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Tech Article Title	Author	Date
<b>Symphony EQ Settings or the A6 Sedan</b>	<a href="#">Stoney</a>	2001

The Symphony radio has hidden equalizer settings that the user can adjust to improve the sound. Below are my results from experimenting with them, followed by detailed instructions for setting your own radio.

### Settings for my A6 4.2

I experimented with these EQ settings in my 2001 A6 4.2L (Bose), and found a setting that tames the midbass bloat rather nicely. It also flattens the response at higher frequencies. My settings are **7438 6444**, with bass and midrange knobs flat, treble set to -1 or -2 depending on source, and fader set to -5 for a front image.

The first number in each group of four digits (which control front and back speaker pairs) is lower bass, the second is upper bass, and so on. I found that turning up lower bass and down upper bass tames it nicely. Settings within one "click" of the above setting sound pretty good. Your best settings may differ depending on year, Bose vs. standard, and possibly manufacturing variations in the speakers.

I also found that the flabby midbass is in part due to harmonic distortion created by the moving trunk liner, including the removable panel over the woofer. So, I remove the panel, and bass now sounds flatter. I may someday stiffen all of the liner panels.

You can also fold down the rear middle console, exposing the ski sack cover, which makes the bass a bit louder and more dynamic.

This phenomenon of vibrating walls creating harmonic distortion, was studied in home listening environments by a PhD acoustician friend of mine, Brian Elliot, a manufacturer of \$100k loudspeakers. Dr. Elliot found that such distortion can be very large, even louder than the fundamental tone that triggers it. Harmonic distortion in the bass is perceived as midbass bloat.

Caveats: The EQ cannot work wonders with the cheap speakers and amps. The Bose system still suffers from limited dynamics and very little top or bottom octave. Some colorations cannot be eliminated. Complex instrumental lines sound congested. Distortion is high and some instruments like brass section will never sound realistic. Treble tends to all sound the same, due to what sounds like a cheap tweeter. The distance between tweeter in the top of the door and midrange at the bottom damages the frequency response in the crossover region and destroys imaging.

### How to Access Symphony EQ Settings

You access the setting by *turning off the car, removing the key, then turning on the radio by pressing the volume knob while simultaneously holding down the 5 preset button.*

The readout says 55555555 initially. Each digit is a band for either front OR rear

speakers.

"ABCD EFGH"

A= low bass front  
B= upper bass front  
C= lower treble front  
D= upper treble front  
E= low bass back  
F= upper bass back  
G= lower treble back  
H= upper treble back

The first digit will be blinking. You adjust the blinking digit's setting using the volume knob. To advance to the next digit, press the P scan button. When you're done, turn the radio off then on again to test your settings. Note that this won't work if the car is running... take the key out before changing these settings.

The filter bands are rather wide, not quite narrow enough to fix some of the problems I hear. But, they are narrower than the bass and treble tone control knobs (although the midrange tone knob is very narrow).

### **How to Find the Best Sounding Settings**

1. Use well-recorded natural-sounding CDs (preferably not synth or techno music unless that is all you listen to) whose sound you are familiar with. You might try taking these disks to a high-end home stereo store to hear how they sound ("high-end" equipment can be identified by the absence of tone controls; the tonal balance is so good, they aren't needed).
2. Don't use FM stations because they all sound different and use heavy compression and bass boost.
3. Set the tone control knobs to flat. These you will use later only to adjust between sources (CDs, tape, FM).
4. Listen at a loud but typical listening level so you can easily tell which frequency band sounds too loud or too soft. Discomfort is a good indicator!
5. Always experiment **ONLY** with front **OR** rear speakers, by setting the fader to one extreme or the other.
  - With the fader set so that only the front speakers are playing, adjust the first 4 digits until it sounds flat on several songs or CDs. Keep the settings near 5, and only change those bands that need a little more or a little less. In other words, 9999 is not a useful setting.
  - When done, shift fader to rear, and adjust only the second 4 digits. Your goal is to make the front speakers sound like the back speakers, which should both sound like live unamplified music.
  - Finally, set the fader where you like it and check that the tonal balance still sounds good. I prefer the fader about 5 clicks to the left of middle, so that the rear speakers are relatively quiet. That way, the front speakers are perceived as being where the band is located (imaging), and the back only provides fill. Otherwise, if the back is loud, images jump and smear between front and back too much.

## Other Ways to Improve Bass

I find that some the bloated bass comes from vibration of the trunk liner panels. Not only do they resonate, but they generate harmonic distortion which is quite loud. The result of this distortion is tubby, bloated, inarticulate bass.

To reduce this, I removed the panel that covers the woofer, and found that it sounds flatter and less distorted. Perhaps I will one-day damp and stiffen all the trunk liner panels.

I also tried putting towels or other damping material below the woofer in its compartment. This may help slightly.

## More Information

A previous thread that discussed this was here:

<http://forums.audiworld.com/a6/msgs/75433.phtml>.

Since then, I've used the hidden EQ settings to turn down the midbass a bit more, and turn up the lower bass.

How to access the hidden EQ settings:

<http://forums.audiworld.com/a6/msgs/75310.phtml>.

Covering the woofer hole partially to tame the bass (I don't recommend this, as it will raise the frequency of the woofer's resonance, and reduce its output):

<http://www.audiworld.com/tech/elec38.shtml>.