Background

Today’s multichannel music and film soundtracks demand more performance from a centre channel than ever before. High performance centre-channel loudspeakers must have frequency, phase and sonic characteristics that closely match your main speakers. When matched correctly, the resulting surround sound or enhanced stereo presentation will be natural. New higher resolution multichannel formats mean that correct choice of a centre speaker is even more critical. By designing our systems with music reproduction foremost in our minds, Meridian has once again anticipated your needs with the DSP5500HC, matching the performance of its vertical counterparts.

Meridian DSP5500HC

The DSP5500HC is constructed with steel panels sandwiched between the rigid inner cabinet and the veneered outer panels on four sides. The two 200mm bass drivers are housed in separate internal enclosures. A third internal enclosure houses the tweeter and midrange. As a result the acoustic cabinet is extremely rigid, giving the benefits of extension, clarity and dynamic range unheard of in conventional centre channels.

Meridian also included innovative DSP technology to compensate for boundary and corner use. This is a centre speaker that can be installed in almost any environment with confidence.

The DSP5500HC has been designed to work coherently with the Meridian DSP5500, DSP6000 and DSP8000 loudspeakers.

Technical Specification

**Performance:**
- Frequency response in-room within 3dB from 35Hz to over 20kHz.
- Maximum output >111dB spl @ 1m on music material
- Noise less than 15dB spl.
- Overall distortion typically <0.02% at any frequency or level.

**Inputs:**
- Two digital inputs to SPDIF standard; 32kHz–96kHz sampling rates at up to 24 bit; MHR support. (A future software update will enable support for 192kHz.)

**Construction:**
- 3-way acoustic reflex system.
- 2 x 200mm long-throw bass drivers.
- 1 x 160mm polypropylene mid driver in separate enclosure.
- 1 x 25mm aluminium-dome tweeter, silver wire, short horn-loaded with protective grille.
- Cabinet constructed from high-density MDF. Integral magnetic shielding and user-changeable real wood veneer acoustic damping side panels.
- FIFO memory buffer input for the lowest possible jitter from almost any source.
- Four precision 128x oversampling converters for bass, mid and tweeter signals.
- Analogue gain and filtering using proprietary Meridian Class-A discrete amplification.
- Digital and conversion electronics constructed using advanced surface-mount techniques and partitioned 6-layer printed-circuit boards.
- Four 75W power amplifiers, one for each of the drivers.
Power amplifiers use a unique feedback topology and precision local error-correction systems to achieve a performance equivalent to the conversion system.

**Dimensions:**
1100mm (43.3in) W, 285 (11.2) H, 415 (16.3) D
Weight 81kg (179lb)

**DSP:**
100MHz Motorola digital signal processor.
Digital crossover at 200Hz and 2.6kHz.
Response correction for the whole system.
User tone, volume and phase controls.

**Controls:**
Rear-panel controls for power On/Off. MSR and RS232 port provide control over bass, treble tilt, listening axis, volume, time-compensated balance and absolute phase.

**Front display:**
Eight-character display with system lights, can be blank.

Added to this inner cabinet are four steel sheets and four veneered panels for increased rigidity.