

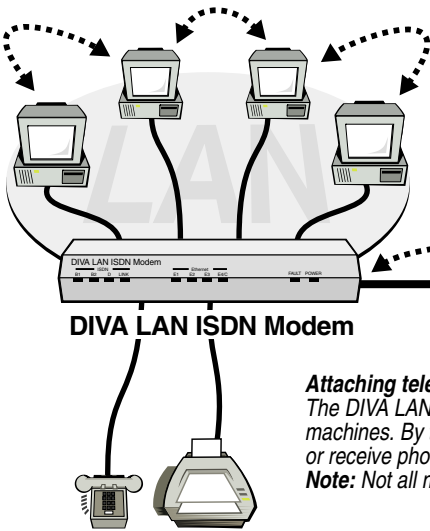
QUICK INSTALL

This booklet explains how to install and configure the DIVA LAN ISDN Modem for one specific application: Internet access. If this application does not meet your needs, refer to the DIVA LAN ISDN Modem User's Guide on the CD-ROM for a description of other installation scenarios.

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1 How it works



Create a local area network
 The DIVA LAN ISDN Modem has a built-in 10 Mbps Ethernet hub with four ports. By connecting computers to these ports, they become part of a LAN (local area network), and can share data and resources with each other.

Transparent Internet access
 The DIVA LAN ISDN Modem provides Internet access for all computers on the LAN using a single account. To save communications charges, the ISDN link is only enabled when a computer on the LAN needs to send data.

Attaching telephones and fax machines
 The DIVA LAN ISDN Modem supports the connection of analog devices, such as telephones or fax machines. By taking advantage of the flexibility of ISDN, the DIVA LAN ISDN Modem enables you to make or receive phone calls or faxes, while at the same time using your computers to access the Internet.
Note: Not all models have phone ports.

2 Your package should contain

DIVA LAN ISDN Modem

Ethernet Cable (Blue)

Use this to connect your computer to the DIVA LAN ISDN Modem via its Ethernet port.

ISDN Cable (Grey)

Use this to connect the DIVA LAN ISDN Modem to your ISDN line.

Console Cable (Beige)

Advanced users only. Connects your computer to the DIVA LAN ISDN Modem via the CONSOLE port.

CD-ROM

Use this to install the DIVA LAN ISDN Modem software and view the documentation.

Power Supply

Terminating Resistor

Only included if you purchased the S/T model.

Order your ISDN line

Call your local phone company and order an ISDN Basic Rate line. The following pre-defined packages should be available:

- *EZ-ISDN 1 or IOC: "U"*: Offers voice and data on both ISDN channels and supports advanced calling features such as call conference, call transfer, and caller ID on the first ISDN number.
- *EZ-ISDN 1A or IOC: "V"*: Same as EZ-ISDN 1, but adds voice mail.
- *IOC: "S"*: Offers voice and data on both ISDN channels, but without any advanced calling features. If you select this package, make sure to get Additional Call Offering (ACO), which is required for call bumping and call waiting to work correctly.
- *EZ-ISDN 3 or 3A*: Same as EZ-ISDN 1 (1A), plus adds support for Always On/Dynamic ISDN (AO/DI).
- *Capability Package AB*: Same as IOC U, but with advanced calling support on both channels and support for AO/DI.
- *Capability Package AC*: Same as IOC V, but with advanced calling support on both channels and support for AO/DI.

Record the following information

Your ISDN phone number(s): _____

Your ISDN SPID(s): _____

ISDN switch type: National ISDN-1 AT&T 5ESS AT&T 5ESS Point-to-Point

Order your ISP account

Obtain an account with an ISP (Internet Service Provider).

Record the following information:

ISP's ISDN phone number(s)

Your ISP may have a different phone number for each ISDN channel and may also have a backup number in case the primary number is busy or unavailable.

Primary: _____ Backup: _____

Account information

The DIVA LAN ISDN Modem uses this information to log on to the ISP.

User name: _____ Password: _____

DNS information

To reach other sites on the Internet you need to use your ISP's DNS server. In most cases, the DIVA LAN ISDN Modem will automatically discover the addresses for these servers. However, if it is unable to do so, you will have to enter them manually.

Primary DNS server address: _____

Secondary DNS server address: _____

Addresses are written as four numbers separated by periods. Each number can range from 0 to 255.

For example:
 213.121.098.111
 198.125.1.1

4 Install the DIVA LAN ISDN Modem

1. If you have more than one computer, select the one you want to use to configure the DIVA LAN ISDN Modem. Once the DIVA LAN ISDN Modem is up and running, you can connect your other computers. See Appendix B for details.
2. Verify that your computer has the necessary software and hardware to connect with the DIVA LAN ISDN Modem.
3. Turn your computer off.
4. Connect the DIVA LAN ISDN Modem to your ISDN line using the supplied grey ISDN cable. Plug one end into the ISDN port on the back of the DIVA LAN ISDN Modem and plug the other end into your ISDN wall outlet.
5. Connect your computer to the DIVA LAN ISDN Modem using the supplied blue Ethernet cable. Plug one end of the cable into the Ethernet port on your computer and plug the other end into an Ethernet port on the DIVA LAN ISDN Modem. It does not matter which port you use. All the Ethernet ports are the same.
6. Connect the power supply to the POWER jack on the DIVA LAN ISDN Modem and plug it into a power outlet.
7. Turn on your computer.
8. Go to Section 5 to install the Modem Monitor software.

To connect with the DIVA LAN ISDN Modem, a computer must have:

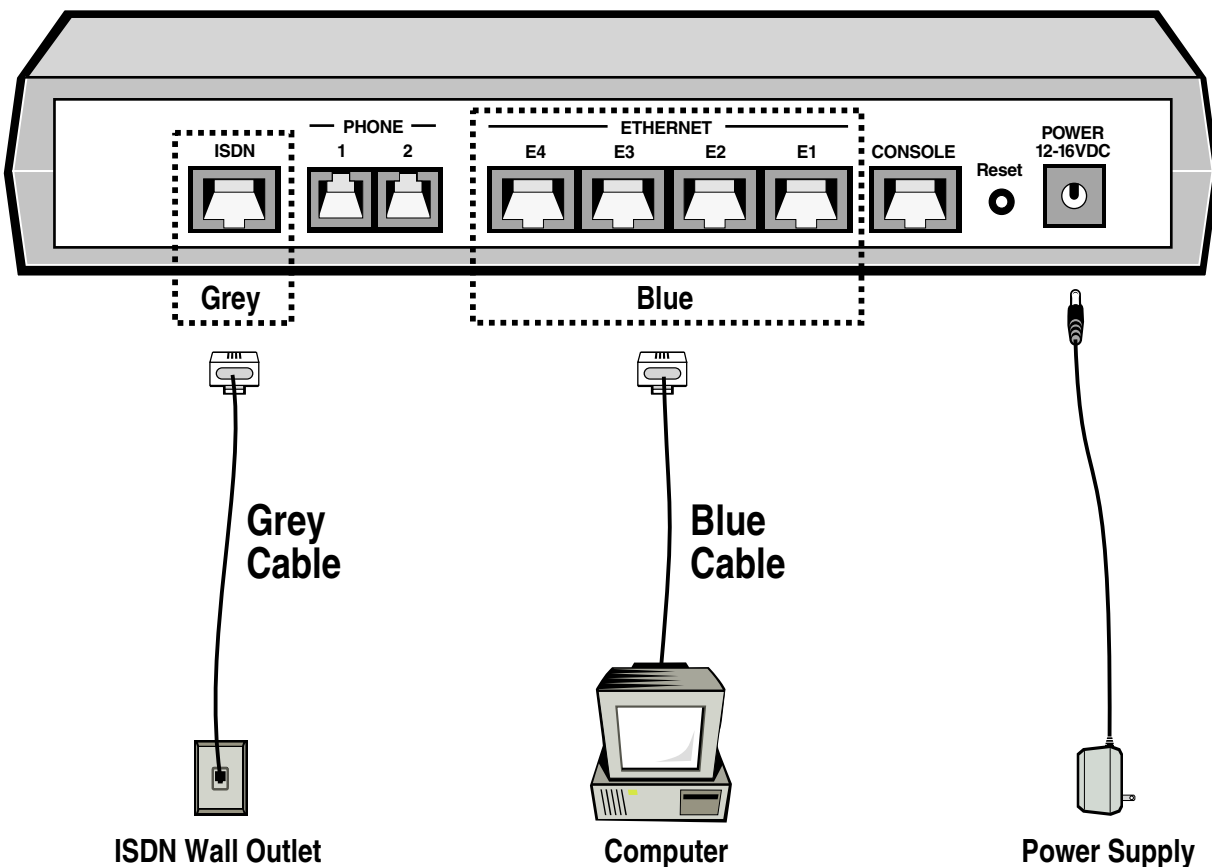
- A 10BASE-T Ethernet network interface card, properly installed. Consult the documentation that came with your card for instructions on how to do this.
- The card must be configured to use the TCP/IP protocol and the TCP/IP protocol must be set to use its default values. Specifically, it must be a DHCP client (obtain IP address automatically) and not be configured to use a DNS server.

To adjust these settings in Windows 95/98, use the Network program in Control Panel. If you do not know how to check these settings, the Modem Monitor program that is part of the DIVA LAN ISDN Modem package will verify these settings for you. Modem Monitor is installed in Section 5.

To configure the DIVA LAN ISDN Modem, a computer must have:

- Web browser (Netscape 3.01 or later, or Internet Explorer 4 or later). Internet Explorer is included on the DIVA LAN ISDN Modem CD for computers running Windows 95/98/NT4. (NT 4 requires Service Pack 3 or 4. Both are available on the DIVA LAN ISDN Modem CD.)

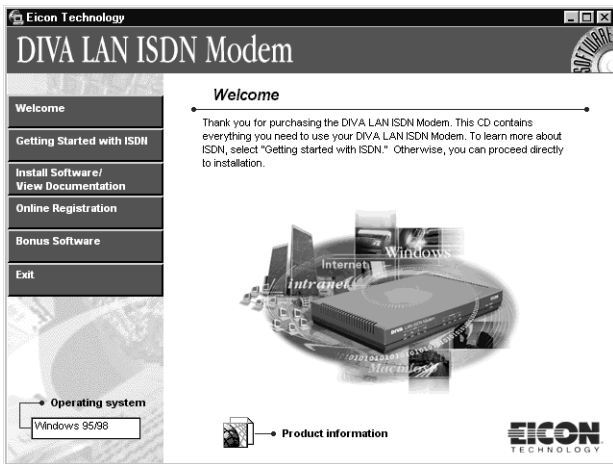
Note: Make sure your browser is not configured to use a Proxy Server or a dial-up connection.



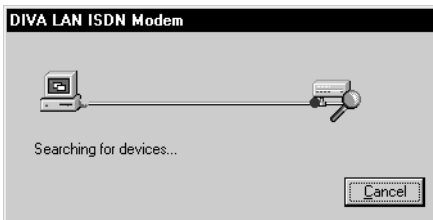
5 Install the Modem Monitor software (Windows 95/98/NT)

Refer to Appendix D if you are using another operating system.

1. Insert the DIVA LAN ISDN Modem CD into the CD-ROM drive on your computer. The setup program will automatically start. If it does not, click "CDSETUP.EXE" in the root folder of the CD.



2. Click 'Install Software / View Documentation', then click 'Install DIVA LAN ISDN Modem Software'.
3. The DIVA LAN ISDN Modem Setup Wizard starts. Follow the directions on your screen to install the software.
4. Once installation is complete, the Setup Wizard searches for your DIVA LAN ISDN Modem.



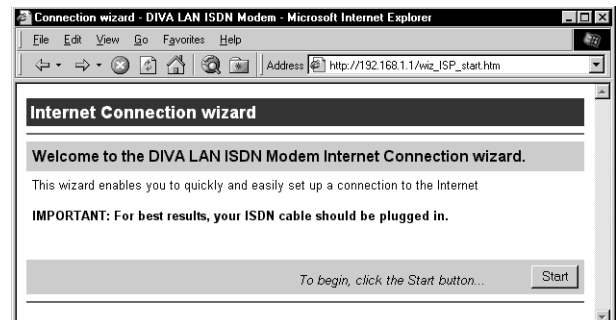
5. Once detected, Setup Wizard starts the Network Wizard. The Network Wizard will verify that you can communicate with the DIVA LAN ISDN Modem. If a problem is found, the Network Wizard will help you correct it.

If at any point you are prompted to upgrade the firmware on your DIVA LAN ISDN Modem, do so. The procedure is automatic. In certain cases, the firmware on the CD-ROM may be more recent than that on the DIVA LAN ISDN Modem. For more information on firmware upgrades see Appendix E

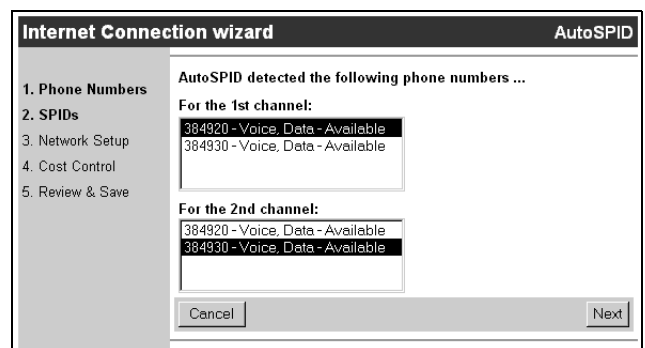
6. When the Network Wizard is done, it displays this dialog box:



7. Click the "Configure" button. The DIVA LAN ISDN Modem launches your default web browser and displays the first page of the Internet wizard.



8. Click the "Start" button.
9. The first thing you must do is define your ISDN numbers and SPIDs.
 - a) If your line supports AutoSPID, the DIVA LAN ISDN Modem will automatically discover your SPIDs and ISDN numbers and present them to you. Simply click "Next" to continue.



Continued

5 Install the Modem Monitor software (continued)

b) If your line does not support AutoSPID, enter your area code and your ISDN numbers and click "Next". The DIVA LAN ISDN Modem will use this information to attempt to guess your SPIDs.

c) If SPID guessing fails or your ISDN line is not plugged in, you must specify your switch type, your ISDN numbers, and your SPIDs. Click "Next" to continue.

10. Fill in the fields with the information you gathered and click "Next".

Do not change this name.

Specify your ISP's ISDN phone numbers. If your ISP uses two ISDN numbers (one for each B-channel), enter the second one after the first. Separate the two with an ampersand (&), a tilde (~), or a forward slash (/). For example: 7451111/7451113

Do not change this parameter. The default setting of MLPPP has been chosen to work with the majority of ISPs.

Once your connection is working, you can configure other connection protocols. Consult the DIVA LAN ISDN Modem User's Guide for details.

Do not change this setting.

Specify the user name and password given to you by your ISP.

If your ISP supplied you with the addresses of its DNS servers, enter them. If not, leave these addresses as 0.0.0.0. When the DIVA LAN ISDN Modem connects with the ISP, it will automatically discover these addresses (if supported by your ISP).

11. Specify the cost control settings and click 'Next'.

These settings are designed to assist you in ensuring that your ISDN line is not accidentally used by your applications. The recommended settings should be sufficient protection in most cases and with most applications; however, the ultimate responsibility to limit your ISDN usage charges lies with you and not with Eicon. You must change and/or adjust these settings in accordance with the calling-out features of your applications.

- The "Maximum Number of Calls" setting restricts the number of outgoing calls that your application makes through your DIVA LAN ISDN Modem during the "Threshold Monitoring Interval" that is set.
- The "Maximum Duration of Calls" setting restricts the total time-length of all outgoing calls during the "Threshold Monitoring Interval". This prevents an application from keeping your link open for an extended period of time.

As a responsible user it is up to you to understand these settings and adjust them appropriately in accordance with your desired use.

Continued

6 Using the DIVA LAN ISDN Modem

The DIVA LAN ISDN Modem automatically dials out and establishes the ISDN link as required. You simply launch your web browser or e-mail application and you are connected to the Internet.

How long will the line stay connected?

By default, the DIVA LAN ISDN Modem will stay connected until the line has been idle for two minutes. To customize this setting for your installation, see the chapter “Minimizing ISDN Charges” in the DIVA LAN ISDN Modem User’s Guide.

Defining a login password

It is a good idea to define a password to prevent unauthorized access to your DIVA LAN ISDN Modem.

1. On the “Manual Configuration” menu, click “System”.
2. Enter the system password in the “Login Password” and “Repeat Login Password” fields.

Viewing status information

The main menu provides you with quick access to status information.

DIVA LAN ISDN Modem
Configuration main menu

Quick start

[Internet wizard](#) - Quickly create a connection to the Internet.

Administration These options are only fully enable once you complete the Internet wizard

Connection profiles
Configure your connection profile settings.

Manual configuration
Manual access to all configuration settings.

Statistics
See current statistics for all protocols.

View system status and log
Information on the status, past and present, of your device.

Maintenance
Update and backup your configuration or firmware.

Information
Contact us, technical support, etc...

Reset Log out

EICON TECHNOLOGY

Registering your DIVA LAN ISDN Modem

Once your system is running you should visit the Eicon web site and register your DIVA LAN ISDN Modem. This ensures that you will always be kept up-to-date of new features and firmware releases. Point your web browser to

<http://www.eicon.com/divalan/downld.htm>

or follow the procedure on the last page of this booklet to upgrade your firmware. Registration is part of the upgrade process.

System status

ISDN

Line 1 is: L1 Down Line 2 is: L1 Down

Profile Status

ISP	Ready
CORPORATE	Ready

Front panel display

B1	B2	D	LNK	E1	E2	E3	E4/C	FLT	PWR
■	■	■	■	■	■	■	■	■	■

(automatically refreshed every 10 seconds)

Refresh now Close

What’s next?

- If you are a Windows 95/98/NT user, refer to Appendix A. It provides a quick introduction to the Modem Monitor program.
- Refer to Appendix E for instructions on how to upgrade the DIVA LAN ISDN Modem firmware, and how to register your purchase. Registration ensures that you will be informed of updates and new releases.
- To fine tune the operation of your DIVA LAN ISDN Modem, refer to the DIVA LAN ISDN Modem User’s Guide on the CD (also installed on your system with the Modem Monitor software).

The DIVA LAN ISDN Modem User’s Guide provides you with detailed information on customizing the operation of the DIVA LAN ISDN Modem. Here are some topics you may want to refer to:

“**Setting up the phone ports**”: provides information on using the PHONE ports to connect telephones, fax machines, and modems.

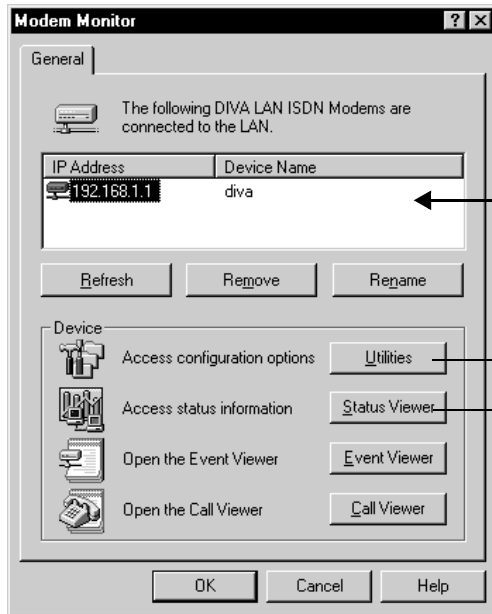
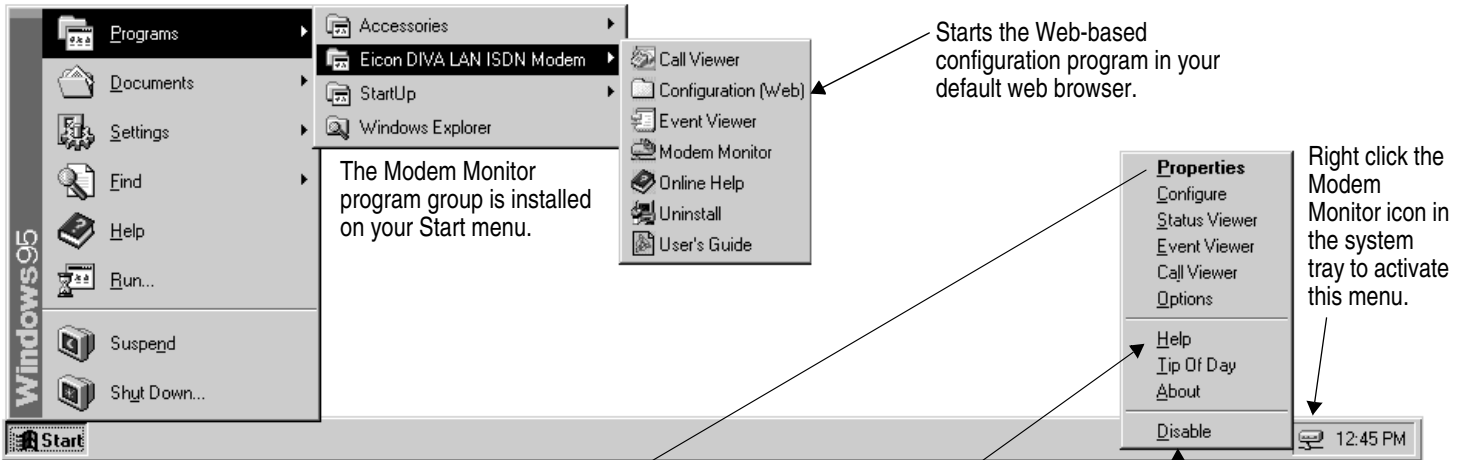
“**Minimizing ISDN charges**”: explains how to customize various settings that let you limit your ISDN line charges. This includes limiting the number of calls and the total connection time.

“**Connecting more than four computers**”: explains how to connect the DIVA LAN ISDN Modem to a third-party Ethernet hub so it can be shared by more than four computers.

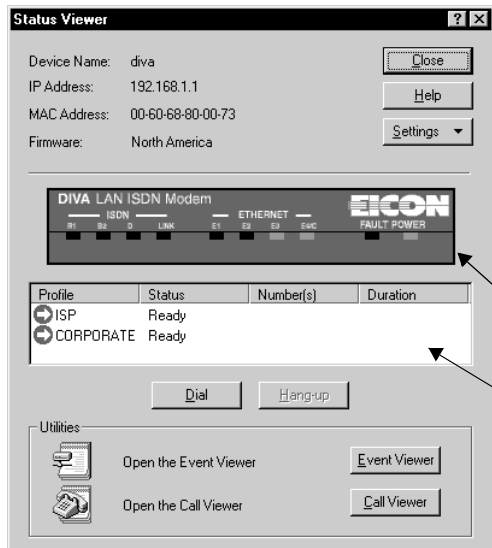
“**Installing on an existing LAN**”: explains how to install the DIVA LAN ISDN Modem on an existing local area network.

A Using the Modem Monitor software

The Modem Monitor software was installed on your system in Section 5. It provides an effective way to manage your DIVA LAN ISDN Modem. It is activated each time you start your computer and appears in the system tray.

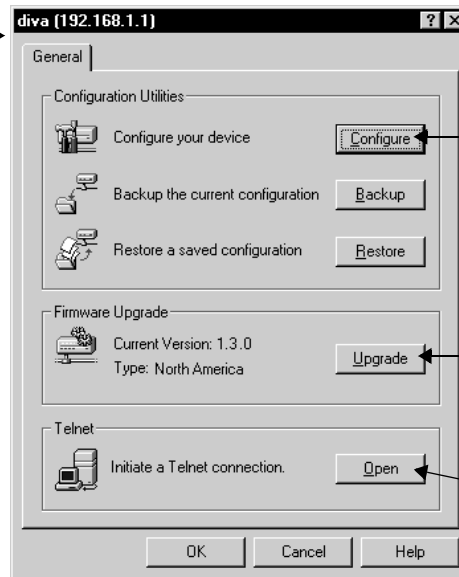


This list displays all the DIVA LAN ISDN Modems that were detected by the Modem Monitor. Click "Refresh" to update this list if any new devices have been added to your system.



Lets you view the status of the front panel LEDs.

Lets you view the status of your connections.



Starts the web-based configuration interface using your default browser.

Lets you upgrade your DIVA LAN ISDN Modem with firmware you have already downloaded to your computer.

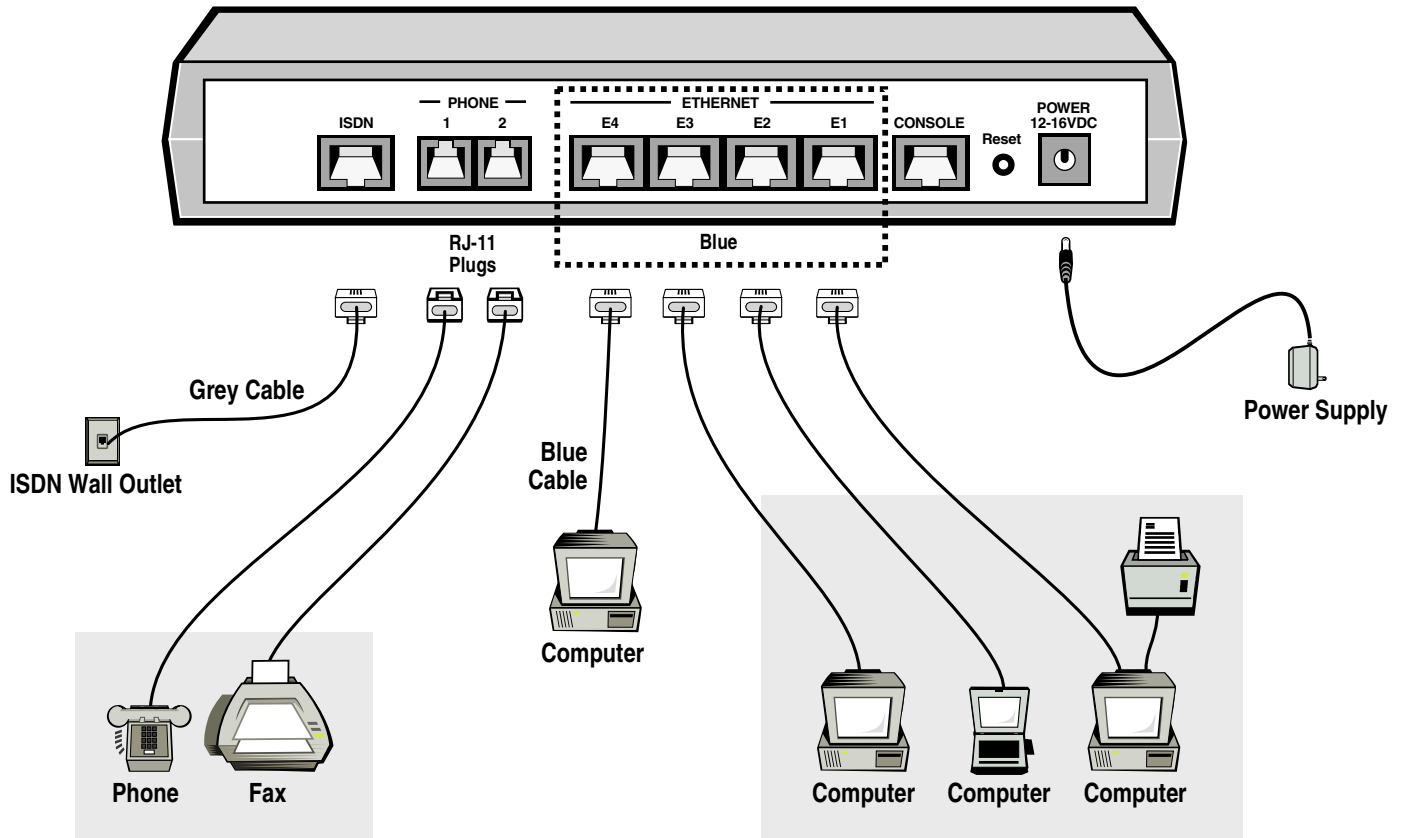
For advanced configuration tasks only. See the DIVA LAN ISDN Modem User's Guide for more information.

Comprehensive online help is available for using Modem Monitor.

Click here to disable and exit Modem Monitor.

To keep Modem Monitor from loading each time you start your system, select Options and disable the "Run DIVA LAN ISDN Modem at startup" option.

B Connecting additional computers and analog devices



Connecting analog devices

You can connect analog devices, such as telephones or fax machines, to the PHONE plugs.

Phone cables are not included.

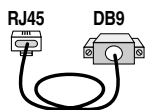
Connecting additional computers

You can connect up to four computers to the DIVA LAN ISDN Modem. These computers require an Ethernet network interface card and TCP/IP, both installed and configured like the first computer you connected. Do not, however, install Modem Monitor on these machines.

Follow these steps:

1. Turn off the computer.
2. Use an Ethernet cable to connect the computer to an ETHERNET port on the DIVA LAN ISDN Modem. It does not matter which port a computer is connected to. All ETHERNET ports are the same.
3. Turn on the computer.

If you need to connect more than four computers, you can connect the DIVA LAN ISDN Modem to a third-party Ethernet hub. Refer to the DIVA LAN ISDN Modem User's Guide for more information.



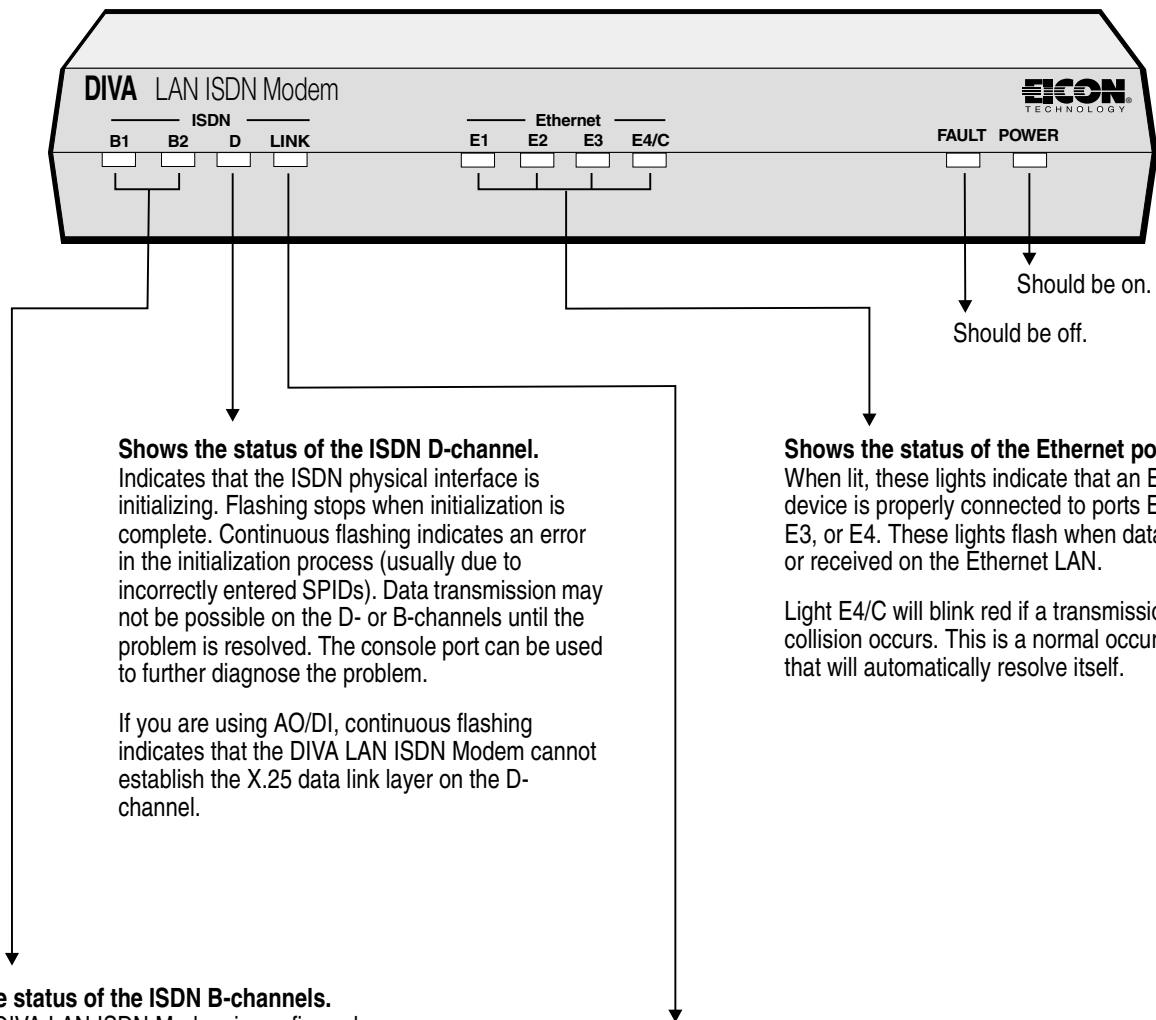
Beige Cable:

Do not connect the beige cable. It is for advanced configuration options only. See the DIVA LAN ISDN Modem User's Guide for details.



About the front panel lights

The Ethernet lights provide instant feedback on whether or not your computers are properly connected to the DIVA LAN ISDN Modem. The states of the B1, B2, D and LINK lights, however, should only be examined after you have configured the DIVA LAN ISDN Modem.



D Using DIVA LAN ISDN Modem with non-Windows computers

If you are using an operating system other than Windows 95/98/NT4, follow the steps in this section to configure your system so that it can communicate with the DIVA LAN ISDN Modem.

1. Make sure that your computer has TCP/IP configured and bound to your Ethernet card.
2. Enable DHCP client support. This allows your computer to automatically obtain its IP address from the DIVA LAN ISDN Modem (which acts as a DHCP server).

OR

If you do not want to use the DIVA LAN ISDN Modem as your DHCP server, make sure that the IP address assigned to your computer is on the same IP network as the DIVA LAN ISDN Modem (192.168.1.0), and that its subnet mask is 255.255.255.0. A simple solution is to use the address 192.168.1.2 for your computer. You must also ensure that the DIVA LAN ISDN Modem is set as your default gateway and DNS server.

3. Restart your computer (if required) to activate your new settings.
4. Start your web browser (Netscape 3.01 or later, or Internet Explorer 4 or later).
5. Specify the address 192.168.1.1 and press "Enter". (If you changed the address of the DIVA LAN ISDN Modem, enter the new address instead.)
6. Your web browser will load the "Log in" page.



If you cannot load the Log in page, try to PING the DIVA LAN ISDN Modem with the command: PING 192.168.1.1.

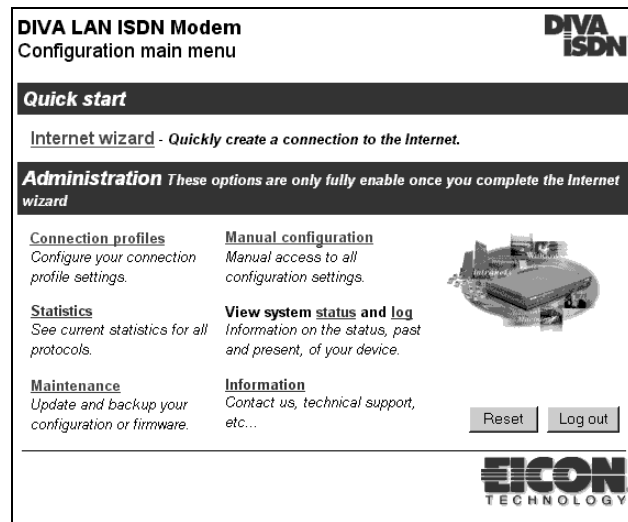
If you receive a reply, your Web browser may not be configured properly. Make sure that:

- it is configured to use the LAN, and not a dial-up connection
- it is not set to use a proxy server

If you do not receive a reply, it is likely that your TCP/IP settings are incorrect. Verify the settings you made in step 2.

7. Click the "Log In" button. (Until you set a password, none is required to log in.)

The DIVA LAN ISDN Modem displays the Main Configuration menu.



8. Click "Internet wizard". The DIVA LAN ISDN Modem displays the first page of the Internet wizard. Turn to Section 5, Step 8 to continue.

The DIVA LAN ISDN Modem contains special software, called firmware, that controls its operation. The firmware is stored in flash ROM, which allows it to be replaced by uploading a new version. The DIVA LAN ISDN Modem CD contains firmware that may be more recent than the version currently installed on your DIVA LAN ISDN Modem. In addition, Eicon Technology posts the latest DIVA LAN ISDN Modem firmware on its web site. To download this firmware, you require an Internet connection. An added benefit of visiting the Eicon web site is that you can register your purchase.

1. Start your web browser.
2. Specify the address 192.168.1.1 (default DIVA LAN ISDN Modem address) and press "Enter".
3. Your web browser will load the log in page.
4. Click the "Log In" button. (Until you set a password, none is required to log in.) The DIVA LAN ISDN Modem displays the Configuration main menu.

5. Click "Maintenance". The following page is displayed:

6. Click "Firmware". The DIVA LAN ISDN Modem displays the "Firmware Maintenance" page.

7. Click the "Backup" button. This retrieves a copy of the current firmware that is loaded on the DIVA LAN ISDN Modem. Save it to disk, just in case you encounter problems installing or using the new firmware.

8. To retrieve new firmware from the Eicon web site, click the "Visit" button. This points your web browser to the DIVA LAN ISDN Modem firmware upgrade page on the Eicon Technology web site. Select the latest firmware release and download it. Save it in the folder:

Eicon\DIVA LAN ISDN Modem\ELM

By default this folder is located in:

c:\Program Files\

However, it may be located elsewhere, depending on where you installed your DIVA LAN ISDN Modem software. When the download is done, return to the "Firmware Maintenance" page.

9. Click the "Browse" button. Select the new firmware file you downloaded, or if you want to upgrade from the CD, open the following folder on the CD:

\Firmware

Select the file "rtma.elm".

10. Click the "Upgrade" button to upload the firmware to the DIVA LAN ISDN Modem. When done, the DIVA LAN ISDN Modem is reset to activate the new firmware.