

## IMPULSE S4+ Woofer EI12S4+ · 12"



The new multi-talent portal to the world of truly tight bass – EMPHASER's Impulse woofer series has been setting the standards in this class for years. And the new S4+ woofers are readjusting matters again, with features and details rarely seen in their price class. The EI10S4+ and EI12S4+ are suited to make a believer out of you as well.

## EI12S4+

The sturdy aluminum die-cast basket serves as the solid foundation for a design created with high efficiency and accurate, clean bass reproduction in mind. The basket is well vented on all sides and allows plenty of space between the spider contact surface and the basket bottom, which means it can accommodate hefty cone excursions.

The sophisticated air exchange system ensures appropriate power headroom and provides optimal cooling for the voice coil – the best prerequisites for extended use on the road.

## **Power features:**

- Powerful double strontium ferrite magnet with a total weight of 92 oz.
- Light-weight, stiff Nomex Composite cone for producing precise, undistorted bass with a clean punch
- Surround made of durable Santoprene: optimally suited for large cone excursions; surround and cone are stitched together for extra strength



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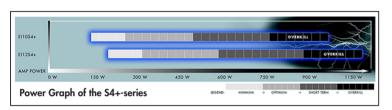


Precision machined steel pole pieces with optimal magnet field geometry ensure top efficiency and a high power-handling capacity.

- Big spider made of Conex for taut suspension of the moving system: the progressive spider's characteristics enhance the unit's power-handling capacity and minimize distortion
- Temperature-resistant 2" voice coil, black polyimide former, 4-layer coil windings with 27 mm winding height, made of round copper wire

The front and rear pole pieces are cold rolled and CNC cut. The center pole extends considerably beyond the front pole piece, ensuring a linear magnetic field, even at high excursions – another feature unusual in this price class.

The rear pole piece is undercut, allowing plenty of space for the coil former, for high cone excursions preventing hard bottoming.





S4+ woofers feature the sturdy chromium-plated EMPHASER screw terminals that can accommodate large cable diameters; the lead wires are insulated and relieved of mechanical stress.

TECHNICAL SPECIFICATIONS	EI10S4+						
Usable Frequency Response*	20 - 150 Hz						
Continuous Power Handling*	500 W RMS*						
Peak Power Handling*	900 W*						
Nominal Impedance	4 Ohms						
Voice Coil Diameter	2"/51 mm						
Voice Coil Winding Height	27 mm						
Front Pole Plate Height	8 mm						
Total Weight of Sr-Fe Magnet	92 oz./2610 g						
Mounting Cutout Diameter	283 mm						
Mounting Depth	1 <i>57</i> mm						
*Exact performance data depending upon actual enclosure!							

## **ENCLOSURE SUGGESTIONS**

**SEALED ENCLOSURE** 

Net Volume: 35 l

PORTED ENCLOSURE I (SPL)

Net Volume:  $55 \, \text{l}$ Inner Diameter of Port:  $2 \times 10 \, \text{cm}$ Length of Port:  $25 \, \text{cm}$  each

PORTED ENCLOSURE II (LOW BASS)

Net Volume: 55 |
Inner Diameter of Port: 1 x 10 cm
Length of Port: 28 cm each

**BANDPASS ENCLOSURE** 

Net Volume Ported Chamber: 28 l Net Volume Sealed Chamber: 24 l Inside Diameter of Ports: 2 x 10 cm

Port Length: 25 to 29 cm each

THIELE/SN	SMALL PARAMETERS								
	resonance frequency Hz	vas air equiv. suspension Litres	moving mass Gramms	QTS total Q	<b>QES</b> electro- magnetic Q	QMS mechanical Q	RDC DC resistance Ohms	SD effective cone area cm <sup>2</sup>	Xmax linear excursion mm
EI1254+	31	67.2	155	0.40	0.45	3.9	3.8	526	10.5