

Apogee Rosetta 800 + Symphony

It's been long awaited and promises a very high density of I-O in Core Audio. **JON THORNTON** checks out Apogee's latest A-D and D-A convertor, and hears a Symphony...



APOGEE'S ROSETTA 800 (UK£1725 +VAT) is a multichannel A-D and D-A convertor. Building on the technologies first introduced with the acclaimed AD8000, it offers eight channels of analogue to digital and digital to analogue conversion, supporting a variety of digital formats. Although it's been around for some time, what is relatively new is the ability to use it in conjunction with Apogee's Symphony system, allowing direct connection to any Core Audio application running on a Mac.

Before looking at Symphony, it's worth giving the features of the Rosetta 800 as a standalone unit the once over. The rear panel offers eight balanced analogue inputs and eight balanced outputs on the familiar DB25 connector. Operating level is nominally +4dBu equalling -16dBFS in both directions, although this can be changed independently for the A-D and D-A processes by altering jumpers inside the unit. A further DB25 connector gives eight channels of AES-EBU I-O, and four Toslink optical connectors allow up to eight channels of ADAT I-O (at a maximum sample rate of 48kHz), or eight channels of SMUX I-O. TTL wordclock input and output on BNCs complete the line-up.

The Rosetta 800 is capable of working at sample rates of up to 192kHz, using either its own internal clock, or external clock from the TTL input or any of the digital inputs. SMUX interfacing is, of course, limited to 96kHz operation, but the AES inputs can work in either single-wire or dual-wire mode up to the 192kHz maximum.

A front panel switch engages Apogee's Soft Limit circuitry on all analogue inputs, which rounds off transients to gain digital headroom. I confess that I'm not a fan of this approach, but I guess it's a useful safety net in some applications. When working at sample rates of 44.1 or 48kHz, the digital output can also be dithered down from 24 to 16-bit using Apogee's UV22 process. However, this is an all-or-nothing selection — when engaged it is applied to all digital outputs.

The thing that sets the Rosetta 800 apart from many other convertors is the flexibility of its internal signal routing. At a basic level, this allows the selection of a source to feed all of the digital outputs, and a source to feed the analogue outputs. Toggling the digital output source allows you to select all eight channels of any of the digital inputs or the analogue inputs to feed all digital outputs, or to pick and mix

pairs of analogue sources with pairs from one of the digital sources. Conversely, the analogue outputs can be set to carry all eight channels of any digital source, or a combination of analogue inputs (after A-D conversion) and one of the digital inputs. This does give you a lot of flexibility in using the

unit to convert from one digital format to another, and a number of options for monitoring purposes. It's relatively easy to set up, although there is no permanent indication of status when sources are split between analogue and digital — you have to press and hold the routing switches to show this as a matrix on the Signal Present and Over LEDs.

Sonically, the Rosetta 800 is extremely impressive. Running at 48kHz and connecting it via AES to a Digidesign 192, it was possible to do a direct comparison of both the A-D and D-A stages. With Soft Limit firmly disengaged, a 12-string acoustic guitar was recorded using a pair of DPA4006 microphones to four tracks of Pro Tools simultaneously, two tracks using the Apogee and two using the 192. Comparing the recordings using the respective D-A stages, there wasn't a great deal of difference in the high mids and high frequencies. The Rosetta, though, seemed to have a much greater sense of depth and perspective to the low mids, making them sound solid and warm, but that little bit tighter than the 192. The story was the same when auditioning previously recorded material through both D-A stages: better depth and perspective in the low mids with the Rosetta. Both the 192 and the Rosetta seemed to perform well in terms of imaging and perspective in the high frequencies, though, with the Rosetta sounding ever so slightly softer in this area.

The ace in the hole for the Rosetta is the ability to fit option cards in the back. These options allow a further range of digital interfacing, which appear as routing sources on the front panel. An option card allowing the Rosetta to hang off a Pro Tools HD system has been around for while now, but Apogee has recently introduced a card that allows the Rosetta to communicate with its own PCI DSP card, called Symphony (UK£475 +VAT).

Available in either PCIe or PCI-X flavours, a single Symphony card can have up to four Apogee interfaces

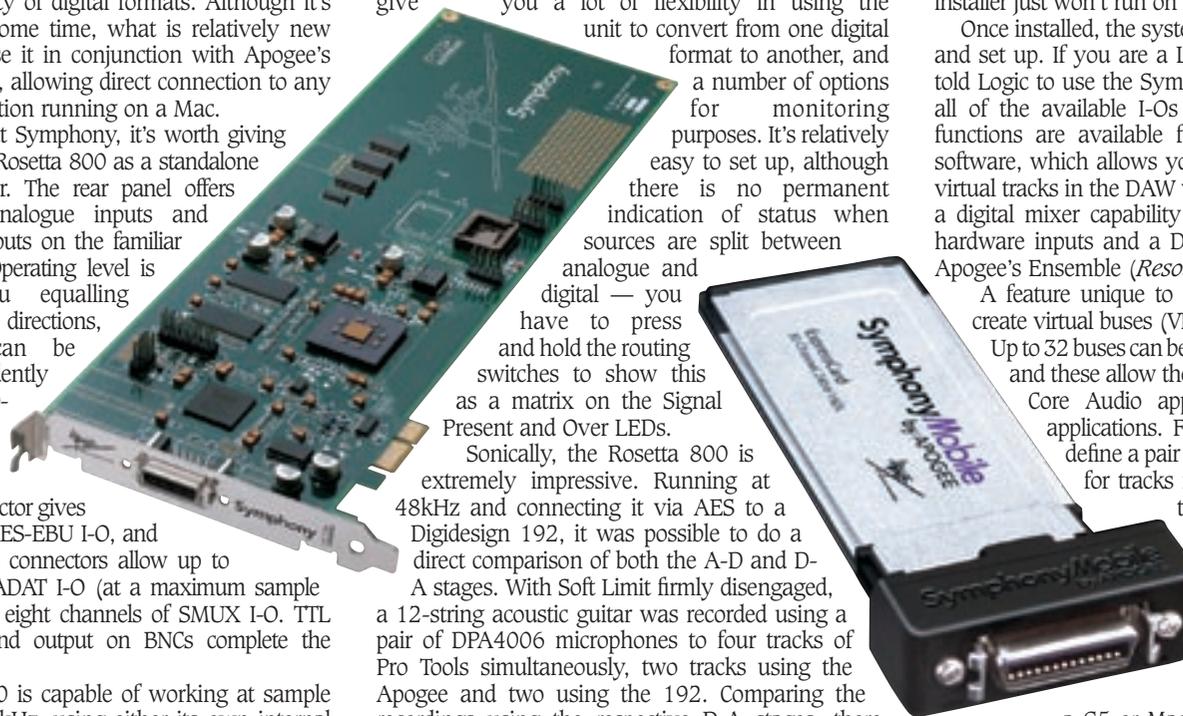
daisy-chained to it. So a single Symphony card and four Symphony-enabled Rosetta 800s gives you 32 channels of I-O which can be directly addressed by any Core Audio application — meaning pretty much any Mac-based sequencer or DAW except for Pro Tools.

Installation of the Symphony expansion card in the interface is straightforward enough if a bit fiddly, involving removing the top of the unit and plugging the expansion board onto the main PCB. The Symphony PCI card installs in an appropriate slot of the Mac, although you do need to watch out with older G5s that you choose the 133MHz slot if you're using the PCI-X card rather than the newer PCIe version. The Symphony Core Audio driver is a straightforward install as long as you're running Mac OS 10.4.x — the installer just won't run on anything older.

Once installed, the system is very easy to configure and set up. If you are a Logic Pro user, once you've told Logic to use the Symphony card you can access all of the available I-Os directly from Logic. More functions are available from the included Maestro software, which allows you to assign physical I-O to virtual tracks in the DAW via a matrix, and also offers a digital mixer capability for latency-free mixing of hardware inputs and a DAW return signal, just like Apogee's Ensemble (Resolution V6.3).

A feature unique to Symphony is the ability to create virtual buses (VBus) within the architecture. Up to 32 buses can be created per Symphony card, and these allow the transport of audio between Core Audio applications, or even within applications. For example, it's possible to define a pair of VBuses as the destination for tracks in Logic, and then to select those VBuses as the inputs to another pair of tracks — something that hasn't been possible within the Logic environment before.

With up to 32 channels of I-O per card, filling up a G5 or Mac Pro with Symphony cards means that it's perfectly possible to have 96 channels of extremely high-quality I-O without the need for an expansion chassis — as long as you use Core Audio. So while Pro Tools users might look wistfully on, Logic users definitely have something to smile about. ■



PROS

Great-sounding convertor; flexible mixing and routing of analogue and digital sources in hardware; Symphony option gives highest I-O density currently available without expansion chassis; VBus improves functionality of Logic Pro.

CONS

Only available for PCI-X and PCIe (old G5 and G4 owners look elsewhere); routing setup on Rosetta hard to see at a glance; application of dither to digital outputs is all or nothing.

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