

DSP520 IN-WALL LOUDSPEAKER

OVERVIEW

Featuring an elegant profile – only 203mm wide – the DSP520 is perfect for delivering high quality music discretely in any living or cinema room.

The DSP520 inherits the latest technologies from Meridian's Meridian's floorstanding loudspeakers including Enhanced Bass Alignment and Centre Elevation, providing incredibly lifelike and spacious sound. This makes the DSP520 a perfect choice for stereo or full surround with virtually no visual impact to the decor.



PRODUCT HIGHLIGHTS

Ultra-narrow (203mm) box design delivers full DSP loudspeaker performance in-wall, while the back-box and frame system allows for easy installation and precise positioning.

- Audio enhancement technologies built in include Enhanced Bass Alignment (EBA), FIFO buffering, DSP upsampling, apodising filters and Meridian High Resolution (MHR).
- Features 1 x 140mm bass and 1 x 85mm wide-range drivers for full-frequency response.
- Incorporates a cool running Class AB amplifier for the wide-range driver and a Class D amplifier for the bass driver.
- Developed for maximum dispersion and listening area plus minimum unwanted diffraction.
- Grille may be painted to match interiors.
- Can be mounted vertically or horizontally in walls.

USER FEATURES

- Can be mounted vertically or horizontally, in a wall. Voice compensation is included for installation behind provided grille, or fabric and screen material.
- The front of the extrusion carries the on/off rocker switch, fuse holder, an infra-red receptor window and a three-way (Left-Centre-Right) channel selector rocker switch. When switched to Centre, the loudspeaker equalisation is optimised for horizontal centre use.
- A LED indicator shows the loudspeaker power status.
- All the Elements are designed for simple, flexible and precision installation into almost any type of wall.

TECHNOLOGIES

ON-BOARD DSP

On-board DSP provides thermal and dynamic bass protection while retaining very accurate transients, ensuring that when the loudspeaker is played at high levels – even over prolonged periods of time – it always delivers a clean, detailed and accurate sound.

CENTRE IMAGE ELEVATION

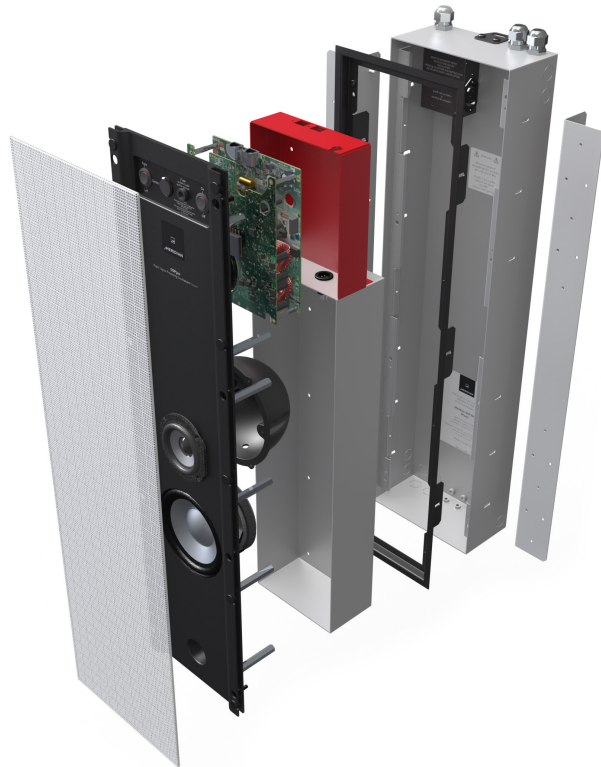
Meridian's Centre Image Elevation technology uses the latest psychoacoustic research to raise the perceived image location from an under-screen loudspeaker so that it appears to come from the centre of the screen or as desired.

ENHANCED BASS ALIGNMENT (EBA)

Meridian's innovative Enhanced Bass Alignment (EBA) 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.

ENHANCEMENT TECHNOLOGIES

Meridian's unique suite of proprietary technologies includes FIFO buffering, DSP upsampling, apodising filters and MHR (Meridian High Resolution) to get the very best performance from all digital sources.



DSP520 SECTION



DSP520 REAR

CONSTRUCTION

The DSP520 unit is built into a completely integrated, narrow (total 203mm wide) all-metal frame enclosure system. This self-contained enclosure mounts to a frame which is in turn mounted into the fire-resistant rough-in box. The flexible back box can be adjusted for various wall materials and depths. IEC mains connector is included in the back-box and connects to flying lead attached to the enclosure.

- The loudspeaker enclosure itself mounts on to the frame which is designed for mounting into new-build partition and stud style walls or be retrofitted into stud or brick/stone-built walls.
- The paintable, perforated steel grille attaches to rubberised magnets in the aluminium extrusion that forms the front panel of the loudspeaker enclosure.

SPECIFICATION

AUDIO INPUTS	• Meridian SpeakerLink connector (RJ45)
AUDIO OUTPUTS	• Meridian SpeakerLink connector (RJ45)
PERFORMANCE	• Peak SPL: 1m - 114dB • Max power - 500W
BASS DRIVERS	• 1 x 140mm
WIDE -RANGE DRIVERS	• 2 x 85mm
FRONT PANEL CONTROLS	• On/off rocker switch, Fuse holder, IR window • LED indicator shows power status • Rocker switch selects left-centre-right channel operation
BOX DIMENSIONS/WEIGHT	• HEIGHT: 800mm [31.5in]* • DEPTH: 102mm [4in] • WIDTH: 203mm [8in] • WEIGHT: 10 kg [22 lbs]
GRILLE DIMENSIONS	• HEIGHT: 820mm [32.28in] • DEPTH: 4mm [0.16in] • WIDTH: 222.5mm [8.73in]
POWER	• IEC mains connector included in back-box connects to flying lead attached to enclosure

* Excludes frame and cable feed channel

For detailed drawings please contact design@meridian.co.uk

DSP520 AND DSP640 IN-WALL LOUDSPEAKERS DISCREET, UNOBTRUSIVE PERFORMANCE

With an entire super-efficient digital audio system inside the enclosure, the DSP520 and DSP640 loudspeakers deliver an extraordinarily lifelike sound. These powerful, full range in-wall solutions require only a 100mm mounting depth and produce wide sound dispersion over the listening area.

Their outstanding performance makes them the perfect in-wall music or movie solution.



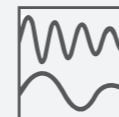
THE DSP520 AND DSP640 AT A GLANCE



Fireproof back-box with frame system for easy installation and compact 100mm mounting depth.



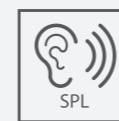
Wide range drive units for effortless dispersion and imaging, coupled with minimum unwanted diffraction.



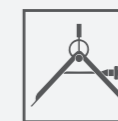
Features Meridian's unique Enhanced Bass Alignment (EBA) technology – bass, mid and treble all reach you at the same time, in perfect alignment.



Built in power amplifiers, one for each driver. A 100W Class AB amplifier powers each wide-range driver, while a 150W Class D amplifier powers the bass drivers.



Outstanding performance that delivers a maximum output level of 117dB (DSP640) and 114dB (DSP520) at 1m. Perfect for theatre applications.



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



Built in IR for simple control solutions.



Centre elevation adjustment technology raises perceived image location.

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.



meridian-audio.com



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.



For full details, contact:
design@meridian.co.uk
+44 (0)1480 445678

