Summit/Neve MPE-200

The MPE-200 is a dual channel mic preamp and EQ which combines a Rupert Neve analogue design with digital control. William Bowden scales the Summit.

Imagine being Rupert Neve. Not a day would go by without someone approaching you to say, "love your early work", and of course be entirely serious about it. Perhaps the same thing happened to Michelangelo after he finished his sculpture of David...

'Neve' is a name that is synonymous with equalisation perhaps more than any other – save perhaps the inventor of parametric EQ, George Massenburg. These days a single channel of second hand Neve 1081 EQ will probably set you back around $2000 US – if you can find one, that is. There are also facilities around the world who owe a large part of their business to owning a cherished Neve console. Fortunately for the rest of us, Rupert is still producing designs that are innovative and intriguing as well as relevant to current recording trends. His collaborations with Amek on their 9098 series introduced many engineers to the terms 'glow' and 'sheen' at a price that was within the realms of mere mortals.

The MPE-200 dual channel mic preamp/equaliser is

a satin gloss finish. Looking from left to right the unit is divided into six modules: input, four separate EQ modules (low, low-mid, high-mid and high), and output. As you can see from the illustration, the MPE-200 uses a combination of 10 rotary controllers and six display switches to access its various parameters.

A display switch is comprised of a small backlit LCD screen embedded in a pushbutton housing. Apart from showing you the status of your parameters in the LCD screen, the buttons also change colour to indicate various states, such as bypass (amber) active (green) and overload (a suitably alarming bright red!). In practice, these display switches are highly informative (if a little spongy) and the colour changes in the LCD give you a very immediate picture of the state of play.

The rotary controllers are also of the pushbutton variety. Simply press on the pot and you can switch back and forth between adjusting either of two value fields.

Around the back there are two sets of XLR inputs and
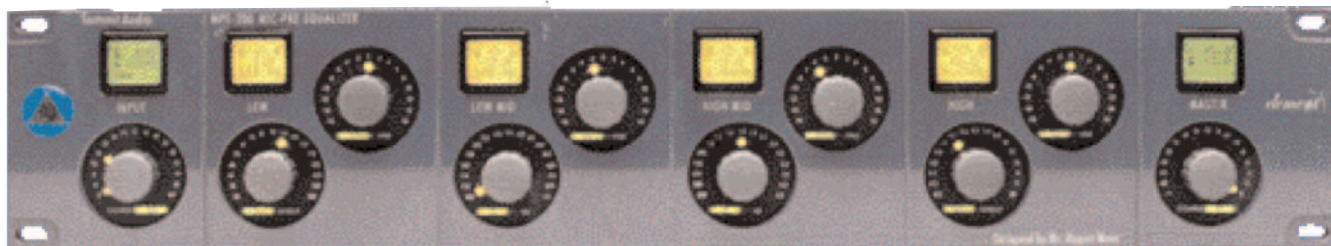
Neve's latest creation and it comes to us via the renowned manufacturer of 'nouveau retro-style' valve gear, Summit Audio. Its front panel alone separates it from previous Summit designs, as does the fact that there are no valves to be found anywhere in the signal path. It's a Class A designed device utilising both solid state and transformer coupled circuitry. Operable as stereo or dual mono, each channel of the MPE-200 has two sections: a high quality microphone preamplifier, and a separate four-band equaliser. These two sections can be used entirely independently of one another, or the mic preamp can be routed directly to the input of the EQ. The headline feature of this unit is 'digital control of analogue'. This means that all operating controls are digital and thus able to be 'saved', while the signal path remains safely free of the pitfalls of digital encoding and stays completely in the analogue domain. Furthermore the unit boasts 25 user definable memories (or 'Presets' in Summit-speak), Midi (in, out and thru), and a price tag that firmly targets the professional market.

Designer Layout

The front panel is an anodised blue/grey colour and has

outputs. The inputs are all balanced and floating, while the outputs are transformer coupled. One set is for the preamp, the other for the EQ. The three Midi ports and a vent for the internal fan (a relatively quiet low speed model) complete the picture. The whole unit is housed in a very heavy duty black aluminium casing which would easily survive a run in with Godzilla – let alone a humble roadie!

The Mic Preamp

Most engineers carry around racks of preamps these days, and the importance of the preamp has trickled down to the mass market. Even the American console manufacturer Mackie has brought out a new range of consoles largely marketed on the strength of their new preamp designs. Producers and engineers go to these lengths because the effect of using inferior preamps erodes the overall quality of a recording and it becomes a case of 'garbage in, garbage out'. Often the sonic flavour imparted by a particular brand of mic preamp suits a specific purpose and this reasoning alone has spawned huge variations in designs over the last few years. Mostly people just want to bypass the desk completely and record directly to the multitrack

inputs, thus reducing noise and unwanted colouration from a lengthy signal path.

If it's input noise or distortion that you're concerned about then this particular design won't disappoint – it's quiet and clean, and pure and open sounding. I particularly liked the sound of the mid range, which was very smooth and uncluttered, with none of the honkiness that plagues even some quite expensive valve designs. In terms of coping with levels you've got a respectable 64dB of adjustable input gain to play with, and if this isn't enough then your microphone may be in trouble. Transient response was also excellent, although it may have you running for a compressor if you're used to inferior slew rates or saturatable valve designs – so be warned.

I found the metering on the input display switch to be reasonable, if a little small. Under some conditions (i.e. at a distance) you can only really see when the display turns from green to red, which means you are only 3dB below clipping (best case) or going over the line (worst case).

A neat feature of the digital recall is that the mic preamp 'boots up' with its 48 volt phantom power disabled – I like it. You've also got phase reversal and a couple of 12dB per octave shelving filters. These filters are not bad either, the high pass having a range of 20Hz to 320Hz while the low pass goes from 4kHz to 30kHz. The filters have 17 positions across the frequency range, and if you switch both filters to the same frequency and shape then the slope becomes 24dB per octave – neat. Of course if you want some serious equalisation it's not far away...

The Equaliser

The EQ section of this box definitely has a flavour of its own. It's powerful as a tone shaping tool, with all four modules offering ±16dB of gain adjustable in 0.5dB increments, which is great. Let's start with the high and low bands as they're much the same module apart from their frequency ranges. Both these modules are switchable between shelving (12dB per octave) and peak (fixed around 1.2 of an octave). The low range is 30Hz to 300Hz while the high range is 2kHz to 20kHz. In use the bottom end is very fat and warm, although I found the fixed peak was a little broad for my tastes and I had trouble really isolating a specific frequency. The top end was very clean and smooth but you really have to push it if you want some bite. This is not a criticism, as many EQs are harsh in the top end – especially anything digital. I did find the jump from 20kHz down to 17kHz a wee bit large as 18kHz and 19kHz have a lot to recommend them at times... ah well.

If you want a bit more control then the low mid and high mid sections have adjustable Q factors ranging from 1.6 to 0.5 of an octave. Their frequency ranges are 100Hz to 1kHz for the low mid and 500Hz to 5kHz for the high mid. The mid range is the hardest of all nuts to crack as there is usually so much going on in that area. I felt in some ways that this unit had it's greatest strengths in the mids and the dreaded 'boost in the 1kHz region' was quite musical and only honky when pushed to the

extremes. Other problem areas such as 3kHz to 4kHz could also sound good – but with 16dB to play with, watch those guitars! The lower mids were warm and round and didn't suffer the thickness and clag which the 350Hz to 500Hz area so often has. Again I found the Q control could have been a bit finer – I think half an octave is still a bit all encompassing. But, there again, the MPE-300 is a mic preamp/EQ and not a mastering EQ scalpel, and when I knew I had to notch something out I turned to my GML or Sontec 430B. Also, it's a shame the low mid only extends down to 100Hz because, you just can't get to the thumping part of the bottom end with anything less than a peak width of around an octave, which is quite wide. These couple of observations aside, I enjoyed using this equaliser immensely and certainly appreciated it's extremely smooth overall sound.

Conclusion

I'm out of space and I've only scratched the surface. This unit has all kinds of quality design elements, like the audible clicking of relays when you disable something (and not so much as a hint of a click in your program), individually bypassable bands on the equaliser, and the ability to run low-cost slave units. Also, having memories on an analogue unit is pure luxury! As for the EQ, it's really more of a sophisticated tone shaper, which, considering it is part of a mic preamp and not a dedicated mastering unit, means it is almost overspec'd for the task. As such, it should be highly commended. I have a few criticisms: there's no negative gain on the input to the EQ, no global bypass button on all four bands of EQ at once (causing me to check that it was Rupert not Ruprect who had designed the unit [William, you 'dirty rotten scoundrel'! – CH]) and there's no continuous Midi control over the front panel parameters – which hopefully may change as the Midi operating system is upgraded. Overall, though, if you want a high quality mic preamp and equaliser I strongly suggest you try the MPE-200.   🄰🄣

Summit's reply

While there is no negative gain on the EQ input, there is now an overall bypass implemented via our latest firmware. This upgrade also allowed us to set a 'clip point' that wasn't too sensitive. You can get this upgrade from Sound Devices at no extra cost.

Perhaps the most important new item is Extension-78, a ProTools compatible plug-in which runs up to 16 units (32 channels) over the Digi Midi bus – no internal DSP is used. This allows you to build up a system to the point where you end up with a 'Gonzo', Rupert Neve-designed front-end which will exceed the specs of the next several generations of digital sampling rates. This software is currently being offered at no charge.