

TC Electronic VSS3

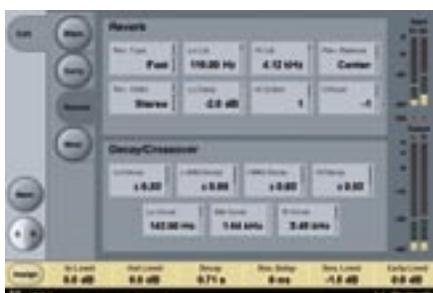
Adding to the arsenal of plug-ins available for its PowerCore platform, TC has ported over a reverb from its flagship System 6000. **ROB JAMES** experiments with time and space.

REVERBERATION IS PROBABLY the most seductive effect in our arsenal. Very few dry recorded sounds do not benefit from the application of a little reverb to bring them to life. In the real world we are usually completely unaware of just how much of the sound we hear is reflected until the delay time is above 30-50ms and we notice echoes. Even in the countryside, the ground, the trees and other features all contribute to the reverberant field. I remember the first time I heard a shotgun fired in a wood (*Those gamekeepers come well armed. Ed*). The real thing sounds completely different from what you tend to hear as a sound effect in a film. This is the crux of the matter. A slavish replication of reality does not always convince.

A world without reflected sound is a very alien place. Anyone who mixes sound should make it their business to experience an anechoic chamber at least once. The sense of isolation and disconnection should help them to understand the problem. Although present in almost every real-world situation, natural reverb does not usually hinder imaging. The psychoacoustics of localisation are still only incompletely understood. What is certain, however, is that conventional artificial reverb can smear imaging in a way that doesn't happen in a natural environment. Conventional artificial reverb can, and often does, suffer other maladies, notably unwanted pitch shifting and modulation. One much touted alternative is sampled or 'convolution' reverb. However, while this can be an excellent way of placing an entire mix in an acoustic space it is less effective with individual sounds and has several other limitations, notably that RT60 times tend to be relatively short.

The TC Electronic PowerCore concept is simple enough, rather than overburdening a computer's CPU with signal processing tasks, it provides DSP horsepower optimised for the purpose but presented in the form of conventional plug-ins. The 'catch' is that the extra power is only available to dedicated plug-ins. TC's counter to this has always been that its supplied and optional plug-ins are sufficiently attractive to justify the PowerCore's existence.

At UK£345 plus VAT, VSS-3 is the latest fulfilment of the TC promise to make some very serious effects available to PowerCore users. A port from the System 6000, VSS-3 is dubbed a 'Source Reverb', which gives the clue to its forte — individual sound sources, such as solo instruments or, in the film context, voices or sound effects. TC highlights the disadvantages of using a conventional 'generic' reverb for individual sources, specifically the blurring effect, inferior imaging and pitch modulation. With the VSS-3, even when the controls and source are identical, the reverb effect is subtly different every time. This is much closer



to what happens in real life due to the complexities involved. The downsides are that Source reverb is less effective with moving sources, confers no real advantage with a composite source and requires lots of aux sends and returns if the maximum benefits are to be obtained.

VSS stands for Virtual Space Simulation and TC says it uses 'chaotic response' algorithms and that the early reflected signals are manipulated separately from the decay or reverb tail of the signal. Notwithstanding the effort put into research and number crunching, the fine-tuning involved a lot of 'golden eared' listening and tweaking with results that more than justify the exercise.

The VSS3 algorithm has almost 800 parameters, mercifully these have been condensed into a comparatively simple user interface. The first thing to strike you when opening VSS-3 for the first time is its unconventional appearance. There isn't a 'virtual knob' in sight. However, a glance at the System 6000's dedicated screen explains where the look and feel originates. I have a few reservations about the lack of colour and the tiny fader representations. In the context of the System 6000's Icon remote controller, with its faders and touch screen, it all

makes sense but I wasn't so convinced the translation of this interface to a plug-in would be quite so successful. However, in operation it proved to be fine. It isn't necessary to be accurate with the mouse, so long as you click somewhere on a button and drag, the parameter follows.

The paradigm is tabbed pages of parameters, grouped by type — Main, Early, Reverb and Mod. The bottom row of buttons are designated as 'Focus Fields', which by default are the parameters TC considers most likely to require adjustment. However, it is easy to assign the Focus Fields to whichever parameters the user considers most useful. Helpfully, the Focus Fields can present parameters from several different pages.

If you have an hour or two to spare, the degree of control on offer here allows you to dig into the minutiae of a patch and to design a preset from the ground up. Given the time, the control available enables you to construct really impressive spaces and to emulate many less impressive, but 'difficult', environments.

In the time-conscious, pressured world of film, designing spaces from scratch is frequently out of the

question so a wide variety of presets is essential and VSS-3 has them in abundance. Divided into logical groups to make them easy to locate, film has 12 folders and music 7 with a total of around 200 presets in all. If a preset isn't quite appropriate for the purpose, a quick tweak is generally all that's necessary to fine-tune.

With many reverbs, mono-ing the output is a recipe for disaster and means big compromises when mono compatibility is an issue. One of the VSS design aims was to maintain mono compatibility and I was thoroughly impressed with the results. The VSS-3 manages to add character to sources without drowning them in a wash of reverb. The sense of 'being there' can be almost uncanny. To put this another way, treated with the appropriate preset, a dry sound can be convincingly placed in an instantly recognisable environment. If you cannot afford a System 6000, the PowerCore VSS-3 proposition is a sensible choice. I just wish I had had tools like this a few years ago. ■

Contact

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PROS

System 6000 reverb at a killer price; excellent for sound for picture; interesting interface.

CONS

Mono Stereo only; interface takes a while to get used to.

EXTRAS



TC-Helicon's VoicePro is described as 'the most technologically advanced voice-processing unit on the market'. A combination of proprietary voice processing algorithms and a voice-optimised compilation of vocal effects, including classic TC algorithms, it is designed to allow all aspects of a vocal performance to be altered once the talent has left the studio.

Features include TC-Helicon's VoiceModeling, Hybrid Shifting and Flextime algorithms that permit the pitch, time and character of a voice to be refined and manipulated. Sound designers and music producers will benefit from a Transducer algorithm that emulates telephones, radios and other quality reducing devices.