

Neve 1073DPA & 1073DPD

Very few preamps are as well known as the famous Neve 1073 module. Simon Leadley puts the 'official' reincarnation to the test.

Aston Martin, Courvoisier, Armani... these names are synonymous with quality, and in the audio world Neve has been a top-shelf player for almost as long as I can remember. The first console I worked on was a Neve in a small studio in North Sydney, in the days when every studio had to have a Neve if it wanted to be considered professional. The reason for the success of the brand was that Rupert Neve designed consoles that were built like military hardware and could withstand the rigours of rock'n'roll... and they sounded great as well.

Neve preamps and EQ became industry standards in the '70s, but as time passed the consoles went out of fashion, deemed too basic and lacking in features for the sophisticated '80s. These days many of the old consoles have been carved up into strips (literally); the mic preamp/EQ modules themselves often mounted into customised 19-inch racks by those

phase reversal switches, gain trim pots and switchable impedance to suit different microphones. The switchable impedance (1200Ω or 300Ω, which affects the tone of the microphone connected to it) feeds a transformer-coupled stage that is sent to a two-stage gain circuit, controlled by a stepped 21-pole switch that selects sources from -80 to -20dB for the mic stage and +10 to -20 for the line input stage in 5dB steps, à la the red knob on an original 1073 module. This signal is fed to an electronically balanced input stage and then onto the second stage of the Class A gain stage.

Each of the mic preamp and line inputs (the line inputs on the rear, incidentally, offer both XLR and ¼-inch jack facilities via speakon connectors and a 20k input impedance suited for instrument inputs such as bass, guitars and keyboards) are then fed to a transformer-coupled Class A output stage. It is capable of +26dBu, which is more than enough for



lucky enough to own them. The original modules, like the fabled 1073 and 1081 are sought after and expensive, and the second-hand trade in old Neve parts and components continues to thrive, as it has done for well over two decades.

No longer content to sit on its hands and watch everyone else exploit the fame and popularity of Rupert's old 'vintage' designs, Neve has recently got into the act. The most recent release in this range are two 're-issues' of the classic preamp found in the original 1073 module: the 1073DPA and 1073DPD, redesigned and packaged to bring the classic sound of the '70s kicking and screaming into the 21st century. The familiar Neve retro design and excellent build quality are faithfully replicated in the new single rack unit devices, with the knobs, buttons and colour scheme all instantly recognisable.

Electronically the two preamps resident in both the 1073DPA and 1073DPD are based closely – as the name strongly suggests – on the Class A 1073 preamp, and has been teamed up with phantom power,

any professional recording device – so it won't be the preamp that distorts when it gets a little loud! The noise and distortion figures of the module are very good and the frequency response is excellent considering the unit employs transformers (20Hz – 20kHz ±0.5dB). But then, Neve has been designing these for a while now so you would expect them to be great.

Aye Aye Caps

One thing that I was interested to discover in this modern era of surface mount components was what sort of construction method Neve now employs and what sort of power supply the designers have opted for – all of which has a bearing on the sound and reliability of the units. One thing that has often been overlooked by people manufacturing their own 'Neve racks' has been the power supply they use to drive them – many a custom-racked vintage 1073 has been let down by the power supply driving it.

The supply of power to the 1073DPA and 1073DPD appears to be very well provided for, right down to the

securing mechanism for the IEC power cable (so that it stays put even if someone trips on it).

Opening the lid on the unit reveals some very interesting things. The two circuit boards are a hybrid of modern surface-mounted components and standard transistors and capacitors. It has been argued that surface-mount transistors aren't optimised for audio and, if you mean business, you should still employ the specially designed ones – Neve has opted for the purpose-built alternative. The board for the preamp is very complex when you consider there is no EQ or metering (apart from a simple red Clip LED). The output stage has a couple of very hefty transistors that make up the Class A output, which behaves more like a power amp than a preamp, but as I have said before, professional systems worth their salt must have headroom, headroom and more headroom. The power supply itself is a conventional switch-mode design that feeds a very elaborate regulation system designed to power the analogue and digital circuitry while simultaneously delivering enough power to give you the full +26dBu at the output stage.

The digital model of the 1073 rack, the 1073DPD, differs only in that it contains two A/D stages, allowing you to feed the mic outputs directly to the digital inputs

on any workstation, thereby bypassing the inferior A/D stages of cheaper systems. All sample rates up to 192k are supported as well as external word clock. There's also a pre A/D insert point so that you can use the signal for processing (think of it like a separate pre and A/D in one unit). Neve has been in the 'digital' business since the early days of the technology and its digital products have always been very high-end, and the A/D converters certainly don't let the side down. Selection of internal sample rates is performed by front panel switches and you can even feed a 48k reference (via BNC or AES connector) and the unit will frequency double to 96k (similarly with 96k). This combination of 'classic' analogue preamplification and high quality digital technology makes a rare and desirable combination.

On Test – Flute of the Room

I was fortunate to have both units at my studio for a couple of weeks and during that time we were able to try them out on a number of different sources. The first instrument that we patched into the mic preamp was a flute for a solo part in an orchestral arrangement. Perhaps not the most obvious first-up test candidate for a preamp whose ancestry is famous for its 'rock' credentials, nevertheless my immediate impression



was that the flute had more breath and depth than the reference preamp we were using alongside it. It was also superbly quiet. Level adjustment was tricky without a built-in VU or PPM meter but using the ProTools meters in concert with the Neve's clip LED (which lights at -3dB before clip), was enough to get the gain set to our satisfaction. Next we tried a bass guitar. This was slightly less successful; to our ears it was 'woolier' than the reference (due in part to the transformers in the Neve), however, I should point out that this was very much a taste thing. The bass player on the day preferred the cleaner tone of the reference. We tried both inputs for the bass: using an external DI and also connecting directly into the line-in, with similar results.

On to vocals, and here the preamp gave an excellent account of itself. Vocals were clear, yet warm and silky. Furthermore, the ability to match the mic impedance to our microphone afforded us better sound control than a fixed impedance mic preamp might have allowed. Noise performance and distortion characteristics in the modern 1073 are excellent for vocal recording, and the overall impression of the preamp is that it provides a big, detailed and solid picture of the voice in frame.

Although these reincarnated 1073s aren't identical 'component for component' to the original 1073 mic pre/EQ modules from the '70s (the important obvious difference being the complete absence of the EQ stage, famous in the original design), the sound of the unit is close to my memory of the classic Neve preamps and their operation is identical. These preamps would make a welcome addition to any home studio or professional rack. I'd further suggest that the digital version (the 1073DPD) might be of particular interest to people with

systems that have lower end A/D converters, to ensure that their investment in the classic Neve sound isn't compromised by lower quality A/D converters further along the recording chain.

Neve to Know Basis

Affording a pair of these new Neve preamps remains the big issue for most. Like the original designs, the 1073DPA and 1073DPD don't come cheap, however, the Australian retail price has thankfully been set to match the equivalent UK and US price tags. Like all the high-end gear on offer in the marketplace, value for money can really only be measured in terms of how good a product sounds – and let's face it, there will always be a cheaper 'equivalent' product on the market offering more 'value for money'. To my ears the sound of the 1073DPA and 1073DPD make them well worth the price and the redesigns mean that now every studio can own a piece of modern classical gear. The fact is, every studio should have at least one Neve preamp in its arsenal. If you have a good mic and preamp combination (and good mic technique) you should need to do very little EQ'ing to the signal.

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Available from

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Price

- 1073DPA: \$3900; 1073DPD: \$4900