

GRAND designs

Meridian is famous for combining pioneering technology with stunning aesthetics. David Price traces the rise of this great British company through the years to the present day.



Meridian launched in 1977, the result of a partnership between one-time Lecson technical director Bob Stuart and industrial designer Allen Boothroyd. Having jointly penned one of Britain's most striking looking hi-fi products, Lecson's AC1/API pre-power, Bob decided that he wanted to start an audio company, "We both felt we had skills to produce fine sounding electronics with uniquely housable designs". The Lecson duly went on permanent display in the New York Museum of Modern Art, and brought Bob and Allen their first British Design Council Award in 1974.

The Meridian M1 loudspeaker was the company's first product, a radical active design featuring power amps installed inside the cabinets, driven by electronic crossovers. Bob's academic background in human psycho-acoustics and electronics convinced him that active speakers were the way ahead, thanks to the far greater control they gave designers over the problems

inherent in loudspeaker design. Sadly the M1s' high price made them prohibitively expensive for many audiophiles, and thus was born the smaller, simpler M2. This loudspeaker remains a favourite of Bob's to this day thanks to its ability to make, "a convincing sound from such a small package".

Back in the seventies, brashly styled separates dripping with brushed aluminium were all the rage, so the subsequent arrival of Meridian's first electronics range must have raised an eyebrow or two. The svelte looking 101/105 pre-power amplifiers comprised five diminutive 140x50x300mm boxes painted a dark olive green/brown colour. Compared to Japanese high end, their stark minimalism was almost as striking as their hefty £600 price tags. The 101/105 proved a highly capable amplifier, winning over the hearts of the British hi-fi press and proving a big hit with dealers too. Although tonally dry, it

sounded extremely detailed and refined by the standards of the day, with a fantastically capable 110w RMS power amplifier section capable of driving even the largest, power-hungry monitor loudspeakers.

The 100 series was soon augmented by Meridian's new 103 power amplifiers pushing out 50WV per channel for £490. Then the 104 tuner appeared, with house styling to match the 101 preamplifier. A £225 FM-only design offering six screwdriver set presets with a small analogue tuning meter, it was another beautifully understated affair with fine ►►





Lecson
AC1/AP1: Bob
and Allen's first
pre-power
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◀◀◀ sound quality. The range was subtly refined and improved over the years, and became ever more popular. Recognising this, its designers received their second gong from the Design Council in 1982.

Around this time Bob found himself involved in the early stages of development of Compact Disc, through his technical connections with Philips in Holland. For this reason, Meridian was the very first British hi-fi company to launch its own CD player, barely a year after the format had started back in 1983. Called the MCD, it's one of Bob's all-time favourite Meridian products, "it really demonstrated that digital audio had a very serious future". Although obviously based on Philips' first generation CD100 - sharing the same CDM1 Pro laser transport, diecast metal chassis and fourteen bit, Philips 1540 four times oversampling chipset - it featured a thorough reworking of its audio electronics to great effect.

The MCD proved a tremendous sales success and a big hit with the world's hi-fi press, winning awards for the best sounding CD player in seven major countries including Japan and the United States. The MCD Pro followed in 1985, adding a number of features and taking the sound quality to an even higher level. £675 bought you the original MCD with beefier power supply arrangements, a low jitter master clock, absolute phase switching, error indication and a revised disc clamping system damped by a rubber mat.

Meridian subsequently made a bold move into the integrated amp arena with the grey Nextel finished MCA-I. An ingenious modular design that clipped together with automatic electrical

connections, you could buy as many or as few bits as you needed to suit your requirements. The modules included a power amp, preamp/phono stage, line input extender, headphone amp and moving coil preamp. In basic single input guise the MCA-I retailed for a mere £240. Sound was excellent for the price, with balanced preamp, discrete transistor phono amp and a power amp running complementary transistor output stages in dual mono configuration. With hindsight Bob is equivocal about the MCA-I, describing it as, "quite an advanced concept and rather harder to make than we had thought".

The next year Meridian surprised everyone by launching a completely revised range of electronics, the 200 Series. Visually quite different to the 100 Series 'mini-components', this new range was both physically larger and functionally far more versatile than the range it replaced. At the time, some fans of the earlier separates lamented the unspectacular styling, but some fifteen years later the 200 Series, complete with its pinstripes and shift key operation, looks no less radical! It was Meridian's most comprehensive product line up yet, and included CD players, radio tuners, pre-amplifiers, power amplifiers, digital converters and multiroom components.

Meridian's 207 CD player was one of the best selling products in the new range. A characteristically radical design, it offered a number of features completely unavailable from the company's British or Japanese rivals. First was its two-box design which physically separated the transport and DAC, allowing you to stand them side-by-side

or on top of one another. Another was its integral preamp which provided electronic volume control and source switching for two other line level inputs. This enabled CD fans to drive the player straight into a power amp or pair of active loudspeakers, the latter proving an enduring fascination for designer Bob Stuart.

The 207 proved a superb performer, offering a musical and articulate sound despite its humble electronic origins. In fact it wasn't too dissimilar to the original MCD, sharing as it did the Philips transport and fourteen bit chipset. Its superb build reflected its high £850 selling price, boasting a beautifully engineered transport housing complete with metal sleeve and glass front plate, pinstriped of course!

Unfortunately its control system - which included a programming feature for the first time - was an utter chore. This fact was obviously missed by Britain's Design Council, who gave Bob and Allen their third bauble in 1988. This, Meridian point out, is the only time a design team has won the award on three separate occasions. The CDR followed next. Although CD recorders are pretty run-of-the-mill these days, in the late eighties it was a staggeringly advanced piece of kit. Costing £5000, the CD-R wrote onto £30 blank discs with remarkable fidelity to the original.

In 1989 the company stamped its name on the super-fi scene with dramatic effect, with the introduction of the world's first digitally-driven loudspeaker, the £7,650 Meridian D6000. At the time it was arguably the most radical speaker ever. A fully active design with built-in electronic digital

D6000:
Meridian's first
active digital
loudspeaker
gave a stunningly
clean and open
sound





551 Integrated amp: smooth detailed sound allied to great flexibility

converters, preamp, digital signal processing crossovers and amplifiers, everything upstream of the power amps (and drive units) worked in the digital domain. Using an 'intelligent' remote commander, the D6000 even offered complete control of other suitably equipped Meridian separates, from source, track and channel switching to volume levels.

Each speaker comprised two units, a bass enclosure containing four 210mm woofers running in parallel, plus electronics which ran an umbilical up to the upper trapezoidal cabinet containing a 170mm mid/bass driver and SEAS metal dome tweeter. Fascinatingly, no attempt was made to engineer the driver/enclosure combination to give a flat response. Instead, all the equalisation was done actively in the digital domain. The result was an amazingly open sounding loudspeaker with Herculean amounts of control, if a touch dry and hard sounding. Twelve years on, the idea of 16bit digital speakers might sound questionable, but the D6000 is nevertheless an engineering *tour-de-force* which looks destined for a place in history. Bob counts it as one of his all-time favourites, arguing that, "for the first time a speaker system was able to place instruments in space and reproduce dynamics".

Meridian was no less busy innovating and launching new products in the nineties. After a management buyout in 1992 supported by Bob Stuart, The Meridian Group was formed, comprising Meridian Audio Limited, Digital Gramophone & Wireless Ltd. and Meridian America Inc. The new company immediately set to work on the new 500 Series, which was finally launched in

July 1993. Despite more sober, conservative styling, the new twelve-strong product range had vastly improved features and ergonomics which effectively brought the brand into the Home Entertainment market. With products like Meridian Digital Theatre, based on the 565 Surround Sound Processor and a range of DSP loudspeakers, the brand is spreading its wings further afield.

Despite branching out to over thirty products, the company has also remained true to its hi-fi roots. The £1,200 Meridian 506-24 CD player carries on the original MCD's tradition of sweet, smooth, clean sound from silver disc, while the 551 integrated offers much of the magic of the MCA-1 but with even greater flexibility and superior sound. As Meridian's entry-level pre-power the £1445 501/555 pre-power is a high quality multi-purpose amplifier ready for all manner of applications.

MODERN MUSIC

These days Meridian is a mature British high end specialist with about 80% of its products sold overseas, much of this going to North America. Currently employing over 100 people in the UK and 11 in the USA, it is based in Huntingdon, the UK's 'hi-fi Silicon Valley' in Cambridge, in a 25,000 square foot factory.

The story doesn't stop here though, because the company wrote itself into hi-fi's history books once again when Meridian Lossless Packing (MLP) was incorporated in the DVD-Audio 1.0 specification. This is soon to become a subset of DVD Universal (also incorpo-

rating DVD-Video, DVD-ROM, DVD-RAM and DVD-R) which all next generation DVD players will use, and puts Meridian on the world's hi-fi map once and for all.

A clever way of storing more digital audio data in a limited space, MLP enables standard DVD discs to offer over one hour of six channel audio at up to 24bit, 96kHz resolution. Crudely put, it permits better sound for a given 'bit budget', something digital audio devotees should be very thankful for! Bob cites MLP as another of his favourite Meridian products, thanks to its superior efficiency to rival coding systems. He says that without its dramatic technical superiority, he would have failed in his "David and Goliath" struggle to convince the Japanese electronics giants in the DVD Forum to adopt it.

The future promises more "high resolution audio rendering systems" (as Bob calls them) and the presence of Meridian Lossless Packing in the forthcoming DVD Audio-Recordable specification. Watch out also for a growing presence in Home Theatre, digital video and multimedia, and even a commitment to support the new compressed audio formats like MP3. After nearly a quarter of a century in the audio business, Meridian remains a consistently innovative and charismatic player. Few others have combined aesthetic beauty, ergonomic excellence and excellent sound so successfully. ■▶▶

Bob Stuart: shaping the future of digital audio

