

## **Addendum to 8117C Procedure for Upgrading to Mehta Tech, Inc.'s Ethernet Interface Module**

**Revision 18, 31 May 2023**

These instructions are written to supplement the upgrade/installation for the Ethernet Interface Module (PN 9879) and specifically address installing the RealPort driver on a remote Master Station computer.

Mehta Tech, Inc. recommends that you copy the folders from the CD-ROM (PN 9598, supplied with this upgrade kit) to the hard drive of the Master Station computer on which you want to install the driver for the Ethernet module. To copy the folder to the Master Station:

- ☐ 1. Insert the “Ethernet interface drivers” CD-ROM (PN 9598) into the Master Station's CD-ROM drive.
- ☐ 2. In My Computer or Windows Explorer, navigate to the CD-ROM drive and browse to find the folders “RealPort (Drivers)” and “DeviceDiscoveryTool.”
- ☐ 3. Click to select the folders, then copy and paste them to the Master Station's hard drive (usually C:\).

### ***This procedure assumes the following:***

- ☐ That the Ethernet Interface Module has been properly installed in the DFR
- ☐ That the Ethernet Interface Module has been connected to the company network
- ☐ That the DFR in which the Ethernet Interface Module has been installed is powered on and operating correctly
- ☐ That the IP address assigned to the Ethernet Interface Module (and if possible, the MAC address of the Digi Connect ME module) is known at the Master Station
- ☐ That the Master Station is also connected to the company network

### **Setting Up the RealPort Device Driver on a Master Station**

- ☐ 4. On the Master Station computer, in My Computer or Windows Explorer, navigate to the **RealPort (Drivers)** folder, and then double-click **Setup32.exe** for a 32-bit computer. For a 64-bit computer, use **Setup64.exe**.

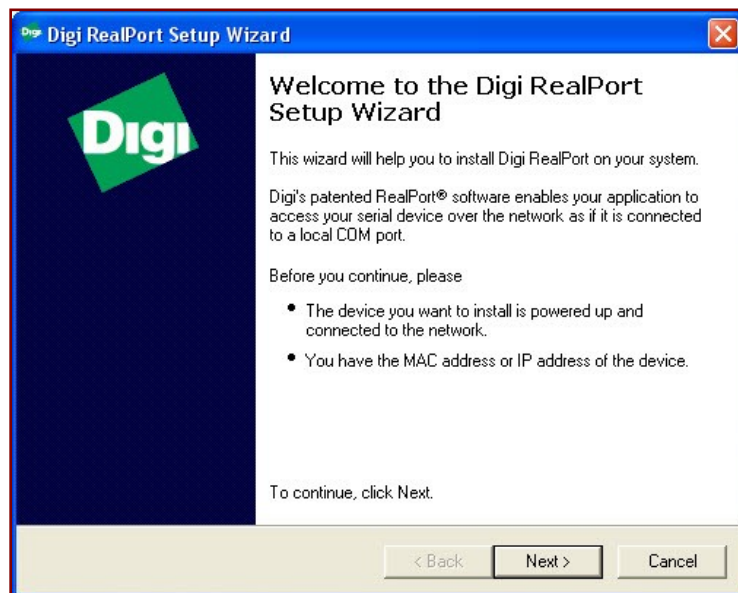
**NOTE:** Be sure that you select **Setup32.exe** or **Setup64.exe** from the **RealPort (Drivers)** folder.

- 5. If RealPort drivers have ever been installed on the Master Station computer, you see the following window:



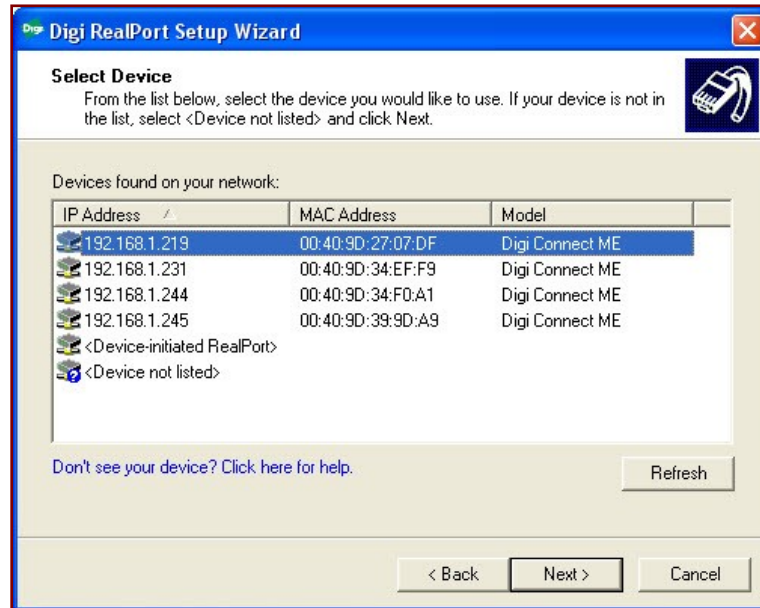
In this case, click the radio button for **Add a New Device**, and then click **Next**.

**NOTE:** Under some circumstances, you may see the following window when you start **Setup32.exe** or **Setup64.exe**:



**This is normal. Click Next and continue to step 6 below.**

- 6. Clicking **Next** starts the “device discovery” software module and displays the Digi devices it sees on the network:

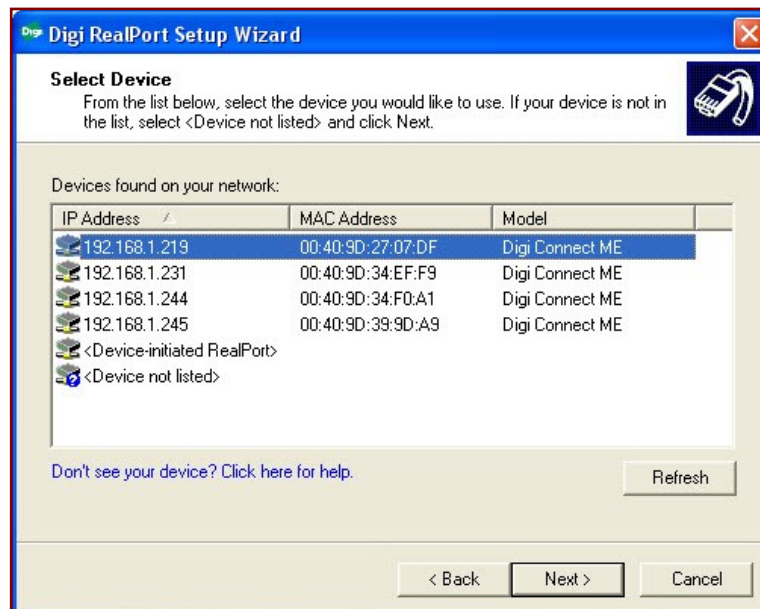


**NOTE:** The device discovery process may take several seconds.

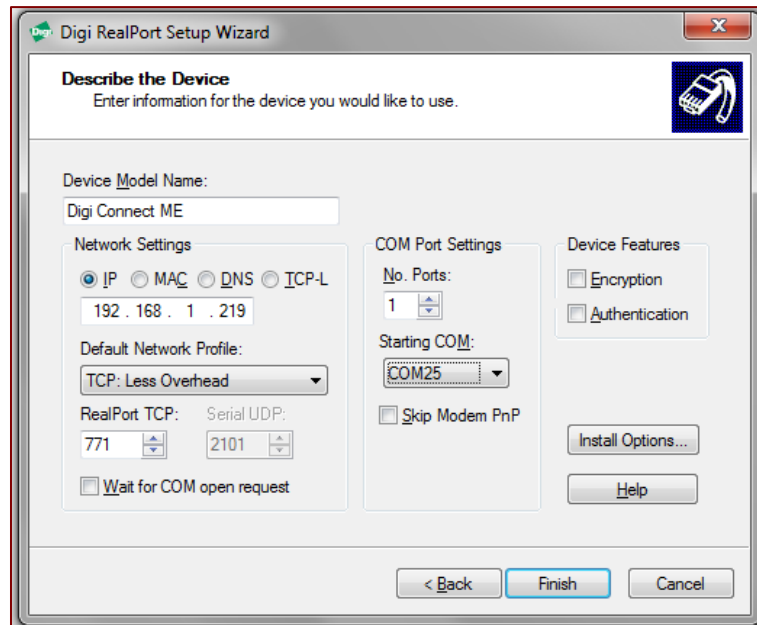
- 7. If the target device's IP Address and/or MAC Address is listed, go to step 8.

If you do NOT see the target device's IP Address and/or MAC Address listed, try clicking **Refresh**. If the device is still not listed, go to step 13.

- 8. Select the name of the device you installed (see the MAC Address on page 3 of the main 8117 Upgrade Procedure). Then click **Next**.



- 9. You will see a window similar to this:



In the “Digi RealPort Setup Wizard” window, make any changes necessary to be sure that:

- The wizard shows the address of the chosen Ethernet Interface Module (in this example, 192.168.1.219). The “IP” radio button must be selected.
- “Device Module Name” is “Digi Connect ME”.
- “Default Network Profile” is “TCP: Less Overhead”<sup>1</sup>. Click on the pull-down menu arrow to select this option.
- “RealPort TCP” is set to 771.
- “COM Port Settings” are
  - “1” for “No. Ports”.
  - A “Starting COM” port number of 10 or higher is chosen.
- “Encryption”, “Authentication”, “Wait for COM open request”, and “Skip Modem PnP” boxes are not checked.

Click **Finish**.

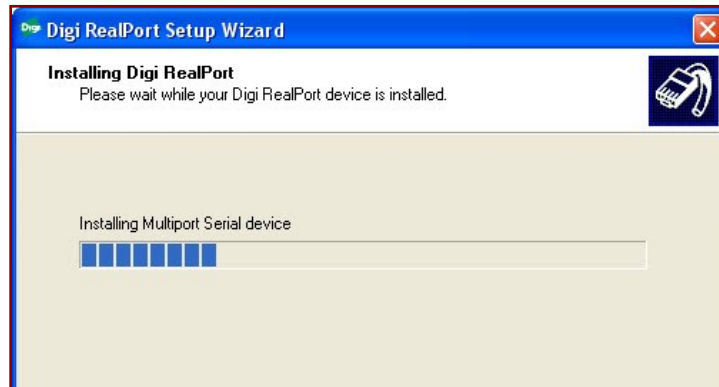
- 10. The wizard displays messages as it searches for and installs the ports.

**NOTE:** This process may take several seconds.

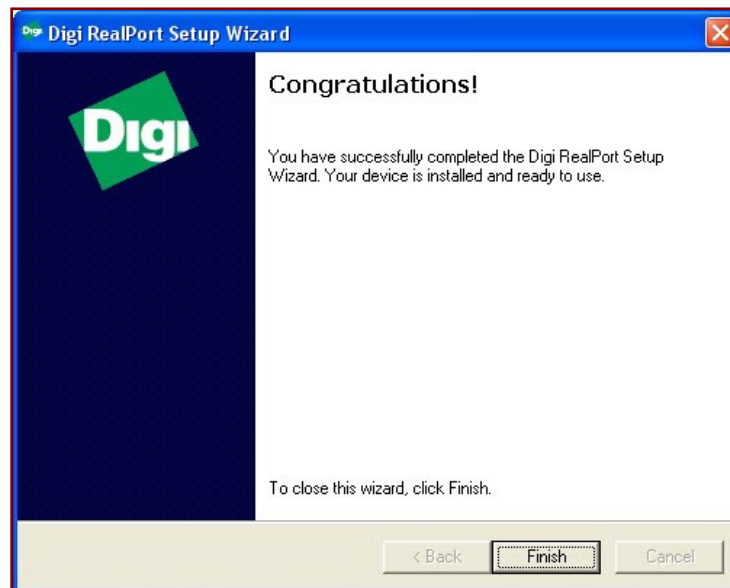
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<sup>1</sup> In many instances changing the Less Overhead Profile has improved the data transfer rate between the DFR and the Master Station PC. If after making this change you experience network issues, there may be network bandwidth allocation issues. See Appendix II for details of changing existing installations.

**TIP:** You can observe the drivers being installed in Windows by opening Control Panel > System > Hardware > Device Manager. Expand fields “Multi-port serial adapters” and “Ports (COM & LPT)” to watch for changes.



- ☐ 11. Click Finish to complete the installation procedure.



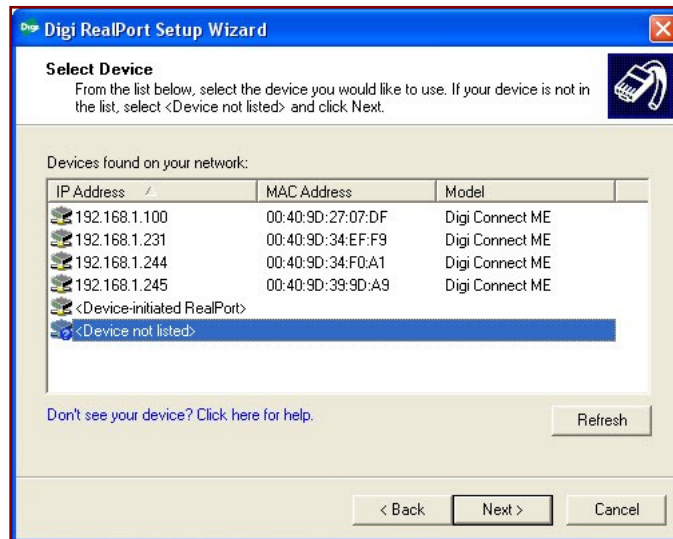
- ☐ 12. Go to step 16 to create a station for the DFR and connect to it through the network.

**NOTE:** If Polycomm is running when you install the RealPort driver, you will need to click Scan for Changes (under Configure > Com Ports in Polycomm32) in order to see the newly created port.

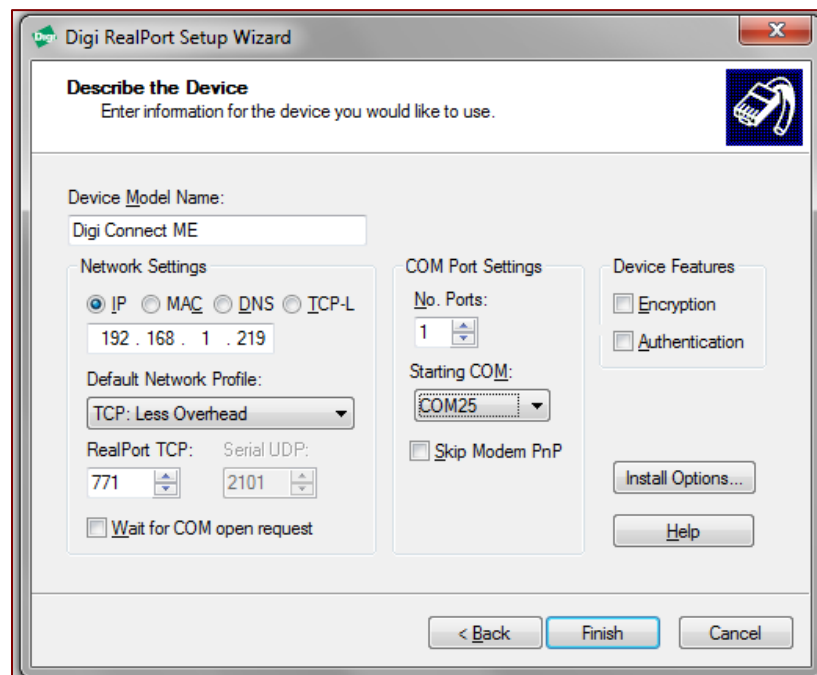
This completes the installation procedure if the device was found.

- ☐ 13. Follow these instructions if the installed device was not listed.

Click to highlight **<Device not listed>**, then click **Next**.



□ 14. You will see a window like the following:



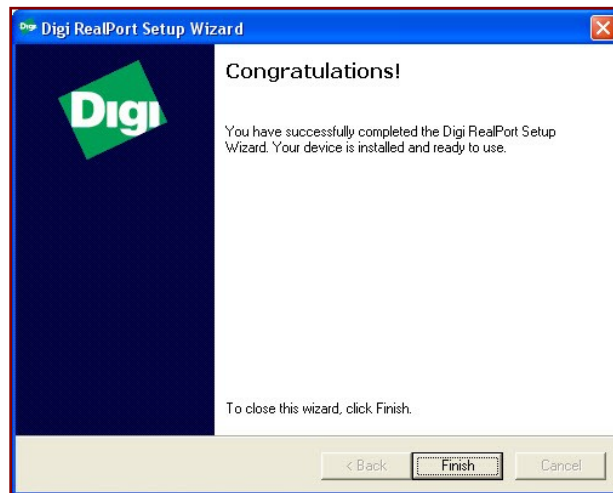
Enter information specific to your Digi Connect device:

- For **Model Name**, enter **Digi Connect ME**
- For **Serial Ports**, scroll to **1**.
- Enter the **IP Address** for the target device (**192.168.1.219** in this example).
- For **TCP Port**, either accept the default (**771**) or enter the port as directed by your IT department.
- Set a Com Port (please choose port 10 or higher).

- Change Default Network Profile, using the pull-down menu to “TCP: Less Overhead”<sup>2</sup>
  - Make sure “Encryption”, “Authentication”, “Wait for COM open request”, and “Skip Modem PnP” boxes are all unchecked.
- 15. When you have finished entering information for the target Ethernet Interface Module, click **Finish**. The Wizard will find and install the RealPort driver.

**NOTE:** This process may take several seconds.

Eventually you will see the following window:

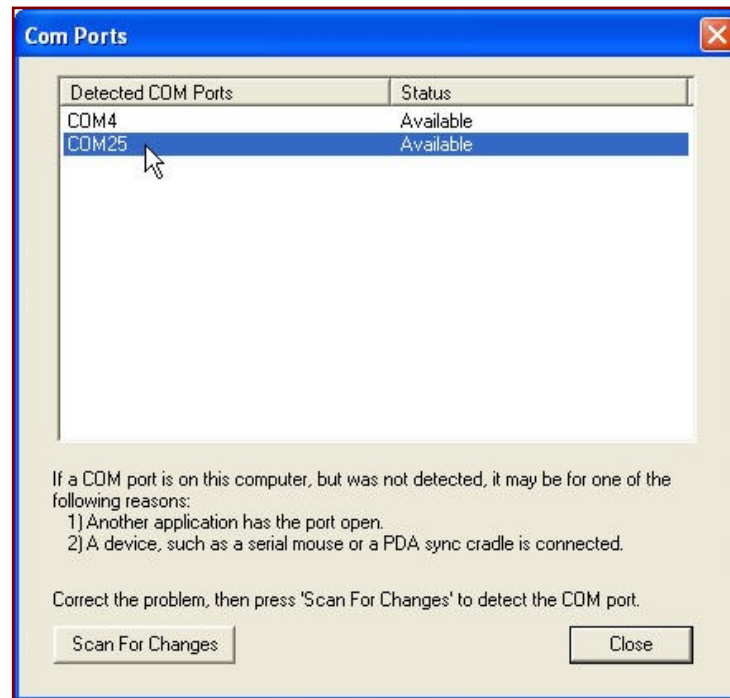


Click **Finish** to complete the driver installation.

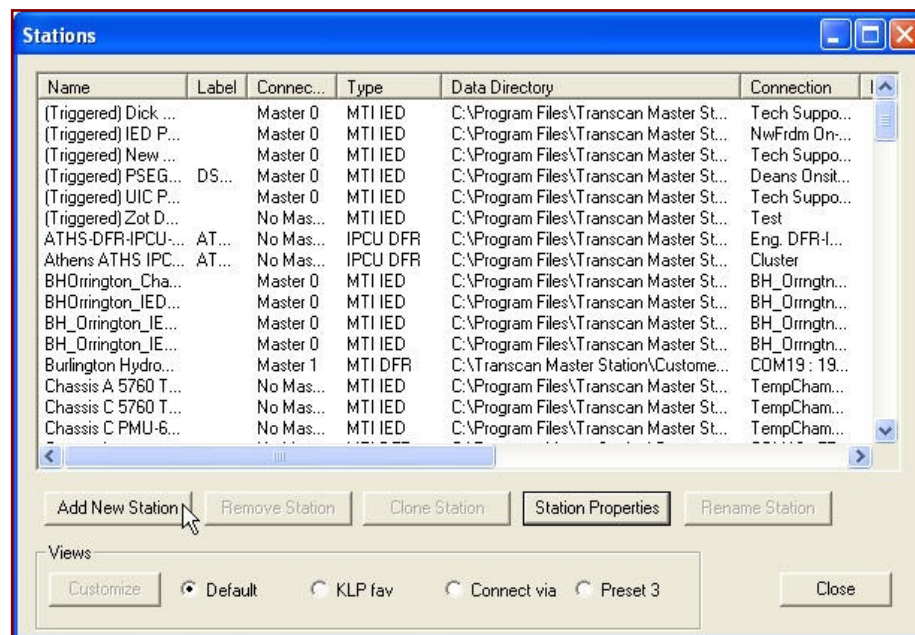
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<sup>2</sup> In many instances changing the Less Overhead Profile has improved the data transfer rate between the DFR and the Master Station PC. If after making this change you experience network issues, there may be network bandwidth allocation issues. See Appendix II for details of changing existing installations.

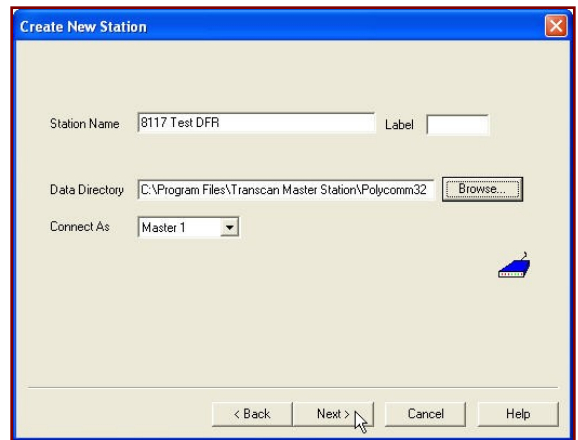
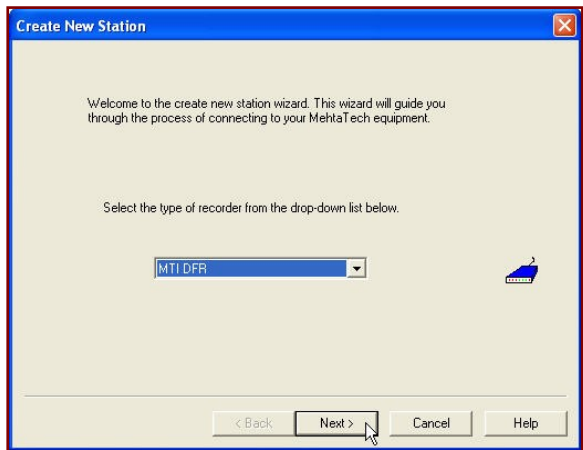
- 16. After you have installed the RealPort drivers, set up a station in Polycomm and connect to the Ethernet Interface Module over the network by following the steps below.
- 17. To set up a station to call the DFR through the Ethernet connection, start Polycomm by clicking **Start > Programs > Transcan Master Station > Transcan DFR > Polycomm32**. Then click **Configure > Com Ports** to check that the port is present and available. Then click **Close**.



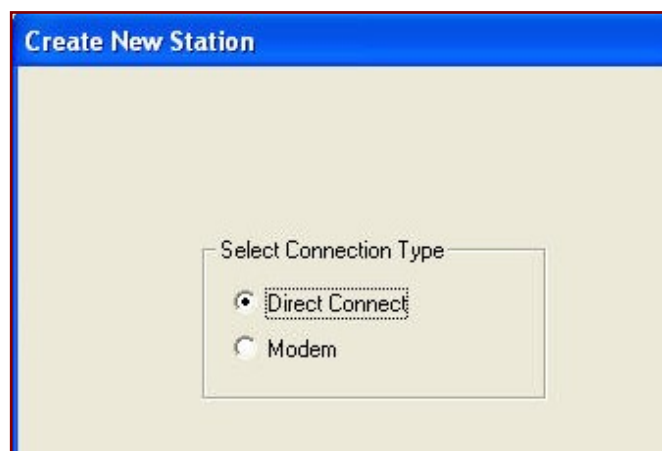
- 18. Click **Configure > Stations** and in the “Stations” window, click **Add New Station** to start the Station setup wizard.



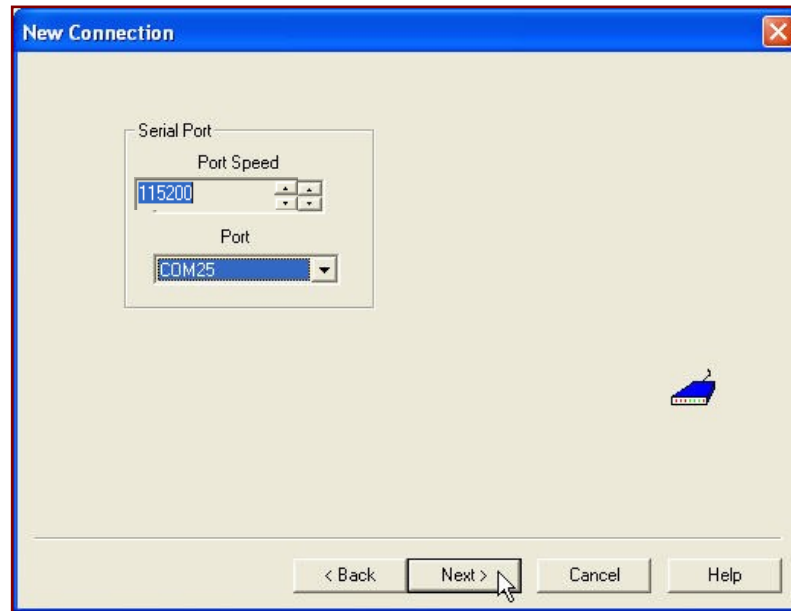
- 19. Follow the prompts to create a new station. Enter a station name, browse to locate/create the **Data Directory**, and choose **Master 0, 1, or 2**. Click **Next**.



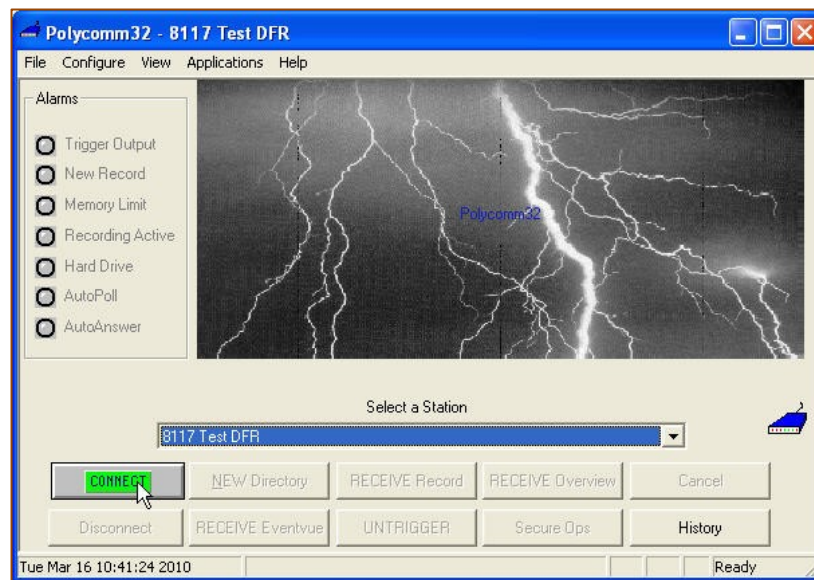
- 20. Choose **Direct Connect** in the following window. Click **Next**.



- 21. Set the **Port Speed** to **115200** and select the **Port** you installed in the previous step of this procedure. Click **Next**.



- 22. In the next window, we recommend that you check **Disable System AutoPoll** and click **Finish**. Complete the station setup, and then click **Close** in the next window to return to the Polycomm main window. Select the station from the drop-down list, and then click **CONNECT**.



- 23. After you connect successfully, test the connection by receiving a record from the DFR.
- 24. Finally, click **Disconnect** to break the connection to the Ethernet Interface Module.

**NOTE:** If you do not click **Disconnect**, Polycomm will not release the port.

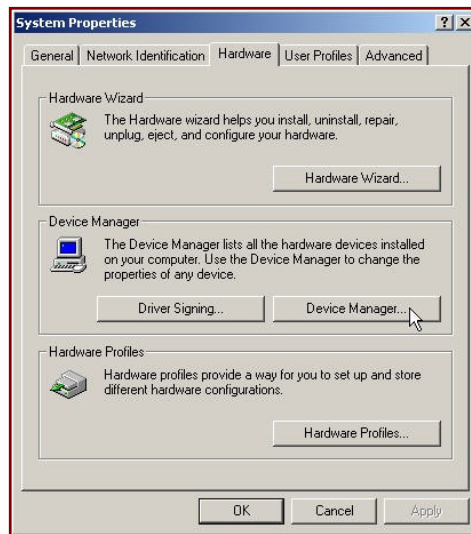
## Appendix I

Steps A-C show how to find the port number and IP address of the 9879 Ethernet Interface Module.

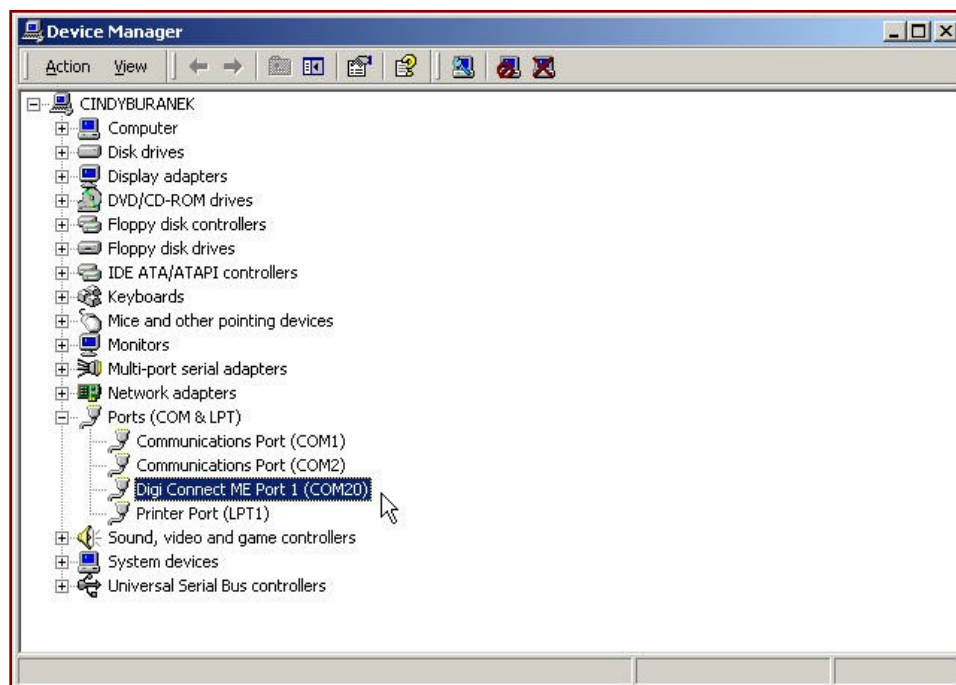
☐ A1. Windows 7: Click **Start** then type “**device**” in the search box. Select **Device Manager** from the list then press Enter.

or

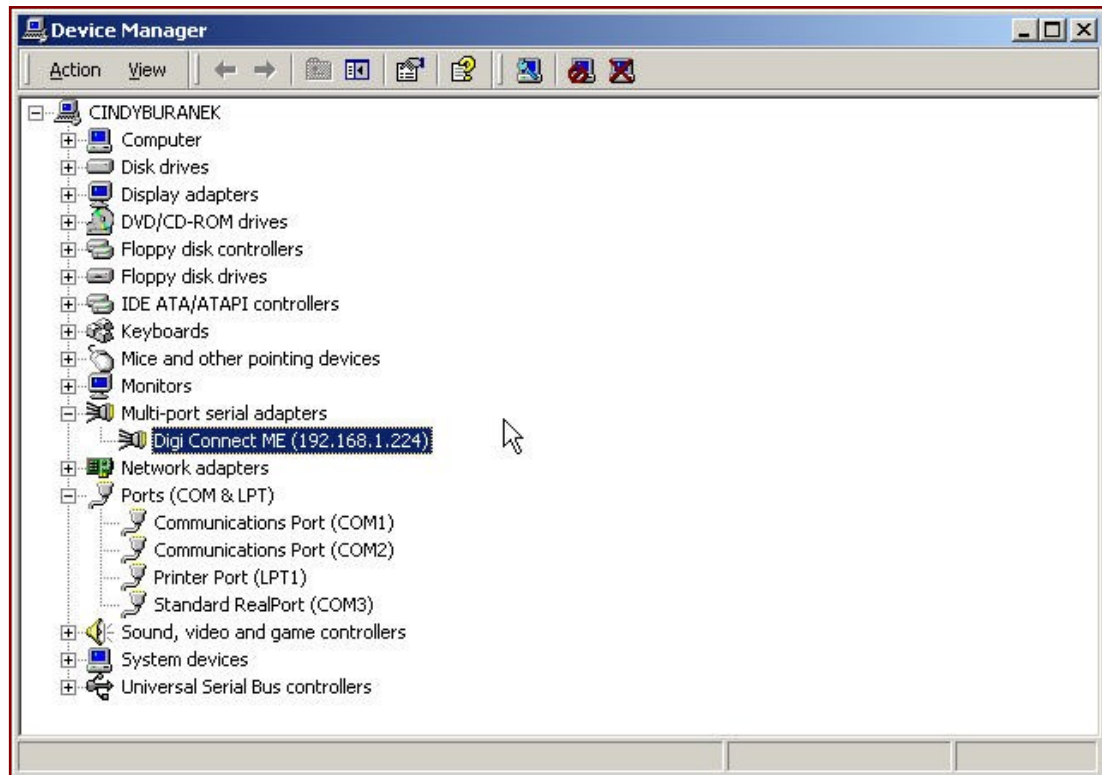
☐ A2. Windows XP: Click **Start > Control Panel > System**, the **Hardware** tab, and then click **Device Manager**.



☐ B. Find the Digi ME Device in the list of **Ports** and note the Port number. In this example the Digi has been assigned the port COM20.



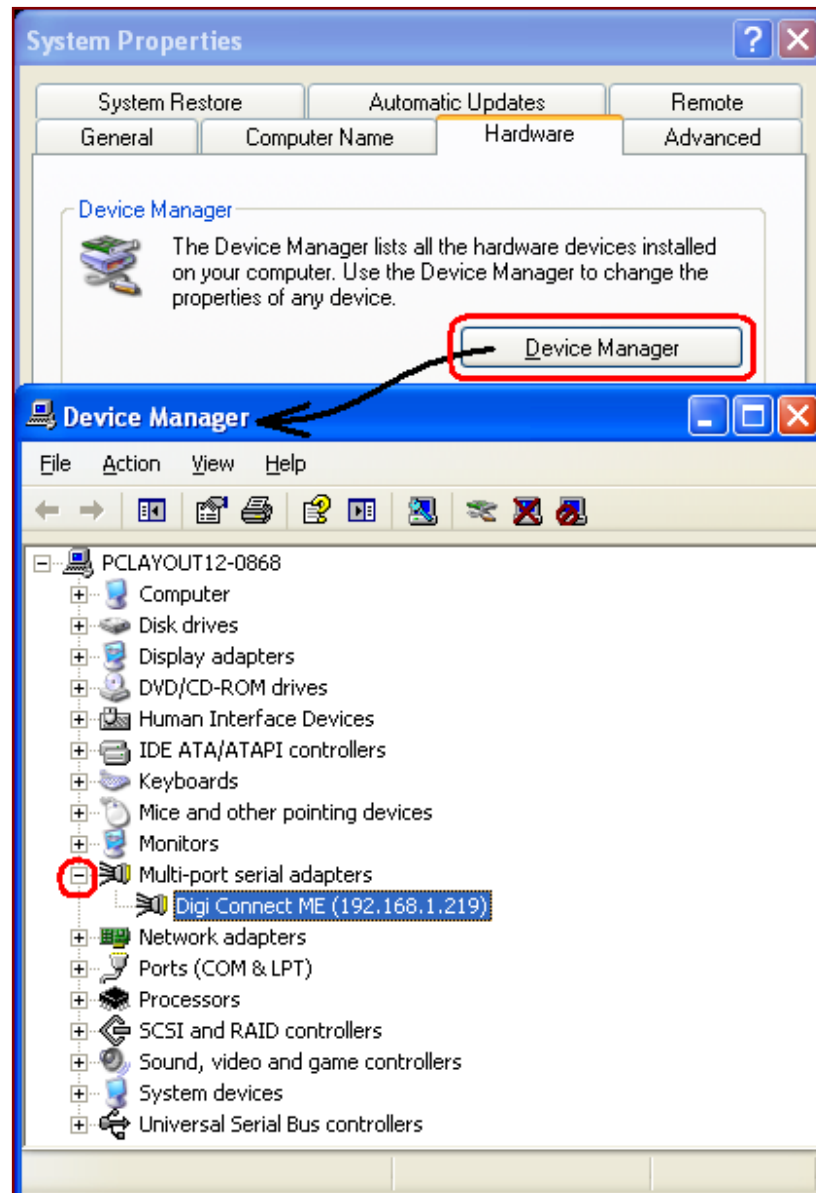
- ☐ C. The address of the Ethernet Interface Module is listed after the name of the device under **Multi-port serial adapters**. In this example the IP address is 192.168.1.244.



## Appendix II

*Certain Ethernet networks can reduce the data transfer rate over the link between the DFR and the Master Station computer. The size of the Ethernet packet overhead can be reduced by selecting an option within the drivers. Reducing packet overhead should eliminate this slow transfer rate problem. Here is how to configure the packet overhead size.*

- 1. In Device Manager, expand **Multi-port serial adapters**. Installed “Digi Connect ME” drivers should display. (In this example the Master Station computer has one driver installed to communicate with one DFR. That DFR has an IP address of 192.168.1.219.)

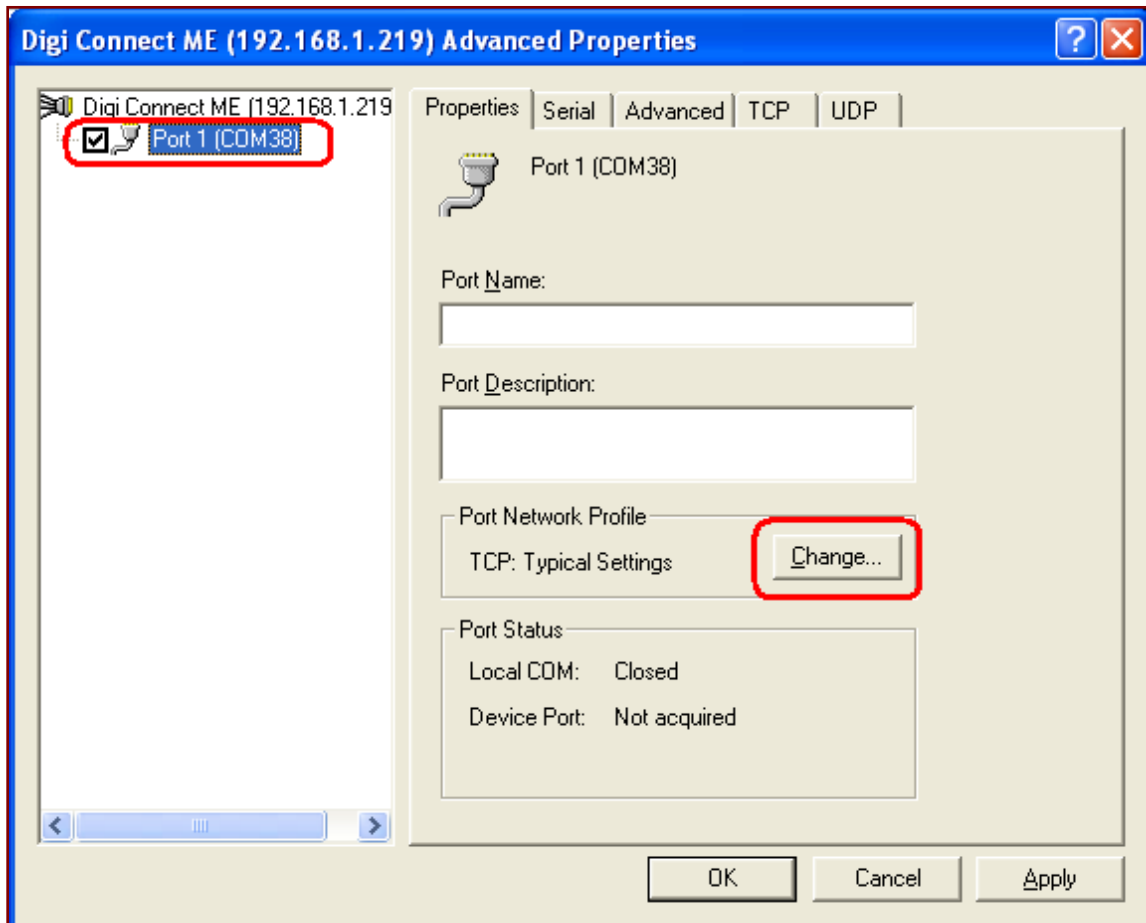


- 2. Right click on the **Digi Connect ME** driver to be updated. Select **Properties** from the pop-up menu.
- 3. Select the **Advanced** tab in the Properties window and click on the **Properties...** button. This brings up the “Advanced Properties” dialog box. Click on the text **Port 1 [COMxx]**. Note: do not

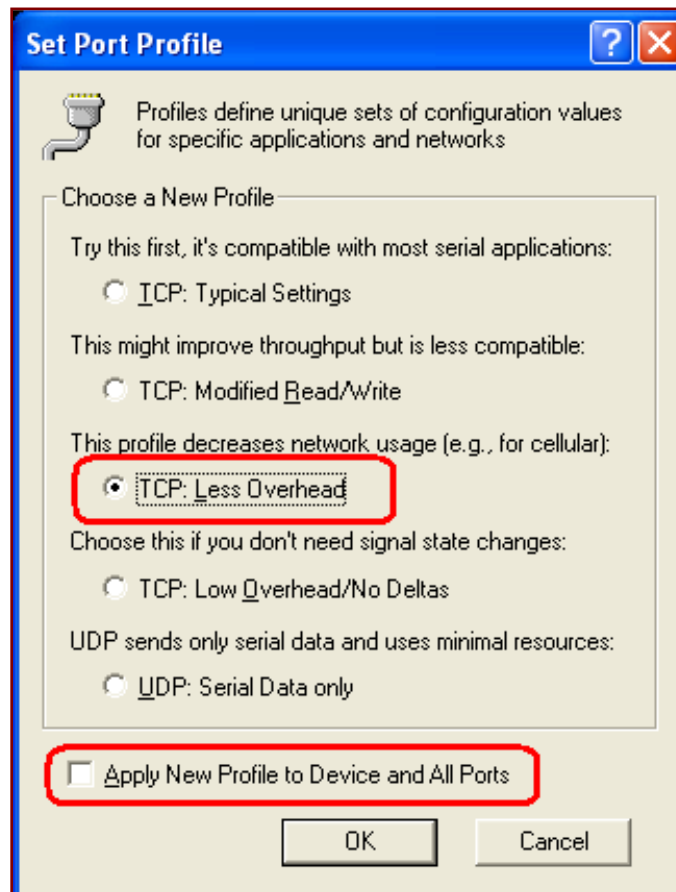
click on the check mark in the box.

In this example the virtual port assigned to the driver is COM38. The tab names will change. Select on the “Properties” tab, if it is not already selected.

In the “Port Network Profile” box, click the **Change** button.



- 4. The “Set Port Profile” option box pops up. Select “**TCP: Less Overhead**”.



- 5. If additional RealPort drivers are listed in Device Manager and need to be updated, click on the check box for **Apply New Profile to Device and All Ports**. Click **OK**. Then click **OK** on the “Advanced Properties” dialog box. Allow Device Manager to update. As it does this, “Ports (COM & LPT)” may expand temporarily while the change is in progress.
- 6. Close all the remaining windows used for this procedure.