

# Demeter RV-1, VTMP-2c & HXC-1

Demeter has turned back the clock with a spring reverb, tube preamp/DI and optical mono compressor. James Wilkinson gives us the low-down on all three.

Unlike most audio gear where choice is almost overwhelming, when it comes to buying a spring reverb, the choice is limited. In fact, most people searching for a product like this either end up building their own or searching for an original. This makes the release of the Demeter Real Reverb RV-1 stereo spring reverb unusual and intriguing.

## RV-1 Stereo Spring Reverb

The Real Reverb RV-1 is a silver single rack unit that has two reverb 'tanks', both of which contain six shielded springs made by Accutronic. Both of these tanks have different decay times with Channel One set to 1.5 seconds and Channel Two to 3.5 seconds.

In terms of operation it's pretty much a plug and play situation. Each tank has its own set of controls that are logically laid out, with knobs for input and output

attenuation and a mix control that varies the ratio between wet and dry signal. A red light indicates when overloading occurs and signal travels via 10K $\Omega$  inputs and outputs, located on the rear of the box as both balanced XLR and TRS ¼-inch connectors.

Between the reverb banks' main control knobs are buttons to link the input and output stages. Summing the In and Out stages provides different combinations of stereo effect, and on the output stage also creates a humbucking configuration which reduces electromagnetic noise (EMS). Even so, I did encounter some noise when placing the RV-1 close to other devices.

Variations of reverb flavour can be achieved by employing the phase reverse switch. Using this switch results in a brighter, wider reverberation, creating a much larger stereophonic effect, but as this signal is out of phase it will all but disappear if summed to mono (as is the case with AM radio broadcast for example).

The high-pass filter switch cuts out lower spring rumble and makes the reverb easier to blend in a mix by creating a smoother-sounding atmosphere with less presence. The filter is a nice inclusion considering the lack of EQ.

I've listened to the RV-1 on different instruments and vocals, and referenced it to my ageing (but much loved) AKG BX-25. The AKG's reverb is more flexible in application, with basic EQ and variable decay time,

and the sound is thicker and fatter. But the AKG is as big as a bar fridge, whereas the RV-1 is only a single 19-inch rack unit and sounds much lighter, cleaner and reactive to transient sounds.

If you're into dub reggae, the RV-1 will supply some genuine, classic dub ambience, with clear stereo effect. Spring reverbs are all about flavour, so if you want new (or is that vintage?) flavour, this box offers a sound different to the other authentic spring reverbs available.

The RV-1 sounds great when applied in a dub fashion (i.e. generously) or mixed low to create a subtle ambience. Hitting it with a loud, sharp transient (like a snare drum) will have it smoothly twanging with plenty of personality.

The only thing stopping a live engineer adding this to their rack might be the price and the unit's EMS susceptibility, as build quality seems robust enough for touring. But in the studio it would certainly be a welcome and esoteric spring reverb to complement any selection of reverberation devices.



## VTMP-2c Tube Dual-Channel Preamp/DI

Demeter's two-channel VTMP-2c is the Limited Edition 20th Anniversary release of their original two-channel tube preamp. Made for low noise, transparency and quick transient response, it can be used as both a microphone preamp and DI box.

The burgundy two-rack, independent classic dual tube channels are a pleasant and appealing package that suits their limited edition status. Demeter products present themselves as well thought out and well built, with this preamp being no exception.

When used as a DI, the VTMP-2c adds warmth and clarity to an electric bass but is subtler on an analogue synthesizer. The sound of the preamps don't exactly pile on the flavour, but rather, make their presence heard subtly, with transient sounds appearing cleaner with added bottom end and presence. This preamp would be useful for recording drum overheads, strings and acoustic instruments.

You have a choice between both balanced and unbalanced inputs and outputs from both XLR and ¼-inch jacks on the back panel and also ¼-inch jack inputs located front-side that allow instrumentalists to plug directly into the preamps. Their variable gain (30 – 65dB) when turned up has the overload indicator flashing in no time at all. If you try slamming signal into the tubes for an overdriven sound you'll have

mixed results (as I did) and, on balance, I wouldn't recommend using it in this way, as the preamp likes to operate below its saturation point.

Surprisingly, the high-pass filter really inspires more than anything else on the box, with a shelving slope that keeps the overall character sweet and fluffy whether you're using the 6dB or 12dB cut – you have to compliment a filter when it talks to you like this one does!

Other features included on both channels are phantom power (with associated indicator light), normal and calibrated metering for output levels, a 20dB input pad switch and phase inversion.

The VTMP-2c is a clean, transparent tube preamp with a very neutral tone, and in fact, it's surprising how little 'colour' it adds. If you're looking for a tube preamp with a distinctive sound that sets it apart from a popular solid-state preamp, for example, then the subtlety of the VTMP-2c may not fit your criterion – this unit will not 'colour' your sound with generous helpings of harmonic distortion as is often expected of valve devices these days. The VTMP-2c has an understated valve tone that makes you search for adjectives to describe its effects, and yet it goes about its job with a clarity of purpose that has its own appeal. The 2c is a sweet and sophisticated preamp which resists the temptation to overwhelm a signal with too many valve artefacts. The question really is (for its price), has the VTMP-2c enough personality to convince you? You'll have to listen to it for yourself to really make that value-judgement, but it's well worth checking out.

### HXC-1 Optical Mono Compressor

The HXC-1 is an optical-style mono compressor, which uses a photosensitive cell in combination with a light to control the amount of compression applied to the incoming signal. This design is used in some legendary compressors like the Teletronics LA-2A levelling amplifier, although Demeter's HXC-1 has broadened the brush by including some extra controls generally not found in vintage opto-compressor design.

When using the HXC-1 you notice how its tube design lends its colour (regardless of the compression levels) in a way which warms, smooths and fattens whatever you put through it. The tube circuitry in the HXC-1 is found only in the amplification stage, with solid-state drivers running the unit's output stage, the connectors for which are on XLR and TRS ¼-inch jacks.

Located on the front panel above the controls is LED-styled metering which comprises a red input overload indicator, a change meter for indicating gain reduction (in dB) and the output level RMS VU meter.

Input is switchable on the front panel between either +4 or –10 operation, which is cool, and alongside this switch is the 'Compress' button which has two operational modes: 'Normal' or 'High'. The high

frequency button filters sensitivity to high-end signals and 'weights' the compressor to react to the lower end of the spectrum – which is useful when trying to compress a bass microphone (low frequency signal) that has captured lots of drum spill (high frequency signal) for example. This side-chain-style function certainly doesn't exist in the LA-2A.

There is also a link in/out switch, which allows this mono compressor to be connected with another HXC-1 via its side-chain. Connection is made via the ¼-inch TRS jacks on the rear panel, and when linked, the two compressors act as a stereo unit by summing their drive signals. The volume knob can be used in this configuration to match the output signals once they have been compressed, and these can be easily



bypassed where necessary by engaging the output bypass switches on both units.

For flavour in recording you can use the HXC-1 to keep levels in check while adding some tube-style texture. With an electric bass at a gig it created a smoother, warmer and more vibrant sound, adding copious amounts of colour while compressing in a low-key fashion. Demeter suggests that the HXC-1 is a great compressor for bass players, which seems to fit its billing, but like all compressors, it depends on your application. So if you're a bass player who wants brickwall attitude from your compressor, the HXC-1 may not appeal to you at all. But first and foremost, this unit is an instrument rather than mix or mastering compressor – it's a 'colour machine' rather than a transparent gain control device.

In all, the HXC-1 takes the classic opto design and transforms it into a more flexible machine by including features that allow a broad range of applications while still retaining the essential flavour of that vintage optical sound.



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### Price

• RV-1: \$1,499; VTMP-2C: \$3,999; HXC-1: \$1,999;