



Deep Blue sub aims to plumb the depths

Thanks to its monster 15in driver, Velodyne Acoustics' new sealed subwoofer gives **Mark Craven** a taste of the low life

AV INFO

PRODUCT: Front-firing sealed subwoofer with 15in driver

POSITION: Top of Velodyne's DB series, above 12in, 10in and 8in

PEERS: Bowers & Wilkins DB4S; KEF KF92; SVS SB-3000

LONG-TERM AV FANS will remember Velodyne. Once the go-to for superior, face-melting subwoofers, the American company picked up awards left, right and centre for its range of bassmakers, particularly the flagship DD+ series, which peaked with a terrifying 18in model.

Then something very weird happened. In the mid-2000s, company founder David Hall – clearly something of a boffin – began experimenting with driverless car technology and developing LIDAR (Light Detection and Ranging) sensors. This proved to be highly successful: by 2010, Velodyne's LIDAR wizardry was being used in Google's prototype driverless cars, and in the following years the technology was picked up by companies including Ford, Nokia, Caterpillar and Tom-Tom.

All this, plus the marine division of Velodyne created by Hall to cook up self-balancing boats, seems to have put

the subwoofer business on the back foot. The product cycles became longer, and new arrivals dried up (Martin Morecroft, boss of Velodyne's UK distributor Red Line, tells me the last 'proper' new Velodyne sub was the 2015 Impact MkII). Eventually, in 2016, Velodyne LIDAR became a separate operation to Velodyne Acoustics, and the latter was then sold to German company Audio Reference in 2019.

Now, in 2021, under the guidance of its new owners – which has employed members of the original Velodyne design team – it's back in business and back in the UK. A new Deep Blue subwoofer series (represented here by the 15in DB-15) has joined a revamped version of its compact MicroVee, and Red Line says other ranges are due before the end of the year. It's even promising new DD subwoofers in 2022.

The Deep Blue models are successors to Velodyne's previous SPL I range, and aim to be similarly compact thanks to sealed cabinets. I'm of no doubt the DB-8, an 8in model, is nice and slinky (and there are also 10in and 12in versions) but this 15in iteration is, obviously, fairly large at 42cm wide and 44cm high.

The weight, however, is an entirely manageable 23kg, which some might feel is indicative of where this woofer has been built to a price – SVS's SB16-Ultra, for example,

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tips the scales at over 50kg. Yet more money is surely being saved by the DB-15's basic specification. There's no app control, EQ or digital filtering here, with setup running to standard crossover and phase control.

The DB-15's new driver uses a reinforced polypropylene cone with quad-layer voice coil and a dual magnet assembly. Giving it its get-up-and-go is a 450W-rated amp. Somewhat unusually for a woofer, this is Class AB rather than Class D.

Throwing a party

Installed as part of a system with Monitor Audio speakers and Arcam processing, the DB-15 proves to be a chip off the old block. Velodyne has lost none of its ability to craft a big, deep and – when needed – brutal bass experience. This is a sub that throws its weight around, and enjoys doing it.

Chapter 2 of *Edge of Tomorrow* (Blu-ray) begins with Tom Cruise's hapless military smartball strapped into his dropship 'seat'. There's no overt low-frequency info in these opening moments (unlike the film's credit sequence, which had the DB-15's woofer jutting out its jaw yet still managing to stop surprisingly quickly), but the Velodyne still adds layers to the experience, bringing a pervasive sense of depth and scale to the soundfield, and conveying the size and heft of the craft as it rumbles through the air. Of course, its impact becomes ever more noticeable when the dropship is hit, the explosion that rips a hole in its side arriving with real slam.

The following beach battle sequence offers everything from tight, bassy impacts, deep thuds and longer, more reverberant swells. The DB-15 nails them all, its ability to maintain output with real low-frequency moments helping, in particular, the crashing helicopter than almost slices Tom's head off.

This sub, as advertised, goes loud and deep. The frequency response is rated down to 23Hz at -3dB, with the promise of effective wooferage to 13Hz, and in my medium-sized room it proved to be a genuine trouser-flapper. What was particularly welcome was that it didn't seem to reach the limits of its ability even when I'd pushed the level way beyond what my neighbours would tolerate. Your experience may differ, but I can't imagine many people moaning that the Velodyne DB-15 is 'too quiet.'

SPECIFICATIONS

DRIVE UNITS: 1 x 15in high-excursion reinforced polypropylene woofer **ENCLOSURE:** Sealed **FREQUENCY RESPONSE (CLAIMED):** 23Hz-120Hz (+/-3dB) **ONBOARD POWER (CLAIMED):** 450W (RMS); 1,000W (peak) Class AB amp **REMOTE CONTROL:** No **DIMENSIONS:** 425(w) x 445(h) x 488(d)mm **WEIGHT:** 23kg

FEATURES: Stereo RCA line-level input; LFE input; speaker-level input (on spring-clip terminals); 50Hz to 180Hz low-pass filter; volume and variable phase control; MDF cabinet with 2in-thick front baffle; on/off/auto power control; four-layer 3in voice coil and dual ferrite magnet motor

TESTED WITH



FREE FIRE: This delightfully straightforward 2016 arms-deal-gone-wrong bulletfest from director Ben Wheatley (next movie: *Aquaman 2*) misses out on a 4K Blu-ray release or object audio soundmix. In its place, we get a crisp-looking 1080p encode and a 5.1 DTS-HD Master Audio track that's full of snap, crackle and pop.



It's also a sub that brings a good-time feel to your movie-watching. Instead of the steely-eyed control of some sealed, big-driver rivals, this Velodyne gives off a slight feeling of flying by the seat of its 3in voice coil. That's not to say its output is loose, flabby or uncertain – there's enough engineering skill here to keep the 15in woofer in healthy check – but it's not polite either. The DB-15 attacks LFE effects with gusto. Arguably, it sometimes makes a bit too much of them, not quite nailing a transient snap.

That said, with the more upper-range bass of the frequent gunplay in *Free Fire* (Blu-ray) it sounded really fast and responsive, and this characteristic worked well when I put it to work with music.

A run-through of Michael Jackson's one-two punch of *Beat It* and *Billie Jean* (Thriller, CD) benefitted from a rich bass tone and the scale it bought to drums.

Back to basics

My reservations about the DB-15 don't really concern its performance. Rather, I feel duty-bound to point out that while the curved-corner black MDF cabinet looks smart, Velodyne's circular, flush-fit grill is a bit of an eyesore, but when you remove it, it exposes a less-than-premium finish to the cabinetry underneath. Operation and setup are also unexciting. There are more affordable subs offering remotes, a choice of preset modes or EQ, plus wireless connection potential and 12V triggers.

So from the outside, the DB-15 looks and feels a little bit basic. Thankfully its performance is anything but. Anyone who's always wanted to experience the scale of a 15in subwoofer but couldn't afford one should check this out ■

HCC VERDICT



Velodyne Acoustics DB-15
→ £1,495 → velodyneacoustics.com

WE SAY: This subwoofer gives you a 15in driver in a cabinet that's not too big and then hammers you about the head with it. A deep, cinematic performer with an exuberant edge.

1. Velodyne's sealed, front-ported DB-15 sits on stubby rubber feet

2. The subwoofer's 15in polypropylene cone driver gets a four-layer voice coil and hefty magnet