



DP564 Multichannel Audio Decoder



The Dolby DP564 is the multichannel audio reference decoder for DTV broadcast, postproduction, and DVD-authoring applications.

Critical monitoring of your signal is essential to ensure that the highest quality audio reaches your listeners at home. As our reference decoder, the Dolby® DP564 is the ideal monitoring tool for all quality-control applications. Using the DP564, you can decode and monitor programs with Dolby Digital, Dolby Digital Surround EX™, Dolby Pro Logic® and Pro Logic II, as well as regular two-channel PCM soundtracks.

Control Flexibility

The DP564 provides easy selection and monitoring of Dolby Digital's unique downmixing capabilities, listening modes, and compression modes. This gives content producers and providers an accurate way to verify how material originally produced and transmitted in 5.1 will sound when played back through Dolby Pro Logic or Pro Logic II, two-channel stereo, or mono home systems. Built-in Dolby Headphone processing, with a dedicated volume control, allows monitoring surround sound over standard headphones. The DP564 provides a comprehensive set of functions such as test noise, speaker trims and delays, bass redirection, mutes, and solos for the configuration and control of multichannel monitoring environments.

Inputs and Outputs

There are three digital inputs (one a Toslink™ optical) and an Ethernet port for RTP streaming Dolby Digital audio. A linear timecode (LTC) output allows DVD facilities to check A/V sync between audio encoded in Dolby Digital and uncompressed video. Front- and rear-panel serial interfaces, along with the Ethernet port, facilitate software remote control (supplied) and software updates via a PC. A rear-panel GPI/O port also offers remote control from the Dolby Cat. No. 549 GPI/O controller or other external source.

The ideal companion encoder units are the Dolby DP569 for creating Dolby Digital material, and the Dolby DP563 for encoding into Dolby Pro Logic II and Dolby Pro Logic.

Dolby DP564 Multichannel Audio Decoder

DP564 Front Panel

Multifunction Display

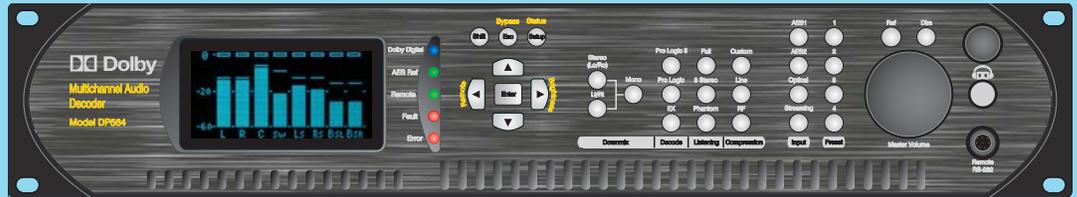
Large display for setup and status monitoring

Keypad

Access to all Dolby downmix, decode, listening, and compression modes; input and monitoring selection, and access to user-assignable presets

Volume Controls

Master and headphone levels



Headphone Output

User selectable: Dolby Headphone or stereo modes. +7 dBu maximum output into 50 Ω nominal; 6.35 mm (1/4-inch) standard stereo headphone jack

RS-232 Serial Remote Port

8-pin female mini-DIN connector; for remote control and software upgrades

DP564 Rear Panel

Digital Audio Inputs

Three total: Two BNC female connectors, unbalanced, 75 Ω , signal levels per AES3-ID-1995 (SMPTE 276M); one fiber optic via Toslink connector

AES Reference Input

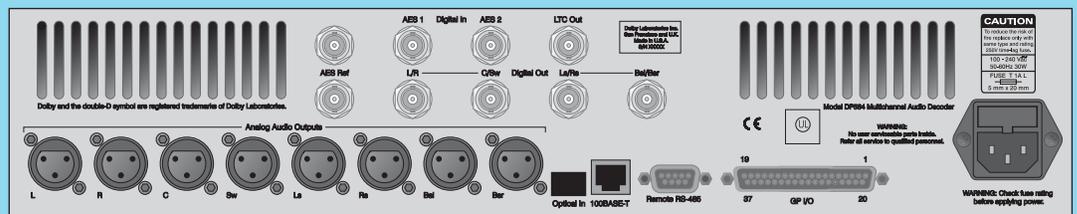
BNC female with loop-through, unbalanced, 75 Ω , signal levels per AES3-ID-1995 (SMPTE 276M)

Digital Audio Outputs

Four BNC female connectors, unbalanced, 75 Ω , signal levels per AES3-ID-1995 (SMPTE 276M)

Analog Audio Outputs

0 dBFS = +24 dBu; balanced floating; eight 3-pin XLR male connectors, 24-bit DAC



Linear Timecode Output

One SMPTE 12M-1995, BNC female, unbalanced, nominal output signal 1 V_{p-p}, output impedance 50 Ω

Serial Remote Control Input/Output

RS-485, 9-pin female D-connector (SMPTE 207M); for remote control and software upgrades

General Purpose Input/Output (GPI/O) Port

37-pin female D-connector, TTL compatible, may be configured to be level or edge sensitive using either polarity; supports Dolby Cat. No. 549 GPI/O controller

Ethernet Port

10/100 Base-T with auto-detection; RJ-45 female connector

Audio Coding Algorithms

Dolby Digital, Dolby Digital Surround EX, Dolby Pro Logic II, Dolby Pro Logic, and Dolby Headphone

Downmix Modes

Lt/Rt, Stereo, Mono

Listening Modes

Full, 3 Stereo, Phantom

Compression Modes

Line, RF, and Custom mode with adjustable parameters

Audio Input Sampling Rates

32, 44.1, 48, 88.2, or 96 kHz

Audio Output Sampling Rates

32, 44.1, or 48 kHz

Frequency Response

Digital outputs: 20 Hz to 20 kHz, ± 0.01 dB

Analog outputs: 20 Hz to 20 kHz, ± 0.5 dB

Distortion

<0.02%, 20 Hz to 10 kHz

Dynamic Range

>106 dB

Channel Trim Level Adjust

+6 to -20 dB in 0.125 dB steps

Crosstalk

<100 dB at 1 kHz

Test Noise

Auto: Sequences wideband or band-limited pink noise through enabled channels at two-second intervals

Manual: Feeds continuous noise to selected channel when unit is in trim level mode

Power Requirements

90–264 VAC, 50–60 Hz, auto-sensing, 40 W maximum; this unit is designed to operate from a centrally switched power source

Dimensions and Weight

2-U rackmount: 88 × 483 × 376 mm

(3.5 × 19 × 14.8 inches)

Net: 4 kg (8.5 lbs)

Environmental Conditions

Operating: 0° to 50°C (32° to 122°F), natural convection cooling, 0–98% relative humidity (noncondensing)

Nonoperating: -20° to +70°C (-4° to +158°F)

Regulatory Notices

North America: This unit complies with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules and Industry Canada ICES-003 Class A requirements, and is UL listed for both US and Canada.

Europe: This unit 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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