SocketMode Serial Port Testing with Putty

Start by resetting the DeviceMaster to factory defaults. Open the web page of the DeviceMaster. Scroll to the bottom of the page and click the Reboot button

A confirmation page will be presented.

Checkmark the option "Set configuration for all ports to factory default settings"





Re-open the web pages.

Click on the appropriate port (in this example port 1 is selected)

The serial settings do not matter in this case.

Select ONLY the enable option in the TCP Connection Configuration. Leave everything else at defaults.

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Edit Port I Configuratio	on	- 1
Serial Configuration 🕼		
Mode:	RS-232	
Baud:	9600 💌	
Parity:	none 💌	
Data Bits:	8 🕶	
Stop Bits:	1 💌	
Flow:	none	
RTS:	off 🔹	E
EOL:	disabled • 00 00 (hex)	
Input Timeout:	0 ms	
Rx FIFO Disable:		
Tx Complete After Close:		
TCP Connection Configuration 🖗		— L
Enable:		
Listen:	Port: 8000	
Connect To:	0.0.0.0 To Port: 0 From Port: 0	
Connect On:	Always Data	
Disconnect On:	Idle	
Idle Timer:	300	
Telnet Com Port Control Option (RF	C 2217):	
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	C = 100%	- 1
Done	Unternet Protected Mode: Uff Var	

Scroll to the bottom and click Save

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UDP Listen Port:	7000				
Clone Port	Undo Changes Save Help				(III) *
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Click **OK** on the confirmation page.

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If necessary, close and re-open the web page. You should show this

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Network Enal	bling Devices	onfic	uration (
	Software:	Socke	tServer 7.11	=
	IP Config:	Static		_
• • • • •	IP Address:	192.16	58.2.22	_
	IP Netmask:	255.25	5.0.0	_
	IP Gateway:	192.16	8.0.254	_
DEV/CE+MASTER	Configure Net	work		
/	Configure Sec	urity		
	Configure Em	ail Mes	sages	
	Configure RFC	:1006 (ISO over TCP)	_
TCP Connection Status	Port	1	Port 2	
Enabled:	Yes		No	
Local:	0.0.	0.0:0	0.0.0.0:0	
Remote:	0.0.	0.0:0	0.0.0.0:0	
Rx bytes:	0		0	
Tx bytes:	0		0	-
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Attach the Loopback Plug supplied with the DeviceMaster to the appropriate physical port. (In this example, port 1)

This test must use the Loopback Plug. If you do not have a Loopback Plug you may download <u>ftp://ftp.comtrol.com/tech_misc/cabling/loopback-plugs.pdf</u> to build your own.

Go to PortVision Plus

High-light the appropriate DeviceMaster and right-click on it.

🕅 PortVision Plus		_				
<u>File Folder D</u> evice <u>V</u> iew <u>T</u> oo	ols <u>H</u> elp					
Scan Refresh Config	A A A A Save Load Uploa	ad Reboot Web I	Mgr Notes	🥩 🚺 Help About	Exit	
Scan Refresh Config Save Load Upload Rebot Web Mgr Notes Help About Exit						
Customers [0 of 0 online]	 Device Name 	Model	IP Address	MAC Address	Software Version	Status
mine [0 of 0 online]	Device 28:FF:F5	RTS-2P (1E)	192.168.2.22	00:C0:4E:28:FF:F5	SocketServer 7.11	ON-LINE
1 Ports [7 of 7 online]	Device 29:FF:F6	RTS-2P (2E)	192.168.2.23	00:C0:4E:29:FF:F6	NS-Link 7.15	ON-LINE
2 Ports [4 of 4 online]	Device 2A:FF:F9	RTS-2P (DB9/1E)	192.168.2.24	00:C0:4E:2A:FF:F9	NS-Link 7.15	ON-LINE
4 Ports [2 of 3 online]	Device 2B:FF:F1	RTS-2P (DB9/2E)	192.168.2.25	00:C0:4E:2B:FF:F1	NS-Link 7.14	ON-LINE
For Help, press F1						2 Ports 4 1 Ready //

Select "Telnet / SSH" from the pop-up menu. This dialog will appear

Telnet / SSH Set	tings 🗾
€ Telnet C SSH	Selected Port : 23
	OK Cancel

Enter the appropriate socket number (In this example port1 default socket is 8000)

Telnet / SSH Settings	— X —
⊙ Telnet	Selected Port : 8000
	OK Cancel

Click OK

Putty will open connected to the port1 serial port.

B 192.168.2.22 - PuTTY	x
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	÷

Enter 123

🛃 192.168.2.22 - PuTTY	 -	
112233		<u>^</u>
		*

If 112233 is displayed, Putty needs to have local echo disabled.

In many cases, Putty will automatically know when to disable local echo. If it does not however, You may force it off.

To disable local echo:

Go to C:\Program Files (x86)\Comtrol\PortVision Plus and run putty.exe This will open the PuTTy Configuration pages.

PuTTY Configuration	? X
PuTTY Configuration Category:	Basic options for your PuTTY session Specify the destination you want to connect to Host Name (or IP address) Port 22
Window Window	Connection type: <u>Raw</u> <u>Telnet</u> Rlogin <u>SSH</u> Serial Load, save or delete a stored session Saved Sessions Default Settings
⊡ · Connection	Sa <u>v</u> e Delete
<u>About</u> <u>H</u> elp	Close <u>wi</u> ndow on exit: Always Never Only on clean exit Open <u>Cancel</u>

Select "Terminal"

😵 PuTTY Configuration	?
Category:	
Category: Session Logging Termina Keyboard Bell Features Window Behaviour Translation Selection Colours Colours Colours Connection Data Proxy Telnet Rlogin Rlogin Rlogin	Options controlling the terminal emulation Set various terminal options Auto wrap mode initially on DEC Origin Mode initially on Implicit CR in every LF Implicit LE in every CR Use background colour to erase screen Enable blinking text Answerback to ^E: PuTTY
	Line discipline options Local echo: Auto Force on Force off Local line editing: Auto Force on Force off
Serial	Remote-controlled printing <u>Printer to send ANSI printer output to:</u> None (printing disabled)
About <u>H</u> elp	Open Cancel

Select the option for Local echo: to "Force off"

Real PuTTY Configuration	? * *
Category:	Options controlling the terminal emulation Set various terminal options
	Auto wrap mode initially on DEC Origin Mode initially on Implicit CR in every LF Implicit LF in every CR Use background colour to erase screen Enable blinking text
	Angwerback to E: PuTTY Line discipline options Local echo: Auto Force on Errore officient
	Local line editing: Auto Force on Force off Remote-controlled printing <u>Printer to send ANSI printer output to:</u> None (printing disabled)
About Help	<u>Open</u>

Go back to the Sessions menu Select Default Settings and click on **Save** Close the PuTTy Configuration window.

😵 PuTTY Configuration		? ×
Category:		
Category: Session Logging Terminal Keyboard Bell Features Window Competition Selection Translation Colours Connection Proxy Telnet Rlogin SSH Serial	Basic options for your PuTTY ses Specify the destination you want to connect Host Name (or IP address) Connection type: Baw Ielnet Rlogin SSH Load, save or delete a stored session Savgd Sessions Default Settings Close window on exit:	sion t to Port 22 Serial Load Save Delete
About Help	Open	<u>C</u> ancel

Close the open telnet session.

Re-open the telnet session using PortVision Plus using the 8000 port.

Te	Inet / SSH Setting	s	x
	 Telnet C SSH 	Selected Port : 8000	
		OK Cancel	

PuTTy will open enter 123



Single digits should appear. Remove the Loopback Plug from the DeviceMaster.

Enter abc

No characters should be displayed as the return path is open.



Reattach the Loopback Plug.

Enter in abc and the characters should be displayed.



This concludes the local echo test.

Other telnet applications will have other configuration options. It may also be necessary to configure the end point device to not echo characters. By itself, the DeviceMaster is unable to echo.

If after performing the above test procedure, echo is seen, or command options such as the arrow keys are not properly handled when connected to a device such as a console port, then it will be necessary to configure the RFC2217 option in the web pages of the DeviceMaster.

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	Software:	SocketSe	erver 7.11	E
	IP Config:	Static		
\cdot	IP Address:	192.168.	2.22	
	IP Netmask:	255.255.	D.O	
	IP Gateway:	192.168.	0.254	
DEV/CE+MASTER	Configure Net	work		
	Configure Security			
	Configure Email Messages			
	Configure RFC	C1006 (ISO	D over TCP)	
TCP Connection Status	Po	ort 1	Port 2	
Enabled:	No		No	
Local:	0.0	0.0.0:0	0.0.0.0:0	
Remote:	0.0	0.0.0:0	0.0.0.0:0	
Rx bytes:	0		0	-
To hotoe:	net Protected Mode: Of	f		¥

Re-open the web pages. Click on the appropriate port (in this example port 1 is selected)

Scroll to the 'TCP Connection Configuration' options

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TCP Connection Configuration 🔮		
Enable:		
Listen:	Port: 8000	
Connect To:	0.0.0.0 To Port: 0 From Port: 0	
Connect On:	🗌 Always 🗌 Data	
Disconnect On:	Idle	
Idle Timer:	300	
Telnet Com Port Control Option (RFC 2217)): 🔽	
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Done	😜 Internet 🦓 👻 🔍 100	0% ▼

Select the option 'Telnet Com Port Control Option (RFC2217)'

Scroll to the bottom and click Save

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0	0 0]		^
UDP Listen Port:	7000			
Clone Port Undo Changes Save Help			(III) *	
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Done	😔 Internet Protected Mode: Off	- @ -	🔍 100%	•

Click **OK** on the confirmation page.

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Retest for proper results.

Version 1.1 Added in RFC2217 option instructions for Console Ports that returned echo or did not accept proper command optios.

Version 1.0 Created 4/12/10 Created by Mac Harned