Soundcraft Spirit M8 Mixing Console

BY MARK AMUNDSON

Recently, Soundcraft has done an overhaul of its product organization and has decided to make its ties to its sister line of Spirit mixing consoles a permanent part of itself. In keeping with merging of the Soundcraft and Spirit lines of consoles under the Soundcraft name, a new line of four, eight and twelve mic input consoles with professional features called the "M Series" was created.

I received a Soundcraft Spirit M8 mixing console that was nicely double-boxed. When I opened the packaging, a beauty of a black mixing console emerged sporting curved aluminum side trim panels and a sloped front design. Users also have the option of removing the side panels for mounting in an 11-rackspace road case. Vital statistics include a modest 18.1 pounds of weight in 19.9" wide by 4.7" high by 20.6" deep form factor.

The rear panel of this mixer is fairly sparse and includes only the IEC power cord socket, mains fuse, and a S/PDIF RCA jack for handling the 44.1 kbps stereo digital audio output signals. The rear panel provides the sloped feature for tabletop use but only has a couple of inches of depth to enclose the mixer's internal power supply electronics. The rest of the user interface is placed on the front console surface for easy access.

The front panel layout of the M8 consists of eight XLR input microphone channel inputs to the left of four similar dual TRS stereo inputs for line level inputs next to a full-featured master output section for stereo mix outputs. The beauty of this console is how you look at it for its utility. Live sound giggers will appreciate professional grade mic channels, plenty of stereo inputs for stereo effects returns, and support for a couple of stage monitor mixes. Recording enthusiasts will like the compatibility of the eight mic channels with switchable pre/post fader direct to tape outputs, digital stereo outputs, two-track playback inputs, and separate control room monitoring that switches to PFL (Pre-Fader Listen) on demand. Disc Jockey and Karaoke Masters-of-Ceremonies will appreciate the eight stereo mix returns, headphone output, and plenty of mic channels that also can double as additional stereo line level returns; all compatible with –10dBu levels from turntable preamps, compact disc players, and samplers.

Features

Starting with the monophonic channels, I want to point out the biggest reason to purchase the Spirit M8: 100mm faders. While smaller faders are typical of most of its competition, professional soundmen are used to 100mm faders—anything less is a toy in their eyes. Most of the fader's critical range is in the –30 to +10 dB area with fairly even spacing over each 5dB increment—something only the most experienced operators can appreciate. The console has also borrowed the mic preamp design from the Soundcraft "Ghost" recording studio mixing console to ensure the highest fidelity and lowest noise performance. Each mic preamp includes a 100Hz high-pass filter switch to knock out wind noise and rumble from any channel not needing extended low frequency response. Also the channel includes a TRS balanced line input that is padded 26dB before running into the mic preamp.

From the mic preamps, the M8 sends the signal to TRS insert jacks and then on to a three-band "British EQ" section. Each band contains a dB scaled control for adjusting the frequency response +/- 15dB, plus the midrange has a swept frequency center control ranging from 240Hz to 6kHz to deal with most equalization needs. After the equalization section, four auxiliary sends are provided for flexibility. The two green auxiliary controls (AUX1, AUX2) provide pre-fader sends for recording or two stage monitor mixes. The two blue aux-

iliary controls (AUX3, AUX4) provide post-fader sends for sending channel signals to outboard effects. With the black metal/white lettering and the vivid colored controls, the M8 displays an attractive and professional appearance.

To add to its professional capabilities, each mic channel has mute, PFL and Direct Pre switches, plus signal present and peak LEDs. Mute and PFL switches are pretty much standard, but the Direct Pre switch switches the Direct Output jack on each channel from a normal post-fader to a pre-fader patching arrangement. The signal present and peak LEDs illuminate when their triple-monitor points (pre-EQ, post-EQ, post-fader) show signals above –20dBu and +17dBu respectively.

The stereo channels replicate the mic channels in features except for a two-band EQ section, 100Hz high-pass filter, direct pre switch. You still get all the same smooth circuits and a 100mm fader with a blue cap denoting a stereo channel. In keeping with many consoles' fader cap color codes, the white caps denote mono mic channels, blue caps stereo, red caps subgroups, and yellow caps master outputs.

The master section includes four stereo auxiliary returns; each with gain controls, peak LEDs, and RCA jacks. While I do not prefer RCA jacks in these returns, they are a perfect compromise for home studio use since I can use the stereo channels as souped-up auxiliary returns. An additional touch is the inclusion of a master auxiliary return level control with a corresponding mute switch. For auxiliary sends, each send has a master send control and an After-Fader Listen (AFL) switch to monitor the balanced TRS sends. To further accommodate recording or between set music, a playback (P/B) section is included featuring two RCA jacks, a level control, a PFL switch, and a P/B replace mix switch. A nice feature of playback replace mix switch is that the playback function still occurs regardless of switch position and only the rest of main mix is removed when used.

The master section also includes a very professional stereo output mix section including dual 12-LED bar graph signal level indicators, global phantom power switch, XLR output jacks, stereo insert jacks, a mono sum TRS output, and a stereo monitor outputs. The stereo LED bar graphs range from –30 to +15dB with the zero point representing the +4dBu (1.23 volts RMS) level. Both the mono sum and monitor outputs have balanced TRS output jacks and individual controls for levels. The M8 console also includes a Phones TRS jack and level control to monitor the main mix or any AFL/PFL selected signal. Of course there is the two 100mm yellow capped master faders for a wide –40 to 0dB adjustment of mix levels.

The M8 mixing console's specifications are fairly impressive with a 0.008% THD measured at 1 kHz via the mic to master electronics. Overall unequalized frequency response is +/1dB from 20Hz to 20kHz. Crosstalk isolation is greater than 80dB down over the same frequency range with mic channel noise measured at –128dBu. Another point to make is that the console outputs are all 75ohm or lower and capable driving +21dBu into 10kohm loads cleanly.

Moments Of Truth

As is usual, the first checks are done at home to build confidence and experience before hitting the gigs. No major surprises were found in connecting up, and all controls and switches worked as advertised. One thing I want to point out is that these Soundcraft Spirit consoles do not have any additional gain stages after the master summing of signals (this explains the –40 to 0dB master fader scaling), meaning that any signal levels above 0dB have to come from the channels themselves or through a combination of many channels at near the 0dB point. Since I prefer to mix at 0dB (+4dBu) with peaks in the 6 to 10dB range for full sound system volume, I had to get used to hotter signal levels at the mono and stereo channels to have some margin of extra volume at the master faders.

The first audition of the Spirit M8 was at a simple speakers-on-sticks type of gig for a 100-person private party at a Legion hall. The input signals consisted of five vocal mic inputs plus two instruments (acoustic guitar, fiddle), and a CD player for between set tracks. All the giggers enjoyed the quiet and clear sounds and the swept mid EQ section permitted just the right amount of presence adjustment on the vocals to make everything sound sweet. Having all balanced outputs for monitor mixes and mains to keep the demons of hum away from the speakers was a bonus.

The next gig was a medium sized (300 person seating) club with a five-piece blues/rock band. This job was done to be on the cheap, so we simply miked two vocals, snare and kick drum, and connected a single effects processor. The M8 console is perfect for these kind of quick jobs, giving me (the sound person) all the visibility into the signal levels and quality of sound of each channel. Most mixers that compete in this low channel-count market do not have PFLs or headphone monitoring capability, so one tends to guess on gain structure and frequency equalization.

Conclusions

The Soundcraft Spirit M8 is modest in its eight microphone channels, but pleasing in the number of its professional features. Its versatility for live sound, project recording studio, and sub-mixer applications makes it a perfect second console for when the big console is too much, or needs a little extra capability. And, thanks to its S/PDIF outputs, purchasing this analog mixer does not mean instant obsolescence if you convert to a near all-digital system in the future.

The negatives of this can be summed up using the "it could have more of this and more of that" cliché, but that's exactly why you would buy a big mixing console in the first place. Sure a four-band EQ section would be fine, and more auxiliary sends would be great, but they do not credibly extend the utility and usefulness for the compact size and modest price tag. The positives are the pro-grade features, the looks, performance and price of the M8. GIG

SOUNDCHECK

The Gear: The Soundcraft Spirit M8 Mixing Console.
The Gigs: A Private Party at the Forest Lake American Legion with The Typo Creek Band. A Blues gig with the Shuffle-Cats at Heroes Bar and Grill.
Who It's For: Giggers with modest mic channel needs, but with professional feature tastes.
How Much: $849

PROS

100mm Faders
High quality mic preamps
Flexible to a variety of applications

CONS

RCA jacks on stereo auxiliary returns
An extra swept-mid EQ section would be nice

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