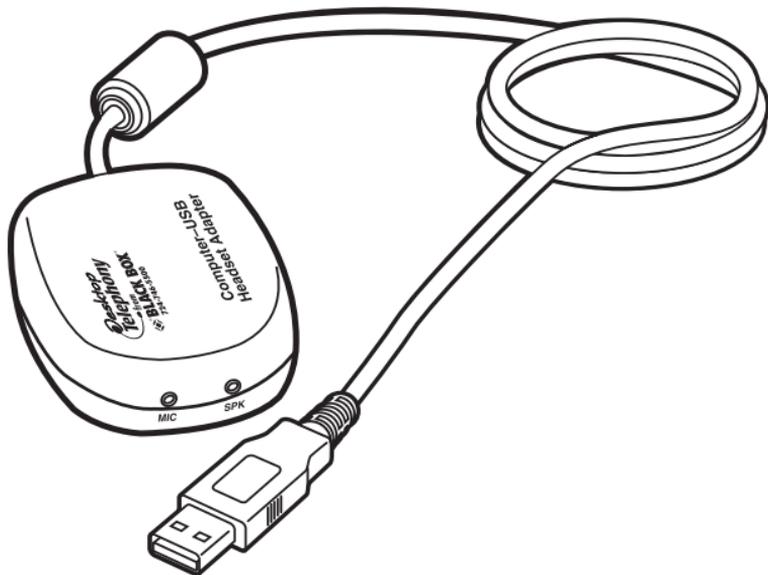




Computer USB Headset Adapter



CUSTOMER SUPPORT INFORMATION

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Mailing address: **Black Box Corporation**, 1000 Park Drive, Lawrence, PA 15055-1018

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**FEDERAL COMMUNICATIONS COMMISSION
AND
INDUSTRY CANADA
RADIO FREQUENCY INTERFERENCE STATEMENTS**

Class B Digital Device. This equipment has been tested and found to comply with the limits for a Class B computing device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. If this equipment does cause harmful interference to radio or telephone reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.

COMPUTER USB HEADSET ADAPTER

- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an experienced radio/TV technician for help.

Caution:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

To meet FCC requirements, shielded cables and power cords are required to connect this device to a personal computer or other Class B certified device.

This digital apparatus does not exceed the Class B limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de classe B prescrites dans le Règlement sur le brouillage radioélectrique publié par Industrie Canada.

**NORMAS OFICIALES MEXICANAS (NOM)
ELECTRICAL SAFETY STATEMENT****INSTRUCCIONES DE SEGURIDAD**

1. Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.
2. Las instrucciones de seguridad y operación deberán ser guardadas para referencia futura.
3. Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.
4. Todas las instrucciones de operación y uso deben ser seguidas.
5. El aparato eléctrico no deberá ser usado cerca del agua—por ejemplo, cerca de la tina de baño, lavabo, sótano mojado o cerca de una alberca, etc..
6. El aparato eléctrico debe ser usado únicamente con carritos o pedestales que sean recomendados por el fabricante.
7. El aparato eléctrico debe ser montado a la pared o al techo sólo como sea recomendado por el fabricante.
8. Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá a lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.
9. El aparato eléctrico debe ser situado de tal manera que su posición no interfiera su uso. La colocación del aparato eléctrico sobre una cama, sofá, alfombra o superficie similar puede bloquea la ventilación, no se debe colocar en libreros o gabinetes que impidan el flujo de aire por los orificios de ventilación.
10. El equipo eléctrico deber ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u otros aparatos (incluyendo amplificadores) que producen calor.

COMPUTER USB HEADSET ADAPTER

11. El aparato eléctrico deberá ser conectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.
12. Precaución debe ser tomada de tal manera que la tierra física y la polarización del equipo no sea eliminada.
13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.
14. El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.
15. En caso de existir, una antena externa deberá ser localizada lejos de las líneas de energía.
16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.
17. Cuidado debe ser tomado de tal manera que objetos líquidos no sean derramados sobre la cubierta u orificios de ventilación.
18. Servicio por personal calificado deberá ser provisto cuando:
 - A: El cable de poder o el contacto ha sido dañado; u
 - B: Objetos han caído o líquido ha sido derramado dentro del aparato; o
 - C: El aparato ha sido expuesto a la lluvia; o
 - D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o
 - E: El aparato ha sido tirado o su cubierta ha sido dañada.

TRADEMARKS USED IN THIS MANUAL

Windows® is a registered trademark of Microsoft Corporation.

Any other trademarks mentioned in this manual are acknowledged to be the property of the trademark owners.

SAFETY PRECAUTIONS

Keep the microphone away from heat sources, such as radiators, heat registers, and other similar appliances.

Keep the microphone away from liquids.

Protect the microphone from high humidity.

Keep the Computer USB Headset Adapter away from children. The Adapter contains a cord and small parts that pose a tangling and choking hazard.

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1. Specifications

Microphone Volume Control: 22.5-dB range, 1.5-dB steps, software controlled

Microphone Input: 0.25 V_{rms} (maximum)

Microphone Sensitivity: 12 V_{rms} full scale at maximum volume

Speaker Volume Control: 46.5-dB range, 1.5-dB steps, software controlled

Speaker Output: 1 V_{rms} (maximum)

Speaker Sensitivity: 3 V_{pp} (1 V_{rms}) output for a ¼-full-scale (digital word) input

Sampling Rate: Variable, controlled by host: 8 kHz, 11 kHz, 22 kHz, and 44 kHz

A/D Converter: 18-bit (sampling rate 8 kHz to 44 kHz)

D/A Converter: 18-bit (sampling rate 8 kHz to 44 kHz) with integral filtering

Formatting: Supports 8-bit and 16-bit stream

USB Compatibility: Isochronous high-speed device (12 Mbps), compliant with USB General and Audio Class

Software Drivers: Included in Windows® 98 SE, Windows 2000, and Windows Me

USB Interface: Hard-wired 2-meter (6.6-ft.) cable with Type A USB connector

Standards: FCC Part 15, Class B; CE; VCCI

Connectors: (1) USB Type A, (2) 3-5-mm phone plugs ([1] for microphone input, [1] for speaker output)

Power: From the interface

Size: 0.875"H x 1.875"W x 2.5"D (2.2 x 4.8 x 6.4 cm)

Weight: 2 oz. (57 g)

2. Introduction

2.1 Description

Connect any existing computer headset into your computer using the USB port with the Computer USB Headset Adapter. It has a 6-inch (15.2-cm) pigtail with a USB connector. The Adapter also has (2) 3.5-mm stereo jacks to connect the microphone and audio for the headset. With this adapter, you can use any manufacturer's headset instead of one with a fixed USB connector. You don't have to install new drivers. The operating system will automatically detect the new device and search for the generic driver.

2.2 Features

- Universal Serial Bus interface for audio headsets.
- Duplex (2-way) operation.
- Accommodates monaural or stereo output.

2.3 System Requirements

- Computer with Windows 98 SE, Windows 2000, or Windows Me installed
- One available USB port

3. Installation

3.1 Hardware Installation

1. Plug the audio headset microphone and speaker connectors (3.5-mm phone connectors) into the appropriately marked jacks on the USB adapter case. Individual multimedia microphones and speakers may be connected in place of a headset, if desired.
2. Connect the USB Headset Adapter to your computer's USB port. (It makes no difference whether you do this before or after the computer is powered up.) Once it is connected, the Window Wizard will detect the device and automatically launch the software driver.

NOTE

You will not need a CD or floppy disk during the installation. Simply follow the simple step-by-step instructions.

3.2 USB Composite Driver/Audio Device Driver Installation

3.2.1 USB SOFTWARE DRIVER INSTALLATION

1. Once Windows detects the presence of the USB Headset Adapter, it will automatically run the “Add New Hardware Wizard” to configure the device properly. See Figure 3-1.

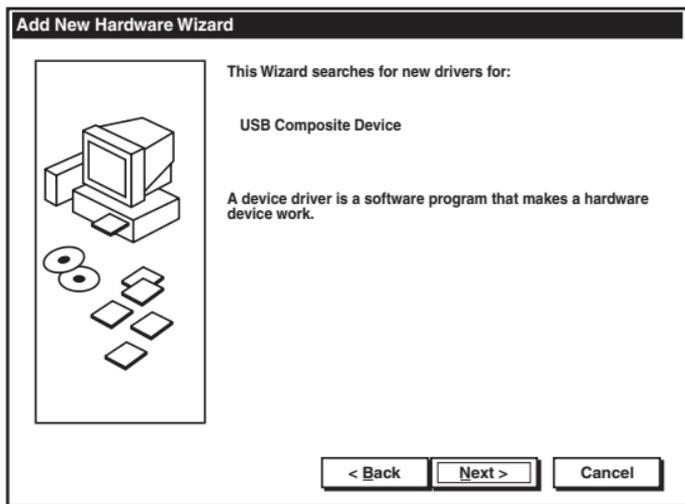


Figure 3-1. Add New Hardware Wizard screen.

2. Under the “What do you want Windows to do?” menu, select “Display a list...,” and click **Next** to continue. See Figure 3-2.

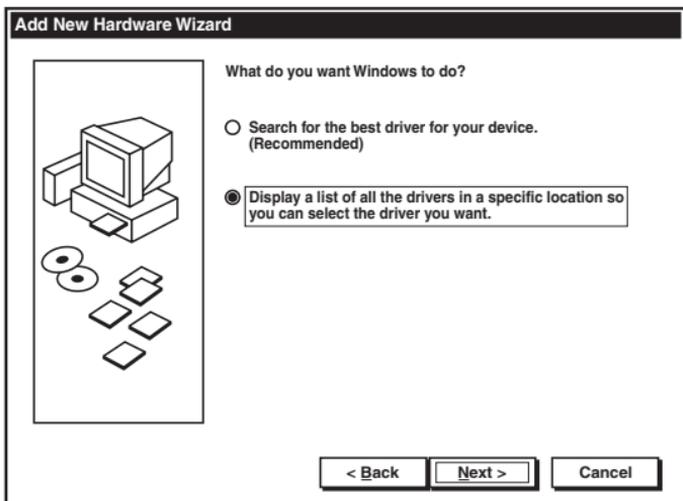


Figure 3-2. What Do You Want Windows to Do screen.

NOTE

If Wizard does not automatically detect the presence of the USB Adapter, proceed to **Chapter 6** and **Chapter 7**.

- Wizard will prompt you to select the device driver. On the menu below, make sure “Show compatible hardware” and “USB Composite Device” are selected. Click **Next** to continue. See Figure 3-3.

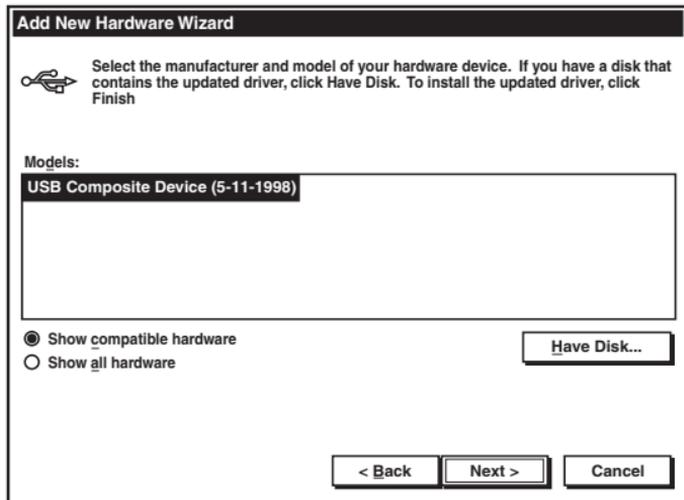


Figure 3-3. Selecting the Device Driver screen.

4. Wizard will now begin to install the software driver. Click **Next** to continue. See Figure 3-4.

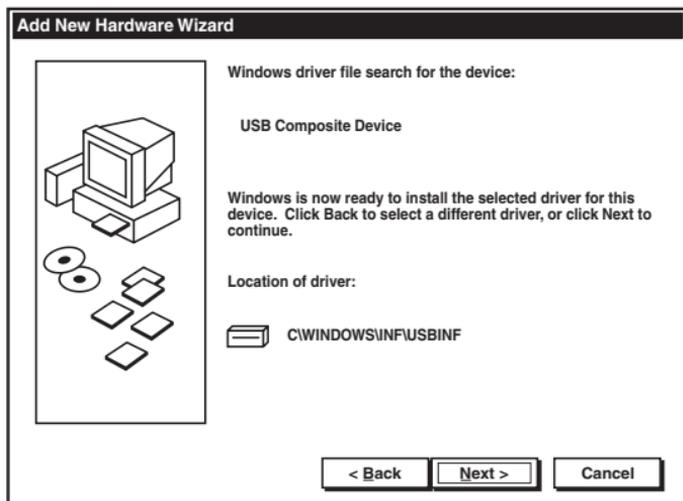


Figure 3-4. Installing the Software Driver screen.

5. This completes the USB Adapter Windows driver installation. Click **Finish** to complete the “USB Composite Device” installation. The installation will automatically proceed to “USB Human Interface Device” installation. See Figure 3-5.

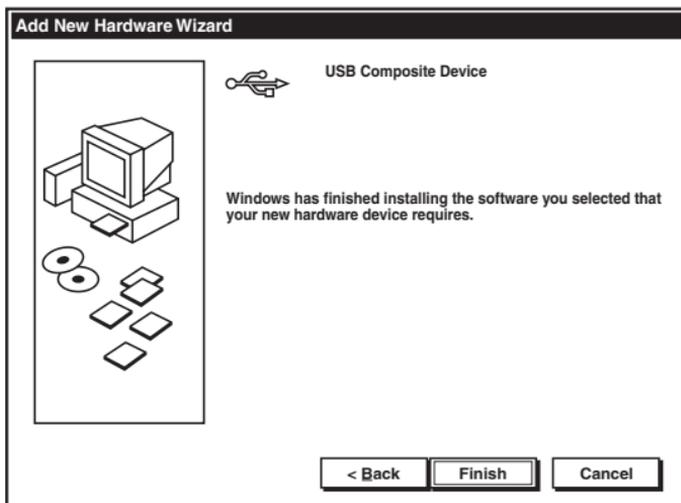


Figure 3-5. Completing the Driver Installation screen.

NOTE

This message below may appear depending on the current setting of your system. You may select “Yes” to restart your computer now. Windows will properly close all open files and restart your computer. You may select “No” and proceed to the next steps to complete the installation. But you will need to restart your computer before using the USB Adapter. See Figure 3-6.

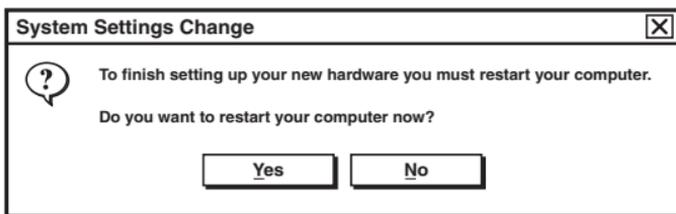


Figure 3-6. System Settings Change screen.

3.2.2 USB HUMAN INTERFACE DEVICE INSTALLATION

1. Wizard will search for drivers for the USB Human Interface Device. Click **Next** to continue. See Figure 3-7.



Figure 3-7. Add New Hardware Wizard screen.

2. Select “Display a list of all the drivers in a specific location...,” and then click **Next** to continue. See Figure 3-8.

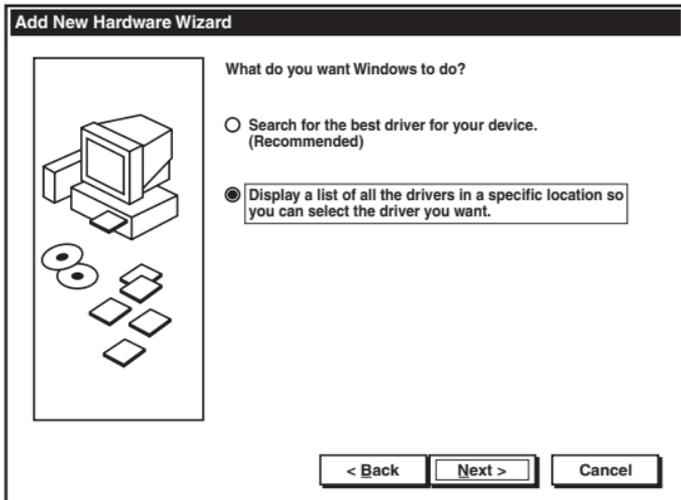


Figure 3-8. What Do You Want Windows to Do screen.

- Windows will confirm the device model. Make sure that “Show compatible hardware” and the device model “USB Audio Device” are selected. Click **Next** to continue. See Figure 3-9.

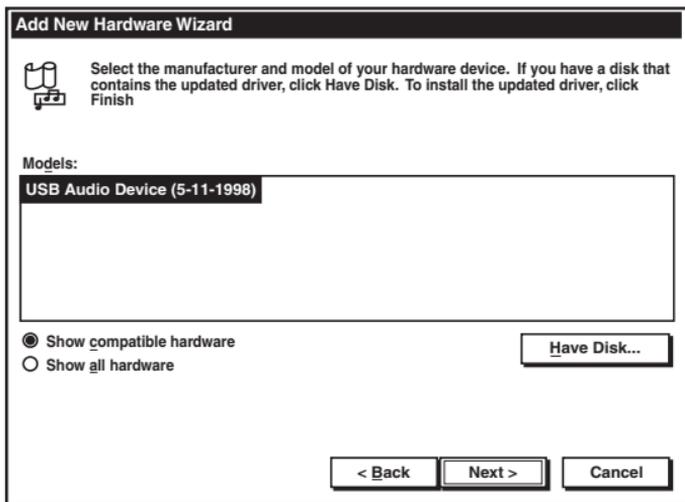


Figure 3-9. Device Driver Location screen.

- Windows will show the device driver location before installation. Click **Next** to continue.
- This concludes the “USB Human Interface Device” driver installation. Click **Finish** to continue to “USB Audio Device” installation. See Figure 3-10.

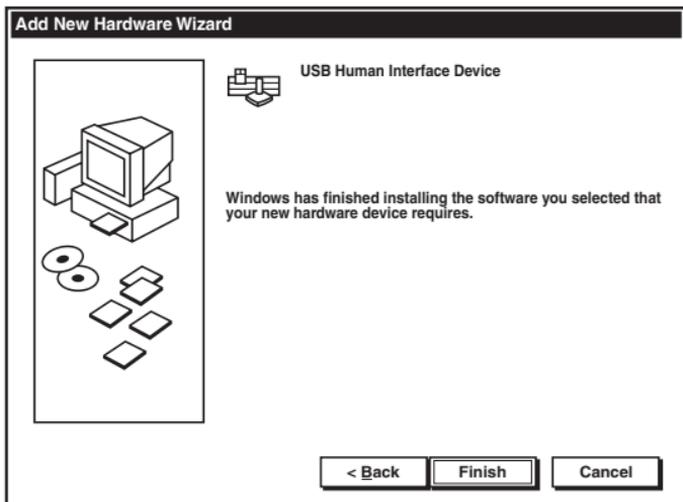


Figure 3-10. Installation Complete screen.

3.2.3 USB AUDIO DEVICE INSTALLATION

1. The “Add New Hardware Wizard” should indicate that it has found the new device (USB Audio Device). Click **Next** to proceed. See Figure 3-11.



Figure 3-11. Add New Hardware Wizard, USB Audio Device screen.

2. Select “Display a list of all the drivers in a specific location...,” and then click **Next** to continue. See Figure 3-12.

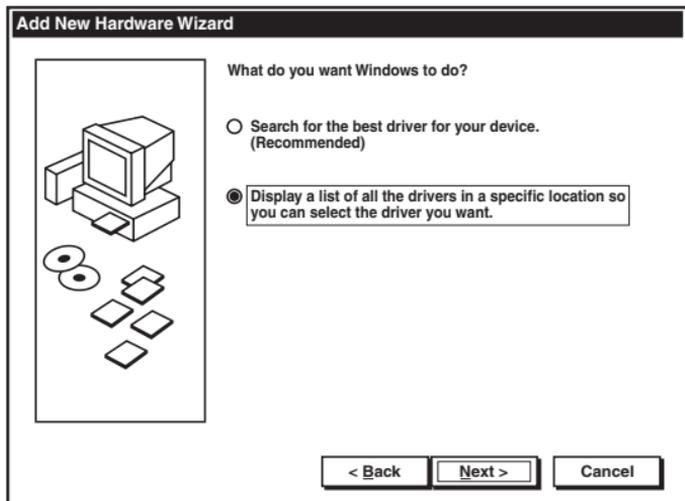


Figure 3-12. Display Drivers screen.

- Windows will confirm the device model. Make sure that the “Show compatible hardware” and the device model “USB Audio Device” are selected. Click **Next** to continue. See Figure 3-13.

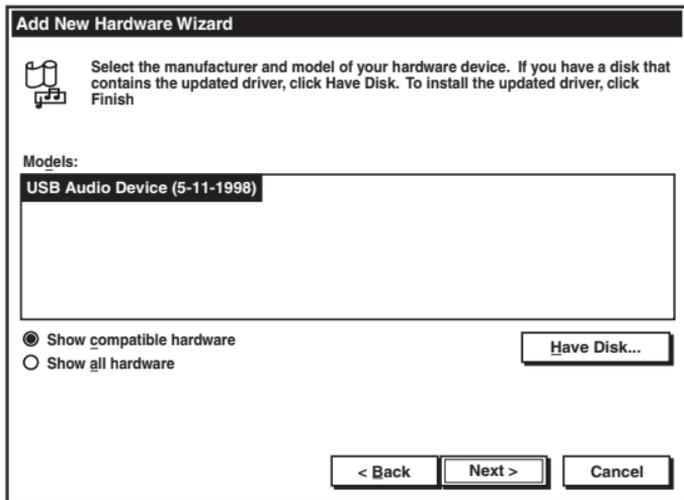


Figure 3-13. Confirming the Device Model screen.

- Windows will show the device driver location before installation. Click **Next** to continue. See Figure 3-14.

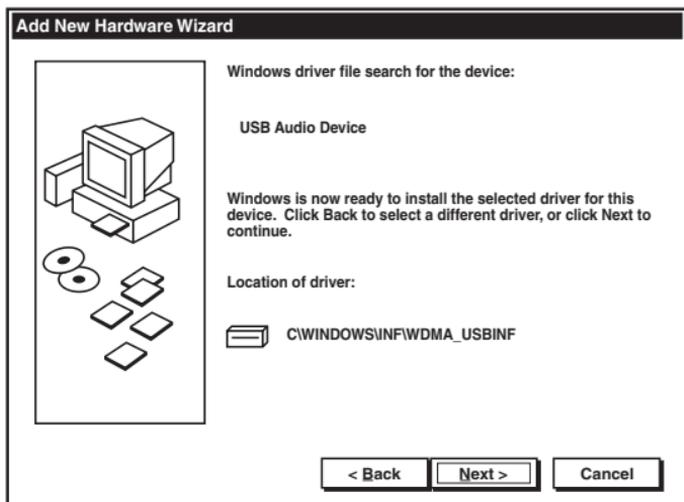


Figure 3-14. Device Driver Location screen.

5. This concludes the USB Adapter software installation. Click **Finish** to continue. See Figure 3-15.

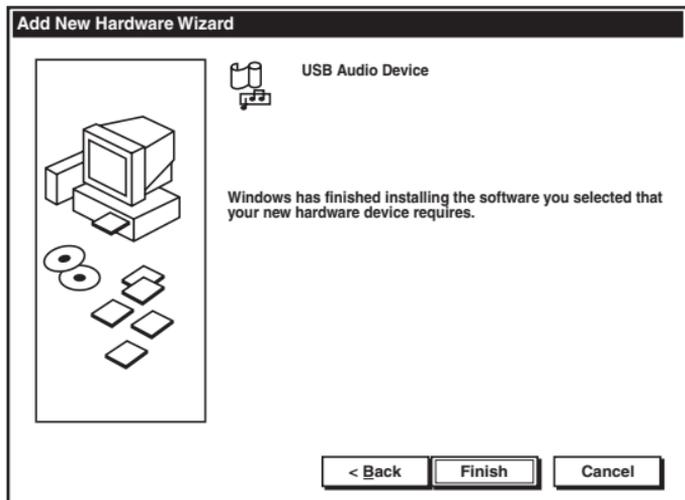


Figure 3-15. Software Installation Complete screen.

NOTE

Close all applications and restart your computer before using the USB Adapter.

4. Operation

To verify operation, please proceed with the following steps.

4.1 Function Verification

1. Go to **Start, Programs, Accessories, Entertainment, Sound Recorder**, then...
2. Select **File and Properties, Convert Now, Select CD Quality**, then click **OK** to accept.
3. Press the **Record** button and speak into the microphone.
4. Press **Rewind**, then the **Play** button to hear the recorded voice.

NOTE

If there is no recorded voice heard during Play mode, please refer to **Section 4.2** and **Chapter 7**. Then repeat the Function Verification procedure.

Stop recording before unplugging the USB Headset Adapter from the USB port. Unplugging the device while it is recording could cause the computer to lock up, which then will require you to reboot your computer. The USB protocol allows the “hot swapping” of USB devices, but we recommend that you shut down Windows before unplugging the device.

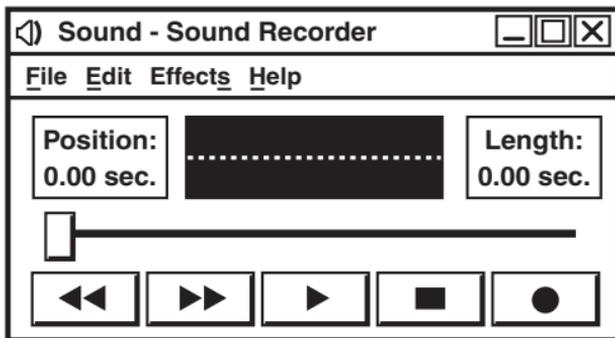


Figure 4-1. Sound Recorder screen.

4.2 Microphone Adjustment

Adjust the microphone's volume via the volume slider in your computer's multimedia audio setting.

1. Go to **Start, Settings, Control Panel, Multimedia, and Audio**. Make sure the “USB Audio Device” is selected as the preferred device for both “Playback” and “Recording.” Make sure that “Use only preferred devices” is checked. Click **OK** to continue. See Figure 4-2.



Figure 4-2. Selecting the USB Audio Device screen.

2. Double-click the speaker icon on your Windows task bar or go to **Start, Programs, Accessories, Entertainment, Volume Control**. Select **Options, Properties**. Under **Set Volume for Select Recording**. Be sure that the **USB Audio Device** is selected under **Mixer Device**. Make sure the **Unknown, Wave, or Capture** is selected under **Show the following volume controls** menu. Click **OK**. See Figure 4-3.



Figure 4-3. Properties screen.

3. Make sure **Unknown**, **Wave**, or **Capture** is displayed on the **Volume Control Panel**. Also, make sure that “Mute all” is not selected. Adjust the microphone via the **Volume** slider. See Figure 4-4.

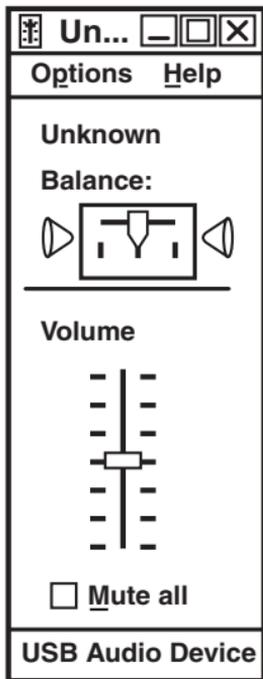


Figure 4-4. Volume Control Panel screen.

4.3 Speaker Volume Adjustment

Adjust the speaker volume via the volume slider of your computer's multimedia audio settings.

1. Go to **Start, Setting, Control Panel, Multimedia, Audio**, and make sure that the **USB Audio Device** is selected as the preferred device for both "Playback" and "Recording." Be sure that the **Use only preferred devices** is checked. Click **OK**. See Figure 4-5.

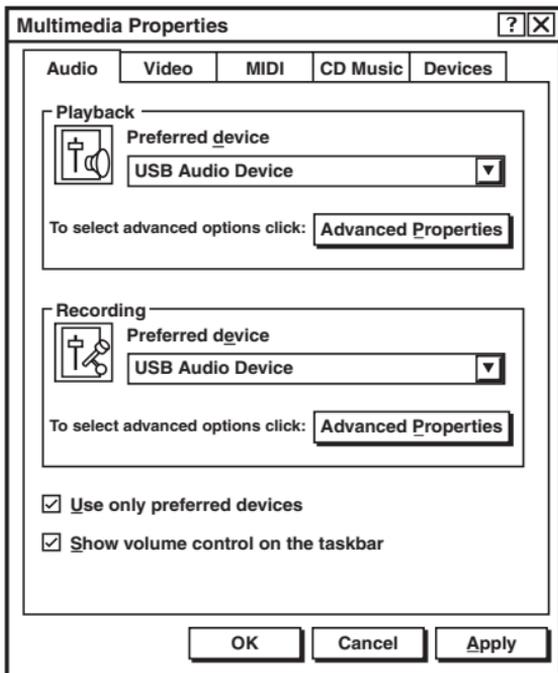


Figure 4-5. Multimedia Properties screen.

2. Double click the speaker icon on your **Windows** task bar.
3. Select **Options, Properties**.

4. Select **Playback** under the **Adjust volume for** menu. See Figure 4-6.

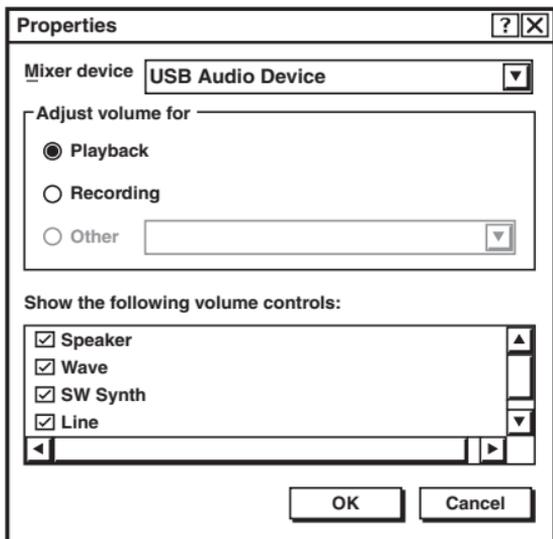


Figure 4-6. Properties screen.

5. Make sure the following items in the **Show the following volume controls** have check marks: **Speaker**, **Wave**, and **SW Synth**. Click **OK** to accept.

- On the **Volume Control Panel**, make sure the **Speaker**, **Wave**, and **SW Synth** appear as volume control options and that selection panels are not muted. See Figure 4-7.

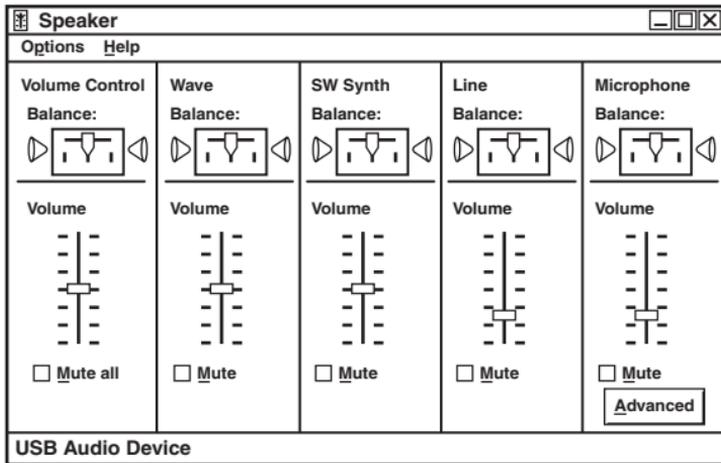


Figure 4-7. Volume Control Panel screen.

Adjust the speaker volume via sliders. To record a voice file, refer to **Section 4.1**.

5. Special Considerations for Speech-Dictation Applications

When upgrading to a new microphone for speech-recognition applications, always create a new user file. For large vocabulary applications, this usually involves running the application's Audio Setup Wizard to adjust the volume, and going through a new enrollment process to train the system for the microphone. Position the microphone properly for best performance on speech-dictation systems.

For optimal performance, position the microphone about ¼" to 1" from the side of your mouth and the tip of the microphone boom.

6. Manual Installation

If Windows does not detect the USB Adapter, follow these instructions to manually install the proper drivers.

1. Select **Start, Setting, Control Panel**, and then double-click **Add New Hardware**.
2. Windows will prompt you to close any open applications before proceeding. Click **Next** to continue. See Figure 6-1.



Figure 6-1. Add New Hardware Wizard screen.

3. Windows will now search for any new Plug-and-Play devices on your system. Click **Next** to continue. See Figure 6-2.

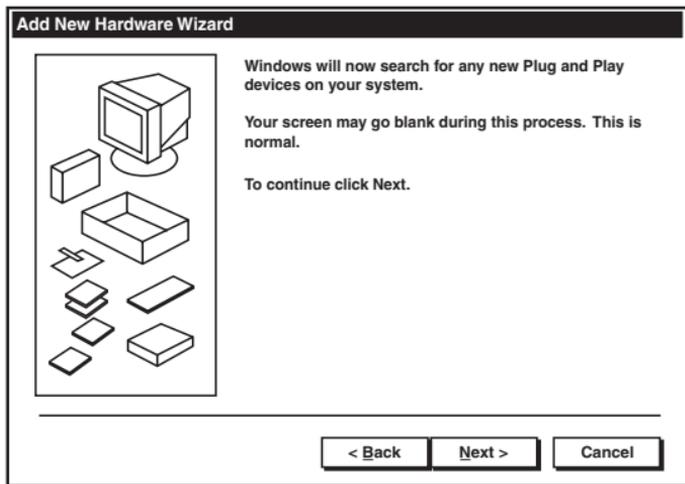


Figure 6-2. Searching for Plug-and-Play Devices screen.

- If Windows does not detect the device, it will prompt you to identify the product. Select **No**, **I want to select hardware from a list**, then click **Next**. See Figure 6-3.



Figure 6-3. Identify the Hardware screen.

- Windows will prompt you to select the type of hardware you want to install. Under **Hardware types**, select **Sound, video and game controllers**. Click **Next** to continue. See Figure 6-4.

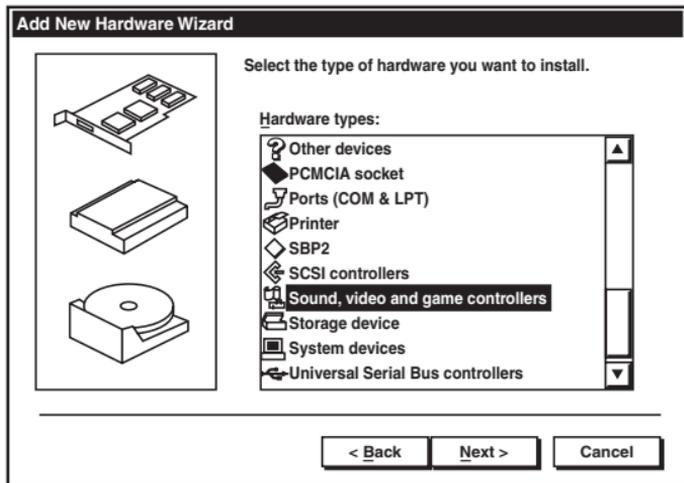


Figure 6-4. Selecting the Hardware to Install screen.

- Under **Manufacturers**, select **Generic USB Audio** and under **Models**, select **USB Audio Device**. Click **Next** to continue. See Figure 6-5.

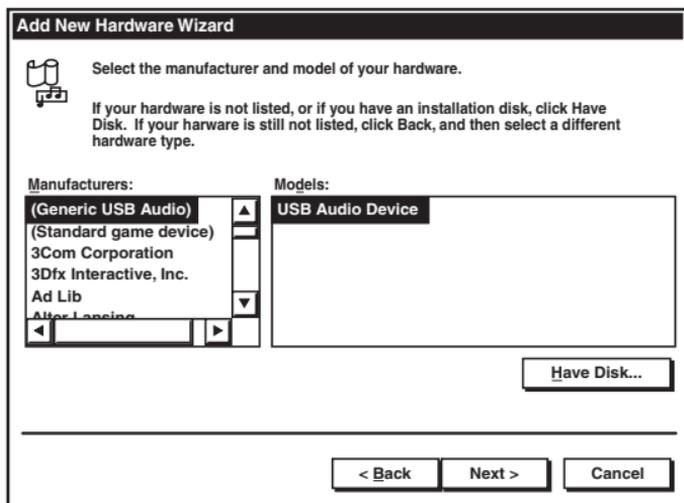


Figure 6-5. Selecting USB Audio Device screen.

7. Windows will now confirm that the hardware you are installing is Plug and Play compatible. Click **Next** to continue. See Figure 6-6.

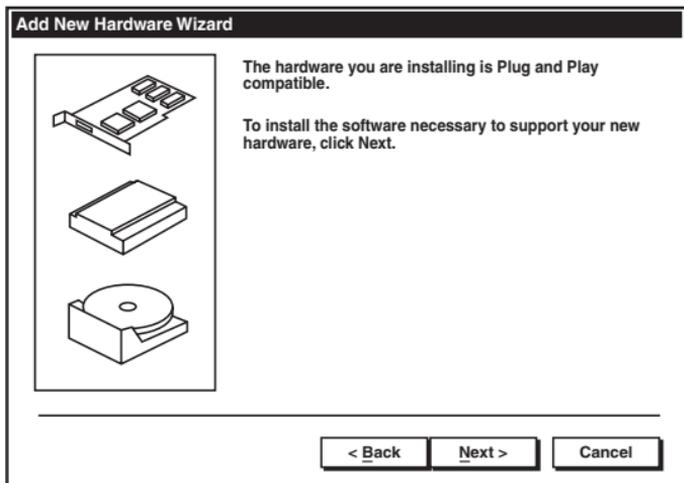


Figure 6-6. Installing the Software screen.

8. Once each software driver has been loaded, Windows will tell you that the installation has been completed. Click **Finish**. See Figure 6-7.

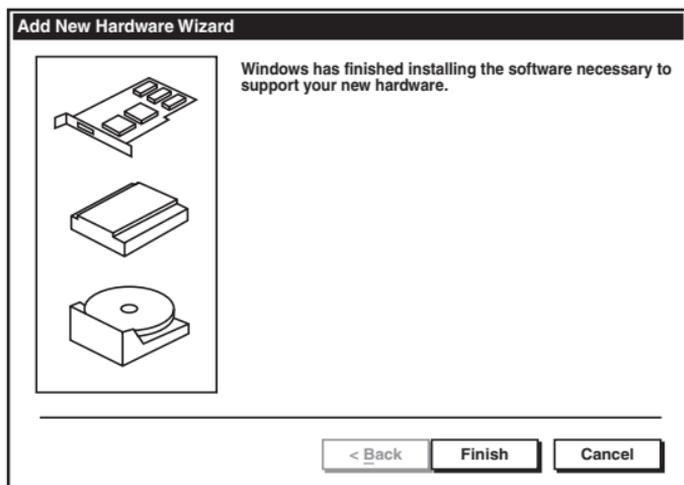


Figure 6-7. Completing the Software Installation screen.

Refer to **Sections 4.1** and **4.2** to verify the installation.

7. Troubleshooting

If Windows does not detect the USB Adapter, check the following items.

1. Make sure that the Adapter is properly connected to the available USB port of your computer.
2. Follow the instructions in **Chapter 6** to install the software drivers manually.
3. Follow the instructions in **Chapter 4** to verify that the device is functioning properly.
4. Check that the speaker volume is set properly. Go to **Start, Programs, Accessories, Entertainment, and Volume Control**. Be sure that the **Speaker, Wave, and SW Synth** sliders are set at least halfway, and that **Mute All** is not selected.
5. Check that the USB Adapter is listed in the Device Manager. Go to **Start, Settings, Control Panel, and System**. Select **View devices by type** on the **Device Manager** tab. See Figure 7-1.

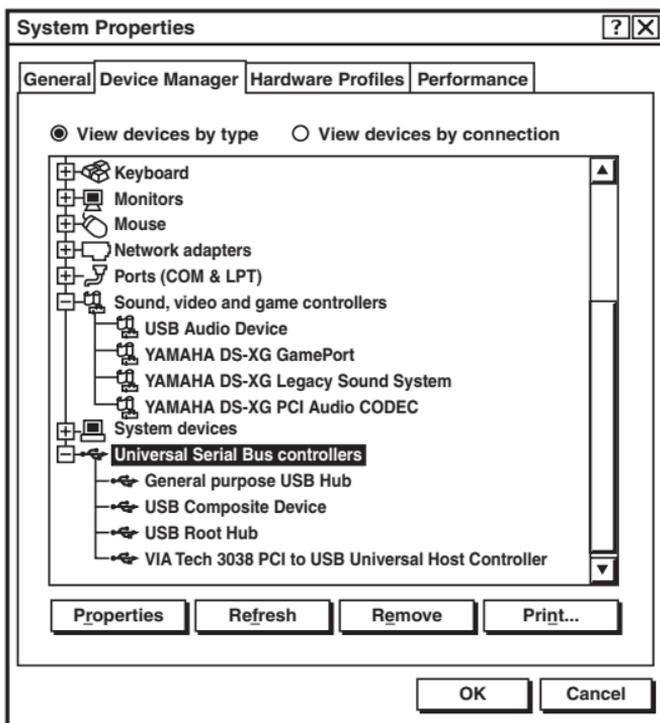


Figure 7-1. Device Manager tab.

Under **Sound, video and game controllers** and **Universal Serial Bus controller**, you should see “USB Audio Device” and “USB Composite Device” respectively.

6. Make sure that the device is selected under **Multimedia Properties**. Go to **Start, Settings, Control Panel, and Multimedia**. Under the **Audio tab**, check that **USB Audio Device** is selected for both “Recording” and “Playback” preferred devices. Click **Apply**, then **OK** to select. See Figure 7-2.

NOTE

Make sure that “Use only preferred devices” is checked.

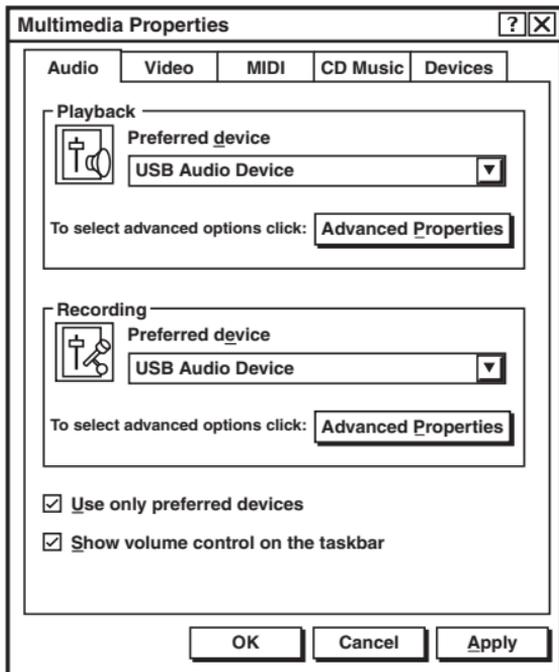


Figure 7-2. Multimedia Properties screen, Audio tab.

7. Check the microphone setting. Go to **Start, Programs, Accessories, Entertainment, and Volume Control**. Select **Option, Properties**. Select **USB Audio Device** under the **Mixer Device** menu. Select **Recording** under the **Adjust volume for** menu. **Capture** or **Unknown** is selected under **Show the following volume controls**. Adjust the volume as necessary via the slider control. See Figure 7-3.

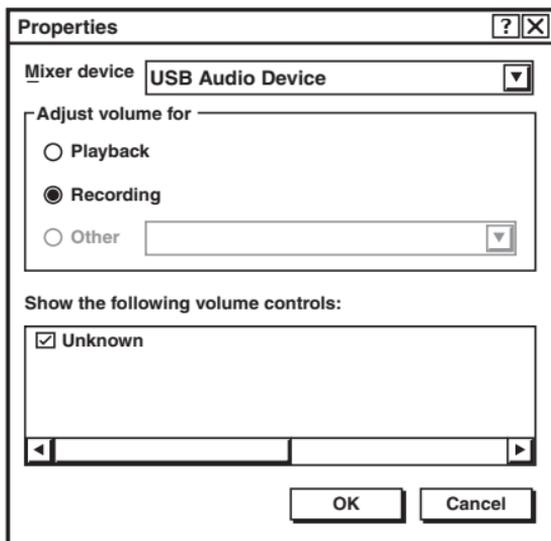


Figure 7-3. Properties screen.

Incompatible Computer Systems

Some computer systems may lock up while using the USB Adapter because of an incompatibility with standard USB protocol. If this occurs in your system, contact your computer's manufacturer.

Also, some application software may not work automatically with the USB Adapter. You may need to set the input device manually in the Multimedia/Audio setting. In this case, follow these instructions.

- a. Select **Start, Setting, Control Panel**. Then double-click the **Multimedia** icon and click on the **Audio** tab. See Figure 7-4.
- b. Under **Playback** and **Recording**, select **USB Audio Device** as the preferred device.
- c. Check **Use only preferred devices**.
- d. Click **Apply**, then **OK**.

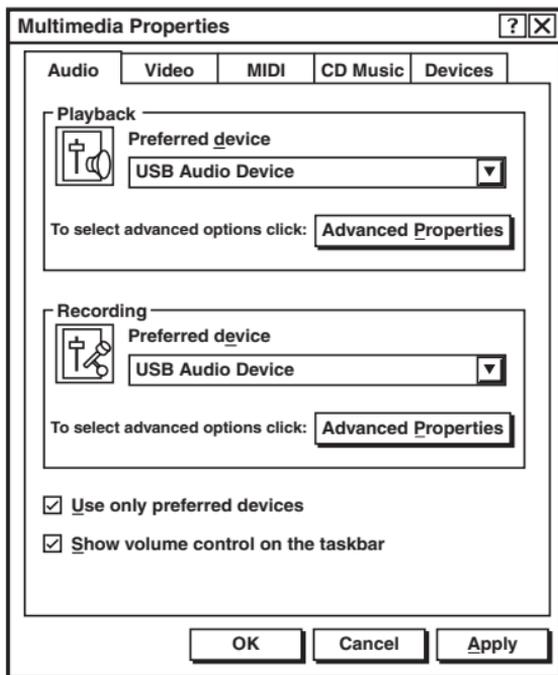


Figure 7-4. Selecting the USB Audio Device screen.

NOTE

Most CD and DVD players are directly connected to the computer sound card. The Adapter will not transmit through those peripherals.



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