# Ideal EQ Settings for HK Audio System

#### By Lincoln30 March 14, 2015

I finally got my car. Here is what I came up with using an Audio Control RTA and pink noise from a CMAA test code (IASCA soaked them up in the early 1990's). This was done in my 2015 M3 with full leather. The microphone was in the driver's seat at my ear level about 2 inches forward of where my ears would be (deep microphone and I didn't want to adjust the seat with the tripod in place).

Let me start with my credentials and goals. I have been an audiophile since I before was 12 (my love of cars started at 7). I was a car electronics installer in the higher end space for 9 years in high school and college. I was a CMAA certified SQ judge. I love accurate sound, when I say that I mean as close to the source recording as possible. That's is not just a flat response but also sound stage and imaging. Because of sound stage and image my primary setting front channels only (fader all the way to the left) and logic 7 turned off.

All of my measurements were taken at 80db avg level using the CMAA CD in the CD player. My main source of music is a 1tb hard drive plugged into the USB port with 2300 songs burned in uncompressed FLAC and 3100 songs burned WAV.

#### What I am posting here is 4 different settings:

- 1. Bass, Treble, Fader, Balance all centered, logic 7 turned ON
- 2. Bass, Treble, Fader, Balance all centered, logic 7 turned OFF
- 3. Bass, Treble, Balance all centered, Fader to the front and logic 7 turned OFF
- 4. Absolute flattest I could get Bass -6 or 7 (I can't tell from the pic but I remember its four bars from the left showing), Treble center, balance center, fader front, logic 7 OFF

The first pics are the setup of the RTA in the passenger floor and the mic in the drivers seat. I sat in the passenger seat to take the measurements.

All four examples are very flat from around 500hz to 20k. Below 500 is where the real problems lie. There is bump at 200hz that you can't tune out with the available tools and overall the system a tad brighter then it should be. Overall, It's better then many stock systems and the best I've had in a BMW but still just OK. The bass starts rolling off at 50hz.

I will be using setting #4 with the balance +3 to the right to center it for the driver. +3 is almost perfect but it's a hair too much, +2 is not enough.

#### **Bimmerpost Forum:**

http://f80.bimmerpost.com/forums/showthread.php?t=1006751&page=4



### 1. Bass, Treble, Fader, Balance all centered, logic 7 turned ON

EQ setting 100hz -3 200hz -1 500hz +2 1khz +1 2khz flat 5khz +2 10khz +3

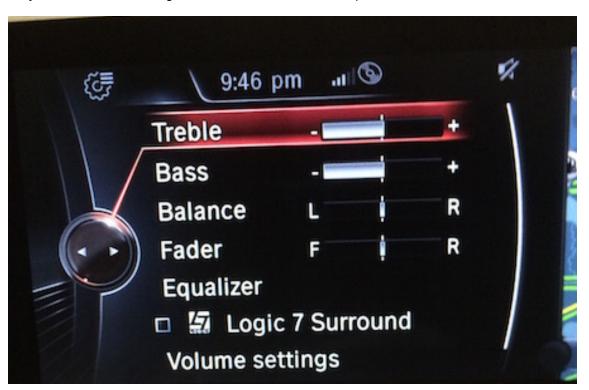




### 2. Bass, Treble, Fader, Balance all centered, logic 7 turned OFF

EQ setting 100hz -3 200hz -1 500hz +2 1khz +1 2khz flat 5khz +2 10khz +2

Only difference between logic 7 on and off was the +1 bump in 10k.





## 3. Bass, Treble, Balance all centered, Fader to the front and logic 7 turned OFF

EQ setting 100hz -4 200hz flat 500hz -2 1khz +2 2khz +1 5khz +1 10khz +2





4. Absolute flattest I could get - Bass -6 or 7 (I can't tell from the pic but I remember its four bars from the left showing), Treble center, balance center, fader front, logic 7 OFF

EQ setting 100hz +3 200hz -4 500hz -1 1khz +2 2khz -2 5khz flat 10khz -1

