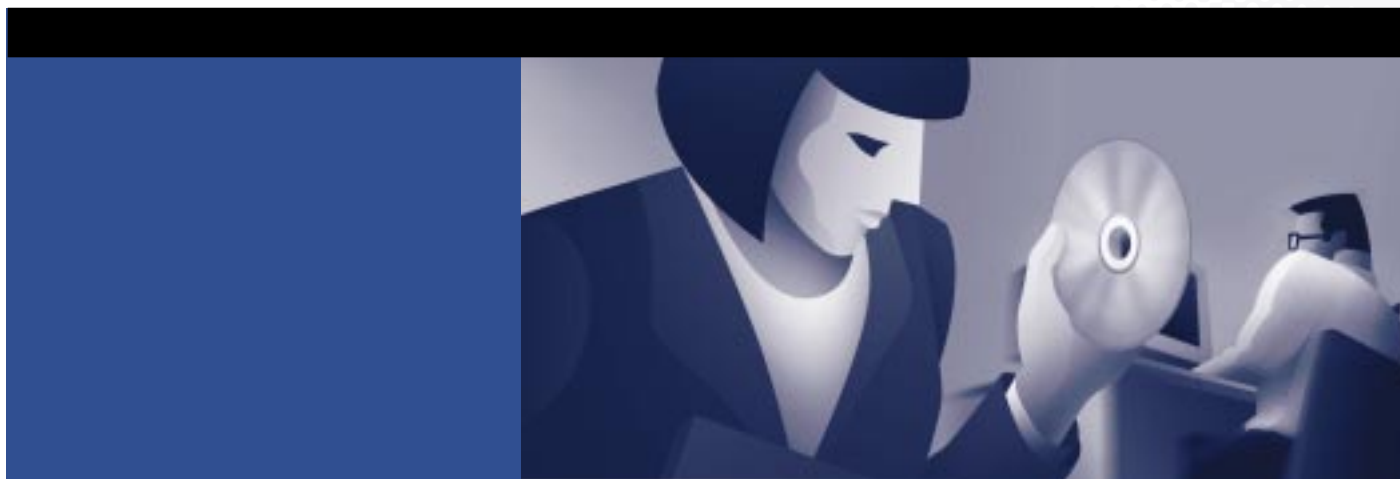




Quick Start User Guide



## Cisco CVA122/122E Cable Voice Adapter

- 1 Introduction
- 2 Installing the Cisco CVA122/122E Cable Voice Adapter
- 3 Installing the USB Driver for a Windows PC
- 4 Configuring the Computer for Ethernet Network Access
- 5 Cisco Limited Warranty and Software License
- 6 United States Federal Communications Commission Notice
- 7 Translated Safety Warnings

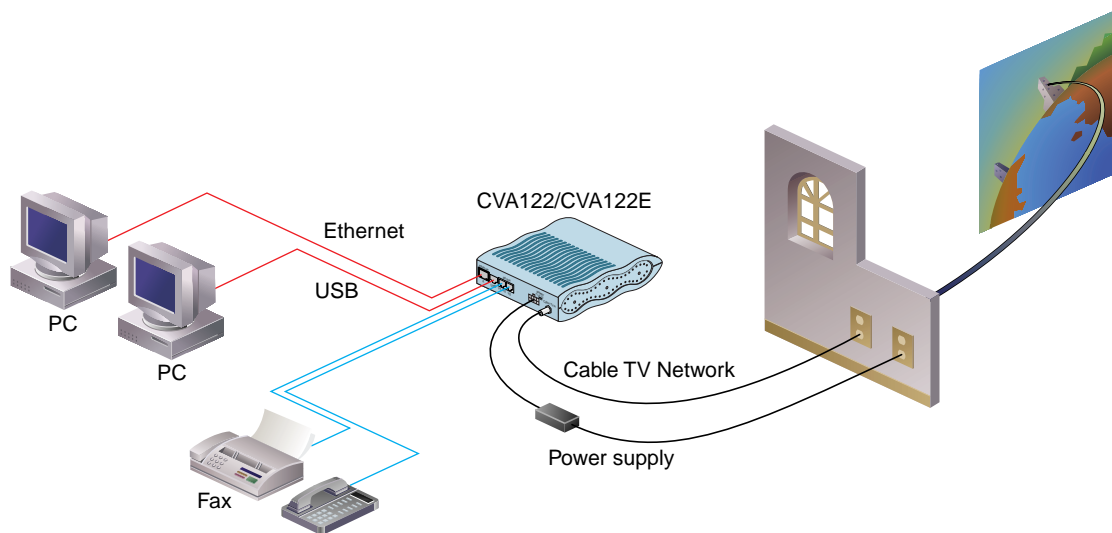




# 1 Introduction

This guide provides the basic information needed to install the Cisco CVA122/122E Cable Voice Adapter. The Cisco CVA122/122E Cable Voice Adapter connects a cable TV (CATV) network to one or more computers using either an Ethernet network card or a Universal Serial Bus (USB) port. The Cisco CVA122/122E Cable Voice Adapter supports both bidirectional data traffic and toll quality Voice over IP (VoIP) traffic over a high-bandwidth cable connection.

**Figure 1** Typical Cisco CVA122/122E Cable Voice Adapter Installation



**Note** The Cisco CVA122 Cable Voice Adapter conforms to the DOCSIS specifications, which are compatible with cable systems throughout the world. The Cisco CVA122E Cable Voice Adapter conforms to the EuroDOCSIS specifications, which are compatible with cable systems in Europe and parts of Asia. The procedures for installing the Cisco CVA122 and Cisco CVA122E Cable Voice Adapters are identical.

## System Requirements

This section identifies the hardware requirements necessary to install and operate the Cisco CVA122/122E Cable Voice Adapter.

- Cisco CVA122/122E Cable Voice Adapter and power supply unit
- (Optional) Uninterruptible Power Supply (UPS) for the Cisco CVA122/122E Cable Voice Adapter
- If using Ethernet connectivity:
  - Straight-through Ethernet cable (included with some packaging options for the Cisco CVA122/122E Cable Voice Adapter)
  - Computer with an Ethernet network adapter, and TCP/IP protocols installed and configured so an IP address is assigned automatically by a DHCP server
  - Windows 95, Windows 98, Windows 98 Second Edition, Windows NT, Windows 2000, Windows Millennium



**Note** The service provider might support other types of PCs and CPE devices for network connectivity. At the minimum, these CPE devices must meet the following requirements: 10Base T Ethernet connectivity, TCP/IP networking software, and the ability to obtain an IP address using the DHCP protocol.

- If using USB connectivity:
  - Cisco USB driver software CD (included with the Cisco CVA122/122E Cable Voice Adapter)
  - Host-to-device USB cable (type “A” to type “B” connectors, not included)
  - Computer equipped with a USB port
  - Windows 98, Windows 98 Second Edition, Windows 2000, Windows Millennium
- Cable TV (CATV) outlet and coaxial cable
- Coaxial cable splitter (not included; required only if using the same coaxial cable for both the TV and the Cisco CVA122/122E Cable Voice Adapter)
- (Optional) If connecting analog telephone, modem, or fax devices:
  - Ensure that all telephone, modem, or fax devices are analog devices that use a tone dial set.
  - A maximum of 2 single-line or 1 dual-line telephone, modem, or fax devices using RJ-11 connectors.
  - Telephone cables (four-wire cable with RJ-11 connectors, not included) for connecting telephone, modem, and fax devices to the Cisco CVA122/122E Cable Voice Adapter.
  - If connecting multiple telephones, modems, or fax devices to a telephone line, be sure that the sum of the Ringer Equivalence Number (REN) of all devices on any one voice port does not exceed five. The REN value is a measure of the AC load that the device places on a voice line and is typically listed on each device. If too many devices are connected on the same line, the telephones might not ring properly, and you might have difficulty completing telephone calls.



## 2 Installing the Cisco CVA122/122E Cable Voice Adapter

This section provides the basic information necessary to install the Cisco CVA122/122E Cable Voice Adapter. The following figure shows the locations for connecting all cables to the connectors on the rear panel of the Cisco CVA122/122E Cable Voice Adapter. Use Figure 2 as a guide to connecting the required cables.

Figure 2 Cisco CVA122/122E Cable Voice Adapter

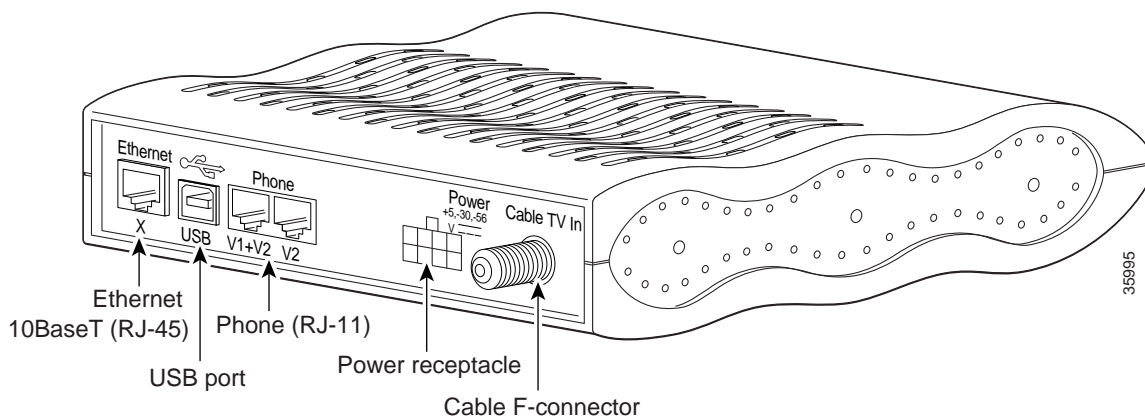
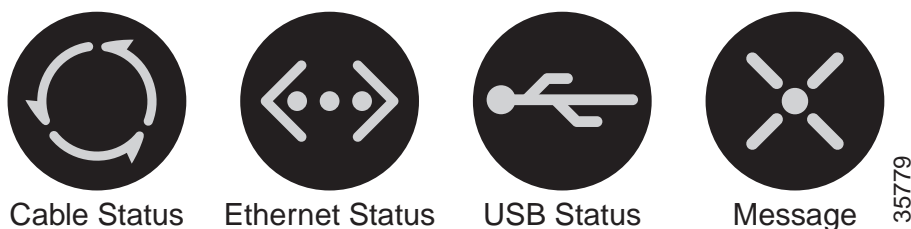



Figure 3 figure identifies the LEDs on the front panel of the Cisco CVA122/122E Cable Voice Adapter.

Figure 3 Cisco CVA122/122E Cable Voice Adapter LEDs



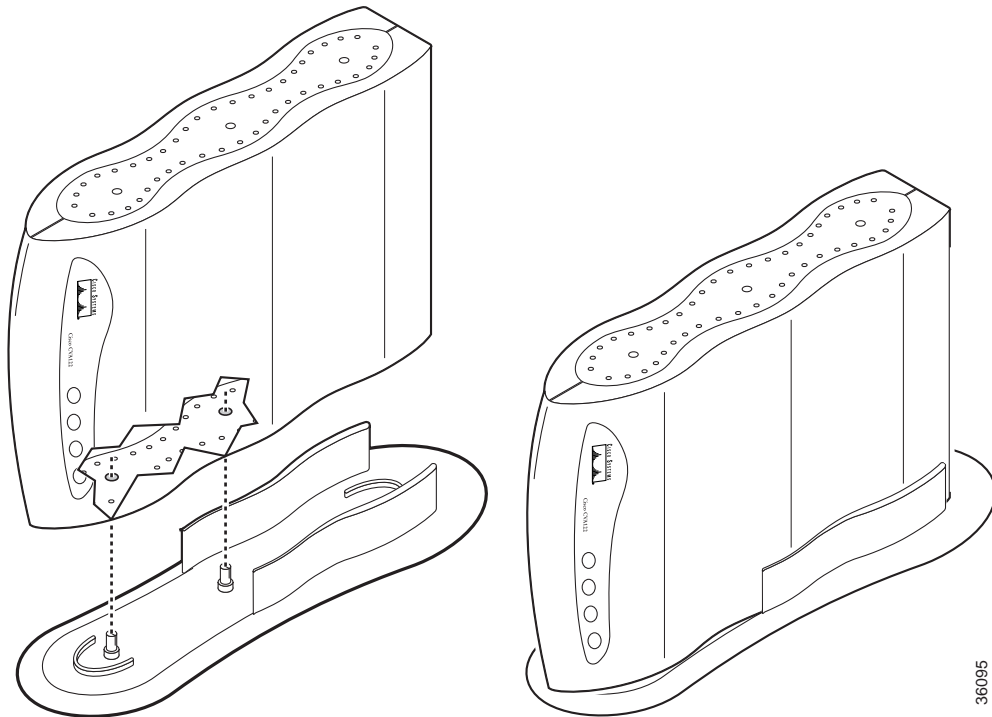
 **Warning** This warning symbol means *danger*. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Review the safety warnings in the section Translated Safety Warnings, page 34, before proceeding with the installation.

## Physical Placement

You can install the Cisco CVA122/122E Cable Voice Adapter in the following ways:

- Placed flat on a desktop or other stable, flat surface. Do not install the Cisco CVA122/122E Cable Voice Adapter on an uneven or soft surface.
- Placed vertically on a desktop when placed in the support stand that is shipped with the unit. See Figure 4 for details.

**Figure 4** Side-Mounting the Cisco CVA122/122E Cable Voice Adapter

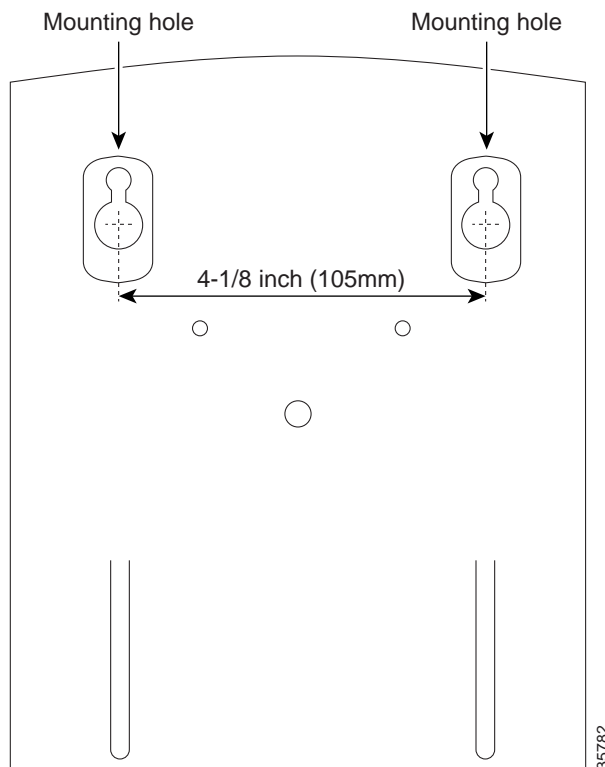


**Note** The Cisco CVA122/122E Cable Voice Adapter can be mounted vertically on either of its two sides, but for stability, Cisco recommends using only the orientation shown in Figure 4, so that the coaxial cable connector and its attached cable are at the bottom.



- Mounted on a wall, using the following instructions:
  - Choose a location on a suitable wall (wood, cement, or drywall) that is close to the cable TV drop connection and all devices to be connected at the subscriber site.
  - If also mounting the Uninterruptible Power Supply (UPS) for the Cisco CVA122/122E Cable Voice Adapter, mount it first, using the instructions that accompany the UPS, to ensure that the wall and location are suitable for both the UPS and the cable voice adapter.
  - Drill two holes 4-1/8 in. (105 mm) apart, using Figure 5 (not to scale) as a guideline:

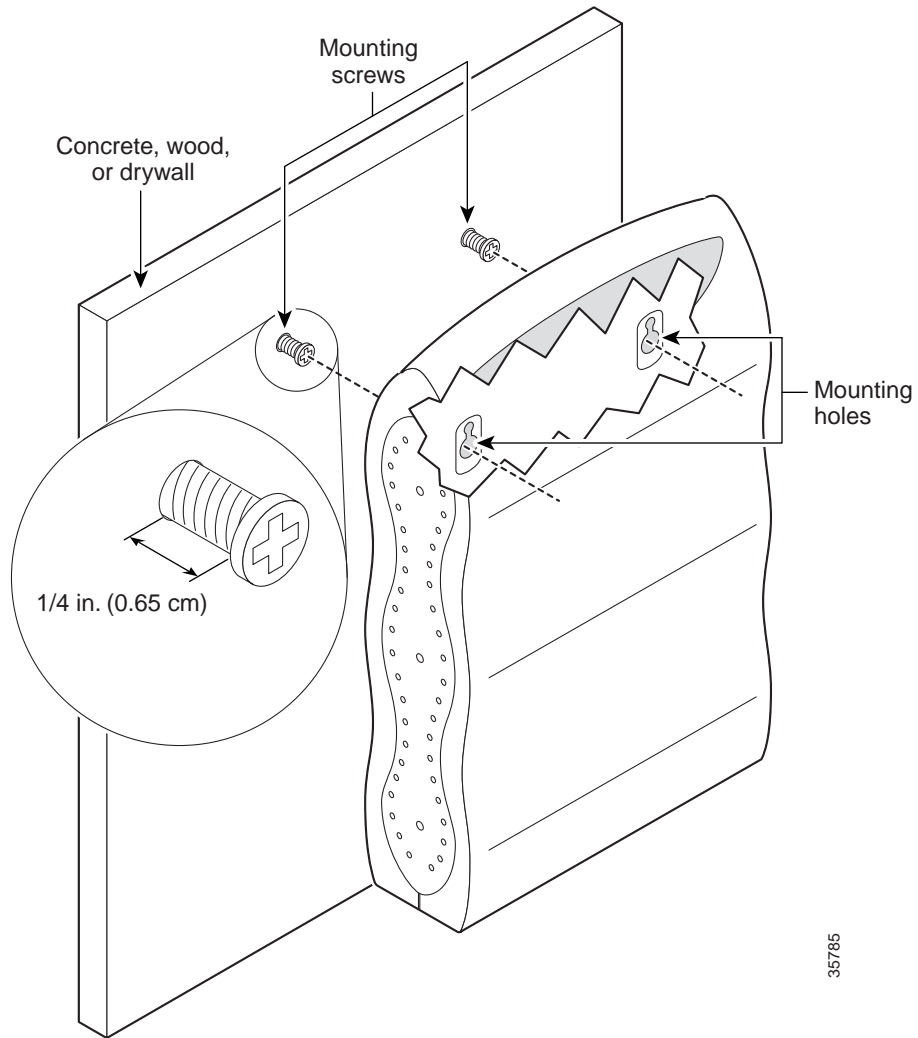
**Figure 5** *Wall-Mounting Guidelines*



- Install two 1/4 in. (6 mm) screws, extending about 1/4 in. (6mm) from the wall. (The anchors or mounting screws should be appropriate for the type of wall being used.)

- Hang the Cisco CVA122/122E Cable Voice Adapter on the two screws, with the rear panel facing down toward the ground. See Figure 6:

**Figure 6** *Wall-Mounting the Cisco CVA122/122E Cable Voice Adapter*







Regardless of the mounting method you choose, you should follow these guidelines:

- Place the Cisco CVA122/122E Cable Voice Adapter close to the cable TV drop connection and all devices to be connected at the subscriber site.
- The top and sides of the cable voice adapter must remain unobstructed to ensure adequate airflow and to prevent the unit from overheating.
- Leave enough space at the rear of the cable voice adapter to allow sufficient space for the connected cables without crimping.

## Powering the Computer ON


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**Step 1** Power ON your computer and wait until it boots to the Windows desktop.

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## Connecting Power to the Cisco CVA122/122E Cable Voice Adapter

This procedure connects the Cisco CVA122/122E Cable Voice Adapter to its power supply and to the wall outlet supplying power to the unit. The cable voice adapter is meant to be left on at all times, and therefore, has no power switch.

 **Note** Always use the power supply unit that is supplied with the Cisco CVA122/122E Cable Voice Adapter. If you are using the Cisco CVA122 Uninterruptible Power Supply (UPS), connect it to the cable voice adapter and to the power outlet, using the instructions that are shipped with the unit.

- 
- Step 1** Connect the eight-pin connector on the power supply cable into the socket labeled “Power” on the rear panel of Cisco CVA122/122E Cable Voice Adapter. Push the plug into the connector until it locks securely.
- Step 2** Connect the plug end of the power cord into the other end of the power supply.
- Step 3** Plug the prong end of the power cord into the electrical wall outlet. Power is immediately supplied to the cable voice adapter.
- Step 4** Verify that the Message LED on the front panel of the Cisco CVA122/122E Cable Voice Adapter starts blinking a few moments after power is applied. If this LED does not come on or blink, check that the power supply cable is plugged into the cable voice adapter and into a working wall outlet.
-

## Connecting the Cisco CVA122/122E Cable Voice Adapter to the Cable System

This procedure connects the cable voice adapter to the cable network. This is required for all installations.


- 
- Step 1** If you are using the same outlet for both cable TV and cable network service, install a cable splitter/directional coupler to provide separate signals for the TV and cable network signals. (Contact your service provider for details on how to properly connect a cable splitter or directional coupler.)
  - Step 2** Plug one end of the coaxial cable into the cable TV wall outlet.
  - Step 3** Connect the other end of the coaxial cable to the connector on the rear panel of the Cisco CVA122/122E Cable Voice Adapter that is labeled **Cable TV In**.
  - Step 4** Hand-tighten each connector, making sure that each is finger-tight.
  - Step 5** The Message LED should stop blinking, and the Cable Status LED should turn on solid within ten minutes after connecting the Cisco CVA122/122E Cable Voice Adapter to the cable TV wall outlet. If the Cable Status LED does not come on solid after ten minutes, check that the coaxial cable is properly plugged into the correct cable TV outlet and in to the cable voice adapter's **Cable TV In** connector.
- 

## Connecting to Telephones, Modems, or Fax Devices (optional)


If you have purchased voice services from your service provider, use the following procedure to connect the Cisco CVA122/122E Cable Voice Adapter to telephone, modem, or fax devices. If you have not purchased voice services, skip to the “Connecting to the Computer (Ethernet, optional)” section on page 11.

- 
- Step 1** Obtain the telephone number assignments for each voice port from your service provider, and label each telephone, modem, or fax device with its assigned number.
  - Step 2** Connect the RJ-11 end of this cable to the appropriate voice port (labeled “V1+V2” or “V2”) on the rear panel of the Cisco CVA122/122E Cable Voice Adapter. Press the cable firmly into the receptacle.
  - Step 3** Connect the other end of the cable to the telephone, modem, or fax device that has been given the number assigned for that voice port. Press the cable firmly into the receptacle.



 **Note** The V1+V2 connector supports either a single-line or a two-line analog telephone that uses a four-wire connection. If using a two-line telephone, the second line behaves as if it were a single-line telephone plugged into the V2 voice port; you can then plug a second device in to the V2 port and use it as an extension to the second line telephone.


**Step 4** Repeat Steps 2 and 3 as needed to connect another telephone device to the other voice port.

 **Caution** Do not plug the Cisco CVA122/122E Cable Voice Adapter into any RJ-11 jack in your home, unless otherwise instructed by your service provider. The cable voice adapter must not be plugged in to the Public Telephone Switched Network (PTSN) or in to any jack that is connected to the PTSN; doing so will damage the cable voice adapter.

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## Connecting to the Computer (Ethernet, optional)

These steps connect the Ethernet port on the Cisco CVA122/122E Cable Voice Adapter to a computer using an Ethernet network adapter card. This is required only when you are using the Ethernet port to connect the cable voice adapter to a computer; if you are using the USB port, see the next section.

 **Note** Do not proceed with these steps if your computer does not have a working Ethernet interface. If necessary, install an Ethernet network adapter card according to the manufacturer's instructions before proceeding.

---

**Step 1** Plug one end of the supplied straight-through Ethernet cable to the RJ-45 connector labeled Ethernet on the rear panel of the Cisco CVA122/122E Cable Voice Adapter.

**Step 2** Plug the other end of the Ethernet cable into the RJ-45 connector on your computer's Ethernet network adapter.

**Step 3** Verify that the Ethernet Status LED on the front panel of the Cisco CVA122/122E Cable Voice Adapter is on. If this LED does not come on, check that the Ethernet cable is plugged into the correct RJ-45 connector on your computer and that the computer is turned on. Also verify that the other end of the cable is plugged into the Ethernet connector on the Cisco CVA122/122E Cable Voice Adapter.

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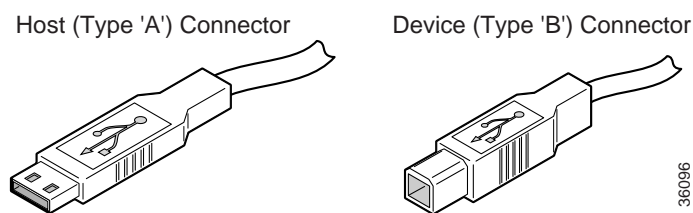
If the steps above do not correct the problem, check that the Ethernet adapter is configured for TCP/IP operation, as described in the "Configuring the Computer for Ethernet Network Access" section on page 22.

## Connecting to the Computer (USB, optional)


These steps connect the Cisco CVA122/122E Cable Voice Adapter to a computer using the USB port. This is required only when you are making a USB connection to a computer; if you are using an Ethernet port, see the previous section.

- 
- Step 1** Before making any connection, verify the following requirements for a USB connection:
- The computer is running Windows 98, Windows 98 Second Edition, Windows Millennium, or Windows 2000. Windows 95 and Windows NT do not support USB networking connections.
  - Both the Cisco CVA122/122E Cable Voice Adapter and the computer must be powered on.
  - If using a USB hub, verify that it is already installed and working before connecting the Cisco CVA122/122E Cable Voice Adapter. (A USB hub allows multiple devices to be connected to one PC, but it does not allow multiple computers to be connected to the Cisco CVA122/122E Cable Voice Adapter.)
- Step 2** Plug the broad, flat plug (the type “A” or host-end, shown in the figure on the next page) of the USB cable into the USB port on your computer (or USB hub).
- Step 3** Plug the other, rectangular end of the USB cable (the type “B” or device-end, shown in Figure 7) into the USB port on the rear panel of the Cisco CVA122/122E Cable Voice Adapter.

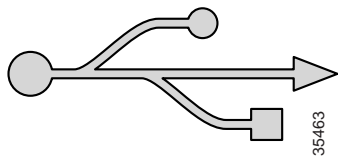
**Figure 7** USB Connectors





 **Note** The USB port on the Cisco CVA122/122E Cable Voice Adapter is between the Ethernet and telephone connectors, and it is labeled with the USB icon that is shown in Figure 8:


**Figure 8**    *USB Icon*



- Step 4** Verify that the USB Status on the front panel of the Cisco CVA122/122E Cable Voice Adapter turns on. If this LED does not come on, check that each connector on the USB cable is fully inserted into the USB port on the computer (or USB hub) and the USB port on the Cisco CVA122/122E Cable Voice Adapter. If you are using a USB hub, verify that it is properly connected to the computer.
- Step 5** The Windows software detects the installation of a new USB device and automatically begins the software installation process. Proceed to the next section, “Installing the USB Driver for a Windows PC” for instructions on installing the USB software driver.
-

### 3 Installing the USB Driver for a Windows PC


This section describes how to install the Cisco USB driver software on a PC that is running Windows 98, Windows 98 Second Edition, Windows Millennium, or Windows 2000. This step is necessary to establish communications over the USB interface between the PC and the Cisco CVA122/122E Cable Voice Adapter.

 **Note** The USB driver needs to be installed only when you are using a USB connection with the Cisco CVA122/122E Cable Voice Adapter. Do not install the USB driver if you are not using a USB connection.

**Step 1** When the Cisco CVA122/122E Cable Voice Adapter is first connected to a PC that is running Windows 98, Windows 98 Second Edition, Windows Millennium, or Windows 2000, the following window automatically appears. Click **Next** to continue. See Figure 9:

**Figure 9** Adding a USB Device to Windows



 **Note** The Windows software might not automatically detect the presence of the USB interface until the Cisco CVA122/122E Cable Voice Adapter completes the registration process with the cable system and is online. This can take up to five minutes, depending on the cable network and services purchased from the service provider.



**Step 2** When the next screen appears, choose the “Search for the best driver” option and click **Next**.  
See Figure 10:

**Figure 10** Searching for the USB Driver



**Step 3** When you are prompted for where the Windows software should search for the USB driver, insert the Cisco USB software driver CD into your computer's CD-ROM drive. Then choose the CD-ROM drive option and click **Next**. See Figure 11:

**Figure 11** *Selecting the CD-ROM Drive*








**Step 4** The Windows software searches the CD and displays the following driver information. Click **Next** to continue. See Figure 12:

**Figure 12** Driver Installation Screen



 **Note** The exact text and driver filename displayed in these windows can vary, depending on the model number and software version of the Cisco CVA122/122E Cable Voice Adapter.

**Step 5** If prompted to enter your Windows installation CD-ROM, remove the Cisco USB driver CD, insert your Windows installation CD, and click **OK**. (This step might not be required, depending on how you installed the Windows software on your computer.)

**Step 6** The Windows software displays the following status window. Click **Finish** to continue. See Figure 13:

**Figure 13** *Driver Installation Status Window*





**Step 7** Windows then installs the TCP/IP drivers that are necessary for USB networking. Click **Next** to continue. See Figure 14:

**Figure 14** *Networking Driver Installation Screen*



**Step 8** The Windows software prompts how it should search for the required drivers. Choose the “Search for the best driver” option and select the CD-ROM drive. Click **Next** to continue.

**Step 9** After installing the TCP/IP drivers, Windows displays the following status window. Click **Finish** to continue. See Figure 15:

**Figure 15** *Driver Installation Status Window*



**Step 10** The Windows software completes installing the USB driver software and prompts you to restart your PC. Click **Yes** to restart your PC, which will activate the driver and begin communications with the Cisco CVA122/122E Cable Voice Adapter. See Figure 16:

**Figure 16** *Restart Screen*






This concludes the installation procedures for the Cisco CVA122/122E Cable Voice Adapter when using USB connectivity—no further configuration is needed. If, however, you are also using Ethernet connectivity to connect to the Cisco CVA122/122E Cable Voice Adapter, proceed to the next section to configure the TCP/IP software for Ethernet networking.



**Note** Your service provider might have their own configuration instructions that are needed to access their services. If so, please complete those procedures before continuing.

## 4 Configuring the Computer for Ethernet Network Access

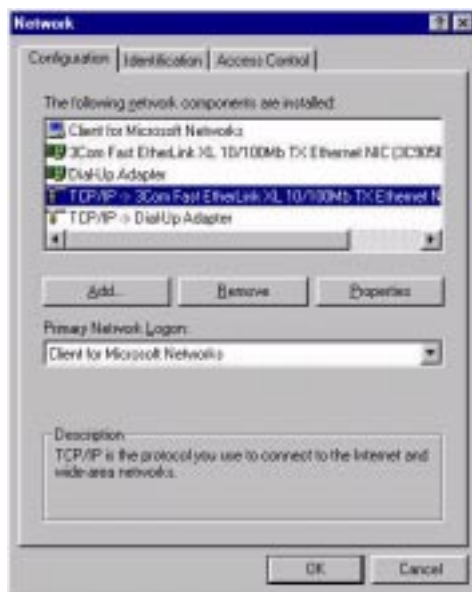
If your PC uses an Ethernet card to connect to the Cisco CVA122/122E Cable Voice Adapter, the final installation step is to modify the TCP/IP configuration for that computer. This procedure is different for computers running Windows 95/98 and Windows NT/2000.

 **Note** This step does not need to be done for computers using a USB connection, because installing the USB software driver also installs and configures the TCP/IP software.

### TCP/IP Configuration for Windows 95/98

- Step 1** Choose **Start>Settings>Control Panel** and double-click the **Network** icon in the Control Panel.
- Step 2** Click the **Configuration** tab in the Network window to display the list of network adapters and other network components.
- Step 3** Select the **TCP/IP** option that is linked with your Ethernet card and click the **Properties** button. See Figure 17:

*Figure 17 Ethernet Properties Window*





- Step 4** Click the **IP Address** tab, click **Obtain an IP address automatically**, and click **OK**. This configures the computer to obtain its IP address from a Dynamic Host Configuration Protocol (DHCP) server during boot.
  - Step 5** If your service provider has given you values for a default gateway, click the **Gateway** tab and enter those values for the default gateway. Otherwise, leave these fields blank.
  - Step 6** If your service provider has supplied values for Dynamic Name Server (DNS) configuration, click the **DNS Configuration** tab. Then click the **Enable DNS** button and enter the DNS server information supplied by your provider.
  - Step 7** Click **OK** to accept the new settings, and click **OK** again to dismiss the configuration window.
  - Step 8** Restart the computer to force it to obtain a new IP address from the DHCP server.
- 



**Note** Your service provider might have their own configuration instructions that are needed to access their services. If so, please complete those procedures now.

## TCP/IP Configuration for Windows NT

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- Step 1** Choose **Start>Settings>Control Panel**.
- Step 2** Double-click **Network** and select the **Protocols** tab.

**Step 3** Click the **TCP/IP Protocols** entry in the list, then click **Properties** and select the **IP Address** tab. See Figure 18:

*Figure 18 TCP/IP Protocols Configuration Window*



**Step 4** Click **Obtain an IP address automatically**.

**Step 5** Click **Apply**.

**Step 6** Select the **DNS** tab and enter the DNS server information supplied by your cable service provider.

**Step 7** Click **OK**.

**Step 8** Restart the computer to force it to obtain a new IP address from the DHCP server.



**Note** Your service provider might have their own configuration instructions that are needed to access their services. If so, please complete those procedures now.

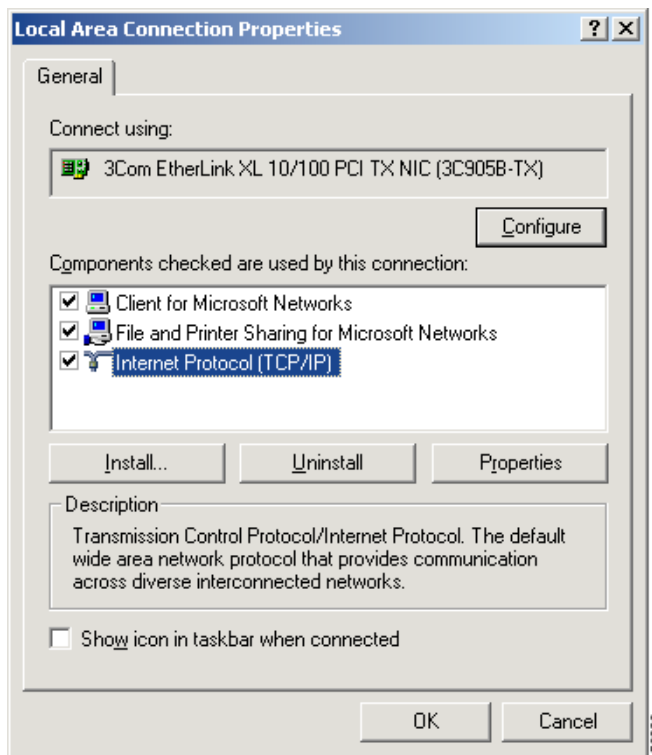




## TCP/IP Configuration for Windows 2000

- Step 1** Choose **Start>Settings>Network and Dial-up Connections:Local Area Connection**.
- Step 2** In the Local Area Connection Status window, click the **Properties** button.
- Step 3** If necessary, select your computer's Ethernet card in the box at the top of the window. Then select the **Internet Protocol (TCP/IP)** entry in the list. See Figure 19:

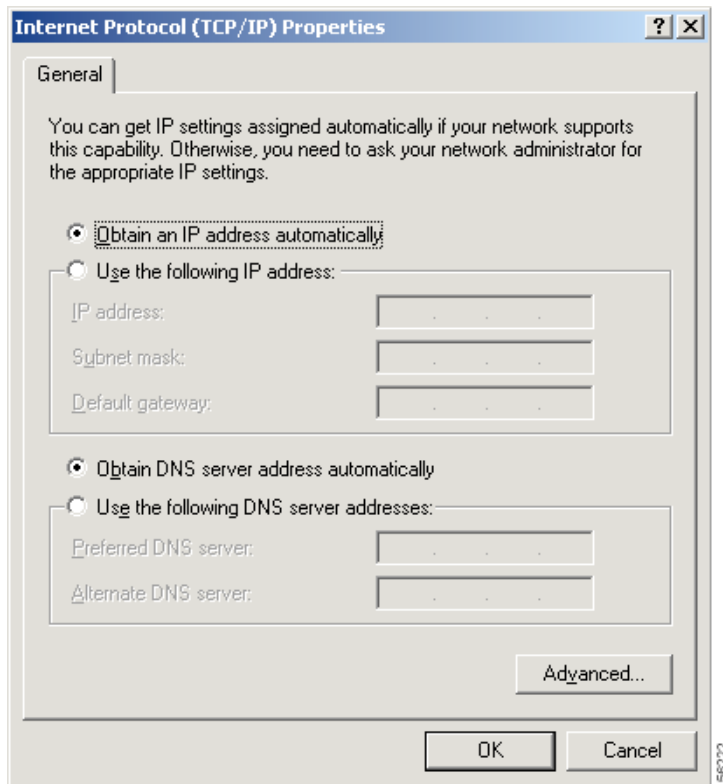
*Figure 19 Ethernet Device Selection Window*



- Step 4** Click the **Properties** button.

**Step 5** Select **Obtain and IP address automatically** and **Obtain DNS server address automatically**. See Figure 20:

**Figure 20** DNC Configuration Window



**Step 6** Click **OK** twice and click **Close** once to dismiss all of the networking windows.

**Step 7** Restart the computer to force it to obtain a new IP address from the DHCP server.



**Note** Your service provider might have their own configuration instructions that are needed to access their services. If so, please complete those procedures now.



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## Warranty Information

The manufacturer's warranty period for your new Cisco product can be found on the separate card that accompanies this booklet. Specific information about the warranty is provided in several languages at the following URL:

[http://www.cisco.com/univercd/cc/td/doc/es\\_inpk/cetrans.htm](http://www.cisco.com/univercd/cc/td/doc/es_inpk/cetrans.htm)





## 6 United States Federal Communications Commission Notice

The following information is for FCC compliance of Class A devices: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio-frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case users will be required to correct the interference at their own expense.

The following information is for FCC compliance of Class B devices: The equipment described in this manual generates and may radiate radio-frequency energy. If it is not installed in accordance with Cisco's installation instructions, it may cause interference with radio and television reception. This equipment has been tested and found to comply with the limits for a Class B digital device in accordance with the specifications in part 15 of the FCC rules. These specifications are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

You can determine whether your equipment is causing interference by turning it off. If the interference stops, it was probably caused by the Cisco equipment or one of its peripheral devices. If the equipment causes interference to radio or television reception, try to correct the interference by using one or more of the following measures:

- Turn the television or radio antenna until the interference stops.
- Move the equipment to one side or the other of the television or radio.
- Move the equipment farther away from the television or radio.
- Plug the equipment into an outlet that is on a different circuit from the television or radio. (That is, make certain the equipment and the television or radio are on circuits controlled by different circuit breakers or fuses.)

Modifications to this product not authorized by Cisco could void the FCC approval and negate your authority to operate the product.

## 7 Translated Safety Warnings

### Safety Information

Before you install your Cisco product, read the FCC and other regulatory material, including the safety and site preparation section in this *User Guide* and the other documentation for this product. For your safety, Cisco includes translated safety warnings in this document.

### Warning Definition



**Warning** This warning symbol means *danger*. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents.

**Waarschuwing** Dit waarschuwingssymbool betekent gevaar. U verkeert in een situatie die lichamelijk letsel kan veroorzaken. Voordat u aan enige apparatuur gaat werken, dient u zich bewust te zijn van de bij elektrische schakelingen betrokken risico's en dient u op de hoogte te zijn van standaard maatregelen om ongelukken te voorkomen.

**Varoitus** Tämä varoitusmerkki merkitsee vaaraa. Olet tilanteessa, joka voi johtaa ruumiinvammaan. Ennen kuin työskentelet minkään laitteiston parissa, ota selvää sähkökytkentöihin liittyvistä vaaroista ja tavanomaisista onnettomuuksien ehkäisykeinoista.

**Attention** Ce symbole d'avertissement indique un danger. Vous vous trouvez dans une situation pouvant causer des blessures ou des dommages corporels. Avant de travailler sur un équipement, soyez conscient des dangers posés par les circuits électriques et familiarisez-vous avec les procédures couramment utilisées pour éviter les accidents.

**Warnung** Dieses Warnsymbol bedeutet Gefahr. Sie befinden sich in einer Situation, die zu einer Körperverletzung führen könnte. Bevor Sie mit der Arbeit an irgendeinem Gerät beginnen, seien Sie sich der mit elektrischen Stromkreisen verbundenen Gefahren und der Standardpraktiken zur Vermeidung von Unfällen bewusst.

**Avvertenza** Questo simbolo di avvertenza indica un pericolo. La situazione potrebbe causare infortuni alle persone. Prima di lavorare su qualsiasi apparecchiatura, occorre conoscere i pericoli relativi ai circuiti elettrici ed essere al corrente delle pratiche standard per la prevenzione di incidenti.



**Advarsel** Dette varselsymbolet betyr fare. Du befinner deg i en situasjon som kan føre til personskade. Før du utfører arbeid på utstyr, må du være oppmerksom på de faremomentene som elektriske kretser innebærer, samt gjøre deg kjent med vanlig praksis når det gjelder å unngå ulykker.

**Aviso** Este símbolo de aviso indica perigo. Encontra-se numa situação que lhe poderá causar danos físicos. Antes de começar a trabalhar com qualquer equipamento, familiarize-se com os perigos relacionados com circuitos eléctricos, e com quaisquer práticas comuns que possam prevenir possíveis acidentes.

**¡Advertencia!** Este símbolo de aviso significa peligro. Existe riesgo para su integridad física. Antes de manipular cualquier equipo, considere los riesgos que entraña la corriente eléctrica y familiarizarse con los procedimientos estándar de prevención de accidentes.

**Warning!** Denna varningssymbol signalerar fara. Du befinner dig i en situation som kan leda till personskada. Innan du utför arbete på någon utrustning måste du vara medveten om farorna med elkretser och känna till vanligt förfarande för att förebygga skador.

## Lightning Activity Warning



**Warning** Do not work on the system or connect or disconnect cables during periods of lightning activity.

**Waarschuwing** Tijdens onweer dat gepaard gaat met bliksem, dient u niet aan het systeem te werken of kabels aan te sluiten of te ontkoppelen.

**Varoitus** Älä työskentele järjestelmän parissa äläkä yhdistä tai irrota kaapeleita ukkosilmalla.

**Attention** Ne pas travailler sur le système ni brancher ou débrancher les câbles pendant un orage.

**Warnung** Arbeiten Sie nicht am System und schließen Sie keine Kabel an bzw. trennen Sie keine ab, wenn es gewittert.

**Avvertenza** Non lavorare sul sistema o collegare oppure scollegare i cavi durante un temporale con fulmini.

**Advarsel** Utfør aldri arbeid på systemet, eller koble kabler til eller fra systemet når det tordner eller lyner.

**Aviso** Não trabalhe no sistema ou ligue e desligue cabos durante períodos de mau tempo (trovoada).

**¡Advertencia!** No operar el sistema ni conectar o desconectar cables durante el transcurso de descargas eléctricas en la atmósfera.

**Warning!** Vid áska skall du aldriq utföra arbete på systemet eller ansluta eller koppla loss kablar.

## Incorrect Connection Warning



**Warning** Incorrect connection of this or connected equipment to a general purpose outlet could result in a hazardous situation.

**Waarschuwing** Incorrecte aansluiting van deze of aangesloten apparatuur op een stopcontact voor algemene doeleinden kan een gevaarlijke situatie tot gevolg hebben.

**Varoitus** Tämän laitteen tai siihen liitettyjen laitteiden virheellinen kytkentä yleispistorasiaan voi aiheuttaa vaaratilanteen.

**Attention** Un branchement incorrect de cet équipement ou de l'équipement branché à une prise d'usage général peut créer une situation dangereuse.

**Warnung** Inkorrektes Anschließen von diesem oder damit verbundenen Geräten an einer Allzwecksteckdose kann eine Gefahrensituation verursachen.

**Avvertenza** Un collegamento errato di questo apparecchio, o dell'apparecchiatura a esso collegato, a una presa di uso generale può causare una situazione pericolosa.

**Advarsel** Feil kobling av dette utstyret eller tilhørende utstyr til et vanlig uttak kan føre til farlige situasjoner.

**Aviso** Uma conexão incorrecta a uma ficha de alimentação eléctrica normal, deste ou de qualquer equipamento a este conectado, poderá resultar numa situação potencialmente perigosa.

**Advertencia** La conexión incorrecta de este equipo, o del equipo conectado, a una toma o receptáculo de tipo general podría resultar en una situación peligrosa.

**Warning!** Felaktig koppling av denna eller ansluten utrustning till ett universaluttak kan orsaka riskfylld situation.

## Ring Signal Generator Warning



**Warning** This equipment contains a ring signal generator (ringer), which is a source of hazardous voltage. Do not touch the RJ-11 (phone) port wires (conductors), the conductors of a cable connected to the RJ-11 port, or the associated circuit-board when the ringer is active. The ringer is activated by an incoming call.



**Waarschuwing** Deze apparatuur brengt een belsignaal voort wat op spanningsgevaar duidt. Wanneer de bel rinkelt, mogen de RJ-11-draden (telefoon), d.w.z. de geleiders van een aan de RJ-11-poort verbonden kabel, en de bijbehorende circuitplaat, niet aangeraakt worden. De bel wordt geactiveerd door een binnenkomend analogoog gesprek.

**Varoitus** Tämä laite on varustettu soittovirran generaattorilla (puhelinkello), jossa on vaarallinen jännite. Älä koske RJ-11 (puhelimen liittymän) liitännäjohtoihin (johtimet), RJ-11-liittymään yhdistetyn kaapelin johtimiin tai piirilevyyn puhelinkellon ollessa päälle kytkettynä. Saapuva analogisoitto aktivoi puhelinkellon.

**Attention** Cet appareil contient un générateur de sonneries, source de tensions dangereuses. Lorsque la sonnerie est active, ne touchez en aucun cas les fils de port (conducteurs) du connecteur RJ11 (téléphone), les âmes du câble connecté au port RJ11 ou les cartes imprimées correspondantes. La sonnerie est activée par un appel entrant.

**Warnung** Dieses Gerät enthält einen Rufsignalgeber (Rufumsetzer), der unter gefährlicher Spannung steht. Die RJ-11 (Telefon-) Anschlußdrähte (Leiter), die Leiter eines im RJ-11-Anschluß eingesteckten Kabels bzw. die dazugehörige Leiterplatte auf keinen Fall berühren, wenn der Rufumsetzer aktiviert ist. Der Rufumsetzer wird aktiviert, wenn ein Analoganruf eingeht.

**Avvertenza** Questa apparecchiatura contiene un generatore di segnali di chiamata (suoneria) che origina un voltaggio pericoloso. Quando la suoneria è attivata, non toccare l' RJ-11 (telefono), i fili della porta (conduttori), i conduttori di un cavo collegato alla porta RJ-11 o l' associata scheda a circuiti stampati. La suoneria è attivata da un segnale di chiamata analogica in arrivo.

**Advarsel** Dette utstyret inneholder en ringesignalgenerator (ringeklokke) med farlig spenning. Berør ikke RJ-11-utgangens (telefonutgangens) ledninger (lederne), lederne til den kablen som er koplet til RJ-11-utgangen, eller tilhørende kretskort når ringeklokken er aktivert. Ringeklokken aktiveres av innkommende analoge anrop.

**Aviso** Este equipamento contém um gerador de sinal de campainha que constitui uma fonte de tensão perigosa. Não toque nos fios de porta (condutores) RJ-11 (telefone), nos condutores do cabo conectado à porta RJ-11 ou na placa de circuito associada quando a campainha estiver activa. A campainha é activada pela entrada de uma chamada analógica.

**¡Advertencia!** Este equipo contiene un generador de señal de llamada (timbre), el cual es una fuente de tensión peligrosa. No toque los alambres de la puerta (condutores) RJ-11 (teléfono), ni los conductores de un cable conectado a la puerta RJ-11, ni la placa del circuito relacionado cuando el timbre está activo. El timbre es activado por medio de una llamada de entrada analógica.

**Warning!** Denna utrustning innehåller en tongenerator (ringklocka) med farlig spänning. Vidrör inte RJ-11-portens (telefonportens) ledningar (ledarna), ledarna hos kabel som är ansluten till porten RJ-11 eller tillhörande kretskort när ringklockan är aktiverad. Ringklockan aktiveras av inkommande analoga anrop.

## Product Disposal Warning



**Warning** Ultimate disposal of this product should be handled according to all national laws and regulations.

**Waarschuwing** Dit produkt dient volgens alle landelijke wetten en voorschriften te worden afgedankt.

**Varoitus** Tämän tuotteen lopullisesta hävittämisestä tulee huolehtia kaikkia valtakunnallisia lakeja ja säännöksiä noudattaen.

**Attention** La mise au rebut définitive de ce produit doit être effectuée conformément à toutes les lois et réglementations en vigueur.

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**Advarsel** Endelig disponering av dette produktet må skje i henhold til nasjonale lover og forskrifter.

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DOC-7811772=