Guide for setting up a subwoofer with SA Cockpit

# How to set up your subwoofer correctly – and get perfect sound in your room

**We've gathered tips and recommendations so you can get the most out of your System Audio subwoofer.**

The goal: The subwoofer should disappear into the soundstage, and the sound should act as an extension of the sound from your main speakers. Not boomy and bloated bass – but timing, coherence, and depth.

Use your ears and playlist and take your time. Small adjustments make a big difference.

Link to Subwoofer test tracks on Spotify

Link to Subwoofer test tracks on Tidal

Consider whether your system is primarily for music or movies.

- For music, we recommend a relatively low crossover frequency and relatively low volume for precision.
- For movies, we recommend a slightly higher volume, a crossover frequency up to 80 Hz, and a bit more headroom – possibly an extra subwoofer.

## Placement of the subwoofer

**Corner placement**
A corner provides natural reinforcement of the bass, and the walls act as an acoustic horn. This can be an advantage in larger rooms, and it often gives the fastest and most dynamic bass. Remember to use room correction to avoid resonance.

**Close to the main speakers**
Placing the subwoofer near your main speakers helps with timing and integration, so the bass blends with the rest of the sound. Note: In a silverback system, the subwoofer doesn't need to be close to the main speakers, as timing and integration are set precisely in SA Cockpit. This is a big advantage.

**Along a wall, but not in the middle**
Placing the subwoofer along a wall (but not in the middle) can provide a good balance between reinforcement and control. Avoid the middle of the wall placement, as it often creates standing waves and uneven bass.

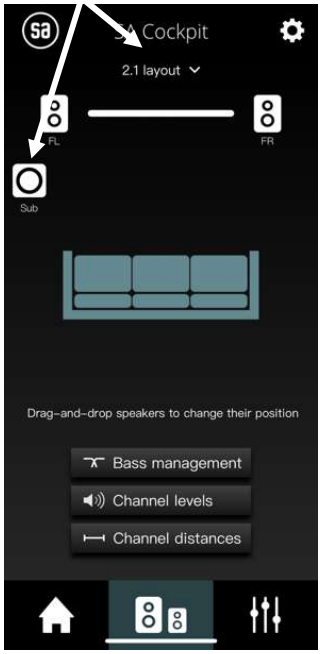
**Placements to avoid**

- **Middle of the room:** This is where "nulls" typically occur, and bass disappears. This gives a flat and lifeless sound.
- **Listening position in the middle of the room:** Also avoid placing your listening position in the middle of the room. This is often where most nulls are found, resulting in the most uneven bass response. The middle of the room is acoustically not a good place to sit.

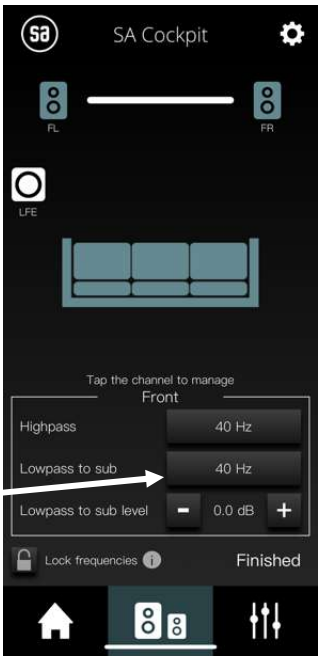
**Adjusting the subwoofer**

Let's begin. No matter how advanced technology is, your ears that should enjoy the result. So, use your ears (in combination with the playlist) to get the best outcome.

When the subwoofer is connected to the hub, either wirelessly or by cable, you can choose a setup, such as 2.1, that includes a subwoofer. To adjust the settings, tap the subwoofer icon.



**1. Start with a low crossover frequency (30-40 Hz)**

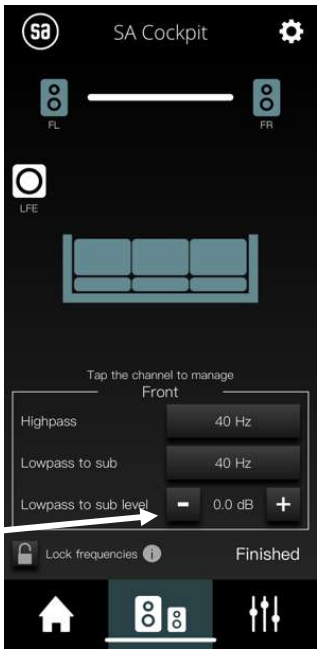



Start with a very low crossover frequency to ensure the subwoofer only plays the deepest tones. This makes it easier to hear when the bass starts to "stand out."

- Set the crossover frequency to 30-40 Hz.
- Play acoustic tracks (e.g., Take Five and So What).
- Gradually increase the crossover: 40, 50, 60 Hz, etc., while listening.
- Stop when you can localize the subwoofer (i.e., you can hear where it is).
- Lower the crossover frequency by 10–20 Hz, until you can no longer locate the subwoofer
- Now you have a crossover frequency that matches the acoustics of your room, without being able to hear where the subwoofer is.

**Tip:** If you play in larger rooms or want better bass control, a Silverback Sub Duo may be a relevant upgrade to Sub Solo. The Duo model provides more headroom and ensures more even bass coverage in the room than a single subwoofer.

**2. Set the subwoofer volume – Keep the level low**




If the level is too high, you reveal the subwoofer. If it's too low, the music loses its foundation.

- Start low and play different tracks from the playlist. SA Cockpit can help you find the right level under 'Channel levels.'
- Increase the volume in small steps of 1–2 dB.
- Stop when the subwoofer dominates the sound and go back one step.
- The sound should become deeper and bigger, not heavier.

**Suggested test music:** Billie Jean and Dreams – great tracks to test rhythmic coherence and timing.

**3. Adjust phase / delay (speed and timing)**

Timing is crucial. The sound from the subwoofer and main speakers must reach your ears at the same time, or the bass will be blurred.

- Measure the distance from the subwoofer and speakers to your listening position.
- Enter these measurements under 'Channel distances' in SA Cockpit (applies to Silverback Sub Solo and Sub Duo, as well as Signature Sub 8 if set up with Stereo Hub HT).
- Notice how this adjustment makes the sound blend nicely together.
- Switch the phase in SA Cockpit while listening. Notice the body and impact of the sound. Move around the room while switching the phase between 0 and 180 degrees and keep the setting where it sounds best.

**Music suggestion:** Royals – listen for punchy bass hits with great body.

**Note about Signature Sub 8:** If you use Signature Sub 8 with a traditional HiFi amplifier or surround receiver, you cannot control distance and phase via SA Cockpit. Here you must use the amplifier's or receiver's own bass management, if available.

**4. Listen for integration – not impressive bass**

Once you've found a good crossover frequency, correct level, and correct timing, listen to the total sound:

- The bass should not feel "stuck" to the subwoofer.
- The music should feel bigger, not more bass heavy.
- Vocals should stand free and clear.

**Music suggestion:** Take Five or So What – perfect for hearing tonal balance and natural bass.

**5. Use bass management in SA Cockpit**

When the subwoofer and speakers play naturally together, bass management can improve the system's performance.

**Purpose:**

- To take away stress front the main speakers and let the subwoofer handle the deep bass.
- Improve dynamics and headroom.
- Provide effortless playback at all volumes.

**How to do it:**

- Start by setting the front speakers to small in SA Cockpit (even if they are large).
- Begin by choosing a high pass crossover frequency lower than the front speakers' lowest frequency (e.g., 30 Hz).
- Make sure the subwoofer is not double filtered (its own crossover should not be active when controlled by bass management in SA Cockpit).
- Listen to the same tracks as before, while gradually increasing the high pass crossover frequency and notice how the depth and precision of the sound "falls into place" at a certain frequency.
- The sound should become freer and calmer as you slowly increase the crossover frequency - not fuller.
- Choose the crossover frequency that gives the sound a perfect balance between depth and precision.

**6. Add room correction (final step)**

Room correction is the final touch.

**How to do it:**

- For Silverback systems: Follow the instructions in SA Cockpit under Room Service.
- Avoid standing too close to the speakers when measuring acoustics. Never be closer than 1.5 meters from the speakers.
- Leave the level and crossover frequency as you found them manually.

**Music suggestion:** Teardrop – perfect for hearing if room correction makes the bass more controlled without blurring the depth.

**7. Final listening – Now hear the result**

The last step is to listen to the system before simply enjoying it in everyday life.

**Test at low and moderate volume**
Good bass doesn't just work when you play loud. No Sanctuary Here – listen for whether the bass is still clear, even when you play at low volume.

**Test across genres**
Use electronic music, acoustic music, vocals, jazz, and film. Black Muse, Teardrop, Why So Serious? and Limit to Your Love – all reveal different qualities.

**The crucial question**
Do you miss the subwoofer when it's off – without noticing it when it's on? If the answer is yes, the setup is perfect.

**Only make small adjustments**
If something can still be improved: Adjust ±0.5 dB. Small changes are often the solution.

**How to use the playlist**

This playlist helps you set up the subwoofer precisely and musically. Follow the order here – it's important to hear if the setup works across genres and bass types.

**1) Start with acoustic music**
Use Take Five – Dave Brubeck and So What – Miles Davis.
Listen for:

- Whether the double bass sounds natural and clear.
- Whether the rhythm is tight and the drums stand out clearly in the room.
- No "mud" in the midrange – the subwoofer must not color the sound.

**2) Move on to pop and rock**
Use Billie Jean – Michael Jackson, Dreams – Fleetwood Mac, and Royals – Lorde.
Listen for:

- Whether bass lines are precise and follow the rhythm.
- Whether vocals stand free and undisturbed, even when the bass goes deep.
- Whether the subwoofer feels like part of the music – not a separate layer.

**3) Check the deep bass**
Use tracks with extremely deep frequencies:

- Limit to Your Love – James Blake
- Why So Serious? – Hans Zimmer
  Listen for:
- Whether the bass is deep without shaking the room unnecessarily.
- Whether you can feel the energy – but still hear the details.
- Whether certain frequencies rumble (signs of room problems).

**4) Finish with musical wholeness**
Use Teardrop – Massive Attack, Black Muse – Prince, and No Sanctuary Here – Chris Jones.
Listen for:

- Whether the entire soundscape is a complete experience.
- Whether the music feels bigger and more present.
- Whether you miss the subwoofer when you turn it off – and don’t notice it when it’s on.

When you’ve completed the setup and listened across genres, you’ll discover something special: The music sounds bigger, deeper, and more involving – without you necessarily being able to point out where the sound comes from. That’s exactly how a subwoofer should work. It shouldn’t dominate. It should be complete.

A properly set up subwoofer is not just an extra speaker. It’s an extension of the music. It releases the energy, depth, and atmosphere that the artists have put into the recording – which many unfortunately never hear.

Enjoy – and happy listening!