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Main Window

The main window allows you to play CD audio tracks, enter disc information, and eject discs. The main window contains the following items:

Artist, Title
   Displays the artist and disc title of the CD. You can enter or modify these values whenever the disc is in the drive. The values are saved in the disc database and is re-loaded anytime you insert the disc.

   You can move out of these items by hitting the ENTER key or the UP or DOWN arrow keys. For example, hitting ENTER when you are in the Artist item will move you to the Title item; hitting ENTER or DOWN from the Artist item will move you to the first Track item.

Tracks
   Displays the number of tracks on the current CD. If a disc program is currently in use, this will be the number of tracks in the program.

   You can navigate through the current CD's tracks with standard movement keys (ENTER, UP, DOWN, PAGE UP, PAGE DOWN).

Length
   Displays the total length of the current CD in minutes and seconds. If a disc program is currently in use, this will be the total length of the program.

Track Buttons (1, 2, ...)
   The numbers which appear on the track buttons correspond to track numbers on the current CD, or to selection numbers in the current program if a disc program is in use. Click on a track button to start audio playback at that track. If the current CD or disc program has more than 10 tracks, then 10 buttons will be displayed along with a vertical scroll bar which can be used to view the rest of the tracks.

Track Arrows
   A horizontal red arrow points to the current track. If the current track has scrolled away from the track display, then a red arrow points up or down to indicate the direction of the current track relative to the track display. Clicking on the up or down arrow will scroll the window back to the current track.

Track Titles
   Displays the titles of the CD's audio tracks. You can enter or modify these values whenever the disc is in the drive. The values are saved in the disc database and are re-loaded anytime you insert the disc.

   When a CD is playing, the current track is indicated by yellow highlight.

Track Lengths
   Displays the lengths of the CD's audio tracks in minutes and seconds.

Play/Stop
   Starts and stops playback of the current CD. When you insert a CD, playback starts at the first audio track, or at the first program selection if a disc program is in use. When you stop a CD, the CD player remains at its current position, so that a subsequent Play command will resume playback where it left off.

Eject
   Ejects the current CD. If you have made any changes to the disc information, you will be asked if you want to update the disc database.

Shuffle/Un-Shuffle

Shuffle rearranges the playback order of tracks into a random sequence. Un-shuffle restores the original order.

Current Track

Displays the position within the current track in a scroll bar, and in minutes and seconds.

You can click and drag the scroll bar to reposition playback. If the disc is playing, then playback continues at the new location. If the disc is not playing, then the disc head is positioned at the new location; clicking the Play button will start playback at that point.

See Also

Creating a Program
Disc Database

Menu Commands

Disc menu
Program
Use Program
Repeat
Save Disc Info
Copy Tracks to Clipboard
Register
Choose CD-ROM Drive
Reset CD-ROM Drive
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Auto Play
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Refresh Now

Program command (Disc menu)

Use this command to create or modify a disc program for a CD. The program you create is saved in the disc database and is re-loaded anytime you insert the disc.

See Also
> Creating a Program
> Disc Database
> Use Program Command (Disc menu)

Use Program command (Disc menu)

If this command is checked on the menu, then CD Audio will play audio tracks according to the currently defined disc program. If the command is not checked, then tracks will be played back normally. This command is disabled if no program is defined.

This setting is saved in the disc database and is reloaded anytime you insert the disc.

See Also
> Creating a Program
> Disc Database
> Program Command (Disc menu)

Repeat command (Disc menu)

This command causes the current disc to play continuously. When playback reaches the end of the disc or disc program, it resumes at the first track of the disc or disc program. If Shuffle play is enabled (see Main WindowMainWindow), the track order is re-shuffled each time before playback. To stop a disc when Repeat play is enabled, just click the Stop button.

Save Disc Info command (Disc menu)

This command saves any disc information changes you have made to the disc database.

See Also
Disc Database

Copy Tracks to Clipboard command (Disc menu)

This command copies the artist, disc title, and track titles of the current CD to the clipboard. If a disc program is in use, then the track titles of the program selections are copied.

You can paste the track titles into a word processor or spreadsheet and print them out, e.g. to create a cassette label for a home recording.

Register command (Disc menu)

This command allows you to enter your personal CD Audio registration number, giving you unrestricted access to all CD Audio features. You can purchase a registration number from the author.

The Registration dialog box contains the following items:

Name
Enter your name *exactly* as it appears on your registration.

Serial Number
Enter your serial number *exactly* as it appears on your registration.

This command is only available in the unregistered version of CD Audio.

See Also
Registration

Choose CD-ROM Drive command (Disc menu)

Allows you to choose among multiple CD-ROM drives attached to your system. Running this command brings up the "Choose CD-ROM Drive" window, which contains the following items:

Available CD-ROM Drives
Displays the list of available CD-ROM drive letters on your system. If you have multiple drives, CD Audio will select by default the first CD-ROM drive in the system. To select a different drive, click on the drive letter in the list box, then click the OK button. Alternatively, you can just double-click the drive letter in the list box.

OK
Selects the drive letter in the list box as the current CD-ROM drive. This choice will be saved in the disc database so that the next time you run CD Audio, it will go directly to this drive.

Cancel
Cancels the window and leaves the current drive unchanged.

This command is only available on systems that have more than one CD-ROM drive installed.

Reset CD-ROM Drive command (Disc Menu)

This command instructs the CD-ROM drive to reset its state. It is rarely needed; you can try it sometime if your CD-ROM drive is exhibiting erratic behavior.

Exit command (Disc menu)

Exits CD Audio. If you have made any changes to the disc information, you will be asked if you want to update the disc database.

If a disc is playing when you exit, it will continue to play afterwards. A disc will also continue to play if you exit Windows and return to DOS. However, rebooting your machine will reset the CD-ROM drive, stopping playback.

Mini-player command (Options menu)

This command reduces CD Audio to an icon bar with just the Play, Eject, and Shuffle buttons, so you can run the program without taking up much screen space. To restore CD Audio to its normal size, just run the command again.

Auto Play command (Options menu)

When this option is checked, CD Audio will automatically start playback of CD's every time you start the program or when you change discs.

Display command (Options menu)

This command controls CD Audio's display options. Running this command brings up the "Display Options" window, which contains the following items:

Refresh Frequency
> This determines how often CD Audio polls your CD-ROM drive to determine its status. The default setting is every 800 milliseconds (i.e. 0.8 seconds); you can set this to a larger value if you feel that polling your CD-ROM drive is degrading your overall system performance. However, increasing this value will cause the status display in the main window not to be updated as frequently. Also, you may find that disc programs do not advance from one track to the next quite as quickly, since this depends on the status interval.
>
> You can disable polling and screen redraws entirely if you want to. In this case you can force CD Audio to poll and refresh immediately with the Refresh Now command.

Window Title
> This determines what CD Audio displays as the caption of its main window. The caption is either "CD Audio - *artist name*" or "CD Audio - *disc title*."

Refresh Now command (Options menu)

Running this command (or hitting the F9 key, its keyboard equivalent) causes CD Audio to immediately poll the CD-ROM drive and update its status display on the screen. This command is useful when you have set the refresh frequency to a larger value and you want to refresh the screen immediately, before the next interval occurs naturally.

Creating a Program

A disc program is a rearrangement of a CD's audio tracks. You can use a program to play a disc's audio tracks in an order that you choose, or to play only some of a disc's audio tracks. The program you create is saved in the disc database and automatically re-loaded anytime you insert the disc (see Disc Database).

You create and modify programs in the "Disc Program" window. It contains the following items:

Available Tracks
> Displays the list of audio tracks which are not currently included in the disc program. If you haven't entered the actual track titles in the main window, then the default track titles "Track 1", "Track 2", etc. will be displayed. If the program already uses all of the disc's audio tracks, then this list will be empty.
>
> Tracks appear in this list box in the same order as they appear on the disc.

Tracks Remaining
> Displays the number of tracks available for use in the disc program.

Time Remaining
> Displays the combined length of all tracks available for use in the disc program.

Current Program
> Displays the current disc program. If there is no program, then this list will be empty.

Tracks Used
> Displays the number of tracks in the disc program.

Time Used
> Displays the combined length of all tracks in the disc program.

Add
> Adds a track to the disc program. To add a track to the end of the program, simply double-click the track in the Tracks Available list box. To add a track to any other position, select the track in the Tracks Available list box and click the Add button (see Adding a Track to a Disc Program).
>
> When you add a track to the program, it is removed from the Tracks Available list.

Add All
> Adds all remaining tracks to the disc program, in order. This is useful if you want to start with the regular track ordering and just make a slight change to it.

Fit to Tape
> This button allows you to fit audio tracks into a certain length of time, e.g. onto one side of a cassette tape. When you click this button and type in the number of minutes of music you want; CD Audio will take as many tracks as it can from the Tracks Available list box (starting at the beginning of the list) and append them to the disc program in order. If the current program is too long to fit into the time you specify, then CD Audio will remove as many tracks as necessary from the end of the program to make it fit.

Remove
> Removes a track from the disc program. To remove a track, select it from the Current Program list box and click the Remove button, or double-click the track in the Current Program list box. When you remove a track from the program, it is removed from the Current Program list and inserted back into the Tracks Available list in its proper position.

Remove All
Removes all tracks from the disc program. This deletes the disc program and reverts to normal playing order.

Allow Repeats
Allows tracks to be used more than once in the disc program. Checking this option lets you include a track in the disc program as many times as you want; unchecking it lets you use each track only once.

OK
Saves changes made to the disc program and returns to the main window. The program is saved in the disc database at this time.

Cancel
Cancels changes made to the disc program and returns to the main window.

Adding a Track to a Disc Program

If you want to add a new track to the beginning or in the middle of a disc program, then you use the "Add Track to Disc Program" window. You get there by clicking the Add button in the "Disc Program" window (see Creating a Program).

The window contains the following items:

Track
> Displays the track which you are adding to the disc program.

Insert after which track
> This is a list box containing the current disc program. To insert the new track after a track already in the program, select the track in the list box and click the Insert button, or just double-click the track in the list box.
>
> To add the new track at the beginning of the disc program, double-click the first entry in the list box, which is a special entry called "<Start of Program>".

Insert
> Adds the new track to the disc program, after the track which is selected in the list box. This has the same effect as double-clicking the track in the list box.

Close
> Closes the window without adding the new track to the disc program.

Disc Database

The disc database contains information on all of your CD's. It holds the following items for each disc:

    Artist
    Title of disc
    Track titles
    Disc program

All of these items are optional. You can enter or modify the items any time a disc is in the CD-ROM drive. The values stored in the database will be automatically re-loaded each time you insert the disc.

The main disc database is stored as a text file named CDAUDIO.INI in your CDAUDIO directory. This file is completely compatible with MUSICBOX.INI, the disc database used by the MusicBox application; you can import or export data between the two files using Notepad or any other text editor. It's nice to exchange disc databases with your friends, because then both of you can save time by not having to type in disc information for discs you have in common.

The size limit of a disc database is 64K bytes (about 100 CD's). When you fill up your main database, CD Audio will automatically create up to 9 auxiliary databases (CDAUDIO1.INI, CDAUDIO2.INI, ...), so the total disc capacity is 640K bytes (about 1000 CD's). CD Audio handles all the details of auxiliary disc databases, so you should never have to worry about them.

(Note: if you are using version 1.29 or earlier of CD Audio, then your disc databases are stored in the Windows directory. You can move them into your CDAUDIO directory if you like, as long as you don't do it while CD Audio is running. Just move all files named CDAUDIO*.INI from your Windows directory into your CDAUDIO directory).

See Also
    [Settings] Section of CDAUDIO.INI

[Settings] Section of CDAUDIO.INI

The [Settings] section of CDAUDIO.INI contains several entries which control program operation. If you are experiencing problems with your CD-ROM drive, you can sometimes remedy them by changing your settings.

This section can contain the following entries:

AutoPlay
　　　Controls the Auto Play option (see Auto Play command (Options menu)).

AllowRepeats
　　　Controls the "Allow Repeats" checkbox in the Disc Program window (see Creating A Program).

AutoRefresh
　　　Enables or disables automatic polling of your CD-ROM drive and screen redrawing (see Display command (Options menu)).

CurrentDrive
　　　Specifies the DOS drive letter of the default CD-ROM drive. This is only applicable to systems with more than one CD-ROM drive attached (see Choose CD-ROM Drive command (Disc menu)).

MiniPlayer
　　　Controls the Mini-player option (see Mini-player command (Options menu)).

RefreshFrequency
　　　Controls the frequency of drive polling and screen redrawing (see Display command (Options menu)).

ResetOnStartup
　　　Specifies whether CD Audio should re-initialize your CD-ROM drive when it starts up. This is necessary on some CD-ROM drives to prevent errors. Values are as follows:
　　　　　　0　　　do not reset on startup (the default)
　　　　　　1　　　always reset on startup
　　　　　　2　　　reset on startup only if there is a CD in the drive
　　　　　　3　　　reset on startup only if there is no CD in the drive

　　　This setting can be further modified to prevent other kinds of errors. This is done by adding a number to the base value of 0 - 3:
　　　　　　256　　　Ignore errors encountered in qcdGetStatus (e.g. "Invalid disc change", "Drive not ready").
　　　　　　512　　　Ignore errors encountered when ejecting a disc
　　　　　　32768　Ignore all errors encountered

　　　For example, to always reset your drive on startup and ignore qcdGetStatus errors, you would set ResetOnStartup to 257 (i.e. 1 + 256).

TrackFormat
　　　Corrects bugs in some CD-ROM device drivers which report incorrect track numbers. If the track numbers reported by CD Audio are incorrect (e.g. CD Audio reports track 17 instead of track 11, or vice versa), then try changing this setting to hex (i.e. set TrackFormat=hex).

WaitDiscChange
　　　Specfies the amount of time, in milliseconds, that CD Audio should wait before reporting an error in the CD-ROM drive. Sometimes these errors clear themselves up after a few seconds. The default value is 5000 (i.e. 5 seconds).

WindowTitle
 Controls the title that CD Audio displays in the main window (see <u>Display command (Options menu)</u>).

Registration

An unregistered version of CD Audio contains all the features of the full version, except that it will stop CD playback every 20 minutes and present you with this message. You may copy and distribute the unregistered version freely.

You may use the unregistered version on an evaluation basis for two weeks. If you like the program, please send $20 plus shipping charges to the author, and you will receive a personal registration number through email or regular mail. This makes you a registered owner of CD Audio and gives you unrestricted access to all its features. You will also be entitled to free upgrades to the software through Compuserve.

You may register your software either online through Compuserve, or by mail. Online registration accepts VISA and MasterCard orders; mail orders are by check or cash only.

To register by Compuserve:
-   Log on to Compuserve and go to the Shareware Registration forum (GO SWREG).
-   Choose command 2, "Register Shareware." Search by Registration ID, which is 341 for CD Audio. Follow the forum instructions to register your copy; you will receive your registration number by email.

To fill out an order form for mail order, do the following:
-   Run the Order Form command on the Help menu.
-   Fill in your name, address, and how you would like to receive your registration number (email, regular mail, or fax).
-   Click the Copy to Clipboard button. This will compute the shipping charges for your order, and will copy your order form to the clipboard.
-   Paste from the clipboard into Notepad or a word processor and print the order form.
-   Mail the order form, along with a check for the proper amount, to the address shown on the form.

If you decide not to purchase a registered copy of the software, then you must delete the unregistered version after the two week evaluation period has elapsed.

Product support for CD Audio is available via email or U.S. mail (see Product Support).

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Product Support

Product support for CD Audio is available via email or U.S. mail. Please contact me to report bugs, request new features, or obtain more detailed product information.

If you are reporting a bug, please include the following:
- An exact description of the problem.
- A list of your system's hardware and software.
- A copy of the file CDAUDIO.LOG. This is a file in your Windows directory where CD Audio logs information when an error occurs. This file can get quite large (about 8K bytes per error), so if you are sending it by email you should compress it first using PKZip or LHArc. You can delete this file from your hard disk anytime you want to.
- A copy of your disc database (CDAUDIO.INI), if applicable.

Most errors occur because of idiosyncrasies in CD-ROM device drivers. The most common error is "An error occurred in the CD-ROM device driver", which is usually one of the following:

Drive not ready. General failure, or Invalid disc change
This kind of error can usually be corrected by adding 256 to the ResetOnStartup value in your CDAUDIO.INI file (see [Settings] Section of CDAUDIO.INI)

Unknown command
Unfortunately, this means that you cannot run CD Audio, because your CD-ROM device driver is out of date (this refers to the CONFIG.SYS device driver, not MSCDEX.EXE). Usually when this happens, you can get an updated driver from your drive manufacturer or vendor.

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Product Information

The user interface and all the high-level code for CD Audio is written in Visual Basic, and is in the file CDAUDIO.EXE. Several auxiliary files are required:
- CDAUDIO.HLP, the CD Audio help file
- QUICKCD.DLL, a CD-ROM interface toolkit.
- VBRUN100.DLL, the Visual Basic runtime environment
- VBUTIL.DLL, a few random utility routines that must be in C (e.g. calls to the C library functions)

The following auxiliary files are required, but may already be installed on your system:
- THREED.VBX, 3-D push buttons used in CD Audio. If you have installed the Microsoft Visual Basic Professional Toolkit, then you already have this file.
- TOOLHELP.DLL, a library of diagnostic routines. If you are running Windows version 3.1 or above, then you already have this file.

QUICKCD.DLL is the most interesting of these auxiliary files. CD Audio runs under Windows 3.0 or 3.1, and does not require the Multimedia Extensions for Windows; this is because it contains its own CD-ROM routines, which call the Microsoft CD-ROM Extensions (MSCDEX) directly. Why bother, you ask? Because the CD audio driver which ships with Windows is really slow, buggy, and a pain to use. So I wrote my own.

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