Appendix C

Listening to Audio CDs

Just yesterday I went up to my local music store to buy a few CDs. When I mentioned to the clerk that I would play them on my computer sound system, he warned me that these were music discs, not computer ones. I assured him that I could play them on my computer. It turned out that he has a computer at home with all the equipment he needs — sound board, speakers, and a CD-ROM drive — but he had no idea that he could play music discs on it. He's not the only one. I have coached many people who didn't know that their computers could also play music CDs.

You might be saying to yourself, "Why play music discs on my computer when I've got a fabulous sound system that costs several months salary?" It's true that they'll only sound as good as your computer's audio hardware, but with today's technology, that can be good indeed. Your CD-ROM drive has the advantage of being right there with you while you're working at your computer, and you can control the music with a few clicks of your mouse. If your sound system is in the same room, you might explore doing what I do — connect the Line Out port from your sound board to the Auxiliary Input jack of your tuner, and enjoy the full power of your sound system not just for your music CDs but for all your computer sound.

This appendix isn't about your hardware, though. It's about the software you can use to play and control audio CDs in your

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CD-ROM drive. It shows you how to use the CD players that come with Windows and Mac OS, Deluxe CD Player from the Microsoft Plus! 98 pack, as well as the player that is included with Jet-Audio on the book's CD-ROM. You can also listen to CDs using Windows Media Player. But it has so few features compared to CD Player, which is also included with Windows, that it's worth only this mere mention.

What you'll learn:

- How to use Windows CD Player
- How to use Apple CD Audio Player
- How to use Jet-Audio's CD Player
- How to use the Microsoft Plus! 98 Deluxe CD Player

Note

Many of today's CDs contain both audio and video tracks. The CD players in this appendix can play only the audio tracks. You need a multimedia player such as QuickTime, Media Player, or Jet-Audio's Digital Video Player to handle the video tracks.

Windows CD Player

The Windows CD player is called, oddly enough, CD Player. Figure C-1 shows its main control panel, which opens automatically when you insert an audio CD into your CD-ROM drive. If not, you can open it yourself by choosing Start ⇨ Programs ⇨ Accessories ⇨ Multimedia ⇨ CD Player in Windows 95 or Start ⇨ Programs ⇨ Accessories ⇨ Entertainment ⇨ CD Player in Windows 98. The window is not resizable—what you see in Figure C-1 is what you get (except that it's a little more colorful on your screen).

Figure C-1 *Windows CD Player provides the basic features but little more.*

If you have installed Plus! 98 and you find Deluxe CD Player rather than CD Player on your Entertainment menu, don't worry. Deluxe CD Player, which is a much better player, is described later in this chapter. I suggest you just skip this section on plain old CD Player.

The controls

The track display and playback controls are designed to look just like those on a real CD player. Figure C-2 identifies them, but if you can't remember which is which, just pause your mouse pointer over each one to pop up a reminder. The Skip Forward and Skip Backwards buttons skip about one second if you just click them. But you can hold them down to skip farther distances.
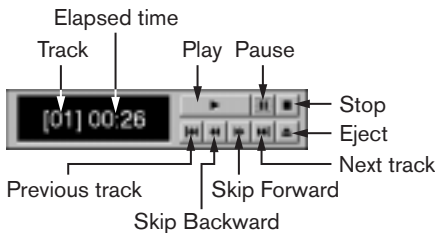

Figure C-2 *The playback controls use the same icons as CD players and VCRs.*

By default, the track display shows how much time has elapsed for the current track, as Figure C-1 shows. But if you're recording, you might prefer to know how much time remains for the current track or for the entire disc. You can select another time display by clicking the display or by choosing one of these three tools:

Track elapsed time (the default)

Track remaining time

Disc remaining time

The status bar at the bottom of the window shows you more information that comes in handy when recording: the total time for the disc and the current track. The display shows minutes and seconds, but not hours. The disc in Figure C-1, for example, is a little over 71 minutes long (1 hour and 11 minutes).

Tip

The disc continues to play when you minimize CD Player. In fact, it will continue to play even after you exit CD Player if you choose Options ⇨ Preferences and disable "Stop CD playing on exit."

CD Player doesn't provide its own volume control because you can use the one supplied by Windows. If you don't keep Volume Control in your system tray, you can access it by choosing View ⇨ Volume Control.

Play modes

CD Player by default plays straight through the disc and then stops. If you prefer, you can choose one, two, or all three of these play modes:

Random Order, which is called shuffle mode on many CD players, selects tracks at random.

Continuous Play, which is called repeat mode on many CDs, repeats the entire CD or program.

🕔 *Intro Play* plays just the first 10 seconds of each track.

Use Intro Play to search for a song you want to hear. When you find the song you're looking for, click the Intro Play tool again to toggle it off and listen to the entire song.

> **Tip**
>
> If you know which track you want to hear, the quickest way to play it is to drop down the Track list and select it.

Playlists

CD Player has no way of knowing what the CD contains unless you painstakingly enter that information yourself. When you play an undocumented CD, you'll just see New Artist, New Title, and Track 1. If you take the time to enter track and title information, CD Player saves it and displays it the next time you insert the same CD.

> **Tip**
>
> Can you tell from my wording that I think it's a pain in the neck to enter track and title information? You'll see a much better solution with some of the players discussed later.

How to enter track and title information:

   1. Choose the Edit Play List tool, shown in the margin, to open the Disc Settings dialog box (see Figure C-3).

   2. Type the disc's artist in the Artist box and the disc's title in the Title box.

   3. For each track:

   a. Select the track.

   b. Type the title in the Track *nn* box (near the bottom of the dialog box).

   c. Choose Set Name. The name appears in the Play list and in the Available Tracks list.

4. When have entered all the information, choose OK to close
the dialog. The track and title information now appears in the
main CD Player window.

Figure C-3 *You enter track and title information and create a playlist in this
Disc Settings dialog box.*

You use the same dialog box to set up a playlist—a list of the
tracks you want to hear. All the tracks on the disk are listed in the
Available Tracks box. The Play List box shows the ones that will
actually be played. By default, the playlist includes all the tracks. To
remove tracks from the playlist, select them and choose Remove->.
To add tracks to the list, select them in the Available Tracks list and
choose <-Add. Drag tracks up and down in the playlist to change
their order. Choose Clear All to remove everything from the playlist
or Reset to restore it to its original condition (the entire list of avail-
able tracks).

You can select multiple tracks in the Disc Setting lists by the
standard Windows methods. To select several adjacent tracks, click
the first track, and then hold down Shift and click the last track. To
select nonadjacent tracks, press Ctrl while you click each one.

> **Tip**
>
> Yes, you can add the same track more than once.

When you close the dialog box, the CD Player window reflects only the playlist. The Track drop-down list shows the tracks in the playlist. Random mode selects from the tracks on the playlist only. The status bar shows the total time for the playlist.

CD Player stores your track and title information and your playlist in `cdplayer.ini` in your Windows folder. If you listen to the same discs on more than one computer, you can copy `cdplayer.ini` to your other computers to have the same information available there. The `cdplayer.ini` file is a plain text file, and you can view, edit, and print it just like any other text file.

> **Tip**
>
> To repeat a single track continuously, clear the playlist, add that track to the playlist, and then choose continuous mode.

Multiple discs

CD Player can handle multiple audio discs if you have more than one CD-ROM drive. You can play only one at a time, of course. Drop down the Artist list box to change drives.

Apple CD Audio Player

Macintosh OS plays CDs with Apple CD Audio Player. As you can see in Figure C-4, it is designed to look like a real CD player, with familiar icons on its controls. I labeled them in Figure C-4 just in case they're not so familiar to you. If you have difficulty remembering them, just turn on Bubble Help and move your mouse pointer over each one to pop up its explanation.
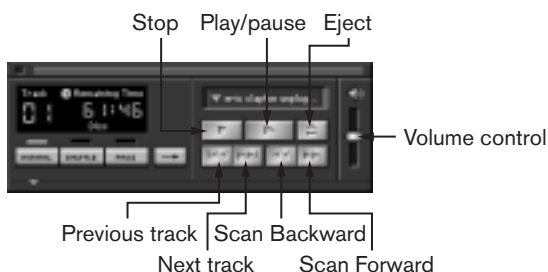
Figure C-4 *Apple CD Audio Player's main window looks like a CD player's control panel.*

Controls and time display

To start the CD player, choose Apple ➪ Apple CD Audio Player and insert a CD into the CD-ROM drive. Choose the Play button to start playing the CD from the beginning. While a CD is playing, the Play button becomes a Pause button that halts playing but keeps your place until you click it again. Scan Forward and Scan Backward are meant to be held down instead of just clicked. You can see how far you are scanning by watching the time display.

The display window shows the current track and a time value. By default, it shows the elapsed time of the current track. Choose the clock icon to pop up a menu where you can select one of these time display options:

- Track elapsed time (the default)
- Track remaining time
- Disc elapsed time
- Disc remaining time

Play modes

You can choose from three play modes:

NORMAL   *Normal mode* plays straight through all the tracks.

SHUFFLE   *Shuffle mode* selects tracks at random.

PROG   *Program mode* plays the programmed playlist (explained in the next section).

The Repeat button gives you the option of two repeat modes. Clicking the button toggles between the two modes. The button's icon changes to indicate the current mode:

→   *No Repeat* plays the program once and then stops.

⟲   *Repeat* plays the program continuously until you stop it.

If you choose both Repeat mode and Shuffle mode, the player repeats the same shuffled sequence as long as you wish. Just click the Shuffle button again to reshuffle the sequence.

Playlists

Notice the tiny down arrow below the Normal button. Clicking it adds the current playlist to the window, as you can see in Figure C-5. Expand the window to see more of the playlist. The list shows tracks in the order they will be played — whether you have chosen Normal mode (tracks 01 to *nn*), Shuffle mode, or Program mode. The track currently playing is highlighted — it's "signe" in Figure C-5. To play a particular track, double-click it in the playlist. When that track finishes, the player continues playing the next track in the list.

Figure C-5 *This playlist shows the order in which the tracks will be played.*

> ### Tip
> Each time you choose the Shuffle button, you can see the tracks being shuffled in the playlist.

When you insert a CD for the first time, Apple CD Audio Player can read the number and length of the tracks from the CD, but it has no title information. You can edit the playlist to fill in the names of the disk and the tracks. In Figure C-5, I have entered the title of the CD and the first three tracks but not the rest of the tracks. Editing a title is simple—just click it and type the desired text. I suggest you do this in Normal mode so you don't get confused about which track is which.

The titles you enter are saved in the CD Remote Programs file in the Preferences folder in the System folder. The next time you insert the same CD, the player locates and displays the saved titles. (It identifies a disc by a unique ID number that is stored on each CD.) If you use more than one Macintosh and want to copy your CD information to another one, you could copy the CD Remote Programs file to the other computer. Keep in mind, though, that it will overwrite the file with the same name on that computer, replacing any disc information that you already had stored on that computer.

Programming the playlist

If you don't want to listen to all the tracks, you can program the playlist. Choose the PROG button to change the normal playlist to a track list and playlist, as shown in Figure C-6. Drag tracks from the track list on the left to the playlist on the right. You can change the order of play by dragging them up and down in playlist. The same track can appear in a playlist multiple times. (In the example in Figure C-6, I have inserted "nobody knows you when you're down & out" twice.) When Program mode is selected, controls and displays pertain to the programmed playlist only. The disc remaining time, for example, shows the remaining time for the tracks on the playlist, not the entire disc.

Figure C-6 *When you choose the PROG button, you can program the playlist by dragging tracks into it.*

> **Tip**
>
> To repeat a single track continuously, make it the only track on the playlist and then choose Repeat mode.

The CD title also appears in main window, above the playback controls. If you don't want to keep the playlist open, you can click

this title to open a menu showing the current playlist, where you can select a track if you wish. A check mark identifies the current track in the menu.

Jet-Audio CD Player

Now let's take a look at what an advanced CD player can do. Chapter 2 introduced the Jet-Audio stereo rack system, and you learned there about Jet-Audio's Digital Audio Player, Mixer, and Sound Effector. Now it's time to explore CD Audio Player and take a second look at Mixer and Sound Effector. Figure C-7 shows these three components.
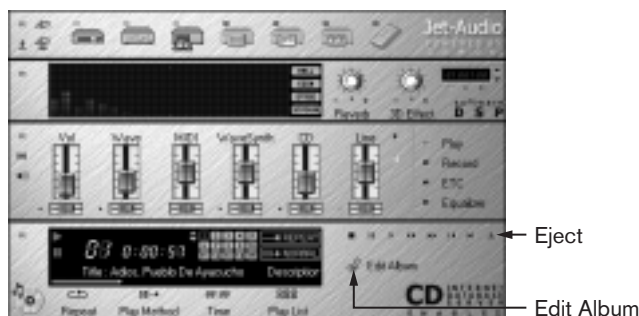

Figure C-7 *Jet-Audio's Sound Effector, Mixer, and CD Player play and control audio CDs.*

The playback controls (Play, Stop, and so on) are the same as for Digital Audio Player, except CD Audio Player provides an Eject button instead of a Record button (see Figure C-7). The play modes, repeat modes, and time displays are also the same. Also like Digital Audio Player, you can hide the Jet-Audio window and control the CD by right-clicking the icon in the system tray. Pausing the mouse pointer over the icon pops up the name of the track that's currently playing. The bad news is — if you don't fill out the playlist, you just see `Track nn` instead of the title of the track. But wait — don't start typing the playlist yet. Read the next section first.

The CD Database (CDDB) service

Here's the good news—you don't have to enter track titles manually. You can download them from a CD Database (CDDB) server on the Internet. CDDB is a database containing artist and title information for over 100,000 CDs, so unless your CD is really rare, you should be able to download its track titles and save yourself a lot of time and trouble.

Start by signing on to the Internet in your usual way. Then in the Jet-Audio window choose the Edit Album button, shown in Figure C-4, to display the dialog box in Figure C-8. If you couldn't access a CDDB server, you would use this dialog box to enter the track titles by hand. But instead, all you have to do is choose the Connect to CDDB Server button at the top of the box.

Figure C-8 *The Album Information dialog box gives you access to CDDB servers so you can download track titles.*

Stored on every CD is an ID number that Jet-Audio sends to the CDDB server. Since the identifiers are not always unique, the server presents a list of possible CDs for you to select from. In the example in Figure C-9, the identifier turns out to be unique, so only one CD

is listed. Select the correct CD — even if only one is listed — and choose OK to download all titles from the server. They appear in the Album Information dialog box when the download finishes.

Figure C-9 *The CDDB server returns a list of possible CDs (in this case, only one CD is listed).*

The information displayed in Figure C-9 provides an interesting example of CDDB, because the artist's name is misspelled — Wynton Marslis instead of Wynton Marsalis. Many of CDDB's entries are made by users, not the folks who maintain the CDDB database, and mistakes happen. But once you download information for a CD, you can edit it in the Album Information dialog box just as if you had typed it yourself. You could, for example, correct mistakes and add descriptions.

You can find many CDDB servers, which all access the same database, on the Internet. Jet-Audio provides a long list in the Server Location drop-down list. If you're having trouble accessing the selected one — it might be down for a while or overused — drop down the list and choose another. If you're behind a company firewall, select one of the server addresses starting with HTTP. (They're at the bottom of the list.)

CDDB has its own Web site at the address listed below. It includes a facility to search the database by artist or title so you

could, for example, look up all recordings of "Benny and the Jets" or all Elton John CDs. I recently searched for Frank Sinatra and came up with an "instant discography" of 417 CDs. Also at the site are a description of the database, frequently asked questions (FAQs), instructions for adding your own entries to the database, the current list of servers, and a list of players that use CDDB. (Jet-Audio is not included in the list — an oversight.)

`http://www.cddb.com`

Jet-Audio saves title information in the `JetCDP.sdb` file in the Jet-Audio folder. The next time you play the same CD, it automatically reloads the information from the file. You can copy that file to other computers to make artist and title information available on that computer too. But be careful not to overwrite an existing `JetCDP.sdb` file that already contains information for other CDs. `JetCDP.sdb` is not a text file, so you can't edit it manually.

Mixer and Sound Effector

You can control volume on your CD player with any volume control, Jet-Audio's Mixer, Windows Volume Control, or any other one you happen to have. Use the CD sliders to adjust the volumes and balances of the CD player without affecting your other devices. Use the master sliders to adjust the volume and balance of all devices. Don't forget that Jet-Audio's mixer also includes an Attenuation switch to cut the volume without muting it. Jet-Audio's graphic equalizer doesn't work with CDs — that's for MPEG only.

Sound Effector's spectrum analysis window works with CD player, but the DSP effects don't. The sleep timer does.

Deluxe CD Player

Microsoft Plus! 98 provides a new CD Player, shown in Figure C-10. Deluxe CD Player has a nice collection of features:

- Normal view (shown in Figure C-10) or tiny view
- Programmable playlists
- Download album title and artist information from online databases
- Download album information for several albums at once (batch downloading)
- Standard, Random, Preview, Repeat track, and Repeat All playback modes
- Display track time elapsed, disc time elapsed, track time remaining, or disc time remaining
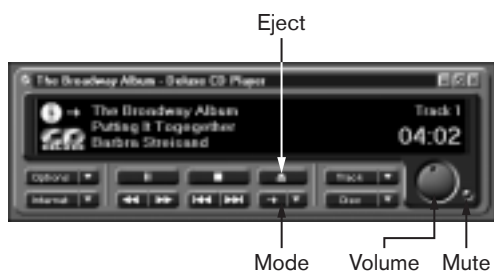- Links to Internet music sites

Figure C-10 *Deluxe CD Player comes with Plus! 98.*

Deluxe CD Player's window

In normal view, Deluxe CD Player displays the CD title, track number, title, artist, and time. Click the time display to change among the four types. Clicking the Mode button drops down a menu where you can select a new mode. The button displays an icon

for the current mode, which is repeated in the main display window, next to the CD's title. If you're not sure what the icons mean, drop down the mode list, which shows the icons next to the mode names. If you have multiple CD-ROM drives, clicking the Disc button drops down a list of your drives so you can select another one.

> **Tip**
>
> Pause your mouse pointer over any object in the window to pop up a brief explanation of that object.

Tiny view, shown in Figure C-11, is an excellent view for keeping the player on top of your other work. It's so slim that it practically fits into the title bar of another application. Only the most essential functions are displayed in this view. The easiest way to switch into tiny view is to click the icon shown in the margin. In most applications this is the maximize/restore icon, but in Deluxe CD Player, it switches the window between normal and tiny view. When you first reduce the window to tiny view, it still has a title bar. If you want the tiniest view, as in Figure C-11, double-click the window. Double-click it again to restore the title bar and then click the restore icon to return to normal view. You can also switch between normal and tiny view on the Options menu.

Figure C-11 *Deluxe CD Player's tiny view is slim enough to sit on top of another application without getting in the way.*

> **Tip**
>
> To keep Deluxe CD Player on top, choose Options ⇨ Preferences and enable "Always make player topmost window on desktop."

Album information

Deluxe CD Player can access title and artist information from two sources: tunes.com or Music Boulevard. Both sites are extensive online music stores where you can search for CDs, listen to previews, read extensive information about music, artists, and albums, and order the CDs. They also include album information databases, which Deluxe CD Player can access and download. Their databases work pretty much the same as CDDB's, although the actual content is different because it was created by different users. (As you can see in Figure C-10, their users can't spell either.)

How to select a download site:

1. Choose Options ⇨ Preferences to open the Preferences dialog box, shown in Figure C-12.
2. Click the Album Options tab to open the Album Options page.
3. Drop down the Primary Provider list and select the desired site.
4. Choose OK to close the dialog box.

Figure C-12 *You configure database access in the Album Options preferences.*

Deluxe CD Player is flexible in how it accesses the database. You configure it with the Album Options preferences, shown in Figure C-12. If you want the player to automatically access the database whenever you play an unknown CD, make sure that "Enable Internet album information download" is enabled. If you enable "Prompt me before attempting Internet download," the player asks you before automatically accessing the database. When these options are disabled, you can still access the database, but you have to do it manually.

The "Album download batching" option determines what happens when you *don't* download information for an unknown CD. It comes into play in these situations:

- You disabled automatic download.
- You enabled automatic download with prompting, but you said no when the player prompted you to download information for an unknown CD.
- You accessed the database but no information was available for the CD.

If the "Album download batching" option is disabled, the player keeps no record of unknown CDs. It simply ignores the fact that the CD has no album information. But if this option is enabled, the player keeps a list of the unknown CDs you have played. The next time you access the database, whether automatically or manually, it downloads album information for all the CDs in its list. The item called "Number of batched albums" shows you how many albums are waiting for album information. When you're ready to download information, choose the Download Now button.

Here's an example of how you might use the batching feature. Suppose that you have just bought a handful of new CDs, and you want to download their information all at once. Disable "Enable Internet album information download" and enable "Enable album download batching." Then insert each CD long enough for the player to start playing it. The player saves each CD's ID in its list. After you insert the last CD, choose Options ➪ Preferences, click the Album Options tab, and then click Download.

> **Note**
> You can manually download information about the current CD by choosing Internet ⇨ Download track names.

You can review all the CDs in your database on the Playlists page of the Preferences dialog box, shown in Figure C-13. You open this page by choosing Options ⇨ Playlist. The list works much like a Windows Explorer folder. Click a plus sign (+) to expand that item; click a minus sign (−) to close it again. In Figure C-13, you can see that the album currently in the player is by Obert Shaw. (Sigh — another typo. It should be Robert Shaw.) You can also see four of the albums in my database. I expanded the Scott Joplin album to show the track titles.
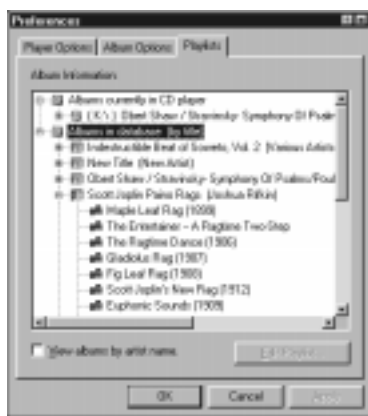

Figure C-13 *The Playlists Preferences page displays all the albums in your database.*

The album titled New Album (New Artist) is a CD that is not in the Internet database, so I have been unable to download information for it. Of course, I could type it in by hand, but I'm hoping it will soon show up in the database. The following procedure shows you how to type in your own album information or make corrections to what you downloaded.

How to edit album information:

1. To enter new album information from scratch, insert the CD into your CD-ROM drive.

2. Choose Options ⇨ Playlist to open the Playlists Preferences page.

3. Select the album that you want to edit. (For a new album, select the album currently in the CD player.)

4. Choose Create Playlist or Edit Playlist to open the CD Playlist Editor, shown in Figure C-14.

5. Type or edit the information in the Artist and Title boxes.

6. Select a track in the Available Tracks drop-down list (*not* in the Playlist) and type or edit the title, artist, and any other information you'd like to add. You type right in the Available Tracks box.

7. Repeat step 6 until you have made all the changes you want to make.

8. Choose OK to close the editor and save the information.

You also use the CD Playlist Editor to program a playlist for an album, as you'll see in the next section.

Figure C-14 *Edit album information in the CD Playlist Editor dialog box.*

Programming the playlist

A CD's playlist determines which songs are played whenever you listen to the CD. By default, all the CD's tracks are included in the playlist. But you can skip some tracks, repeat others, and change the order if you wish. You do this by editing the playlist. The CD does not have to be in the drive when you edit its playlist, by the way. You can edit any playlist stored in your information database.

How to edit a playlist:

1. Choose Options⇨Playlist to open the Playlists Preferences page.
2. Select the album you want to edit.
3. Choose Edit Playlist to open the CD Playlist Editor. The current playlist is shown in the Playlist box. You might have to scroll to see it all.
4. To remove a song from the playlist, select it and then choose Remove.
5. To add a song to the playlist, select it in the Available Tracks drop-down list and choose Add to Playlist. It is added to the end of the list.
6. To change the order of the songs, drag songs up and down in the playlist.
7. To remove all songs from the playlist, choose Clear All.
8. To restore the default playlist, choose Reset. The playlist will consist of all the tracks from the CD, in order.
9. Choose OK to close the CD Playlist Editor.
10. Choose OK to close the Preferences dialog box.

Deluxe CD Player remembers a CD's playlist as long as the CD is in its database. The next time you listen to the same CD, you'll hear the same playlist. You can always edit it again if you want a different playlist.

Internet Connections

The Internet menu gives you several options for accessing information on the Internet. You saw earlier that you can download album information for the current album by choose Internet ⇨ Download track names. You can also browse to the home pages of tunes.com and Music Boulevard by choosing Internet ⇨ Internet Music Sites and then selecting which site you want to access. If you're not already online, Deluxe CD Player tries to sign you on using your default service. Then it opens your default browser to access the site.

When a known album is in the CD-ROM drive, the Internet menu offers several more options:

- Look for album on *site* — Choose this option to browse to this album's page at the indicated Web site, either tunes.com or Music Boulevard, depending on your default download site. The album's Web page contains information and links about the album, the playlist, the artists, and so on.

- Look for artist on *site* — Choose this option to browse to the artist's page at the indicated Web site. You might find lots of information about the artist, including a list of other CDs.

- Search the net ⇨ Search for this artist — This option uses your browser's search function to search for links based on the artist's name.

- Search the net ⇨ Search for this album — This option uses your browser's search function to search for links based on the album title.

- Search the net ⇨ View Billboard's Reviews & Previews for this artist — Choose this option to access Billboard's Web site containing reviews of nearly 20,000 albums. Many of the reviews include audio clips.

- Search the net ⇨ View Billboard's Reviews & Previews for this album — This option also accesses Billboard's Web site.

What's on the CD-ROM

CD/Spectrum Pro is another rack components-style player that includes access to CDDB. It doesn't have all the features of Jet-Audio, but it includes two terrific screen savers that respond to the beat of whatever CD you are playing.