



## **Option Audio OA12XTMPACK Enclosed 12-inch Subwoofer**

Reviewer *Marty Price*

Getting in touch with your inner basshead.

» Option Audio is a company well known for its subwoofers, speakers and amplifiers. While it may have been a little scarce a few years ago, these days it's common to find an Option Audio equipped car at most audio related car shows and sound offs. So once one has successfully created an award winning range of subwoofers, what is the next step? Well rather than developing further ranges unnecessarily, Option Audio instead opted to inject some serious time and effort into developing an enclosure to suit its top performing subwoofer – the OA12DVCXTM. Yes, the part number is a complete mouthful but the subwoofer is quite competent, as is its enclosure.

### **SIZE IS ALL**

The OA12DVCXTM subwoofer represents the epitome of Option Audio's ability to move serious amounts of air around your car. Weighing in at the better part of 25 kilograms, it's an impressive unit and it would take some engineering prowess to create an enclosure to suit. See, the single biggest issue with designing a prebuilt enclosure is not the driver itself but the surrounding area. Both sealed and ported enclosure designs need to be tweaked a little depending on how much air is in front of them. In other words you would build a different enclosure to suit a Mini Cooper S than you would for a massive Mercedes Vito van. Therefore I was

quite interested to see how a company such as Option Audio (possessing the credibility for subwoofer and enclosure design that it does) would attack this hurdle.

Known for its chrome and other visual delights, the packaging and enclosure itself is pretty tame. Pulling aside the metric ton of cardboard packing it takes to hold a thirty kilogram unit securely; you'll find the enclosure trimmed in somewhat thin, but functional carpet. However to spruce the external appearance up a little the enclosure does have the 'Option Audio' logo and the word 'Extreme' embroidered into the face and ends respectively. Despite the website saying the wall

thickness is 20mm, the wood is actually 18mm but then again if you include the carpet thickness then it's spot on. A large plastic terminal plate is screwed to the rear, and besides leaking around the edges and through the terminal posts, are also susceptible to cracking. I was relieved to see that Option has seen fit to include two large slot ports on the same plane as the subwoofer, unlike the last two pre-loaded enclosures I've reviewed. This is important, because when you think about the nature of a ported enclosure, you're trying to get a certain frequency of airwave to expel and marry up with the front wave.

Turning our attention from enclosure to the subwoofer itself and starting at the top; the cone is made from dual woven Nomex and is finished in a bright silver textured colour. In the centre of the cone is a large inverted domed dust cap which has the Option Audio logo brightly embossed into it. This works in conjunction with the cone material providing an extremely strong cone that has very

through these huge air vents while the thick dual 2-ohm copper voice coils are buried deep within the magnet. Given the solidity of the motor and the amount of air flow that has been allowed for in the design, you'll not be surprised to hear the unit can handle a *continuous* power feed of 1250 watts! The suspension, cone and surround make the unit capable of peak bursts over twice that amount. The bottom end of the suspension is via a thick flat spider with a more than generous run of resin around the edge holding it in. The flat tinsel leads that run from the chrome terminal posts built into the frame to the motor itself are fused to the spider and hence don't rattle and make strange noises at full song.

### MAD BUILD, MAD SPECS

Some of the unit's specs include a frequency response of 10-2000Hz (may be a tad optimistic), an equivalent suspension stiffness/air space (Vas) of 53.5 litres and sensitivity of 90.2dB – pretty good

with the suspension holding everything linear and controlled, but just doesn't like doing the precise and micro detail work. I also noticed the image shifting as the sound hovered around the port frequency. Group delay is a bit of an issue for many ported enclosures as the timing goes up as the port frequency is approached. I got the feeling that although the entire package overall is nice, you would require a slightly different enclosure design if you're a serious sound quality buff. So from there I jumped into the pressure testing.

The OA12XTMPACK is marketed as one of the harder hitting combinations on the market so would it live up to the hype? The short answer is: absolutely. When pushing the subwoofer hard with anything from sine waves off bass CDs to even deliberate thrashing on a pipe organ track, the subwoofer just keeps on giving. What did surprise me is just the strength of the thing – even when pushing the better part of 140dB in our test car there wasn't a hint of smoke, bottoming out, surround creasing or that familiar glue smell you sometimes get when getting a little over enthusiastic with the volume control. Now I should mention that on the Option Audio website larger SPL figures are claimed but I'm here to test the subwoofer, not destroy it.

### CONCLUSION

If you're a little tired of the usual mainstream selection of subwoofer brands available on the market for more SPL than SQ duties, then definitely include Option Audio in your audition list. If you want a seriously hard hitting subwoofer and are not that keen (or able) to make an enclosure yourself, then designs such as the OA12XTMPACK are a smart place to start. ◀◀◀

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little give in its design. The surround is constructed from butyl rubber and in what felt like a trip down memory lane, has double stitching around the edge just to make sure the top end stays together and linear during the seriously noisy moments. Surrounding the top of the frame is a chrome retaining cap which adds to the visual appeal. One thing that does irk me a little is the proclamation by most companies regarding a subwoofer's size when it includes a massive surround. Granted; the surround on the OA12DVCXTM subwoofer is smaller than some but when you take into account its size the actual cone diaphragm that is pushing air measures closer to 8.5-inch not 12-inches which is the stated size.

The back-end of the unit is a fairly impressive sight to behold – the bright chrome die cast aluminum basket will have you reaching for the sunglasses right away! It's a large structure, larger than most on the market today and it sits a little over 230mm high – the 450 ounce magnet itself makes up just over 70mm of this height. The OA12DVCXTM uses triple stacked 23mm thick magnets sandwiched between a 10mm thick top retaining plate and 12mm sloping back plate.

Located around the top of the motor retaining ring, between it and the basket, are massive external 8mm x 25mm cooling vent triplets from which the air can exhaust once sucked in through the 25mm pole vent hole on the rear plate. The thick 90mm voice coil former can clearly be viewed

considering the motor size and weight. Neither Xmax nor physical cone excursions are quoted which is odd (as most companies like to boast about it) but I didn't think for a second that it couldn't move some serious air. Well enough talk, it was time to find out.

Before I could test it, I first had to pull the terminal plate off the rear to reconnect the subwoofer, only once the driver itself was secured in front. See while Option Audio may make some very nice subwoofers, the cable budget may have been a little down during this unit's design as there's a terrible stretch for the cable to reach from the terminal plate to the subwoofer itself. With that soon rectified I positioned the enclosure into our wagon test car to have a listen.

Running the unit in you can definitely see that it's built for punishment; it shows very little sign of breakup and distortion even at volumes of 120dB plus. I ran the sub with an Audison LRx1.2k amplifier which can output as much as 3200 watts at 1 ohm. In other words; that's more than enough power to get the OA12DVCXTM to dance. I started the testing using some sound quality related test CDs containing everything from fast double kick drumming to complex bassoon, cello, tuba and pipe organ tracks. The subwoofer performs surprisingly well considering its girth, however when trying to faithfully reproduce those pesky little twitches on Les Claypool's bass guitar, it isn't overly happy. It seems to have no trouble

### TECH SPECS

#### OPTION AUDIO OA12XTMPACK ENCLOSED 12-INCH SUBWOOFER

**TYPE:** 12-inch dual voice coil subwoofer

**POWER HANDLING:** 1250 watts continuous, 2050 watts maximum

**FREQUENCY RESPONSE:** 10Hz – 2000Hz

**IMPEDANCE:** dual 2 ohm

**COST:** \$899

**CONTACT:** Option Audio on 07 3805 5112

**WEB:** www.optionaudio.com.au

- Highly engineered driver
- Well made enclosure
- Capable of massive sound pressure

- Very heavy
- Lacks subtlety with finer musical detail