



Phoenix Audio DRS-Q4M

Some people don't do things by halves; **GEORGE SHILLING** tests the theory with a super-sounding 'half size' Class A mono mic preamp/DI/EQ.

Phoenix Audio's DRS-2 and DRS-1 microphone and instrument preamplifiers have been delighting audio professionals for a number of years, and I have been a regular user since reviewing the DRS-2 in 2002. As of May 2009 all Phoenix units have been built in California. The DRS-Q4M is an enhanced version of the DRS-1, a Class A mono microphone preamp/DI/EQ, additionally featuring a 4-band EQ circuit and other improvements.

The DRS-Q4M is in 1U half-rack form; it's essentially half of the stereo DRS-Q4. The case is deep, and the box itself fairly weighty — no doubt mainly due to the large toroidal mains transformer housed within. On the rear are XLRs for input and output — Neutriks, of course — plus a handy bonus TRS jack duplicate output, often useful for monitoring purposes when tracking; this is simply paralleled from the XLR. The IEC mains socket is accompanied by a fuse holder and a voltage selector.

The front panel gain selector is a sparkly version of the classic vintage double-finned Neve knob, with EQ and Output level knobs taking the form of miniature versions of this. The large gain knob is labelled Mic/Line Sens and is switchable in 5dB steps from 30 to 70dB. The small O/P Level knob is a continuous fader pot, which completely mutes signal at the fully counter clockwise position. This is uncalibrated, but there are handy indicator marker lines around it, and it has a pleasantly gluey, damped feel (unlike that on the older DRS-2 which moves more freely). Above this are a pair of LEDs, a green one labelled 0 and a yellow one labelled +8. These indicate the output level in dB, equivalent to 4 and 6 on a standard PPM. The +8 LED was previously red on earlier models but this was changed as the perception of users was that red meant 'overload'. Driving the circuit into the red produces a subtly driven harmonic richness, and the powerful output stage is certainly capable of overloading following equipment in the chain, but the DRS-Q4M itself rarely overloads. It's therefore perfectly reasonable to drive the unit so that the yellow LED is almost constantly lit, with warm-sounding results.

Alongside the gain controls is a jack socket for DI Input. An EQ enable button is accompanied by an LED, as are the six further pushbuttons for selecting DI input; High Pass Filter, which rolls off gently from 120Hz (and only operates when the EQ is enabled, though I'd have preferred it independent and perhaps slightly lower); Phase (polarity); +48V phantom power, Mic/Line (more of which later); and Ground Lift. I'd have also preferred the phantom button top to have a different colour for safety — it can be hard to see which one does what with the legending below the buttons.

The original DRS-2 featured legended buttons, whereas here the legending is beneath the buttons



on the panel, which is impossible to read if the unit is below eye level. I have rarely used the Ground Lift button on the DRS-2, or heard it do anything; I'd perhaps have preferred a power button here (which the DRS-2 does have).

Sonically, the mic preamp is super, with a solidity and warm glow in a vaguely Neve style — especially when pushed a little. The high frequencies are sweet and clear, with a claimed extended range up to 25kHz. Overall it sounds very natural, with just a hint of character that is rather more akin to UA's 610 than super-clean units like, say, Millennia HV-3 or Focusrite ISA.

The DI input works great for guitar or bass; it doesn't employ the main gain selector, but there's plenty of boost on the fader knob, although I did find that large onboard EQ boosts sometimes tended to emphasise noise from the source.

Line mode reduces input gain by 30dB; there is no separate line input. In this mode, the 30dB gain setting provided zero gain when the fader knob was at approximately three-quarters up; there is no calibrated setting for zero, but the green LED should light at zero so presumably users could use this to set the level with a tone if necessary. Even with the Output knob at full tilt, there is still a generous 10dB+ of headroom. Line mode is also useful as a pad button when dealing with high microphone output levels.

Above the row of buttons are the EQ controls. These comprise four bands with uncalibrated boost/cut knobs, damped like the output fader, and each accompanied by a mini-toggle switch to select the frequency. The circuit is described as 'Gyratory EQ' and employs a transistor-based circuit to simulate the characteristics of a coil (or inductor) by converting an impedance into its inverse. Fixed inductors are expensive, bulky, and inflexible, but in the gyratory circuit, changing a few passive components can provide any frequency desired. Here, the HF band located on the left is switchable between 15k and 10k; the high-mid band covers 6k, 3k, or 1k; the low-mid band 800, 400 or 200Hz; and the low band 130, 80, or 40Hz.

The EQ knobs have a syrupy feel (*Rather than gluey? Ed*), but no centre detente or individual band bypass, so care is needed when adjusting. Also, it's not always obvious which of the two fins is the

pointer; it does have a small groove, but a bit of white paint in it would have been helpful. The mini-toggles for frequency switching are neat nevertheless.

My first impression was that the EQ was very powerful, with a few small tweaks seeming to alter a guitar amplifier tone quite dramatically. However, subsequent experiments tempted me to more radical boosts (and cuts) where expected harshness didn't materialise, and wonderfully sweet (*That'll be the syrup. Ed*) and musical shaping moulded source sounds beautifully. I liked the chosen frequencies; the 6k setting on the high-mid band provides a very sweet treble, and both mid bands are narrow enough to poke tonal colours through (or diminish offending bands) without being too peaky and surgical. While not specified as such, the high and low bands seem to be shelving and rather broader in range, though the low end always seems to stay under control.

The EQ is an easily acquired taste, with a little apparently doing quite a lot, yet contrarily, you are often tempted into increasing boosts that are handled with smoothness and ease. Initially I used

it timidly when tracking acoustic guitar where it gently enhanced the signal with a smidgen of extra brightness and bite, and a touch less middle and boom.

This worked transparently and elegantly with no fuss. But for a characteristically twangy '60s electric guitar sound, much of the twang came from the DRS-Q4M, with almost the full 16dB boost on the high and mid bands, without any nastiness encroaching.

For recordists whose tastes lean towards the vintage Neve sound, the DRS-Q4M makes a terrific all-rounder as a mono recording path for general use, with the cleverly designed EQ providing ample opportunity to shape powerfully the tone without detracting from the sonic characteristics of the microphone or instrument. ■



PROS

Enhanced Neve-style preamp; juicy and flexible EQ; huge headroom; compact.

CONS

No power button; legending hidden beneath the buttons; no EQ centre detentes.

EXTRAS

Phoenix Audio's DRS8 is an 8-channel solid state Class A discrete mic preamp. Each channel has its own dedicated level control, -30dB pad, phantom power, phase reverse, high pass filter and mute buttons. The unit has an 8-channel monitoring output facility so all channels can be sent directly to a monitor controller or a patchbay as well as having individual channel outputs.



The design is based on the current family of DRS mic preamps like the DRS1 and DRS2, that all feature the DSOP2 output stage.

Contact

PHOENIX AUDIO.USA:
Website: www.phoenixaudio.net
UK, ASAP Europe: +44 207 231 9661