

506 20-bit CD Player

Meridian take the 506 one step closer to the award wining standard of the 508 20-bit CD player. The new 20-bit 506 uses the same D-A conversion technonogy developed with Crystal Semiconductor for the 508 CD Player but without the added expense of precision re-clocking.

Background

It has become possible, principally through the mastering technologies of advanced psychoacoustic-based noise-shaping, to make compatible CDs with an effective dynamic range in excess of 19 bits. Meridian is the leader in this field, and the Meridian 518 Mastering Processor is widely recognized to make the best sounding CDs -- hundreds of which are now available.

In order to get the best from this compatible mastering process, the CD player needs to have considerably higher precision than was thought necessary some years ago. For example, to obtain the best sound from these 'super CDs' a player need, not only a D/A converter of more than 19 bits' precision, but also a DSP filter whose internal arithmetic exceeds 20 bit precision.

Meridian 506 20 bit CD player

Built as one of the world-famous 500-Series, this latest CD player from Meridian sports the same D/A converter as used in the 508 but without precision re-clocking

Over a period of three years, Meridian has worked closely with chip-maker Crystal Semiconductor, helping them to develop the ultimate converter. The resulting device, has the required 20-bit analogue and digital parameters.

The unique Meridian drawer system combines the user benefits of tray-loading with the important performance benefits of top-loading. The pick-up mechanisms use a carbon and glass-fiber anti-vibration disc clamp.

The 506 uses a Meridian CD transport that gives all the play ability advantages of a linear 3-beam pickup optimized for high-speed data recovery, with the famous Focault focus arrangement that gives adjustment-free setting, long life and great sound.

This CD transport uses in-house control software that, amongst its many features, adapts the player to the parameters of each CD. The laser pick-up uses a radical, proprietary analogue-processing system that de-jitters the data coming from the disc *before* it is decoded.

Contrary to market trends, Meridian refuses to compromise in the error-correction and digital signal processing capability of their CD players. The 506 uses a state-of-the-art decoder IC that provides an exceptional ability to correct disc defects.

The resulting sound is open, sweet, dynamic with spatial resolution.

Technical Data Sheet 506/1 – 23-10-96

Performance

20 bit differential-mode push-pull Digital -- Analogue conversion

Inputs and outputs

Digital outputs on optical, and S/PDIF cable Analogue outputs unbalanced

Construction

Precision data-grade Focault-focus linear three-beam laser pick up

Mechanical loader incorporating glass and carbon fiber damping wheel

Audiophile grade components used throughout

Full remote control using Meridian System Remote (MSR) provided

Absolute phase adjustable from remote

Meridian in-house servo software for higher play ability and better sound

Precision analogue-domain de-emphasis

Black textured enamel and glass finish

Dimensions 88mm (3.46in) H, 321 (12.64) W, 332 (13.07) D – Weight 5kg (10lbs)