

19 November 2012

## Finding a Lost XPort

These AVT interfaces all use the Lantronix XPort embedded serial server device to “connect” the AVT interface to the host computer using an Ethernet network.

- AVT-418
- AVT-843
- AVT-853

The interfaces are shipped from the factory with the IP address set to: 192.168.1.70.

You may want or need to change the IP address. This can be done using “telnet” or a browser. See the interface User’s Manual for a description of how to change the IP address.

It can happen that after you change the IP address, you can’t connect to the interface and you can’t “find” the interface on the Ethernet network.

I know of three methods that can be used to “find” a lost XPort device. One method is the procedure I describe below. The other two are briefly noted at the end of this document.

Here is a procedure to “find” a lost AVT interface (with an XPort) and change its IP address.

This method does not require any special software and is pretty quick.

You will need a computer that is connected to the same Ethernet network as the AVT interface. I assume your computer is running Windows XP or Windows7.

You will use the “telnet” application.

For Windows XP, you invoke “telnet” using the “run” window command line.

From the “Desktop”, click on “Start”, and then click on “Run”.

Enter the commands as I show them in the procedure.

I believe it is the same for Windows7.

You will use a command prompt session.

For Windows XP, to open a command prompt:

From the “Desktop”, click on “Start”, click on “Programs”, click on “Accessories”, click on “Command Prompt.”

I believe it is similar for Windows7.

You need to know the ‘mac’ address of the XPort you’re working with.

If the AVT interface is in a black box, remove the two screws on the bottom of the enclosure, and pull the enclosure halves apart.

You don’t have to remove any screws on the end panels.

On the top of the XPort device is printed the ‘mac’ address.

It will look like this: 00-20-4A-xx-xx-xx

Procedure to “connect” to a lost AVT interface (with XPort Ethernet device).

1. Connect the AVT interface to the same Ethernet network as the computer you are using.
2. Provide power to the AVT interface and turn it on.
3. Open a command prompt window (session).
4. For all the following commands, note the spaces in the command.
5. Type this command at the command prompt.  
Substitute in the actual ‘mac’ address for the “xx”.  

```
arp -s 192.168.1.250 00-20-4A-xx-xx-xx
```

  
Hit Enter.

This creates a static entry in the arp table associating the temporary IP address (192.168.1.250) with the mac address of the XPort.  
 (“arp” - Address Resolution Protocol)

Note: Depending on the network you are connected to, you may need to use a different temporary IP address. No problem. Just be sure to change it in all the steps of this procedure.

6. In the “Run” window command line, enter this command:  

```
telnet 192.168.1.250 1
```

Hit Enter.
7. A telnet window will open and almost immediately time out.  
Close it, if necessary, after it times out.
8. In the “Run” window command line, enter this command:  

```
telnet 192.168.1.250 9999
```

Hit Enter.
9. A telnet window will open and you will be at the XPort server prompt.
10. Hit Enter right away and it will display the menu.
11. Select <0> and hit Enter.
12. Set the IP address you want for the XPort.  
The current value for the various fields is indicated in parentheses at each prompt. Hitting Enter accepts that value.
13. When you finish with all the server settings, you will return to the menu.
14. Select <9> and hit Enter.
15. The telnet window will lose connection when the XPort reboots.  
Close the telnet window.
16. In the command prompt window, enter this command.  

```
arp -d 192.168.1.250
```

Hit Enter.  
This deletes the entry from the arp table.
17. After the XPort reboots (20 seconds or so), it should be set to its new IP address. You can verify that by trying to connect to it.  
You can use a browser or you can use my Hex Terminal application.

I hope this helps.  
Contact me if you have any questions or problems.  
Mike.

There are two other possible ways to 'find' a lost XPort device.

#### Alternate Method #1

From Lantronix you can obtain their XPort installer software.

Go to their web site: [www.lantronix.com](http://www.lantronix.com)

Go to: Support | Technical Support

Under "Embedded Networking" select "XPort"

On the XPort page, under the "Firmware / Utilities" section click on the "Device Installer"

It appears they have at least two versions of the device installer.

The stand alone version is pretty big and it is a full install on your computer.

There is also a "web" version. I have not tried it, so I don't have any comments.

The Lantronix "Device Installer" should always work, but may require an installation of software and you'll have to learn how to use it.

#### Alternate Method #2

There are third party software applications that will 'scan' for IP addresses present on the network. A quick web search will bring up a number of them.

This method may work, if the "lost" XPort is in the same network domain as your computer. But it might not. It could also take a long time as the scanner software likely searches by pinging every IP address and waits to see if the ping is answered.