

Mojave Audio MA-101fet

It's a small diaphragm mic but not as we know it. **JON THORNTON** sweeps generalisations and reappraises his preconceptions in search of an r'n'r stick.

David Royer is probably best known for his role as chief designer with Royer Labs, a company whose inception was probably one of the most significant contributory factors in the modern resurgence in ribbon microphone designs. What may be less well known is that he also founded Mojave Audio — in fact the original company predates Royer Labs by some years. As is often the case in pro audio (and particularly custom/boutique pro audio), the cast of characters involved in the two companies is somewhat shared but the bottom line is that the latest incarnation of Mojave Audio effectively produces Royer's non-ribbon designs, leaving the ribbon designs to Royer Labs.

Mojave Audio's initial offerings concentrated on valve based capacitor microphones, although somewhat unusually these came in large diaphragm side-address formats (the MA-200) and small diaphragm 'pencil' formats (the MA-100). A FET-based large diaphragm design followed (the MA-201fet), and the latest offering mates the electronics of that microphone with the small-diaphragm capsules of the original MA-100. So far, so simple. But it's at this point that the borders start to blur a little, starting with that perennially tricky question — just how small is a small diaphragm?

The two, interchangeable capsules supplied with the MA-101 (one cardioid, one omni) both sport diaphragms measuring just over 20mm in diameter — that's less than the generally accepted 1-inch diameter of an LDC, but not by much, and just that bit bigger than the likes of Schoeps and DPA. The capsules are of the screw on, screw off variety — although interestingly the ports for sound entry to the rear of the cardioid capsule are built into the microphone body itself rather than the capsule assembly, which I assume would preclude the introduction of a wider or narrower cardioid capsule variant.

The MA-101 (UK£450 + VAT) is also a little less svelte looking than the aforementioned Europeans.

It's a chunky affair with a wide body (in part to accommodate the Jensen transformer in the output stage)



that tapers slightly at the capsule end. Finished in matt black, it looks simple but effective, and feels reassuringly weighty. There are no external switches, although there is a switchable -15dB pad but to access it you effectively need to disassemble the microphone. While this isn't actually as involved as it sounds (and with practice you should be able to get the whole routine down to 20 seconds or so including replugging the mic), it's not as convenient as an external switch. And although I can imagine some good rationale for the decision (shorter signal path, reduced costs, removing a point of dirt/moisture ingress), it could drive some people nuts. Not me though, as I'm going to leave those pads firmly in place, for reasons which will become clear in a little while.

At this point, and at the risk of oversimplifying things, let's make some sweeping generalisations (*You're making me feel nervous. Ed*). When considering the relative merits of small diaphragm versus large diaphragm designs, it's generally accepted that a SDC sacrifices signal to noise performance in favour of a flatter frequency response. Cardioid patterns can also suffer from a certain lack of LF weight when compared with larger diaphragm designs. Increase the size of the diaphragm, and the signal to noise performance improves, but

at the expense of a less flat response. But in many ways, it is that variation in response that gives microphones their own characteristic sounds, which are beloved and exploited by engineers around the world. So here comes the sweeping generalisation — small diaphragm designs tend to be favoured by those in pursuit of capturing the 'natural' sound of a source, and large diaphragm designs by those who deliberately want to colour that sound in some way for their own

ends. Or to put it another way, the SDC is classical/acoustic, the LDC is rock 'n' roll (*I think I'm going to faint. Ed*).

Whether you subscribe to this view or not, I'm here to tell you that the MA-101fet is that very rare beast — a rock 'n' roll small diaphragm condenser. That much is apparent as soon as you put it up against a DPA4011 on an acoustic guitar. While the DPA gives you exactly what's there in the source, the MA-101 gives a much chunkier sound, aided by a slight LF bump around 100Hz even at moderate working distances. Another little peak at 5kHz gives some added bite to the sound — although care needs to be taken here as this can also accentuate problems in the guitar's set-up that the DPA doesn't bring out as much.

Moving onto a drum kit, and a pair of MA-101s was set up as a fairly close kit pair, spaced equidistant from the snare drum. One of my favourite microphones for this application is a pair of Beyer M201s — a lovely, fairly neutral dynamic microphone that helps to soften overly splashy cymbals in the balance of the kit. But there's a trade off here, as sometimes they don't capture as much transient detail or 'air' as you need. I think the MA-101s may just have knocked them off their spot here. What you get is an immensely solid sound that doesn't suffer from being as brittle as other SDCs in this application, but with that little bit more detail than the M201s provide.

Time to get up close and personal on the top of the snare drum — again an application where I don't tend to use SDCs, finding them a little bit 'flat' sounding. Again the MA-101 works nicely here — a nice solidity to the stick sound, plenty of mid-frequency attack, and with a little bit of HF EQ roll-off, not overly sizzly. With the internal pad firmly in place, SPL handling was never an issue either; not even a vague sense that the mic was approaching clipping.

After this, well I tried it on pretty much everything in a standard rock session — bass and guitar cabs, kick drum, toms — even male vocals, and while there isn't space to detail everything here, the underlying theme was the same. What you get is a versatile, easy to position microphone that has really made me re-evaluate just what a SDC can do. Don't get me wrong — this is a lovely sounding microphone, and just as suited to acoustic instrumentation as it is to amplified sources. But what it does have is character, and that makes it almost as rock 'n' roll as an SM57. Which is why the internal pad switch doesn't really bother me — in any given session I'd know where to set it. Mostly on. ■

PROS

Solidly built; good SPL handling; versatile; bags of character.

CONS

Changing pad setting a little fiddly; may be a little too coloured for some.

EXTRAS



The MA-100SP is a matched pair of MA-100 small-diaphragm, vacuum tube condenser microphones with interchangeable cardioid and omnidirectional capsules and a dual power supply. It's packaged in a single carrying case.

Contact

MOJAVE AUDIO, US:
Website: www.mojaveaudio.com