All of the stereo image was still there, just moved around in a rather unique way. Field and Focus are really nothing like panning, and we'll again refer to you the photograph analogy above to help you grasp what's different.

We could go on about other examples, but we feel these two sum up our impressions of how *DrMs* can be used to manipulate full mixes and individual tracks to achieve results that you just couldn't get with any other tool that we're aware of. This plug-in, especially at this price, definitely has a place in the toolboxes of the creative mixer, desperate mastering engineer, or anyone who finds themselves wanting to do some very unique manipulation of stereo image. The ability to invert the stereo image with the Field and Focus controls, as well as the ability to manipulate phase relationships and to delay signals, makes *DrMs* just about the most unique M/S processor out there, if not one of the most unique plug-ins we've seen in a long time. It's a great gift idea for the geekiest and tweakiest of engineers. Visit the website, and try the free demo.

(⊕9 EUR; www.mathewlane.com) -Jessica Thompson, www.songfolly.com; Allen Farmelo, www.farmelo.com

Slate Pro Audio

Dragon Dynamics Processor

If you've heard of Steven Slate and his sample libraries, you're aware of one thing; Steven Slate *loves* drums. All kinds of drums — big ones, small ones, drums up close, drums far away..... drums, drums, drums.

The *Dragon Dynamics Processor* is the first offering from his new hardware company, Slate Pro Audio. Made entirely in the USA in Wisconsin and Los Angeles, the *Dragon* is designed around his love of old FET compressors and a serious long-term relationship with another more modern compressor known for its distortion. This is way more than a drum box and definitely dialed in by dudes serious about their compression coloration. It sounds great on anything and everything. Slate set me up with two units so I could try them in stereo, and that was a smart move. The only thing better than a *Dragon* would be two of them.

The desire to have a box do "everything" while offering a sane number of controls is a tricky balance. Too many bells and whistles, and the user is lost in minutia, and the workflow suffers. Too little, and the designer misses the full range of capability from the circuitry. The Dragon manages to combine what would be a great sounding straightforward FET compressor on any level with a control set that drastically changes the overall characteristics of the unit quickly, without making the experience too confusing. I was able to navigate it all pretty easily on the first day, even though some of the options really color the sound. I think it's because everything here does something and does it really, really well. This box sounds great, and with all those switches and knobs, the available tone options are staggering. When you start to dial in heavier levels of compression and saturation, an amazing amount of sonic flexibility is at play.

There are input and output level controls; variable attack and release controls; and a six-position knob with all the classic 1176 ratios. A switch labeled *Squash* is the classic "all buttons in" feature with a twist; it can be engaged at any ratio. It was my favorite at 2:1, boosting the level quite a bit but riding the waveform in a manner that brought out loads of detail on a drum bus, shimmer on acoustic guitars, and a pleasing buzz to electric guitars. Highly recommended to try, it was like catsup or BBQ sauce — good on everything. The detection circuit has an adjustable six-position high-pass filter on it, helping kick drums pass through, but also great for adding weight to acoustic guitars. There's a *Vintage* switch that changes the way the whole unit reacts and is a bit harder to qualify. In certain situations, notably drums, engaging this switch increased the amount of compression, affected release time, and brought the midrange forward. Slate says that the switch engages a different output board, and it does change what's going on pretty drastically. Vintage, schmintage, who cares? With one flip of a switch, the whole game changes, and you have another set of sounds.

Sitting at the heart of the *Dragon*, a four-position *Saturation* knob allows for adjustable amounts of pleasing (that's an understatement) overdrive; this knob is one of the crucial adjustments for dialing in character. Triggered primarily by transients and less by sustained information, the distortion ranges from a mild tonal change at position 1 to a more aggressive buzz at position 3. While trying to dissect the more fuzzed-out upper levels of the *Dragon*, I was at a loss for a direct comparison, as it does have its own, unique, distorted tone. The breakup is occasionally centered maybe just a tad too high frequency-wise for my wants and desires, making me wish for a level "4", but this is a compressor, not a fuzzbox. But then again you may begin to wonder.

There are three EQ boost switches — *Sheen, Bite,* and *Boom* — and they sit right where you think they would. These boosts are in the audio path, not in the detection circuit, and while useful, I didn't find myself engaging them that much. They seem more like a quick fix and were just a bit more than I wanted most of the time. There were other more fun ways to shape sound with the *Dragon* — just start digging through the Squash and Vintage switches and the HPF and find yet another awesome sounding compression shape. Although, those switches could be last minute mix lifesavers, for sure.

With all of these tone options and the ability to drive the compressor happily bonkers, the onboard mix control — allowing the dry to be added back in — is really, really useful. But the switch to disengage the parallel compression mixer, so you can A/B fully-processed with a mix of processed and dry? Completely essential. Super smart.

In use, the *Dragon* easily became a first-choice compressor during overdubs for acoustics, electrics, and percussion. A deadly tell for compressors for me is how they handle the transients of tambourines, and the *Dragon* kept the initial hit clamped down just right so I could blend hits with snares and focus on the business end of the jangle. On electric guitars, I was impressed with the open and clear compression that could be dialed in. Once I got a mic/amp combo that I liked, finding the right level of compression activity seemed simple. Making sounds with this box is a breeze.

During a mix for San Francisco's Papercuts, the *Dragons* did a great job in stereo on the drum bus. Jason Quever, main Papercuts architect and a serious and picky recording dude in his own right, loved them. Jason has an intensely monogamous relationship with an old, mojo-laden, silverface 1176 that we used on a mono overhead during tracking and was a primary part of the drum sonics. We had been careful during basics not to push the 1176 too hard, and I could tell Jason wanted to bring out more of that particular "bloom" that he loved, but we had been cautious not to overdo. This was a situation where we already liked what we had and just needed the right extra oomph. The *Dragons* easily matched and enhanced that tone during mix, allowing

us to really get a ton of depth and detail from the drums without them sounding overcompressed. Drum mixes came up easily; the wide range of compression curves on hand made experimentation fun and helped the mix flow easily. One way or the other, there was always some simple way to get at a particular frequency range or transient shape.

One peculiarity that arose was in the gain-reduction metering. Initially warned by Slate to turn the units on for 15 minutes at the beginning of any session and let them sit before use to allow that circuit to warm up, the GR metering for the first few days was odd in certain settings and unusable at times, but after the units had a solid week of burn in, everything was fine. I was told that there have been changes in this circuit, so that will probably not be an issue for anyone else.

My only real gripe is a purely aesthetic one. The *Dragon* is adorned with a glossy Dragon graphic that is mostly invisible, but truly detracting and kind of horrible looking. But that's just me; I think it looks like a menu from a cheap Chinese restaurant. When I asked Slate if they ever thought about doing a plainer version, they replied, "Well, then they wouldn't be the *Dragons.*" True enough — but trust me guys, you don't need to overcompensate; the compressor is great, it speaks for itself. (*\$1799 street; www.slateproaudio.com*)

-Thom Monahan <thom.mn@gmail.com>

Sonoris Audio Engineering DDP Player OEM

This standalone, cross-platform application allows mastering engineers to provide complete evaluation masters to artists. If you're wondering why this matters, it means that artists can review masters remotely. There is no need to ship a physical CD. There is no need for the band to travel to the mastering house. This saves money and hastens the approval process.

Here's how it works. The mastering house provides the client with a copy of DDP Player OEM and a license code. The client installs the application on a PC or Mac. The mastering engineer exports the client's finished project in DDP 2.0 format. (Version 1 is also supported.) The DDP files are transferred to the client electronically or on physical media such as CD-R, USB drive, or hard drive. The client imports the files into DDP Player OEM for review. To be sure the DDP is a bit-for-bit clone of the master, the Tools menu lets you check the MD5 checksum file for validation. (This topic is beyond the scope of this article, but an MD5 checksum is a cryptographic hash function used to check the integrity of files.) Inside the program, the audio can be auditioned via the onscreen playback controls or can be burned as a reference copy by the client's machine. A PQ reference sheet can be viewed or printed, allowing the client to confirm spellings for CD TEXT and ISRC allocations.

Of course, audio engineers have been able to send audio over the internet for quite some time, but sending individual songs is not the same as a complete master. Reviewing factors such as crossfades, relative loudness, and spacing has been difficult at best. Of course, people have cobbled together workarounds. Some engineers send disc images or Roxio Toast images, but these options require that the client owns a copy of Toast or Jam and has the computer skills to import the image, load it, and make a copy. And there's always the send-one-big-glob-of-audio option, but that doesn't show where start and end flags will be, etc. The OEM version has all the features of the regular Sonoris DDP Player application but comes with a customized splash screen and help section with your studio branding, logo, name, address, and website URL. For example, when I send *DDP Player OEM* to my clients, the branding elements, including the application icon, are plastered with Treelady Studios' logo and contact information. OEM customers receive a license from Sonoris allowing engineers to send any number of copies freely to customers.

Since many clients are concerned about the security of their intellectual property, a Security Option is available as an additional-cost option. Its most significant feature is encryption of the file-set that precludes anyone but the intended receiver from opening the DDP. A second security feature limits DDP imports so a customer can only open a DDP coming from your studio, preventing the load-in of competitors' DDP files.

Of course, if you're still wondering what a *DDP* is, you're not alone. With audio CDs being the predominant delivery format, there are mastering engineers who haven't heard of DDP. DDP stands for Disc Description Protocol, a format originated by Doug Carson Associates (DCA). DDP was extended to DVD in 1996, with High Density formats added in 2006, and continues to be licensed and kept current by DCA. When it was a popular album delivery format, DDP masters were written to 8 mm Exabyte tape, 4 mm DAT, or Digital Linear Tape (DLT), and shipped to the plant. As the data tape formats began to fade (and CD burners became more affordable), fewer masters were submitted via DDP. For a while, it seemed like a burned CD was the only format most plants received.

However, not everyone gave up on DDP and with good reason. DDP has some advantages over a master CD. First, it reduces a step in the manufacturing process. Audio Master CDs must be read at the plant and made into a DDP for pressing. Supplying a client-approved DDP removes one layer (and chance for errors) from the equation. Second, DDPs are written as data, with better error detection and correction routines than those used for audio CDs. A third advantage comes from sending a compressed DDP or DDP with a CRC checksum to the plant. The plant can verify that the DDP is a 100% bit-for-bit copy of what's on the mastering house's hard drive. You can't do that with an audio CD. (To be fair, the number of CDs released using Master CDs is insanely large. And the vast majority of those releases had zero technical issues.)

Sonoris *DDP Player* supports both Windows and Mac OS X operating systems. Although there was a minor driver glitch with certain Apple burners, *DDP Player* has been rock-solid throughout testing and implementation phases. Even users with little computer experience can install, open, and load their DDP in a few minutes.

My concerns with this application are minor. First, the menu terms Import and Export have been confusing to users in USA, who have been trained by Microsoft to look for commands like Open or Burn. Another small issue deals with how ISRC codes are displayed on the track grid. Per the Red Book Standard, the ISRC is written at the first flag of a given track. This sometimes leads to confusion. For example, track 1 must have a 2 second pause index before the start-oftrack marker. Thus, the ISRC for the first song displays on the 2 second pause line instead of the track 1 start line. Likewise, any time there is a pause between songs, the ISRC will be displayed on the pause marker line instead of the track title line. While this makes perfect sense to those of us on the technical side of the art, it is confusing to artists. Every time I've had a client with ISRC allocations, they have complained that they did not understand why the codes show up with some songs sometimes and on pauses other times. My thought is Sonoris could either go through a big recode that forces the ISRC to go alongside the song name (which would be imprecise according to the standard) or add a note on the audition screen that warns users that ISRCs must appear on the first flag of a track, which may or may not be the same line where the track name is. (At press time, Sonoris informed me that they are working on enhancements to the graphic user interface to decrease confusion over ISRC placement.)

Users have also had every kind of "how do I do this?" question. But Sonoris includes a well-documented help section that answers just about every question someone might have. If people would only Read the Furnished Manual (RTFM)! There is also a video tutorial page on the Sonoris website, with new content being added frequently.

My clients have been very pleased with *DDP Player*. In particular, those with specific sequencing requests are most impressed. *DDP Player OEM* provides a level of certainty that their manufactured CDs will play the way they intended it to play. Short of creating a custom-coded solution or having clients that have professional studios (so you could send them your project files), I can't think of a better way to offer reference masters for approval. A fully functional 10-day demo can be found on the Sonoris website.

(\$367 direct, \$123 for Security Option; www.sonoris.nl) -GH



