TASCAM GigaStudio 3

BY DEVON BRENT

Back in the '90s, a small company named NemeSys Music released GigaSampler, the first direct-from-disk software streaming sampler. NemeSys followed up with GigaStudio 32, 96, and 160, which raised the bar even higher with more power and flexibility. Shortly after that new release, NemeSys Music was bought by TASCAM, and everyone held their breath about the future of GigaStudio.

In a market that is focused on lead, follow, or get out of the way, many had feared the delay of the release of version 3 would be a case of too little, too late. Competition in this market segment has certainly grown stiff in the last few years. Was TASCAM capable of producing the 'killer app' it needed, making GigaStudio the quintessential sampler yet again? Let's read on.

Three versions, PC only

GigaStudio version 3 ("GS3") is only for the PC platform. It requires at minimum a 1.7 GHz Intel processor or an AMD XP 2100+ processor, 512 Megabytes of RAM, and 100 Megabytes of hard drive space for the application to run. Special drivers, called GSIF (GigaStudio InterFace), are provided by many card manufacturers in order to make GigaStudio run optimally on your computer. You'll need to research if your sound card has GSIF drivers available. It's possible to run without GSIF drivers using Propellerhead's ReWire protocol if your DAW understands it, but you may not be able to push as much performance out of your computer in such a setup.

GS3 is delivered in three distinct flavors: GigaStudio Solo, GigaStudio Ensemble, and GigaStudio Orchestra.

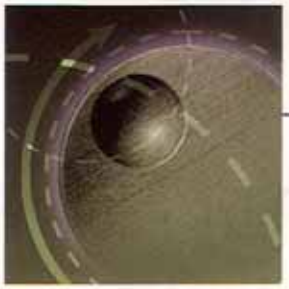
Giga Solo provides up to 96-note polyphony, 2 MIDI ports, the light version of the Giga Piano II, Mega Piano II, and GigaPulse SP (we'll go over GigaPulse later in the article).

Giga Ensemble is beefed up to 160 notes of polyphony, 4 MIDI ports, the full version of Giga Piano II, Giga Piano II LE, Mega Piano II, GigaPulse SP, and Giga Editor.

Giga Orchestra provides unlimited polyphony (basically whatever your machine can muster), 8 MIDI ports, the full version of Giga Piano II, Giga Piano II, Mega Piano II, GigaPulse Pro, and the Giga Editor.

GS3 can be run as a standalone application, or be inserted into your ReWire-compatible host—a new feature for version 3. Most people I've found tend to

The software sampler to beat adds to its already immense power



run GigaStudio on its own dedicated PC, and treat it (and the computer running it) as a stand-alone workstation.

The facelift

GS3 sure is pretty this time around. The layout is cleaner than that of its predecessor, and allows for customization of the interface. The ability to do free-floating windows for certain components is also a nice touch. Having worked with GigaSampler since 2000 and moved up to GigaStudio 2 in 2001, I can now say that Giga's old look is almost hard on the eyes compared to that of GS3.

By default, the top section of the interface contains the Tool Bar and the 16-channel MIDI Mixer. Each channel has controls to mute or solo the channel, launch the Quick Editor or FX Editor, change the volume, fine-tune the pitch in cents, change the panning, and adjust Mixer Input selection. A new and welcome feature, Stacking, allows you to load as many sample banks onto a single MIDI channel as you desire. Below that are the MIDI Port Navigation tabs which allow switching between 2, 4, or 8 MIDI ports, depending on which version of GS3 you bought.

The next default section below the MIDI Mixer is the QuickSound database. From left to right are the Drive and Filter Tree View, the Instrument List View, and the Loaded Instrument View. The search field in the toolbar section makes for quick finding of the sounds you need. For example, type in "piano," and every file that references the term "piano" will be displayed.

The Virtual Keyboard is a dockable and floatable window in GS3. The color coding on its virtual keys can make dissecting a loaded bank quick and painless.

The DSP Station is really a virtual mixer inside of Giga3. It has your Input channels, Group channels, 6 Aux busses, and an Output Master section. The only thing that left me wanting with this setup was to have dedicated level meters on each of the Aux returns.

Giga Editor

GS3 now has two modes of operation for editing your .GIG banks: the full-fledged Giga Editor and the Quick Edit window.

Giga Editor, which is only available in the Ensemble and Orchestra version, is a full-fledged instrument creation tool. Normally aimed at the soundware developer, it's here that you can manipulate the actual sound content of a bank. (We should also note that GS3 is a real sampler, not just a sample player—you can record up to 32 audio channels and build instruments from them without leaving the Giga environment.)

The Quick Edit window (top) and the Giga Editor

The Quick Edit page is where the easy tweaks can be done. Access is given to the global tuning, sound panning, volume, amplitude and filter envelopes, etc.—basically what you'd expect from a standard subtractive synthesizer.

The effects

GS3 comes with five effects: NFX-1 Reverb, NFX-2 Chorus, NFX-3 Multi Tap Delay, NFX-4 EQ Contour, and the new GigaPulse.

NFX-1 Reverb, even after all these years, is quite an impressive reverb. It provides some fairly smooth halls and plate reverbs that aren't plagued with a bad case of the 'metallic ring'. The chorus, delay, and eq are also quite nice for what they are, but with GS3 supporting VST plug-ins, you can use your own favorite effects instead.

GigaPulse

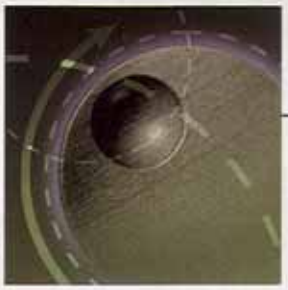
There's a good reverb plug-in, and then there's GigaPulse. Soon to be released as a standalone VST plug-in, GigaPulse Pro comes with the GS3 Orchestra version and GigaPulse SP is provided with all three Giga3 flavors (to ensure compatibility with Giga3 sound libraries encoded with GigaPulse information). GigaPulse is an incredibly realistic convolution reverb unit, instrument resonance simulator, and microphone modeler.

These realistic effects are achieved with the use of recording of an actual room space or impulse response. GigaPulse then takes these recordings, called Impulses, and convolves (combines) them with the streaming audio performance in real time. GigaPulse allows a selection from a single position to as many positions as needed within a given space, depending upon the GigaPulse bank you've chosen. What you're left with is simply breathtaking reverb, results that made me wonder if I was actually standing in that space for real or not.

The sounds

The collection of sounds that come with GS3 Orchestra is quite significant at first glance. Over 18 Gigabytes of samples are included with the Orchestral version. Such companies as Bigga Giggas, Project SAM, Sonic Implants, Vienna Symphonic Library, plus several others contributed to the diverse sound pool. The two biggest contributions to the new sound collection are the greatly improved version of Giga Piano realized in Giga Piano II, and a nice selection of orchestral instruments(over 5 GB) that Vienna Symphonic Library generously threw in.

The original Giga Piano had its faults. Mainly, it needed a good amount of tweaking to get it to sound really good in my opinion. Most Giga users I knew have actually moved on to bigger and better piano libraries. Giga Piano II is a different story. This time, the piano of choice is a bright 7'4" Kawai grand piano. Seven velocity layers were captured, and the sound board resonance has been made into an impulse for GigaPulse. If you like a nice, bright piano tone, this piano is simply gorgeous.



The other highlight is the nice selection of orchestral samples from VSL. Various woodwind, string, brass, percussion ensembles, and solo instruments were provided in this collection. All of them are of top-notch quality, and give you just a taste of what the full VSL library provides.

While some other companies made a goodwill contribution to the collection, most of those are a disappointing mish-mash of disparate instruments and stripped-down demos. I can understand that PMI, in the business of selling piano banks, would not want to give away their whole 6-layer piano. I suggest that they at least give one velocity layer across the full key range for all three pianos, not just the one piano. [*If you're curious about this product, keep an eye open for a Showcase of Sounds review in an upcoming issue.—Ed.*] DT Sounds' Puilli sticks bank (and nothing else) just seemed so out of place in the collection. In comparison to the multi-Gigabyte complete and rounded collections provided with some competing products, this soundware collection seemed more like an afterthought.

GigaPulse (top) is easily routed with GS3's built-in effects mixer.

In use

Installation was pretty smooth, albeit a bit lengthy. Installing GS3 off the first DVD went by quickly; it's the sound content that took so long, but with six DVDs' worth of sounds in the package, the wait was to be expected.

The workflow with GS3 compared to its older siblings feels a lot smoother, even at the beginning. For example, Giga Editor loads in much faster, and Quick Edit gives you access to most commonly tweaked parameters within seconds. Tweaking sounds isn't as much of a laborious task as it was in GigaStudio 2.x.

Those who demand low latency out of their DAW will be pleased with GS3. Even with GigaPulse enabled, keeping a low latency didn't seem to affect CPU performance. I've tried 64 samples (approx 1.5ms) and 256 samples (approx 6ms) for latency settings on my Frontier Designs Dakota card, and the CPU meter remained the same. Quite unusual and very efficient compared to most other host applications out there.

What's improved

Anyone who's been a long-term GigaStudio user, like myself, is wondering what's been improved that's not advertised on the box. Those of you new to GS3 will not be concerned with the next few points. Those of you who've waited 20+ minutes for your full GigaStudio 160 project to load every morning should read on.

The end of the Great Giga Wait: Anyone who's familiar with the switch from Windows 98/ME to Windows XP with Gigastudio 2.x is quite familiar with the extended load times. Thankfully, GS3 is much improved in that department.

Strangely, though, my 1 GHz Intel machine with GS2 running Windows Me still loads certain banks faster than my 1.7 GHz machine running GS3 running XP. For example, the Dan Dean Flute bank takes approximately 20 seconds to load on the 1 GHz box, but takes approximately 40 seconds on the 1.7 GHz. While it used to take a few minutes before under GS2, the situation thankfully has improved. Other banks, like Kirk Hunter Solo Viola, take almost exactly 1 minute to load on both machines.

Thanks for the memory: Memory usage under Windows XP and GS3 is now back in line with GS2 under Windows Me. It used to be that GS2 under Windows XP would eat up approximately 256 MB of extra RAM. The percentage meter of Memory In Use between a 512 MB Windows Me machine and 768 MB Windows XP machine would be the same or within one percent of each other for the same sound bank loaded in, for example. No more—now GS3 under XP is as memory-efficient as the program ever was per instrument in play.

A word on file format support

In case you're thinking of using other sample players to play back GigaStudio files—it's possible to do so in some cases, but you'll be likely to lose some features that are unique to the original format. As a result, the sounds may not come out the way you would hear them when played by GS3, especially new features in recent GS3 releases.

While many plug-ins support GigaStudio 2.x format, such as Native Instruments Kontakt, Steinberg HALion, etc., the import process always seems to lose something in the process. Keep in mind, new GS3 libraries are not supported with the GigaStudio compatible sample players either.

If you're dying to have access of one of the largest selection of sound libraries around, the GS3 format is used to deliver gobs upon Gigabytes of quality samples from many developers.

Conclusion

GigaStudio 3 is one fine piece of work in and of itself. Add in the inclusion of the incredible Giga Piano II, and one of the best reverb units, GigaPulse, and you've got one of the best sampler bargains around.

With 96 kHz support, 24 bits sample depth, an excellent convolution effects processor, and a gorgeous piano, upgrading to GS3 is a no-brainer. Even if you don't own a previous version of GigaStudio, GS3 is an excellent choice for your sample-based needs.

Prices: GigaStudio Solo, $199; GigaStudio Ensemble, $369; GigaStudio Orchestra, $599

More from: TASCAM, 7733 Telegraph Rd., Montebello, CA 90640. 323/726-0303, www.tascam.com.