DaySequerra

DownMix
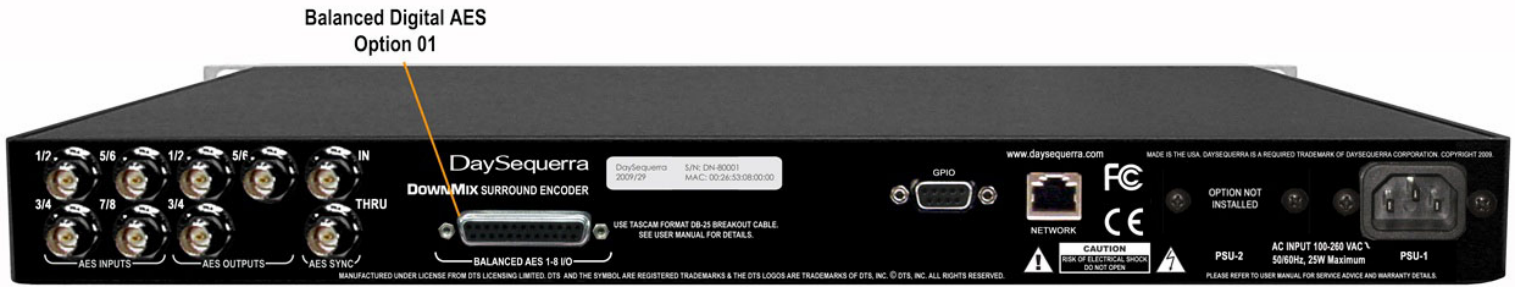## Surround Audio Encoder

DTS Neural Technologies

The DTS Neural Surround™ DownMix encodes 5.1 surround sound to a stereo mix that accurately represents the 5.1 original. Unlike standard summing methods, the DTS Neural Surround DownMix creates stereo that contains the "watermarked" surround steering information. This stereo audio can be stored, mixed, transported and monitored just like any other (LtRt) stereo mix.

- Perfect mapping of 5.1 or 7.1 surround elements into LtRt stereo

- Active correction to fix issues such as comb filtering, spatial location and distortion

- The convenience of a matrix surround encode/decode system with the performance of modern day perceptual audio codecs

- Backward compatibility with matrix decoders (Dolby ProLogic II, SRS Circle Surround, etc)

- End-to-end surround delivery system when combined with the DTS Neural Surround UpMix

dts™
Neural Surround

Balanced Digital AES
Option 01

DownMix Technical Specifications

Inputs	- 4 AES PCM inputs - 4 balanced analog inputs with Option 01 - 1 AES-3 or AES-11 SYNC
Outputs	- 4 AES PCM outputs - 4 balanced analog outputs with Option 01 - 1 AES-3 or AES-11 SYNC pass-through
Digital Inputs & Outputs	- AES/EBU, 75 ohm, unbalanced BNC - Balanced Digital AES via DB-25 TASCAM format cable with option
Sample Rate	- 32kHz to 96kHz
Latency	< 16msec
Dynamic Range	- 140dB, DR any input to any output; 135dB, any input to any output [1]
GPIO	- DB-9 female connector 0-5V TTL
Ethernet	- 10/100-BASE-T for field software updates
Dimensions and Weight	- 1 RU, 19" (482mm) W x 8" (203mm) L x 1.75" (44mm) H; 7 lb (3.2kg)
Environmental	- Convection cooled. Operating: 0 to 60 degrees C
Regulatory	- North America: Designed to comply with FCC Class A, Part 15 - Europe: LV Directive 73/23/EEC and EMC Directive 89/336/EEC; CE Mark (EN 55022 Class A, EN55024) - RoHS and WEEE compliance.
Power Supply	- Auto-sensing 100-240V, 50-60Hz - EMI supressed male IEC320 connector
Applications Include:	- Ingest, Head-End, Uplinks, Post Production
Notes	[1] Audio measurement made using a 0dBfs 1kHz sine wave sampled at 48kHz, 20-20kHz A-weighted

www.daysequerra.com

Neural Surround