

ESX SE800.6DSP + SE1500.1 – 8-channel power amplifier with  
9-channel DSP and mono power amplifier in review



# Performance and Köpfchen

Two new Signum amplifiers are ready to hit the market this season. We put ESX's brand-new SE amps to the test.

With state-of-the-art features and very attractive prices, ESX is launching new power amplifiers in its Signum series. Signum is normally positioned at the lower end of the product range, but the new SE amplifiers are definitely not entry-level. They look quite classy and bear no resemblance to the existing Signum SEX amplifiers, so one must speak of a completely new SE series. The SE800.6DSP comes with six channels and a signal processor, while the SE1500.1 is a powerful mono amplifier – a perfect combination for the modern car hi-fi system. With their sturdy cast housings, the SEs offer a great feel, and the SE800.6DSP is also very easy to connect. Bluetooth is built in as standard, and the 5.0 standard ensures flawless audio quality. There is also an optical digital input, and we also find an analog AUX input.

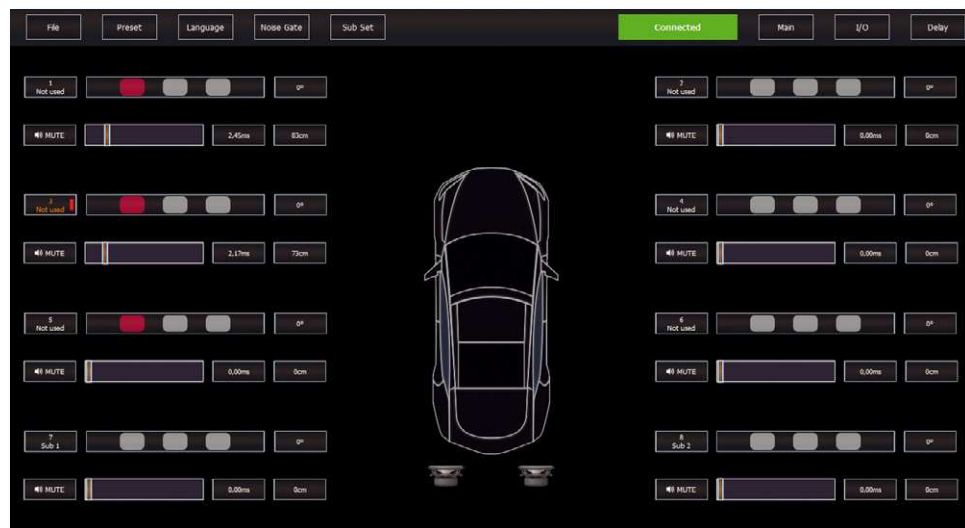


In the main window there are levels, crossovers and 31 EQ bands for the channels

RCA jack pair. The SE is primarily powered via the six line-level inputs, which are equipped with the proprietary EPS integrated into the line-level wiring harnesses. A wide Molex connector handles channels 1 – 4, and the last two channels have their own input and output connectors (although technically all six channels are identical). And the Mode Preset Switch, also called the Cabrio pin, is always a popular feature. It's a control contact that switches between two presets.

## software

The ESX SE800.6DSP can be controlled via PC software or an Android or iOS app. The whole thing is called DSP Master and serves as a cross-brand DSP platform that also works with power amplifiers from the Hifonics and Crunch brands. The PC software is straightforward, combining all important audio functions in a single main screen, which is still manageable with the SE800.6DSP's 8 DSP channels. The channels can be linked and muted, and the crossovers offer slopes of up to 48 dB per octave in the usual characteristics, although these aren't 100% serious. As is often the case with Linkwitz, there are odd orders and somewhat sloping slopes. It's nice that the EQs work perfectly and can also be converted to an all-pass filter. The outputs are in third-octave bands, resulting in 31 per channel. The delay time works in 7 millimeter steps at a 48 kHz sample rate, which corresponds to 0.02 milliseconds. The routing, which is also straightforward, and the delay time are outsourced. Up to four channels can be defined as subwoofers in a Sub Set menu. This becomes particularly interesting when you invest in the optional on-screen remote control, which can then adjust the levels nicely. The Android app we tested is in no way inferior to the desktop software. All functions are also available on the phone, neatly sorted one after the other in individual screens, making operation logical and straightforward. The start screen functions as a remote control, so the master and subwoofer levels can be adjusted very easily, and selecting sources and presets is also child's play.

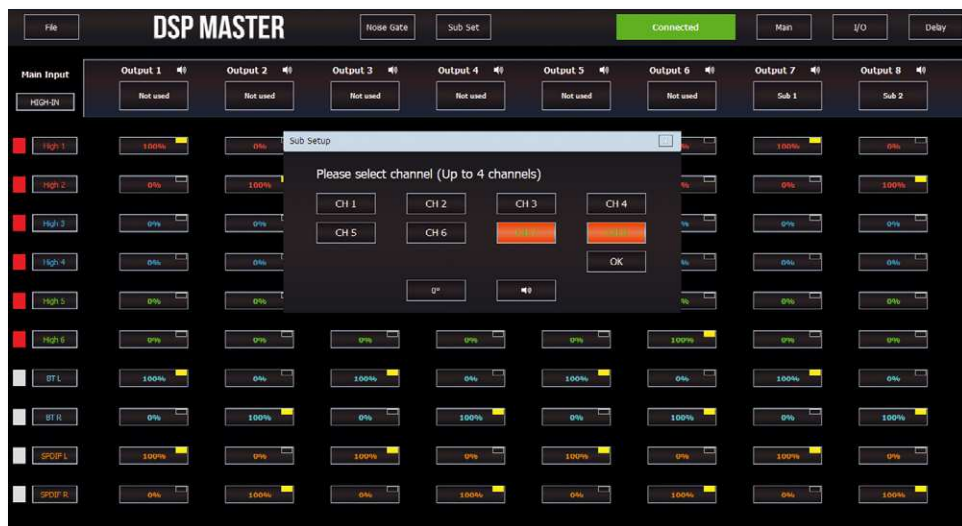


In the Delay window, the runtimes of all channels can be easily adjusted, and there are also muting and reversing functions



On the left the 1500.1 with strong terminals and double connectors for thick wires, on the right the 800.6 with Molex multi-pin connectors for the 6 inputs and outputs





Analog and digital inputs can be assigned to the channels in the mixer with exact percentages; under Sub Set, up to 4 channels can be defined as subwoofers

can be switched to automatically select the appropriate sound. The Mono SE1500.1 is well-equipped, offering solid power terminals and dual speaker terminals. In addition to the obligatory low-pass filter, it also offers a boost and a subsonic filter, making it easy to work with.

A look inside reveals the modern development date of both SE amplifiers. The Mono is very generously equipped, with basically everything duplicated: two mains transformers, two MOSFET pairs, two Class D filters.

and even a two-channel driver chip from Infineon. The three integrated 30 amp fuses on the board make 1.5 kilowatts seem possible; the SE800.6DSP has two of them, making the kilowatt targeting possible. The amplification of the six-channel amplifier is state-of-the-art, equipped with the latest amplifier chips, also from Infineon. However, this isn't just about driver ICs; it contains the entire amplification, including the MOSFETs. The highlight is that the

## Technical data

### Entrances

- 6-channel high level with autosense
- 2-channel low level
- Sensitivity high: 11 V
- Digital S/PDIF optical
- Digital Bluetooth

### Exits

- 2-channel, processed
- Remote Out

### DSP channels

- 8

DSP software (PC V2.0.15)

### equalizer

### Exits

- fully parametric EQ, 31 bands per channel
- EQ, all-pass
- 20 – 20k Hz, 1-Hz steps
- + 12 – -12 dB, Q 0.7 – 9

### Crossovers

- 20 – 20k Hz, Bessel, Butterworth, Linkwitz, 1-Hz steps
- Slope up to 48 dB/oct.

### Time and level

Sample rate 48 kHz, 7 mm steps (0.02 ms)

### Outputs

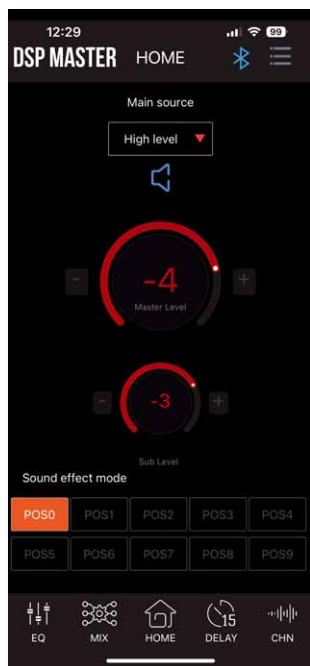
- 0 – 510 cm (15.00 ms), 720 samples
- Phase reversal 0, 180°
- Level adjustment 0.1 dB steps, mute function

### equipment

- 10 presets
- Programming via PC or app (iOS and Android)
- Bluetooth 5.0 music streaming and programming
- Mode Preset Switch (convertible pin)

### Optional accessories

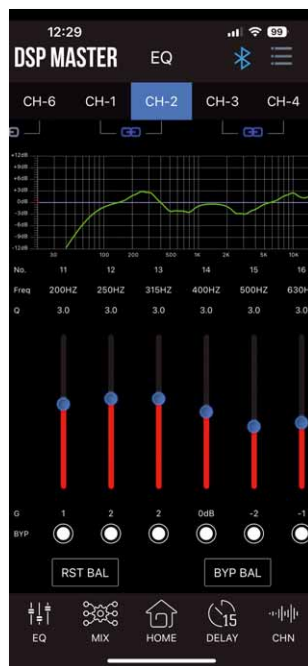
- Display remote control RC-SXE
- Cable sets



The app offers separate controls for overall level and bass level

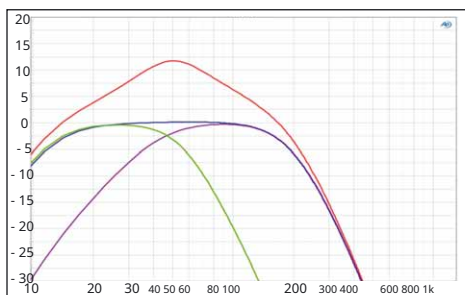


The app divides the individual areas of crossovers, EQ, runtime, etc., so that operation is easy

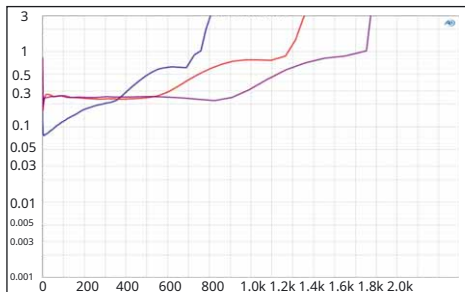


The equalizer has a frequency response diagram to check the settings

Two-channel components are simply installed on the circuit board, and manage without a heat sink. Cooling is handled exclusively by the circuit board, which indicates an incredibly high level of efficiency. We do have a DSP, but the SE isn't so forthcoming about this. We only see four two-channel DACs; the rest (along with a few peripherals in the form of Bluetooth or S/PDIF chips) is hidden in a large, mysteriously blackened multi-legged device that handles the computing and serves as both a controller and an audio DSP. This fellow is no stranger; it can also be found in sister brands Crunch (CRE400.4) and almost certainly Hifonics (ZRX800/8), which use shared software and therefore share the same DSP platform. These are all affordable designs that use a few fewer components than the top models like ESX' Vision series, which is equipped with very high-quality Analog Devices and AKM components.



The crossovers work reasonably well, high-pass with Butterworth 6 – 48 dB, the low-passes agree at 12 dB/octave, the characteristics are about right



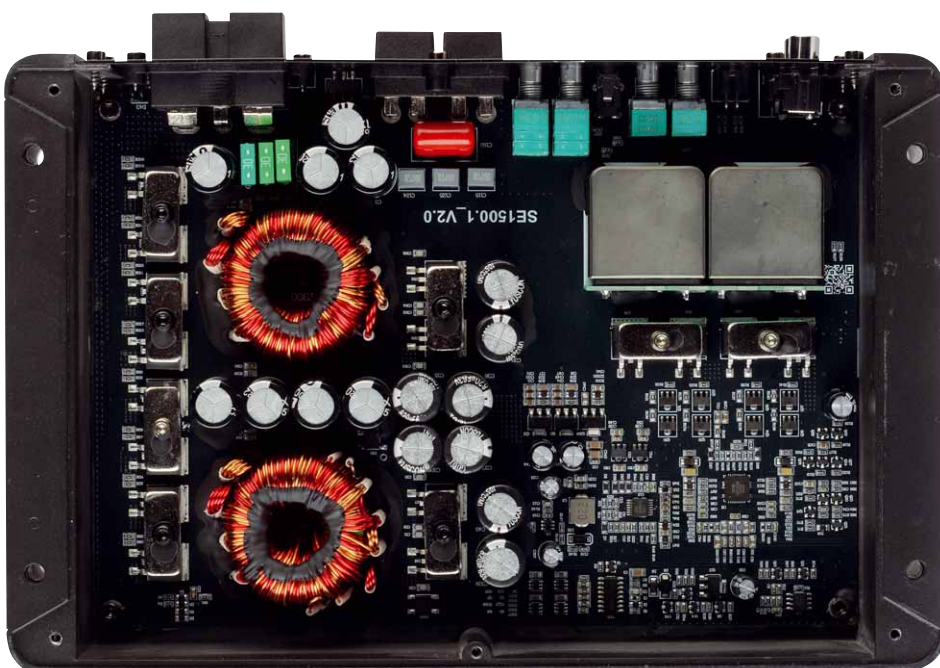
The SE1500.1 manages 1500 W at 1 Ohm, at 2 Ohm it is close to 1200 and at 4 Ohm it already delivers a good 750 Watt

## Measurements and sound

The SE1500.1 is the first to start. With a price tag of €330, it just slips into our top class, where it has to compete with significantly more expensive power amplifiers. All the more impressive are the top marks it garners, starting with 750 watts at 4 ohms. At a 2 ohm load, we measure almost 1.2 kW, and at 1 ohm, it crackles.



The SE1500.1 delivers 1500 watts, blowing its three 30-volt fuses. The SE800.6 is almost even more impressive, pushing more than 80 watts of channel power into 4 ohms. At 2 ohms, it manages 146 watts – as mentioned, without a heat sink and with two channels in the 7 x 7 millimeter chip. All this is achieved with extremely low distortion, which suggests that the chip isn't even at its limits; only the damping is modest, even with these marvelous ICs. Sonically, the six-channel amplifier once again excels, and its performance doesn't shy away from even the toughest operating conditions. It sounds clean and clear even at high volumes, and the bass range remains contoured and clean at all times. But even with quieter sounds, the SE800.6 is convincing, with percussion or



In the mono, everything is duplicated: two mains transformers take care of two pairs of transistors and the two thick low-pass coils at the top right

**SOUND TIP**  
Top class  
**CAR & HiFi** 4/2025

**EMC TIP**  
Undisturbed radio reception  
**CAR & HiFi** 4/2025

## ESX SE1500.1

Price around 330 euros  
distribution Audio Design, Kronau  
Hotline 07253 9465-0  
Internet www.esxaudio.de

## Evaluation

sound	20%	1.0	----	-
Depth	5%	1.0	----	-
Pressure	5%	0.5	----	-
cleanliness	5%	1.0	----	-
dynamics	5%	1.5	----	-
laboratory	55%	0.9	----	-
Performance	40%	0.5	----	-
Damping factor	5%	1.5	----	-
Signal-to-noise ratio	5%	2.0	----	-
distortion factor	5%	2.0	----	-
Practice	25%	1.1	----	-
equipment	15%	1.0	----	-
Processing electronics	5%	1.5	----	-
Processing mechanics	5%	1.0	----	-

## Technical data

Channels	1
Power 4 ohms	757
Power 2 ohms	1177
Power 1 Ohm	1553
Sensitivity max. mV	180
Sensitivity min. V	5.0
THD+N (<22 kHz) 5 W	0.088
THD+N (<2 kHz) half load	0.265
Signal-to-noise ratio dB(A)	80
Damping factor 20 Hz	152
Damping factor 40 Hz	151
Damping factor 60 Hz	152
Damping factor 80 Hz	155
Damping factor 100 Hz	158
Damping factor 120 Hz	164

## equipment

Low pass	40 – 150 Hz
High pass	–
Bandpass	10 – 150 Hz
Bass boost	0 – 12 dB/50 Hz
Subsonic filter	10 – 50 Hz
Phase shift	–
High-level inputs	•
Automatic switch-on(Autosense)	• DC
RCA outputs	–
Start-stop capability	• (7.0V)
Dimensions(L x W x H in mm)	250 x 163 x 47
Miscellaneous	Remote control, EPS

## ESX SE1500.1

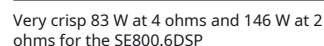
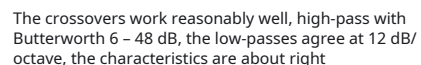
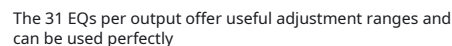
**Top class** 1.0

**CAR & HiFi** 4/25

Price/performance: excellent

"Ultra-modern and at a very attractive price."





Practice	25%	0.8	-----
equipment	15%	0.5	-----
Processing electronics	5%	1.0	-----
Processing mechanics	5%	1.5	-----

Plucked strings sounded very dynamic. The mono SE1500.1 is also the ideal choice when things can get a bit louder. At low loads, it delivers a nice punch right down to the bass, making the car vibrate. But the ESX also excels with a 4-ohm SQ subwoofer, producing beautiful bass lines and precise drums. Everything is perfectly in line; a bass amplifier doesn't need to be any more capable.

## Conclusion

With the new SE amplifiers, ESX presents a series that shines with high-quality workmanship and outstanding performance. Given this, the prices of just €550 and €330, respectively, can only be described as a super bargain.

Elmar Michels

The daughterboard on which the Bluetooth receiver is located is mounted at the top left. Under the 6 Class D coils are the three amplifier chips, which do not require a heat sink

# CAR & HiFi

Price/performance: very good

*"Ultra-modern and at a very attractive price."*