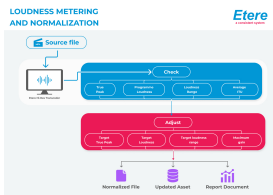


## EA1545 ETERE ETX-L LIVE LOUDNESS CONTROL

Etere ETX-L Live Loudness Control prevents excessive audio jumps through automatic audio control using ITU-R BS. 1770/ITU-R BS. 1771 and peak value analysis.



Loudness Control Etere

Etere ETX-L integrates predictive and automatic scheduling control capabilities instead of using dedicated processing hardware with manual management.

Etere ETX-L Live Loudness Control is the most versatile software for correcting common errors and avoiding fines due to excessive transmission volume. With Etere, it is also possible to perform a preliminary calculation of the output volume through the loudness statistics of a specific broadcast day.

This automated audio control feature is currently available for Etere Automation with ETX, Etere ETX-M Multiviewer, and Etere Ad Insertion/ Etere continuously monitors embedded multi-channel surround audio loudness while seamlessly adjusting system gain across all channels to ensure loudness levels are at an optimum level.

### Key Features

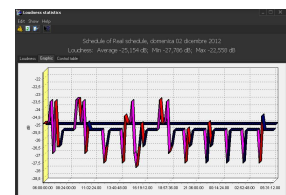
- ☐ Perform all audio controls before broadcast to ensure on-air playlists are always error-free
- ☐ Supports multiple controls concurrently
- ☐ Does not require audio compressors; with intelligent technology, ETX-L automatically adjusts the average loudness to meet guidelines before the media goes on air
- ☐ No more fines due to audio loudness mistakes
- ☐ Fast and accurate workflows
- ☐ Up to 100x file-based audio control, including also true-peak detection performed across multiple channels to ensure that "peak-program level limits" are adhered to for each channel



### Loudness Average

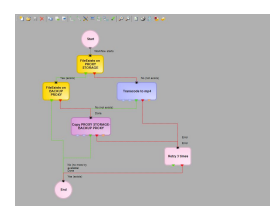
A television playlist's "daily loudness average" is automatically calculated using the Etere Loudness Statistics module. This tool computes the loudness average of all the events featured on it, also performing some loudness checks such as:

- ☐ Events present in the playlist must not exceed the daily average in more than a user-defined tolerance (in dB)
- ☐ Events present in the playlist must not exceed the loudness of the previous event in more than a user-defined tolerance (in dB)



### Workflow Integration

Etere Media Asset Management (MAM) integrates an automatic, high-speed video quality check, including loudness analysis capabilities. The asset loudness data is saved in the MAM database as asset metadata.



## Etere Ecosystem Integration

Etere ETX-L is integrative with the Etere Ecosystem.

- ☐ As a very first action, the operator sets -before the on-air- in Etere Executive Scheduling the minimum/maximum volume for the forthcoming scheduling
- ☐ Etere CMS will automatically check the actual peak loudness and audio phase of all materials' audio outputs, marking the detected values in the asset's EDL at the exact points they were encountered
- ☐ Checked asset forms are automatically catalogued in Etere Media Asset Management (MAM) to let the operator know in advance where a manual check needs to be performed
- ☐ The operator will be alerted in case any error is encountered (for example, the loudness does not follow all the set benchmarks) during the production, ingest or other work phases
- ☐ The loudness integration can be further enhanced by using Etere HiRes Transcoder to support file-based loudness normalization as well as standard encoding, decoding and transcoding operations between different audio formats

