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Ethernet Setup for PC

Supported Products: TMX, Dash 32HF-HS, Dash 32HF, Dash 20HF-HS, Dash 20HF, Dash 18X, Dash 18, Dash 8HF-HS, Dash 8HF, Dash 8Xe, Dash 8X, AstroDAQ Xe, Everest X, Everest, Dash 2EZ+, Dash 2EZ, Dash 16u, Dash 8n, Dash 8u, Dash 4u, AstroDAQ, AstroDAQ 2.

I. Hardware:

For direct connection of the Astro-Med Data Acquisition Recorders recorder to a PC, use an Ethernet cross cable. A five-foot cable is available from Astro-Med. The cross cable is identified by holding both connectors of the cable in the same orientation next to each other. Because the connectors are transparent, you can see the colors of the wires. The cross cable has the green and orange wires crossed.

It is recommended to have your Astro-Med Data Acquisition Recorder powered on and ready for operation. Then, turn on your PC. After boot up, you get verification of Ethernet connection. Most Ethernet cards have a steady yellow LED to confirm physical connection and a green LED that blinks during transmission back and forth.

Ethernet set up on the PC for Windows 7

Ethernet set up on the PC for Windows Vista

Ethernet set up on the PC for Windows XP

Ethernet set up on the PC for Windows 2000

Ethernet set up on the PC for Windows 98X

Using Ethernet with Astro-Med Data Acquisition Recorders



II. Ethernet set up on the PC for Windows 7:

Note: You may need to check with your network administrator if your PC is already on a network.

Many PCs that run Windows 7 already have Ethernet installed. If you need to install an Ethernet card, please see section VI "Ethernet set up on the PC for Win 9X" below for guidance on installation of the card and TCP/IP protocol. Then return here for setting up your TCP/IP properties.

Click on the Start button. Click on Control Panel. In the search box (upper right-hand corner), type "adapter" (no quotes).

Under "Network and Sharing Center", click "View network connections".

Right-click the "Local Area Connection", and then click Properties.

Note: If you're prompted for an administrator password or confirmation, type the password or provide confirmation.

Click the "Networking" tab.
Under "This connection uses the following items", click "Internet Protocol Version 4 (TCP/IPv4)", and then click Properties.

Choose "Use the following IP address".

Enter 192.168.255.100 for the IP address.

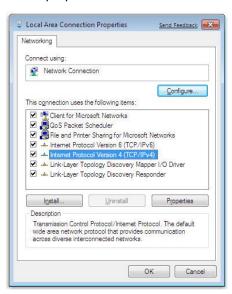
The subnet mask should be 255.255.255.0.

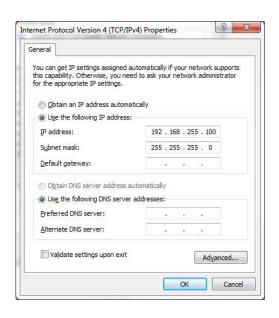
Click OK.

At this point, the PC's network address is 192.168.255.100. The Astro-Med Data Acquisition Recorder ships as address 192.168.255.1. To verify network setup and connections, use the Ping command.

Access the Windows command prompt as follows: Click on the Start button, and then click on "All Programs". Click on "Accessories", then click on "Command Prompt". A command prompt window appears.

Type "ping" (no quotes) followed by a space and the full IP address of the computer (192.168.255.100). Next, ping the full IP address of the Astro-Med Data Acquisition Recorder (192.168.255.1).





III. Ethernet set up on the PC for Windows Vista:

Note: You may need to check with your network administrator if your PC is already on a network.

Many PCs that run Windows Vista already have Ethernet installed. If you need to install an Ethernet card, please see section VI "Ethernet set up on the PC for Win 9X" below for guidance on installation of the card and TCP/IP protocol. Then return here for setting up your TCP/IP properties.

Click on the Start button.

Click on Control Panel.

Click on" Network and Internet".

Click on "Network and Sharing Center".

Click on "Manage network connections".

Right-click the "Local Area Connection", and then click Properties.

Note: If you're prompted for an administrator password or confirmation, type the password or provide confirmation.

Click the "Networking" tab.

Under "This connection uses the following items", click "Internet Protocol Version 4 (TCP/IPv4)", and then click Properties.

Choose "Use the following IP address".

Enter 192.168.255.100 for the IP address.

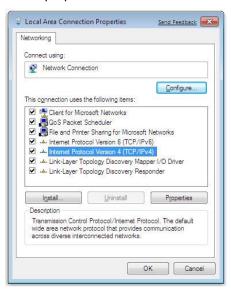
The subnet mask should be 255.255.255.0.

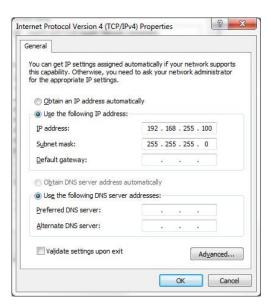
Click "OK".

At this point, the PC's network address is 192.168.255.100. The Astro-Med Data Acquisition Recorder ships as address 192.168.255.1. To verify network setup and connections, use the Ping command.

Access the Windows command prompt as follows: Click on the Start button, and then click on "All Programs". Click on "Accessories", then click on "Command Prompt". A command prompt window appears.

Type "ping" (no quotes) followed by a space and the full IP address of the computer (192.168.255.100). Next, ping the full IP address of the Astro-Med Data Acquisition Recorder (192.168.255.1).





IV. Ethernet set up on the PC for Windows XP:

Note: You may need to check with your network administrator if your PC is already on a network.

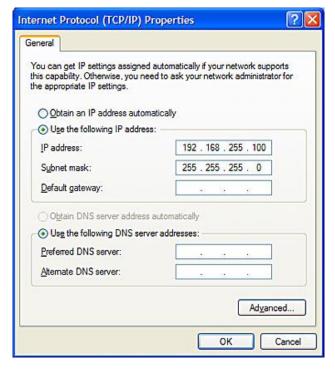
Many PCs that run Windows XP already have Ethernet installed. If you need to install an Ethernet card, please see section VI "Ethernet set up on the PC for Win 9X" below for guidance on installation of the card and TCP/IP protocol. Then return here for setting up your TCP/IP properties.

Click on the Start button, choose Settings >> Control Panel. Double-click on "Network Connections". Double-click on "Local Area Connection".

In the "Local Area Connection Status" window, click the "Properties" button in the lower left hand corner.

In the "Local Area Connection Properties" window, highlight "Internet Protocol (TCP/IP)" and click the "Properties" button.

Choose "Use the following IP address". Enter 192.168.255.100 for the IP address. The subnet mask should be 255.255.255.0. Click OK.



You are returned to the "Local Area Connection Properties" window. Click the "Close" button. You are returned to the "Local Area Connection Status" window. Click the "Close" button. Close the "Network Connections" window and the "Control Panel" window.

At this point, the PC's network address is 192.168.255.100. The Astro-Med Data Acquisition Recorder ships as address 192.168.255.1. To verify network setup and connections, use the Ping command.

Access the Windows command prompt as follows: Click on the Start button, and then click on "Run..."

Type "cmd" (no quotes) in the entry box and click on "OK". A command prompt window appears. Type "ping" (no quotes) followed by a space and the full IP address of the computer (192.168.255.100).

Next, ping the full IP address of the Astro-Med Data Acquisition Recorder (192.168.255.1).

V. Ethernet set up on the PC for Windows 2000:

Note: You may need to check with your network administrator if your PC is already on a network.

Many PCs that run Windows 2000 already have Ethernet installed. If you need to install an Ethernet card, please see section VI "Ethernet set up on the PC for Win 9X" below for guidance on installation of the card and TCP/IP protocol. Then return here for setting up your TCP/IP properties.

Click on the Start button, choose Settings >> Control Panel. Double-click on "Network and Dial-up Connections". Double-click on "Local Area Connection".

In the "Local Area Connection Status" window, click the "Properties" button in the lower left hand corner.

In the "Local Area Connection Properties" window, highlight "Internet Protocol (TCP/IP)" and click the "Properties" button.

Choose "Use the following IP address". Enter 192.168.255.100 for the IP address. The subnet mask should be 255.255.255.0. Click OK.



You are returned to the "Local Area Connection Properties" window. Click the "OK" button. You are returned to the "Local Area Connection Status" window. Click the "Close" button. Close the "Network and Dial-up Connections" window.

At this point, the PC's network address is 192.168.255.100. The Astro-Med Data Acquisition Recorder ships as address 192.168.255.1. To verify network setup and connections, use the Ping command.

Access the Windows command prompt as follows: Click on the Start button, and then click on "Run..."

Type "cmd" (no quotes) in the entry box and click on "OK". A command prompt window appears.

Type "ping" (no quotes) followed by a space and the full IP address of the computer (192.168.255.100).

Next, ping the full IP address of the Astro-Med Data Acquisition Recorder (192.168.255.1).

VI. Ethernet set up on the PC for Windows 98X:

Note: You may need to check with your network administrator if your PC is already on a network.

Ethernet card installation:

If the PC does not have Ethernet, you may have to install an Ethernet card and driver. Follow the Ethernet card manufacturer's instructions for installation. When Windows 9X detects new hardware, the installation wizard will guide the user. At one point, it will want the driver installed. It is recommended to use the driver disk that came with the Ethernet card.

Next, verify or install the network driver. In the Control Panel, double click the Network icon. Your Ethernet card should be listed under hardware and the TCP/IP protocol should also be listed. If the hardware is not listed, use the Add/Remove Hardware from the Control Panel to install. If the protocol is not listed, use Add Protocol to add TCP/IP for your network card. Select Microsoft as the manufacturer and TCP/IP as the protocol. Click the TCP/IP entry for your network card, then the click Properties button.

Under IP address tab, click Specify IP Address and enter 192.168.255.100.

The subnet mask should be 255.255.255.0.

Leave all selections in the other tabs blank (disabled).

Select OK and close. Restart windows if any entries were made or changed.



At this point, the PC's network address is 192.168.255.100. The Astro-Med Data Acquisition Recorder ships as address 192.168.255.1. To verify network setup and connections, use the Ping command.

Shell out to the DOS prompt as follows:

Click on the Start button, and then click on "Run..."

Type "command" (no quotes) in the entry box and click on "OK". A command prompt window appears. Type "ping" (no quotes) followed by a space and the full IP address of the computer (192.168.255.100). Next, ping the full IP address of the Astro-Med Data Acquisition Recorder (192.168.255.1).

The response to the ping command should be "Reply from ..." four times with no errors reported. If there are errors or address not found, check connection and TCP/IP addresses. If problem persists, it may indicate either the TCP/IP protocol or network card is improperly installed.

VII. Using Ethernet with Astro-Med Data Acquisition Recorders:

Ethernet is useful for transferring data capture and setup files. The Astro-Med Data Acquisition Recorders have software programs that support file transfer via Ethernet. Some of the programs are available at no additional charge.

Software Supporting Ethernet function	Product(s) Supported
Dash 32HF Offline	Dash 32HF-HS, Dash 32HF
Dash 20HF Offline	Dash 20HF-HS, Dash 20HF
Dash 18 Offline	Dash 18X, Dash 18
Dash 8HF Offline	Dash 8HF-HS, Dash 8HF
Dash 8X Offline	Dash 8Xe, Dash 8X
AstroLINK Xe	AstroDAQ Xe
Everest Offline	Everest X, Everest
AstroVIEW X	TMX, Everest X, Everest, Dash 32HF-HS, Dash 32HF,
	Dash 20HF-HS, Dash 20HF, Dash 18X, Dash 18,
	Dash 8HF-HS, Dash 8HF, Dash 8Xe, Dash 8X,
	Dash 2EZ+, Dash 2EZ, AstroDAQ Xe
AstroVIEW C	Dash 16u, Dash 8n, Dash 8u, Dash 4u
AstroSET	Dash 16u, Dash 8n, Dash 8u, Dash 4u
AstroLINK C	AstroDAQ, AstroDAQ 2

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