

La Scala MKII Optologic DAC

the new standard reference in a class by itself

Key features

- High performance proprietary FPGA-based digital decoding without digital filter
- Galvanic and magnetic isolations between the FPGA and the four branches of the R2R ladder converter
- Custom designed discrete circuit with high-speed optocouplers for Galvanic and magnetic isolation between Digital stage and Analog DAC ground
- Jitter free digital interface AQLink PRO (I2S protocol), uncompromising digital connection to La Diva cd transport
- Zero S/PDIF Jitter design, digital receiver stage PLL (phase locked loop) technology
- High-performance AQ Discrete Regulator (MOSFET, J-FET, BJT) for analog and digital DAC's power supply
- Valve-Mosfet direct coupling analog stage in pure class-A without negative feedback
- MOSFET Virtual battery circuit for analog anode supply
- Soft-start power up for extended tube life
- MODULAR DESIGN with upgradeable multi board platform
- 2 separate low noise power transformers, one for the analog and one for the digital section
- Transformer-based true balanced audio output stage
- Regulated DC filament supplies with soft start for tubes
- Fully discrete analog stage
- Proprietary USB Firmware / driver :
Apple MAC OS - Linux OS : USB asynchronous native support, no need to install drivers software
- Fully upgradeable asynchronous USB high-speed module with resolution up to 24 bit and 384 KHz, operates with computers running OSX 10.7 and above, WINDOWS XP, 7, 8 and 10 ASIO bit perfect
- Digital phase selector on front panel
- High-quality parts selected for sound quality:
 - 105° long life capacitors
 - low noise Metal Foil ultra-precision resistors
 - double metallized film pulse capacitor
 - ultra-fast diodes
 - halogen free cables
- Aluminium anti-resonant cabinet with Nextel
- Designed and handmade in Italy

Performance characteristics

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|-----------------------------------|---|
| Native Sample Rates Supported | AQLink / I2S serial bus - USB PC Audio : 24 bit / 384 KHz S/PDIF - AES/EBU : 24 bit / 192 KHz |
| Asynchronous USB (High Speed) | USB Type B |
| Digital Receiver | PLL (phase locked loop) technology 128 or 256 FS internally selectable |
| AQLink (I2S bus) | CMOS level |
| Digital to analog conversion type | Proprietary Optologic DAC |
| Oversampling factor | 1x |
| Digital to analog conversion type | Multibit sign magnitude R2R ladder (upgradable) |
| Analog Conversion method | Pure R2R ladder - FPGA (Field Programmable Gate Arrays) based digital decoding without digital filter |
| Analogue Outputs | UNBAL 2 RCA Output 2.2 V RMS BALANCED (symmetrical output) 2 XLR Output : 2.2 V RMS |
| Output Impedance | 100 Ω RCA - 600 Ω XLR |
| Load Impedance | 10 k Ω (min.) RCA - 600 Ω XLR |
| Frequency Response | 20Hz to 22kHz +0.5dB/-0.5dB |
| Phase Response | Linear phase |
| THD + N | <0.1% 1KHz -20dB |
| Front Panel | Power, input selector, Phase Invert switch |
| Power Consumption | 100-115V / 220-240V; 50 or 60Hz - 58VA |
| Dimensions | (W x D x H) 450 x 370 x 100 mm |
| Weight | 9 kg |
| Front finish | Satin Alu Silver or Satin Black |
| Case finish | Grey Nextel powder coated |

Handcrafted in Italy



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