

# Contents

## Quick Start

- [Take the Quick Tour!](#)
- [Installing Cambium Sound Choice](#)
- [What's the idea, anyway?](#)
- [Methods For Choosing Music from the Database](#)
- [Auditioning Music](#)
- [Copying a File](#)
- [The Session Log](#)
- [Music Information Screen](#)
- [Using Music in a Multimedia Presentation](#)

## Cambium Sound Choice Features: An Overview

- [Summary](#)
- [Range of Music](#)
- [Royalty-Free](#)
- [High Quality Music](#)
- [Created Expressly for PC Multimedia](#)
- [Interactive Database](#)
- [Log Report](#)
- [Choice of Devices](#)
- [ADPCM wave compression support](#)
- [Shortening and Fading of Wave Files](#)
- [Checking for the Cambium Sound Choice CD](#)

## Using the Setup Menu Options

- [Summary](#)
- [CD-ROM Drive Letter](#)
- [Destination Path Default](#)
- [Wave Formats Available](#)
- [Wave Format Default](#)
- [Fade Length Default](#)
- [Rewind Unit Default](#)
- [MIDI File Format](#)

## Selecting A Set of Music to Audition

- [Accessing the Database](#)
- [Audition All Music](#)
- [Pick and Choose](#)
- [Screen the Database](#)

## Auditioning Music

- [The Screen](#)
- [Browse Control](#)
- [Selection Profile Information](#)
- [Version](#)
- [Device](#)
- [Wave Audio Format](#)
- [Rewind/Stop/Play/FFwd](#)
- [Elapsed Play Time](#)

[Jukebox Preview](#)  
[Music Information Screen](#)  
[Cambium Sound Choice Audio Player](#)  
[Copy](#)

## **Copying Music from the CD-ROM**

[The Screen](#)  
[Destination](#)  
[Copy Method](#)  
[Set File Fade Lengths](#)  
[Check Copy](#)  
[Listen \(Loop\)](#)  
[Erase Copy](#)  
[Done Copying](#)

## **Viewing and Printing the Session Log**

[The Log Screen](#)

## **Using the Keyboard**

[Alternative to a Mouse](#)  
[Accessing Menus With the Keyboard](#)  
[Navigating Within a Screen With the Keyboard](#)

## **Common Questions**

[I cannot hear CD Audio](#)  
[MIDI sounds really weird](#)  
["File Not Found"](#)  
[Cambium Sound Choice won't let me shorten MIDI files](#)  
[I hear gaps when playing back wave audio](#)  
[Nothing happens when I try to play a WAV file](#)  
[When I try to listen to CD Audio I get an error message](#)  
[The music always seems to start "late."](#)  
[The volume is not correct or the sound is distorted.](#)  
[The volume levels of wave, MIDI and CD Audio are all different](#)  
[I get a message when I play a MIDI file.](#)  
[The looping is not smooth](#)  
[The play time on MIDI files is always shorter](#)  
[My portable CD-ROM will not play CD Audio](#)  
[When I play 8 bit files they sound very noisy](#)  
[11K/ADPCM/mono won't play](#)

## **Technical Support**

[Reaching Cambium for Help](#)

## **Configuring Your PC**

[Minimum Requirements \(MPC1\)](#)  
[Enhanced Hardware to achieve better performance](#)  
[Newer Versions of GRID.VBX](#)  
[Windowsä MCI Drivers](#)  
[How to Uninstall Cambium Sound Choice](#)  
[Compacting the Database](#)  
[How to Exit Cambium Sound Choice](#)

## **The License**

[Your rights and obligations with Cambium Sound Choice](#)

## **Bibliography**

[Further reading about Multimedia](#)

## **Take the Quick Tour!**

Cambium Sound Choice comes with a ten minute multimedia Quick Tour which gives you an overview of using Cambium Sound Choice, and lets you listen to some of the music as well along the way. You can take the Quick Tour either by double clicking the Tour icon in your Cambium Sound Choice Program Group, or by selecting the Quick Tour from the Help menu in any main screen within Cambium Sound Choice. Try it - it's fun!

# Installing Cambium Sound Choice

## ADPCM

In order for you to play ADPCM compressed wave files, you must either have a sound card whose hardware directly supports ADPCM, or the Microsoft® ACM software drivers. In order to apply a fade out to ADPCM files, you must have the ACM drivers installed. These drivers were automatically installed as part of the Cambium Sound Choice setup procedure. For more information on ADPCM and installing the ACM drivers please see [ADPCM wave compression support](#).

## What's the idea, anyway?

Cambium Sound Choice is designed to assist users of multimedia presentation packages and other multimedia project tools in applying top quality music to their projects. By concentrating only on music, Cambium is able to deliver a broad range of impeccably recorded, royalty-free, mainstream quality music for use in projects created with authoring software, and other multimedia applications.

Each volume contains 25-30 main selections, over 100 individual clips, and over 800 music files in all. As each volume is purchased, all of that music is seamlessly added to the Cambium Sound Choice database.

The Cambium Sound Choice software is designed to allow the you to quickly and effectively accomplish three tasks:

1. Choose a set of music from the database to audition for the project
2. Audition that music in it's various versions, formats and devices
3. Copy the music you select to the appropriate hard disk directory for integration into your multimedia project.

# Methods For Choosing Music from the Database



Cambium Sound Choice offers three alternative ways for you to select music for audition from the database: auditioning all of the selections in the database, viewing them all and choosing by sight, or culling by means of a database query based on Category, Tempo, and Key Words. Unless you specify, you will initially bring all of the music in the database to the audition.

## See Also:

[Auditioning all of the Music](#)

[Pick and Choose](#)

[Screen the Database](#)

## Auditioning all of the Music

**Cambium Sound Choice: Audition Music**




**File Edit Setup Log Music Info Audio Player Help**


Category: Latin/Tropical Disc Volume: One  
Title: Coconut Groove Tempo: Upbeat  
Cambium Moods: Rhythmic, Calypso, Carefree  
Saxophone and steel drums combine to create an island calypso.

Enter Your Keywords:

Enter Your Comments:

**File Information**  
5 seconds  
460,172 bytes






    
Prev 11 of 57 Next


**Elapsed Play Time**  
  
Seconds: 2.4 of 5.2

**Version**  
☐ Main  
☒ Bumper 1  
☐ Bumper 2  
☐ Bumper 3  
☐ Bumper 4  
Finale

**Device**  
☒ WAV  
☐ CD  
☐ MIDI

**WAV Format**  
☒ 22k/16bit/st ☐ 11k/ADPCM/m  
☐ 22k/ADPCM/st ☐ 11k/8bit/st  
☐ 22k/ADPCM/m ☐ 11k/8bit/m



      
Rew Stop Play FFwd Copy File

  
New Set



## Pick and Choose

Cambium Sound Choice: Pick and Choose			
Title	Category	Tempo	Volume
Last Call	Jazz	Moderate	One
After Midnight	Jazz	Upbeat	One
Preservation Hall	Jazz	Moderate	One
Turning Point	Contemporary	Moderate	One
L.A. Cool	Contemporary	Upbeat	One
The Deal	Contemporary	Upbeat	One
Only The Strong	Rock	Upbeat	One
Power Play	Rock	Upbeat	One
Jamaica Commitment	Latin/Tropical	Moderate	One
Rio	Latin/Tropical	Upbeat	One
Coconut Groove	Latin/Tropical	Upbeat	One
Old Friends	New Age	Moderate	One
Lazy Rain	New Age	Moderate	One
The Dream	New Age	Moderate	One
Serengeti	Exotic	Upbeat	One
Heartland	Orchestral	Moderate	One
The News	Orchestral	Upbeat	One

Audition Selections

Cancel

Click to mark a single selection, Control-Click to add additional selections, Click and then Shift-Click to select a range of selections.

For those who prefer to see their choices, the Pick and Choose allows you to view basic information about all of the Cambium Sound Choice music available in the database. Candidates for auditioning can be selected just as you would select files in the File Manager. Clicking on a selection selects a single item, holding down the Control key and then clicking adds additional selections, and clicking on one selection followed by a Shift-click selects all of the music between the two records.

Pressing the Audition Selections button will load the selected music and move you to the Audition Music screen. Pressing the Cancel button will ignore the selections and return you to the Audition Music screen.

## Screen the Database

The screenshot shows a software window titled "Cambium Sound Choice: Screen the Database". It has a menu bar with "File", "Setup", "Log", "Audio Player", and "Help". The main area is divided into three sections:

- Select One or More Categories:** Contains two columns of checkboxes. The first column has "Classical", "Orchestral", "Exotic", "Rock", and "Broadway". The second column has "Jazz", "Contemporary", "New Age", "Latin/Tropical", and "Country/Folk". To the right are two buttons: "Select All" (with a pencil icon) and "Unselect All" (with a pencil icon).
- Select One or More Tempos:** Contains three checkboxes: "Upbeat", "Moderate", and "Slow". To the right are two buttons: "Select All" (with a pencil icon) and "Unselect All" (with a pencil icon).
- Search for Key Word:** Contains a text input field with the word "Brassy". To its right are three radio buttons: "In Your Keywords", "In Cambium Moods" (which is selected), and "In Your Comments". Below the input field is a button labeled "Audition Selected Music" with a green checkmark icon. To the right of the radio buttons is a list box showing a list of moods: "Acoustic", "Active", "Agressive", "Assertive", "Ballad", "Baroque", "Brassy" (which is highlighted in blue), and "Breezy".

At the bottom center, there is a button labeled "4 Matches".

The database can be narrowed three ways:

1. By Category (e.g. Classical, Jazz, Rock, etc.)
2. By Tempo (e.g. Upbeat, Moderate, Slow)
3. By Key Words (put in the database by either you or us)

### See Also:

[Category](#)  
[Tempo](#)  
[Comments](#)  
[Running Match Count](#)  
[Audition Music](#)

## **Category**

Pick any combination of categories, from one to all. The more categories you pick, the larger the selection of music. Try using the Select All and Unselect All buttons to speed things up.

## ***Tempo***

Pick between one and three tempos. Remember that Tempo and Category are often related. There won't be much in the way of Slow Rock or Upbeat New Age!

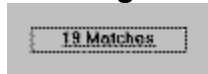
## **Comments**

As you get used to Cambium Sound Choice you may wish to narrow the selection process further by selecting a word for which to search in either -

1. Your Keywords: Selecting this option will pop-up an alphabetized list of the keywords you've entered from the Audition Music screen.
2. Your Comments: Search for any text which is "close to" text contained in the unlimited amount of comments saved with each selection in the Audition Music screen.
3. Our Keywords: A pop-up list of descriptive adjectives we've come up with to try and justify our English majors!

Cambium Sound Choice will automatically select all of the categories and tempos when one of the text search categories is selected in order to allow you to search the entire database for your keyword. If you wish to search for your keyword only in a subset of the database, simply deselect those categories or tempos you wish to eliminate. See Search for Key Words.

## ***Running Match Count***



Cambium Sound Choice keeps a running count of the number of successful matches as you add and remove criteria in the Select Music screen. In this way you can assemble a suitable audition group quickly. If no matches exist, the Audition Music button is disabled, rendering it impossible to come up empty handed.

## ***Audition Music***



Hit the button and away we go!

# Auditioning Music

What's with this Audition stuff?

Copy

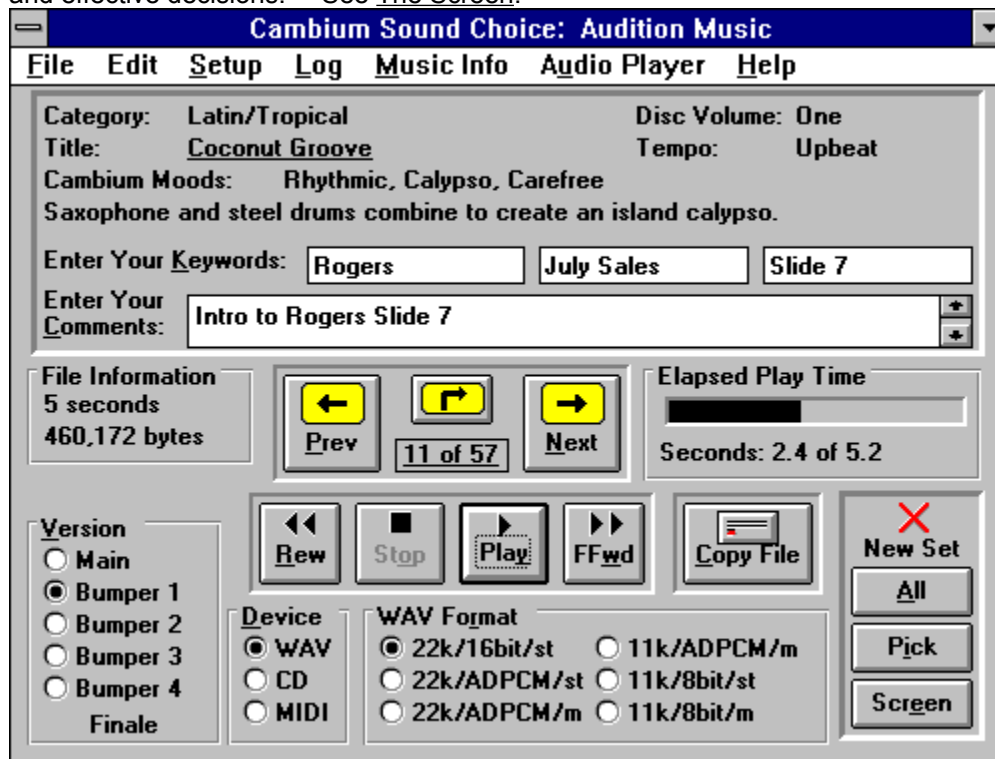


## What's with this Audition stuff?

The goal in auditioning music is to decide on the best

1. Selection: the actual melody
2. Version: The main selection and/or one of the bumpers (or more)
3. Device: WAV, CD Audio, or MIDI
4. WAV Format (if WAV): sampling rate, compression, etc.

The key tradeoff in using music in multimedia is file size versus sound quality. All the information you need regarding selection length, file size, and other details is clearly displayed to allow you to make quick and effective decisions. See [The Screen](#).



Move through each of the selections by using the large yellow right and left arrows. The information displayed is for one selection at a time. You can jump directly to any member of the [audition](#) set by pressing the small "right hand turn" arrow between the two main arrows.

Pressing Play will play the music in the version, device and format that you have selected. Selecting the "Jukebox Preview" box will cycle through all of the selections in the audition set (main versions only).

## **Copy**

Once you've settled on a file to copy, hit the Copy button to move to the last of the three steps.

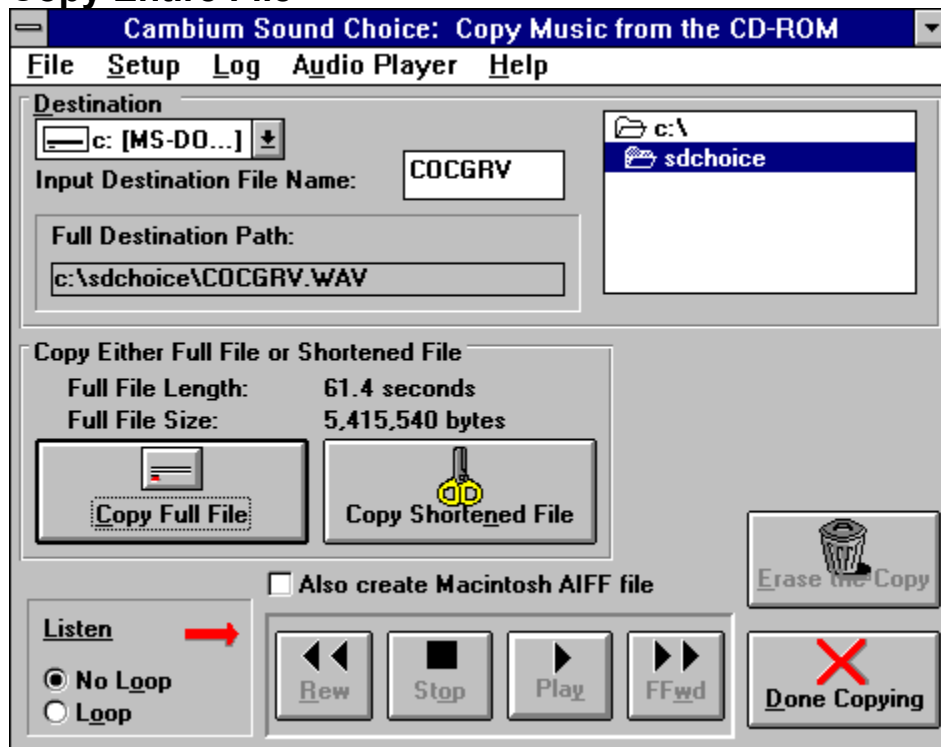
# Copying a File

Copy Entire File

Copy Shortened File

Macintosh AIFF File Creation

## Copy Entire File

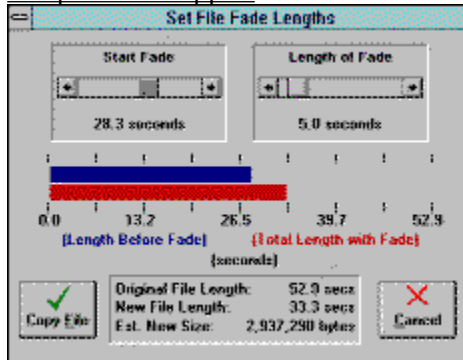


All wave audio and MIDI files (but not CD Audio) can be copied in their entirety from the CD-ROM to another location, generally your hard drive, where they can be directly accessed for your project.

Cambium Sound Choice suggests a destination drive, directory, and name for the file. All of these can be temporarily changed on this screen, and the default destination drive and directory can be set from the Setup/Default Destination Directory menu.

## Copy Shortened File

WAV files can be shortened (and faded) as they are copied. In order to shorten ADPCM compressed files, three items must be installed: Cambium's FADE.DLL version 2.0 or later, Microsoft ACM version 2.0 or later, and the Microsoft ADPCM codec. If either of these is not installed, the shorten options will be disabled and a warning message will appear if you have selected an ADPCM file. Select Help/About Cambium Sound Choice from any menu to view the currently installed devices. See ADPCM wave compression support.



See The Screen.

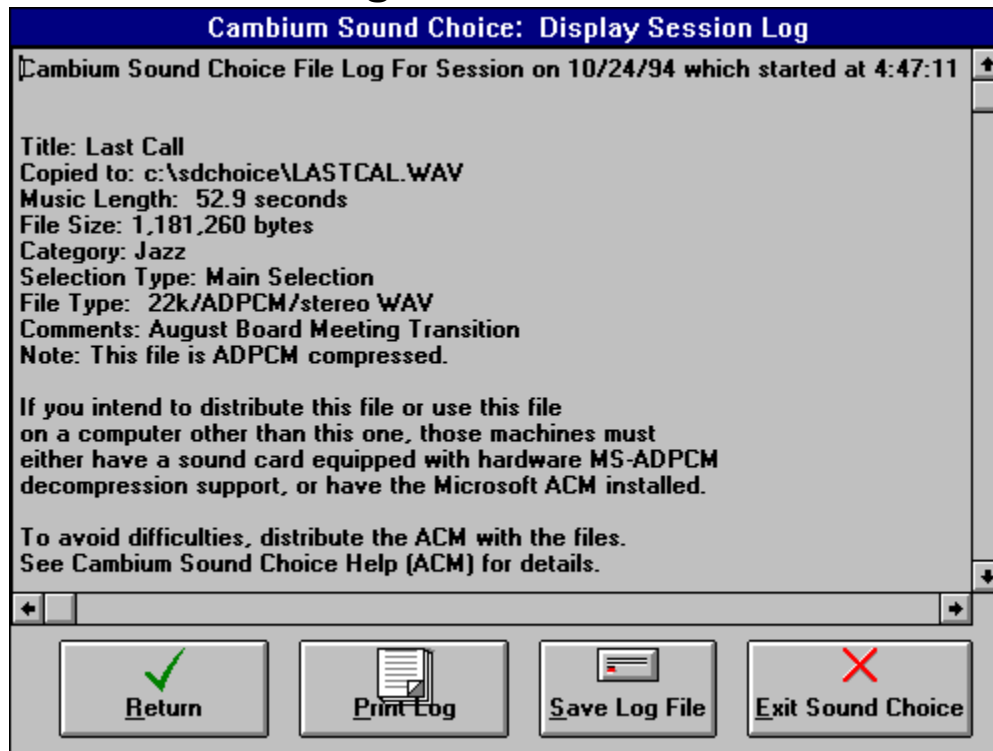
## Macintosh AIFF File Creation

Checking the "Also create Macintosh AIFF File" box will also save a version of the WAV file in Macintosh AIFF format for cross platform authoring. Since the Mac does not support MS-ADPCM, only non-ADPCM WAV files may be exported as AIFF. The file will be copied to the same path as the WAV file under the same filename as the WAV file, but with a .AIF file type.

If you are not networked, in order to move the AIFF file to the Mac, you will need to use one of the DOS to Mac disk translation utilities, or save the files to a DOS formatted disk which can be read with the appropriate software on the Mac.

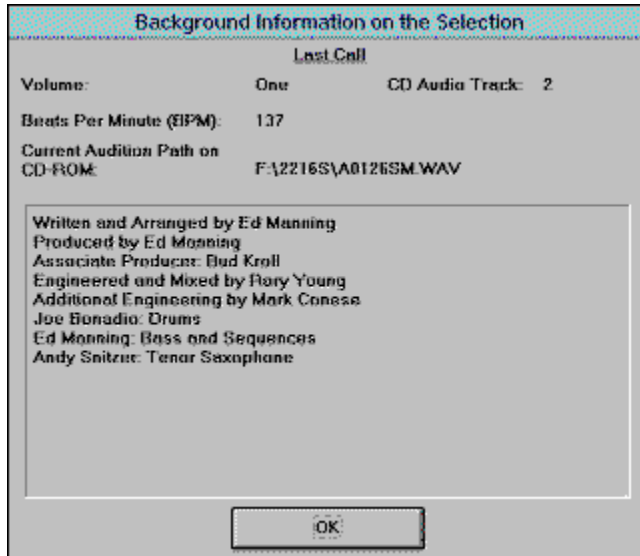
In addition, you will need to open the AIFF file on the Mac in an application such as ResEdit, and identify the file type as AIFF. In Res Edit go to "Get File Info." ResEdit will ask you for the File Type and Creator. Just enter "AIFF" for the File Type.

## The Session Log



To assist you in quickly integrating the copied music into your project, Cambium Sound Choice will print a log detailing all of the relevant information for the files you have copied during each session, including the comments you entered in the database. See The Log Screen.

# Music Information Screen



Additional information on the current selection loaded in the Audition Music screen is available by selecting the "Music Info" menu item. The information includes the title, Volume, CD Audio Track, Beats per Minute, source path (on the CD-ROM), and production and performance credits.



# Using Music in a Multimedia Presentation

Music can be extremely effective in a Multimedia presentation. We only have to look to a more mature medium, filmmaking, to see the impact music can make. Can you imagine a film without music?

Yet, many presenters shy away from music, sometimes feeling it may draw away from the point they are trying to make with their audience, or because they perceive it to be too difficult to incorporate music into their presentation. A few tips for graceful integration of music into a project:

- Less is more: One of the most powerful features of a film soundtrack is that you don't notice the music, it simply becomes part of the overall image. Use of music that blends easily, and judicious use of volume can make a big difference. Many Cambium Sound Choice selections have been constructed as soundscapes, designed to blend rather than fight for attention. Take a second look at some of the classical selections on Cambium Sound Choice, they may fit the bill.
  - Use full length cuts at the beginning and end of your presentation to settle a room down, or let a group blow off steam.
  - Use bumpers which come from similar selections to establish a musical thread in a presentation without fighting with the speaker for attention.
  - Bumpers allow the speaker transition time to change slides, regroup, or simply take a drink of water without an awkward, quiet pause.
  - Stinger and Finale bumpers can help confirm a point and provide for a clean break in a presentation.
  - Introduction Bumpers can set the audience up for a new point.
  - Transitional Bumpers can move the audience forward without breaking the thread.
  - Groove Loops or Loops of longer selections can provide "vamp" or indefinite background music if scene durations are unknown.
  - Rehearse with music so it does not come as a surprise to the speaker.
  - Leave the mixer (volume) control applet for your sound card minimized for quick volume adjustment if conditions change.
- Always test your equipment before the presentation, especially if the platform is unfamiliar to you. Carry a copy of the ACM runtime files and ACM installation program if you use ADPCM compressed files. See Installing the ACM.

# Summary

This section is intended to provide an overview of the Cambium Sound Choice features, and some background information on multimedia sound. For specific information on screens and procedures, please see one of the later chapters which discuss each screen in detail.

## Range of Music

Cambium Sound Choice includes music across a broad range of styles, including classical, jazz, rock, contemporary, new age, and several others. Each volume contains approximately 30 main selections. Each main selection has several "bumpers" associated with it. Bumpers are short subsets of the main selection which have been created as transitional or short accented musical effects. For more information on Bumpers, see [Version](#).

Additional volumes of Cambium Sound Choice can be seamlessly added to your database.

# Royalty-Free

Source material, including music, is the intellectual and legal property of the creator. While the temptation is surely there to pop your favorite audio CD into your player, and record it to your hard drive for use in a presentation, it is legally and morally wrong to do so. In addition, the resulting file may not adequately fulfill your music needs.

The music on the Cambium Sound Choice discs is provided for your royalty-free use in presentations, multimedia projects, and other non-broadcast environments. You do not need to specifically obtain, nor pay for the right to use this music in any environment except TV (broadcast or cable) and radio.

You are not allowed to resell this music as music of your own (such as repackaging it as another clip music library), but you could combine it with other multimedia elements into a game, presentation, or other creation. Please read your License for details, see [Your rights and obligations with Cambium Sound Choice](#).

Broadcast rights are available for a fee. Please contact us directly for information. See [Reaching Cambium for Help](#).

## High Quality Music

Cambium entered the clip music market because its founders were disappointed by the quality and availability of music for their own multimedia projects. All but the classical selections are composed (and the classical pieces are arranged) by top writers, whose international writing and playing credentials are widely respected in the recording industry.

Each piece of music was written or arranged from the ground up to be a part of this collection, and fully satisfy the most critical listener and multimedia developer. Our personal goal was to provide music which was not just well suited to multimedia production, but of a quality we would want to purchase on a CD in a record store for our own personal listening.

The performers were hand-picked from the best New York and California studio musicians. All of the music was recorded and mixed using state of the art equipment in top studios.

# Created Expressly for PC Multimedia

Length

Bumpers

Decay

Looping

## **Length**

Each composition has a main selection of approximately 60 seconds, and two to four short "bumpers."

## Bumpers

The bumpers, short takes of the main selection, are designed (and labeled) to fulfill different roles: introduction, transition, groove loop, finale, and stinger. They are designed to be much more than a short take of the main selection. Bumpers punctuate the project with specifically aimed musical accents that are linked in the listener's mind to both the main selection and the other bumpers. For more information on Bumpers, see [Version](#).



## **Decay**

Some commercially available music clips "cut" the music too quickly at the end of the selection, resulting in an unnatural "chop" ending, rather than allowing the music to fully decay in a more natural way, as Cambium Sound Choice does.

## Looping

Looping is the restarting of a selection once it has reached its conclusion. It is a very handy tool in multimedia, since often the duration of a particular scene, action, or slide is unknown. Also, with disk space at a premium, a strategy which uses shorter selections, and then loops them can save valuable hard disk real estate. Most presentation packages allow selections to be looped, but some disk drives and sound cards may cause a hesitation when looping (resulting in a small delay between the end of the selection and the loop to the beginning).

Cambium Sound Choice music is "looping aware" in two ways. First, each main (60 second) selection, and many bumpers, have been written or arranged for natural looping. The selections begin and end in the same key, tempo, and time signature. Tap your foot while a Cambium Sound Choice selection loops, and it will stay on the beat. No "skip" will be felt, and the music will sound as if the players have taken it "once more from the top" without adding or dropping a beat.

Second, some bumpers (called "groove loops") are designed to be looped to simulate a rhythm section's "groove." Groove loops use up very little disk space, and can be quite useful as unobtrusive background.

Loops can be previewed on the "Copy Selection" screen once the file has been copied from the CD-ROM to the hard drive. Unfortunately, CD-ROM seek times are too slow to allow for seamless looping from most CD-ROM drives. For more information on Looping, see [Listen \(Loop\)](#).

# Interactive Database

Cambium Sound Choice includes a full-featured, interactive database for managing the Cambium Sound Choice library of music. This tool enables you to quickly screen the entire database for music which fits your requirements for any combination of categories (e.g., classical and jazz) and tempos (e.g. moderate and upbeat). A drop down box enables you to select from an array of "moods" which we feel capture each selection.

In addition, you can search for the mention of a particular word or phrase, either in descriptions we have provided of each selection, or those you have added as you auditioned the music. In this manner you can audition a batch of music, make notes to the database as you go, and then revisit groups of tunes by sorting on a key word, such as the name of an upcoming presentation, or a grading system.

Additional volumes of Cambium Sound Choice can be seamlessly added to the database library, allowing you to search across all of the Cambium Sound Choice discs at once. For more information on the database, see [Accessing the Database](#).

The database and other functions of the [WaveRider](#) librarian are limited to Cambium's music, and other sources of music may not be accessed. You can listen to non-Cambium Sound Choice CD Audio, [Wave](#), and [MIDI](#) files with the Cambium Sound Choice Audio Player, but these files may not be copied or shortened from within Cambium Sound Choice.

The Cambium Sound Choice files, however, may be used in any application which supports wave or MIDI files.

# Log Report

Cambium Sound Choice keeps a record of all of the music you have copied to your hard drive over the course of each session, including file names and paths, descriptions, lengths, and your comments as entered in the database. This log can be viewed or printed at any time during the session, and if you have copied any files during the session, you are prompted to view or print it before exiting Cambium Sound Choice.

The Log allows you to quickly and accurately refer to the files you have copied to disk when you move to the real task at hand: building your multimedia project in the authoring system. For more information on the log report, see The Log Screen.

## Choice of Devices

Cambium Sound Choice provides music files for three multimedia devices: digitized audio (the Microsoft® Windows™ .wav file), CD Audio (which can be played either in your computer's CD-ROM drive, or on a standard audio CD player), and MIDI. Digitized audio can also be exported in AIFF format and MIDI in Extended General MIDI for Mac compatibility.

### See Also:

[Wave Audio](#)

[CD Audio](#)

[MIDI](#)

## Wave Audio

Wave files (.wav) are the Microsoft® Windows™ standard files for the playing of digitized audio. In their highest quality version (44.1k, 16 bit, stereo), a wave file is essentially identical to the music on a CD, both in terms of listening quality and technical content.

### See Also:

[Advantages of Wave Audio](#)

[Disadvantages of Wave Audio](#)

### ***Advantages of Wave Audio***

Unlike CD audio, wave files can be directly copied to other media, such as a hard disk, and used from there. This results in many advantages, including the ability to edit the file with some of the simple tools available in Cambium Sound Choice, or, if you were to get more deeply involved, by using a hard disk audio editor, which are widely available. Also, files from a variety of sources can be placed in one hard disk directory, and made available to a single presentation, with no swapping of CD's.

## ***Disadvantages of Wave Audio***

While full CD-quality wave files sound great, unfortunately they consume disk space voraciously. One minute of full quality wave (or CD audio, for that matter) uses over 10 megabytes of disk space, one-third the size of the MPC level 1 minimum hard drive! As a result, a variety of methods are used to save space, all of which are available in Cambium Sound Choice.

As is exercise for most of us, sound compression is a case of "no pain, no gain." Lowering the file size generally results in a drop in quality. Smaller wave files are created by a combination of:

- **Downsampling to 22k or 11k:** By sampling the waveform one-half (or one-quarter) as many times per second, the file size is cut to one-half (or one-quarter) the original size. Unfortunately, this also results in the loss of frequencies above one-half the sampling rate. At 44.1k CD quality levels, frequencies up to 22.05k are intact, a level above the normal human hearing limits. A drop to 22.05k sampling results in the elimination of frequencies above 11k, and an 11k sampled file eliminates those frequencies above 5.5k. Cambium Sound Choice files are anti-aliased, so that frequencies do not "wrap around" when downsampled. Each of these downsamples is clearly audible on a reasonable stereo system, but might not be noticeable with small PC speakers.
- **Switching to mono:** Combining both stereo channels into a single, mono signal cuts the file size in half, but results in a "flatter" sound.
- **ADPCM compression:** Cambium Sound Choice uses the Microsoft® ADPCM compression technique for three of the six wave formats provided on the CD-ROM. ADPCM is a very effective compression technique which results in a 75% savings in space (compared to a 16 bit file) with very little loss in fidelity.



## CD Audio

Cambium Sound Choice provides the main selections, but not the bumpers, in CD Audio format.

### See Also:

[Advantages of CD Audio](#)

[Disadvantages of CD Audio](#)

## ***Advantages of CD Audio***

CD audio is great to listen to. With the full aural range of uncompressed, full sampling rate audio, it is the finest quality sound source. In addition, since Microsoft® Windows™ 3.1 generally can play only one multimedia device of a kind at a time (one WAV or AVI device, one CD Audio device, and one MIDI device), a music track from CD Audio can be used at the same time as a wave file of a voice, or an AVI video with an interleaved voice track.

If you are involved in producing videotape, using CD audio can make a lot of sense, since the audio track on your video is not sensitive to the size of the audio file.

CD Audio may also be played directly from the disc on any standard CD player.

**Please note:** Like most CD's which contain both data and CD Audio, the data (all of the wave and MIDI files, as well as the software) on the Cambium Sound Choice CD is stored in CD Audio track one. Subsequent tracks are standard audio tracks. Do not play track one in a standard CD player, as the "pops" that might result could be harmful to your speakers and amplifier at certain volume levels.

Although this may not occur on all machines, we urge you to please skip to track two before pressing the play button in either a standard CD Audio player, or when using the Microsoft® Windows™ Media Player.

Because of this, Cambium can assume no liability for playing the CD in a standard audio player.

### ***Disadvantages of CD Audio***

CD Audio cannot be edited. What is on the CD is there, and only by converting it to a wave file (or to tape) can it be edited.

While CD changers for PC's are beginning to make their way into the market, most platforms have single play CD-ROMs, resulting in the need to "swap" discs if all of the desired music is not contained on a single disc.

## MIDI

MIDI files are fundamentally different from CD Audio and wave files. Rather than containing a digital representation of what the music "sounds like," MIDI files are merely instructions to a MIDI device to play certain notes on certain electronic "instruments."

### See Also:

[General MIDI and Device Independent Files](#)

[Using Extended Files](#)

[Advantages of MIDI](#)

[Disadvantages of MIDI](#)

## ***General MIDI and Device Independent Files***

The MIDI card in your MPC computer has, at a minimum, the ability to reproduce the 128 General MIDI (GM) Instruments. The quality of that reproduction varies significantly, however.

General MIDI is an industry convention that standardizes, among other things, which electronic instruments correspond to which "patch numbers" or identifiers. In this way, all computers which are set up for GM will play, for example, a piano when patch 1 is selected, and a French Horn when patch 61 is chosen.

To accommodate the broad range of MIDI configurations in place, Cambium Sound Choice includes two complete sets of General MIDI files. The first set, which conforms to the to the Microsoft® Device Independent format, is the default set, and should be used by most users.

The Microsoft® Device Independent MIDI standard allows two kinds of MIDI cards to read the same MIDI file. Some sound cards only recognize MIDI channels 13-16 (referred to as "base level"). Other higher level cards recognize the full GM array of channels 1-16 (referred to as "extended-level"). Device Independent Files actually have two arrangements of the same music in each file, one for the base level cards on channels 13-16, and another for the extended level cards on channels 1-10 (channels 11-12 are not used). Percussion is on tracks 10 and 16.

If you use the Device Independent format, because of this "two in one," the user must be careful to adjust the MIDI Mapper which is found in the Windows™ Control Panel. If using a base level card, make sure channels 13-16 are activated, or nothing will be heard. If using an extended level card, only channels 1-10 should be activated.

## ***Using Extended Files***

If all 16 channels are activated while using the Device Independent format files, two versions of the music will be played simultaneously, often not a terribly pleasing result. To accommodate those users with professional configurations using all 16 channels, Cambium Sound Choice also includes a second set of Extended General MIDI files, with only one set of music on channels 1-10.

**Using these Extended files will result in the inability to play the MIDI files on base level MIDI cards.** This is very important if you intend to distribute the files. Your Session Log will indicate if the MIDI file is an Extended file. When in doubt, we encourage you to use the Device Independent format.

You can switch between the two formats using the Setup/MIDI Format menu. See MIDI File Format. Always consult your sound card manual for instructions.

### ***Advantages of MIDI***

- MIDI files are incredibly small, the one minute main selection which used over 10 megabytes in the case of CD Audio or a full range wave file takes only 5-25,000 bytes, or less than one-four hundredth of the space of the other digitized audio files!
- MIDI files can be infinitely adjusted in tempo without affecting the pitches of the notes. This can be very handy when timing is an issue.
- The scores (representations of the notes played by each instrument) can be printed out, and parts changed by the user. Don't like the solo played by a tenor saxophone? Just reassign it to a Tuba!

## ***Disadvantages of MIDI***

- The sounds that come from a MIDI file are only as good as the synthesizer into which they play. Some cards use "FM Synthesis," which approximates the sound of instruments by mixing a small number of waveforms. Unfortunately these sounds are not particularly realistic. Better cards (and most freestanding synthesizers) use "sampled" sounds. They record a small sample of the sound of an instrument in a particular frequency and dynamic range, and then use it to "clone" a larger range of instrument sounds. Even the sampled sound cards fall short in several categories, notably reed instruments like saxophones, and strings, in many cases.
- Synthesizers are limited by "polyphony," or how many notes can be playing at one time. Some lower level cards are limited to as few as six (non-percussion), while others can support non-percussion instruments of 16 or 32. While 16 notes may sound like a lot, a single piano chord with 8 notes uses half of the available notes. Synthesizer cards are programmed to "steal" notes from higher channels when polyphony limits are reached, sometimes resulting in strange effects.
- In general, the notes that come out of a MIDI card are "dry," that is with none of the reverb, chorus, and digital effects to which our ears have grown accustomed. This can make MIDI sound "tinny" and flat.
- MIDI setups are notoriously flaky, with changes in the MIDI Mapper, "stuck" notes, and other anomalies. Make sure you know what the MIDI card on a non-development machine sounds like before you arrive and try and use MIDI music.



## ADPCM wave compression support

ADPCM is a method of compressing wave audio files. This robust technology results in 4:1 sound file compression (on a 16 bit file) with little loss in fidelity. Cambium Sound Choice supports a particular flavor of ADPCM, Microsoft® ADPCM. In order to use Microsoft® ADPCM, you must either have a sound card whose hardware supports Microsoft® ADPCM, or you must install the Microsoft® Audio Compression Manager (ACM) (a runtime version is provided with Cambium Sound Choice and installed as part of the setup) onto your computer. The ACM decompresses the ADPCM files "on-the-fly" transparently to the user, and is smart enough to step out of the way if the sound card is ADPCM equipped.

### See Also:

[Installing the ACM](#)

[Be Mindful when using ADPCM](#)

[Other Compression Techniques](#)

## Installing the ACM

The Cambium Sound Choice Setup automatically installed the most recent ACM drivers. If you select ADPCM compressed files with Cambium Sound Choice and plan to use them on another computer, that machine will need to have the ACM installed as well, unless the sound card on that machine has hardware support for ADPCM.

To assist you in doing this, an automated ACM installation has been provided in the \ACM subdirectory of the Cambium Sound Choice CD. Copy the entire contents of the \ACM directory to a floppy disk. Insert the floppy disk into the new machine, and from the Program Manager select "Run" and then "a:setup" where "a" is the drive letter for the floppy disk. If you elect to put the ACM install in a subdirectory instead of the root directory on the floppy (or CD-ROM which you produce), the subdirectory must be named "\ACM" for the installation routine to work properly.

You are **not** licensed to install the Cambium Sound Choice software on an additional computer. Only the ACM runtime files may be installed on additional machines.

## Be Mindful when using ADPCM

ADPCM files appear to be identical to normal [wave](#) files (they both are "filename.wav" files). However, **ADPCM compressed files cannot be played unless the PC is either equipped with an audio card with ADPCM hardware support or the Microsoft® ACM has been installed.**

As a result, if you use ADPCM files, be very careful that you install the ACM onto the remote machine that will be giving the presentation, or insure that it's card will play the ADPCM files. Having the ACM on the development machine but not the presentation platform can prove to be very embarrassing. When in doubt, use non-ADPCM files, or always carry an installable copy of the ACM (found on the Cambium Sound Choice CD-ROM in the \ACM directory). See [Installing the ACM](#).

Cambium Sound Choice supports the shortening and fading of ADPCM compressed files. In order to shorten ADPCM compressed files, three items must be installed: Cambium's [FADE.DLL](#) version 2.0 or later, Microsoft ACM version 2.0 or later, and the Microsoft ADPCM codec. If either of these is not installed, the shorten options will be disabled and a warning message will appear if you have selected an ADPCM file. Select Help/About Cambium Sound Choice from any menu to view the currently installed devices.

## Other Compression Techniques

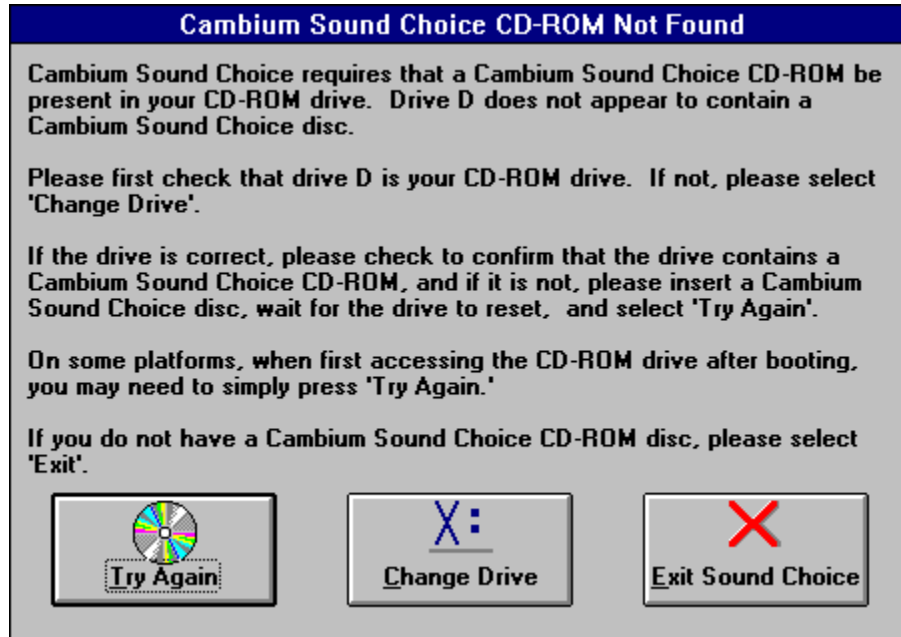
Standard compression programs such as PKZIP™ and LHARC™ rely on the repetition of patterns in the file to save space. Unfortunately, since digital audio is so random, using these compression tools does not save much space, and in some cases may even increase the file size. In addition, ADPCM compressed files can be decompressed "on the fly," not always the case for standard compression programs.

## Shortening and Fading of Wave Files

In addition to the shorter bumpers which are available, both main selections and bumpers can be shortened as they are copied to disk. This shortening is not applicable to MIDI or CD Audio formats.

When shortening files, Cambium Sound Choice allows the user to "fade out" over a user-specified period of time to insure smooth transitions. While some authoring packages with which Cambium Sound Choice might be used allow for files to be stopped after a specified period of time, this results in an abrupt stop, rather than a smooth fade.

# Checking for the Cambium Sound Choice CD



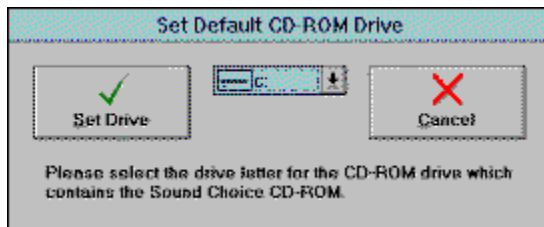
At several points Cambium Sound Choice checks to ensure that a Cambium Sound Choice CD is inserted in your CD-ROM drive. If Cambium Sound Choice cannot find a Cambium Sound Choice disc, a warning message will appear. There are two possibilities: Either the CD is not a Cambium Sound Choice CD (in which case you should switch to one and press "Try Again"), or Cambium Sound Choice is looking to the wrong drive for the CD. To remedy this, press "Change Drive."

# Summary



The Cambium Sound Choice menus contain a setup option which is retained from session to session. Using this drop-down menu, you can save your own customized defaults, or standard settings for some of the often used features in Cambium Sound Choice. Each of these settings is originally recorded in the installation process, but may be changed at any time.

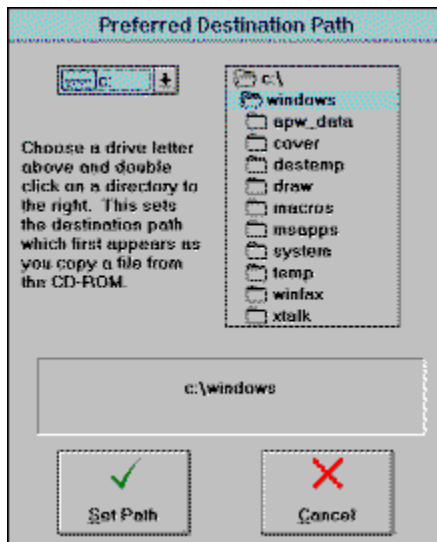
## CD-ROM Drive Letter



Cambium Sound Choice needs to know where to look for the CD-ROM drive. The program will not function without a Cambium Sound Choice CD in your drive. If you change the location of your CD-ROM drive after the original Cambium Sound Choice installation, simply reset this option.



## Destination Path Default



While music can be copied to any path you may specify at the time, Cambium Sound Choice suggests a default path to you each time you enter the Copy Music screen. For your convenience, we suggest that you select the clip music directory of the authoring tool you are currently using for the default directory. This way files are available to you with a minimum of searching at authoring time.

You can always change the destination path in the Copy Music screen at the time of each copy command, but to save keystrokes, the default may be also be changed at any time. For more information on setting the destination path, see [Destination](#).

## Wave Formats Available

Available Wave Formats

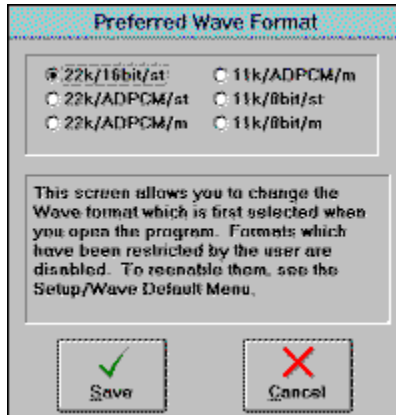
<input checked="" type="checkbox"/> 22k/16bit/st	<input checked="" type="checkbox"/> 11k/ADPCM/m
<input checked="" type="checkbox"/> 22k/ADPCM/st	<input checked="" type="checkbox"/> 11k/8bit/st
<input checked="" type="checkbox"/> 22k/ADPCM/m	<input checked="" type="checkbox"/> 11k/8bit/m

Save      Cancel

This screen can be used to restrict those WAV formats which you would like to see available to you. It can be used to eliminate formats which your PC might not be able to handle, such as 16 bit or ADPCM in order to save you time and effort as you use the program. The default setting is all formats checked. Your choices are saved for future sessions. If you later add the capability to use a format, please remember to recheck the box.

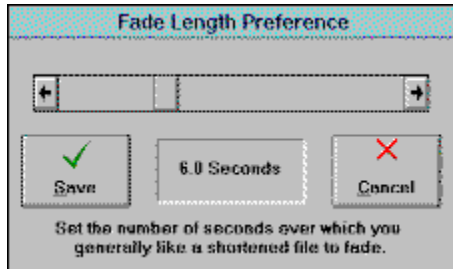
If you find that you never use certain formats (for example, 8 bit files), you can use this setup option to "gray out" the formats you never use. This will keep you from selecting them in error. If you later change your preferences, please adjust the setup accordingly. For more information on wave formats, see Wave Format Default.

## Wave Format Default



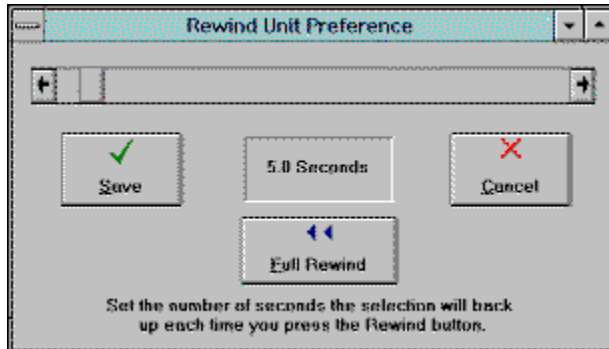
When you enter the Audition Music screen each time, Cambium Sound Choice selects a wave format (e.g. 22k/16 bit/stereo) using the "wave format default." To save time, use this setup to select the wave format you most often prefer to audition first. Please note that a default cannot be selected which has been "grayed out" by the "Wave Formats Available" setup. For more information on wave format default, see Wave Formats Available.

## Fade Length Default



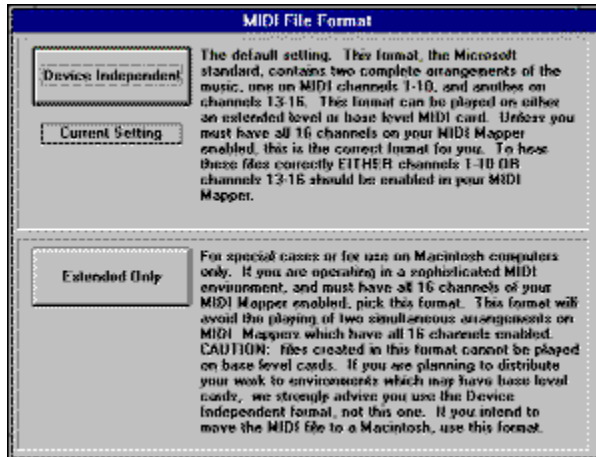
When copying a shortened file, Cambium Sound Choice suggests a fade length, or number of seconds over which the selection will fade from full volume to silence. Changing this default will adjust the initial suggested fade length as the Fade File screen is entered each time. The fade length may also be manually changed each time a file is shortened in the Set File Fade Length screen. For more information on setting the Fade Length, see [Set File Fade Lengths](#).

## Rewind Unit Default



The rewind buttons on the Audition Music and Copy Music screens can be set to different increments. This comes in handy when you are trying to look at a selection more closely. To adjust the rewind increment, simply adjust the slider to the desired rewind unit (5.0 would rewind the selection 5 seconds each time you pressed the rewind button) and press Save. To have the rewind button return to the beginning of the selection each time it is pressed (full, not incremental rewind) press the Full Rewind button and then Save.

# MIDI File Format



In most cases you will want to select Device Independent files, the default setting. If, however, your MIDI setup must be configured for all 16 or more channels, Extended Only files may be helpful.

WARNING: Extended only files will not play on base level sound cards. Please keep this in mind if you plan to distribute your MIDI files. See General MIDI and Device Independent Files.

## Accessing the Database



Cambium Sound Choice offers three alternative ways for you to select music for audition from the database: auditioning all of the selections in the database, viewing them all and choosing by sight, or culling by means of a database query based on Category, Tempo, and Key Words.

## **Audition All Music**

At first, all of the selections in the Cambium Sound Choice database (across all of the volumes you own) will be loaded into the Audition Music screen for your review.



## Pick and Choose

Cambium Sound Choice: Pick and Choose			
Title	Category	Tempo	Volume
Last Call	Jazz	Moderate	One
After Midnight	Jazz	Upbeat	One
Preservation Hall	Jazz	Moderate	One
Turning Point	Contemporary	Moderate	One
L.A. Cool	Contemporary	Upbeat	One
The Deal	Contemporary	Upbeat	One
Only The Strong	Rock	Upbeat	One
Power Play	Rock	Upbeat	One
Jamaica Commitment	Latin/Tropical	Moderate	One
Rio	Latin/Tropical	Upbeat	One
Coconut Groove	Latin/Tropical	Upbeat	One
Old Friends	New Age	Moderate	One
Lazy Rain	New Age	Moderate	One
The Dream	New Age	Moderate	One
Serengeti	Exotic	Upbeat	One
Heartland	Orchestral	Moderate	One
The News	Orchestral	Upbeat	One

**Audition Selections**

**Cancel**

Click to mark a single selection. Control-Click to add additional selections. Click and then Shift-Click to select a range of selections.

For those who prefer to see their choices, the Pick and Choose allows you to view basic information about all of the Cambium Sound Choice music available in the database. Candidates for auditioning can be selected just as you would select files in the File Manager. Clicking on a selection selects a single item, holding down the Control key and then clicking adds additional selections, and clicking on one selection followed by a Shift-click selects all of the music between the two records.

Pressing the Audition Selections button will load the selected music and move you to the Audition Music screen. Pressing the Cancel button will ignore the selections and return you to the "How to Access Data" screen.

# Screen the Database

**Cambium Sound Choice: Screen the Database**

File Setup Log Audio Player Help

Select One or More Categories

☒ Classical ☒ Jazz  
☒ Orchestral ☒ Contemporary  
☒ Exotic ☒ New Age  
☒ Rock ☒ Latin/Tropical  
☒ Broadway ☒ Country/Folk

Select All Unselect All

Select One or More Tempos

☒ Upbeat ☒ Moderate ☒ Slow

Select All Unselect All

Search for Key Word

☐ In Your Keywords  
☒ In Cambium Moods  
☐ In Your Comments

Audition Selected Music

4 Matches

Acoustic  
Active  
Agressive  
Assertive  
Ballad  
Baroque  
Brassy  
Breezy

The database can be narrowed three ways:

1. By Category (e.g. Classical, Jazz, Rock, etc.)
2. By Tempo (e.g. Upbeat, Moderate, Slow)
3. By Key Words (put in the database by either you or us)

## See Also:

Category

Tempo

Search for Key Words

Audition Music Command

## Category

Pick any combination of categories, from one to all. The more categories you pick, the larger the selection of music. Try using the Select All and Unselect All buttons to speed things up.

The Cambium Sound Choice volumes contain a broad variety of musical styles including Classical, Orchestral, Contemporary, Rock, Country/Folk, Jazz, Latin/Tropical, New Age, Exotic, and Broadway.

Any combination of these diverse styles may be tagged, and the database will select appropriately. To select all categories click the "Select All" Button. To clear them all and start the category selection process from scratch, click the "Unselect All" button.

At least one category must be chosen, otherwise the search will return no matches. Please note that the use of the Tempo and Key Word search factors will further narrow the search. As a result, a search for "Slow Rock" may yield no matches.

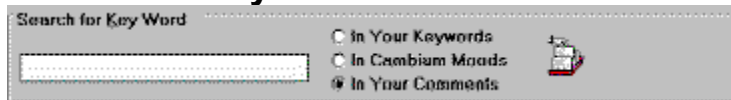
Some categories, such as classical, have many choices, while others are more limited. All categories do not exist in all volumes. Browse and discover!

## Tempo

The database may be additionally constrained by Tempo. Our research has shown that after style, tempo most affects the "feel" of music to presenters and users. Mixing tempos can be an effective tool in creating a specific effect on your audience.

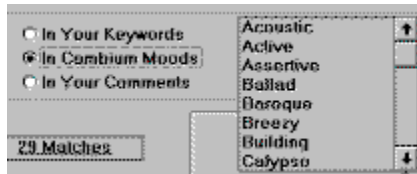
The Cambium Sound Choice music is divided into upbeat, moderate, and slow tempos, and you may select any combination of these to screen your selections. As with category, at least one tempo must be chosen, otherwise the search will return no matches. Pick between one and three tempos. Remember that Tempo and Category are often related. There won't be much in the way of Slow Rock or Upbeat New Age!

## Search for Key Words



Cambium Sound Choice allows you to search the database for words or phrases appearing in one of three places:

1. **Your Keywords:** In the Audition Music Screen you have the opportunity to add up to three keyword per selection to the database. Your alphabetized keywords will appear in a pop-up box. Simply scroll to the word you desire, and click.
2. **Cambium Moods:** We have included three to four descriptive words per selection which we feel capture the mood and texture of the music. When Cambium Moods is clicked, a scroll box appears, containing the Mood words for all of the selections in the database. Simply scroll to the word you desire, and click.



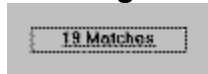
3. **Your Comments:** In the Audition Music Screen you have the opportunity to add an unlimited length comment to each selection's record. You can search for words that are similar to those you have entered.

Cambium Sound Choice will automatically select all of the categories and tempos when one of the three text search categories is selected in order to allow you to search the entire database for your keyword. If you wish to search for your keyword only in a subset of the database, simply deselect those categories or tempos you wish to eliminate.

### See Also:

[Running Match Count](#)

## ***Running Match Count***



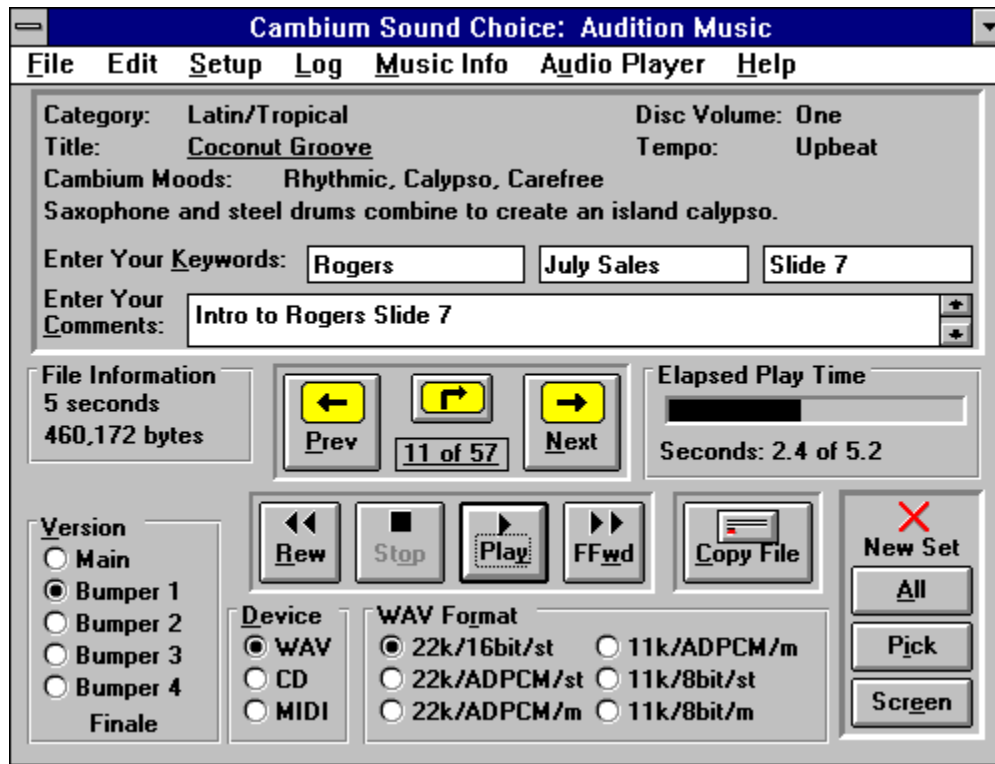
Cambium Sound Choice keeps a running count of the number of successful matches as you add and remove criteria in the Select Music screen. In this way you can assemble a suitable audition group quickly. If no matches exist, the Audition Music button is disabled, rendering it impossible to come up empty handed.

## Audition Music Command



Pressing the Audition Music Command Button compiles your database requests, submits them to the database and, away we go! If your requests have narrowed the field such that no selections make the cut, the button will be disabled. Otherwise it will bring you to the Audition Music screen, where the fun begins.

# The Screen



Most of your time in Cambium Sound Choice will be spent using this screen, where different selections, cuts (main selections and their bumpers), audio devices (wave, CD Audio, MIDI) and wave formats can be previewed. In addition, you can enter notes into the database, and initiate the copying of the appropriate files to your hard drive.

One musical selection is displayed at a time, allowing you to explore all of the variations on a single selection, copy it if it suits you, and then move on to another selection. You can easily return to selections.



# Browse Control



Smack in the center of your screen is the Cambium Sound Choice browse control. Think of it as a place keeper. It informs you which selection from the screened set you are currently auditioning (in this example, number 1), and how many total selections passed the screen of the database that you applied (in this example, 29). Use the "Prev" (Previous selection) and "Next" (Next Selection) arrows to move from choice to choice. As you move, all of the pertinent information associated with each record will change. To "jump" to a selection without going record by record, press the "right hand turn" button between the Previous and Next buttons.

Cambium Sound Choice: Jump To a Selection			
Title	Category	Tempo	Volume
Last Call	Jazz	Moderate	One
After Midnight	Jazz	Upbeat	One
Preservation Hall	Jazz	Moderate	One
Turning Point	Contemporary	Moderate	One
L.A. Cool	Contemporary	Upbeat	One
The Deal	Contemporary	Upbeat	One
Only The Strong	Rock	Upbeat	One
Power Play	Rock	Upbeat	One
Jamaica Commitment	Latin/Tropical	Moderate	One
Rio	Latin/Tropical	Upbeat	One
Coconut Groove	Latin/Tropical	Upbeat	One
Old Friends	New Age	Moderate	One
Lazy Rain	New Age	Moderate	One
The Dream	New Age	Moderate	One
Serengeti	Exotic	Upbeat	One
Heartland	Orchestral	Moderate	One
The News	Orchestral	Upbeat	One
Mahler: Symphony No. 3	Classical	Slow	One
Beethoven: Sonata No. 8	Classical	Slow	One

Double-Click on a Title or highlight and press "OK" to Jump to the Selection

OK Cancel

After pressing the "jump" arrow, the jump screen will appear. This screen displays the Title, Category, Tempo, and Disc Volume of each selection that has been included in the audition set. Double-click on any selection to jump to it (or highlight it and click OK).

## Selection Profile Information

Category:	Jazz	Disc Volume:	One
Title:	Last Call	Tempo:	Moderate
Cambium Moods:	Acoustic, Cool, Smooth		
A bass, drums and sax trio with a smokey ambience. Pass the whiskey, Joe.			
Enter Your Keywords:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Enter Your Comments:	<input type="text"/>		

Each selection has several components to its profile information provided from the database.

### See Also:

- [Category](#)
- [Disk Volume](#)
- [Title](#)
- [Cambium Comments](#)
- [Tempo](#)
- [Cambium Moods](#)
- [Your Keywords](#)
- [Your Comments](#)
- [File Information](#)

***Category***

The category into which the piece falls is displayed.

***Disk Volume***

Identifies from which volume of the Cambium Sound Choice series the selection comes. WaveRider sorts the selections so that all selections on one disc are auditioned before the next. Please insert the correct CD when prompted.

***Title***

The title of the main selection from which you are currently auditioning music, including the main selection itself, and the accompanying bumpers. This title is the root from which the file names used later in copying are derived.

### ***Cambium Comments***

We give you a thumbnail sketch of the selection, expanding on instrumentation and background.

## ***Tempo***

The tempo of the selection, used in the database selection.

## ***Cambium Moods***

We have tried to distill the "feel" of each selection into a few well-chosen adjectives. Nothing will substitute for actually listening to the music yourself, but if time is a factor (as it usually is), these key words can impart the texture of a selection quickly as you scan the database. These moods can be displayed in a pop-up box and searched for in the Select Music screen.



## ***Your Keywords***

You have the opportunity to enter up to three words per selection to capture mood, or perhaps assist you in linking selections to projects on which you may be working. These keywords can be displayed in a pop-up box and searched for in the Select Music screen.

We find it helpful to use a relatively narrow group of keywords, using each word in several selections. To assist you in doing this, pressing the right mouse button in either of the three keyword boxes will pop-up the list of your previously entered keywords. Clicking with the left mouse button on any word will enter it into the keyword box you first selected. Pressing Escape will close the pop-up if you decide not to choose a word.

## ***Your Comments***

We encourage you to enter a few impressions in this user accessible field as you audition selections. These comments are automatically saved to the database. Not only will this jog your memory as you review the selections later, but you can search the database for any word, or group of words in this field by using the "Search For Keywords/Your Descriptions" option in the Select Music screen. The comments also appear in the session log, which will be an important tool for you later in the production process.

Entering names of projects for which you have used selections (either in this field or in the Keywords field) can help prevent overusing a particular musical selection for a specific audience, thereby keeping your work sounding fresh to your audiences.

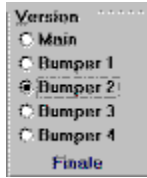
Comments may be copied from the Clipboard with the Edit/Paste command. For more information regarding your comments, see [Search for Key Words](#).

### ***File Information***

As selections are auditioned, or the devices, versions, or wave formats of a given selection are changed in the Audition Music screen, the File Information box reflects the length (in rounded seconds) and the file size (in bytes) of the specific file. (File size is not displayed for CD Audio).

Selection length is important for obvious reasons, and the file size is a crucial determinant of the appropriate tradeoffs made in selecting a device type or wave audio format.

# Version

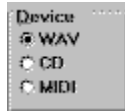


Choose a version by clicking on the appropriate choice. The main version (approximately 60 seconds) is available for every selection, and between two and four shorter bumpers are available as well. Bumper numbers will only appear for those bumpers which are available.

When a bumper is selected, the bumper type (introduction, transition, groove loop, finale, or stinger) will appear at the bottom of the Version display. This can help you quickly locate the appropriate bumper(s) for the task.

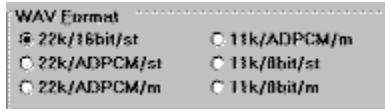
Selecting a different version will reset all relevant information on the screen to apply to the new version. For more information on versions, see Bumpers.

## Device



Choose the device from which you would like to hear (and copy) the selection. For information on Wave Audio, see Wave Audio. For information on CD Audio, see CD Audio. For information on MIDI, see MIDI.

# Wave Audio Format



Choose a wave audio format in which you would like to hear (and copy) the selection. If a particular format is not available for that selection, or if you have manually disabled specific formats in the Setup/Wave Formats Available menu, these will be grayed out and unavailable.

To reenale formats, select Setup/Wave Formats Available from the menu and recheck the appropriate formats. For information on Wave Formats Available, see [Wave Formats Available](#).

Please note that the ability of each computer to play certain formats (e.g. [16 bit](#) or [ADPCM](#)) is a function of the sound card's hardware and the level of Microsoft® [ACM](#) support installed on the machine.

For information on wave audio, see [Wave Audio](#). For information on ADPCM compression, see [ADPCM wave compression support](#).

## Rewind/Stop/Play/FFwd



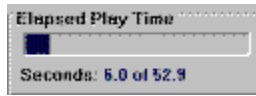
Once the desired selection, device and format have been chosen, pressing the Play button will load the appropriate file, display its exact playing time (to the tenth of a second) and start playing.

To hear a selection in its entirety, nothing more need be done. The selection of any other button on the screen will automatically stop the playback and begin the new action you have selected, there is no need to press "stop."

To stop and replay a section of the music, press Rewind. The Rewind can be set to almost any increment in the Setup/Rewind menu, the initial default is five seconds. See Rewind Unit Default.

Fast forward is permanently set to an increment of five seconds. To cease playing, press Stop.

# Elapsed Play Time



After the Listen button is selected, the Elapsed Play Time indicator will appear. As the selected file plays, the elapsed play time indicator will reflect the current position. This can be useful in determining cut and fade points for later copying (as well as giving you something fun to look at while you are listening!)

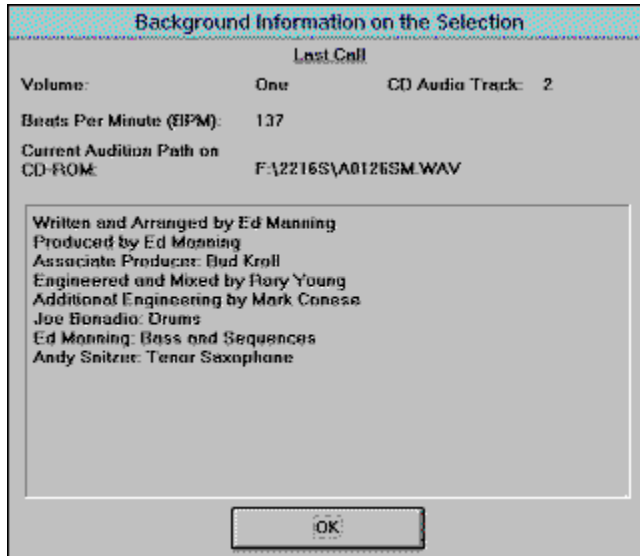


# Jukebox Preview



Checking the Jukebox box will play each of the main selections in the audition set one after another without your interaction (as a jukebox would), so you can get an overview of all the music at once. You can minimize Cambium Sound Choice and work in other applications, opening Cambium Sound Choice periodically to make notes to the database or check on the details of a particular selection.

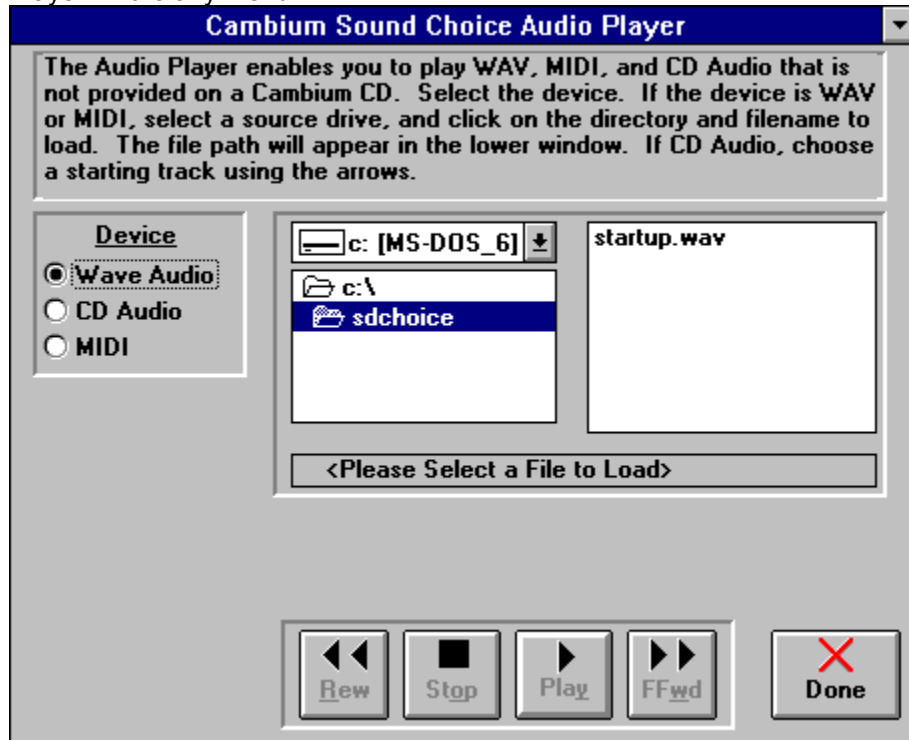
# Music Information Screen



Additional information on the current selection loaded in the Audition Music screen is available by selecting the "Music Info" menu item. The information includes the title, Volume, CD Audio Track, Beats per Minute, source path (on the CD-ROM), and production and performance credits.

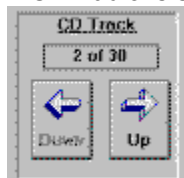
# Cambium Sound Choice Audio Player

Although you cannot add non-Cambium Sound Choice selections to the database you can play any WAV, MIDI or CD Audio file using the Cambium Sound Choice Audio Player, accessed by clicking "Audio Player" in the any menu.



If wave audio or MIDI is selected, the drive windows will be visible. Pick the source drive, double click on the directory, and a list of the appropriate files will appear. Double click on the filename to select, and press Play to start.

If CD Audio is selected the drive windows will not be visible, but the CD Audio track buttons will appear.



If the disc is a mixed mode CD (data in track one, and CD audio on the remaining tracks) the Cambium Sound Choice Audio Player will sense this and prevent you from accessing track one. Select the track from which you would like to start playing, and press Play. The entire balance of the CD will play from that point.

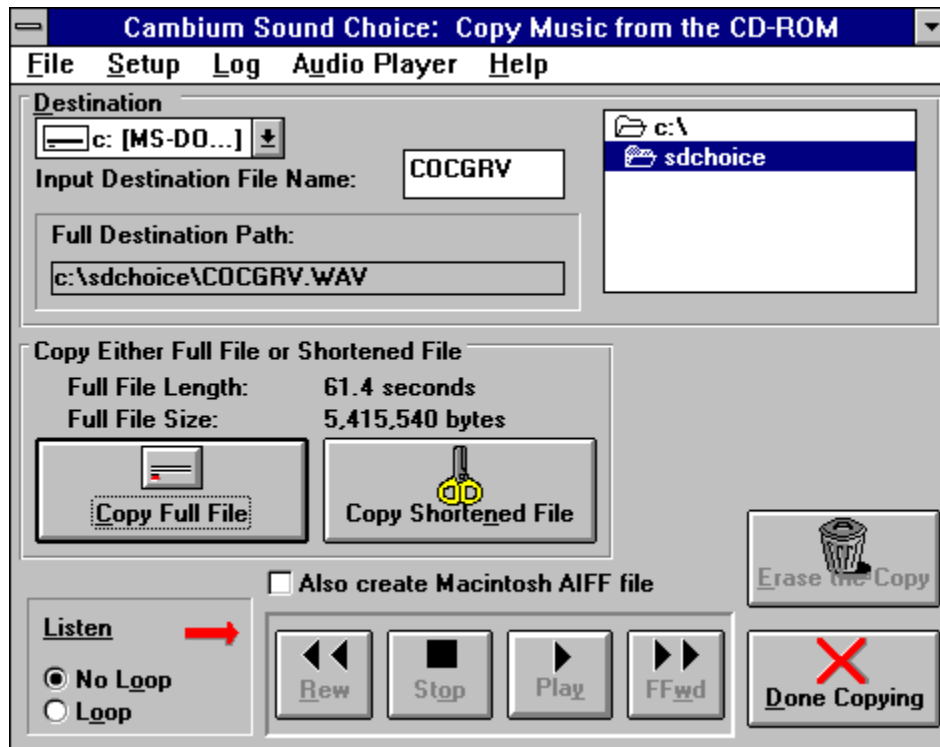
# Copy



Depressing the Copy button will stop the playback (if the device is active) and bring you to a choice of copy options in the Copy screen.

Copy is used to copy files, either in their full length or a shortened version, from the Cambium Sound Choice CD-ROM to another drive, such as your hard drive. Please note that CD Audio files cannot be copied using the Copy function.

## The Screen



Well, here's the reason you bought Cambium Sound Choice, to copy some great music to your hard drive so you can use it in your multimedia project.

# Destination



Either in the course of installing Cambium Sound Choice, or later by using the Setup/Destination Directory menu, you designated a standard drive and directory into which you wanted Cambium Sound Choice to copy files from the CD-ROM. This directory appears as the default when you enter the Copy screen. It can be changed any time by using the Setup/Destination Directory menu, see Destination Path Default.

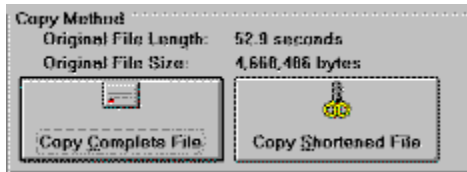
In addition, if you want to leave the default destination as it is, but change the destination path for a specific file, you may do so in this screen. Changing the destination in this screen will not affect the default settings, only these temporary ones.

To change the drive, click on the down arrow of the drive letter box, and select the desired drive letter. Then double click on the directory tree (it is a standard Microsoft® Windows™ directory tree) until the desired destination path appears in the indented box labeled "Full Destination Path." Please note that single clicking the directory will not change it, it must be double clicked.

Cambium Sound Choice suggests a filename for the file to be copied. It is designed to evoke some sense of recognition of the selection title, but with only seven characters to work with, some of the filenames are quite obscure! The last character in each bumper file's suggested name will be 1,2,3 or 4, corresponding to the bumper number.

Feel free to replace the suggested filenames with your own by highlighting the file name in the light gray "Input Destination File Name" field. You don't have to have a photographic memory, nor scrounge around for a pen and scratch paper. Cambium Sound Choice will display and/or print a log report for you at the end of each session (or any time during a session) which includes all of the path information, and quite a bit more. (Note: only comments that were entered in the Audition Music screen before the file was copied will appear in the Log). See The Log Screen.

# Copy Method



Cambium Sound Choice allows you to copy wave audio files two ways - either as complete files, or as shortened files. MIDI files may not be shortened. To shorten ADPCM compressed files, the ACM must be installed. The Copy Shortened File button choice will be disabled if shortening is not available for that particular file type.

Please select one of the copy methods.

## See Also:

[Copy Complete File](#)

[Copy Shortened File](#)

[Macintosh AIFF File Creation](#)

## Copy Complete File

In this case the file will be copied to the destination path. If you have selected a name for the file which already exists in the destination path, a warning message will ask you to confirm overwriting the file. If you do not want to overwrite the old file, select "No" and choose a new name or destination path.

Copying large wave audio files can take some time, so please be patient while the hourglass is displayed by the cursor. When the copy is completed, a message will confirm the name and path of the copy. (You need not write it down, it will be contained in the Session Log).



## **Copy Shortened File**

All non-ADPCM WAV files and, if the proper drivers are installed, ADPCM WAV files may be shortened. See ADPCM wave compression support. Selecting this option brings you to the Set File Fade Lengths screen.

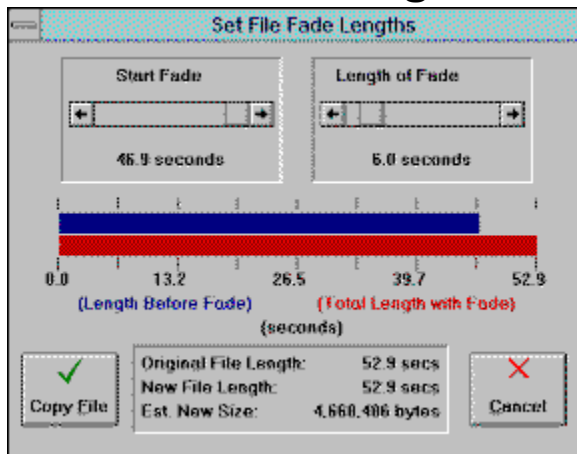
## Macintosh AIFF File Creation

Checking the "Also create Macintosh AIFF File" box will also save a version of the WAV file in Macintosh AIFF format for cross platform authoring. Since the Mac does not support MS-ADPCM, only non-ADPCM WAV files may be exported as AIFF. The file will be copied to the same path as the WAV file under the same filename as the WAV file, but with a .AIF file type.

If you are not networked, in order to move the AIFF file to the Mac, you will need to use one of the DOS to Mac disk translation utilities, or save the files to a DOS formatted disk which can be read with the appropriate software on the Mac. In addition, you will need to open the AIFF file on the Mac in an application such as ResEdit, and identify the file type as AIFF. In ResEdit go to "Get File Info." ResEdit will ask you for the File Type and Creator. Just enter "AIFF" for the File Type.

For information on Macintosh compatible MIDI file output, please see Using Extended Files.

# Set File Fade Lengths



When shortening a file, it is general practice to fade out over some period of time to make the transition less abrupt. You can set the default fade length, see Fade Length Default. When installed, Cambium Sound Choice has a default of five seconds. We recommend leaving the fade length at four to eight seconds. The initial screen will reflect the default fade length, and a total file length equal to the original file.

By dragging the Start Fade button to the left (clicking on the bar moves the time in one second increments, the arrows are 0.1 second increments) you can start the fade earlier. Notice how the Total File Length decreases while the fade length remains the same.

The Blue (top) bar represents the portion of the file that is copied at full volume, and the Red (lower) bar represents the entire file length as shortened. The difference between the two bars is the period over which the file fades out. Positioning the two bars with the same length would result in a shortened file with no fade out.

Increasing the Length of Fade enough will eventually cause the Start Fade to decrease, because Cambium Sound Choice will not allow you to create a shortened file which is longer than the original! Cambium Sound Choice does not currently support fade ins.

Once you have selected the proper timings press Copy File to copy the shortened version, or press Cancel to leave without copying. Copying large wave audio files can take some time, so please be patient while the hourglass is displayed by the cursor. When the copy is completed, a message will confirm the name and path of the copy.

## Check Copy



Once the full or shortened copy is made, you can preview it before returning to other selections to assure that you got what you wanted. Pressing the Check Copy button will load the copied file from the hard drive, and play it for you much like the Listen command in the Audition Music screen played choices from the CD.

## Listen (Loop)



Before listening to the copy, if you would like to see how it will sound if you were to loop the file in the authoring package you will be using, select "Loop." Pressing stop will halt the playing immediately, and pressing "No Loop" will allow it to end it's next cycle normally.

Please note that this button does not affect the file that is saved on the disk in any way (the saved file is only recorded once), it merely allows you to listen to what a loop command will do when the file is used in another software package. This is particularly handy for checking groove loops.

Unfortunately, loops cannot be previewed directly from the CD-ROM due to slow seek times. Also, some computers may have difficulty with seamless looping due to slow hard drives or their sound cards.

Due to memory constraints, files must be copied to the hard drive before a loop can be previewed. For more information on looping, see Looping.

## Erase Copy



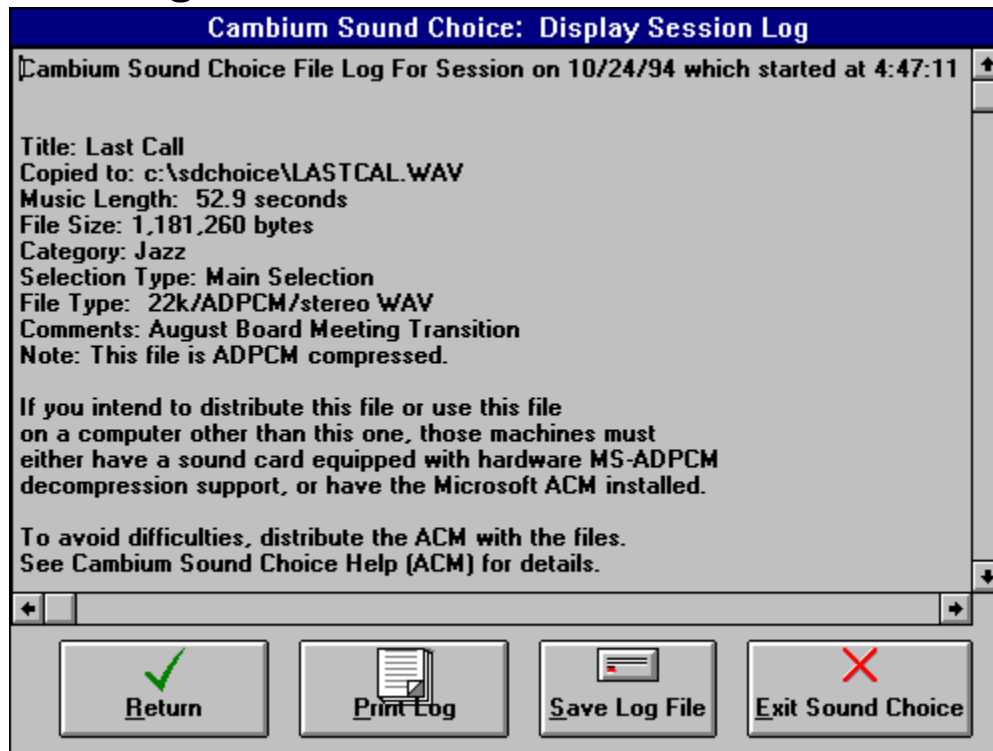
If the copy is not acceptable, you can immediately erase it by pressing the Erase Copy button. Creating another file with the same name will also erase the file.

# Done Copying



Press Done Copying when you are satisfied with the copy. It will return you to the Audition Music screen.

# The Log Screen



Cambium Sound Choice keeps a record of all of the music you have copied from the CD-ROM (and erased) each session. Once you exit Cambium Sound Choice, however, the log is erased. Before Cambium Sound Choice is closed, if you have copied files during the session you will be prompted to view and print or save the log. You can also view, save and print the log at any time during the session by selecting "Log" from the menu bar. Viewing, saving, or printing the log does not reset the log, the log is reset only when Cambium Sound Choice has been exited.

The log is a powerful assistant when constructing a multimedia project. By consulting the log when you open your authoring package, the job of matching the music you have selected to the proper sequences is made much easier. No need for a production assistant, a good memory, or trying to read your late night handwriting!

For each selection which has been copied from the CD-ROM, the log contains:

- Title of the Main Selection
- Drive, Directory, and Filename to which the file was copied
- Length of selection in seconds
- File size in bytes
- Category (e.g. Classical)
- Selection Type (e.g. Finale Bumper)
- File Type (e.g. MIDI or 22k/ADPCM/stereo)
- Your Comments from the Database (if any)
- An overwrite warning if it replaced a file with the same name in that path (in order to keep your records straight)



- An ADPCM warning if it is an ADPCM compressed file, so that you remind yourself to only use it on ACM or ADPCM hardware equipped platforms
- An erasure warning if the file was erased.
- A warning if the MIDI file is not Device Independent.

The log can be scrolled for easy viewing, and the print command will print to the Microsoft® Windows™ default printer. Change the printer selection in the Windows™ Control Panel before selecting Print if you would like to direct the print elsewhere. The default log filename if saved is SDCHMMDD.TXT where MM is the month and DD is the day.

For more information about the session log, see [Log Report](#).

## **Alternative to a Mouse**

Especially on portable computers, many users prefer to operate without using a pointing device, and instead relying on the keyboard for navigation and editing. Cambium Sound Choice is fully configured to operate from the keyboard.

# Accessing Menus With the Keyboard

Cambium Sound Choice's menus operate like any standard Microsoft® Windows™ application.

- To get to the menus at the top of the screen, press the <Alt> key
- To move between main menu choices along the menu ribbon, use the right and left arrows
- To expose sub-menus for a particular menu, press <Enter> or <Space Bar> at the main menu choice
- To move between sub-menus, use the up and down arrows
- To select a sub-menu choice, press <Enter> or <Space Bar>

# Navigating Within a Screen With the Keyboard

Each of the controls on each screen can be given the focus (a small box appears around it, enabling you to change it's settings) by successively pressing the <Tab> key. Simply cycle through the controls until you give focus to the control you desire. The path of the cycle should make sense to you (well, it made sense to us!). If you overshoot a control, you can reverse direction by using <Shift> <Tab>.

The tabbing will generally bring you to a "set" of controls, grouped together either by a frame, or by being placed together on a recessed panel.

## See Also:

[Options With a Keyboard](#)

[Check Boxes With a Keyboard](#)

[Command Buttons With a Keyboard](#)

[Drive Selectors With a Keyboard](#)

[Directory Trees With a Keyboard](#)

## Options With a Keyboard

The control set may be, for example, the three available devices: Wave, CD Audio, and MIDI in the Audition Music screen. Navigate between the options by using the up or down arrow key. When you have decided which option to choose, press <Enter> or <Space Bar> to select it. Press <Tab> to move to the next control.

## Check Boxes With a Keyboard

Some control sets do not contain exclusive options (such as pick one of the three devices in the option example), but rather a series of check boxes, of which several may be checked. In this case use the up and down arrows to move between the boxes, press <Enter> or <Space Bar> to check (or uncheck) the appropriate boxes, and press <Tab> to move to the next control when you are done.

## **Command Buttons With a Keyboard**

Press <Tab> until the desired command button has the focus, and then press <Enter> or <Space Bar>.

## **Drive Selectors With a Keyboard**

Scroll through the drives using the up and down arrows.



## Directory Trees With a Keyboard

When setting a new directory, either in the Copy screen, or in the Setup/Destination Path Default menu command, first <Tab> to the directory tree. Use the up and down arrows to move up and down the tree. Select a directory by pressing <Enter>.

# I cannot hear CD Audio

To isolate the problem, insert a standard Audio CD in the CD-ROM drive (not the Cambium Sound Choice CD). Open the Microsoft® Media Player (it was installed with your Microsoft® Windows™ 3.1). Select "Device", choose "CD Audio." Press "Play" (the triangle pointing to the right).

If you can not hear the audio CD with the Media Player, the problem is not with Cambium Sound Choice. If you can hear it with Media Player, but not Cambium Sound Choice, please call Cambium Tech Support. See [Reaching Cambium for Help](#).

Unfortunately, the Media Player is not capable of playing CD Audio on mixed mode discs such as Cambium Sound Choice, where data is in track one, and CD Audio in the balance of the tracks.

If you have a pair of headphones with a stereo mini-plug that can be plugged into the front of your CD-ROM player, please do so. Check the volume control knob to make sure it is not too low. Try the Media Player again.

If there is still no sound, there is most likely a problem with your CD-ROM drive.

If there is sound, it implies that the signal is not getting from the CD-ROM drive to your speakers. CD-ROMs produce two streams of information for the price of one - an audio stream from CD audio, and a data stream from data CD-ROMs. Cambium Sound Choice CD's contain both kinds of information.

The CD audio stream (separate and distinct from the data stream for wave and MIDI files) comes out in two places on most CD-ROM drives, the headphone jack in the front of the unit, and a connection in the back of the unit.

Most sound cards need a special cable which runs between the connection in the back of the CD-ROM drive and the sound card in order to play the audio CD through the same speakers to which your sound card is connected. Alternatively, you can avoid opening the computer by hooking a stereo miniplug cable from the headphone jack on the front of the CD-ROM drive to the IN plug on the back of the sound card. Please make sure one of these cables is connected properly.

## MIDI sounds really weird

First, let's discern the difference between "weird" and "not that great." Do not expect that MIDI sound will be of a similar quality to wave audio or CD audio. Depending on the MIDI device, in our experience it can range from "pretty terrible" to "pretty good, for General MIDI."

As a control, open the Open the Microsoft® Media Player (it was installed with your Microsoft® Windows™ 3.1). Select "Device", choose "MIDI Sequencer." Select the "Windows" directory and double click on a file called "CANYON.MID" (provided by Microsoft). Press "Play" (the triangle pointing to the right). You should hear a pleasant contemporary selection. If it sounds OK, try a variety of categories of the Cambium Sound Choice selections, from classical, jazz, and contemporary to get a feeling for the range of quality. MIDI works better for some types of music than others.

If the Cambium Sound Choice and CANYON.MID MIDI sounds downright bizarre, chances are that the MIDI Mapper has not been configured properly. (Cambium Sound Choice MIDI selections should sound at least similar to the wave and CD audio versions). When your MIDI sound card was installed, it should have installed a default MIDI Mapper Setup. You can take a look at this by double clicking the MIDI Mapper icon in the Control Panel.

If your card is a base level card, channels 13-16 should be active. If you have an extended level card, then channels 1-10 should be active, and 11-16 inactive. Please consult your MIDI sound card's manual for assistance in configuring the MIDI Mapper, as it is card specific.

If you can't hear any drums, then you may need to remap the MIDI Mapper Channel 16 to channel 10.

For more detailed information on the MIDI Mapper, we recommend you get a copy of the Microsoft® Knowledge Base article Q84817, "Using the MIDI Mapper."

## "File Not Found"

This usually occurs when the Cambium Sound Choice files are moved from the directory into which they were originally installed. Cambium Sound Choice looks for the "startup directory" for the application. This startup directory was automatically entered as part of the Cambium Sound Choice setup procedure. If you have changed directories without reinstalling Cambium Sound Choice from the automated setup procedure, please check your startup directory as follows:

1. Highlight the Cambium Sound Choice icon in the Cambium Sound Choice Program Group. From the Program Manager (or another shell) select "Properties."
2. Note the Path of the application.
3. Selected "Advanced."
4. Note the Startup Directory. If it is not the same as the Path of the application (leaving off the application name itself, such as SDCHOICE.EXE) please enter the current Path.
5. Repeat this for each of the items in the Cambium Sound Choice Program Group.

Alternatively, you can reinstall from the CD-ROM, and Cambium Sound Choice will do the work for you, leaving your preferences and database intact.

## **Cambium Sound Choice won't let me shorten MIDI files**

Unfortunately, Cambium Sound Choice does not allow the shortening of MIDI files. This can be done with a MIDI sequencer, of which there are several on the market.

## **I hear gaps when playing back wave audio**

Certain wave audio files need to read huge volumes of information in a continual stream. If your CPU and/or CD-ROM drive is not fast enough, some information can be dropped, resulting in gaps.

Try copying the selection to your hard drive and playing back from there. Hard drives can feed the data to your sound card much more quickly than CD-ROM drives.

Also, try using an ADPCM file, or a lower sampling rate (11k) to cut down on the volume of data.

## Nothing happens when I try to play a WAV file

**If ADPCM:** Cambium Sound Choice (or any sound application) requires either software or hardware ADPCM support in order to play ADPCM wave files. Your sound card may support ADPCM directly (but probably doesn't if you can't hear the ADPCM versions).

If not, you'll need to install a version of the Microsoft ACM, or Audio Compression Manager. Please see [ADPCM wave compression support](#).

**If Not ADPCM:** Most likely another device has a WAV or AVI file open. Windows can only play one AVI or WAV at a time. Close the other device.

## **When I try to listen to CD Audio I get an error message**

It says "This drive or path does not exist or cannot be accessed. Please check the path. In order to hear CD Audio, the MCI CD Audio driver must be installed. Open the Control Panel and open the Drivers icon. Add the CD Audio MCI driver.



## **The music always seems to start "late,"**

I miss the first half second or so.

Some computer speakers have a feature that "powers down" the speaker to save power (generally those that have an option to use batteries). If this is the case, the speaker waits until it gets a sound, then powers up again. Unfortunately, this results in the "clipping" of the initial sound, a real drag. If you can, disable the power down feature. If you can't, consider saving up for another pair of speakers!

When playing CD Audio, some drives also "choke" on the first half second or so of audio.

## **The volume is not correct or the sound is distorted.**

Volume is set as a combination of the physical volume control on your speaker amplifier (or stereo if you have it hooked up through a stereo) and the software "mixer" program that came with your sound card. Consult the sound card documentation for instructions on how to use the mixer to adjust volume levels. You'll want to find a combination of software and hardware volume levels that yields the best quality sound. You may find it handy to include the mixer in your Windows Startup Group in a minimized option, and thereby have it available to you more easily.

## The volume levels of wave, MIDI and CD Audio are all different

Each card reproduces the various formats at different volumes. The mixer software that comes with your card sets relative volumes for the various MCI components. See The volume is not correct or the sound is distorted. Try adjusting the levels of each component until they are equal. Then you can just change the overall volume as you wish.

## **I get a message when I play a MIDI file,**

it warns me that the MIDI file may not play correctly with the current setup.

Cambium Sound Choice Device Independent MIDI files are "stamped" to indicate their standard construction. The Extended files are not stamped for your protection. In this way you are warned that the MIDI files are not Device Independent.

## The looping is not smooth

If I copy a groove loop bumper and then play it back with the "Listen - Loop" selected, there is a short pause between the end of the selection and the restart.

On some computers and sound cards, the equipment is not capable of seamless looping. Often this is related to the lack of a disk hardware cache, or insufficient RAM. The Cambium Sound Choice file is in meter, however, and if you test the file on a faster hard drive or higher quality sound card, you will get the desired seamless loop.

## **The play time on MIDI files is always shorter**

When I audition MIDI versions, the running time indicator always ends a second or two before the selection length says it should.

The selection lengths come from the WAV versions. Since many of the WAV files have some decay or silence following the end of the selection, they are longer than the MIDI versions, which do not.

## **My portable CD-ROM will not play CD Audio**

Some PCMCIA SCSI devices do not properly transfer CD Audio instructions to some double and triple speed CD-ROMs which are already in data mode. This problem was reproduced on other software besides Cambium Sound Choice. The problem is related to the some triple-speed drive/driver combinations not recognizing CD Audio commands from the MCI once they are in 3X spin mode. We are working with the driver and hardware manufacturers on this problem, but it is a SCSI controller firmware issue, and not related to Cambium Sound Choice.

## When I play 8 bit files they sound very noisy

Unfortunately, 8 bit files are very noisy. They are forced to "describe" the sound dynamic in 28 or 256 increments while 16 bit files do so in 2<sup>16</sup> or 65,536 increments. On early cards, this noise was crudely disguised by simply filtering out the higher frequencies. On today's more advanced cards, however, the noise is more apparent. We suggest two solutions:

First, If you have a 16 bit card, use either 16 bit or ADPCM files instead. ADPCM files are half the size of equivalent 8 bit files, with better sound reproduction. 16 bit files are, of course, larger, but have greater fidelity.

Second, if you have an 8 bit card, use the ACM to "translate" either ADPCM or 16 bit files. This can result in somewhat greater fidelity.



## **11K/ADPCM/mono won't play**

If 11K/ADPCM/mono files won't play, but 22K/ADPCM/stereo files will play, and you are using an early version of the Turtle Beach Monterey sound card, there is a bug in the card's hardware which prevents the card from playing 11K/ADPCM files. Please contact Turtle Beach for assistance.

# Reaching Cambium for Help

Technical Support for Cambium Sound Choice is provided in four ways:

- Cambium is an active participant on CompuServe®, The fastest and most complete support can be obtained from us in the Cambium Section of the Multimedia Vendor B Forum of CompuServe. GO CAMBIUM to reach the Forum, and post a message in the Cambium section. We guarantee to respond within 24 hours, and usually within a much shorter period.

If you are not already a CompuServe member, Cambium customers are entitled to a free Introductory Membership to CompuServe, including:

- FREE access to all of CompuServe's Basic Services for one month,
- a \$15 introductory usage credit to explore the Cambium Section of the Multimedia B Vendor Forum and CompuServe's other Extended and Premium Service offerings,
- a private User ID Number and Password,
- a complimentary subscription to CompuServe Magazine, CompuServe's monthly computing publication.

To take advantage of this offer, please call CompuServe at 800.524.3388. Be sure to ask for representative 228.

- We can be reached by e-mail at [72650.3150@compuserve.com](mailto:72650.3150@compuserve.com)
- We can be reached by fax at 914.472.6729
- We can be reached by phone at 914.472.6246 from 9-5 Eastern time, weekdays.

# Minimum Requirements (MPC1)

Cambium Sound Choice is designed to run on a Multimedia PC platform. Cambium Sound Choice does not have any special requirements other than the base MPC1 configuration. The MPC1 minimum configuration includes:

- 386SX or higher processor
- 2 MG of RAM
- 30 MB hard disk
- CD-ROM drive (with CD-DA outputs, sustained 150K transfer rate, maximum seek time of 1 second while using no more than 40% of the CPU's processing power)
- audio board (minimum 8 bit)
- mouse (although Cambium Sound Choice is designed to be completely accessible for users without a mouse)
- VGA or VGA+ Monitor
- MS-DOS 3.1 or later
- Microsoft® Windows™ operating system 3.1 or later
- MS-DOS® CD-ROM extensions (MSCDEX) version 2.2 or later
- Headphones or speakers

Note: The Cambium Sound Choice software will not play through the PC speaker. An MPC compatible sound card and speakers must be used. Once Cambium Sound Choice files have been copied from the CD-ROM, however, they may be played through the PC speaker through other software if the platform is so configured.

## Enhanced Hardware to achieve better performance

As with most things in life, more is generally better (and more expensive!). While the MPC1 specification (above) is sufficient to run Cambium Sound Choice, and many, if not all, authoring packages, certain enhancements allow for faster and higher quality presentation creation and presentation. They include:

- Faster processor (such as the 486 DX)
- More RAM (4-8 meg, or more)
- Larger hard disk
- Double-speed, or faster, CD-ROM drive
- Super VGA monitor
- 16 bit sound card with sampled, as opposed to synthesized, MIDI sounds. These advanced cards generally allow access to 16 channels of MIDI information, not just the 4 accessed by the "base level" cards such as the original Sound Blaster. They also allow for greater polyphony (simultaneous notes). 16 bit wave audio, greater polyphony, and sampled MIDI sounds make a huge difference in the quality of the music reproduction.

## Newer Versions of GRID.VBX

Microsoft released a new GRID.VBX control dated 6/15/93 which we are installing with this version. They have indicated that there is a known bug with certain previous versions of the GRID.VBX which, when running with newer GRID.VBX's, can cause programs compiled with the old one to give the following error message:

" Invalid file format."

This message will occur when programs compiled under an older "bad" GRID.VBX control are run under an updated GRID.VBX control (most controls are "backwards compatible"). Microsoft has urged developers to recompile under the new control, or to keep a copy of the "old" control in the application's directory so that it runs under that control rather than a newer one which applications like ours would update in a shared directory like \windows\system (as Microsoft suggests we do - to keep your system current.) This is clearly impractical for those applications already in the field.

For your convenience, if a copy of GRID.VBX was overwritten when Cambium Sound Choice was installed, the setup made a backup copy of it called "GRID.B00." If you get the "invalid file format" error message in other applications, we suggest you copy the GRID.B00 (try both the \windows and \windows\system directories) as GRID.VBX to the directory of the application having the trouble. We do not recommend that you copy the older version to the windows\system directory since it can cause conflicts with programs compiled under the newer versions.

## Windows™ MCI Drivers

In order for sound files to play on your machine, the basic Microsoft MCI drivers must be installed. In most cases they were installed when Windows was first installed on your machine. You can check to make sure they are installed by double clicking on the Windows Control Panel and selecting Drivers. The following drivers should appear in the list:

a) [MCI CD Audio]

b) [MCI MIDI Sequencer]

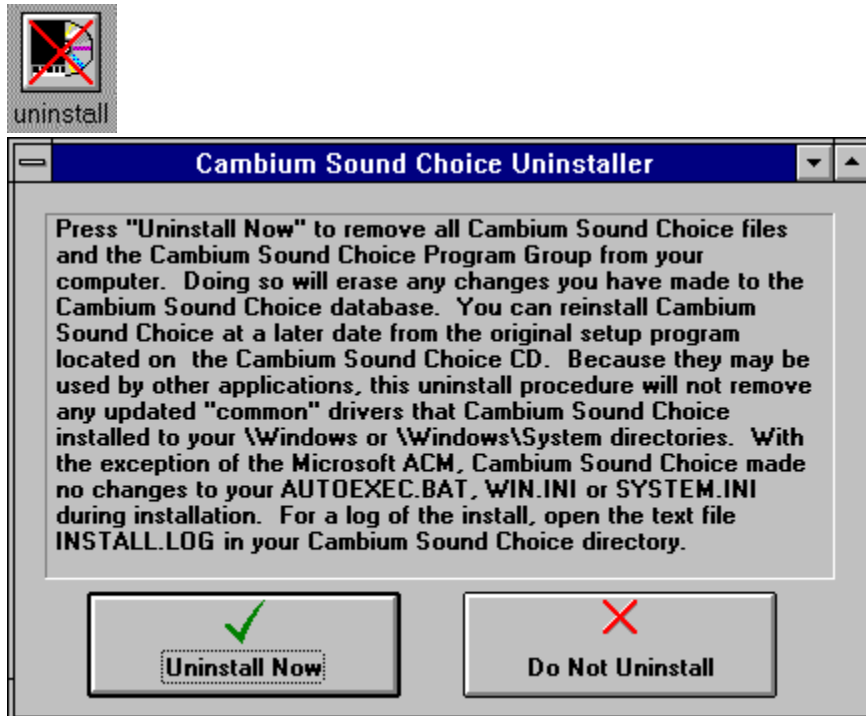
c) [MCI Sound]

and unless your card is configured to use a proprietary MIDI map,

d) MIDI Mapper.

If they are not on the list, select "Add", click the appropriate driver name from the list, and follow the instructions. In some cases you may have to insert the original Windows™ installation diskettes.

# How to Uninstall Cambium Sound Choice



Cambium Sound Choice comes with an uninstall program which is available from your Cambium Sound Choice Program Group.

At installation, Cambium Sound Choice made no changes to your WIN.INI or SYSTEM.INI files. Cambium Sound Choice copied its initialization file, called CAMBWAVE.INI, to your Windows directory, its own program files to the Cambium Sound Choice directory you specified at installation time. It installed or updated a variety of system dll's and vbx's to the most recent versions in your \Windows\System directory, and if duplicate copies already existed there, to your \Windows directory as well. Cambium Sound Choice did not overwrite files with a version number (internally coded by Microsoft) later or equal to the ones Cambium Sound Choice provided.

To view a log of exactly what the Cambium Sound Choice installation did, view the file "INSTALL.LOG" in the directory into which you installed Cambium Sound Choice.

The Uninstaller will delete the CAMBWAVE.INI, all of the files in the Cambium Sound Choice directory, remove the Cambium Sound Choice directory, and remove the Cambium Sound Choice Program Group. In deference to other applications which may be using them, the Uninstaller **will not** remove any of the system dll's or vbx's which it installed or updated. The Microsoft ACM drivers will not be removed by the Uninstaller.

In order to allow you to uninstall Cambium Sound Choice without having the Cambium Sound Choice CD on hand, the Uninstall program itself resides in the \WINDOWS directory. Unfortunately, it can not erase itself, and will remain after the uninstall has been run. If you would like to remove it as well (it is less than 14,000 bytes in size), you must delete the file "SCUNINST.EXE" by hand from your Windows directory.

- You may have installed the Microsoft ACM drivers. These should be left in place for other applications, but may be removed from the Control Panel by highlighting the drivers and selecting Remove. For more information on the specific drivers please see [ADPCM wave compression support](#). In conjunction with the ACM installation, you may have copied three help files to your \Windows directory:

CHOO\_WIN.HLP

FIL\_WIN.HLP

MAP\_WIN.HLP

- Cambium Sound Choice attempted to copy the following files to your \Windows\System directory. If a more recent or equivalent version of any of these files existed on your hard disk already, the file on your disk was not replaced. Please view the file INSTALL.LOG in the Cambium Sound Choice directory to determine exactly which files Cambium Sound Choice installed. Many of these files are also used by other programs, so if you do elect to remove Cambium Sound Choice we strongly recommend that you **DO NOT** remove these files:

DWVSTAMP.VBX

GAUGE.VBX

GRID.VBX

MCI.VBX

MMSYSTEM.DLL

MSAES110.DLL

MSAJT110.DLL

MSMASKED.VBX

SETUPKIT.DLL

THREED.VBX

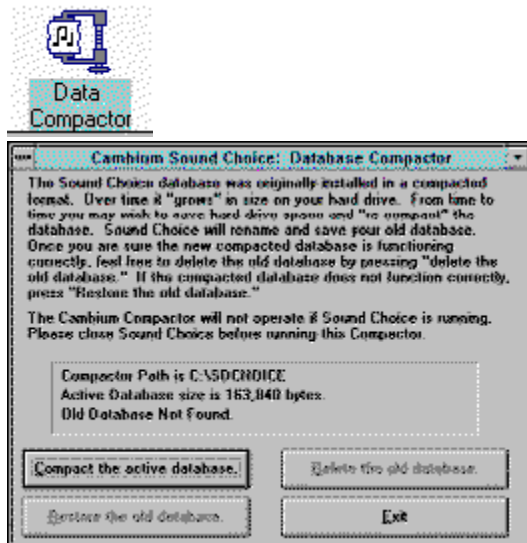
VBDB300.DLL

VBRUN300.DLL

VER.DLL



# Compacting the Database



Cambium Sound Choice includes a utility for compacting your database (not the audio files themselves). When the database was originally installed onto your hard drive, it was in compacted form. As you use Cambium Sound Choice, over time the database will grow in size.

In order to save hard disk space, you may choose to recompact the database. First, close Cambium Sound Choice, as the Compactor will not function if Cambium Sound Choice is running. Then, select the Compactor from your Cambium Sound Choice Program Group.

The Compactor will identify the path to which it is looking (this should be your current Cambium Sound Choice installed directory), the size of your current database, and, if one exists, the size of your "old" database.

If you elect to compact the database, the existing database will be backed up (as the "old" database), and then compacted. We recommend that you try the newly compacted database to make sure it is functioning correctly before deleting the "old" database. If it is functioning correctly, if you would like to recover the disk space, you can reenter the Compactor utility and erase the old database.

## How to Exit Cambium Sound Choice

Exit Cambium Sound Choice one of two ways. From any main screen (one with a menu bar) select File/Exit from the menu. Alternatively, double click on the control box in the upper left hand corner of any main screen. (You will need to finish your activity in one of the secondary screens and return to a main screen before exiting Cambium Sound Choice.

Before exiting, if you have copied any files during the session, you will be offered the opportunity to view, save or print the log before exiting. We encourage you to do so, as the log will be deleted when you exit.

# Your rights and obligations with Cambium Sound Choice

## IMPORTANT - READ CAREFULLY BEFORE USING CAMBIUM SOUND CHOICE

By installing the enclosed software, Licensee indicate your acceptance of the following License Agreement.

### Cambium License Agreement

1. **Ownership and License.** This is a license agreement and NOT an agreement for sale. Cambium continues to own the copy of the software (the "Software") and Music Clips (the "Music") contained in this package and all other copies that Licensee is authorized by this Agreement to make. Licensee's rights to use the Software and Music contained in Cambium Sound Choice are specified in this Agreement, and Cambium retains all rights not expressly granted to Licensee in this Agreement. Nothing in this Agreement constitutes a waiver of Cambium's rights under any law, rule, regulation or international treaty, including, but not limited to Copyright, Trade Secret, Trademark, and Patent.

2. **Permitted Uses.** Licensee is granted the following rights to the Software:

(a) **Right to Install and Use.** Licensee may install and use the Software on the hard disk drive of any single compatible computer that Licensee owns. However, Licensee may not under any circumstances have the Software installed onto the hard drives of two or more computers at the same time. If Licensee desires to use the Software on more than one computer, Licensee must either erase the Software from the first hard drive before Licensee install it onto a second hard drive, or else license an additional copy of the Software for each additional computer on which Licensee uses it.

(b) **Right to Transfer.** Licensee may not rent, lend, or lease this Software. However, Licensee may transfer this license to use the Software by transferring this copy of the License Agreement, at least one original copy of the Software and Music, and all documentation. Such transfer of possession terminates Licensee's license from Cambium. Such other party shall be licensed under the terms of this Agreement upon its acceptance of this Agreement by its initial use of the Software. If Licensee transfers the Software, Licensee must remove the Software from Licensee's hard disk and Licensee may not retain any copies of the Software.

3. **Multimedia Content License.** Cambium grants Licensee a royalty-free license to use, copy, reproduce, and distribute the Music. Licensee may freely use the Music subject to the following restrictions.

(a) Licensee may not use the Music in any radio or television broadcast.

(b) Licensee may not resell or redistribute the Music for value in the form of, or as part of, a library or clip software product consisting predominantly of audio, image, and/or video materials.

(c) Licensee may not redistribute the Music in such a form that the Music itself is the predominant content.

4. **Limited Warranty.** Cambium makes the following limited warranties, for a period of 90 days from the date Licensee acquired the Software from Cambium or Cambium's authorized dealer:

(a) **Media.** The disc in this package will be free from defects in materials and workmanship under normal use. If the disc fails to conform to this warranty, Licensee may, as your sole and exclusive remedy, obtain a replacement free of charge if Licensee returns the defective disc to Cambium with a dated proof of purchase.

(b) **Software.** The Software in this package will materially conform to the documentation that accompanies it. If the Software fails to operate in accordance with this warranty, Licensee may, as Licensee's sole and exclusive remedy, return all of the Software and the documentation to the authorized dealer from whom Licensee acquired it, along with a dated proof of purchase, specifying the problem, and Cambium will provide Licensee with a new version of the Software or a full refund at Cambium's election.

(c) Warranty Disclaimer: Cambium does not warrant that this Software or Music will meet your requirements or that the Software operation will be uninterrupted or error-free. Cambium excludes and expressly disclaims all express and implied warranties not stated herein, including the implied warranties of merchantability and fitness for a particular purpose. This limited warranty gives Licensee specific legal rights, and Licensee may also have other legal rights, which vary from state to state.

5. Limitation of Liability. Cambium's liability to Licensee for any losses shall be limited to direct damages, and shall not exceed the amount Licensee originally paid for the Software and Music. In no event shall Cambium be liable to Licensee for any indirect, special, incidental, or consequential damages (including loss of profits) even if Cambium has been advised of such damages.

6. United States Government Restricted Rights. The enclosed Software and Music are provided with Restricted Rights. Use, duplication or disclosure by the U.S. Government or any agency or instrumentality thereof is subject to restrictions as set forth in subdivision (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at 48 C. F.R. 252.227-7013, or in subdivision (c)(1) and (2) of the Commercial Computer Software -- Restricted Rights Clause at 48 C.F.R. 52.227-19, as applicable. Contractor Manufacturer is Cambium Development, Inc., P.O. Box 296-H, Scarsdale, N.Y. 10583-8796.

If Licensee has any questions about this Agreement, write to Cambium Development, Inc. at the address above, or call 914-472-6246.

# Further reading about Multimedia

## Books

The Absolute Beginner's Guide to Multimedia, Ron Wodaski, Sams Publishing

The Business Week Guide to Multimedia Presentations, Robert Lindstrom, Osborne McGraw Hill

Multimedia Madness Deluxe, Ron Wodaski, Sams Publishing

PC Video Madness, Ron Wodaski, Sams Publishing

Visual Basic Multimedia Adventure Set, Scott Jarol, Coriolis Group Books

Windows 3.1 Multimedia, Roger Jennings, Que Corporation

## Magazines

CD ROM World

Electronic Musician

Multimedia World

New Media

PC Computing

PC Magazine

Windows Magazine

Windows Sources

## On Line Services

Compuserve Multimedia Forum (GO MULTIMEDIA)

# Glossary of Terms

## Glossary

AIFF  
anti-aliased  
11k  
16 bit  
22k  
44.1k  
ACM  
ADPCM  
audio board  
audition  
base level  
bumper  
category  
CD-DA  
channel  
clip music  
default  
digital  
fade  
finale  
gray out  
groove  
groove loop  
hard disk  
log  
Loop  
MCI  
megabyte  
MIDI  
MPC1  
path  
polyphony  
RAM  
royalty-free  
seek  
sequencer  
stinger  
tempo  
transition  
wave  
WaveRider

## **AIFF**

A digitized audio format, similar to WAV, which is used on the Macintosh.

## **anti-aliased**

The filtering of frequencies higher than one-half the new downsampled rate (e.g. above 11.025 K in a 22K file) to avoid annoying "wrap around" of frequencies due to downsampling.



## **11k**

An audio file in which the waveform has been sampled 11,025 times per second, one-quarter as often as CD Audio.

## **16 bit**

An audio file in which each sample can be described using 2 to the 16th, or 65,536 units. The resulting sound quality is generally much higher than on a file recorded in 8 bit, with 2 to the 8th or 256 units.

## 22k

A sound file in which the wave audio has been sampled 22,050 times per second, half the number of times as CD Audio.

## **44.1k**

A sound file in which the waveforms have been sampled 44,100 times per second. A high quality sampling rate, the same as CD Audio.

# ACM

Microsoft Audio Compression Manager.

## **ADPCM**

A general audio compression technique.

## **audio board**

A device which is usually a separate card, but sometimes part of the computer's motherboard, that turns digital data into analog sound.

## **audition**

Tryout



## **base level**

A sound card which can only receive MIDI channels 13-16.

## **bumper**

A short selection of music designed to act as a transition or punctuation. Often used when scenes are introduced, changed, or ended.

## **category**

In Cambium Sound Choice, a style of music, such as Classical or Jazz.

## **CD-DA**

CD Digital Audio, or CD Audio.

## **channel**

In MIDI, used to route the MIDI protocol instructions to various different devices, or "instruments" within a device.

**clip music**

Music which is designed to be used in production and multimedia presentation work.

**default**

A setting which will be used unless otherwise overridden.

## **digital**

All the data is represented in a series of zeros and ones.



**fade**

Reduce the volume in a sound file gradually until the volume is zero at the end of the file.

## **finale**

Ending

## **gray out**

When an item on the screen is not available for selection, it's coloration changes to make it blend into the background.

## **groove**

Besides being one of our favorite words from the late 60's/early 70's, the rhythm section's underlying pulse which drives the music.

## **groove loop**

A short sample of the rhythm section's underlying pulse which is repeated over and over.

**hard disk**

A permanent storage device on your computer where programs and sound files may be stored.

## **log**

Printed record of the actions made during the session.

## **Loop**

Automatically restart the audio selection from the beginning as soon as it is finished.



# **MCI**

Media Control Interface

## **megabyte**

1,048,576 bytes, also referred to as "meg" or MG.

## **MIDI**

Musical Instrument Digital Interface, a method of distilling musical performances into a series of note commands which can be directed to devices which reproduce the sounds.

## **MPC1**

A base standard of hardware required to work with multimedia on a PC platform created by the Multimedia PC Marketing Council.

## **path**

The complete location of a file, including drive letter, directory (and sub directories, if any), and filename.

## **polyphony**

The number of simultaneous notes that can be sounded by a MIDI device.

## **RAM**

Random Access Memory, the fastest type of storage device on your PC. Generally in the form of a silicon chip. Like money, you can never have too much RAM.

## **royalty-free**

The user is entitled to use the music under the terms of the license without paying a subsequent fee.



**seek**

The time it takes a storage device like a CD-ROM to find the file you have asked it for. The lower the number the better. Seek times on CD-ROMs are generally much higher than those on hard drives.

## **sequencer**

A piece of software which interprets MIDI files and sends commands to the MIDI device, resulting in music.

**stinger**

A short, often percussive note or chord which signals the conclusion.

## **tempo**

Number of beats per minute.

## **transition**

Move from one to another.

**wave**

Short for waveform, also the source of the file type name of the Microsoft digitized audio file (.wav).

## **WaveRider**

The software program provided with Cambium Cambium Sound Choice to sort, preview, and copy Cambium Sound Choice music selections.

