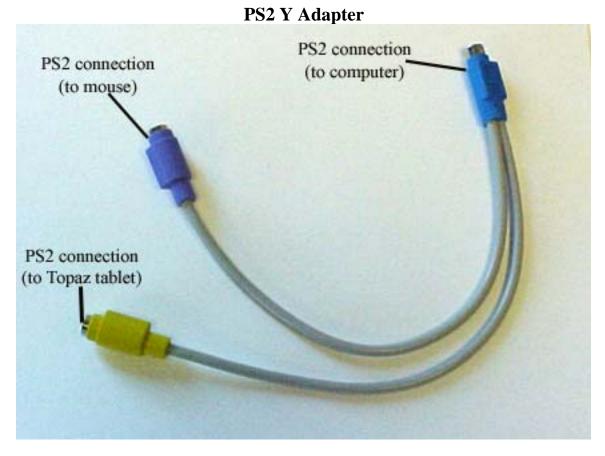
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This document is a troubleshooting guide to the setup process for a Topaz LCD serial tablet. After following the steps in this document if problems still persist contact a Topaz service representative.

To successfully connect a Topaz LCD serial tablet the user will need two Y adaptor cables.



This adaptor allows for power to be sent to the Topaz LCD serial tablet from the mouse (or keyboard) PS2 port while also allowing for full functionality and operation of the mouse device (or keyboard).

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Serial connection
(to Topaz tablet)

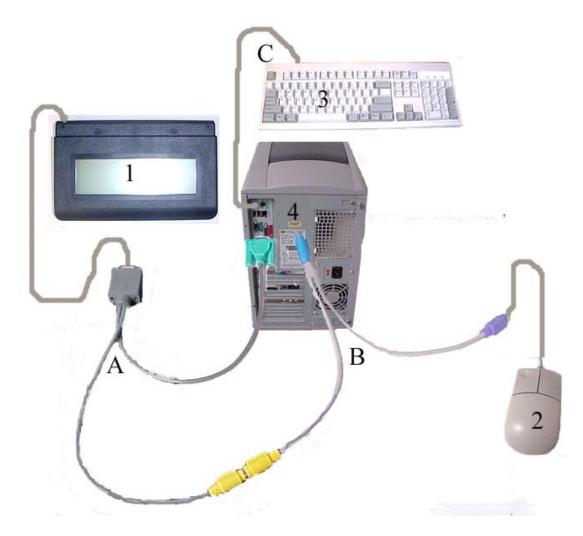
Serial connection
(to computer)

PS2 connection
(to PS2 Y adapter)

This Y adapter connects the Topaz LCD serial tablet to the computer's serial port and to the Topaz PS2 Y adapter.

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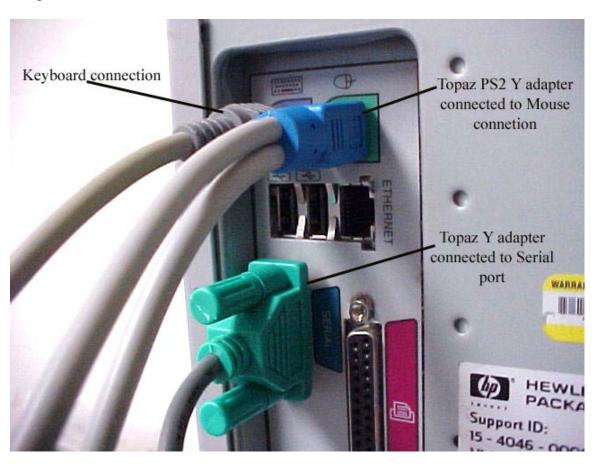
- A- Serial Y adapter connected to CPU and PS2 Y adapter
- B- PS Y adapter connected to CPU PS2 port, Mouse, and Topaz Serial Y adapter
- C- Keyboard connected to CPU Keyboard port
- 1-Topaz LCD Serial Tablet
- 2- Mouse
- 3-Keyboard
- 4-Computer

Connecting the Topaz LCD Serial tablet successfully

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The tablet needs power to function. There are two Y-cables provided to accomplish this. Install as follows:

- a. Unplug either the mouse or keyboard from its port (makes no difference which)
- b. Plug the single end of the PS2 Y adapter into the port (this will split the mouse/or keyboard port, making 2 ports out of 1)
 - c. Re-plug the mouse/keyboard into one of the splits (makes no difference which)
- d. Plug the PS2 end of the Serial Y adapter into the remaining split (it is the only connection on the darker-colored Y-cable that will fit)
- e. Plug the Topaz tablet into the male serial end of the Serial Y adapter (there is only one end on this cable that will fit the Topaz tablet)
- f. Plug the remaining end of the Serial Y adapter into a COM port on the back of the computer



(It may be necessary to reboot the computer for the mouse or keyboard to function again. Check for functionality after you have reconnected.)

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For Computers with No PS2 Ports

Many new computers do not have PS2 ports in which case a PS2 to USB adapter will be needed.



Using this adapter will allow for the user to only use the Serial Y adapter by plugging the serial port into the computer as before, and then using the adapter plugging the PS2 connector into a USB port. This will allow for the Tablet to be powered as well as all of the computers peripherals working in their native forms without the need for the PS2 Y adapter.

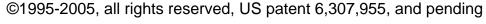
Testing for Power

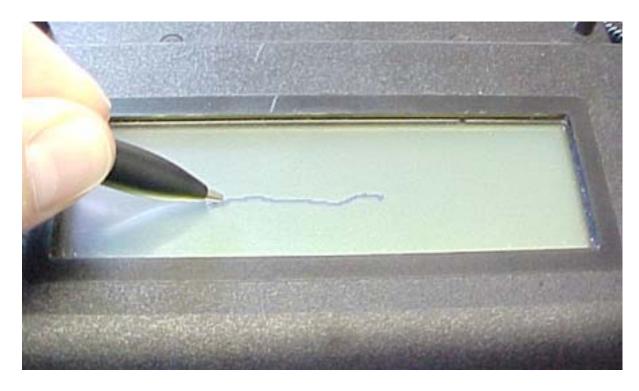
Once the Topaz LCD Serial tablet has been successfully connected to the Computer, it may be necessary to check that both the Tablet and Topaz pen are receiving power.

There are two tests to perform to make sure power is distributed properly:

- a. Follow the cable that extends from the back of the Topaz tablet to the connection it makes to the Y-cable. Unplug the tablet here. Watching the LCD screen of the Topaz tablet, reconnect the tablet to the Y-cable. If powered, a dark-colored "wave" will wash down the tablet's LCD screen from top to bottom. If no dark-colored "wave" is seen, then the tablet is not receiving power--check Y-cables, replace if possible, and test again.
- b. Once the previous test has been performed, and power is getting to the tablet, draw on the LCD using the Topaz pen. Electronic "ink" should appear under pen tip on the LCD as you draw, indicating the pen is functioning properly.

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If there is no ink being displayed, then the pen may not be receiving power.

TESTING THE TOPAZ PEN. ONLY NECESSARY IF B. ABOVE FAILS

(not for use with model TL460B)—

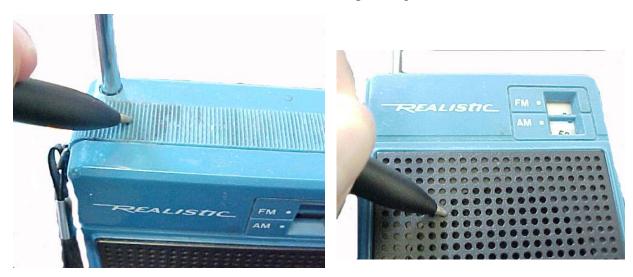
To test the pen independently, you can use any standard compact battery-operated or plug-in AM/FM radio. Follow these steps:

- a. Turn radio on to the AM band
- b. Move dial to about 550 (or 55, depending on radio controls)
- c. Between stations is best, where there is static



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d. Bring the pen up to the radio, and depress the tip directly on radio's surface, about 1-2 inches from antenna (if there is no antenna, on the speaker grill will work also).



If pen is working, the radio will emit a high-pitched interference noise. If pen is not working, or batteries are bad, nothing will happen. If pen does not function, try replacing the pen's batteries (found within the cap on the back of the pen). Battery type is 393, 1.5v "hearing aid"-type batteries. Additionally, make sure batteries are not loose in the battery chamber when installed.

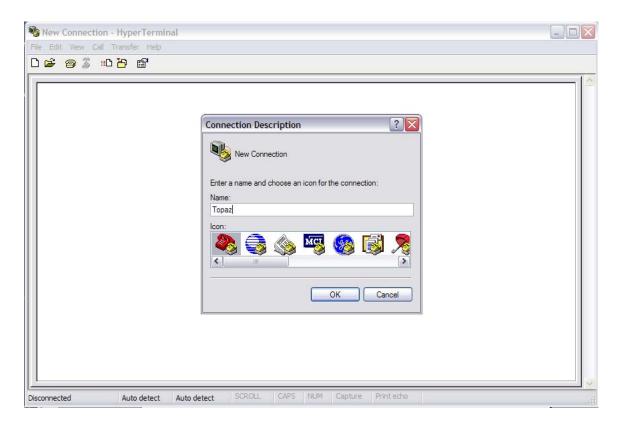
Once it has been determined that both the Topaz LCD Serial tablet and Pen are properly powered, the tablet connection to the CPU should be checked.

Using Hyperterminal to test the tablet connection,

- a. Click on Start...Programs...Accessories...Communications...HyperTerminal (the icon looks like a computer with a telephone). Open HyperTerminal. (If you cannot find HyperTerminal there, you can also search for it by clicking on Start...Search(or Find)...Files or Folders, and typing in"hypertrm.exe". Click "Search(Find) Now" to look for this file. Double-click to open once found.)
- b. When prompted to "Enter a Name and Choose an Icon", simply type in "topaz" and click OK

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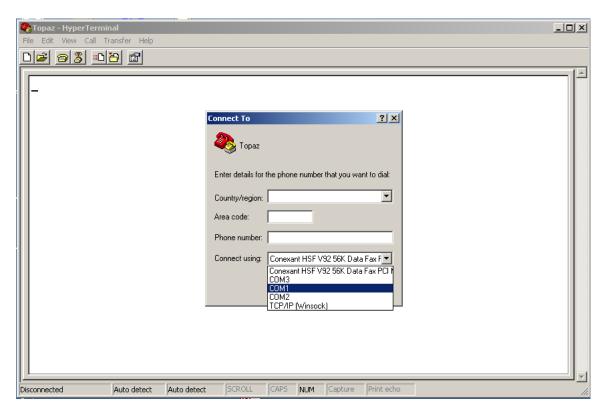


c. In the next window, locate "Connect Using", the fourth option. Using the arrow on the right, change this value to the COM port that the tablet is connected to (for example, COM1), and click OK (If you're not sure of the comport number, try COM1 first)

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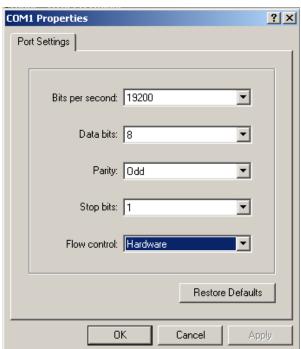
d. In the next window, change the "Bits Per Second" to 19200, then change the Parity to "Odd". The values should be as follows:

Bits per second: 19200

Data bits: 8 Parity: Odd Stop bits: 1

Flow control: Doesn't matter...leave

default value



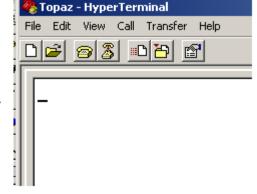
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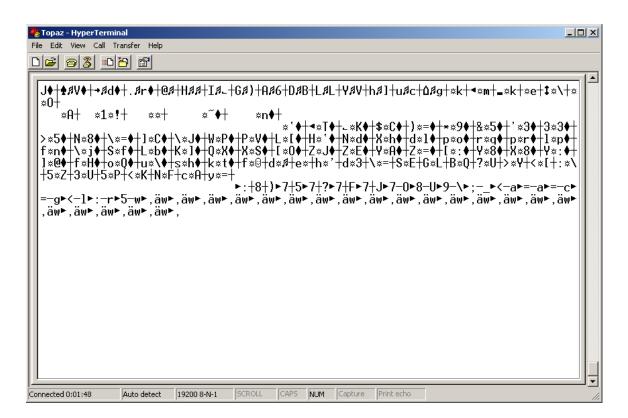
e. Click OK -- (If it says "Unable to Open Com", then com port is already being used by

another program...this will have to be resolved first.)

f. You should get a cursor blinking on a white background. Draw on the tablet, and see if the raw data is displayed as you draw--it will look like a series of random characters moving up and down the screen. If so, tablet is ok--close

HyperTerminal.





If there is no raw data being shown, or HyperTerminal could not open the port then check your computer. If you have another 9-pin COM port on the back of the computer, try physically plugging the Y-cable into this COM port instead, then draw on the tablet

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again. Do you now see the series of characters displayed as you draw? If so, tablet is okclose HyperTerminal. If not, continue with h. below.

- h. Close HyperTerminal using the X in the upper-right corner. (Choose Yes to "Disconnect Now", and No to "Save Session")
- i. Repeat steps a through g. For step c., choose a different COM port (ie, COM2) instead.

UNBLOCKING AN IN-USE COM PORT

If the "Unable to open Com1" message appears, you can try to open the port with the following steps:

- a. Click on Start...Settings...Control Panel
- b. Open the System icon.
- c. Click on the Hardware tab.
- d. Click on the Device Manager button.



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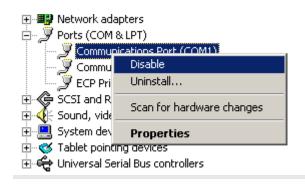
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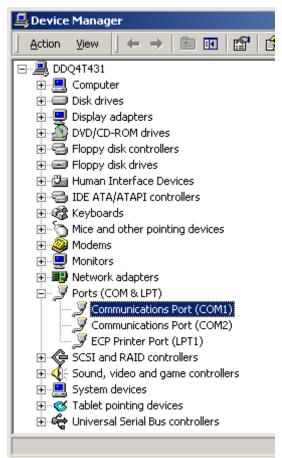
e. Locate the "+" sign in front of Ports, and click on it



g. Choose Disable from the list, and click OK. (If computer does not automatically reboot, then manually reboot the computer)



f. Right-click on the Com1 icon.



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- h. After reboot is complete, repeat steps a-f above
- i. You should now see the Enable option. Please choose Enable from the list. The red "X" in front of the Com1 should disappear.
- Ports (COM & LPT)

 Communicatio
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 Communicatio
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 Communicatio
 Uninstall...

 SCSI and RAID cc
 Scan for hardware changes

 System devices

 Tablet pointing devices
- j. Try signing in your application again

Be sure that the application has been set up for the correct serial port a. As applicable, be sure that the serial port that functions within HyperTerminal (ie, COM1, COM2, etc.) Has been properly assigned to the application. For example, if HyperTerminal functions with COM2 set, then change the COM port setting in the application to reflect COM2.

If after completing all of the steps in this trouble shooting document you are still experiencing technical problems with your Topaz LCD Serial tablet please contact Topaz Systems Technical Support at support@topazsystems.com or at 805-520-8286.