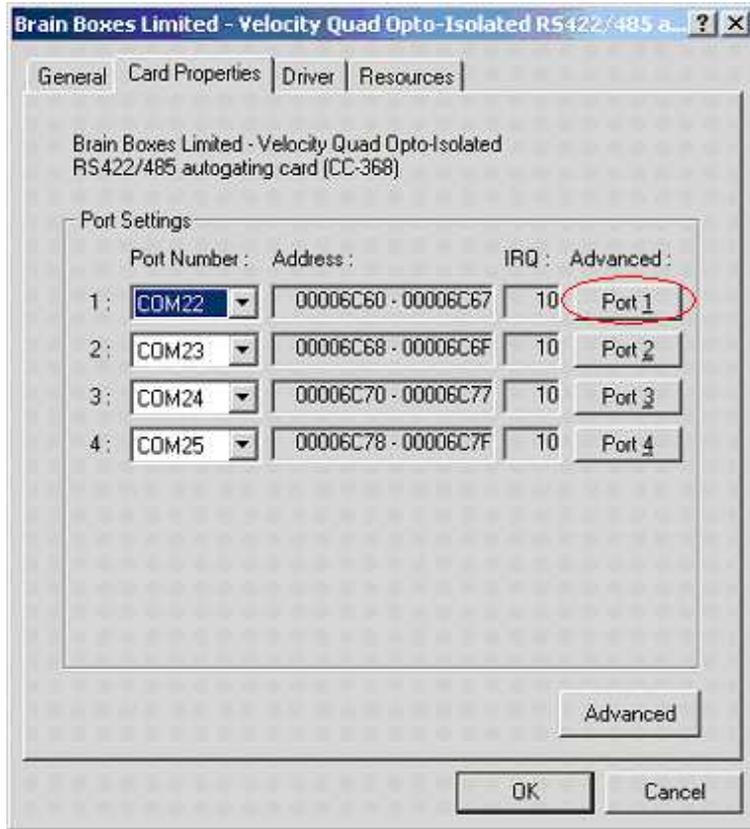

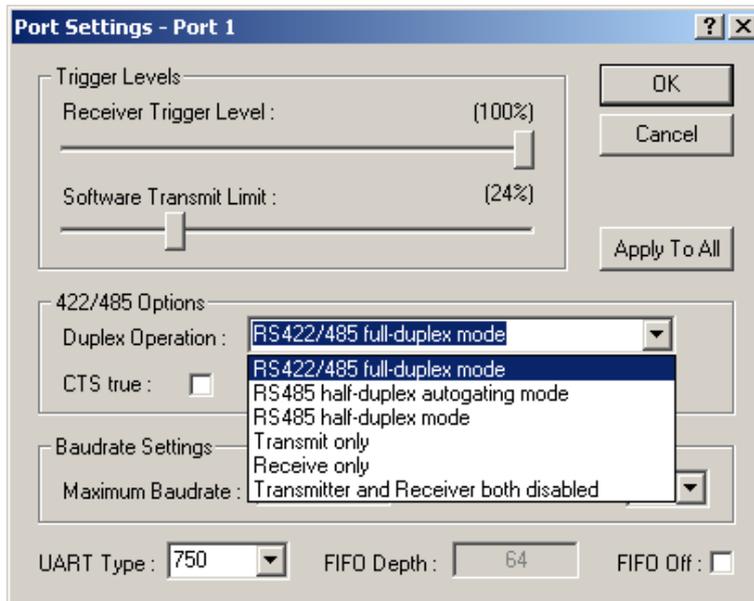# 3. Loopback for RS422/485 serial cards

On the card there are a set of multiplex jumpers. These are the set nearest to the 'D' type connectors. They need to have the jumpers on, i.e., Tx+ shorted to Rx+ and Tx- shorted to Rx-. See below:

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Go to Device Manager (Control Panel/System/Hardware) and double click on the card's entry under Multi-port Serial Adaptor (Multi-Function Adaptor in Window 9x). In the Card Properties tab click on the port button next to the COM port to be tested:

Select RS422/485 full-duplex mode:

4. Using HyperTerminal

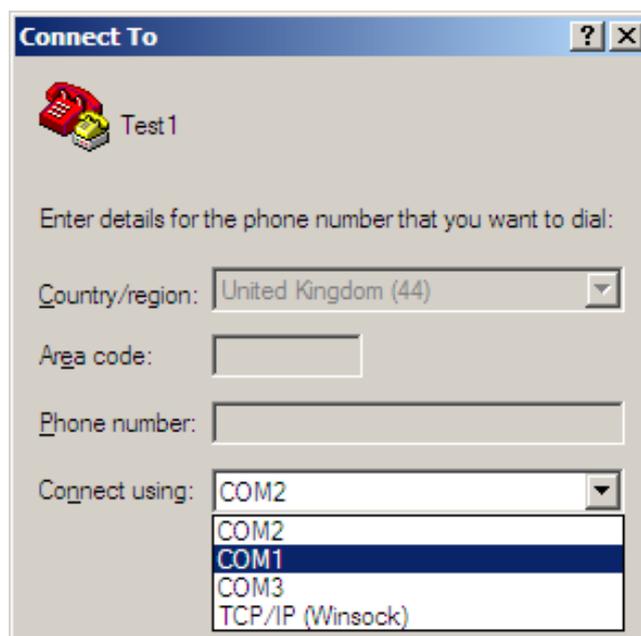Set up the card to be able to perform a loopback. See 2 and 3.

From the Start menu select Programs\Accessories\Communications\HyperTerminal or perform a search in My Computer for "HyperTerminal"

Double click on the application and the following window will appear:

Type in a connection identifier name say "Test1" and click OK. The only restriction here is it cannot be a device name e.g. "COM1"
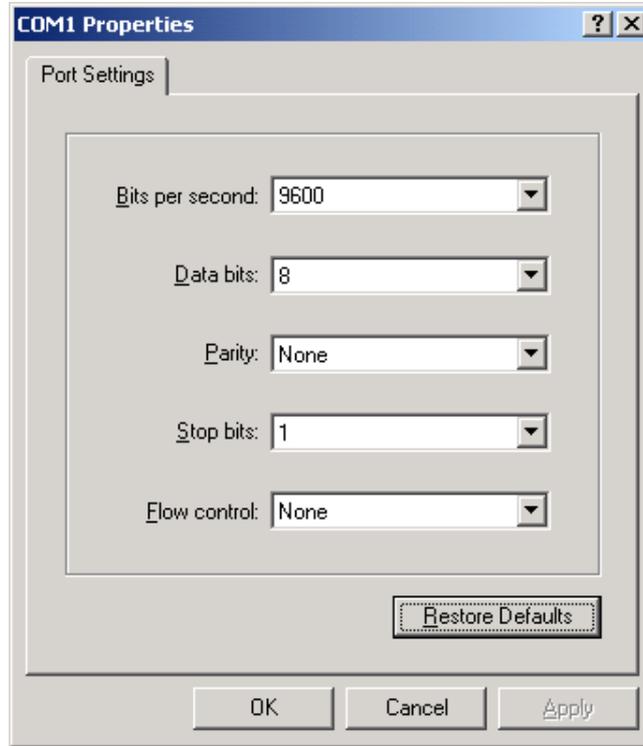
You will then be presented with the following dialogue box:

Here it is possible to choose the COM port to test using the drop down box. In this example we will use the onboard port COM1. Click OK.

Please note in Windows 9x and Millennium only, COM labels COM1 to COM4 are available. If the port under test is COM5 then the COM label will need to be changed from Device Manager.
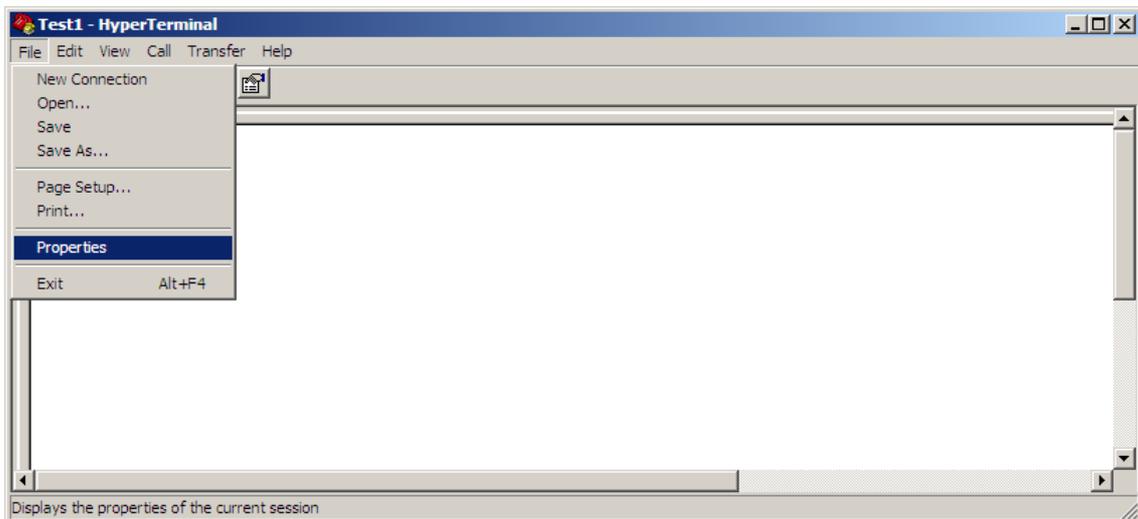
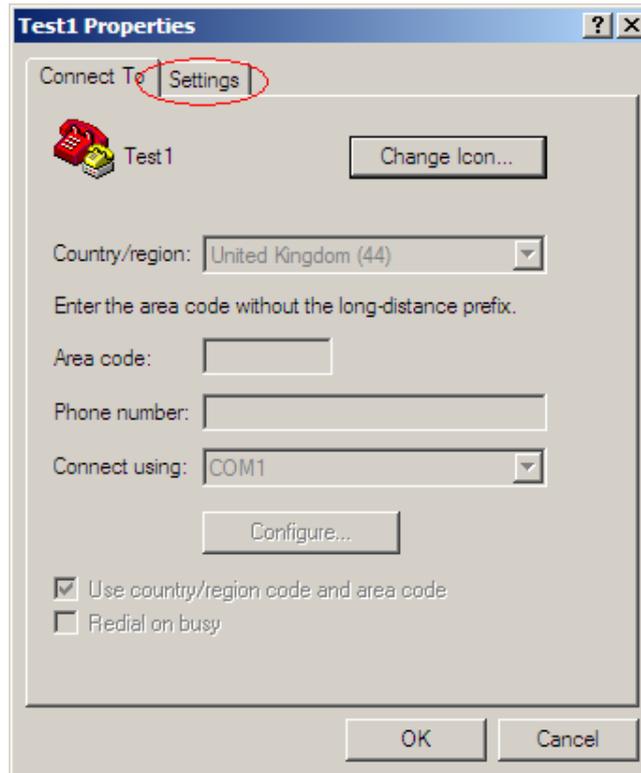The next dialogue box will ask for the Port Communication Settings:

Click "Restore Defaults" then OK.

If all went well you would then be give a blank dialogue box with a flashing cursor. The COM port is now open and ready to transmit and receive data.
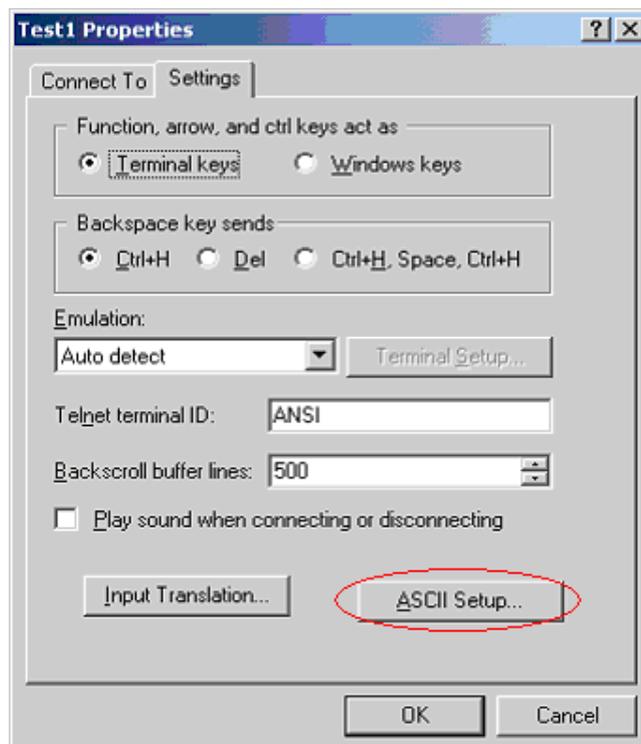
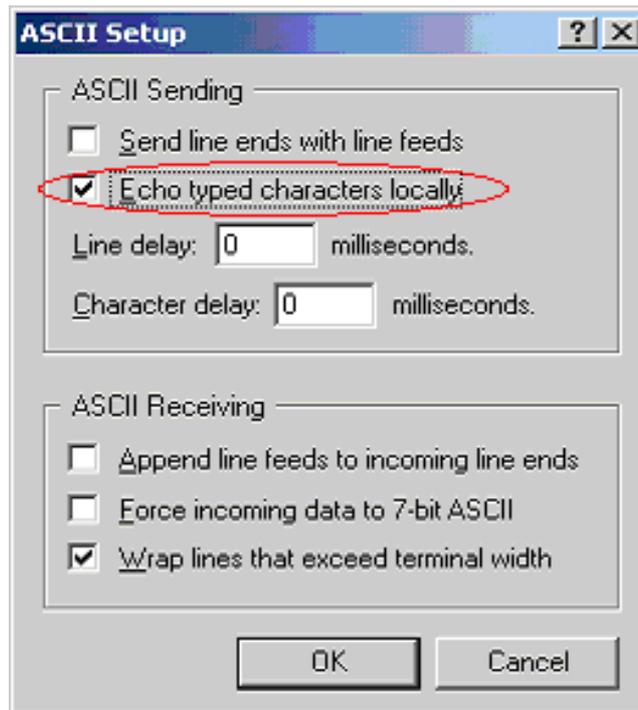From the File menu choose Properties:

Click on the Settings tab:
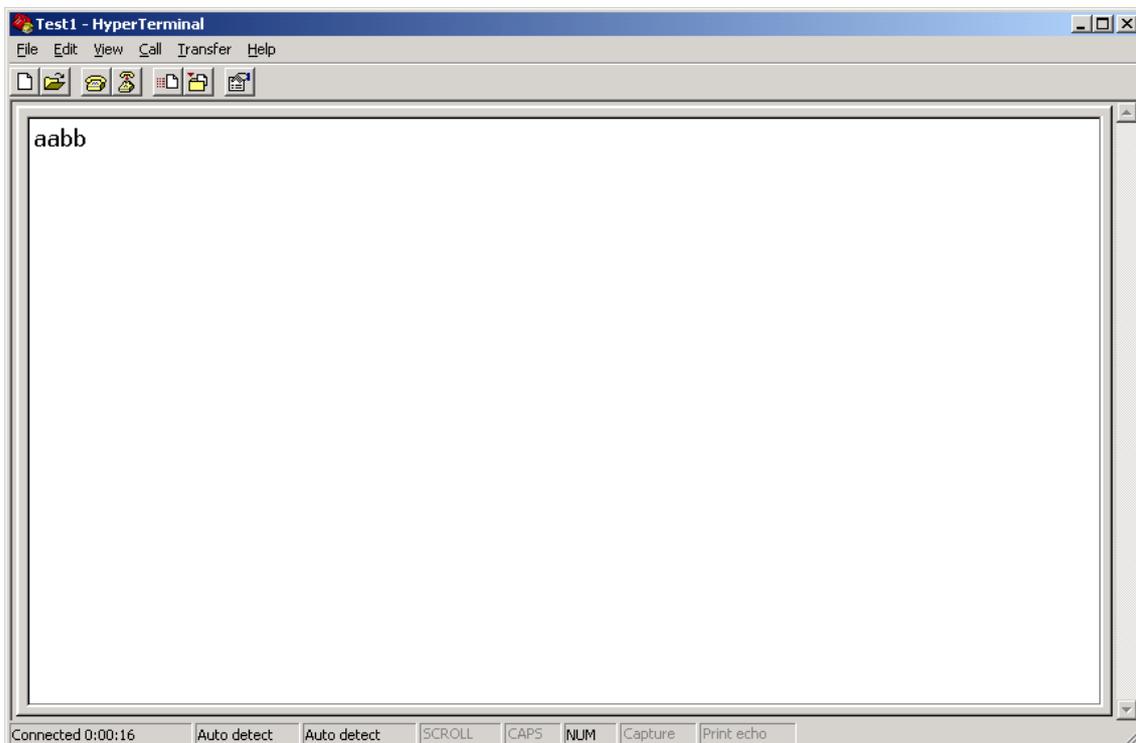
Click on the ASCII Setup button:

Then check the "Echo typed characters locally" tick box:

Click OK for both open dialogue boxes and the original blank screen will appear again. Ensure the loopback connector is connected as described in section 2/3.

Now, every time a character on the keyboard is pressed two will appear on the screen:

This means that characters are being transmitted and received through the loopback. If you don't believe us remove the loopback connector. This time you should only see one character each time a key is pressed.

Please note in Windows 98 only one character will be seen. This is the received character.

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Version History

Version	Date	Author	Checked By	Comments
1.1	17/12/02	Mike Wilcox	Gavin Jewel	

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