



EX-EU4 Dolby Surround EX Encoder

Dolby
Surround Encoder Unit
Model EX-EU4



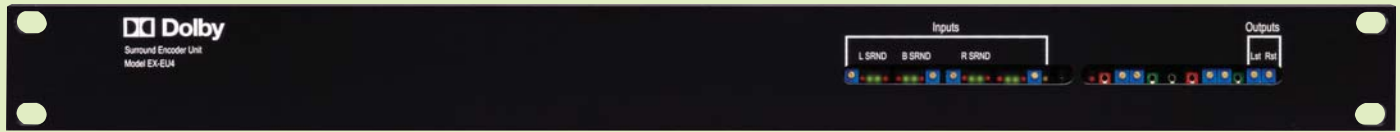
The Dolby EX-EU4 enables the creation of Dolby Digital Surround EX soundtracks by recording, mixing, postproduction, and DVD authoring facilities.

Using precision matrix encoding technology, the Dolby® EX-EU4 combines three discrete analog inputs—Left Surround, Back Surround, and Right Surround—into two analog outputs: Left surround total (Lst) and Right surround total (Rst). Lst and Rst can then be included with L, C, R, and LFE in Dolby Digital Surround EX™ 5.1 mixes for coding by the Dolby DP569 into Dolby Digital bitstreams for such media as DVD and digital TV.

Dolby Digital Surround EX programming is fully compatible with mono, stereo, Dolby Pro Logic® and Pro Logic II, and standard 5.1-channel playback, while providing 6.1 Surround EX playback on home systems equipped with Dolby Digital EX decoding. For monitoring in the studio, the companion Dolby EX-DU4 Surround EX Decoder decodes Lst and Rst analog signals from a Dolby Digital decoder such as the Dolby DP562 into Left Surround (Ls), Back Surround Left (Bsl), Back Surround Right (Bsr), and Right Surround (Rs) channels. Alternatively, for new facilities, the Dolby DP564 Multichannel Audio Decoder provides both Dolby Digital and Dolby Digital Surround EX decoding.

EX-EU4 Dolby Surround EX Encoder

EX-EU4 Front Panel



Controls and Indicators

Screwdriver-adjustable trimpots for input and output levels; four-segment LED input level meters for Ls, Bs, and Rs calibration

EX-EU4 Rear Panel



Analog Audio Inputs

Three female XLR connectors for Ls, Bs, and Rs; balanced floating transformerless inputs
Input gain adjustment range: 300 mV (−8.2 dBr) to 2 V_{RMS} (+8.2 dBr)
0 dBr: 0.775 V_{RMS}
Input impedance: >10 kΩ
Maximum common mode voltage: 4 V_{RMS}, 5.8 V peak

Analog Audio Outputs

Two male XLR connectors for Lst and Rst; balanced floating transformerless outputs
Output gain adjustment range: 250 mV (−9.8 dBr) to 2.5 V (+10.2 dBr); output
Output impedance: 25Ω
Maximum output voltage: +26 dBr into balanced 600Ω load, less into lower impedances; +20 dBr into unbalanced 600Ω load

Overall Frequency Response

20 Hz to 20 kHz, ±1 dB

S/N Ratio (Referenced to Dolby level)

>80 dB (Left, Center, Right) CCIR/ARM weighted

Total Harmonic Distortion

<0.25% into balanced loads 600Ω or greater at any output level up to 12.5 V_{RMS}
0.1% typical at 1 kHz (at Dolby level) with input and output adjusted for +4 dBr

Power Requirements

230 V version: 200–240 VAC, 50/60 Hz, 20 mm T250 mA fuse

Multivoltage version:

100–120 VAC, 50/60 Hz, one 1.25 inch 500 mA slow-blow fuse
200–240 VAC, 50/60 Hz, one 20 mm T250 mA fuse

Power consumption (all versions) 20 W

Designed for operation from a centrally switched power source

Dimensions and Weight

43 × 260 × 220 mm
(1.75 × 10.25 × 0.875 inches)
Net: 4.6 kg (10.2 lb)

Environmental Conditions

0° to 40°C (32° to 104°F)

Regulatory Notice

The 230 VAC only version complies with the requirements of Low Voltage Directive 73/23/EEC and EMC Directive 89/336/EEC and carries the CE marking accordingly.

Warranty

One-year limited parts and labor; see disclaimer. Specifications subject to change without notice.

Disclaimer of Warranties

Equipment manufactured by Dolby Laboratories is warranted against defects in materials and workmanship for a period of one year from the date of purchase. There are no other express or implied warranties and no warranty of merchantability or fitness for a particular purpose, or of noninfringement of third-party rights (including, but not limited to, copyright and patent rights).

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