

Sequis Motherload Elemental

Dummy load & speaker emulator

The Sequis Motherload has been lauded by guitar-amp connoisseurs the world over, and the new Elemental version aims to offer the sound of the original at a more affordable price point.



Bob Thomas

As guitarists, we've all been in the situation where we have to trade good tone for acceptable volume, when using valve amps. If you turn the amp down then it stops working as hard and you lose the output valve distortion that helps create the harmonic-laden sounds that we love. Unless you are prepared to use a modelling or master volume amp, the only practical option is to invest in a device that allows you to operate your valve amp up in its sweet spot whilst reducing the level getting to the loudspeakers.

There are quite a few such units on the market and the best of them combine an attenuator, essentially a variable resistive dummy load, with a reactive element mimicking the response of a real loudspeaker, so that the valve amplifier's output stage is properly loaded. This dummy/reactive load is crucial to the tone that you hear when the loudspeaker volume is reduced.

To add to this complexity is the fact that, in a guitar amplifier, the loudspeaker is not just the means of turning the Volts at the output of the amp into something that can be heard, but it also acts as a physical band-pass filter, where the driver's response characteristics determine the frequency range and harmonic content of the output. This fact is why loudspeakers have such an effect on what you hear from your amp, and why certain models have reached legendary status when paired with particular amps.

Now we're into the area of the black art of combining attenuation, loading and speaker emulation, and one of the foremost names in this area is Essex-based Sequis, whose Rick Cawley-designed Motherload rackmounted reactive dummy load and speaker emulator, and Richter free-standing speaker attenuator and reactive load, have been gathering plaudits near and far for their performance and preservation of tone. However, this performance and

preservation comes at a price that is usually the preserve of a discerning few. Luckily, for more mortal monetarists, Rick Cawley has released the Motherload Elemental, which aims to combine an updated Richter control with the versatility and sonic qualities of the Motherload in a more affordable, compact, integrated package capable of handling valve amplifier outputs up to 100 Watts, although it will also cope with amps with a slightly higher output.

Construction

The Motherload Elemental is a hefty, seriously chunky, blue-black enamelled piece of kit. Although it is compact, it's no lightweight, weighing in at just over 3kg and being a purely passive device, there's no power supply to worry about. All controls are on the front panel and, starting on the left, you'll find the revised Richter's rotary Speaker Volume potentiometer, which can be switched between two ranges of attenuation — Low (0 to 12 percent) and High (12 to 50 percent). Signal and Overload indicator LEDs sit above the Output Range switch. The range switching can also be done via a footswitch.

On the right-hand side, you'll first find the two knobs that control the filters in the Speaker Emulation section. The Distortion pot mimics the movement of a microphone's position relative to the cone of a loudspeaker, moving from centre to edge. Cab Type changes the voicing of the speaker emulator between the sound of a Celestion Blue, as used by Vox, and that of a modern 4 x 12 cabinet. Finally XLR Out sets the level coming out of the rear-panel XLR.

The back panel is more densely populated. On the right sits the Input jack, and between it and the two parallel Speaker Outputs sits the jack for the remote range Shifter footswitch. Beside these are the two jacks for the FX Send and Return loop. The Return jack can also be used as a line-level input into the speaker-emulator filters. The FX loop allows you to insert post-amplifier, pre-loudspeaker emulator effects (such as reverb

and delay) into the signal path.

Next come the two Richter Thru connectors that can be used to connect an amplifier plugged into Thru In to a full-range PA loudspeaker via the Thru Out, if speaker emulation without attenuation is required. On the extreme left sits the binding post for the chassis ground, and on its right is the balanced jack that carries a maximum level output that bypasses the XLR out volume pot. Between this jack and the balanced, 600Ω XLR sit two switches that can isolate the chassis ground from the screen on the two output connectors, to help avoid ground loops and the hum that they cause.

Sounds

Setting up the Motherload Elemental is a simple matter of ensuring that you have a unit with the correct impedance for your amplifier and speaker combination (4Ω, 8Ω and 16Ω versions are available), making the necessary connections, deciding which attenuation range you're going to use first, switching on and then adjusting the level through your speakers to taste. To give the Elemental a real workout I opted to test it by using an amplifier that I know really well, a THD Univalve. My Univalve is currently

Performing Musician

Sequis Motherload Elemental **£356**

Superbly designed and engineered, the Sequis Motherload Elemental is an absolutely brilliant unit and one that should be part of the armoury of every serious guitarist and bassist who plays through a good valve amp and who cares about his or her sound (and neighbours).

Sequis +44 (0)1206 823108
www.motherload.co.uk

fitted with a 6L6 output valve, giving around 15 Watts of extremely detailed, Class-A sounds that range from crystal clear to raucous distortion. The cabinet I use all the time with the Univalve is a THD 2 x 12, and the Elemental was set up between the two.

The speaker attenuation worked perfectly, the lower range capable of dropping volumes to zero and the upper range taming volumes enough to keep the neighbours happy whilst allowing the Univalve to sing. Overall, the attenuated output kept the Univalve's tone pretty much intact, although I did notice a slight loss in overall detail, which gave the sound a slightly 'veiled' quality compared to the original. With a less detailed amp (such as my '64 Deluxe), this effect wasn't as noticeable. I think that if I owned an Elemental and wanted to mostly use it to attenuate amplifiers into a cabinet for critical listening, such as I did in this review, I'd probably experiment with a few different loudspeakers as I suspect that using more sensitive loudspeakers would restore the detail to the sound.

Connecting the XLR speaker-emulated output to my recording setup and listening through my Tannoy Ellipse monitors was a revelation. I've owned a couple of top-end attenuator/speaker emulator units in the past and neither of them came close to the Motherload Elemental in

performance. It took a matter of moments to find Distortion and Cab Type settings that replicated almost exactly the sound I was hearing in the room from my Strat, the Univalve and its THD 2 x 12 cabinet. What Rick Cawley has achieved in the design of these passive filters is, to my ears, absolutely stunning.

I ran through the Univalve's repertoire of sounds and then changed the output valve to a 6V6, and heard the character change come through loud and clear. The Elemental is also designed to be used with bass amplifiers, and as I don't own a valve bass amp, I ran my five-string bass via a Trace Elliot bass preamp's line output into the FX Return to try out the standalone speaker emulation. Again, the sounds obtained were superb, with a tight, solid bottom end. Although I wasn't able to test the Elemental's performance with an actual valve bass amp, on the basis of what I heard with the preamped sound I would expect the results to be as good as those from the Strat/Univalve combination.

Conclusion

The Motherload Elemental is a seriously impressive piece of design and engineering. If you have valve amplifiers that you need to run at high volumes to get your sound and you want to keep your on-stage volume down, feed a PA,

record them or you simply just want to keep your neighbours happy, the Elemental is one of the best ways of achieving this that I've ever heard. It's easy to set up, simple to get a great recorded sound from, and does exactly what it says it does. You can only buy the Elemental direct from Sequis in Essex, but the web bulletin boards are already full of happy customers extolling its virtues. Buy one and enjoy! ■ **PM**

Tech Spec

Motherload Elemental

- Amp and speaker attenuator.
- Passive reactive dummy load.
- Speaker Volume control with High and Low output range switch.
- Centre/Edge Distortion control.
- Cab Type selector.
- Speaker-emulated output with volume control.
- Parallel speaker outputs.
- FX Send and Return jacks.
- Direct amp/speaker Thru In and Out jacks.
- Footswitch socket.
- Available in 4 Ω , 8 Ω and 16 Ω versions.
- Dimensions (WDH): 280 x 230 x 70mm.
- Weight: 3kg.

Performing Musician

+LIVE SOUND WORLD

This article was originally published in
Performing Musician magazine, **June 2009 edition.**



Performing Musician, Media House, Trafalgar Way, Bar Hill, Cambridge, CB23 8SQ, United Kingdom

Email: subscribe@performing-musician.com

Tel: +44 (0) 1954 789888 Fax: +44 (0) 1954 789895

Subscribe & Save Money!

Visit our subscriptions page at www.performing-musician.com

All contents copyright © SOS Publications Group and/or its licensors, 1985-2009. All rights reserved.

The contents of this article are subject to worldwide copyright protection and reproduction in whole or part, whether mechanical or electronic, is expressly forbidden without the prior written consent of the Publishers. Great care has been taken to ensure accuracy in the preparation of this article but neither Sound On Sound Limited nor the publishers can be held responsible for its contents. The views expressed are those of the contributors and not necessarily those of the publishers.