

DSP5200.2

DIGITAL ACTIVE LOUDSPEAKER

OVERVIEW

DSP5200.2 is a full range floorstanding loudspeaker which adopts the same cabinet design and technology principles as the flagship DSP8000. The latest edition, our DSP5200.2, takes this technology to a new level with a series of technological innovations that deliver superior performance in many areas.

Built by hand in the UK, each Meridian DSP5200.2 Digital Active loudspeaker features the latest Digital Signal Processing (DSP) technology. This ingenious, yet elegant design means that the loudspeaker enclosure contains the entire system's electronics including three custom drivers, amplifiers and advanced sound-shaping DSP computers in each cabinet. It also includes the Enhanced Bass Alignment (EBA) system, which ensures that low frequencies are time-aligned across the entire bass range.

The DSP 5200.2 can be used as a stand-alone pair or as part of a multi loudspeaker installation in applications such as a home cinema. From small sized rooms to more spacious environments, the DSP5200.2 fits in perfectly and delivers an outstanding and powerful performance.



PRODUCT HIGHLIGHTS

- Features three custom drivers, amplifiers, digital converters, improved digital crossovers and advanced sound-shaping DSP technology.
- New improved-performance dual-magnet, semi-horn-loaded composite dome tweeter with silver voice coil.
- Curved cabinet features advanced damping technology and “Meridium” metal/wood laminate for superb rigidity.
- Advanced DSP filtering “cleans up” older digital recordings, and new Enhanced Bass Alignment improves LF transient response to provide additional clarity and an open, transparent sound-stage.

USER FEATURES

- Whether in a two-channel system or as part of a multichannel home theatre array, the DSP5200.2 provides precision command of frequency balance, listening axis, time-compensated balance and master volume.
- 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

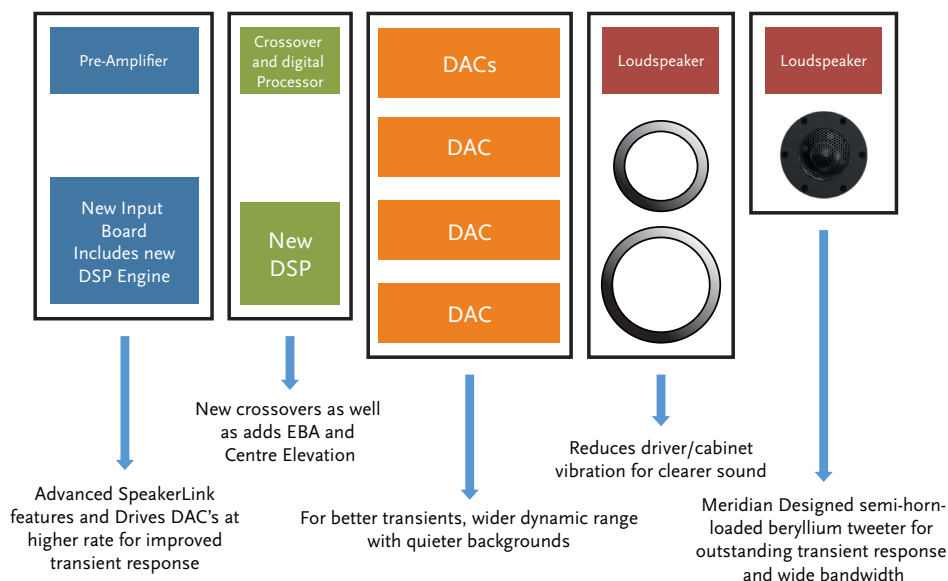
A unique Meridian filter that avoids pre-ringing, so it can be steeper, cleaning up the effects of early, less efficient filters used in the digital recording process. The result: a better, cleaner sound from recordings both old and new.

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

The Meridian DSP5200.2 is manufactured from interlaminated Meridium panels finished in high gloss piano lacquer. Meridium features highest-grade laminated plywood layers bonded to an aluminium core, allowing the loudspeaker to reproduce music accurately without adding its own sound

For perfect stability, the loudspeaker stands on adjustable foot assemblies machined from solid aluminium.

The narrow shape emulates aspects of the human form, which according to psychoacoustic research provides a more realistic performance. Soft cabinet edges enhance the visual design, but they also avoid generating unwanted additional high frequency sounds that can blur the soundstage.

- 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, 32kHz–96kHz sampling rates at up to 24 bit with MHR support (phono)
OUTPUTS	• 1x RJ45 with balanced digital audio and control for 2nd loudspeaker. Carries infra-red pickup
	• for system automation
PERFORMANCE	• Peak SPL: 108dB at 1m
	• Noise less than 15dB spl. Overall distortion typically <0.02% at any frequency or level
	• Frequency response In room within 3dB: 35Hz - over 20kHz
AMPLIFIERS	• 3 x 75W (225 W)
BASS DRIVERS	• 2 x 160mm polypropylene long throw bass drivers
ALUMINIUM DOME TWEETER	• 1 x 25mm (1") Meridian piston in short horn, aluminium dome with silver voice-coil
DSP SPECIFICATION	• Digital & conversion electronics utilise advanced surface-mount techniques and partitioned 6-layer printed-circuit boards
	• FIFO memory buffer input for the lowest possible jitter from almost any source
	• 3x 24-bit 128x oversampling D/A converters for maximum audio quality
DISPLAY	• Eight-character display with system lights, can be blanked
DIMENSIONS/WEIGHT	• HEIGHT*: 903mm [36in] • WIDTH*: 300mm [12in]
	• DEPTH*: 356mm [14in], tapering to 217mm [8.5in] • WEIGHT: 35kg [77.1lbs]
POWER	• 20VA standby: 600VA max

* Without feet/spikes ** Max at base

DSP5200.2 DIGITAL ACTIVE LOUDSPEAKER ULTIMATE PERFORMANCE AND FLEXIBILITY

A truly full range loudspeaker, the DSP5200.2 provides listeners with extraordinary power and clarity.

Standard finishes are available in piano lacquered white or black and a further 270 bespoke colour finishes are available via Meridian Select.



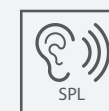
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THE DSP5200.2 AT A GLANCE



Advanced, high-efficiency composite dome tweeter.



Outstanding performance – three powerful, built in 75W amplifiers with DSP provide a maximum output level of 116dB at 1m.



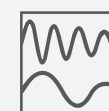
DSP active advantage – self-contained audio system with no amplification equipment needed.



On-board DSP provides thermal and dynamic bass protection – enables high volume use for prolonged periods of time.



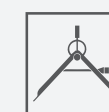
Centre elevation adjustment technology delivered with the DSP Horizontal Centre 5200.2. This raises the voice to the screen centre, ideal when the HC loudspeaker is positioned below the TV.



Features Meridian's unique Enhanced Bass Alignment (EBA) technology - bass, mid and treble all reach you at the same time, in perfect alignment.



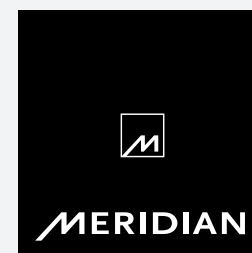
Listener controls including time-compensated balance, listening axis and Enhanced Bass Alignment – enables considerable speaker placement flexibility.



Multiple installation applications in home and commercial environments enabled by Meridian's unique Design and Specification Service.



For full details, contact:
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DIGITAL SIGNAL PROCESSING THE ESSENCE OF AUTHENTIC SOUND

Digital Signal Processing (DSP) technology provides the foundation for every Meridian loudspeaker. A completely integrated audio system featuring multiple power amps, precision DACs and unique technologies, Meridian DSP loudspeakers provide more output, more bass and significant control advantages.

With designs suited for a wide variety of applications including living spaces, home theatres and marine, all Meridian DSP loudspeakers deliver unparalleled performance levels.



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THE DSP PATH AT A GLANCE



The DSP Loudspeaker is a complete audio system with DAC's, pre amplifiers, power amplifiers and high efficiency digital crossovers built into each speaker – just add a source.



Advanced listener controls including time-compensated balance, listening axis and Enhanced Bass Alignment – these enable speaker placement flexibility in a variety of environments.



Built in high performance power amplifiers, custom matched to each drive unit for maximum fidelity, control and output.



True, measured Sound Pressure Level (SPL) output for all models.



Features Meridian's proprietary Enhanced Bass Alignment (EBA) technology – bass, mid and treble all reach you at the same time, in perfect alignment.



On-board Digital Signal Processing – no lossy passive crossovers and wasted power.



Inert, rigid cabinet construction – you hear the high quality drive units, not the box.



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