



Dolby® DP568 Professional Reference Decoder

The Dolby DP568 Professional Reference Decoder is a 7.1-channel decoder that assists broadcasters and manufacturers in the adoption and deployment of the latest Dolby audio codecs.

The Dolby® DP568 is designed to help broadcasters monitor streams along multiple points of the broadcast chain. The DP568 provides a detailed analysis of Dolby audio streams for professionals, making it ideal for broadcast trials and manufacturers' test environments.

It provides real-time decoding of Dolby Digital Plus, Dolby Digital, Dolby E, HE AAC with Dolby metadata, and Dolby Pro Logic® IIX. Enhanced features of Dolby Digital Plus, such as secondary audio bitstream mixing and 7.1-channel decoding, can easily be monitored using the DP568.

Among its extensive capabilities, the DP568 can:

- Allow broadcasters to perform quality control at any point within their headends
- Enable monitoring, display, and logging of all audio-related metadata and measurement of program loudness, using Dolby Dialogue Intelligence™, ITU-R BS.1770-2, or EBU Mode loudness estimation

Additional features include:

- Monitoring capabilities for emulating set-top box behavior in the QC environment
- A consumer emulation mode for Dolby Digital Plus and Dolby Multistream Decoders found in consumer TVs and set-top boxes
- Support for MPEG-2 transport stream with H.264 and MPEG-2 video decoding to help verify audio/video synchronization
- Standard analog and digital audio and video outputs (including HDMI®)
- A web-based user interface for easy selection and monitoring of the unique downmixing capabilities, listening modes, and compression modes of Dolby technologies
- A front-panel interface for basic setup and monitoring
- A headphone output for confidence monitoring
- A web services API to enable automated test operations

Dolby DP568 Professional Reference Decoder



Front Panel

Multifunction Display

For status indication and setup operations, LEDs display errors and presence of audio and video

Volume Controls

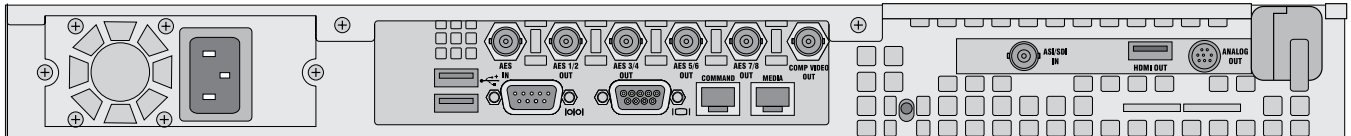
Master and headphone levels

Headphone Output

6.35 mm (1/4-inch) standard stereo headphone jack for confidence monitoring

USB Ports

Two standard USB ports



Rear Panel

ASI/SDI Input

One autodetecting BNC female connector, 75Ω, unbalanced

Autodetects and supports SD-SDI (SMPTE 259M-1998), 1.5 GB/s HD-SDI (SMPTE 292M-1998), 3.0 GB/s HD-SDI (SMPTE 424M-2008), or DVB-ASI (ETSI TR 101 891 v1.1.1)

Supports processing of one stereo pair within the 16 embedded audio channels in SDI

AES Input

One BNC female connector, unbalanced, 75Ω, signal levels per AES-3id-1995 (SMPTE 276M)

Supports Dolby Digital Plus, Dolby Digital, Dolby E, HE AAC, and PCM input

Digital Audio Outputs

Four BNC female connectors, unbalanced, 75Ω, signal levels per AES-3id-1995 (SMPTE 276M)

Provides PCM, Dolby Digital, or Dolby Digital Plus output

Analog Audio Outputs

Balanced two-channel stereo analog audio output via one 8-pin mini-DIN connector

Breakout cable with two 3-pin XLR male connectors

HDMI Output

HDMI 1.3a-compatible output with support for uncompressed video and multichannel PCM audio

Composite Video Output

BNC female connector, unbalanced, 75Ω supporting SMPTE 170M NTSC or ITU-R BT.470 PAL formats

Media Ethernet Port

RJ45 connector for 1000Base-T Ethernet; supports MPEG-2 transport streams over UDP/RTP with IGMPv3

Control Ethernet Port

RJ45 connector for 1000Base-T Ethernet; provides status and control through a web-based user interface

Processing Capabilities

Audio Coding Algorithms

Dolby Digital Plus (E-AC-3); Dolby Digital (AC-3); Dolby E, AAC, HE AAC v1, HE AAC v2 with Dolby metadata; Dolby Pro Logic IIx; MPEG-1 LII

Video Formats Supported

H.264, MPEG-2

HD: 1080i at 25, 29.97, and 30 fps; 720p at 59.94, 60, and 50 fps

SD: 480i at 29.97 fps and 576i at 25 fps

Loudness Estimation/Algorithms

ITU-R BS.1770-1 audio loudness measurement with Dialogue Intelligence, patented

ITU-R BS.1770-2 audio loudness measurement
EBU Mode (EBU R128)

Peak Measurement

True Peak per ITU-R BS.1770-1 Annex 2

Environmental Characteristics

Power Specifications

100–240 VAC, 50–60 Hz, autosensing, 350 W, designed to operate from a centrally switched power source

Front-panel power switch

Field-replaceable power supply

Dimensions and Weight

1-U rackmount: 44 × 483 × 394 mm (1.75 × 19 × 15.50 inches)

Net: 6.5 kg (14.5 lb)

Environmental Conditions

Operating: 0°C–40°C (32°F–104°F), fan cooling, 20%–80% relative humidity (noncondensing)

Regulatory Notices

North America: UL, FCC, and CE compliant

Europe: complies with the European Union Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS), as amended by Commission Decisions 2005/618/EC, 2005/717/EC, and 2005/747/EC (RoHS Directive) and WEEE

Visit www.dolby.com/warranty for the latest product warranty information.

To purchase a Dolby product, go to the Find a Dealer section of www.dolby.com/broadcast.

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