



STRAIGHT EIGHT WIDENS TELEVISION AUDIO HORIZONS

SDI Video still has some surprises in store when it comes to transporting multichannel audio

Audio for television always seems to take a back seat, despite evidence that the advent of NICAM Stereo actually sold new television sets. Today, the International spotlight falls on multi-language and multichannel audio delivery, whether for television, interactive, or DVD production. How can Production houses and Broadcasters integrate multichannel audio without disrupting their infra structures? One not so obvious solution relies on using SDI Video as the Audio backbone. We asked Dr John Emmett, Technical Director of Broadcast Project Research Ltd, to tell us more;

“ SDI still has a few surprises in store when it comes to carrying auxiliary data. You see the SDI standards evolved bit by bit, and in somewhat of a hurry as the first users quickly appreciated the economic advantages of using digital routing. All those layers of SMPTE Recommendations may look terrifying, but the reality underneath is not so bad. The core Video data format kept to the timings of the streaming analogue signal, which in turn had preserved the fly-back times which were needed for 1930's receivers. The result of this can be simply interpreted as loads of data space for audio, metadata and whatever else you wish to pack into the spare SDI space. OK, so the actual data packing is a bit fragmented as a result of compatibility with 1980's legacy systems, but circuits don't worry about that sort of complexity, so nor do you need to. By designing our Straight-Eight embedders and de-embedders in a straightforward plug and play form, we can guarantee low latency embedding and de-embedding of up to 16 channels of full 24 bit plus ancillary data AES/EBU in 625 line 270Mbit SDI.”

But who needs so many audio channels? Those who still think that an extra M and E track is an unnecessary luxury, should look towards interactive International Markets with the Chief Engineer of Flextech, David Maynard;

“European programme production will soon demand not only surround sound, but also multi-language production.....”

Broadcast Project Research developed the Straight-Eight embedders and de-embedders to be small, simple and affordable, with 8 or 16 channel audio capability and in-built Monitoring D to A's. There are also matching AES/EBU codecs to be seen on stand 9.319, but if you are just wondering about that name, we asked John Emmett to put us out of our misery; “Oh that was pure jealousy. We were talking one miserable winter lunchtime about the rusty cars of our youth, and someone asked Neil Garner of BPR if he had had any cars in Australia. Yes he said, Straight-Eight Buick's, quite a few actually, and they weren't rusty at all”.

Broadcast Project Research Ltd is a Studio-based Research and Design Group based at the UK's most up to date independent Television Production Studios.

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