

DACS MicAmp

With recent move into mic preamp manufacture, British company DACS has opened with a spec-beater. Dave Foister reports...

I've seen some ambitious specifications in my time, but those for the DACS MicAmp take the prize for nerve. Microphone preamps being one of the few things you can sell on performance figures alone, we're used to seeing bold claims, but "negligible" is a word normally only seen in the context of digital wow and flutter, not for the three most important characteristics of an analogue signal path. That, however, is how Digital Audio and Computer Systems describes the noise, distortion and crosstalk of its preamp; add a frequency response from DC to 45kHz and you have something that is effectively claiming to be perfect. Clearly perfection is what DACS aims to achieve, with super matched transistors, minimal controls and special microphone power arrangements aimed at producing the cleanest signal path possible. The R&D budget has clearly gone on this kind of expertise rather than to an image consultant, as the styling is odd to say the least, with the cheap knobs in particular doing little to inspire confidence. Everything else does, however, from the choice of facilities to the thoughtful ideas, all of which show a single-mindedness towards sheer sonic quality with little time for fripperies.

The MicAmp has two independent channels, each carrying the bare minimum of controls. The all-important gain is handled by an 8-position switch plus a trim pot; the switch has 6dB increments while the pot has a 10dB range with repeatable 0.5dB scale markings. Level monitoring is novel, with a circular window containing three coloured LEDs arranged like a Mercedes-Benz sign; the bottom one lights green to show signal present, the left one yellow to show healthy signals above +5dBm, and the final red one shows peak above +13dBm. In addition a spectacularly bright red light comes on to warn of clipping (above +25dBm) and stays on for a few seconds just in case you miss it. The whole lot ties in so well with what the meters elsewhere in the system are showing you that you start to wonder why you need anything more.

A 3-position bass roll off switch is provided, whose settings are lower than normal and reflect the extended low end of the preamp. Its two frequencies are set at 30Hz and 80Hz, giving an unusual facility to remove extreme LF with minimal effect on the wanted signal. This is backed up by DACS' claim to have taken special care with the filter design to avoid noticeable coloration above the cut-off frequency, not always something to be taken for granted. The only remaining control is a toggle switch for phase reverse. The obvious omission, you will have noted, is a switch for phantom power; has the MicAmp then no phantom facility? Of course it has, but it boasts a feature I cannot recall seeing before - separate inputs for those microphones which require phantom and those which, like valve models and others with their own dedicated supplies, do not. The reason for this is that the latter inputs can dispense with the DC blocking capacitors normally needed on phantom powered inputs and therefore extend the LF response literally down to DC. Even the phantom inputs go down flat to 20Hz with a 6dB/octave roll off below. The other benefit of this arrangement is the removal of any switching from the microphone-level signal path with the risk of degradation it would bring.

At the other end of the spectrum, DACS has made the judgement as to how far to extend it, tailoring the frequency response above its flat line limit of 45kHz. Even beyond, the roll off is only around 6dB/octave, giving 3dB down at 65kHz and 6dB at 100kHz. Since the whole 96kHz sampling thing is about importance of that extra octave, it's good to know that you haven't lost it even before the signal reaches the console - can you be sure that's always true? Noise and CMRR performance is in the same league, with hand-trimming of the CMRR at two separate frequencies. The result is that DACS claim not to have found a microphone with as little noise as the MicAmp, and after listening to it I would not like to argue. In every sonic respect this is surely on a par with the best preamps I have heard: open and complete, with an integrity that inspires confidence in the circuit's refusal to put anything in the way of the microphone. This is the kind of preamp that can make all your microphones deliver more than you thought they were capable of,

giving new insights into the potential of even old favourites. This is even more surprising in view of the asking price, which I have to confess is less than half what I would have expected given the unit's quality. Coupled with a 3 year warranty, this makes the DACS MicAmp an extraordinary attractive buy.