

G55 Multichannel Power Amplifier



Based on the unique DSP8000 amplifier

5 x 100W continuous amplification

Unique ultra-low-feedback design for superb overall sound

Capacitor-free signal path for fast, accurate bass

Remote trigger/standby operation

Standby mode maintains voltage rails for instant warm-up

Balanced/unbalanced inputs

Full DC/thermal protection

Bridge Mode

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.

Although Meridian is today best-known for its digital circuitry, it is a company built on analogue roots, and indeed, superb analogue circuit design and implementation are important parts of all Meridian products.

The G Series power amplifiers offer the ideal way to interface G Series components to third-party passive loudspeakers. They include the latest power amp developments from Meridian, utilised in their flagship DSP8000 digital loudspeaker systems, and share many common design parameters.

In all cases, pairs of channels can be bridged for additional output and flexibility, and the amplifiers in the range are gain-matched to further add to the possibilities when building a system. The Meridian G55 is a five-channel unit, and delivers a solid 100W continuous mean power per channel into 8Ω.

Special attention has been paid to ensuring that the amplifiers can deliver the power that's required at any given moment. Massive twin low-noise toroidal power transformers provide power to no less than 25 selected pairs of output devices, carefully temperature-controlled for optimum operating characteristics and efficiency. The result is a clear, open sound with detail as well as punch where it's required – at any volume level from a string quartet at midnight to Metallica at high noon.

The amplifier modules feature a symmetrical design with fully electronically-balanced inputs.

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G55 rear panel drawing (actual product may differ slightly)

Outline Specifications

Power Output:	5 channels at 100W into 8Ω, or 2 channels at >300W into 8Ω (bridge mode)
Distortion:	Less than 0.01% input to output
Signal/Noise:	Better than -100dB
Inputs:	Balanced on XLR-3F connectors and unbalanced on phono
Outputs:	2 output sets per channel, terminal posts
Construction:	25 pairs of 15amp output devices and 68,000μF of audiophile-grade PSU smoothing capacitors. Ultra low impedance error-corrected output stage. DC coupled, with no capacitors in the signal path. Soft start and thermal management in main assembly. Optimised magnetic design based on DSP8000. Meridian black or silver finish in metal & glass

Dimensions:	Width: 440mm (17.32in); Depth: 350mm (13.78in) plus connectors; Height: 132mm (5.20in)
Rack Mounting:	Kit available from Meridian authorized dealers
Weight:	20 kg (44 lbs)
Controls:	Rear-panel power switch; per-channel switches for balanced or single-ended input; Bridge/Stereo mode switches on channels 1 and 5
Trigger:	Wide voltage-range (5–30V, AC/DC) trigger input for remote standby/on switching
Display:	Power/Fault indicator and per-channel operation LEDs
Power:	Versions: 100, 110, 115, 220, 230, 240 Vac, 50/60Hz. Standby 31VA, Idle 58VA, 5 channels driven 748VA

Both balanced and unbalanced inputs are provided, but in fact the unbalanced inputs are converted to balanced before they enter the amplifier itself.

The discrete active input components are thermally and electrically matched in pairs. The amps feature active bias control throughout, with thermal sensing carefully managing temperature and current flow at different volume levels.

Fully DC-coupled, the signal path contains no capacitors, while those in the power supplies are audiophile grade components.

The amplifiers are of a unique low-feedback design for minimum transient and intermodulation distortion, offering superb clarity and transparency right across the audible range, with an output impedance that is close to zero and suitable for virtually any high-quality passive loudspeaker system.

A trigger input allows the amplifier to be activated on a signal from your preamp. Triggers and other control signals are optically isolated from the amplifier itself. When in stand-by mode, a standing voltage is maintained on the power rails and supply components. As a result, you do not have to wait for half an hour after switching on for optimum performance to be achieved: it is there immediately.

Two sets of outputs are provided per channel for bi-wiring, etc, on sturdy binding posts colour-coded for easy reference and capable of handling large-diameter high-quality loudspeaker cables. The output terminals are connected to the amplifiers by Van den Hul silver-strand cable to avoid signal losses.

The outer pairs of channels can be operated in bridge mode by actuating a rear-panel rocker switch on the channel 1 and/or channel 5 modules, in which case the outer channel input of the pair becomes the bridged input and the upper output terminals are linked, power being derived from the lower terminal pairs (see red labelling on rear panel diagram).

The amplifiers have electronic protection, reset by power-cycling, and include full DC and thermal protection.

A front-panel indicator shows when the amplifier is in standby. When the unit is activated, an LED illuminates for each channel. In the event of thermal overload, the main indicator goes red and the channel lights go out, showing that the unit is off-line. A pushbutton on the front panel can be used to take the unit in and out of standby, while flexible 5–30V AC/DC trigger capability is also provided to fully integrate power cycling into the overall system.

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