



**MERIDIAN**

**DSW**

DSP Subwoofer



DSW is a powerful and dynamic subwoofer offering exceptional performance in a wide range of Meridian system applications.

Designed to complement Meridian's Digital Active Loudspeakers, DSW is an extremely powerful unit. It is ideal for use in a complete surround-sound configuration of DSP3200 or DSP3300 loudspeakers, for example, or to complement larger Meridian loudspeakers such as the DSP5200. DSW subwoofers can even be paired with DSP7200 loudspeakers where appropriate.

The unit includes full thermal protection and an advanced, sturdily-constructed, long-throw, high-power 12in drive unit. It is driven by a powerful closed-loop Class D amplifier capable of delivering up to 600W. The driver points downwards and thus removes any tendency to sideways cabinet movement.

#### **Designing a Meridian Subwoofer**

The design criteria for a subwoofer to complement Meridian Digital Active loudspeakers differ significantly from those

of a subwoofer designed for conventional systems. To begin with, Meridian Digital Active Loudspeakers already include a significant deep bass extension that far exceeds the capabilities of conventional loudspeakers of a similar size.

Thus, to make a meaningful contribution to the bass reproduction of the Meridian system in which it is installed, a Meridian subwoofer design must generate a significant level of low bass. This, in turn, dictates a larger, more powerful driver and appropriate cabinetry. The result is a digital subwoofer that is not only suitable to complement DSP3200 and DSP3300 systems but larger loudspeakers in the range, such as the DSP5200, as well.

#### **Simplified configuration**

An additional benefit of the Meridian approach is that the subwoofer does not require the phase control found on many conventional active subwoofers. This is because the phase control is designed to compensate for performance differences in an unknown system that could include

#### **Product highlights**

Meridian's first DSP Subwoofer, DSW delivers powerful, authentic bass with room-filling performance to enhance both music and movie soundtracks.

Meridian SpeakerLink connectivity makes DSW quick and easy to install. A three-way switch determines the digital channels to which the unit responds.

Ideal for use with a Meridian Surround Controller or in systems incorporating Audio Core 200.

Designed with the power needed to complement the bass response of Meridian Digital Active Loudspeakers, which already exhibit impressive bass extension.

New high-power long-throw 12in driver and amplifier combination delivers maximum performance under total DSP control, for full, impressive yet fully-integrated bass.

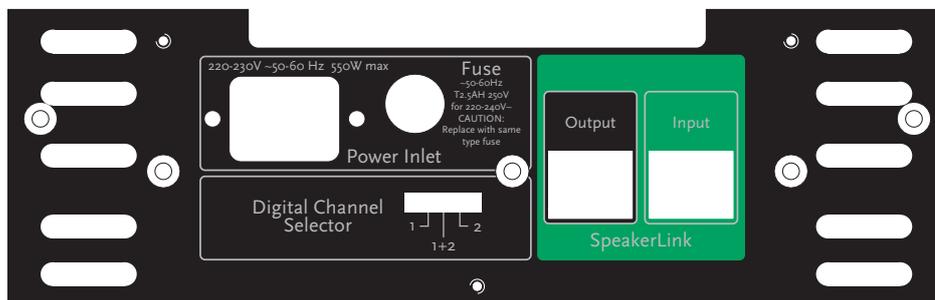
Downward-facing driver minimises lateral movement.

Extremely strong internal cabinet construction for maximum rigidity at high power levels.

Ideal for the most bass-heavy music and the most powerful action movie soundtracks.

**Meridian Audio Limited**

[www.meridian-audio.com](http://www.meridian-audio.com)



DSW connector panel layout

one of many types of main loudspeakers that are not under the direct control of a controller. In a Meridian system, this is not the case.

In most cases, the phase control is in fact an attempt to compensate for an inability to establish the correct delay setting in signals sent to the main loudspeakers. In a Meridian surround system, however, loudspeaker delay is configured as part of the setup and installation of the surround controller, so this issue does not arise. As a result, the phase control can be dispensed with as it is completely unnecessary.

### Typical applications

In addition to being suitable for use with any Meridian Surround Controller, DSW is ideal for use in a system incorporating Audio Core 200 – for example with a pair of DSP3200 loudspeakers. Here, the Audio Core 200 can be used to select the crossover setting below which audio to the DSP3200 loudspeakers is rolled off, and the DSW is activated.

DSW is also a perfect complement for larger Meridian Digital Active Loudspeakers such as the DSP5200. In addition, multiple DSW subwoofers can be used in a DSP7200-based system.

In normal operation, the bass end of the main loudspeakers is rolled off and all bass is handled by the subwoofer(s). Alternatively, a surround system including DSW can be operated in “Bass Heavy” mode – ideal for action movie soundtracks, for example, and certain types of music – where both the main loudspeakers and the subwoofer are configured to handle bass frequencies.

### Connector panel

The connector panel of the DSW (located under the heatsink and thus hiding the cable entry) includes Meridian SpeakerLink input and output connections so that DSW can be “daisy-chained” to other speakers in the system. A three-position selector switch marked ‘1 1+2 2’ allows the unit to be set to pick up the appropriate digital signal from the SpeakerLink feed.

In the case of a surround system with a single subwoofer where the Centre and Subwoofer loudspeaker feeds are carried by the same cable, the switch is set to pick up Channel 2, which is generally defined as being the Subwoofer channel in the surround controller. In the case of a system with multiple subwoofers, 1 or 2 can be selected to pick up the left or right channel feed according to the position of the unit. In the case of an Audio Core 200 system, the switch would be set to 1+2 so as to handle the bass for both left and right channels.

### Cabinet and construction

Despite utilising a 12in driver, the DSW is relatively compact and yet capable of very high performance. To manage the level of power the unit can produce, the plywood cabinet is extremely robust, with exceptionally strong, carefully-positioned internal struts. In addition, the driver itself is mounted in a “nest” of internal ribs that hold it firmly in position for the maximum stability and control.

The unit is raised off the ground by three feet, thus remaining stable at all times. The feet, which are suitable for carpeted floors, are supplied with optional rubber tips, which can be used on hard floor surfaces.

The unit is available as standard in high-gloss black or high-gloss white.

## Outline Technical Specification

### Connections

- Meridian SpeakerLink in and out (RJ45)

### Controls

- Channel selector switch for channel(s) 1, 1+2 or 2

### Construction

- Plywood cabinet with extensive internal structures for maximum strength & rigidity

### Driver

- 1 x 12in long-throw bass driver, facing downwards

### Amplifier

- Closed-loop Class D Power amplifier rated at 600W peak.
- Overall distortion typically <0.02%

### Power consumption:

- 550W max

### Indicators

- Rear-mounted LED

### Dimensions

- Height on standard feet (recommended for use on a carpeted floor): 445mm (17.52in); height on standard feet plus rubber shock absorber (recommended for use on a hard floor surface): 450mm (17.72in)
- Width at base: 380mm (15in)
- Depth at base: 430mm (17in)

### Weight

- 22kg (48.4lb)