

# Prism Sound Orpheus | £3,225

Prism Sound are famous for their high-end converters and mic pres, but a FireWire interface is new territory for them. *Jon Musgrave* investigates...



## WHAT IS IT?

FireWire audio interface

## CONTACT

Who: Prism Sound Ltd  
Tel: +44 (0)1353 648 888  
Web: [prismsound.com](http://prismsound.com)

## HIGHLIGHTS

- 1 Effortless sound
- 2 Flexible connectivity
- 3 Smooth software integration

**S**etting up your own high-quality native DAW has never been simpler, and a FireWire interface is often the best

solution. But if you want the best quality and have £1000 to spend, you'll find you have only a few options. No doubt the same thinking led pro audio company Prism to come up with the Orpheus. From their configurable ADA-8XR converter to their Maselec mic pres, they certainly have the pedigree. But inevitably, quality costs, and at over £3k this could be in a class of its own.

## Features

Many FireWire interfaces combine conversion, mic pres and also some form of software driven low-latency monitoring, and this is the same for Orpheus. At the most basic level it offers 18 streams of in/out (eight analogue, eight ADAT and two S/PDIF) and MIDI, with four mic pres, two instrument inputs and two headphone outs. However, this typical spec doesn't really portray the quality or flexibility of the unit. With conversion based on their other units, a new mic pre design, state-of-the-art 'CleverClox' clocking, and carefully engineered balanced audio

paths to minimise hum and noise, the emphasis is clearly high-end. But possibly the most significant aspect of Orpheus is its software control system. Pretty much every aspect of the unit is configurable from here, including mic pre options (and mic gain) and software monitoring, and this explains why the front-panel is so sparse. The back panel on the other hand is anything but. The first four inputs (which are the ones that include mic pres) are on combi XLR/TRS connectors. All other analogue

connections are on TRS jacks. Digital connectors include optical (for both ADAT and S/PDIF) and coax (which can handle both AES and S/PDIF). Maybe a little surprisingly there are no insert points on the mic inputs.

In addition to the basics, Orpheus has a number of extras including real-time sample rate conversion on the S/PDIF ins and outs, individual phase reverse, low cut and phantom power on the mic inputs, real-time M/S stereo decoding on the mic inputs, and various clocking options. You can even run it in ADAT Direct mode as a standalone 2-way ADAT signal converter. It's also nice to see individual limiters (called overkillers) on all inputs.

If this all sounds a bit complex, the front-panel display is compact but informative, and by the careful use of multi-coloured indicators, shows an enormous amount of information.

## In Use

Out of the box the Orpheus feels very well made. Having tried many FireWire interfaces, for me it's important that a unit not only sounds good but also feels stable and responsive. In use, the Orpheus software seemed as good as

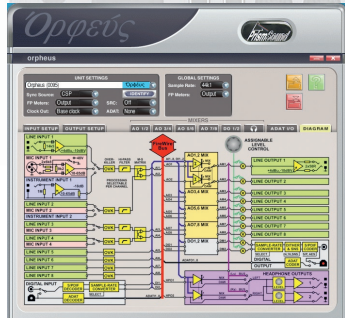
## What's The Deal With Jitter?

If you're trying to achieve the best possible audio conversion, your converters need to be clocked as accurately as possible. But what exactly does that mean? It boils down to the signal that controls the sampling intervals of the converter. Small variations in this are known as jitter, and in practice this results in undesirable distortions. Typically, these will be

aharmonic and will be audible in higher frequencies and masked in lower frequencies. In practice, people interpret this as a lack of definition in complex high frequencies. This may simply make things sound dull, but could reduce the accuracy of stereo information. If you need to clock your unit using an external signal such as S/PDIF, things can be

further affected by the transmission of that signal. The typical solution is a phase-locked loop (PLL). Orpheus tackles both situations by providing a stable clock, making it a perfect master clock. It also includes their CleverClox system which removes jitter from incoming clock sources, allowing the unit to both slave to and re-generate jittery external clock.





Orpheus' comprehensive routing software makes integration seamless



Routing your inputs and outputs is all controlled through the bundled software

any I've tried, with responsive buttons and faders and corresponding feedback from the front-panel display. One rather nice feature is the option to assign the front-panel knob to any number of the output levels. This would be great for controlling multiple surround monitoring feeds, and in a stereo setup allows you to assign control of your monitor output

shutting down (although that would be nice). Even so, because it reboots when you change certain settings in its software, this would be a welcome 'monitor protecting' addition.

**Pristine**

Sonically, it's very difficult to fault the Orpheus. Anyone familiar with their mic

software, there's no evidence of the zipper noise you get with cheaper gear.

While we're on the subject of software, you can set up outputs to follow your audio application direct (DAW), or set up individual mixes for each output pair using the software mixer. This is simple enough, allowing you to combine analogue and S/PDIF inputs with your DAW source. What it won't let you do is factor in the ADAT connections (should you be using them). I'm also a little surprised that the twin headphone outs are sourced from the same headphone sub mix, so you can only have one headphone mix.

**Verdict**

The Orpheus is a serious piece of kit that delivers excellent quality precisely where you would expect – mic pres and conversion – but packs in all sorts of other useful pro-level features. At over three grand it's the most expensive standalone FireWire interface I've ever tried, and on price alone I must confess I'm struggling to think of any direct

competition. For all its capabilities, I'm a bit surprised there are no insert points or more flexibility in the headphone department, and it must be said that some of the cheaper quality interfaces offer more flexible software mixing. However, in use, it was extremely stable and sounded fantastic and possibly marks a new state-of-the-art for the FireWire interface. **FM**

Anyone familiar with their mic pres and converters will know that colouration isn't really their thing

while your main outs remain untouched. The knob also has a push-button action (yet to be implemented). I think this would make a perfect overall or assignable mute option.

While I'm on the subject of muting, it's also worth noting that the Orpheus seems to have no automatic muting. Maybe you wouldn't expect this when

pres and converters will know that colouration isn't really their thing, and the same is very true of this box. If I were to say you're unaware it's there, that's probably the best compliment. This extends to control of mic levels and outputs with behaviour akin to the better digital desks, and even though you're making level adjustments in



**SPECS**

- System Requirements**
- Mac:** OS X 10.4 or later, Core Audio application, free FireWire port
- PC:** Windows XP or Vista, ASIO or WDM application, free FireWire port
- Analogue inputs:** 4 x combi XLR/TRS, 4 TRS jacks, 2x TS instrument
- Analogue outputs:** 8 TRS jacks, 2x TRS headphones
- Digital:** coax in/out, Toslink optical in/out, Word Clock BNC in/out, MIDI in/out, two FireWire ports
- Input impedance:** line 14.5kohm, mic 5.5kohm, instrument 1Mohm
- Input Gain:** 10dB to 65dB mic and instrument
- Optional low cut filter (inputs 1 to 4):** 80Hz, Optional RIAA turntable de-emphasis filter (inputs 1 & 2)
- Digital formats**
- S/PDIF (44.1, 48, 88.2, 96, 176.4 & 192kHz), ADAT (8 channel) 44.1 & 48kHz, ADAT SMUX (4 channel) 88.2 & 96kHz, AES via S/PDIF phono using included converter cable
- Synchronisation sources:** local, word clock, S/PDIF input, ADAT, slave to 1394 buss (host or another interface)
- Dimensions:** 440x290x50mm
- Weight:** 3.7kg

**ALTERNATIVES**

**Metric Halo Mobile I/O 2882**

**£1,279**  
Can include additional onboard DSP for real-time processing, but are limited to 96kHz and are Mac only. [mhlabs.com](http://mhlabs.com)

**Apogee Ensemble**  
**£1,404**

Apogee's Mac-only interface integrates perfectly into Logic and delivers fantastic performance. [apogeedigital.com](http://apogeedigital.com)

**RME FireFace 800**  
**£999**

Another long-established interface with flexible software monitoring and rock-solid RME drivers. [rme-audio.com](http://rme-audio.com)

**FutureMusic VERDICT**

<b>BUILD</b>	████████████████████
<b>VALUE</b>	██████████████████
<b>EASE OF USE</b>	██████████████████
<b>VERSATILITY</b>	██████████████████
<b>RESULTS</b>	██████████████████

PrismSound have raised the bar with their high-end all-in-one FireWire interface.