



# Steinberg AXR4

**RUSSELL COTTIER** checks out a Thunderbolt audio interface with Rupert Neve Silk circuits

This flagship high-end 28/24 I/O interface has on-board DSP mixing and effects, quality preamplifiers and Rupert Neve Designs-approved physical modelling algorithms that emulate the Silk circuits. With high sample rate and 32-bit integer conversion it offers bold claims, but can it live up to expectations?

The unit is a 1U rackmount with the familiar Steinberg aesthetic, front panel connectivity includes four XLR Combi Neutrik inputs. Maybe not a popular look in higher end interfaces, but they do offer useful functionality for more intimate tracking sessions in the control room, for example. A large, clear multicolour LED screen shows context sensitive menus based on the last button pressed and immediately brings up relevant controls for intuitive and quick access to all the key parameters via the encoder.

## Smooth as Silk

An encoder is provided for the Silk texture: a dedicated button bypasses the mode and another selects between blue and red variations of the 'circuit'. This is physical modelling (DSP), but sounds great in a production, adding some character to the generally clean preamps.

A cluster of buttons and the LED screen and encoder offer extensive and clear control over parameters that might normally be difficult to access except via control panel software. Kudos to Steinberg for the menu implementation, which is both deep yet simple. The main rotary encoder has a metal outer and feels great, the push function is utilised well for menu navigation. A dedicated Mute button is useful, but the continuous LED flashing is quite irritating in peripheral vision, even with the LED brightness turned down to 1 in the rather nifty brightness menu.

The front panel has two headphones sockets with individual knobs to control volume. The outputs are loud and clear and again would be very useful in a small production studio. Feeds can be allocated either from Cubase, dspMixFX or the menu on the AXR4. However the

positioning of the adjacent power rocker switch is perhaps an oversight. Whilst hard power cut-off might be useful ecologically, positioning the rocker so it could be flipped as one turns up the headphone gain is a questionable choice.

The rear of the panel is packed full of connectivity with conventional TRS sockets for eight line inputs and eight line outputs. There are 16 channels of ADAT/SPDIF lightpipe I/O, eight of which can be assigned to the AES/EBU connector. 5-Pin DIN MIDI I/O is included, Word Clock and an expansion card loaded with two Thunderbolt 2.0 ports. Power is via a 4-pin XLR and inline supply.

Software installation was not the easiest process but the unit does come with a complimentary copy of Cubase AI and integrates directly with the DAW. If you're not a Cubase user the unit functions exactly as you would expect any converter to. There is a separate dspMixFX application which offers an extensive mixer view, each channel having a send to the Yamaha Rev-X DSP powered reverb, which is actually rather nice.

## DSP channel strip

The DSP included is perhaps not quite as extensive as some of Yamaha's mixer offerings, with only three 'plug-ins'. DSP power does get consumed rather quickly if you are using the vintage models. The channel strip DSP plug-in includes Drive, Compression and EQ. A large Sweet Spot Morphing knob at the bottom of this GUI seems gimmicky at first, but actually allows morphing between various settings and was surprisingly usable. EQ and compression settings are shown changing during the sweep so it's not just a mystery black box.

The COMP276 compressor is a model of a classic FET-type compressor, it sounds good and conveniently has millisecond displays for attack and release settings, something which is often confused in that design. EQ601 equaliser is a blue, red and grey unit harkening back to a famous classic design. The additional graphical display is useful and each of the four bands and two filters is fully sweepable.

Implementing 32-bit integer conversion into the unit seems like a forward-thinking move, but it's worth considering what this actually means. Bit depth translates to noise-floor, with 32-bit conversion offering a theoretical -192dB noise-floor. However the input dynamic range of the unit is only specified at 119dB, which is easily achievable with 24-bit conversion. The analogue circuitry noise-floor is clearly much higher. So this additional data use benefits perhaps should be weighed up.

Likewise the 384kHz output data sample rate was not something that I found myself reaching for. The anti-aliasing filters (and presumably Delta-Sigma nature of the conversion) meant that a 192kHz Nyquist frequency was not necessary for this device, of course personal choice and required delivery specifications may influence users' inclination towards high sample rates.

At £2,054 there are certainly many competitors for this device, but if you're a Cubase user this might be exactly what you are after, offering some of the features of a hardware accelerated system directly to your DAW. Rock solid, near zero latency performance from your DAW during tracking has been the preserve of specific systems to this point. Or perhaps you just need those high sample rates and 32-bit conversion for film score delivery. **T**

## resolution/VERDICT

**PROS** Near Zero latency monitoring. Exceptional menu system on the device and clear screen. RND Silk modes sound excellent.

**CONS** Cubase is needed to really get the most benefit from this unit. Dynamic range specifications bring into question the benefits of 32-bit conversion. DSP power gets used up a little too quickly.

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