



808.2

Signature Reference Compact Disc Player



Meridian is the acknowledged leader in high-performance Compact Disc playback, and has held that pre-eminent position since the release of the world's first audiophile CD player, the MCD, in 1984. Over the last two decades, Meridian has introduced no less than two dozen CD player models, each one better than the last; each one redefining the state of the Compact Disc art.

This steady process of improving CD performance has been recognized by more than 50 awards and has made Meridian absolutely synonymous with the very best in Compact Disc.

The 808 was introduced in 2004 to immediate acclaim. Meridian hailed it as the best CD player they had ever made. But, since then, developments in technology and innovations conceived in Meridian's own R&D laboratories have made it possible to better even the best.

Now, Meridian introduces the 808.2: a proud member of the 800 Reference Series and one specifically developed to render the ultimate performance possible today from the CD medium.

The 808 was the best CD player we had ever made – until the 808.2. For a quarter of a century, Meridian has been making the finest audiophile CD players. And now, with the 808.2, we have made our best ever.

Meridian has been deeply involved in developing technologies for higher quality sound and for higher resolution delivery. In fact, our technology was chosen to give the ultimate sound on DVD and blue-laser formats.

But, for a music lover the over-riding factors in selecting content are first the catalogue, then quality and finally convenience.

CD has an amazing depth of catalogue, and if you are looking for a piece of music, chances are that it's on Compact Disc, and that you have a choice of recordings. You may find a download, but the quality or value will likely be lower and no matter how fine a new niche format may sound, if the music you want isn't available, then it has only passing interest.

All the more reason, then, to continue our quest to make Compact Disc sound the very best it can. 808.2 inherits Meridian's 25-year tradition of award-winning players, yet sets a whole new benchmark.

Product highlights

Highest quality CD player ever offered by Meridian

Unique new proprietary filter with 'apodizing' performance realises the promise of Compact Disc

New, improved DSP, CPU, clocking, decoding, buffering and analogue circuitry

SpeakerLink RJ45 single-wire audio/control interfacing capability

808.2 Player-only version, or 808.2i Player/Preamplifier version including built-in stereo preamp functionality

S/PDIF coaxial and RJ45 balanced (AES/EBU) digital outputs for connection to Meridian DSP Loudspeakers or controllers

Balanced and unbalanced analogue outputs, fixed or variable for connection to preamp or power amp

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1984

Meridian MCD and Pro-MCD

Meridian's first CD player, the MCD, based on a Philips chassis with completely custom analogue circuitry, was the world's first audiophile CD Player. Its successor, the Pro-MCD shown here, included a separate custom-designed power supply, DAC and oscillator, mounted underneath the transport.



1985

Meridian invents the CD Transport

The idea of separating the transport from the rest of the player – to minimise jitter and other distortion from the mechanism – was developed to produce the world's first separate Transport/DAC product – the critically-acclaimed 200/203 shown here.



1989

Meridian 208 CD Player

The highly successful 200 Series included several CD players. Using different DACs as the technology developed, the 208 was a landmark in Meridian's CD player development, with up to 20-bit conversion capability and preamplifier functionality.



1991

Meridian 602 Transport and 601 DSP Preamplifier

The 600 Series was highly regarded by reviewers and owners alike, especially the 602 transport and its companion 601 DSP Preamplifier, 603 Digital Control Unit or 606 DAC.



1993

508 – Compact Disc Classic

The 500 Series, launched in 1993, developed into a full range of audio/video products, including Meridian's first DVD player, the 596, in 1997. Meanwhile, from 1994 onwards, the 508 set the standard for CD until the advent of the G08 in 2003.



2004

Meridian 800 Reference Series

Originally a superb DVD player, the Meridian 800 has developed to become one of the most highly-specified optical disc players in the world. From its impeccable pedigree came the original 808 Signature Reference CD player, and now the 808.2 – the highest quality Compact Disc player Meridian has ever built.



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Meridian: CD Innovator

Of all manufacturers, Meridian has the longest history of high-performance CD players. Meridian's first CD player, MCD, was introduced almost a quarter of a century ago. MCD sounded radically better than anything else available, and still stands comparison with many so-called audiophile designs of today.

In the intervening years, Meridian has relentlessly pursued the path of making better and better CD players, introducing more than 25 models – each one better than the one before. Every model has received critical acclaim, and we have gathered more than 50 awards for our CD players.

Over the years we have researched, pioneered and ultimately mastered the art of refinement of every aspect of CD playback. We showed how jitter was a major challenge to audio quality – indeed, Meridian was the first company to isolate jitter, as far back as 1984.

Our technologies include advanced servo implementations, unique power supply designs, significant innovations in the digital arena and, of course, peerless analogue sections. Meridian also pioneered the idea that special disc navigation could improve the playback quality on difficult discs (such as those with fingerprints, scratches or manufacturing defects). Our players also benefited from digital output capabilities.

Meridian was also the first company to offer a 2-box solution (utilising an outboard DAC), and has developed special phase-locked loops and FIFO buffers to produce the very best result in such systems – including of course our preferred system, a CD player directly connected to a pair of Meridian DSP loudspeakers.

Meridian has also offered its technologies for the mastering of Compact Discs. Some of the highest quality recordings have been made using our 607 A/D converter, while even more have used the 618 Mastering Processor to maximise the dynamic range on disc. Top recording studios tend to use a Meridian player for checking, and over the years a Meridian CD player has become synonymous with the best sound, and 'a reference'. This is a reputation we cherish, and one which we aim to defend by making each player better than the one before.

The press on Meridian's CD players...

Meridian CD Player

"...a breakthrough for CD players. ...[Soundstage] is where the Meridian renders the competition irrelevant and worthless."

—*The Absolute Sound*, Winter 1985

Meridian Pro-MCD

"I suspect that [the Meridian Pro-MCD] will be the first CD player to be regarded as a 'classic!'"

—*Hi-Fi News & Record Review*, Feb 1986

Meridian 207

"The original Pro-MCD set the benchmark in its day, but the 207-Pro was the radical step, placing Meridian for all time in the CD player hall of fame."

—*Hi-Fi Choice*, June 1990

"There is nothing else on the market remotely like the Meridian 207... It is...one of the finest-sounding CD players on the market."

—*Sydney Morning Herald*, Aug 1988

Meridian 602/606

"In Meridian we might be looking at a company that has a real contribution to make towards raising CD performance."

—*Audiophile*, June 1991

"...the 602 [via the 606] was damn near impossible to fault... Its resolution of the subtlest treble details was intricate to the point of being exquisite... the 602/606 turned out to be a very 'special' combination."

—*Hi-Fi Choice*, July 1991

Meridian 508

"...the Meridian 508.24...the world's best single-box player and used as a reference machine by renowned US publication *Stereophile*... brings out aspects of music that most players can merely hint at..."

—*Audio & Video Lifestyle*, 1999

"...the 508.24's measured performance reveals that Bob Stuart and his talented digital design team have done a fabulous job."

—*Stereophile*, May 1998

Meridian 800

"...the 800 is perhaps the finest overall CD player I've ever laid ears on. When you consider that there are some CD-only players round that demand this outlay, the price tag doesn't seem all that eye-watering... Takes audio to another level.... Without doubt the finest optical disc playing system we've encountered."

—*HiFi World*, December 2002

"...I found that the Meridian... was clearly superior... not just to my reference components, but to any other CD front ends that I've auditioned or reviewed.... The performance of Meridian's 800/861 with CDs is superior to the performance you get with the great majority of SACDs and DVD-As through any player."

—*Absolute Sound*, December 2003

Meridian 808

"The 808 is worth every penny asked for it. ...this deck is head and shoulders above almost everything else I have ever heard. It's beautiful, well built and sounds wonderful... After listening to this player for the last three months at least six (sometimes 10-12) hours a day, I'm still as infatuated with it as the day it arrived. The main thing is that the Meridian 808 is an extremely musical player that gets it right on all levels."

—*Tone Audio*, Issue 8, 2007

Why the 808?

Meridian decided to introduce the 808 Signature Reference Compact Disc Player for several reasons. We have been both surprised and pleased by increasing levels of interest in our popular G Series CD players: this tells us that there is a strong element of listeners who do not want pictures or complications attached to their music enjoyment, and wish to take advantage of the extensive selection that is available on no medium, to date, other than Compact Disc.

Thus the 808.2 is offered as an exquisite CD-only player, embodying the very best of our art and technology. And the 808.2 is a 'signature' model – each one hand-signed by Meridian's founders, Robert Stuart and Allen Boothroyd.

Meridian's 808.2 is the latest in a series of optical disc players that use a specially-selected ROM drive for reading. The ROM drive allows multiple passes to be made, ensuring that the correct data are recovered from the disc and improving Compact Disc's error-correction a hundredfold. It also allows complete buffering of the recovered data.

To ensure the lowest possible jitter, 808.2 incorporates an entirely new clocking regime and employs three buffers, two of which are used as FIFOs in a completely redesigned buffering environment.

By the time the data is passed to the DACs or the digital output, the jitter is incredibly low – in fact 808.2 has the lowest jitter we have ever measured on a CD player: even better than the original 808's 90 picoseconds, with the jitter spectrum held below 0.1Hz.

The signal path includes proprietary error correction and concealment, and Meridian's acclaimed 'Resolution Enhancement' DSP, in which the original 44.1kHz, 16-bit audio is upsampled to 176.4kHz, 24-bit in a new 150MIPs processor operating with

48-bit internal precision. This is 'true' DSP upsampling, completely redesigned for the 808.2 and unlike anything else available in the marketplace. This upsampling allows conversion-related filtering to take place far above the limits of human hearing, so there are no artefacts added to the sound – simply the pure music.

The 808.2 employs the latest, exquisite multi-bit over-sampled delta-sigma D/A converters, combined with a matching proprietary analogue output stage of the highest quality, completely redesigned for the 808.2.

Delivering the promise of CD

The new model includes many other new features, including the RJ45-based SpeakerLink interfacing system, allowing a direct single-cable link from the 808.2 to Meridian DSP speakers via convenient, easily-installed CAT-5 cabling. But the most significant is the new, proprietary digital filter system developed by Meridian and included for the first time in the new 808.2.

High-resolution audio prefers sample rates and bit depths higher than the 44.1kHz 16-bit CD format. For this reason our top-end CD players have incorporated resolution enhancement that includes upsampling. 808.2 perfectly upscales its outputs to 176.4kHz and 24 bits, significantly improving the sound.

But upsampling alone cannot improve on one aspect of CD: the original sampling rate of the recording. Digital audio captures sound up to half the sample rate and you have to filter out any meaningless information above that frequency (22kHz in the case of CD).

Traditionally, the steep filters required to do this job have audibly degraded the sound. The earliest analogue filters caused enormous phase shifts at high frequencies, and with digital linear-phase filters a big issue was the introduction of pre-echoes.

Robert Stuart Chairman and Technical Director
Meridian Audio Limited

Allen Boothroyd Design Director
Meridian Audio Limited

Each 808.2 unit is individually hand-signed by the founders of Meridian, Bob Stuart and Allen Boothroyd.



808.2 rear panel – the 808.2i is shown, with analogue and digital inputs

Meridian's goal was to invent a technology that stripped away this fundamental limitation in the making of the CD, taking the listener right back to the original higher-resolution sound – no mean ambition, nor a trivial task. But Meridian's founder, Bob Stuart, was sure that high-definition sound could be achieved without excessive sample rates – if the filters were right.

Bob authored an Audio Engineering Society paper on high definition audio in 2004 in which he recommended the development of 'apodizing' filters – filters that were minimum phase, with no ripple, causing no pre-echo: and thus offering perfect timing. He predicted they would even be able to fix problems in the origination process itself.

Meridian's research team designed an exquisite new filter based on this research – a filter with 'apodizing-like' qualities (you can't do a true apodizing filter for 44.1kHz sampling) – and its first appearance is in the 808.2. It needs significant DSP to deliver, using much of the power of the player's 150MIPS main processor. This filter system is so effective that it can even correct errors made in the recording or mastering stage – CDs played back on the 808.2 can sound even better than they did in the studio!

Bob Harley, editor of The Absolute Sound, reported: "CDs played through the 808.2 and the new DSP7200 active DSP loudspeaker sounded like high-resolution recordings". Why not listen for yourself?



Additional panel controls are accessed via the front left flap next to the main controls.

Outline Specifications

THD & Noise

- Better than –96dBFS

Mechanism

- Triple-beam laser, multi-speed CD/DVD-ROM transport

Converters

- 192kHz-capable, 24-bit, Delta Sigma converters operating at 4 x CD sample rate (176.4kHz)

Stereo Outputs

- Analogue: 1 unbalanced on phono, 1 balanced on XLR-3M: 2.3V rms fixed/variable, Class A, 47Ω impedance
Digital: coax unbalanced (S/PDIF), RJ45 balanced (AES/EBU) digital interface for single-cable connection of other Meridian equipment. Operating at up to 2 x CD sample rate (88.2kHz), 24-bit with MHR option.

Stereo Inputs

- (808i only) Analogue: 6 unbalanced on phono. Digital S/PDIF: 3 coax and 2 Toslink optical

Formats

- CD Audio (CD-DA), CD-R, CD-R/W

Comms

- Two 5-pin 240° DIN sockets for Meridian Comms, and RS232 full remote/configuration interface. Three programmable 12v trigger outputs. RJ45 for single-cable connection to other Meridian equipment.

Construction

- Black lacquer or satin silver finish in metal & glass

Controls

- Front-panel keys for Open/Close, Play, Stop, Pause, Previous, Next, On/Off. Additional controls behind hinged front access cover include Repeat, Fast Forward/Reverse, Display, Mute, Volume Up/Down, Store/Clear; Source. Full remote control via MSR+, RS232

Display

- 20-character dot matrix display with adjustable brightness and contrast. Indicators for Phase, Repeat and EQ (emphasis).

Dimensions

- 480mm (18.9in) x 175mm (6.9in) x 411mm (16.2in) (whd)

Power

- Universal power supply for 100–240Vac, 50/60Hz, 25W