audition

equipment review

Legend Acoustics Kurlette II Active Subwoofer

hat? another subwoofer! Hot on the heels of the huge Accusound

from our previous issue (AVL-166) comes a very different beast. The price is the same - the ultra competitive \$999 mark, but as we will see, the approach is very different. This new subwoofer is from Legend Acoustics' founder and chief designer, Dr Rob Crawford and

he's made a Mk. II model as replacement to the successful Kurlette.

Legend Acoustics has made quite a name for itself in its 10 year history, and Dr Crawford is certainly one of the better-credentialed speaker designers in this industry. After completing his doctorate he was soon working for Scottish audio manufacturer Linn Products as a speaker designer. He cranked out some well-known and very competitive designs before heading back to Australia and setting up Legend Acoustics - a company which has won a number of awards since its founding. With such an impressive past one can't but help take his products with a certain level of seriousness. My only previous time with one of his products was with the Kurlo 3 subwoofer a couple of years ago. The Kurlette II reminds me of that sub (although it is smaller and less expensive) as it is built like a brick outhouse and unusually for its price point, has no port. Let's get ready to rumble!

The Kurlette II is very small cube but don't let that fool you. It is very solidly put together, with extensive asymmetric bracing and well damped with plenty of wool states the Legend website. I didn't open up the sub but after rapping the knuckles around the enclosure there could be no doubt that this little guy is solidly built.

Legend's compact subwoofer delivers more bass than its size suggests

By Gavin Womersley

Vital Statistics

Dimensions:

325 x 325 x 310mm

Weight:

18kg

Price:

Distributor:

Legend Acoustics

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Tuross Head, NSW 2537

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The amplifier in the new design has jumped up to an impressive 500 watts as rated into the drivers nominal 4 ohm load. The driver is no off-the-shelf special either. Nominally 10-inches (250mm) in diameter and with an oversized 3kg magnet, the Peerless woofer from Denmark has a stated excursion of 2cm. That means it can move a lot of air. As mentioned previously the sub is a sealed enclosure thus the only source of sound is going to be from the driver. While this will cost some output in some of the subwoofer's frequency range Audio & Video Lifestyle readers will know that the sealed subs don't 'chuff' and generally sound tighter with less overhang after transients (like a good old kick drum) than a ported design. Well that's the theory anyway. After hooking up we can see if it holds true with the Kurlette II.

As far as hooking up is concerned the sub has line-level inputs but no outputs for those who might want to place it as a link between a stereo pre and power combination. There would be few people wanting to do this with a \$999 sub so the loss of line level outputs is no great blow. There are

speaker-level inputs and outputs and the usual frequency control that lets you decide how high in frequency you want to have your sub run to.

A switch is provided which lets you take an unmodified signal straight from your surround receiver or processor can bypass this control and there is an auto/on/off choice for the subs power and a gain control.

The Kurlette II was placed as close to the front left corner as I could manage. With all Legend subs purchased, Dr Crawford sends an article on subwoofer set-up from a Swedish scientist Ingvar Oman. He advocates the use of corner placement for subwoofers. I have always been a fan of corner placement for a variety of reasons, not the least of which is the roughly 9dB boost gained over most of the subs operating range. This means the sub does not have to work as hard to produce the same output. There are also a number of other benefits from corner location such as weakening out of phase reflections from the room boundaries and equal excitement of all existing resonances so that none come to dominate. More companies should supply such information to help the

end user. Ingvar Oman also explains the advantages of multiple subwoofers and their placement, but that is another story. I had the sub running for close to a week before any serious listening or testing was completed. As with all subwoofers, I adjusted the volume control until its level matched the other speakers which are already balanced and the reference level point known. I then started testing to see how low, loud and how cleanly the sub went.

Measurements were made four metres from the sub location in free space. At 45Hz I expected the little sub to do well and I was right - it did! However between 40Hz and 30Hz the Legend Kurlette II performed extremely well. At all of these frequencies its output was clean in character, again with the benefit of not suffering any port noise due to its sealed design.

At 25Hz I could still get a clean 90dB from the Kurlette II. In my room the Legend's bass started to drop away below 27Hz. Please remember though that my measurements are not performed in an anechoic chamber and are subject to the vagaries of room size and construction. They at least give a peek at how subwoofers perform in a reasonably typical Gyprock-walled room.

Once the testing was done it was on to music. First up was Diana Krall: Live In Paris. This is a great DVD with some really nice plucked bass from bass player John Clayton. The Kurlette II was clean and pretty tight, stopping when it was supposed to and carrying the tune and revealing some of the subtle variations in pitch of John Clayton's bass playing. Next up was music from a Telarc movies compilations disc. I tried the dramatic Imperial March from Star Wars and the bass drum gets an almighty thwack throughout this track. The big transient was handled well and only sounded strained at silly volume levels.

Organ music sounded great on the Kurlette II. Its control and ability to go deep for a small sub really became an advantage here as both Jesu Joy Of Mans Desiring and tracks from the Dorian recording The Great Organ of St. Eustace showed. Kick drums also fared well with the Legend handling the transients from my test drumming track Boxenkiller with ease. At very high levels things came undone but for most

Technotalk **Product Type:** Active subwoofer **Driver Complement:** 1 x 10-inch (250mm) forwardfiring, long-throw woofer with 20mm excursion Cabinet Type: Sealed **Cabinet Construction:** 40/18mm MDF, internally braced **Power Amplification:** 500 watts RMS Low Frequency Response: 28Hz -3dB Input: 1 x line level Output: 1 x line level, 1 x speaker level Variable Low Pass Filter: 40Hz-160Hz **Cabinet Finishes:** Black vinyl grained veneer

people in most rooms any bass associated with heavy rock will cause no complaints. Like all other woofers at this sort of price the deepest bass eluded the Legend. The first few footfalls of the T-Rex on the *The Great Fantasy And Adventure Album* from Telarc are all well under 25Hz and simply those subwoofers priced around the \$1,000 mark generally don't go as low.

Technotalk specifications and recommended

retail prices are supplied by the manufacturer

Movies are probably the most important reason for the widespread popularity of subwoofers and I tried a variety of them on the little Legend. The Kurlette II had amazing output for a small sealed subwoofer, but it cannot do the impossible. On most movies it could give reference level a nudge before it reached its limits. It let me know what those limits were by a cracking bark but otherwise seemed unaffected. Event Horizon, Independence Day and Top Gun were a hoot with controlled precise fury at about 8dB below reference level. For movies with even tougher bass passages, such as U-571 and The Haunting, I had to back off to around 10dB below reference in my 2,000 square foot room. This is still loud and to be honest most people would consider it too loud. I only torture products for review purposes and it is rare that I

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would watch a whole movie at reference level.

The Kurlette II offered high quality bass right up to its physical limits and it did it from a damn small cabinet.

There are now a number of great subwoofer choices at \$999 but the Legend Kurlette II has the tightest bass of any that I've so far tested. And although it does not play quite as loudly as some, it still has guts-aplenty and goes very deep for such a small subwoofer. It will be just the ticket for smaller rooms. Many people will appreciate the Kurlette II's modest footprint and a bass performance which is out of all proportion to its size.

Ancillary Equipment: Yamaha DVD-S1500 DVD player, Rotel RSP-1068 AV processor/preamp, Parasound HCA-2205 multichannel power amp, Topfield TF-5000 STB, Celestion A Series loudspeakers, Velodyne DD-18 active subwoofer, Toshiba 46-inch Widescreen RPTV, Audioquest speaker cables and interconnects

Opinion

The 'Opinion' expressed here is that of the reviewer, summarised in the form of a 5-star rating system, and should be considered as an integral part of the full contents of this Audition Equipment Review. As such, each category should be judged on its own merits and not necessarily used as a comparison with other equipment reviews in this, or other editions of Audio & Video Lifestyle magazine.

★ Shocker
 ★ Average
 ★ Good
 ★ A Excellent
 ★ A Perfection

"The Kurlette II offered high quality bass right up to its physical limits and it did it from a damn small cabinet."

Performance

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Build Quality

* * * * *

Compatibility

* * * *

Value For Money

Audio & Video Lifestyle Magazine