

Engineering Note: EN0088 Recover Lost Ethernet Adapter

Summary: Recovering an Ethernet Adapter if the IP Address is not Reachable

Products affected: Ethernet Adapter Model: 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 restore to factory defaults which can be achieved using a serial console cable connected to a COM port and a terminal emulator (such as HyperTerminal).

Resetting the adapter

1. Connect a Serial Console cable to the adapter as follows:
 - Pin 12: RS232 Ground
 - Pin 10: RS232 Rx
 - Pin 9: RS232 TxThe Ethernet Adapter will also require a 24vDC power supply.
 - Pin 1: 24v
 - Pin2: 0v
2. Connect the Serial Console cable to an available com port on the computer.
3. Open a terminal emulation software package, HyperTerminal is used in this engineering note.
4. Set the connection as follows (Figure 1):

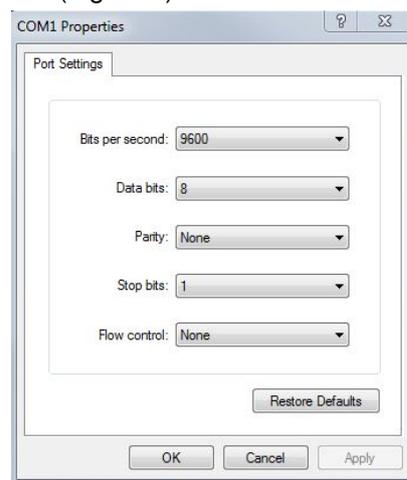


Figure 1: HyperTerminal Settings

To test the connection press any key on the computer and make sure the Receive light on the Ethernet Adapter flashes. If the light does not flash confirm that the RS232 Tx and RS232 Rx wires are connected correctly.

5. Remove the power to the Ethernet Adapter.
6. Hold down the x key on HyperTerminal and at the same time re-connect the power to the Ethernet Adapter. The following screen will be displayed (Figure 2).



Figure 2: Enter Set-up Mode Screen

7. Once “Press Enter for Setup Mode” is displayed press enter within 3 seconds. The following screen will be displayed (Figure 3).

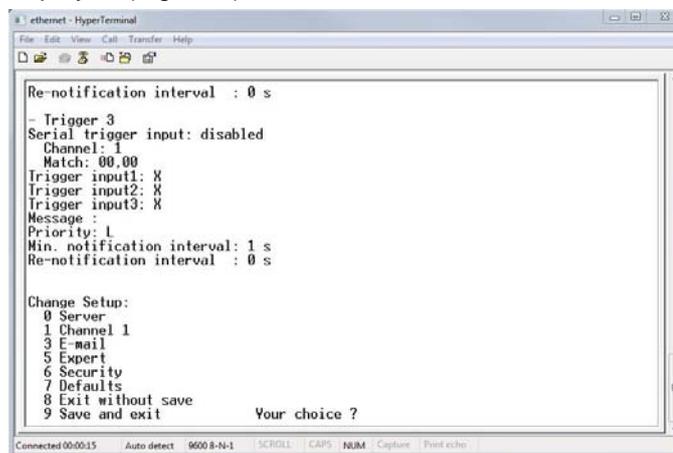


Figure 3: Change Set-up Selection Screen

8. Type 0 to enter the Server configuration section (Figure 4).

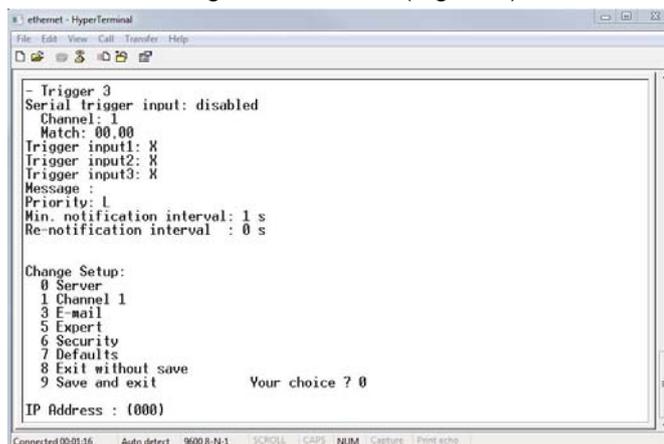


Figure 4: Server Configuration section

9. Set the “IP Address” to 000 000 000 000
The current IP address values are displayed in brackets (Figure 5), to change the IP address enter the required address after the brackets and press enter.

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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 ? 0
IP Address : (000) 000.(000) 000.(000) 000.(000) 000

```

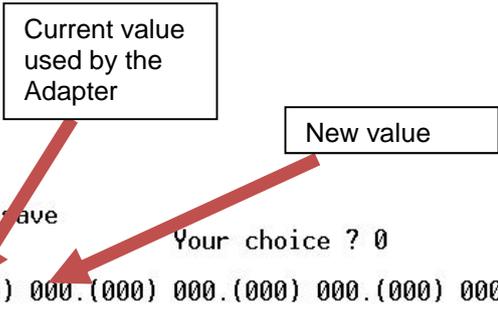


Figure 5: Changing the IP Address

10. Set the "Gateway IP Address" to 000 000 000 000
11. Set the "Number of Bits for the Host Part" to 0
12. Set the "DNS Server IP address" to 000 000 000 000
13. Set "Change Telnet/Web Manager Password" to N
14. Type 9 to save the changes
15. Type 1 to access the "Channel 1" set-up screen (Figure 6)

```

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 ? 1
Baudrate (9600) ?

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Figure 6: Channel 1 Set-up

16. Ensure that the "Baudrate" is set to 9600.
17. Ensure that "I/F Mode" is set to 4F.
18. Press enter on all other settings
19. Type 9 to save changes.

Once the settings have been changed the Ethernet adapter will be reset to default with the IP Address set to Automatic (DHCP).

Note: This facility may not be available with some versions of the Ethernet Adapter. If it is not possible to access the set-up menus using HyperTerminal please contact support@Hydronix.com for assistance.