

Engineering Note: EN0121 Recovery of an Unreachable EA01

 Summary:
 Procedure for recovering an Ethernet Adapter if the IP address is not reachable

 Products affected:
 Ethernet Adaptor (EA01)

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Summary

Hydronix Ethernet Adapters can be configured to use a Fixed or Automatic (DHCP) IP address. If the adapter has been configured incorrectly or set to a fixed IP Address that is on a different Sub-net to the connected computer, it can become unreachable. Hydro-Com will no longer be able to communicate with the adapter if it is unreachable. To recover the adapter, it is necessary to reset the IP address settings to obtain an address automatically via DHCP. This can be achieved using the Lantronix DeviceInstaller software.

Note: This document supersedes EN0088 which provides an alternative procedure for resetting an Ethernet Adaptor via a serial connection. The procedure described below is the preferred method.

Equipment Required

- Windows PC
- Lantronix DeviceInstaller software: <u>https://ts.lantronix.com/ftp/DeviceInstaller/Lantronix/4.4/4.4.0.7/Installers/SingleInstallFiles/De</u> <u>viceInstaller-4407-SA.zip</u>
- Ethernet Cable
- 24VDC Power Supply
- 3mm Flat Blade Screwdriver



Equipment Setup

1. Connect the Ethernet Adapter directly to the PC's ethernet port using the ethernet cable.

To avoid confusion it is recommended to disconnect the PC from any other networks while performing the recovery, however, this is not essential.



2. Connect 24V DC power to the Ethernet Adapter:

Pin 1: +24V Pin 2: 0V



Resetting the IP Address

1. Launch Lantronix DeviceInstaller

If the following dialogue appears, click "No"



2. Click on the "Options" button in the top Menu bar and in the Network tab of the dialogue, check that the correct ethernet port is selected, this will be the one corresponding to the port on the PC that the cable has been plugged into (most likely called "Ethernet"). Click OK.

File Edit View Device Tools Search 💿 Options 👄 Exclude 🔮	Help , Assign IP	
- ∰ Lantronix Devices - 1 device(s) - ∰ Ethemet 2 (172.16.99.110) ⊕ -	Name Us IP Address Hardware Address Ware Vs IP Address Hardware Address Ware 172.16.99.129 00-80-A3-BA-1E-16	Status Online
	Options Network Customization Use the following network adapter:	×
	Name Setternet Ethernet 2	IP Address Subnet mask: 192.168.10.108 255.255.255.0 172.16.99.110 255.255.255.0
	OK Cancel	Apply



 Click the "Search" button on the Menu bar, the expand the items shown on the left by clicking on the "+" next each item. DeviceInstaller should have found the connected Ethernet Adapter and will show its firmware version and the IP address that it has been configured with.



4. Click on the IP address. This will generate and Error message a shown, so just click on "Done"

2 Lantronix DeviceInstaller 4.4.0.7		-	×
File Edit View Device Tools Help			
🔎 Search 🛛 🚳 Options 🤤 Exclude 🛛 🗞 Assign IP			
Search Options Exclude Assign IP Search Options Exclude Assign IP Search Options I devices - 1 device(s) Ethermet (169.254.218.155) The XPort Direct + firmware v6.5 192.168.1.143	Device Info Configuration Records Status Records Web Configuration Telnet Configuration ERROR ERROR Communications error. The configuration was not received from the device. Done Show Details >> 1.143		
Retrieving configuration from device			



5. Click on "Assign IP" on the Menu bar, and in the dialogue, select "Obtain an IP address automatically". Click Next



6. On the next dialogue, ensure that the "DHCP", "Auto-IP" and "Clear Gateway" options are selected. Click "Next"





7. On the next screen, click the "Assign" button. When the operation has completed click "Finish"



8. When the operation has completed click "Finish".

S Assign IP Address	×
	Assignment
	Click the Assign button to complete the IP address assignment.
	The Device was set to obtain an IP address automatically. This may take some time. The Status of the device may be busy or unreachable until the background task finds the device. Progress of task: Completed successfully.
	Finish Cancel Help



9. The device should now be set in DHCP mode and be discoverable and configurable on any network.

Lantronix Devices - 1 device(s)	Configuration Records Status Records Web Config	untion Talant Configuration
Chemical Devices (169,254,218,155)	Lofe	
E XPort	inio	1
→ 42 XPort Direct + - firmware v6.5	Property	Value
	Name	XPort Direct+
Turner -	DHCP Device Name	
	Group	
	Comments	
	Device Family	XPort
	Туре	XPort Direct+
	ID	X8
	Hardware Address	00-20-4A-A8-E2-2A
	Firmware Version	6.5
	Extended Firmware Version	6.5.0.9
	Online Status	Online
	IP Address	169.254.71.137
	IP Address was Obtained	Dynamically
	Obtain via DHCP	True
	Obtain via BOOTP	False
	Obtain via RARP	False
	Obtain via Auto IP	True
	Subnet Mask	255.255.0.0
	Gateway	0.0.0.0
	Number of COB partitions supported	6
	Number of Serial Ports	1
	TCP Keepalive	45
	Telnet Supported	True
	Telnet Port	9999
	Web Port	80
	Maximum Baud Rate Supported	921600
	Firmware Upgradable	True
	Supports Configurable Pins	True
	Supports Email Triggers	True
	Supports AES Data Stream	True
	Supports 485	True
	Supports 921K Baud Rate	True
	Supports HTTP Server	True
	Supports HTTP Setup	True
	Supports 230K Baud Bate	True
	Supports GPIO	True

If any further information or assistance is required regarding this procedure, please contact support@hydronix.com