Drawmer DMS-2

The humble distribution amplifier is one of the unsung heroes of this business. Often to be found lurking, unseen, inside other pieces of equipment, occasionally they get to strut their stuff. ROB JAMES reports on a Word clock measurement and distribution amplifier.

ALTHOUGH IT IS POSSIBLE to make do with just a few Word clock outputs from the master source, looping them through several devices, this is undesirable and a source of potential problems with clock phase and terminations. A star arrangement, with each device fed from a separate socket, ideally with equal length cables is the preferred configuration. However, in a complex studio, this can mean a lot of outputs.

DMS-2, the latest addition to Drawmer's digital interconnectivity range, certainly supplies BNC Word clock sockets in abundance. On the rear, Word clock In and Through are accompanied by 16 outputs and AES In and Through on XLRs. The inputs can be terminated via switches adjacent to the sockets. Coming around to the front panel there are four further BNC outputs. If this was just a simple distribution amplifier that would be just about it and the review would end here, but the DMS-2 has another trick up its sleeve.

Drawmer broke new ground by bringing the logic of the multi-effects unit to the somewhat unexciting area of synchronisation with the first in this series of products, the DMS-1 M-Clock. The DMS-2, continues the theme at a very reasonable UK£395 (+ VAT). As might be expected both units share the same look with a subtly sculpted alloy front panel and glowing blue Drawmer logo. In this case, the blue is provided by an LCD alphanumeric display.

A high (2ppm) accuracy counter measures the incoming Word clock frequency. This can be displayed in terms of Frequency +/- ppm or +/-percentage as determined by the Mode switch. The other front panel switch determines which input is used for the source. LEDs indicate the current mode, input and the presence of valid clock on each input.

I was curious to see if the DMS-2 would reveal variances that would not make themselves glaringly obvious by producing clicks, etc. First candidate was my Rosendahl Nanosyncs. Perhaps unsurprisingly, this gave a read out of 00000ppm, with occasional readings of 00002. This is on the limit of the claimed tolerance for the DMS-2 and can be dismissed as insignificant. I then checked a couple of small digital mixers, an A-D convertor and a DAT recorder. The convertor (an Apogee AD-16X with C777 clock) proved to be equally accurate at 00000ppm with similar occasional excursions to 00002, the consoles came in at 00049ppm and 00004ppm and the DAT at 00011ppm....

Although this is hardly a scientific test it does demonstrate the virtue of a serious master clock generator and the variances you might encounter if attempting to use other equipment as a master clock. The counter ranges up to 768kHz with plus and minus ppm and percentage pull up and down read-out available for the standard 32, 44.1, 48, 96 and 192kHz sampling rates.

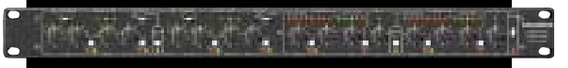
Apart from providing an idea of the accuracy of the internal clocks of new additions to the equipment roster this measurement facility will find application in the increasingly complex world of sound for picture. Having an instant indication of pull up or pull down could prove to be very useful when dealing with the plethora of video formats now in circulation.

The DMS-2 brings a new twist to a potentially rather boring but essential piece of modern studio equipment. Given the reasonable cost, if you are in the market for a Word clock distribution amplifier, then the DMS-2's frequency counter might make the purchase more interesting. ■

PROS Attractive new take on a boring but essential part of the studio jigsaw puzzle; plug and play.

CONS Another decimal place of accuracy would be nice.

EXTRAS New in Drawmer's analogue outboard range, the DSL424 TwoPlusTwo combined dynamics processor includes two frequency conscious noise gates and



two soft/hard knee compressors with variable threshold limiting. The channels may be front panel configured as four individual standalone processors, a stereo linked pair of compressor/limiters with a stereo linked pair of gates. Alternatively, any combination of processing can be achieved by rear panel patching.

The DSL424 combines the gates of the Drawmer DS404 with the compressor/limiters of the Drawmer DL441.

DRAWMER, UK:
Tel: +44 1924 378669
Website: www.drawmer.com