



SUBWOOFER OF THE YEAR



For the *Hot4s* magazine Subwoofer of the Year category, we were sent no less than 11 drivers from all manner of brands and for all manner of prices, spanning from as affordable as under a hundred bucks to as much as over \$699. Bass, it seems, is available to any man on any budget, but only one will be awarded as the best subwoofer of the year.

While ostensibly designed to do the exact same job, determining what the best of the best is comes down to more than simply how a subwoofer sounds or how cool it looks.

Subwoofers have one of the most difficult jobs in mobile electronics, requiring to be situated in a suitable enclosure volume while also fitting into the car's boot area and mating neatly to any kind of amplifier.

From an initial list of 11 candidates for Subwoofer of the Year, we began by culling this back to a more manageable six final qualifiers for the sound quality, SPL and other subjective comparison tests. To achieve this, we looked at each subwoofer's basic attributes to determine which have been designed to be useful to as many buyers as possible.

Points were awarded for the number of variations offered in the identical range for both diameter and impedance options for the voice-coils, which determines how easy it will be to match the subwoofer to your car and amplifier.

Points were also awarded for the minimum sealed enclosure size recommended by the manufacturer, with smaller being more desirable for obvious reasons. Here the most compact scored full marks and every other subwoofer was scored a percentage of points in direct relation to how their box size compared.

We also awarded extra marks for any subwoofer that is offered in a factory-built enclosure to make adding it to your system a headache-free process, while further marks were offered for the type of technical support the supplied owner's manual provided, like electro-mechanical specs and marks for each recommended enclosure suggested.

Lastly, there were points for build, appearance and innovation in design, allowing a sub total that could make a value-for-money assessment possible. After the first tally was done, the bottom five scoring subwoofers were removed from the contest.

SUBWOOFERS HAVE ONE OF THE MOST DIFFICULT JOBS IN MOBILE ELECTRONICS, REQUIRING TO BE SITUATED IN A SUITABLE ENCLOSURE VOLUME WHILE ALSO FITTING INTO THE CAR'S BOOT AREA AND MATING NEATLY TO ANY KIND OF AMPLIFIER

FEATURES AND PERFORMANCE SCORE CHART

Basic attributes											
Brand	Kicker	Morel	Earthquake	JBL	Sony	Kenwood	Hertz	Jaycar	Blaupunkt	Pioneer	Cadence
Model	08S12L7	Ultimo 10	DBXI-12D	P1222	XSL120PSA	KFCXW1224D	ES300	CS2358	GTW1200	TSSW301	FXW12
Diameters offered /20	8,10,12,15	10,12	10,12,15	10,12	12	10,12	10,12,15	10,12	10,12	10,12	10,12,15
Impedances /20	D2 or D4	S4	S4 or D4	D2 or D4	S4	D2 or D4	S4 or D4	S4	S4	S4	S2 or S4
Minimum sealed box size /10	24.9-l	23-l	25.5-l	28.3-l	81.7-l	Not stated	20-l	32.9-lt	44-l	18.4-l	32-l
Pre-fab enclosure /10	Single	No	No	Single	No	No	No	No	Single	No	Single or dual
Supplied technical data /20	18	20	16	16	2	0	14	14	16	16	16
Build quality /20	18	17	13	14	6	12	11	7	5	10	8
Innovation in design /10	9	8	6	7	5	6	5	7	4	9	5
Cosmetic appearance /10	10	10	7	8	5	7	6	4	3	6	4
Score /120	107.5	78	79	86.5	30	57	75	52.5	52	66	74
RRP	\$629	\$699	\$319	\$399	\$149	\$249	\$296	\$99.95	\$139	\$229	\$229
Dollars per point	\$5.85	\$8.96	\$4.04	\$4.61	\$4.97	\$4.36	\$3.94	\$1.90	\$2.67	\$3.42	\$3.09
Value for money /25	8	5.5	12	10	9	11	12	25	18	14	15.5
Sub Total /145	115.5	83.5	91	96.5	39	68	87	77.5	70	80	89.5
Rank	1	6	3	2	11	10	5	8	9	7	4

QUALIFIERS

Sony's XSL120P5A was the first to fall by the wayside, thanks to being very simplistic in features and options while asking for a whopping 81.7L sealed box to work, which is simply far too large for any single 12in subwoofer to be considered a viable option in 2008.

Had Kenwood supplied its impressively built KFCXW1224D with electro-mechanical specs and a couple of box design suggestions, it would have made the final cut, and to omit these essentials is, quite frankly, unforgivable these days.

Next, Jaycar's new low-profile Venom 12in got the chop due to being only offered in single 4ohm in either 10 or 12in and with no factory fitted enclosure on offer. Blaupunkt's affordable GTw1200 also missed the cut thanks to a basic overall design that, while cheap, never really shone in any area.

Pioneer's low-profile TSSW301 was also an also-ran, largely because no factory-fitted box is offered (which is hard given this driver is designed for awkward locations) and because it only comes in two sizes (10 or 12in)

and one impedance choice (4ohm).

While I have no doubt that some, or all, of these subwoofers have their sound quality merits, so too do those six that indeed qualified for the audible testing. The fact is, to be Subwoofer of the Year takes more than just great sound quality, and this first round of elimination comparisons allows us to spend more time listening to the subwoofers that are the most relevant to the most number of buyers.

Each of these was slotted into a sealed enclosure as

close as possible to the factory recommendation, and tested when driven with amplifiers capable of upwards of 1500WRMS of power in our test evaluation vehicle.

While changing to ported alignments for any of these subwoofers would have altered the SQ and SPL scores considerably, this is a comparison of subwoofers – not enclosure designs. The sealed systems were suitable to all drivers, and this is a great way of levelling the playing field to allow each driver's pure merits to shine through. ■

■ SUBJECTIVE EVALUATION

Brand	Kicker	JBL	Hertz	Cadence	Earthquake	Morel
Model	08S12L7	P1222	ES300	FXW12	DBXI-12D	Ultimo 10
Sound quality evaluations						
Overall linearity /10	8.5	7	6.5	7	8	9
Attack & dynamics /10	9	8.5	7	7.5	8.5	8.5
Accuracy & control /10	8	6.5	7.5	6	7.5	8.5
Efficiency /10	5	7	8	8	6.5	7
SPL /10	10	7.5	6.5	7	8.5	6
Box volume vs. performance /10	9	7	9	6	8	6
Score /60	49.5/60	43.5/60	44.5/60	41.5/60	47/60	45/60
RRP	\$629	\$399	\$296	\$229	\$319	\$699
Dollars per point	\$12.70	\$9.17	\$6.65	\$5.51	\$6.78	\$15.53
Value for money /15	6.5	9	12.5	15	12	5.5
Sub total /75	56	52.5	57	56.5	59	50.5
Basic attributes /145	115.5/60	96.5/145	87/145	89.5/145	91/145	83.5/145
GRAND TOTAL /220	171.5/220	149/220	144/220	146/220	150/220	134/220
RANKING	1	3	5	4	2	6



While it certainly impressed us with its sonic signature and scored equal highest marks for outright sound quality, Morel's exquisitely built Ultimo 10in wasn't able to exceed the other less expensive designs here for other subjective merits like efficiency, SPL capabilities and enclosure volume relative to performance. Its \$699 RRP is certainly justified by its wonderfully exotic construction, though when push comes to shove, the price disadvantage loses valuable value for money points. Still, if sonic purity is the goal, this is a fantastic subwoofer. The Hertz ES300 and Cadence FXW12 went blow for blow in the point scoring system, even though they are markedly different speakers. So close were the points for these two that it was only when the Cadence's lower RRP was factored in did it come out marginally on top – yet still three points shy of the podium.

EACH OF THESE WAS SLOTTED INTO A SEALED ENCLOSURE AS CLOSE AS POSSIBLE TO THE FACTORY RECOMMENDATION, AND TESTED WHEN DRIVEN WITH AMPLIFIERS CAPABLE OF UPWARDS OF 1500WRMS OF POWER IN OUR TEST EVALUATION VEHICLE

3RD PLACE – RECOMMENDED BUYING

JBL P1222

Contact: www.ehifi.com.au

With packaging and build quality that's as tough as nails, JBL's P1222 subwoofer makes a great case for itself thanks to being offered in both dual 2ohm and dual-4ohm impedance models.

It's a very lively and aggressive-sounding beast that likes to get loud, while it can work well in both a compact sealed and a ported box – with the latter being available off the shelf. A solid overall performance very worthy of a third place in this year's Subwoofer of the Year review.



2ND PLACE – HIGHLY RECOMMENDED BUYING

EARTHQUAKE DBXI-12D

Contact: www.amgaudio.com.au

The foundation for a second-place finish for Earthquake's DBXI-12D subwoofer was established early on thanks to it coming in 10in and 15in diameters along with dual 2ohm or 4ohm voice-coils.

When combined with a very small sealed enclosure requirement, decent technical data, solid scores for both SQ and SPL, and a very affordable \$319 RRP, it is no wonder this subwoofer was able to take its place here as runner-up. Given that it's a full 50 percent less expensive than the winner makes the Earthquake DBXI-12D a stand-out performer in subwoofers and the most realistic purchase for many of you.



1ST PLACE – OUTSTANDING PERFORMANCE

KICKER OBS12L7

Contact: www.customcar.com.au

Kicker's Solobaric OBS12L7 showed the entire field a clean pair of heels throughout this entire contest. It won from every angle, being expertly built while offering innovation, rugged style, and bone-crushing SPL performance all in one package.

That the OBS12L7 does all of this in a tiny sealed enclosure while also offering every other size from 8in to 15in, is why it deserves our award for Subwoofer of the Year for 2008. The Solobaric legend lives on in this magnificent driver, and if you can afford the entry fee, you may never go back to a regular old round subwoofer ever again.