

APPENDIX H
: USER'S MANUAL

**IBM T860
Speaker/USB HUB
User Guide**

ENGLISH

First Edition (May / 2002)

Note : For important information, refer to the Monitor Safety and Warranty manual that comes with this monitor.

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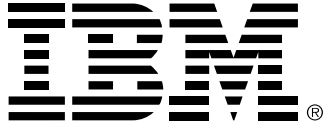
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Safety: Read first

Before installing this product, read the Safety Information.

Avant d'installer ce produit, lisez les consignes de sécurité.

Vor der Installation dieses Produkts die Sicherheitshinweise lesen.

Πριν εγκαταστήσετε το προϊόν αυτό, διαβάστε τις πληροφορίες ασφάλειας (safety information).

לפני שתתקינו מוצר זה, קראו את הוראות הבטיחות.

A termék telepítése előtt olvassa el a Biztonsági előírásokat!

Prima di installare questo prodotto, leggere le Informazioni sulla Sicurezza

Antes de instalar este produto, leia as Informações de Segurança.

Läs säkerhetsinformationen innan du installerar den här produkten.

Prije instalacije ovog produkta obavezno pročitajte Sigurnosne Upute.

Les sikkerhetsinformasjonen (Safety Information) før du installerer dette produktet.

Przed zainstalowaniem tego produktu, należy zapoznać się z książką "Informacje dotyczące bezpieczeństwa" (Safety Information).

Пред да се инсталира овој продукт, прочитајте информацијата за безбедност.

Pred inštaláciou tohto zariadenia si peôitajte Bezpeônostné predpisy.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

Ennen kuin asennat tämän tuotteen, lue turvaohjeet kohdasta Safety Information

Pred instalací tohoto produktu si přečteš příručku bezpečnostních instrukcí.

在安裝本產品之前，請仔細閱讀 **Safety Information** (安全信息)。

安裝本產品之前，請先閱讀「安全資訊」。

مع، يجب قراءة ذات السلامة

Læs sikkerhedsforskrifterne, før du installerer dette produkt.

製品の設置の前に、安全情報をお読みください。

본 제품을 설치하기 전에 안전 정보를 읽으십시오.

Antes de instalar este producto lea la información de seguridad.

Antes de instalar este produto, leia as Informações de Segurança.

Перед установкой продукта прочтите инструкции по технике безопасности.

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

Connecting the Speaker

Before you connect the speaker to the monitor, be sure to turn off the monitor, computer and any devices attached to the computer. To connect the speaker, to the following:

1. Place the monitor in a convenient, well-ventilated location near your computer system.
2. Find the attachment points on the underside and the back of the monitor. Attach the speaker to the monitor as shown in the diagram. Using the hand screws provided.

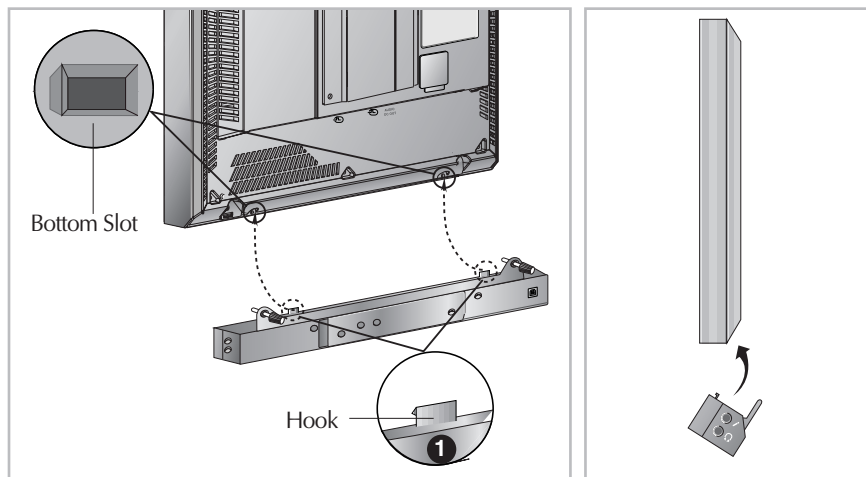


Figure 1.

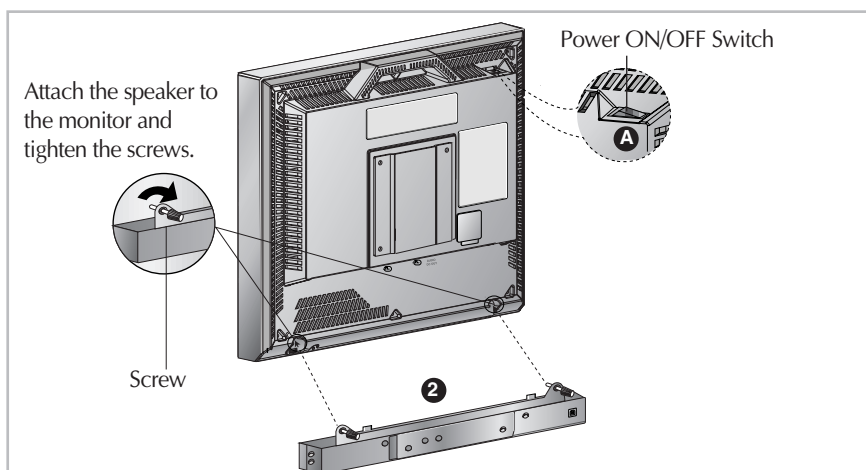


Figure 2.

Connecting the Speaker

3. Connect one end of the Power cable to the dc OUT jack **a** on the rear panel of the monitor. Connect the other end to the dc IN jack **b** on the rear panel of the speaker option.

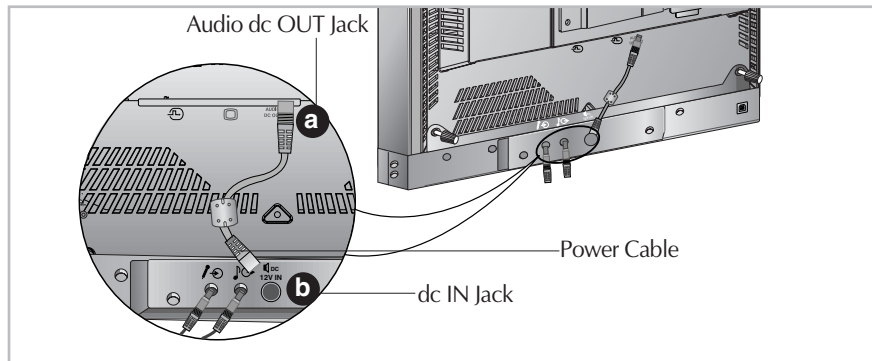


Figure 3.

4. Connect the Mic, Audio and USB cables as shown in the diagram.

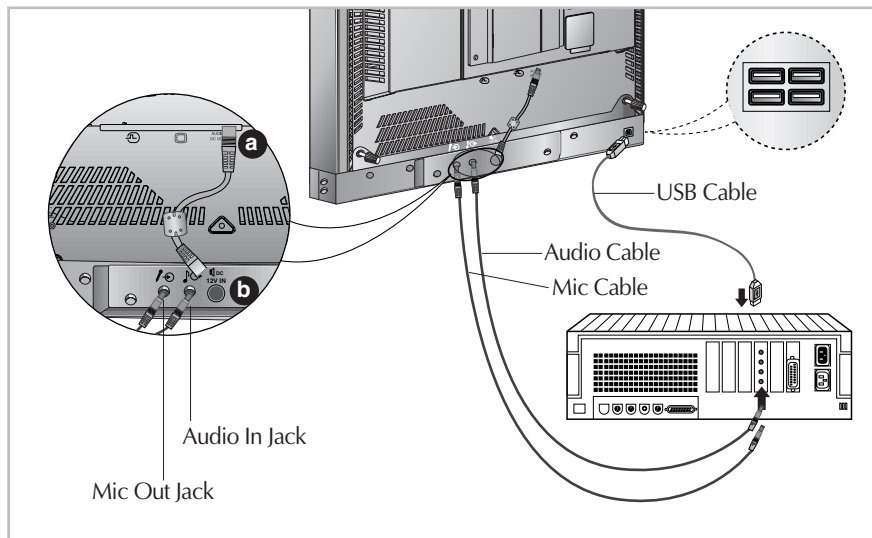


Figure 4.

5. After connecting the cables, Power on the computer monitor **A**, then the speaker. Power ON/OFF/volume control.

Using the Audio Functions

This section provides information on the speaker audio functions.

Side Jacks



Microphone Jack



An external microphone can be used instead of the preinstalled microphone.

Headphone Jack



A headphone jack that automatically mutes the speaker volume when headphones plugged in.

Rear Panel Jacks



Mic Out - Pink

Connects to the microphone jack of the computer sound card.



Audio In -Lime Green

Connects to the *LINE OUT jack of the computer sound card.

Microphone Extension Operation

The Microphone Jacks on the Speaker/USB HUB Option provide a convenient way to extend the microphone input connector to your desktop.

In order to use the MIC jack on the side of the Speaker/USB HUB Option, use the provided Microphone extender cable (pink connectors) to plug into the rear of the Speaker/USB HUB Option (MIC OUT) and into the MIC input jack of your sound card (if available). A microphone (that meets the requirements defined for your sound card) can then be plugged into the MIC jack on the side of the Speaker/USB HUB Option.

Audio Input

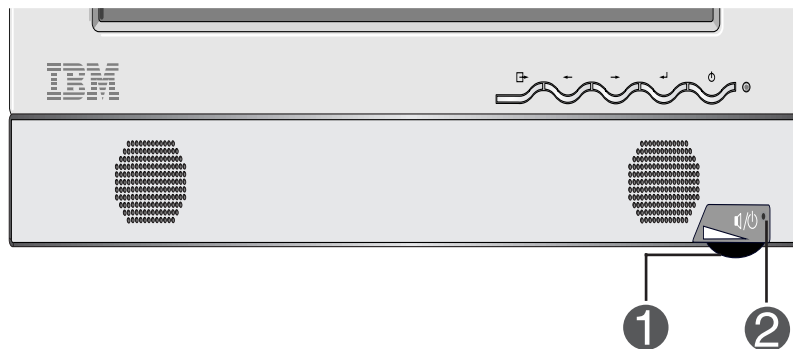
The Audio Input on the back of the Speaker/USB HUB Option should be connected to the Line Output jack on the computer system sound card using the provided cable (Lime Green connectors). The Speaker/USB HUB Option has a built-in amplifier (Amp). If the Audio Out of computer sound card has only Speaker Out, reduce the volume control on the computer system.

NOTE

- If the Audio Out of the computer supports both Speaker Out and Line Out, Please use the Line Out function (For more information, refer to the documentation that comes with your computer).

Using the Audio Functions

Front Panel Controls



Control	Function
1 Power ON/OFF and Volume Control	Use to turn on/off audio and used to adjust volume.
2 Indicator	The light-emitting diode (LED) is turned on for the speaker power ON and is turned off for the speaker power OFF.

Audio Specifications

Audio	dc Input Voltage	dc 12 V
	RMS Audio Output	1W + 1W (Right + Left)
	Input Sensitivity	0.7 Vrms
	Speaker Impedance	4Ω

Using the USB (Universal Serial Bus) HUB Features

Universal Serial Bus (USB) is an innovation that conveniently connects different devices to your computer. USB enables you to have the flexibility to connect your mouse, keyboard, and other devices to the monitor instead of the computer. The Speaker/USB HUB Option provides a 4 port USB HUB that will enable you to connect a chain of up to 120 devices on a single USB connection. You can “hot-plug” USB devices, that is, you can attach the devices while the computer is on. You can also disconnect USB devices while maintaining “Plug and Play” auto detection and configuration. This monitor comes with an integrated BUS-power USB hub that can have up to four other USB devices attached to it. The Speaker/USB HUB Option has an integrated BUS-powered HUB that meets the USB 2.0 Specification for Full Speed Devices, allowing up to 4 low power (<100 mA each) USB devices to be attached.

Side Jacks



USB HUB Jacks

External USB 1.1 low power devices such as keyboards and mice can be connected to these ports.

Rear Jack



USB Devices Jack

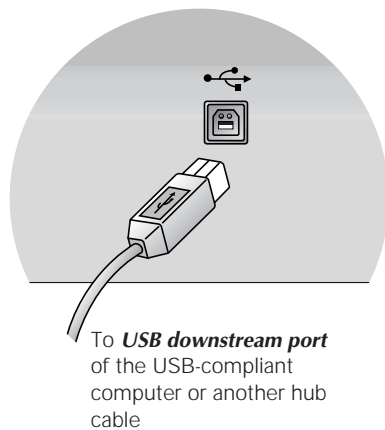
Connects the USB HUB to the computer system Downstream port.

Using the USB (Universal Serial Bus) HUB Features

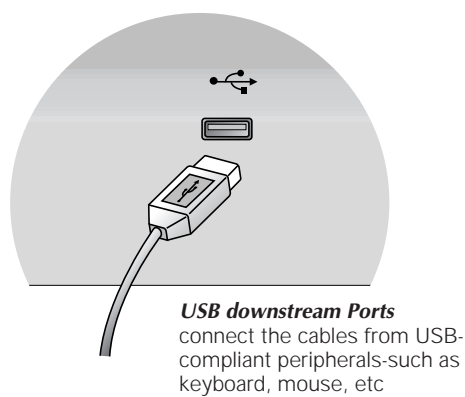
Connecting USB devices

1. Insert the USB cable into the square USB connector of the Speaker/USB HUB Option as shown in the diagram on the left. Then, insert the other end of the USB cable into the rectangular USB connector on a USB-compliant computer or USB hub as shown in the diagram on the right.
2. Insert the USB cable for USB-compliant devices into the rectangular USB connector in the monitor as shown in the diagram on the right.

- This is a simplified representation of the rear view.



- This is a simplified representation of the side view.



Notes :

- To activate the USB hub function, the Speaker/USB HUB Option must be connected to a USB compliant computer (OS) or another hub with the USB cable(enclosed).
- When connecting the USB cable, check that the shape of the connector at the cable side matches the shape at the connecting side.
- High powered devices (such as stand alone scanners and camera's etc.) can not be connected to the USB HUB ports. Self powered devices (use an external AC adapter to meet the high power requirement) can be connected to the USB HUB port.
- The USB HUB is compliant to the USB 2.0 Specification and will support low speed and full speed devices (same as USB 1.1). The HUB can not support high speed devices and will connect them as full speed devices.

Using the USB (Universal Serial Bus) HUB Features

USB Specifications

USB standard	Rev. 1.1 Compliant BUS-powered hub
Downstream power supply	100 mA for each (maximum)
Communication speed	12 Mbps (full), 1.5 Mbps (low)
USB port	1 Upstream port / 4 Downstream ports

IMPORTANT: These USB connectors are not designed for use with high-power USB devices such as a video camera, scanner, etc. For optimal performance, connecting high-power USB devices directly to the computer.

Service Information

Service Information

The following parts are for use by IBM services, or IBM authorized dealers, to support customer warranty. Parts are for service use only.

PART NUMBER	FRU PART NUMBER	DESCRIPTION	MODEL	COLOR
19K1901	24P0556	Speaker/USB HUB Option		Stealth Black
19K1902	24P0557	Speaker/USB HUB Option		Pearl White
N/A	19K1903	Cable set		