XPORT User Manual

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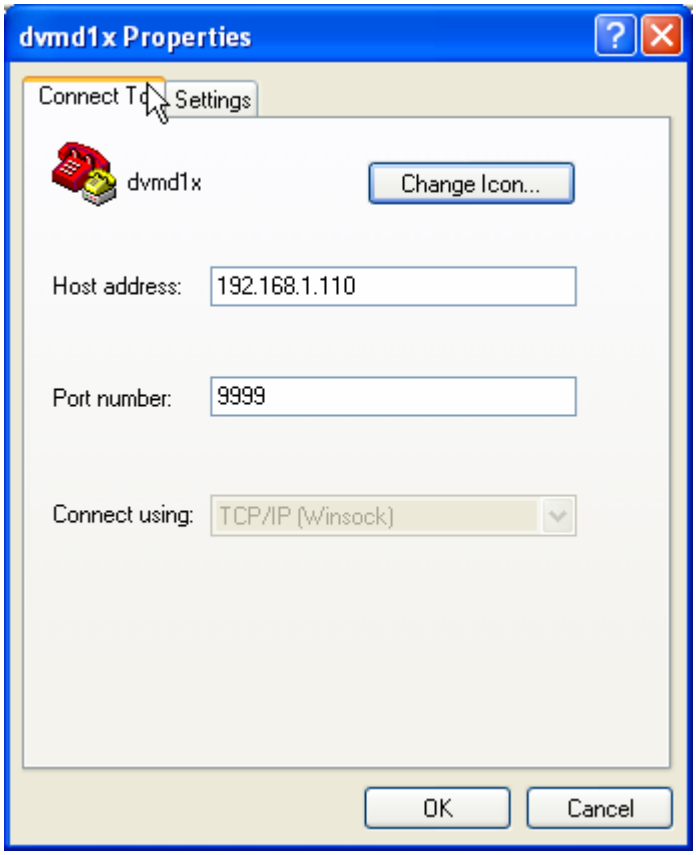
XPORT CONFIGURATION METHODS

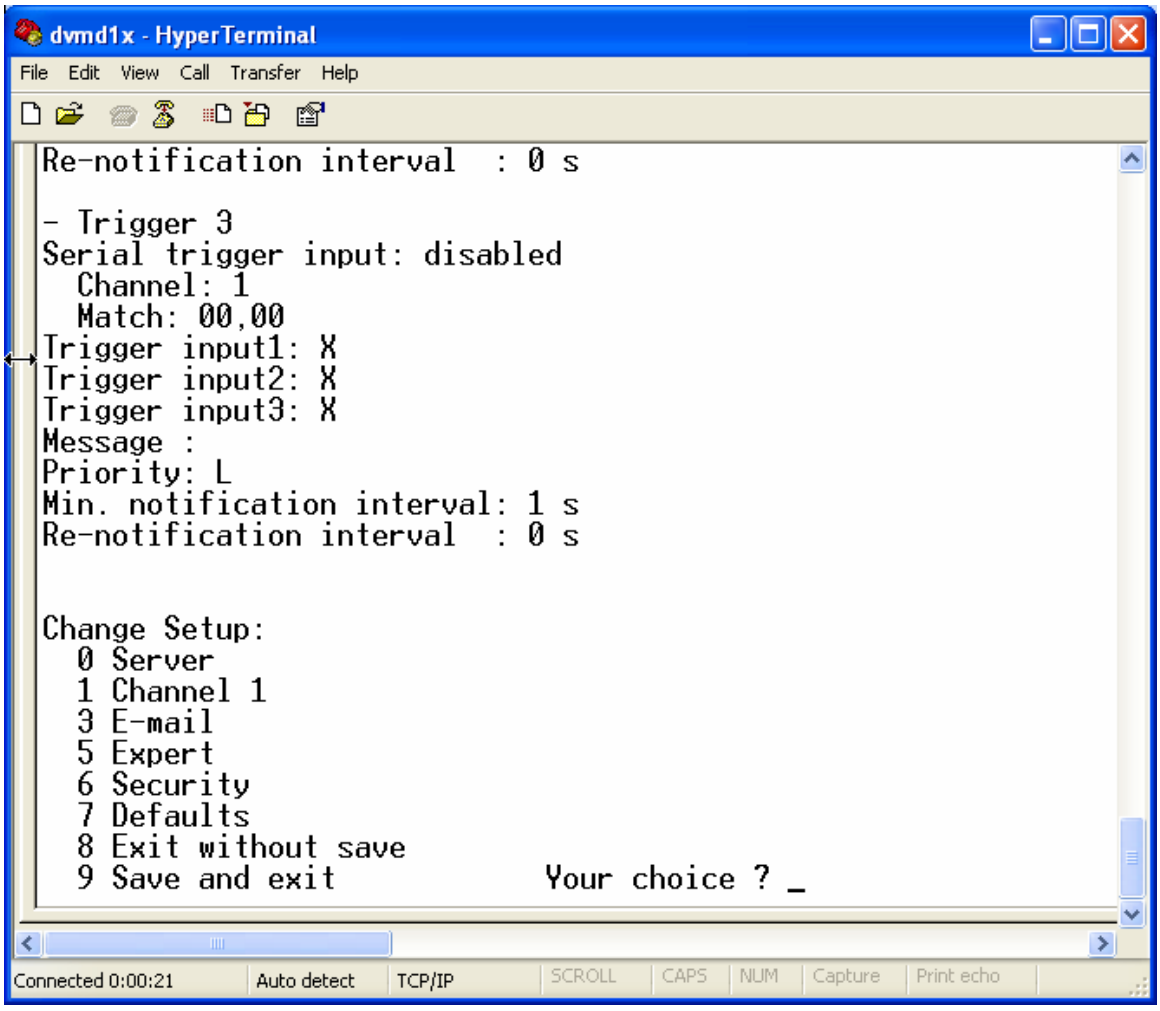
There are two methods available to set the IP address and Port number for the XPORT device inside the DVMD1X and DVMD16 products:

1. If the current IP address is known or the default is still in use, use TELNET.
2. If the current IP address is unknown use the discovery process within DeviceInstaller.

TELNET WITHIN HYPERTERMINAL

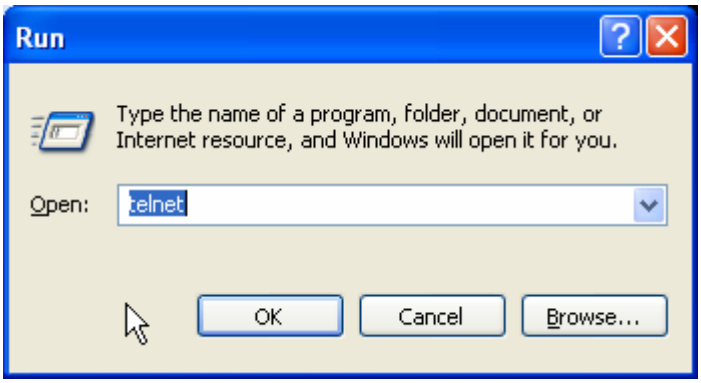
The default IP address (192.168.1.110) and XPORT default TELNET port settings (9999) are shown in below. Use these settings to establish a TELNET link to the XPORT with HyperTerminal. They are available to edit in the FILE - PROPERTIES tab.



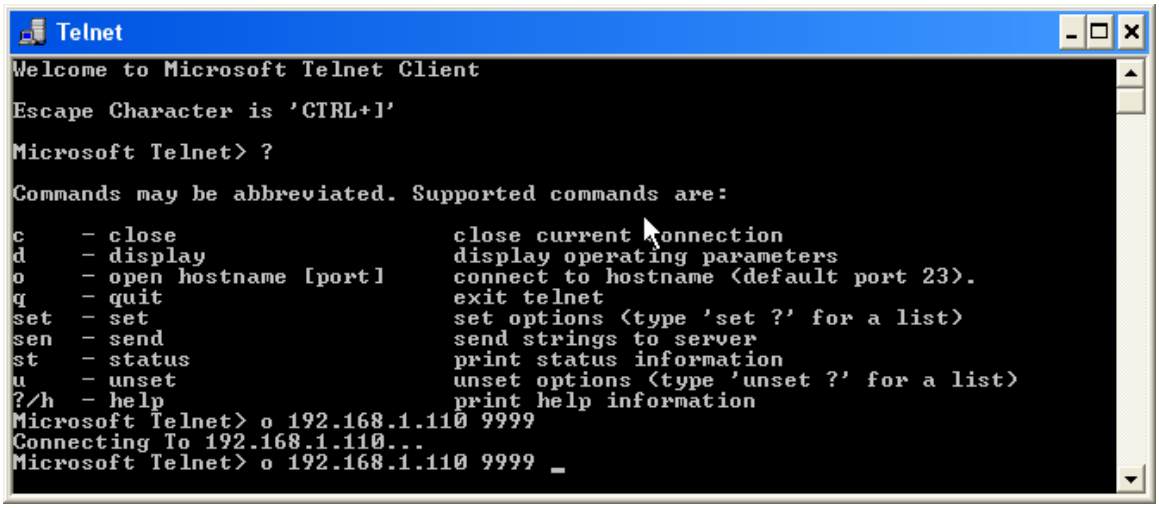

dvmd1x - HyperTerminal
File Edit View Call Transfer Help
Re-notification interval : 0 s
- Trigger 3
Serial trigger input: disabled
Channel: 1
Match: 00,00
Trigger input1: X
Trigger input2: X
Trigger input3: X
Message :
Priority: L
Min. notification interval: 1 s
Re-notification interval : 0 s
Change Setup:
0 Server
1 Channel 1
3 E-mail
5 Expert
6 Security
7 Defaults
8 Exit without save
9 Save and exit
Your choice ? _
Connected 0:00:21
Auto detect
TCP/IP
SCROLL
CAPS
NUM
Capture
Print echo

TELNET WITHIN WINDOWS

Most Windows version of software have a version of TELNET installed, but not all. Hit the START icon and select RUN. When the popup asks for a program name, type in TELNET and press OK.



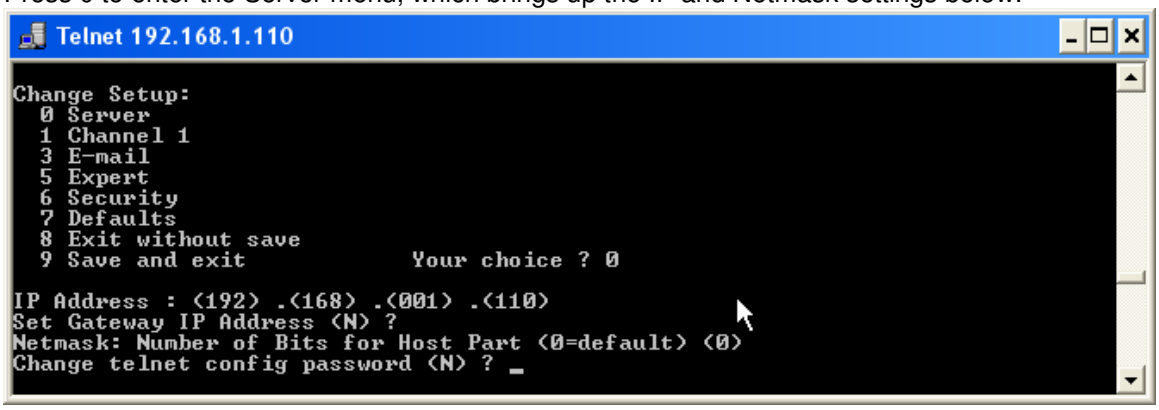
The figure below shows the TELNET version on an XP machine.
Press ? to get the TELNET main menu for instructions.



Type in 192.168.1.110 9999 to access the XPORT device.
PRESS RETURN TWICE.

The first RETURN invokes the TELNET command and the second RETURN is sent to the XPORT to bring up the MENU as below:

Press 0 to enter the Server menu, which brings up the IP and Netmask settings below:



Change the IP address from the default value of 192.168.1.110 to the IP address needed in your system.

Remember to change the IP address in the ManagerNET setup screen to match the value you set the IP address to above, and to put a label on the device so the IP address is known to future users.

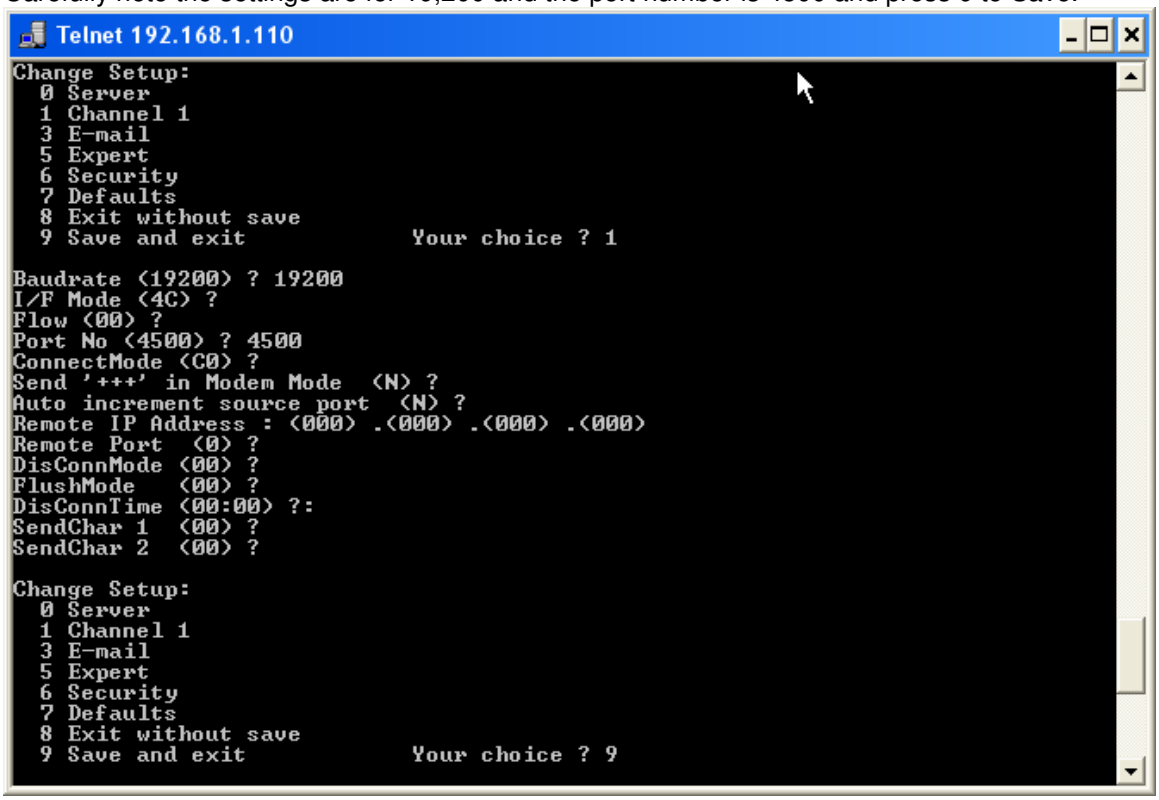
If the XPORT works with ManagerNET all is well. If not see the further documentation below to set (or reset) the Serial Port parameters.

XPORT Serial Port Setup

If the XPORT is still not working there is a chance that the XPORT serial port baud rate and port number must be reset. This can happen when an XPORT is accessed by a web browser which changes the port number to 14001.

In that case you must re-enter TELENT and verify the serial port settings in the XPORT are 19.2Kbaud and the port number is 4500.

Select 1 to set up the Channel 1 as below:
Carefully note the settings are for 19,200 and the port number is 4500 and press 9 to Save.



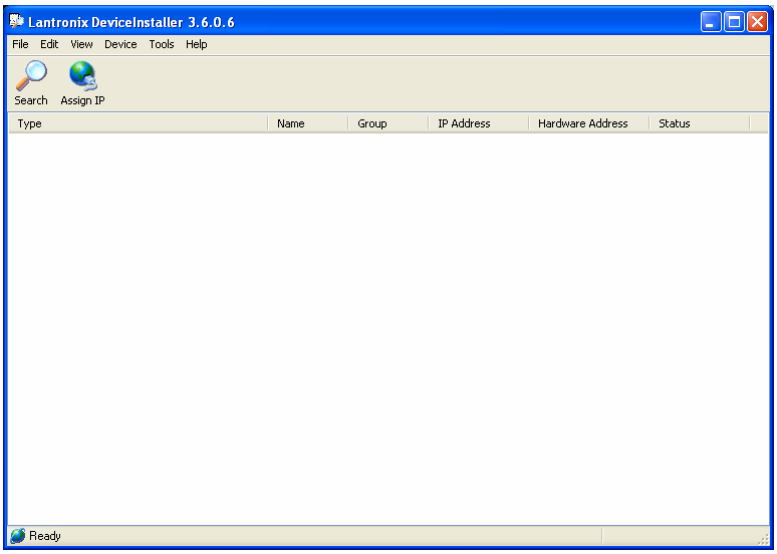
Device Installer 4.1.0.3
Go to the Lantronix website to download the Device Driver upgrade at:

http://ltxfaq.custhelp.com/cgi-bin/ltxfaq.cfg/php/enduser/std_adp.php?p_faqid=644

Product	Download via FTP	Download via HTTP
Mini	v3.6	v3.6
Micro	v3.6	v3.6
Micro100	v3.6	v3.6
UDS-10, UDS-10B and UDS-10-IAP	v3.6	v3.6
UDSx00 and UDSx00-IAP	v3.6	v3.6
SDS1100 and SDS2100	v3.6	v3.6
WiPort	v4.0.0.6	v4.0.0.6
WiBox	v4.0.0.6	v4.0.0.6
XPort	v4.1.0.3	v4.1.0.3
CoBox-FL and CoBox-FL-IAP	v3.6	v3.6
XPress DR and XPress DR IAP	v3.6	v3.6
CoBox-DR1 and CoBox-DR1-IAP	v3.6	v3.6
CoBox-E2	v3.6	v3.6
CoBox-Mini100	v3.6	v3.6

Install Software
Download, Save, Unzip and install DeviceInstaller (v.4.1.0.3)

Run DeviceInstaller
Run the software to get the main menu below.
Note that the GUI is blank until you press the Search icon.



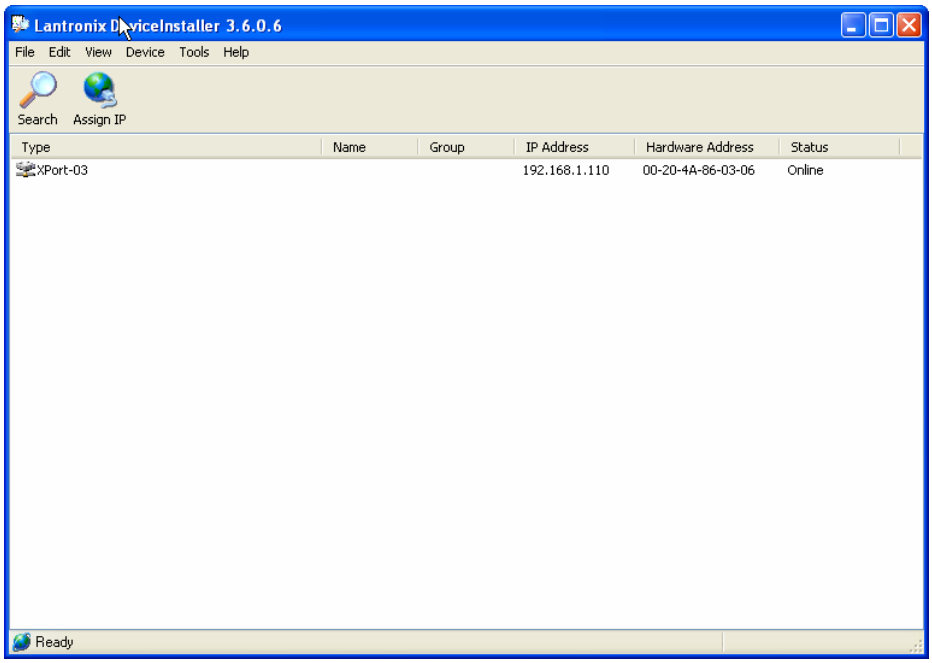
Search

Click the Search icon to force Device Installer to go out to the network and find all Lantronix devices. This should find the XPORTs in the DVMD1 or DVMD16. I suggest connection one XPORT device at a time to insure that the IP address is going to the physical device you intend.

Select XPort-xx Device

Select the XPORT device that you wish to configure by clicking on the line.

The selected line will turn blue to show it has been selected. In this example there is only one XPORT device so we select XPort-00.

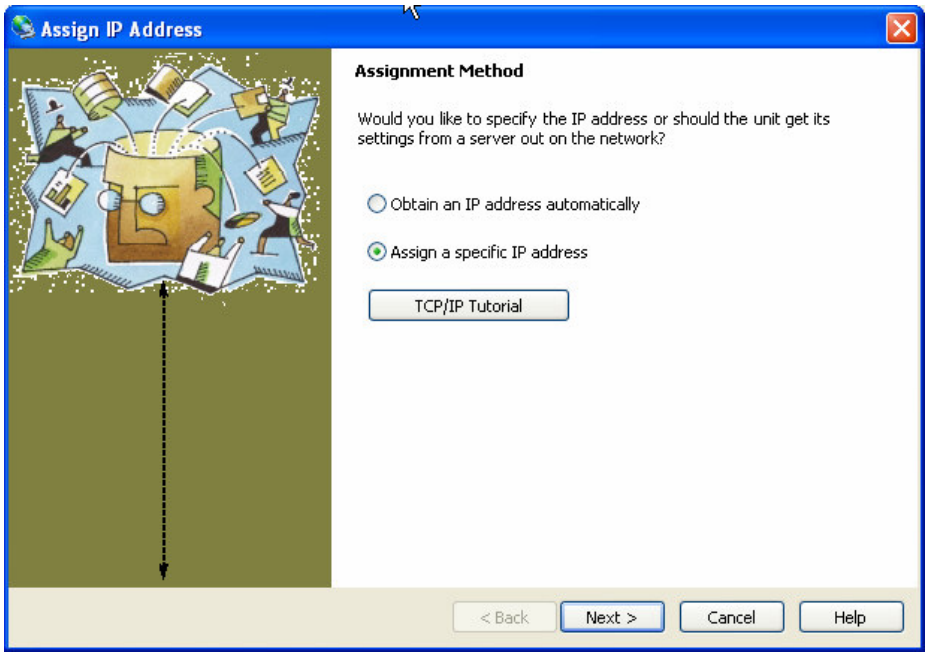


Assign the IP Address

Click on the Assign IP button. You will get the following menu.

Select the 'Assign a Specific IP Address' radio button.

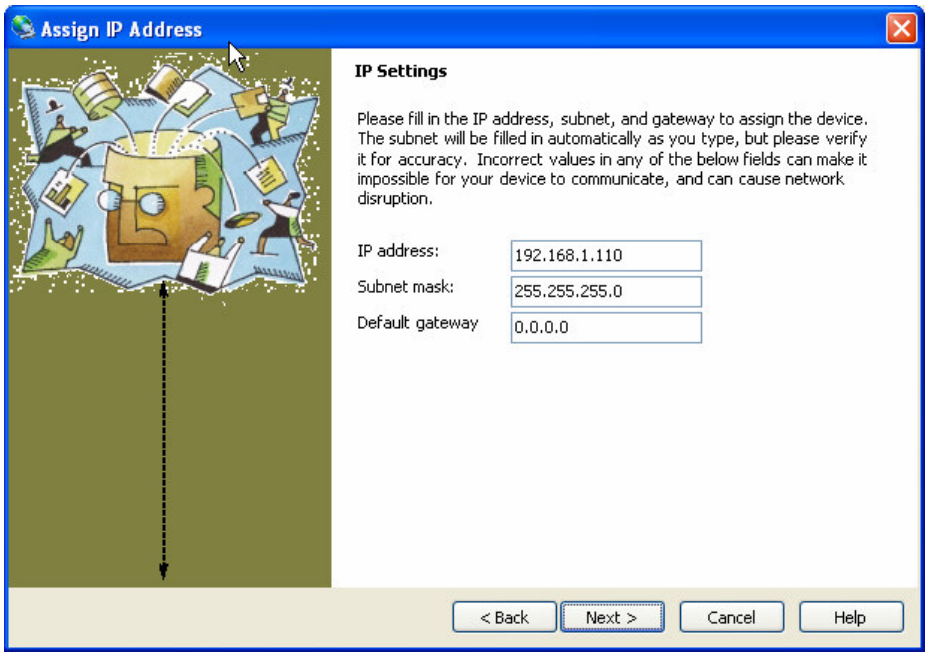
Press Next>



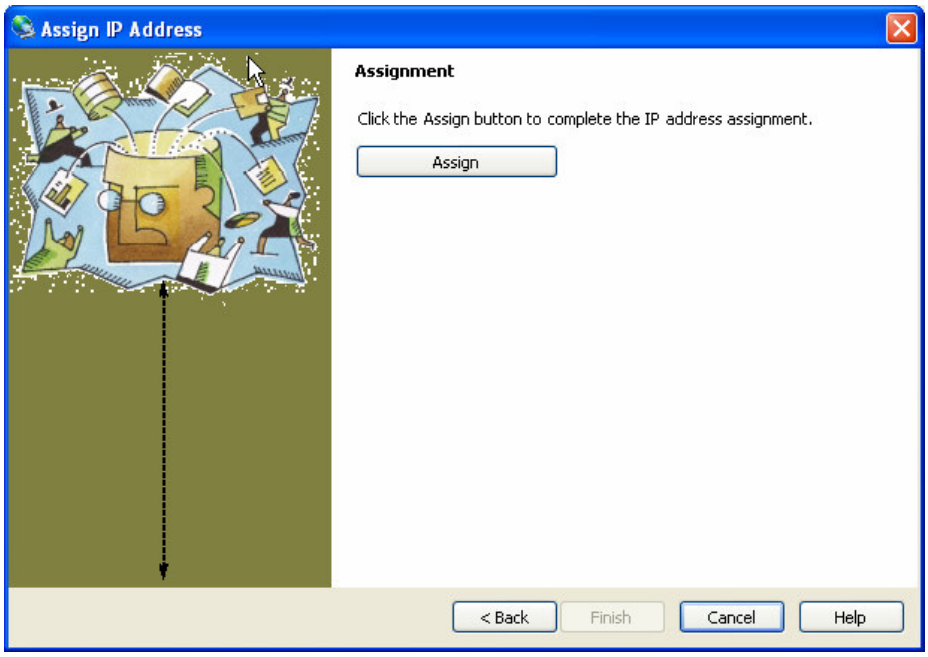
Set IP Address
Fill in the IP address that you wish to use in the XPORT device. In this example we used 192.168.1.110

The Subnet Mask is automatically set to 255.255.255.0. You may change this to fit the needs of your LAN.

The Default gateway is automatically set to 0.0.0.0. You may change this to match the needs of your LAN.



Assignment
Press the 'Assign' button.

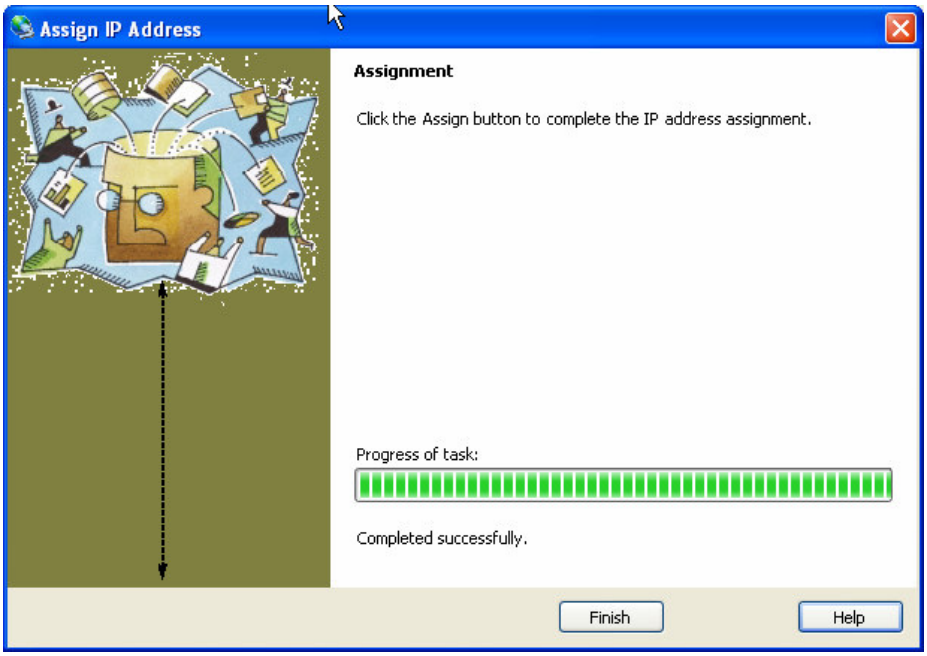


Assignment
Wait 10-12 seconds for the operation to complete.

Watch for the green status bar to move from left to right.

Monitor the bottom line until you see the Completed successfully message.

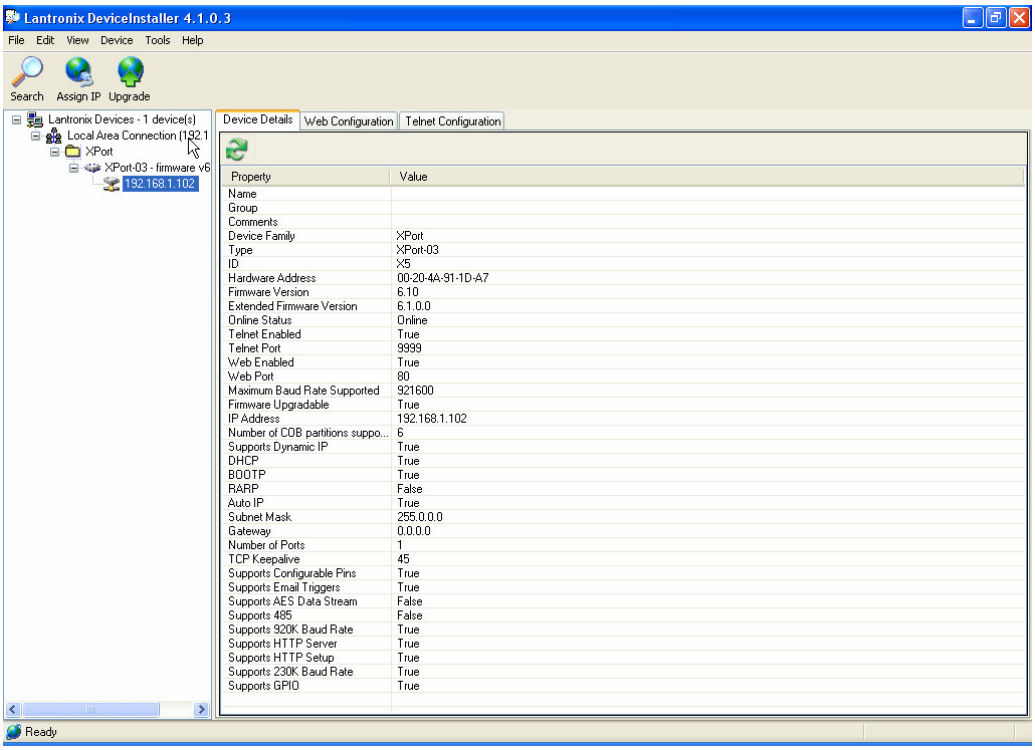
Press Finish.



Search
Press Search and wait for Device Installer to find the device.

Verify the IP address you intended to program is correct.

Click down all the levels in the left side tree structure to get to the lowest device, which will contain the graphic and an IP address.

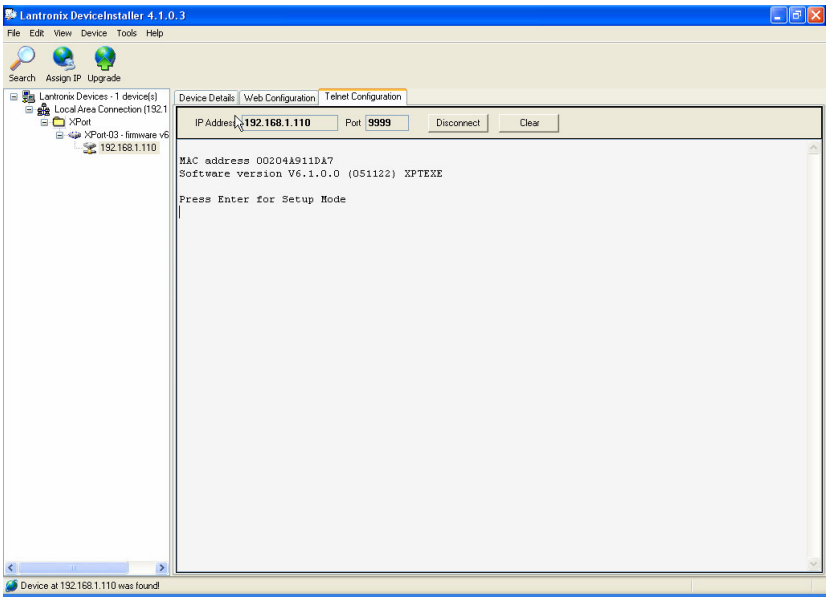


Setup Serial Port

Press the Telnet Tab.

Press Connect.

Hit RET



Configure Serial Port

Press the following sequence to set the baud rate to 19.2K and the port number to 4500:

1 RET	(Select Channel1)
Baudrate (9600) ? 19,200 RET	(Set Baud Rate to 19.2K)
I/F Mode (4C) ? RET	(use default value)
Flow (00) ? RET	(use default value)
Port Number (10001) ? 4500 RET	(set port to 4500)
Connect Mode (C0) ? RET	(use default value)
Send +++ in Modem Mode (Y) ? N RET	(turn this off)
Auto Increment Source Port (N) ? RET	(use default value)
Remote IP address ? RET RET RET RET	(use 0.0.0.0)
Remote Port Number (0) ? RET	(use 0)
Discon Mode (0) ? RET	(use default)
Flush Mode (0) ? RET	(use default)
DisConn Time (00:00) ? RET RET	(use default)
Send Char 1 ? RET	(use default)
Send Char 2 ? RET	(use default)

0 Server
1 Channel 1
3 Email
5 Expert
6 Security
7 Defaults
8 Exit without Save
9 Save and Exit Your Choice ? **9 RET** (save and exit)

Lantronix DeviceInstaller 4.1.0.3
File Edit View Device Tools Help
Search Assign IP Upgrade
Lantronix Devices - 1 device(s)
Local Area Connection (192.1
XPot
XPot-03 - firmware v6
192.168.1.110
Device Details
Web Configuration
Telnet Configuration
IP Address 192.168.1.110
Port 9999
Disconnect
Clear
0 Server
1 Channel 1
3 E-mail
5 Expert
6 Security
7 Defaults
8 Exit without save
9 Save and exit
Your choice ? 1
Baudrate (9600) ? 19200
I/F Mode (4C) ?
Flow (00) ?
Port No (10001) ? 4500
ConnectMode (C0) ?
Send '+++' in Modem Mode (Y) ? N
Auto increment source port (N) ? N
Remote IP Address : (000) .(000) .(000) .(000)
Remote Port (0) ?
DisConnMode (00) ?
FlushMode (00) ?
DisConnTime (00:00) ?:
SendChar 1 (00) ?
SendChar 2 (00) ?
Change Setup:
0 Server
1 Channel 1
3 E-mail
5 Expert
6 Security
7 Defaults
8 Exit without save
9 Save and exit
Your choice ? 9
Ready

APPENDIX A: XPORT LEDS

LEDs

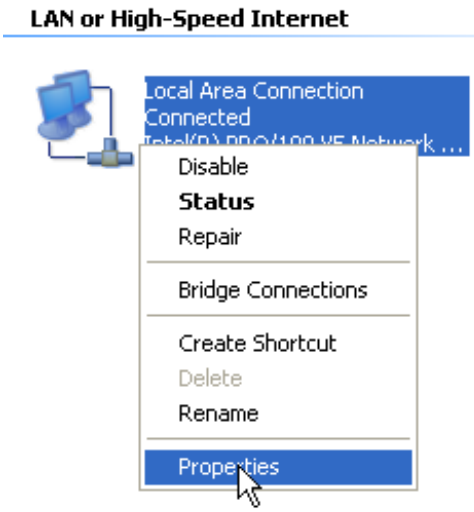
The device contains two Bi-color LEDs built into the front of the XPort connector. (See dimension drawing for location.)

Left LED	Right LED	Meaning
Off	Off	No Link
Off	Solid Amber	100BASE-T Half Duplex Link
Off	Blinking Amber	100BASE-T Half Duplex; Activity
Off	Solid Green	100BASE-T Full Duplex Link
Off	Blinking Green	100BASE-T Full Duplex; Activity
Solid Amber	Off	10BASE-T Half Duplex Link
Blinking Amber	Off	10BASE-T Half Duplex; Activity
Solid Green	Off	10BASE-T Full Duplex Link
Blinking Green	Off	10BASE-T Full Duplex; Activity

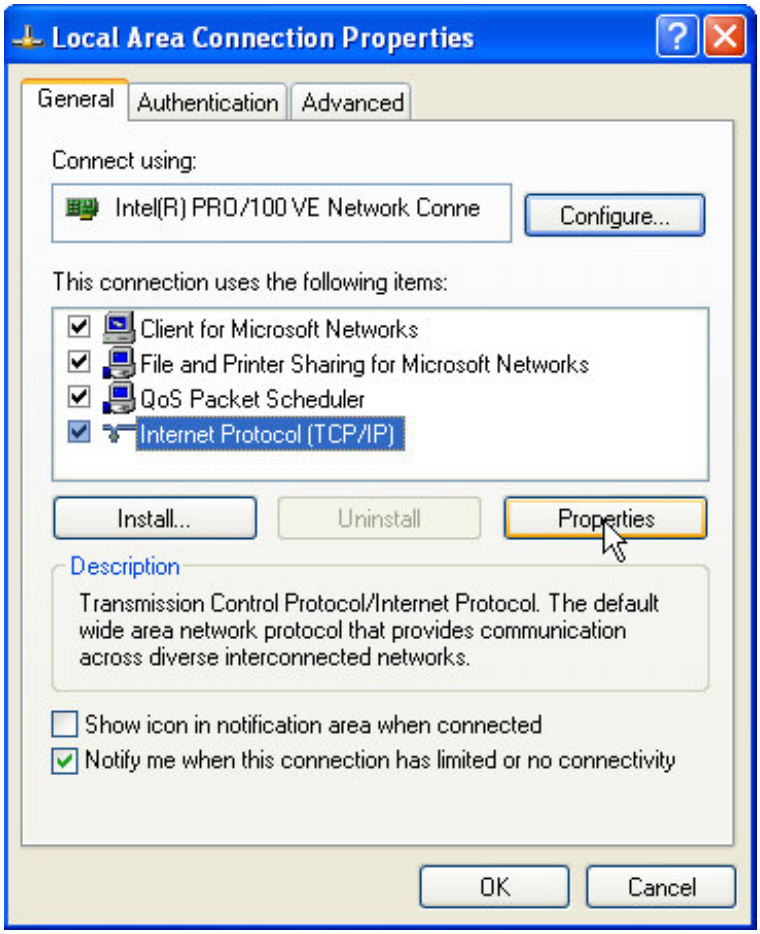
APPENDIX B: Set IP Address on HOST Computer

On Windows HOST computers, the IP address may be set manually.

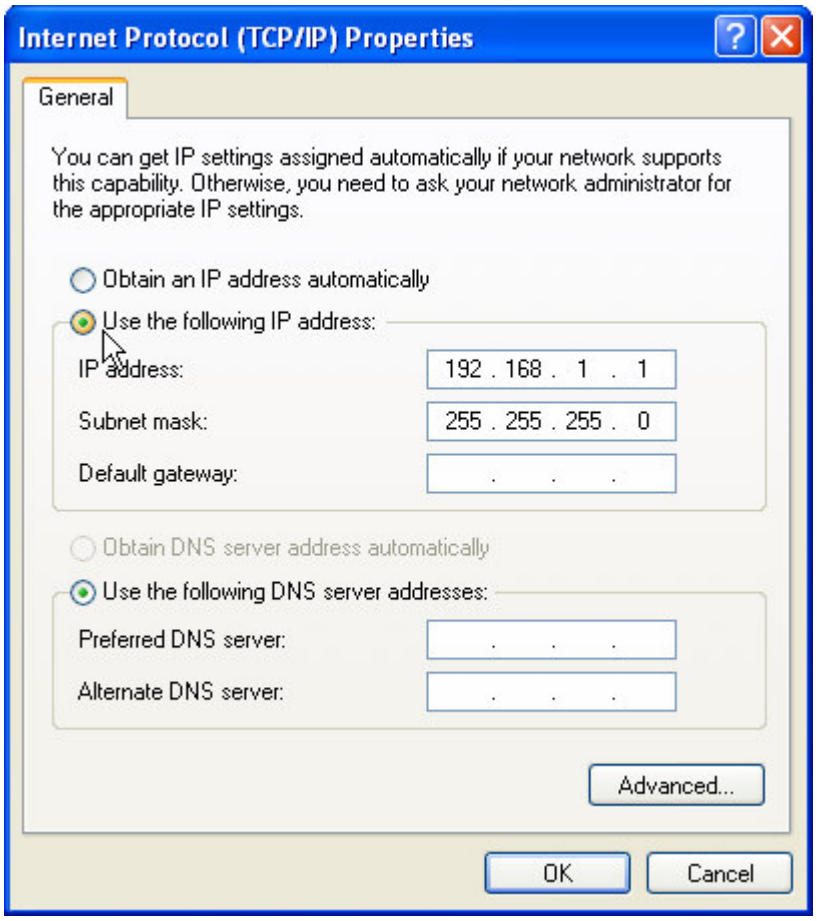
- Go to Control Panel and open Network Connections
- Find the Local Area Connection icon and right click to bring up Properties



- In the General Tab select Internet Protocol (TCP/IP) and click Properties



- Select User the following IP address and type in 192.168.1.1 (or any other address with the first three numbers: 192.168.1. Do not use 192.168.1.110 because that is the IP address of the XPORT in the DVMD1 and DVMD16 default value.
- Set the Subnet mask: to 255.255.255.0
- Leave the Default gateway blank.



- Press OK to set the HOST IP address and Subnet to a value compatible with the default XPORT settings.
- After getting the communication established, the XPORT address can be changed to be compatible with the local area network you are using.
- In large networks you must use IP addresses that are compatible with DSL, routers, other computers, video streamers, and corporate IP address restrictions.
- It is best to begin development work on the DVMD1 or DVMD16 with a laptop or desktop that is not connected to a LAN.
- Use a CAT5 crossover cable to connect from the HOST network adaptor to the XPORT directly to avoid IP address conflicts.

APPENDIX C: Link Failures due to Microsoft Windows

On Windows HOST computers, there can be link failures immediately after using the Device Installer software. This is because the Windows operating system keeps a list of the open sockets to IP devices and may have an entry for the IP address and MAC address already.

This can happen when the same IP address is used for two different devices, each with different MAC addresses.

One solution is to wait, but the amount of time that Windows needs to 'release' a socket varies.

A second solution is to reset the Windows HOST computer.

To monitor all open sockets use the Windows Run command and type 'COMMAND". When the dos prompt window comes up type 'NETSTAT' and look at the Foreign IP addresses for the XPORT IP address. If it is LISTENING (normal case) the socket is open and the IP address has been linked to a MAC address. Opening ManagerNET to the same IP address with a different device will fail, even if the new device has the same IP address. This is because the XPORT MAC address is already established in the list of open sockets. This socket must close (or be closed by reboot) before the new XPORT device will connect to Windows correctly.