

DSP8000.2

DIGITAL ACTIVE LOUDSPEAKER

OVERVIEW

DSP8200.2 is a full range floorstanding loudspeaker which features a highly unique Meridian design. A separate decoupled head provides convincingly natural voice reproduction, whilst the discrete bass cabinet provides effortless deep bass.

Built by hand in the UK, each Meridian DSP8000.2 Digital Active loudspeaker features the latest Digital Signal Processing (DSP) technology. The DSP8000.2's engineered curved cabinet provides a graceful and perfect home for its high performance electronics components and advanced software.

Designed as a complete system, the DSP8000.2's five independent amplifiers are tuned precisely for the bandwidth and drive units they serve and are designed to reproduce sounds at up to full natural level while providing all the resolution required by high-definition audio sources up to 24-bit. This allows the DSP8000.2's to reproduce musical recordings in the finest detail and play at concert levels without stress.



PRODUCT HIGHLIGHTS

- Dual magnet, semi-horn-loaded composite dome tweeter with silver voice coil.
- The separate head unit is decoupled from the bass cabinet to reduce coloration, for life-like authentic sound.
- The six high efficiency long-throw custom bass drive units are mounted symmetrically in pairs on the sides of the bass cabinet, cancelling vibration in order to minimise interference with the mid-range and treble units.
- New extended-bandwidth analogue electronics, optimised to deliver maximum performance from high-resolution recordings.
- Self-contained audio system with four custom drivers, amplifiers, digital converters, improved digital crossovers and advanced sound-shaping DSP technology such as Enhanced Bass Alignment (EBA).

USER FEATURES

- The DSP8000.2 provides precision command of frequency balance, volume, bass, treble, tilt, listening axis, time-compensated balance, absolute phase and Enhanced Boundary Correction.
- Ethernet' style SpeakerLink cabling which maintains performance and is easy to install.

TECHNOLOGIES

NEW SPEAKERLINK INPUT BOARD AND DSP

A new SpeakerLink board provides enhanced interoperability between Meridian Controllers and DSP Loudspeakers. Digital Signal Processing has been enhanced for higher clock speeds, giving superb handling of the high sample rates encountered with high-resolution audio sources.

WIDEBAND ANALOGUE ELECTRONICS

Each amplifier has been refined to provide a more lifelike sound, with optimised transient response, extended frequency response and enhanced dynamic range.

ENHANCED BASS ALIGNMENT (EBA)

Meridian's innovative Enhanced Bass Alignment technology uses two different technologies to time-align high, mid and upper bass frequencies with the low bass, resulting in audibly improved bass transients and added life and clarity.

MERIDIAN APODISING FILTER

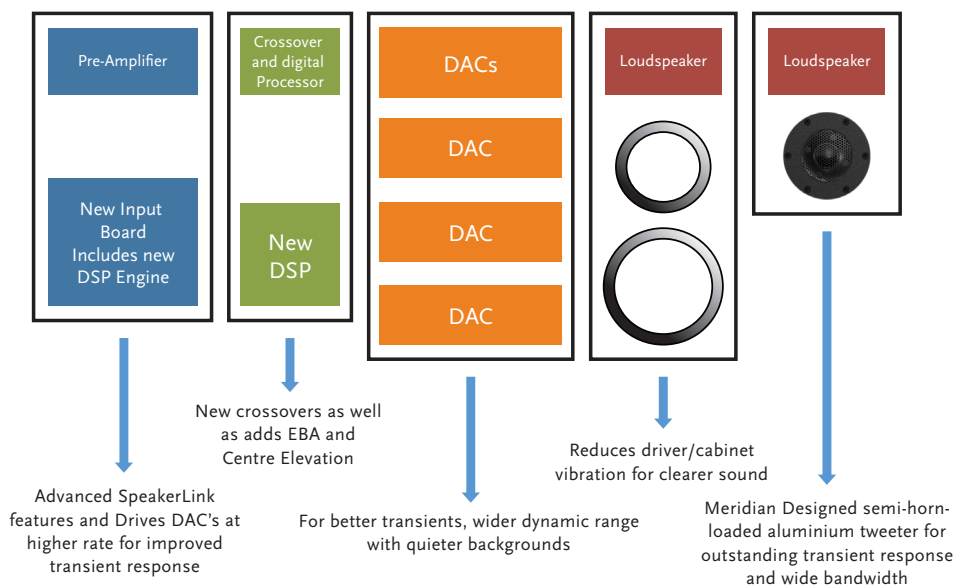
A unique Meridian filter that avoids pre-ringing, so it can be steeper, cleaning up the effects of early, less efficient filters used in the digital recording process. The result: a better, cleaner sound from recordings both old and new.

FIFO BUFFERING

Meridian's "First In, First Out" buffering system minimises jitter, ensuring perfect timing and improved clarity. You enjoy a clearer feeling of the instruments and their interrelationship.

MERIDIAN HIGH RESOLUTION

MHR was the first approved encryption method for transferring high definition digital audio between components. MHR allows secure movement of high resolution digital audio within a Meridian system, without compromise, improving quality by reducing cyclic repetition.



CONSTRUCTION

Meridian have designed and engineered the DSP8000.2 to include two separate enclosures: mid/top and bass. The two enclosures are horizontally opposed and feature a profiled bass system which introduces minimal vibration to the mid/top enclosure.

The Meridian DSP8000.2 is manufactured from interlaminated Meridium panels finished in high gloss piano lacquer. Meridium features the highest-grade laminated plywood layers bonded to an aluminium core, allowing the loudspeaker to reproduce music accurately without adding its own sound.

- Available in High Gloss Black or High Gloss White as standard finishes. Custom finishes are available upon request as well as a further 270 RAL colour finishes as part of Meridian's Select programme.

SPECIFICATION

INPUTS	• Meridian SpeakerLink (RJ45) & S/PDIF digital input
OUTPUTS	• 1 x RJ45 with balanced digital audio and control for 2nd loudspeaker. Carries infra-red pickup for system automation
PERFORMANCE	• Peak SPL: 120dB at 1m
	• Noise less than 15dB spl. Overall distortion typically <0.02% at any frequency or level
	• Frequency response In room within 3dB: 20Hz - over 20kHz (for inputs at 44.1kHz or 48kHz)
AMPLIFIERS	• 5 x 150W (750W)
BASS DRIVERS	• 6 x 200mm
MID DRIVERS	• 1 x 160mm
ALUMINIUM DOME TWEETER	• 1 x 25mm (1") aluminium dome tweeter, silver wire, short horn-loaded
DSP SPECIFICATION	• FIFO memory buffer input for the lowest possible jitter from almost any source
	• Four 24-bit D/A converters
	• Linear-phase mid-top crossover; 6th-order Linkwitz-Riley bass-mid crossover
	• Bass protection
	• All upsampling and processing is performed by a 150MHz digital signal processor (DSP)
DIMENSIONS/WEIGHT	• HEIGHT*: 1305mm [53.2in] • WIDTH: 158mm [6.2in] tapering to 400mm [15.7in]
	• DEPTH: 210mm [8.3in] tapering to 528mm [20.8in] • FOOTPRINT (W x D): 400mm [15.7in] x 528mm [20.8in]
	• WEIGHT: 105kg [231lbs]
DISPLAY	• Eight-character display with system lights, can be blanked
POWER	• 20W standby, 920W max

* Without feet/spikes