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 louspeaker 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-hornloaded 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 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 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 DSP5200.2 is manufactured from high-grown birch plywoodfinished 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, 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 part of Meridian's Select programme. This includes over 270 different RAL colour finishes.

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	٠	1 x 25mm (1") Meridian piston in short horn, aluminium dome with silver voice-coil
DSP SPECIFICATION	٠	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: 27kg [59.5lbs]
POWER	•	20VA standby: 600VA max

* Without feet/spikes ** Max at base