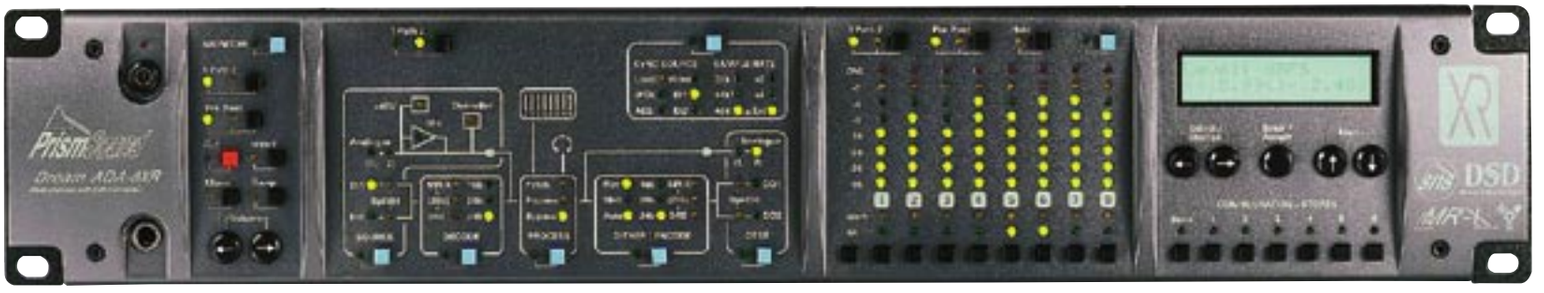
Prism Sound ADA-8XR

It's rare to find a digital box these days that can grow with your needs and expand with your requirements. GEORGE SHILLING uncovers all this and more in the mother of all convertors.



PRISM SOUND CONVERTORS HAVE, for many years, been most highly respected. Their pricing certainly places them at the upper end of the market, and the latest model in the 'Dream' range is no exception. The ADA-8XR is capable of standard sample rates and DSD operation. The audio performance is further improved; the convertors undoubtedly rate among the best currently available, but the emphasis is on clock purity, jitter rejection and analogue audio integrity. 192kHz operation is added, but Prism Sound claims that its tests fail to show any significant improvement over well-designed 96kHz convertors. With the ADA-8XR's seemingly comprehensive connectivity options and the facility to mix and match I-O modules, there is no need to buy unnecessary format interfaces, and the theoretical possibility to upgrade to future yet-to-be-invented formats. Built like the proverbial brick outhouse, the 2u box's front panel is crowded with controls, diagrams, status indicators and meters.

A 'normal' configuration provides eight A-D and eight D-A channels. These are designated Path 1 and Path 2, and the eight meters will show levels of one or other of the two paths. However, it is possible to specify 16 D-A or A-D as an alternative, implemented by fitting two of the same type of analogue module in the two slots on the rear panel. There are also two digital module slots and you can therefore configure signal paths for D-D conversions when both are occupied. Modular digital I-O options currently include boards for Pro Tools Mix, Pro Tools HD, AES3 with completely independent input and output sections and supplied 'squid' for splitting the DB25 connector to XLRs (operating in Split96 or one-wire modes), DSD (with the possibility to convert to and from analogue and PCM), and a FireWire board for direct connection to Windows or Mac computers. This allows you to use the ADA-8XR as your computer's sound card, providing top-quality audio conversion for users of Logic, Digital Performer, Cubase or Nuendo.

The Monitor section is accompanied by a headphone socket for monitoring channel pairs; there are additional analogue and digital monitor outputs on the rear utility module that share the same path. There is even a basic built-in mixer with the possibility of setting levels and pan positions of the eight channels of a main Path.

The Mimic panel takes up the largest area, and is populated with small buttons and diagrams that cover configuration settings. Pressing any of the blue buttons causes the Menu panel's screen to jump to that particular function, thus aiding configuration. Repeated pressing cycles relevant functions, and there are plenty of neat touches that indicate the care and thought that has gone into this design. For example, returning to one of these options will bring up the last viewed menu of the cycle.

The Menu section is the heart of operations. Because there is so much here, legending is small, and the illuminated Menu display requires that your face is fairly near for easy navigation of the menus. However, with only 2 x 16 characters possible on the display it is surprisingly easy to navigate myriad menus and functions. There is no visual clue as to your place in the menu tree, but this doesn't seem to be a hindrance as items are placed logically, and using the Mimic panel or a little exploration will usually take you to where you want to go. Parameter changes can be effected for the entire 8-channel Path or for individual channels. Factory Stores are provided for various situations and with software controlling the line-up levels (to very high tolerances) a parameter defines whether or not these are loaded with the setup.

Audio features include switchable Overkiller progressive limiters on the A-D line inputs — these are automatically set depending on the chosen line-up and are extremely useful for unpredictable recording situations. Sample rate conversion is handled particularly efficiently partly thanks to an internal sample rate of 352.8kHz. There are actually two internal clocks, one for each Path. The ADA-8XR will even synchronise to, say, a 44.1kHz clock and referencing this, run a Path at 48kHz, doing the necessary maths along the way. The Synchronous Sample Rate Convertor is included with the DSD module, which claims a huge improvement over asynchronous rate convertors. The largest spurious component in a 96kHz to 44.1kHz conversion was at a remarkable -151.65dB in a factory test. Prism's proprietary Super Noise Shaping dither is available on each channel in a choice of four flavours of varying frequency shift.

I tested the unit with the Pro Tools HD module. When Pro Tools is launched some reassuringly loud pinging and clunking relays spring into life. For use with Pro Tools, as with other modules, a convenient Factory Store can be loaded for a typical configuration so you are up and running very quickly, although of course a certain amount of typing is necessary within Pro Tools. The ADA-8XR cleverly turns itself into a virtual Digidesign 192, albeit with only the first eight I-O channels present in standard configuration. The ADA-8XR must be configured as the first 192, with others following, so extra renaming will be required when supplementing a setup.

The manual is superb, covering plenty of technical background and fully explaining the reasoning behind design decisions. For example, cheaper convertors are more stable at clocking internally than externally. Therefore, it is recommended that the ADA-8XR is clocked (using WC or AES) to the inferior device for rock-solid jitter-free performance.

The Prism Sound undoubtedly exhibits more of the 'openness' one associates with analogue gear and less of that clogged-up, closed-in digital character. At 44.1kHz things are noticeably improved over standard interfaces, and at 96kHz the audio quality is remarkable. The ADA-8XR is a class-leader, with the stats to prove it (from UK £6000). Many audio professionals concur that these are among the best convertors money can buy. I can find no reason to disagree.

PROS Great sounding convertors; unparalleled clock stability; interfaces available for all scenarios including Pro Tools HD, FireWire and DSD.

CONS No simultaneous metering of all ins and outs; needs to be carefully located for visual access.

EXTRAS The DA-2 D-AC and AD-2 A-DC are 2-channel convertors in Prism's Dream series. The AD-2 behaves like two separate A-DCs plus a digital processor and can generate two entirely separate output signals simultaneously with different sampling rates, different wordlengths and different noise-shapers.

Contact

PRISM SOUND, UK:
Website: www.prismsound.com