

TechNote TN-112201-41
Date: November 24, 2001
Subject: Using Quatech Dual Port PCMCIA Cards: a Workaround
Applies To: VCS Async, Async Plus, and Viewer

Problem

VCS hangs on startup when both Quatech ports are selected in the Hardware Defaults dialog. There does not appear to be a problem using one port on the Quatech card and any other port.

Solution

With VCS version 2.5, the Quatech dual port card will only work with both ports if the COM port that the DCE connector is hooked up to is listed in the top drop-down in the Hardware Defaults window. The first step is determining which COM port the DCE connector is hooked up to.

Step 1 - Determining which cable is connected to which port.

The Quatech cables are labeled A and B. For simplicity, we'll call them port A and port B. The connectors on the VCS routing cable are labeled DTE and DCE, according to use.

Connect the DTE and DCE connectors of the routing cable to the ports on the Quatech card. The connectors can be hooked up to either port. Then connect the monitor head to the routing cable.

Open the Hardware Defaults window by clicking on the Start button and choosing Programs | ViewComm Async | Hardware Defaults (or Options | Hardware Settings with VCS running).

The Hardware Defaults window has two boxes for listing the COM ports you want to use. In the top box, choose one of the two COM ports listed for the Quatech card. Choose Not Used in the bottom box.

Click on the Detect Now button. VCS will tell you what connectors and cables were found, which in turn tells you which com port is port A and which is port B. For example, if you have the DCE connector from the Routing Cable connected to port B, and you list COM4 in the Hardware Defaults top box, then if VCS told you that it found the DCE connector connected to COM4, you would know that COM4 is using port B.

Step 2 - The Workaround

Now that you know which COM port is connected to the DCE connector, list that COM port in the TOP box of the Hardware Defaults window. List the COM port connected to the DTE connector in the BOTTOM box.

If this is done, FTS will be able to correctly determine what cables are connected where and capture data properly. For an unresolved reason, it does not work if the DTE connector is listed in the top box. It is possible that this will be corrected in newer releases.

Also, the Quatech card has two modes: "COM mode" and "block mode." COM mode puts the card on either COMs 1 and 3 or COMs 2 and 4, at standard addresses and interrupts. Block mode is used when the card is installed on COMs 5 and 6 or above. It uses a contiguous 16 byte block of memory and a non-standard IRQ. We were unable to force the card into Block mode during testing, so we recommend using COM mode if possible. The card normally only uses block mode if COMs 1-4 are already taken, and it is possible that the workaround will work in this situation as well.

Using Quatech DSP-100 Dual Port Serial Cards with VCS Under Windows NT 4.0

The DSP-100 will work under NT 4.0 with a minor modification to your registry. Editing your registry can have unpredictable and possibly disastrous results. Be careful! Go to Start | Run and type "regedit" (without the quotes) and click on "OK". Browse to HKey_LocalMachine | System | ControlSet001 | Services | Quatech1 | Parameters. Double click on PCCard AttributeMemoryAddress and set the value to d9000. Reboot your PC and both ports should function normally.