



# **Modem and Networking**

## **Compaq Notebook Series**

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This guide describes the modem and networking features on the notebook and explains how to connect a modem cable and a network cable. It also provides instructions for using the modem when travelling internationally.

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## Using an Internal Modem

Your notebook has an internal modem, an RJ-11 telephone jack, preinstalled modem drivers, and a modem cable. The internal modem:

- Supports applications running under Microsoft Windows 98, Windows 2000 Professional, Windows XP Home, and Windows XP Professional operating systems.
- Supports V.34 ITU (International Telecommunications Union) analog modem recommendations for speeds up to 33.6 Kbps. Supports V.44 data compression algorithm.
- Supports V.90/V.92 ITU digital/analog modem pair recommendations for speeds up to 56 Kbps.

The digital/analog modem pair rates allow faster downloads only from compliant digital sources. Maximum achievable download rates are currently unknown, may not reach 56 Kbps, and will vary with line conditions. Maximum achievable upload rates are limited to 31.2 Kbps, may not reach 31.2 Kbps, and will vary with line conditions.

- Uses a universal Direct Access Arrangement (DAA) that supports multiple countries. An adapter may be required to connect the modem to the standard telephone jack in some countries.
- Does not support the modem pass-through connection available on some optional port replicators.

## Connecting the Modem Cable

### Using the RJ-11 Cable

The modem cable may have noise suppression circuitry that prevents interference with TV and radio reception. The modem cable must be connected to an analog telephone line.



**CAUTION:** Jacks for digital PBX systems may resemble analog telephone jacks, but are not compatible with the modem.

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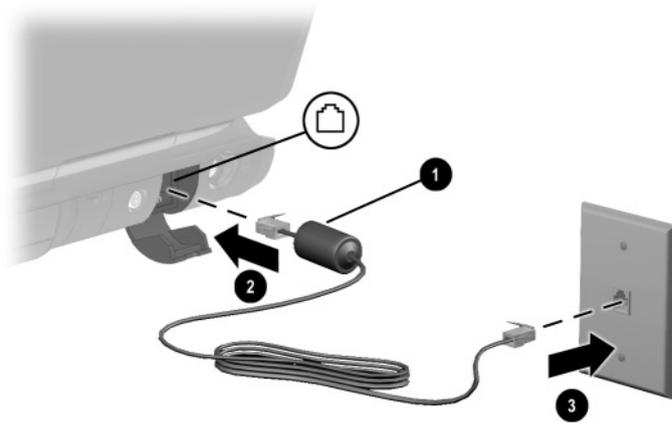
1. If the modem cable has noise suppression circuitry **❶**, orient the circuitry end of the cable toward the computer.
2. Plug the cable into the RJ-11 telephone jack **❷** on the notebook.



**WARNING:** To reduce the risk of electrical shock, fire, or damage to the equipment, do not plug a telephone cable into the RJ-45 jack.

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3. Plug the modem cable into the RJ-11 telephone jack ③.



**Connecting the modem using an RJ-11 jack**



**WARNING:** To reduce the risk of electrical shock, always ensure that the modem line is disconnected from the telephone network when opening the notebook's enclosure.

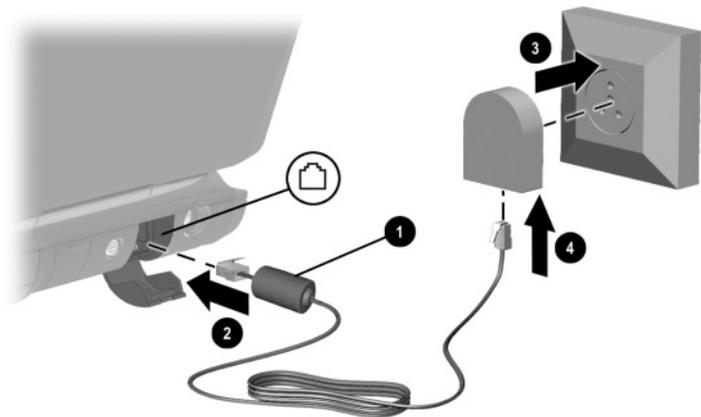
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## Using a Country-Specific Modem Cable Adapter

Software for the internal modem supports multiple countries, but telephone jacks vary by country. To use the modem and the RJ-11 cable outside the country in which you purchased the notebook, you must obtain a country-specific modem adapter and define your location in Dialing Properties.

To connect the modem to an analog telephone line that does not have an RJ-11 telephone jack:

1. If the modem cable has noise suppression circuitry ❶, orient the circuitry end of the cable toward the notebook.
2. Plug the modem cable into the RJ-11 telephone jack ❷ on the notebook.
3. Plug the country-specific modem adapter ❸ into the telephone jack.
4. Plug the modem cable ❹ into the country-specific modem adapter.



**Connecting the modem using a country-specific modem adapter**

## Viewing the Current Country Selection

To see the current country setting for your modem, follow these steps:

### **Windows 98:**

Select Start > Settings > Control Panel > Modems > Dialing Properties. The current country selection appears in the I Am In box.

### **Windows 2000 Professional:**

1. Select Start > Settings > Control Panel.
2. Double-click the Regional Options icon.
3. Under Settings for the Current User, view the country that is displayed under Your Locale.

### **Windows XP Home and XP Professional:**

1. Select Start > Control Panel.
2. Double-click the Regional & Language Options icon.
3. Under Location, view your present location.

## Adding New Locations When Travelling

The internal modem is configured to meet only the operating standards in the country where you purchased the notebook. When travelling internationally, you can add new location configurations that comply with standards in other countries.



**CAUTION:** Do not delete your current modem country settings. To enable modem use in other countries while preserving your home country configuration, add a new configuration for each location in which you will use the modem.

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The drop-down lists described below may include countries not supported by the modem. Unless you select a supported country, the country selection will default to USA or UK.



**CAUTION:** Selecting a country other than the one in which it is located may cause your modem to be configured in a way that violates the telecommunications regulations/laws of that country. In addition, your modem may not function properly if the correct country selection is not made.

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To add a new country location, follow these steps:

### **Windows 98:**

1. Select Start > Settings > Control Panel.
2. Double-click the Modems icon > General tab > Select your modem > Dialing Properties.
3. Assign the Location name (home, work, etc.).
4. Select the Country/Region from the drop-down list.
5. Click OK > OK.

### **Windows 2000 Professional:**

1. Select Start > Settings > Control Panel.
2. Double-click the Phone and Modem Options icon > Select New.

3. Assign the New Location Name (home, work, etc.).
4. Select the Country/Region from the drop-down list.
5. Click OK > OK.

**Windows XP Home and XP Professional:**

1. Select Start > Control Panel.
2. Double-click the Network and Internet Connections icon.
3. Select Phone and Modem Properties (menu in the left column) > Dialing Rules tab.
4. Select the New button and assign it a name (home, work, etc.).
5. Select the Country/Region from the drop-down list.
6. Click OK > OK.

## Solving Travel Connection Problems

If you experience connection problems while using the modem outside your home country, the following suggestions may help:

■ **Check the telephone line type**

The modem requires an analog, not a digital, telephone line. A line described as a PBX line is usually a digital line. A telephone line described as a data line, fax machine line, modem line, or standard telephone line, is probably an analog line.

■ **Check for pulse or tone dialing**

Dial a few digits on the telephone and listen for clicks (pulses) or tones. Then select:

**Windows 98:**

1. Select Start > Settings > Control Panel.
2. Double-click the Modems icon > General tab.
3. Select your modem > Dialing Properties > Tone or Pulse Dialing.
4. Select OK > OK.

**Windows 2000 Professional:**

1. Select Start > Settings > Control panel.
2. Double-click the Phone and Modem Options icon.
3. Select your location > Edit > Tone or Pulse Dialing.
4. Select OK > OK.

**Windows XP Home and XP Professional:**

1. Select Start > Control Panel.
2. Double-click the Network and Internet Connections icon > Phone and Modem Properties (menu in the left column).
3. Select the Dialing Rules tab.
4. Select your location.
5. Select Edit > Tone or Pulse Dialing.
6. Select OK > OK.

■ **Check the telephone number you are dialing and the response of the remote modem**

Dial the telephone number on the telephone, wait for the remote modem to answer, then hang up.

■ **Set the modem to ignore dial tones**

If the modem receives a dial tone it does not recognize, it will not dial and will display a No Dial Tone error message. Use the following procedures to set the modem to ignore all dial tones before dialing:

**Windows 98:**

1. Select Start > Settings > Control Panel.
2. Double-click the Modems icon > Select your modem.
3. Select Properties > Connection tab > Clear the Wait for Dial Tone Before Dialing check box.
4. If you continue to receive the No Dial Tone error message after clearing the check box:
  - a. Select Start > Settings > Control Panel > Double-click Modem > Dialing Properties.
  - b. Select your location in the I Am In drop-down box.
  - c. Clear the Wait for Dial Tone Before Dialing check box.

**Windows 2000 Professional:**

1. Select Start > Settings > Control Panel.
2. Double-click the Phone and Modem Options icon > Modem tab.
3. Select your modem.
4. Select Properties > General tab.

5. Clear the Wait for Dial Tone Before Dialing check box.
6. If you continue to receive the No Dial Tone error message after clearing the check box:
  - a. Select Start > Settings > Control Panel > Phone and Modems Options icon.
  - b. Select the Dialing Rules tab.
  - c. In the Locations list, select the location from which you are dialing.
  - d. Select Edit.
  - e. Select your location from the drop-down list in the Country/Region box.
  - f. Select Apply > OK.
  - g. Select the Modem tab.
  - h. Select your modem.
  - i. Select Properties > General tab.
  - j. Clear the Wait for Dial Tone Before Dialing check box.

**Windows XP Home and XP Professional:**

1. Select Start > Control Panel > Network and Internet Connections icon.
2. Select Phone and Modem Properties (menu in the left column) > Modem Tab.
3. Select your modem > Properties > Modem tab.
4. Clear the Wait for Dial Tone Before Dialing check box.
5. If you continue to receive the No Dial Tone error message after clearing the check box:
  - a. Select Start > Control Panel > Network and Internet Connections icon.
  - b. Select Phone and Modem Properties (menu in the left column).
  - c. Select the Dialing Rules tab.
  - d. Select your location > Edit.
  - e. Select your location from the drop-down list in the Country/Region box.
  - f. Select Apply > OK.
7. Select the Modem tab.
8. Select your modem > Properties.
9. Clear the Wait for Dial Tone Before Dialing check box.

## **Accessing Preinstalled Communication Software**

To use preinstalled modem software for terminal emulation and data transfer, follow these steps:

### **Windows 98:**

Select Start > Programs > Accessories > HyperTerminal.

### **Windows 2000 Professional:**

1. Start > Programs > Accessories > Communications.
2. Select the appropriate terminal emulation program or internet connection wizard.

### **Windows XP Home or Windows XP Professional:**

1. Start > All Programs > Accessories > Communications.
2. Select the appropriate fax or terminal emulation program or internet connection wizard.

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## Connecting to a Network

Your notebook has an RJ-45 network jack, an internal NIC (network interface card), preinstalled network drivers, and may have a network cable.



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Networking requiring connection to domains is not supported in Windows XP Home Edition.

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Your notebook supports:

- Network speeds up to 10 Mbps when connected to a 10BaseT network and 100 Mbps when connected to a 100BaseTX network.
- Can be connected to a network whether or not the internal modem is connected to a telephone line.
- 56bitDES or 3DES or “null” encryption with MD5 or SHA-1 integrity.
- IPSec Authentication Header (AH) transform algorithms: MD5 and SHA-1.



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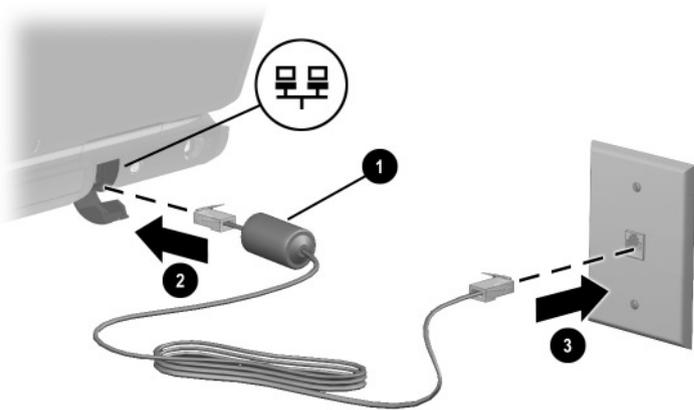
If your notebook is connected to a network, you may want to confer with your network administrator before changing network settings.

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## Connecting a Network Cable

A network cable has an 8-pin RJ-45 network connector at each end and may contain noise suppression circuitry, which prevents interference with TV and radio reception.

1. Orient the end of a network cable with noise suppression circuitry **1** toward the RJ-45 network jack on the notebook.
2. Plug the network cable into the RJ-45 network jack **2** on the notebook.
3. Plug the other end of the cable into an RJ-45 network jack **3**.
4. Start or restart the notebook.
5. Connect to the network.



**Connecting a network cable**