

Grimm *AUDIO*

driven to improve



LS1 Series | Music Systems





LS1

The Reference Music System

*Presenting the first user friendly playback system
combining the highest degree of sonic precision
with untrammelled musicality.*

Grimm Audio LS1 series

The LS1 is a fully integrated music playback system that offers supreme transparency. It comes in three flavours: the original (though updated) LS1, the more affordable LS1a and the flagship LS1be. All LS1's share the same vision that ultimate transparency can only be reached by integrating all components of the playback chain into one system. Only then, designers have full control over the interaction of electronics, loudspeaker units and the acoustic behaviour of the cabinet. The result is very low distortion and an extremely linear amplitude and phase response. At the same time the LS1 offers a very elegant appearance that is a gem in every interior.

As DSP control, DA converters, amplifiers and loudspeakers are fully integrated, one only has to add a source to start enjoying music. Both analog and digital sources like a record player, a CD transport, a media player or a computer are accepted by the LS1. The LS1r controller allows convenient control of volume and source selection.

Grimm Audio believes that once the whole audio chain becomes transparent the work of the artists can be enjoyed in full, with its original intention. This total clarity inspires both the artists and the listeners.

LS1r

The LS1r offers volume control and source selection of the analog and digital inputs. The LS1r is IR remote controllable. An LS1i USB interface is included.



„Especially in the fundamental audiophile criteria, neutrality and detail, the LS1 is by far the best speaker AUDIO magazine had the chance to test in over 35 years.“

Review AUDIO

„A dream for high-enders: the naturalness of the LS1 turns me on big time. A grand bouquet of tonal hues, unexcited dynamics, details aplenty: the best sources display their full potential on the Grimm.“

Review AUDIOPHILE

„The LS1 is the most exciting, strange, beautiful, ridiculously convenient piece of non-audiophile audiophile gear I have ever seen or heard... This system is a bit science fiction really.“

Bogdan Roscic, president Sony Classical



LS1a

An LS1a offers a high level of performance in all key areas. If you are looking for a reference quality system with a somewhat limited budget, the LS1a is for you.

- Polypropylene Seas woofer
- Seas DXT tweeter
- NCore amplifiers
- High quality lacquer finish



LS1

The LS1 playback system is Grimm Audio's solid performer. It excels both as a two-way and as a three-way loudspeaker. Loved by many for its supreme level of performance in music reproduction, it is the benchmark for audio quality.

- Magnesium Seas woofer
- Seas DXT tweeter
- Optimised NCore amplifiers
- Heavy footplate
- Bamboo finish



LS1be

Our low distortion Beryllium tweeter, a co-development of Seas and Grimm Audio, takes the LS1 performance to the next level. With upgraded components, top quality cabinet finish, and paired with the new DMF sub, the LS1be is the summit of contemporary audio performance.

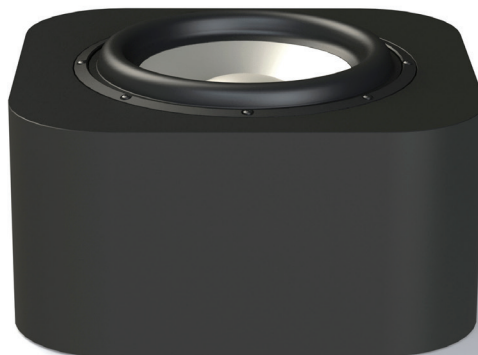
- Magnesium Seas woofer
- Seas Beryllium tweeter
- Optimised NCore amplifiers
- Upgraded components
- Heavy footplate
- Hi-Macs™ cabinet



LS1s Sub

Adding the LS1s sub to an LS1 turns it into a unique phase-coherent three-way system. Although the LS1 on its own can play down to 40 Hz with quite impressive power, the bottom octave down to 20 Hz is hard to reproduce with a two-way loudspeaker system. A dedicated driver for frequencies below 70 Hz solves this.

The low system distortion offered by the LS1s will appeal to those who like to listen at higher sound levels and to those who are in search of low distortion in general. As a bonus the LS1s sub can be taken off the footplate and placed in the optimum position for low frequency reproduction, which is not necessarily also the optimum spot for the main loudspeakers. The LS1s is based upon a very high quality Peerless woofer and a 400W Hypex amplifier.



LS1s-dmf Sub

The LS1s-dmf is a technological marvel. By applying 'Digital Motional Feedback', a control technology from the renowned Dutch high-tech industry, it became possible to achieve exceptionally low levels of distortion and full dynamic control.

At frequencies below 100 Hz loudspeaker drivers need to move a vast amount of air and therefore have high excursion levels. The result is that all conventional loudspeakers exhibit a rising distortion in the bass region. In electronics, feedback is used to minimise distortion. To apply feedback in electro-mechanical systems like an active loudspeaker, an acceleration sensor needs to be mounted on the cone to monitor its motions. This so called "Motional Feedback" technology has been presented a few times before in history but the precision and control as found in the Grimm Audio LS1s-dmf is unique. By applying smart digital processing and current drive, the low distortion of the already high-performance aluminium Seas woofer is further reduced by as much as 30 dB, solving all problems that are related to low frequency resonances and distortion.

"Digital Motional Feedback in the LS1s-dmf offers exceptionally low levels of distortion."

Rob Munnig Schmidt, designer of the LS1s-dmf

LS1 - Technical Specifications

Audio inputs:

- 1 x stereo analog line level
- 3 x AES/EBU 44.1 - 192 kHz
- 1 x USB: PCM up to 384kHz/24bit (DXD), DSD64 & DSD128

Frequency response:

- 20 Hz - 20 kHz +/-3dB (unsmoothed!)
- 30 Hz - 20 kHz +/-0.5dB (unsmoothed!)

Deviation from minimum phase: <10 degrees

Amplifier power:

- LS1 2 x 120 Watt (per side)
- LS1s Sub 400 Watt (per sub)
- LS1s-dmf Sub 700 Watt (per sub)

Maximum SPL: 105 dB

Signal to noise ratio: 114dB (unweighted)

Height, width, depth: 1150mm x 520mm x 160mm

5 year limited warranty on material and workmanship.



LS1be White Hi-Macs™



LS1 Caramel Bamboo

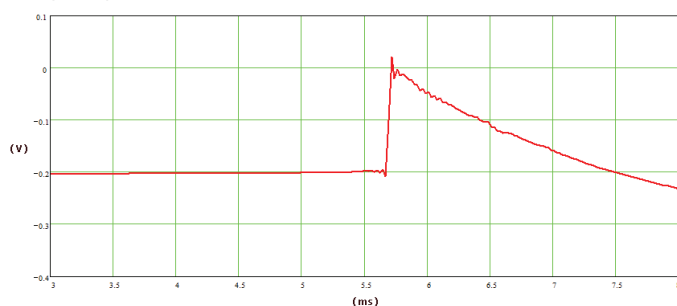


LS1 Natural Bamboo



LS1a White lacquer

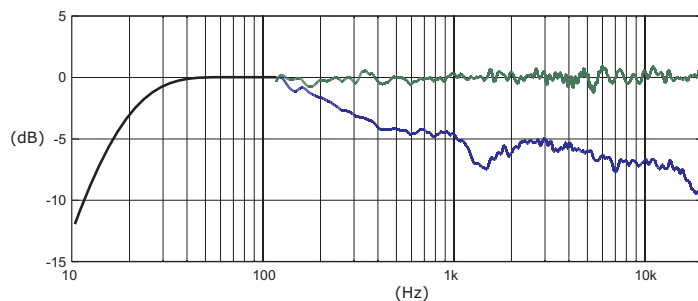
Step response



Green: on-axis response

Blue: room averaged power response

(simulated below 150Hz)



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