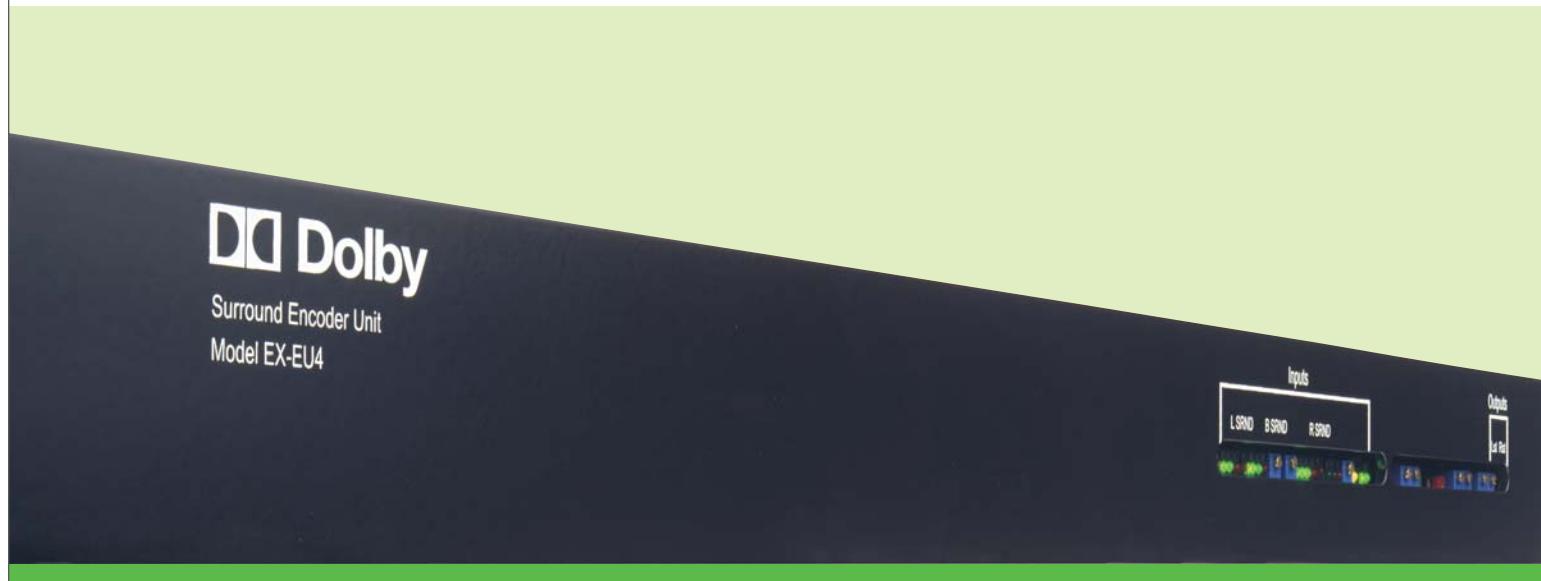




## EX-EU4

### Dolby Surround EX Encoder



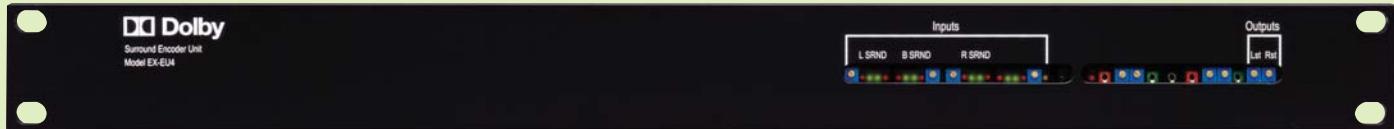
**The Dolby EX-EU4 enables the creation of Dolby Digital Surround EX soundtracks by recording, mixing, postproduction, and DVD authoring facilities.**

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 dB)  
to 2 V<sub>RMS</sub> (+8.2 dB)  
0 dB: 0.775 V<sub>RMS</sub>  
Input impedance: >10 kΩ  
Maximum common mode voltage:  
4 V<sub>RMS</sub>, 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 dB) to 2.5 V (+10.2 dB); output  
Output impedance: 25Ω  
Maximum output voltage: +26 dB into  
balanced 600Ω load, less into lower  
impedances; +20 dB 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<sub>RMS</sub>  
0.1% typical at 1 kHz (at Dolby level) with input  
and output adjusted for +4 dB

### 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 × 8.75 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).

### Limitation of Liability

It is understood and agreed that Dolby Laboratories' liability whether  
in contract, in tort, under any warranty, in negligence, or otherwise  
shall not exceed the cost of repair or replacement of the defective  
components or accused infringing devices, and under no circumstances  
shall Dolby Laboratories be liable for incidental, special, direct, indirect,  
or consequential damages (including, but not limited to, damage to  
software or recorded audio or visual material), cost of defense, or loss of  
use, revenue, or profit even if Dolby Laboratories or its agents have been  
advised, orally or in writing, of the possibility of such damages.

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