



Solution Sheet

Emotion Systems Audio Description Module
brings operational efficiencies to
Audio Processing of File-Based Video



What is Audio Description (AD)?

Audio Description (AD), also known as Descriptive Video Service (DVS), is a service designed to make video content more accessible to visually impaired individuals. AD involves providing a narration of visual descriptions (such as a character opening a door) during natural gaps in dialogue, enriching the experience of visual media for people with sight loss. This service plays a crucial role in promoting inclusivity by ensuring that content is accessible to all.

Several countries have implemented requirements for broadcasters to air a specific percentage of programming containing audio description. Streaming giant Netflix has also committed to providing descriptions for its original series within a set timeframe. The interest in AD stems from a commitment to a greater inclusivity and meeting the diverse needs of audiences.



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Benefits

- Inclusive accessibility for blind or visually impaired individuals
- Promotes independence and enhanced understanding for visually impaired community
- Cultural and social inclusion
- Compliance with accessibility standards



Emotion Systems Engine boasts an array of powerful audio processing features, including:



All adeptly applied to popular broadcast file formats like MXF ,MOV, Wav.

Delivering Audio Description Content in Engine:

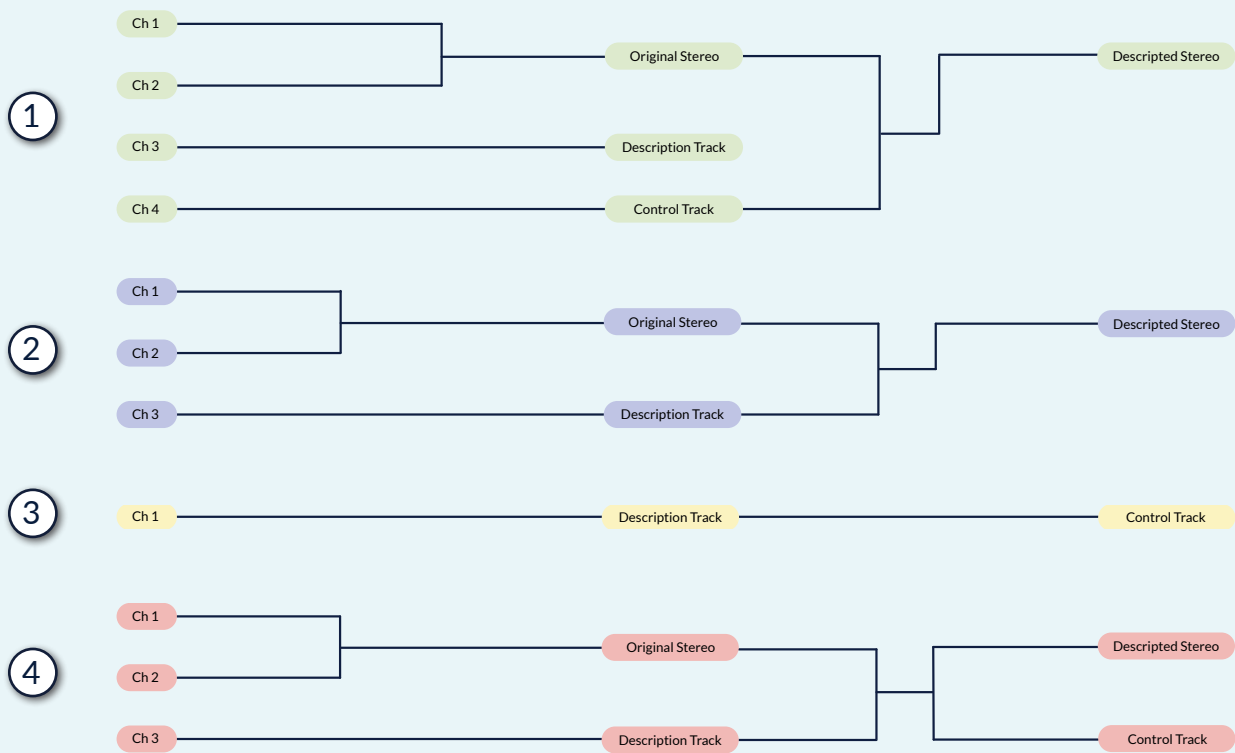
Typically, AD content is delivered as a second audio stream, either mixed by the set-top box or pre-mixed for online consumption. Engines ADMix Module offers a simple method for mixing program audio with AD commentary tracks, making it particularly useful for delivering Video on Demand (VOD) content. The nature of Engine as an automated audio signal processing application means the operator, once setting up the correct workflow, can automate the creation of AD deliverables. This ensures our customers can meet the ever increasing demand in providing AD deliverables.

ADMix Creation:

Engine's flexible workflow generator allows users to select channels for the source main mix, commentary, and control track from various source file formats, including MXF and WAV files. Configuration choices enable the creation of AD with Program Mix files suitable for transmission to Set-Top Boxes or Online devices.

Options for ADMix Creation:

Our ADMix Module provides multiple options for creating AD with Program Mix files, including scenarios where the original control track is missing. From creating files suitable for online consumption to complying with broadcast standards like BBC WHP198, Engine empowers users with unparalleled flexibility. Please see below for a list of the different ADMix options we offer.



- ① **Create an Audio Described Program Mix file when you have:**
 - Original Program Audio Track
 - The Audio Description Commentary Track
 - The Audio Description Control Track

- ② **Create an Audio Described Program Mix file when you have:**
 - Audio and AD with Program Mix
 - Original Stereo and Description tracks available
 - Missing control track

- ③ **Generate BBC WHP198-compliant control track from Description track.**
 - Original Stereo and Description tracks present
 - Missing control track

- ④ **Simultaneously create a Description mix by merging the original main mix with the commentary track and generate a WHP198 compliant control track.**
 - Original Stereo and Description tracks present
 - Missing control track

Using an automated system like Engine for generating audio descriptions offers several advantages that significantly improve accessibility for individuals with visual impairments. Firstly, these systems bring efficiency and speed to the process, enabling the rapid creation of audio descriptions, especially beneficial when dealing with a large volume of multimedia content. Their consistency in producing standardised descriptions ensures a uniform experience for users, eliminating variations in style and quality that might occur with manual approaches. The cost-effectiveness of automated systems makes them a sustainable solution for organisations seeking to enhance accessibility without incurring significant labour costs.

Another key advantage of Engine lies in its scalability which allows it to handle a diverse range of content seamlessly. With the ability to generate audio descriptions with missing data, Engine enables the user to create inclusive content almost immediately. Additionally, Engine's integration with many leading media supply chains and transcoders enhances the efficiency of the overall production process, streamlining the addition of audio descriptions during the content delivery phase.

In contrast to human-dependent processes, Engine seamlessly combines the original mix with pre-recorded audio description narrations. This approach minimises the risk of timing errors that may occur when humans manually synchronise audio elements. By eliminating the need for direct human intervention, Engine ensures a precise and error-free integration of audio descriptions. The automation provided by Engine not only mitigates the potential for errors but also offers a reliable and consistent solution for organisations seeking a streamlined method for incorporating audio descriptions into multimedia content.

About Emotion Systems

Emotion Systems provide audio professionals in the broadcast and television industry with the very best products to solve real-life problems. We do this by focusing relentlessly on audio processing, listening enthusiastically to our clients and industry colleagues, and collaborating to create products that innovate the broadcast industry. As a small team of specialists, Emotion Systems has designed products that have helped audio professionals all over the world transition from analogue to digital delivery, navigate the changes in the industry, and provide operational efficiencies in the process. More information available at www.emotion-systems.com