

Lawson L251 Tube Condenser Microphone

Classic Telefunken Design and Sound In a New Mic

The Lawson L251 is a side-address, dual-diaphragm tube condenser mic that offers many extras, including an infinitely variable polar pattern, two bass-frequency contour settings and a 10dB pad. The mic's model number is derived from its faithful reproduction of the 1-inch, 6-micron capsule used in the venerable Telefunken Ela M 251 tube mic. Like Lawson's other mics, the L251 oozes artistic coloration and has a distinctly vintage vibe.

MAINTAINING FAMILY TIES

The L251 will look familiar to anyone who has worked with the company's L47MP. Both mics have a cylindrical shape and roughly the same dimensions. There are two cosmetic finish options: Buyers can order the L251 with either a nickel-plated or 24-karat-gold head grille and base for the same price. All of Lawson's head assemblies (capsule and grille) are interchangeable, allowing you to easily mix and match capsules with different mic bodies and electronics. The company also offers head assemblies for sale a la carte.

Weighing a full two pounds and measuring 9½ inches in length and 2½ inches in diameter, the L251 demands a sturdy mic stand with a short, counterbalanced boom arm to keep it from sagging out of position. The included mic stand adapter secures the L251 via an integral O-shaped ring that slips over and tightens around the mic's connector housing. This is a bomb-proof design that allows the L251 to securely hang upside down. As the L251's capsule is internally shock-mounted, an external shock-mount is not required.

The L251 connects to its remote power supply using the supplied 30-foot cable with latching 7-pin, gold-plated Neutrik connectors. The cable is long enough in most situations to place the power supply in the control room while tracking with the mic in the studio. That's a real advantage, because most of the controls for the L251—including the infinitely variable polar pattern control, 10dB pad and bass frequency contour switch—are on the power supply, and they change the response of the mic quite dramatically.

The rotary polar pattern control smooth-

ly transitions through all possible responses, from omni mode through cardioid to figure-8. The L251's 10dB pad lowers the capsule's polarizing voltage, thus lowering the input level to the vacuum tube. The bass frequency contour switch provides two alternate settings: One, labeled "-BASS/L251," introduces a 6dB/octave roll-off at 100 Hz to emulate the original Ela M 251's bass frequency response. (A fixed roll-off was engineered into the vintage mic to counteract its gargantuan bass proximity effect.) The other setting, labeled "+BASS/L47," flattens the response to provide extended lows and a more dramatic proximity effect. Lawson generally recommends that users choose the +BASS/L47 setting when using the power supply with a Lawson L47MP MKII mic, but there's no reason why you can't use this setting with the L251, as well. I generally preferred using the -BASS/L251 setting, because it lent more transparency to the mic's overall sound.

POLAR STROLLER

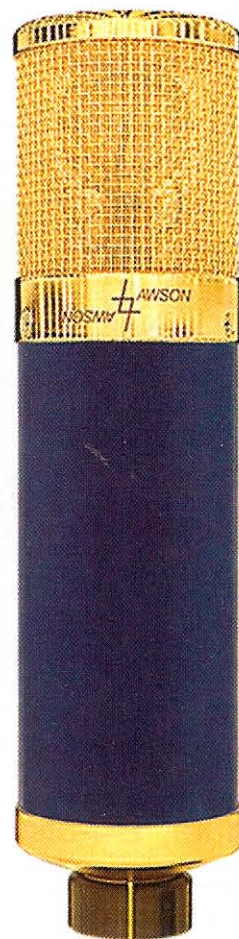
Turning the power supply's polar pattern control knob yields different frequency responses for the L251. The supplied specs and frequency response charts are not exact enough to cite responses down to the precise dB and kHz, but here's the general scoop: All patterns produce a broad 3 to 4dB peak at around 10 kHz and a response roughly 7 to 9 dB down at 20 kHz, yielding a nice presence peak and a soft vintage-style top end. As the polar pattern becomes increasingly more directional, a smooth hump between 3 and 7 kHz develops, culminating in roughly a 5dB boost in bidirectional mode in this band. Likewise, bass response below 200 Hz increases as the pattern becomes more directional.

A switch on the bottom of the L251 disables the power supply's polar pattern control and puts the mic into fixed-cardioid mode. (A cool-looking blue LED lights up inside the windscreens when you're in multipattern mode—a nice reminder.) This "cardioid-only" mode takes the mic's rear diaphragm completely out of circuit, resulting in 3dB lower self-noise and 3dB hotter output. Sensitivity is specified to be 18 mv/Pa (at 1 kHz) in cardioid-only mode vs. 11.6

mv/Pa in multipattern mode.

The L251 uses a dual-triode 6N1P (6922) tube—currently in production and widely available—in a configuration that uses both halves of the triode wired in parallel. This scheme lowers the noise floor an additional 3 dB (resulting in a conservatively rated 13dBA equivalent noise level in cardioid-only mode) and halves the tube's output impedance, reducing the possibility of current limiting and therefore increasing headroom. Maximum SPL is rated to be 134dB SPL (for 3% THD at 1 kHz) with the pad switched out, and 144dB SPL with it switched in. One other touch: The tube socket uses gold-plated beryllium-copper contacts with secure grip and low contact resistance to further thwart noise.

Lawson includes a foam-lined, water-



and air-tight Pelican case to store and transport the L251 and all accessories. It's a tight fit to get everything in the case, but there's no denying that this is a great extra.

TAKING THE L251 FOR A RIDE

My first test with the L251 was an A/B comparison with an original Lawson L47MP (not the newer mkII version), with both mics recording male vocals in cardioid (cardioid-only mode for the L251). To avoid additional coloration, I used my ultratransparent, Millennia HV-3D 8-channel mic pre and Apogee Rosetta 96 A/D with the two mics. The L251 in -BASS/L251 mode reproduced much more depth than the L47MP, as well as a fuller bottom end, more highly resolved midrange and more detailed (yet still soft) highs. The L251 also exhibited markedly lower noise and a tad higher output compared to the L47MP.

Recording another male vocalist with the L251 set to cardioid-only and -BASS/L251 modes, I was struck by the mic's warm, velvety character and sweetly articulated highs. In order to achieve the pop sound I was after, I needed to apply a highpass filter at 105 Hz and a fair amount of high-shelving EQ boost to the track, but that's typical treatment for a pop mix with almost any mic. The end result sounded gorgeous, brimming with sweet tube character. On female vocals, the L251 reproduced a similarly full bottom, soft highs and velvety texture.

I once again chose the -BASS/L251 setting when using the L251 as a room mic to record drums. I found the +BASS/L47 setting captured too much kick drum and was too boomy in this application. In -BASS/L251 mode, however, the L251 is an outstanding room mic. The creamy texture it lent to the sound was the perfect complement to the solid-state mics placed close in on the kit.

Finally, when recording acoustic guitar, the L251 lacked the high-end sparkle and detail I was after and had too round of a bottom end for my taste.

CONCLUSIONS

At \$2,495 (factory-direct), the L251 is fairly pricey, but no more so than other mics of the same ilk. The mic's plethora of controls produce many useful timbres, while always maintaining a creamy texture. For those who seek a new tube mic with vintage character, the L251 is a very worthy candidate.

Lawson, 615/269-5542, www.lawsonmicrophones.com.

Mix contributing editor Michael Cooper is the owner of Michael Cooper Recording, located in beautiful Sisters, Ore. Cooper's studio offers recording, mixing and mastering services.

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