

Focus on FireWire

Karl Foster rounds up a sextet of the finest FireWire audio interfaces around and asks... which is best for you?

Anyone serious about making music soon graduates from system sound or gaming-type soundcards to a high-quality audio interface. The sound quality, inputs, outputs and routing options of a dedicated device blow consumer-audio solutions into the weeds when it comes to driving a sequencer and recording live audio.

There are many interfaces to choose from, including PCI cards, cards with breakout boxes, USB interfaces and – the focus of this round-up – FireWire. PC owners may ask, “FireWhat?” because their workstations don’t usually have FireWire as standard, so for those unfamiliar with the technology, FireWire (aka IEEE 1394) is a serial interface that comes in two kinds: 400 and 800, the numbers indicating their maximum data transfer rates in Megabits per second (Mbps). The former uses a 6-pin connector for devices that draw power from the bus and a 4-pin connector for those that don’t. FireWire 800, meanwhile, uses a 9-pin connector. FireWire peripherals can be daisy-chained, communicating on a peer-to-peer basis in that two devices can chat away without bothering the computer’s memory or CPU.

And if you’re thinking that USB 2.0 with its maximum 480Mbps data rate is superior to FireWire 400, bear in mind that FW 400 actually has a higher sustained data transfer rate, which is important when dealing with audio.

So having sold you on the technology, let’s take a look at some of the top audio interfaces currently available. We’ve gathered together six of the best, each of which appeal to different types of user, so you can decide on the right one for your working methods and budget...

MOTU Traveler | £795

Traveler is good for studio or mobile use and the spec is impressive: eight channels of analogue recording/

playback at 192kHz/24-bit; four mic/instrument ins, each with independent 48V phantom power; extensive digital connectivity including ADAT, AES/EBU and S/PDIF; 20 ins, 22 outs; Word Clock in and out; and, of course, MIDI I/O.

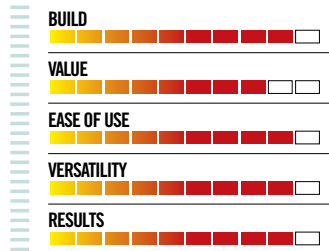
The Traveler draws its power from the 6-pin FireWire bus, and power requirements change depending on how you use the interface. The more I/O that are in use, the greater the power requirements.

You can use a mains adaptor should the battery be a problem, or if you're planning to use the Traveler as a stand-alone mixer. If you do, you'll miss out on the bundled mixing software that offers immense control over CueMix DSP, the latency-free digital mixing system that lets you create and save four separate stereo

monitor mixes, one of which can be bounced back to the computer for recording. The console also offers talkback and listenback buttons for communicating with musicians in a studio environment.

Multiple Travelers, as well as MOTU 828 and 896 FireWire interfaces, can be linked so you'll not be stuck for expansion options should your needs grow.

FutureMusic VERDICT



This professional, portable and flexible interface will find favour on the road and in the studio

RME Fireface 800 | £999

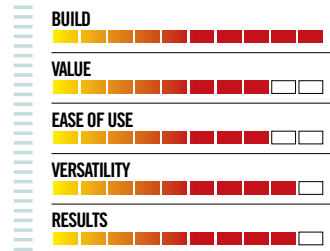
The only interface in our round-up that supports the super-quick FireWire 800 spec, although it's

compatible with FW 400 if you don't have the right port. The price tag is justified by impressive specifications, including eight TRS; four XLR and one TRS line inputs; an unbalanced 1/4-inch input; eight balanced TRS outs; one unbalanced, optical ADAT and S/PDIF connectivity; coaxial S/PDIF and word clock I/O. The audio ins can be used at the same time – you can feed up to 35 signals into the box simultaneously and record them on to 28 separate tracks. An internal flash memory retains the configuration of the TotalMix mixer so the unit can be used as a standalone submixer, pre-amp, format converter and more...

Those who record guitar and bass benefit from a Hi-Z input and a soft-limiter that can also create harmonic distortion, while a drive filter and a

speaker emulation filter remove the need to mic up a cab. The sturdy unit, featuring sampling of up to 192kHz on all analogue ins and outs, will sit at the heart of the studio and its FW 800 performance is enough to handle the volumes of data generated at more outrageous sample rates. Chain multiple Firefaces in parallel from just one port and you've immense audio-handling capability.

FutureMusic VERDICT



This high-performance interface offers numerous I/Os and the speed of FW 800 connectivity



We've all seen the front of the MOTU, so here's the back for you I/O lovers!



Traveler

- Audio ins: 20
- Audio outs: 22
- Digital: ADAT, AES/EBU, S/PDIF
- MIDI: In, Out
- Max sample rate: 192kHz

Fireface 800

- Audio ins: 14
- Audio outs: 9
- Digital: 2 x ADAT, S/PDIF
- MIDI: In, Out
- Max sample rate: 192kHz



Phase X24 FW

- Audio ins: 4
- Audio outs: 4
- Digital: S/PDIF
- MIDI: In, Out
- Max sample rate: 192kHz

FutureMusic



FA-101

- Audio ins: 10
- Audio outs: 10
- Digital: S/PDIF
- MIDI: In, Out
- Max sample rate: 192kHz

Edirol FA-101 | £359

This is Edirol's most sophisticated FW interface and is impressively well-built at the price. Its metal

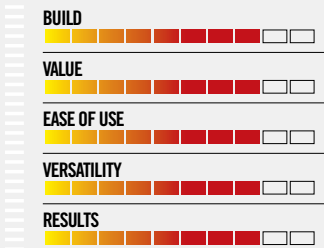
case is well able to withstand a good few knocks. Edirol suggest it's particularly handy for bands requiring the means to route multiple signals to a multitrack recorder while playing live. It's up to most such jobs thanks to a maximum ten input and output channels at 96kHz/24-bit, and also capable of 192kHz/24-bit in a 6-In/6-Out configuration.

Twin XLR/TRS inputs at the front offer switchable phantom power, optical S/PDIF also resides on the front panel, and there are six balanced 1/4-inch TRS sockets at rear, alongside six balanced outs, a stereo out, MIDI I/O and two FW sockets. The FA-101 is incredibly easy to use – ideal for those unfamiliar with audio/MIDI interfaces, but who need flexibility. Mac users can plug in and get working straight

away thanks to support for the Apple FireWire driver, and Windows XP users have ASIO 2.0 or WDM from which to choose once the supplied drivers are installed.

Straightforward signal routing, self-explanatory controls and a slick layout contribute to making the FA-101 a simple-to-use tool for a variety of studio and field applications, and it's unlikely to break the bank.

FutureMusic VERDICT



Good build quality and plenty of I/Os for the price – a sturdy, mid-range interface

TerraTec Phase X24 FW | £245

Although this interface is billed as the professional version of the Phase 24, it's more angled towards

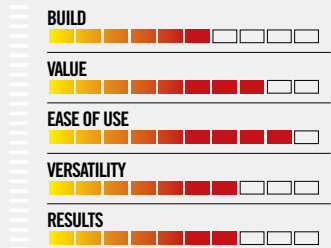
newcomers than high-quality audio recording solutions. This is a compact device offering less functionality than some of the interfaces in this round-up, but is useful for those putting together a portable recording set-up on a budget.

Two XLR/TRS inputs feature, each with phantom power, along with two balanced 1/4-inch ins, two insert jacks for looping an effects unit and four balanced 1/4-inch outs, two for main and two for monitor. Digital equipment can be connected via S/PDIF, while MIDI gear occupies In and Out sockets.

The A/D, D/A converters are 192kHz/24-bit, so no worries about audio quality, and there's support for Windows XP and Mac OS X. In itself, the X24 is pretty basic, but it does the job and isn't too expensive. The

deal is sweetened by the inclusion of Cubase LE for Mac and PC, plus PC versions of WaveLab Lite and Traktor DJ. So if you have a computer and need some rather fine music-making software (plus a no-frills interface for not a lot of money) the X24 bundle could be for you. More experienced and more demanding musicians should look to the MOTU and RME offerings featured on page 98...

FutureMusic VERDICT



A budget unit with limited I/Os, but well suited to newcomers to high-quality digital audio