

56K LAN Modem Getting Started Guide

PRODUCT NO.: 3C886A

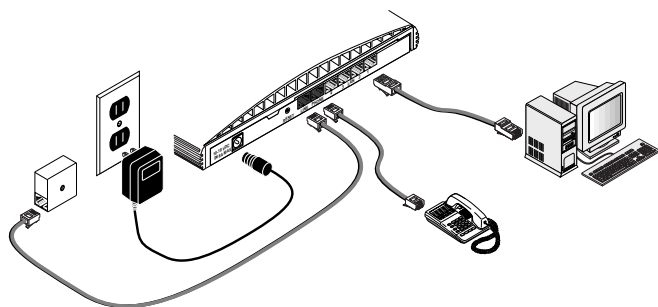
Part No. 981/000116-3
Published July 1999



TWO-STEP SETUP

Congratulations on choosing the 3Com OfficeConnect 56K LAN Modem! For the most common network application, creating a LAN with shared Internet access, the 56K LAN Modem setup is a simple, two-step process:

1. Install . . .



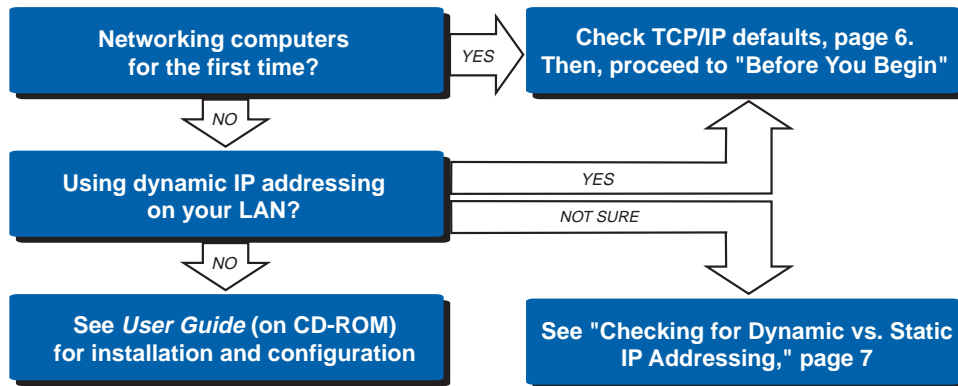
Connect the cables

2. Configure . . .



**Launch your Web browser
to run the ISP Wizard**

This *Getting Started Guide* provides instructions for installing and configuring the 56K LAN Modem based on the most common configuration — shared Internet access. For advanced configurations, the *OfficeConnect 56K LAN Modem User Guide* is available in PDF and HTML formats on the *OfficeConnect 56K LAN Modem Companion Programs CD-ROM*. The flow chart below will help direct you to the proper documentation source and location for your network scenario.



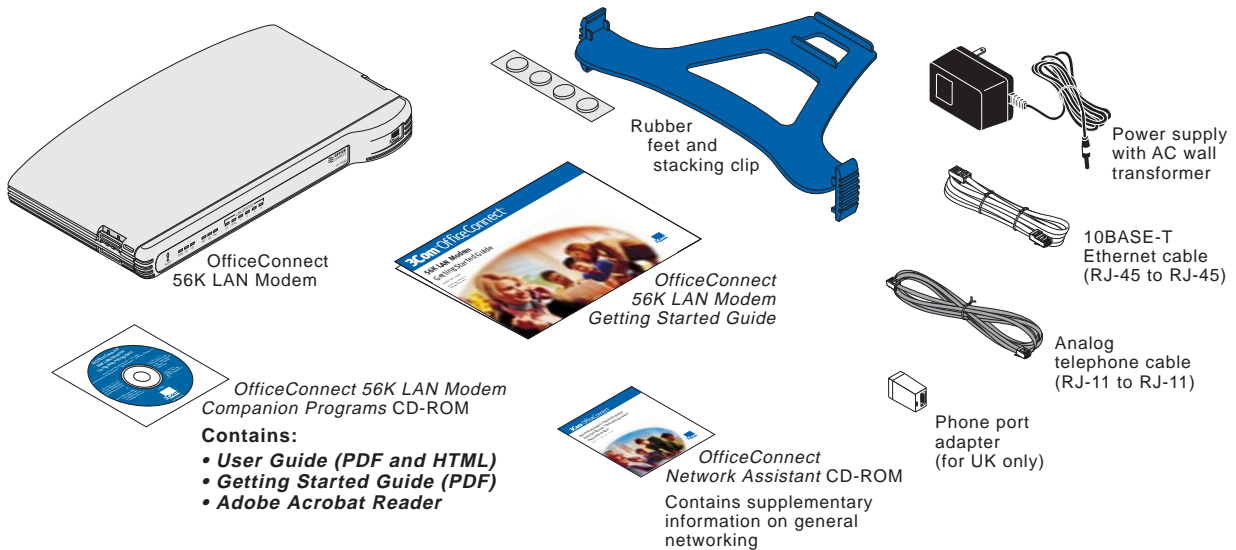
BEFORE YOU BEGIN

To complete your setup and establish an Internet connection for the first time, you must have the following:

- **An Internet Service Provider (ISP) Account.**
- **A Workstation** with the following requirements:
 - 10BASE-T Ethernet card (Ethernet connectivity built in with all Power Macintoshes)
 - TCP/IP connectivity (built in with Windows 98, 95, and NT and Macintosh OS 7.6 or later)
 - 386, 486, or Pentium processor (PCs only)
 - CD-ROM drive
- **A Web Browser**, such as Netscape Navigator (3.0 or later) or Microsoft Internet Explorer (3.0 or later), that is frames-capable and JavaScript-enabled.

If you do not have a browser, a custom browser is provided on the *OfficeConnect 56K LAN Modem Companion Programs CD-ROM*.

PACKAGE CONTENTS

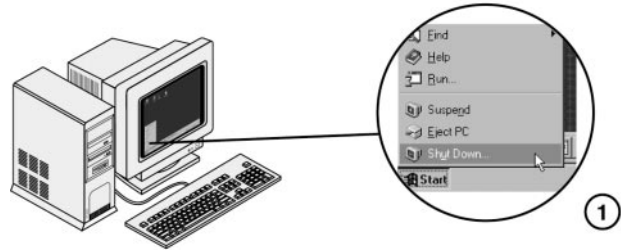


To install the 56K LAN Modem:

- 1 Turn off your computer.

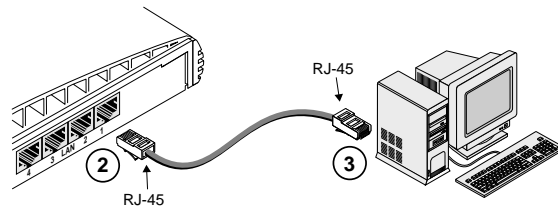


CAUTION: Do not connect more than one computer for this initial setup. After installation and configuration, you can connect additional computers and/or printers to the 56K LAN Modem. Do not connect the 56K LAN Modem to an existing LAN until after you have completed the configuration.



CONNECT YOUR COMPUTER:

- 2 Insert either end of the Ethernet cable into one of the LAN Modem ports labeled LAN.
- 3 Insert the other end of the Ethernet cable into your computer's 10BASE-T Ethernet port.

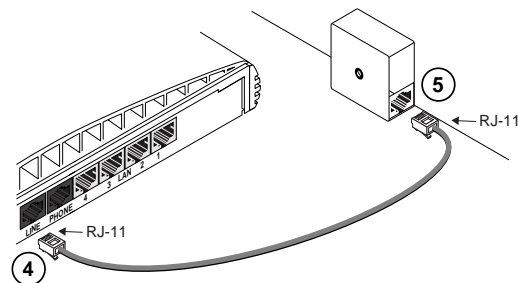


CONNECT THE ANALOG LINE:

- 4 Insert one end of the RJ-11 analog telephone cable into the LAN Modem port labeled LINE.
- 5 Insert the other end of the analog cable into an analog wall jack.

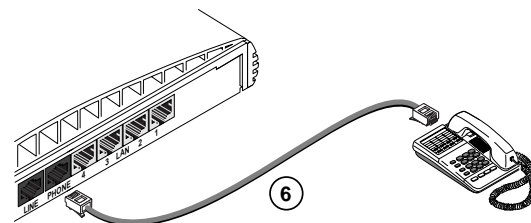


UK users may first have to insert the supplied phone port adapter into the wall jack and then insert the RJ-11 cable into the phone adapter. Users in other geographic areas may also need a phone port adapter.



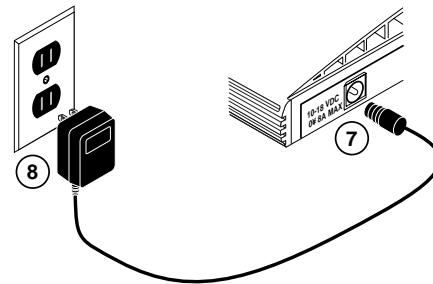
(Optional) CONNECT ADDITIONAL ANALOG EQUIPMENT:

- 6 Connect the additional device to the port labeled PHONE, using the RJ-11/RJ-11 cable provided with your analog equipment, as shown.



CONNECT THE POWER SUPPLY:

- 7 Connect the power supply to the 56K LAN Modem.
- 8 Plug the wall end of the power supply into your wall outlet (use of a surge-protected outlet strip is recommended).

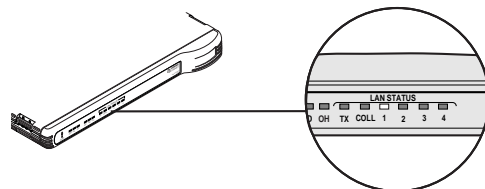


Watch for the following front panel LED signals:

- PWR and AA LEDs illuminate.
- Alert LED flashes momentarily as the unit undergoes a power-up, self-test diagnostic.
- AA LED goes off, and only the PWR LED remains lit.

- 9 Turn on your computer.

Watch for the LAN Status LED on the unit to flash and then remain lit.



This completes the installation. Continue with "Configuring the 56K LAN Modem." After you have finished the configuration, you can connect additional computers and/or printers. If you wish to add more than four users, see "Connecting More Than Four Users" after completing the configuration. Refer to "Troubleshooting," page 8, if the installation was not successful.

These instructions cover the typical configuration — setting up a connection for shared access to the Internet. To set up a connection to a private network, such as a corporate LAN, refer to the “Additional Service Providers” section in Chapter 6 of the *OfficeConnect 56K LAN Modem User Guide*, located on the *OfficeConnect 56K LAN Modem Companion Programs* CD-ROM.

Before You Start the Configuration

Before you start to configure the 56K LAN Modem, have the following ready:

- ISP telephone number
- ISP account user ID
- ISP account password
- ISP DNS server address (if required)

Configuration Steps

To configure the 56K LAN Modem for Internet access:

- 1 Launch your Web browser to start the configuration process.

A welcome message appears. (If the welcome message does not appear, refer to “Troubleshooting,” page 8.)



Windows 98 and 95 users: If the Dial-Up Connection window appears, refer to “Note for Windows Dial-Up Networking Users,” page 7.

- 2 Click *Continue*.

The 56K LAN Modem clock is synchronized to the date and time on your workstation. The Set Password window appears.

- 3 (Optional) Enter a password in the Password field and in the Password (repeat) field to confirm. (Be sure to record your password for future use.) This password protects access to the LAN Modem.

- 4 Click *Submit*.

The ISP Wizard window appears.

- 5 Enter your ISP information from above. Choose any name for the ISP Name. If you are not sure about the DNS server address, leave this field blank.
- 6 In the Dial Out Prefix field, enter the number required to access an outside line from your location, if applicable (for example, if you are in an office with a PBX and need to dial a ‘9’ to access an outside line).
- 7 In the Call Waiting Disable Command field, enter the appropriate command to disable call waiting, if you desire. Your telephone company can provide this value.
- 8 Click *Continue*.

A call is launched to your ISP, and a message confirming proper configuration appears.



If you experience problems connecting to your ISP, refer to the troubleshooting section of the OfficeConnect 56K LAN Modem User Guide, located on your CD-ROM.

- 9 Click *Continue*.

This takes you directly to the support page for the LAN Modem on 3Com's World Wide Web site.

- 10 Click *Register* to register your product.



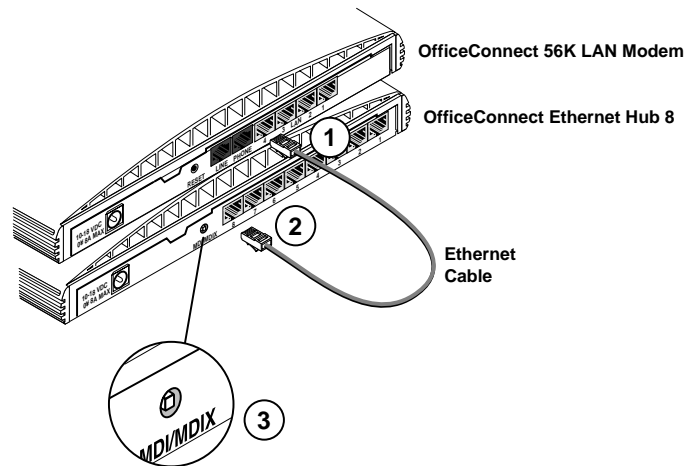
Your parameters for connecting to your ISP have been set to a typical default through this configuration. To change these default parameters, enter <http://3com.oc.lanmodem> or <http://192.168.1.1> to reach the LAN Modem's main configuration page. Click the Service Providers icon, and then select your ISP Name from the list.

This completes the configuration process. You may now connect additional computers and/or printers to your new LAN. If you wish to add more than four users, see “Connecting More Than Four Users.” If you wish to set up a connection to a private network or to a second ISP, refer to Chapter 6 of the *User Guide*.



For access to documentation, firmware upgrades, and all the latest information about your 56K LAN Modem, go to <http://www.remoteaccess.3com.com/support/docs/lanmodem/welcome.html>.

After you have finished configuring your 56K LAN Modem, you can connect an additional Ethernet hub or hubs to the 56K LAN Modem to add up to 25 users. An example of a ten-user connection is shown.



To connect an additional hub:

- 1 Insert one end of a 10BASE-T Ethernet cable into one of the ports marked *LAN* on the back of the 56K LAN Modem.
- 2 Insert the opposite end of the cable into one of the 10BASE-T Ethernet ports on the Ethernet hub. (If you are connecting to an OfficeConnect Ethernet Hub 8, insert the cable into port 8.)
- 3 If connecting to an OfficeConnect Ethernet Hub 8, set the MDI/MDIX switch to MDI (that is, pressed in).



If the hub to which you are connecting does not have an MDI/X switch, you will need a cross-over Ethernet cable.

STACKING OFFICECONNECT UNITS

The Rubber Feet. For desktop use, the four self-adhesive rubber feet prevent your 56K LAN Modem from sliding. Attach the feet to the underside of the LAN Modem in the marked corners.

The Stacking Clip. The stacking clip allows you to stack two or more OfficeConnect units together securely.

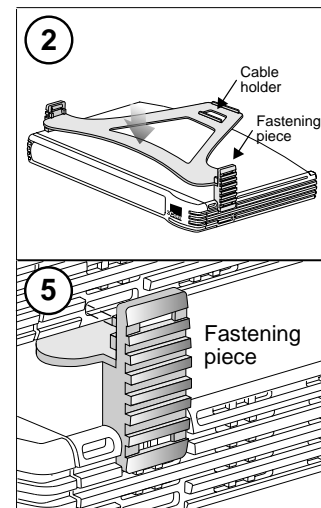


CAUTION: You can stack up to a maximum of four units. Smaller units must be stacked on top of larger units.

To stack two units:

- 1 Place the first unit on a flat surface.
- 2 Fit the clip across the top of the unit, as shown. The longer end of the fastening pieces should point downward.
- 3 Align the fastening pieces over the slots on each side of the unit, and then push the clip down gently to secure it. Ensure that the fastening pieces snap into the slots.
- 4 Rest the second unit on top of the clip and align it with the front of the bottom unit.
- 5 Press down gently to secure the top unit onto the clip, ensuring that the fastening pieces fit into the slots, as shown.

To unstack units, gently pry the top unit away from the clip, and then carefully pull either fastening piece out of its slot to detach the clip from the bottom unit.



It is recommended that you return your TCP/IP settings to their factory default values (this is for use with dynamic IP addressing). To do this, follow the steps for your operating system:

Windows 98 and 95

- 1 From the *Start* menu, select *Settings*, and then *Control Panel*. Double-click the *Network* icon.
- 2 Select *TCP/IP*, and then click *Properties*.
- 3 If you do not see *TCP/IP* listed, refer to "Setting Up TCP/IP" below.



If you have more than one TCP/IP entry, select the entry associated with your Ethernet card.

- 3 Click the *IP Address* tab. Select *Obtain an IP address automatically*.
- 4 Click the *Gateway* tab. Click *Remove* to clear the *Installed gateways* field.
- 5 Click the *DNS Configuration* tab. Select *Disable*.
- 6 Click *OK* to close the *TCP/IP Properties* window, and then click *OK* to close the *Network* window, saving any changes.

If prompted, restart your workstation.

Windows NT 4.0

- 1 From the *Start* menu, select *Settings*, and then *Control Panel*. Double-click the *Network* icon.
- 2 Click the *Protocols* tab. Select *TCP/IP*, and then click *Properties*. If you do not see *TCP/IP* listed, refer to "Setting Up TCP/IP" below.
- 3 Click the *IP Address* tab. From the *Adapter* field, select the Ethernet card associated with your 56K LAN Modem. Select *Obtain an IP Address automatically*.
- 4 Click *OK*.

If prompted, restart your workstation.

Macintosh

- 1 From the *Apple* menu, select *Control Panels*. Double-click *TCP/IP*.
- 2 From the *Connect Via* drop-down list box, select *Ethernet* (if iMac, select *Ethernet built-in*).
- 3 From the *Configure* drop-down list box, select *Using DHCP Server*. All other entries should be either blank or set to *<will be supplied by server>*.
- 4 Select *File*, and then *Close*, saving any changes.

SETTING UP TCP/IP

If you are using Windows 98, 95, or NT and have never made remote connections on your computer, you may have to set up the TCP/IP protocol by adding it to your computer's protocol list. To do this, have your Windows installation disks or CD-ROM ready, in case you are prompted for them, and then follow the steps for your operating system.

Windows 98 and 95

- 1 From the *Start* menu, select *Settings*, and then *Control Panel*. Double-click the *Network* icon.
- 2 Click *Add*.
The *Select Network Component Type* dialog box opens.
- 3 Select *Protocol*, and then click *Add*.
The *Select Network Protocol* dialog box appears.
- 4 From the *Manufacturers* list box, select *Microsoft*, and then from the *Network Protocols* list box, select *TCP/IP*.
- 5 Click *OK*.

Windows NT 4.0

- 1 From the *Start* menu, select *Settings*, and then *Control Panel*. Double-click the *Network* icon.
The *Network* dialog box appears.
- 2 Click the *Protocols* tab.
- 3 Click *Add*.

The *Select Network Protocol* dialog box appears.

- 4 Select *TCP/IP Protocol*, and then click *OK*.

You are asked if your network has a DHCP server and if you would like to have IP addresses automatically configured. It is recommended that you click *Yes*, since the 56K LAN Modem has a DHCP server and automatic configuration is preferred. If, however, you are on a static network, click *No*.

You may now be prompted to insert your Windows NT 4.0 installation CD-ROM.



If you have Windows NT Remote Access Service (RAS) installed on your workstation, after the appropriate files are copied to your workstation, you are asked whether or not you would like TCP/IP installed for RAS. If you select Yes, you must select the adapter you want to access remotely and then click Close.

After the appropriate files are copied to your workstation, you will see *TCP/IP Protocol* listed in the *Network Protocols* group box.

NOTE FOR WINDOWS DIAL-UP NETWORKING USERS 7

If you are already using Dial-Up Networking for remote connections, you may have to make the following changes to your Internet connection parameters:

- 1 From the *Start* menu, select *Settings*, and then *Control Panel*. Double-click the *Internet* icon.
- 2 Click the *Connection* tab, and clear the check box labeled *Connect to the Internet as needed*. (If this option is not available, choose *Connect to the Internet using a local area network* instead.) Click *OK*.

This allows outgoing connections to run through your 56K LAN Modem each time you launch your Web browser, bypassing the Dial-Up Connection window.



If you want to use Dial-Up Networking again — for example, to use another modem connected to your computer's serial port when you are not using the 56K LAN Modem — remember to switch back to the setting, Connect to the Internet as needed.

CHECKING FOR DYNAMIC VS. STATIC IP ADDRESSING

Your 56K LAN Modem is optimized for use with dynamic, rather than static, IP addressing. In static IP addressing, a permanent IP address is manually assigned to each device on a network. In dynamic IP addressing, an IP address is temporarily assigned for the duration of a network "session" and then returned to a pool of addresses for reuse. By default, the 56K LAN Modem assigns IP addresses dynamically to each attached computer.

For most users setting up a LAN for shared Internet access (regardless of whether you are connecting to the Internet for the first time or have already been dialing in through an individual connection), it is most likely that your computer or computers are set up for dynamic IP addressing. To verify that your computer or computers are set up for dynamic IP addressing, follow the steps for your platform:

Windows 98, 95 and NT 4.0

- 1 From the *Start* menu, select *Settings*, and then *Control Panel*. Double-click the *Network* icon.
- 2 **Windows 98, 95:** Select *TCP/IP* for the Ethernet card associated with your 56K LAN Modem.
Windows NT: Select *Protocols*, and then *TCP/IP*.
- 3 Click *Properties*.
- 4 Click the *IP Address* tab.

If *Obtain an IP address automatically* (Windows 98, 95) or *Obtain an IP address from a DHCP server* (Windows NT 4.0) is selected, your computer has a dynamic IP address.

If *Specify an IP address* is selected, your computer has a static IP address.
- 5 Click *Cancel* to exit the TCP/IP Properties window, and then *Cancel* to exit the Network window.

Macintosh

- 1 From the Apple menu, select *Control Panels*.
- 2 Double-click *TCP/IP*.
- 3 Select *Ethernet* from the *Connect Via* pop-up menu, if it is not already chosen.

If the *Configure* pop-up menu is set to *Using DHCP Server*, your computer has a dynamic IP address.

If *Configure* is not set to *Using DHCP Server* and you have specific values listed in any of the following fields: *IP Address*, *Subnet mask*, *Router address*, or *Name server addr.*, your computer has a static IP address.

- 4 Select *File* and *Close* to exit the *TCP/IP Control Panel*.

Where to Go from Here . . .

If you are set up for dynamic IP addressing, you are ready to continue directly with "Before You Begin," page 2.

If you are set up for static IP addressing, refer to Chapters 3 and then 5 of the *User Guide* (located on the *OfficeConnect 56K LAN Modem Companion Programs* CD-ROM) for your installation and configuration. You may have to perform additional steps not covered in this guide.

The table below lists symptoms of common problems, possible causes, and possible solutions. For additional troubleshooting information from the *User Guide*, FAQs, and other technical notes, refer to:

<http://www.remoteaccess.3com.com/support/docs/lanmodem/welcome.html>.

Symptom	Possible Cause	Solution
Launching your Web browser does not start the configuration process (the welcome message does not appear).	Incompatible IP address on your computer.	Reset the IP address on your computer, as follows: Windows 98 and 95: Run winipcfg.exe . Select the Ethernet adapter connected to the 56K LAN Modem. Click <i>Release All</i> and then <i>Renew All</i> . Windows NT 4.0: Run ipconfig /release and then ipconfig /renew .
	Web browser needs the IP address of the LAN Modem.	Enter the following URL in your Web browser: http://3com.oc.lanmodem . Alternatively, you can enter http://192.168.1.1 .
	Web browser may not be set to a default start page.	Launch your Web browser and enter a default URL, as follows: Internet Explorer: From the <i>View</i> menu, select <i>Options</i> . From Page, select <i>Start Page</i> , and then enter an address in the address field, such as http://www.3com.com . Netscape: From the <i>Options</i> menu, select <i>General Preferences</i> . From <i>Browser Starts With</i> , select <i>Home Page Location</i> , and then enter a URL such as http://www.3com.com .
	Web browser may be configured to use a proxy server.	Launch your Web browser, and then set the browser to use the LAN Modem, as follows: Internet Explorer: From the <i>View</i> menu, select <i>Internet Options</i> , and then the <i>Connection</i> tab. Under the <i>Proxy Server</i> header, uncheck the box labeled <i>Accessing the Internet using a proxy server</i> . Netscape: From the <i>Edit</i> menu, select <i>Preferences</i> . Double-click <i>Advanced</i> , and then click <i>Proxies</i> . Check the box labeled <i>Direct Connection to the Internet</i> .
	There is a configuration problem.	Reset the 56K LAN Modem to the factory default setting as follows: Press and continue to hold in the reset button on the back of the unit. (You must continuously hold the reset button through three cycles of LED flashing: Reset, Firmware Download Mode, and Factory Default Reset.) After the ALERT LED has flashed for the third cycle, you have successfully reset the LAN Modem back to factory defaults. Release the reset button. The LAN Modem reinitializes itself and is reset to the factory defaults. All user-entered information will be erased. Restart your computer and launch your Web browser.
Clicking "submit" during configuration does not take you to the next screen.	JavaScript may not be enabled in your Web browser.	Enable JavaScript via your Web browser's configuration options.
At installation, LAN LED does not light.	Wrong cable used to connect your computer to the LAN Modem's LAN port.	Make sure you are using the 8-pin to 8-pin cable labeled <i>Ethernet</i> which was provided with your 56K LAN Modem. If you are using another 10BASE-T Ethernet (Category 5) cable, it must be a straight-through cable.
At installation, ALERT LED remains lit.	An internal failure.	Notify your reseller or technical support that the 56K LAN Modem has failed the self-test.
At installation, ALERT LED continues to flash.	Self-test failure, or the LAN Modem is in firmware download mode	Power cycle the 56K LAN Modem. If the ALERT LED continues to flash, the 56K LAN Modem has failed the self-test. Contact your network supplier. If the ALERT LED is not flashing, then the LAN Modem is now operating correctly.
No dial tone when handset of a phone attached to the LAN Modem is lifted.	The telephone line cable, power cable and/or phone cable may not be firmly connected.	Check all cables and connectors to ensure that they are inserted securely.
	Telephone cable may not be in the correct port.	Ensure that the incoming analog telephone line has been connected to the port labeled <i>LINE</i> on the 56K LAN Modem's back panel.
	A data call may be in progress.	Disconnect any data calls currently in progress.

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