RocketPort® USB® Serial or Modem Hub Driver Installation with Windows 98

How to Use this Document

You can use the interactive Table of Contents to locate the information you need.

Note: *All blue underlined text are jumps to the information referenced.*

Overview

This document discusses how to:

- Install a single RocketPort USB Serial or Modem Hub.

    Note: *For specific hardware information, such as building cables or specifications, see the* Hardware Installation documentation, *which is available on Comtrol media (diskette or CD) or you can download the current version from the ftp/web site.*

- Install multiple RocketPort USB Serial Hubs or Modem Hubs.
- Remove an existing driver.
- Install modems on the RocketPort USB Serial Hub.
- Troubleshoot.
- Contact Technical Support.

Comtrol documentation (hardware and software) are available in electronic form on Comtrol media and the Web/ftp site. Driver updates can be downloaded at no charge from the Comtrol Web/ftp site. Always check the Web or ftp sites to make sure that you have the current driver and documentation. There is information about extracting Comtrol software.

Installation Prerequisites

You will need the following to install the RocketPort USB Serial Hub or Modem Hub series:

- A computer with the Windows 98 operating system and a functioning USB port or hub.

    Note: *For information about USB support, see* http://www.usb.org.

- If you are using a USB hub instead of a USB port on your PC, make sure that the hub is self-powered (external power supply attached).
- The Windows 98 operating system CD.
- RocketPort USB Serial Hub or RocketPort USB Modem Hub unit with the USB cable.
- Driver for the RocketPort USB Serial or Modem Hub (from CD, diskette, or downloaded file).

Note: *See the* Removing the Software *discussion before re-installing a driver.*

Interactive Table of Contents

Installing a Single RocketPort USB Serial or Modem Hub

Use the following procedure to initially install the RocketPort USB Hub hardware and software. If you have installed a previous version of the device driver, you must remove it before installing an updated driver. See the *Removing the Software* discussion before reinstalling a driver.

Note: *If you downloaded the driver from the ftp/Web sites, make sure that you extract the driver before installing the software.*

1. Plug the B end of the cable into the RocketPort USB Hub back panel labeled USB-B.

   Note: *If your installation requires power, connect a power adapter to the RocketPort USB Serial or Modem Hub and a power source before connecting the unit. If you do not connect the power at this time, the installation will fail.*

2. Plug the A end of the cable into your USB port on your computer or USB Hub.

   Note: *The Power light (amber) on the front of the unit indicates that there is power coming into the unit.*

3. If this is the first Comtrol USB device that you are installing on this computer, click the **Next** button when the following screen appears. This procedure installs the platform for installing USB Devices.

   Note: *If the first screen that appears for the installation is NOT searching for the USB Composite Device driver, go to Step 10.*

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4. Select the **Search for best driver for your device** option and click the **Next** button.

5. Insert your Windows 98 CD in to the CD-ROM drive.
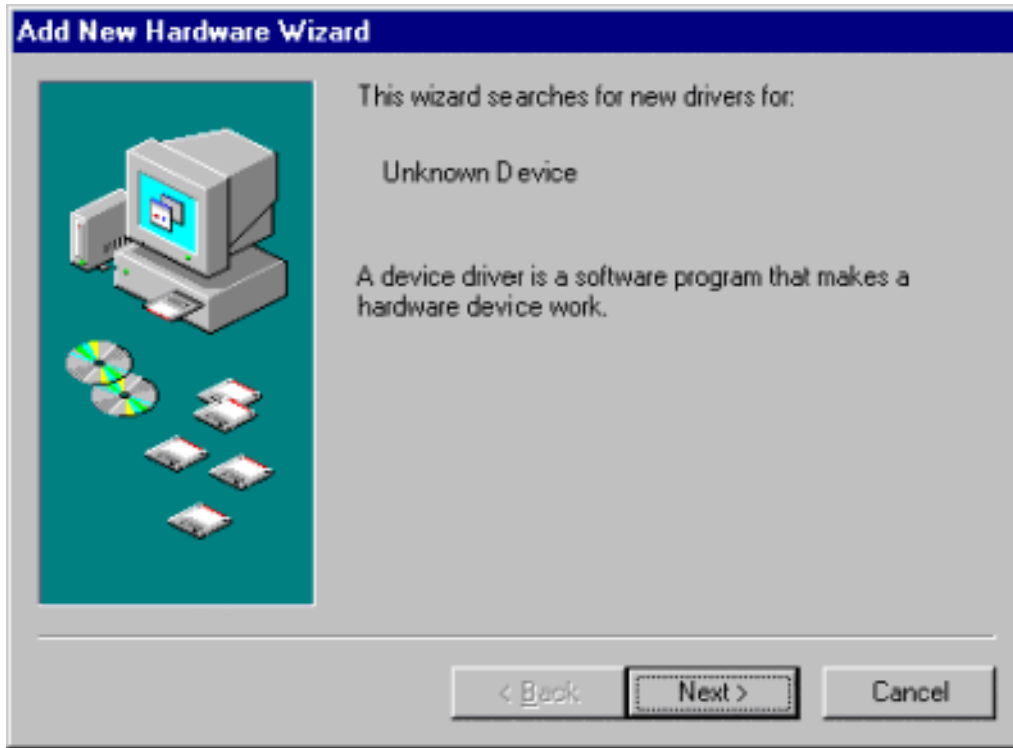6. Select the **CD-ROM drive** option and click the **Next** button.

7. Click the **Next** button to install the USB Composite Device driver when the following screen appears:

8. Remove the Windows 98 CD-ROM from the drive.

9. Click the **Finish** button.

10. Click the **Next** button when this **Add New Hardware Wizard** screen appears. The device name in this screen depends on the device (either Serial Hub or Modem Hub) that you are installing.

11. If you are installing the driver from the RocketPort USB Serial or RocketPort USB Modem Hub media, insert the diskette or CD in the appropriate drive.

12. Select the **Search for the best driver for your device (Recommended)** option and click the **Next** button.

13. Clear the **CD-ROM drive** option and select the **Specify a location** option.

14. Click the **Browse** button to locate the driver and select the location of the driver files. For example, if installing the driver from a Comtrol diskette, the path would appear as follows:

Note: In some cases the driver is located in the C:\comtrol\ directory.

15. Click the **OK** button in the **Browse for Folder** dialog box.

16. Click the **Next** button after specifying the driver location.

17. Click the **Next** button when Windows is ready to install the driver. The device name depends on the hub you are installing.

Windows copies the files to your system and builds your database files. The following is an example. Your source and destination might be different.
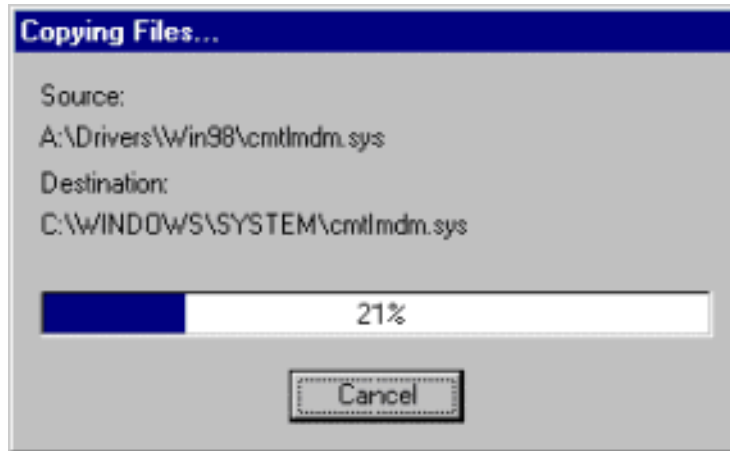
18. Click the **Finish** button when the following screen appears.

    Note: *If you are installing an RS-422 model or a Modem Hub, the screen will reflect that model.*


    Note: *A new hardware found message displays for each port on the RocketPort USB Serial Hub (P101 - P104) or for each modem on the RocketPort USB Modem Hub.*

19. If necessary, remove the RocketPort USB Serial Hub or Modem Hub media from your system.

20. To verify that the COM ports or Modems are available to Windows 98:

    a.   On your desk top, right-click on the **My Computer** icon.

    b.   Select **Properties**.

    c.   Select the **Device Manager** tab.

    d.   View your system:

- Ports by clicking on the plus (+) sign for Ports (COM & LPT) if you are installing the RocketPort USB Serial Hub.

- Modems by clicking on the plus(+) sign for Modems if you are installing the RocketPort USB Modem Hub..
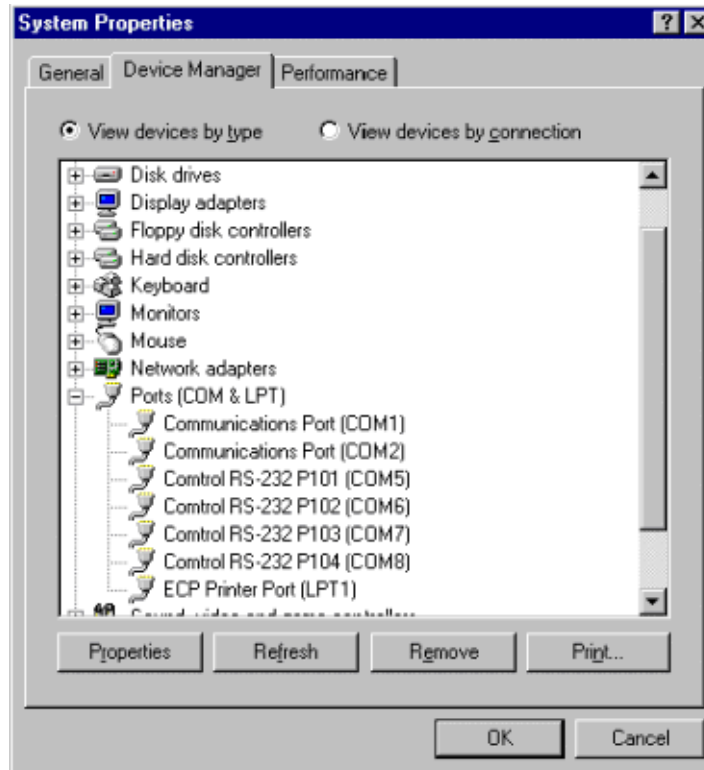
Serial Ports
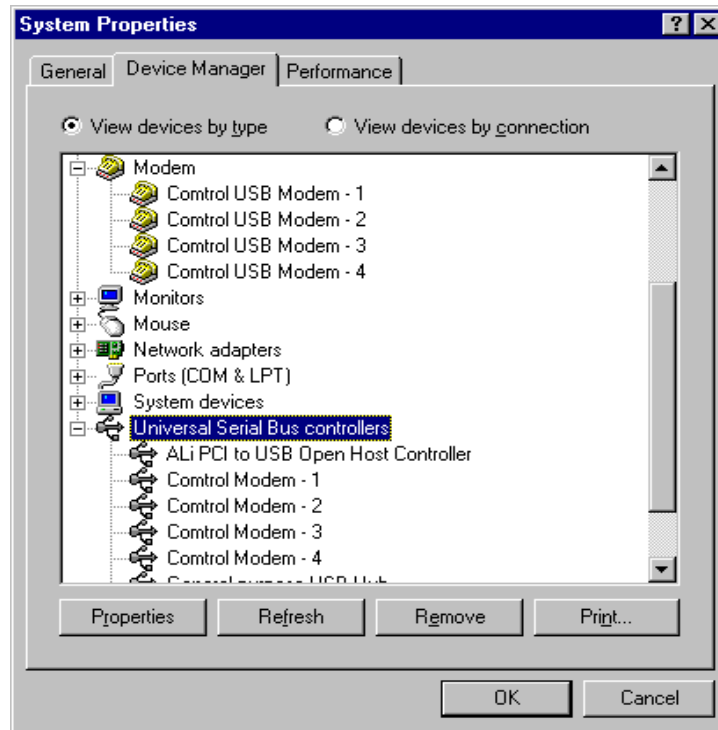
Modems

21. Restart your system to load the **Program Group**. The following window appears:

22. Double-click the Test Terminal icon if you want to use the **Test Terminal** to verify that the hardware is working properly.

23. Close the program group.

If you are using the RocketPort USB Serial Hub, you are ready to install the serial devices on the ports. See the *Installing Modems using the Serial Hub* discussion for more information. The connector pinouts are illustrated in the *Hardware Documentation*.

If you are using the RocketPort USB Modem Hub, you are ready to configure the modem properties using normal Win98 procedures. If you need to use features like modem reset or the speakers, see the *Hardware Documentation*.

Installing Multiple RocketPort USB Serial and Modem Hubs

Install additional units by adding them one at a time. To install multiple RocketPort USB Hubs in the same system, use the following procedure.

Note: *Do not disconnect a RocketPort USB Serial or Modem Hub unless you plan on removing the hardware and software. If you physically disconnect one unit and then connect another unit, the COM ports become unstable.*

1. The Modem Hub requires you to connect a power cable to the unit and a power source at this time. If your Serial Hub requires power, connect a user-supplied power adapter to the RocketPort USB Serial Hub and a power source before connecting the unit. If you do not connect the power at this time, the installation will fail.

2. Plug the B end of the cable into the RocketPort USB Serial or Modem Hub back panel labeled USB-B.

3. Plug the A end of the cable into your USB port on your computer or USB hub.

   Note: *The Power light (amber) on the front of the unit indicates that there is power coming into the unit. New Hardware Found messages flash on the screen.*

4. Follow the appropriate procedure:

   a. If the USB Composite Wizard appears, go to Step 3 of the installation discussion to complete the installation. Skip Step 5 and browse to the **c:\Windows** directory for the USB Composite driver. Follow the remainder of the procedure to complete the installation.

   b. If the Unknown Device Wizard appears, go to Step 10 and complete the installation.

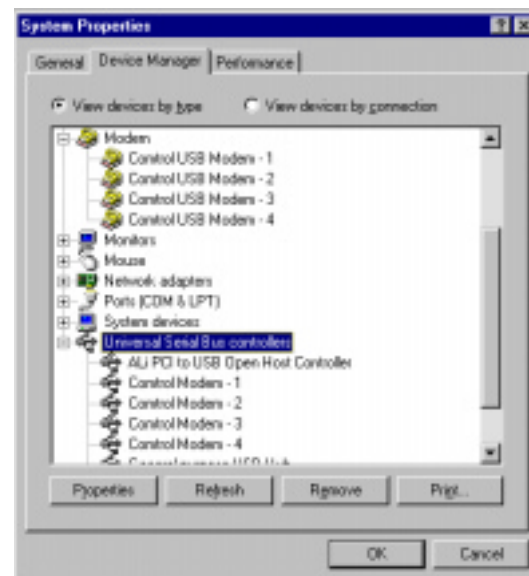5. To verify that the COM ports are available to Windows 98:

   a. Right-click on the **My Computer** icon.
   b. Select **Properties**.
   c. Select the **Device Manager** tab.
   d. View your system:

      • Ports by clicking on the plus (+) sign for Ports (COM & LPT) if you are installing the RocketPort USB Serial Hub.

- Modems by clicking on the plus(+) sign for Modems if you are installing the RocketPort USB Modem Hub
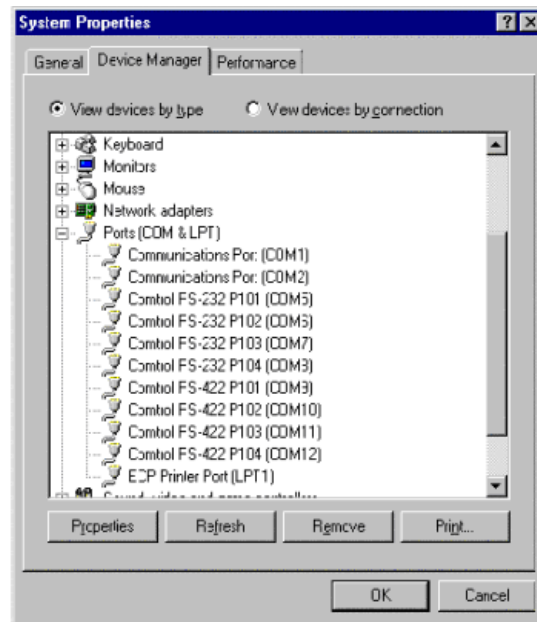
Serial Ports

Modems

6. Your USB Hub is now installed. If you want to install a modem on a serial port, see the *Installing Modems on the Serial Ports* discussion.

Installing Modems on the Serial Ports

The RocketPort USB Serial Hub can support any asynchronous serial modem for use by any application that uses Windows 98 COM ports.

Follow these steps to install and configure modems on the RocketPort USB Serial Hub.

1. Connect the modem(s) to the desired port(s).

2. Power up the modem(s).

3. Open the **Control Panel** window and double-click on the **Modems** icon.

   • If you have previously installed a modem on this system, the following screen appears. Select the **Add** button.
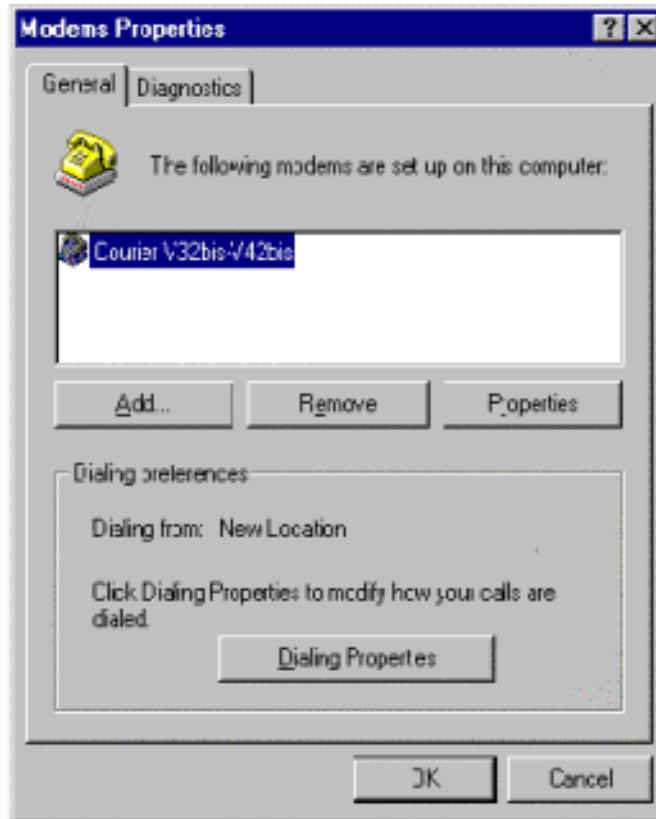

   • If you have not previously installed a modem on this system, go to the next step.

4. Select the **Don't detect my modem: I will select from a list** check box when the Install New Modem wizard starts and click the **Next** button.
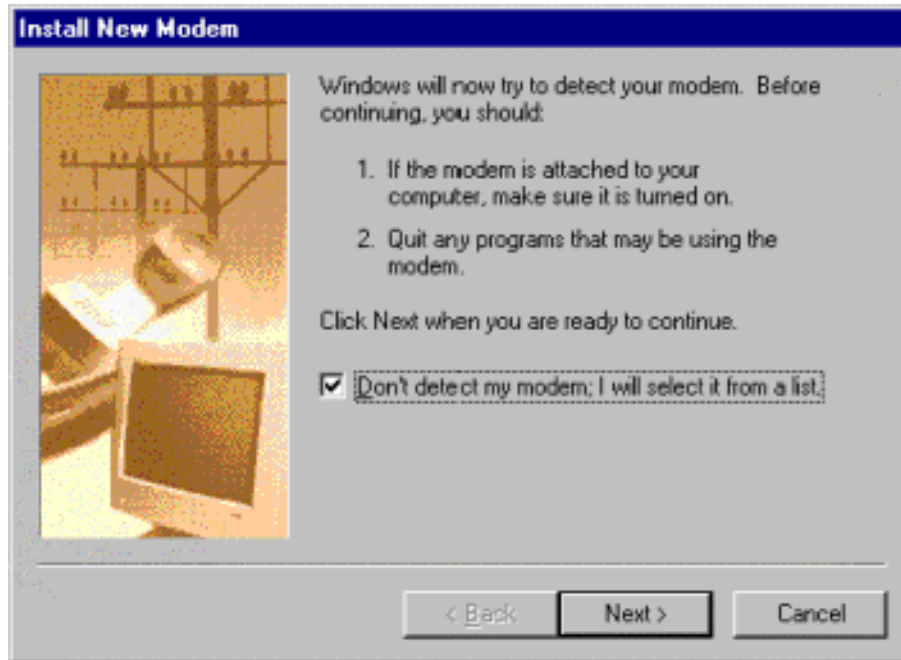
> **Note:** Do **not** use the auto-detect feature. The Windows modem auto-detect function does not recognize ports above COM10, and it scans **down**, beginning with the highest detected COM port. This can produce extremely confusing modem-to-port numbering and naming sequences.
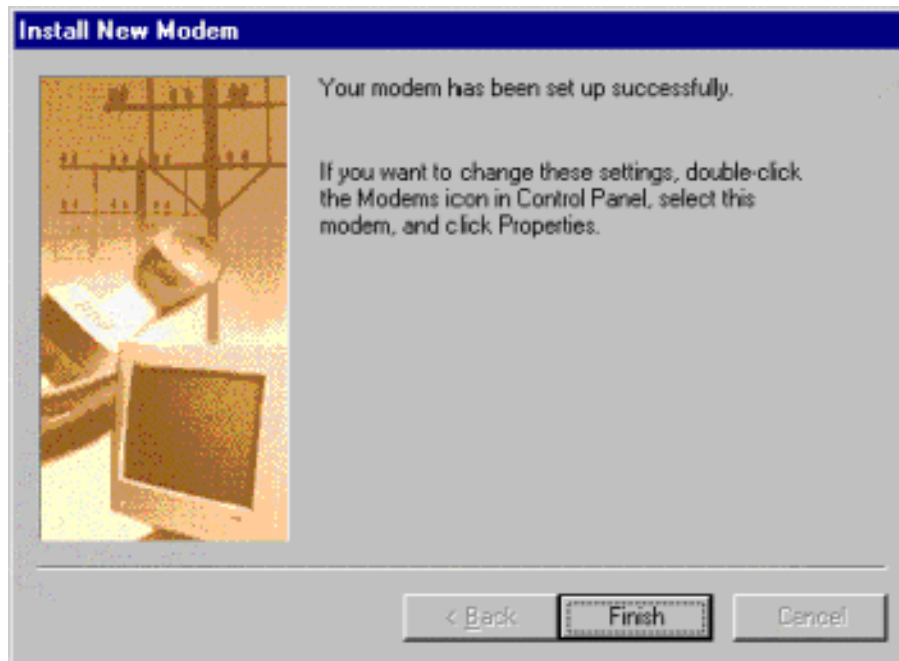
5. Select your modem from the lists, or click the **Have Disk** button and select the **Next** button when this screen appears.
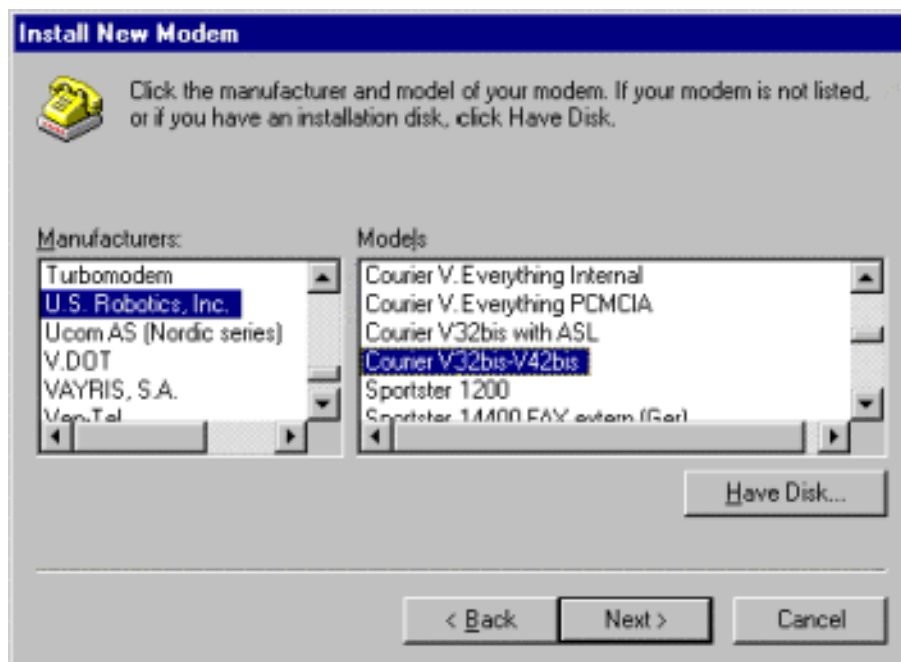
6. Select the port to which the modem is attached and click the **Next** button when the list of available ports appears.
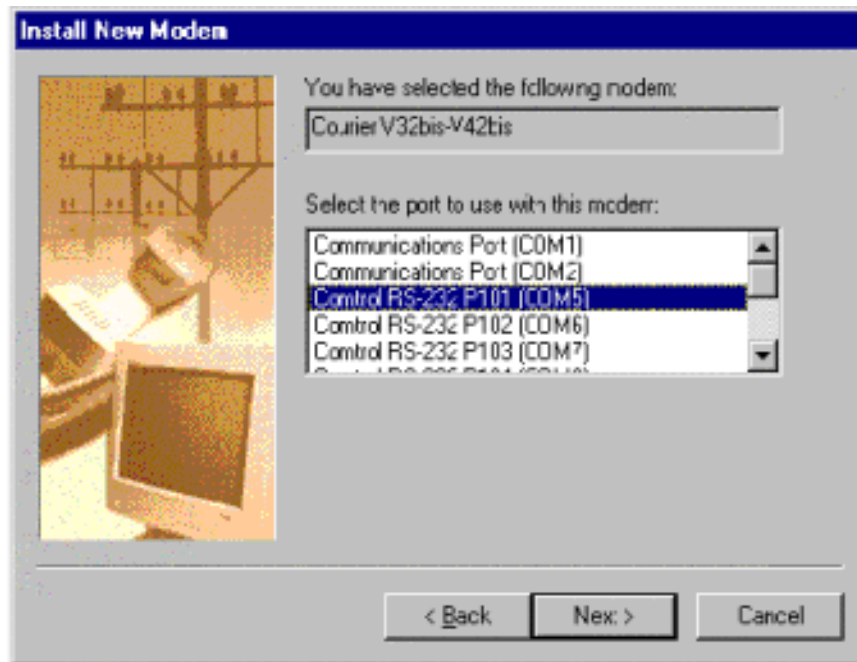
7. Click the **Finish** button.

8. To add more modems, click the **Add** button and repeat Steps 3 through 7.
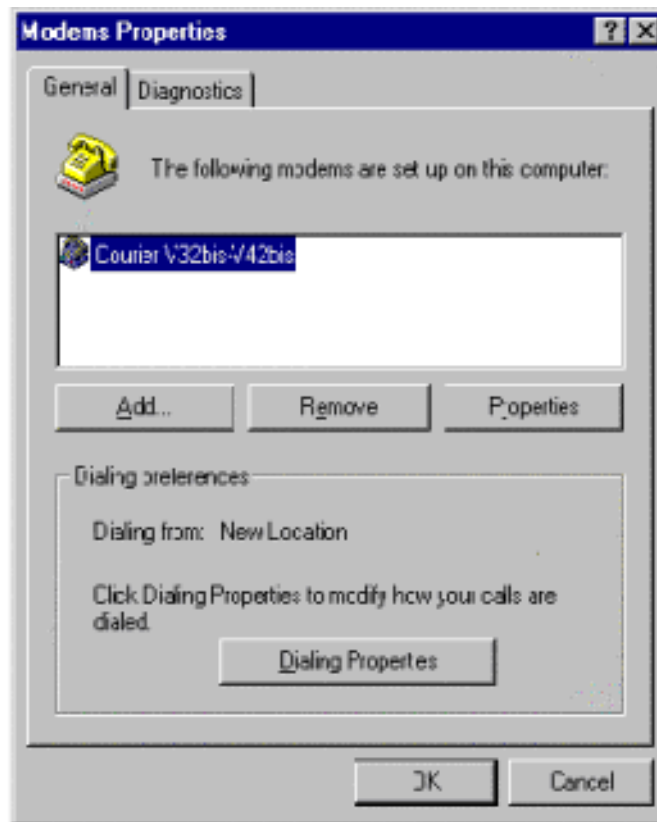
9. **Optionally**:
   a. Click the **Dialing Properties** button to configure basic phone service information.
   b. Select a modem and click the **Properties** button to configure port speed, data bits, parity, and so on.
   c. Click the **Diagnostics** tab, then select a port and click **More Info** to query and test the modem.
10. When you are done, click **OK** to exit the Modem Properties screen. Your changes take effect immediately. No reboot is required.

Removing the Software

You must remove an existing driver before re-installing or updating a driver.

Note: *Failure to remove the hardware and software as discussed may corrupt some of your files. If you are removing the RocketPort USB Serial Hub or Modem Hub permanently, you may want to properly remove the devices attached to the ports.*

To remove an existing version of the driver, use the following procedure:

1. Disconnect the RocketPort USB Serial Hub unit or units from your system.
2. Open the Control Panel and select **Add/Remove Programs** icon.

3. Select the **Comtrol RocketPort USB Serial Hub** or **Comtrol RocketPort USB Modem Hub** and click the **Add/Remove** button.
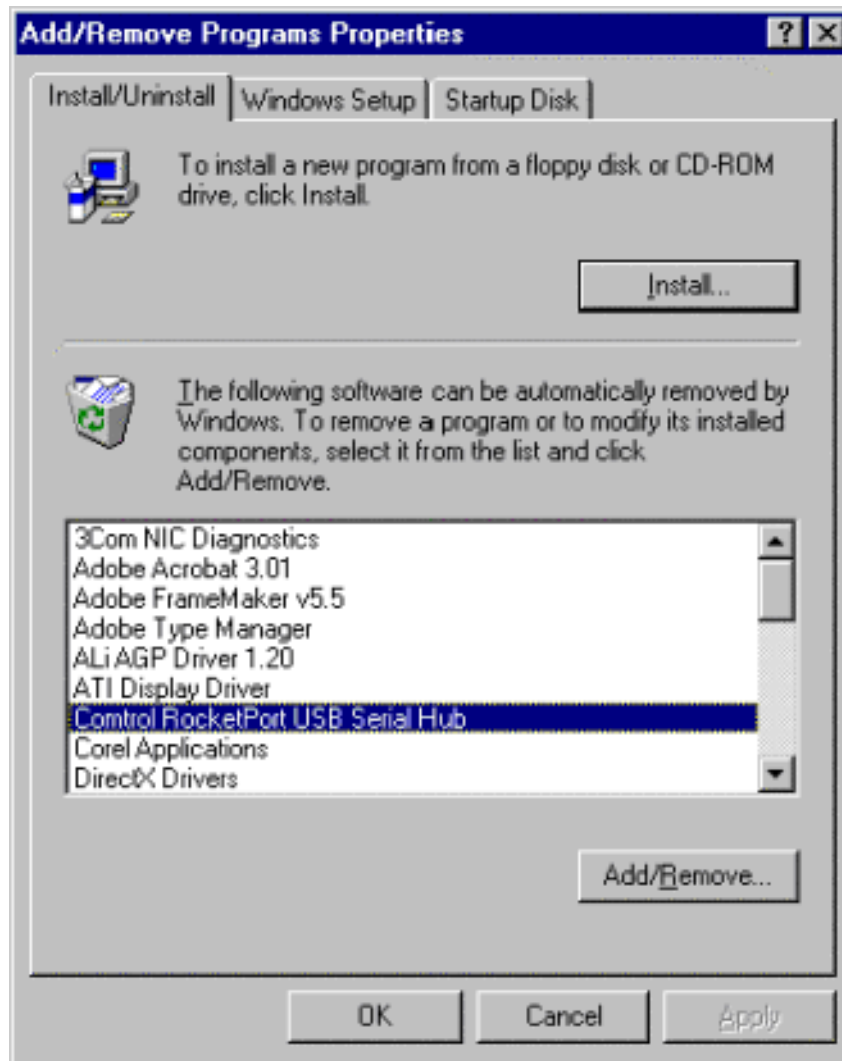
4. If you want to verify that the ports have been removed from Windows 98:

   a. Right-click your mouse on the **My Computer** icon.

   b. Select **Properties**.

   c. Click the **Device Manager** tab.

   d. Review the available ports by clicking on the + **Ports (COM & LPT)**.

   If you do not see any RocketPort USB Serial Hub ports, you correctly removed the software. The next system reboot removes the Test Terminal program group.

Note: *An additional reboot is required before to ensure that the Registry is cleaned up properly and before installing another RocketPort USB Serial Hub.*

Troubleshooting

Comtrol ships a test terminal program (WCOM32.EXE) with RocketPort USB Serial and Modem Hub. Please see the following discussions for information on testing your hub.

If you are having problems, use the following procedure:

1. For serial hubs, verify that you are using the correct types of serial cables. See the *RocketPort USB Serial Hub Hardware documentation* for pin out information.

2. For Modem Hubs, try manually resetting the inactive modem.

3. Verify that all cables are connected securely.

4. Reboot the Windows 98 machine.

5. Verify that you are addressing the port correctly. In many applications, the device names above COM9 require the prefix \\.\ in order to be recognized. For example, to reference COM10, use \\.\COM10 as the file or port name.

6. Use the Test Terminal program (**WCOM32**) to troubleshoot communications on a port-by-port basis.

    a. Test port integrity.
    b. Test modem functionality.

7. Remove and reinstall the driver.

Using the Test Terminal Program to Test Serial Ports

The Test Terminal program enables you to open a port, send characters and commands to the port, and toggle the control signals.

Note: *You must reboot your system after installation before the Comtrol program group for Test Terminal appears.*

Use the following procedure to run Test Terminal (WCOM32) to test the RocketPort USB Serial Hub ports.

1. To start WCOM32, select **Test Terminal** from the Comtrol program group. The program window appears:

2. Select **Open Port** from the **Port** menu. A list of possible COM port numbers appears.

3. Select the COM port you want to test, for example, COM5.

Note: *Unavailable signals appear dimmed and lowercase; available signals are green and uppercase.*
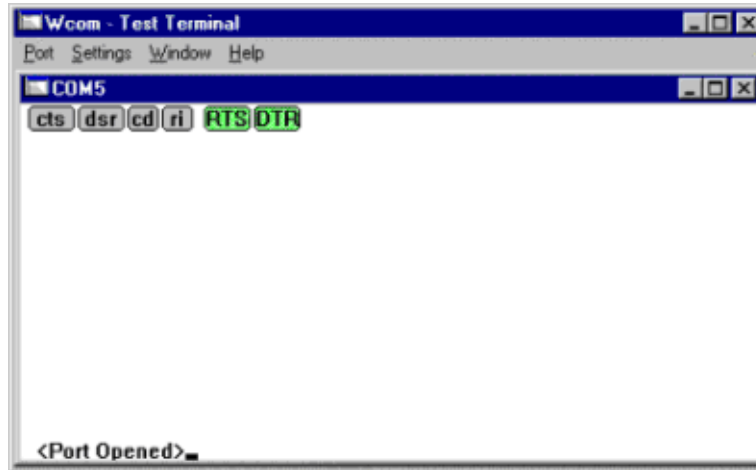
Note: *If the COM port does not exist or if it is currently being used by another program, a* **Create File Error** *message appears.*

4. Place a loopback plug on the COM port you want to test. Make sure all connectors are seated firmly. If you need to build loopback plugs, see the *Hardware documentation*.

   Note: From the **Port** menu, select **Send Test Data**. The program sends out a repeating data stream.
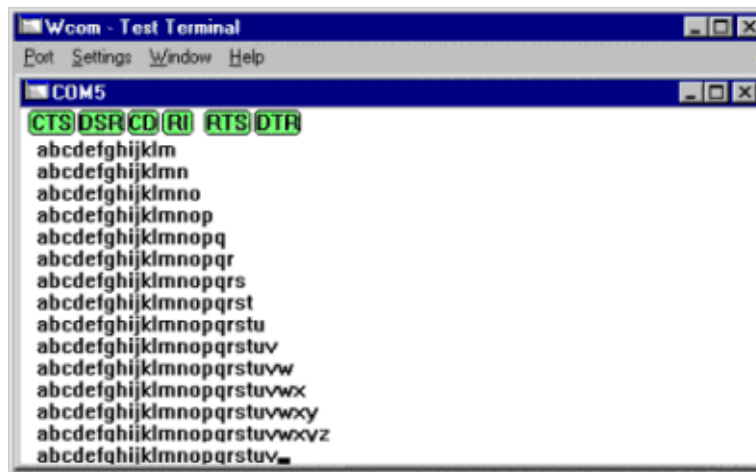
Note: *If the loopback plug is in place and the port is working correctly, the test data should be echoed back to the screen. If the loopback plug is not in place or the port is not working correctly, no data or garbled data is echoed back to the screen. If no characters appear, try putting the loopback plug on an adjacent port. It may be that you have the ports mixed up.*

5. To stop sending data, select **Send Test Data** again.

   Note: *It takes a few moments for the buffer to empty and the data to stop displaying on the screen.*

6. If further testing is required, select **Loopback Test** from the **Port** menu. If the loopback plug is in place and the port is working correctly, the system displays:

Note: *If the loopback plug is not in place or the port is not working correctly, the system returns a "Failed" message.*

Troubleshooting for the Modem Hub

Note: *This discussion is for the Modem Hub only. Please see the* Troubleshooting for Serial Hubs *discussion if you need this information.*

If you are having problems, use the following procedure:

1. Verify that all cables are connected securely.

2. Reboot the Windows 98 machine.

3. Verify that you are addressing the port correctly. In many applications, the device names above COM9 require the prefix **.**\ in order to be recognized. For example, to reference COM10, use **.****COM10** as the file or port name.

4. Use the Test Terminal program (**WCOM32**) to troubleshoot communications on a modem-by-modem basis.

5. Remove and reinstall the driver.

Using the Test Terminal Program to Test Modem Ports

The Test Terminal program enables you to open a modem, send characters and commands to the port, and toggle the control signals.

Note: *You must reboot your system after installation before the Comtrol program group for Test Terminal appears.*

Use the following procedure to run Test Terminal (WCOM32) and test modem ports.

You can use the Test Terminal to:

• Verify that the modem responds.

• Test calls from the modem to a telephone.

• Call from modem to modem.

1. Select **Test Terminal** from the Comtrol program group. The program window appears:
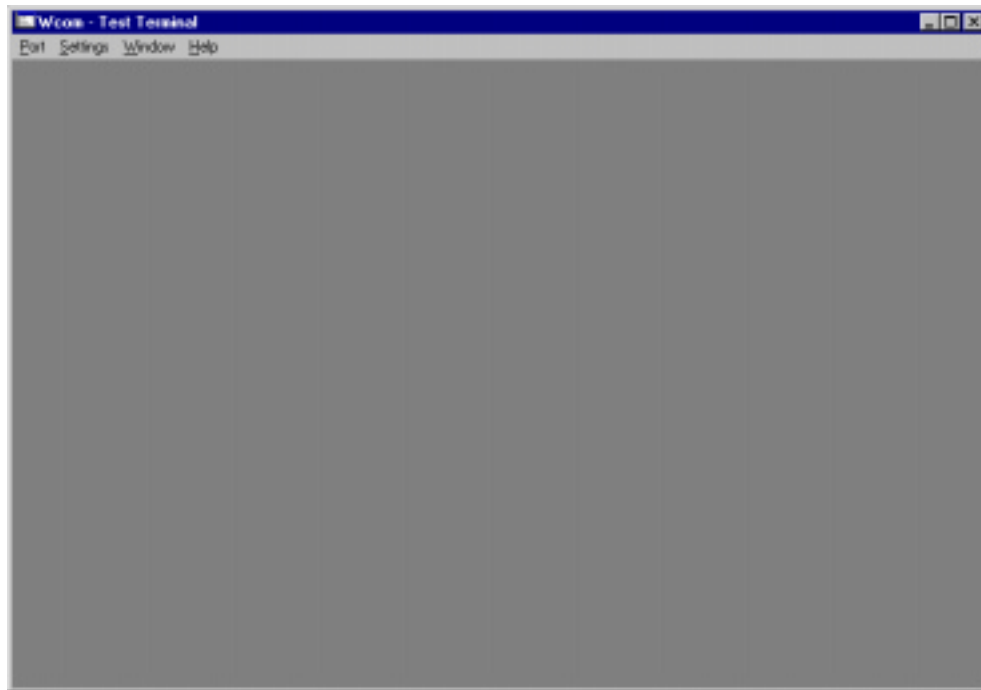
2. Select **Open Port** from the **Port** menu. A list of possible COM port numbers appears.
3. Select the COM port you want to test, for example, COM5.

   Note: *Make sure the loop button is off for the following tests. See the online help for more details.*

Test 1: Verify that the modem responds
1. Type **atz**. This should return an OK.
2. Type **at&v**. This should display the modem configuration.

Test 2: Test calls from the modem to a telephone.
1. Connect the modem to a phone line.
2. Type **atdt***phonenumber* (where the *phonenumber* is an ordinary telephone). The telephone should ring.

Test 3: Call from modem to modem.
1. Type **+++ath** to hang up.

   Note: Make sure that data sending is done before and after using the +++ command.

2. Connect two modems to phone lines, open two Test Terminal sessions, and use one modem to call the other. Send typed characters from one modem to the other.

Contacting Technical Support

Comtrol has a staff of support technicians available to help you. Before you call, please have the following information available:

- Model number.
- Serial number.
- Type of USB hub (if appropriate).
- Operating system type and release.
- Device driver version.
- PC make, model, and speed.

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