

SOUNDCRAFT SPIRIT 324 LIVE

By Mike Sokol

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I GREW UP in an analog world. When I first started mixing sound for my own bands back around 1968, things were simple. A big mixing board would have four to eight inputs, maybe one effects send to an internal spring reverb, and a mono output. Nowadays the sound-reinforcement scenario is much more complicated. Sophisticated listeners require that nearly everything on a live stage run through the console, which has grown to 16 input channels or more for even simple weekend club gigs.

While I have one foot firmly in the tube and analog world, I've always embraced the latest audio technology, especially digital recording, processing, and editing — so I'm not afraid of much when it comes to using cool audio tools live. Still, the thought of using multilayer digital consoles for live gigs has always given me a touch of terror. For example, you simply don't have enough time to flip through a bunch of menus when a vocal mic is feeding back, and you don't want to have to deal with anything complicated just to, say, adjust the subwoofer send.

So when asked to review Soundcraft's new Spirit 324 Live console, I said I would give it a go, all the while feeling my heart do a little dance. It's that love-hate thing. I love new technology, but I'm always nervous that it won't deliver on its promises.

OUT OF THE BOX

The 324 Live is a deceptively small console (it weighs just under 32 pounds) that can do far more than its diminutive footprint would suggest. The 324 Live is based on the Spirit 328 digital studio console and shares much of the 328's architecture and feature set, but there are some significant differences. For example, the 324 Live lacks the two 8-channel ADAT Optical inputs and four of the eight subgroups found on the 328. But the 324 Live has four assignable Matrix outputs you can use to drive subwoofers, center-channel fills, or delay stacks; a talk-back section; and improved solo monitoring — all of which make it much more useful as a live mixer.

The 324 Live sports 24-bit A/D and D/A converters and 24-bit throughput, resulting in exceptionally high sound quality overall. You get 16 analog and 16 digital input channels, analog and digital stereo I/O, and lots of analog and digital output options. The console has a 3-band fully parametric equalizer on every input channel, four auxiliary sends per channel, four mute groups, three types of solo (AFL, PFL, and Solo-in-Place), and a built-in meter bridge.

But wait, there's more — you also get “snapshot” scene automation (and the capacity for MIDI remote dynamic automation); a pair of onboard dynamics processors that you can patch digitally into any input, bus, or output; and two onboard Lexicon effects processors that provide delays, reverbs, and other ear candy.

COMINGS AND GOINGS

The stock 324 Live comes with 16 channels of analog inputs on XLR (mic) and ¼-inch TRS (instrument) connectors, and 16 channels of TDIF digital inputs, for a total of 32 input channels. Each of the 16 analog input channels includes a mic preamp with a trim control, a TRS insert (something of a rarity on compact digital mixers), and a 100 Hz low-cut filter. A global phantom power switch turns on 48V power to all 16 microphone inputs simultaneously. Analog (¼-inch TRS) and digital (XLR and RCA) stereo inputs are also provided.

Output connections on the 324 Live include XLR jacks for the main left and right outputs, the four Matrix outputs, and two assignable Floating outputs. Quarter-inch TRS jacks output the four auxiliary and two monitor sends, and a cue-monitor function allows you to connect a cue wedge for monitoring channels in solo mode. There's also a word-clock output for synchronizing external digital devices, as well as MIDI In/Out/Thru connectors.

For live recording, a prefader output function lets you map analog inputs 1 to 16 directly to TDIF inputs 17 to 32 prior to the faders. This allows you the convenience of recording 16 analog channels directly to a pair of Tascam decks (such as the DA-78HR) without recording your live fader moves.

If you need more mic channels, you can add up to two optional Mic Line Interfaces (\$1,099.95 each), which connect to the TDIF connectors. Each interface gives you eight more XLR and ¼-inch TRS inputs with preamps, inserts, direct outputs, a highpass filter, four-stage metering, and individually switched phantom power. An Analog Interface (\$415.95) gives you eight analog inputs and outputs on 16 RCA connectors, and an AES/EBU Interface (\$699.95) offers four pairs of AES/EBU digital I/O.

FADER LAYERS

There are 16 motorized 100 mm channel faders (which are actually digital encoders and pass no audio) that you can switch between four different control layers, allowing them to do quadruple duty. When assigned to the first layer, the faders control the 16 analog inputs, and when assigned to the second layer, they control the 16 TDIF digital inputs (17 to 32). At the third layer, the faders control the four group, four Matrix, four auxiliary, and two effects sends, along with the mono output and solo trim levels. The fourth layer sends MIDI commands.

A 10-segment LED meter is located above each input strip, and a pair of 16-segment LED meters monitor output levels and the status of dynamics processing. One really cool function is the ability to split the LED displays so that they show the overall levels of one fader bank while also displaying the peak-overload LED for the alternate layer. Called Alt PK, for Alternate Peak Level, this function goes a long way toward letting the operator keep an eye on all 32 inputs without having to resort to flipping back and forth between layers. This makes the 324 Live a real powerhouse.

REMEMBER ME

The 324 Live's snapshot automation has 99 memory slots, allowing you to store every internal patch, effect, and level (with the exception of the trim controls) and recall them with the push of a button. For example, you can save a patch for the sensitive ballad you like to do right before the metal-thrash set, and transition instantaneously between the two. Use it for anything you like, but once you get used to saving your major patches, you'll never want to go back to resetting the console manually for each song. This function makes the 324 Live especially useful for small theaters, where a group might be performing the same play a few dozen times. Once you have set and stored all the appropriate levels for each scene, you can simply call up the patch as each scene arrives, confident that the proper body microphones are muted and the lead actor's mic is turned on. Of course, the same would apply for bands that require complex mixer reconfiguring between sets or even individual songs.

E-Z STRIP

Overall the Spirit 324 Live provides a lot of useful features in a small box. As with all things digital, however, the ability to access needed features easily is more important than the full feature set — and that's what sets the 324 Live apart from the crowd of digital mixers.

Another feature that makes the 324 Live stand out is what Soundcraft calls the E-Strip — a full channel strip's worth of knobs and switches turned on its side that you can patch to whatever input channel needs adjustment. Think of it as a virtual input strip that lets you access any channel at the push of a button. Just select, say, channel 10 for bass guitar, and you instantly have access to three bands of parametric equalization controls, four auxiliary sends, two effects level sends, and stereo panning for that channel.

The lighted controls show you the virtual settings of each pot; you just adjust one way or the other to change the corresponding parameters. Similarly, if you want to see the pan setting for all 16 channels simultaneously, simply pushing the pan button causes the E-Strip to display them. This is the first small-format digital console I've operated that is truly usable in a sound-reinforcement situation.

LIVE SPIRIT

I used the 324 Live for a month's worth of small gigs, and after an initial shakedown cruise I was pretty much up to speed. Because these were all small acts in a club situation, the 16 built-in inputs sufficed and I had no need for an optional expander interface.

The equalization section was quite useful and musical, and I could achieve the desired sound easily without resorting to lots of knob twisting. The Lexicon effects, particularly the reverb patches, were first-rate for a built-in unit. The stock effects programs offer plenty for anyone to get started right from the get-go, and a few parameter tweaks are all you need to personalize them.

One of the few problematic things about the 324 Live is that it has only one pair of dynamics processors. Yes, you can patch these digitally to anywhere you might need them, and true, there are insert points in each of the input channels, but that means you still need to bring along a rack of compressors and patching cables. Once in the digital domain, I would prefer to handle basic dynamics processing within the console itself. Even a simple compressor-gate on each channel (as many other small digital mixers have) would make it possible to handle a drum kit without resorting to a rack of outboard gear.

Another limitation I would prefer not to endure is the global phantom power switch. You should be able to power a few condenser microphones without sending power to your dynamic and other mics, which are still the most common types of mics used in sound reinforcement.

One final concern is the overall console operation: as easy as it is, it's still a bit complex for a neophyte operator without any training. I couldn't just stick a 324 Live in a club, mark up some board tape with a Sharpie, and walk away, leaving it for another engineer to use later that night. It can be quite intimidating for a first-time operator when the motorized faders

jump up and down as you access the various layers, and not being able to see all the meters at once is also a little challenging. Consequently, I ended up running the sound for a few gigs where I would normally have turned it over to the band's engineer. This is not a criticism of the 324 Live console per se, but a general training issue that anyone coming from a big analog console to a multilayer digital console must address.

LAST WORDS

The Spirit 324 Live is jam-packed with lots of great features, reasonably priced, expandable enough to be useful in a wide variety of applications, and about as easy to use as a small digital console can be. I highly recommend that you take one for a test-drive and check it out for yourself — just make sure you don't do your test-drive at an important gig!

Mike Sokol has been mixing on all types of consoles for 30 years. He still has his Kustom 150 P.A. head with four high-impedance inputs, a spring reverb, and 75W of RMS power. What a long, strange trip it's been.

SPIRIT 324 LIVE SPECS

Analog Inputs (16) XLR mic, (16) ¼" TRS line, (1 pair) ¼" TRS stereo, (1) XLR talk-back mic

Digital I/O (16) TDIF, (1) XLR AES/EBU, (1) RCA S/PDIF

Outputs (1 pair) XLR mix left/right, (1 pair) ¼" TRS monitor, (4) XLR Matrix, (1) ¼" TRS mono, (4) ¼" TRS aux, (2) XLR Floating

Converters 24-bit 128x oversampling

Internal Processing 24-bit, 56-bit bussing

Onboard Processing (2) Lexicon stereo multi-effects, (2) stereo dynamics processors

Dimensions 28.17" (W) × 6.3" (H) × 21.15" (D)

Weight 31.7 lbs.

PRODUCT SUMMARY

Soundcraft Spirit 324 Live
digital mixer
\$4,799.95

Overall Rating (1 through 5): 4.5

PROS: Excellent overall sound quality. Equalization section very useful and musical. E-Strip makes accessing multilayer functions almost as easy as on an analog console.

CONS: Only one pair of dynamics processors means you have to bring external compressor-gate for live gigs. Phantom power not switchable for individual channels.

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