

## Installation Instructions



## Contents

<b>1.0</b>	<b>Introduction.....</b>	<b>3</b>
1.1	Network Interface.....	3
1.2	Serial Interface.....	3
<b>2.0</b>	<b>Specifications.....</b>	<b>4</b>
<b>3.0</b>	<b>Installation.....</b>	<b>5</b>
3.1	All Installations.....	5
3.2	UL Installations Fire Alarm Applications.....	5
3.3	Mounting in a Separate Enclosure.....	5
3.4	D8004 Transformer Enclosure.....	6
3.4.1	Installation Instructions.....	6
<b>4.0</b>	<b>Configuration and Programming.....</b>	<b>7</b>
4.1	Factory Default IP Address.....	7
4.2	Identifying the MAC Hardware Address.....	7
4.3	Obtaining an IP Address.....	7
4.4	Initial Assignment of the IP Address using ARP.....	8
4.4.1	ARP Command Usage.....	8
4.5	Using Telnet to Finish the Configuration.....	10
4.5.1	Using Windows 95/98/98SE/Me Telnet.....	10
4.5.2	Using Windows NT/2000/XP Telnet.....	14
4.6	Programming the D6600 Communications Receiver/Gateway Overview.....	15
4.7	Configuring for Network Communication via a D6680 Network Adapter.....	15
4.8	Editing Program Parameters.....	17

## Figures

Figure 1: Network Interface.....	3
Figure 2: RJ-45 Ethernet Jack Pinouts.....	3
Figure 3: Serial Interface.....	3
Figure 4: 25-pin Serial Port.....	3
Figure 5: Mounting Holes for D6680.....	5
Figure 6: D6680 in an AE1/AE2 Enclosure.....	5
Figure 7: D8004 Installation.....	6
Figure 8: D6680 Network Adapter Label.....	7
Figure 9: Telnet session.....	11
Figure 10: Telnet session – Gateway Address.....	12
Figure 11: D6680 Encryption.....	14

## Tables

Table 1: Network Interface Components (refer to <i>Figure 1</i> ).....	3
Table 2: Serial Interface Components (refer to <i>Figure 3</i> ).....	3
Table 3: D6680 Default IP Addresses.....	7
Table 4: Netmask Address.....	12

## 1.0 Introduction

The Bosch Security Systems D6680 Network Adapter is a two-channel network adapter. The D6680 includes a cable for connecting to the DB25 Channel 1 Port. For most NetCom installations, only one channel needs to be used and configured.



*These instructions should be followed to avoid the possibility of physical damage to the operator, program and/or equipment.*

### 1.1 Network Interface

**Note:** *Do not attempt to connect both Ethernet ports simultaneously. The D6680 does not have routing capabilities.*



Figure 1: Network Interface

Callout	Description
1	10BASE-T Ethernet Port (refer to <i>Figure 2</i> )
2	10BASE-FL Ethernet Port (Transmit) – Not Used
3	10BASE-FL Ethernet Port (Receive) – Not Used
4	Network LEDs
5	Power Plug

Table 1: Network Interface Components (refer to *Figure 1*)

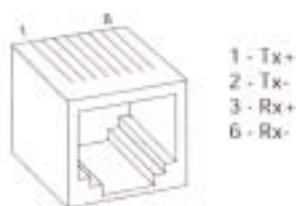


Figure 2: RJ-45 Ethernet Jack Pinouts

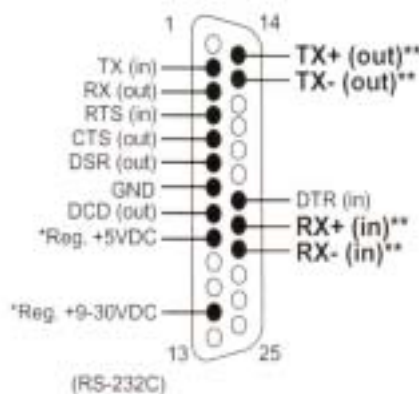
### 1.2 Serial Interface



Figure 3: Serial Interface

Callout	Description
1	DB9 Serial Port (DTE) – Not Used
2	Serial LEDs
3	DB25 Serial Port (DCE) (refer to <i>Figure 4</i> )

Table 2: Serial Interface Components (refer to *Figure 3*)



\* *The Device Server can alternately be powered up via the serial port using one of these pins*

\*\* *The minus sign (-) is sometimes represented as A (such as TXA). The plus sign (+) is sometimes represented as B (such as TXB).*

Figure 4: 25-pin Serial Port

## 2.0 Specifications

<b>Protocols Supported</b>	ARP, UDP, TCP, Telnet, ICMP, SNMP, DHCP, TFTP, HTTP, BootP and ECHO
<b>Connectors</b>	
<b>Serial:</b>	DB25: RS-232/RS-322/RS-485 serial port with DCE configuration DB9: RS232 serial port with DTE configuration
<b>Network:</b>	10BASE-T or 10BASE-FL LAN/WAN: RJ-45 Modular Jack (Ethernet)
<b>Cables</b>	
<b>Ethernet:</b>	Category 3 or better unshielded twisted pair Max Length: 328 ft. (100 m)
<b>RS-232:</b>	Max Length: 50 ft. (15 m)
<b>Data Rates</b>	Serial speed ranging from 300 bps to 115.2 kbps
<b>Serial Line Formats</b>	
<b>Characters:</b>	7 or 8 data bits
<b>Stop bits:</b>	1 or 2
<b>Parity:</b>	Odd, even, none
<b>Modem Controls</b>	RTS, CTS, DSR, DCD, DTR
<b>Flow Control</b>	XON/XOFF CTS/RTS
<b>Management</b>	HTTP (internal web server) SNMP (read only) Serial login Telnet login
<b>System Software</b>	Flash ROM standard: downloadable from a TCP/IP host (TFTP) or over serial port
<b>Diagnostic LEDs</b>	Network Transmit, Network Receive, Good Link, Collisions, Channel 1 Status, Channel 2 Status, Diagnostic
<b>Compatibility</b>	Ethernet: v2.0/IEEE 802.3 D6600
<b>Power Requirements</b>	9 to 30 VDC or 9 to 25 VAC (External adapter included) Power Consumption: 3 W
<b>AC Current Required</b>	UPS Standby Current: 35 mA
<b>Power Input</b>	AC nominal operating range 120 or 240 VAC AC maximum operating range 100 to 240 VAC ~ 50/60 Hz 0.2 Amp maximum
<b>Standby Power</b>	An Uninterrupted Power Supply is required for use with the D6680, when used for UL FIRE Protective Signaling Systems. A 60 hr. minimum UPS standby power supply is required for UL Certification.
<b>Environmental</b>	
<b>Operating Temperature:</b>	+41°F to +122°F (+5°C to +49°C)
<b>Storage Temperature:</b>	-40°F to +151°F (+40°C to +66°C)
<b>Dimensions (H x W x D):</b>	
<b>Unit:</b>	6.5 in. x 4.46 in. x 1.39 in. (16.5 cm x 11.3 cm x 36 mm)
<b>Enclosure</b>	12.5 in. x 14.5 in. x 3 in. (31.8 cm x 36.8 cm x 76 mm) The enclosure is manufactured from 20 Gauge (1.0 mm), cold-rolled steel. A keyed lock is included.
<b>Weight</b>	1.1 lbs. (0.48 kg)

## 3.0 Installation

### 3.1 All Installations

Install the D6600 Communications Receiver/Gateway in accordance with NFPA 70, NFPA 72 and the local Authority Having Jurisdiction (AHJ).

### 3.2 UL Installations Fire Alarm Applications

The D6680 Ethernet Adapter is suitable for Central Station Protective Signaling when it is installed and used in compliance with NFPA 72 and ANSI/NFPA 70. Installation limits for Digital Alarm Communicator Receivers (DACR) are under the jurisdiction of your local authority.

The D6680 must be installed in the same room as the D6600 Central Station Receiver and within 15.2 m (50 ft) of the D6600.

**Note:** For UL Listed Fire Installations, equipment between Ethernet Interface Modules and the D6680 is required to be UL Listed Information Technology Equipment.

### 3.3 Mounting in a Separate Enclosure

Required for UL Central Station Protective Signaling, the D6680 must be mounted in a separate enclosure like the AE1 (grey) or the AE2 (red).

Before installing the D6680 in the AE1 or AE2 enclosure, the correct mounting holes must be found on the back wall of the enclosure. Only these holes line up correctly to allow the D6680 to be secured with two screws.

Once the holes are found, proceed to mount the D6680:

1. Place the D6680 against the back wall of the enclosure.
2. Line up the side mounting holes on the D6680 with the enclosure mounting holes indicated in *Figure 5*.
3. Insert the two screws provided and slowly tighten them down until the D6680 is securely mounted to the enclosure (refer to *Figure 6*).

**Note:** It is recommended the enclosure be mounted on a vertical surface, BEFORE installing the module. All wires within the enclosure are power limited and supervised.



Figure 5: Mounting Holes for D6680

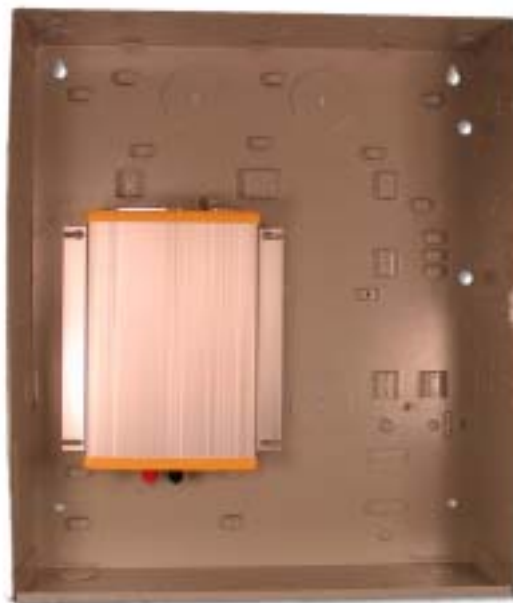


Figure 6: D6680 in an AE1/AE2 Enclosure

## 3.4 D8004 Transformer Enclosure

The D8004 Transformer Enclosure protects the AC plug-in transformer and ensures that it remains securely fixed to the AC wall outlet. The D8004 Transformer Enclosure may be required for certain applications, the most common being fire alarms. Consult your AHJ for installation requirements.

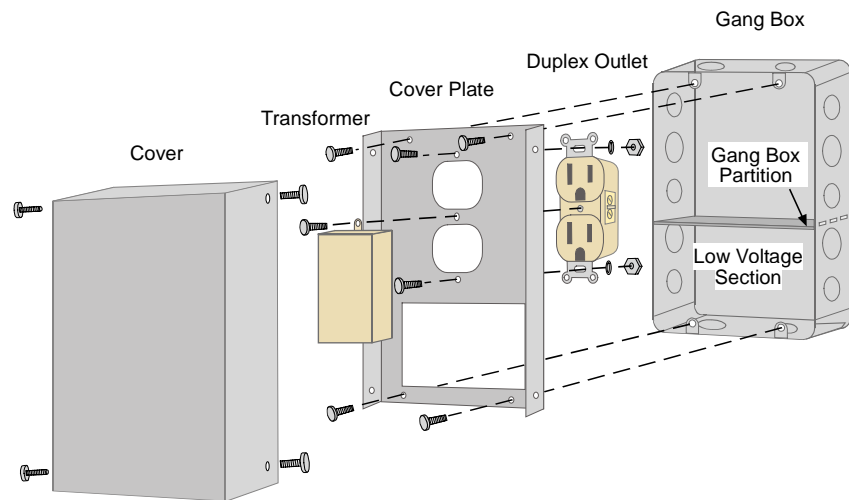
The D8004 is a direct replacement for the AE-TR16.

### 3.4.1 Installation Instructions



*Remove AC power and lock out the circuit breakers prior to installation.*

1. Mount the gang box to the wall or supporting structure.
2. Insert a gang box partition into the gang box. The partition will divide the gang box into two sections. The large section contains the high voltage wiring; the small section contains the low voltage wiring.
3. Punch out a conduit knockout in the high voltage side of the gang box. Bring the 110 VAC wiring through the knockout hole and into the gang box as required by the local Authority Having Jurisdiction, NFPA and the NEC.
4. Connect the isolated 110 VAC wiring to the duplex outlet.
5. Mount the duplex outlet to the cover plate using the #6 machine screws, nuts and lockwashers provided. Mount the cover plate to the gang box with the #10 screws provided with the gang box.
6. Energize the power to the circuit(s) and, using a voltmeter, test the duplex outlet for proper voltage.
7. Punch out a conduit knockout in the low voltage side of the gang box. Bring the low voltage wiring through the knockout hole and into the gang box as required by the local Authority Having Jurisdiction, NFPA and the NEC.
8. Connect the low voltage wiring to the transformer.
9. Plug the transformer into the bottom outlet of the duplex outlet. Secure the transformer to the duplex outlet using the screw provided.
10. Attach the cover to the cover plate with the four #6 self-tapping screws provided.



**Figure 7: D8004 Installation**

## 4.0 Configuration and Programming

The D6680 is a two-channel network adapter. The D6680 includes a cable for connecting to Channel 1, and for most NetCom installations, only one channel needs to be used and configured. The examples below illustrate configuration of Channel 1 only.

### 4.1 Factory Default IP Address



*The default IP address is not used for any of the Bosch Security Systems NetCom functions. This information is supplied only to assist the technician if a failure of the ARP commands occurs (refer to Section 4.4 Initial Assignment of the IP Address using ARP on page 8). It could be useful to know the default IP address should the ARP commands fail. However, this occurrence is highly unlikely. Contact Bosch Security Systems Tech Support or a NetCom engineer if you have further questions!*

The D6680 Network Adapters are shipped with the following default IP addresses:

Bosch Security Systems Model Number	Application	Default IP Address
D6680	Network Adapter for Ethernet networks	194.039.078.254

Table 3: D6680 Default IP Addresses

### 4.2 Identifying the MAC Hardware Address

Once everything is verified for proper setup per the previous steps it is time to program the IP address of the D6680 Network Adapter. The first step is finding and writing down the MAC or hardware address of the D6680 Network Adapter. *MAC is short for Media Access Control address, a hardware address that uniquely identifies each node of a network.* This address is hard-coded into the D6680 Network Adapter during its manufacture and cannot be changed. This address is 6 bytes (which is 12 digits) in length and can be found on a label on the D6680 Network Adapter.

The MAC or hardware address for the D6680 Network Adapter is found on the label under the words 'Ethernet Address.'

**Note:** *It is a good idea to record this 12-digit number for future reference.*

### 4.3 Obtaining an IP Address

Go to the network administrator with the MAC address of the D6680 Network Adapter. The network administrator will assign your D6680 network adapter an IP Address. An IP Address is an identifier for a computer or device on a TCP/IP network. Networks using the TCP/IP protocol route messages based on the IP address of the destination. The format of an IP address is a 32-bit numeric address written as four numbers or fields separated by periods. Each number can be 0 to 255.

For example, 190.200.128.111 could be an IP address. Within an isolated network, you can assign IP addresses at random as long as each one is unique. However, connecting a private network to the Internet requires using registered IP addresses (called Internet addresses) to avoid duplicates.



Figure 8: D6680 Network Adapter Label

## 4.4 Initial Assignment of the IP Address using ARP

Bosch Security Systems recommends that you read this entire step before beginning. Also, make sure there is power to the D6680 Network Adapter and the Ethernet Network RJ45 connection is in place.



*The D6680 Network Adapter being configured and the PC being used to configure it, must both be on the same gateway (the device that connects the LAN to the WAN) in order to telnet (the process of using the TELNET program to communicate with the D6680 Network Adapter and establish its communications configuration parameters) into the configuration program. After the D6680 Network Adapter has been configured and it has an IP address - you will be able to telnet in to change configuration parameters from anywhere on the network.*

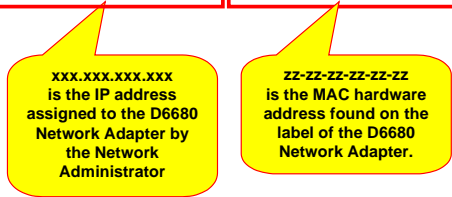
The *D6200 Software Operation and Installation Guide (P/N: 4998154991)* describes the use of the D6200 software to program network devices. This is the recommended way to program the network devices. If you choose to use the software to program the network devices, please skip to *Section 4.6 Programming the D6600 Communications Receiver/Gateway Overview* on page 15 after referencing the *D6200 Software Operation and Installation Guide (P/N: 4998154991)*.

Once you have the IP address and the network administrator confirms that it is ready, open up the MS-DOS® prompt on the host computer tied into the network that is to be used. You will now need to use the ARP program to assign the D6680 Network Adapter its new IP address.

*Address Resolution Protocol (ARP)*, is a program used to create a temporary association between an IP address and a hardware address, such as a MAC. The ARP program is installed into the C:\WINDOWS directory by default by Microsoft® Windows® 95, Windows® 98, Windows® 98SE, Windows® Me, Windows® 2000, Windows® NT, and Windows® XP, during install.

At the MS-DOS® prompt (usually C:\WINDOWS or command prompt for Windows NT and 2000, usually C:\WINNT), the following command syntax is to be used:

```
arp -s xxx.xxx.xxx.xxx zz-zz-zz-zz-zz-zz
```



The following steps detail the assignment of an IP address to a D6680 Network Adapter, using the ARP command. The following MAC address is used as an example.

00-20-4a-12-04-0e  
Example MAC Address

### 4.4.1 ARP Command Usage

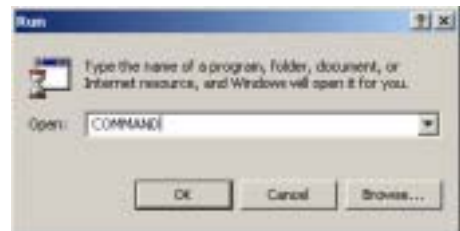


*Remember that the IP and MAC addresses used in this example will not be the same as the numbers you are using. This is for demonstration only.*

1. Open a MS-DOS® window by selecting Start → Run



At the Run dialog box, type COMMAND and click OK.



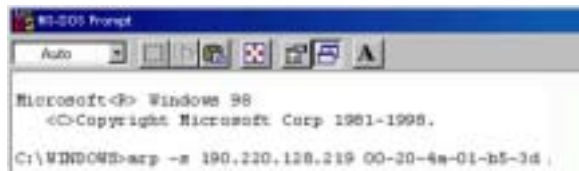


A DOS window will appear.



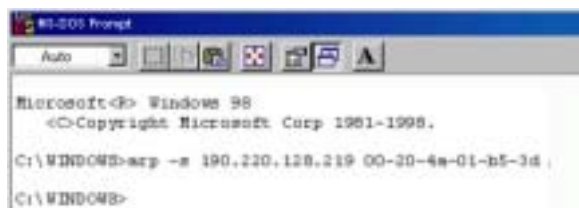
2. Type the ARP -s command with the IP Address and the MAC Hardware address from above.

For this example the IP address to assign is 190.220.128.219 and the MAC hardware address is:  
00-20-4a-01-b5-3d



3. If following your command the computer responds with a prompt of C:\WINDOWS> (Refer to *Example 1*), then the address was accepted.

**Note:** *There is no indication that the operation has been performed properly. The absence of an error message is your indication that the ARP command was successful.*



Example 1: arp -s

4. Verify that the IP address was correctly entered into the ARP table by typing:

arp -g [ENTER]

## 4.5 Using Telnet to Finish the Configuration

If you are using Windows 95/98/98SE/Me, refer to *Section 4.5.1 Using Windows 95/98/98SE/Me Telnet*.

If you are using Windows NT/2000/XP, refer to *Section 4.5.2 Using Windows NT/2000/XP Telnet* on page 14.

### 4.5.1 Using Windows 95/98/98SE/Me Telnet

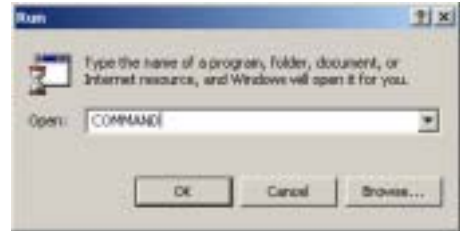
**Note:** *Even though the screen captures are specific to Windows 95/98, they are similar for Windows 98SE and Me.*

Once the IP address has been verified to be correct, the TELNET utility must be used to finish the configuration.

1. Open a MS-DOS® window by selecting **Start → Run**

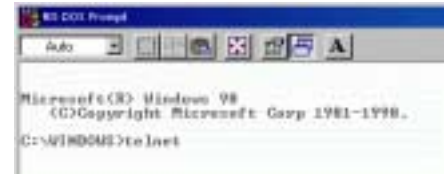


At the Run dialog box, type `COMMAND` and click **OK**.

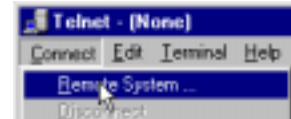


2. At the DOS prompt (usually `C:\windows`), type `telnet` [ENTER].

The TELNET application window will appear.



3. Click on **C**onnect → **R**emote System.



4. The Connect window will appear.



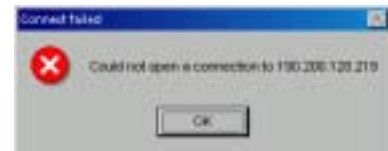
5. Type the IP address of the D6680 Network Adapter into the **H**ost Name field (this is the IP address that was assigned to the D6680 Network Adapter in the previous section).

Enter 1 into the **P**ort field and leave the **T**ermType field at "vt100"

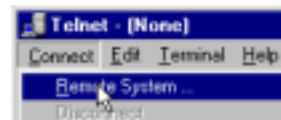


*Remember that the IP and MAC addresses used in this example will not be the same as the numbers you are using. This is for demonstration only.*

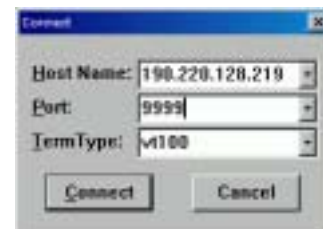
6. Click **C**onnect. An error message will appear saying "'Connect Failed' Could not open a connection to 190.200.128.219."



- Click [OK] and the TELNET window will appear again.  
Click on Connect → Remote System again.



Enter 9999 into the Port field, leaving the Host Name and TermType fields the same. Click the Connect.



- The program will prompt you to press [ENTER] by displaying "Press Enter to go into setup mode."  
Press [ENTER].

Press Enter to go into Setup Mode



If you do not press [ENTER] within 5 sec. of seeing the above message, you will be disconnected.



- If you pressed [ENTER] within 5 sec., then you should see the following screen (Refer to Figure 9).

**Note:** *Software Version will be displayed briefly before the [ENTER] key is pressed. Pressing [ENTER] forces the screen to scroll and the software version will no longer be available. Please note the software version before 5 sec. have elapsed.*

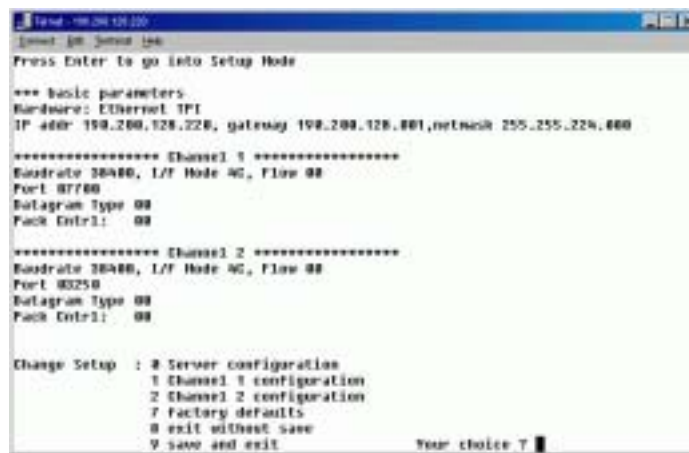


Figure 9: Telnet session

- Press [0] + [ENTER] to set up the basic Server Configuration. You are now required to enter the desired IP address.

If the D6680 Network Adapter has been programmed with an IP address in the past, it will be displayed in parentheses.

IP Address : (190)

For example, if this D6680 Network Adapter were originally programmed to IP address 190.200.128.152, we would be changing it to address 190.200.128.220.

- To properly program the IP address 190.200.128.220, the following keys would be entered:

```

IP Address : <(190)> 190.<(200)> 200.<(128)> 128.<(152)> 220
Set Gateway IP Address (Y)
    
```

190 [ENTER] 200 [ENTER] 128 [ENTER] 220 [ENTER]



Remember that the IP and MAC addresses used in this example will not be the same as the numbers you are using. This is for demonstration only.

- When asked to set the Gateway IP address, type N [ENTER] to leave it at the default

Set Gateway IP Address (N) \_

Figure 10: Telnet session – Gateway Address

**Note:** The Gateway IP is only needed if using a Wide Area Network (WAN). In a Local Area Network (LAN), typically the Gateway is not needed.

- If the Netmask needs to be changed from the default, enter the number of bits that correspond to the Netmask your network is using (Refer to Table 4). See your network administrator for more information. Press [ENTER] after entering the correct number of bits for the Netmask.

Number of Host Bits	Netmask	Number of Host Bits	Netmask	Number of Host Bits	Netmask
1	255.255.255.254	11	255.255.248.0	21	255.224.0.0
2	255.255.255.252	12	255.255.240.0	22	255.192.0.0
3	255.255.255.248	13	255.255.224.0	23	255.128.0.0
4	255.255.255.240	14	255.255.192.0	24	255.0.0.0
5	255.255.255.224	15	255.255.128.0	25	254.0.0.0
6	255.255.255.192	16	255.255.0.0	26	252.0.0.0
7	255.255.255.128	17	255.254.0.0	27	248.0.0.0
8	255.255.255.0	18	255.252.0.0	28	240.0.0.0
9	255.255.254.0	19	255.248.0.0	29	224.0.0.0
10	255.255.252.0	20	255.240.0.0	30	192.0.0.0
				31	128.0.0.0

Table 4: Netmask Address

- You will be prompted to change the TELNET password, press [N] for the default of "No". This screen will now show the Setup Mode screen you saw previously in Figure 9.



If a password is entered, store in a secured place. If the password is lost or forgotten you will not be able to telnet this unit again. The unit will have to be sent back to the factory and reconditioned before it will be able to receive another TELNET session.

- Now press [1] [ENTER] to go into setup Channel 1 configuration. The following will be displayed:

Baudrate (09600) █



You must set the baud rate of the D6680 to 38400.

Enter 38400 [ENTER] to change it.

- You should then see:

I/F Mode (4C) ? █

Press [ENTER] to accept the default of (4C). If it doesn't show that, type 4C [ENTER] to change it.

17. You should then see:

**Flow (00) ?**

Press [ENTER] to accept the default of (00). If it doesn't show that, type 00 [ENTER] to change it.

18. You should then see:

**Port No (03257) ?**

For the Port number, type a number that is between 2000 and 10000 followed by [ENTER].



*If using 2 Channels, be sure to set the port number for Channel 1 different from the port number for Channel 2 (displayed in the TELNET configuration screen).*

19. You should then see:

**ConnectMode (CC) ?**

Press [ENTER] to accept the default of (CC). If no default is shown, type CC [ENTER] to change it.

20. You should then see:

**Datagram Type (00) ?**

Type 00 [ENTER] if all field devices (C900TTL-E, D9133TTL-E, and DX4020) are using the same port number entered in Step 18.

**Note:** *To use Datagram Type 02, firmware version 5.5c or greater is required for Hardware Revision 2. Refer to DeviceInstaller Operation and Installation Guide (P/N: 4998138688) for more information.*

Type 02 [ENTER] if all field devices (C900TTL-E, D9133TTL-E, and DX4020) are using unique port numbers.

**Note:** *If Datagram Type 02 is used, it must be enabled in the D6600 Receiver [Refer to D6600 Program Entry Guide (P/N: 4998122702)]*

**Note:** *For more information on Datagram Types, refer to the D6600 NetCom System Guide (P/N: 4998122712).*

21. If you want to enable encryption, from the main menu select 6 Security and perform the following steps:



*If encryption is enabled on the D6680, it must be enabled on all field devices (C900TTL-E, D9133TTL-E, DX4020) with the same key. It must also be enabled in the D6600 Receiver [Refer to D6600 Program Entry Guide (P/N: 4998122702)]*



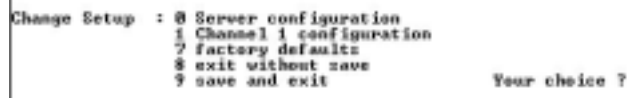
*The network Interface Module (D6680, C900TTL-E, D9133TTL-E, or DX4020) must have the proper software version to support encryption. For more details, refer to the DeviceInstaller Operation and Installation Guide (P/N: 51224).*

22. At Disable SNMP (N) N, press [ENTER].
23. At SNMP Community Name (:): press [ENTER].
24. At Disable Telnet Setup (N) N, press [ENTER].
25. At Disable Port 77Feh (N) N, press [ENTER].
26. At Disable Web Server (N) N, press [ENTER].
27. At Disable ECHO ports (Y) Y, press [ENTER].



28. At Enable Encryption (N), press [ENTER].
29. At Change keys (N), press 'Y'. Enter keys as follows: These 16 bytes (32 characters) should match the bytes programmed in the D6680. Default value is 01-02-03-04-05-06-07-08-09-10-11-12-13-14-15-16.
30. At Enable Enhanced Password (N), press [ENTER].
31. After all the changes have been made and verified for accuracy the information now needs to be saved.
32. Select 9 – save and exit. Connection to host will be lost, press [ENTER] to continue.

Figure 11: D6680 Encryption



4.5.2 Using Windows NT/2000/XP Telnet

**Note:** *Even though the screen captures are specific to Windows 2000, they are similar for Windows NT and XP.*

To finish the IP address configuration of the D6680, a telnet session must be launched.



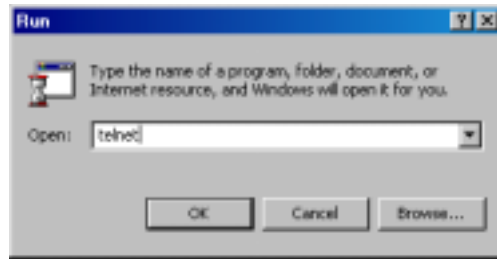
*It is necessary to be logged into Windows 2000 with an ADMINISTRATOR privilege level.*

**Note:** *This example uses the IP address of 10.25.124.148 and the MAC Address of 00-20-4a-51-01-a7*

1. Open a MS-DOS® window by selecting Start → Run



Type Telnet and press OK.  
Go to step #3.



A DOS window will appear looking like this:

**Note:** *The colors have been inverted here for clarity. The normal prompt window appears with white text on black.*



2. At the C:\> prompt, type in TELNET and press [ENTER].



- At the MICROSOFT TELNET> prompt, type OPEN (space) IP ADDRESS (space) PORT NUMBER

*Ex: open 190.220.128.219 1*

```

Command Prompt - telnet
Microsoft (R) Windows 2000 (TM) Version 5.00 (Build 2195)
Welcome to Microsoft Telnet Client
Telnet Client Build 5.00.99203.1
Escape Character is 'CTRL+]'
Microsoft Telnet> open 190.200.128.219 1

```

- The connection will fail the first time. (This is normal). At the prompt enter the same sequence but using port 9999 instead of 1.

*Ex: open 190.220.128.219 9999*

```

Command Prompt - telnet
Microsoft (R) Windows 2000 (TM) Version 5.00 (Build 2195)
Welcome to Microsoft Telnet Client
Telnet Client Build 5.00.99203.1
Escape Character is 'CTRL+]'
Microsoft Telnet> open 190.200.128.219 1
Connectng To 190.200.128.219...Could not open a connection to host as part 1 :
Connection Failed
Microsoft Telnet> open 190.200.128.219 9999...

```

*Hint: Pressing [F3] will display last line typed, BACKSPACE over the port and change to 9999.*

Press [ENTER].

- Follow Steps 8 through 32 from *Section 4.5.1 Using Windows 95/98/98SE/Me Telnet.*

Configuration of the D6680 Network Adapter is complete. Perform this procedure again for any additional D6680's you may have.

#### 4.6 Programming the D6600 Communications Receiver/Gateway Overview

The D6600 Receiver is shipped with factory default program parameters and features already installed. Descriptions of the program items are found in the *D6600 Program Entry Guide* (P/N: 4998122702). Many of the operational features of the D6600 can be altered through programming options. The programming options you choose will depend on the type(s) of peripheral reporting device(s) used in your central station (i.e. external printer or automation computer), the supervision characteristics for these devices, the type of communicators reporting to the receiver, and the number and type of receiving lines in use.

#### 4.7 Configuring for Network Communication via a D6680 Network Adapter

The following steps will allow the D6600 to communicate to the Host PC running the D6200 Programmer Software using a D6680 Network Adapter on a network.

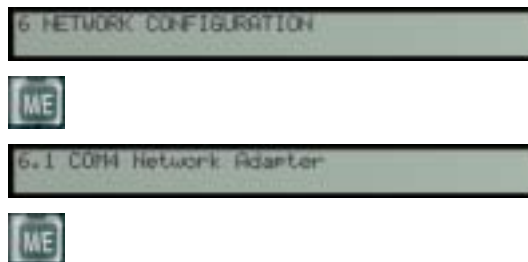
**Note:** *For this to function, a properly configured D6680 Network Adapter must be installed per the previous sections. If they are not installed, then further D6200 software programming via the network is not possible.*

- Enter programming mode from the front panel keypad of the D6600 by pressing [M/E] then entering the default passcode of [6] [6] [0] [0] on the keypad and then pressing [M/E] again.



**Note:** *To change any programming parameter, follow this syntax: Press [M/E], then enter the desired value, then press [M/E] again to store.*

- Press the down arrow key to scroll down to section 6 NETWORK CONFIGURATION and then press [M/E].
- Press the down arrow key to scroll down to section 6.1 COM4 Network Adapter and then press [M/E].



4. Verify that section **6.1.1 COM4 Baud Rate** is set to a value of 9 then press [M/E].
5. Verify parameters **6.1.2 COM4 Data Bit** is set to 8 (default) then press [M/E]. Change if necessary.
6. Verify that section **6.1.3 COM4 Parity** is set to 0 (default) then press [M/E]. Change if necessary.
7. Verify that section **6.1.4 COM4 Stop Bit** is set to 1 (default) then press [M/E]. Change if necessary.
8. Set **6.1.5 COM4 Network Adapter Enabled** to a value of 1 then press [M/E].
9. If not set to 1, press [M/E] then [1] and then press [M/E] again.
10. Set **6.1.6 COM4 Network Encryption Enabled** to 1 if the D6680 connected to COM4 has encryption enabled.

6.1.1 COM4 Baud Rate  
Current setting [9]

[M/E]

6.1.2 COM4 Data Bit  
Current setting [8]

[M/E]

6.1.3 COM4 Parity  
Current setting [0]

[M/E]

6.1.4 COM4 Stop Bit  
Current setting [1]

[M/E]

6.1.5 COM4 Network Adapter Enabled  
Current setting [1]

[M/E]

[M/E] [1] [M/E]



*If you have not installed the optional D6672 Serial COM1 expansion kit skip this step.*

11. If you have COM1 installed, press [CAN] then the down arrow and repeat steps 4 through 9 for section **6.2 COM1 Network Adapter**.
12. Press [CAN] then the down arrow once to scroll down to section **6.3 Automation Network Connection**.
13. Press [M/E] twice.
14. Press the down arrow to scroll to section **6.3.6 Network Automation Output Format**.  
Enter a [1] for 6500 mode or [2] for SIA mode and then [M/E] to enter selection.
15. Press [CAN] then the down arrow once to scroll down to section **6.3.7 Device**.
16. Press [M/E].
17. Press [1] to have the automation communication via a network or [2] to have automation communication via the RS-232 COM3 port.

[CAN] [↓]

[CAN] [↓]

6.3 Automation Network Connection

[M/E] [M/E]

[↓]

6.3.6 Network Automation Output Format  
Current setting [0]

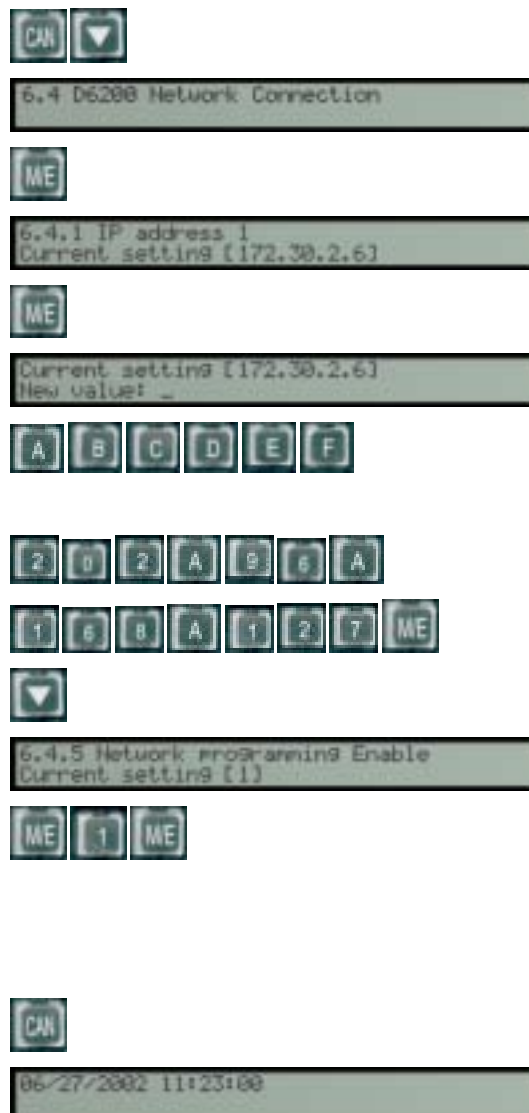
[CAN] [↓]

6.3.7 Device  
Current setting [2]

[M/E]



18. Press [CAN] then the down arrow once to scroll down to section **6.4 D6200 Network Connections**.
19. Press [M/E] to go to section **6.4.1 IP Address 1**.
20. Press [M/E] again to enter the IP address of the Host PC that will be running the D6200 Software.
21. When entering an IP address through the keypad of the D6600, an alpha character ([A] to [F]) must be pressed to enter a decimal point in the IP address.
22. For example, an IP address 202.96.168.127 may be entered as [2] [0] [2] [A] [9] [6] [A] [1] [6] [8] [A] [1] [2] [7] [M/E].
23. Press the down arrow key to go to section **6.4.5 Network Programming Enable**.  
Verify it is set to 1.
24. If not set to 1, press [M/E] then [1] and then press [M/E] again.
25. Set section **6.2.6 COM1 Network Encryption Enabled** to 1 if the D6680 connected to COM1 has encryption enabled.
26. Press [CAN] multiple times to return to the idle stage (time and date on the LCD).



## 4.8 Editing Program Parameters

The D6600 must have account database information entered into it before it can be ready to manage and receive signals from alarm panels connected to D9133TTLs, DX4020s and C900TTLs. Bosch Security Systems recommends programming this information using the D6200 Programming Software.

The D6200 is a GUI, a Graphical (rather than purely textual) User Interface that allows the user to perform the following functions:

- Retrieval of data files from the D6600 (CPU/Host/Network, Account Database, or Line Card)
- Editing of the D6600 data files (CPU/Host/Network, Account Database, or Line Card)
- Sending the files back to the D6600 (CPU/Host/Network, Account Database, or Line Card)
- Upgrading the Software installed in the D6600 (*CPU, System, or PSTN line cards*)

Refer to *D6200 Software Operation and Installation Guide* (P/N: 4998154991) which provides information and procedures on how to accomplish these tasks.

