MERIDIAN ULTRA DIGITAL TO ANALOGUE CONVERTER

OVERVIEW

Incorporating a host of innovative technologies and world firsts, the Meridian Ultra Digital to Analogue Converter brings our renowned expertise to the analogue realm.

With comprehensive connectivity options, user features and format support, it incorporates an extensive list of performance enhancing technologies including Dual Mono DAC cards, DSP filter options, upsampling and apodising. The result is a level of performance that is unachievable with normal DACs. The Meridian Ultra Digital to Analogue Converter represents a step change in engineering excellence, construction and technology.

PRODUCT HIGHLIGHTS

*   384kHz/24 bit dedicated DAC capable of playing a host of content including DXD, DSD64 and DSD128 (DoP) as well as MQA.

*   The first product in the world to include MQA's patented Hierarchichal Converter Technology.

*   An extensive range of connectivity options, including USB 2.0, S/PDIF, TOSLINK, 75 Ohm BNC and AES3 on XLR as well as Meridian's Speakerlink. One pair of balanced and one pair of unbalanced analogue outputs are also provided.

USER FEATURES

A significant number of user features are provided. As well as basic controls such as volume, mute, source and phase other features include LipSync, PC setup and RS232 enabling integration with third-party control systems.

In addition, uniquely on a Meridian product, the user also has the option to select one of three upsampling filters to deliver the very best performance when reproducing sources with a sample rate of 44kHz or 48kHz, including including CD-quality audio sourced from streaming services.

TECHNOLOGIES

CLOCKING

The only Meridian product that has a dedicated clock card for the lowest possible jitter. Incorporating Meridian's FIFO buffering all jitter is folded down below 0.5Hz. As well as reducing jitter this dedicated high-current clock design reduces low phase noise.

RESOLUTION ENHANCEMENT

Resolution enhancement technologies including dither shaping, Meridian upsampling and apodising filters are employed to deliver the very best performance from any digital source. Three DSP filter options - short, medium and long are available for the user to select.
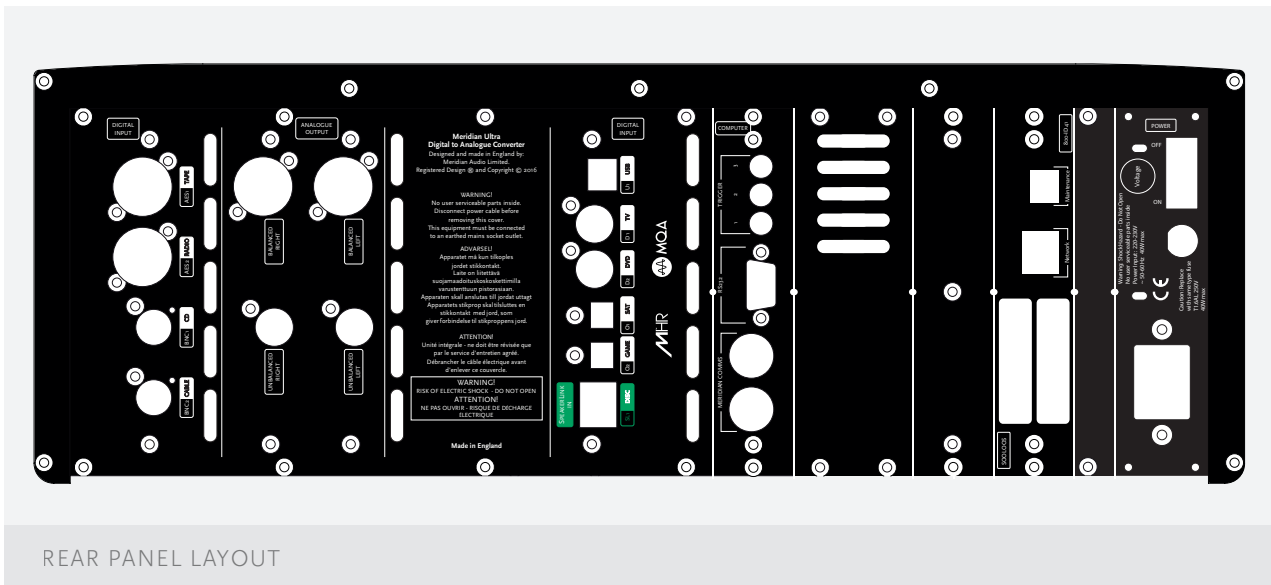
MQA rendering capability for analogue outputs.

DSD playback (DoP) – propriety impulse response optimized and multibit modulator conversion.

HIERARCHICAL CONVERTER TECHNOLOGY

The first product in the world to include MQA's Hierarchical Converter Technology, which is a patented DAC technology from the creators behind MQA. It employs multiple converters to increase temporal resolution while also reducing noise and quantization errors.

The result is a level of performance that is unachievable with normal DACs.

REAR PANEL LAYOUT

CONSTRUCTION

The first Meridian product to feature Dual Mono DAC card construction. It incorporates multiple regulated power supplies for the lowest noise interference with eight-layer board construction with low impedance planes for excellent signal isolation and grounding accuracy.

- **A DC coupled output** – no degradation from AC coupling capacitors.
- **Linear power supply** – for isolation from AC supply and increased reliability.
- **Non-ferrous chassis and panels** (aluminium construction) – linear hysteresis-free magnetics.
- **Quiet display** – static LCD for low electrical noise.
- **Custom colours** – Meridian Select colours available

SPECIFICATION

AUDIO OUTPUTS	• 2-channel balanced audio output	• 2-channel unbalanced audio output
	• Outputs driven by four 192 kHz digital to analogue converters	• The output stage incorporates Hierarchical Converter technology [by MQA]
AUDIO INPUTS	• One USB 2.0 input for connection to a computer. Up to 384 kHz sampling and up to 24-bit precision	
	• Two 2-channel balanced AES3 XLR inputs. 44.1kHz to 192kHz sampling and up to 24-bit precision	
	• Two 2-channel 750 Ohm BNC coaxial inputs. 44.1kHz to 192kHz sampling and up to 24-bit precision	
	• Two 2-channel digital coaxial S/PDIF inputs. 44.1kHz to 192kHz sampling and up to 24-bit precision	
	• One 2-channel Meridian Speakerlink input. 44.1kHz to 192kHz sampling and up to 24-bit precision	
	• Two 2-channel digital optical TOSLINK inputs. 44.1kHz to 96kHz sampling and up to 24-bit precision	
	• One network input (Ethernet) for connection to a Roon or Meridian Sooloos System	
	• Re-nameable legends for all inputs.	
CONTROL SIGNALS	• Two Meridian Comms 5-pin 240° DIN sockets	• RS232 interface for control and maintenance
	• Three 12VDC/100mA trigger outputs configurable by source	
CONTROLS	• FRONT-PANEL: Source, DSP, Display, Mute, Off, Volume +/-, Setup, and Menu keys	
	• REMOTE CONTROL: IR (via Meridian System Remote) and RS232	
DISPLAY	• 20-character dot-matrix display with adjustable brightness and contrast	
	• Indicators for Emphasis and Phase	
POWER	• Advanced linear power supply: 100V ac 50/60 Hz | 110-120V ac 50/60Hz | 220-240V ac 50/60Hz	
	• Max power consumption: 40 Watts	
DIMENSIONS	• HEIGHT: 175 mm [6.9 in]	• WIDTH: 480 mm [18.9 in]
	• DEPTH: 411 mm [16.2 in]	• WEIGHT: 16 kg [35.2 lbs]
PACKED DIMENSIONS	• HEIGHT: 320 mm [12.6 in]	• WIDTH: 650 mm [25.6 in]
	• DEPTH: 560 mm [22 in]	• PACKED WEIGHT: 20 kg [44 lbs]