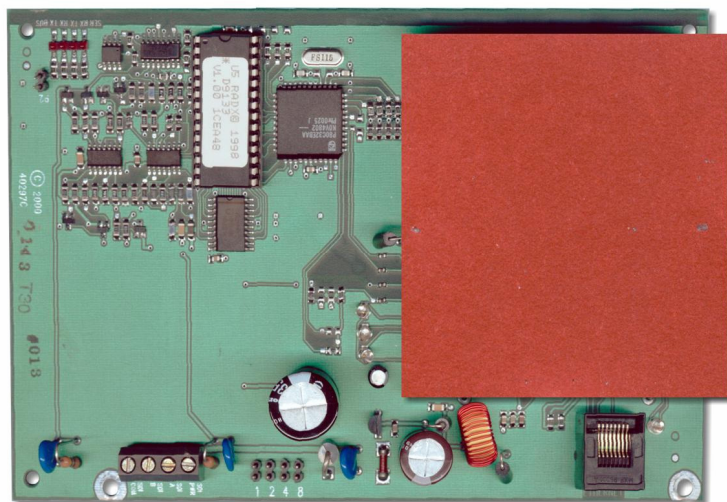


D9133TTL-E



EN

Installation Guide
Network Interface
Module



BOSCH

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Contents

1.0	Introduction.....	4
2.0	Overview	4
2.1	System Interconnection	4
2.1.1	Conettix System.....	4
3.0	Installation	5
3.1	Mounting	5
3.1.1	Mounting Plate.....	5
3.1.2	Attaching Module to Enclosure Door.....	6
3.1.3	Mounting in a Separate Enclosure	7
3.2	Wiring	7
3.2.1	Connection Sequence (D9133TTL-E to Panel in Separate Enclosure).....	7
3.3	Ethernet Connections.....	8
4.0	LEDs	8
4.1	SDI LEDs	8
4.2	Ethernet/Serial Status LED	8
5.0	IP Address Configuration Setup Instructions	9
5.1	Factory Programmed Default IP Address.....	9
5.2	Identifying the MAC Hardware Address	10
5.3	Obtaining an IP Address	10
5.4	Initial Assignment of the IP Address using ARP.EXE.....	10
5.4.1	ARP Command Usage.....	10
5.5	Using Telnet to Finish the Configuration	11
5.5.1	Using Windows 98 Telnet.....	11
5.5.2	Using Windows 2000 or XP Telnet	16
6.0	Additional UL Requirements.....	16
7.0	UL Listings and Approvals	18
8.0	Specifications	18

Figures

Figure 1:	D9133TTL-E.....	4
Figure 2:	Conettix D6600 System Connection Diagram using D9133TTL-E and Bosch control panels.....	4
Figure 3:	D9133TTL-E Circuit Board Layout.....	5
Figure 4:	Installing the D9133TTL-E on the Mounting Plate	6
Figure 5:	Attaching Module to Enclosure Door.....	6
Figure 6:	D9133TTL-E mounted in Panel Enclosure.....	6
Figure 7:	Mounting the D9133TTL-E in a AE1/AE2 Enclosure.....	7
Figure 8:	Wiring the D9133TTL-E to a Bosch control panel (in a separate enclosure)	7
Figure 9:	SDI Address 88 – Alternate Communication (Jumper 8 installed).....	8
Figure 10:	Ethernet Connector Pinouts.....	8
Figure 11:	Diagnostic SDI LEDs and the LED Enable Jumper	8
Figure 12:	Ethernet Status LEDs - Location	9
Figure 13:	MAC Address Label.....	10
Figure 14:	Command Syntax	10
Figure 15:	arp -g.....	11
Figure 16:	Setting values in Telnet Session.....	14
Figure 17:	D9133TTL-E Encryption	15

Tables

Table 1:	D9133TTL-E Connection Sequence	8
Table 2:	D9133TTL-E Ethernet Status LED Function.....	9
Table 3:	Netmask Address.....	13
Table 4:	Entering Datagram Values	15
Table 5:	Bosch control panels RADXAUX1 and GV2AUX UL Parameters.....	17
Table 6:	Specifications.....	18

1.0 Introduction

Throughout the rest of this guide, the D9412GV2, D7412GV2, D7212GV2, D9412G, D7412G, D7212G, D9412, D9112, and D7212 will be collectively referred to as “Bosch control panels.”

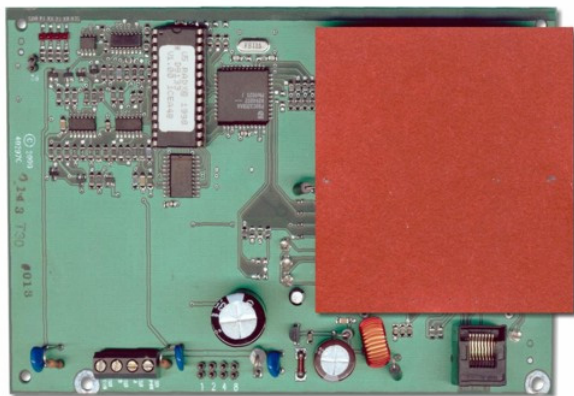


The D9412G, D7412G, D7212G, D9412, D7412, D7212, and D9112 must have firmware version 6.30 or later.

These instructions are for installing and setting up the D9133TTL-E Network Interface Module to work with Bosch control panels as a SDI bus device.

The D9133TTL-E (*Figure 1*) is used for bi-directional communications over Ethernet networks. Typical uses include PC front-end software packages, local RPS connection for programming, diagnostic troubleshooting, Conettix D6600 Communications Receiver/Gateway reporting and history retrieval.

Figure 1: D9133TTL-E



These instructions contain procedures to follow in order to avoid personal injury and damage to equipment.

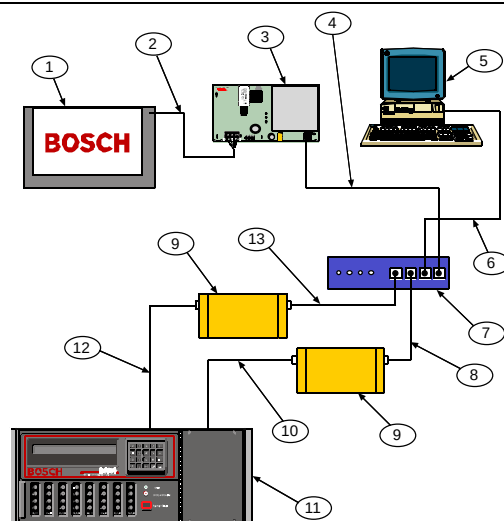
2.0 Overview

2.1 System Interconnection

2.1.1 Conettix System

Figure 2 shows a Conettix D6600 System using Bosch Security Systems, Inc. Control Panels, D9133TTL-E Network Interface, D6600, and D6680.

Figure 2: Conettix D6600 System Connection Diagram using D9133TTL-E and Bosch control panels



- 1 - Bosch control panel
- 2 - Connection - control panel SDI bus to D9133TTL-E/DX4020 SDI bus
- 3 - D9133TTL-E or DX4020
- 4 - Connection - D9133TTL-E/DX4020 Ethernet jack to Ethernet hub
- 5 - Host PC- 6200 Programming Administrative Software
- 6 - Connection - Ethernet hub to host PC Ethernet NIC
- 7 - Ethernet hub
- 8 - Connection - Ethernet hub to D6680
- 9 - Conettix D6680 Network Ethernet adapter
- 10 - Connection - D6680 to D6600 COM1 (optional)
- 11 - Conettix D6600 Central Station Receiver
- 12 - Connection - D6680 to D6600 COM4
- 13 - Connection - Ethernet hub to D6680

The Bosch Security Systems, Inc. D6200 Programming/Administration Software is a D6600 programming utility that is designed to work over a network or serial connection. Each network interface device (Conettix D6680 Ethernet Network Adapter, D9133TTL-E Network Interface, or C900TTL-E Dialer Capture Module) or device connected to COM3 must be added to the ARP table (refer to *Section 5.4 Initial Assignment of the IP Address using ARP.EXE* on page 10) then configured through a Telnet session (refer to *Section 5.5 Using Telnet to Finish the Configuration* on page 11) before network communications will function.

The **Address Resolution Protocol (ARP)** is used to temporarily assign the D9133TTL-E IP address to its hardware address on the host PC.

3.0 Installation

If the Bosch control panels are used for fire applications, test according to NFPA-72.

Failure to follow these instructions may result in failure of the system to initiate an alarm condition. Bosch Security Systems is not responsible for improperly installed, tested or maintained devices.



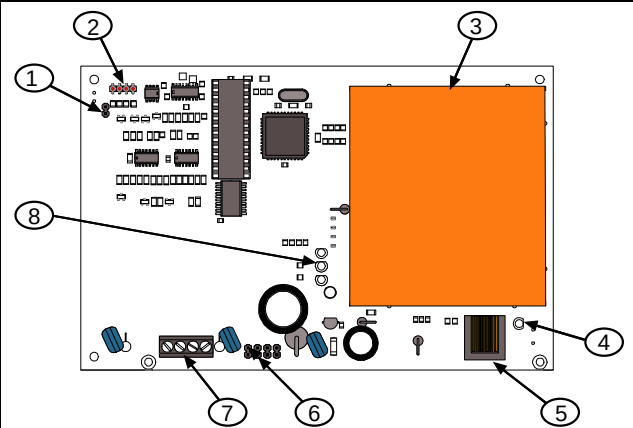
For UL Listed Fire Installations, shared on-premises communications equipment is required to be UL Listed for Information Technology Equipment.



Inform the operator and the local authority before installing the D9133TTL-E in an existing system. Disconnect all power to the Control Panel before installing the D9133TTL-E.

The D9133TTL-E has several important features that are shown in *Figure 3*.

Figure 3: D9133TTL-E Circuit Board Layout



- 1 - LED Enable Jumper (refer to Section 4.1 SDI LEDs on page 8)
- 2 - SDI LEDs (refer to Section 4.1 SDI LEDs on page 8)
- 3 - Network Interface Module and metal enclosure
- 4 - Ethernet Link LED (refer to Section 4.2 Ethernet/Serial Status LED on page 8)
- 5 - Ethernet RJ-45 Modular Jack (refer to Section 3.3 Ethernet Connections on page 8)
- 6 - Address Jumpers (refer to Section 3.2 Wiring on page 7)
- 7 - SDI Bus Connection Terminal Strip (refer to Section 3.2 Wiring on page 7)
- 8 - Ethernet Interface Indicator LEDs (refer to Section 4.2 Ethernet/Serial Status LED on page 8)

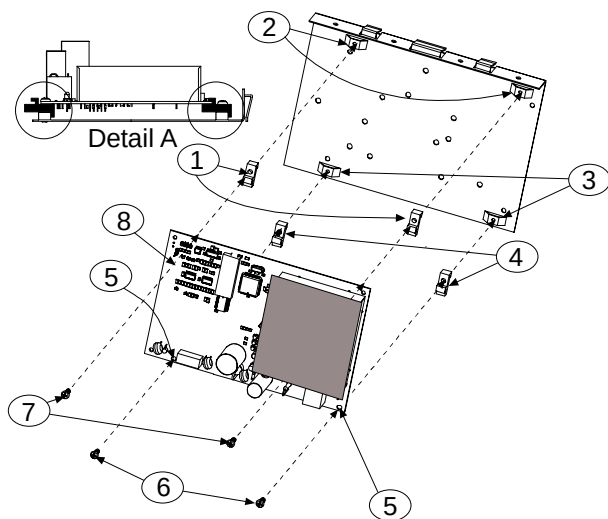
3.1 Mounting

The D9133TTL-E can be mounted in one of two ways:

- In its own enclosure (AE1 is recommended).
- To include mounting plate and hung on the door of the panel enclosure.

3.1.1 Mounting Plate

The D9133TTL-E Module has an included mounting plate (P/N: 40182) that is used to attach to the door of a standard panel enclosure.

Figure 4: Installing the D9133TTL-E on the Mounting Plate

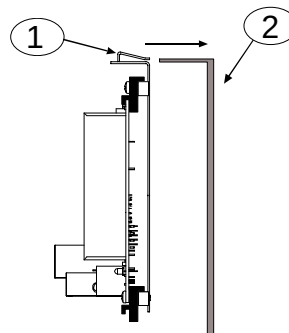
- 1 - Top plastic standoffs
- 2 - Top mounting brackets
- 3 - Bottom mounting brackets
- 4 - Bottom plastic standoffs
- 5 - Bottom mounting holes
- 6 - Bottom screws
- 7 - Top Screws
- 8 - D9133TTL-E Module

To attach the mounting plate to the module:

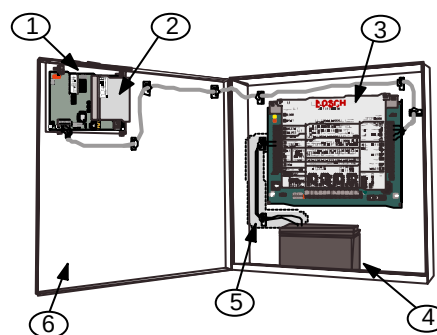
1. Insert the top hook of the top and bottom plastic standoffs into the mounting brackets on the mounting plate. Refer to Detail A on *Figure 4*.
2. Insert two of the screws into the top two plastic standoffs and secure to the top mounting plate brackets by tightening the screws.
3. Place the top edge of the D9133TTL-E module under the facing hook (refer to Detail A) on the plastic standoffs.
4. Align the bottom two mounting holes with the bottom two mounting brackets.
5. Insert two of the screws through the bottom module mounting holes, through the bottom standoffs, and into the bottom mounting brackets. Slowly tighten them down until the D9133TTL-E is seated securely to the mounting plate.

3.1.2 Attaching Module to Enclosure Door

When the module is securely attached to the mounting plate (refer to *Figure 4*), slide the tabs at the top of the mounting plate over the top lip of the enclosure door (refer to *Figure 5*), then slide the mounting plate to the outer edge of the enclosure door (refer to *Figure 6*).

Figure 5: Attaching Module to Enclosure Door

- 1 - Tabs
- 2 - Top lip of enclosure door

Figure 6: D9133TTL-E mounted in Panel Enclosure

- 1 - Mounting plate
- 2 - D9133TTL-E Network Interface Module
- 3 - Bosch control panel
- 4 - Battery
- 5 - Non-power limited area
- 6 - Enclosure Door



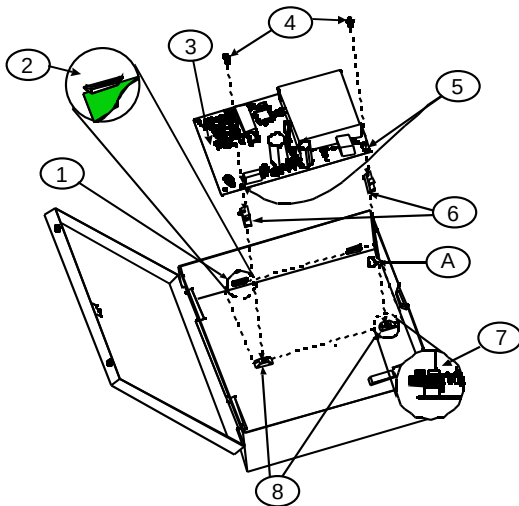
Non-power limited area - All power limited wiring must remain out of this area.

3.1.3 Mounting in a Separate Enclosure

If so desired, the D9133TTL-E can be mounted in a separate enclosure like the AE1 (Grey) or the AE2 (Red). For other enclosures, please see the instructions for panel to be used. The separate enclosure to be used must be UL Listed for Fire Applications and no other equipment is to be present.

To install a D9133TTL-E in an AE2 enclosure, refer to *Figure 7*.

Figure 7: Mounting the D9133TTL-E in a AE1/AE2 Enclosure



- 1 - Enclosure top slot (detail)
- 2 - D9133TTL-E
- 3 - Enclosure top slot
- 4 - Mounting screws (2)
- 5 - Bottom mounting holes
- 6 - Top plastic standoffs
- 7 - Mounting Bracket (detail)
- 8 - Mounting brackets



It is recommended that the enclosure be mounted on a vertical surface **before** installing the module. When the module is installed, one of the enclosure mounting holes (item A in *Figure 7*) will be covered by the module.

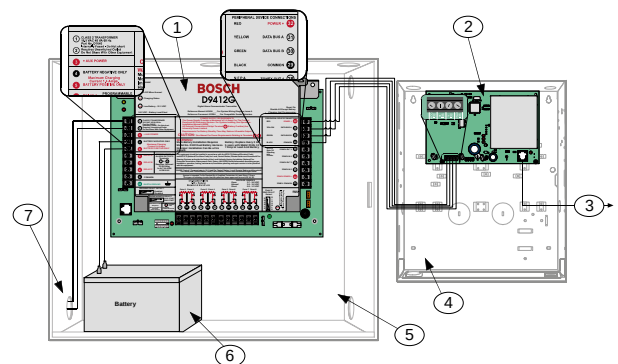
1. Place the top edge of the D9133TTL-E module between the two slots on the inside top of the enclosure.
2. Insert the top hook of the top plastic standoffs into the mounting brackets on the back wall of the enclosure.

3. Line up the bottom two mounting holes on the D9133TTL-E with the plastic standoffs and the enclosure mounting brackets.
4. Insert two screws into the holes and slowly tighten them until the D9133TTL-E is seated firmly on the enclosure.

3.2 Wiring

The D9133TTL-E is specifically designed to work with the Bosch control panels as an SDI bus device (D9412GV2, D7412GV2, D7212GV2, D9412G, D7412G, D7212G, D9412, D9112, D7412, and D7212 with software version 6.30 or later). Refer to *Section 3.2.1 Connection Sequence (D9133TTL-E to Panel in Separate Enclosure)* for the proper connection sequence.

Figure 8: Wiring the D9133TTL-E to a Bosch control panel (in a separate enclosure)



- 1 - Bosch control panel – D9412G is shown
- 2 - D9133TTL-E Network Interface Module
- 3 - To LAN/WAN via Ethernet Controller
- 4 - AE1 Enclosure
- 5 - D8103 Enclosure
- 6 - Battery
- 7 - To AC Transformer

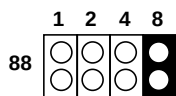
3.2.1 Connection Sequence (D9133TTL-E to Panel in Separate Enclosure)

Follow the procedures below to correctly wire the D9133TTL-E to the control panel.

Table 1: D9133TTL-E Connection Sequence

Seq	Connection from	Connected to
1	Ethernet RJ-45 Jack	LAN or WAN
2	SDI PWR	Power + (Terminal 32)
3	SDI A	Data A (Terminal 31)
4	SDI B	Data B (Terminal 30)
5	SDI COM	Common (Terminal 29)
6	Battery – (Terminal 4)	Battery Negative (-)
7	Battery + (Terminal 5)	Battery Positive (+)
8	Terminal 1	AC Transformer
9	Terminal 2	AC Transformer

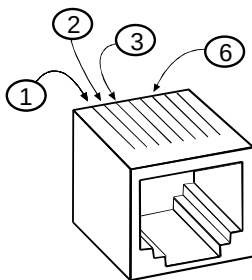
The D9133TTL-E address is set by placing and removing jumpers from the “Address Pins” (refer to *Figure 3* on page 5 for location of Address Pins). *Figure 9* defines the current addresses that may be used.

Figure 9: SDI Address 88 – Alternate Communication (Jumper 8 installed)

The D9133TTL-E address configuration is read only at D9133TTL-E power-up. If the address configuration is changed while the D9133TTL-E is powered, a power reset must be performed so that the D9133TTL-E can reconfigure its address.

3.3 Ethernet Connections

The RJ45 Jack is used to connect to the D9133TTL-E to the Ethernet Network (LAN/WAN). The connector definitions are shown in *Figure 10*.

Figure 10: Ethernet Connector Pinouts

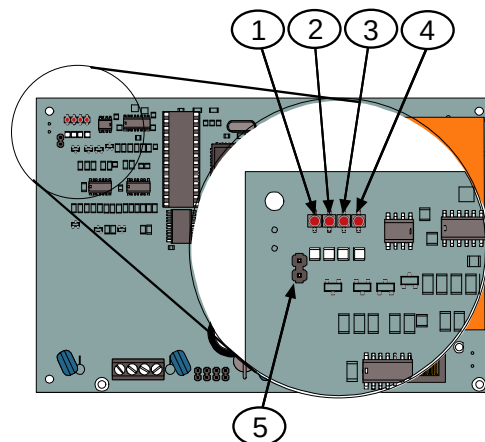
- 1 - TX +
- 2 - TX -
- 3 - RX +
- 6 - RX -

4.0 LEDs

4.1 SDI LEDs

To enable the SDI LEDs, place the jumper across the LED Enable Jumper.

The function of the LEDs and the Jumper is described in *Figure 11*.

Figure 11: Diagnostic SDI LEDs and the LED Enable Jumper

- 1 - BUS TX
- 2 - BUS RX
- 3 - SER TX
- 4 - SER RX
- 5 - Jumper P2

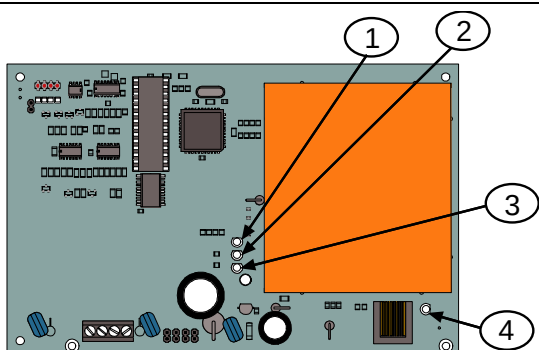
4.2 Ethernet/Serial Status LED

The D9133TTL-E has four Ethernet/Serial status LEDs (refer to *Figure 12* on page 9), three in the center and one in the lower right corner next to the RJ45 Modular Jack.

The LEDs on the D9133TTL-E are described in *Table 2* on page 9.

On power up, the three LEDs (LED 1, 2 and 3) are on for one sec., LED 3 flashes four times, then LED 1 and LED 2 turn on, and LED 3 turns off. LED 4 stays on continuously as long as there is a connection to the network.

If a Telnet session is established, LED 1 and LED 2 stay on; LED 3 toggles on and off.

Figure 12: Ethernet Status LEDs - Location

- 1 - Serial Port (Channel)1 Status
- 2 - Serial Port (Channel)2 Status
- 3 - Diagnostic
- 4 - Network Link Status

Table 2: D9133TTL-E Ethernet Status LED Function

LED	Function
1	NIM Software Version 4.5: On to indicate Serial Port (Channel) 1 is idle. NIM software version 5.1b5 or 5.1b6: Off to indicate Serial Port (Channel) 1 is idle.
2	Not used. Disregard status.
3	Glowes steadily or flashes red in combination with the Channel 1 LED to indicate diagnostics and error detection. LED 3 solid red, LED 1 (Channel 1) flashing red: 1x EPROM checksum error 2x RAM error 3x Network controller error 4x EEPROM checksum error 5x Duplicated IP address on the network* 6x Software does not match hardware LED 3 Flashing red, LED 1 (Channel 1) flashing red: 4x Fault network connection* 5x No DHCP response received*
4	On to indicate the network port is connected to the network.

* Non-fatal error



The Network Interface Module (refer to Item 3, *Figure 3* on page 5) software version must be version 4.5 or higher. To verify the software version, a Telnet session must be initiated. Refer to *Section 5.5 Using Telnet to Finish the Configuration* on page 11.

5.0 IP Address Configuration Setup Instructions

The purpose is to set up the initial IP address so that the D9133TTL-E can be set with a Network IP address. The set up consists of using resident commands and programs, i.e. the commands “ARP”, “Ping” and the program “Telnet” (the quotes used in this explanation are not part of the command, they are only used to identify the command string) available in the Microsoft Windows® operating system.



A working knowledge of DOS commands, Windows®, networks and their operation are required.

5.1 Factory Programmed Default IP Address

Bosch Security Systems, Inc. has programmed a default IP address into the D9133TTL-E Serial Interface.



The default IP address is not used for any of the Bosch Security Systems, Inc. functions. This information is supplied only to assist the technician if a failure of the ARP commands occurs. It might be useful to know the default IP address should the ARP commands fail. However, this occurrence is highly unlikely. Contact Technical Support at (800) 289-0096 if you have further questions.

The D9133TTL-E ships with a default IP address of 192.168.000.002.

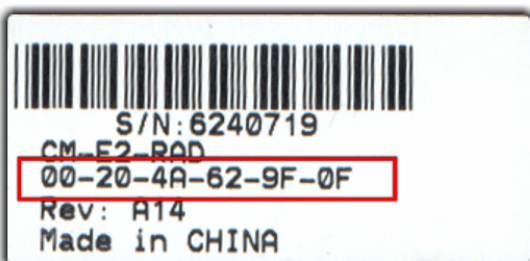
5.2 Identifying the MAC Hardware Address



The MAC address label is located on the side of the Co-Box.

This address is hard-coded into the D9133TTL-E during its manufacture and cannot be changed. This address is six bytes (twelve digits) in length and can be found on a label on the large metal box soldered to the D9133TTL-E.

Figure 13: MAC Address Label



5.3 Obtaining an IP Address

Go to the network administrator with the MAC address. The network administrator will assign your D9133TTL-E 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 separated by periods. Each number can be zero to 255. For example, 172.17.10.70 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.

5.4 Initial Assignment of the IP Address using ARP.EXE

Bosch Security Systems recommends that you read this entire step before beginning. Also, make sure there is power to the D9133TTL-E and the Ethernet Network RJ45 connection is in place.



The D9133TTL-E 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 into the configuration program. Telnet is the process of using the Telnet program to communicate with the D6680 Network Adapter and establish its communications configuration parameters. It may be called a router or hub. After the D9133TTL-E has been configured and it has an IP address, you will be able to establish a telnet connection to change configuration parameters from anywhere on the network.

When you have the IP address and the network administrator confirms that it is ready, open up the DOS prompt (from Windows®) on any PC tied into the network that is to be used. You will now need to use the ARP program to temporarily assign the D9133TTL-Es IP address to its hardware address on the Host PC. The ARP program is installed into the /WINDOWS directory by default in Windows 98®, Windows 2000®, and Windows Millennium operating systems during install.

At the DOS prompt (usually C:\windows), the following command syntax is to be used.

Figure 14: Command Syntax

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

xxx.xxx.xxx.xxx
is the IP address assigned
to the D9133TTL-E Serial
Interface by the Network
Administrator

zz-zz-zz-zz-zz-zz
is the MAC hardware
address found on the
label of the D9133TTL-E
Serial Interface.

The following sections detail the assignment of an IP address to a D9133TTL-E Network Adapter, using the ARP program.

00-20-4a-12-04-0e

Example MAC Address



The IP, MAC address, and port number used in this example will not be the same as the numbers you are using. This is for demonstration only!

5.4.1 ARP Command Usage

1. Open a DOS window from the Start menu by selecting, **Start → Run**
2. At the Run dialog box, type **COMMAND** and click **OK**.
3. A DOS window appears looking like this:



4. At the DOS command line type: `arp -s 172.17.10.70 00-20-4a-12-04-0e` [ENTER]

```
C:\WINDOWS>arp -s 172.17.10.70 00-20-4a-12-04-0e.
```

5. If following your command the computer responds with a prompt (as shown to the right) then the address was accepted.

```
C:\WINDOWS>arp -s 172.17.10.70 00-20-4a-12-04-0e.
```

```
C:\WINDOWS>_
```



There is no indication that the operation has been performed properly. The absence of an error message is your indication that the function was correct.

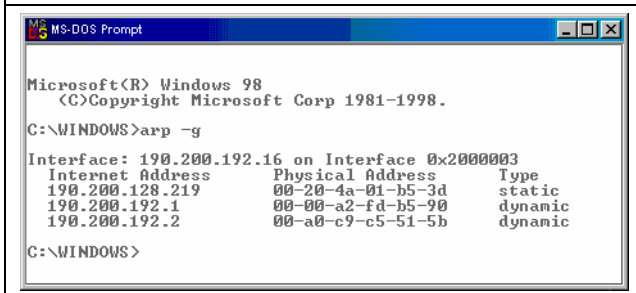
6. Verify that the IP address was correctly entered into the ARP table by typing:

```
arp -g [ENTER]
```

This shows the Internet address (IP ADDRESS) and the corresponding Physical Address (MAC hardware address). The third line of the table in *Figure 15* shows that the arp table contains a MAC address 00-20-4a-51-19-8c temporarily linked to IP address 172.17.10.70.

The network uses this table to identify devices and route signals. The number of devices and other “types,” like “dynamic,” depends on the network and the number and type of devices that this PC has corresponded with. The important thing is to identify the MAC address of the device you are installing and verify that it now has an IP address linked to it.

Figure 15: arp -g



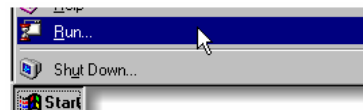
5.5 Using Telnet to Finish the Configuration

If you are using Windows 98, refer to *Section 5.5.1 Using Windows 98 Telnet*.

If you are using Windows 2000 or XP, refer to *Section 5.5.2 Using Windows 2000 or XP Telnet* on page 16.

5.5.1 Using Windows 98 Telnet

1. Open a DOS window from the Start menu by selecting, **Start → Run**

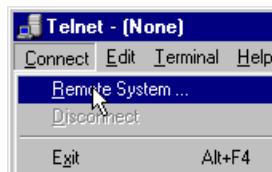


2. At the Run dialog box, type `telnet` [ENTER].

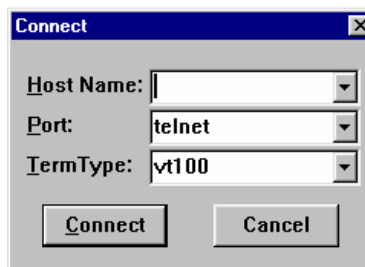
The Telnet application should now be running.



3. Click on the **Connect** menu and the **Remote System...**



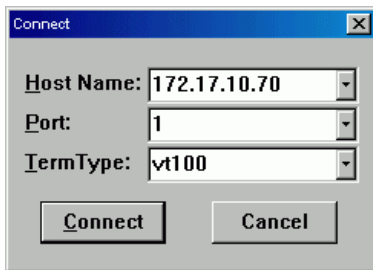
The Connect window displays:



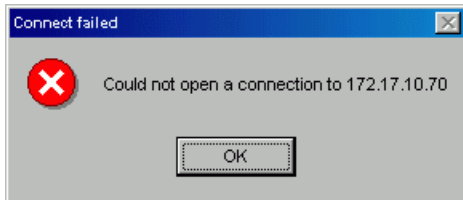
4. Type the IP address of the D9133TTL-E (this is the IP address that was assigned to the D9133TTL-E in the previous section) in the **Host Name** field,

In this example, the IP address is 172.17.10.70.

Type 1 into the **Port** field and leave the **TermType** field at vt100.



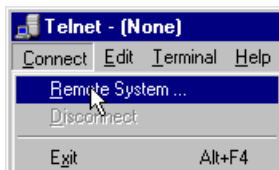
5. Click **Connect** and wait a few seconds for a connect failed message to display stating: "Could not open a connection to 172.17.10.70."



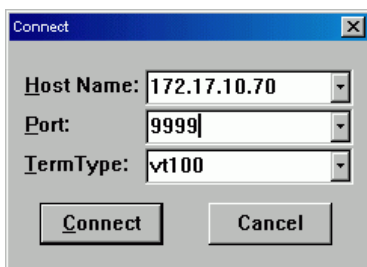
 The IP, MAC address, and port number used in this example are not the same numbers you are using. This is for demonstration only, along with the presented screenshots. Actual values will differ.

Click **OK** to open. The Telnet window appears again.

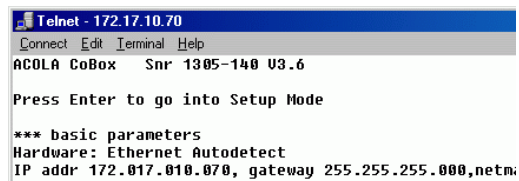
6. Click the **Connect** menu and then **Remote System ...**



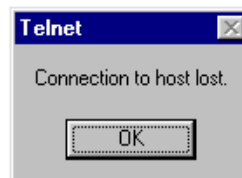
This time, leave everything as it is except, type 9999 into the **Port** field. Click **Connect**.



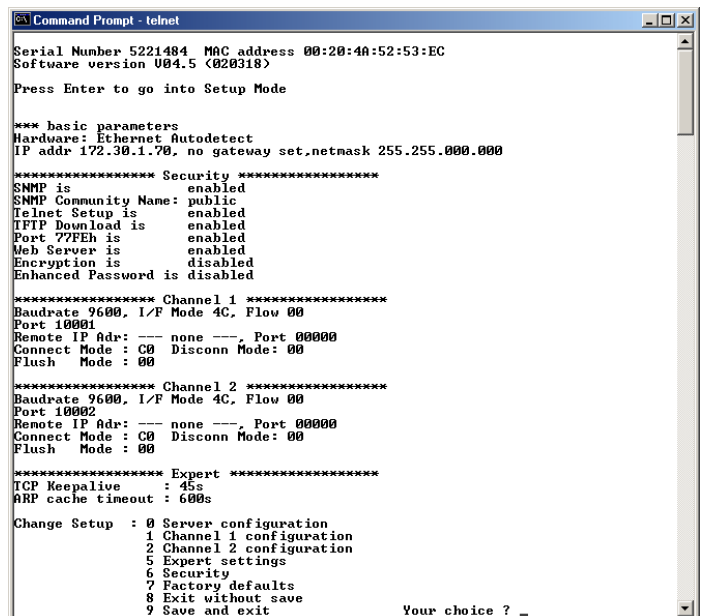
7. The message, displays, "Press Enter to go into setup mode".
Press **[ENTER]**.



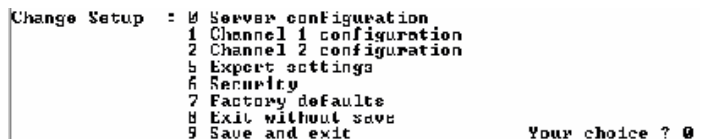
 If you do not press **[ENTER]** within five sec. of seeing the above message, you will be disconnected. If you are disconnected, the following message displays:



8. If you pressed **[ENTER]** within 5 sec. of seeing the "Press Enter to go into Setup Mode" message, you should see the following screen:



9. Press **[0]** then **[ENTER]** to set up the basic Server configuration.



If the D9133TTL-E Dialer Capture Module has been programmed with an IP address in the past, it will be displayed in parentheses.

For example, if this D9133TTL-E was originally programmed to IP address 190.200.128.152, we would be changing it to address 190.200.128.219.

10. To properly program the IP address 190.200.128.219, the following keys would be entered:

190.200.128.219 [ENTER]

If using DHCP (Dynamic Host Configuration Protocol), the following would be entered: **0.0.0.0 [ENTER]**



The IP, MAC address, and port number used in this example are not the same as the numbers you are using. This is for demonstration only along with the presented screenshots. Actual values will differ.

11. When asked to set the Gateway address, if it is not needed or if using DHCP,

type **N [ENTER]**

If it is needed, type **Y** and the gateway IP address as:

190.200.128.1 [ENTER]



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.

12. The following displays:

Netmask: Number of Bits for Host Part (0=default) (08)

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 3*). If using DHCP, press [ENTER]

See your network administrator for more information.

Press [ENTER] after entering the correct number of bits for the netmask.

Table 3: Netmask Address

Number of Host Bits	Netmask
1	255.255.255.254
2	255.255.255.252
3	255.255.255.248
4	255.255.255.240
5	255.255.255.224
6	255.255.255.191
7	255.255.255.128
8	255.255.255.0
9	255.255.254.0
10	255.255.252.0
11	255.255.248.0
12	255.255.240.0
13	255.255.224.0
14	255.255.192.0
15	255.255.128.0
16	255.255.0.0
17	255.254.0.0
18	255.252.0.0
19	255.248.0.0
20	255.240.0.0
21	255.224.0.0
22	255.192.0.0
23	255.128.0.0
24	255.0.0.0
25	254.0.0.0
26	252.0.0.0
27	248.0.0.0
28	240.0.0.0
29	224.0.0.0
30	192.0.0.0
31	128.0.0.0

13. If using DHCP, you will see:

Change DHCP device name (<)?(<N>) _

If you want to assign a name for this device for use on a LAN, type Y and enter up to 16 characters and [ENTER]. Otherwise just press [ENTER].

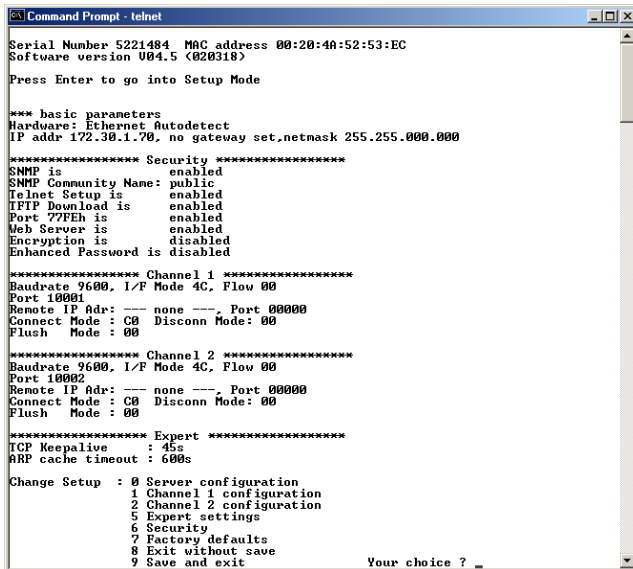


If no DHCP device name is entered, a default name of Cxxxxx is used (where xxxxxx is the last six digits of the MAC address).

14. Change the Telnet password by pressing [N] to leave at default of "No".

Change telnet config password (N) _

This screen shows the Setup Mode screen you saw previously.



```

Command Prompt - telnet
Serial Number 5221484 MAC address 00:20:4A:52:53:EC
Software version 004.5 (020318)
Press Enter to go into Setup Mode

*** basic parameters
Hardware: Ethernet Autodetect
IP addr 172.30.1.70, no gateway set, netmask 255.255.000.000

***** Security *****
SNMP is enabled
SNMP Community Name: public
Telnet Setup is enabled
TFTP Download is enabled
Port 7777 is enabled
Web Server is enabled
Encryption is disabled
Enhanced Password is disabled

***** Channel 1 *****
Baudrate 9600, I/F Mode 4C, Flow 00
Port 10001
Remote IP Addr: --- none ---, Port 00000
Connect Mode : C0 Disconn Mode: 00
Flush Mode : 00

***** Channel 2 *****
Baudrate 9600, I/F Mode 4C, Flow 00
Port 10002
Remote IP Addr: --- none ---, Port 00000
Connect Mode : C0 Disconn Mode: 00
Flush Mode : 00

***** Expert *****
TCP Keepalive : 45s
ARP cache timeout : 600s

Change Setup : 0 Server configuration
               1 Channel 1 configuration
               2 Channel 2 configuration
               5 Expert settings
               6 Security
               7 Factory defaults
               8 Exit without save
               9 Save and exit
Your choice ? _

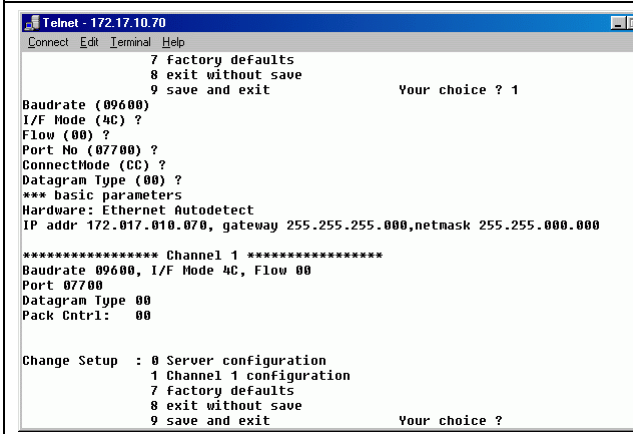
```



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.

15. Now press [1] [ENTER] to go into setup Channel 1 configuration. The following displays (refer to *Figure 16*):

Figure 16: Setting values in Telnet Session



```

Telnet - 172.17.10.70
Connect Edit Terminal Help

7 Factory defaults
8 exit without save
9 save and exit
Your choice ? 1

Baudrate (09600)
I/F Mode (4C) ?
Flow (00) ?
Port No (07700) ?
ConnectMode (CC) ?
Datagram Type (00) ?
*** basic parameters
Hardware: Ethernet Autodetect
IP addr 172.017.010.070, gateway 255.255.255.000, netmask 255.255.000.000

***** Channel 1 *****
Baudrate 09600, I/F Mode 4C, Flow 00
Port 07700
Datagram Type 00
Pack Cntrl: 00

Change Setup : 0 Server configuration
               1 Channel 1 configuration
               7 Factory defaults
               8 exit without save
               9 save and exit
Your choice ?

```

16. Press [Enter] to accept the **Baud Rate** default of (9600). If 9600 is not the default, type 9600 and press [ENTER] to change it.
17. The following information appears:

I/F Mode (4C) ?

18. Press [Enter] to accept the default **I/F Mode** of (4C). If is not the default, type [4c] [ENTER] to change it.
19. Press Enter to accept the default **Flow** of (00). If 00 is not the default, type [00] [ENTER] to change it.

Flow (00) ?

20. Type a unique port number for the particular LAN that the device is connected to and then press [ENTER].



Datagram Type 07 must be used if the unique port number is not the same one used for the D6680.

The port number displayed here is an example and may not be the same.

Port No (03257) ?

21. Press [Enter] to accept the default **ConnectMode** of (CC). CC is not the default, type [cc] [ENTER] to change it.

ConnectMode (CC) ?

22. Type [00] if the unique port number typed in above is the same that was used for the D6680. If 00 is selected for the Datagram type, the remote IP and port number do not apply and the next step is the option to enable encryption (Step 25).

Datagram Type (00) ?

To use Datagram Type 02 or 07, an E2-RAD version of the NIM with firmware version 5.5c or greater is required. See DeviceInstaller Operation and Installation Guide (P/N: 4998138688) for more information.

23. Enter the appropriate Datagram value based on your type of control panel. Refer to *Table 4* on page 15.

Table 4: Entering Datagram Values

Control Panel Type	Do Step:
DS7240V2/DS7220V2	23a
FPD-7024	23a
D9412GV2/D7412GV2/D7212GV2 with firmware version 7.06 or later	23a
D9412G/D7412G with firmware version 7.00 or later	23a
D7212G with firmware version 7.01 or later	23a
D9412/D7412/D7212/D9112/D9124 with firmware version 7.00 or later	23a
DS7400Xiv4+	23b
D9412GV2/D7412GV2/D7212GV2 with firmware version 7.05 or earlier	23b
D9412G/D7412G with firmware version 6.90 or earlier	23b
D7212G with firmware version 6.91 or earlier	23b
D9412/D7412/D7212/D9112/D9124 with firmware version 6.90 or earlier	23b

- a. Type **02** and go to Step 26.



Datagram 02 on the 9000, G, or GV2 Series control panels requires RPS version 5.5 or later.

- b. If the unique port number previously entered is the same as the D6680, type 00 and go to Step 26. Otherwise, type 07 and go to Step 24.



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

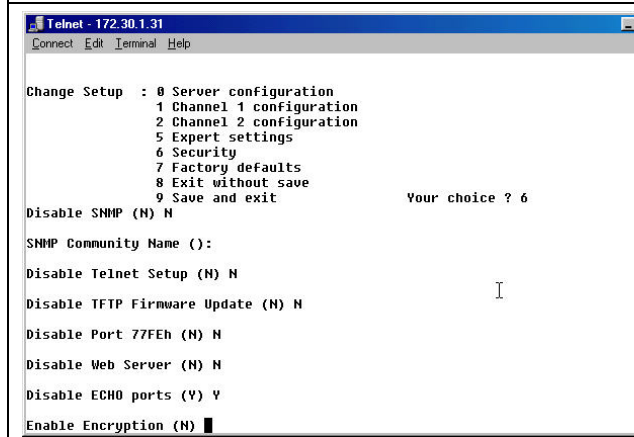
24. Press [ENTER] four times to specify 0.0.0.0 for remote IP address.
25. Enter in the same port number that was used for the D6680
26. If you want to enable encryption, from the main menu Select **6- Security** and follow the steps.



If encryption is enabled on the D9133TTL-E, it must be enabled at the D6680 with the same key.



Software revision of the Network Interface Module attached to the D9133TTL-E must be 5.16 or greater, the hardware revision must be CM-E2-RAD to support encryption. To check the version, Telnet the unit and it will display in the first five sec. before pressing [Enter].

Figure 17: D9133TTL-E Encryption

27. At **Disable SNMP (N) N** press [ENTER].
28. At **SNMP Community Name ():** press [ENTER].
29. At **Disable Telnet Setup (N) N** press [ENTER].
30. At **Disable Port 77FEh (N) N** press [ENTER].
31. At **Disable Web Server (N) N** press [ENTER].
32. At **Disable ECHO ports (Y) Y** press [ENTER].
33. At **Enable Encryption (N)** press [Y].
34. Change keys (N) press 'Y'.
35. Enter keys: 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.
36. At **Enable Enhanced Password (N)** press [ENTER].
37. Select **9** at the main menu to save and close telnet session.
38. A message is displayed the connection was lost. Click OK to close the Telnet window.
39. To confirm that the IP address had been configured properly, PING the IP Address and check for a response.
40. At the C:\> prompt, type PING <IP Address> then press [ENTER].

Four reply messages should be received, confirming that the D9133TTL-E is talking to the network.

Configuration of the D9133TTL-E Network Interface Module is complete. Perform this procedure for any additional D9133TTL-E's you may have.

5.5.2 Using Windows 2000 or XP Telnet

To finish the IP address configuration of the D9133TTL-E, a Telnet session must be launched.

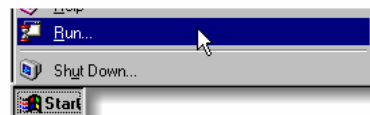


It is necessary to be logged into Windows with an Administrator privilege level.

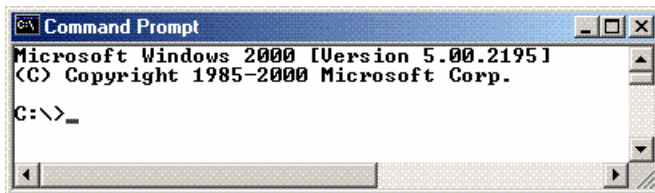


This example uses the IP address of 172.17.10.70 and the MAC Address of 00-20-4a-72-04-0e.

1. Open a DOS window from the Start menu by selecting, **Start** → **Run**



2. At the Run dialog box, type **COMMAND** and click **OK**.
3. A command prompt window appears looking like this:

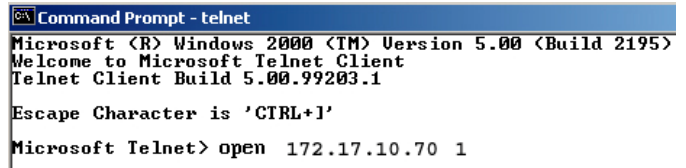


4. At the **C:\>** prompt, type in **telnet** and press [ENTER].



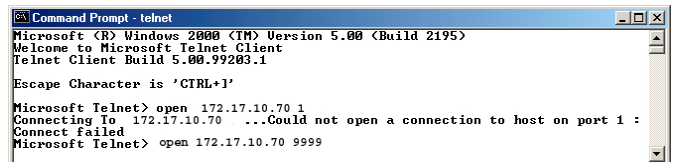
5. At the **Microsoft Telnet>** prompt, type **open** (space) **IP ADDRESS** (space) **PORT NUMBER**

Example: open 172.17.10.70 1



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

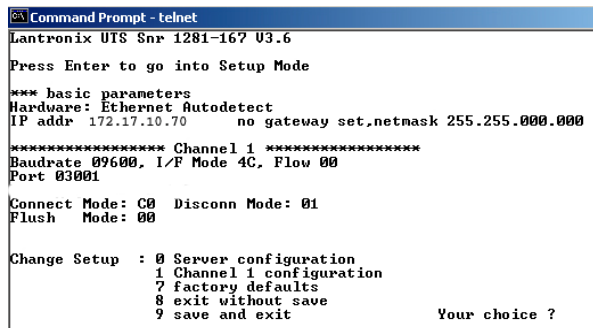
Example: open 172.17.10.70 9999



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

7. Press [ENTER] and you should be in the setup menu of the D9133TTL-E device.

Follow steps 7 to 39 in *Section 5.5.1 Using Windows 98 Telnet* on page 11.



6.0 Additional UL Requirements



For UL Listed Fire Installations, shared on-premises communications equipment is required to be UL Listed for Information Technology Equipment.

1. Set the following parameters in the RADXAUX1 and GV2AUX section of the Bosch control panels:



The GV2AUX handler is used for GV2 Series control panels. The RADXAUX1 handler is used for G Series control panels.

Table 5: Bosch control panels RADXAUX1 and GV2AUX UL Parameters

RADXAUX1 and GV2AUX Parameters	Control Panel on Protected Premises		
	UL 1610 Line Security (formally Grade AA) Intrusion System Installations		UL 864 Fire System Installations (The system must be installed in accordance with NFPA-72.)
	No Digital Dialer Backup	Digital Dialer Backup	
Poll Rate	75 seconds	240 seconds	75 seconds
Ack Wait	13 seconds	13 seconds	13 seconds
Retry Count	3	3	3

2. Add a Telnet password to the communications protocol of the D9133TTL-E's Network Interface Module (refer to *Section 5.5 Using Telnet to Finish the Configuration*, step 14 on page 13). Retain the password for future reference.

7.0 UL Listings and Approvals

The D9133TTL-E Network Interface Module is UL Listed as a device.

- UL Central Station Burglary (1610), Line Security (Grade AA)
- UL Commercial Fire Alarm Signaling (864), Supplementary
- UL Commercial Fire Alarm Signaling (864), Primary
- FCC Part 15 Radiated/Conducted Emissions



Refer to the *Conettix D6200 Programming/Software Operation and Installation Guide* (P/N: 4998154991) for information on how to prepare the account database in the D6600 in your Monitoring Center to receive UL Listed communications from a D9133TTL-E Network Interface Module.

8.0 Specifications

Table 6: Specifications

Table 6: Specifications	
Dimensions (Enclosure)	7 in. x 4.5 in. (17.8 cm x 11.4 cm)
Current Draw	140 mA maximum
Operation Voltage	12 VDC Nominal
Connectors	Control Panel: SDI Bus Terminal Strip LAN/WAN: RJ-45 Modular Jack (Ethernet)
Ethernet Cable	Category 3 or better unshielded twisted pair Maximum Length: 328 ft (100 m)
Interface	IEEE 802.3
Compatibility	D9412G, D7412G, D7212G, D9412, D9112, D7412, or D7212 Control Panels – Version 6.3 or later
Default IP Address	192.168.000.002

Notes

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