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Made in
BRITAIN

Chord Electronics
Product Communication | English
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Qutest   V.2.0   ○ CHORD ○
Manual   Chord Electronics Ltd.
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_____ **Drivers**

Qutest is compatible with a wide variety of devices, including Mac OS X, Windows, Linux, iOS and Android systems. Drivers are required for Windows-based operating systems and these can be located on the product page on the Chord Electronics website: **chordelectronics.co.uk**

_____ **Start-up sequence**

Upon connection to power, Qutest will perform a start-up sequence evident by the internal sample rate indicator cycling through a series of rainbow colours. This will take approximately 16 seconds. During this time, Qutest may not be discoverable, or output any audio. As mentioned, Qutest automatically remembers last-used settings including Filter, Input, and Line Level selection.

NOTE: When the correct input is selected on Qutest and the device successfully detects an incoming signal the sample rate indicator will illuminate (located within the viewing porthole).

_____ **Galvanic isolation**

Galvanic isolation involves isolating the power rails of the data USB input, allowing for greater sonic performance. Qutest features a Class 2 Type-B USB input with this protection. No special attention or cables are required to allow Qutest to function.

NO SOUND? Make sure that you have correctly selected Qutest as the digital audio output on your machine. When plugging Qutest into your computer, Qutest may not immediately or automatically be selected. For more help please visit: chordelectronics.co.uk/get-support

⚠ Qutest must be connected to a device capable of attenuating its output before being used. Connecting Qutest directly to a power amplifier can cause irreparable damage to your equipment and your hearing.

If you require any help or advice, we first recommend contacting your original dealer. They will have the best understanding of your system and will be able to offer you bespoke advice. If you require further assistance please visit the support page of the Chord Electronics website: **chordelectronics.co.uk/get-support**

_____ **Specifications**

Tap length	WTA1 16FS filter 49,152 taps
Elements	10 Element Pulse Array Design
Frequency response	20Hz - 20kHz +/- 0.2dB
Dynamic range	124dB A-Weighted
THD	0.0001% 1kHz 2.5v RMS 300Ω
Channel separation	138dB at 1kHz 300Ω
Noise floor modulation	None measurable
Dimensions	41mm (H) x 160mm (W) x 72mm (D

Made in
BRITAIN
established 1989
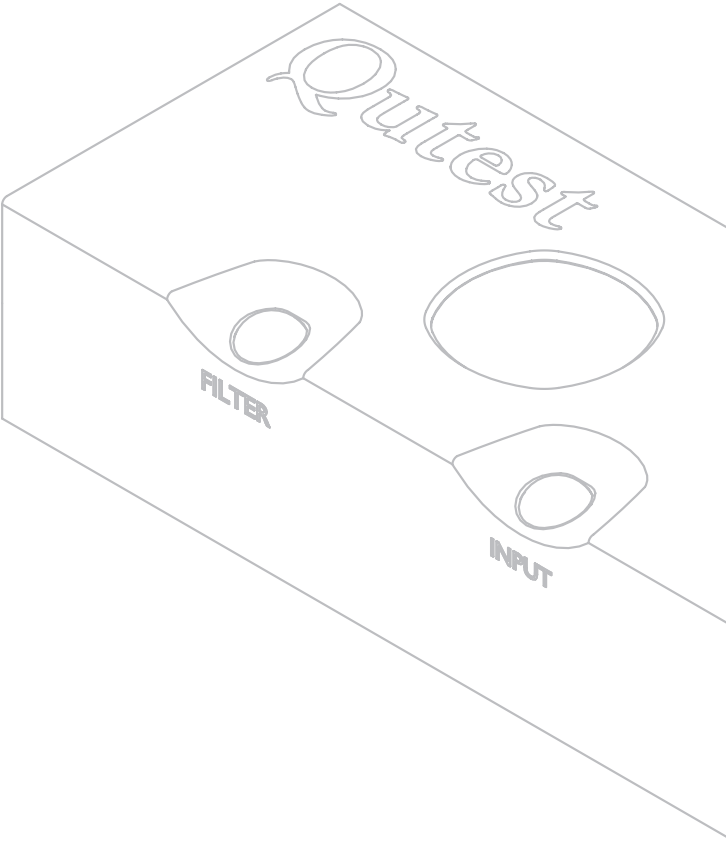
General operation, and important information 1.0

Introduction
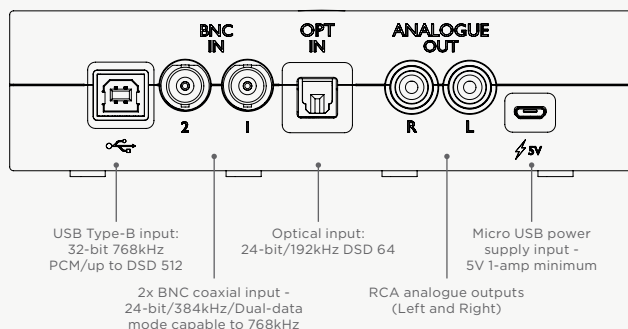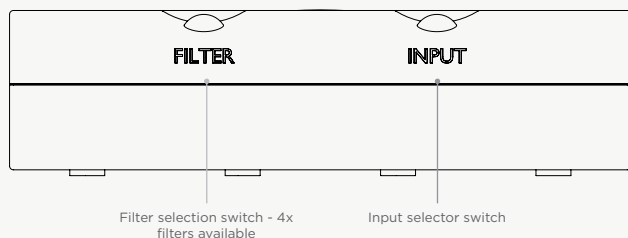
Welcome to Qutest, an advanced ultra-compact FPGA digital-to-analogue converter proudly developed and manufactured by Chord Electronics in Kent, England. Please take a few moments to familiarise yourself with its operation.

Rear

USB Type-B input:
32-bit 768kHz
PCM/up to DSD 512

2x BNC coaxial input -
24-bit/384kHz/Dual-data
mode capable to 768kHz

Optical input:
24-bit/192kHz DSD 64

RCA analogue outputs
(Left and Right)

Micro USB power
supply input -
5V 1-amp minimum

Front

Filter selection switch - 4x
filters available

Input selector switch

Power connection

Qutest is supplied with an external power supply and has been designed to be permanently connected to a power source. A 5V 2.1-amp Micro USB cable and power supply is supplied. Note: Qutest cannot be powered via the USB

Selectable options and variable line level 2.0

Qutest has two selector spheres on the front of the unit, FILTER and INPUT. Each button also has an additional function - variable line-level output mode and variable display brightness. Please refer to the sections below to learn more.

Filters

By cycling through the four filter options, it is possible to subtly change the device's tonal characteristics. Qutest achieves this not by strictly applying an equalisation curve, but by changing the way in which the FPGA handles the data.

Incisive neutral

Designed for all who wish to hear the full spectrum of audio no matter what sample rate, this option has an ultra linear frequency response. For the technically minded this includes a 16FS to 256FS WTA2 filter.

Incisive neutral HF roll-off

Designed for purists in mind, who playback high sample rate PCM recordings, this option has an ultra linear frequency response with a high frequency filter past 20kHz to remove HF distortion and noise from these recordings. This includes a 16FS to 256FS WTA2 filter with the HF filter enabled.

Warm

Designed to introduce a little warmth to recordings, this filter will satisfy. This is a 16FS WTA1 filter only.

Warm HF roll-off

Designed to introduce a little warmth to recordings, this filter will satisfy and is ideal for high resolution PCM playback. This is a 16FS filter but with a high-frequency roll-off.

Inputs

With four selectable digital input options, Qutest is a standalone DAC that acts as a digital hub to allow audio components to be instantly upgraded. Many hi-fi and audio components can benefit, including CD transports and players, streamers, computers, laptops, tablets and smartphones, plus most audio devices with a suitable digital output.

HD Type-B USB

Up to 768kHz and DSD 512 native playback. DSD 64 - DSD 256 via DoP, native DSD via ASIO

COAX 1

Up to 384kHz and up to DSD 128 (via DoP). Dual-data* capable

COAX 2

Up to 384kHz and up to DSD 128 (via DoP). Dual-data* capable

Optical input

Up to 192kHz and DSD 64 (via DoP)

*M-Scaler compatibility: Using dual data, Qutest can accept an upsampled signal from a Chord Electronics M-Scaler. To do so, connect the Dual-Data BNC outputs 1&2 of M-Scaler, to input BNC's
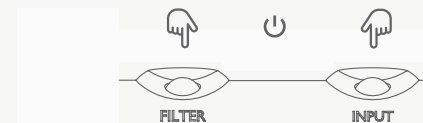

Variable line level output and how to read sample rate 3.0

Variable line level output

Qutest has a three-stage variable output voltage feature (1V, 2V and 3V) enabling compatibility with a wide range of partnering amplifiers and pre-amps.

(1) During start-up (the first 16 seconds), simultaneously press both 'FILTER' and 'INPUT' buttons
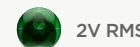
FILTER   INPUT

(2) Release press and repeat the duplicate press again to reach the desired output level ranging from 1V, 2V and 3V. Once the start-up sequence has completed, the output level will be fixed. Repeat the steps above to change the level.

1V RMS   3V RMS   2V RMS

MEMORY FUNCTION:
Qutest remembers the last-used setting, including filter, input and variable voltage selection.
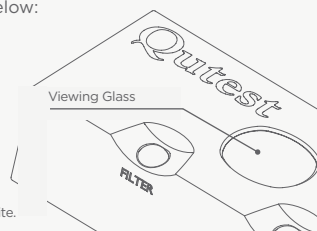
Setting the brightness of the LEDs

To adjust the brightness level (after Qutest has finished the start-up sequence), again, press both 'FILTER' and 'INPUT' to cycle between 'High' and 'Low' modes. This will dim both the internal and external LEDs.

How to read sample rate

Qutest is fully future-proof with 768kHz PCM support, DSD up to 256 via DoP (Mac) and native DSD up to DSD 512 playback (via ASIO driver for Windows). Sample rate switching is fully automatic, intuitively triggered by your device, playback application or computer. You can identify the incoming sample rate by observing the colour displayed in the viewing porthole and referencing it to the guide below:

PCM   44.1kHz to 768kHz - 16-bit to 32-bit
       Automatic sample rate switching

DSD   DSD up to DSD 256 via DoP,
       native DSD up to DSD 512 via
       ASIO driver

Viewing Glass

* Native DSD playback is only available via Windows OS with the driver available from the Chord Electronics website.

Sample frequencies in kHz

| 96 | 176.4 | 192 | 352.8 | 384 | 705.6 | 768 | DSD |