PAUL MAC looks at the details
of the bigger picture.

TC Electronic's Studio Konnekt 48 can best be described as a compendium of inputs, outputs, control, processing, and routing. The FireWire connections are just a small part of a much bigger picture that, hopefully, I'll be able to convey over the course of this review.

First, the number: 48. This is derived from the combined total of inputs and outputs available to a single Studio Konnekt 48. So, that's 24 physical or 'via FireWire' inputs, and 24 outputs. The output stage though needs clarification, as it is really set-up in two stages – the output from the internal routing of the unit (internal mixer, DAW outputs, and direct from inputs), and the unit's physical outputs. The former can be assigned, as you wish, to the latter. This is, of course, how FireWire things mostly work, but the software that comes with the Studio Konnekt 48 makes a very good job of pointing it out, and TC takes full advantage of it by throwing three virtual speaker sets (routing set-ups) and bass management into the fray.

routing and input status, processing control, remote control set-up, and even a tuner. It's worth remembering that all of this is simply control – the DSP is in the main unit and the host has no say in the matter – which is why you can use it 'standalone' (once set up).

In the mixer screen you assign up to 24 available inputs to 24 available mixer channels. By default, the software throws a few channels up there for you, but the rest you have to put in with an 'add channel' button and drop down menu of all the input options. There's a nice graphic of the input type and a label at the top of the strip, then metering, and then a space for inserting one of the two on-board Fabrik C compressors. Below this stuff is the 'direct monitoring' section (which you can disable if required), with three sends (one is permanently connected to the onboard Fabrik R reverb processor, and the others – Aux 1 and 2 – are assignable to the various output options), a pan, mute and solo switches, and level faders. Two standard inputs are the

TC ELECTRONIC
STUDIO KONNEKT 48
FIREWIRE INTERFACE

In And Out

With '48' defined, it's back to the beginning. Actual physical connection options to the unit begin with four mic preamps (TC IMPACT II) with individual pad switching, phantom power, combo-style front panel inputs, and gain knobs. Around the back there are eight quarter-inch line inputs and outputs; four optical connections – either eight channels of ADAT or Toslink, or 'double' ADAT for eight channels of hi-res (176.4 or 192kHz), SPDIF I/O, left/right XLR connections (main out), and two FireWire connectors. Then there's Wordclock I/O, MIDI I/O, and RJ-45 for the remote, and power. All that remains on that front are two headphone outputs with individual level controls. That, I think, is pretty much the limit of what you could physically fit on a 1U rack, I/O-wise. From here you have to jump to the TC Near software. I did have an earlier version of software for the Studio Konnekt 48, but there were a few quirks with it. Since then, version 2 has been released, along with firmware for the unit, and those quirks have gone. Under Leopard, the software did quit on me a couple of times, but the unit carried on regardless, so nothing fatal occurred.

TC Near is where you'll find a nice big graphic overview of the system, including tabs for the mixer, and output

DAW Main Out, and the Talkback. Talkback facilities include Fabrik R level, dim level options (Aux 1, aux 2, main), a talk switch, and a fader.

Aux 1, Aux 2, and main mix output channels have their own strips with, usefully, Fabrik R return levels, metering, and (for the auxes), 'To Main' switching.

Out And Out

The set-up section is dedicated mostly to outputs. I've used some very complicated version of this in the past with other units where anything goes, and to give TC its due, this one is fairly straightforward, in a good way. Signal path runs from left to right, with the fixed entities of the physical outputs over on the right hand side. Say, for example, you were dealing with the row that ends up at Line Out 5, you simply select its source on the left from main mix, auxes, reverb send, DAW outputs, and physical inputs. It's the middle bit that gets really interesting. You can assign these sources as direct line outs (0dB straight out) or as speaker outputs (subject to attenuation, and delay settings; and what is more, there are three possible speaker set-ups – setup within A, B, and C tabs, plus a generic bass management section that uses 'main and 'sub' output channel designations and provides crossover, HP and LP filtering, and sub- attenuation.

Whichever way you look at it, this is still output routing. It's just that TC has taken away the usual clinical approach and paid attention to the needs of the target audience. Yes, the speaker-set thing adds a level of complexity, but it also adds a level of familiarity.

Remote Working

A highlight of the Studio Konnekt 48 package is the little desktop remote that comes with it. The so-called Studio Control connects via Cat5e to the rear of the main unit
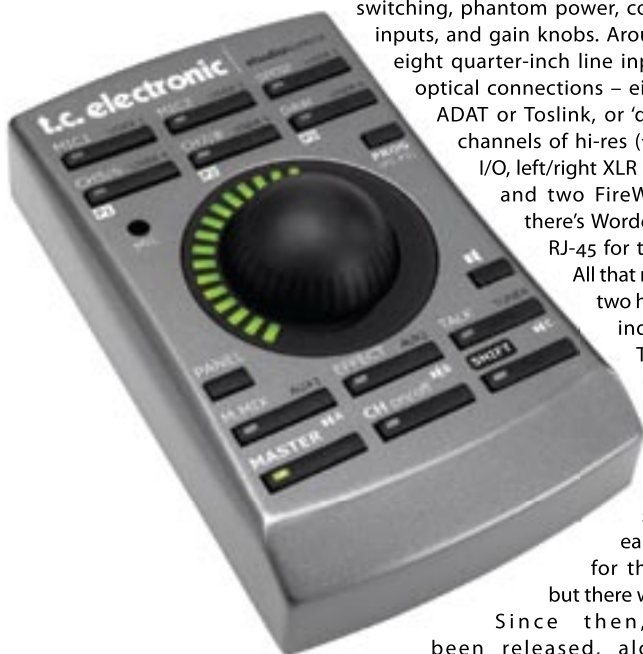
THE REVIEWER

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and, while compact, it's well built (metal), looks good, and is heavy enough to stay where you put it.

The Studio Control is also an object lesson in getting as many control options onto such a small device. This feat does mean that there are double and triple-function buttons and associated modifier keys, along with a rotary encoder, to make it all happen, but even if your time on the buttons is minimal, the encoder is, by default, a large master volume control: fantastic. In fact, the encoder is one of the push-button types. The default 'push' behaviour is a settable 'dim' level for the master channel, and pan/balance for other channels (but can be set to control the reverb or aux sends if required).

All the buttons on the Studio Control have sensible one-touch defaults, such as the first two mic inputs, a couple of line input pairs, the DAW channels, main mix, the Fabrik R return level, and so on. You can also call up six user-set channels, you can choose from three on-board user 'states', and the three speaker set-ups. A Panel button brings the TC Near control panel to the fore on your computer screen (if it's running), and the all important 'Talk' button lets you use the mic that's built into the Studio Control.

The bright green circle of LEDs around the central encoder helps enormously, and the fact that the Remote defaults back to 'Master' after a period of time set by you means the potential for mistakes is minimised.

Effects Engines

There are three very different aspects to the way Studio Konnekt can help you with processing. First are the built-in Fabrik processes. In addition, there are two included DAW plug-ins for very different tasks.

The Integrator plug-in is designed to let you use hardware processes, connected via the Studio Konnekt 48, as plug-ins. The theory is straightforward – simply instantiate the plug-in, select the Konnekt device, select the first of a pair of channels to use as the send, assign the return channels, and you're up and running. There are also facilities for calibrating the round-trip latency, and for testing the left and right paths.

The other plug-in is just that – a normal VST/AU plug-in that's installed along with the rest of the software. ResFilter, it has to be said, is a very desirable plug-in in its own right with good filtering options controlled by an envelope follower and a 'SoftSat' analogue saturation section to make the difference between any old filter and a 'Res' filter. There is another particularly noteworthy feature though, and its secret lies in the fact that any instantiations of ResFilter can talk to any other instantiations. In practise this means you can select a parameter to control one or more parameters on other ResFilters. Applications go from filter-based crossfades between tracks to filter control based on the signal in other separate tracks (side-chaining on steroids). This facility opens up an already high quality, creative filter plug-in to another world of possibilities.

Unfortunately, I really don't have space to go into the Fabrik processes in any depth, though they have been reviewed before as plug-ins in Audio Media. Indeed, the two stereo Fabrik C Studio processors that come with Studio Konnekt 48 (and the Fabrik R Reverb) can be used as both on-board processing or treated as VSO plug-ins with a compatible DAW.

Both the C and the R are based around TC Electronic's MINT interface technology, designed to put a creative spin on the often dull, and numerical, world of plug-in tweaking. It's probably enough to say that these are up to the usual high standards of TC processing, yet are uniquely creative – with the main parameters mapped to graphical representations that allow several aspects of an algorithm to be controlled simultaneously.

The TC Near Mixer tab.

Conclusion

I've been using the Studio Konnekt for a while now, and can vouch for exemplary audio performance. I can also say that this unit has got more tricks, tools, and possibilities than anything else in the price range. On top of those things is a layer of friendliness that puts it properly into the context of a small studio set-up, where nobody wants to be grappling with an routing matrix of nightmarish proportions and so flexible a system that it turns every average user into a victim within two minutes.

If there were a couple things that I could add to the unit, they would be phase invert on the monitoring section of the mic channels, and on-board guitar effects (however minimal) for lower latency monitoring of a processed guitar as a convenient guide when tracking.

There are quite a number of nooks and crannies that I didn't explore in this review, but you should already have gathered that the Studio Konnekt is a very capable potential addition to any Native DAW set-up, and can also double as a standalone unit for field recording and monitoring duties – especially with the remote in the picture. Very nice indeed. *AM*

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