

Apogee AD-16X and DA-16X

Relish or loathe the variability of convertor quality and value for money, chances are you can never have enough. **ROB JAMES** looks at two new 16-channel units and suggests that it might be best to buy in bulk.



GIGO, AS I'M SURE many of you are aware, is an old computing term dating back to the days of the early mainframes. It is a contraction of 'Garbage In, Garbage Out'. For digital audio, I think this needs a little modification. In our case, assuming any digital processing is transparent (and leaving aside any artistic considerations) the most likely candidate for degradation is the analogue to digital conversion and/or the digital to analogue conversion process. 'Degradation In, Degradation Out' — DiDo will probably do the trick. When you consider the amount of time and effort spent adding value to audio once it is digitised, not to mention the time spent listening to it, it makes sense not to stint on convertors.

Thanks to Moore's law, and the number of devices now using this technology, even high sampling rate convertors have become an insignificant purchase for consumers, hidden away in cheap DVD players and recorders. As ever though, you get what you pay for when it comes to ultimate performance and if you want the conversion technology conveniently packaged to perform the specific tasks routinely required in studios.

As a manufacturer, Apogee occupies an interesting

position in the convertor food chain. An obvious step up from 'budget' designs and generally slightly more expensive than DAW manufacturers 'in-house' convertors, Apogee products are nonetheless considerably more attainable than some of the more exotic designs. As a result the AD-8000 has become something of a worldwide standard. The AD and DA-16X designs bring the Apogee offer bang up to date with the promise of more channels of high quality conversion with proprietary extras, such as UV-22, at sampling rates up to 192kHz and, just as importantly, an ever more affordable price.

These units are members of Apogee's X-Series range, which also includes the Rosetta 800 and Rosetta 200. These all share a number of common features, not least the same expansion cards and very similar operational paradigms. Learn one unit and you can find your way around any of them without opening the manual.

Navigating the menu structure using the front panel controls is much simpler than with the older units. On the DA-16X there are just four Setup buttons arranged as Previous, Next, Up and Down. The AD-16X adds a Clear button. Pressing any of the four buttons enters

Setup mode. Previous and Next cycle through the 'Primary Parameter Loop' — if you can remember the order primary parameters are arranged in, you can save some button pushes by going in the right direction. The selected parameter is indicated in the display and its value may be changed with the Up and Down buttons.

Where a parameter can be applied to individual channels or globally, e.g. UV22, Soft Limit, etc, pressing and holding Previous or Next takes you down a level into the individual channel's loop for that parameter. Easier to do than describe.

A forest of LEDs show currently selected set-up parameters. The 16 red LEDs flag up input A to D clipping in excess of 3 samples duration, the green ones act as level meters in the range -36 to 0dBFS. On the AD-16X the Clear button clears clip indications. Pressing and holding it toggles between two modes, One Second Clear, which does what it says and 'Autoclear'. This clears clip indications between takes. The clip indication is held until the channel level drops below -50dBFS for 5 seconds or more and until a new signal above this level is input.

Unusually, the Power switch LED illuminates only in standby. The power switch is programmable (via internal jumpers) to either power the unit on when power is applied or require the front panel Power button to be pressed.

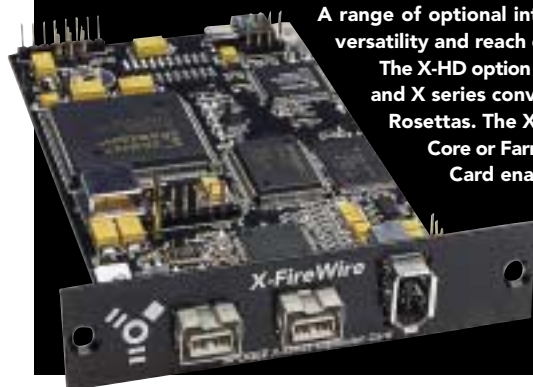
Also under the hood are a termination switch for Word clock and a MIDI socket for firmware upgrades. Both units come with analogue and AES-EBU connections on 25 pin Sub-Ds plus ADAT optical Toslink and Word clock on BNCs. For the higher sampling rates single and double wire AES are supported, as is SMUX optical. The X-Series expansion card option slot further extends versatility.

At UK£2500 (+ VAT) apiece these devices are still a long way from being a casual purchase. Mercifully convertors have a far longer useful life-span than computers before obsolescence sets in. Therefore it is all the more important that the build quality is representative of the excellence we have come to expect from Apogee. It is no coincidence that previous generation Apogee convertors are to be found in many of the more critical applications around the world.

If anything, these are better than the earlier units. The power supplies are a new design with passive cooling — no fans to add to the noise burden. The DA-16X has new, ultra-low impedance, balanced line-drivers claimed to accurately simulate transformer behaviour and able to drive even non-symmetrical loads at up to 26dBu. Clocking technology is Apogee's C777, as used in the Big Ben, and 192kHz is standard.

In short, these convertors represent another notch upward, offering Apogee 'house style' in appearance and sound with up to the minute technology at an ever more attractive price. ■

Option cards



A range of optional interface cards at UK£449 (+ VAT) each greatly extends the versatility and reach of the AD-16 and DA-16.

The X-HD option card allows direct connectivity between Pro Tools|HD systems and X series convertors including the units under consideration here and the Rosettas. The X-Digi-Mix card interfaces directly with legacy Pro Tools Mix Core or Farm cards and also provides a SuperClock output. The X-FireWire Card enables direct connection to any FireWire equipped computer.

It supports the new S800 standard (with backwards compatibility for S400 connections). Two FireWire sockets allow an AD-16 and a DA-16 or any other X-Series units to be daisy-chained with up to 16x16 24-bit channels at 44.1/48/88.2/96KHz or up to 16 24-bit channels at 176.4/192KHz from a single PC or Mac connection.

PROS

Industry standard convertors at a less scary price; easy to use, once you get the hang of it; no fans, so quiet in every sense.

CONS

Menu structure may initially confuse; still a lot of money for some budgets.

Contact

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