



**MERIDIAN**

## PRODUCT INFORMATION

### DIRECTOR

#### USB & S/PDIF 24/192 DAC

Director delivers superior sound quality from computers, network players and other digital sources into an analogue hi-fi.

REDEFINE THE POSSIBLE



**Meridian's Director is a high-quality DAC (Digital to Analogue Converter) designed to deliver superior audio quality from digital sources such as media players and computers when listened to on analogue hi-fi systems. Built in Britain to the same exacting standards as any Meridian product, Director is particularly appropriate for installation systems.**

Director features three digital inputs. A USB2 B socket allows it to be connected to a computer for playback of computer-based sources such as network and audio file players, far exceeding the audio performance of a standard computer sound card.

A 3.5mm hybrid socket provides input for S/PDIF digital signals, either coax (via a 3.5mm mono jack) or optical (via a Mini-TOSLINK connector). Two adaptors are included: one allows standard coaxial S/PDIF phono cables to be used with Director while the other allows standard TOSLINK optical cables to be used.

Director forms the ideal add-on for network players, video streamers and music servers, bringing Meridian performance to an entire class of audio products, significantly out-performing the standard DACs found inside computers and most network players.

Director supports sample rates up to 24-bit, 192kHz and incorporates Meridian Resolution Enhancement technologies, including Meridian Upsampling and the Apodising filter, which audibly improve audio quality. The proprietary Apodising filter can actually improve the sound of some digital recordings by fixing recording faults. Standard sample rate signals (16–24 bit, 44.1/48kHz) are automatically upsampled to 24-bit 88.2/96kHz, allowing filtering to be carried out far above the range of human hearing.

Director includes separate precision reference oscillators for sample rates based on 44.1 kHz and on 48 kHz, minimising jitter. The DAC itself offers extremely low modulation noise and distortion,

### Key Features

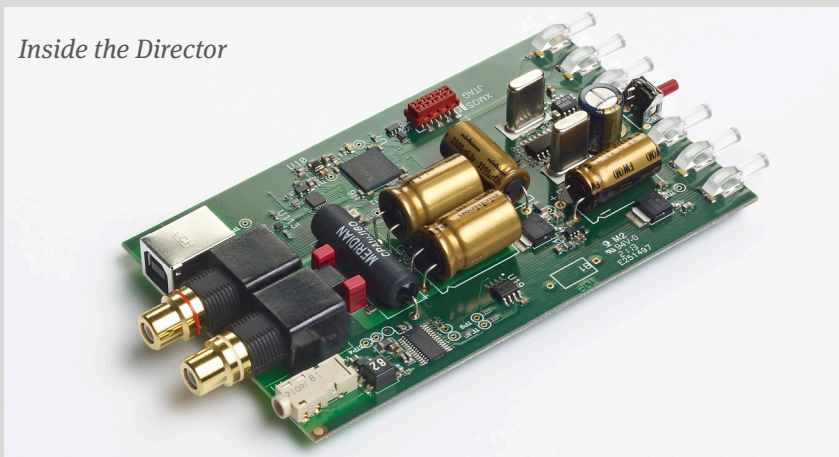
- Up to 24-bit, 192kHz Digital to Analogue conversion
- Meridian Resolution Enhancement technologies including Upsampling and Apodising
- 16–24 bit 44.1/48kHz inputs upsampled to 24-bit, 88.2/96kHz
- Takes digital audio from USB, Optical and Coax S/PDIF
- Separate crystal oscillators for 44.1- and 48kHz-based sample rates for minimal jitter and improved performance
- Music grade power supply capacitors
- Direct-coupled, fixed output for connection to an audio system or powered loudspeakers
- 4-layer PC board minimises noise and improves performance
- Durable, elegant anodised metal enclosure



Director front and rear panels



Inside the Director



and incorporates the highest-quality components throughout, including audiophile grade capacitors, resistors and gold-plated phono sockets. Some features of the design are based directly on circuitry and components used in Meridian's 800 Series.

Director is powered solely via the USB2 B socket, either when connected to a computer for playback or via the included power supply. The USB port is also used for firmware upgrades.

Director offers plug and play operation with Macintosh computers, while a driver is required for Windows (XP or later): this is the same driver used for the Explorer DAC. In USB mode, Director uses asynchronous transfer for the best sound quality.

Director is designed for connection to an analogue hi-fi or audio system with its own volume control, and is particularly appropriate for installation environments. It is bit-precise and delivers the lowest possible distortion and modulation noise. The 2v RMS fixed-level analogue output includes anti-thump circuitry for trouble-free performance at switch-on.

Director is enclosed in a sturdy, durable anodised aluminium extrusion case with moulded endcaps. LEDs on the left of the front cap indicate the selected input in conjunction with a pushbutton that steps through the available sources. When S/PDIF is chosen, the optical or coax input is selected automatically. The most recently selected input is remembered across power cycles.

## Outline Specifications

### Inputs

- 1 x USB2 B socket for computer playback (24-bit,  $\leq 192\text{kHz}$ )
- 3.5mm socket offering S/PDIF coax (3.5mm mono connector, (24-bit,  $\leq 192\text{kHz}$ ) or S/PDIF Optical (3.5mm Mini-TOSLINK, 24-bit  $\leq 96\text{kHz}$ )

### Outputs

- 1 x analogue stereo pair (gold-plated phono), 2v RMS fixed

### Controls & Indicators

- 3 x Sample rate LEDs: 44.1/48, 88.2/96, 176.4/192 kHz sampling
- 2 x Input selection LEDs. Input selected with input pushbutton: S/PDIF, USB. Optical/coax digital selected automatically.

### Construction

- Aluminium extrusion with moulded endcaps

### Power

- 5v  $< 500\text{mA}$  DC via USB interface

### Dimensions

- 80mm (3.15in) x 139mm (5.47in) x 34mm (1.34in) (WDH)

### Weight

- 0.25kg (9oz)

A further set of LEDs to the right indicates the input sample rate. When the 1x LED is illuminated, Director is receiving a signal at 44.1 or 48kHz sampling: (upsampled to 88.2/96kHz). When the 2x LED is on in addition, the unit is receiving 88.2/96kHz and when the 4x LED is also lit, 176.4/192kHz is being received.

Director is particularly useful for installations where, for example, a network player is to be connected to an existing analogue hi-fi system. The use of Director in this kind of configuration will significantly increase overall audio quality.

Equally, Director can be used to link the digital output of a classic component such as a CD player or music server with a digital output, to an analogue audio system.