

# Alpha S10 Powered Subwoofer



## Why You Need a Subwoofer

The subwoofer is a fairly recent entrant to the typical home entertainment system and we see the concept popping up in even low price desktop systems. The idea of having a separate bass speaker was first encountered in cinemas and public address systems where a lot of audio power was needed to fill the theater or stadium. Since the sound wavelengths are so long at these low frequencies (3 to 9 meters) using a single mono subwoofer will not disturb the stereo image. But do you need a subwoofer? What are the needs and the benefits?

Subs are typically specified for systems where large full range speakers are not practical, or for large open rooms, or where very high SPLs are desired. Placing small speakers where they create the most lifelike stereo image is often at odds with the location that gives the most even and powerful bass response. The 'sub/sat' system is the answer for this dilemma, by allowing the sub to be placed for best bass response, and the satellite speakers to be placed for best imaging. Another great use for subwoofers is when speakers need to be hidden and must be both small and unobtrusive. To have the correct sound balance a subwoofer is called for. And probably the most common use is in the home cinema, where realistic special effects demand the power of a subwoofer. Dolby found subwoofers to be an essential element of home theater sound and even created a special 'Low Frequency Effects' channel specifically for a subwoofer.

The other hidden benefit of the subwoofer is that it removes the burden of bass output from the satellite speaker. This allows the speaker to play louder and with far less distortion. Since most subwoofers today are powered, they also add considerable power to the overall system performance.

- Bass reflex design with rear port
- 150 Watt Continuous Power
- Compact cabinet volumes with high output
- Woofers feature polypropylene cones and rubber surrounds
- Design and final voicing engineered by Paul Barton
- Rear Mounted Volume Crossover Controls
- AutoOn/Standby Switch
- Gold-plated RCAs
- USB Power Jack for RT100 wireless accessory
- Rubber bumpers and spikes

## Why PSB Should be Your First Choice

If you just want a big booming sound almost any subwoofer will do. But if you want to create a realistic sound field in your listening room the experience and expertise of PSB should make it your first choice. The key to getting accurate bass is both in tuning the subwoofer acoustically, and in properly integrating it with the other speakers in the system. When listening to music we feel the subwoofer, but we hear the bass instruments by listening to the overtones and harmonics of the instrument produced by the satellite speaker. If the soundwaves are not properly aligned between the sub and the satellite it will not sound natural. The sub will detach, and you'll hear the music and the sub as two different sounds. The musical quality of a subwoofer is the most important characteristic in our opinion. After all, even movies have a musical soundtrack.

## The Alpha S10

PSB makes several different subwoofer models, from small desktop subs like the SSE100 to the incredibly powerful and refined SSE450. The S10 is in the sweet spot between where high value coexists with legendary PSB performance. Employing a specially developed long throw 10" polypropylene woofer and powerful magnet assembly, it is matched to a highly efficient 150W Power Amplifier, and placed in a well-engineered enclosure that is carefully tuned for deep, crisp bass response all the way down to an earth shaking 22Hz. The S10 is a vented, or ported, design that takes advantage of the woofers back wave to extend bass response and power output. Unusual at this low price point is the inclusion of powerful Digital Signal Processing that allows for a level of optimization that is not otherwise possible. The high output levels and low distortion are a direct result of PSBs expertise in this area of signal processing. The included electronic crossover is another important element in integrating the S10 to your room and satellite speakers, and we include a full featured crossover with variable crossover frequency (50 – 150Hz) and a simple 180 degree phase reversal switch. There is also a USB power port that supports PSBs RT100 wireless adaptor. This optional accessory replaces the long, and often expensive wire normally required between your Receiver/Amplifier and the subwoofer. Setup of the RT100 is automatic; just plug in the AC cord of the sub, plug in the RT100 to the USB power jack, switch on your receiver and the wireless link will connect.

## Amazing Value for Money

The sophisticated performance of PSB's new Alpha range sets a new benchmark for affordable loudspeakers, and the S10 Subwoofer is no exception. This modest investment will not only improve your existing speakers, it will recreate all the depth and drama you have been missing from your music and movies.

## SPECIFICATIONS

### FREQUENCY RANGE RESPONSE (Anechoic Chamber)

On Axis @ 0° ± 3dB	28-150Hz
LF Cutoff -10dB	22Hz

### IMPEDANCE NOMINAL INPUT

Minimum	22k Ohms
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### INPUT POWER

Recommended Program	15-120 Watts
	60 Watts

### AMPLIFIER POWER

150W Continuous
210W Dynamic

### ACOUSTIC DESIGN

Woofer (Nominal)	10" (254mm) Polypropylene Cone, Rubber Surround Variable 50-150Hz with LFE setting, B2
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Crossover	Low Pass Filter
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Internal Volume Design Type	1.45 cu ft (41 liter) Bass Reflex
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### SIZE (W x H x D)

(Gross Dimensions)

Net	14" x 14 1/8" x 17 1/2" * (356 x 359 x 445mm)
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### WEIGHT

Net	30 lbs (13 3/5 kg)
Shipping	33 lbs (15 kg)

### FINISH

Black	Woodgrained
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### FEATURES

- Rear Mounted Volume
- Crossover Controls
- Phase Switch
- LFE Settings
- Low Level Input
- AutoOn/Standby Switch
- Gold-plated RCAs
- USB Power Jack for RT100 wireless accessory
- Rubber bumpers and spikes

\*Non-metric measurements are approximate.

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