# DSP640 IN-WALL LOUDSPEAKER

## OVERVIEW

Featuring an elegant profile – only 203mm wide – the DSP640 is perfect for delivering high quality music discretely in any living or cinema room.

The DSP640 inherits the latest technologies from Meridian's floorstanding loudspeakers including Enhanced Bass Alignment and Centre Elevation, providing incredibly lifelike and spacious sound. This makes the DSP640 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 2 x 140mm bass and 2 x 85mm wide-range drivers for full-frequency response.
- Incorporates cool running 1 x 200w Class AB amplifiers for the wide-range drivers and 1 x 310w Class D amplifiers for the bass drivers.
- 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.

# DATASHEET

# 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 threeway (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.



DSP640 SECTION

# CONSTRUCTION

The DSP640 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 fireproof 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	٠	Meridian SpeakerLink connector (RJ45)
PERFORMANCE	•	Peak SPL: 1m - 117dB
AMPLIFIERS	•	1 x 100w Class AB amplifier for the wide-range drivers
		1 x 150w Class D amplifier for the bass-driver
BASS DRIVERS	•	2 x 140mm
WIDE -RANGE DRIVERS		2 x 85mm
FRONT PANEL CONTROLS	•	On/off rocker switch, Fuse holder, IR window
		Rocker switch selects left-centre-right channel operation
		LED indicator shows power status
BOX DIMENSIONS/WEIGHT		HEIGHT: 1230mm [48.5in]* • WIDTH: 203mm [8in]
		DEPTH: 102mm [4in] • WEIGHT: 15 kg [33 lbs]
GRILLE DIMENSIONS		HEIGHT: 1251.3mm [49.25in] • WIDTH: 222.5mm [8.73in]
	•	DEPTH: 4mm [0.16in]
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