

Sonifex digital Redboxes

Away from the glamorous end of audio kit, a requirement still remains for the rudimentary yet essential fix-it and interface box. Needless to say, it helps if they look good in red. **ROB JAMES** comes over all pantomime.

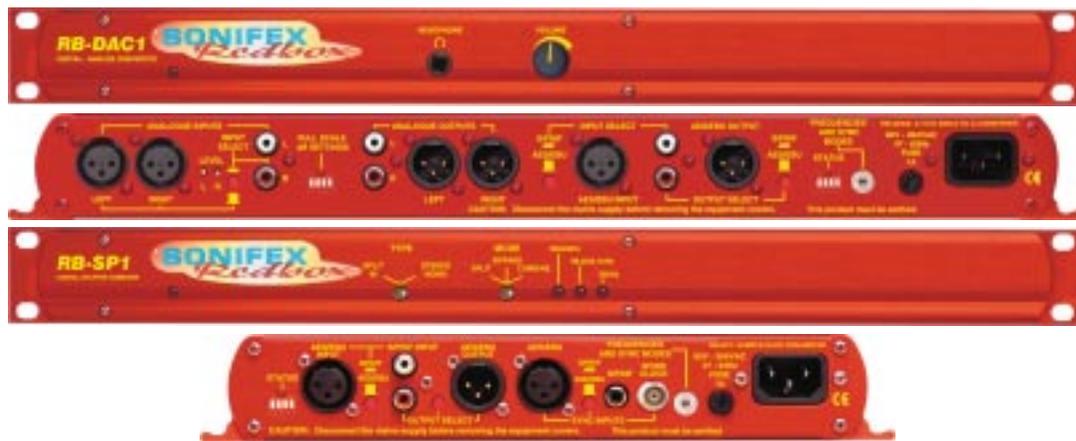
DON'T BELIEVE ANY TRUE devotee of the black art (pro audio that is) fails to appreciate the allure of a sleek console, a juicy bit of outboard, or even an elegant DAW. But what of the Cinderellas, the interface boxes and convertors quietly doing their job out of the limelight? The anonymous, dowdy boxes that actually enable the frontline kit to communicate and do some useful work instead of merely appealing to the senses?

Sonifex apparently sympathises with the plight of these unassuming but vital workers. Enter the Redboxes. And, as in all good fairy tales, these Cinderellas do get to go to the ball and often end up in the best of company.

Using a number of alloy extrusions anodised in a rich, deep crimson, Sonifex's Redboxes are certainly not the ugly sisters. All are 1U high and, where appropriate, are rackmountable. They are also equipped with mounting flanges to allow them to be screwed to a flat surface, such as the underside of a desk. Additionally, an accessory pack is available to enable rackmounting of units that are not already rack width.

I had four of the range to play with. Apart from appearance the Redboxes have many other features in common, both operationally and in capability. Full scale dB and Status setting is via DIP switches, frequency and sync mode via a rotary selector, all on the rear panels. Input and output selections between XLR and phono are made with latching push switches. All the convertors are 24-bit, 96kHz capable.

The line-level RB-ADDA full duplex A-D and D-A convertor is a good example of the breed. Thoroughly capable, it will find a home in transfer bays and many other situations where a standalone, fit and forget convertor is required. The four sync modes add to the versatility. Master Mode uses the internal clock, Slave mode only gives an output if an external sync signal is detected. Auto Mode syncs to an external sync source if present otherwise it syncs to internal. Auto



Lock Mode is a refinement and if no external sync source is present, then the unit syncs to internal at the sampling rate it was last clocked to.

The input analogue reference level is set with a combination of DIP switches and trim pots. These give a range of +9dBu to +27dBu for OdBFS (balanced). The output level selections are +12dBu, +18dBu or +24dBu with factory preset +/-1dB internal trimmers.

The RB-DAC1 is a stereo D-A convertor with the addition of a headphone output and volume control.

It accepts AES-EBU or SPDIF digital audio at sampling rates up to 24/96 and converts to analogue balanced XLR or unbalanced phono. Analogue output levels have individual Left and Right selection to give +12dBu, +18dBu or +24dBu for OdBFS balanced. The unbalanced output is 8.5dB lower. The RB-DAC can de-emphasize 50/15 micro second pre-emphasis when selected and the appropriate status bits are present.

Double sampling rate equipment is taking a while to settle on a 'standard' interface with 'single wire' and 'two wire' connections in common use (machines

using two AES-EBU connections at normal frame rate to carry a single double rate signal pair). The RB-SP1 digital splitter and combiner can interface between the two standards in either direction and can also split a standard rate signal's left and right channels into separate streams or combine separate LR inputs into a single stream. A sample rate convertor on the second digital input can match the rate to the primary input. On this rackmounting unit, the commonly used options are available on the front panel via toggle switches.

The RB-SC1 is the sample rate convertor with switch-selectable AES-EBU or SPDIF inputs and outputs. Output is referenced to internal sync at 32kHz, 44.1kHz, 48kHz, 64kHz, 88.2kHz or 96kHz. Alternatively it syncs to an external synchronising input in AES-EBU, SPDIF or word clock (ttl) formats. Sync modes are the same as those on the RB-ADDA except that Auto mode is replaced by Auto-Lock mode. In Auto-Lock there is no output until lock is obtained from an external sync signal. Thereafter, if the external sync is lost, the unit 'flywheels' using the internal generator at the closest available frequency to the previous sync input.

These units solve a good number of common problems at a sensible cost. Well thought out, with a solid and attractive appearance, the sonic performance is good enough for serious professional use. They are ideally suited to 'fit and forget' duties but are also reassuringly configurable when required. ■

More of the range

RB-DDA6A is simple 6-way distribution amplifier for AES-EBU pairs. A single XLR input is distributed to six XLR outputs without change of level or relocking/reframing. The digital equivalent of a parallel strip, it runs at up to 24-bit, 96kHz. The **RB-DDA6S** is similar to the RB-DDA6A but has phono connections for SPDIF.

The **RB-DHD6** is a digital 6-way headphone distribution amplifier. It accepts AES-EBU or SPDIF digital audio and provides six headphone outputs giving 150mW into impedances between 32Ohms and 600Ohms, all individually buffered with volume controls.

The **RB-DMA2** is a dual digital microphone preamplifier. Two independent mic preamps combine with a convertor to an AES-EBU or SPDIF output (consumer or professional). Internal sync at rates between 32kHz and 96kHz or external sync from AES-EBU, SPDIF or word clock. Bit depth is 16, 20 or 24 and dither is applied below 24 bits.



PROS

Simple, good looking solutions to common problems; cost-effective; sensible configuration options.

CONS

Configuration can be fiddly with DIP switches and tiny rotary selectors on the rear of the units; otherwise, not much.

Contact

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