



## Configuration of Ethernet interface (Digi Connect ME-C)



Read this «**Instructions**» carefully before you start any other action!



## Contents:

1	Ethernet interface configuration .....	3
1.1	Default settings of Ethernet valve controller .....	3
1.1.1	Change default settings via service port.....	4
1.1.2	Change default settings via Ethernet RJ45 (Telnet port 500).....	10



## 1 Ethernet interface configuration

### 1.1 Default settings of Ethernet valve controller

TCP/IP settings:

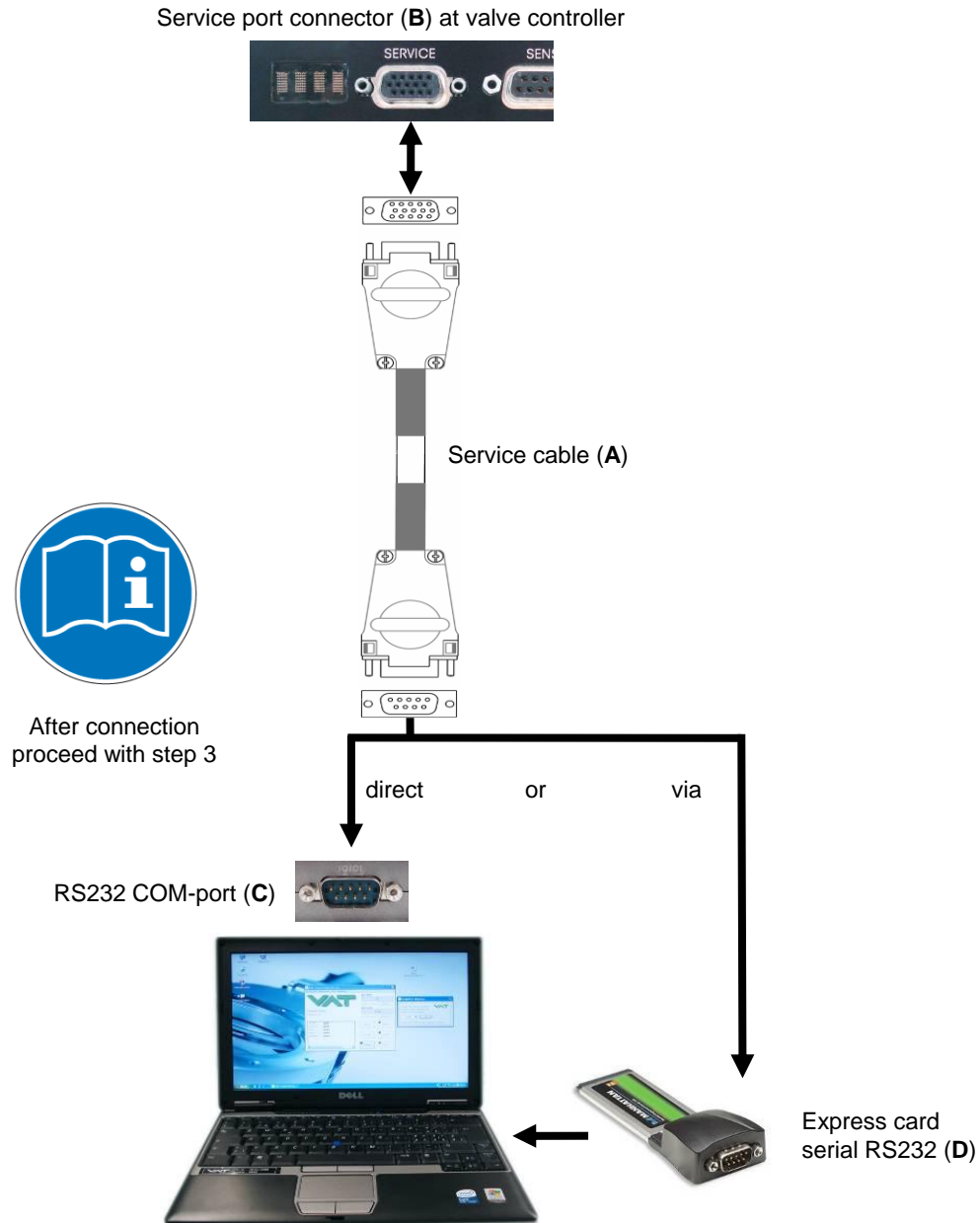
■	IP address	192.168.9.208
■	Subnet Mask:	255.255.255.0
■	Gateway:	192.168.9.111
■	DHCP:	OFF
■	Telnet Port 1:	503
■	Telnet Port 2:	504

**Note:** There are two possibility to change the default settings:

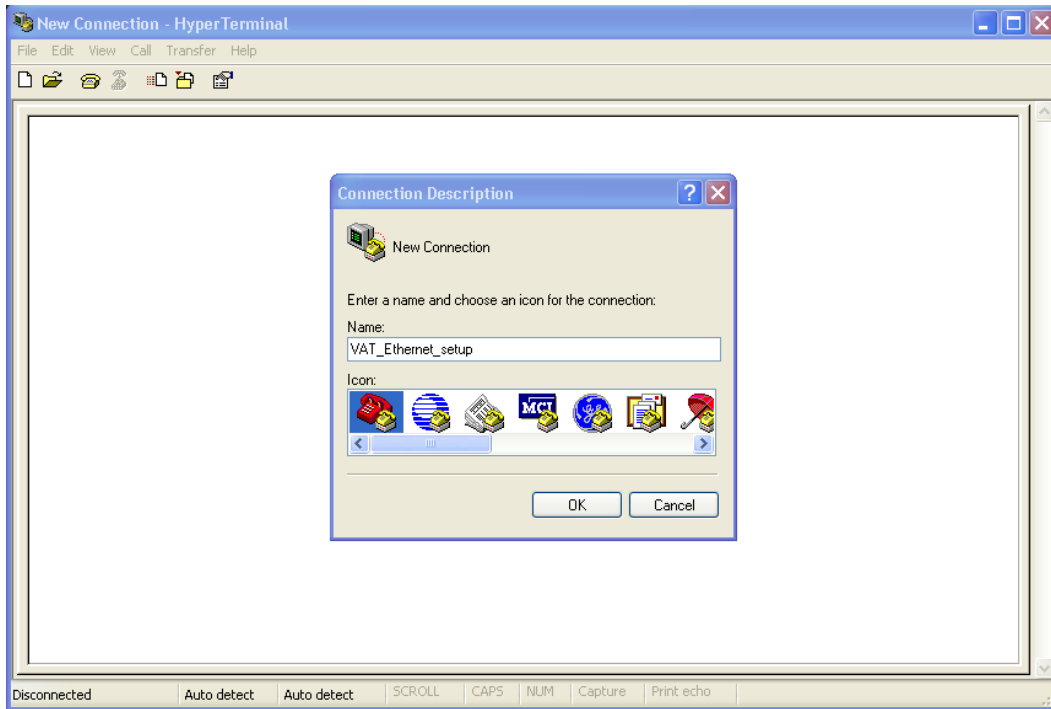
- Via service port, refer to chapter: 1.1.1 Change default settings via service port.
- Via EtherNet RJ45, refer to chapter: 1.1.2 Change default settings via Ethernet RJ45

## 1.1.1 Change default settings via service port

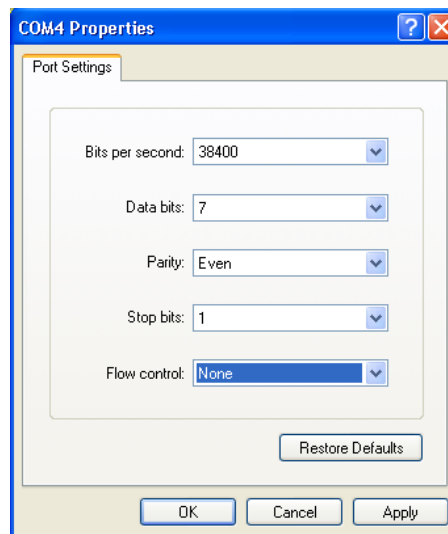
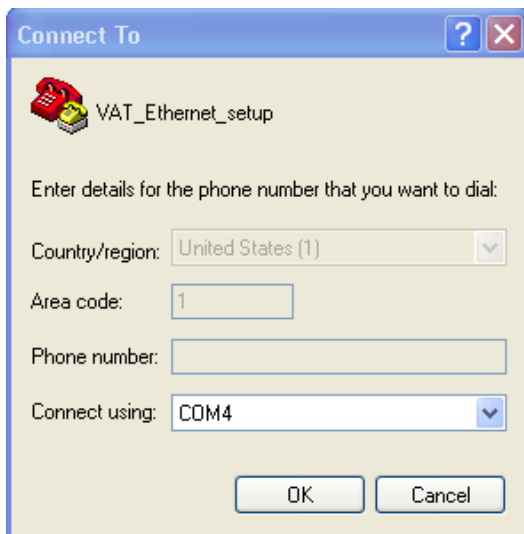
1. Connect «service cable» (A) between valve controller «service port connector» (B) and notebook «RS232 COM-port» (C). **Note:** If no «RS232 COM-port» (C) at notebook is available, use an «express card serial RS232» (D) between «service cable» (A) and notebook.
2. Switch on valve power.



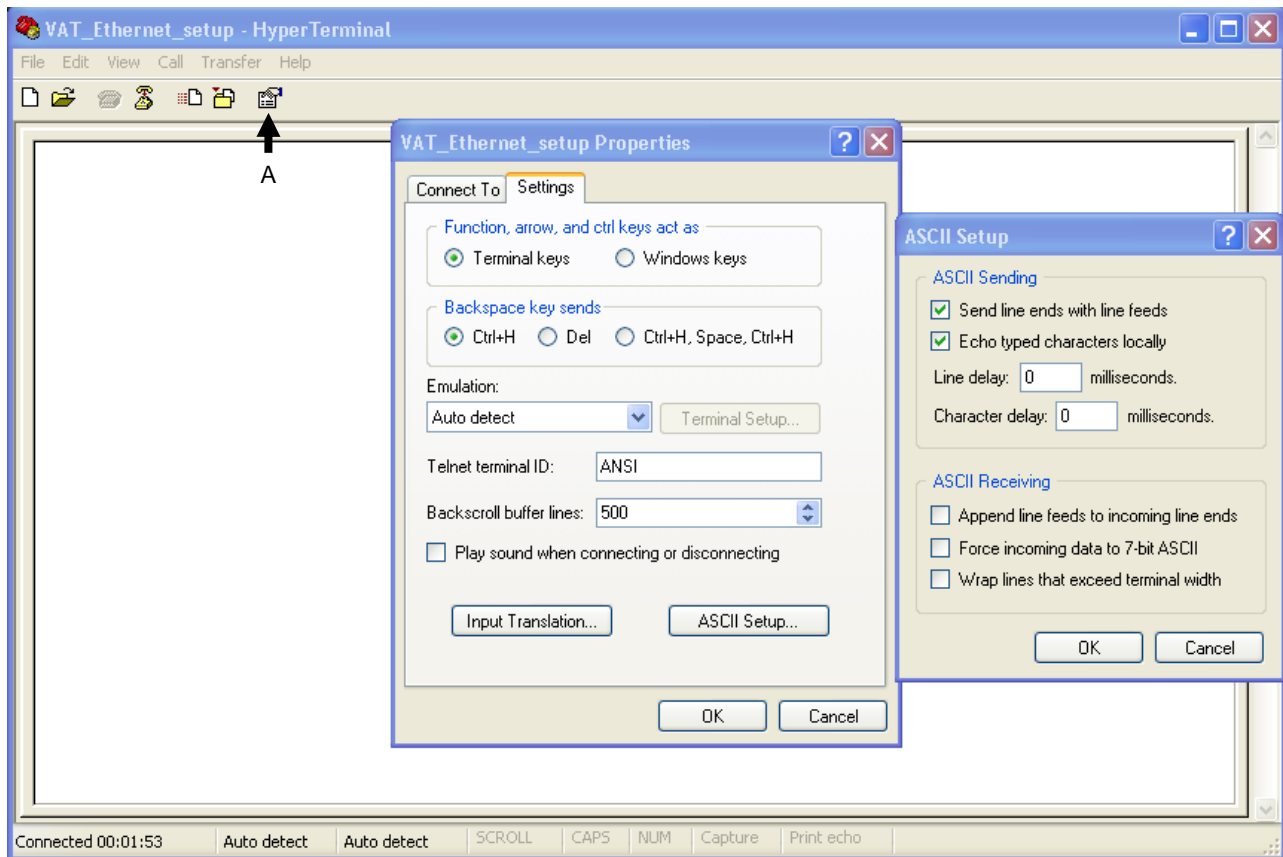
3. Open a hyper terminal
4. Enter on «Name:» VAT\_Ethernet\_setup (example)
5. Klick [OK]



6. Select the COM port on «Connect using:» COM4 (example) and klick [OK]
7. Enter all data on «Port Settings» as shown in the screen right and klick [OK]



8. Klick [Properties] (A)
9. Enter on «VAT\_Ethernet\_setup Properties» > «Settings» all data as shown
10. Klick [ASCII Setup...]
11. Enter on «ASCII Setup» all data as shown
12. Kilck [OK] on «ASCII Setup»
13. Kilck [OK] on «VAT\_Ethernet\_setup Properties»



**Note:**

Acknowledgment that hyper terminal is connected to valve controller.



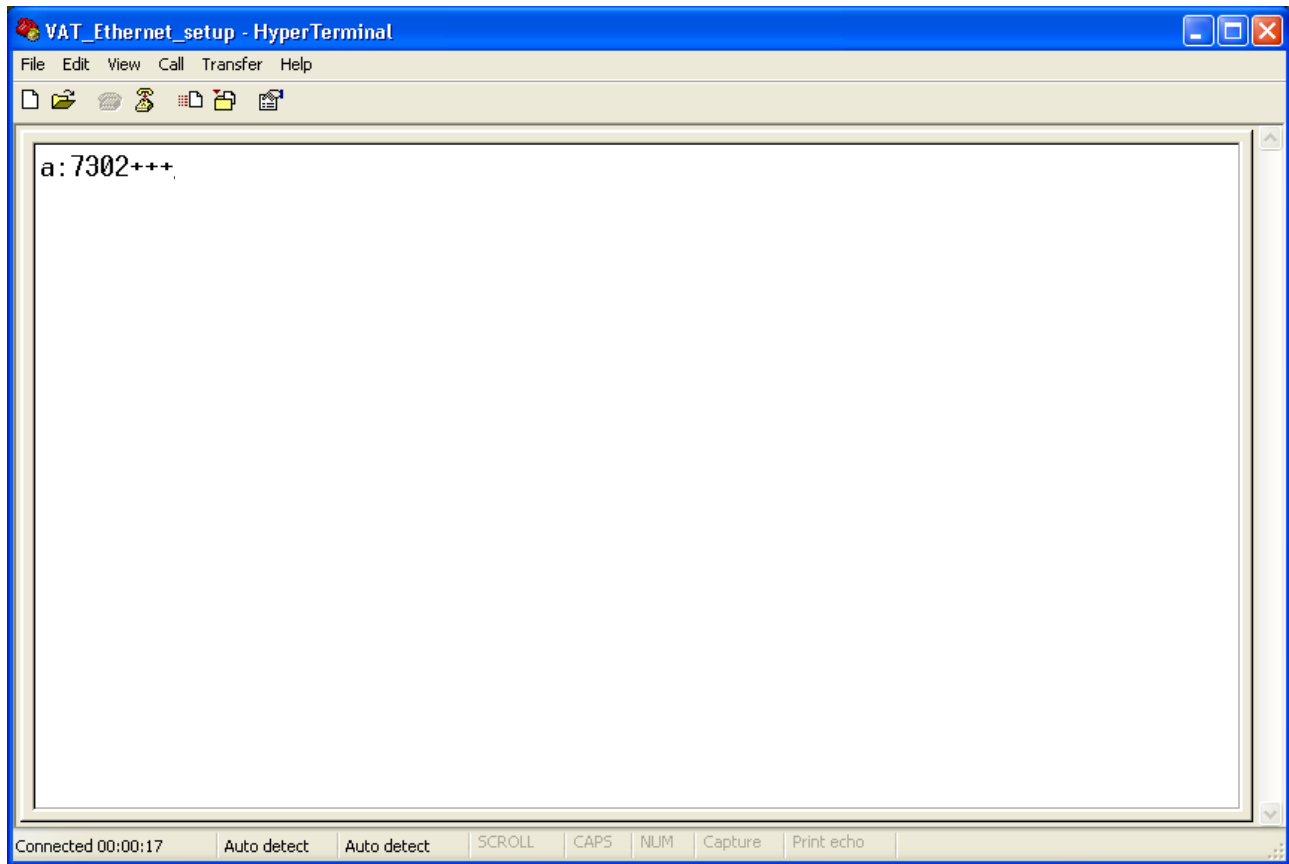
## Ethernet setup instruction

---

**Note:** For changing control commands, you have to go to «configuration modus» first with hyper terminal.

14. Enter a:7302+++ («configuration modus» is activated). Control commands are changeable now, communication to host is interrupted.

**Note:** If response the Error: "E:000042", then send the command "a:7300000001". Repeat step 14 to proceed.



15. Change «Control commands» as shown chapter: 1.1.1.1 Control commands

16. After changing «Control commands» enter a:7302--- to leave the «configuration modus»

17. Restart the valve to activate the changed commands:

- Power OFF at controller
- Power ON at controller
- Wait 1 Minute

**Note:** Changed commands are now activated.



## 1.1.1.1 Control commands

**Note:** Prefix of each command is: a:7302

Control function	Command		Acknowledgement (within 10ms after reception of command)
	Description		
IP ADDRESS	Set	a:7302AT04xxx.xxx.xxx.xxx	a:7302xxx.xxx.xxx.xxx
	Get	a:7302ATg04	a:7302xxx.xxx.xxx.xxx
	<p>An Internet Protocol (IP) address is a numerical identification (logical address) that is assigned to devices participating in a computer network utilizing the Internet Protocol for communication between its nodes.            data length x max. 15 characters for writing</p> <p>Example: 159.122.10.213            Command: a:7302AT04159.122.10.213</p>		
SUBNET MASK	Set	a:7302AT05xxx.xxx.xxx.xxx	a:7302xxx.xxx.xxx.xxx
	Get	a:7302ATg05	a:7302xxx.xxx.xxx.xxx
	<p>IP Subnet mask            data length x max. 15 characters for writing</p> <p>Example: 255.255.255.0            Command: a:7302AT05255.255.255.0</p>		
GATEWAY	Set	a:7302AT06xxx.xxx.xxx.xxx	a:7302xxx.xxx.xxx.xxx
	Get	a:7302ATg06	a:7302xxx.xxx.xxx.xxx
	<p>A gateway is a node (a router) on a computer network that serves as an access point to another network.            data length x max. 15 characters for writing</p> <p>Example: 159.122.10.111            Command: a:7302AT06159.122.10.111</p>		
DHCP	Set	a:7302AT07x	a:7302x
	Get	a:7302ATg07	a:7302x
	<p>«Dynamic Host Configuration Protocol» A protocol that computers use to decide on one IP address to use when using dynamic IP addressing.            x = y or n            y = ON (then used «Dynamic Host Configuration Protocol»)            n = OFF (then used AT04, AT05, AT06)</p> <p>Example: y            Command: a:7302AT07y</p>		





## Ethernet setup instruction

Control function	Command		Acknowledgement (within 10ms after reception of command)
	Description		
TELNET PORT 1	Set	a:7302AT09xxxx	a:7302xxxx
	Get	a:7302ATg09	a:7302xxxx
	Telnet (Telecommunication network) is a network protocol used on the Internet or local area networks.  data length x max. 4 characters for writing xxxx value from > 500 to < 2500  Example: 503 Command: a:7302AT09503		
TELNET PORT 2	Set	a:7302AT10xxxx	a:7302xxxx
	Get	a:7302ATg10	a:7302xxxx
	Telnet (Telecommunication network) is a network protocol used on the Internet or local area networks. TELNET PORT 2 is used for Streaming.  data length x max. 4 characters for writing xxxx value from > 500 to < 2500  Example: 504 Command: a:7302AT10504		

## 1.1.2 Change default settings via Ethernet RJ45 (Telnet port 500)

1. Connect «Ethernet cable RJ45» (A) between valve controller «RJ45 Ethernet connector 8P8C» (B) and notebook «RJ45 Ethernet connector 8P8C» (C).
2. Switch on valve power.

RJ45 Ethernet connector 8P8C (B) at valve controller



After connection  
proceed with step 3

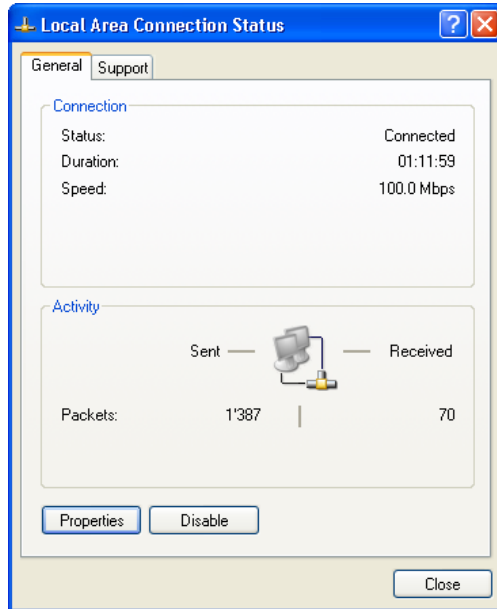


Ethernet cable RJ45 (A)

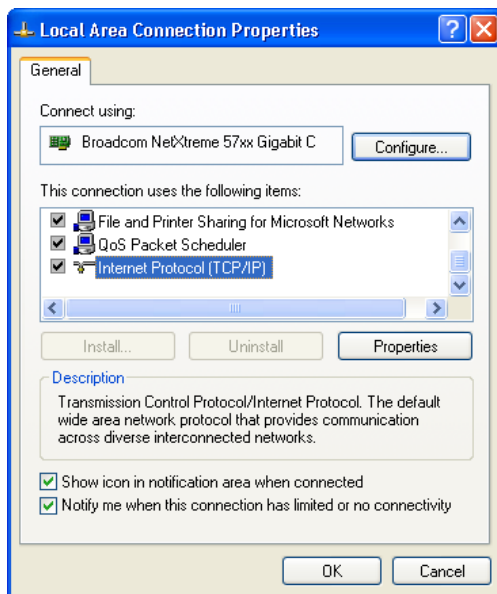
RJ45 Ethernet connector(C)



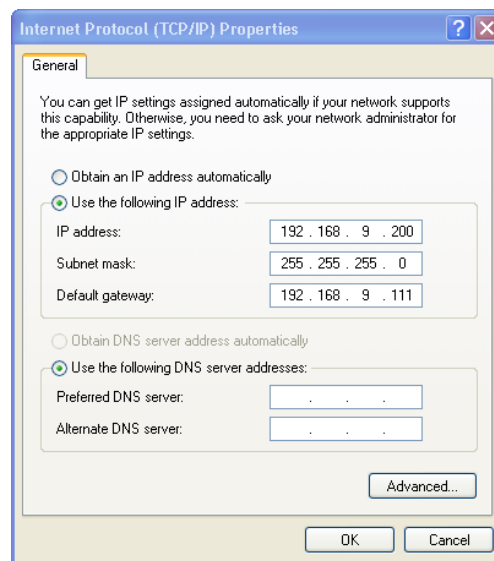
3. Set your PC/Laptop to the necessarily IP address (for example 192.168.9.200)!
4. Go to «Local Area Connection Status»
5. Click [Properties]



6. Select and click [Internet Protocol (TCP/IP)]

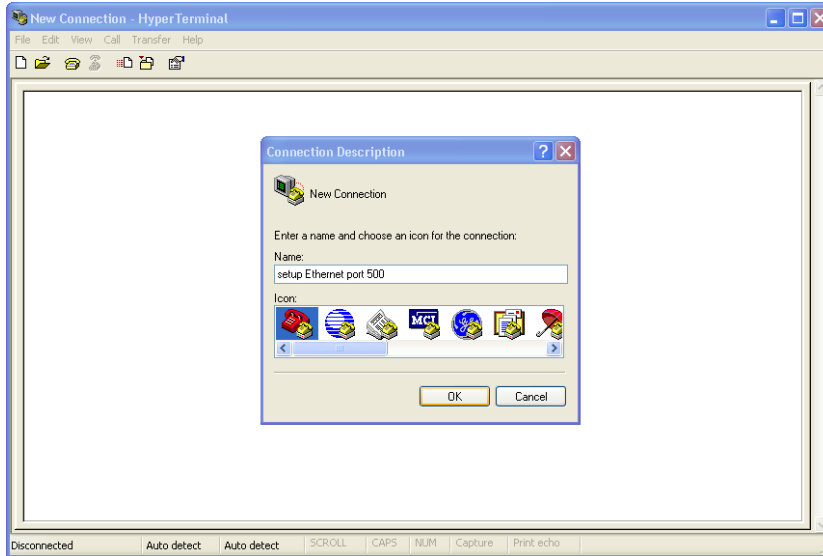


- 6.1 Set the necessary IP address and click [OK]

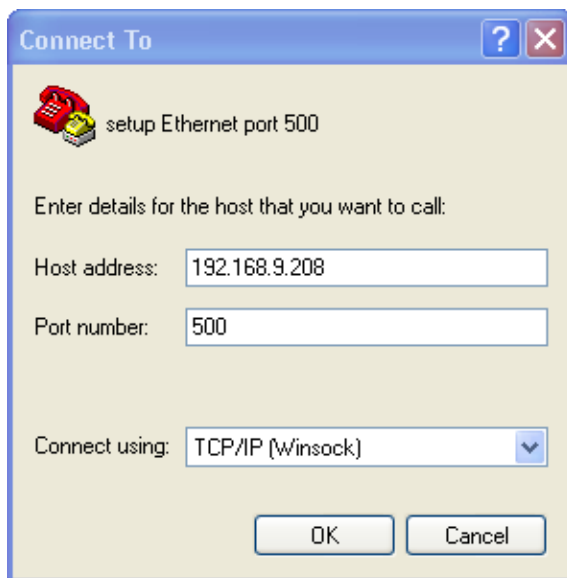


7. Click [OK] to close the «Local Area Connection Properties» window
8. Click [Close] to close the «Local Area Connection Status» window

9. Open a hyper terminal
10. Enter on Name: setup Ethernet port 500 (example)
11. Klick [OK]

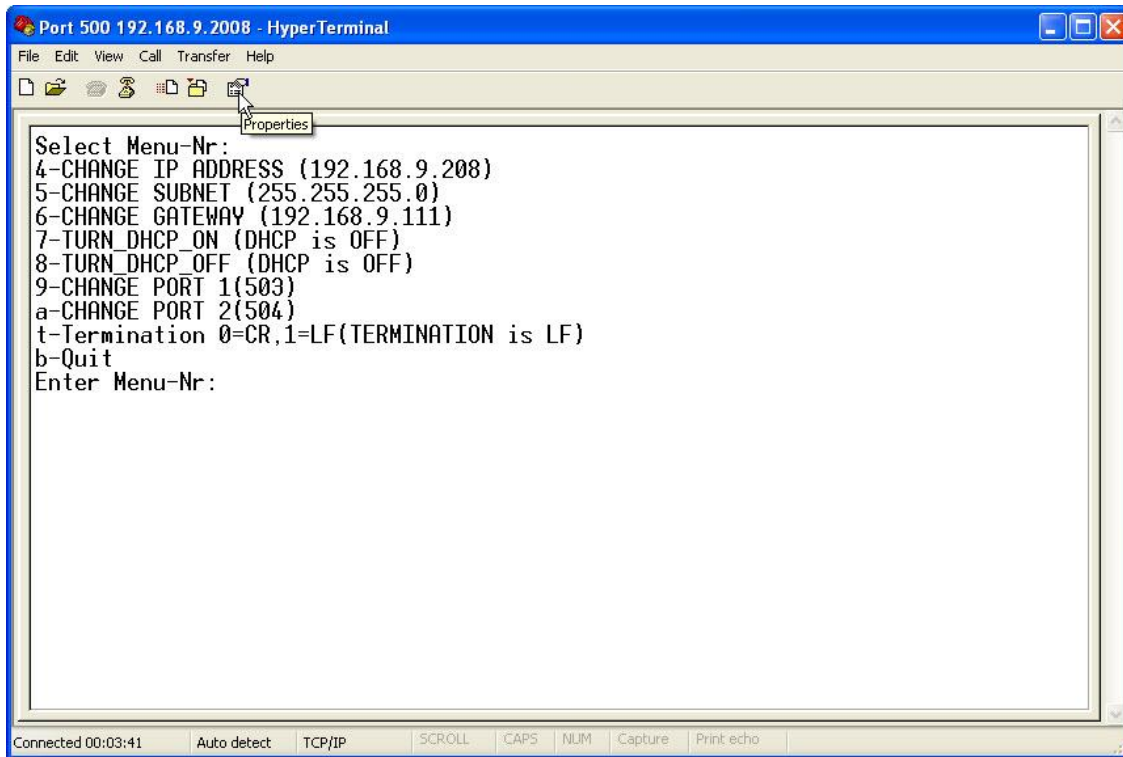


12. Select the TCP/IP on «Connect using:»
13. Enter Port number: 500
14. Enter Host address: 192.168.9.208 (default on valve)
15. Klick [OK]

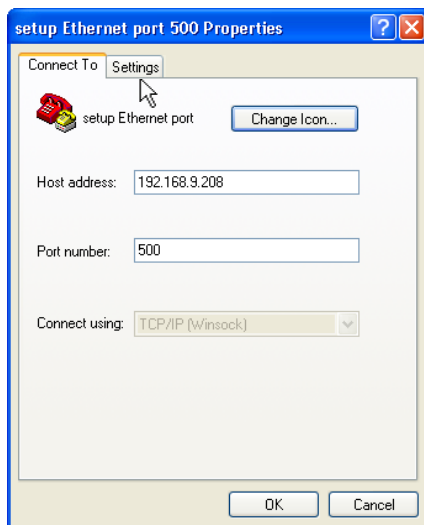


the following window opens...

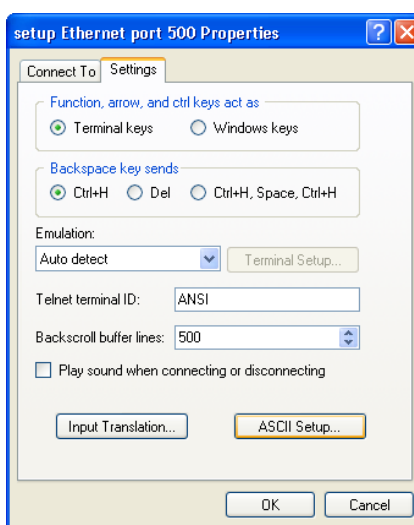
16. Klick [Properties]



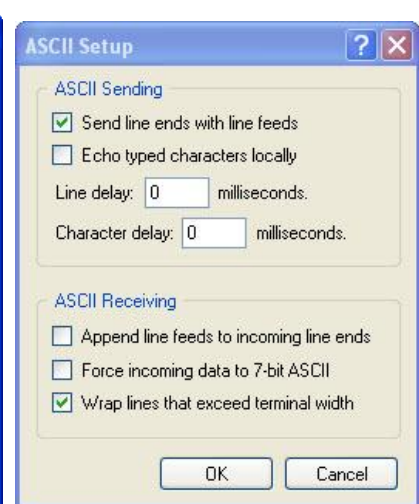
17. Klick [Settings]



17.1 Klick [ASCII Setup]



17.2 Assume settings

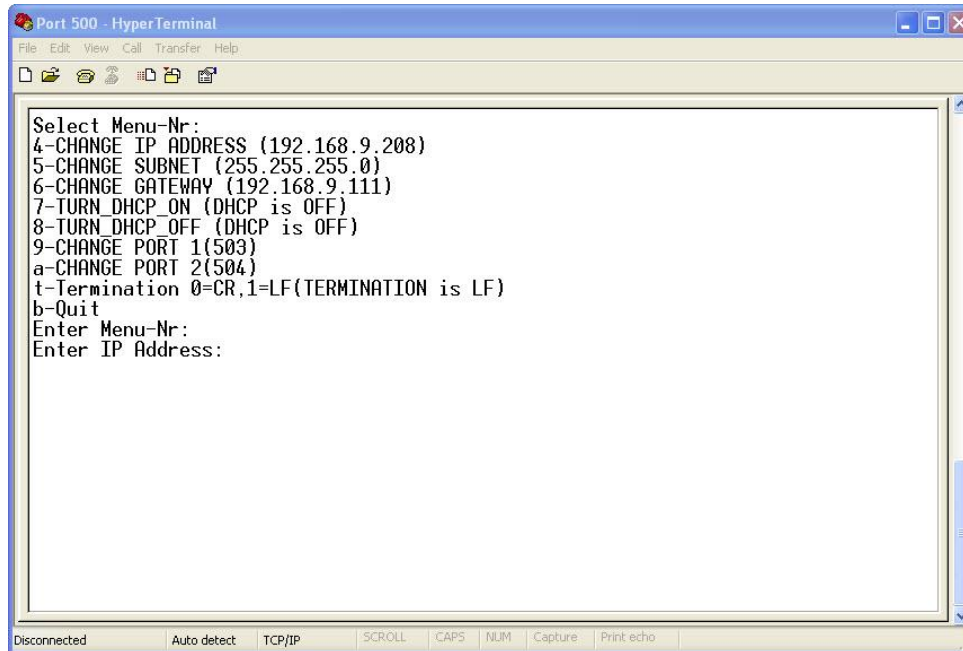


18. Click [OK] to close the «ASCII Setup» window

19. Click [OK] to close the «setup Ethernet port 500 Properties» window

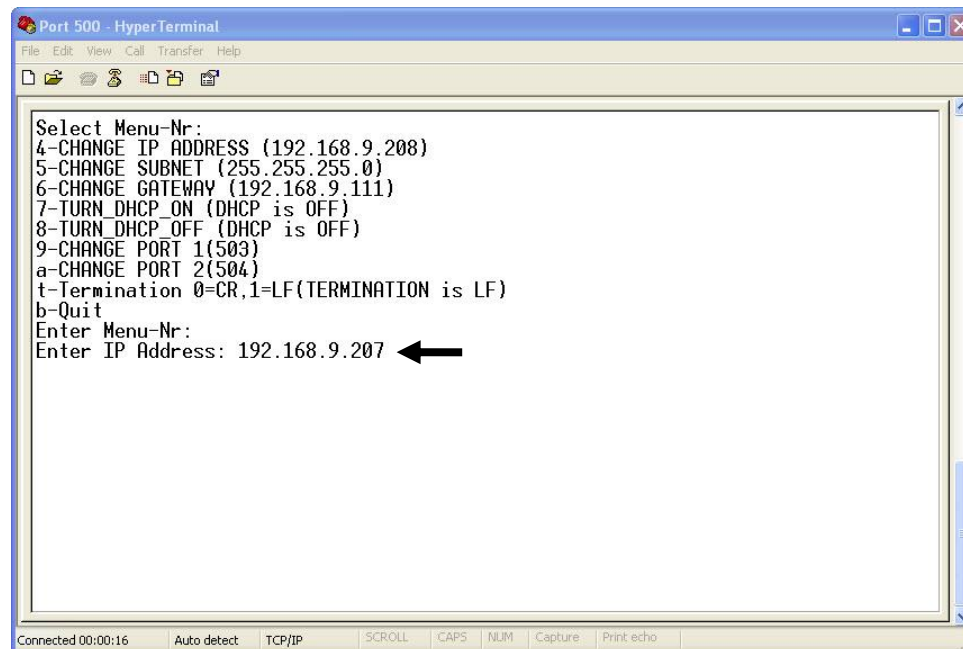
Example: Change the default IP Address, resume with step 20.

20. Enter [4] (CHANGE IP ADRESS ...)



```
Port 500 - HyperTerminal
File Edit View Call Transfer Help
Select Menu-Nr:
4-CHANGE IP ADDRESS (192.168.9.208)
5-CHANGE SUBNET (255.255.255.0)
6-CHANGE GATEWAY (192.168.9.111)
7-TURN_DHCP_ON (DHCP is OFF)
8-TURN_DHCP_OFF (DHCP is OFF)
9-CHANGE PORT 1(503)
a-CHANGE PORT 2(504)
t-Termination 0=CR,1=LF(TERMINATION is LF)
b-Quit
Enter Menu-Nr:
Enter IP Address:
Disconnected Auto detect TCP/IP SCROLL CAPS NUM Capture Print echo
```

21. Enter the new IP Address example: (192.168.9.207) and click [Enter]

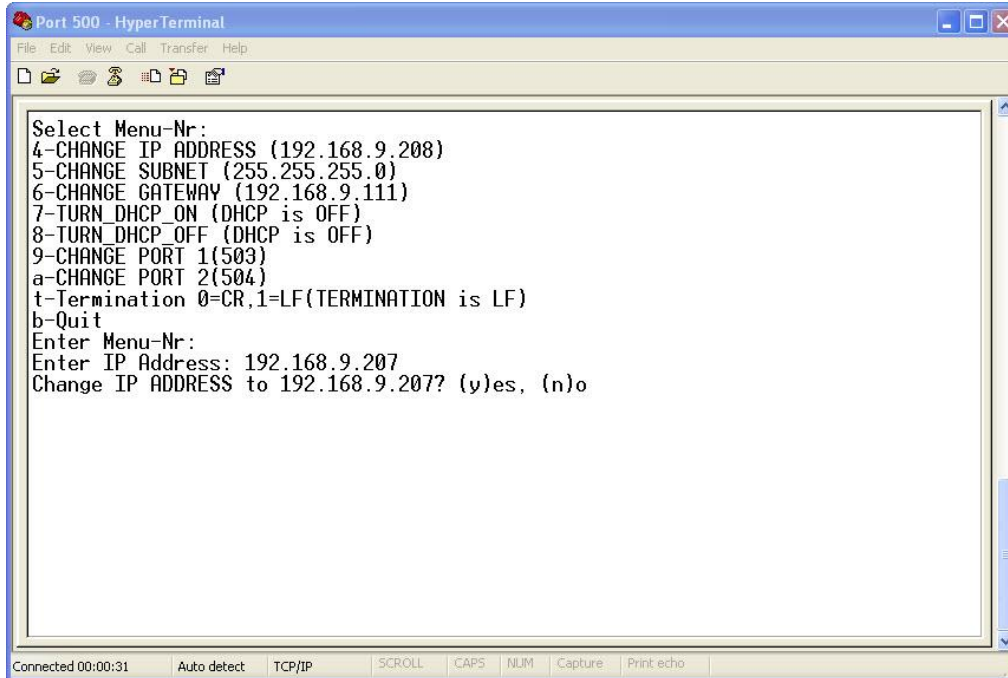


```
Port 500 - HyperTerminal
File Edit View Call Transfer Help
Select Menu-Nr:
4-CHANGE IP ADDRESS (192.168.9.208)
5-CHANGE SUBNET (255.255.255.0)
6-CHANGE GATEWAY (192.168.9.111)
7-TURN_DHCP_ON (DHCP is OFF)
8-TURN_DHCP_OFF (DHCP is OFF)
9-CHANGE PORT 1(503)
a-CHANGE PORT 2(504)
t-Termination 0=CR,1=LF(TERMINATION is LF)
b-Quit
Enter Menu-Nr:
Enter IP Address: 192.168.9.207 ←
Connected 00:00:16 Auto detect TCP/IP SCROLL CAPS NUM Capture Print echo
```

22. Change IP ADDRESS to 192.168.9.207

22.1 Enter **[yes]** to confirm and store the new IP ADDRESS

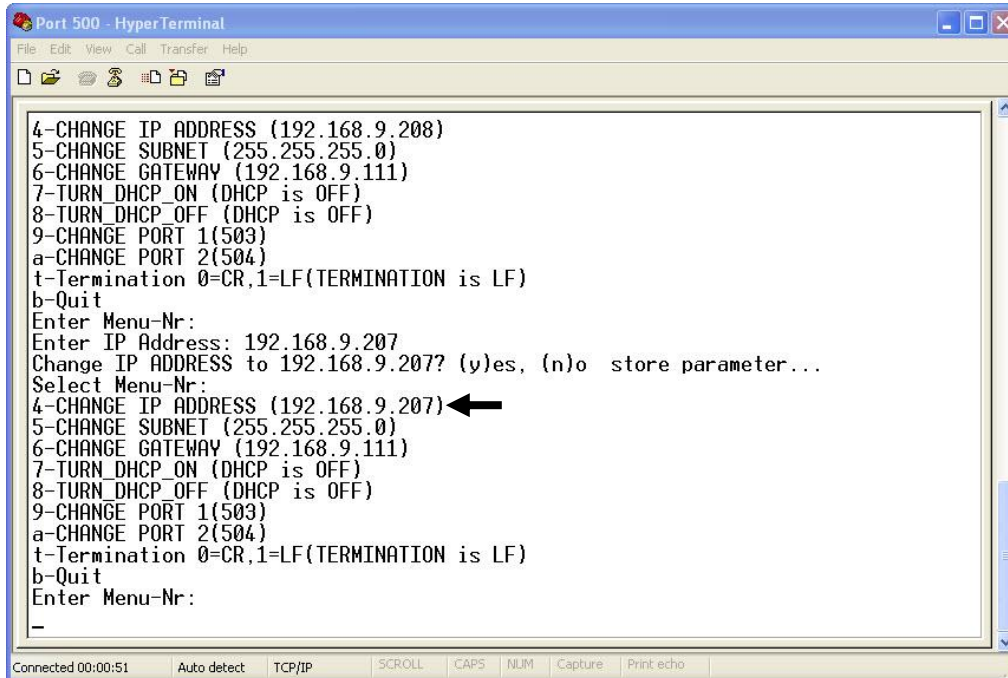
22.2 Enter **[no]** to cancel the procedure



```

Port 500 - HyperTerminal
File Edit View Call Transfer Help
Select Menu-Nr:
4-CHANGE IP ADDRESS (192.168.9.208)
5-CHANGE SUBNET (255.255.255.0)
6-CHANGE GATEWAY (192.168.9.111)
7-TURN_DHCP_ON (DHCP is OFF)
8-TURN_DHCP_OFF (DHCP is OFF)
9-CHANGE PORT 1(503)
a-CHANGE PORT 2(504)
t-Termination 0=CR,1=LF(TERMINATION is LF)
b-Quit
Enter Menu-Nr:
Enter IP Address: 192.168.9.207
Change IP ADDRESS to 192.168.9.207? (y)es, (n)o
    
```

**Note:** If Enter **[yes]**, the new IP ADDRESS is stored now. Proceed with step 23.



```

Port 500 - HyperTerminal
File Edit View Call Transfer Help
4-CHANGE IP ADDRESS (192.168.9.208)
5-CHANGE SUBNET (255.255.255.0)
6-CHANGE GATEWAY (192.168.9.111)
7-TURN_DHCP_ON (DHCP is OFF)
8-TURN_DHCP_OFF (DHCP is OFF)
9-CHANGE PORT 1(503)
a-CHANGE PORT 2(504)
t-Termination 0=CR,1=LF(TERMINATION is LF)
b-Quit
Enter Menu-Nr:
Enter IP Address: 192.168.9.207
Change IP ADDRESS to 192.168.9.207? (y)es, (n)o store parameter...
Select Menu-Nr:
4-CHANGE IP ADDRESS (192.168.9.207) ←
5-CHANGE SUBNET (255.255.255.0)
6-CHANGE GATEWAY (192.168.9.111)
7-TURN_DHCP_ON (DHCP is OFF)
8-TURN_DHCP_OFF (DHCP is OFF)
9-CHANGE PORT 1(503)
a-CHANGE PORT 2(504)
t-Termination 0=CR,1=LF(TERMINATION is LF)
b-Quit
Enter Menu-Nr:
-
    
```



23. Restart the valve to activate the changed commands

- Power OFF at controller
- Power ON at controller
- Wait 1 Minute

**Note:** Changed commands are now activated.

**Note:** Restart the valve after any changing.





## Ethernet setup instruction

---

This Page Intentionally Left Blank