

Macintosh CD

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The Documentation

This documentation is for MacCD Version 1.00 DEMO. Those who purchase MacCD, for A\$40 (OR: A\$35 + disk), will receive a fully operational version, a complete set of documentation, and some sample sounds. Registering also entitles you to substantially reduced cost of upgrades (which there will be), and the knowledge that you will receive program support from me.

Any comments you wish to make about MacCD, this documentation, or anything else, please mail me at the above address. Specify system setup, inits used, and if you would like a reply.

What does MacCD do?

There are two distinct functions of MacCD. Firstly, the conversion between various sound file formats. And secondly, the playing of different types of sounds.

The sound formats supported by MacCD are:

- SoundCap, SoundWave, SoundEdit
- snd resource format 1
- snd resource format 2

However, MacCD's greatest feature is its ability to play all of the above sound formats together, as though they were one CD (Compact Disc). MacCD will do this while your down loading, word processing, spread sheeting, etc (need MF 6.0).

Features

- Novel user interface
- Play snd format 1 resources SYSBEEPS - (on a mac][or under sys 6.0)
- Play snd format 2 resources - HyperCard (all machines)
- Play digitized sound. ie Soundcap/SoundEdit/SoundWave files
- Convert between the different formats
- Install snd resources directly into files (stacks, system, etc)
- Colour on a colour mac
- Link any number of snd resources and SoundCap files together - CD

- Time display
- Auto repeat tracks
- Play all tracks continuously
- Volume control
- Five variable speed settings
- VU meter display
- Cached sound memory management system
- Multiple player windows open at once
- Background Capabilities under Multifinder
- Preload tracks to allow continuous play
- Future Support

System Requirements:

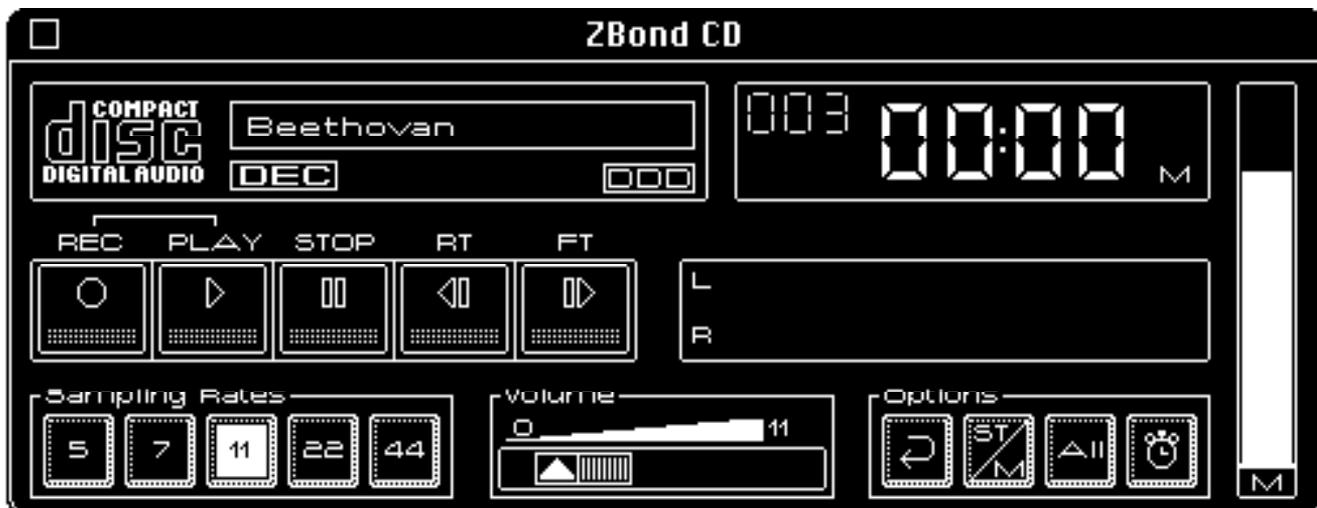
MacCD will run on a 512e, Plus, SE, or Mac II. To gain access to all of MacCD's features you must run System 6.0. If System 6.0 is not used it is recommended that you use System 4.3, as some of the colour pictures will not be displayed with previous systems. (ie about box) MacCD will work under System 3.2, however as mentioned, some of its pictures will appear empty.

To obtain MacCD's backgrounding capabilities use Multifinder 6.0, as with previous versions of Multifinder MacCD will not switch into background. A minimum segment of 384k is required, however a larger segment (512K, 750K, 1024k) will enhance sound playing.

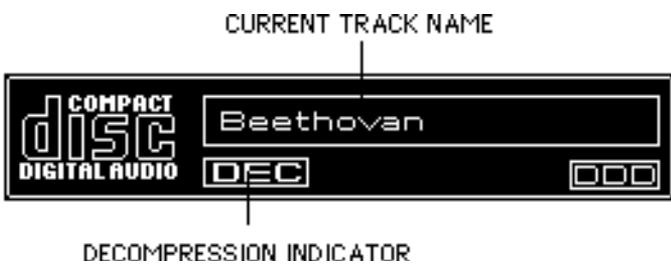
WARNING: The System 6.0 sound manager implementation on a Mac +/-SE has a number of problems (which I hope will be fixed in System 6.0.1). When playing a sound with MacCD, be careful if some other program beeps (ie. under Multifinder). A beep will cause the sound channel MacCD is using to be corrupted without MacCD's knowledge. These problems do NOT occur on a Mac][.

The Controls:

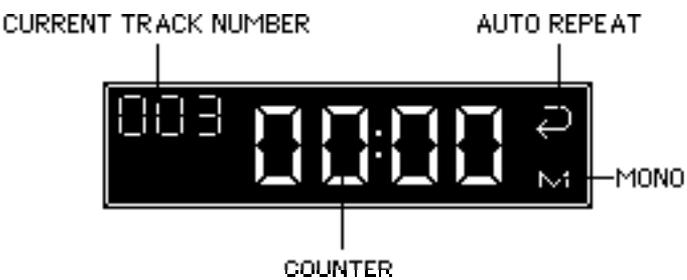
Upon opening a SoundCap file or snd resources a window like the one below will appear. The name in the title bar indicating the name of the originating file.



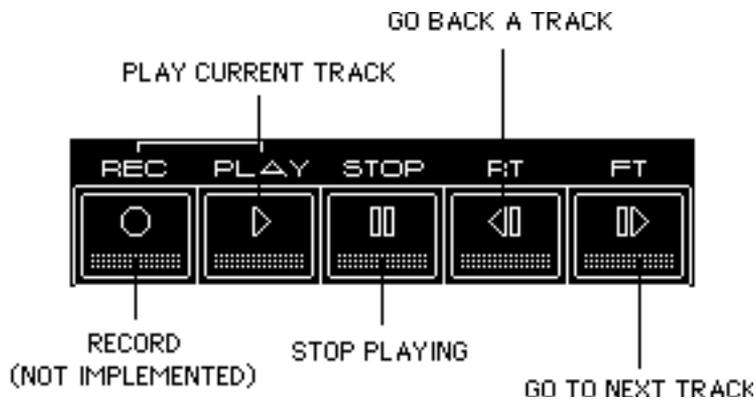
When you have more than one track in your CD (ie. multiple snd resources) the name of the current track is indicated in the box below. If the sound is compressed (SoundCap files) a small light will appear indicating decompression. During this time no other operations can be performed by the computer, this includes background/foreground tasks. The small "DDD" box on the bottom right is purely decorative.



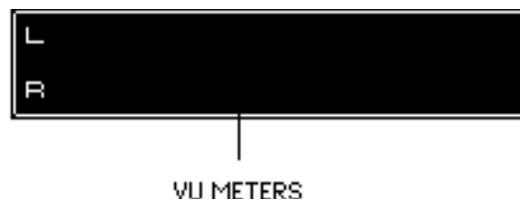
The three small LED digits contain the track number corresponding to the track name. A maximum of 999 tracks are allowed per CD. The large LED digits will display the number of seconds the CD has been currently played (ie. from the last PLAY command). If the time option is on these two displays will show the time - minutes and seconds. The auto repeat symbol on the top right indicates that the current playing sequence will be repeated indefinitely. Current versions of MacCD only support Mono sound, so the M symbol cannot be changed.



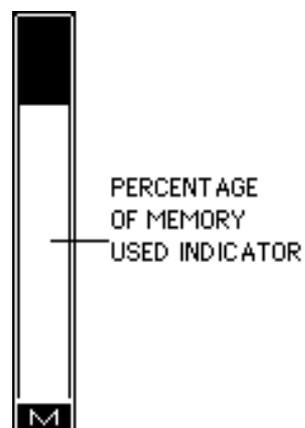
In current versions of MacCD recording is not available, so the record button does nothing. Depressing the PLAY button will play the current track. If the ALL or REPEAT options (below) are on, PLAY will play all or repeat the tracks. STOP does what it implies - stop the playing. RT and FT only work when sounds are not being played: RT steps back through the tracks, conversely FT steps forward through the tracks. Holding either of these keys down will auto repeat the operation.



When playing a snd format 2 resource (HyperCard) or a SoundCap file, VU meters will appear in the area below. As stereo is not yet supported, both the left and right channels will be the same.

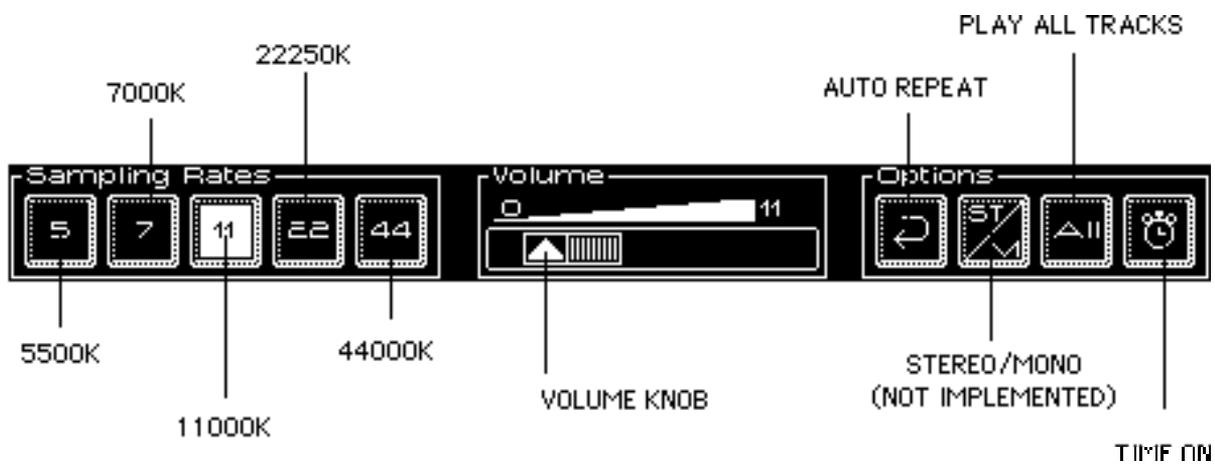


The bar graph of the right shows the percentage of application memory that each respective window holds. This will obviously vary when playing large sounds as MacCD loads in the next stage.



Across the bottom of each window are the control options. The sampling Rate options determine the speed at which the sound will be played. (This has no effect when playing snd format 1 resources - sys beeps). The rate can be changed during playing if you are running sys 6.0 or are on a Mac][. Likewise, the volume control can be varied while a sound is being played (same conditions apply. ie Sys 6.0 or Mac][).

Auto repeat will tell MacCD to repeat the current track or all the tracks if ALL is on. The ALL option will tell MacCD to play all of the tracks from the current track when you press PLAY. The TIME ON button will show the current time in the digit display.



Menus - FILE

New: Create a new empty CD window - for adding tracks.

Open: A number of files can be opened:

- MacCD's (Not available in this DEMO)
- SoundCap/SoundWave/SoundEdit files
(ie. the file type must be: "FSSD")
- HyperCard stacks - snd resources
- System
- Resource files
(ie. the file type must be: "" - empty)

Close: Closes the front most window

Save CD: This will allow you to save your CD, either with the tracks included in the CD file, or just the position on the sound file on disk (saves space).

Save CD as: As above.

Save as snd format 1 (Sys): Save the current track into the system or any other file, as a snd format 1 resource - sys beeps.

Save as snd format 2 (HC): Save the current track into a stack or any other file, as a snd format 2 resource.

Save as SoundCap: Save the current track as a SoundCap or SoundWave or SoundEdit file.

Append to SoundCap: Append the current track to an existing SoundCap etc file.

Quit: I wonder....

PLEASE NOTE: All of the above saving options are NOT available in this demo version. If you register you will receive a fully operation version of MacCD, with all functions working.

Menus - EDIT

Add Tracks: Will add new extra tracks to the front CD. If there is no front CD nothing will happen. Tracks can be obtained from the files listed above.

Switch Track: With a CD containing two or more tracks, this command will swap the current track with the one after it. In other words you can rearrange the order of play.

Delete Track: Delete the current track. This command will not allow you to have a CD with nothing in it.

Preferences: A number of preferences are shown, none of these work in this Demo version. For registered users, the options do the following.

- Preload: Given enough memory, this will preload the next track so as to give a smooth transition when playing long songs.

- Colour: You can turn off the colour displays on multibit B/W screens.

- Save CD with tracks: This will save all the tracks as snd resources within the CD itself.

The CD can be moved or copied with all the sounds intact. Obviously there is a large space overhead with this.

- Save CD with LOCATION of tracks: For hard disk users with plenty of sounds, using this option a CD will only contain the position of the sound on the disk. Thus if the sounds are moved the CD will not work. The size of a CD in this case is very small (<10k). Remember, that copying a CD which only contains the location of the sounds, will NOT copy the sounds themselves.

Menus - COLLECTION

Close All: Close all open CD's.

Memory Management:

MacCD uses a cached memory management system. This means that all sound files that are loaded into memory are kept in memory as long as possible. Should memory become short, tracks in windows behind the front window will be removed first - and the memory indicator updated. This feature means that you can create a CD with as many sounds as you have on disk as long as no single track is greater than available memory.

Future Versions:

Further development of MacCD is already underway. New features which will probably be added are:

- Stereo playback
- Stereo/Mono recording via two serial ports
- Controlling CD-ROM
- Sampling off CD-ROM
- More colour
- Any other major suggestions by registered users.

Acknowledgments:

Thanks to Greg Ward for helping me work out the hidden "features" of System release 6.0, testing beta versions, and lending me his digitizer.

Also, thanks to John Lim (Moire screen saver fame) for his constructive criticisms of my user interface, great testing, and finding those initial problems with System 6.0.

In coming versions of MacCD there will also be a recording option, thanks to Jeff Laing who deciphered some cryptic assembly for me, which will be used later on.

Thanks to all those who sent bug reports, made some helpful suggestions, or are going to register.

Copyright Notice:

This demonstration version of MacCD is FREE. Thou shall not touch the inner realm of MacCD without the express permission, in writing, of the author. Nor shall this program be used for someone else's commercial gain. This documentation must accompany MacCD.

No legal liability is assumed for any damages resulting from the use of this program from an implied or express term. Furthermore, even if liability is found to exist, the liability is not to exceed the cost of this program (nothing).

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