

DSP5200.2HC

DIGITAL ACTIVE LOUDSPEAKER



OVERVIEW

Designed to compliment the DSP5200.2, the DSP5200.2HC provides full range playback in a horizontal centre channel package. Built by hand in the UK, each Meridian DSP5200.2HC is a Digital Active loudspeaker which uses Digital Signal Processing (DSP) technology. This ingenious, yet elegant design means that the loudspeaker enclosure contains the entire system's electronics including its amplification. With all the features of the freestanding DSP5200.2, the DSP5200.2HC provides full range playback in a horizontal centre channel package.

The DSP5200.2HC is ideal for mounting on a shelf, under a large-screen TV, or behind an acoustically-transparent projection screen and in partnership with other Meridian free standing or in-wall loudspeakers. The DSP5200.2HC features unique Centre Elevation adjustment technology which raises the centre image for the perfect movie experience, bringing life to formats such as 5.1 surround sound. This unique Centre Elevation adjustment technology allows the listener to raise the centre image making it an integral part of systems which use Trifield technology.

PRODUCT HIGHLIGHTS

- Dual magnet, semi-horn-loaded composite dome tweeter with silver voice coil.
- DSP provides performance enhancements including the latest implementation of Enhanced Bass Alignment (EBA) technology to provide additional clarity and an open, transparent sound-stage.
- Centre Elevation - allows the image from a centre channel loudspeaker to be raised to be in line with main left and right loudspeakers.
- New extended-bandwidth analogue electronics, optimised to deliver maximum performance from high-resolution recordings.

USER FEATURES

- Source information in the loudspeaker display is also derived from the controller, allowing for additional custom legending.
- Bass, Tilt, Centre Elevation and Axis presets for enhanced control and a new lowpass crossover design.
- ‘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.

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.

CENTRE ELEVATION

In most installations, where the centre-channel loudspeaker is below the display, the sound seems to emanate from below and not from the screen, detracting from the experience. DSP in a Meridian centre loudspeaker psychoacoustically raises the sound image to centre-screen – where we expect it for the most engaging movie or concert experience.

ENHANCED BASS ALIGNMENT (EBA)

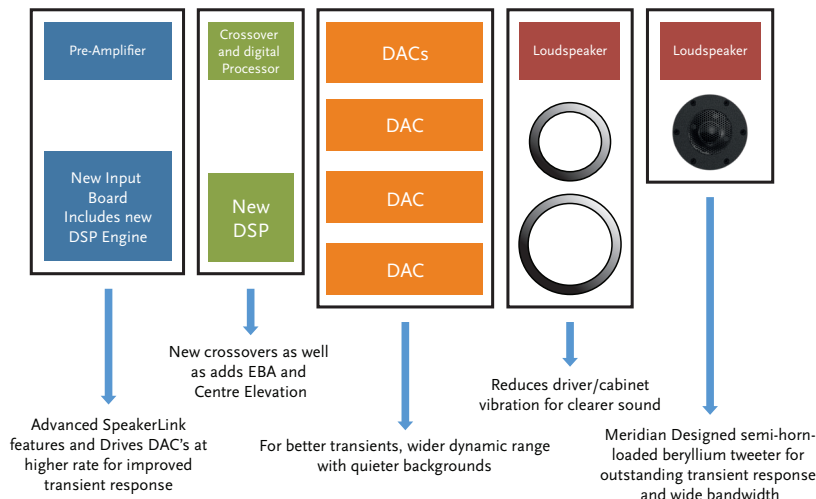
Meridian’s innovative Enhanced Bass Alignment technology uses two different technologies to time-align high, mid and upper bass frequencies with the low bass, resulting in audibly improved bass transients and added life and clarity.

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.

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.



CONSTRUCTION

The Meridian Special Edition DSP5200.2HC is manufactured from interlaminated panels finished in high gloss piano lacquer. Black and High Gloss White are available as standard finishes.

The DSP5200.2HC features a centre LED display with eight-characters with system lights which can be blanked.

- 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.
- '2 1/2-way' acoustic reflex system with Ported bass.
- Individually covered grilles for bass units.

SPECIFICATION

INPUTS	<ul style="list-style-type: none"> • Meridian Speakerlink (RJ45) & S/PDIF digital input, , 32kHz–96kHz sampling rates at up to 24 bit with MHR support (phono) and Meridian BNC Comms • Carries infra-red pickup for system automation
OUTPUTS	<ul style="list-style-type: none"> • 1x RJ45 with balanced digital audio and control for 2nd loudspeaker
PERFORMANCE	<ul style="list-style-type: none"> • Peak SPL: 108dB at 1m (music material) • 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	<ul style="list-style-type: none"> • 3 x 75W (225 W)
BASS DRIVERS	<ul style="list-style-type: none"> • 2 x 160mm polypropylene long throw bass drivers
ALUMINIUM DOME TWEETER	<ul style="list-style-type: none"> • 1 x 25mm Meridian piston in short horn, aluminium dome with silver voice-coil
DSP SPECIFICATION	<ul style="list-style-type: none"> • 1 x Freescale 56367 running at 150MHz • 2 x 24-bit Multi-bit delta-sigma DACs with 128x oversampling • Active bass/mid crossover - minimum-phase at 2.6kHz. • Bass protection Response correction for the whole system • User tone controls • Analogue/digital volume and phase control
DISPLAY	<ul style="list-style-type: none"> • Eight-character display with system lights, can be blanked
DIMENSIONS/WEIGHT	<ul style="list-style-type: none"> • HEIGHT: 201mm [7.9in] • DEPTH*: 267mm [10.5in] • WIDTH**: 735mm [29in] • WEIGHT: 35kg [77.1lbs]
POWER	<ul style="list-style-type: none"> • 100-125; 200-250V AC 50-60Hz • 20VA standby; 600VA max

* At deepest point

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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