

DigiPort™ Installation and Setup

DigiPort™ Installation and Setup



Copyright, Trademarks, and Acknowledgements

COPYRIGHT

Information in this document is subject to change without notice. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or any means electronic or mechanical, including photocopying and recording, for any purpose other than the purchaser's personal use, without the written permission of PTI Security Systems.

PUBLISHED BY

PTI Security Systems
Copyright© 2013
All Rights Reserved.

TRADEMARKS

Digitech, DigiGate and DigiPort are trademarks of PTI Security Systems. Microsoft and Windows are registered trademarks of Microsoft Corporation. Other brands and their products are trademarks or registered trademarks of their respective holders and should be noted as such.

“Acrobat® Reader Copyright© 1987-2013 Adobe Systems Incorporated. All rights reserved. Adobe, the Adobe logo, Acrobat, and the Acrobat logo are trademarks of Adobe Systems Incorporated.”

ELECTRONIC DOCUMENT AND ACROBAT® READER

An electronic version of this document is available. Please call PTI Security Systems to receive your CD containing a PDF version viewable with **Adobe® Acrobat® Reader**.

Copyright © 2006-2013 Preferred Technology Systems, LLC. All rights reserved. This information is proprietary and confidential and may be used for the purpose of planning within the context of installing a Digitech Brand System. All other use, including reproduction or distribution to other than the intended user is PROHIBITED.

Document No. 1200-187 Rev. 2.4 05/16/2013

Printed in the United States of America

Table Of Contents

COPYRIGHT..... b

PUBLISHED BY b

TRADEMARKS b

ELECTRONIC DOCUMENT AND ACROBAT® READER b

Table Of Contents i

 Conventions used in this Guide ii

 Warranty and Disclaimer iii

 Terms and Conditions of Purchase iv

 System Hardware Repair Policy v

 General v

 Terms v

Chapter 1 Broadband Info and Prerequisites for DigiPort 1-1

 Network Configuration Requirements 1-2

 Open Ports Requirements 1-3

Chapter 2 Access Equipment Requirements 2- 1

 Connections to the DigiPort..... 2- 2

 Running the Hyperterminal Program..... 2- 3

 Configuring the DigiPort 2- 4

 Testing the Network Connection 2- 12

 Configuring the COM ports on the PC 2- 13

 Setting up the COM port in the DigiGate program 2- 19

Conventions used in this Guide

Format/Symbol	Definition	Example
<i>Bold Arial Italic</i>	Represents Menu selections or Screen objects to select.	Move the cursor to the Set button.
< Bold Arial > text in braces	In the Software - represents a key on the PC Keyboard. On hardware items, this will represent a device (i.e. plug, chip, jumper, cable, etc) on a board or a control device.	Press the < Enter > key. Remove the < J3 > jumper.
"Courier Regular"	Actual text the user is to enter or text displayed on the screen.	Type "CD\DIGI" and press < Enter >. Do Not type the Quotation marks!
Bold Times text	Bold text in the Guide's normal font means to perform a task.	Select the Unit Setup tab.
" "	Quotations around the Guide's normal font will be used to represent other sections in the guide or to emphasize the text enclosed in quotes.	(See the "System Setup" section on page ...)
☐ ☐	Used to indicate an item in a list or one step in a procedure. Numbers will also be used for this.	☐ Select Unit Setup tab. ☐ Click on Unit Type.
1. 2.	Also used to indicate an item in a list or a step in a procedure. Bullets will also be used for this.	1. Select the Unit Setup tab. 2. Click on Unit Type.
< Key1 >< Key2 >	Multiple keyboard keys indicate that you should push the first key and hold it down while pressing the second key.	Press < Ctrl >< C > to copy the contents.
{c1 c2}	Indicates a User Choice from the items. Each choice is separated by a vertical bar.	Select { OK Cancel } based on the situation.

Warranty and Disclaimer

PTI Security Systems warrants its products and equipment to conform to its own specifications and to be free from defects in materials and workmanship, under normal use and service, for a period of one year from the date of shipment. Within the warranty period, PTI Security Systems will repair or replace, at its option, all or any part of the warranted product which fails due to materials and/or workmanship. PTI Security Systems will not be responsible for the dismantling and/or re-installation charges. To utilize this warranty, the customer must be given a Return Materials Authorization (RMA) number by PTI Security Systems. The customer must pay all shipping costs for returning the product.

This warranty does not apply in cases of improper installation, misuse, failure to follow the installation and operating instructions, alteration, abuse, accident, tampering, natural events (lightning, flooding, storms, etc.), and repair by anyone other than PTI Security Systems. This warranty does not warrant the replacement of batteries that are used to power our products.

This warranty is exclusive and in lieu of all other warranties, expressed or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. PTI Security Systems will not be liable to anyone for any consequential or incidental damages for breach of this warranty or any other warranties.

This warranty will not be modified or varied. PTI Security Systems does not authorize any person to act on its behalf to modify or vary this warranty. This warranty applies to PTI Security Systems products only. All other products, accessories, or attachments used in conjunction with our equipment, including batteries, will be covered solely by their own warranty, if any. PTI Security Systems will not be liable for any direct, incidental, or consequential damage or loss whatsoever, caused by the malfunction of product due to products, accessories, or attachments of other manufacturers, including batteries, used in conjunction with our

products.

The customer recognizes that a properly installed and maintained security system may only reduce the risk of events such as burglary, robbery, personal injury, and fire. It does not insure or guarantee that there will be no death, personal damage, and/or damage to property as a result. PTI Security Systems does not claim that the Product may not be compromised and/or circumvented, or that the Product will prevent any death, personal and/or bodily injury and/or damage to property resulting from burglary, robbery, fire, or otherwise, or that the Product will in all cases provide adequate warning or protection.

PTI Security Systems products should only be installed by qualified installers. The customer is responsible for verifying the qualifications of the selected installer.

Terms and Conditions of Purchase

PURCHASER understands that unless otherwise specified on a PTI Sales Order Copy, or other contractual agreement, neither installation nor the warranty thereof, is included in this agreement. The PURCHASER hereby recognizes and agrees that the system is a custom integrated system that may include both hardware and software, designed particularly for the premises, and the PURCHASER recognizes and agrees that it shall have no subjective right to refuse the system. PURCHASER understands that the materials specified on the reverse side of this agreement, on a signed PTI Sales Order Copy, or in executed contractual agreements, properly installed, are sufficient to complete the installation as required. Should additional materials be necessary, they may be purchased at current catalog prices. Should any part of the system be lost, stolen, damaged or destroyed by fire, water, or extraneous causes, whether or not subject to the PURCHASER's control; the repair, replacement work, and reinstallation shall be carried out at the expense of the PURCHASER. PURCHASER agrees that the SELLER's obligation hereunder relates solely to the system as provided by the SELLER, and the SELLER shall not be liable for any loss or damage incurred by the PURCHASER caused by PURCHASER's installation, alteration to, removal of, or tampering with the system. Otherwise, this purchase is subject to the PTI Written Limited Warranty, the details of which are available on request.

PURCHASER agrees to pay the purchase price indicated on the stated terms reflected on a PTI Sales Order Copy or in contractual agreements. Thereafter, interest shall be charged on any due and unpaid balance at a rate equal to one and one-half percent (1 1/2%) per month from the due date until paid in full. In no event shall the interest be greater than the maximum permitted by applicable law.

If the SELLER deems it necessary to employ an attorney or collection agency to collect this account, or any part thereof, the PURCHASER agrees to pay actual, reasonable attorney fees or collection costs.

By installing or using Software provided with this purchase, PURCHASER indicates acceptance that the software is part of a system consisting of the software and the hardware it controls, that the software is meant to be installed on only one computer (including Network Terminals, if so noted), and that software may be supplied to PURCHASER with a temporary activation code. Once all purchase terms have been complied with, including all payments as agreed, a Software Registration will be issued with a permanent activation code.

This agreement shall be interpreted and governed by the laws of the State of North Carolina. The PURCHASER represents that this Agreement constitutes the entire agreement between PURCHASER and SELLER and that no other agreements, promises, representation, undertakings, warranties, express or implied, except those expressly set forth herein have been relied upon by PURCHASER, or have been made to PURCHASER by SELLER, its agents, or employees, and that no modification of this AGREEMENT shall be claimed by PURCHASER subsequent to the execution hereof unless first reduced to writing and executed by the parties hereto.

Further, the PURCHASER acknowledges and agrees that the SELLER has not made, and the PURCHASER is not relying upon any representation or warranties, express or implied, except as contained herein, and any and all implied warranties are hereby expressly waived by PURCHASER.

System Hardware Return Policy

General

Equipment to be returned may be sent to PTI Security Systems after a Return Material Authorization Number has been issued by visiting <http://rma.ptisecurity.com>. The items should be shipped prepaid to:

PTI Security Systems
Attn: RMA
9160 E Bahia Dr Ste 100
Scottsdale, AZ 85260

PTI Telephone/Fax Numbers

Phone: (480) 257-2600 Fax: (480) 257-2599

A detailed packing list showing the Return Material Authorization Number, quantity, product, purchase order number for any out-of-warranty returns, return address, telephone number and any special instructions must be included with the shipment. Equipment shipments made on a COD basis will be refused.

Each returned item shall have a written description of the defect on the packing list.

Upon receipt by PTI, each shipment will be inspected to verify all items are received as listed, and that defects are due to failure under normal usage, not user negligence. Damaged or defective items which are not covered by warranty will be handled according to the non-warranty policy.

Terms

All shipments to PTI, are to be prepaid. Freight shipments sent on a COD basis will be refused.

Chapter 1

Broadband Info and Prerequisites for DigiPort

Included in this Chapter

How to Reach PTI Security Systems.....	Corporate Address Internet and E-mail Telephone and Fax
Network and ISP Requirements	Network Configurations Requirements Network Configuration Information

How to Reach PTI Security Systems

CORPORATE ADDRESS

PTI Security Systems
9160 E Bahia Dr Ste 100
Scottsdale, AZ 85260

INTERNET AND E-MAIL

Our Web site is
www.ptisecurity.com
E-Mail to Sales at
sales@ptisecurity.com

TELEPHONE AND FAX

Main Office (480) 257-2600
Fax Line (480) 257-2599
Tech Support
support.ptisecurity.com

The following information and instructions will be instrumental in the proper configuration and use of a Modem, Router and DigiPort over a broadband internet connection. Failure to adhere to the following guidelines or obtain the following information may result in an unstable and unreliable network connection. PTI Security Systems is not responsible for network configuration and maintenance.

Network Configuration Requirements Needed Prior to Establishing a New Broadband Account

These items need to be covered with the Internet Service Provider (ISP)

1. A *Static* IP address needs to be established at both the main office and the remote facility. A *Dynamic* IP is not acceptable and will not work. For clarification, a *Static* address is one that identifies your location on the internet and never changes. Whereas a *Dynamic* address is one that constantly changes every time the computer reboots or connects to the internet.
2. If at all possible, **DO NOT USE** the modem/router combination broadband modems provided by many ISPs. Instead request a standalone modem with a single WIDE AREA NETWORK (WAN) connector that can then be connected directly to the WAN input port on a Linksys® Router. The problem with using the modem/router combination provided by the ISP is that many of these devices have limited routing capabilities, and are difficult to properly configure with respect to forwarding information to the DigiPort. PTI Security Systems has found that the Linksys® brand routers are more configurable for the specific needs as presented by the DigiPort.
3. Most ISPs work closely with computer service and network companies in their local areas where the DigiPort is to be installed. It will be advantageous to obtain a listing of these companies from the service provider prior to signing a broadband service agreement. In this way the network service company will be able to assist with the network configuration and requirement.

⚠ WARNING: PTI Security Systems is not responsible for network configuration and maintenance. PTI Security Systems will be willing assist a **qualified network technician** with **general configuration** questions and testing should the need arise.

Network Configuration Information for the Broadband Account

This information should be provided by the Internet Service Provider (ISP).

The TCP/IP configuration information. Include:

- a. The type of connection to the ISP.
Example: Static IP Address using PPPoE, PPTP, L2TP, DHCP, etc. *A Dynamic IP is **not** an acceptable protocol.*
- b. Does the ISP require or use a physical or MAC address in the account configuration? If so obtain the information.
- c. Does the ISP require a Host name, Domain Name, and MTU in the account configuration? If so obtain the information.
- d. The *Static* IP Address provided by the ISP for both headquarters and remote facilities.
- e. The Net Mask number used by the ISP.
- f. The Gateway number used by the ISP.
- g. The Primary and Secondary Domain Name Server (DNS) numbers used by the ISP.

This information will be vital in the configuration of the Linksys® Router, and will be used by the network technician. **PTI Security Systems is not responsible for network configuration and maintenance. Obtaining a certified network technician prior to the installation of the broadband connectivity between the remote and headquarters sites will greatly reduce costly mistakes and make for a smooth and seamless installation.**

Additional information:

The following router ports will need to be opened and forwarded to the Digiport:

- Port 23 Telnet
- Port 950 TCP
- Port 966 TCP
- Port 1029 UDP
- Port 4000 to 4001 - TCP

Failure to open these router ports may cause the errors “Get Interface Error” or “Get DHCP Error” when the COM mapping utility is run in the setup and installation steps. The DigiPort **will not** work if these ports are not opened in your router and forwarded to the DigiPort.

Included in this Chapter

Introduction.....	General Purpose
Installation.....	Running the Hyper Terminal Program Verifying the DigiPort Configuration Running the Ping Program
Running the DigiPort Setup Program.....	Detailed Instructions
Setting the COM Port in theDigiGate-700™ Software	Detailed Instructions

Updated DigiPort drivers are available at:

http://www.moxa.com/support/sarch_result.aspx?prod_id=50&type_id=5&type=soft



Figure 2-1



Figure 2-2

Introduction

The **DigiPort™ Network Interface** was designed to give PTI Digitech brand system devices the ability to transmit data over a standard Local or Wide Area Network. This ability allows control of the system controller and other PTI Digitech brand system components from virtually anywhere, using Internet connectivity.

Installation

1. Obtain the IP address that will be assigned to this device (See Chapter One for information on how to obtain this IP address and for network requirements necessary for the DigiPort to work).
2. Connect the DigiPort to a serial port on the PC being used to set up the unit. **Note:** To configure the device you must have a terminal program such as HyperTerminal installed on the PC that you have the DigiPort connected to. If you do not have HyperTerminal then contact your PC technician or network administrator for help in configuring this program. The device should be connected with a standard serial cable. **Do not use the Null Modem adapter supplied with the DigiPort during this procedure.** Figure 2-1.
3. On the front of the device set SW1, Dip switch one to the ON (up) position. **Figure 2-1**
4. Connect the cord of the supplied transformer to the DC-IN connection, and plug the transformer into an outlet. The RED power light should turn on. **Figure 2-2**

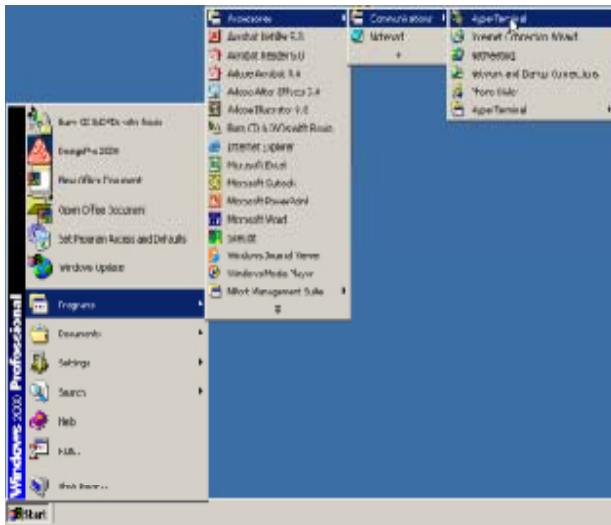


Figure 2-3



Figure 2-4

5. From the *Start* menu, Select *Programs*, then *Accessories*, then *Communication*, then *Hyper Terminal*. **Figure 2-3**
6. This opens the “Connection” window. **Figure 2-4**
7. Enter a Name for the connection.
8. Select an Icon (any Icon is fine) and click the **OK** Button.

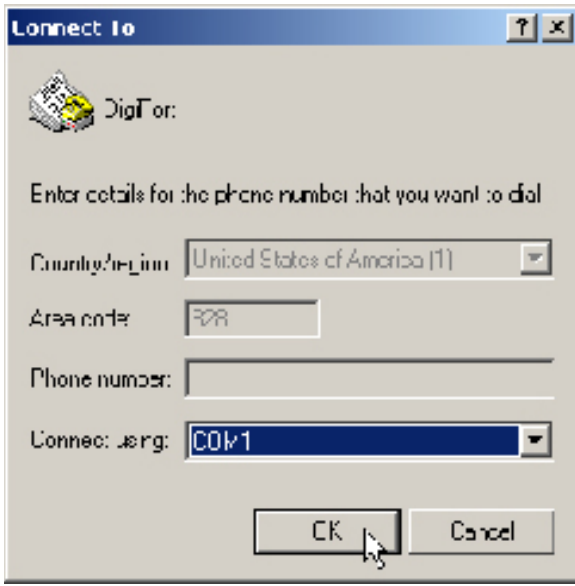


Figure 2-5

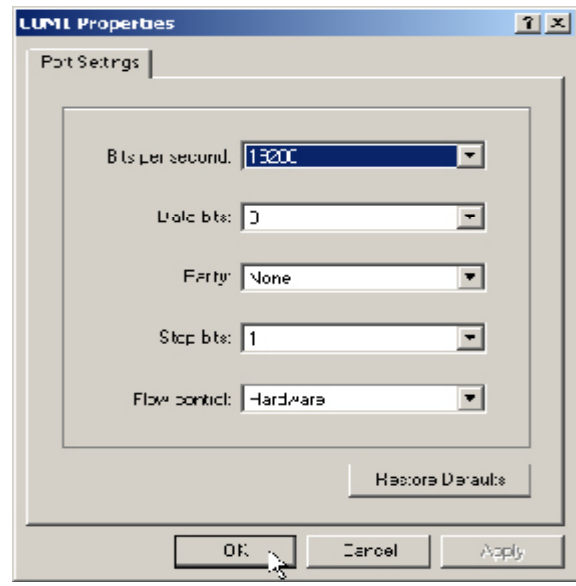


Figure 2-6

9. This opens the “Connect To” window.

Figure 2-5

10. Select the COM port that is being used for connection the DigiPort, and click the **OK** button. **Note:** In the example screen above, COM1 is being used. Your system may use a different COM port.

11. This opens the “Com Properties” window.

Figure 2-6

12. In the **Properties** dialog box select:
Bits per second = 19200
Data Bits = 8
Parity = None
Stop bits = 1
Flow Control = Hardware

13. Click the **OK** button.

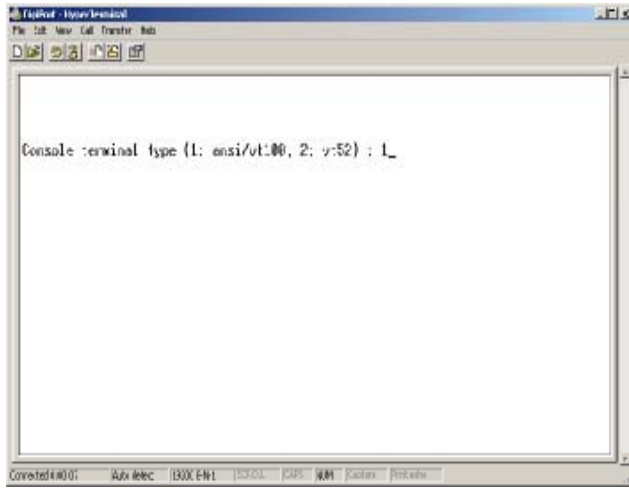


Figure 2-7

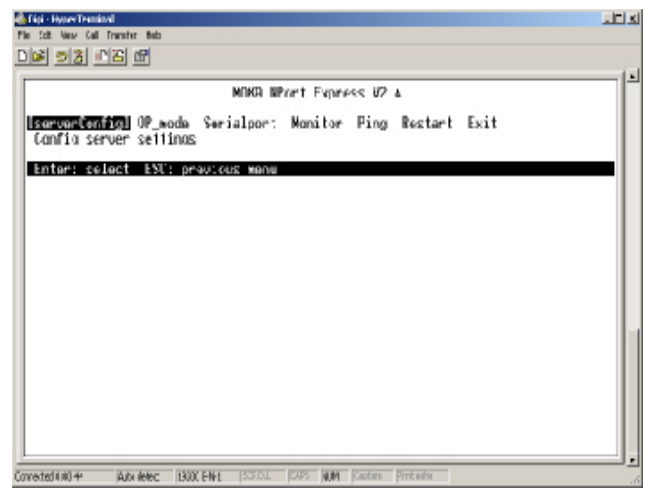


Figure 2-8

14. This will connect you to the DigiPort- and open the **Hyper Terminal** window.
Figure 2-7

15. Select **Console Terminal Type** as 1 and press the **Enter** key.

NOTE: If you do not get the screen shown in **Figure 2-7**, double check the com port you have selected and verify it is the com port connected to the DigiPort™.

If necessary, repeat the steps listed on the prior pages.

16. The “Server Configuration” window should open as shown in **Figure 2-8**.

17. The left and right arrow keys on the keyboard will allow you to scroll through the option settings.

18. Highlight the **serverConfig** option and press the **Enter** key.

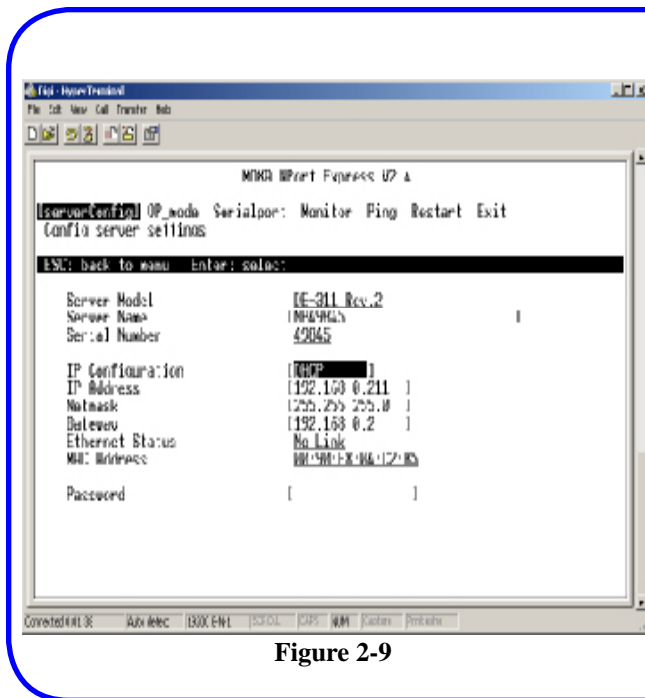


Figure 2-9

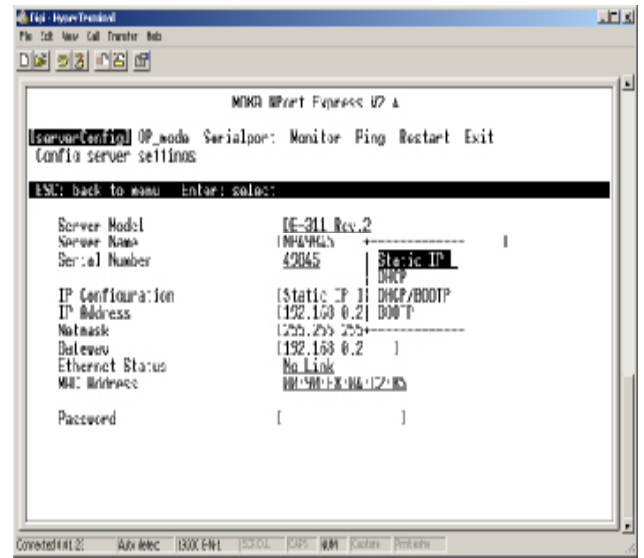


Figure 2-10

19. Use the Up and Down Arrow keys to move to a setup item and the **ENTER** key to open the selection list for that item.
20. Move to **IP Configuration** and press the **ENTER** key. **Figure 2-9**

21. This opens a list box. **Figure 2-10**
22. Select **Static IP** and press the **ENTER** key.
23. Next select and enter the **IP Address**, the **Net Mask**, and the **Gateway** for the location where the DigiPort will be installed. These items were determined by your Network Technician in Chapter One.

Note: The numbers shown in Figure 2-9 are just an example and are not necessarily the numbers that will be used at your particular site.

24. Press the **ESC** key to save changes and return to the selection menu.

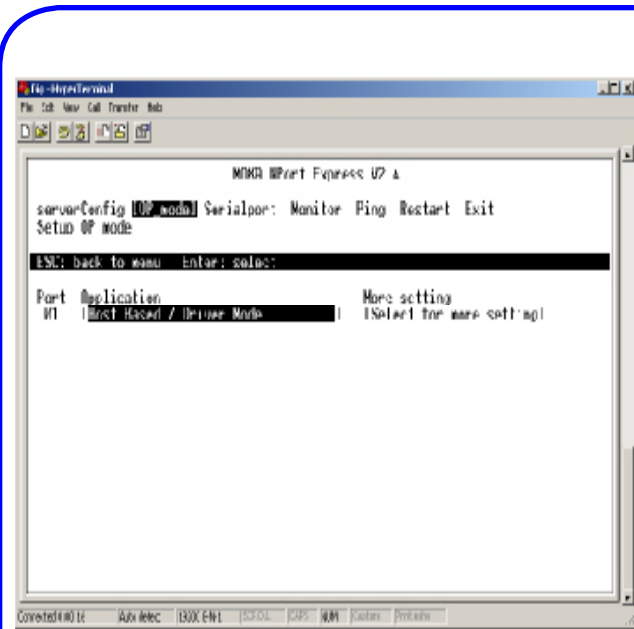


Figure 2-11

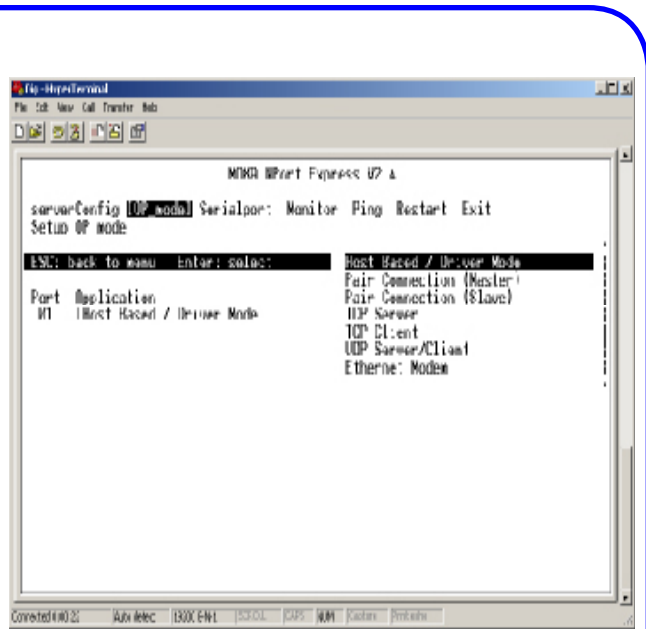


Figure 2-12

25. Press the right arrow key to select the **OP_ mode** option and press the **ENTER** key.
Figure 2-11

26. From the list box, select **Host Based/Driver Mode** and press the **ENTER** key.
Figure 2-12

27. Press the **ESC** key to save your changes.

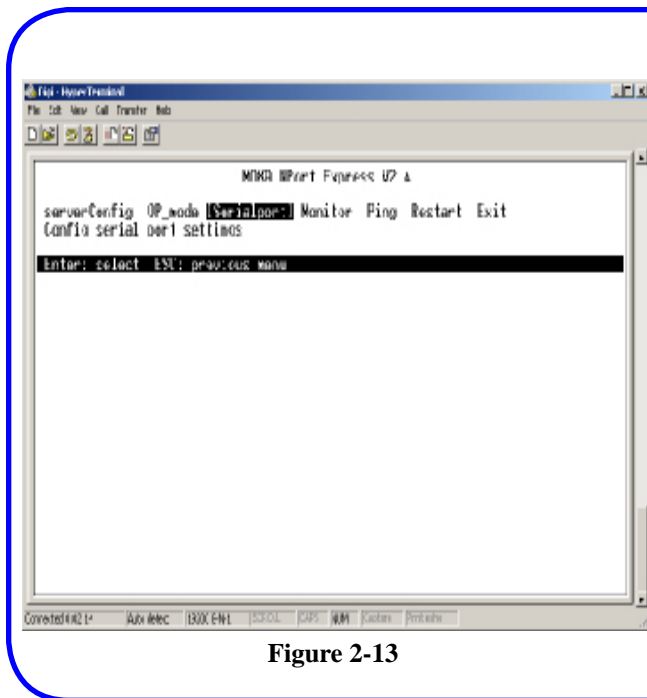


Figure 2-13

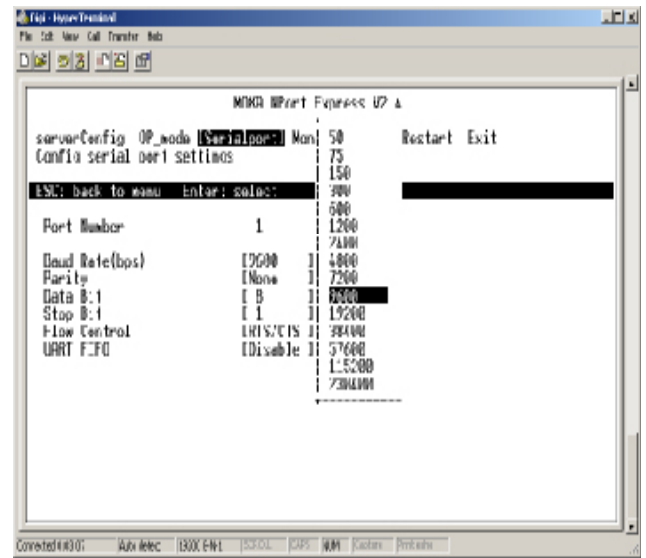


Figure 2-14

28. Press the right arrow key to select the **Serialport** option and press the **ENTER** key. **Figure 2-13**

29. Using the down arrow key, select each of the following and press the **ENTER** key to change. **Figure 2-14**

30. Set the following parameters:

Baud Rate to **9600**

Parity to **None**

Data Bits to **8**

Stop Bit to **1**

Flow Control to **RTS/CTS**

UART FIFO to **Disable**.

31. Press the **ESC** key to save changes.

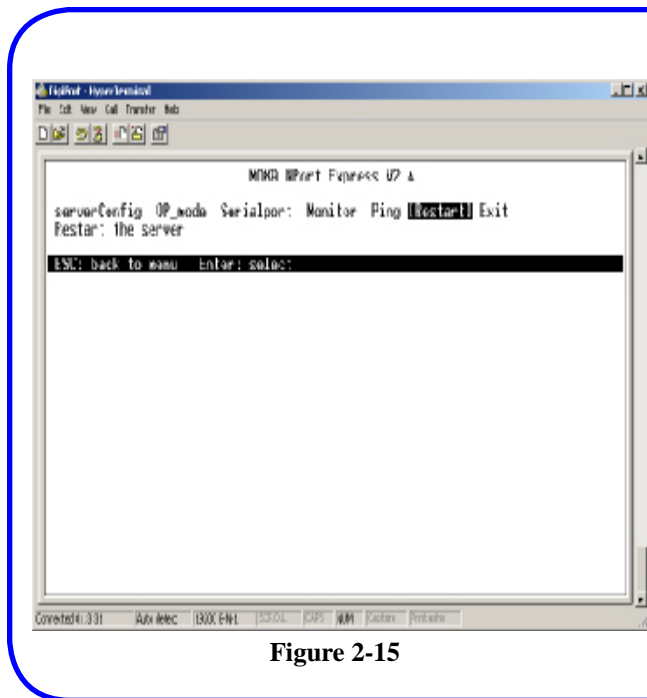


Figure 2-15

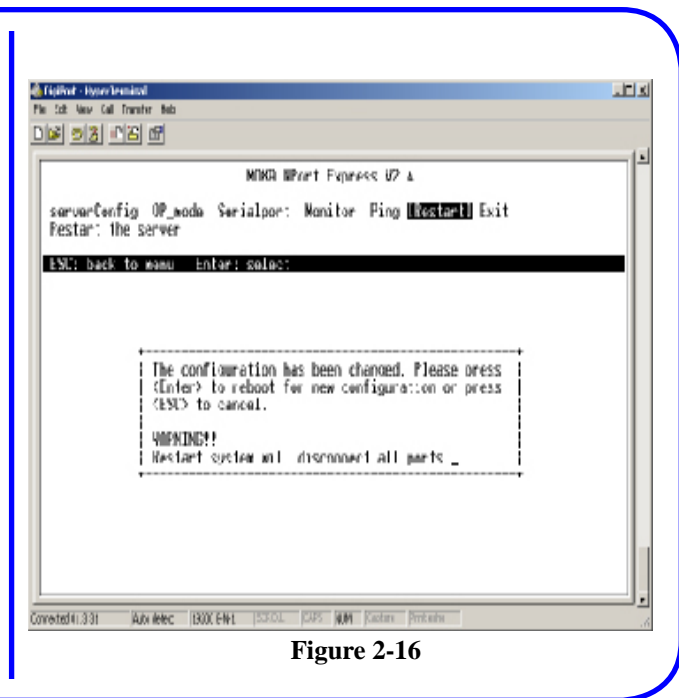


Figure 2-16

32. Press the right arrow key to select the **ReStart** option and press the **ENTER** key.
Figure 2-15

34. The restart confirmation window will open.
Figure 2-16

35. Press the **ENTER** key to restart the DigiPort and save all changes you have made.

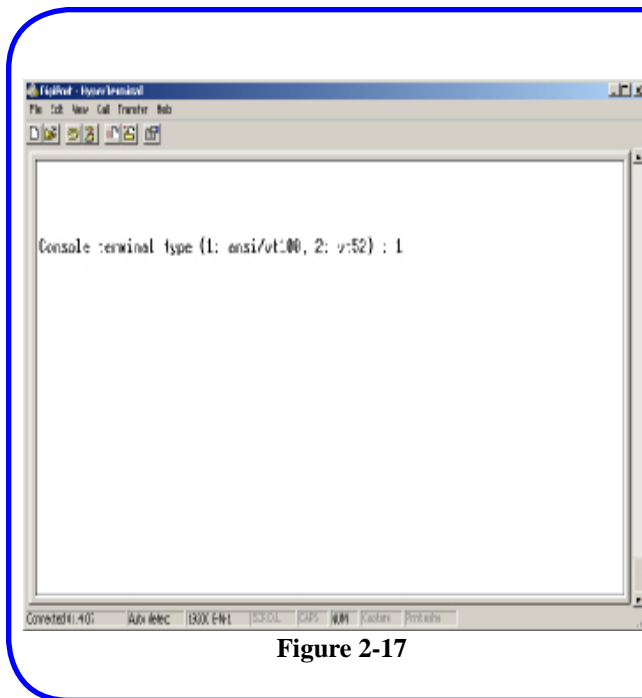


Figure 2-17

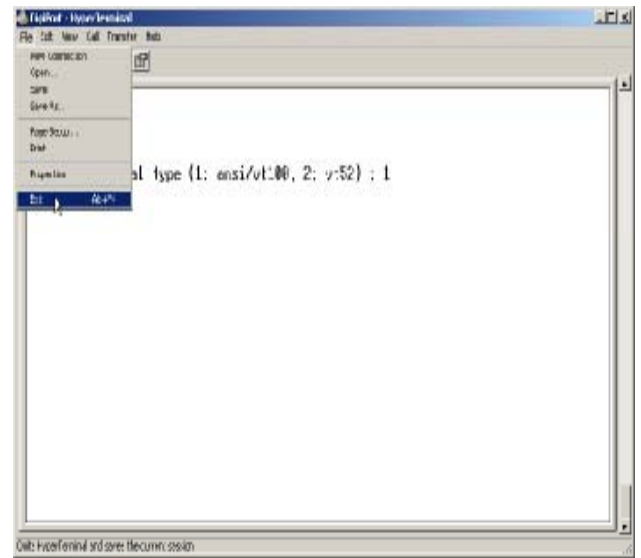


Figure 2-18

36. Wait until the HyperTerminal screen, is re-displayed. **Figure 2-17**

37. Exit from the HyperTerminal program by clicking on the **File** menu and selecting **Exit**. **Figure 2-18**

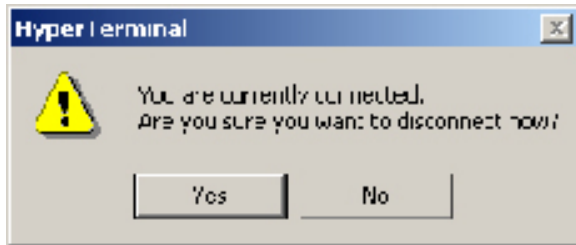


Figure 2-19

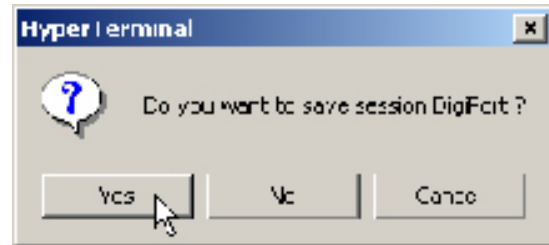


Figure 2-20

38. This will open the disconnect warning.

Figure 2-19

39. Click on the **Yes** button.

40. The save session confirmation window will open.

Figure 2-18

41. Click on the **NO** button to exit the Hyperterminal program.

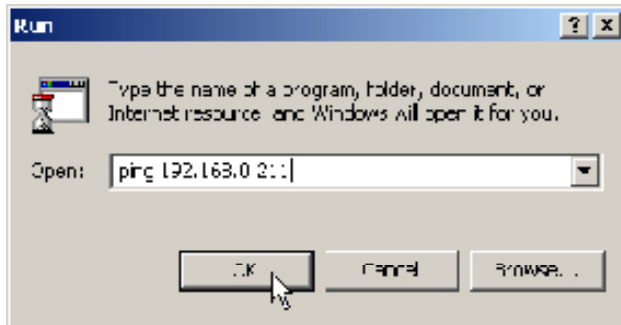


Figure 2-21

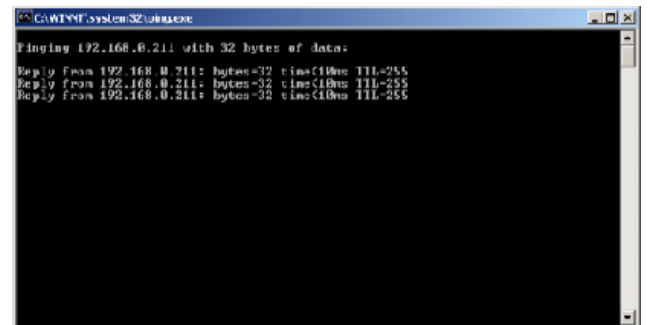


Figure 2-22

Verifying the DigiPort Configuration

1. Disconnect the power from the DigiPort-. The red PWR light should be off.
2. Disconnect the DigiPort from the computers serial port.
3. Set **SW1** switch 1, 2 and 3 to off position.
4. Connect the DigiPort- serial output to your System Controller. Use a standard serial cable with the orange-banded NULL MODEM serial adapter supplied with the DigiPort™. The adapter **MUST** be added to end of the cable that attaches to the DigiPort, and **NOT** to the end that connects to the System Controller. Check that all connections are tight and secure.

NOTE: If the orange-banded adapter was not provided with the DigiPort-, change jumper **J2** in the System Controller to the **DTE** setting.
5. Connect the DigiPort- to your network, using a network cable. The network cable is supplied by the customer to ensure that it is the proper length for the connection.
6. Connect the power transformer to the DigiPort-.

NOTE: All three DigiPort LEDs should be on. If the Link or Ready LEDs are not on, check the network cable and its installation.
7. At a PC that is on the same network as the DigiPort, click on the Windows Start button.
8. Select **Run** which opens the run menu.
9. Type “ping”, a space, and the IP address that was programmed into the DigiPort. **Figure 2-21**
10. A DOS window will open running the Ping program. Reply responses should start displaying in the window. **Figure 2-22**

NOTE: If the message “Request Timeout” is displayed, the DigiPort is not connected to the network, or a setup error (such as an incorrect or duplicate IP address) has been assigned to it.



Figure 2-23

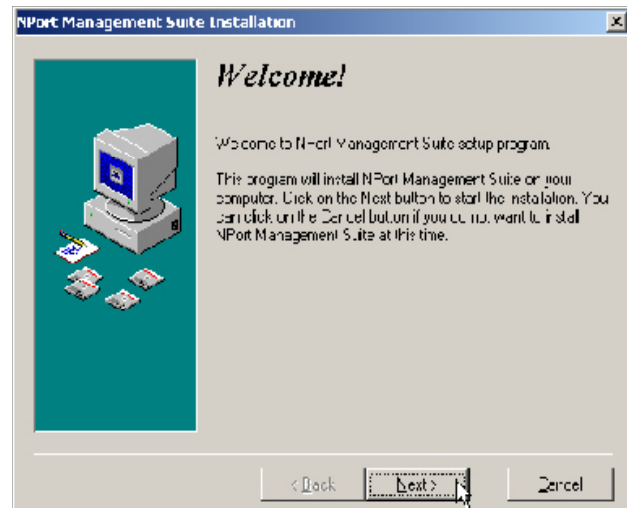


Figure 2-24

DigiPort Driver Setup

1. Place the Installation CD that came with the DigiPort into the drive on the PC that will be running the DigiGate program.
2. Click on the Windows Start button and select **Run** which opens the run menu. Browse to your CD Drive and select the **dssetup.exe** program, then click **OK**. This will run the program and display the window shown in **Figure 2-23**.
3. The program installs the driver that allows the DigiGate-700 program to communicate with the DigiPort™. **Figure 2-23**

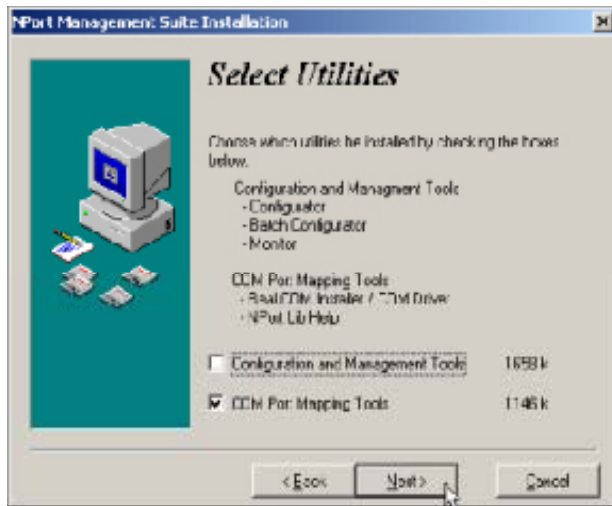


Figure 2-25

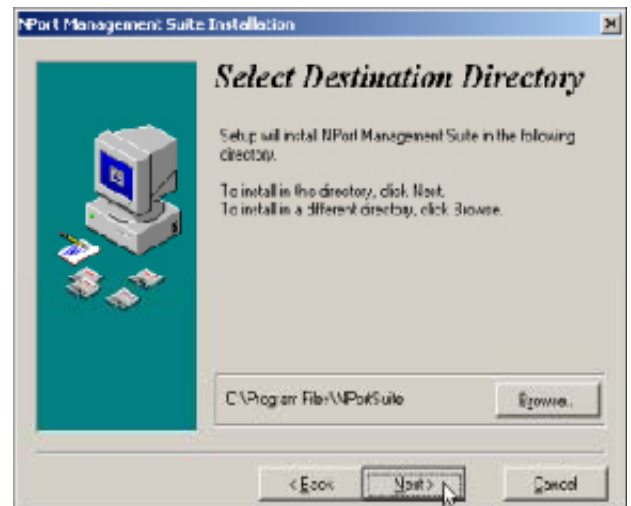


Figure 2-26

4. Follow the onscreen prompts, and after installation is complete the **Select Utilities** window will open. **Figure 2-25**
5. Place a check mark beside the **COM Port Mapping Tools** and then click **Next**.
6. The **Select Destination Directory** window opens. **Figure 2-26**
7. Leave the default directory selected and click **Next**.

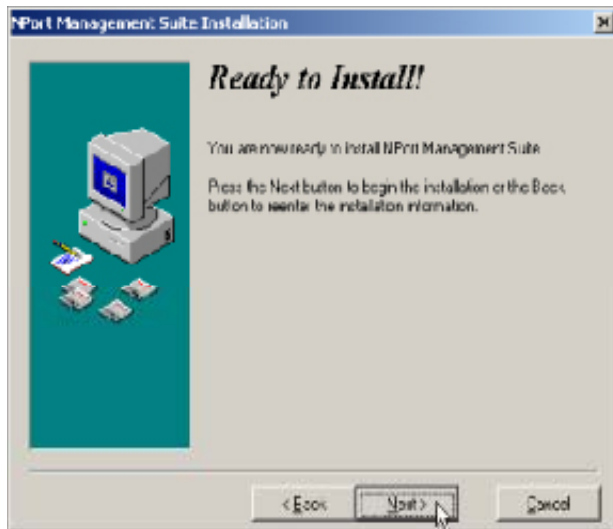


Figure 2-27

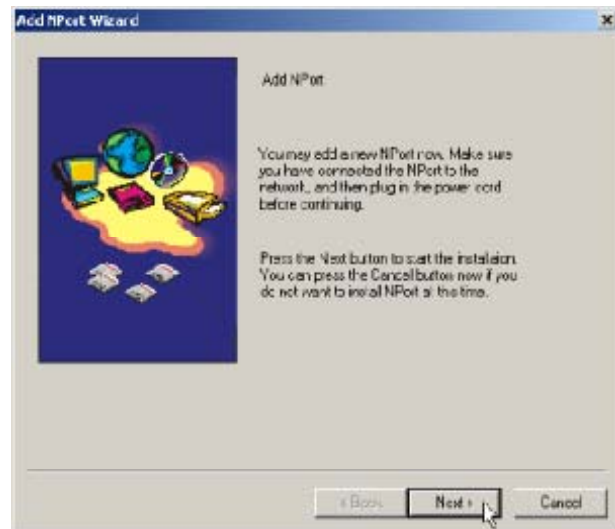


Figure 2-28

8. The **Ready to Install** window opens. **Figure 2-27**.
9. Click **Next**.

10. The **Add Port** window opens. **Figure 2-28**.
11. Click **Next**.

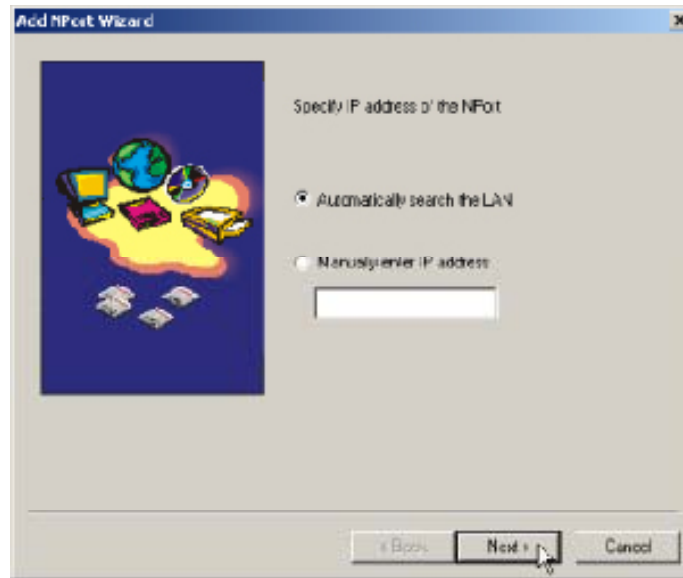


Figure 2-29

12. The **specify IP address** window opens.
Figure 2-29.

13. Select **Manually Enter IP Address**. Enter the IP Address that was assigned to the DigiPort. This should be the same address that was successfully pinged in the test on page 2-12.

14. Click **Next**.

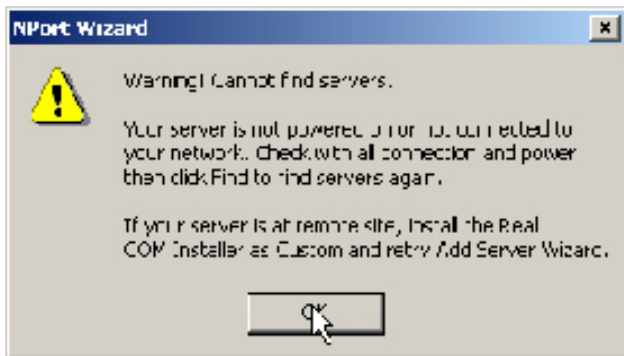


Figure 2-30

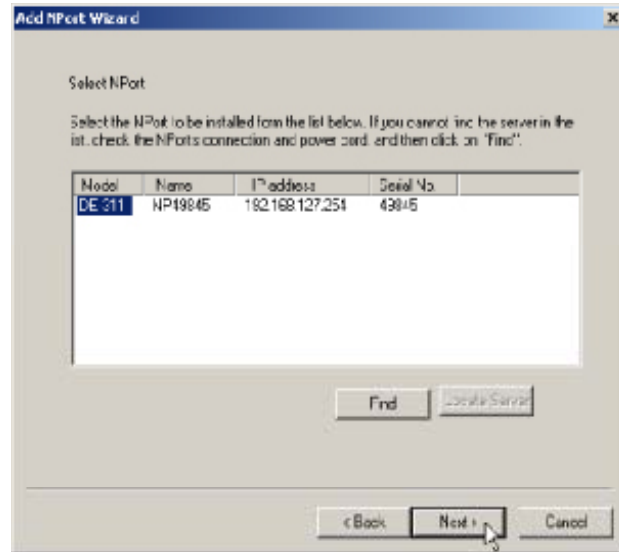


Figure 2-31

15. The network address you specified will be searched for a DigiPort. This may take a moment.
16. If a DigiPort is not found on the network, a warning window opens. **Figure 2-30.**
17. Click **OK**, you will be returned to **Figure 2-29**. Recheck your installation and make sure the DigiPort is connected to the network, is powered on, and you are searching the correct IP address. Also check to make sure that any firewalls or routers are set up to forward ports correctly (See Chapter One for more information on ports that need to be opened for the DigiPort to work.)
18. If a DigiPort is found on the network, the **Select** window opens listing the DigiPort unit. **Figure 2-31**
19. Click **Next**.

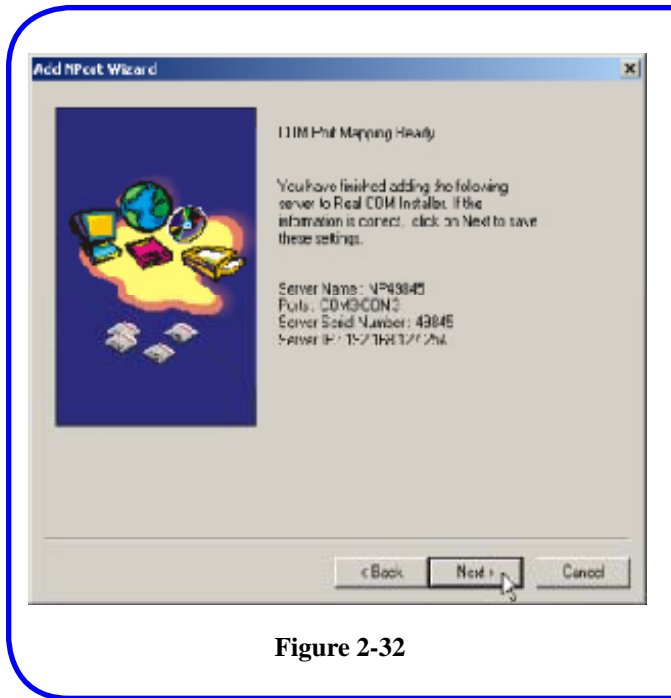


Figure 2-32

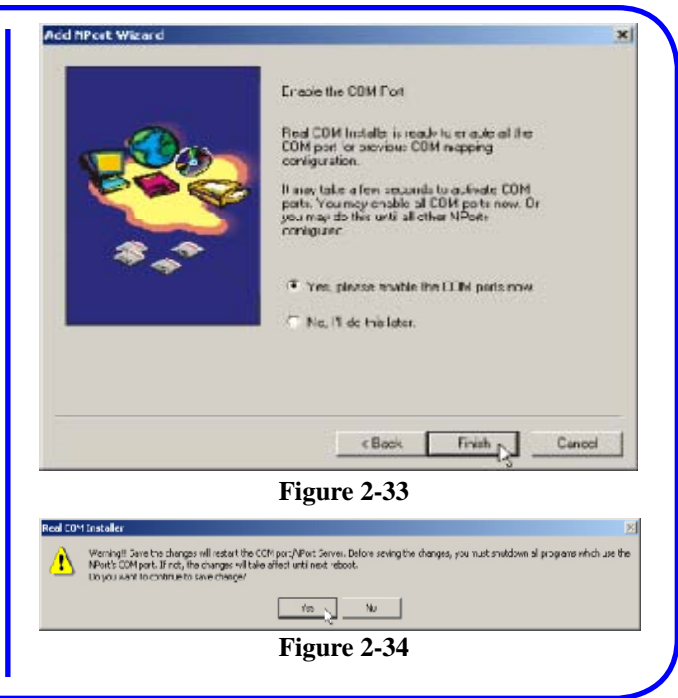


Figure 2-33

Figure 2-34

20. The **Com Port Mapping Ready** window opens. **Figure 2-32**

Note: The COM port listed in this window must be port #1, 2, 3 or 4. It cannot be assigned a number higher than 4.

21. Click **Next**.

22. The **Enable the COM Port** window opens. **Figure 2-33**

23. Click **Finish**.

24. The **Real COM Installer** warning window opens. **Figure 2-34**

25. Click **Yes**.

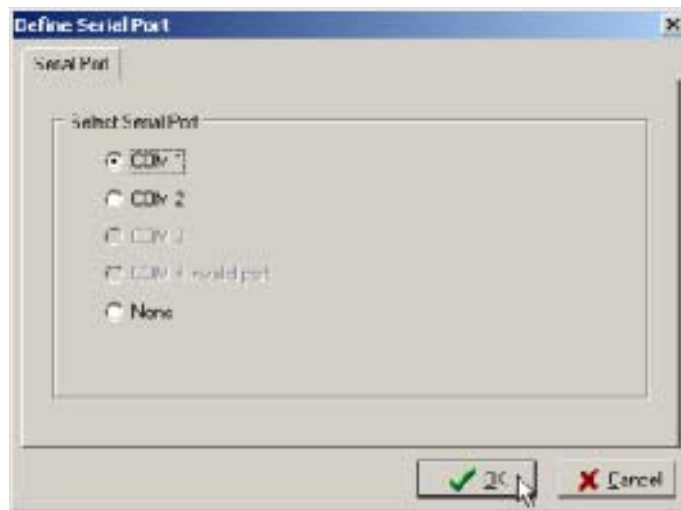


Figure 2-35

Setting the COM Port in the DigiGate-700™ Software

1. Run the DigiGate-700 program
2. Click on the **Setup** menu icon.
3. Select the **SysCon Setup** tab.
4. Select the **Serial Port** icon.
5. The **Define Serial Port** window opens. **Figure 2-35**
6. Select the COM port connected to the DigiPort™. (This was shown in the window that is in **Figure 2-32**)
7. Click **OK**.
8. Exit from the DigiGate-700 program.
9. Restart the DigiGate-700 program. The program should be communicating with the System Controller.

If communications fails, check that the proper COM port was assigned. Also check the System Controller and make sure that it has power, that the J3 Jumper is across both pins, and that the supplied NULL MODEM adapter was used on the serial cable and connected at the DigiPort end of the cable. You may also want to do a hard reset of the System Controller if it fails to communicate. Do this by pressing the reset button located just to the left of the red LED's on the bottom board of the Syscon. Press the button firmly until a "Click" is heard from the relay on the System

