



# 568.2

## Digital Surround Processor

Sales information

July 2002

- **Digital Surround Processor incorporating Meridian 861 technology**
- **DVD-Audio support from the inventors of MLP**
- **Exceptional sound quality**
- **New Powerful DSP engine with 5 processors for enhanced audio performance**
- **48bit high-resolution DSP for modes and format decoding**
- **8 digital outputs, 8 analogue outputs**
- **5 digital and 2 analogue inputs**
- **Optional MHR Smart Link multichannel input module enables ultimate performance**
- **Full 96kHz/24-bit resolution available to all sources and up to 8 independent outputs**
- **Automatic mode and speaker management**
- **Flexible system bass management with protection**
- **Full RS232 control and status**
- **PC Setup**
- **Software updateable**

### Background

Meridian is widely recognised as providing the benchmark for surround sound quality. Collecting many awards for individual products and theatre systems, Meridian has built an unassailable reputation for innovative systems of the highest performance and quality, which offer an ease of installation and flexibility that is second to none. In addition Meridian now holds a unique position as the provider of MLP, the lossless technology for the new DVD-Audio format. This puts Meridian in the best position to anticipate the future of surround sound and make provisions for it in current products.

Meridian's 568 incorporated many of the techniques and features developed in the design of the AAA-rated 861 Surround Processor. Following the 861's recent exciting performance upgrade to Version 3, Meridian has now evolved 568. Designated 568.2, Meridian's world-beating 500 Series surround processor has received extensive upgrades that impact on every aspect of its performance.

### 568.2

At the heart of the Meridian 568.2 Digital Surround Processor is a powerful new DSP engine that attains the highest-resolution digital audio. This DSP engine (containing no fewer than 5 DSP chips) provides 48-bit processing to ensure that no detail, no matter how subtle, is lost. In fact the reverse is true because in many operating modes Meridian's proprietary resolution enhancement and upsampling reveal new perspectives and information from all CD and DVD material. For example, when listening to CD, advanced DSP is used to upsample and enhance the resolution of the incoming digital audio. Meridian's Trifield process can then upscale the music to surround and match the exact configuration of your loudspeaker system. User menus and custom presets permit the processor to always respect your listening options.

One of the most exciting features of the new 568.2 is the optional multichannel digital input card. This addition furnishes the Digital Surround Processor with a multichannel link through which it can receive high-resolution 6-channel digital audio streams from a compatible source, such as the Meridian 598 or 800 DVD Players. This proprietary connection technology is the Meridian MHR Smart Link and is the first approved high-resolution digital audio transfer system between a DVD-Audio player and compatible surround processor. Originally developed for Meridian's Version 3 800 Series products, the MHR Smart Link also carries intelligent stream content information from the source product. The processor puts this information to good use; it enables automatic processing mode and speaker management that can be preset by the user for 2-channel or multichannel sources, for music or movies.

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The enhanced DSP power in 598.2 enables exquisite support for the exciting new DVD-Audio format. Not only does 568.2 accept and process up to six channels of high-resolution digital audio, but it provides full bass and speaker array management to support any speaker arrangement, including a Meridian Digital Theatre, with full resolution.

Meridian's recent DVD Players, 598 and 800 V3, introduce a unique breakthrough in system architecture. Now, multichannel movie and music soundtracks are decoded in the player. MHR Smart Link passes this information losslessly from player to processor as discrete encrypted audio and data channels.

What does this mean for 568.2? The answer is even better movie performance! No longer burdened by format decoding, the 568.2 can apply its considerable DSP power to upsample each channel of a Dolby Digital or DTS soundtrack to give 96kHz/24bit resolution for playback within a 7.1-channel analogue or Meridian Digital Theatre. Until you have experienced this improved movie sound it is hard to anticipate just how engaging and entertaining it can be.

Unified bass management is an essential element for multichannel audio systems and the 568.2 handles this task with a refined accuracy that results in a seamless blend of full-range sound. Importantly, information carried by the MHR Smart Link allows 568.2 to distinguish between music and movies and, should you wish, it will automatically apply different bass management profiles, tailored by you, to suit the original sound format.

## Audio quality

Meridian's 568.2 incorporates advanced dejittering techniques, including a multichannel FIFO to maximise sound transparency and clarity.

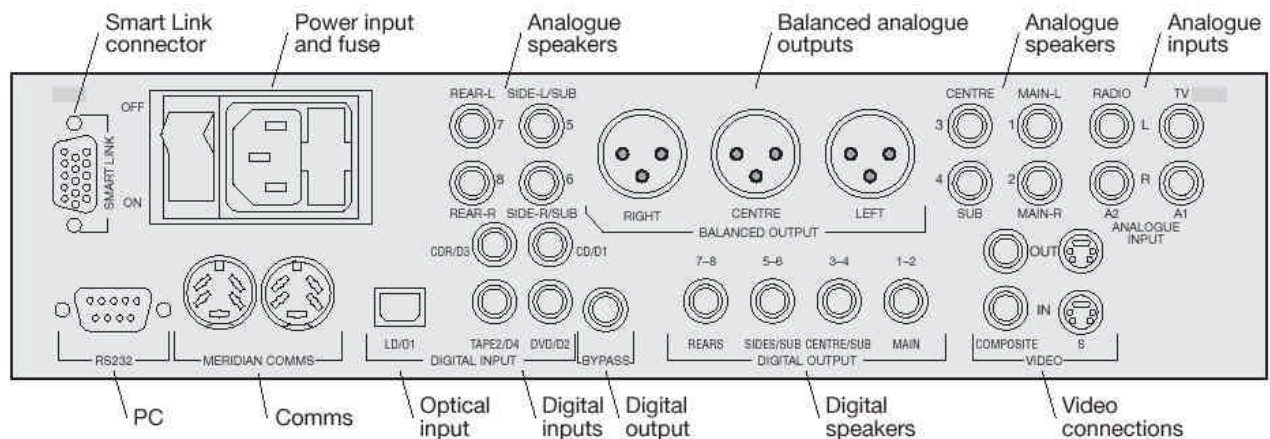
568.2 offers up to eight discrete digital output channels all with 96kHz/24bit resolution (for connection to Meridian's DSP loudspeakers). It also features eight channels of analogue audio output including an extra three balanced connections for the front channels. The outputs can be used in any mixed combinations of analogue and digital.

568.2 offers two high-quality analogue inputs, four digital coaxial inputs, and one digital optical input – all in addition to the optional MHR Smart Link input. (If desired, the multichannel input can be configured to provide three normal digital inputs instead of multichannel). There is a pass-through for Composite and S-Video which allows the processor to overwrite a controllable and informative On-Screen Display plus, of course, all the necessary sockets and connections for Meridian 500 Series Comms and serial control via RS232.

This advanced level of connectivity means 568.2 can be used at the heart of any system whether it is being designed for a fan of music or movies. 568.2 can support from two to eight channels, traditional amplification and passive loudspeakers or the advanced design and performance of Meridian's DSP Loudspeakers. There can be no doubt that this is a landmark product for Meridian.

We strongly recommend that you listen to the 568.2 as soon as possible.

## Back panel



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### Specification highlights 568.2

<b>Digital Inputs:</b>	4 x cable, 75Ω, IEC958 and data compatible, up to 24 bits. 1 x optical, Toslink (EIAJ), IEC958 and data compatible, up to 24 bits.
<b>Analogue Inputs:</b>	2 x unbalanced, 20kΩ input impedance. 1 x stereo 24bit Delta-Sigma ADC.
<b>Processing:</b>	2 x Motorola 56002 running at 66MHz. 2 x Motorola 56367 running at 150MHz. 1 x Motorola 56007 running at 82MHz. Internal precision maintained using 24 and 48-bit arithmetic.
<b>Optional Input:</b>	1 x MHR Smart Link connection.
<b>Analogue Outs:</b>	4 x stereo 24-bit Delta-Sigma DAC. 8 x unbalanced outputs for center, sub, rears, mains and sides or subs. 3 x balanced outputs for left, right and center. Outputs variable between 0 and 3.5Vrms, output impedance 47Ω. Distortion <0.01%. Noise and hum <-95dB CCIR.
<b>Digital Outs:</b>	4 x stereo SPDIF or MHR on cable, 75Ω, up to 24-bit precision.
<b>Video Circuit:</b>	1 x Composite video loop with On-Screen Display: phono75Ω, 1.5V p-p, PAL/NTSC. 1 x S-Video loop with On-Screen Display: Y/C on mini-din, 1.5V p-p, PAL/NTSC.
<b>Tape Outs:</b>	1 x digital bypass.
<b>Control:</b>	2 x Meridian Comms. 9-pin D connector for RS232 PC setup and control.
<b>Front panel:</b>	Controls for: <b>Source, Copy, Preset, Display, Volume</b> and <b>Off</b> . Other features accessed using a Meridian System Remote (supplied). 12-character dot-matrix display. Lights for AC-3, DTS, MPEG and THX.
<b>Formats:</b>	Dolby Digital, DTS, MPEG Surround, THX, THX Surround EX and Meridian EZ.
<b>DSP Modes:</b>	Direct, Music, Trifield, Ambisonics, Super Stereo, Music Logic, ProLogic, THX, Mono, Discrete, TV Logic, Digital, Digital THX, DTS, DTS THX, DTS Music, MPEG, MPEG THX, MPEG Music, ProLogic II Music, ProLogic II Movie, ProLogic II THX, Cinema.
<b>Dimensions:</b>	H 321mm (12.7"), W 88mm (3.5"), D 332mm (13.1").
<b>Weight:</b>	5kg (10lb).

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