DOLBY®

Hear It. See It. Feel It.
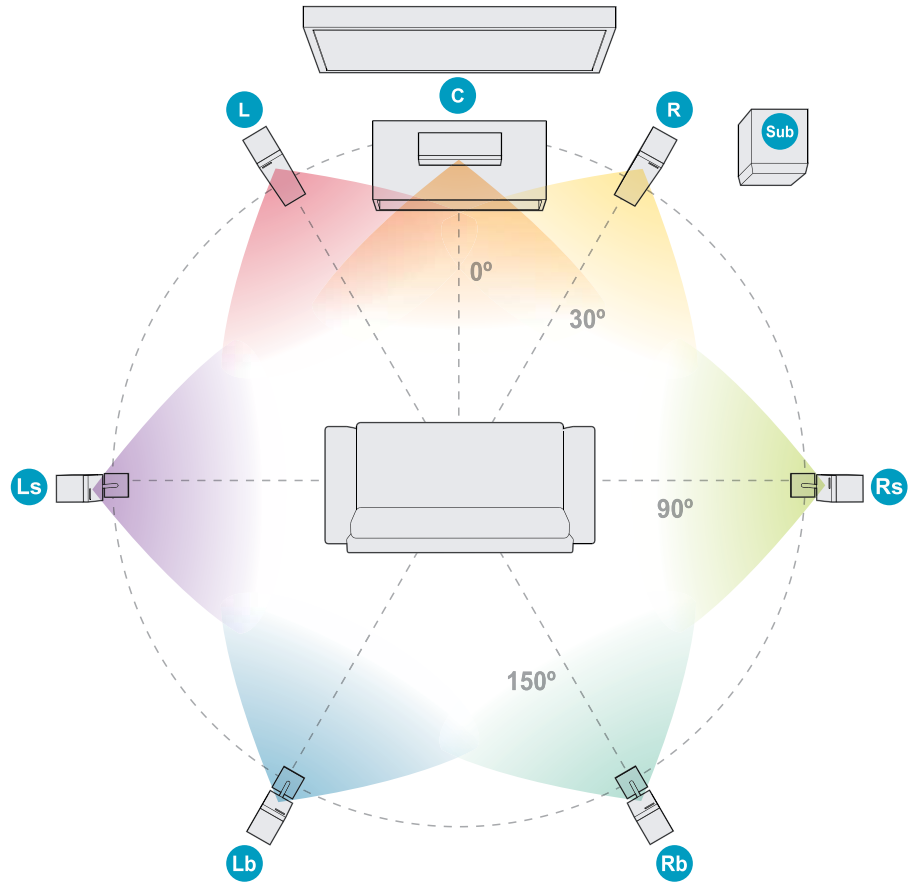

DOLBY® DIGITAL PLUS

What's the Plus in Dolby® Digital Plus?

Dolby® Digital Plus is Dolby's new-generation audio technology that elevates and redefines the home theater surround experience with formats like Blu-ray Disc™, digital broadcasting, and devices that play downloadable movie content.

Better Sound

As implemented in Blu-ray Disc, Dolby Digital Plus features more channels, less compression, and higher data rates for a warmer, richer, more compelling audio experience than is possible from standard-definition DVDs. Dolby Digital Plus content when encoded at higher bit rates has been described by some reviewers as being "virtually transparent" to the original source.

At the same time, the advanced coding efficiencies of Dolby Digital Plus enable content producers to deliver high-resolution multichannel soundtracks at lower bit rates than with Dolby Digital.

Dolby Digital Plus offers an enveloping 7.1-channel listening experience.

More Channels

Dolby Digital Plus can deliver up to 7.1 channels of surround sound from Blu-ray Disc players and digital broadcasts, providing a more enveloping entertainment experience. Capable of supporting up to 15.1 channels of dynamic surround sound, Dolby Digital Plus has the flexibility to fulfill the needs of new content delivery formats for years to come.

Interactivity Support in Blu-ray Disc

Dolby Digital Plus also enables BonusView (Profile 1.1) and BD-Live™ (Profile 2.0), interactive Blu-ray Disc features that mix stereo or multichannel secondary audio such as a director's commentary with the disc's main theatrical soundtrack. BonusView is an embedded picture-in-picture option for secondary audio and video content recorded on the disc, while BD-Live displays content streamed off the Internet.

Ready to Go

Dolby Digital Plus has been adopted as an audio format for Blu-ray Disc. Dolby Digital Plus decoding and playback is integrated in the majority of Blu-ray Disc players, and Dolby Digital Plus decoding is included in all advanced digital A/V receiver products.

Connectivity and Compatibility

Today's advanced digital A/V receivers are equipped to decode Dolby Digital Plus bitstreams transported by means of an HDMI™ 1.3 connection. HDMI 1.3 provides all the standard HDMI benefits (such as single-cable connection for both audio and video), and allows full application of the receiver's DSP postprocessing and bass management.

A/V receivers equipped with Dolby Digital Plus can decode and play back Dolby Digital Plus bitstreams from Blu-ray Disc, as well as future devices including set-top boxes, Internet audio and video sources, and downloadable HD media. Decoding soundtracks in your A/V receiver can also enable full 96/24 digital audio capability when that feature is not supported in the player.

Additionally, multichannel Dolby Digital Plus signals can be decoded inside the player and transported to a connected A/V receiver via analog outputs. Dolby Digital Plus signals can also be decoded to PCM inside the player and transported via HDMI 1.1, HDMI 1.2, and HDMI 1.3 connections; the majority of Blu-ray Disc players support this capability.

Dolby Digital Plus ensures compatibility with the millions of Dolby Digital equipped receivers and home theater systems currently in use, with even better audio performance than standard-definition DVD. Dolby Digital Plus soundtracks are easily converted to a 640 kbps Dolby Digital signal without decoding and reencoding, for output via S/PDIF. The 640 kbps bit rate, higher than the 448 kbps used on DVDs, is fully compatible with all existing Dolby Digital decoding products such as A/V receivers and can provide higher-than-DVD quality from Dolby Digital Plus soundtracks.

The discrete 5.1 "core plus extension" design of Dolby Digital Plus ensures the finest discrete surround sound experience over both 5.1 and 7.1 playback systems. Blu-ray Disc content providers can deliver—in a single bitstream—a discrete 7.1-channel soundtrack while simultaneously supporting a fully discrete 5.1-channel mix.

DOLBY DIGITAL PLUS FEATURES AND BENEFITS

Feature: Less compression with higher bit rates on Blu-ray Disc.

Benefit: Richer, more compelling audio.

Feature: Up to 7.1 channels of surround sound.

Benefits: More involving and enveloping listening experience, dramatic special effects.

Feature: Backward compatibility.

Benefit: Works with existing A/V receivers and home theater systems for compelling 5.1 surround sound with even higher quality than DVD.

Feature: Scalable sound delivery.

Benefit: Optimum sound quality and efficiency for available bandwidth, ideal for bandwidth-critical broadcast and streaming applications as well as high-bandwidth HD media.

Feature: HDMI support.

Benefit: Easy connections with current and future components.

Flexibility

Dolby Digital Plus can be configured for optimum performance with the available bandwidth, operating at higher bit rates for high-definition Blu-ray Discs and at lower bit rates for emerging bandwidth-critical applications such as cable, IPTV, IP streaming, satellite (DBS), and terrestrial broadcast. At lower bit rates Dolby Digital Plus is also a preferred format for delivering high-quality interactive secondary audio content on Blu-ray Disc.

Efficiency

Dolby Digital Plus not only enables interactive features but also makes it possible to produce discs with multiple high-quality soundtracks without compromising video quality or sacrificing disc space available for additional content. Multichannel alternate-language soundtracks encoded in Dolby Digital Plus can complement a Dolby TrueHD soundtrack on Blu-ray Disc, giving the content maker more flexibility while providing all listeners a playback audio experience that is of a higher quality than standard-definition DVD.

Metadata Support

Dolby Digital Plus supports the metadata parameters currently employed by content producers and broadcasters to ensure a consistent listening experience, and Dolby Digital Plus was designed with the flexibility to support future metadata applications and features.