

BOOTHROYD STUART
MERIDIAN
G95 DVD Receiver System

DOLBY DIGITAL
DTS
DAB
MLP
dts

Home

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Open

Display

On/Off

One-box Wonder

MERIDIAN G95 (£4195)

Meridian squeezes five amplifiers into its G91A DVD surround processor to create an all-in-one home entertainment package for the audiophile

Whether through foresight or fortuitous coincidence, Meridian has had the genesis of this fabulous all-in-one music and movie playing solution right under its nose for some time. I'm not exactly sure when the penny dropped (see Modern Day Music Centre, p32), but some bright spark has finally shoe-horned five very efficient, cool-running power amplifiers into its G91 DVD-playing surround processor. There have been some compromises to complete the package, including the loss of DVD-A playback and individual digital outputs for each of the front, centre and surround channels. Nevertheless, these sacrifices were well-judged because the emergent G95 is hardly bereft of features.

MASTER OF DISGUISE

Meridian describes its £4195 G95 as the 'most powerful and versatile member of the G Series family', but you'd never suspect this from the deceptively self-effacing fascia. The 30kg bulk also comes as a surprise when you first attempt to lift its cunningly-contoured chassis from the deck. It also has a new slot-loading CD/DVD drive and although Meridian's proprietary digital output regime is lost, the remaining HDMI output still supports multichannel audio as well as digital video. And this little socket is the first – on an all-in-one solution at least – to offer video resolutions all the way up to 1080p.

Standard Dolby Digital and DTS decoding is provided (for both bitstream inputs and DVD media) instead of the EX/ES variants as this is a 5.1 and not a 6.1 or 7.1 channel receiver. Meridian offers an FM/DAB tuner module upgrade for another £100. Well worth having, unless you already listen to digital radio via a Sky box.

All digital inputs to the G95 are upsampled to 96kHz prior to any subsequent processing, just as all analogue inputs are digitised using 96kHz/24-bit ADCs before joining the same signal path. This digital data is then returned to the analogue domain before reaching any or all of the five, cool-running amplifier modules nestling under the bonnet (see our inside shot, page 33). You'll probably see these described as 'Digital' amplifiers by any magazine that reprints from Meridian's press release verbatim. Actually, they are high-speed analogue switching amplifiers developed by the clever people at Hypex Electronics. Meridian, typically a stickler for accuracy, has promised to delete the 'Digital' from its website and literature regarding the G95.



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BELOW: Coaxial and optical digital ins plus 5.1 channel analogue outs allow the G95 to function as an AV processor/preamp. Comp., component (BNC) and S-video are joined by an HDMI socket offering both multichannel digital audio and digital video scaled to 1080p

DRIVING THE G95

While Meridian provides its hugely comprehensive, tabletop remote control, it is still possible to navigate your way through the G95's setup and any DVD title menu using five of the seven buttons on its fascia. These are 'soft keys' whose function is indicated on the dot-matrix display immediately above. Load a DVD, for example, and the five middle buttons are configured for left, right, down, up and enter, allowing the disc's menu to be navigated at a stroke.

Press the hard-coded 'More' button, and these soft keys are reconfigured for Audio (mode), single and A-B repeat. Press 'More' again and options for subtitle and video angle are provided. Repeating the process brings up DSP mode, video input assignment and display brightness followed by DVD, Radio, TV, VCR1 and Aux input selection; DVD, Tape, Game, Sat and Disc input selection followed by (finally) two batches of disc transport controls.

WAIT FOR IT...

The setup menu only appears as an option once you've stopped the disc in play, though it will resume at the same point once the setup menu is closed and the 'play' soft key pressed. If you are using the G95 as an outboard DAC/AV processor then it's worth noting that none of the video, audio or source setup nor playback options is updated on-the-fly as they are with most competing solutions. Instead, you must return out of the setup menu, wait a good few seconds before the G95 unmutes (that's a relay you'll hear click in the background) and implements your latest settings.

The features are generous, including display aspect, black level, closed captions and TV standard options within the 'Video setup' menu with further sub-menus dealing with 'Scaler setup' and 'HDMI options'. The former offers native de-interlaced, 720p, 1080i, 1080p and auto digital video scaling with 0.8 to 1.1 gamma



correction and a variable sharpness control. The HDMI options include auto switching and the choice of either RGB or component (YCbCr) colour space configurations. If your display supports a component colour space, then select this option along with the OIRE black level and 1.0 gamma correction mode from the other areas of Meridian's video setup menu.

MENU A LA CARTE

The 'Audio setup' menu specifies the G95 as an analogue or digital (HDMI) two- or multichannel application and whether the HDMI link carries native or internally decoded audio data. Similarly, the 'Speakers' sub-menu determines whether each of the Left/Right, Centre or Surround channels is set to Large, Small or Off and whether your system has a subwoofer or not. The menu currently allows you to select 'inadmissible' configurations such as Front/Centre/Surround Small and Sub Off, but the selection is not executed in its software.

All this from a combination of two 'hard' and five 'soft' keys is impressive and more reminiscent of the approach taken by the likes of Rohde & Schwarz or Agilent Technologies in the design of their test equipment, rather than a strategy for a piece of domestic hi-fi. But it works and works well.

VOYAGE OF DISCOVERY

Living with a product as comprehensively specified and potentially diverse in application as the G95 calls for a voyage of discovery rather than a standard review process. My journey began with the G95 in two-channel

'You get a complete musical picture painted into the room, rather than a jigsaw with gaps'

mode, playing CDs, and with the swift realisation that this compact box was just as capable as Naim's n-Vi in casting a surprisingly open and transparent sound into the room. Surprising, that is, if you buy into the conspiracy theory that all Class D amplifier technologies necessarily lack that spark of 'musicality'. So far, the sympathetic implementation of ICE Power by Rotel, TriPath's Class T by Naim and now the Hypex switching amps in this G95 all firmly suggest otherwise. I was struck by the G95's resolution of Amy Wadge's warbling piano tone through tracks including 'This is Me, This is You' (*No Sudden Moves*, Hatman 2022).

MODERN DAY MUSIC CENTRE

For a good couple of decades, the all-in-one record-playing music centre had pretty much had its chips, before Linn and then Arcam reinvented the concept with the Classik and Solo, respectively. Arcam's affordable combination of CD player with FM/DAB radio and stereo amplifier proved a massive hit with consumers looking for high quality sound without the headache of multiple boxes, interconnects and associated paraphernalia. You know, the stuff that makes hi-fi a fun hobby for enthusiasts... Anyway, the likes of Primare and Musical Fidelity followed in short order with their CDI10 and kW250S (*HFN* July '06 and Aug '06 respectively) while Naim upped the ante with a multichannel one-box solution, complete with DVD/CD player, HDMI digital video output and five 'digital' amplifiers to tempt reluctant fans of both music and home cinema. The Naim n-Vi was reviewed in June '06. Arcam has taken its time to respond with the inevitable Movie Solo (full technical review next month), leaving the door sufficiently ajar for Meridian to crown the breed with this hugely sophisticated and necessarily high-end home entertainment solution.



BELOW: The G95 includes five 100W power amps to drive the main channels of a home theatre or multichannel audio system. A sub would be driven from the G95's preamp

The silence of the background acoustic was impressive too, a cleanliness that helped both her voice and accompanying acoustic guitar stand out in a clear but enjoyable, almost slightly cosy, relief. There's plenty of warm, stringy and resonant detail here but it's never delivered in a fashion that puts the music's technical structure ahead of the integration or comprehension of the whole performance.

You get a complete musical picture painted into the room, rather than a jigsaw with gaps. So while its bass may not trawl the rib-tickling depths of what's possible and the high treble may lack that last suggestion of alpine freshness, listen to the wholesome and richly ambient sound of Bach's *Magnificat* [Telarc 60651] and you'll not be left with the nagging feeling that parts of the performance were missing. Once again, it's the wonderfully dark quality of the G95's backgrounds that serve to illustrate the character of, in this case, the soaring soprano, the delicate whisper of flute and distinctive timbre of the oboe. This is a passionate piece, delivered with real emotion by the G95.

MULTICHANNEL AVENUES

Of course, the G95 has not two but five amplifiers to service a multichannel system. For most users this will mean a home theatre system, not least because the lack of support for SACD and DVD-A means those particular avenues of multichannel music are firmly shut. And, as the G95 has no 5.1 channel analogue inputs, neither will an external SACD/DVD-A player be of particular benefit.

While Meridian's own Trifield surround emulation regime (along with Dolby's PLII) will synthesise a multichannel performance from a two-channel source, my preference would still be for Dolby or DTS-encoded music videos. Fortunately, with specialist hi-fi labels



One of two Motorola processors used to handle Dolby/DTS decoding, bass management and other audio functions

Optional FM/DAB tuner module is a popular Radioscape solution

Genesis (Faroudja) FL2310 video de-interlacer and scaler

Silicon Image Sil9030 drives the HDMI digital video/audio output

A substantial toroidal transformer feeds the numerous linear power supplies for the G95's digital and analogue circuits

Two Hypex Electronics switching power amplifier modules feed the L/R stereo speaker outputs

Three Hypex Electronics switching power amplifier modules feed the L/R surround and centre speaker outputs

Slot-loading CD/DVD drive distinguishes the G95 from related products like the G91

such as Linn and Naim also moving into the realm of home theatre, we are also seeing the release of some superb DVD music software, including the recent live concert of Antonio Forcione's *Quartet* [naimdvd100].

The prospect of sitting back to watch this performance via Meridian's scaled digital video output while being immersed in the sultry sounds of pipes, strings and experiencing Adriano Adewale's distinctive percussive style from every angle of the room, is not to be passed up. I am glad to report that the G95 did not disappoint, rather its slightly warm but transparent delivery brought a smile to all who sat to watch, listen and enjoy this performance. It will also be educational for many, as an opportunity to put both face and sound to the character of less well-known instruments. Try doing this with an audio-only format!

FOR:
True high-end home entertainment

AGAINST: No DVD-A, SACD or 6-channel analogue inputs

As a movie player, this little box excels itself and no DVD provides a better illustration of its qualities than the Signature version of *Gladiator*. The powerful score that accompanies 'Hell Unleashed' might lack the punch and resonance that bigger amps will bring, but there's no mistaking the haunting presence that still fills the room. This is a

home cinema solution that majors on atmosphere rather than special effects and, as such, typically makes a better fist of the sword and sandals epics than SF spectacles like *War of the Worlds* or *Batman Begins*. The G95's pictures are crisp and finely detailed, while any

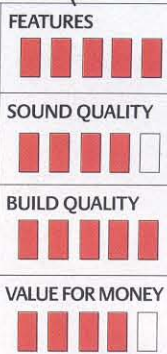
loss of smoothness on swift pans seems less obvious with 720p than 1080p HDMI output settings. With a properly calibrated display, and Meridian's gamma correction set to 1.0, its greyscale reproduction looks very smooth indeed with detail in both shadowy and near-black pictures revealed as cleanly and without obvious highlight as that in the brightest daylight scenes.

So the G95 delivers impressive looking pictures with movies as diverse as *Pitch Black* to the stunning brilliance of *Touching the Void*. It's very nearly a product for all seasons. ☺



Verdict MERIDIAN G95 (£4195)

Meridian's G95 is an elegant, one-box gateway to a brave new world where audio enthusiasts aren't afraid to admit they rather enjoy watching movies too. The more general, but well-heeled, consumer will suffer no such hang-ups in the first place but will appreciate the G95 for what it delivers: exquisite digital audio and video with the minimum bother.



Hi-fi news 18/20 OVERALL RATING

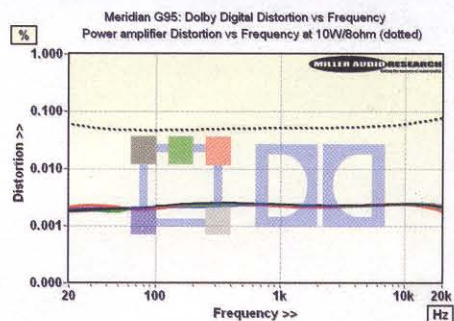
Review system breakdown

DISPLAYS: SIM2 Domino 80, SIM2 C3X, Fujitsu P50XHA58E plasma
LOUDSPEAKERS: B&W 802/804/HTM1 (centre)/ASW850 (sub)

Contact numbers

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WEB: www.meridian-audio.com

Hi-fi News lab report



Meridian's amplifier modules do achieve their 100W/8ohm rating by the skin of their high-speed switching transistors (from a ~0.13ohm output impedance) although there's no significant increase into lower 4ohm impedance loads. Stick to 8ohm-rated speakers of good sensitivity for best results. Distortion is unspectacular at 0.045-0.08% (dotted trace, above), but not bad for this switching amp technology. In practice, because all inputs to the amplifiers are re-converted back to analogue at 96kHz, the response is some -2dB at 40kHz after which it drops away very steeply indeed. Nevertheless this is perfectly sufficient for all media supported by the G95.

The digital decoding and multichannel (analogue) preamp outputs are of far higher performance. Distortion with LPCM digital inputs is held to within 0.0008-0.0025% over a full 20Hz-40kHz span while even Dolby Digital decodes (from DVD or via the optical digital inputs) remain below 0.002% from 20Hz-20kHz (see coloured traces, above). Digital jitter is no more than 265psec from disc or 460psec through the digital input while low-level linearity is good to ±0.8dB over a full 100dB range. Full QC Suite Reports for the G95's CD and DVD, analogue amplifier, LPCM and Dolby Digital performance are available at www.milleraudioresearch.com/avtech. PM

Hi-fi News lab specifications

Maximum Multichannel Output, 8/4ohm	105W/110W
Dynamic Power Output, 8/4/2/1ohm	120W/115W/60W/35W
A-wtd S/N Ratio (Digital/Analogue 0dBW)	102.1dB/ 86.7dB
Dist. 20Hz-20kHz (Analogue, 10W/8ohm)	0.045-0.078%
Distortion 1kHz, 0dBFs/-30dBFs (Digital)	0.0008%/0.005%
Distortion 20kHz/40kHz, 0dBFs (Digital)	0.0015%/0.0025%
Freq. Resp. CD/DVD (20Hz-20kHz)	+0.0/-0.73dB
Freq. Resp. 96kHz DVD (20Hz-45kHz)	+0.0/-1.1dB
Digital Jitter, 16bit CD/24bit DVD/SPDIF	265psec/240psec/460psec
Stereo separation (20Hz-20kHz)	>100dB