



# IBM 15-inch Flat Panel Monitor Speaker Bezel

---

*User's Guide*

OPTIONS  
*by IBM*

**Note**

Before using this information and the product it supports, read the information under the appendixes.

**First Edition (April 2002)**

**© Copyright International Business Machines Corporation 2002. All rights reserved.**  
US Government Users Restricted Rights – Use, duplication or disclosure restricted by  
GSA ADP Schedule Contract with IBM Corp.

---

## Safety: Read first

Before installing this product, read the Safety Information.

مج، يجب قراءة دات السلامة

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

在安装本产品之前，请仔细阅读 **Safety Information**  
(安全信息)。

Prije instalacije ovog produkta obavezno pročitajte Sigurnosne Upute.

Před instalací tohoto produktu si přečtěte příručku bezpečnostních instrukcí.

Læs sikkerhedsforskrifterne, før du installerer dette produkt.

Ennen kuin asennat tämän tuotteen, lue turvaohjeet kohdasta 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).

פני 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.

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.

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

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

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

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

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

Перед установкой продукта прочтите инструкции по технике безопасности.

Pred inštaláciou tohto zariadenia si pečítajte Bezpečnostné predpisy.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

Antes de instalar este producto lea la información de seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

安裝本產品之前，請先閱讀「安全資訊」。

---

# Contents

<b>Safety: Read first</b> . . . . .	<b>iii</b>
<b>About this book</b> . . . . .	<b>vii</b>
Registering your option . . . . .	vii
<b>Installation and user's guide.</b> . . . . .	<b>1-1</b>
Product description . . . . .	1-1
Identifying connectors on the flat panel monitor speaker bezel . . . . .	1-2
Mounting and attaching your flat panel monitor speaker bezel . . . . .	1-2
Removing the back panels from your T541 flat panel monitor . . . . .	1-3
Connecting your flat panel speaker bezel to your monitor . . . . .	1-5
<b>Appendix A. Product warranty and support information</b> . . . . .	<b>A-1</b>
Warranty information . . . . .	A-1
Warranty period . . . . .	A-1
Service and support . . . . .	A-1
Warranty information on the World Wide Web . . . . .	A-1
Online technical support . . . . .	A-1
Telephone technical support . . . . .	A-2
IBM Statement of Limited Warranty Z125-4753-06 8/2000 . . . . .	A-3
Part 1 - General Terms . . . . .	A-3
Part 2 - Country-unique Terms . . . . .	A-6
<b>Appendix B. Notices</b> . . . . .	<b>B-1</b>
Trademarks . . . . .	B-2



---

## About this book

### Installation and user's guide

This guide contains the product description and installation instructions in the following languages:

- English
- French
- Italian
- German
- Spanish
- Brazilian Portuguese
- Simplified Chinese
- Traditional Chinese
- Japanese

### Appendixes

The appendixes contain product warranties, help and service information, and notices.

**Note:** The illustrations in this manual might be slightly different from your hardware.

---

## Registering your option

Thank you for purchasing OPTIONS by IBM®. Please take a few moments to register your product and provide us with information that will help IBM to better serve you in the future. Your feedback is valuable to us in developing products and services that are important to you, as well as in developing better ways to communicate with you. Register your option on the IBM Web site at

<http://www.ibm.com/pc/register/>

IBM will send you information and updates on your registered product unless you indicate on the Web site questionnaire that you do not want to receive further information.





---

## Installation and user's guide

This guide contains instructions on how to install and use the IBM 15-inch Flat Panel Monitor Speaker Bezel.

---

### Product description

The Flat Panel Monitor Speaker Bezel uses a carbon-fiber composite for flat panel speaker technology, which provides speaker performance over traditional speakers. The slide-on speaker concept is a design without using any desktop space, which complements your IBM 15-inch flat panel monitor.

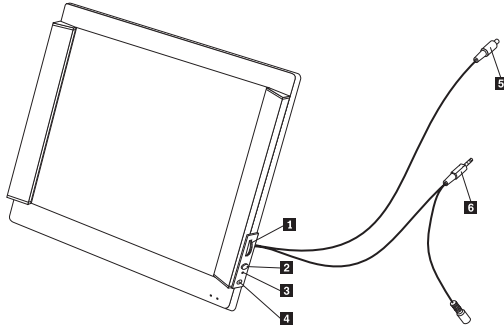
#### Product features

- Power on/off - volume control knob
- Headphone jack provides private listening
- Integrated sound - speaker fits your monitor and provides a complete audio/monitor speaker solution
- No desk space required
- 2 W per channel - 4 W total
- Universal voltage - uses existing dc power from the monitor
- 3 m (118.1 in.) audio cable - that enables you to mount flat-panel monitor on the wall with your computer on the floor
- Easy to connect -- speaker slides onto the bezel of IBM T541 and T560 15-inch flat-panel monitors

---

## Identifying connectors on the flat panel monitor speaker bezel

The following illustration identifies the connectors on the flat panel monitor speaker bezel.

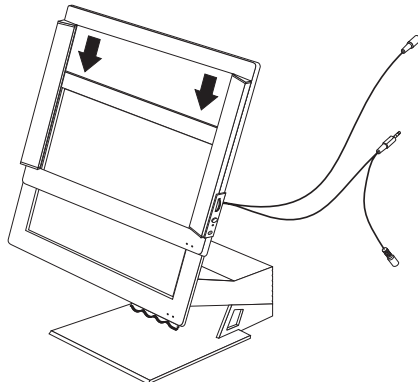


- 1** Volume control
- 2** Power button
- 3** Power light-emitting diode (LED)
- 4** Headphone connector
- 5** Audio cable (3 m)
- 6** Power cable (18 in.)

---

## Mounting and attaching your flat panel monitor speaker bezel

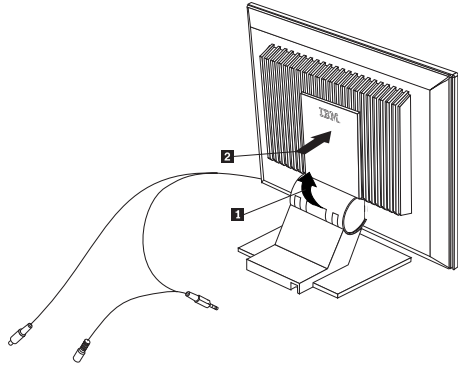
Position your flat panel speaker bezel over your monitor so that the rail guides on the sides of the bezel lines up with the monitor. Slide the speaker bezel down until it covers the monitor bezel.



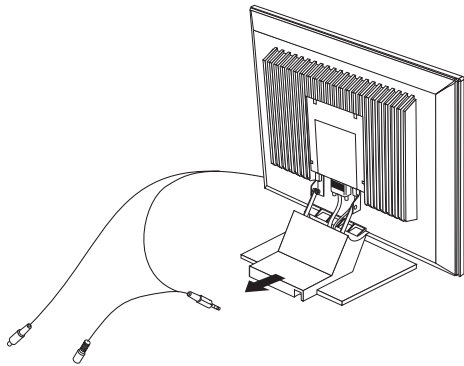
## Removing the back panels from your T541 flat panel monitor

Removing the back panels will allow access to the power connector on the T541 flat panel monitor for attachment of the power cord.

1. Turn off your monitor and unplug the ac/dc power supply from the power outlet.
2. Press both sides of the back panel **1** and push it outward from the monitor to remove it completely. Push panel **2** upward to remove.



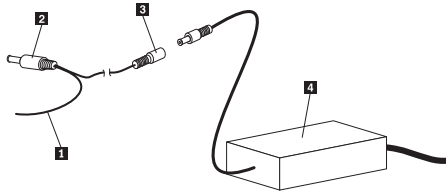
3. Push the remaining panel outward from the monitor to remove.



4. To replace the back panels, reverse the steps, after bezel speaker cabling has been routed and attached (see step 7 on page 1-5).

## Connecting your flat panel speaker bezel to your monitor

Follow these instructions to connect your speakers to your flat panel monitor, refer to the illustration for identification.

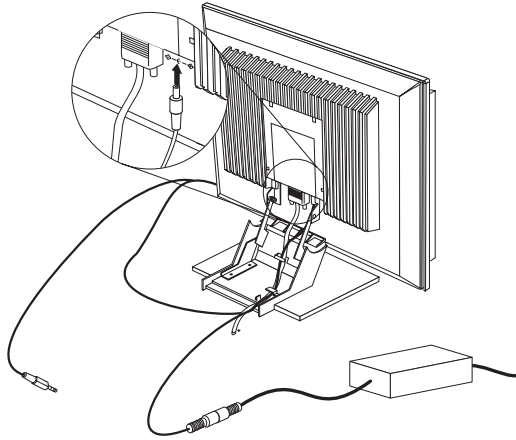


- 1** DC power cable (from bezel speaker assembly)
- 2** DC power plug
- 3** DC power receptable
- 4** AC/DC adapter (monitor)

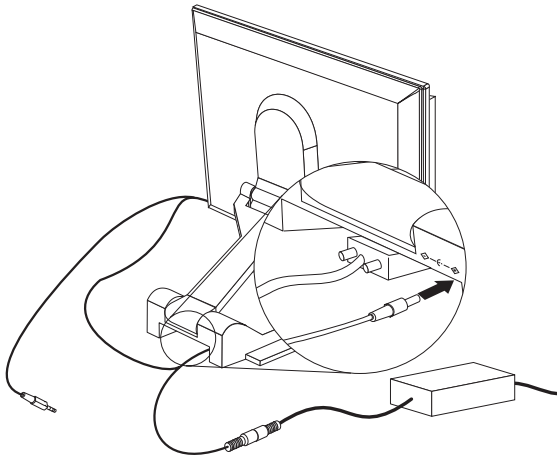
1. Locate the cables on your flat panel monitor speaker bezel. The dc power cable **1** is hardwired to your speaker bezel.
2. Unplug the ac/dc adapter connector from the monitor. (Remove the back panels on the IBM T541 monitor before unplugging the ac/dc adapter).
3. Connect the dc power plug **2** to the receptacle connector on the monitor. See step 6 on page 1-5
4. Route wires as shown. See step 6 on page 1-5
5. Connect the dc power receptacle **3** to the ac/dc adapter plug.

6. Your flat panel monitor will look similar to one of the following illustrations.

**IBM T541 monitor**

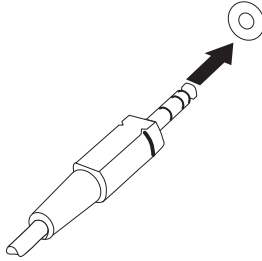


**IBM T560 monitor**



7. If you have an IBM T541 flat panel monitor, replace the back panels.

8. Connect the audio cable, which is hardwired to the speaker bezel, to the audio speaker connector on your computer.



9. Plug the ac/dc adapter cord into a power outlet.
10. You can now turn your monitor on.
11. Press the power button on the speaker bezel to turn on the speakers.

---

## Guide d'installation et d'utilisation

Le présent guide contient des instructions permettant d'installer et d'utiliser le panneau frontal de haut-parleur pour écran plat 15 pouces IBM.

---

### Description du produit

Le panneau frontal de haut-parleur pour écran plat utilise un composite de fibre carbone pour la technologie de haut-parleurs pour écran plat, qui offre des performances accrues par rapport aux haut-parleurs traditionnels. Le concept de haut-parleur à glissière n'utilise pas l'espace du bureau, qui vient compléter l'écran plat 15 pouces IBM.

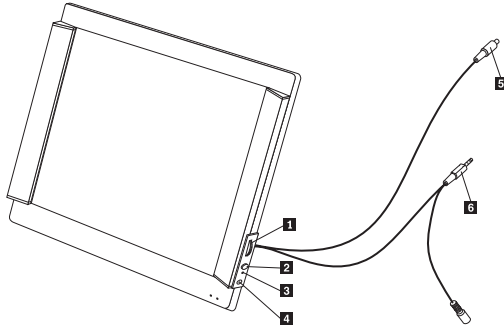
### Caractéristiques du produit

- Interrupteur d'alimentation - bouton de réglage du volume
- La prise pour écouteurs permet une écoute privée.
- Son intégré - un haut-parleur adapté à l'écran offre une solution audio complète.
- Aucun espace de bureau requis
- 2 watts par canal - 4 watts au total
- Tension universelle - utilise l'alimentation en courant continu existante de l'écran.
- Câble audio de 3 m - permet de monter un écran plat contre le mur tout en laissant l'ordinateur sur le sol.
- Facilité de connexion - le haut-parleur s'insère par glissement sur le panneau frontal des écrans plats 15 pouces IBM T541 et T560.

---

## Identification des connecteurs sur le panneau frontal de haut-parleur pour écran plat

L'illustration suivante permet d'identifier les connecteurs sur le panneau frontal de haut-parleur pour écran plat.

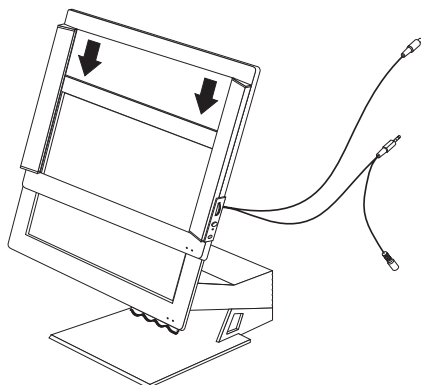


- 1** Réglage du volume
- 2** Interrupteur d'alimentation
- 3** Voyant d'alimentation
- 4** Connecteur d'écouteurs
- 5** Câble audio (3 m)
- 6** Cordon d'alimentation (45 cm environ)



## Montage et connexion du panneau frontal de haut-parleur pour écran plat

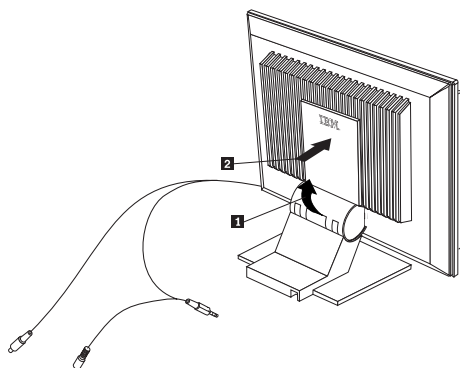
Positionnez le panneau frontal de haut-parleur pour écran plat sur l'écran afin que les guides du rail situés sur les bords du panneau frontal soient alignés sur l'écran. Faites glisser le panneau frontal de haut-parleur vers le bas jusqu'à ce qu'il couvre le panneau frontal de l'écran.



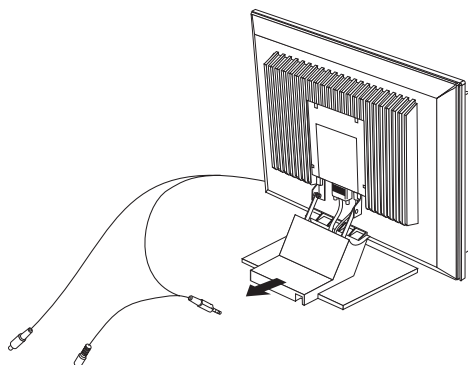
## Retrait des panneaux arrière de l'écran plat T541

Le retrait des panneaux arrière permet d'accéder au connecteur d'alimentation sur l'écran plat T541 en vue de la connexion du cordon d'alimentation.

1. Mettez l'écran hors tension et débranchez le bloc d'alimentation ca/cc du socle de prise de courant.
2. Appuyez sur les deux côtés du panneau arrière **1** et poussez-le hors de l'écran pour le retirer complètement. Poussez le panneau **2** vers le haut pour le retirer.



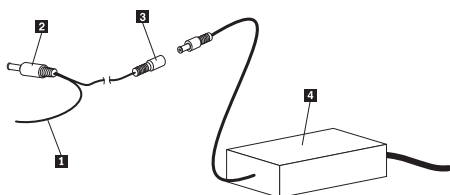
3. Poussez le panneau restant vers l'extérieur pour le retirer de l'écran.



4. Pour replacer les panneaux arrière, exécutez les étapes en sens inverse, une fois que le câble du haut-parleur du panneau frontal a été inséré et connecté (reportez-vous à l'étape 7 à la page 1-12).

### Connexion du panneau frontal de haut-parleur à l'écran plat

Suivez ces instructions pour connecter les haut-parleurs à l'écran plat et consultez l'illustration pour identifier les différents composants.

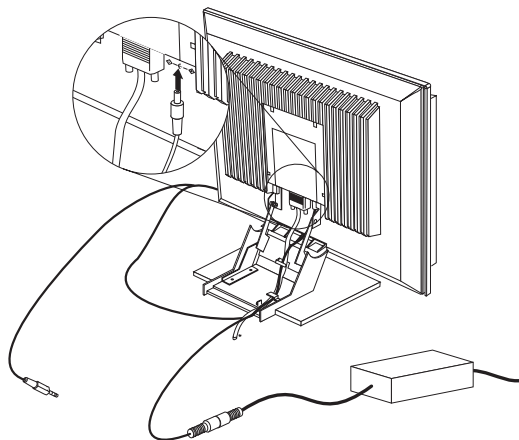


- 1** Cordon d'alimentation CC (à partir du haut-parleur du panneau frontal)
- 2** Fiche d'alimentation CC
- 3** Prise femelle d'alimentation CC
- 4** Adaptateur CA/CC (écran)

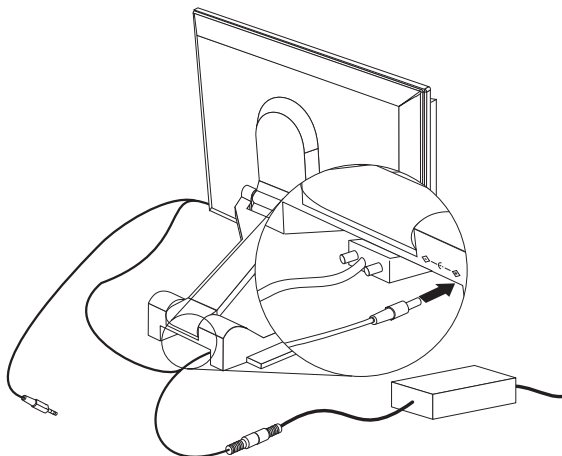
1. Localisez les câbles sur le panneau frontal de haut-parleur pour écran plat. Le cordon d'alimentation cc **1** est raccordé au panneau frontal de haut-parleur.
2. Débranchez le connecteur de l'adaptateur ca/cc de l'écran. (Retirez les panneaux arrière de l'écran IBM T541 avant de débrancher l'adaptateur ca/cc.)
3. Connectez la fiche d'alimentation cc **2** au connecteur de prise femelle sur l'écran. Reportez-vous à l'étape 6 à la page 1-12.
4. Faites passer les fils comme indiqué. Reportez-vous à l'étape 6 à la page 1-12.
5. Connectez la prise d'alimentation cc **3** à la fiche de l'adaptateur ca/cc.

6. L'écran plat ressemble à l'un de ceux présentés dans les illustrations ci-dessous.

**Ecran IBM T541**

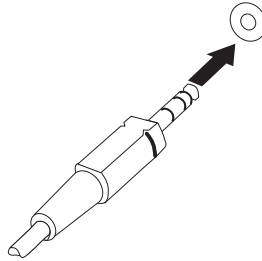


**Ecran IBM T560**



7. Si vous disposez d'un écran plat IBM T541, remplacez les panneaux arrière.

- Connectez le câble audio, qui est raccordé au panneau frontal de haut-parleur, au connecteur de haut-parleur audio de l'ordinateur.



- Branchez le câble de l'adaptateur ca/cc sur un socle de prise de courant.
- Vous pouvez désormais mettre l'écran sous tension.
- Appuyez sur l'interrupteur d'alimentation du panneau frontal de haut-parleur pour mettre les haut-parleurs sous tension.



---

## Guida per l'utente e all'installazione

Questa guida contiene le istruzioni sull'installazione e l'utilizzo della mascherina per l'altoparlante del video a schermo piatto IBM da 15".

---

### Descrizione del prodotto

La mascherina per l'altoparlante del video a schermo piatto utilizza un composto di carbone per la tecnologia dell'altoparlante a schermo piatto, che fornisce elevate prestazioni rispetto a quelle degli altoparlanti tradizionali. L'altoparlante a scorrimento è un disegno senza utilizzare spazio desktop, che complementa il video a schermo piatto IBM da 15".

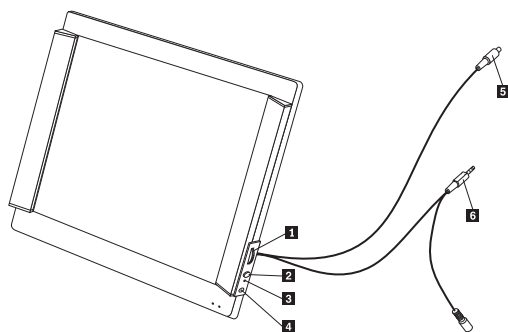
### Caratteristiche del prodotto

- Accensione/Spegnimento - manopola per il controllo del volume
- Spinotto per cuffie
- Audio integrato - gli altoparlanti si adattano al video e viene fornita una soluzione di altoparlanti video/audio completa
- Nessuno spazio richiesto
- 2 W per canale - totale di 4 W
- Tensione universale - utilizza l'alimentazione CC esistente del video
- Cavo audio da 3 mm. - che consente di fissare il video a schermo piatto a muro con l'elaboratore sul piano
- Facile da collegare -- gli altoparlanti scorrono sulla mascherina dei video a schermo piatto IBM T541 e T560 da 15"

---

## Identificazione dei connettori sulla mascherina per l'altoparlante del video a schermo piatto

La seguente figura identifica i connettori sulla mascherina per l'altoparlante del video a schermo piatto.

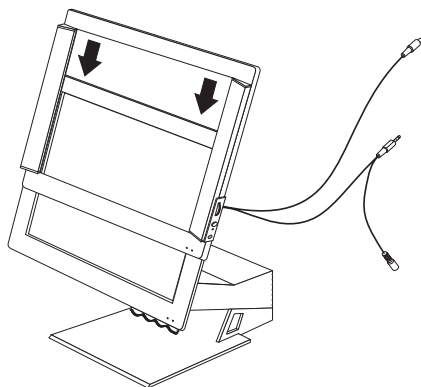


- 1** Controllo del volume
- 2** Pulsante di alimentazione
- 3** LED (light-emitting diode) di alimentazione
- 4** Connettore per cuffie
- 5** Cavo audio (3 m)
- 6** Cavo di alimentazione (18")



## Fissaggio e collegamento della mascherina per l'altoparlante del video a schermo piatto

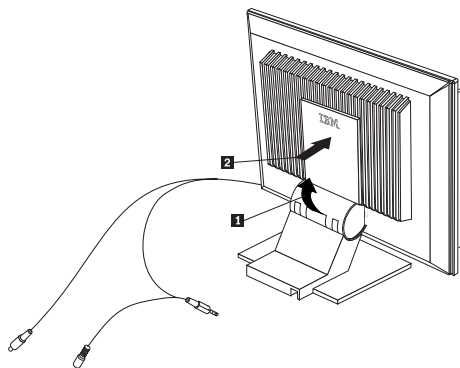
Posizionare la mascherina per l'altoparlante a schermo piatto sul video in modo che i binari guida sulle parti laterali della mascherina siano allineate al video. Far scorrere la mascherina dell'altoparlante verso il basso fino a quando viene coperta la mascherina del video.



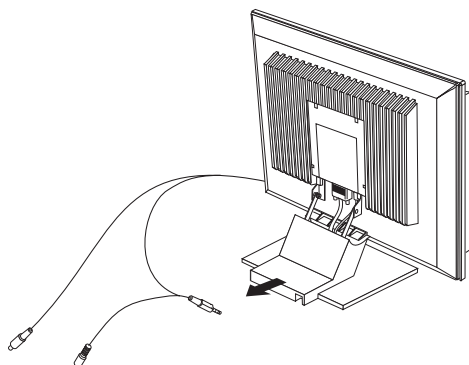
## Rimozione dei pannelli posteriori dal video a schermo piatto T541

La rimozione dei pannelli posteriori consentono di accedere al connettore di alimentazione sul video a schermo piatto T541 per il collegamento del cavo di alimentazione.

1. Spegner il video e scollegare il cavo di alimentazione CA/CC dalla relativa presa.
2. Premere sui lati del pannello posteriore **1** ed estrarre il video per rimuoverlo completamente. Estrarre il pannello **2** per rimuoverlo.



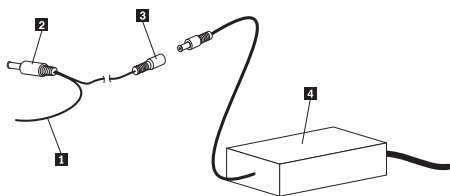
3. Estrarre il pannello rimanente dal video.



4. Per sostituire i pannelli posteriori, invertire la procedura, dopo aver istradati e collegati i cavi della mascherina (consultare la sezione 7 a pagina 1-20).

## Collegamento della mascherina per l'altoparlante del video a schermo piatto al video

Seguire queste istruzioni per collegare gli altoparlanti al video a schermo piatto, consultare la figura per l'identificazione.



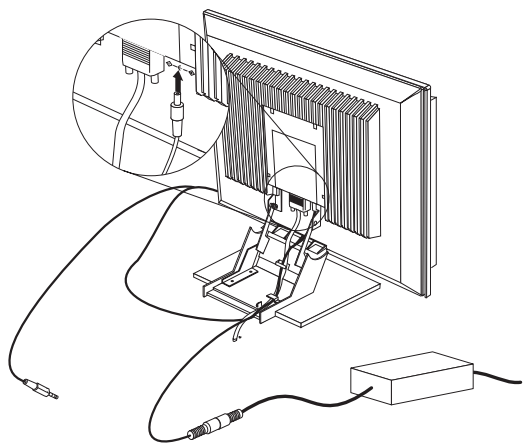
- 1** Cavo di alimentazione CC (dall'assieme altoparlanti mascherina)
- 2** Cavo di alimentazione CC
- 3** Cavo di alimentazione CC
- 4** Adattatore CA/CC (video)

1. Individuare i cavi sulla mascherina per l'altoparlante del video a schermo piatto. Il cavo di alimentazione CC **1** è collegato alla mascherina per l'altoparlante.
2. Scollegare il connettore dell'adattatore CA/CC dal video. (Rimuovere i pannelli posteriori del video IBM T541 prima di scollegare l'adattatore CA/CC).

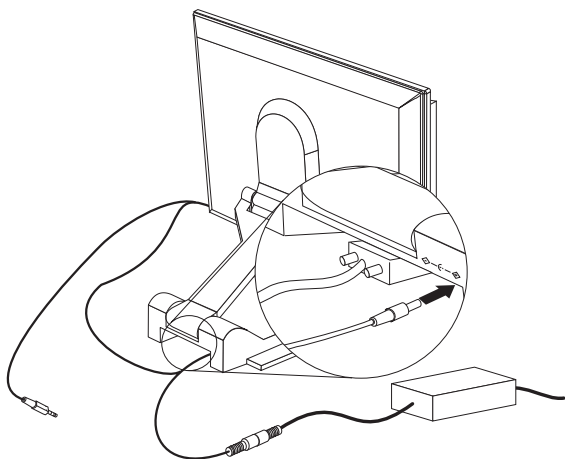
3. Collegare il cavo di alimentazione CC **2** al relativo connettore del video.  
Consultare la sezione 6 a pagina 1-20
4. Istradare i fili come riportato. Consultare la sezione 6 a pagina 1-20
5. Collegare il cavo di alimentazione CC **3** al connettore dell'adattatore CA/CC.

6. Il video a schermo piatto è simile a una delle seguenti figure.

**Video IBM T541**

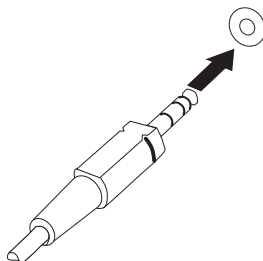


**Video IBM T560**



7. Se si dispone di un video a schermo piatto IBM T541, sostituire i pannelli posteriori.

- Collegare il cavo audio, collegato alla mascherina per l'altoparlante, al connettore per l'altoparlante audio dell'elaboratore.



- Collegare il cavo dell'adattatore CA/CC alla presa di alimentazione.
- E' possibile accendere il video.
- Premere il pulsante di alimentazione della mascherina per attivare gli altoparlanti.



---

## Installations- und Benutzerhandbuch

Dieses Handbuch enthält Anweisungen zur Installation und Verwendung des Lautsprecheraufsatzes für IBM 15-Zoll-Flachbildschirme.

---

### Produktbeschreibung

Für den Lautsprecheraufsatz des Flachbildschirms wird ein Kohlefaserverbundstoff für Flachbildschirmlautsprecher verwendet, der die Lautsprecherleistung im Vergleich zu herkömmlichen Lautsprechern verbessert. Der im Lieferumfang des IBM 15-Zoll-Flachbildschirms enthaltene Lautsprecher ist so konstruiert, dass er nur auf den Bildschirm aufgesetzt werden muss, und benötigt so keinen zusätzlichen Platz auf Ihrer Arbeitsfläche.

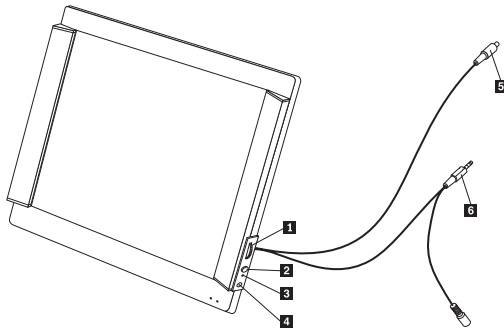
### Produktfunktionen

- Ein-/Ausschalttaste - Lautstärkeregelung
- Kopfhöreranschluss für die Audiowiedergabe, damit andere Personen in der Nähe nicht belästigt werden
- Integrierte Audiowiedergabe - der Lautsprecher passt auf den Bildschirm und bietet somit eine Komplettlösung für Audiowiedergabe und Bildschirm
- Kein zusätzlicher Platz auf der Arbeitsfläche erforderlich
- 2 W pro Kanal - insgesamt 4 W
- Universalspannung - der Gleichstrom vom Computer wird verwendet
- 3 m Audiokabel - dadurch können Sie den Flachbildschirm an der Wand befestigen und den Computer auf dem Boden aufstellen
- Einfach anzuschließen - der Lautsprecher wird mit der Abdeckung auf den IBM T541 oder T560 15-Zoll-Flachbildschirm aufgesetzt

---

## Anschlüsse am Lautsprecheraufsatz des Flachbildschirms

In der folgenden Abbildung sind die Anschlüsse am Lautsprecheraufsatz des Flachbildschirms dargestellt.

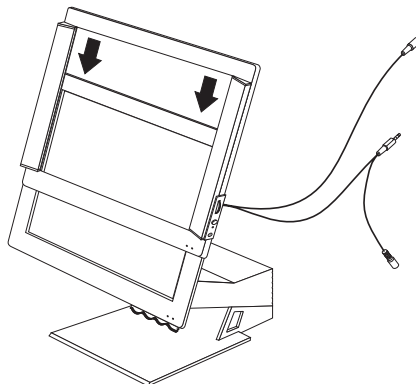


- 1** Lautstärkeregelung
- 2** Ein-/Ausschalttaste
- 3** Ein-/Ausschaltanzeige
- 4** Kopfhöreranschluss
- 5** Audiokabel (3 m)
- 6** Netzkabel (ca. 45 cm)

---

## Lautsprecheraufsatz des Flachbildschirms befestigen und anschließen

Setzen Sie den Lautsprecheraufsatz des Flachbildschirms so auf den Bildschirm, dass die Schienen an beiden Seiten des Aufsatzes am Bildschirm ausgerichtet sind. Schieben Sie den Lautsprecheraufsatz nach unten über den Bildschirmaufsatz.

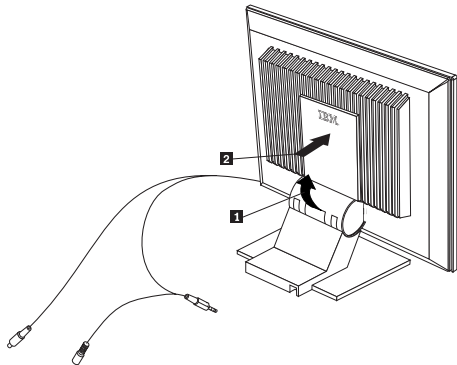




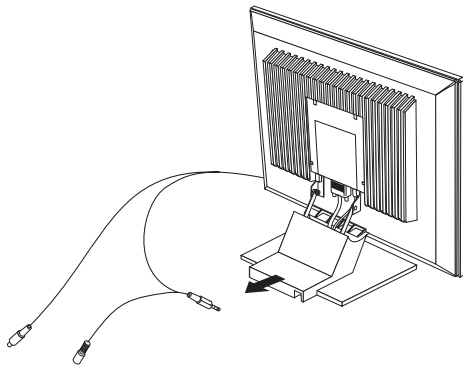
## Hintere Abdeckungen des T541 Flachbildschirms entfernen

Durch das Entfernen der hinteren Abdeckungen können Sie auf die Netzanschlüsse des T541 Flachbildschirms zugreifen, um das Netzkabel anzuschließen.

1. Schalten Sie den Bildschirm aus, und ziehen Sie das Netzteil für Wechsel-/Gleichstrom aus der Netzsteckdose ab.
2. Drücken Sie auf beide Seiten der hinteren Abdeckung **1**, und ziehen Sie sie vom Bildschirm weg, um sie vollständig zu entfernen. Ziehen Sie die Abdeckung **2** nach oben, um sie zu entfernen.



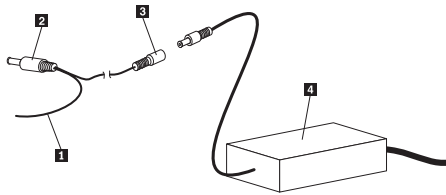
3. Ziehen Sie die untere Abdeckung vom Bildschirm weg, um sie zu entfernen.



4. Nachdem Sie die Kabel des Lautsprecheraufsatzes verlegt und angeschlossen haben (siehe Schritt 7 auf Seite 1-27), führen Sie die zuvor beschriebenen Schritte in umgekehrter Reihenfolge durch, um die hinteren Abdeckungen wieder einzusetzen.

## Lautsprecheraufsatz an den Bildschirm anschließen

Führen Sie die folgenden Schritte anhand der Abbildung durch, um die Lautsprecher an den Flachbildschirm anzuschließen.

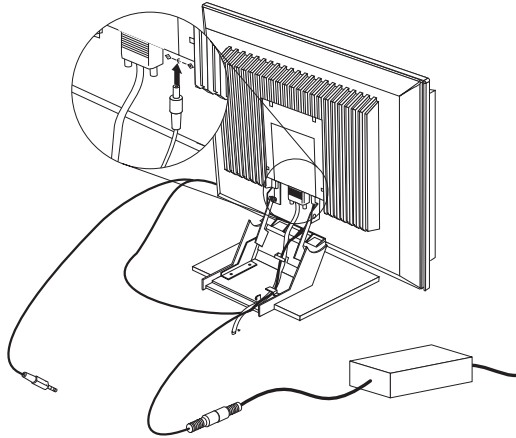


- 1** Netzkabel für Gleichstrom (vom Lautsprecheraufsatz)
- 2** Netzstecker für Gleichstrom
- 3** Anschlussbuchse für Gleichstrom
- 4** Wechsel-/Gleichstromadapter (Bildschirm)

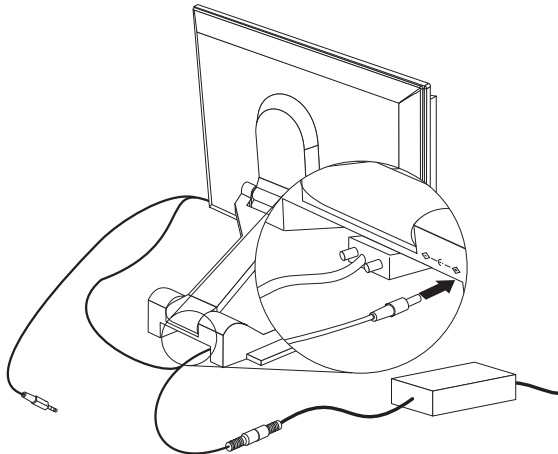
1. Suchen Sie nach den Kabeln am Lautsprecheraufsatz des Flachbildschirms. Das Gleichstromkabel **1** ist fest mit dem Lautsprecheraufsatz verdrahtet.
2. Ziehen Sie den Stecker des Wechsel-/Gleichstromadapters vom Bildschirm ab. (Entfernen Sie die hinteren Abdeckungen des IBM T541 Bildschirms, bevor Sie den Wechsel-/Gleichstromadapter abziehen.)
3. Stecken Sie den Netzstecker für Gleichstrom **2** in die Anschlussbuchse am Bildschirm. Siehe Schritt 6 auf Seite 1-27.
4. Verlegen Sie die Kabel wie in der Abbildung gezeigt. Siehe Schritt 6 auf Seite 1-27.
5. Verbinden Sie die Anschlussbuchse für Gleichstrom **3** mit dem Stecker des Wechsel-/Gleichstromadapters.

6. Ihr Flachbildschirm ist in einer der folgenden Abbildungen dargestellt.

#### IBM T541 Bildschirm

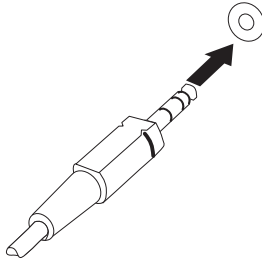


#### IBM T560 Bildschirm



7. Wenn Sie über einen IBM T541 Flachbildschirm verfügen, setzen Sie die hinteren Abdeckungen wieder ein.

8. Schließen Sie das fest mit dem Lautsprecheraufsatz verdrahtete Audiokabel an den Audiolautsprecheranschluss des Computers an.



9. Stecken Sie den Netzstecker des Wechsel-/Gleichstromadapters in eine Netzsteckdose ein.
10. Sie können jetzt den Bildschirm einschalten.
11. Drücken Sie den Netzschalter am Lautsprecheraufsatz, um die Lautsprecher einzuschalten.

---

## Guía de instalación y del usuario

Esta guía contiene instrucciones sobre cómo instalar y utilizar el producto IBM Frontal de altavoz para monitor de pantalla plana de 15 pulgadas.

---

### Descripción del producto

El Frontal de altavoz para monitor de pantalla plana utiliza un compuesto de fibra de carbono para la tecnología de altavoz de pantalla plana, que hace que el rendimiento del altavoz sea superior al de los altavoces tradicionales. El concepto de altavoz deslizante implica un diseño que no utiliza espacio del escritorio, lo cual complementa al monitor de pantalla plana de 15 pulgadas de IBM.

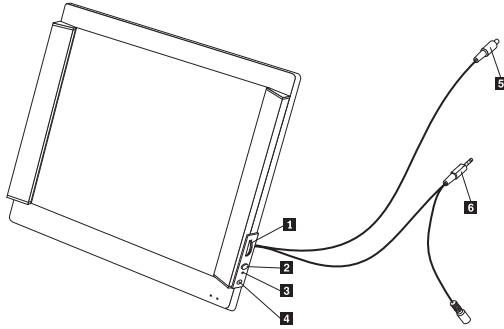
### Características del producto

- Botón de encendido y apagado, y control del volumen.
- Conector de auricular para la escucha individual.
- Sonido integrado: el altavoz se adapta al monitor y proporciona una solución completa de altavoz de audio/monitor.
- No ocupa espacio en el escritorio.
- 2 W por canal: 4 W en total.
- Voltaje universal: utiliza la misma alimentación CC que el monitor.
- Cable de audio de 3 metros (118,1 pulgadas) que le permite montar el monitor de pantalla plana en la pared y dejar el sistema en el suelo.
- Fácil conexión: el altavoz se desliza en el frontal de los monitores de pantalla plana de 15 pulgadas IBM T541 y T560

---

## Identificación de los conectores del frontal de altavoz para monitor de pantalla plana

La siguiente ilustración identifica los conectores del frontal de altavoz para monitor de pantalla plana.

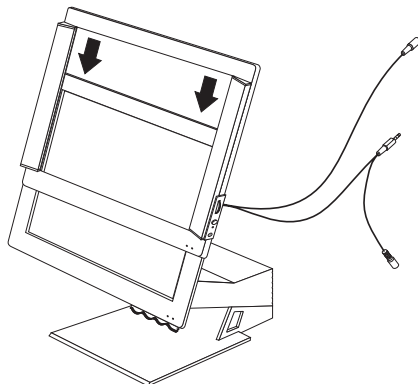


- 1** Control de volumen
- 2** Botón de alimentación
- 3** Diodo emisor de luz (LED)
- 4** Conector de auriculares
- 5** Cable de audio (3 metros)
- 6** Cable de alimentación (18 pulgadas)

---

## Montaje y conexión del frontal de altavoz para monitor de pantalla plana

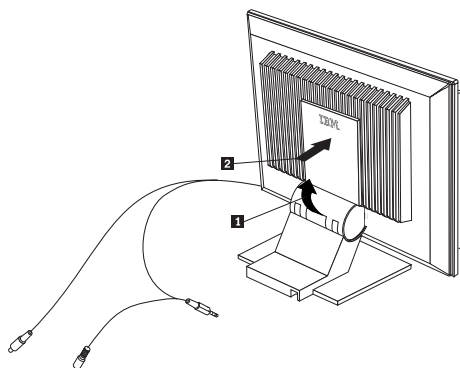
Sítue el frontal de altavoz para monitor de pantalla plana encima del monitor, de manera que las guías laterales del frontal queden alineadas con el monitor. Deslice el frontal de altavoz hacia abajo hasta que cubra el frontal del monitor.



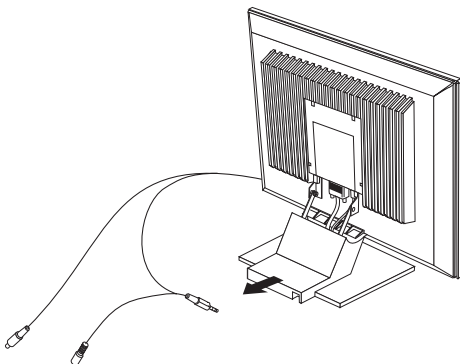
## Extracción de los paneles posteriores del monitor de pantalla plana T541

La extracción de los paneles posteriores le permitirá acceder al conector de alimentación del monitor de pantalla plana T541 para conectar el cable de alimentación.

1. Apague el monitor y desconecte la fuente de alimentación CA/CC de la toma de corriente.
2. Presione ambos lados del panel posterior del monitor **1** y haga fuerza hacia fuera para quitarlo completamente. Presione el panel **2** hacia arriba para extraerlo.



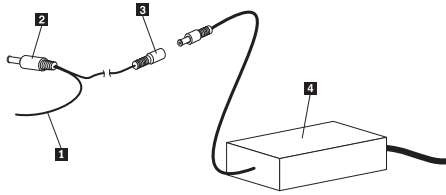
3. Presione el resto del panel del monitor hacia fuera para extraerlo.



4. Para sustituir los paneles posteriores, siga los pasos anteriores a la inversa una vez que se haya instalado y conectado el cableado del altavoz (véase el paso 7 en la página 1-33).

## Conexión del frontal de altavoz para pantalla plana al monitor

Realice los pasos siguientes para conectar los altavoces al monitor de pantalla plana. Consulte las ilustraciones para la identificación.



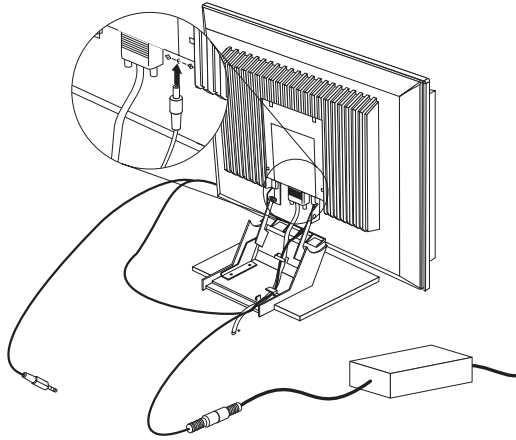
- 1** Cable de alimentación CC (del altavoz del frontal)
- 2** Conector de alimentación CC
- 3** Receptáculo de alimentación CC
- 4** Adaptador CA/CC (monitor)

1. Localice los cables del frontal de altavoz para monitor de pantalla plana. El cable de alimentación CC **1** sale del frontal de altavoz.
2. Desconecte del conector del adaptador CA/CC del monitor. (Extraiga los paneles posteriores del monitor IBM T541 antes de desconectar el adaptador CA/CC.)
3. Conecte el conector de alimentación CC **2** al conector del receptáculo del monitor. Véase el paso 6 en la página 1-33
4. Instale los cables tal y como se muestra en la ilustración. Véase el paso 6 en la página 1-33
5. Conecte el receptáculo de alimentación CC **3** al conector del adaptador CA/CC.

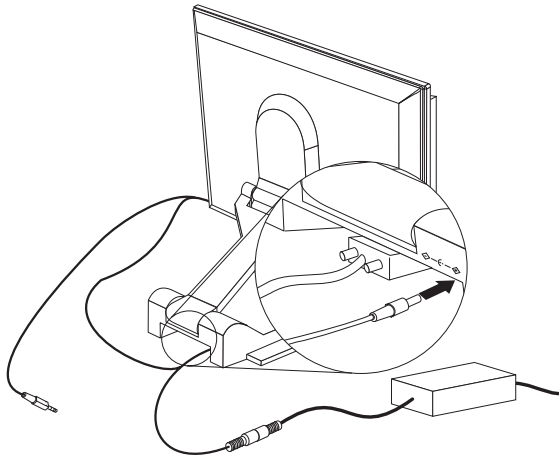


6. El monitor de pantalla plana tendrá un aspecto similar al que se muestra en las ilustraciones siguientes.

**Monitor IBM T541**

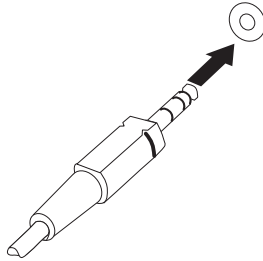


**Monitor IBM T560**



7. Si tiene un monitor de pantalla plana IBM T541, sustituya los paneles posteriores.

8. Conecte el cable de audio que sale del frontal de altavoz al conector del altavoz de audio del sistema.



9. Conecte el cable del adaptador CA/CC a una toma de corriente.
10. Puede encender el monitor.
11. Pulse el botón de alimentación del frontal de altavoz para encender los altavoces.

---

## Guia do Usuário e Instalação

Este guia contém instruções sobre como instalar e utilizar o Engate de Alto-falantes para Monitores IBM de Tela Plana, de 15 pol.

---

### Descrição do Produto

O Engate de Alto-falantes para Monitores de Tela Plana utiliza um composto de fibra de carbono, da tecnologia de alto-falantes para tela plano, o qual proporciona um desempenho de alto-falante acima dos tradicionais. O conceito slide-on do alto-falante é um design que não ocupa espaço na área de trabalho, e é um complemento do seu monitor IBM de 15 pol. de tela plana.

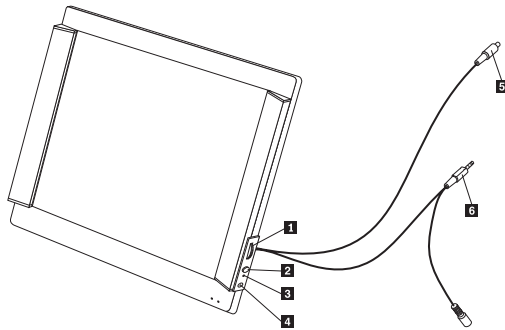
### Recursos do Produto

- Liga/desliga - botão de controle de volume
- Tomada de fone de ouvido - fornece escuta particular
- Som integrado - alto-falante que se ajusta ao seu monitor, fornecendo uma solução completa de áudio/vídeo
- Nenhum espaço de mesa é necessário
- 2 W por canal - 4 W no total
- Voltagem universal - utiliza a energia cc já existente do monitor
- Cabo de áudio de 3 m (118,1 pol.) - que permite a montagem do monitor de tela plana na parede, com o computador no pedestal
- Fácil conexão -- o alto-falante desliza no engate dos monitores de tela plana IBM T541 e T560, de 15 pol.

---

## Identificando os conectores no engate de alto-falantes para monitores de tela plana

A ilustração a seguir identifica os conectores no engate de alto-falantes para monitor de tela plana.

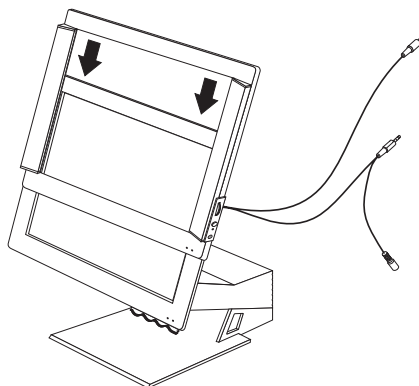


- 1** Controle de volume
- 2** Botão de alimentação
- 3** LED (diodo emissor de luz) de energia
- 4** Conector de fone de ouvido
- 5** Cabo de áudio (3 m)
- 6** Cabo de energia (45,7 cm)

---

## Montando e conectando o engate do alto-falante do monitor de tela plana

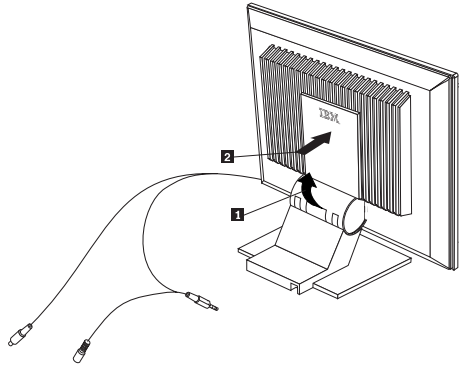
Posicione o engate do alto-falante para tela plana sobre o monitor, de forma que as guias corredeiras nas laterais do engate fiquem alinhadas ao monitor. Faça o alto-falante deslizar para baixo até cobrir o engate do monitor.



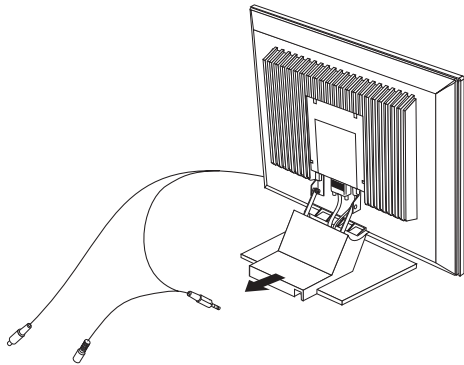
## Removendo os painéis traseiros do monitor de tela plana T541

A remoção dos painéis traseiros permitirá acessar o conector de energia do monitor de tela plana T541 para a conexão do cabo de energia.

1. Desligue o monitor e tire a fonte de alimentação ca/cc da tomada.
2. Pressione os dois lados do painel traseiro **1** e empurre-o para fora do monitor para removê-lo completamente. Para a remoção, empurre o painel **2** para cima.



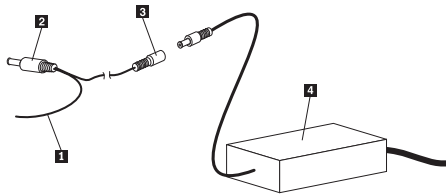
3. Para a remoção, empurre o restante do painel para fora do monitor.



4. Para recolocar os painéis traseiros, inverta as etapas depois que o cabeamento do alto-falante do engate tiver sido roteado e conectado (consulte a etapa 7 na página 1-39).

## Conectando o engate do alto-falante de tela plana ao monitor

Siga estas instruções para conectar seus alto-falantes ao monitor de tela plana. Para identificação, consulte a ilustração.

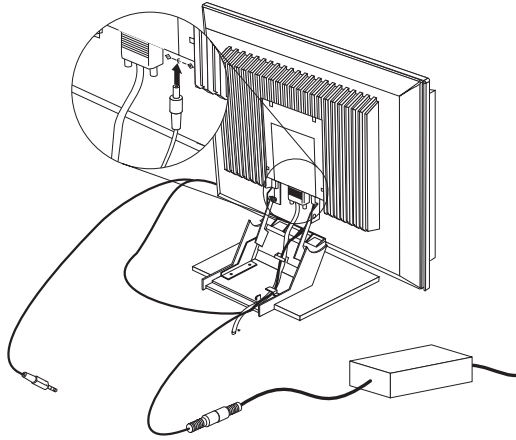


- 1** Cabo de alimentação CC (da montagem do alto-falante do engate)
- 2** Plugue de alimentação CC
- 3** Receptáculo de alimentação CC
- 4** Adaptador CA/CC (monitor)

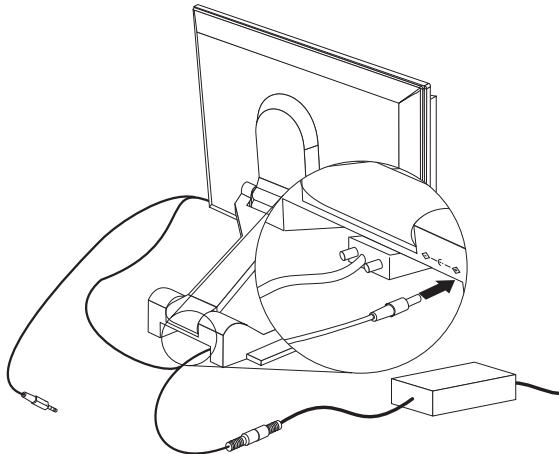
1. Localize os cabos no engate do alto-falante do monitor de tela plana. O cabo de alimentação cc **1** é conectado ao engate do alto-falante.
2. Tire o conector do adaptador ca/cc do monitor. (Remova os painéis traseiros do monitor IBM T541 antes de desconectar o adaptador ca/cc).
3. Conecte o plugue de alimentação cc **2** ao conector de receptáculo do monitor. Consulte a etapa 6 na página 1-39
4. Roteie os fios conforme mostrado. Consulte a etapa 6 na página 1-39
5. Conecte o receptáculo de alimentação cc **3** ao plugue do adaptador ca/cc.

6. Seu monitor de tela plana se parecerá com uma das seguintes ilustrações.

**Monitor IBM T541**

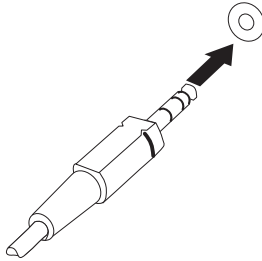


**Monitor IBM T560**



7. Se você possui um monitor de tela plana IBM T541, recoloque os painéis traseiros.

8. Conecte o cabo de áudio, incorporado ao engate do alto-falante, ao conector do alto-falante de áudio de seu computador.



9. Conecte o cabo do adaptador ca/cc a uma tomada de alimentação.
10. Agora, você já pode ligar o monitor.
11. Pressione o botão de alimentação no engate dos alto-falantes para ligá-los.



---

## 安装与用户指南

本指南包含有关如何安装和使用“IBM 15 英寸纯屏监视器音箱边框”的指示信息。

---

### 产品描述

该“纯屏监视器音箱边框”使用用于纯屏音箱工艺的碳纤维复合材料，该复合材料提供的音箱性能超过传统音箱。滑动式音箱概念是一种不使用任何桌面空间的设计，该设计对您的 IBM 15 英寸纯屏监视器进行了补充。

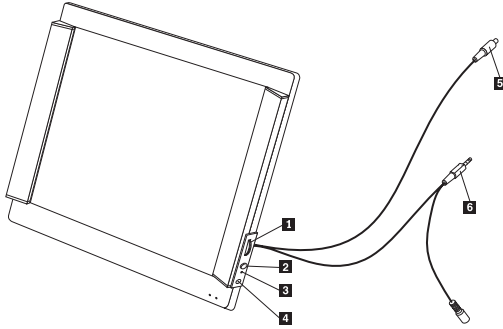
### 产品功能

- 电源开 / 关 — 音量控制旋钮
- 耳机插孔提供私人收听
- 集成的声音 — 音箱与您的监视器配合并提供完全的音频 / 监视器音箱解决方案
- 不需要桌面空间
- 每个通道 2 W — 总共 4 W
- 通用电压 — 使用来自监视器的现有直流电源
- 3 米 (118.1 英寸) 音频电缆 — 可以让您将纯屏监视器安装在墙上同时将计算机安装在地板上
- 便于连接 — 音箱滑动到 IBM T541 和 T560 15 英寸纯屏监视器的边框上

---

## 识别纯屏监视器音箱边框上的接口

以下插图标识了纯屏监视器音箱边框上的接口。

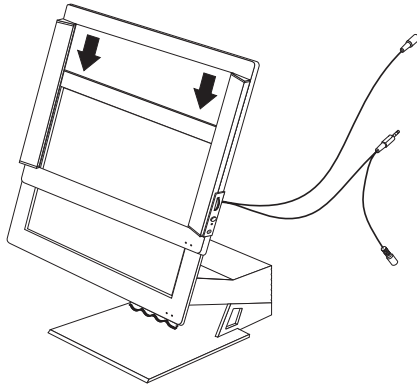


- 1** 音量控制
- 2** 电源按钮
- 3** 电源发光二极管 (LED)
- 4** 耳机接口
- 5** 音频电缆 (3 米)
- 6** 电源电缆 (18 英寸)

---

## 安装并连接纯屏监视器音箱边框

将纯屏音箱边框放置在监视器上，以使边框两侧的导轨与监视器对齐。将音箱边框向下滑动，直至其覆盖监视器边框。

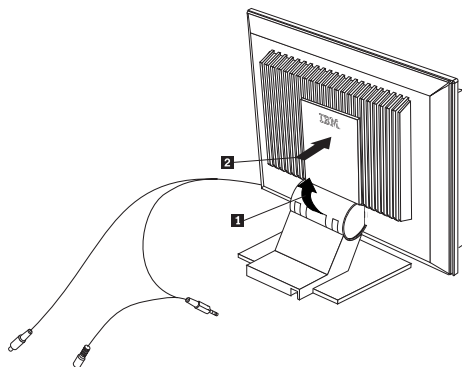


## 从 T541 纯屏监视器上卸下背板

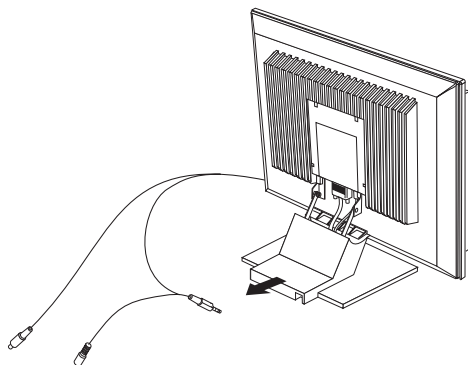
卸下背板将允许对 T541 纯屏监视器上的电源接口进行访问，以连接电源线。

1. 关闭监视器并从电源插座中拔出交流 / 直流电源插头。

2. 同时按住背板 **1** 的两边并将其从监视器向外推以把它完全卸下。将背板 **2** 向上推以将其卸下。



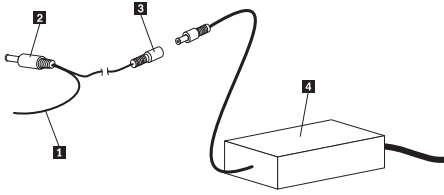
3. 将背板的剩余部分从监视器向外推以将其卸下。



4. 要将背板装回原处，请在已将边框音箱电缆线路布线和连接后，逆向执行这些步骤（请参阅步骤第01-450页的7）。

## 将纯屏音箱边框连接到监视器

请按这些指示信息进行操作，以将音箱连接到纯屏监视器，请参考以下插图以进行识别。

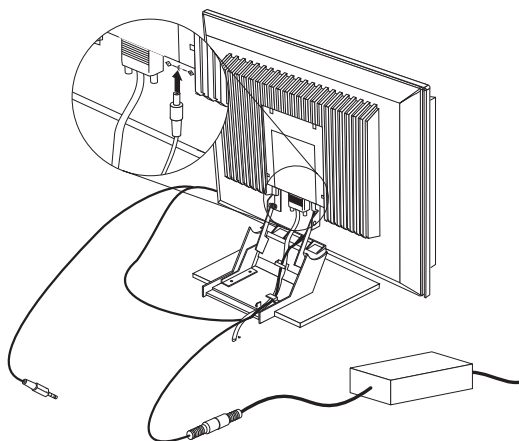


- 1** 直流电源电缆（从边框音箱组件）
- 2** 直流电源插头
- 3** 直流电源插孔
- 4** 交流 / 直流电源适配器（至监视器）

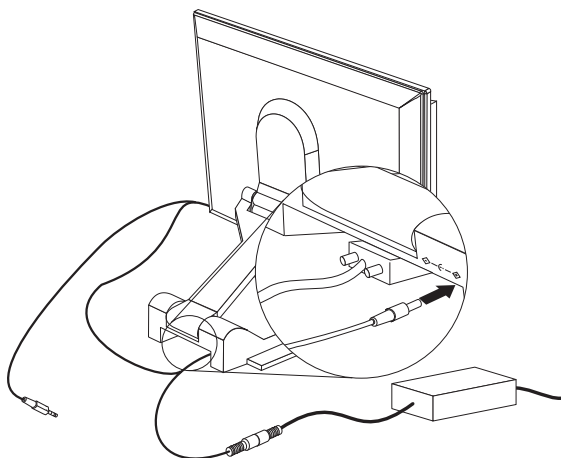
1. 将电缆定位在纯屏监视器音箱边框上。直流电源电缆 **1** 是硬接线到音箱边框的。
2. 从监视器上拔出交流 / 直流电源适配器接头。（拔出交流 / 直流电源适配器前，请卸下 IBM T541 监视器上的背板）。
3. 将直流电源插头 **2** 连接到监视器上的插孔接口。请参阅步骤第 01-450 页的 06。
4. 如图所示布线。请参阅步骤第 01-450 页的 06。
5. 将直流电源插孔 **3** 连接到交流 / 直流电源适配器插头。

6. 纯屏监视器看上去将与以下插图之一相似。

**IBM T541 监视器**

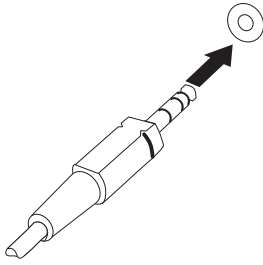


**IBM T560 监视器**



7. 如果您有 IBM T541 纯屏监视器，则请将背板装回原处。

8. 将硬接线到音箱边框的音频电缆连接到计算机上的音频音箱接口。



9. 将交流 / 直流电源适配器电线插入电源插座。

10. 此时可以打开监视器了。

11. 按下音箱边框上的电源按钮以打开音箱。

---

## 安裝及使用手冊

本手冊包含如何安裝及使用「IBM 15 吋平面顯示器喇叭擋板」的說明。

---

### 產品說明

此「平面顯示器喇叭擋板」乃使用平面喇叭技術之碳纖維複合材料，該技術所提供的喇叭效能高於傳統喇叭。滑動式安裝喇叭的概念是與您的 IBM 15 吋平面顯示器相搭配，不使用任何桌面空間的一項設計。

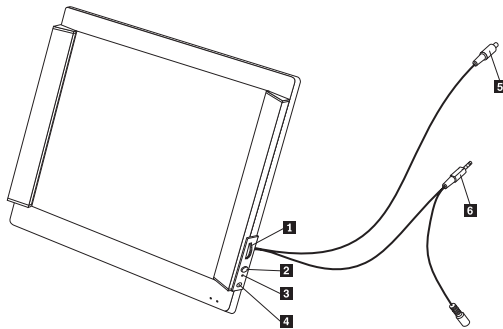
#### 產品特性

- 電源開關 - 音量控制握柄
- 耳機插孔可供獨自收聽之用
- 整合式音效 - 喇叭與您的顯示器套合，提供了完整的聲音/顯示器喇叭解決方案
- 不佔桌面空間
- 各聲道 2 瓦 - 共 4 瓦
- 廣用電壓 - 使用來自顯示器的現有 DC 電源
- 3 公尺 (118.1 吋) 音訊線 - 可讓您將平面顯示器裝載於牆上而電腦置於地板上
- 容易連接 -- 喇叭可用滑動的方式套到 IBM T541 及 T560 15 吋平面顯示器擋板上

---

### 識別平面顯示器喇叭擋板上的接頭

下列圖例識別平面顯示器喇叭擋板上的接頭。

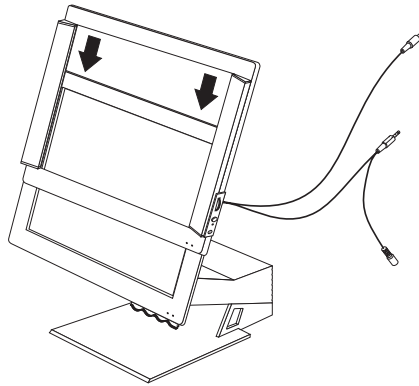


- 1** 音量控制
- 2** 電源按鈕
- 3** 電源發光二極體 (LED)
- 4** 耳機接頭

- 5 音訊線 (3 公尺)
- 6 電源線 (18 吋)

## 裝載及安裝平面顯示器喇叭擋板

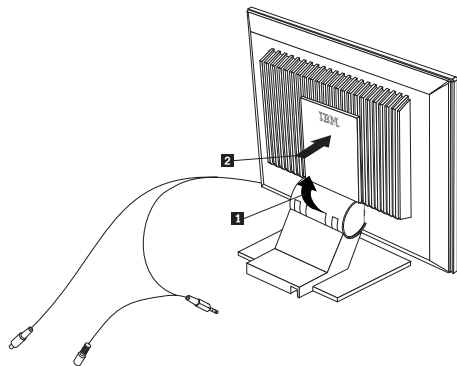
使您的平面喇叭擋板兩側的滑軌指引對齊於顯示器，將其由上往下安置於顯示器上。將喇叭擋板往下滑至其覆蓋住顯示器擋板為止。



## 移除 T541 平面顯示器的後面板

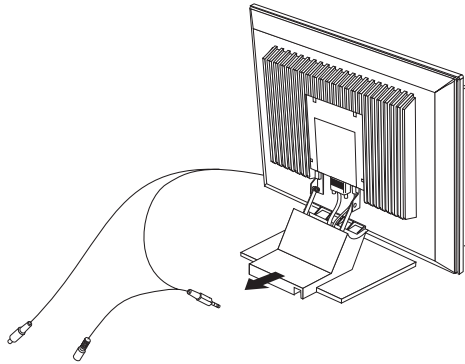
將後面板移除可使平面顯示器上的電源接頭露出，以便連接電源線。

1. 關閉顯示器，從電源插座將 AC/DC 電源供應器拔掉。
2. 按下後面板兩側 **1** 並將其自顯示器往外推，以將其完全移除。往上推按面板 **2** 將其移除。





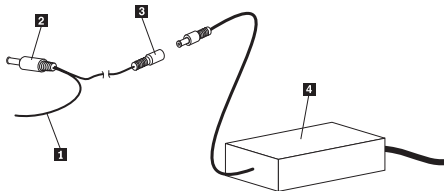
3. 將剩下的面板自顯示器往外推可將其移除。



4. 若要更換後面板，則在擋板喇叭接線定好線路裝設完畢後，照前述步驟反向進行（請參閱步驟第1-50頁的7）。

### 將平面喇叭擋板連接到顯示器

請遵循下述指示，將喇叭連接到平面顯示器，若需識別請參照圖例。

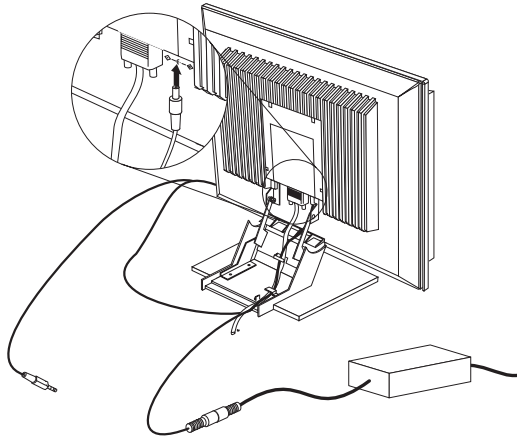


- 1** DC 電源線（來自擋板揚聲器配件）
- 2** DC 電源插頭
- 3** DC 電源母接頭
- 4** AC/DC 整流器（顯示器）

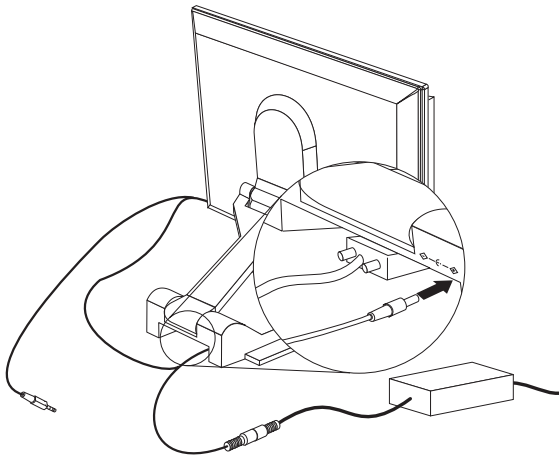
1. 找出平面顯示器喇叭擋板上的接線。DC 電源線 **1** 是以硬接線方式接於喇叭擋板。
2. 從顯示器將 AC/DC 整流器接頭拔掉。（拔掉 AC/DC 整流器之前，請先移除 IBM T541 顯示器的後面板）。
3. 將 DC 電源插頭 **2** 連接到顯示器上的母接頭。請參閱步驟第1-50頁的6
4. 依照圖示接好線路。請參閱步驟第1-50頁的6
5. 將 DC 電源母接頭 **3** 接到 AC/DC 整流器插頭。

6. 您的平面顯示器看起來會像下列圖例之一。

**IBM T541 顯示器**

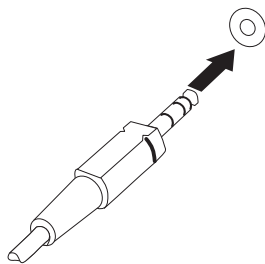


**IBM T560 顯示器**



7. 如果您的顯示器是 IBM T541 平面顯示器，則請更換後面板。

8. 將音訊線（以硬接線方式接於喇叭擋板）連接到電腦上的音訊喇叭接頭。



9. 將 AC/DC 整流器電線插至電源插座。
10. 現在您可以開啓您的顯示器了。
11. 按下喇叭擋板上的電源按鈕來開啓喇叭。



---

## インストールおよびユーザース・ガイド

本書には、IBM 15 インチ フラットパネル・モニター・スピーカー・ベゼルのインストールおよび使用方法の手順が含まれています。

### 製品説明

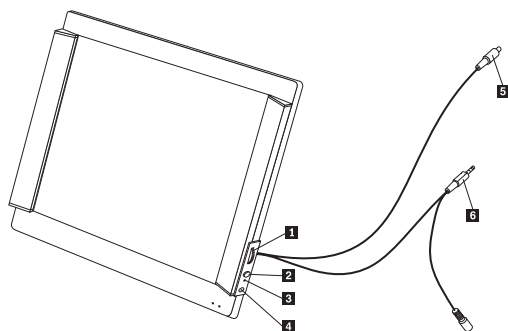
フラット・パネル・モニター・スピーカー・ベゼルは、フラット・パネル・スピーカー・テクノロジー用に炭素繊維複合材料を使用しており、これによりスピーカーは従来のスピーカーと比べてパフォーマンスが優れています。スライドオン・スピーカーの概念は、デスクトップ・スペースを使用しない設計であり、ご使用の IBM 15 インチ フラットパネル・モニターを補完します。

### 製品の特長

- 電源オン/オフ - ボリューム・コントロールつまみ
- ヘッドホン・ジャックにより自分だけで聴くことができます。
- 内蔵サウンド - スピーカーはモニターのスペースに収まり、完全なオーディオ/モニター・スピーカー・ソリューションを提供します。
- 机のスペースは不要です。
- チャンネルあたり 2 W - 合計 4 W
- 専用の AC アダプターは不要 - モニターからの既存の DC 電源を供給します。
- 3 m のオーディオ・ケーブル - これによりコンピューターをフロアに置き、フラット・パネル・モニターを壁に取り付けることができます。
- 接続が簡単 -- スピーカーを IBM T541 および T560 15 インチ フラットパネル・モニターのベゼルにスライドしてはめ込みます。

## フラット・パネル・モニター・スピーカー・ベゼル上のコネクタ ーを識別する

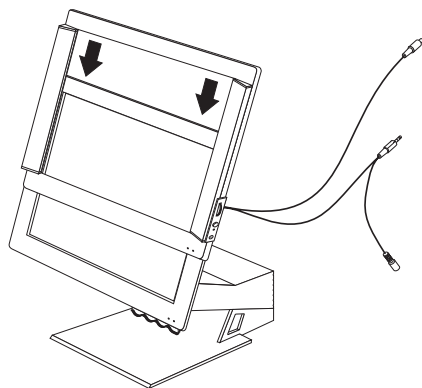
次の図は、フラット・パネル・モニター・スピーカー・ベゼル上のコネクタを示しています。



- 1 ボリューム制御
- 2 電源ボタン
- 3 電源発光ダイオード (LED)
- 4 ヘッドホン・コネクタ
- 5 オーディオ・ケーブル (3 m)
- 6 電源ケーブル (45.7 cm (18 インチ))

## フラット・パネル・モニター・スピーカー・ベゼルを取り付けて 接続する

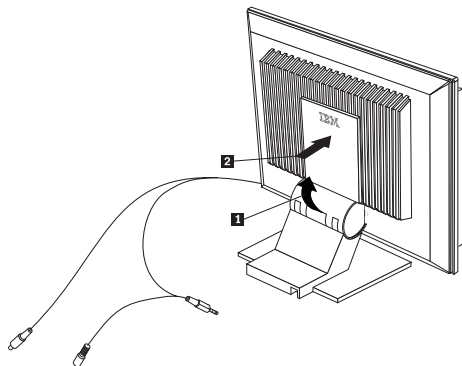
フラット・パネル・スピーカー・ベゼルをモニターの上に置き、ベゼルの両側のレール・ガイドをモニターとそろえてください。スピーカー・ベゼルを下にスライドさせ、それでモニター・ベゼルを覆います。



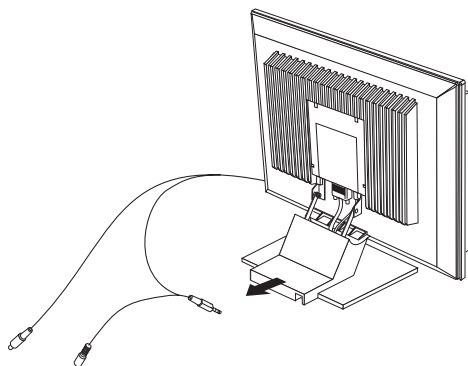
## T541 フラット・パネル・モニターから背面パネルを取り外す

背面パネルを取り外すと、電源コードを接続するための T541 フラット・パネル・モニター上の電源コネクタにアクセスできます。

1. モニターの電源を切り、電源コンセントから AC/DC 電源機構のプラグを抜きます。
2. 背面パネル **1** の両側を押し付け、それをモニターから外側に押し、完全に取り外します。次に、パネル **2** を上に向かって押し、取り外します。



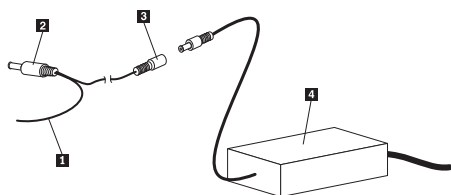
3. 残りのパネルをモニターから外側に押し、取り外します。



4. 背面パネルを再び取り付けるには、ベゼル・スピーカーの配線を引き回して接続した後 (ステップ 7 (1-57 ページ) を参照)、上記のステップを逆に行います。

## フラット・パネル・スピーカー・ベゼルをモニターに接続する

スピーカーをフラット・パネル・モニターに接続するには以下の手順に従い、識別のためには図を参照してください。



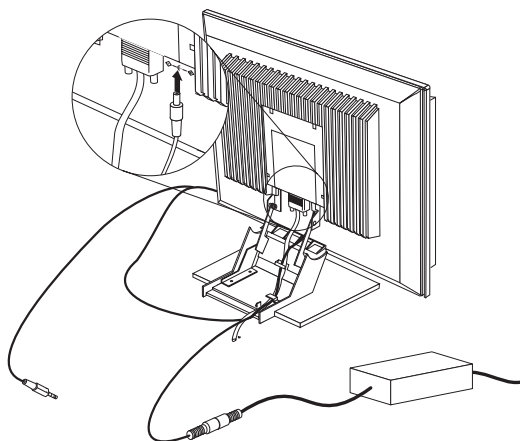
- 1** DC 電源ケーブル (ベゼル・スピーカー・アセンブリーからの)
- 2** DC 電源プラグ
- 3** DC 電源レセプタクル
- 4** AC/DC アダプター (モニター)

1. フラット・パネル・モニター・スピーカー・パネル上のケーブルを見付けます。DC 電源ケーブル **1** はスピーカー・ベゼルに配線されています。
2. モニターから AC/DC アダプター・コネクターのプラグを抜く。(AC/DC アダプターのプラグを抜く前に、IBM T541 モニター上の背面パネルを取り外します)。
3. DC 電源プラグ **2** をモニター上のレセプタクル・コネクターに接続します。ステップ 6 (1-57 ページ) を参照してください。
4. ワイヤを図で示されているように引き回します。ステップ 6 (1-57 ページ) を参照してください。
5. DC 電源レセプタクル **3** を AC/DC アダプター・プラグに接続します。

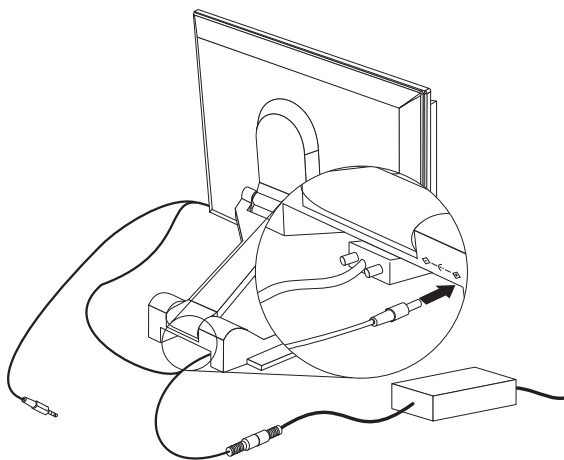


6. ご使用のフラット・パネル・モニターは、次の図のいずれかに似ています。

#### IBM T541 モニター

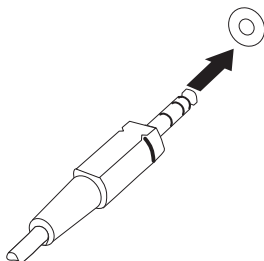


#### IBM T560 モニター



7. IBM T541 フラット・パネル・モニターをお持ちの場合は、背面パネルを取り付けます。

8. スピーカー・ベゼルに配線されたオーディオ・ケーブルを、コンピューター上のオーディオ・スピーカー・コネクタに接続します。



9. AC/DC アダプター・コードのプラグを電源コンセントに差し込みます。
10. これでモニターの電源を入れることができます。
11. スピーカー・ベゼル上の電源ボタンを押して、スピーカーの電源を入れます。

---

## Appendix A. Product warranty and support information

---

### Warranty information

This section contains the warranty period for your product, information about obtaining warranty service and support, and the IBM Statement of Limited Warranty.

---

### Warranty period

Contact your place of purchase for warranty service information. Some IBM Machines are eligible for on-site warranty service depending on the country or region where service is performed.

<b>Machine</b> - IBM 15-inch Flat Panel Monitor Speaker Bezel
---

<b>Warranty period</b> - One year
-----------------------------------

---

### Service and support

The following information describes the technical support that is available for your product, during the warranty period or throughout the life of the product. Refer to your IBM Statement of Limited Warranty for a full explanation of IBM warranty terms.

### Warranty information on the World Wide Web

The IBM Machine Warranties Web site at [http://www.ibm.com/servers/support/machine\\_warranties/](http://www.ibm.com/servers/support/machine_warranties/) contains a worldwide overview of the IBM Limited Warranty for IBM Machines, a glossary of terms used in the Statement of Limited Warranty, Frequently Asked Questions (FAQ), and links to Product Support Web pages. The IBM Statement of Limited Warranty is available from this Web site in 29 languages in Portable Document Format (PDF).

### Online technical support

Online technical support is available during the life of your product through the Personal Computing Support Web site at <http://www.ibm.com/pc/support/>.

During the warranty period, assistance for replacement or exchange of defective components is available. In addition, if your IBM option is installed in an IBM computer, you might be entitled to service at your location. Your technical support representative can help you determine the best alternative.

## Telephone technical support

Installation and configuration support through the IBM HelpCenter® will be withdrawn or made available for a fee, at IBM's discretion, 90 days after the option has been withdrawn from marketing. Additional support offerings, including step-by-step installation assistance, are available for a nominal fee.

To assist the technical support representative, have available as much of the following information as possible:

- Option name
- Option number
- Proof of purchase
- Computer manufacturer, model, serial number (if IBM), and manual
- Exact wording of the error message (if any)
- Description of the problem
- Hardware and software configuration information for your system

If possible, be at your computer. Your technical support representative might want to walk you through the problem during the call.

For the support telephone number and support hours by country, refer to the following table. If the number for your country or region is not listed, contact your IBM reseller or IBM marketing representative. Response time may vary depending on the number and nature of the calls received.

Support 24 hours a day, 7 days a week	
Canada (Toronto only)	416-383-3344
Canada (all other)	1-800-565-3344
U.S.A. and Puerto Rico	1-800-772-2227
All other countries and regions	Go to <a href="http://www.ibm.com/pc/support/">http://www.ibm.com/pc/support/</a> , and click <b>Support Phone List</b> .

---

## IBM Statement of Limited Warranty Z125-4753-06 8/2000

### Part 1 - General Terms

This Statement of Limited Warranty includes Part 1 - General Terms and Part 2 - Country-unique Terms. The terms of Part 2 replace or modify those of Part 1. The warranties provided by IBM in this Statement of Limited Warranty apply only to Machines you purchase for your use, and not for resale, from IBM or your reseller. The term "Machine" means an IBM machine, its features, conversions, upgrades, elements, or accessories, or any combination of them. The term "Machine" does not include any software programs, whether pre-loaded with the Machine, installed subsequently or otherwise. Unless IBM specifies otherwise, the following warranties apply only in the country where you acquire the Machine. Nothing in this Statement of Limited Warranty affects any statutory rights of consumers that cannot be waived or limited by contract. If you have any questions, contact IBM or your reseller.

**The IBM Warranty for Machines:** IBM warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to IBM's Official Published Specifications ("Specifications"). The warranty period for a Machine is a specified, fixed period commencing on its Date of Installation. The date on your sales receipt is the Date of Installation unless IBM or your reseller informs you otherwise.

If a Machine does not function as warranted during the warranty period, and IBM or your reseller are unable to either 1) make it do so or 2) replace it with one that is at least functionally equivalent, you may return it to your place of purchase and your money will be refunded.

**Extent of Warranty:** The warranty does not cover the repair or exchange of a Machine resulting from misuse, accident, modification, unsuitable physical or operating environment, improper maintenance by you, or failure caused by a product for which IBM is not responsible. The warranty is voided by removal or alteration of Machine or parts identification labels.

**THESE WARRANTIES ARE YOUR EXCLUSIVE WARRANTIES AND REPLACE ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THESE WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF EXPRESS OR IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION OR LIMITATION MAY NOT APPLY TO YOU. IN THAT EVENT, SUCH WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO WARRANTIES APPLY AFTER THAT PERIOD.**

**Items Not Covered by Warranty:** IBM does not warrant uninterrupted or error-free operation of a Machine. Any technical or other support provided for a Machine under warranty, such as assistance via telephone with “how-to” questions and those regarding Machine set-up and installation, will be provided **WITHOUT WARRANTIES OF ANY KIND.**

**Warranty Service:** To obtain warranty service for a Machine, contact IBM or your reseller. If you do not register your Machine with IBM, you may be required to present proof of purchase.

During the warranty period, IBM or your reseller, if approved by IBM to provide warranty service, provides without charge certain types of repair and exchange service to keep Machines in, or restore them to, conformance with their Specifications. IBM or your reseller will inform you of the available types of service for a Machine based on its country of installation. At its discretion, IBM or your reseller will 1) either repair or exchange the failing Machine and 2) provide the service either at your location or a service center. IBM or your reseller will also manage and install selected engineering changes that apply to the Machine.

Some parts of IBM Machines are designated as Customer Replaceable Units (called “CRUs”), e.g., keyboards, memory, or hard disk drives. IBM ships CRUs to you for replacement by you. You must return all defective CRUs to IBM within 30 days of your receipt of the replacement CRU. You are responsible for downloading designated Machine Code and Licensed Internal Code updates from an IBM Internet Web site or from other electronic media, and following the instructions that IBM provides.

When warranty service involves the exchange of a Machine or part, the item IBM or your reseller replaces becomes its property and the replacement becomes yours. You represent that all removed items are genuine and unaltered. The replacement may not be new, but will be in good working order and at least functionally equivalent to the item replaced. The replacement assumes the warranty service status of the replaced item. Many features, conversions, or upgrades involve the removal of parts and their return to IBM. A part that replaces a removed part will assume the warranty service status of the removed part.

Before IBM or your reseller exchanges a Machine or part, you agree to remove all features, parts, options, alterations, and attachments not under warranty service.

You also agree to

1. ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange;

2. obtain authorization from the owner to have IBM or your reseller service a Machine that you do not own; and
3. where applicable, before service is provided:
  - a. follow the problem determination, problem analysis, and service request procedures that IBM or your reseller provides;
  - b. secure all programs, data, and funds contained in a Machine;
  - c. provide IBM or your reseller with sufficient, free, and safe access to your facilities to permit them to fulfill their obligations; and
  - d. inform IBM or your reseller of changes in a Machine's location.

IBM is responsible for loss of, or damage to, your Machine while it is 1) in IBM's possession or 2) in transit in those cases where IBM is responsible for the transportation charges.

Neither IBM nor your reseller is responsible for any of your confidential, proprietary or personal information contained in a Machine which you return to IBM or your reseller for any reason. You should remove all such information from the Machine prior to its return.

**Limitation of Liability:** Circumstances may arise where, because of a default on IBM's part or other liability, you are entitled to recover damages from IBM. In each such instance, regardless of the basis on which you are entitled to claim damages from IBM (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), except for any liability that cannot be waived or limited by applicable laws, IBM is liable for no more than

1. damages for bodily injury (including death) and damage to real property and tangible personal property; and
2. the amount of any other actual direct damages, up to the charges (if recurring, 12 months' charges apply) for the Machine that is subject of the claim. For purposes of this item, the term "Machine" includes Machine Code and Licensed Internal Code.

This limit also applies to IBM's suppliers and your reseller. It is the maximum for which IBM, its suppliers, and your reseller are collectively responsible.

**UNDER NO CIRCUMSTANCES IS IBM LIABLE FOR ANY OF THE FOLLOWING: 1) THIRD-PARTY CLAIMS AGAINST YOU FOR DAMAGES (OTHER THAN THOSE UNDER THE FIRST ITEM LISTED ABOVE); 2) LOSS OF, OR DAMAGE TO, YOUR RECORDS OR DATA; OR 3) SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES, LOST PROFITS OR LOST SAVINGS, EVEN IF IBM, ITS SUPPLIERS OR YOUR RESELLER IS INFORMED OF THEIR POSSIBILITY. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.**

## Governing Law

**Governing Law:** Both you and IBM consent to the application of the laws of the country in which you acquired the Machine to govern, interpret, and enforce all of your and IBM's rights, duties, and obligations arising from, or relating in any manner to, the subject matter of this Agreement, without regard to conflict of law principles.

## Part 2 - Country-unique Terms

### AMERICAS

#### BRAZIL

**Governing Law:** *The following is added after the first sentence:*

Any litigation arising from this Agreement will be settled exclusively by the court of Rio de Janeiro.

### NORTH AMERICA

**Warranty Service:** *The following is added to this Section:*

To obtain warranty service from IBM in Canada or the United States, call 1-800-IBM-SERV (426-7378).

#### CANADA

**Governing Law:** *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*

laws in the Province of Ontario.

#### UNITED STATES

**Governing Law:** *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*

laws of the State of New York.

### ASIA PACIFIC

#### AUSTRALIA

**The IBM Warranty for Machines:** *The following paragraph is added to this Section:*

The warranties specified in this Section are in addition to any rights you may have under the Trade Practices Act 1974 or other similar legislation and are only limited to the extent permitted by the applicable legislation.



**Limitation of Liability:** *The following is added to this Section:*

Where IBM is in breach of a condition or warranty implied by the Trade Practices Act 1974 or other similar legislation, IBM's liability is limited to the repair or replacement of the goods or the supply of equivalent goods. Where that condition or warranty relates to right to sell, quiet possession or clear title, or the goods are of a kind ordinarily acquired for personal, domestic or household use or consumption, then none of the limitations in this paragraph apply.

**Governing Law:** *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*

laws of the State or Territory.

## **CAMBODIA, LAOS, AND VIETNAM**

**Governing Law:** *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*

laws of the State of New York.

*The following is added to this Section:*

Disputes and differences arising out of or in connection with this Agreement shall be finally settled by arbitration which shall be held in Singapore in accordance with the rules of the International Chamber of Commerce (ICC). The arbitrator or arbitrators designated in conformity with those rules shall have the power to rule on their own competence and on the validity of the Agreement to submit to arbitration. The arbitration award shall be final and binding for the parties without appeal and the arbitral award shall be in writing and set forth the findings of fact and the conclusions of law.

All proceedings shall be conducted, including all documents presented in such proceedings, in the English language. The number of arbitrators shall be three, with each side to the dispute being entitled to appoint one arbitrator.

The two arbitrators appointed by the parties shall appoint a third arbitrator before proceeding upon the reference. The third arbitrator shall act as chairman of the proceedings. Vacancies in the post of chairman shall be filled by the president of the ICC. Other vacancies shall be filled by the respective nominating party. Proceedings shall continue from the stage they were at when the vacancy occurred.

If one of the parties refuses or otherwise fails to appoint an arbitrator within 30 days of the date the other party appoints its, the first appointed arbitrator shall be the sole arbitrator, provided that the arbitrator was validly and properly appointed.

The English language version of this Agreement prevails over any other language version.

## HONG KONG AND MACAU

**Governing Law:** *The following replaces “laws of the country in which you acquired the Machine” in the first sentence:*

laws of Hong Kong Special Administrative Region.

## INDIA

**Limitation of Liability:** *The following replaces items 1 and 2 of this Section:*

1. liability for bodily injury (including death) or damage to real property and tangible personal property will be limited to that caused by IBM’s negligence;
2. as to any other actual damage arising in any situation involving nonperformance by IBM pursuant to, or in any way related to the subject of this Statement of Limited Warranty, IBM’s liability will be limited to the charge paid by you for the individual Machine that is the subject of the claim.

## JAPAN

**Governing Law:** *The following sentence is added to this Section:*

Any doubts concerning this Agreement will be initially resolved between us in good faith and in accordance with the principle of mutual trust.

## NEW ZEALAND

**The IBM Warranty for Machines:** *The following paragraph is added to this Section:*

The warranties specified in this Section are in addition to any rights you may have under the Consumer Guarantees Act 1993 or other legislation which cannot be excluded or limited. The Consumer Guarantees Act 1993 will not apply in respect of any goods which IBM provides, if you require the goods for the purposes of a business as defined in that Act.

**Limitation of Liability:** *The following is added to this Section:*

Where Machines are not acquired for the purposes of a business as defined in the Consumer Guarantees Act 1993, the limitations in this Section are subject to the limitations in that Act.

## PEOPLE’S REPUBLIC OF CHINA (PRC)

**Governing Law:** *The following replaces this Section:*

Both you and IBM consent to the application of the laws of the State of New York (except when local law requires otherwise) to govern, interpret, and

enforce all your and IBM's rights, duties, and obligations arising from, or relating in any manner to, the subject matter of this Agreement, without regard to conflict of law principles.

Any disputes arising from or in connection with this Agreement will first be resolved by friendly negotiations, failing which either of us has the right to submit the dispute to the China International Economic and Trade Arbitration Commission in Beijing, the PRC, for arbitration in accordance with its arbitration rules in force at the time. The arbitration tribunal will consist of three arbitrators. The language to be used therein will be English and Chinese. An arbitral award will be final and binding on all the parties, and will be enforceable under the Convention on the Recognition and Enforcement of Foreign Arbitral Awards (1958).

The arbitration fee will be borne by the losing party unless otherwise determined by the arbitral award.

During the course of arbitration, this Agreement will continue to be performed except for the part which the parties are disputing and which is undergoing arbitration.

#### **EUROPE, MIDDLE EAST, AFRICA (EMEA)**

##### ***THE FOLLOWING TERMS APPLY TO ALL EMEA COUNTRIES:***

The terms of this Statement of Limited Warranty apply to Machines purchased from IBM or an IBM reseller.

**Warranty Service:** If you purchase an IBM Machine in Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland or United Kingdom, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM. If you purchase an IBM Personal Computer Machine in Albania, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Georgia, Hungary, Kazakhstan, Kirghizia, Federal Republic of Yugoslavia, Former Yugoslav Republic of Macedonia (FYROM), Moldova, Poland, Romania, Russia, Slovak Republic, Slovenia, or Ukraine, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM.

If you purchase an IBM Machine in a Middle Eastern or African country, you may obtain warranty service for that Machine from the IBM entity within the country of purchase, if that IBM entity provides warranty service in that country, or from an IBM reseller, approved by IBM to perform warranty service on that Machine in that country. Warranty service in Africa is available within

50 kilometers of an IBM authorized service provider. You are responsible for transportation costs for Machines located outside 50 kilometers of an IBM authorized service provider.

**Governing Law:** The applicable laws that govern, interpret and enforce rights, duties, and obligations of each of us arising from, or relating in any manner to, the subject matter of this Statement, without regard to conflict of laws principles, as well as Country-unique terms and competent court for this Statement are those of the country in which the warranty service is being provided, except that in 1) Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Hungary, Former Yugoslav Republic of Macedonia, Romania, Slovakia, Slovenia, Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan, the laws of Austria apply; 2) Estonia, Latvia, and Lithuania, the laws of Finland apply; 3) Algeria, Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Congo, Djibouti, Democratic Republic of Congo, Equatorial Guinea, France, Gabon, Gambia, Guinea, Guinea-Bissau, Ivory Coast, Lebanon, Mali, Mauritania, Morocco, Niger, Senegal, Togo, and Tunisia, this Agreement will be construed and the legal relations between the parties will be determined in accordance with the French laws and all disputes arising out of this Agreement or related to its violation or execution, including summary proceedings, will be settled exclusively by the Commercial Court of Paris; 4) Angola, Bahrain, Botswana, Burundi, Egypt, Eritrea, Ethiopia, Ghana, Jordan, Kenya, Kuwait, Liberia, Malawi, Malta, Mozambique, Nigeria, Oman, Pakistan, Qatar, Rwanda, Sao Tome, Saudi Arabia, Sierra Leone, Somalia, Tanzania, Uganda, United Arab Emirates, United Kingdom, West Bank/Gaza, Yemen, Zambia, and Zimbabwe, this Agreement will be governed by English Law and disputes relating to it will be submitted to the exclusive jurisdiction of the English courts; and 5) in Greece, Israel, Italy, Portugal, and Spain any legal claim arising out of this Statement will be brought before, and finally settled by, the competent court of Athens, Tel Aviv, Milan, Lisbon, and Madrid, respectively.

#### **THE FOLLOWING TERMS APPLY TO THE COUNTRY SPECIFIED:**

##### **AUSTRIA AND GERMANY**

**The IBM Warranty for Machines:** *The following replaces the first sentence of the first paragraph of this Section:*

The warranty for an IBM Machine covers the functionality of the Machine for its normal use and the Machine's conformity to its Specifications.

*The following paragraphs are added to this Section:*

The minimum warranty period for Machines is six months. In case IBM or your reseller is unable to repair an IBM Machine, you can alternatively ask for

a partial refund as far as justified by the reduced value of the unrepaired Machine or ask for a cancellation of the respective agreement for such Machine and get your money refunded.

**Extent of Warranty:** *The second paragraph does not apply.*

**Warranty Service:** *The following is added to this Section:*

During the warranty period, transportation for delivery of the failing Machine to IBM will be at IBM's expense.

**Limitation of Liability:** *The following paragraph is added to this Section:*

The limitations and exclusions specified in the Statement of Limited Warranty will not apply to damages caused by IBM with fraud or gross negligence and for express warranty.

*The following sentence is added to the end of item 2:*

IBM's liability under this item is limited to the violation of essential contractual terms in cases of ordinary negligence.

## EGYPT

**Limitation of Liability:** *The following replaces item 2 in this Section:*

as to any other actual direct damages, IBM's liability will be limited to the total amount you paid for the Machine that is the subject of the claim. For purposes of this item, the term "Machine" includes Machine Code and Licensed Internal Code.

*Applicability of suppliers and resellers (unchanged).*

## FRANCE

**Limitation of Liability:** *The following replaces the second sentence of the first paragraph of this Section:*

In such instances, regardless of the basis on which you are entitled to claim damages from IBM, IBM is liable for no more than: *(items 1 and 2 unchanged).*

## IRELAND

**Extent of Warranty:** *The following is added to this Section:*

Except as expressly provided in these terms and conditions, all statutory conditions, including all warranties implied, but without prejudice to the generality of the foregoing all warranties implied by the Sale of Goods Act 1893 or the Sale of Goods and Supply of Services Act 1980 are hereby excluded.

**Limitation of Liability:** *The following replaces items one and two of the first paragraph of this Section:*

1. death or personal injury or physical damage to your real property solely caused by IBM's negligence; and
2. the amount of any other actual direct damages, up to 125 percent of the charges (if recurring, the 12 months' charges apply) for the Machine that is the subject of the claim or which otherwise gives rise to the claim.

*Applicability of suppliers and resellers (unchanged).*

*The following paragraph is added at the end of this Section:*

IBM's entire liability and your sole remedy, whether in contract or in tort, in respect of any default shall be limited to damages.

## ITALY

**Limitation of Liability:** *The following replaces the second sentence in the first paragraph:*

In each such instance unless otherwise provided by mandatory law, IBM is liable for no more than:

1. *(unchanged)*
2. as to any other actual damage arising in all situations involving nonperformance by IBM pursuant to, or in any way related to the subject matter of this Statement of Warranty, IBM's liability, will be limited to the total amount you paid for the Machine that is the subject of the claim.

*Applicability of suppliers and resellers (unchanged).*

*The following replaces the third paragraph of this Section:*

Unless otherwise provided by mandatory law, IBM and your reseller are not liable for any of the following: *(items 1 and 2 unchanged)* 3) indirect damages, even if IBM or your reseller is informed of their possibility.

## SOUTH AFRICA, NAMIBIA, BOTSWANA, LESOTHO AND SWAZILAND

**Limitation of Liability:** *The following is added to this Section:*

IBM's entire liability to you for actual damages arising in all situations involving nonperformance by IBM in respect of the subject matter of this Statement of Warranty will be limited to the charge paid by you for the individual Machine that is the subject of your claim from IBM.

## UNITED KINGDOM

**Limitation of Liability:** *The following replaces items 1 and 2 of the first paragraph of this Section:*

1. death or personal injury or physical damage to your real property solely caused by IBM's negligence;

2. the amount of any other actual direct damages or loss, up to 125 percent of the charges (if recurring, the 12 months' charges apply) for the Machine that is the subject of the claim or which otherwise gives rise to the claim;

*The following item is added to this paragraph:*

3. breach of IBM's obligations implied by Section 12 of the Sale of Goods Act 1979 or Section 2 of the Supply of Goods and Services Act 1982.

*Applicability of suppliers and resellers (unchanged).*

*The following is added to the end of this Section:*

IBM's entire liability and your sole remedy, whether in contract or in tort, in respect of any default shall be limited to damages.





---

## Appendix B. Notices

IBM may not offer the products, services, or features discussed in this document in all countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

*IBM Director of Licensing  
IBM Corporation  
North Castle Drive  
Armonk, NY 10504-1785  
U.S.A.*

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Any references in this publication to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product, and use of those Web sites is at your own risk.

Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

---

## **Trademarks**

The following terms are trademarks of International Business Machines Corporation in the United States, other countries, or both:

IBM

HelpCenter

Other company, product, or service names may be the trademarks or service marks of others.





Part Number: 22P8993



Printed in the United States of America  
on recycled paper containing 10%  
recovered post-consumer fiber.

(1P) P/N: 22P8993

