

Subject: SVS AS-EQ1/SubEQ Frequently Asked Questions (FAQ)

Question 1: I'm interested in what the SVS AS-EQ1 can do to help me get better performance from my subwoofer(s) in my listening environment. I currently do not own SVS subs. Can I still use the SVS AS-EQ1?

Answer: Yes you can. The SVS AS-EQ1 is designed to work with any combination of subwoofer(s), and almost all receivers or pre-amps/processors (pre/pro). It integrates into your system between your receiver or pre/pro and your subwoofer(s) and accepts standard line-level RCA inputs. It outputs corrected bass response via the same means to your subwoofer(s). As a key advantage, the SVS AS-EQ1 can handle a single subwoofer channel as input and output to two different channels equalized together; or it can handle two discrete subwoofer channels (stereo subs) and equalize them separately. Of course it can handle a single subwoofer channel in and a single subwoofer channel out too. **Any brand sub or a mix of brands and models will be optimized by the AS-EQ1.**

Question 2: I already have a receiver or pre/pro with Audyssey® MultEQ XT™. Will the SVS AS-EQ1 make any noticeable improvement in my subwoofer(s) frequency response?

Answer: In most rooms the AS-EQ1's enhanced bass correction will make a profound improvement in your sound. The SVS AS-EQ1 has twice the filter resolution of most consumer MultEQ XT systems and uses superior processing power and correction customized for the low frequency band. The SVS AS-EQ1 is also specifically designed to handle two discrete subwoofer output channels (inputs as well) and equalizes each subwoofer channel separately for vastly improved equalization capability. The SVS AS-EQ1 was specifically designed to augment the low frequency equalization capability of receivers and pre/pros and allows seamless integration of the two EQ systems to avoid double-processing of any frequency band. **The AS-EQ1 works hand in glove with your AV receiver regardless of what room correction scheme it uses, and even if it uses none at all! Of course, every SVS product has a 45 day trial period too. If you aren't astounded we take it back.**

Question 3: What Operating System(s) is Audyssey SubEQ™ (the application and graphical user interface of the SVS AS-EQ1) compatible with?

Answer: Supported platforms include a minimum of Windows XP SP2 or Windows Vista 32-bit. Support for Vista 64-bit and in the future, Windows 7 is planned but neither is compatible at this time. Currently the Mac is not officially supported, although there have been reports of dual boot systems such as Boot Camp running XP and Vista working with SubEQ and the SVS AS-EQ1.

Question 4: What if I have a single subwoofer? Will the SVS AS-EQ1 help me?

Answer: Yes, absolutely. There are just as many potential acoustical challenges in homes with a single subwoofer as with multiple subs. The SVS AS-EQ1 is fairly unique given its ability to handle multiple

subwoofers, but it also works just as well with single subwoofers. If you've ever sat for hours running tones and adjusting manual EQ devices to try and flatten your room's LFR, you'll be delighted with the typical, ruler-flat response you can get in minutes using the SVS AS-EQ1.

Question 5: Can the SVS AS-EQ1 handle more than two subwoofers?

Answer: Yes it can. There are two discrete subwoofer outputs on the SVS AS-EQ1. Either or both of those can be attached to one or more subwoofers and the resulting subwoofer "system" is treated as a single source of bass during calibration. Of course attention should be paid to good basic setup to avoid more correction by the AS-EQ1 than necessary. For example, the best way to group multiple subs on a single channel is via co-location (two subs side by side or on top of each other) which often yields a smoother in-room (pre-correction) frequency response than separated subs. Stacked subs are not always aesthetically acceptable, so we recommend auditioning dual subs along adjacent or common walls. Due to the flexibility of the SVS AS-EQ1's Audyssey software (SubEQ™) it is very easy and quick to perform placement trials before final calibration. The SubEQ graphical user interface shows either combined "dual" sub or individual before and after corrections to allow you to avoid inherently poor grouping of subwoofers in your listening environment.

Question 6: After calibrating my subwoofer(s) using the SVS AS-EQ1, it feels like I've lost a bit of the "slam" I'm used to in my room. Why is that and what can I do to get it back?

Answer: Many people who have never heard truly flat bass initially have that reaction. Accurate bass can take a while to fully appreciate, so give your ears time to adjust to the new sound. Unequalized rooms often have peaks and valleys in the frequency response which can affect the accuracy of the bass. Removal of these peaks can initially seem to reduce "slam" and "punch", but in reality the bass is simply more accurate. With that said, given the complexity of channel level matching with some systems, it's possible the subwoofer channel might require some fine tuning too.

We suggest doing a few things to help ensure optimal bass integration:

- 1) Ensure you have properly level-matched your speakers and subwoofer(s) as described in the SVS AS-EQ1 Operator Manual. If your speakers and subwoofer(s) are not level matched, you will not be hearing the proper balance between your speakers and subwoofer(s). Also make sure you are running your speakers as "Small" with the crossover on your receiver or pre/pro set high enough to ensure most of the lower frequencies are being routed to your sub(s). Lastly, make sure you have set your Subwoofer Trim level and Subwoofer Distance in your receiver or pre/pro as directed in the SubEQ program after you have run your calibration measurements.
- 2) If you have a sound meter, you can double check the AS-EQ1 level matching using a different source of test tones – a HT calibration DVD like AVIA's Guide to Home Theater, or the internal test tones from your AV receiver. If you properly level-matched your system as described in the SVS AS-EQ1 Operator Manual, all of your speaker channels should be at about the same level when independently checked with an alternate source of test tones. Please note, however, that the subwoofer tone will typically read a few dB lower than the speaker channels when using a C-

weighted SPL meter. Remember, you are only looking to verify that the speakers and the subwoofer are all playing at the same relative level. There will always be small differences in absolute SPL between various microphones (such as used by the AS-EQ1 or your A/V receiver) and the RS SPL meter. So if your speakers and subwoofer are level matched, but the overall playback volume is a bit higher or lower than before, simply adjust your master volume setting during music or DVD playback to account for the difference.

- 3) Lastly, you can experiment with increasing the subwoofer channel trim level in your receiver or pre/pro to add more bass relative to the speaker channels. You might find this more pleasing, if you were previously running your subwoofer with a “hot” calibration level (i.e., louder than the speaker channels). With that said, experienced listeners often find that “hot” subwoofer levels are no longer needed to achieve balance and realism once AS-EQ1 correction is run. Running subwoofer levels “flat” with the main speakers will provide the most accurate reproduction of what the recording engineer intended, so give your ears time to adjust to the new sound before deciding to run the subwoofer channel on the hot side.

Question 7: I want to save my Calibration Certificate for later reference or for sharing with colleagues or discussion forums. How can I do that?

Answer: There are at least three ways to save your graphs, though SVS recommends “CutePDF™” writer bundled on your installation CD. (Note that if you want to bring up your graphs after you have completed your calibration at any time, just run the SubEQ application and select “View Calibration Certificate” to bring up your final graphs in your browser.):

- 1) **CutePDF** is a virtual Printer driver which creates Adobe .pdf files rather than physically printing the output. Look to the installation CD for “CuteWriter.zip” for the necessary programs and instructions on how to install it on your PC. After installation simply select “Print...” from your browser and select the “CutePDF Writer” printer when offered a choice of devices to print to. You will then be prompted for a location and name to store the resulting .pdf file, which can be opened using the Adobe Reader application and sent to others via any e-mail or web-posting system.
- 2) **Graphs as pictures:** Right-click on either one of the graphs in the browser window and select “Save Picture As...”. Each graph (before and after) can be saved and shared or posted.
- 3) **“Print screen”:** Bring your browser window into focus (click on it) and press Alt+PrintScreen. This will place a copy of the browser window in the clipboard and allow you to paste it into the application of your choice for saving and sharing.

Question 8: If I don't have multi-channel analog inputs available on my receiver or pre/pro how can I perform the level matching task when setting up my SVS AS-EQ1?

Answer: You can use a standard two-channel analog input on your receiver or pre/pro in lieu of an available multi-channel input using either the left (white) or right (red) connection. However, unlike most multi-channel inputs, you need to be mindful of any DSP activity that is being performed on that set of input jacks (such as those on many AVR front panels). This includes any multi-channel processing such as Dolby PLII(x) or DTS neo modes, proprietary DSP modes your receiver or pre/pro might be applying, as well as any bass management. Most receivers or pre/pros have an "analog direct" mode that can be set which disables all digital processing and emulates the non-processing mode of most multi-channel inputs with access to just the left or right front channels.

Alternately, you can simply run the AS-EQ1 routine on just the subwoofer (be sure to set the subwoofer SPL to 75 dB in the SubEQ application before proceeding to the EQ step). After the subwoofer has been equalized, you may calibrate the speaker and subwoofer channel levels using an alternate source of test tones, as described in Question 6, above.

Question 9: Can I turn off my SVS AS-EQ1 when not in use or should I leave it on?

Answer: The SVS AS-EQ1 uses very little power and hence also runs very cool. It need not be turned off when not in use but if you want or need to shut it off you can. Just don't forget to turn it back on so as to not miss any of your great bass! The unit will not pass an audio signal to your sub when the AS-EQ1 is off. In the rare case you desire to disengage the AS-EQ1 but still pass an uncorrected audio signal to your sub simply connect a USB cable to your laptop with the SubEQ application installed, turn on the GUI and turn processing "Off" and disconnect the USB.

Question 10: I have a 2-channel system without any distance controls in my pre/pro. Can I still use the AS-EQ1, and are there any special requirements?

Answer: Yes, the AS-EQ1 can be used in 2-channel systems. It does, however, have a fixed electrical latency (delay) of about 8 milliseconds (ms). This will require the subwoofer to be placed about 8 feet closer to the listening position than the speakers in order to achieve the correct time alignment between the speakers and the subwoofer. This is often physically infeasible, so you can also purchase a digital crossover (such as the Behringer DCX 2496) which can impose an 8 ms delay on the loudspeaker channel outputs. This will also provide the proper time alignment between the speakers and the subwoofer without resorting to moving the subwoofer closer to the listening position.