

Linear Acoustic® LA-5291

Audio Encoding, Transcoding, and Decoding for Live Dolby Atmos® Workflows



OVERVIEW

The Linear Acoustic LA-5291 Professional Audio Encoder provides decoding, encoding, and transcoding to and from PCM and select Dolby® coded formats for up to 16 audio channels in support of live Dolby Atmos® workflows for television.

FEATURES

- Decoding from Dolby E and ED2 to PCM
- Transcoding from Dolby E and ED2 to Dolby Digital Plus and Dolby Digital Plus Atmos®
- Encoding PCM and PCM with PMD into Dolby Digital Plus, Dolby Digital Plus Atmos, and Dolby ED2
- 3Gb/s HD/SD-SDI and AES-3 I/O
- AES67 I/O supports SMPTE ST 2110-30 workflows
- Optional - Quad-link 3Gb/s SDI I/O for supporting 4K video workflows or MADI I/O
- Dual internal redundant auto-ranging power supplies
- Browser-based remote control

IN DEPTH

Supporting Today's Dolby Atmos Workflows

The amount of cinematic and live content produced in Dolby Atmos continues to grow, reaching consumers via Blu-ray Disc, satellite and cable, and streaming services. The workflow required to create, transport, and deliver that content to viewers at home can be complex, requiring the ability to work with PCM, Dolby E and ED2, and Dolby Digital Plus and Dolby Digital Plus Atmos formats.

Equally at Home for Contribution and Distribution

The LA-5291 integrates well into remote and OB trucks for encoding multi-channel PCM audio into Dolby ED2 or Dolby Digital Plus Atmos for distribution. Further downstream, it can transcode Dolby E and ED2 directly to Dolby Digital Plus and Dolby Digital Plus Atmos, and can encode PCM and PCM with PMD (as specified in SMPTE RDD 49 and SMPTE ST 2109) to Dolby Digital Plus and Dolby Digital Plus Atmos for final distribution.

SPECIFICATIONS

Decoding

- Decodes Dolby E and ED2 to PCM and PCM with PMD

Transcoding

- Transcodes Dolby E and ED2 to Dolby Digital Plus and Dolby Digital Plus Atmos

Encoding

- Encodes PCM and PCM with PMD into Dolby Digital Plus and Dolby Digital Plus Atmos

3G HD/SD-SDI I/O

- Two independent auto-sensing 3Gb/s HD/SD-SDI inputs (SMPTE ST 425-1, 292M, and 259M), up to 1080i/60/59.94/50Hz, each with de-embedding/re-embedding for up to 8 audio pairs
- Optional quad-link 3Gb/s SDI for 4K workflows (mutually exclusive option with MADI option)

AES-3 I/O

- 4 inputs/outputs via 75 Ohm BNC unbalanced female connectors, internally terminated; signal levels per SMPTE 276M/AES-31D-2001

AES67 I/O

- 16 channels of bi-directional AES67 I/O in support of SMPTE ST 2110-30 workflows

MADI I/O

- Optional 64 channels of MADI I/O; I/O connection, coax, or optical via SFP socket* (mutually exclusive with quad-link SDI option)

* SFP sold separately

Reference

- 48kHz reference via SDI, PTP, AES-3, or internal clock

Sample Rate/Resolution/Frequency Response

- 48kHz, 24-bit, 20Hz – 20kHz

Ethernet

- Two Gigabit RJ-45 connections – one for AES67, one for networked remote control

Parallel GPI/O Control Port

- 15-pin female D connector, 0-5V TTL levels, 5 GPI/O inputs, 5 GPI/O outputs. Functionality TBD

Power

- Dual internal redundant auto-ranging power supplies
- 95-240 VAC, 50/60 Hz, 100W maximum total

Dimensions and Weight

- 19" W x 15.5" D x 1.75" H (approximately 48.2 x 39.4 x 4.5 cm)
- Net weight: Approximately 9.0 lbs (4.08 kg)
- Shipping weight: Approximately 12.0 lbs (5.44 kg)

Regulatory

- North America – FCC and CE tested and compliant with UL-approved power supplies
- Europe – Complies with European Union Directive 2002/95/EC on the restriction of use of certain hazardous substances in electrical and electronic equipment (RoHS), as amended by Commission Decisions 2005/618/EC, 2005/717/EC, 2005/747/EC (RoHS directive), and WEEE

Warranty

- Standard Telos Alliance 2-year limited parts and labor