

18) Rip CD-Quality MP3s with One Click

Even if you're happy with your MP3 collection, *Maximum PC* begs you to try this method—you'll quiver with pleasure when you hear the difference!

If you want a maintenance-free MP3 collection that sounds as good on your portable player as it does on your uppity home audio system, we've got the solution—and it's free! (The software, that is—not the music.) The secret lies in three components:

- ▶ A ripper that won't let bad extractions through the gate.
- ▶ A sophisticated MP3 encoder that delivers sparkling audio at reasonable file sizes.
- ▶ A process that isn't a chore to complete.

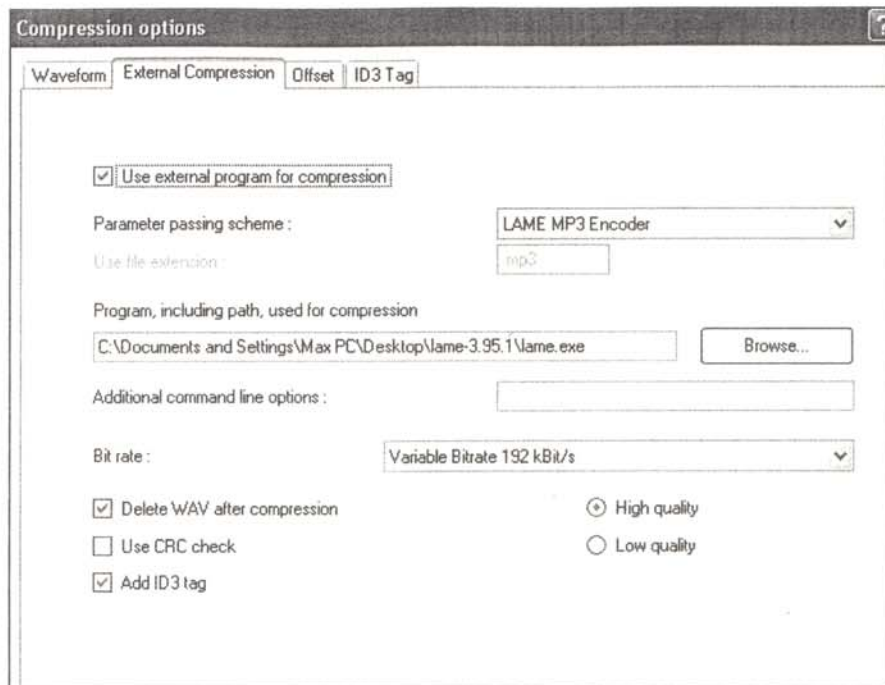
We engineered a process that automatically looks up your CD information on freedb.org after you insert the CD, and with a single click will rip the contents, compress the music using the *LAME* encoder, name, number, and tag the tracks for you, create folders for artist and album, and neatly tuck each track into the album folder. Grab your CDs, and let's get started.

Download EAC and the LAME Encoder

If you want spectacular rips from your CD collection without having to worry about reviewing every track for flaws, you need *Exact Audio Copy*—download it at www.exactaudiocopy.de, and don't forget to send the author a postcard! Unlike other ripping apps, *EAC* double-checks every bit for accuracy against the original; if it finds discrepancies, it reads the data again, and yet again if necessary. As a result, it's intrinsically slower than other rippers, but with the automated process we're about to show you, it doesn't matter. You'll also need the *LAME* encoder, which has long been acknowledged as the finest MP3 encoder available, and it's free to boot. The current version at press time is 3.95.1 and you can download it at <http://mitiok.cjb.net/> (if the server is down, just Google "LAME encoder" for an alternative site). Unzip both applications into the same directory.

Configure EAC

EAC is extremely friendly to power-users, and offers oodles of control over the



In the **External Compression** dialog box, note that you can elect to have **Exact Audio Copy** delete the WAV files after converting them to MP3.

ripping process. This means the initial configuration can be overwhelming. But don't sweat it—here's our tab-by-tab configuration guide. Change only the following settings.

▶ On first launch, *EAC* will perform an initial drive test. When asked, select Optimization for "accurate results." You'll need an audio CD handy to allow the program to test your drive's error-correcting capabilities. If you have multiple optical drives, *EAC* will default to what it considers to be the best drive, though you have the option of changing this in the Options menu. *EAC* also graciously offers to configure *LAME* parameters for you. It will begin to search your drive for the *LAME* executable. Trust us, it's much faster to cancel the search and point *EAC* to the executable yourself. When asked, select the "standard" *LAME* setting option—for now. Finally, choose the Expert interface option, because that's where the action is these days. Now we're ready for some fine-tuning.

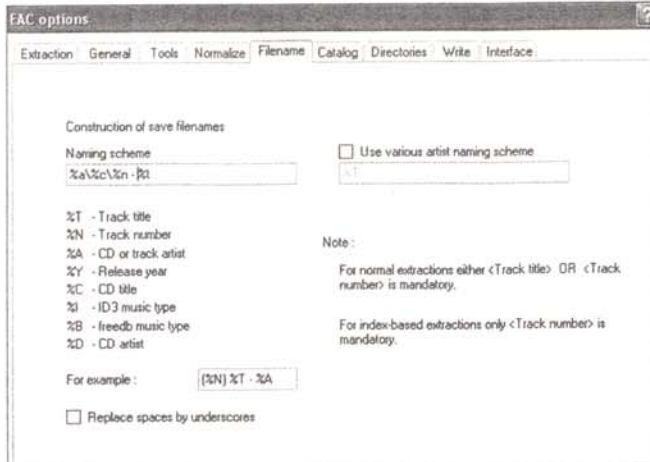
▶ From the *EAC* > *EAC* Options menu,

select the General tab, and check "On unknown CDs," then click the "Automatically access online freedb database" radio button.

▶ Now select the Filename tab, and under Naming scheme carefully type %A%\%C%\%N - %T (including the space before the %T tag). This will result in a directory structure that creates a folder from the artist name, a subfolder with the album name, and numbered tracks within the album folder, like this: Yma Sumac > Mambo > 04 - Chicken Talk. You can't designate an exact position (using C:\, for example); you'll get to specify your music directory in the next step.

▶ Select the Directories tab, and then choose "Use this directory." Point *EAC* to the folder you want to store your music in.

▶ Go to the *EAC* > Drive Options menu. The box marked "Drive is capable of retrieving C2 error information" might already be checked. Leave it the way it is, but if, after ripping your first CD, you hear audible flaws in the tracks, it means your drive might not report error-correction information properly. If so, uncheck



The Filename dialog box lets you assign metadata to folders by following the field with a backslash; "%C\" creates a folder with the CD title and stuffs your tracks into it.

the box. Do not uncheck Secure mode—this is exactly what makes EAC special! ▶ Go to the EAC > Compression Options menu. Select the External Compression tab and make sure the LAME MP3 Encoder is displayed in the "Parameter passing scheme" pulldown box. If it isn't, select it.

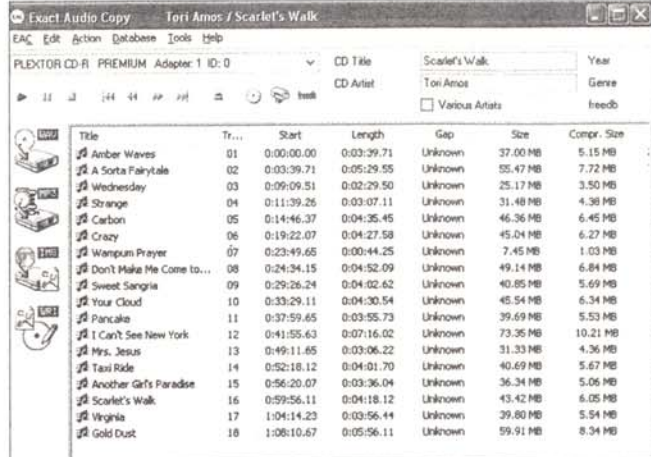
▶ Go to the "Bit rate" pulldown menu, and select Variable Bitrate 192Kbps. We're happiest with variable bit rate encoding (VBR), which raises the bitrate during complex portions of music, and lowers the bitrate during quiet or simple portions. But your MP3 player may not support VBR playback, or your disk space might be limited. In the former situation, you'll still get fine results with constant bitrate (CBR) encoding at a minimum of 192Kbps. In the latter situation, drop down to as low as you can stomach; 128Kbps CBR, for example, is okay if you listen to your music through cheap earbuds at the gym. But aren't we looking for the perfect-sounding MP3?

▶ Go to the EAC > freedb Options menu. Confirm that your e-mail address is correct in the e-mail field, and click the "Get active freedb server list" button.

Test Run

Wow! Thank heavens you only have to go through that process once. Now we're ready to make sure all our settings are correct before happily ripping away. Put an audio CD in the drive. EAC should automatically query the freedb server for track data. Annoyingly, it's sometimes reluctant to do so. If this happens, just press Alt-G.

Now click the MP3 button on the taskbar to the far left. Remember, EAC is not a fast worker. It's not supposed to be—it's a careful one instead. Depending on the condition of your CD and the accuracy of your drive, the ripping process could take a while. When the test run is finished, review your tracks. If they are blank or there are any errors, shout out "D'oh!"; then double-check the settings above. If the settings look good, try downloading the Nero ASPI layer at [ftp://ftp6.nero.com/wnaspi32.dll](http://ftp6.nero.com/wnaspi32.dll) (your PC can't rip music without an ASPI layer). Put it in the same directory as EAC and try the test again. You can get troubleshooting help from the forums at the EAC web site, or check out Chris Myden's spectacular



Exact Audio Copy uses the freedb.org online database to automatically fill in disc data.



Exact Audio Copy is not speedy, but it's still the most sophisticated and effective ripper we've ever used. And it's free!

exploration of the program's options at www.chrismyden.com. (From the home page, click "Elite DAE" from the column on the left side of the page.)

19) Burn CDs Flawlessly—Every Time

Despite the best efforts of the music industry, producing perfect-sounding burned CDs has never been easier. Here's some simple advice for good results every time.

- ▶ Don't burn audio CDs at rates higher than 24x. Due to the unique error-correcting scheme used by audio CDs, faster recording leads to more errors and gradual loss of fidelity.
- ▶ Don't burn at greater than 4x to avoid

compatibility problems with fussy car audio systems.

- ▶ Always use brand-name media; at the very least, higher-quality media will extend the life of your disc.
- ▶ For higher compatibility with consumer electronics equipment, always "finalize" your disc (check your software documentation to find out where this option is).
- ▶ Always record in Disc-at-Once mode (instead of Track-at-Once)

▶ If you are recording a live show or a disc with songs that crossfade, make sure to eliminate the pauses between tracks if your burning software allows it.

▶ If you are making a "mix" CD, make sure to normalize the volume levels from track to track. Some recording software includes this feature, or you can do it yourself (and get better results) with MP3Gain, available for free at www.geocities.com/mp3gain.