Sunfire SDS-12 Powered Subwoofer

The most powerful of the family, the SDS-12 delivers all the dynamics found in your most demanding material. At home in larger rooms, the SDS-12 delivers 600W of peak power from Sunfire's Class-D digital amplification, while sipping merely a half a watt in standby. Sunfire's exclusive FFDTM technology is standard, delivering the spectral balance required to reproduce the finest musical detail found in your favorite BluRay and DVDs, as well as high fidelity music sources. Whether it's chest-pounding special effects or delicate musical notes, the DS12 delivers a true experience where others fall flat.

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<th>Design</th>
<th>12”</th>
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<td>Woofer</td>
<td>Front firing active woofer, down firing passive radiator</td>
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<td>Configuration</td>
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<tr>
<td>Soft Clipping Circuitry</td>
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<td>Auto Turn-On</td>
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<td>Crossover Adjustment</td>
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<td>Crossover Bypass</td>
<td>✓</td>
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</table>
Phase Adjustment

0-180° inf. var.

Connections

Inputs

RCA Inputs/Outputs

Gold Plated Connections

Detachable Power Cord

Miscellaneous

Finish

Black ash

Grille

Black

Performance

Frequency Response

28-150Hz

Maximum SPL (inc. room gain)

106 db

Driver Impedance

4 ohms

Input Impedance

10K ohms

General

Power Consumption (120VAC, 50-60Hz)

50W (Based on 1/8th power all the time at 35Hz)

Standby Consumption (120VAC, 50-60Hz)

0.5W

Dimensions (W x H x D) including grill and feet

14.57 x 16.65 x 15.52" / 370 x 423 x 394 mm

Weight

35 lb / 15.9kg

Features

Passive Radiator Design: A front firing, 12” custom Sunfire driver is acoustically matched to a 12” down-firing passive radiator, creating nearly double the output compared to conventional single-driver designs.

250W Amp w/ Soft Clipping Circuit: Sunfire’s digital amplifier delivers 300W or RMS output and 600W of Peak output. A compressor circuit kicks in automatically if the input signal level reaches a level that would overload the driver. This maintains a ceiling on the output without clipping. If the input signal is driven even further, a Soft Clipping circuit is enabled to prevent driver damage.

Controls: Controls for adjusting the volume, crossover frequency and phase, allow the subwoofer to be perfectly matched to any listening environment and audio components.

- **Level**: This control lets you match the output level of the subwoofer to the level of your other speakers. The subwoofer output will increase as this control is rotated clockwise.
- **Crossover**: This control changes the high frequency cutoff point. With the control set to 150 Hz, the subwoofer will reproduce frequencies up to 150 Hz. If the control is set fully clockwise, the crossover is bypassed and the subwoofer will reproduce a wide frequency range. With the control fully counter-clock wise the subwoofer reproduces a narrow range, up to 50 Hz. Rotate the control until the bass sounds natural. If the mid-bass sounds natural but you want more low bass, turn this control down a little, then turn the
Volume control up by about the same amount. This increases the low-bass output while leaving the mid-bass output the same.

- **Phase:** This control changes the relative phase (0°-180°) of the subwoofer with respect to the other speakers. Use this control to help blend the subwoofer with the rest of the system. This is accomplished by adjusting the control in small increments as you listen for the most bass at your listening position. As a final adjustment, readjust the Crossover Frequency and Volume controls after the Phase has been set.

**Connections:** The Sunfire SDS-12 powered sub is fitted with RCA inputs and outputs.

- **LFE/RCA Inputs:** Connect these unbalanced inputs with RCA-type patch cords to the line-level outputs of your receiver or preamp. If your preamplifier or receiver has a single sub/LFE output, connect it to Left RCA input jack.
- **Line-Level Outputs:** These stereo RCA output jacks are a copy of the signals going into the powered sub's inputs, except the bass has been removed by a fixed high-pass crossover circuit (85Hz). The output is not affected by the subwoofer's controls.

**Auto Turn-On/Standby:** The powered subwoofer has a special power circuit which automatically turns the powered subwoofer on when a signal is fed to the loudspeaker and turns it off when there is no signal present (approximately 15 minutes).

**Placement:** Although low frequencies are non-directional, factors such as room reflections, standing waves, resonance and absorption will strongly affect your subwoofer’s performance. Moving the subwoofer from one location to another can have a major effect on the bass response. The Sunfire SDS-12 powered subwoofer is designed to be placed in a corner for optimum performance.