

Contents

Welcome to Audio Companion!

This program consists of three parts: one to read from the computer's CD-ROM unit digitally (CD Ripper), a wav to MP3 encoder, a MP3 to wav decoder and a maximizer (Batch Processor) and a sound recorder allowing you to record music via your computer's sound card (Audio Splitter).

The unregistered version of **Audio Companion** has some limitations.

1. The "CD Ripper" only rips the first two tracks on a CD.
2. Maximum number of files in the "Batch Processor" are limited to two.
3. The "Audio Splitter" has a 10 minute limit per session.

By registering you will receive a password that converts the program to a full version without imitations.

Note: When registering, you must supply your **user ID**. The user ID is the code displayed at the top of the window. If you don't see it, you'll have to download the latest version from our web site. After ordering, you'll receive a personal password based on this user ID. This entitles you to use the software on your computer.

Context sensitive on-line help.

This help file is available from within **Audio Companion** by pressing the **[F1]** key on the computer keyboard whenever a menu item is highlighted or by clicking the **Help** button in the individual dialogues.

CD Ripper

Audio Splitter

Batch Processor

The Menus

Keyboard Shortcuts

Other products from Roni Music

Legal Stuff

(c) Copyright 2000 Roni Music - All Rights Reserved.

CD Ripper

This part of the program allows you to read music from CD's digitally. That is to say the information doesn't pass through the computer's sound card (which degrades the sound) but is read directly and saved as a *.wav file. You can convert the music to MP3 format at the same time.

Setting up

This assumes that your CD-ROM supports digital reading. Currently, this software works with most modern IDE and SCSI units. If you have more than one CD player connected to your system you can select which of them to use under Options | Select CD Device. Click here to read more about configuring the CD player, [Select CD Device](#).

Overview

The track titles of the CD in the computer's CD-ROM unit are displayed in the track list which takes up most of the window. Clicking on a title selects it and allows you to play it back with the help of the "Stop" and "Play" buttons at the bottom. The "Eject" button allows you to open the CD unit's sled and the "Tracklist" button updates the track list.

You can also select multiple tracks by clicking in the "Select" column. This is in case you only want to "rip" certain tracks.

This is how you go about "ripping" a CD:

Click on the "Rip CD Track(s)..." button. This opens a dialogue allowing you to make your basic settings.

Rip CD Tracks Dialogue

First, under "File type" select whether you want the results saved in .wav or MP3 format. If you select MP3 you'll have to make further settings by clicking on the ["MP3 settings"](#) button.

You then have to select where you want your files saved. Click on the "Browse..." button in the "Save folder" section and select a destination folder.

In the "Track(s) to rip..." section, you can choose to "rip" the entire CD ("All tracks"), only the track highlighted in gray (even if the check boxes for other tracks have been marked) or all tracks that have been selected with an "x" in their check boxes ("Selected tracks").

Start Ripping

Once all these settings have been made you're ready to go. Click on the "Start Ripping" button. If you've chosen to save in .wav format the process is relatively quick. If you've elected to convert the tracks to MP3 format at the same time it takes a little longer.

Audio Splitter

The idea here is to record from various signal sources such as a phonograph or tape recorder, via the line-in jack on your sound card.

For recording from vinyl you should connect the turntable to your stereo and then connect the pre-amp out output to your sound card. Don't connect the turntable directly to the sound card as the turntable's output signal is too low.

Mixer

Use the "Recording" section of the internal Windows Mixer to adjust the level. If you're running Windows 98 you can start the mixer automatically using Options | Volume Control > Recording. If this doesn't work, click on the Mixer icon (next to the computer clock in the task bar) and select Options | Properties > Adjust the volume for recording and exit by clicking on "OK". This procedure may vary depending on your sound card's software.

VU-meters

The "volume meters" (at the right of the screen) display the level of the incoming sound. With no sound coming in, the meters should stay under 0.5%. For best results, adjust the mixer level so the meters don't peak, at least not too often. Above the "volume meters", under the "Peaks" label, some numbers count the peaks for you. These will be reset to zero for each new recording.

You should also turn off any unused mixer inputs and drop their volume to avoid unnecessary noise.

Recording without Autosplit

In order that you can burn your recording(s) on a CD later, each track has to be saved as a separate .wav file. If the "Autosplit" is not activated, the program will start recording when you click the "Record" button and stop when clicking the "Stop" button. Everything recorded will be one huge .wav file even if the music consists of several songs.

Autosplit

If you activate the "Autosplit" function (the check box to the left of the VU-meters), the program will try to detect the end of each track and the beginning of the next. For this to work you have to make a couple of settings: "Threshold" and "Accept short silence".

Threshold

"Threshold" defines "silence" for the program. A high value keeps static and pops from interfering with the process but also means that fade-outs can end the recording before the music is actually finished playing. Experiment a little for best results.

Accept silence

"Accept silence" is where you set the longest time that the music can stay below the threshold level without interrupting the recording. Too long a time limit may not permit the program to separate the tracks. Once again, experiment a little.

Save folder

Indicate where the files should be saved by clicking on the "Browse..." button. Select or create a new folder and then enter a name for the files. The program will automatically add "_song1.wav", "_song2.wav", etc. for each new file.

Recording

Click on the "Record" button. The program will wait until the music starts and then start automatically. If everything works as it should, you can go get another cup of coffee.

Recording finished

When the process is complete, the file list will show the results. If everything went as it should, you'll see your songs in there. There may be more files than you expected. Small files are probably just trash. You can sort them (in the file list) by clicking on "File name" to sort them alphabetically or "File size" to sort them by size. If you want to remove a file, just mark it and click on the "Remove selected files" button. You may also elect to remove them from your hard drive at the same time.

If the recorded music differs much in volume or is recorded a bit low to avoid clipping, you may **"Maximize"** the files in the **"Batch Processor"** part of Audio Companion.

Additional Settings (Options Menu)

If you have more than one sound card installed on your system, select the one you want to use for recording with "Wave In Device".

Under "Program to play files" you should select which internal .wav player to use for playback when you double click on a title in the list (the same is true of the Wave to MP3 section of Audio Companion).

Under "Maximum recording time" you should indicate the maximum time a recording session may last.

Keep in mind that music files take up a lot of hard drive space. Each minute of music requires approximately 10Mb of storage space. In Options | Additional settings you can limit the recording time. 10 minutes = 100Mb, 20 minutes = 200Mb, etc. The program makes sure there's enough hard drive space but recording silence is unnecessary.

Batch Processor

This part of the program allows you to process files on your hard drive in a number of ways. You may convert pre-recorded .wav files to MP3 format - **Encode**, increase the volume on pre-recorded .wav files - **Maximize**, and convert pre-recorded .mp3 files to Wave format - **Decode**.

MP3 encoding

As the technique used for MP3 encoding is partially protected, AudioCompanion doesn't include an MP3 encoder of its own. There are a number of such encoders available commercially or as free downloads from the Internet. **[Read more here](#)**

Encoding / Decoding settings

First, select whether the converted files are to be saved in the same folder as the source files or if they should be placed elsewhere. If you want them saved to a folder of their own just select the check box "Store files in new folder". The "Browse..." button allows you to create a new folder or select an already existing one.

File selection

In order to select files to be converted, simply click on "Add wave files...", which opens the file selector so that you may make your selection. This operation can be repeated until you've selected all the files you wish to convert.

If you wish to remove certain files from the list, just mark them and select "Remove selected files".

Encode

Now click on the button marked **"MP3 Encoding Settings..."**. This opens a dialogue containing a number of control settings. When you've made your selections, click on the "Encode" button and you can go get a cup of coffee. When you come back your .wav files have been converted to MP3 format. Easy, huh?

Maximize

You may also increase the volume on the .wav file(s) to a maximum value without producing distortion or clipping errors. Use if the volume of the files differs much. Select files as above and click on the "Maximize" button. The processed file will replace the original file.

Decode

This function allows you to convert .mp3 files back to .wav files. You may have downloaded some files from the Internet and before burning them on a CD, they need to be converted to Wave files. Select files as above and click on the "Decode" button.

MP3 Encoding Settings

In order to encode files in MP3 format you'll have to get yourself some MP3 encoding software. Freeware versions are available from the Net or you can buy commercial software such as Frauenhofer L3enc.exe or Xing x3enc.exe. [Read more about different encoders.](#)

Audio Companion supports two kinds of encoders external encoders which are small DOS programs which start up automatically and internal encoders (at the moment Blade and LAME).

Select which type you want to use with "Use external encoder" or "Use internal encoder".

Use external encoder

Find the encoder you want to use by using the "Browse..." button. Once you've made your selection you'll see the search path displayed to the left of the button.

At the bottom, select whether the source file (the .wav file) should be deleted after being encoded ("Delete wave file after encoding").

The music will be encoded with a bit-rate of 128000 bits/s.

If you want other settings than the default or if you have chosen another MP3 encoder than Frauenhofer L3enc.exe, you'll have to activate the "Arguments" section and write in your arguments manually.

An example:

The command line argument for one encoder might look like this:

```
-br 128000 -if myfile.wav -of myfile.mp3
```

This means: Encode a .wav-file called myfile.wav using a bitrate of 128000 bits/s, and save it as myfile.mp3

Since Audio Companion supports all types of external encoders and these often use different conventions concerning file names, Audio Companion uses a proprietary convention of it's own.

%1 is used for the input file name and %2 for the output file name.

The example above would then look like this in the "Arguments" box:

```
-br 128000 -if %1 -of %2
```

Thus, you replace myfile.wav with %1 and myfile.mp3 with %2

Audio Companion will now encode all the files at a bitrate of 128,000 bits/s and save them as MP3 files with the same name as the corresponding .wav file.

Refer to the documentation for the specific encoder used for the correct arguments.

Use internal encoder

At the present time, Audio Companion supports two internal encoders, BladeEnc and LAME. Both are Freeware. [More information here.](#)

These files (bladeenc.dll or Lame_enc.dll) should be placed in the same folder as Audio Companion so that the program can find them automatically. You may also elect to store them in your Windows or Windows\System folder.

MP3 Encoders

As the technique used for MP3 encoding is partially protected, AudioCompanion doesn't include an MP3 encoder of its own. There are a number of such encoders available commercially or as free downloads from the Internet.

There exists a very good MP3 encoder by the name of LAME ("Lame Ain't no MP3 Encoder"). As the name implies, the program deals with Fraunhofer MP3 patent issues in an unusual way. It's distributed only as source code and not as a compiled .exe. This appears to be legal. There are a lot of people constantly working on improvements to the LAME MP3 encoder and it's not usually too difficult to find an executable version on the Internet. These are available in two flavors: an external version as Lame.exe and an internal version as lame_enc.dll. There's no official download location for this encoder but the home page can be found at: <http://www.sulaco.org/mp3>.

There's also a good external encoder by the name of BladeEnc. This encoder is also Freeware and produces good sound quality. The author, Tord Jansson, has also released a .dll that works very well with Audio Companion. Download the .dll, unzip it and place it in your Audio Companion folder and you will gain access to the internal MP3 encoding options.

You can download it from: <http://hem.bredband.net/tord/>

Pluggger+ is also Freeware and works fine with Audio Companion. No documentation is included but it seems to use the same arguments as LAME.

Download it from: <http://members.tripod.com/~mp3nkoeder/>

Xing technology has created a fast MP3 encoder that works well as an external encoder. It's called x3enc.exe and cost only \$19.95 to register. <http://www.xingtech.com/products/mp3encoder/>

Fraunhofers L3enc is known for producing very good audio quality. It's not freeware but a demo version can be downloaded from: <http://www.iis.fhg.de/audio>

When using external encoders be sure to read the documentation thoroughly!

Some don't handle long file names, some don't handle certain sample frequencies and bitrates.

Some arguments examples:

Encode the wave file to a bitrate of 128000 bits/s, saving it as a mp3 file.

L3enc.exe: -v -br 128000 -if %1 -of %2

LAME and Pluggger+: -b 128 %1 %2 Note: These do not handle long file names correctly

Bladeenc.exe: -q -br 128 %1 %2

The Menus

File Menu

Exit

Each part of Audio Companion has it's own Options Menu

CD Ripper / Options Menu

Always on Top

Volume Control

Select CD Device

MP3 Encoding Settings

Get CDDb Info

Audio Splitter / Options Menu

Always on Top

Volume Control

Additional settings

Batch Processor / Options Menu

Always on Top

Volume Control

MP3 Encoding Settings

Help Menu

Password

Exit

Exits the program.

Key command [Ctrl] + [Q].

Volume Control

This item has three sub-menus for easy access to the internal Windows Mixer.

1. Opens the "Playback" section of the mixer. Key command [Ctrl] + [P].
2. Opens the "Recording" section of the mixer. Key command [Ctrl] + [R]
3. Opens the "Master Volume" section of the mixer. Key command [Ctrl] + [M]

Note: This command may not work on Windows 2000/NT. In this case it will be necessary to open the Mixer manually.

Always on Top

Check this option to keep the Audio Companion window on top of all other windows.

Get CDDB Info

What is CDDB?

CDDB is a number of servers set up on the Internet. These servers contains CD-information such as the CD's artist, disc title, track titles and other information. If you are connected to the Internet, Audio Companion can connect to one or more of the CDDB servers and query the database for information about the CD you currently have in your CD player. When the info is downloaded, it will show up in the tracklist. It is also saved in the cdplayer.ini file located in the C:\Windows folder, so that the next time you insert this particular record, the info is already available.

What server?

This database is hosted on various servers around the world. By pressing the "Get List" button, Audio Companion will try to fetch the current list directly from the internet. Then select one that is close to you by double clicking in the field above the "Get List" button.

Proxy or not?

There are two different protocols to access a CDDB server: Direct TCP/IP (also called CDDBP database protocol) and HTTP - hypertext transfer protocol. CDDBP is recommended because it's supported by all CDDB servers. But if you are behind a firewall, you will need to use the HTTP protocol - check the "Use proxy" item.

Retrieve Disk Info

When everything is set up correctly, click the "Retrieve Disk Info" button. If you are not already connected to the Internet, you will be asked to do that. The CDDB database is then queried and if the CD is found, the info is stored in the cdplayer.ini file and the tracklist is updated. Don't forget to close your Internet connection when finished!

The cdplayer.ini file

The Windows internal CD player uses a file called cdplayer.ini to store information about CD's. Audio Companion (and most other CD Player software) also uses this file for getting information about song titles, artists etc. This text file is stored in your Windows directory (WinNT for Windows 2000/NT systems).

Note:

CDDB™ is an acronym for Compact Disc DataBase and it is owned by the company Escient®. It is a huge database available on the internet where individuals has submitted their disc data. Programs like Audio Companion can connect to this database to see if the disc is found in the database and download various disc information. Read more about CDDB™ at <http://www.cddb.com>

Select CD Device / CD Ripper

CD-ROM Device

Select the CD-ROM device the program should use.

CD ROM Type

The command set to be used for the CD reader.

Unfortunately, different CD players use ASPI calls in different ways. All IDE CD players use ASPI calls in the same way.

If you have an IDE device, select the IDE-ATAPI item.

SCSI units use their own command set. Select the item that corresponds to your SCSI drive. If your brand is not listed, try another selection. It may work anyway.

If you have a SCSI device, select one of the SCSI items.

DAE Speed

Some CD-ROM drives support the setting of the Digital Audio Extraction speed.

If you experience problems with playing, try to decrease the reading speed. If not, use the Max Speed setting.

This feature **only** works with ATAPI/IDE drives.

Use fast read method

With this item enabled, the program uses the fastest read method available.

If you experience problems with playing, un-checking this item will use a somewhat slower read method that may work better.

Sense CD change

With this item enabled, the program automatically senses if the CD door is opened or closed.

If you experience problems with playing, un-check this item.

When you change CD you must now click the "Tracklist" button to the left of the Eject button to fill the track list with information about the new CD.

Sync correction

With this item enabled, the program automatically corrects for sync errors.

With some CD-ROM drives, every time the music is read, the data comes in slightly shifted. If you hear strange clicks and pops, enable this item to correct for sync errors.

If everything sounds OK without this enabled, don't enable it since it uses some of your computers processing power.

If no selection works, send an e-mail to your CD-ROM manufacturer and ask them to send a description of their command set for audio extraction.

Since we don't have any possibility of testing all the different brands and types of SCSI CD-ROM units available, please let us know whether your SCSI CD-ROM works or not.

Please send an email to: scsi@ronimusic.com

Password

After registering, enter your password here.

When registering, you must supply your **user ID**. The user ID is the code displayed at the top window. If you don't one, you'll have to download the latest version from our web site. After ordering, you'll receive a personal password based on this user ID. This entitles you to use the software on your computer.

When the password has been correctly entered you'll no longer see a registration notice when you use your program.

Make sure you have downloaded the most recent update.

Updates may be downloaded from:

<http://www.ronimusic.com/download.htm>

Keyboard Shortcuts

[Ctrl] + [A]	Open About Dialog
[Ctrl] + [C]	Get CDDDB Info
[Ctrl] + [E]	Open MP3 Encoding Settings Dialog
[Ctrl] + [L]	Open Additional Settings Dialog
[Ctrl] + [M]	Show Windows Mixer / Master Control
[Ctrl] + [P]	Show Windows Mixer / Playback section
[Ctrl] + [Q]	Quit program
[Ctrl] + [R]	Show Windows Mixer / Recording section

Other products from Roni Music

Slow Speed CD Transcriber

Musician's CD Player

Sweet MIDI Player

Sweet Sixteen MIDI Sequencer

Sweet MIDI Arpeggiator

Sweet MIDI Harmony Maker

Sweet Little Piano

For more info, please check the Roni Music homepage at:

<http://www.ronimusic.com>

Slow Speed CD Transcriber

Slow Speed CD Transcriber is a specialized CD player that lets you play and repeat any section of a track at a slower speed, without affecting the original pitch.

It can also change the pitch up or down. Both of these characteristics are ideal tools for musicians learning or transcribing music from a CD.

The system interface is intuitive, with buttons for playback and for setting start and stop times. Audio playback quality is very good and practical for the informal task intended.

Newer IDE CD players and most SCSI CD ROM units and recorders are generally compatible, if they can read digital audio.

Musician's CD Player

If you're a musician who likes to learn new songs and techniques by listening to the same piece of music over and over but wish that the music could be played a little slower, then you'll enjoy **Musician's CD Player**. This 32-bit program works with your CD-ROM drive to record .wavs at desired "slow down" rates from 5% to 600%. The sound is stretched **without changing the pitch**, or the pitch can be adjusted down by one octave. You can record the .wav files at any of the standard sampling rates and frequencies and save them in converted or unconverted states.

Sweet MIDI Player

Sweet MIDI Player is a MIDI player for not only listening to all types of MIDI files but for modifying the MIDI files, themselves. Use its mixer-like interface to easily edit the control messages, transpose the music, change the tempo, mute desired MIDI channels, and save the end results to disk. It also includes a Jukebox function which allow you to create playlists of up to 99 songs.

Sweet MIDI Player features 192 ticks per quarter note resolution and, thanks to multitasking capability, you can use every command while it's running.

Sweet Sixteen MIDI Sequencer

Sweet Sixteen is a comprehensive and powerful MIDI sequencer for PC/Windows and Atari ST/STE range of computers. **Sweet Sixteen** offers Piano Roll, List and Transform edit pages as well as a dedicated Mixer page you can use for your favorite synth.

Capable of playback on 24 + 24 tracks, **Sweet Sixteen** is ideal for the absolute beginner but powerful enough to satisfy experienced "power" users.

The use of MIDI controllers is fully supported to allow control of all the subtle nuances of expression and dynamics demanded by the discerning MIDI programmer.

Powerful, yet user friendly, **Sweet Sixteen** offers features far in advance of its more well-known competitors.

Main features

- Pattern based MIDI sequencer 16+1 patterns (one of few pattern based sequencers)
- 24 + 24 Tracks (48 tracks when running two patterns in parallel)
- High note resolution (192 PPQN)
- GM-mixer
- Multitasking (do anything you like while playing)
- Real-time processing (all track parameters are reversible)
- Handles all MIDI events (including System Exclusive Events)
- Interpolation MIDI Sync (Retains 192 PPQN in external sync)
- Programmable Tempo/Time Signature Track
- Real-time scrolling editors (List and Piano Roll)
- Supports SMF (MIDI Files, Type 0 and 1)
- Undo function (retract any action)
- Logical Editor
- Step Input - Cycle Mode
- On-line help
- Printed manual
- ...and much, much more

What does the press say?

Atari ST User - Dec. 93

"Sweet Sixteen is well specified for the price and well worth your consideration if you're looking at the budget end of the sequencer market."

Sound On Sound - Feb. 94

"Could something this good be this cheap?"

"The only way you'll get a much cheaper sequencer is on the Public Domain but, as Sweet Sixteen is a surprisingly competent sequencer at a very attractive price, why bother?"

"Stability-wise, Sweet Sixteen seems to be rock solid. In spite of trying, I found it impossible to crash."

The MIX - May 95

"Sweet Sixteen is an absolute breeze, once you get the idea of how it works (which doesn't take long).

"... make Sweet Sixteen the easiest way of getting into sequencing."

Sweet MIDI Arpeggiator

Older synthesizers had arpeggiators and now new synths can have them too with **Sweet MIDI Arpeggiator**! This 'virtual arpeggiator' program contains four arpeggio objects that will arpeggiate all MIDI notes that pass through it.

With this program, you can change the arpeggio direction, number of octaves, and length of the arpeggiated notes. You can also modify the rhythm values of the arpeggiated notes and add another arpeggio object by choosing the same MIDI channel for the object.

The arpeggiator can run from the program's internal tempo engine or synchronize to other software that sends MIDI Clock messages. Settings can be saved for later loading.

Sweet MIDI Arpeggiator features a clean-looking interface that shouldn't take too long to figure out.

Sweet MIDI Arpeggiator will work with all Windows programs that use standard Windows MIDI drivers.

Sweet MIDI Harmony Maker

Enhance the sound of notes played on your MIDI keyboard with **Sweet MIDI Harmony Maker**.

This 16-bit software-based version of an intelligent harmony Maker gives you three objects with which to harmonize any MIDI notes that play through it according to desired settings.

These settings may be saved and later loaded back into the program.

Select a desired scale type, derivation of the selected scale, and key; decide what to do with the non-harmonic notes; and pick how many steps from the original note the first added note will be, and if desired, change the velocity for the new note.

Sweet MIDI Harmony Maker features an easy-to-figure out interface and works with any Windows program that uses a standard Windows MIDI driver for input.

Sweet Little Piano

Sweet Little Piano for Windows allows the computer keyboard to act as either a piano or accordion keyboard. Pressing a computer key will generate a MIDI note and send it to the device selected (a sound card or any other MIDI device).

Different aspects of the MIDI message generated may be changed with different menu commands, keyboard commands and the control bars.

Sweet Little Piano works with all Windows programs that use standard Windows MIDI drivers for input.

Legal Stuff

No warrantee is expressed or implied. The author of this program is not responsible for any damage or loss of data due to the use of this program. This document and **Audio Companion** are **Copyright © 2000 Roni Music**.

