## Using Test Terminal to test RS485 serial ports

You will need a STRAIGHT through cable connected between the two ports in question.

Use wcom2 as the test application. (Included in PortVision DX or download here: <a href="http://downloads.com/utilities/windows/comtrol\_utility/Comtrol\_Utility\_Package\_V4.11.msi">http://downloads.com/utilities/windows/comtrol\_utility/Comtrol\_Utility\_Package\_V4.11.msi</a> )

## This can get a little tricky.

Open wcom with the two ports in question. This sample uses com40 and com41:

Open Ports		2
Select Ports		OK
COM38 COM39	<u>^</u>	Cancel
COM40 COM41	-	Settings
COM42 COM43		
COM44 COM45 COM46 COM47	~	
C Select Range		
For example: 3-15,21,45	,51-56,74	

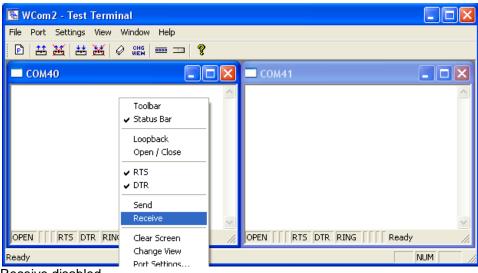
🔚 WCom2 - Test Terminal	
<u>File Port S</u> ettings <u>V</u> iew <u>W</u> indow <u>H</u> elp	
🖻   🗮 😹   📇 😹   🖉 🕮   🚥 🎞   🤗	
🗖 сом40	Сом41
2	
8	
OPEN RTS DTR RING Receiving	OPEN [[ RTS DTR RING ] [ Receiving
Ready	NUM

Note both ports showing Receiving on the status bar

Right click in both com windows and remove the checkmark for Receiving

陆 WCom2 - Test Terminal			
File Port Settings View Window Help			
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Сом40	СОМ41		
		Toolbar 🗸 Status Bar	
		Loopback Open / Close	
		✓ RTS ✓ DTR	
		Send V Receive	
OPEN TR RING Receiving		Clear Screen Change View	eceiving 🏑
Ready		Port Settings	NUM

Here the 'Receive' is shown as enabled with a checkmark on it.



Receive disabled

Both com ports will now show Ready on the status bar

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D   # ₩   # ₩   Ø #   == ⊐   ?	
COM40	
	~
	~
OPEN    RTS DTR RING    Ready // OPEN    RTS DTR RING    Ready	1.
Ready	

Right click in ONE window and select the Receive option from the pop up. Right click the OPPOSITE window and click Send

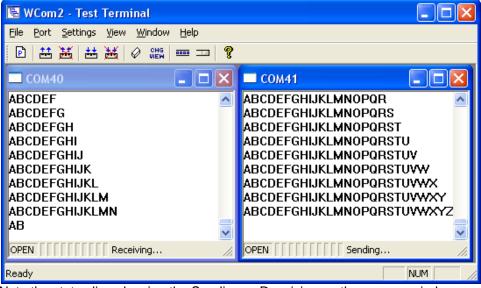
陆 WCom2 - Test Terminal	
<u>File P</u> ort <u>S</u> ettings <u>V</u> iew <u>W</u> indow <u>H</u> elp	
🖻 🖽 😹 🖶 😹 🖉 🏭 🚥 🎞 💡	
Сом40	🗖 СОМ41 📃 🗖 🗙
	ABCDEFGHIJKLM ABCDEFGHIJKLMN0 ABCDEFGHIJKLMN0P ABCDEFGHIJKLMN0PQ ABCDEFGHIJKLMN0PQR ABCDEFGHIJKLMN0PQRST ABCDEFGHIJKLMN0PQRSTU ABCDEFGHIJ
OPEN [[[[[[]]] Sending	OPEN [[[[[[[[ Receiving
Ready	NUM

In this case, com40 is sending data and com41 is receiving the data which is visually confirmed by the data scrolling across the com41 window.

If you do not see the data being received it MAY be necessary to also disable the RTS and DTR Option from the right-click pop-up menu in each com port.

Right-click and remove the checkmark on the **Sending** com port. Right-click and remove the checkmark on the **Receiving** com port. Now again, neither com port is sending or receiving but shows ready on the status bar.

Reverse the sending/receiving windows one at a time. Set the Receiving option first, then in the opposite window select the Sending option.



Note the status line showing the Sending or Receiving on the reverse windows. Data will now be seen scrolling in the com40 window. Com41 will be static as it is not receiving data but is transmitting data.

RS485 2 wire mode is a half duplex protocol. It is not able to send and reseive at the same time.