



## Grace Design M103

Adding to a formidable arsenal of preamps and monitoring solutions, Grace has now branched into the recording channel sector. **JON THORNTON** expects it to be different and good and he's not disappointed.

Michael Grace has established a well-deserved reputation as a designer of some quite exquisite microphone preamplifiers, and since 1994 the company he established with his brother Eben has been steadily developing and expanding its product line. With a range of microphone preamplifiers and A-D conversion solutions that cater for pretty much every flavour of use (single channel, stereo, multichannel, remotely controllable) the product offering has been supplemented by the introduction of a range of monitoring solutions for stereo, 5.1 and headphones. The M103 though, is the company's first foray into other areas of signal processing, and quite bravely enters what is the already fairly crowded market segment of the channel strip (UK£1,194 + VAT). What you get here is a single channel of mic preamplification coupled with a three-band equaliser and an optical compressor in a 1U — in other words a fairly standard approach with similar offerings from other manufacturers. So does it have what it takes to stand out from the competition?

Unpacking the M103 reveals a tidy looking box finished in black with polished chrome knobs and a smattering of stubby toggle switches. It all looks nicely screwed together, and plugging in and powering up (the unit has an internal power supply, praise be) results in the reassuring clicking of relays doing their stuff. The rear panel gives mic level and line level inputs on XLR, together with a line level preamp only output on XLR, and a main (post the EQ and compressor) balanced output on XLR and TRS jack. Unbalanced outputs for the main and preamp only out are also available on ¼-inch jacks — so most interfacing scenarios are well catered for. A final TRS jack on the rear panel is accompanied by a small toggle switch, and allows access to the compressor's side-chain or for two M103s to be stereo linked.

Turning back to the front panel, and it's clear that the channel strip is built on strong initial foundations with the mic preamp itself, which is the same signature transimpedance affair used in other Grace Design products. The gain control is a 12-position stepped switch, which gives a gain range of +10dB to +65dB in 5dB steps. A front panel high-impedance instrument input is also available for DI purposes — plugging into this automatically selects it as the

input rather than the mic input, and the gain range available changes to -10dB to +45dB. The usual phantom power switch and HPF (75Hz, 12dB/octave) are provided. Slightly more unusual is a 'ribbon mode' switch. Engaging this disables phantom power and raises the input impedance of the preamplifier from 8.1kohms to 20kohms.

In use, the preamp stage is extremely quiet even at the extremes of its gain range, and delivers an open, fuss-free sound that delivers tremendous levels of detail without ever sounding overly clinical.

The EQ is three-band with high and low shelving filters that can be switched to peaking if required, and a fully parametric mid band. The frequency ranges chosen are sensible, with decent overlaps — the low band runs from 20Hz to 750Hz, mid from 500Hz to 4kHz, and the high band from 3kHz to 20kHz, with 12dB of cut or boost available in each band. If I was being picky I would have liked to see a slightly wider range in both directions on the mid-band, but that would only be to allow for corrective EQ of a fairly surgical nature. And to be honest, that's not what this particular EQ is really about. It's one of those EQs that is really hard to misuse — keep the cut or boost below 6dB or so and its hard to get results that don't sound musical and polished — at times it can be almost too flattering.

The compressor section uses an optical gain element and, like the EQ, falls firmly into the 'nice' category in terms of its sound. With a maximum compression ratio of 12:1, it's never going to fall into the category of a brick-wall limiter but even at this highest ratio it remains gentle in its approach. Sure, you can induce a good bit of pumping by playing around with the time constants, but in general the sound is transparent rather than aggressive or overtly 'shaping'. And the attack time is never quite quick enough to really 'grab' the leading edge of a transient, but that means that it's hard to really flatten all the life out of a sound. Gain make-up is available courtesy of a +/- 10dB master output trim control — again being picky I would prefer a little more gain available at this stage, and any gain make-up applied here doesn't switch out with the compressor stage, making A/B comparisons at equal level a little difficult.

A channel strip is more than simply the sum of its major parts and the M103 understands this better than most, with some neat touches throughout. For

example, signal metering can be seen easily at all stages in the signal path, with a three-colour LED showing coarse signal level at the mic pre stage, another LED that shows when signals in the EQ stage are within 6dB of clipping, and a 10-segment LED meter showing final output level post the final +/-10dB output trim control. The EQ and compression stages can be independently switched in and out of circuit, and a further switch allows the process order of EQ and Compression to be swapped around. An external sidechain signal can be selected for the compressor, and when selected this looks to a TRS jack on the rear of the unit for its source. A further toggle switch next to this rear-panel input allows the side-chain input to act as a link between two M103 units for stereo bus compression.

The sum of all these parts and little touches is a unit that feels reassuring, safe and hard to go wrong with. It's not a unit that is going to add a distinctive sonic signature to your recordings, but that's not to say that it has no character. Polished, solid and hi-fi like are all adjectives that spring to mind. But more importantly, it has everything you need, nothing that you don't and is executed to near perfection ■

### PROS

Solid construction; smooth, solid, polished sound; flexible features; useful ribbon mode; hard to misuse.

### CONS

EQ mid-band could overlap with HF and LF a little more; output trim doesn't switch with compressor.

### EXTRAS



Spacebar modular microphone positioners are designed to make multimicrophone setup simple and precise. Clearly engraved scales for angle and distance make setting capsule spacing, angle of incidence, and X axis rotation easy and repeatable. Spacebar modular system components can be purchased in preconfigured assemblies for several standard microphone arrays, or you may build a range of microphone holding structures to meet any need.

### Contact

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