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M80



By Loren Alldrin

PreSonus is one of those companies that just doesn't run out of good ideas. Though relatively new on the scene, the company has received a great deal of attention for its eight-channel ACP-8/ACP-88 and Blue Max compressors. Now, PreSonus is presenting the M80, an eight-channel mic preamp that offers an enticing package of cool features, great sound quality and solid value.

Product Points

Applications: Studio recording; live recording; live sound reinforcement

Key Features: Eight mic/instrument channels; stereo mix bus; headphone output; master output; individual balanced send/return; IDSS "warmth" control; high-pass filter; aux bus input

Price: \$2,000

Plus

Focused, chunky sound

Stereo mix bus

Balanced send/returns

Good headphone amp

Minus

Level metering could be better

Large external power supply

The Score

An affordable multichannel preamp with an aggressive sound and some useful added features.

Features

The M80 (\$2,000) is an eight-channel mic/instrument preamp in a two-rack-space package. Each channel uses a combo Neutrik™ input jack that offers both XLR mic and 1/4" instrument inputs. The inputs boast a Jensen transformer and Class-A FET electronics (with "NO capacitors," as the manual proudly states).

Each input has balanced send and return jacks (a rarity at this price point) and a balanced XLR output. You can use the balanced send as a 1/4" output, and the balanced return as a 1/4" line level input. The manual doesn't state the operating level of these jacks.

The M80 has a few other inputs and outputs as well, thanks to its stereo mix bus. A pair of XLR jacks carry the stereo output, with their level controlled by the M80's master output knob. Also tapped off the stereo bus is the M80's headphone output, with a 1/4" jack and level control mounted on the front panel. A pair of XLR inputs allow you to route a stereo source (mixer, stereo playback deck, another M80) right to the M80's stereo bus.

Out front, the M80 is bristling with controls. Each input has phantom power, phase reverse, 20 dB pad and 80 Hz high-pass filter switches. A large gain knob goes from 0 dB to 60 dB, with the gain setting marked off in easy-to-read 10 dB steps. A L/R switch assigns a given input to the stereo bus; just above it is a pan control that places that input in the stereo field.

The last input channel knob is the IDSS control, which goes from 0% to 100%. This knob tweaks the input transistor circuit to generate harmonic distortion. These harmonics are not unlike those generated by mildly overdriven tube circuitry or analog tape, earning this knob the tired audio cliché "warmth" in PreSonus' manual and marketing materials.

Finally, each channel of the M80 has an eight-segment LED meter that tracks its output level. These LEDs are calibrated in 9 dB steps from -36 dB to +18 dB, with the top red LED lighting just before clipping (the manual doesn't state where). There are no output level or peak meters for the stereo bus, which makes summing very hot input signals a bit of a risk. Thankfully, the M80 has lots of headroom (maximum output level is specified at +28 dBu).

In use

Testing mic preamps is always an enjoyable challenge, because their sonic differences can be very subtle. It didn't take long, however, to detect the M80's sonic fingerprint. The PreSonus imparts a favorable coloration that takes it out of the realm of the ultra-transparent, clinically clean preamps. For most types of recording, I favor a preamp with some character.

With the IDSS control set to minimum, the M80 has what I would call a "focused" sound. In contrast to preamps that sound extremely open and airy, the PreSonus has a compact, aggressive sound. Its forward-sounding midrange has a little bit of edge to it, which I really like. You could almost say the M80 sounds tough.

The preamp captures plenty of detail, but its top end doesn't sound overly extended or hyped (in spite of hitting 60 kHz at just 0.5 dB down). One vocalist/mic combination that was too sibilant with another mic preamp sounded much more pleasing through the M80. Likewise, a mic I thought was too bright on an acoustic guitar sounded much better through the M80.

Roll the IDSS control on, and the M80 takes on a different character. Up to about 80% throttle, the ear perceives a very slight loss of top end and a thickening of the low mids. Set to maximum, the IDSS control chops the perceived high-end response noticeably. Gain seems to drop a bit, and the low end really fills out. Higher IDSS settings even flatten out dynamics a little, which can be a nice effect.

It may seem odd that an increase in harmonic distortion would cause a perceived dulling of the sound, but that's definitely what my ears heard. I found the M80 to be chunky enough without the IDSS circuit engaged, though, and I preferred the uncolored setting for all but the brightest mic or sound source.

In contrast to gear with the hard-to-use Euro-cool vibe, I appreciate the M80's no-nonsense controls. Gain is smooth and predictable across the whole range, the constant-power pan controls feel great, and switches are easy to find and engage.

The M80's mix bus opens up countless new applications. You can plug phones into the front of the M80 and use the L/R assign buttons like solo controls for monitoring. You can combine and pan top- and bottom-head snare mics to one output, or combine toms and overheads before recording. Put a guide mix on one channel of an ADAT or HD recorder, grab the M80 and a handful of mics and record your favorite drummer in his living room. Mic up a choir or string section or whatever and record on-the-spot to stereo. The possibilities are endless.

Headphone amps can be an afterthought on a product like this, but PreSonus has equipped the M80 with a good one. It has enough power to drive even stubborn high-impedance phones to respectable levels, and sounds very good.

Complaints? Eight LEDs worth of metering per channel is a real plus, but I would have appreciated a little finer resolution where it really matters. LEDs at -9 dB, 0 dB and +9 dB are all you get, making the metering of little use for actual recording (especially with a digital recorder). A signal present indicator around -50 dB plus a cluster of LEDs around 0 dB might have been a better approach.

The test unit shipped with a huge outboard power supply, easily the largest I've seen on anything short of a mixing console. It connects to the M80 with a clunky locking nut that feels none too sturdy. According to PreSonus, the original internal supply design compromised noise performance, so the company went with the large outboard unit.

Summary

The M80 is what I would call a microphone power tool. It gives you eight channels of no-fuss gain, a convenient mix bus and flexible I/O. The IDSS circuit may come in handy now and then, but I wouldn't buy the M80 for it.

Instead, I'd give the M80 serious consideration because it's a great-sounding, feature-packed preamp that will set you back less than 300 bucks a channel. Check it out.