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
For status indication and setup operations
Keypad
Access to all Dolby downmix, decode, listening, compression modes and user-assignable presets; input and monitoring selection
Volume Controls
Master and headphone levels

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

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, 75Ω, signal levels per AES-3lD-1995 (SMpte 276M); one fiber-optic via Toslink connector
AES Reference Input
BNC female with loop-through, unbalanced, 75Ω, signal levels per AES3-ID-1995 (SMPTE 276M), external 75Ω termination required
Digital Audio Outputs
Four BNC female connectors, unbalanced, 75Ω, signal levels per AES-3ID-1995 (SMpte 276M)
Analog Audio Outputs
0 dBFS = +24 dBu; balanced floating; eight
3-pin XLR male connectors, 24-bit DAC
Linear Timecode Output Port
One SMPTE 12M-1995, BNC female, unbalanced, nominal output signal 1 Vp–p, output impedance 50Ω
RS-485 Serial Remote Control Input/Output Port
9-pin female D-connector for remote control and software upgrades

General Purpose Input/Output 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
RJ-45 female connector, 10/100 Base-T with auto-detection

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, and 96 kHz
Audio Output Sampling Rates
32, 44.1, and 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 2-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

Environmental Conditions
Operating: 0°C–50°C (32°F–122°F), natural convection cooling, 0%–98% relative humidity (noncondensing)
Nonoperating: –20°C to +70°C (–4°F 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. It is UL listed for the 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).

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.

Dolby, Pro Logic, and the double-D symbol are registered trademarks of Dolby Laboratories. Surround EX is a trademark of Dolby Laboratories. Toslink is a trademark of the Toshiba Corporation.

© 2005 Dolby Laboratories, Inc. All rights reserved. S05/15276/16128
Part No. 91770, Issue 2

Dolby Laboratories, Inc. 100 Potrero Avenue, San Francisco, CA 94103-4813 Telephone 415-558-0200 Fax 415-863-1373
Woolton Bassett, Wiltshire SN4 8QJ, England Telephone (44) 1793-842100 Fax (44) 1793-842101 www.dolby.com