Soundcraft EFX12

Soundcraft have been in the business of making mixers for over 30 years, and their latest range combines analogue expertise with Lexicon digital effects, in a low-cost, compact format.

Paul White

The Soundcraft EFX series of mixers can be used both live and in the studio, though the layout and feature set suggests that live performance is the primary target application. One thing that endeared me to this mixer right away was that the 12-channel version under review comes with 12 mic preamps plus a couple of stereo line channels — not four mic preamps plus four stereo line-only channels, which is what some of their competitors seem to offer under the ‘12-channel’ badge. An eight-channel version is also available for those needing fewer inputs. Conceptually, the EFX is a very straightforward and quite compact mixer built into a tough metal chassis that can be rack mounted if necessary, but its 24-bit onboard effects are provided by Lexicon, the biggest name in electronic reverb, which really raises its game. The included reverb, modulation and delay algorithms run on Digitech’s AudioDNA chip, the same one that powers the Lexicon MX500 outboard effects processor. If you’re wondering why so many big-name companies are involved in this one product, it’s because they’re all owned by the same parent company, enabling the individual companies to utilise each other’s expertise.

Both the 8 and 12 mono input versions come with two additional stereo line channels, and there’s a post-fade effects-send control on each channel feeding both the Lexicon processor and an output jack, in case you prefer to use a different outboard effects device. The onboard Lexicon processor offers two banks of 16 effect types, selected via a 16-way rotary switch (which you turn right around to step between banks). The first bank covers the whole range of reverb types, and the second bank covers delay and modulation effects. Each effect setting has three variable parameters, plus a tap-tempo button for where this is applicable. User effects settings may be stored, and in addition to a clip LED that helps you avoid overloading the effects section, there’s also a Mute button making it easy to kill the effects between songs. This is doubled up on a footswitch jack, enabling those bands mixing from the stage to mute their own effects using a standard on/off footswitch. Overall effects level is controlled by a fader, which, like all the other faders on the mixer, is a 60mm type.

Despite its small size, the Soundcraft EFX12 is heavier than expected, and is powered via an IEC mains socket tucked away in a step under the mixer body — far preferable to a power adaptor. Phantom power for the mic inputs is switched globally, and the mains power switch is underneath the unit alongside the power inlet. Apparently the circuitry uses the GB30 mic preamp also used in the larger LX7ii and GB Series professional consoles, and all the channels have a three-band equaliser with centre-detented gain controls. The 12 mic/line channels also have a mid-sweep frequency control that goes from 150Hz to 3.5kHz. This is a good range, and extends down far enough to address some of the lower-mid boxiness problems that many other sweep EQs fail to reach, though there’s no EQ bypass and no switchable low-cut filters. All the EQ sections have a more than adequate ±15dB gain range, and there’s a clip warning LED on every channel. Each channel has a mute button and a PFL button above the 60mm channel fader. TRS insert sockets are fitted to the 12 mono mic/line channels, where the mic input is on a standard XLR and the line input on a quarter-inch jack. There’s no mic/line switching, as inserting a line jack overrides the mic input.

For foldback or a second effect, there’s a further send (Aux 1) that can be set to
pre-fader or post-fader via a switch in the master section, but to save cost and space, there are no master output level controls for the two sends. All channels have a pan control (actually a stereo balance on the stereo channels), and the stereo line channels may be used as mono channels if preferred, by plugging into the left input only. Two-track inputs and outputs are available on phono connectors, providing a useful way of recording a gig or playing your iPod through the system between sets. The two-track input may be routed either to the main stereo mix, or the monitor (and headphone) mix.

In addition to the two stereo line channels and the two-track return, the mixer also features a stereo effects return with level control, that could also be used as a simple extra stereo line input. As well as the main outputs on XLRs (which also feature TRS jack inserts), there’s also a mono output jack and two further stereo jacks for the monitor output. As with most live-sound consoles, using a channel PFL button to solo or adjust an individual sound only affects the monitor and phones mix, not the main outputs.

A couple of 10-section LED meters monitor the main output level, and double up as PFL level meters when a Solo button is depressed. There are no individual channel PFL lights, but rather a single master PFL LED that comes on if one or more channels are soloed.

**Simplicity and sound quality**

As a straightforward mixer, the EFX takes some beating both for simplicity and sound quality. The mic preamps work well with either dynamic or capacitor microphones, and are gratifyingly quiet and transparent. Though the technical spec reads much like any other mixer, claiming a 20Hz to 20kHz response and an equivalent input noise of -128dB, this doesn’t tell you much about what the mixer actually sounds like, and in this case it sounds rather good. Though there’s always a limit to what can be achieved with a three-band EQ, this one has a useful mid-sweep range, while the high control sounds bright and airy. I found that more than a hint of bass boost would muddy up the sound, but in cut mode it can be used to clean up bass-heavy sounds, and may also go some way towards making up for the fact that this mixer has no low-cut filters on the mic channels. There’s plenty of level on the headphone output, which is essential when soloing sounds during a performance, but what sets this mixer apart from most low-cost consoles is the effects section. The reverbs are first class, as you’d expect from Lexicon, and because they are adjustable, it is easy to tailor them to your own needs rather than having to put up with a ‘near enough’ preset. You get all the popular reverb types from hall to plate, as well as the gated and reverse variants, while the delay section can be tweaked to give some nice slapback settings, conventional delays and stereo ping-pong delays. For those weirder moments, there’s also a reverse delay and all the usual modulation effects, as well as phased delay and rotary speaker delay, so you can cover pretty much any vocal treatment. Where tap tempo is appropriate, the Tap light flashes at the current rate, inviting you to tap it to change the delay time if you need to. Pressing the Save button causes it to flash for a couple of seconds, then it lights steadily to show the edited effect has been saved. You can’t copy various edited versions of the same effect to different memory slots, as you can with most outboard units — you can only save one set of adjustments per effect. Even so, there are enough usable reverb and delays that you should be able to create enough custom reverb and delay treatments to see you through a typical gig. The reverb has variable pre-delay, decay time and brightness, while the delays have variable delay time and feedback, plus one additional parameter that varies depending on what the effects is.

Ergonomically, the mixer is generally well set out, with clear colour-coded knobs, though the numbers around the effects select knob are very small and quite difficult to read, even under normal lighting conditions. I also found the list of effects types hard to read under typical gig conditions, and there’s no provision for powering a gooseneck lamp as there is on some small mixers. When you power up the mixer, it remembers the last effect number used but always selects Bank A, so you do need to check you have the right effects setting in place if you plan to open with an effect from Bank B. There are coloured LEDs by the parameter knobs that extinguish if you change the setting, and as with many small consoles, I found the LEDs rather too bright under normal gig conditions as they make the panel legend even harder to read. However, they do need to be bright for outdoor gigs, so unless a dual- or variable-brightness system could be added, which would increase the price, it’s hard to see an alternative solution.

Overall, the mixer performs exceptionally well within its price range, and offers more mic inputs than many consoles claiming to feature more channels. The sound quality is all you’d expect from Soundcraft, the effects are the best I’ve heard to date in an affordable console, and the ability to edit the effects and tap in delay temps is excellent. The lack of a separate power supply is also a big plus for me, as is the compact but rugged format, and the fact that all the main outputs and inputs are balanced (with unbalanced connections for the monitor outputs and stereo returns). Some corners have been cut to keep the price down — no low-cut filters and no EQ bypass — but on the whole there’s nothing missing that you can’t do without. A great little mixer.