



The Sunfire proved impressively weighty not only when you lift it, but in its performance as well.

be 10-inch drivers on two sides, and a black piano gloss finish. A cube of water the same size as this subwoofer would weigh 26.5 kilograms. It weighs 24.8kg. Astonishing!

Anyway, it turns out that one of the drivers is a passive radiator. Pushing either cone firmly creates only the slightest movement. The suspension is incredibly heavy, so a hefty amplifier is required to make this move. But this is Sunfire, most famous for its high efficiency, high performance, tracking downconverter power supply amps. This one is rated at no less than 2700W.

The driver and the passive radiator are exposed. No grilles as such are provided, but a kind of surround is provided for each side which provides a little side-ways protection. Nonetheless, care should be taken around this subwoofer to avoid damage.

The unit comes with stereo line-level inputs, plus a balanced XLR LFE input. Regular LFE connections are made to one channel of the line-level input. There's a bypass setting on the low-pass filter control. There's also a slave input (and output) for daisy-chaining a series of subs. The stereo input is passed on to a stereo line-level output, which can be optionally high-pass filtered at 85Hz.

The usual controls are provided, but there's a little something extra: an automatic calibration system, complete with microphone. Some of the other subs discussed here have calibration system as well, but none is as simple as this: put the microphone at the listening position, plug it in, press the 'Start' button and wait for a couple of minutes. This tests and adjusts the levels at 35, 49, 64 and 84Hz. You can adjust using a fairly clunky manual system at the same test frequencies if you prefer, but given the results we got, we don't see why you'd bother.

Sunfire XTEQ10

Not only an impressive performer, but blessed with ease of use thanks to an effective auto-calibration system.

SUMMARY

Sunfire XTEQ10
subwoofer
Price: \$2999

- + Very high levels available
- + Excellent auto-calibration system
- + Extremely compact

- Not effective at 20Hz
- 2nd harmonic distortion a bit high

When the courier came, he noted that the Sunfire XTEQ10 subwoofer was startlingly heavy, even though the carton was fairly small. But this was misleading. It's actually *shockingly* heavy, especially once you get it out of the carton.

To do that, you slice open the top of the carton, open the four flaps. Inside you'll see another carton. Repeat. Another carton. Repeat. Another carton. Pull this out. It holds the accessories. Invert the three nested cartons carefully and lower the subwoofer. Remove the four cardboard-protected polystyrene corner pieces. Remove the plastic bag. Remove the cloth bag. There, it's done!

What you've revealed is a remarkably small cube, less than one cubic foot in volume, with what appear to

“authoritative, clean, fast and powerful, as though it was four times the size it actually was...”



Performance

As usual, I started my listening with the EQ turned off in order to see what the sub would manage in a kind of native mode. To be frank, it was really quite disappointing. The deep bass was very recessed compared to the upper bass, sapping the sound of any sense of authority. Rather than pursuing that, I ran the auto EQ process — which really was as easy as outlined.

That done, I tried listening again. And the subwoofer was an entirely different unit (see also our *Measurements* panel). It was balanced, authoritative, clean, fast and powerful. It also sounded as though it was four times the size it actually was. I kept having trouble believing that

Measurements



The power of auto-calibration — the Sunfire's response after EQ (blue) was far smoother than without it (orange).

As mentioned in the main article, the subwoofer was quite different with EQ switched off, and with the EQ automatically calibrated. In the former condition (orange line), the bass was flat and even between 27Hz and 50Hz, and then rose to a new plateau some 9dB higher commencing at 60Hz. No wonder the deep bass sounded weak. The auto EQ, though, changed that completely. When it was done (blue line), there was just one plateau, from just under 27Hz to 95Hz (± 2 dB).

This subwoofer produces virtually nothing in the way of infrasonics. Indeed, it looks like the DSP imposes a brick-wall filter around 26-27Hz. The output drops by 15dB well before 24Hz. There's a bump in the response around 20Hz, but it is still down around -17dB.

I think this is good design practice for a subwoofer this small. Trying to move the cones at lower frequencies means greater cone excursions, which at some point would tip over into obvious distortion

and possible bottoming out, plus require even more thousands of watts. This subwoofer works very well in the chosen frequency range.

You might expect a fair bit of distortion given the amount of work everything is required to do, pushing a big cone in a small enclosure. At my chosen 30Hz, though, the results were quite different. There was indeed a fair bit of 2nd harmonic — nearly 4% — but the third harmonic was only 0.4% and the higher orders at or below 0.05%.

this unit was delivering the levels it was doing. The mighty rumble of the jet airlines on the tarmac during the climax of 'Heat' (1995) pounded out. Virtually all musically important notes were reproduced, although some exotic components were missing, such as the 16Hz fundamental on my favourite Bach pipe organ piece. However the 32Hz component of this was wonderfully full and room filling.

Still, the really deep frequencies suggested by the specifications were clearly not evident.

One thing: the sub seemed slow to react to an input — it took eight seconds for the auto switch on.

Conclusion

The Sunfire XTEQ10 is an extraordinary device, with great performance from 27Hz and up, while the auto-calibration feature means that it can be readily optimised for just about all systems. *SD*



SPECS

Sunfire XTEQ10 \$2999

- Drivers:** 1 x 245mm, sideways-firing
- Enclosure:** Passive 254mm radiator
- Inputs:** 1 x stereo line level, 1 x XLR LFE, 1 x Slave
- Outputs:** 1 x stereo high pass, 1 x Slave
- Low-pass crossover:** 30-100Hz
- Quoted power:** 2700 watts
- Measured room response (pink noise -6dB):** 25.6-119Hz
- Level at 20Hz:** -17dB
- Dimensions:** 290 x 315 x 290mm
- Weight:** 24.8kg
- Warranty:** Three years
- Contact:** Qualifi
- Telephone:** 1800 24 24 26
- Web:** www.qualifi.com.au