

G98 DVD Audio/Video Transport



Video scaling/resolution enhancement for single, high quality path to display

DVD-ROM drive reads data with maximum accuracy

Powerful multi-format video processor with HDMI/DVI

Unique MHR SmartLink connects high-resolution digital signals to Meridian systems

Decodes film soundtracks, enabling external upsampling to 24/96



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.

Virtually every piece of audio equipment has its own, characteristic sound. But at Meridian, our intention is to represent the original acoustic or studio event as accurately as possible. The characteristic sound of Meridian, therefore, is clear: it's the real thing.

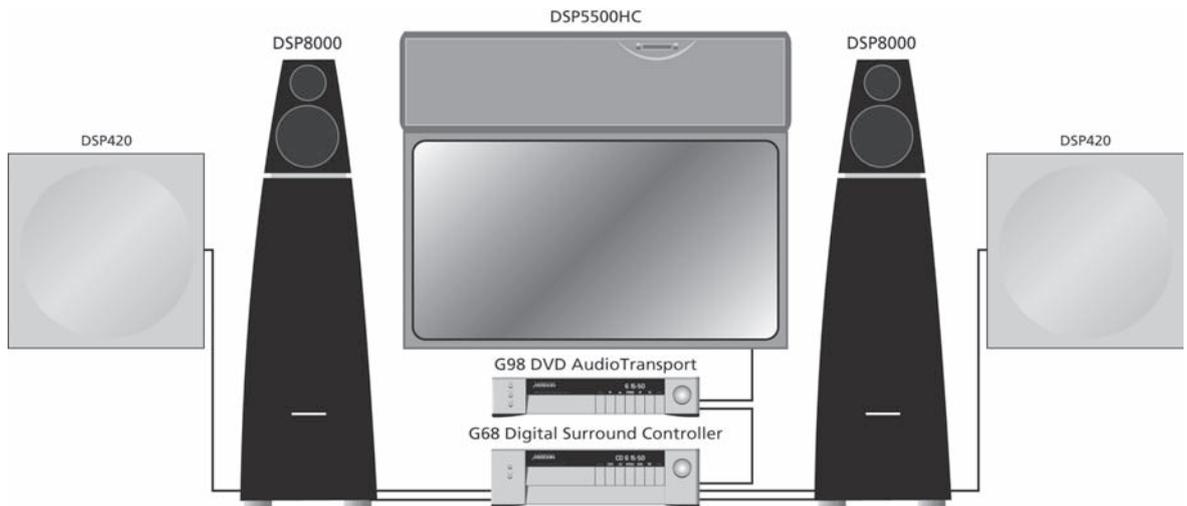
We achieve this sound in many ways, including careful choice of the right components, the right signal processing, multi-layer PC boards, the shortest possible analogue chain, precision digital design and the lowest jitter. Then there are the little things, like using gold-plated connectors throughout.

The G98 DVD-Audio transport plays audio CDs, MP3 CDs, Video CDs, DVD-Video, and DVD-Audio discs, including the DVD side of DualDiscs. It can decode Dolby Digital, DTS, MPEG, MP3, and MLP data streams to PCM for stereo playback. And it can output Dolby Digital, DTS, and MPEG bitstreams for connection to a surround controller such as the G68, for which the G98 is an ideal companion.

Two versions of the G98 are available, the G98AH with analogue outputs, and the G98DH with digital interfacing, though both have basic digital outputs in addition. The G98AH and G98DH provide fixed-level multichannel or two-channel audio outputs. They are designed for use with a surround controller with multichannel analogue (G98AH) or digital (G98DH) inputs. Alternatively, either model can be connected to a pair of DSP loudspeakers to create a complete high-quality two-channel DVD system.

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The G98DH DVD Transport is an ideal source for, and with the G68 Digital Surround Controller forms the basis of, a stunning Meridian Digital Theatre system. The units are shown here connected to a pair of Meridian's top-of-the-line DSP8000 speakers for left and right, coupled with a pair of DSP420 in-walls for the surrounds (not to scale) and a DSP5500HC for the centre front channel. Any kind of video display device can be supported, whether composite, S-Video, Component (progressive or interlaced) or even the latest interfaces such as HDMI or DVI. Different video inputs are converted to all formats, so there is only need for one display connection.

The G98AH and G98DH include a powerful video processor and scaler incorporating both Meridian and Faroudja DCDi® technology, which can simultaneously provide composite and S-video outputs, plus progressive component video and up to 1080i on an HDMI audio/video interface.

They provide two composite video, one component video and three S-video inputs, all of which can be routed to any of the video outputs with appropriate scaling.

At the heart of the G98 is a high-speed computer-style DVD-ROM drive – the best type of drive to use to ensure accurate data recovery from all types of disc, while providing a stable platform that can be updated in the future, if necessary, to keep pace with new requirements.

In addition to regular CDs (including MP3 CD-ROMS) and DVDs, the player can also play most hybrid varieties. The G98 can handle both DVD-Video and DVD-Audio discs, decoding Dolby Digital, DTS or MLP data streams and extracting or downmixing them to stereo if required.

The drive normally operates at standard speed; however it is capable of recovering data a great deal faster when required, enabling it to make successive attempts to recover accurate data from a problem disc. Because of this, the drive can perfectly recover the data from nearly all discs.

Unlike other players that use a mechanical approach to try to lower jitter by minimising drive vibration, the G98 employs a triple buffering system to minimise jitter, maximizing HF transparency and sound stage imaging precision and stability. The result of this sophisticated effort is that the players deliver ultra-low jitter, with sound and picture quality second only to Meridian's 800 Reference DVD/CD Player.

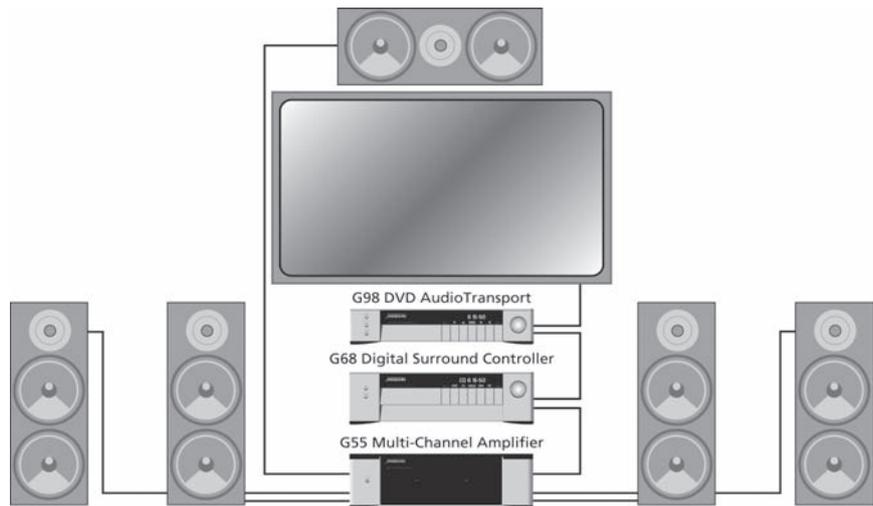
The digital electronics as a whole are driven by a new design of high-stability clocking system which further reduces jitter and ensures that the highest level of detail is recovered from a disc. All digital data is accurately re-clocked. Multiple power supplies ensure that digital and analogue circuitry are kept separate.

The G98 DVD player includes a comprehensive front-panel user interface which allows access to all the features of the unit, including

G98 (above) with G68



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In this analogue alternative to the system shown opposite, the G98AH and an analogue-out G68 are augmented with the G55 5 x 100W multichannel power amplifier. The amplifier will drive any conventional passive analogue loudspeakers. Once again, the video output from the G98 can be selected from any of the available formats, be it composite, S-Video, component (interlaced or progressive) or an emerging interface standard such as HDMI/DVI. The G98's powerful video processor drives all these outputs irrespective of the input format. There are three composite and three S-Video inputs to the unit and broadcast-quality components deliver the highest possible picture quality in any format.

configuration. The player can be reset to a standard Type which configures all the required settings as appropriate for a particular application. In addition, an on-screen display (OSD) allows you to configure specific settings individually.

The player employs Flash ROM memory for the operating system, so software updates can be downloaded from the Internet and installed via a PC connected to the serial port on the back panel. The serial port also allows full remote control and configuration of the unit.

The G98DH provides three principal S/PDIF coax outputs designated L/R, L/R Surround, and C/LFE. These typically connect to Meridian processors, or feed a stereo signal to a pair of DSP loudspeakers. If configured for MHR SmartLink they, or the adjacent combined 15-way D-type connector, carry high-sample rate encrypted data from DVD discs for the highest fidelity of decoding and reproduction. The SmartLink also informs a downstream Meridian processor of the signal source, so that it can switch processing modes automatically.

The G98AH provides six channels of analogue output. These feature true 24-bit DACs that operate at sample rates up to 192kHz for the maximum possible audio quality.

All models provide an additional S/PDIF digital output which delivers a stereo downmix or bitstream signal.

On the video side, advanced video circuit designs, matched phase video filters, and a broadcast-quality video encoder are employed to deliver low-noise images of outstanding colour depth and resolution. Separate ultra-low jitter master video and audio oscillators allow picture and sound to be independently optimized, ensuring that the G98 delivers breathtakingly clear pictures.

The G98's unique high-resolution video processor/scaler can receive composite, S-video, and interlaced component, and convert between the formats, or to the high-density multimedia interface (HDMI) standard, to provide a single video output for all the video sources in the system. A bypass function allows progressive or high definition component video to be routed directly to the component output only.

The HDMI port supports a wide range of high quality digital video options including 480p, 576p, 720p, and 1080i. A unique feature of HDMI is that it is able to 'handshake' between the source and the display to find the highest quality format. Analogue component out is available at 480p and 576p.



G98DH rear panel composite drawing (actual panel layout may differ slightly)

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G98AH rear panel composite drawing (actual panel layout may differ slightly)

Outline Specifications

Formats:	DVD-Audio, DVD-Video, DVD-R; Video CD (VCD), CVCD, MP3; CD Audio (CD-DA), CD-R and hybrids such as SACD (CD layer only) and DualDisc (DVD layer only).
Audio outputs:	G98DH: 3 x digital coax main outputs with MHR Smart Link, plus 15-pin 'D' type connector. 1 x digital coax auxiliary output. HDMI v1.1 6-channel 24-bit/96kHz and bitstream audio (and video) G98AH: 6-channel analogue output on phonos, 2Vrms, 47Ω impedance, plus digital aux out (Toslink optical and coax). HDMI 2-channel 24-bit/96kHz and bitstream audio (and video)
Video features:	Automatic PAL or NTSC encoding on Composite and S-Video outputs. NTSC black-level setup adjustable as 0 or 7.5IRE. 16:9 and 4:3 displays supported
On-Screen Display:	Switchable custom On-Screen Display allows instant review of disc status. Screen saver with user timeout options. Logo screen with PLUGE bars enables set-up of display device
Panel Display:	Multi-character dot-matrix graphic Vacuum Fluorescent Display (VFD)

Video Processor:	Two composite video inputs, one component input, three S-Video inputs; composite, S-Video, component and HDMI outputs (DVI-compatible, HDMI also carries 2-ch audio), outputs all simultaneously active; selected video input is converted to all formats at valid resolutions (except non-interlaced component input which bypasses processor). Faroudja DCDI® scaling and de-interlacing technology. HDMI port supports 480p, 576p, 720p, and 1080i. Analogue component out at 480p and 576p
Controls:	Front-panel soft key functions include Play, Stop, Pause, Previous, Next, plus Home and More keys. Off, Display and Open/Close buttons. Off gently illuminated when off; keys back-illuminated when on
Comms:	Full RS232 control and status enables custom integration or automation. Meridian Comms (2 x DIN plus BNC)
Trigger:	12v trigger output allows control of power amps, etc
Dimensions:	Width: 440mm (17.32in); Depth: 350mm (13.78in) plus connectors; Height: 90mm (3.54in)
Rack Mounting:	Kit available from Meridian authorized dealers
Weight:	9kg (19.8lbs)
Power:	Universal supply 100–240V, 50–60Hz, 25W

The HDMI interface also carries high-resolution digital audio, either two channels of PCM at up to 24-bit, 96kHz or a 5.1 encoded bitstream.

Built-in broadcast-quality circuits deliver the most advanced, high-quality video available today.

The video processor includes picture controls, available via the MSR+ and front-panel display. For the internal DVD and external video inputs you can adjust the horizontal and vertical picture position. In addition, for the video inputs you can adjust the brightness, contrast, colour, and hue (NTSC inputs only).

The HDMI output can be connected to a DVI input if the device supports HDCP copy protection, using a suitable adaptor cable.

Information contained in this data sheet is correct as far as possible, but Meridian Audio accepts no liability for errors or omissions. Trademarks are the property of their respective owners. Meridian Audio reserves the right to amend product specifications at any time.

Further technical details, images, product reviews and company history are available from Meridian Audio or from our web site, www.meridian-audio.com

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BOOTHROYD STUART
MERIDIAN

Meridian Audio Limited

Latham Road, Beaufort Park
Huntingdon, Cambridgeshire PE29 6YE
United Kingdom
Tel +44 (0) 1480 445678
Fax +44 (0) 1480 445686

Meridian America Inc

8055 Troon Circle, Suite C
Austell, Atlanta GA 30168-7849
USA
Tel +1 (404) 344 7111
Fax +1 (404) 346 7111

Email: info@meridian-audio.com

Web: www.meridian-audio.com