

Hifonics ZSPL12R + ZSPL12Dual –  
Boxed subwoofers with 12-inch drivers

# Full SPL!

- With the ZSPL, Hifonics presents new subwoofers that promise to be really loud with their robust enclosures and long-throw chassis. We grab the ear protection and get started.





**BEST PRODUCT**

**Top Class**

**CAR & HiFi**

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**SPL AWARD**

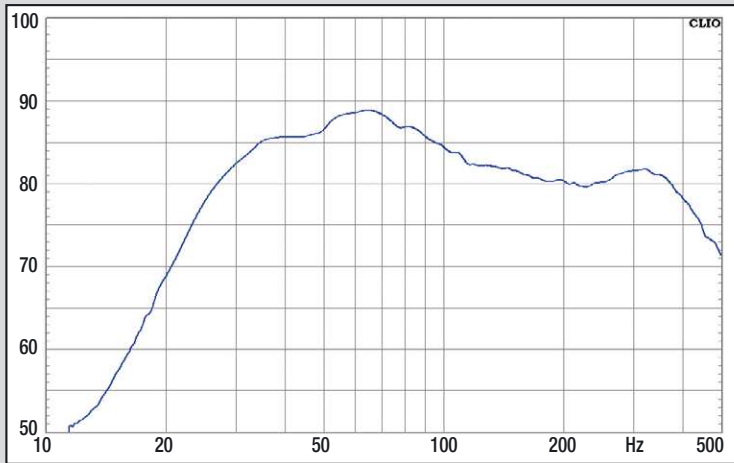
**Absolute Top Class**

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## CAR&HIFI Laboratory



With its tuning to 34 Hz, the ZSPL12R also reaches lower bass frequencies

The abbreviation ZSPL leaves hardly any questions unanswered: This is all about SPL within the Zeus series. But anyone who believes that the subwoofers are correspondingly expensive high-end competitors will be pleasantly disappointed, as Hifonics does not charge more than for the ZRX series bandpass speakers. The design as a bass reflex subwoofer is unusual for Hifonics, as the manufacturer is known for its bandpass boxes. So far, these two models are available, both equipped with the twelve-inch ZSPL12D2, which is also available separately. The ZSPL12R and ZSPL12 Dual are precisely what you think they are when you see them: The Dual is a double R: same tuning, but with two woofers. The woofer is robust and high quality; only the stamped frame is not top shelf. But with its three-dimensionally pressed spokes, the black powder-coated frame is definitely stable. The thick cone made of air-dried paper also makes a very stiff impression, especially as the ZSPL is not stingy with mounting depth and thus allows an acute cone angle. Add the rock-hard carbon dust cap to that, and you have a cone you could put a truck on. The sur-



Although „only“ a stamped frame is available at this price, the ZSPL woofer scores points with its cone and motor



### Specifications

Basket diameter	32,5 cm
Mounting diameter	28,5 cm
Mounting depth	16,4 cm
Magnet diameter	16,0 cm
Box width	52,0 cm
Box height	37,5 cm
Box depth	37,5/47,5 cm
Weight	24,4 kg
Nominal impedance	2 x 2 Ohm
DC resistance R <sub>dc</sub>	3,82 Ohm
Coil inductivity L <sub>e</sub>	2,05 mH
Coil diameter	64 mm
Membrane surface	503 cm <sup>2</sup>
Resonance frequency f <sub>s</sub>	43 Hz
Mechanical Q-Factor Q <sub>ms</sub>	6,58
Electrical Q-factor Q <sub>e</sub>	0,97
Overall Q-factor Q <sub>ts</sub>	0,85
Equivalent volume V <sub>as</sub>	23,5 l
Moved mass M <sub>ms</sub>	201 g
R <sub>ms</sub>	8,36 kg/s
C <sub>ms</sub>	0,07 mm/N
B x l	14,70 Tm
SPL 1 W, 1 m	89 dB
Recommended power	300 – 500 W
Test cabinet	BR 60 l
Reflex tunnel (d x l)	111 cm <sup>2</sup> x 34 cm

### Hifonics ZSPL12R

Price	300 Euro
Distributor	Audio Design, Germany
Internet	<a href="http://hifonics.de/english">hifonics.de/english</a>

### Rating

▶ Sound	50 %	★★★★★
Low frequency extension	12,5 %	★★★★★
Sound pressure	12,5 %	★★★★★
Sound purity	12,5 %	★★★★☆
Dynamics	12,5 %	★★★★★
▶ Lab	30 %	★★★★★
Frequency response	10 %	★★★★★
Efficiency	10 %	★★★★☆
Max. SPL	10 %	★★★★★
▶ Build quality	20 %	★★★★★

Top class



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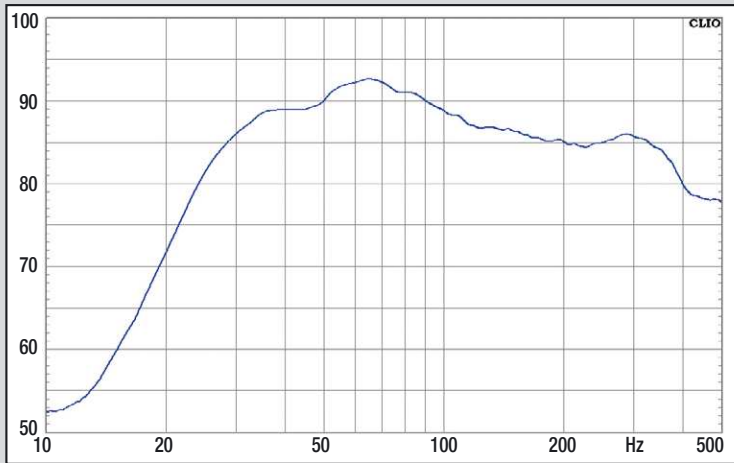
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Price/performance: excellent

„ Rich SPL for reasonable money.“

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The ZSPL12Dual runs 3 dB louder than the R, achieving a full 92 dB at 1 W/m



Fully ventilated: there are rear vents in the frame, a vented pole piece and a ring of holes

round is precisely the same as is done today with a long-throw woofer, that is, high rather than broad and made of foam with supporting ribs. This surround material consumes much less energy than genuine rubber and, therefore, benefits efficiency.

The motor is of the finest quality, with both top plates finely machined and faced, with two generously dimensioned ferrite rings in between. The 2 x 2-ohm dual voice coil is wound from round wire on a very large two-and-a-half-inch aluminum former. The winding height is also impressive at 38 millimeters, which, together with the 12-millimeter thick top plate, results in a linear excursion of 13 millimeters in each direction. Cooling air is well taken care of with the ZSPL; in addition to the obligatory vented pole piece and the large rear ventilation openings under the spider, there is also a ring of holes in the back plate to ventilate the cavity under the voice coil. Both boxes are solidly constructed from 19 mm MDF; the sides are slightly offset inwards and, of course, covered in Hifonics blue. The baffle is reinforced so that the woofers can be milled in flush. The reflex ports are designed as wooden tunnels, which gives the boxes additional stability.

### Measurements and sound

The impedances are the most crucial difference in practice. In the ZSPL12R, the dual coil is simply routed to the outside so that 2 x 2 ohms are present at the terminal. The ZSPL12Dual has two individual terminals, each with 4 ohms, due to the dual coils of the two woofers being connected in series. At 60 liters, the single cabinet features plenty of volume, and the R is already a stately bass box. The Dual achieves slightly less than twice the volume, so the R's reflex tuning of 34 Hz is somewhat lower than the Dual's 35 Hz - but this makes no difference in practice. The R already produces 89 decibel per meter at one watt; the Dual produces three dB more, as it has twice the cone area (but each woofer only gets half a watt). Even the single bass kicks in powerfully, pushing vehemently in the upper bass and not neglecting the lower registers. Ultra-fast



runs are not so much its cup of tea, but it delivers an excellent thrust with sustained bass. Even short bass strikes are delivered with full power, making the inside mirror dance. When the sizeable double woofer is connected to the amplifier(s), there is no mercy for the vehicle's occupants. In short: the same sound, but a whole lot louder if required.

### Conclusion

With the ZSPL, you get a lot of woofer for your money. This applies to the cabinet volume as well as the sound. Not for the faint-hearted, but volume enthusiasts will be delighted.

*Elmar Michels*

Specifications	
Basket diameter	32,5 cm
Mounting diameter	28,5 cm
Mounting depth	16,4 cm
Magnet diameter	16,0 cm
Box width	90,5 cm
Box height	37,5 cm
Box depth	37,5/47,5 cm
Weight	41,2 kg
Nominal impedance	2 x 4 Ohm
DC resistance R <sub>dc</sub>	3,82 Ohm
Coil inductivity L <sub>e</sub>	2,05 mH
Coil diameter	64 mm
Membrane surface	503 cm <sup>2</sup>
Resonance frequency f <sub>s</sub>	43 Hz
Mechanical Q-Factor Q <sub>ms</sub>	6,58
Electrical Q-factor Q <sub>e</sub>	0,97
Overall Q-factor Q <sub>ts</sub>	0,85
Equivalent volume V <sub>as</sub>	23,5 l
Moved mass M <sub>ms</sub>	201 g
R <sub>ms</sub>	8,36 kg/s
C <sub>ms</sub>	0,07 mm/N
B x l	14,70 Tm
SPL 1 W, 1 m	92 dB
Recommended power	500 – 1000 W
Test cabinet	BR 111 l
Reflex tunnel (d x l)	220 cm <sup>2</sup> x 34 cm

### Hifonics ZSPL12Dual

Price	550 Euro
Distributor Internet	Audio Design, Germany hifonics.de/english

### Rating

▶ Sound	50 %	★★★★★
Low frequency extension	12,5 %	★★★★★
Sound pressure	12,5 %	★★★★★
Sound purity	12,5 %	★★★★★
Dynamics	12,5 %	★★★★★
▶ Lab	30 %	★★★★★
Frequency response	10 %	★★★★★
Efficiency	10 %	★★★★★
Max. SPL	10 %	★★★★★
▶ Build quality	20 %	★★★★★

Top class



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