

# G61 Surround Controller



**5 digital optical and 6 digital coax stereo inputs**

**5 stereo analogue inputs**

**10 digital surround and 8 analogue surround outputs**

**Analogue and 2 digital multichannel inputs**

**Powerful DSP engine with four processors delivering over 500MIPS**

**On-board AAC decoding, plus Dolby Digital, DTS, MPEG, Ambisonics and acclaimed Trifield decoding**

**THX Surround EX Ultra 2 certified**



**Meridian's G Series** line of high performance digital & analogue consumer audio components feature a stylish cabinet design in traditional black or a sleek silver finish.

Designed to be either free-standing or rack-mounted, G Series components build on their predecessors, the multi-award-winning 500 and our flagship 800 Series, and include entirely new circuitry developed specifically for the G Series.

Multi-layer boards reduce system noise and improve performance. In products which include video capabilities, broadcast-quality, wide-bandwidth video components are employed for maximum image integrity.

G Series units are easy to use. Where appropriate, a knob is included to control volume. The positive-action front-panel keys are software-defined: their legends are presented in the vacuum fluorescent display and change intelligently according to context.

Full installation configuration of many G Series components is achieved by running a special setup program on a Windows computer, connected to the G Series unit via a serial link, or direct from the front panel.

G Series products also include serial ports for remote operation and configuration, along with infra-red sensor input and trigger capabilities, plus Meridian communications ports. A comprehensive back-lit learning/programmable remote is included with products other than amplifiers.

The G61 builds on the technology that went into Meridian's flagship, AAA-rated 861 surround processor, and is a development of the successful G68. It is a powerful, flexible surround controller with an attractive price-tag, ideal for those who do not require the comprehensive video and multiroom features, tuner or Room Correction software provided in the G68.

At the heart of the G61 is a powerful DSP engine consisting of three Motorola 56367s and a 56371 running at 150MHz – delivering in excess of 500MIPS (million instructions per second). Processing is performed at high sample rates and with 48-bit precision throughout, ensuring that all filtering, processing and other operations are carried out far, far above the limits of human hearing. The G61 is thus ideal for the very latest in digital audio, such as DVD-Audio and emerging standards. For superior audio quality, incoming analogue signals are converted to 24-bit, high-sample-rate digital data via multibit Delta-Sigma converters as soon as they enter the processor, and all digital signals are relocked to minimize jitter and maintain total data integrity.

The G61 includes two 6-channel S/PDIF digital inputs (coax), five stereo Toslink optical inputs, and six stereo coax digital inputs. In addition, there's a 6-channel analogue input, and five stereo analogue ins. All the inputs are reconfigurable for an incredible degree of flexibility, and analogue inputs are converted to digital at high resolution – 24-bit, 96kHz.

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G61 rear panel

## Outline Specifications

|                       |   |
|-----------------------|---|
| <b>Inputs:</b>        | <i>Digital (S/PDIF) Inputs:</i> 5 x TOSlink optical in, 6 coax stereo in, 2 x 6-ch MHR coax in<br><i>Analogue Input:</i> 5 x stereo, 1 x 6-ch analogue in, unbalanced                               |
| <b>Outputs:</b>       | <i>Digital outputs (S/PDIF coax):</i> Main L/R, Centre/Sub, sides, rears; A/B (configurable)<br><i>Analogue outputs (phono):</i> Main L, Main R, Rear L, Rear R, Centre, Sub; LZ, RZ (configurable) |
| <b>Analogue ins:</b>  | 0.5–2.5Vrms adjustable, input impedance 20kΩ  |
| <b>Analogue outs:</b> | Variable between 0 and 3.5Vrms, output impedance 47Ω. Distortion <0.01%. Noise & hum <-95dB CCIR  |
| <b>Control:</b>       | 2 x DIN and 1 x BNC Meridian Comms, 3 x Trigger (+12v, 150mA), IR in, USB, RS232 remote control/configuration   |
| <b>Processing:</b>    | 3 x Motorola 56367s and a 56371 running at 150MHz to give a total of over 500MIPS (million instructions per second). 48-bit arithmetic throughout   |
| <b>Conversion:</b>    | 24-bit Sigma-Delta converter chips operating at up to 96 kHz on analogue inputs and outputs   |

|                       |   |
|-----------------------|---|
| <b>Controls:</b>      | Front-panel soft keys include control of Source, Mute, etc. Power and Display buttons, rotary DSP volume control. Full remote control via MSR+ and serial. Serial and USB link also used for firmware updates. Config via serial/USB or front panel |
| <b>Display:</b>       | Multi-character matrix Vacuum Fluorescent Display   |
| <b>Indicators:</b>    | Front-panel keys back-illuminated; Standby button lit when off  |
| <b>Formats:</b>       | Include AAC, Dolby Digital, DTS, MPEG Surround,   |
| <b>DSP Modes:</b>     | Include Direct, Music, Trifield, Ambisonics (2-ch UHJ & B-Format), Super Stereo, Music Logic, THX, Mono, Discrete, TV Logic, ProLogic IIx Music, ProLogic IIx Movie, ProLogic IIx THX, Cinema and up to 10 user-defined                             |
| <b>Power:</b>         | Universal supply 100–240V, 50–60Hz, 25W   |
| <b>Construction:</b>  | Meridian black or silver finish in metal & glass  |
| <b>Dimensions:</b>    | Width: 440mm (17.32in); Depth: 350mm (13.78in) plus connectors; Height: 90mm (3.54in)   |
| <b>Rack Mounting:</b> | Kit available from Meridian authorized dealers  |
| <b>Weight:</b>        | 9kg (19.8lbs)   |

The G61 combines controller and surround processor functions, meeting the latest THX Ultra 2 specifications and including the latest superb-quality AAC, MPEG, DTS, Dolby, Trifield and Ambisonic (both 2-channel UHJ and B-Format, to 4, 5, 6 or 7 speakers) decoding. The decoders consist almost exclusively of our own code, giving them superior integration with the Meridian design philosophy, as well as superior performance.

The G61's 'Smart Source' feature continually monitors the digital inputs and automatically loads the correct decoding software for the format, speaker layout and encoding of the incoming signal. This capability is enhanced by MHR SmartLink, which provides a digital link between a Meridian optical disc player and processor, carrying explicit information about the nature of the datastream as well as encrypted high-resolution digital signals from DVD-Audio – the first system of its kind to be approved. Virtually all other manufacturers oblige you to go through a D/A-A/D chain, losing quality in the process.

You can also store separate user parameters for each source (such as DVD) depending on whether the incoming signal is stereo or surround, so that any source material is played with the DSP mode of your choice.

The G61 features eight analogue outputs for front, rear, centre and sub connections, plus two additional outputs for other applications. Ten digital surround outputs are provided, including front, rear, side, centre/sub and again include an additional output pair.

The G61 can be configured with a powerful Windows graphical set-up application (downloadable from the Meridian web site), which allows access to all the unit's functions and configuration. However, the G61 can also be configured extensively from the front panel, thanks to the comprehensive 'soft-key' based user interface which is common to all the G Series components. 'Wizards' lead you through the configuration procedure, allowing a powerful degree of customization without having to hook up a computer.

The G61's firmware can be updated via serial link with files downloaded for the Meridian web site.

Contact your Meridian dealer for a demonstration of the G61 and other G Series components, along with Meridian DSP Loudspeakers, which form an ideal complement to them.

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