

Ethernet Module (P/N 10-2627)



Lantronix XPort Programming Guide

DEVELOPED BY

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DOCUMENT HISTORY**Document Title:** Ethernet Module Programming Guide**Document Reorder Number:** 06-388-1

Revision	Section	Date	Reason for Change
0	All Sections	09/08	Initial Release

Ethernet Module Overview

The 10-2627 Ethernet Module provides a means to connect the CyberCat or Cheetah Xi control panels to the local network or the Internet. This allows remote panels to transmit system events to a monitoring panel that can be located on the protected premises or at a remote location. Each module has an integrated Xport Ethernet component that must be programmed with a static IP address, Subnet Mask, and Default Gateway as outlined in this guide for proper communication to occur. You will need to work with the Information Technology (IT) personnel responsible for the protected premises to obtain these values for each Ethernet module installed.

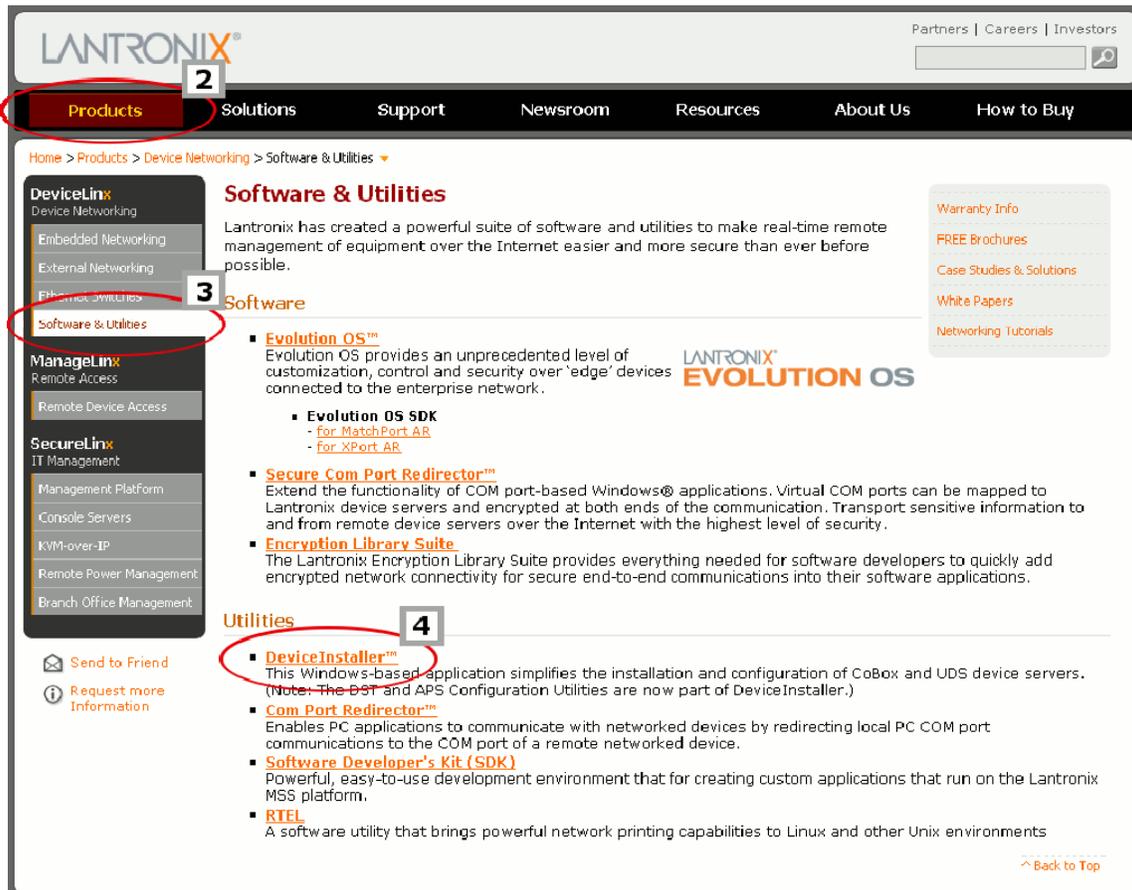
The associated control panel(s) must also be configured for Ethernet operation before proper communication will occur. Refer to Fike document 06-388, "Ethernet Module Product Manual" for panel programming instructions.

Note: The guide was prepared using current information supplied by Lantronix® and Microsoft® for the referenced software and components. Since these items are not under the direct control of Fike, the following information is subject to change without notice.

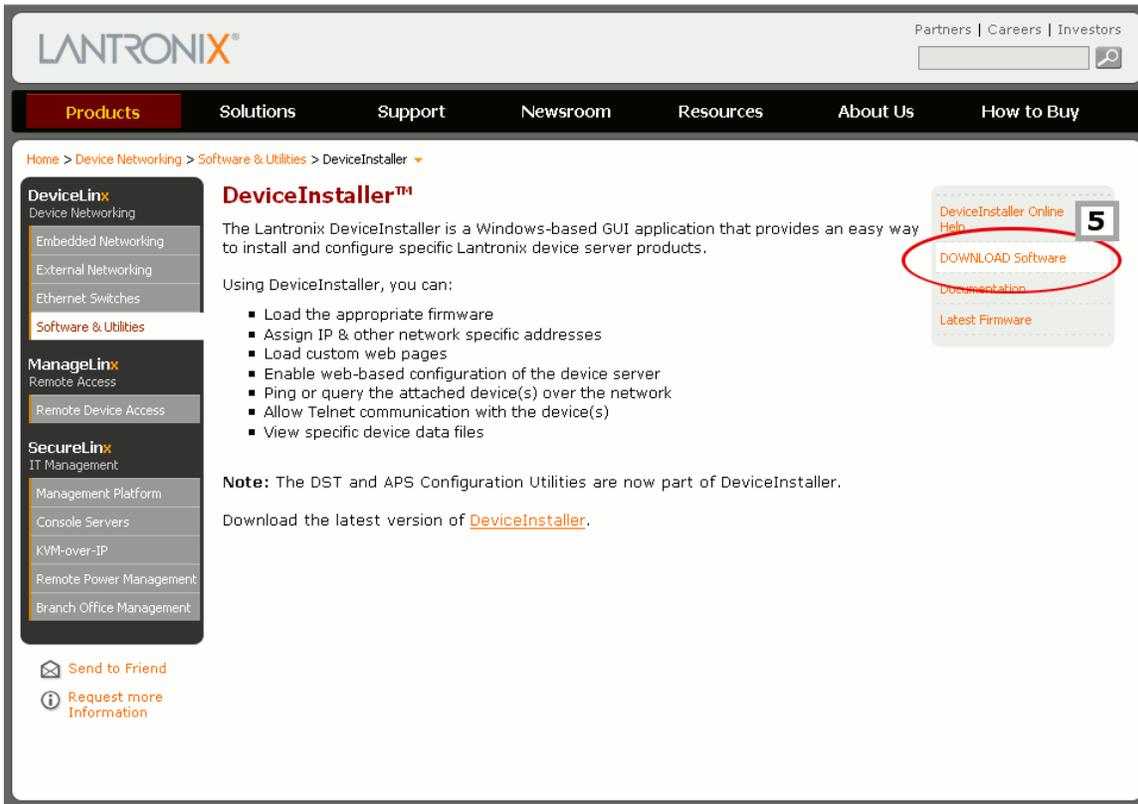
Obtaining and Installing Lantronix DeviceInstaller

There are several methods that Lantronix provides to configure the Xport Ethernet component; however, this guide will only cover the use of the DeviceInstaller windows based programming application. Use the following steps to download the software.

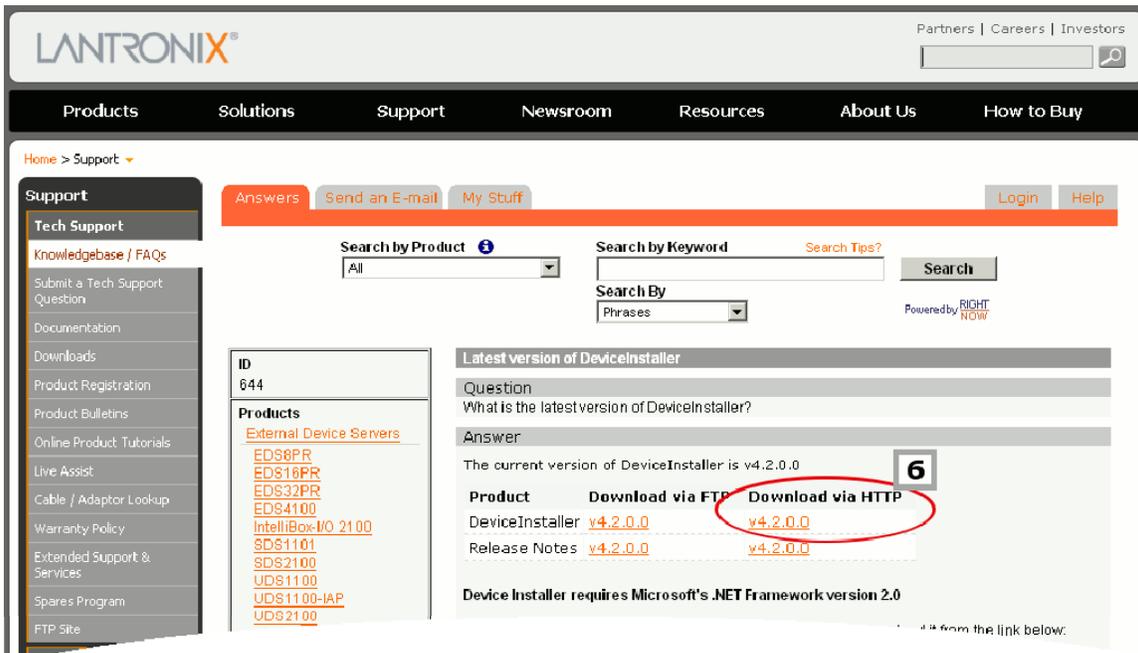
- 1 – Open web browser and navigate to www.lantronix.com
- 2 – Click *Products*
- 3 – Click *Software & Utilities*
- 4 – Click *DeviceInstaller*



5 – Click *Download Software*



6 – From the *Download via HTTP* column, click the latest version number



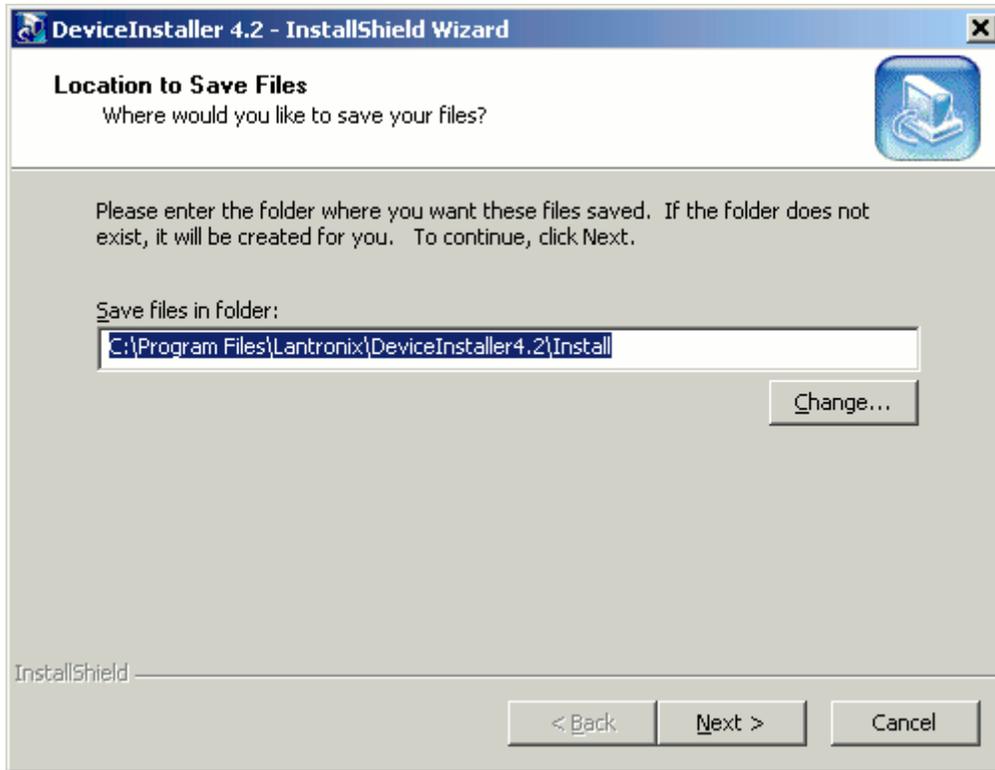
7 – Save installation file to Desktop

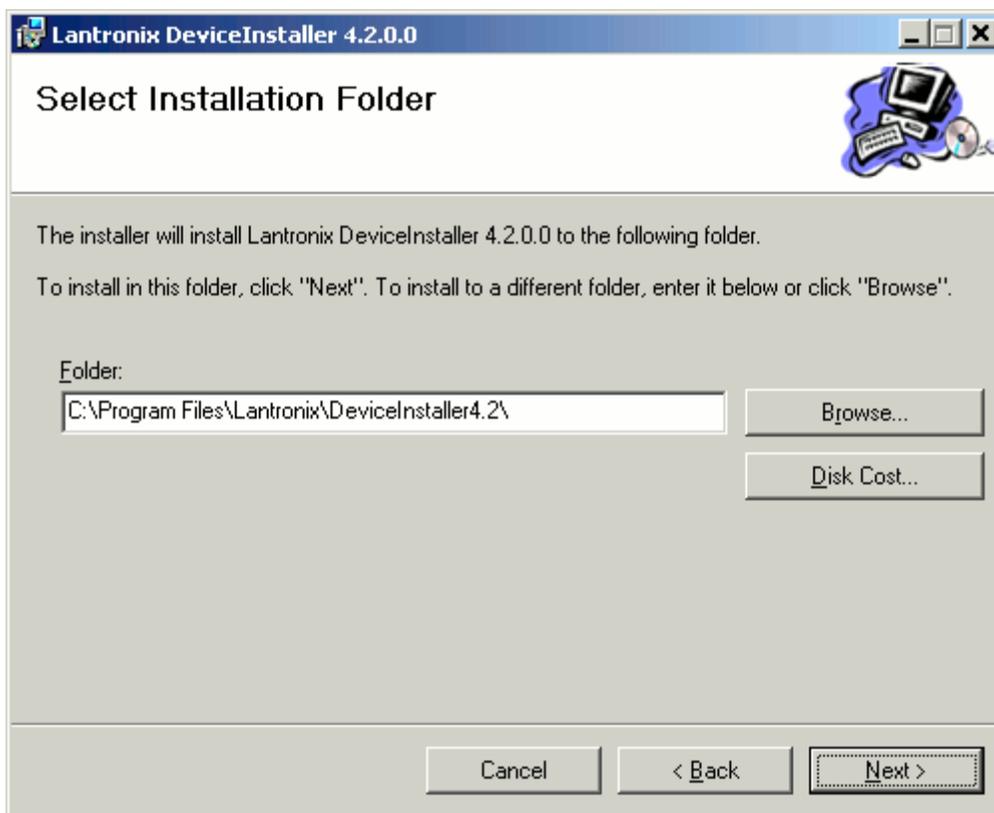
8 – From the Desktop, double-click on DeviceInstaller icon

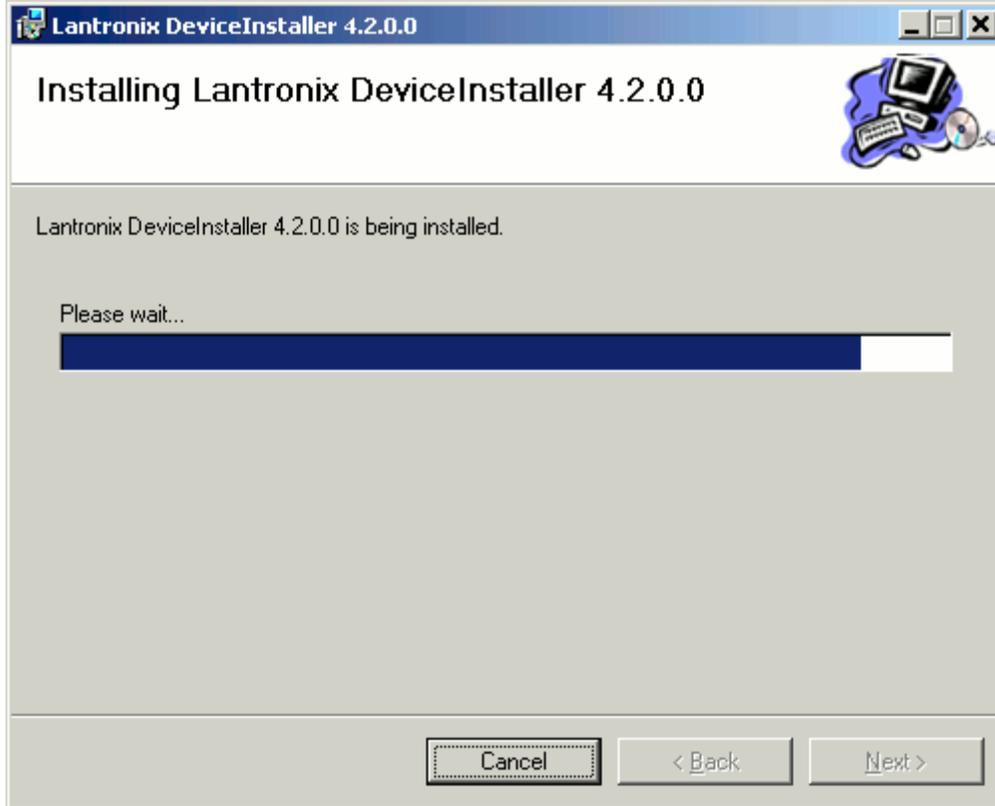
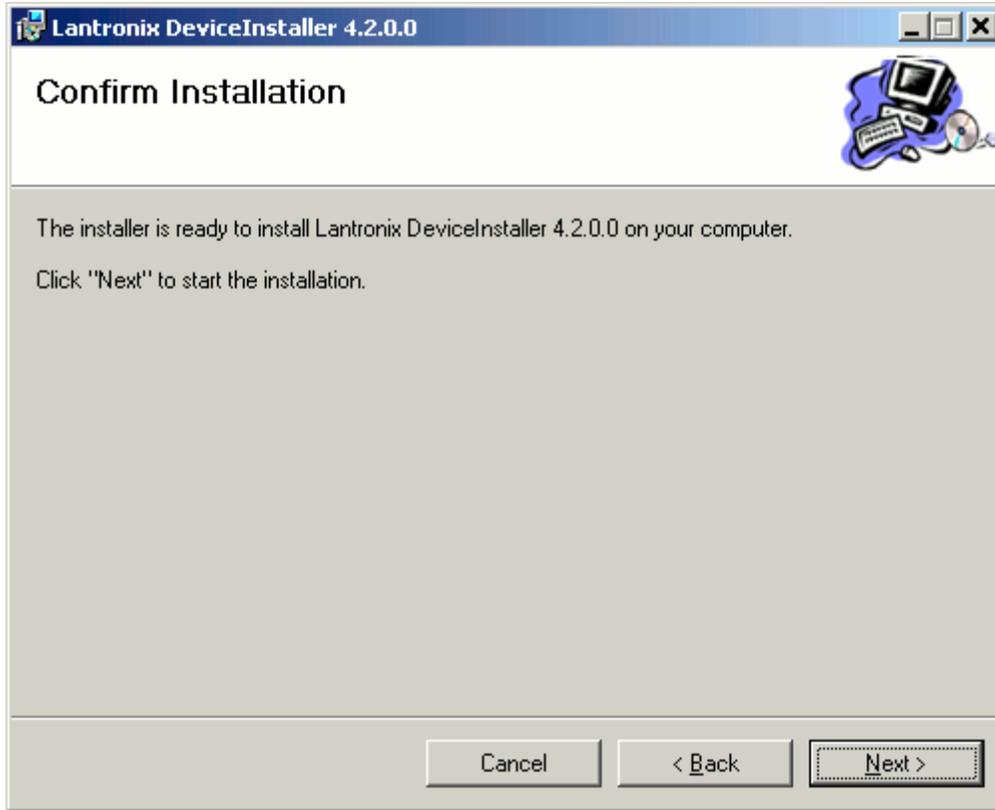


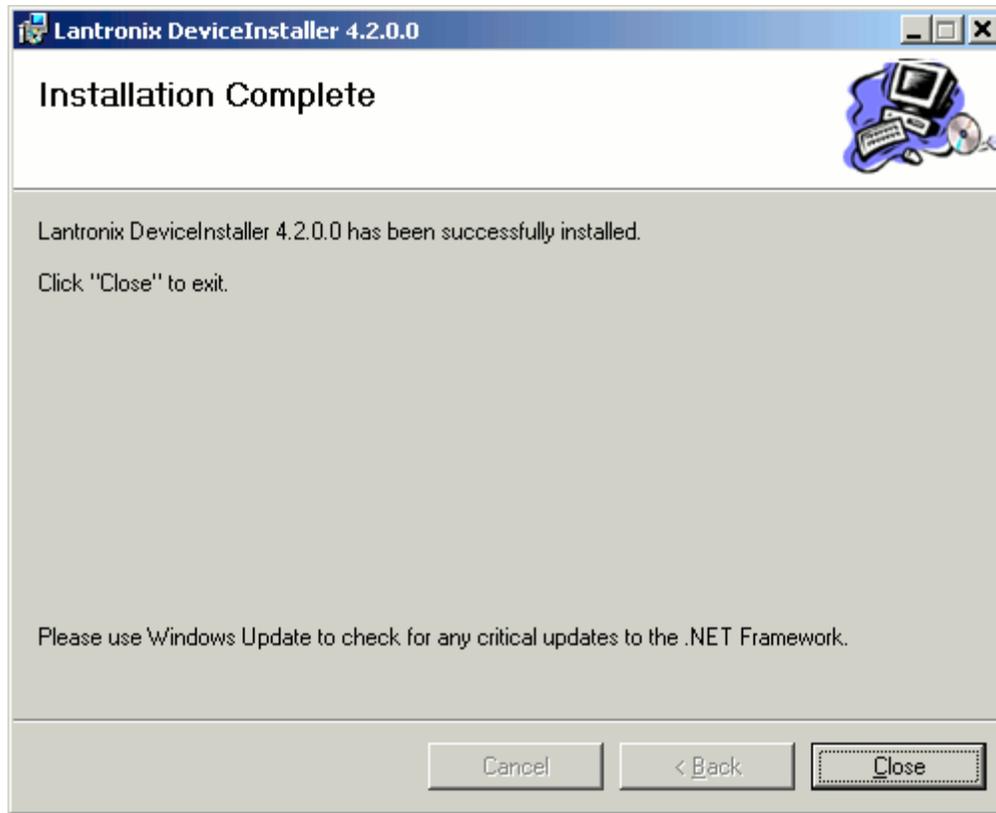
9 – Step thru the installation wizard using default values.

NOTE: If prompted to install Microsoft .NET Framework, locate the proper version on the web page illustrated in Step 6 above.



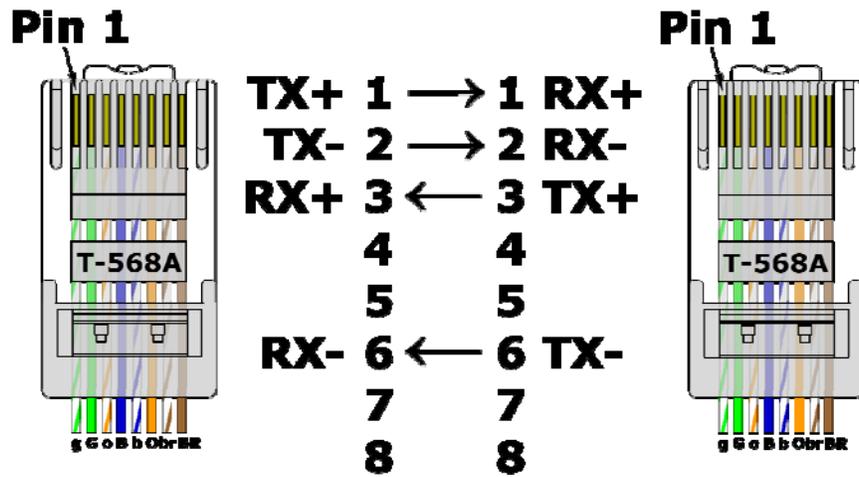
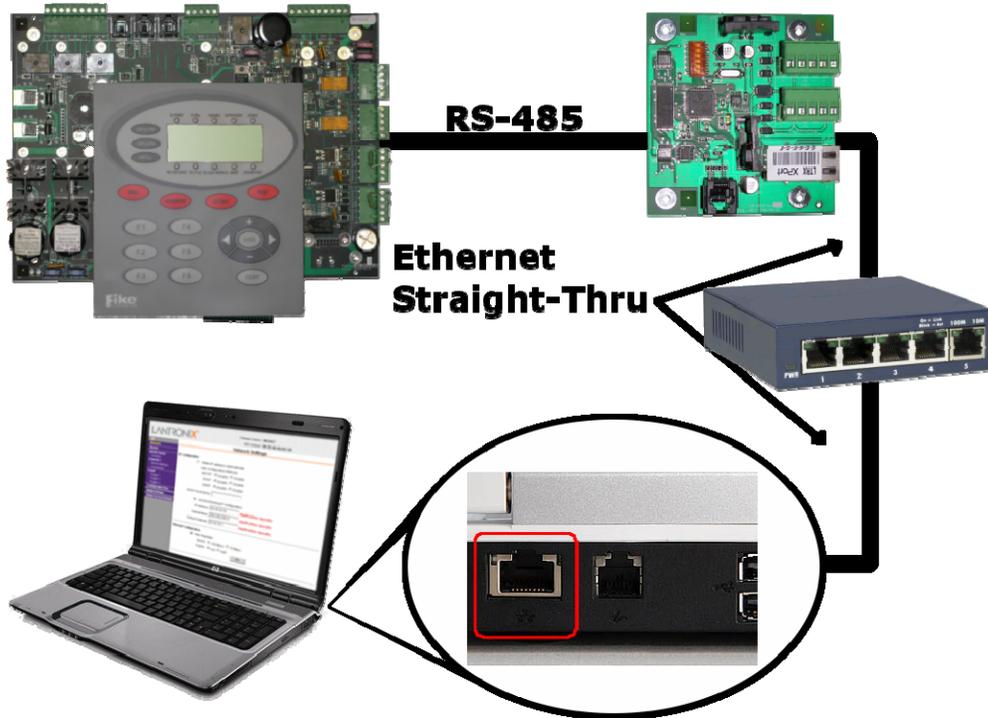






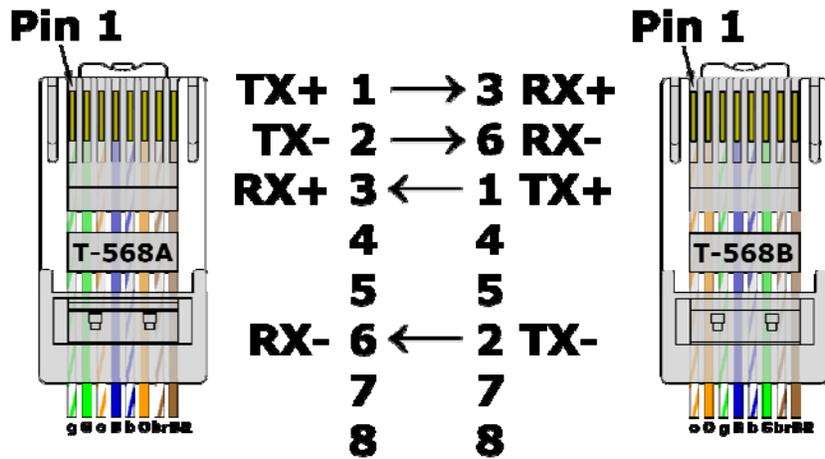
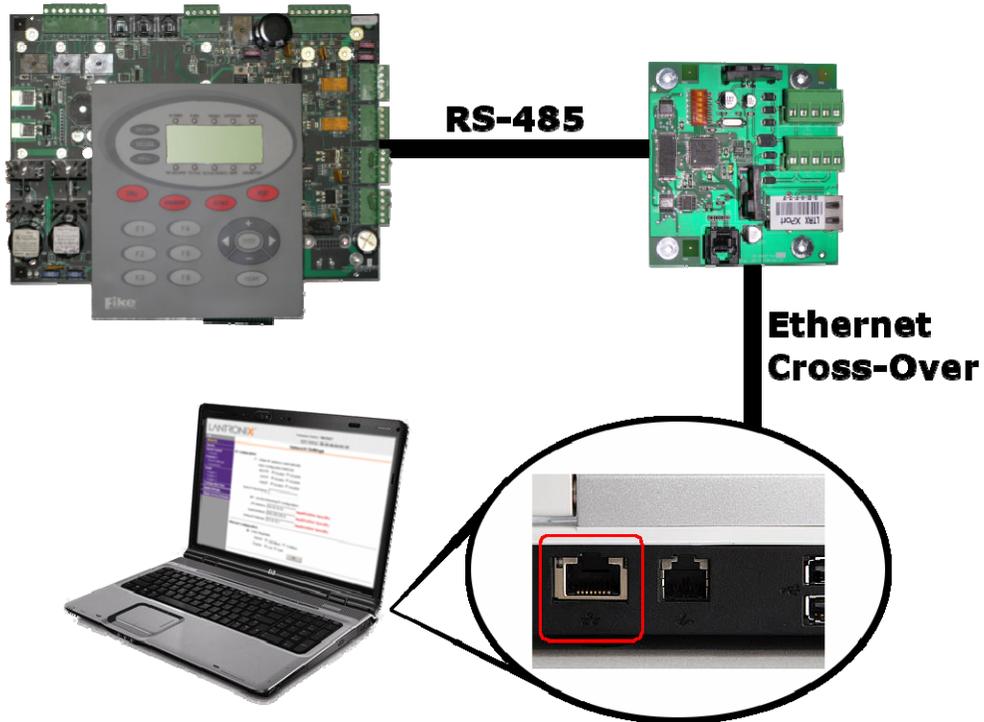
Connect to the Ethernet Module

Option 1: For connection between a PC and the Ethernet Module thru a hub/switch, use a standard, straight-thru, Category-5 (CAT5) Ethernet cable as shown in the following diagrams.



Ethernet Straight-Thru

Option 2: For direct connection between a PC and the Ethernet Module, use a Category-5 (CAT5) Ethernet Cross-Over cable.



Ethernet Cross-Over

Change Computer IP Address and Subnet Mask

The computer running the DeviceInstaller software must be set to the same IP address, Subnet mask and Default Gateway as the default configuration for the Ethernet Module. The following procedure shows how to set these values in a Windows XP operating platform.

1 – Open *Control Panel*



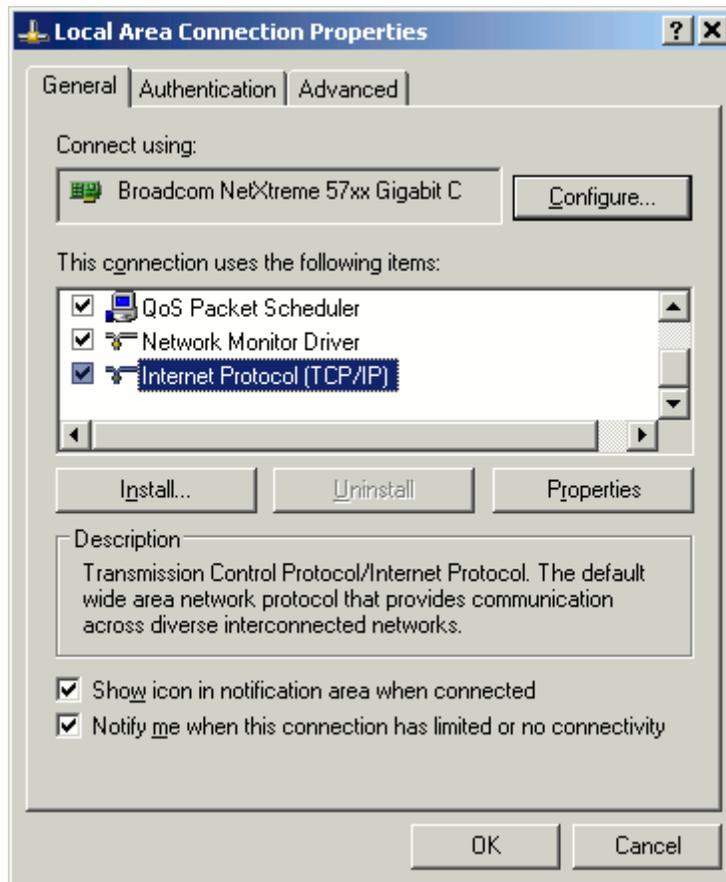
2 – Open *Network Connections*



3 – Right-Click on *Local Area Connection*, and select *Properties*



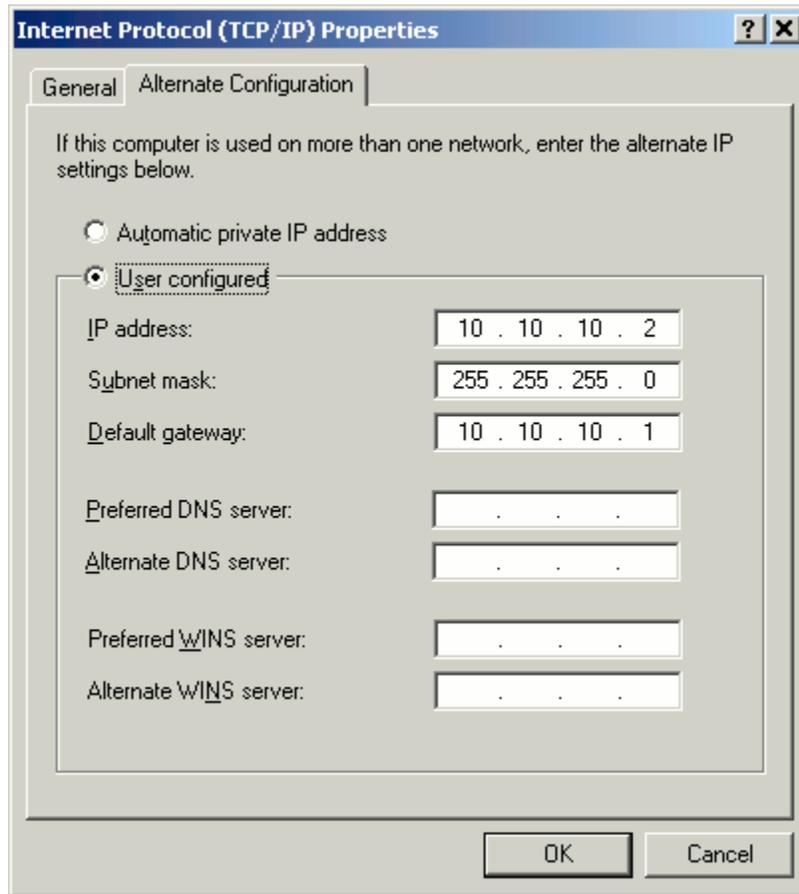
4 – Select *Internet Protocol (TCP/IP)*, and click *Properties*



5 – Select the *Alternate Configuration* tab

6 – Select the *User configured* radio button

7 – Enter the appropriate *IP Address*, *Subnet mask*, and *Default gateway*

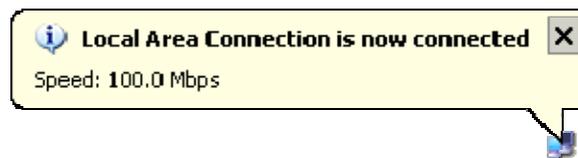


8 – Click *OK* to close the *Internet Protocol (TCP/IP) Properties* window

9 – Click *OK* to close the *Local Area Connection Properties* window

10 – Connect PC to network or Ethernet Module.

NOTE: It takes the computer a minute or so to determine that the *Alternate Configuration* should be used. So be patient and look for the balloon indicating the network is now connected.

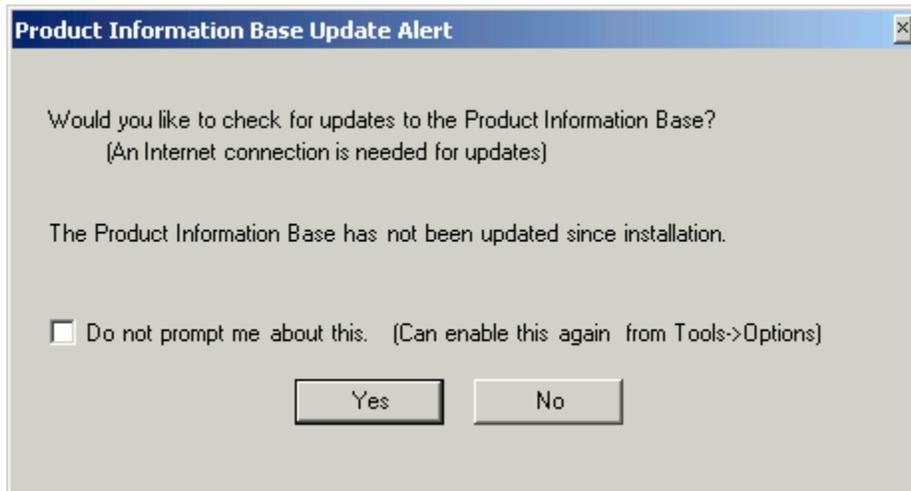


Open *DevicelInstaller* and configure Ethernet Module

- 1 – Start > All Programs > Lantronix > *DevicelInstaller v#.#* > *DevicelInstaller*
- 2 – If Windows Security Alert occurs, click *Unblock*



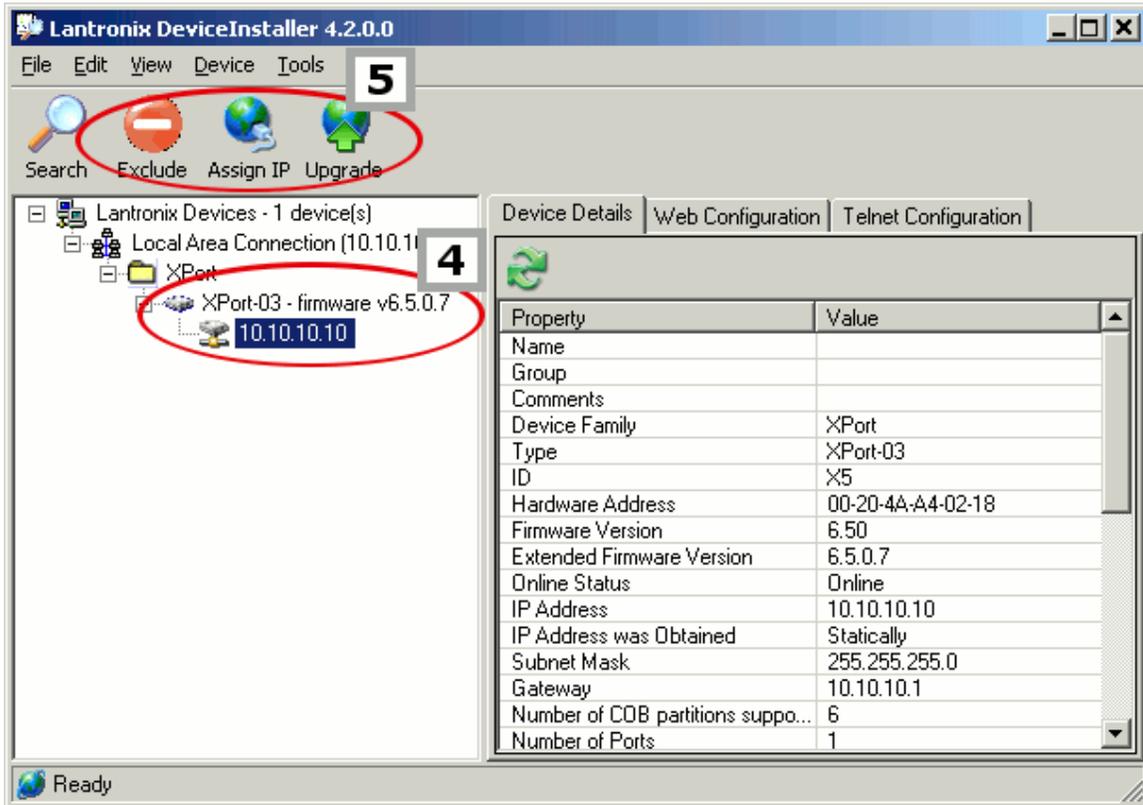
- 3 – When a prompt occurs to update product database, check the *Do not prompt me about this* checkbox and click *No*.



4 – Each Ethernet Module accessible by the computer will be listed in the DeviceInstaller tree. Click the IP Address corresponding with the unit you wish to configure.

NOTE: The computer running DeviceInstaller must be set to the same network and subnet mask as the default configurations for the Ethernet Modules.

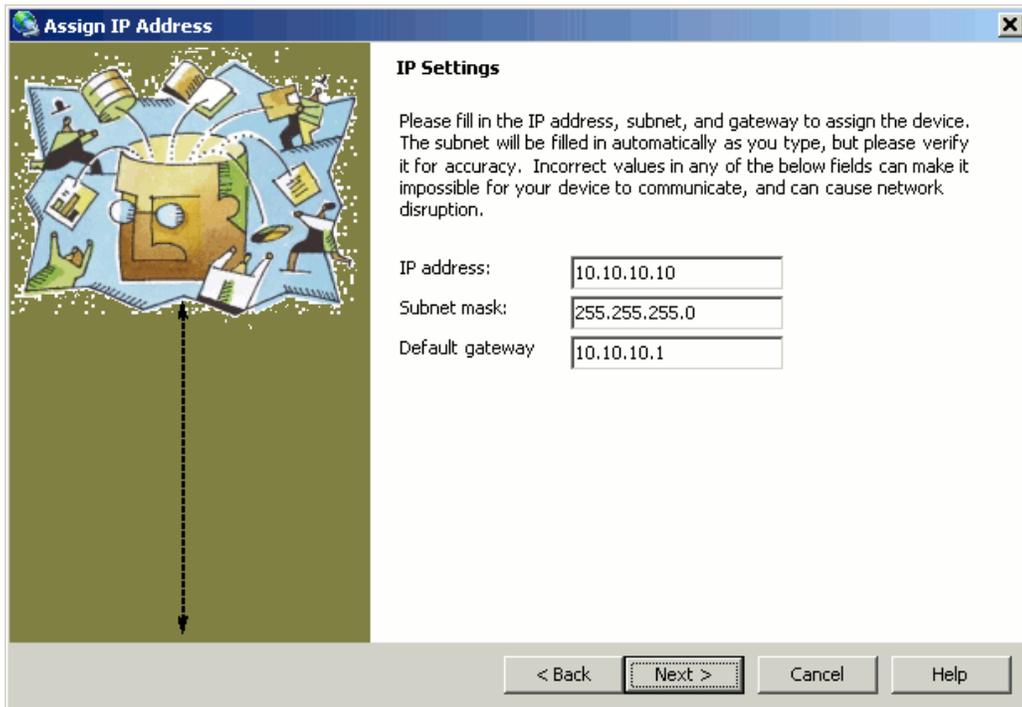
5 – Click *Assign IP*.



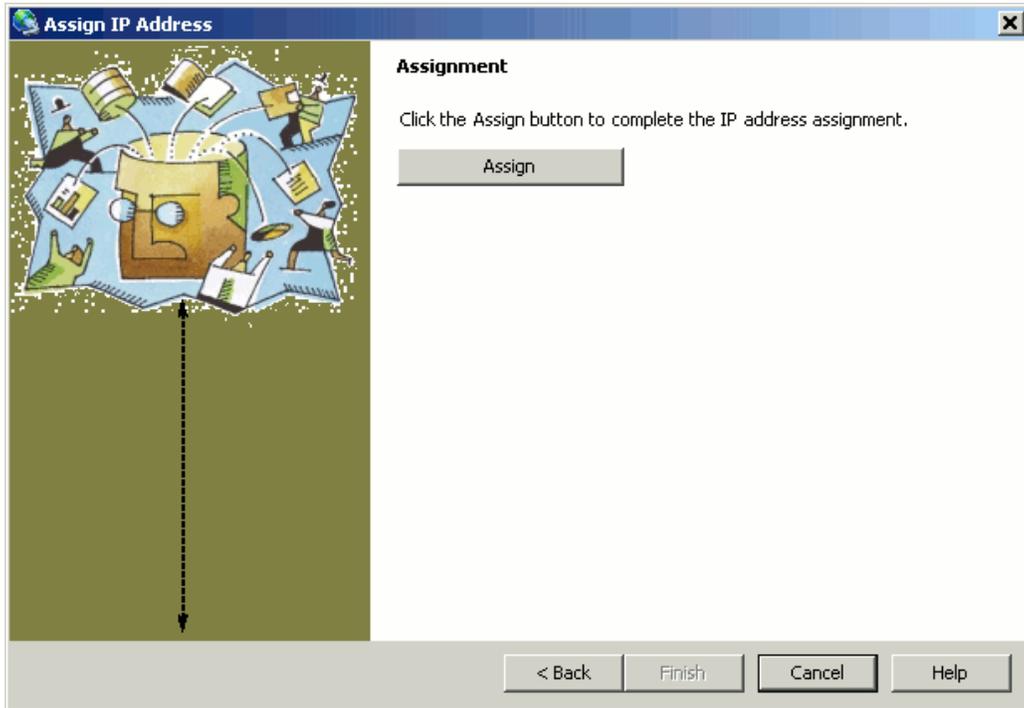
6 – Select *Assign a specific IP address* and click *Next*



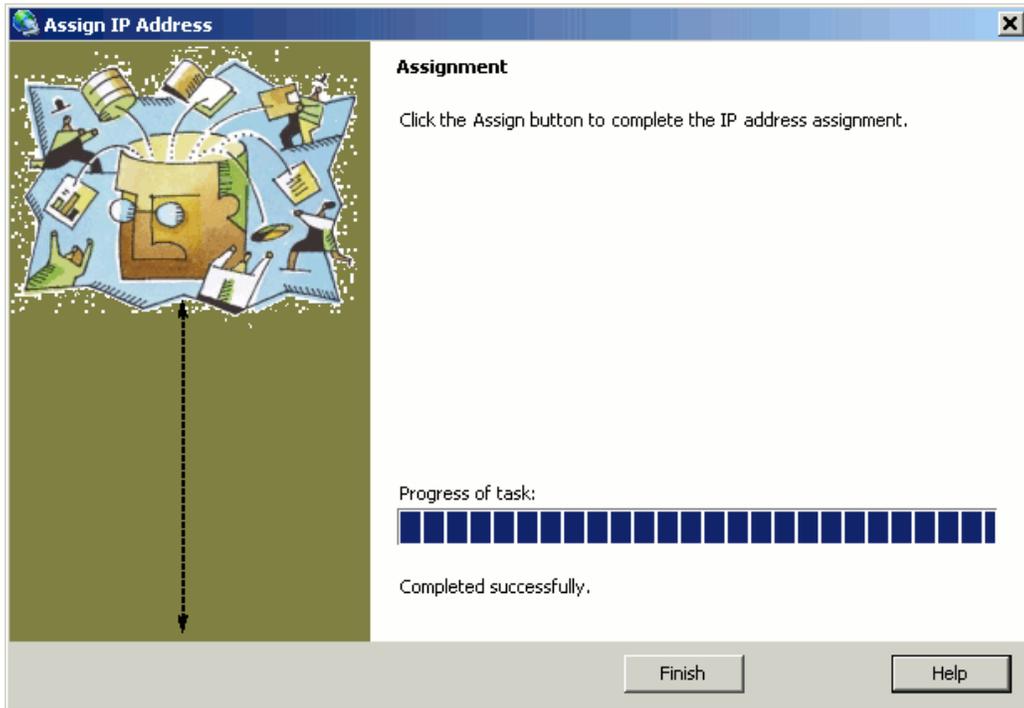
7 – Enter appropriate *IP Address*, *Subnet mask*, and *Gateway*. Press *Next*.



8 – Click *Assign* to update information



9 – Task will progress. Click *Finish* when complete.

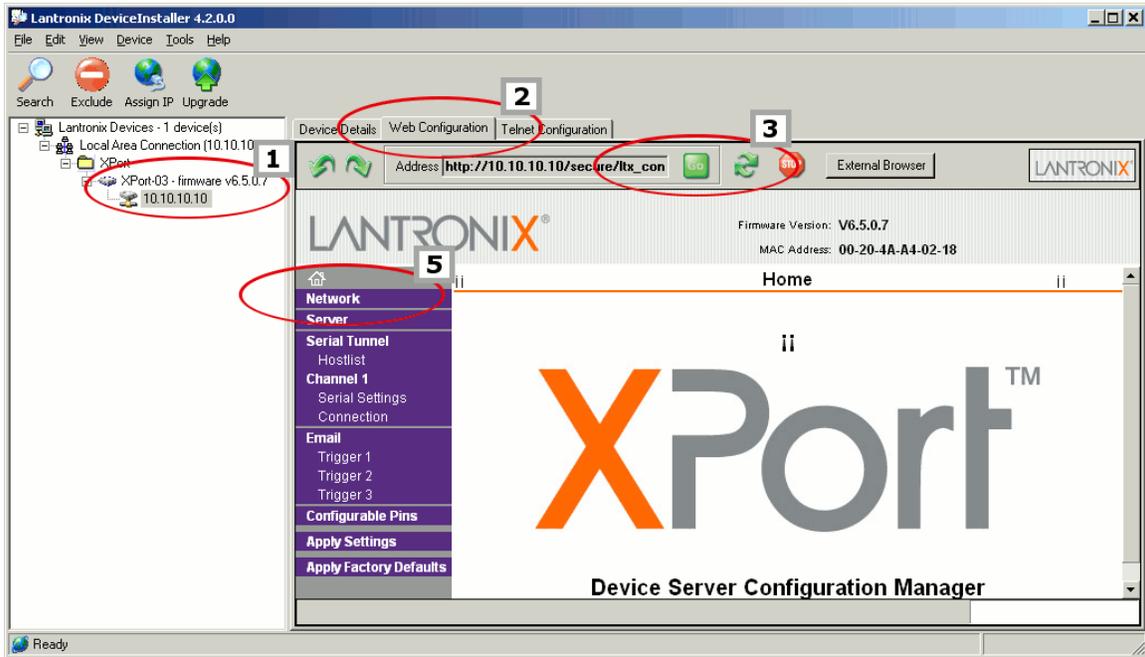


NOTE: Changing IP information could result in loss of communication between the computer running DeviceInstaller and the respective Ethernet Module.

The above information is the minimum required for each Ethernet Module. If module(s) fails to function properly after all configuration has been verified within the Cheetah Xi or CyberCat panel, refer to the following section.

Verification of Ethernet Module settings

- 1 – In DeviceInstaller, click the IP Address corresponding with the unit you wish to verify.
- 2 – Click the *Web Configuration* tab.
- 3 – Click *Go*.



- 4 – At prompt, click *OK* (default username and password are blank)



- 5 – Click *Network* and verify settings match the following. Click *OK* if changes are made.

LANTRONIX® Firmware Version: V6.5.0.7
MAC Address: 00-20-4A-A4-02-18

Network Settings

- Home
- network**
- Server** (6)
- Serial Tunnel
- Channel 1
- Email
- Configurable Pins
- Apply Settings
- Apply Factory Defaults

IP Configuration

Obtain IP address automatically

Auto Configuration Methods

BOOTP: Enable Disable

DHCP: Enable Disable

AutoIP: Enable Disable

DHCP Host Name:

Use the following IP configuration:

IP Address: **Application Specific**

Subnet Mask: **Application Specific**

Default Gateway: **Application Specific**

Ethernet Configuration

Auto Negotiate

Speed: 100 Mbps 10 Mbps

Duplex: Full Half

6 – Click *Server* and verify settings match the following exactly. Click *OK* if changes are made.

LANTRONIX® Firmware Version: V6.5.0.7
MAC Address: 00-20-4A-A4-02-18

Server Settings

- Home
- Network
- Server**
- Serial Tunnel** (7)
- Channel 1
- Email
- Configurable Pins
- Apply Settings
- Apply Factory Defaults

Server Configuration

Telnet Password:

Retype Password:

Advanced

ARP Cache Timeout (secs):

TCP Keepalive (secs):

Monitor Mode @ Bootup: Enable Disable

CPU Performance Mode: Regular High

HTTP Server Port:

MTU Size:

7 – Click *Serial Settings* and verify settings match the following exactly. Click *OK* if changes are made.

LANTRONIX® Firmware Version: V6.5.0.7
MAC Address: 00-20-4A-A4-02-18

Serial Settings

Channel 1

Disable Serial Port

8 Port Settings

Protocol: RS232 Flow Control: None

Baud Rate: 9600 Data Bits: 8 Parity: None Stop Bits: 1

Pack Control

Enable Packing

Idle Gap Time: 12 msec

Match 2 Byte Sequence: Yes No Send Frame Only: Yes No

Match Bytes: 0x00 0x00 (Hex) Send Trailing Bytes: None One Two

Flush Mode

Flush Input Buffer

With Active Connect: Yes No

With Passive Connect: Yes No

At Time of Disconnect: Yes No

Flush Output Buffer

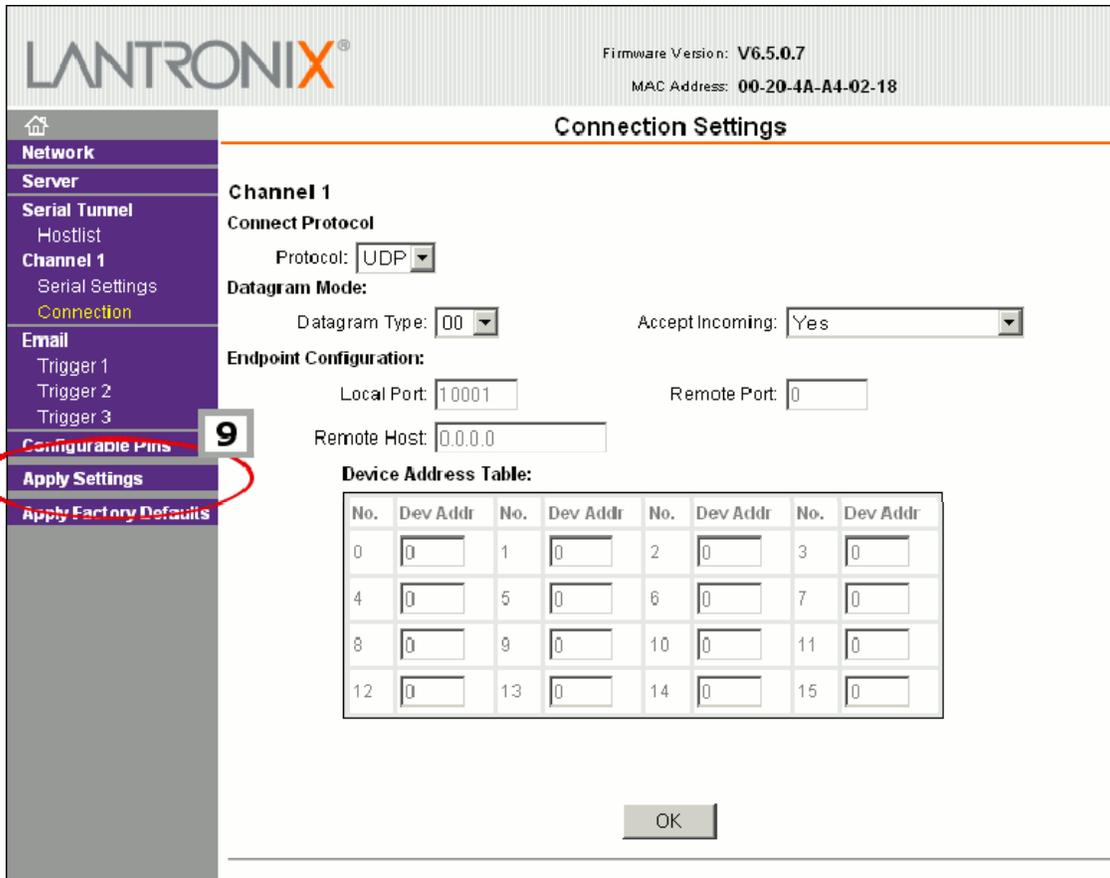
With Active Connect: Yes No

With Passive Connect: Yes No

At Time of Disconnect: Yes No

OK

8 – Click *Connection* and verify settings match the following exactly. Click *OK* if changes are made.



9 – If changes were made, click *Apply Settings*.

Preloaded Factory Settings

The following settings are preloaded into Ethernet Module by Fike prior to shipment from the Factory.

Network / IP Configuration

- IP Address – Customer Provided; factory defaulted to 10.10.10.10
- Subnet Mask – Customer Provided; factory defaulted to 255.255.255.0
- Default Gateway – Customer Provided; factor defaulted to 10.10.10.1

Server / Advanced

- ARP Cache Timeout – 600 seconds
- TCP Keepalive – 45 seconds
- Monitor Mode @ Bootup – Enable
- CPU Performance Mode – Regular
- HTTP Server Port – 80
- MTU Size - 1400

Channel 1 / Serial Settings

Channel 1 / Disable Serial Port – Off
 Port Settings / Protocol – RS232
 Port Settings / Baud Rate – 9600
 Port Settings / Data Bits – 8
 Port Settings / Flow Control – None
 Port Settings / Parity – None
 Port Settings / Stop Bits – 1
 Pack Control / Enable Packing – Off
 Flush Mode / Flush Input Buffer – all set to NO
 Flush Mode / Flush Output Buffer – all set to NO

Channel 1 / Connection

- Connect Protocol / Protocol – UDP
- Datagram Mode / Datagram Type – 00
- Datagram Mode / Accept Incoming - Yes

Reserved for future use.

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