How to test communication ports on a PC by Austin Blanco

Required Hardware:

1. Null Modem serial cable female – female. (DB9 connectors). Both ends should look like the picture below:



2. Minimum of 2 serial Ports (If using a PCI card you cannot connect port 1 to port 2 on the same card, however you CAN connect one on-card port to another extension port which is connected to the same card)

Operation:

1. Connect null modem cable to the desired ports

2. Open Start Menu -> Programs -> Accessories -> Communications -> Hyperterminal.

3. For a name enter "Test Port 1" and click OK

Connection Description		<u>?</u> ×
New Connection		
Enter a name and choose an	icon for the connection:	
Name:		
test PORT1		
lcon:		
	S 🛞 🖉	X
	OK Can	cel

4. Select "Connect Using" and choose the first port which the cable is connected to. If you don't know the port number don't worry about it as you can change this later.

Connect To	<u>?</u> ×	1			
test PORT1					
Enter details for the phone number that you want to dial:					
Country/region:	United States (1)				
Area code:	916				
Phone number:					
Connect using:	Conexant HDA D110 MDC V.92 M Conexant HDA D110 MDC V.92 Moder Standard Modem COM10 COM14				
	COM4 TCP/IP (Winsock)				

5. Set the following comm settings in the next window as shown in the screenshot below. When finished click OK:

COM	14 Properties					? ×
Po	ort Settings					
	Bits per second:	9600			•	
	Data bits:	8			•	
	Parity:	None			•	
	Stop bits:	1			•	
	Flow control:	None			•	
Restore Defaults						
	0	к	0	Cancel	A	oply

6. Under the File menu click Properties. In the window that appears click the Settings Tab. Next click the ASCII Setup button. In this window check both top boxes and then check the "Append line feeds to incoming line ends" Click OK when finished to close all setting windows:

test PORT1 Properties	? 🗙 ASCII Setup	? ×
Connect To Settings 1 Function, arrow, and ctrl keys act as Terminal keys O Windows keys Backspace key sends Ctrl+H O Del O Ctrl+H, Space, Ctrl+H	ASCII Sending Send line ends with line Echo typed character Line delay: 0 milli Character delay: 0	ie feeds s locally seconds. milliseconds.
Emulation: Auto detect Terminal Setup Telnet terminal ID: ANSI Backscroll buffer lines: 500	ASCII Receiving Append line feeds to in Force incoming data to Wrap lines that excee	ncoming line ends o 7-bit ASCII d terminal width
Input Translation ASCII Setup 2 OK Cance	el	

7. Repeat Steps 1 through 6 but select the second com port you've connected your cable to.

8. Once both windows are open make sure you've opened both ports using the phone icon shown below. The left handed icon (currently grayed) is the "Call" button:



9. In the terminal window type several characters and press enter. You should see the characters types in one terminal appear automatically in the second window. If this works you have successfully tested both ports.

10. If the above doesn't work and you need to test which ports to use hang up the connection (disconnect). Then click File -> Properties, and change the port number in the "Connect using" box. Click OK and reopen the port – then repeat step 9. Repeat as required until you find both ports.