PRODUCT INFORMATION SHEET

RED Reference CD Player

Product Description

Building on the success of the Blu and the DAC64 the RED Reference CD player has been designed as the ultimate source component. With stunning looks and state of the art design the RED utilises ground breaking technology to give the most accurate reproduction of compact disc that can be obtained. With internal 176.4KHz upsampling data transfer, selectable RAM buffer clock retiming and both 1024 and 4096 tap length filtering the RED earns its reference status in the Chord range.

Starting on the outside the RED features the Chord trademark design and is manufactured from solid aluminium giving a rigid support structure for the CD mechanism. The front panel design incorporates ball bearing push button control for the commonly used functions and a dual display showing CD status on one side and input, buffer and frequency information on the other. Uniquely the CD mechanism sits at 45 degrees to allow front access even if placed on a stand or in a rack. Access to the CD is at the touch of a button operating a solenoid controlled fluid damped door. At the rear connections are made via gold plated phono or BNC coax, plastic optical fibre or balanced XLR style connections.

Internally the latest CD Pro 2 mechanism from Philips is re-clocked using a highly accurate crystal oscillator then the synchronised data is fed to the upsampling and filtering electronics. Here the 4096 tap length WTA filter is used to minimise the transient timing errors and reconstruct the digital data to either 44.1, 88.2 or 176.4KHz sampling frequencies. This data is fed to the rear XLR and optical output connectors and also via a dual data bus to the digital to analogue conversion electronics. Based on the DAC64 the digital signal is converted from 176.4KHz to analogue audio using 1024 tap filtering and 64 bit digital signal processing core. This is followed by 64 bit 7th order noise shaping, 2048 times oversampling rates and improved pulse width modulated elements. This gives much better measured performance, better detail resolution with a smoother more focused sound quality. The DAC also features RAM buffer technology that sequentially takes in all the data, re-times, it then sends it out giving jitter free operation. Digital data from other sources can also be fed into the RED via the optical or AES balanced XLR connections.
All of the above innovations are implemented in Field Programmable Gate Arrays that can be reprogrammed by simply changing the EPROM memory chip, thus future proofing is assured.

The RED Reference is a truly unique product. As a standalone CD player it is able to deliver the best reference CD playback. The addition of digital inputs and outputs also gives it the ability to act as both a CD transport and DAC for other audio components making it completely versatile.

Product Specification

HARMONIC DISTORTION	< -98 dB (1kHz, 24-Bit @ 44.1KHz Sample Frequency)
SIGNAL TO NOISE RATIO	> 110dB
CHANNEL SEPARATION	> 110dB @ 1KHz (> 100dB @ 22KHz)
DYNAMIC RANGE	120dB
SWITCHABLE DIGITAL INPUTS	1 x AES Balanced XLR Input 1 x Plastic Optical Fibre (TOSLink)
DIGITAL OUTPUTS	1 x BNC coax 1 x Plastic Optical Fibre (TOSLink) 2 x AES Balanced XLR (Can be configured for dual data 176.4KHz)
ANALOGUE OUTPUTS	2 X RCA Phono 2 X BALANCED XLR
SWITCHABLE RAM BUFFER	Position 1 – No Buffering Position 2 – Minimum Buffering Position 3 – Maximum Buffering
WORD CLOCK INPUT	44.1KHz Word Clock Synchronisation via BNC input
SAMPLE FREQUENCIES	32KHz – 176.4KHz
OUTPUT MAX	6V rms. Balanced. 3V rms. unbalanced
OUTPUT IMPEDANCE	75Ω (short circuit protected)
POWER SUPPLY	Universal Input High Frequency Supply operates from 65V to 265V AC
DIMENSIONS IN MM	420 x 140 x 325mm (Width x Height x Depth)
WEIGHT	14Kg

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