

# Integrating the Dolby DP600 Program Optimizer in Omneon Work Flows

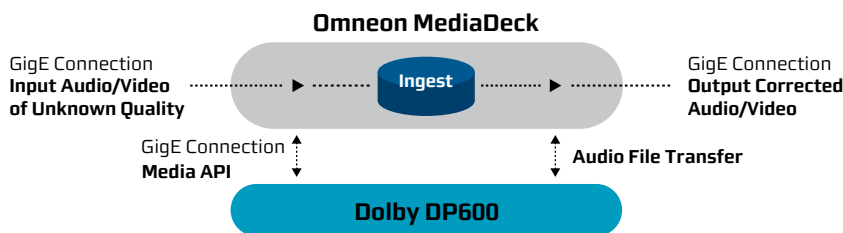
This application note describes the integration of the Dolby® DP600 Program Optimizer and the Omneon® MediaDeck™ or Spectrum™ media servers to provide an automated file-based work flow to correct and normalize audio assets. This solution is compatible with Omneon-based content in both Material Exchange Format (MXF) and QuickTime® formats.

## The Challenge for Broadcast Professionals

Advances in broadcast and information technologies have substantially changed the broadcast operations environment. Stand-alone dedicated equipment and manual processes are being replaced with more flexible and sophisticated processes that are managed in automated work flows. At the same time, broadcasters are dealing with unresolved issues that are carried over to the all-digital world. One such example is the frequent customer complaints about inconsistent loudness in programming and commercials.

## The Solution—The Dolby DP600 Program Optimizer and Omneon MediaDeck

The Dolby DP600 Program Optimizer is a flexible audio platform designed for professional broadcasting and postproduction that provides a file-based work-flow solution for loudness correction, audio conversion, and upmixing. The Omneon MediaDeck is a broadcast-quality media server for ingest and play-out that uses sophisticated file-based work flows and supports a broad range of video formats. The DP600 integrates with the Omneon Media application programming interface (API) to provide a seamless automated work flow that addresses your audio processing needs.



## Benefits of the DP600 Work Flow with Omneon

The integration of the Dolby DP600 and Omneon media servers simplifies your operational environment. Standard gigabit Ethernet is used for all management, communication, and the transfer of files. Hot folders are used to automate the work-flow processes, and the DP600 can even support multiple MediaDecks in a single work flow.

## Features of the DP600

The DP600 provides the following capabilities:

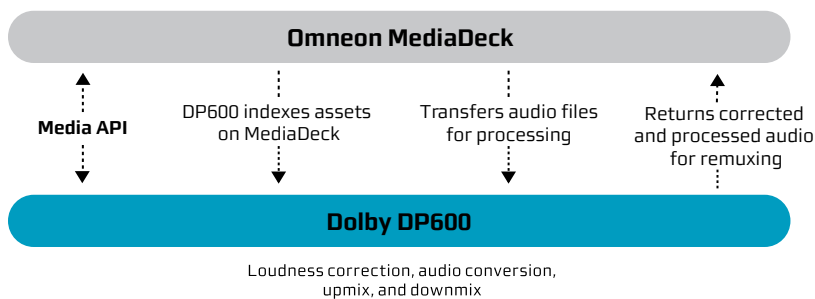
- Audio analysis and loudness correction using Dolby’s intelligent and automatic speech-based loudness normalization or the ITU-R BS.1770-1 loudness specification.
- The DP600-C version of the Program Optimizer provides faster-than-real-time file-based encoding, decoding, and conversion between any of Dolby’s audio formats (Dolby Digital, Dolby Digital Plus, Dolby Pulse, and Dolby E), and PCM, MPEG-1 LII, AAC, HE AAC, and HE AAC v.2, while preserving the audio metadata.
- A highly efficient single-step transcode of Dolby Digital to Dolby Digital Plus.
- An intelligent upmixing option for enhancing two-channel audio for use in 5.1-channel applications.

Please see the DP600 specifications for additional details.

## The Work Flow

The work flow may include the following steps:

- Create directories for file input and file output on the MediaDeck.
- Place MXF or QuickTime files in the input directory of the MediaDeck.
- The DP600 scans the input directory for new files. As these are detected, the DP600 transfers the files and processes the audio locally.
- The DP600 returns the processed audio to the output directory of the MediaDeck.
- The MediaDeck then reassociates the video and audio for play-out.



## Related Omneon Solutions for Broadcast

Omneon provides a number of solutions that seamlessly integrate with the DP600. Please visit the Omneon website to learn more about the Omneon Spectrum, the MediaDeck, and other related products.



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