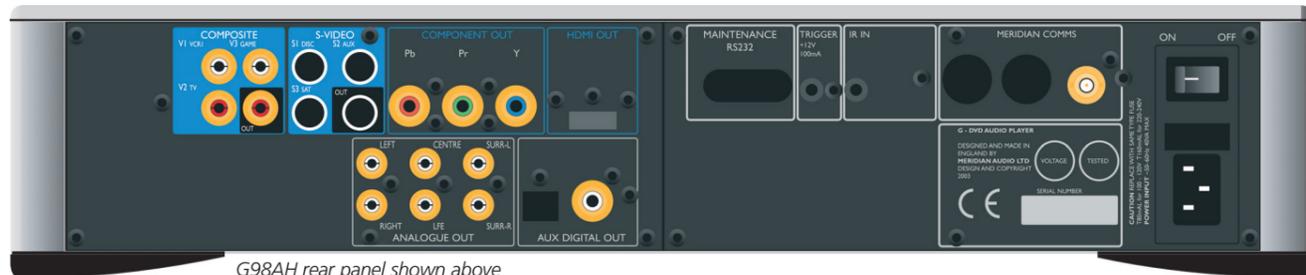


G98 DVD Audio Transport



G98AH rear panel shown above

Outline Specifications

Formats: DVD-Audio, DVD-Video, DVD-R; Video CD (VCD), CVCD, MP3; CD Audio (CD-DA) including CD-R, CD/DVD (DualDisc) and the CD layer of hybrids such as SACD

Audio outputs: G98DH: 3 x digital coax main outputs plus MHR Smart Link digital output. 15 Pin 'D' type connector, plus 1 x aux digital coax.

G68AH: 6-channel analogue output on phonos, 2V/47Ω plus 1 x optical Toslink aux out.

Video features: Automatic PAL or NTSC encoding on Composite and S-Video. NTSC black-level setup adjustable as 0 or 7.5IRE. 16:9 and 4:3 displays supported. Screen saver timeout.

Video Processor: Three composite video inputs, three S-Video inputs; composite, S-Video, component and HDMI outputs (HDMI also carries audio and is DVI compatible via an adaptor cable), all simultaneously active*; selected video input is converted to all formats.

Controls: Front-panel soft key functions include Play, Stop, Pause, Previous, Next, plus Home and More keys. Off, Display and Open/Close buttons. Off button gently illuminated when off; keys back-illuminated when on. Full RS232 control and status enables custom integration or automation. Meridian Comms (a x DIN plus BNC).

Front Display: Multi-character dot-matrix graphic Vacuum Fluorescent Display (VFD).

On-screen Display: Switchable custom OSD allows instant review of disc status. Screen saver with user timeout options. Logo

Dimensions: Width – 440mm (17.32in); Depth – 350mm (13.78in) plus connectors; Height – 90mm (3.54in)

Rack Mounting: Kit available from Meridian authorized dealers

Weight: TBD

Power: Universal supply 100–240V, 50–60Hz, 25W.

*analogue component limited to 480/576p.

screen with pluge bars enables brightness setting of display device.

out plus an auxiliary S/PDIF digital coax stereo/bitstream output. The analogue outputs feature true 24-bit DACs that operate at sample rates up to 192 kHz for the maximum possible audio quality at the output.

Audio connectors feature gold-plated contacts.

The G98 employs a modular construction for maximum flexibility, and 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 rear panel. The serial port also allows full remote control and configuration of the unit via a special Windows graphic application. However the G98 can be configured entirely from the front panel, thanks to its unique context-sensitive user interface and soft keys.

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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G98 DVD Audio Transport

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

DVD-ROM drive reads data with maximum accuracy

Plays all CD and DVD optical discs including hybrids

Upsamples 2-channel digital signals to 88.2/96kHz

Powerful multi-format video processor with HDMI/DVI

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

Decodes film soundtracks, enabling external up-sampling to 24/96



DVD
AUDIO

DVD
VIDEO

COMPACT
disc
DIGITAL AUDIO

MLP
LOSSLESS

BOOTHROYD STUART
MERIDIAN

Meridian's G Series line of high performance digital and 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.

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.

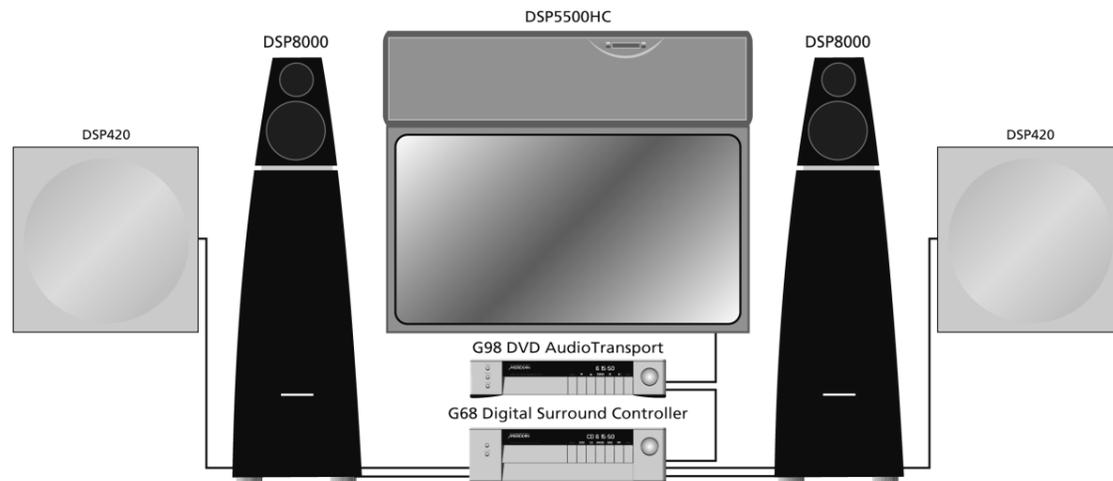
Virtually every piece of audio equipment has its own, characteristic sound. But at Meridian, our intention is to represent the original acoustic or studio event as accurately as possible. The characteristic sound of Meridian, therefore, is clear: it's the real thing. We achieve this sound in many ways, including careful choice of the right components, the right signal processing, the shortest possible analogue chain, precision digital design and the lowest jitter.

The G98 is a DVD-Audio/Video transport offering superb audio and video quality. It will play all CD and DVD format discs, including Compact Disc, CD-R and CD-RW, VCD, MP3, DVD-Video, DVD-Audio and DVD-R. It also handles hybrid discs such as the DualDisc CD/DVD combination, and the CD layer of an SACD.

At the heart of the G98 is a computer-style DVD drive which has much more powerful capabilities than the drives usually found in a DVD player. While data is usually retrieved in real-time, for example, the drive can operate at multiple speeds to recover accurate data from a problem disc. Because of this, the drive recovers the data from a disc perfectly. In a computer, loading a program rarely fails due to the ROM drive. Similarly, extracting the data from a CD or DVD can be achieved without error.

Normally, however, a computer pays no attention to how smoothly the data flows from the

G98 DVD Audio Transport



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 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.

disc, and that's where Meridian's special technology comes in. After leaving the drive, the information is handled by highly sophisticated audio circuitry to obtain ultra-low jitter and the highest integrity data.

Unlike other players that use a mechanical approach to try to lower jitter by minimising drive vibration, the G98's memory architecture abolishes this problem forever: it will even read the data from the disc more than once if necessary, to ensure data integrity. The result of this sophisticated effort can be demonstrated by the fact that the G98 delivers ultra-low jitter, with sound and picture quality second only to the Reference 800 optical disc player.

Once the digital data stream has been recovered from the disc, powerful on-board digital signal processing (DSP) up-samples 2-channel signals.

In the G98AH, signals are upsampled to a rate of 176.4/192kHz for digital to analogue conversion to drive the analogue outputs – DACs can offer better performance at higher sampling rates – while in the G98DH, 88.2/96kHz is used for the digital outputs, all at 24-bit word lengths. Here again, sending 24 bits at high sample rates via an S/PDIF link reduces jitter as compared with the original signal.

Upsampling enables filtering to take place far beyond the range of human hearing, as well as offering other, audible benefits, right across the audio band, including improved transient response and less ringing.

This results in a more open, transparent sound, tighter bass and a generally more "musical" overall sound.

The G98 employs a triple buffering system to minimise jitter, and therefore maximise HF transparency and stereo image precision and stability.

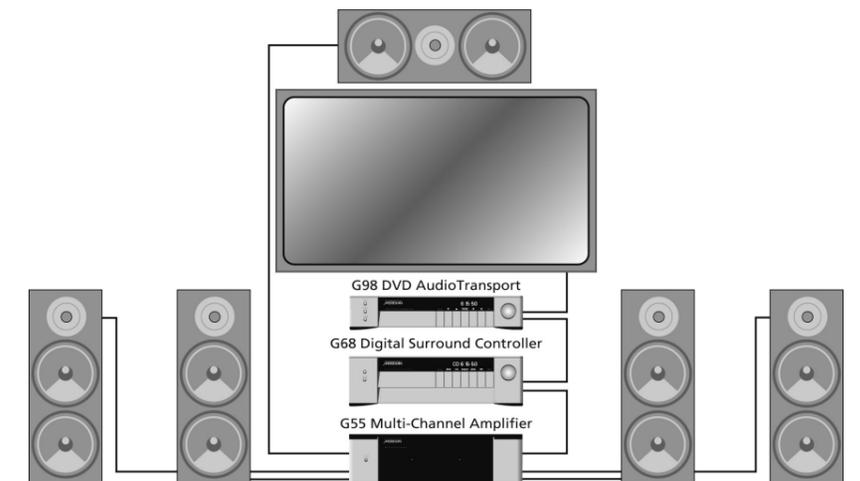
The high-resolution digital outputs are encrypted and, as a result, a high-resolution digital signal can be fed entirely digitally to a Meridian processor. Meridian was the first company to do this: most other manufacturers are obliged to rely on analogue outputs.

As the G98 includes the ability to decode the MLP data stream from a DVD-Audio disc, that processing power can also be applied to decoding Dolby Digital and DTS soundtracks (and DTS CDs). This allows a Meridian surround processor connected to the G98 to upsample the digital signals for a smoother, more detailed sound.

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 apart and can provide the required power when called upon to do so.

At Meridian, we write our own DVD navigation and driver software. As a result, our DVD players are some of the most responsive you'll find, minimising the pause between layers and accessing menus extremely quickly. This also means that we can provide software updates in the event that a disc is released that bends the mastering rules a little, rendering it unplayable on many other players.

G98 DVD Audio Transport



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.

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 includes a unique high-resolution video processor/scaler. This processor can receive composite, S-video and component (interlaced or progressive) and convert between the formats – and to the high-density multimedia interface standard, HDMI – to provide a single video output for all the video sources in the system.

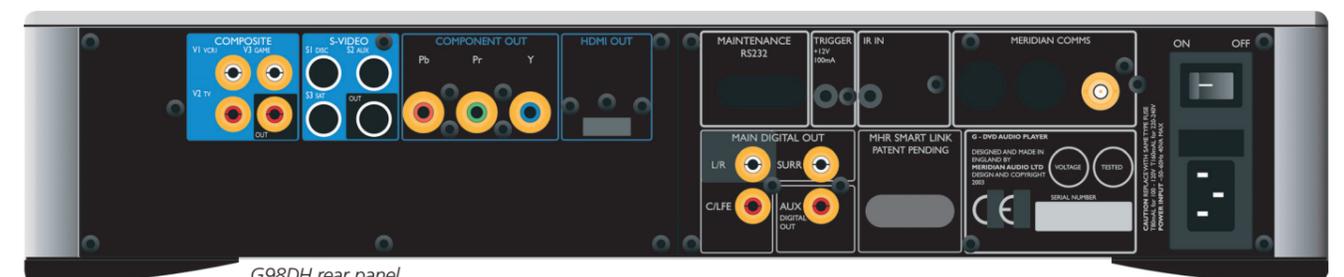
Also on-board is Meridian's superior video processing and a unique implementation of the DCDi technology from Faroudja. Per-pixel motion-adaptive deinterlacing delivers the highest resolution picture while suppressing motion artefacts. The oversampled video conversion and studio-grade output circuits result in video of the highest quality. The HDMI port also carries stereo high-resolution digital audio and is compatible with DVI systems via an available adaptor cable.

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 common format. Analogue component out is available at 480p and 576p.

All G98s include an auxiliary S/PDIF digital output which delivers a stereo downmix or bit-stream signal.

The G98DH offers four S/PDIF coax outputs designated L/R, C/LFE, and two pairs of digital surround signals designed, typically, to connect to Meridian processors, or feed a stereo signal to a pair of DSP loudspeakers. These connectors can be configured for MHR SmartLink, carrying high sample-rate encrypted data from DVD discs to the rest of a Meridian system for highest fidelity decoding and reproduction. This system also carries information on the signal source so that a Meridian processor downstream of the G98 can switch processing modes automatically. An HD15 connector is also provided for MHR SmartLink.

As an alternative, the G98AH provides the same video capability but instead of the digital output set, includes six channels of analogue



G98DH rear panel