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SYSTEMS

Solution Sheet

Enhancing Audio Analysis and Content Verification with Emotion Systems Engine and the Examine Module

engine

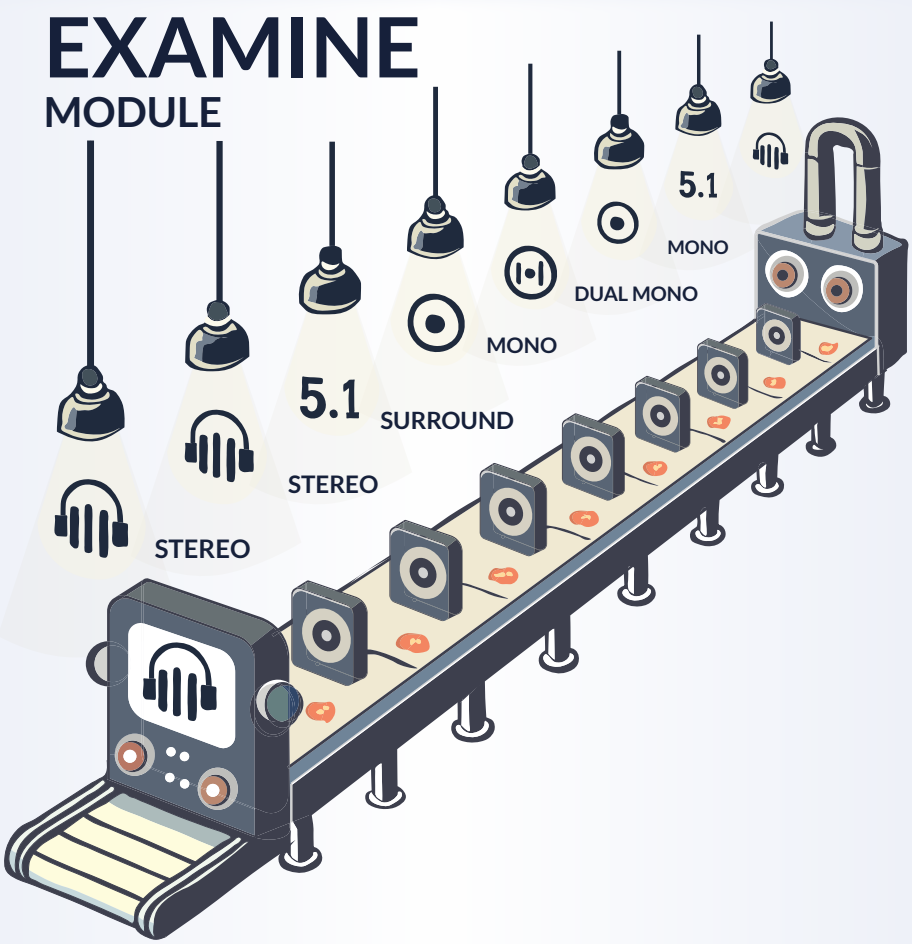
In broadcast audio delivery and processing, identifying the type, format, or structure of the audio within media files can present significant challenges. The shift from tape to digital formats left many legacy media files without crucial metadata, often found on the white card accompanying tapes. In today's fast-paced industry, where broadcasters and platforms are inundated with growing amounts of content, ensuring you've received the correct audio for seamless playout is more critical than ever.

At Emotion Systems, we recognize the complexities involved in onboarding or converting thousands of media files. That's why we developed the Examine module—a powerful solution designed to quickly and accurately verify the audio properties within your media. Integrated within our Engine platform, Examine can automate the analysis of up to 10,000 hours of content per month, ensuring you meet your audio requirements efficiently and with confidence.

Benefits

- **Efficiency**: Quickly analyzes large volumes of media, identifying audio configurations faster than real-time, saving significant time and reducing manual labor.
- **Accuracy**: Precisely detects mono, stereo, dual mono, 5.1 (film and SMPTE order), AAC, and other channel formats, ensuring you know exactly what audio you're working with.
- **Silence Detection**: Identifies and locates silence in multi-channel files, helping you quickly understand the structure of your audio, even in complex 16-channel files.
- **Dialogue Analysis**: Provides a percentage breakdown of dialogue content, allowing you to infer where M&E (music and effects) channels are located.
- **Automation**: Processes thousands of hours of media content automatically, with minimal human intervention, dramatically increasing throughput.
- **Flexibility**: Adapts to various audio formats and structures, making it easier to handle diverse media files without needing to manually inspect them.
- **Scalability**: Proven to analyse over 10,000 hours of content per month, making it ideal for broadcasters and platforms dealing with high volumes of media.
- **Cost-Effectiveness**: Reduces the need for manual quality control, lowering operational costs while maintaining high accuracy and reliability.

Engine is a powerful application designed for comprehensive content analysis and verification, ensuring the highest standards of audio integrity in media delivery. It excels at analysing and verifying audio formats, channel structures, loudness levels, and silence detection, offering a detailed overview of your content. With modules like Examine, Engine can swiftly identify audio configurations such as mono, stereo, 5.1, and more, while also pinpointing key elements like dialogue percentage and M&E channels. This level of automation and precision ensures that your media files meet the required specifications for broadcast or distribution, minimising errors and streamlining the quality control process.



Rapid Troubleshooting with Real-Time Insights

In today's media landscape, downtime and delays are costly. Examine not only automates the identification of audio issues but also provides real-time insights that help engineers quickly troubleshoot problems. Whether it's an incorrectly placed stereo mix or missing M&E channels, Examine's fast and accurate analysis allows for instant feedback, enabling users to make informed decisions on how to correct errors before they affect broadcast or distribution. This ability to rapidly pinpoint and resolve audio issues saves valuable time and resources, ensuring smooth and uninterrupted operations.

One of the key strengths of the Examine module is its flexibility in adapting to different media environments. Whether you're working with archives, broadcast material, or high-volume content deliveries, Examine can be configured to meet your unique requirements. The ability to customise parameters to aid audio channel layout detection, silence thresholds, and dialogue content analysis ensures that your content verification process is tailored specifically to the needs of your organisation. This level of customisation allows for seamless integration into both small-scale operations and large broadcasting networks.

Broadcasting and content delivery are governed by a range of industry standards, such as those for loudness, audio channel configuration, and file format specifications. Engine ensures that all audio passing through your pipeline meets these stringent standards. With Examine automatically verifying the technical aspects of your audio, it helps you avoid costly fines or content rejection due to non-compliance. Whether your needs involve meeting the requirements of ATSC, EBU R128, or other regulatory frameworks, Examine ensures that your audio is fully compliant with the latest industry guidelines.

As media technologies evolve, so too do the demands placed on broadcasters and content creators. Examine is designed not only for current audio formats but also to adapt to emerging standards and technologies. With its scalable architecture and ongoing updates, the Examine module ensures that your audio analysis and verification processes remain at the cutting edge. Whether your content shifts toward immersive audio formats, or you begin handling more complex channel configurations, Examine can grow with your needs, future-proofing your audio workflow for years to come.

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