Troubleshooting: Off-Center or Biased Imaging

Causes

- Manual balance adjustments not accounted for by Dirac Live®.
- Signal processing downstream of Dirac Live®.
- Off-center measurement in the "sweet spot" (first measurement position).
- Faulty microphone, including using a non-omnidirectional microphone.
- Insufficient measurement data.
- Damaged or distorted measurement tones.
    - Here is an example of how the measurement tones (full-range and subwoofer) should sound.
- Emotiva microphones can have a defect in their USB cable that leads to problems with measurement and imaging. Please contact Emotiva customer support if you believe you are affected by this problem.

Solutions

- Ensure Dirac Live® is the final stage in your signal chain. Any and all audio processing such as balance adjustments, bass enhancements, etc. must be carried out before a Dirac Live® measurement is executed, so that Dirac Live® can account for these in filter calculation.
- Always take your first room measurement from the "sweet spot," or a centered location where you most often listen to music. Time and gain (i.e. balance) adjustments are based around the location of this first measurement.
    - For example, if you measure a "sweet spot" that is to the extreme left of your 2.0 setup, then, when sitting directly in the center of your 2.0 setup, the right speaker will be far louder. This is because the system is trying to give good balance and imaging to the position you measured to the extreme left. Always measure your first point in your usual listening spot!
- Your microphone might be incorrectly reading the Dirac Live® measurement tones. This occurs if your microphone is faulty or non-omnidirectional, and can be corrected by replacing your microphone with one that we recommend. A good entry-level measurement microphone is the UMIK-1 from miniDSP.
- Always complete all the measurement points in your selected arrangements.
- Buffer size or sample rate could impact the ability of your system to render the measurement tones properly. When possible, keep system buffer size at 10ms and sample rate at 44.1kHz during measurement. After measurement, you may adjust these freely.
- If your measurement tone is damaged or distorted, restart your device and Dirac Live. If the problem recurs consistently, contact us.