DSP5200.2
DIGITAL ACTIVE LOUDSPEAKER

DATASHEET

OVERVIEW

DSP5200.2 is a full range floorstanding loudspeaker which adopts the same cabinet design and technology principles as the flagship DSP8000.

Built by hand in the UK, the Meridian DSP5200.2 is crafted to fit small to medium sized rooms (20-30m2) due to its small footprint and modest height. Meridian's proprietary Enhanced Bass Alignment technology (EBA) guarantees sound is time-aligned across the full frequency range, producing a coherence unattainable in a passive loudspeaker.

The cabinet of the DSP5200.2 is available in standard piano black or white finish and an array of custom paint finishes

Meridian's latest DSP code ensures all audio signals, including MQA Core streams, are rendered at 88.2/96kHz regardless of the incoming sampling rate, maximising the potential of the loudspeaker's DSP engine.



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 constructed from high-grown, birch plywood featuring advanced damping technology .
- 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 system, the DSP5200.2 provides precision command of tonal balance, listening axis, time-compensated balance and master volume.
- Ethernet-style SpeakerLink cabling which maintains performance and is easy to install.

TECHNOLOGIES

SPEAKERLINK INPUT BOARD AND DSP

The SpeakerLink input 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 lifelike sound, with optimised transient response, extended frequency response and enhanced dynamic range.

ENHANCED BASS ALIGNMENT (EBA)

Meridian's innovative Enhanced Bass Alignment (EBA) technology uses a combination of digital filters and delays to ensure that all frequencies reach the listener's ear at the same time.

MERIDIAN APODISING FILTER

A unique Meridian filter that avoids pre-ringing, 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 fortransferring 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 DSP5200.2HC is manufactured from high-grown birch plywood finished in high-gloss piano lacquer.

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 and 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 part of Meridian's Select programme. This includes over 270 different RAL colour finishes.
- '2 1/2-way' acoustic reflex system with Ported bass.
- Individually covered grilles for bass units.

SPECIFICATION

INPUTS	•	Meridian Speakerlink (RJ45) and co-axial digital input (RCA phono); 32kHz–96kHz sampling rates at up to 24 bit with MHR support. Legacy Meridian comms (BNC)		
OUTPUTS	•	Meridian SpeakerLink (RJ45) and co-axial digital output (RCA phono); 32kHz–96kHz sampling rates at up to 24 bit with MHR support. Legacy Meridian comms (BNC)		
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		
TWEETER	•	1 x 25mm (1") Meridian piston in short horn, aluminium dome with silver voice-coil		
DSP SPECIFICATION	•	1 x Freescale 56367 processor running at 150MHz		
MERIDIAN TECHNOLOGIES	•	Bespoke Signal Mapping, E3 Bass, FFA, Q-Sync, Pro-Active Bass, Pro-Active Thermal,		
	•	True Time, True Link, Free-Q, Digital Precision, Image Focus Plus, Perfect Balance		
DISPLAY	•	Eight-character display with status indicator LEDs; can be blanked		
DIMENSIONS/WEIGHT	•	HEIGHT*: 903mm [36in]	•	WIDTH**: 300mm [12in]
	•	DEPTH**: 356mm [14in], tapering to 217mm [8.5in]	•	WEIGHT: 27kg [59.5lbs]
POWER	•	20W standby, 300W maximum		

* Without feet/spikes ** Max at base

DATASHEET