BY ERIK ZOBLER

Sonic Studio PreMaster CD Software

Professional Prep and Finishing Tool for Replication

Sonic Studio began as workstation pioneer Sonic Solutions. Today, Sonic Studio makes hardware interfaces and Mac software for PCM and DSD production, as well as integrated premastering for CD, SACD and rich-media distribution. PreMaster CD (PMCD) is Sonic Studio's premastering software, designed to trim and space your tracks, make edits, add gain changes, create fades, input text and add PQ codes.

GETTING STARTED

Installation on my Mac G5 Quad running OS 10.4 (PMCD uses Core Audio) was easy. Authorization is more involved due to challenge/response registration; this took about an hour, but the installation guide warns it can take up to three business days.

PMCD creates a CD in six steps. However, if you want to do fine-tuning, then be prepared to have your nose in the manual. The program supports AIFF, BWF and SD2 stereo files, but only at 44.1 kHz. It supports 16 to 24-bit depths and offers a proprietary dither that can be globally turned on or off.

Editing in PMCD is always nondestructive. Gain can be adjusted for each song or by defining audio segments within the song. Gain can also be applied using breakpoint automation on the timeline. Sequencing is fast and easy. If you hold the Command key down as you drop a file in the Audio window, it automatically spaces the track and creates PQ codes for pro disc manufacture.

PMCD performs many tasks in the background. It checks any created PQ codes against the Red Book standard. If there is a problem, PMCD tells you what it is, although it doesn't reveal which track has the problem. It also creates CD references in the background. One of PMCD's most important features is its ability to create Disc Description Protocol (DDP) file sets (later).

Sonic Studio's Smart Fade Tool is a thing of beauty. Fade-ins and fade-outs are color-coded. The cursor's icon and function change depending upon where it's placed near the edit. You can make an edit, crossfade it and then move the whole crossfade back and forward in time to hear where it sounds best. When you move the crossfade, the waveform beneath the fade is "live" and instantly adjusts to reflect the changes you make. You can easily make very long crossfades by holding the Option key and mousing up the center of the crossfade: Crossfade beginning and end regions both expand while keeping the fade parameters that you just created. A small "bead" lets you adjust the fade curves without having to access another window.

What PCMD won't do? It won't record files. It can change polarity, reverse audio, normalize and make gain changes, but it doesn't support DSP processing. There's no provision for scrubbing; only half-speed playback is available. PMCD only offers two vertical window sizes; the large size is certainly big enough, but it won't let you grab the window corner and pull down to the bottom of your screen. There's also no provision for copying and pasting timeline gain changes. PMCD also doesn't allow load back of DDP files, but this feature is promised with the next update.

PMCD is used as the last step before sending your CD for replication.

DECISIONS, DECISIONS

When a CD-DA is sent to a manufacturing plant, the plant can either play the CD in real time directly onto a glass master or onto its server, or it can rip the audio using Digital Audio Extraction (DAE). Each method has its drawbacks: Real-time playback uses error correction for drop-outs and must be properly clocked, while DAE pulls small segments of the audio files off the CD and then reconstructs them back together on the server. Although DAE has greatly improved during the past few years, it can be susceptible to seek errors and jitter, especially at high speeds.

A better option is to deliver a DDP file set. DDPs can be delivered on any media that a plant will accept, such as CD-ROM, DVD-R, Iomega Jaz or hard drives. Manufacturing plants transfer the files onto a server the same way that you would copy any computer data; the difference is that the DDP files are transferred using data redundancy so that every bit is accounted for and there is no need for ripping, re-clocking or error correction.

SURVEY SAYS

I wanted to see if I could hear a difference if I loaded 16-bit/44.1kHz files into two different Mac programs that both support DDP and then burned a CD from each. I was shocked by the difference—and I was not the only person who heard it; we all chose PMCD.

I repeated the test using more CDs and made it a blind test. I used three different Mac programs, and I was able to correctly identify each disc in each group. However, this time the results were less conclusive. I preferred the PMCD disc only twice. In the third group, the PMCD was my second favorite.

My tests didn't prove that brand "a" made a better-sounding CD than brand "b." If that were true, I'd have picked the PMCD disc each time. But I didn't because inconsistencies in CD-R media have a greater effect on the sound of a CD-R than the programs that use them. This point underscores the importance of using DDP as a delivery medium to the pressing plant. DDP is immune to jitter and guarantees audio integrity from your computer to the pressing plant's computer.

I'm sold on the benefits of PMCD as a highly evolved, powerful tool for audio CD preparation that delivers high-quality masters on a superior format at a very reasonable price ($495).

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