

Hugo

Transportable FPGA Digital/Analogue Converter and Headphone Amplifier



Features and specifications:

Materials: Clamshell precision machined aluminium casing with polycarbonate

buttons, acrylic signal window, and glass viewing portal. Available in a choice

of two colours - natural silver, and satin black

Battery: 2x Rechargeable custom Enix Energies 3.7v 9.6Wh Li-ion (lithium-ion

(2600mAh) batteries

Play time: In excess of seven (7) hours

Charging: Nominal four (4) hours via Micro USB at 1.8amps (fast charge) -

Nominal eight (8) hours at lamp (slow charge)

Connectivity (input): Micro USB (White): 44.1kHz - 768kHz - 16bit - 32bit

Coax via 3.5mm Jack (Red): 44.1kHz - 768kHz - 16bit - 32bit Optical (Green): 44.1kHz - 192kHz - 16bit - 24bit

Connectivity (input wireless): Bluetooth (Apt X) (Blue): 44.1kHz - 48kHz - 16bit

Connectivity (output): Ix 1/4" jack headphone output

Ix 3.5mm jack headphone output Ix stereo (L & R) RCA output

PCM support: 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz, 358.8kHz, 384kHz,

717.6kHz, and 768kHz.

DSD support: Native playback supported. DSD64 (Single) to DSD512 (Octa-DSD)

Volume control: Digital, activated in IdB increments. Last known state saved upon

shutdown, with exception of line-level mode

Line-level mode: Activated via dual press of middle 'Source' and 'Crossfeed'

buttons. Line level = 3v via all outputs. Reset by power cycle

Power saving mode: Auto-shutdown after ten minutes of input inactivity

Driver support: Driverless with Mac OS X and Linux, driver required for Windows OS

User Configurable Options:

Filters (Digital): Hugo (Ultimate Reference) (White)

Hugo HF+ (High Frequency roll off) (Green)

Mojo ('Smooth') (Orange)

Mojo HF+ (High Frequency roll off) (Red)

Crossfeed (Digital IIR): Level 1 - Light

Level 2 - Medium Level 3 - Heavy

Control options: Manual

Remote control (included)

Technical specifications:

Chipset: Chord Electronics custom coded Xilinx Artix 7 (XC7A15T) FPGA

Tap-length: 49,152

Pulse array: 10 element pulse array design

Frequency response: 20Hz - 20kHz +/- 0.2dB

Output stage: Class A

Output impedance: 0.025Ω

THD: <0.0001% IkHz 3v RMS 300 Ω

THD and noise at 3v RMS: 120dB at 1kHz 300ohms 'A' wighted (reference 5.3v)

Noise 2.6 uV 'A' weighted: No measurable noise floor modulation

Signal to noise ratio: 126dB 'A' Weighted

Channel separation: 135dB at 1kHz 300Ω

Power output @ IkHz I% THD: 94mW 300Ω

 $740 \text{mW} \ 33\Omega$ $1050 \text{mW} \ 8\Omega$

Weight: 450g

Dimensions: $130 \text{mm} (L) \times 100 \text{mm} (W) \times 21 \text{mm} (H)$

Boxed Dimensions: 220mm (L) x 122mm (W) x 85mm (H)

Supplied materials:

Charger: Region specific 2amp USB Type A Fast charge

Cables and Remote: Comprehensive cable pack and card remote control included

Visual overview:

USB Input:



Digital inputs and analogue outputs



Signal window:



Natural silver and satin black:

