



## AMPS/RECEIVERS

## INTEGRATED VALVE AMPLIFIER

# RICHTER MEDUSA



**R**ichter Acoustics is a long-established Australian brand, best known for its high fidelity loudspeakers and Thor subwoofer. But did you know that it also produces amplifiers? And not just any old amplifiers, but valve ones. (Or 'tube' amps in Amerispeak.)

Hot out of development is its latest one, the Richter Medusa integrated valve amplifier.

## EQUIPMENT

This is a mid to high power unit, employing a push-pull Class A/B design based around four KT88 valves in the power output stage. It's built in a dual-mono configuration for optimum independence of the left and right signals.

It is rated at delivering 50W from each channel into four or eight ohms. There are six hefty gold-plated binding posts on the back, suitable for banana plugs, spades or bare wires, three for each channel. The centre one for each channel is the negative terminal, while there are two positive terminals, one for the four-ohm output transformer tap, one for the eight-ohm tap.

If a user wants more power, the design is also compatible with KT120 valves, which are expected to boost output to 70 watts. The unit can be upgraded simply by purchasing the replacements, unplugging the four existing power tubes and inserting the four new ones. And then rebiasing to the appropriate amount. A small milliamp meter, a four-position selector control and four trim pots nestle among the tubes for this purpose.

This is an integrated amplifier, but before getting to the preamplifier section, we should note that a switch and a pair of RCA inputs on the rear panel convert the unit into a power amp, for those who wish to use a front end that they love.

Even the preamplifier is firmly in valve territory. It employs no transistors — indeed, we're told there are none at all anywhere in the audio path of the whole unit. The four valves used here are a pair of 12AX7 tubes and another pair of 6SN7 valves.

We're sure most of our valve enthusiast readers will already know this, but younger readers may be interested to know that the juniors, the latest releases among all these valves, are the power

amp ones: the KT88, even though this family was introduced way back in 1956. The 12AX7 family was introduced even earlier, in 1947, while the 6SN7 first appeared... in 1939, before World War II started. Indeed, this valve — or, rather, many thousands of them — were used in ENIAC, the first electronic general purpose computer, which was built in 1946. But they were actually developed for audio applications.

The amplifier formally has three line-level inputs: two sets of RCA sockets on the rear panel and a convenient 3.5mm socket on the front (if one doesn't find it too odd to plug a portable player into a quality valve amplifier). But it also has a pair of balanced XLR inputs for use with very high-end source devices. And it has a pair of RCA sockets (and the all-important earthing point) for a turntable, with support for moving magnet level cartridges. All the input terminals are gold-plated.

The layout has the eight valves sitting above the chassis, protected by a perforated metal cage at the top, sides and rear, with what appears to be a Perspex panel across the front. We heartily



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approve. One of the enjoyable aspects of a valve amplifier is the soft orange glow emitted by the tubes. This is enhanced by the VU output meter which is centrally placed on the front chassis panel and is lit to close enough to the same hues.

The cage and panel can be easily lifted after removing two screws.

Behind the cage are four enclosures for transformers: the two output ones and, we're informed, two input transformers. After using the unit for a while it was easy enough to judge by the marked heat differential that the two left-hand transformers were for output.

On the front chassis panel are, besides the aforementioned 3.5mm input and VU meter, just three controls: a hard power button, a rotary input selector and a rotary volume control. The unit also comes with a small remote control for controlling volume, input and putting the unit into standby.

The actual input switching is performed by relays — the front-panel switch merely controls that. Behind the volume knob is a motorised Alps dual-gang potentiometer. This is a brand respected for its close matching of left and right channel balance. Press the volume up or down keys on the remote and the knob turns as the Alps device physically rotates.

The 'power' key on the remote switches the unit to a standby mode that stops any sound coming through, but leaves the heaters on the valves running so there's a fair amount of idling power consumption. If this concerns you, press the button on the front panel.

We must note that the review unit provided to us was a final 'Engineering Sample', expected to be identical to the units you will soon be able to purchase. Except for the remote control, which had some unneeded keys.

### PERFORMANCE

We installed the unit with two sets of loudspeakers available to it. One set were very large floorstanders of low impedance, while the other set were compact KEF loudspeakers with surprising bass for their size and an eight-ohm impedance. For signals we plugged in a high quality digital audio streamer (its analogue outputs of course), a DAB+ receiver, and a turntable.

We shall deal with our sole complaint up front: the volume buttons on the remote control proved to be rather too sensitive, making it difficult for us to get the precise volume level we sought.

Switching the unit for operation from standby mode rendered it ready for immediate use. Switching on from completely off took perhaps 20 seconds as the relevant bits were warmed up. Until then no input could be selected.

First things first: power. Yes. There was plenty. Not once did we feel the slightest sense of limitation with either speaker system. We ran a little headbanger Faith No More — the delicately



titled 'Surprise! You're Dead!' — at a level that had the VU meter touching the edge of the red overload area, and our loudspeakers of moderate-sensitivity remained completely unstressed, but exceptionally loud. There was perhaps a touch of unwarranted brightness, but as we'll see, a fresh delivery of the upper frequencies seemed to be a largely attractive characteristic of the amp.

The thing that surprised us about that track, though, was the astonishing presence during the opening moments as the introductory cymbal was struck. It hovered in space as a real, tangible object, rich with its overtones.

Fall Out Boy's 'Thanks fr th Mmrs' was delivered with a solid bass line and drums that entranced in their presence and position. There was a real sense of dynamism, of limitlessness that lifted the sound above the norm.

We moved over the intimately-miked Laura Marling on 'Once Was An Eagle'. The initial 's' on the first track threatened some sibilance, but after that her voice was delivered with fine restraint, but also with a remarkable immediacy. Her strummed guitar sat back in the mix, and somewhat towards the rear of the sound-stage. The percussion popped out here and there, across and up and down the sound-stage. The bass drum had plenty of strength, and a certain floridness not normally experienced with solid-state amps. It was a kind of slight surrender of control for a more life-like sense.

Indeed, in general with the percussion — both at the bass and midrange — there was a combination of complete lack of compression along with a certain abandon, unconcern for propriety or for clinical accuracy that made for a particular engaging, indeed exciting, delivery.

Oh that sound-stage! We kept on being surprised by it, and by the unconstrained dynamism of the delivery. Early songs from Chicago, such as 1970's '25 or 6 to 4', with their relatively naive recording styles and fat horn sections, were glorious. High-definition jazz from the AIX label — 'Majuka' by the Latin Jazz Trio, for example — achieved the same in terms of imaging and balance and presence, but a greater sense of refinement.

Yet detail aplenty was there, too. The little noises inherent in the movement of Christine

Jaccotet's harpsichord on Bach's 'Well Tempered Clavier' were fully rendered, while the tonal balance was controlled to give a solid sound, rather than the brashness with which harpsichord can often be delivered.

Finally, Mark Knopfler has enjoyed a fairly prolific post-Dire Straits career. This year's album 'Tracker' is as good as anything he has done before, and is gorgeously recorded. The fact is, with 'Mighty Man' played via this amp, he might as well have been in our listening room with us.

### CONCLUSION

The Richter Medusa integrated valve amplifier is a lovely unit to hear and would be a delightful product to own. It will surely find a place in the homes of many who enjoy true hi-fi music. ■

### Richter Medusa integrated valve amplifier

- Glorious sound
- Good connectivity, including pre-amp bypass
- Reasonably priced

- Remote volume control a bit touchy

**Price:** \$3299

**Power:** 2 x 50W

**Inputs:** 1 x stereo audio (balanced XLR), 2 x stereo audio (RCA), 1 x stereo audio (3.5mm), 1 x stereo phono (RCA), 1 x stereo power amplifier input (RCA)

**Outputs:** Speaker binding posts (two taps for 4- and 8-ohm speakers)

**Quoted frequency response:** 20Hz-50kHz (@ 5 watts)

**Distortion:** 0.1% (@ 10 watts)

**Signal to noise ratio:** 86dB (line); 78dB (phono)

**Input Sensitivity:** 300mV (line); 3.5mm (phono)

**Input Impedance:** 80kohms (line); 95kohms (balanced); 47kohms/68pF (phono)

**Dimensions (whd):** 430mm x 180mm x 350mm

**Weight:** 30kg

**Warranty:** Two years (six months on valves)

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