

SBS.1  
Active  
Speakers

USER MANUAL

S I G B E R G  
A U D I O



WE CAN'T WAIT TO PLAY  
YOUR FAVORITE MUSIC!

Thank you for purchasing a Sigberg Audio product. We have done our best to provide a high quality product that will be yours to enjoy for many years to come.

Please read this manual carefully to ensure that you get the most out of your investment! It includes information about how to install, set up and care for your loudspeakers.

## INTRODUCTION

# INSTALLATION & SETUP



# AVAILABLE CONNECTIONS

- **Balanced (XLR) connection**
- Balanced analogue input and through output.
- **Digital (AES & S/PDIF coaxial and optical)**
- AES and coaxial input and through output, optical input
- **Unbalanced (RCA) connection**
- A stereo input signal is internally mixed to mono. For mono use, simply connect only one of the channels (left or right) or use an Y-split.
- **USB input**
- Connect your laptop to access the parametric EQ and additional settings. Otherwise for maintenance / service only. USB audio not supported



# INITIAL CONNECTIONS

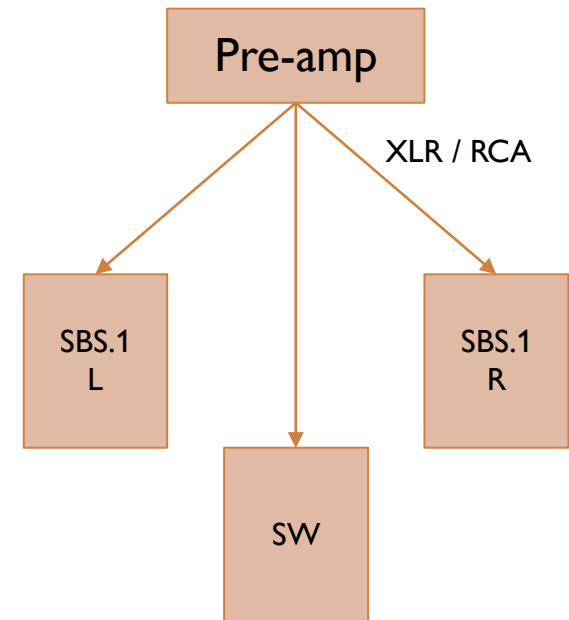
The easiest way to think of the SBS.1 is as speakers with built-in mono power amplifiers. This means you need to connect them to a pre-amplifier or processor with either RCA or XLR stereo outputs, the same way you would with a power amplifier.

If you only have one source (**with volume control**), you can also connect the SBS.1 directly to a source like for instance a network streamer.

Your pre-amp / source also need an additional pre-out or subwoofer output to enable you to connect your subwoofer(s). Using a y-split is also possible if you only have one pre-out.

If you use XLR connections and have dual subwoofers, you can also connect the subwoofers directly via the speakers using the XLR Through connection.

If you need assistance with setting up your system – feel free to contact us, we will be happy to help!



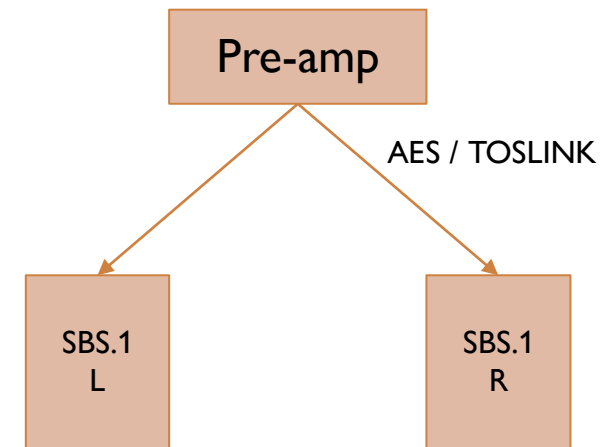
# DIGITAL CONNECTION

If you connect digitally, both speakers will receive a stereo signal. Your SBS.1 speakers are preconfigured as a L+R pair that will pick up the individual left or right channel. Inspect the serial number label on the rear of the speaker. The identical serial numbers will end with “L” and “R” respectively.

Place the speaker labeled “R” as the right speaker, and the speaker labeled “L” as the left speaker.

You can double check the configuration by pressing the select button on the speaker and holding it for 3 seconds. Either “Left”, “Right” or “Left+Right” will light up to indicate the current configuration.

If you wish to change the configuration or accidentally did so: Press the button for three seconds and keep pressing. The configuration will change and cycle through “L”, “R” and “L+R” every 1.5 seconds.





## **SPEAKER PLACEMENT: INTRODUCTION**

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With its neutral response, even dispersion and low distortion, the SBS.1 speakers are suitable both for traditional hifi listening at home, as well as nearfield / midfield studio use.

On the following pages we will share some advice for how to get the most out of your SBS.1 speaker system.



## SPEAKER PLACEMENT: TOE-IN

**The SBS.1 is designed to play well with no (zero) toe-in, so placing the speakers parallel to the wall.**

This will give the largest soundstage, and due to the point source nature of the coax driver, it will still give you accurate stereo perspective. In short, the best of both worlds.

If you would like a more direct sound and slightly elevated highs, you can experiment with slight toe-in towards the listening position. This may also give a wider sweet spot.

Our recommendation is up to 10 degrees.

No  
toe-in

5  
degrees

10  
degrees

## **SPEAKER PLACEMENT: DISTANCE FROM WALL**

The SBS.1 is designed to blend in with a modern living space. Unlike many speakers, it is designed to be placed close to the rear wall.

This will give the speakers a slight boost in the bass region, and it will also give a more even response in the lower frequencies due to a reduction of the so called SBIR effect.

**Recommended distance from the wall:**

**~10cm (4 inches)**

As always, you are encouraged to experiment. 10-50cm may work well depending on your room and listening position.

## **SPEAKER PLACEMENT: DISTANCE, HEIGHT AND POSITION**

**Distance:** A SBS.1 system with speakers and one or more subwoofers have the capacity to fill relatively large rooms. At the same time, its response is both neutral and smooth, which means it can be used in a nearfield situation without listening fatigue.

**Height:** With regards to height, we recommend that the coax (upper) driver is at or slightly above ear height when you are in the listening position. The best thing is to measure, but speaker stands that are ~60-70cm tall will likely work well.

**Listening position:** The traditional triangle with equal distance between the speakers as well as from each speaker to the listener is a good starting point with regards to position. Having them wider apart is likely better than a more narrow setup. If you have the luxury of alternatives: experiment!

# BASIC OPERATIONS

## Amplifier overview



### **Powering on and off**

We recommend leaving the speakers on, unless they will not be used for an extended period of time.

Always make sure the loudspeaker is powered OFF before connecting/disconnecting cables.

### **Presets**

3 EQ presets are available to adjust (see later in this manual for details).

Click the “select” button on the back of the speaker to switch between presets (more about these later).

The green LED lights marked P1 / P2 / P3 will indicate the active setting.

The software needed to access these settings can be downloaded from [www.sigbergaudio.no](http://www.sigbergaudio.no)

After installing the software, locate the Hypex filter designer and launch the software. Connect the speaker to your computer via the included USB cable, and the software will automatically detect your speaker.  
(Windows 7 or higher required)

## BASIC OPERATIONS: ADJUSTING DEFAULTS

You may override or adjust the settings below using a laptop connected to the USB port. All settings are found by clicking the “Device settings” button in the main interface.

### **Auto on/off (enabled by default)**

If no input is detected for 120 minutes, the speaker will enter power saving mode. It will automatically wake up again when a signal is detected.

Power saving settings and auto on/off sensitivity can be adjusted by changing the “Activate signal detection” parameters under Device settings.

Signal detection level 1 is the most sensitive (default), 4 is the least sensitive.

### **Gain and Auto on/off vs gain**

The startup gain of the SBS.1 may be adjusted with the “Volume on start” setting. The default value is +9dB.

Different sources have different output levels, which means the default configuration of your SBS.1 may not work perfectly.

If you experience that the SBS.1 will not automatically turn on, try decreasing the “Volume on start” setting by 3dB.

If you experience that your SBS.1 won't turn off, try changing the “Signal detection level” from 1 to 2, or increasing “Volume on start” by 3dB.

Note: If you change the gain (volume on start) on your speakers, you will need to increase/decrease the gain on your subwoofers with the same amount to ensure proper integration. This can be done either through the software or via the gain knob on the back of your subwoofer.

The software needed to access these settings can be downloaded from [www.sigbergaudio.no](http://www.sigbergaudio.no)

After installing the software, locate the Hypex filter designer and launch the software.

Connect the speaker to your computer via the included USB cable, and the software will automatically detect your speaker.

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## BASIC OPERATIONS: ADJUSTING DEFAULTS

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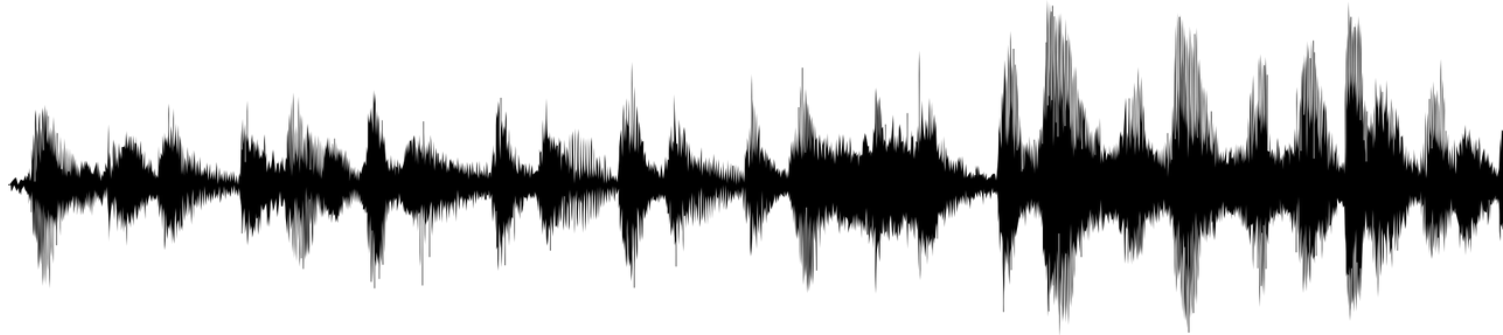
### **Autodetect signal source**

By default the amplifier will autodetect signal from any of the inputs.

If autodetect is enabled and no input is detected for 15 seconds, the subwoofer will mute (green led blinking).

If you experience any problems with this feature, auto-detect can be disabled on the main screen by changing the “Force input” setting to the preferred input.

**Note:** this setting is defined independently per preset. If you want to force the input to a specific input for all presets, you have to cycle through all three presets via the “Filter preset” setting, and configure “Force input” to your preferred setting on each one.



# SUBWOOFER INTEGRATION



*Our subwoofers have been optimized to match the gain of your SBS.1 speakers.*

*However, every preamp have different output levels, and every room amplifies the bass from your subwoofer differently - so adjustments may be needed to accommodate the room and / or personal preferences.*

## SIGBERG AUDIO SUBWOOFER INTEGRATION

Set your Sigberg Audio subwoofer(s) to preset 2.

Set gain on the subwoofer(s) in the default position (straight up), and listen to some of your favorite music. Adjust up or down as necessary until the sound is full, but balanced.

The subwoofer should sound like a natural extension of your speakers. If you can clearly hear the subwoofer, try turning the level down slightly.

## USING AN EXTERNAL CROSSOVER (AVR PROCESSOR OR SIMILAR)

The SBS.1 are designed to integrate perfectly with any Sigberg Audio subwoofers (set your Sigberg Audio subwoofer(s) to preset 2). In this case, you need to disable the internal lowpass/highpass feature of your AVR / amplifier.

Set your speakers to Large in the AVR setup, and set the subwoofer to LFE+Main. Please refer to your AVR manual for details on how to do this.

If you want to use an external crossover to test alternative crossover points, set your Sigberg Audio subwoofers to preset 1. A minimum crossover setting of 100hz is recommended.

If you have Sigberg Audio subwoofer(s) or other high quality subwoofers placed at the front wall, up to 160hz may work well.

## INTEGRATING SBS.1 WITH A SUBWOOFER OF A DIFFERENT BRAND

Set the crossover of your subwoofer to 100hz, and adjust the subwoofer gain until the sound is full. If you can clearly hear the subwoofer dominating, dial back the subwoofer volume until the sound is balanced.

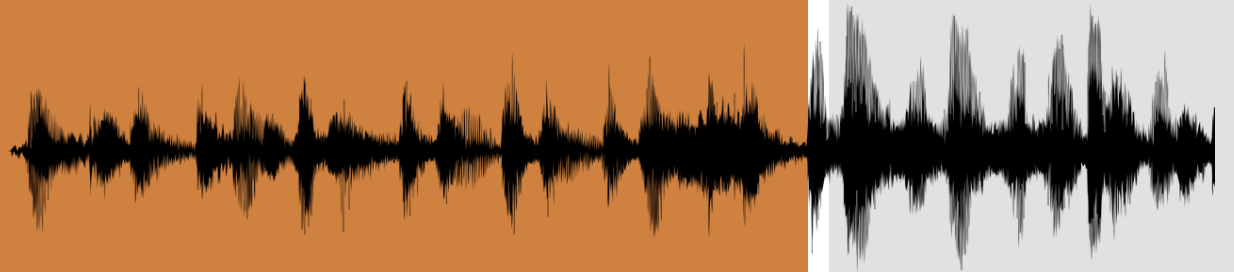
If you have trouble getting a good integration, try adjusting the crossover up or down slightly (anywhere between 80-120hz may be appropriate, depending on your subwoofer and your room).

## SUBWOOFER INTEGRATION TROUBLESHOOTING

If you are unable to match up the gain between the speakers and the subwoofers, it is possible to adjust the gain level of the speakers by connecting with the included USB cable and a laptop (windows only). Please refer to the section about Gain on page 14.

If you are still having trouble, do not hesitate to contact us at [support@sigbergaudio.no](mailto:support@sigbergaudio.no).

PRESETS



All presets can be customized further by the customer. See the EQ chapter for details on how to do this.

Click the “select” button on the back of each speaker to switch between presets.

The green LED lights marked P1 / P2 / P3 will indicate the active setting.

The following pages explain how the three presets have been configured from the factory.

## EQ MODES

SBS.1 has three user defined EQ presets. For your convenience we have loaded example EQ configurations into preset 2 and 3.

**Preset 1: Reference** is the SBS.1 signature sound and will normally give the most natural reproduction across music genres.

**Preset 2: Air** provides more treble for well damped rooms or longer listening distances

**Preset 3: Warm** for reflective or “naked” rooms, or a more relaxed sound.

## **PRESET 1**

The user definable EQ for this preset is blank from the factory.

EQ  
MODES

## **USER PRESET 1: Reference**

This is the SBS.1 reference sound. It's the recommended setting for most situations, including studio use.

In this setting, the speaker is tuned to give the most natural and balanced in-room frequency response.

## **PRESET 2 & 3**

These presets have the same base configuration as preset 1. In addition, the user definable EQ has been factory loaded with example configurations as described to the right (this may be adjusted or changed by the customer).

EQ  
MODES

### **USER PRESET 2: Air**

The user definable EQ has been loaded with a high-shelf with center frequency 2khz and gain 2dB.

This will give more treble and “air” in the sound, which may be suitable for long listening distances and/or well damped rooms.

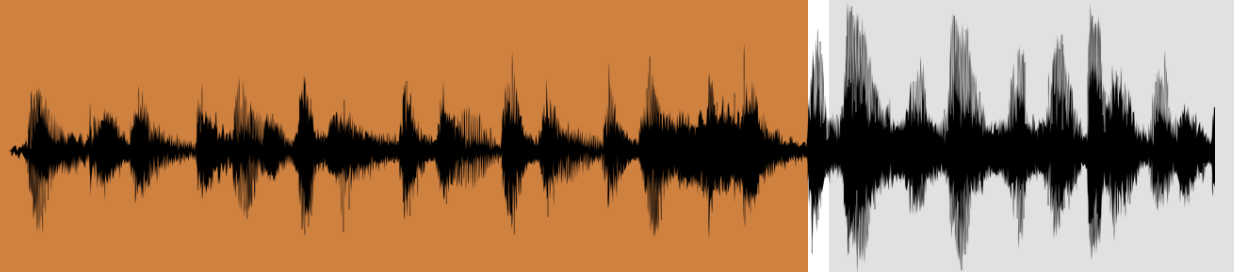
### **USER PRESET 3: Warm**

The user definable EQ has been loaded with a high-shelf with center frequency 2khz and gain -3dB.

This will give a more relaxed sound, suitable for highly reflective rooms or nearfield listening.



# EQUALIZER



The software needed to access the parametric EQ can be downloaded from [www.sigbergaudio.no](http://www.sigbergaudio.no)

After installing the software, locate the Hypex filter designer and launch the software. Connect the subwoofer to your computer via the included USB cable, and the software will automatically detect your subwoofer.

(Windows 7 or higher required)

## MANUAL EQ: INTRODUCTION

### Important note

*Equalizing is an advanced topic, and learning how to do that is beyond the scope of this user manual. Feel free to reach out to us if you have additional questions about this. Please do not randomly change things in the equalizer if you don't know how to do it. Worst case, you may damage your speaker.*

*Note: The EQ is configured independently for each preset.*

### Basic instructions for the Parametric EQ

The EQ should be used primarily to reduce peaks caused by room nodes in order to achieve a smoother in-room response, not add boost. EQ is most effective below ~500hz, but can also be used for broad adjustments higher up, for instance reducing treble in a very reflective room.

With the HFD software active and subwoofer connected, click the «EQ» button in the HFD interface. To add a filter, simply click one of the nine circles in the graph or one of the EQ buttons below the graph, and change the desired parameters.

- Center frequency: The frequency you want to boost / cut
- Q factor: A low number means a wider frequency range is affected, a higher number means a more narrow frequency range is affected. We recommend using low Q (below 0.5-0.7) for most natural sound.
- Gain: Add a positive number to increase (boost) volume in the selected frequency range, and a negative number to reduce (cut) volume. Typical settings: +3/-6

To apply changes: Make sure «EQ Enabled» is selected, and then click the «Upload to DSP» button.

**Tip:** Trying to use all nine filters to perfectly flatten the response isn't always a good idea. Two or three well placed low Q filters may actually sound best even though the result isn't perfectly flat.

**Warning:** We strongly advice against adding boost beyond 3dB.

# CARE & MAINTENANCE

Remove dust with a microfiber cloth. Remove stains by wiping it carefully with a damp microfiber cloth. Do not use any cleaning solvents or soap, as this may damage the surface. Periodically check that all cables are connected properly, and that the speaker is securely installed on a level surface.



## SBS.1 Active Speaker

*We strive to continuously improve our processes and products, so specifications are subject to change whenever advancements are made*

# TECHNICAL SPECIFICATIONS



Frequency response: 90-20,000hz (+/-2dB) / 80-22,000hz (+/-6dB)  
Maximum SPL@1m: 116dB (per speaker)

5.5" Coax with 1" silk dome, 5.5" Mid-bass

Amplifier: Active 3-channel 350W Hypex nCore Class D with DSP

- 3 EQ/Crossover presets + 9 band parametric EQ
- Gain
- Inputs: Balanced / Unbalanced / High-level

Power (Auto switching)

- Low Line input voltage: 100-120Vac  $\pm 10\%$
- High Line input voltage: 200-240Vac  $\pm 10\%$
- Max power consumption: 350W

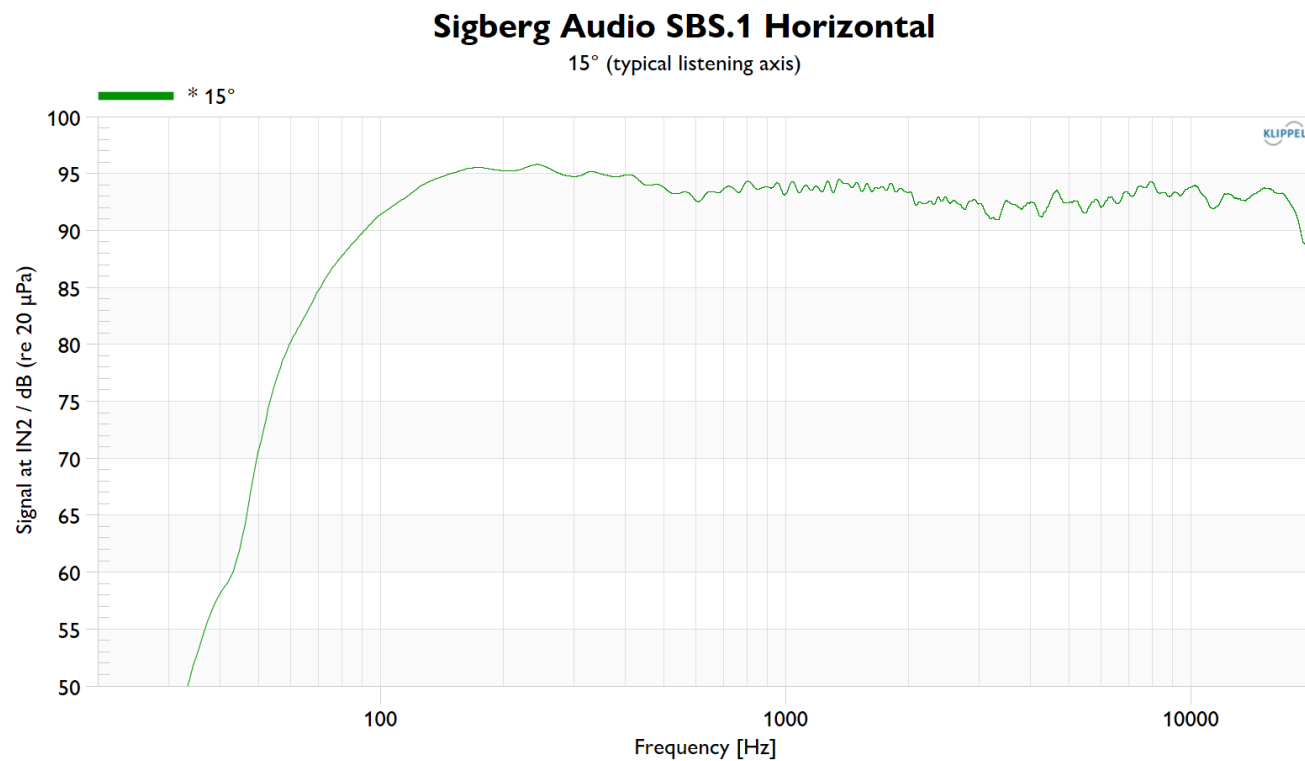
Dimensions

- Width / Height / Depth: 190 / 410 / 230 mm

Weight: 9,5kg

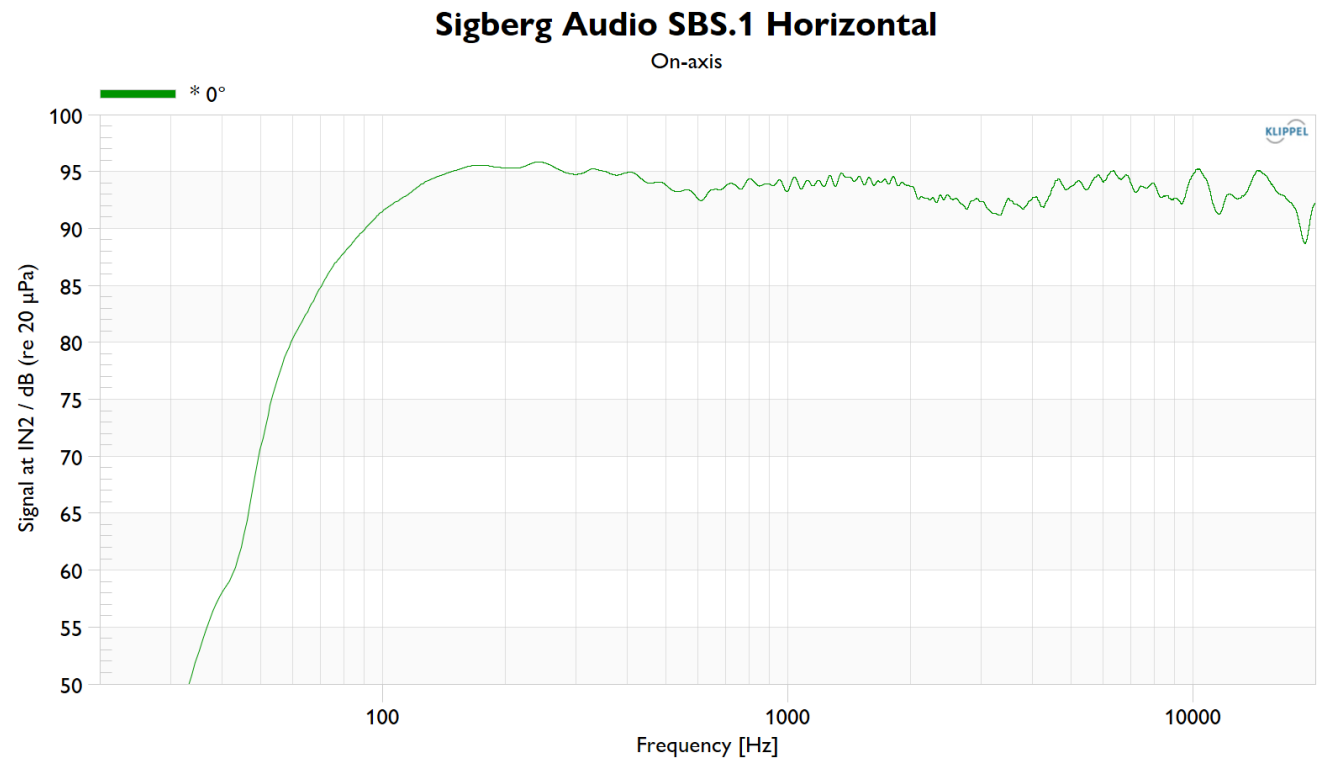
The SBS.1 frequency response and dispersion characteristics has been tuned and verified using Klippel™ software and an anechoic chamber.

## TECHNICAL SPECIFICATIONS



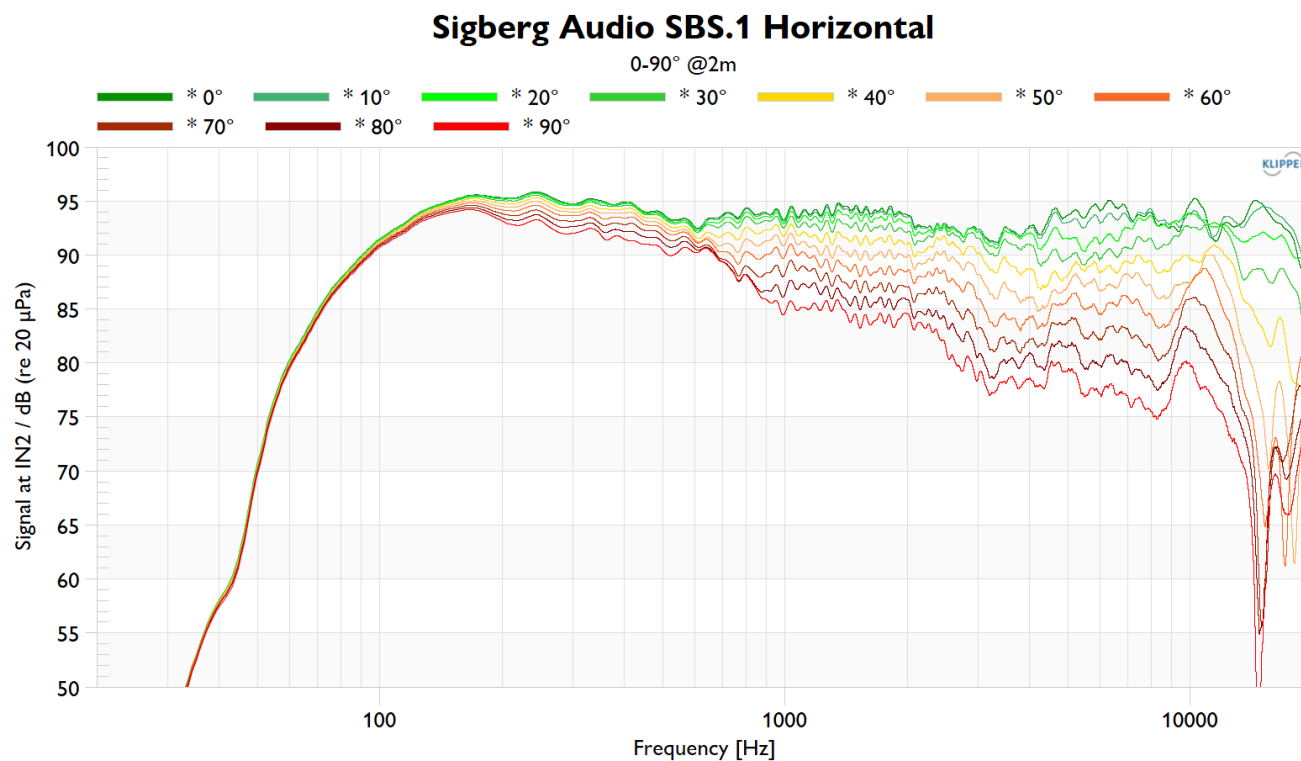
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## TECHNICAL SPECIFICATIONS



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## TECHNICAL SPECIFICATIONS



# CONTACT & SUPPORT

Please do not hesitate to contact us for any reason at all. We are happy to help you make the most out of your investment – and of course sort out any problems.

Inquiries may be directed to [support@sigbergaudio.no](mailto:support@sigbergaudio.no)

Please visit [www.sigbergaudio.no](http://www.sigbergaudio.no) for more information, keeping up to date with new products and additional contact options.

We wish to thank you once again for purchasing a Sigberg Audio subwoofer, we hope it will bring you joy!

Sincerely,

Thorbjørn Sigberg  
Founder



ENJOY THE  
MUSIC!





SIGBERG  
AUDIO