

LA Production

File-based loudness measurement
and normalization

Loudness Analyzer is a line of desktop applications for on-air loudness control and file-based loudness measurement and normalization

Loudness Analyzer



LA Production with Level Magic™ algorithm allows broadcasters to perform file-based loudness measurement and normalization in compliance with all current international standards while preserving high audio quality

Compliant with:

ITU-R BS.1770(-1/2/3)

EBU R128

ATSC A/85

ARIB TR-B32

FREE TV OP-59

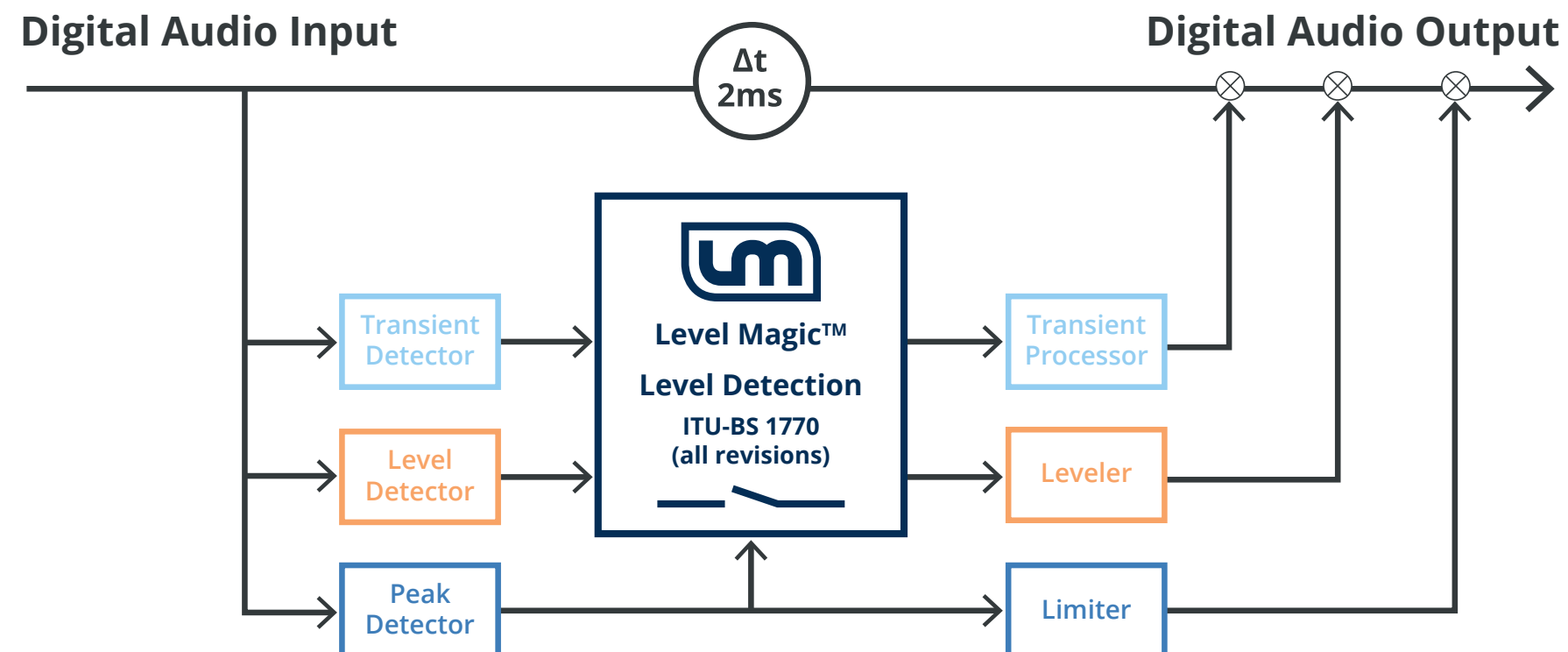
Portaria 354



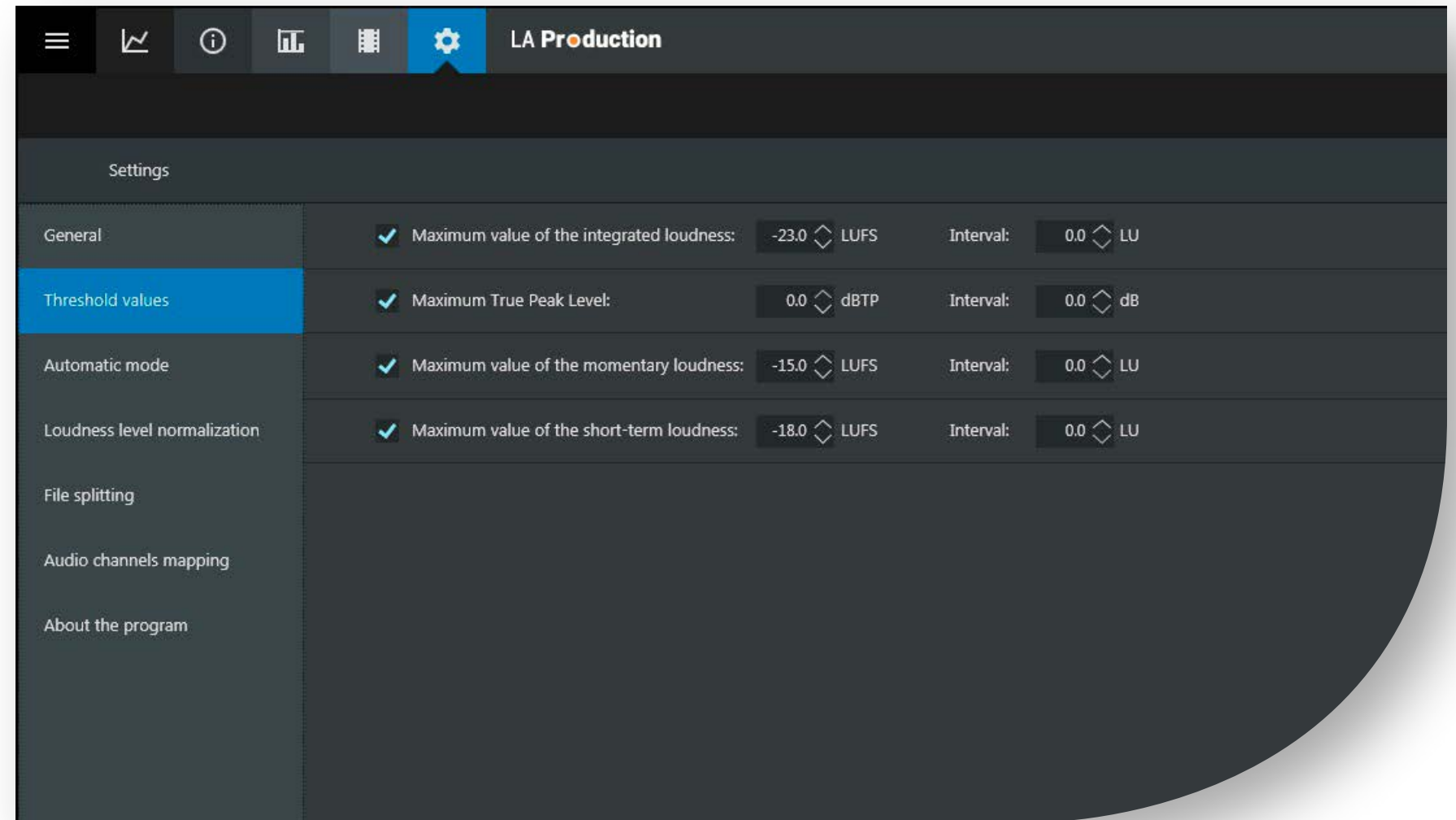
LA Production utilizes the original Level Magic™ algorithm as an option.

Developed by Jünger Audio, Level Magic™ is a sophisticated loudness control algorithm, that normalizes files with a multi-stage design: Adaptive Gain Control (AGC), Transient Processing and Brickwall Peak Limiting.

As a result, the audio is compliant with the selected standard but free of any unwanted artefacts such as pumping, breathing or distortion



The application allows adjusting threshold values for integrated loudness, true peak level, momentary loudness and short-term loudness



The application analyzes audio and video files and displays the most critical loudness values

If the predefined level is exceeded, the respective value and the file name are marked red

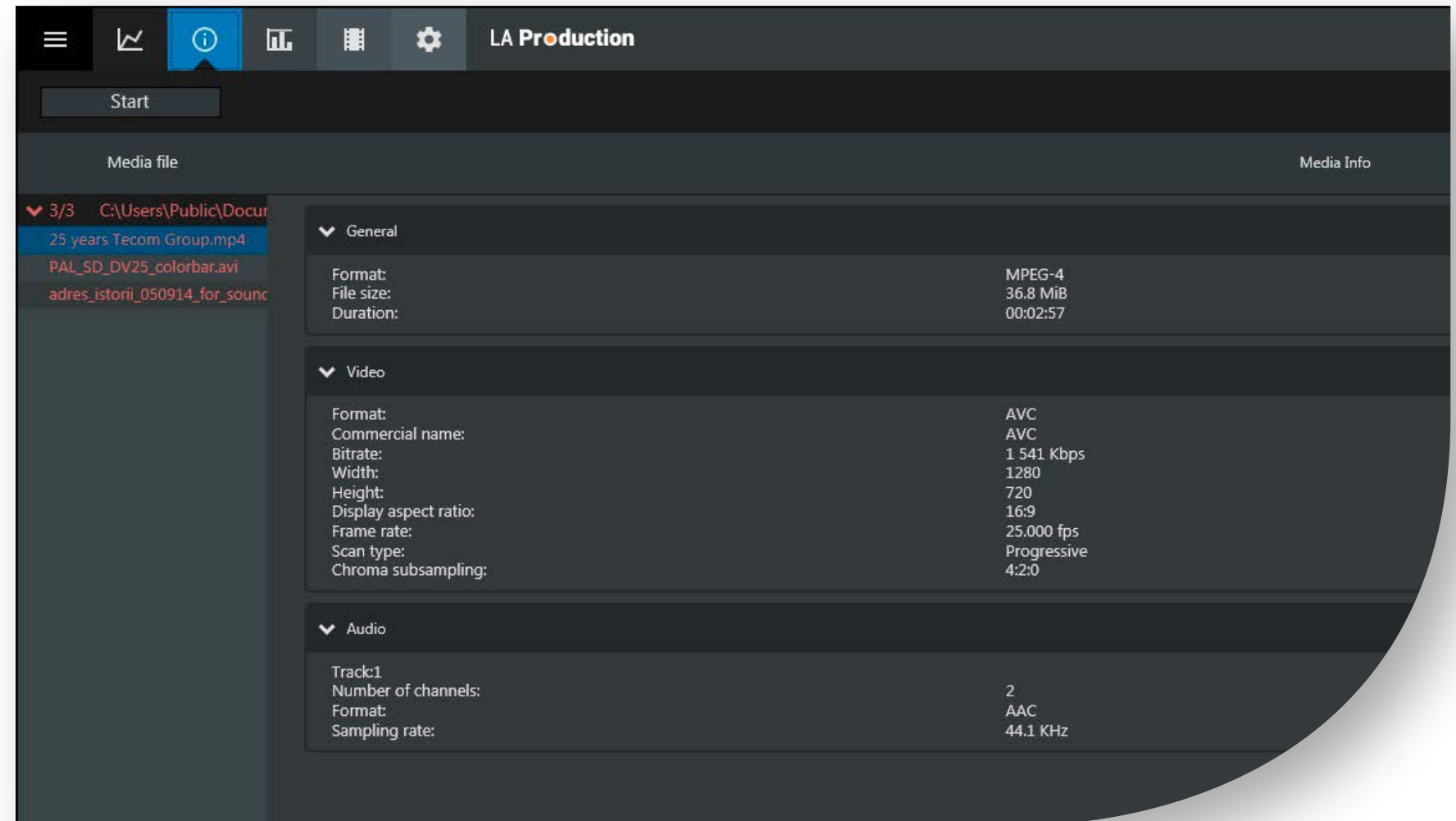


| Media file | Number of audio tracks | Number of channels | Duration | Maximum True Peak Level, dBTP | Maximum value of the momentary loudness, LUFS | Maximum value of the short-term loudness, LUFS | Integrated loudness, LUFS | Loudness range, LU |
|--------------------------------|------------------------|--------------------|----------|-------------------------------|---|--|---------------------------|--------------------|
| 25 years Tecom Group.mp4 | 1 | 2 | 00:02:57 | 0.3 | -9.2 | -13.0 | -15.0 | 3.4 |
| adres_istorii_050914_for_sounc | 1 | 2 | 00:17:53 | 0.1 | -6.3 | -10.5 | -13.8 | 4.7 |
| ▼ PAL_SD_DV25_colorbar.avi | 8 | | | | | | | |
| Audio track 1 | | 2 | 00:00:10 | -12.0 | -12.0 | -12.0 | -12.0 | 0.0 |
| Audio track 2 | | 2 | 00:00:10 | -12.0 | -12.0 | -12.0 | -12.0 | 0.0 |
| Audio track 3 | | 2 | 00:00:10 | -70.0 | -70.0 | -70.0 | -70.0 | 0.0 |
| Audio track 4 | | 2 | 00:00:10 | -70.0 | -70.0 | -70.0 | -70.0 | 0.0 |
| Audio track 5 | | 2 | 00:00:10 | -70.0 | -70.0 | -70.0 | -70.0 | 0.0 |
| Audio track 6 | | 2 | 00:00:10 | -70.0 | -70.0 | -70.0 | -70.0 | 0.0 |
| Audio track 7 | | 2 | 00:00:10 | -70.0 | -70.0 | -70.0 | -70.0 | 0.0 |
| Audio track 8 | | 2 | 00:00:10 | -70.0 | -70.0 | -70.0 | -70.0 | 0.0 |

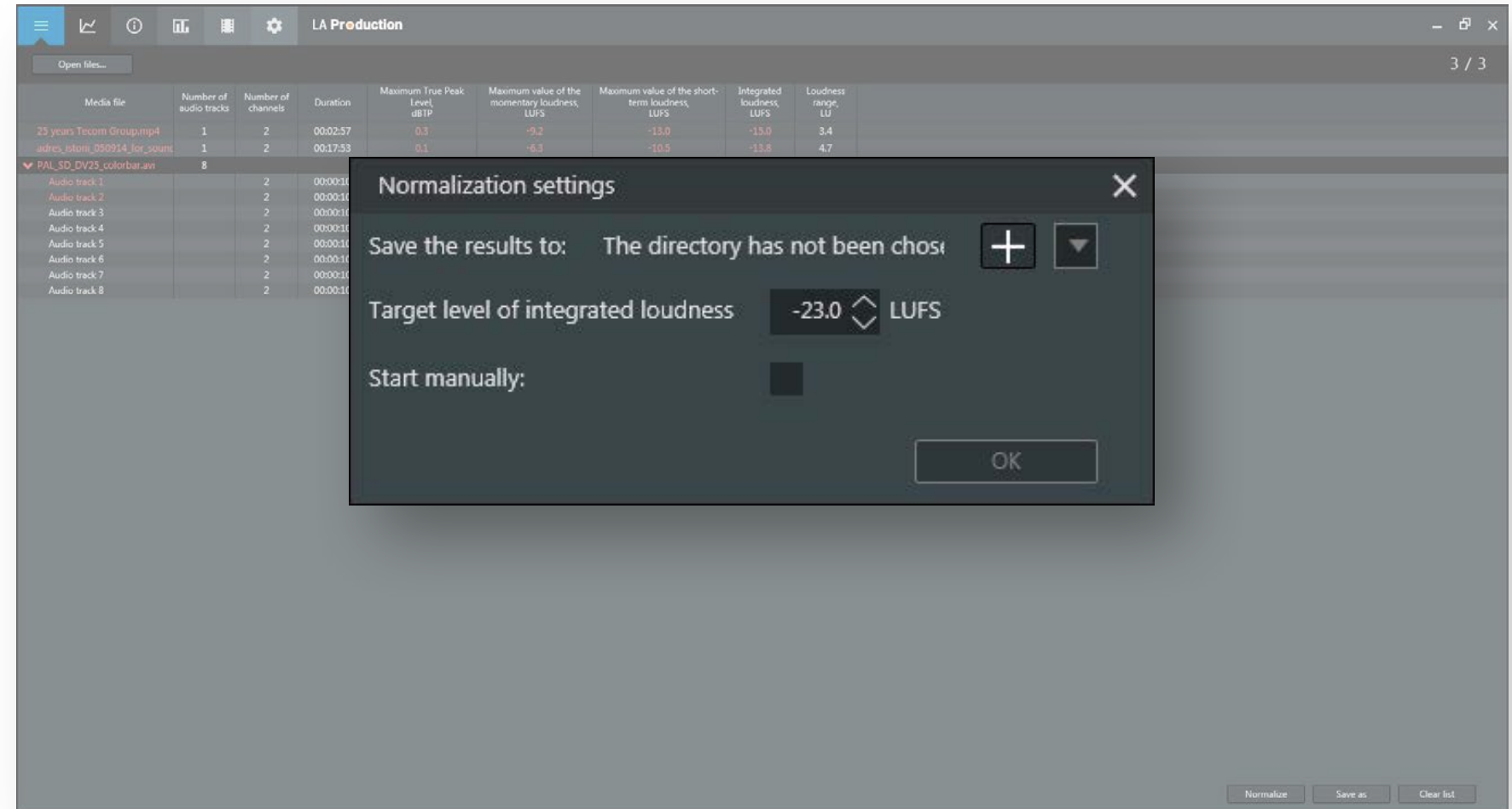
The charts with short-term and momentary loudness values are available in a separate window. It is possible to zoom in to get a close-up view



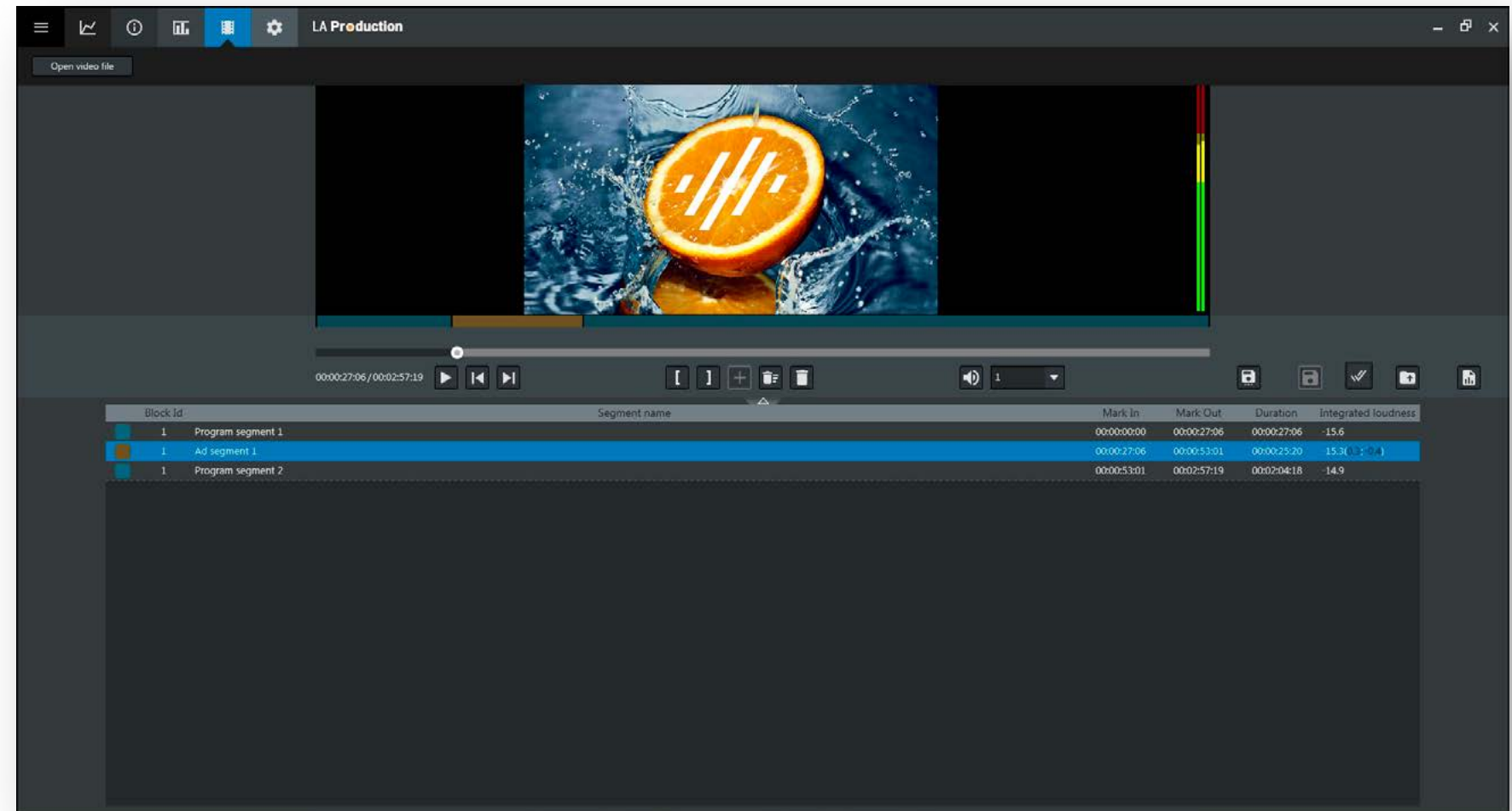
Media information about both video and audio files can be accessed through a separate window



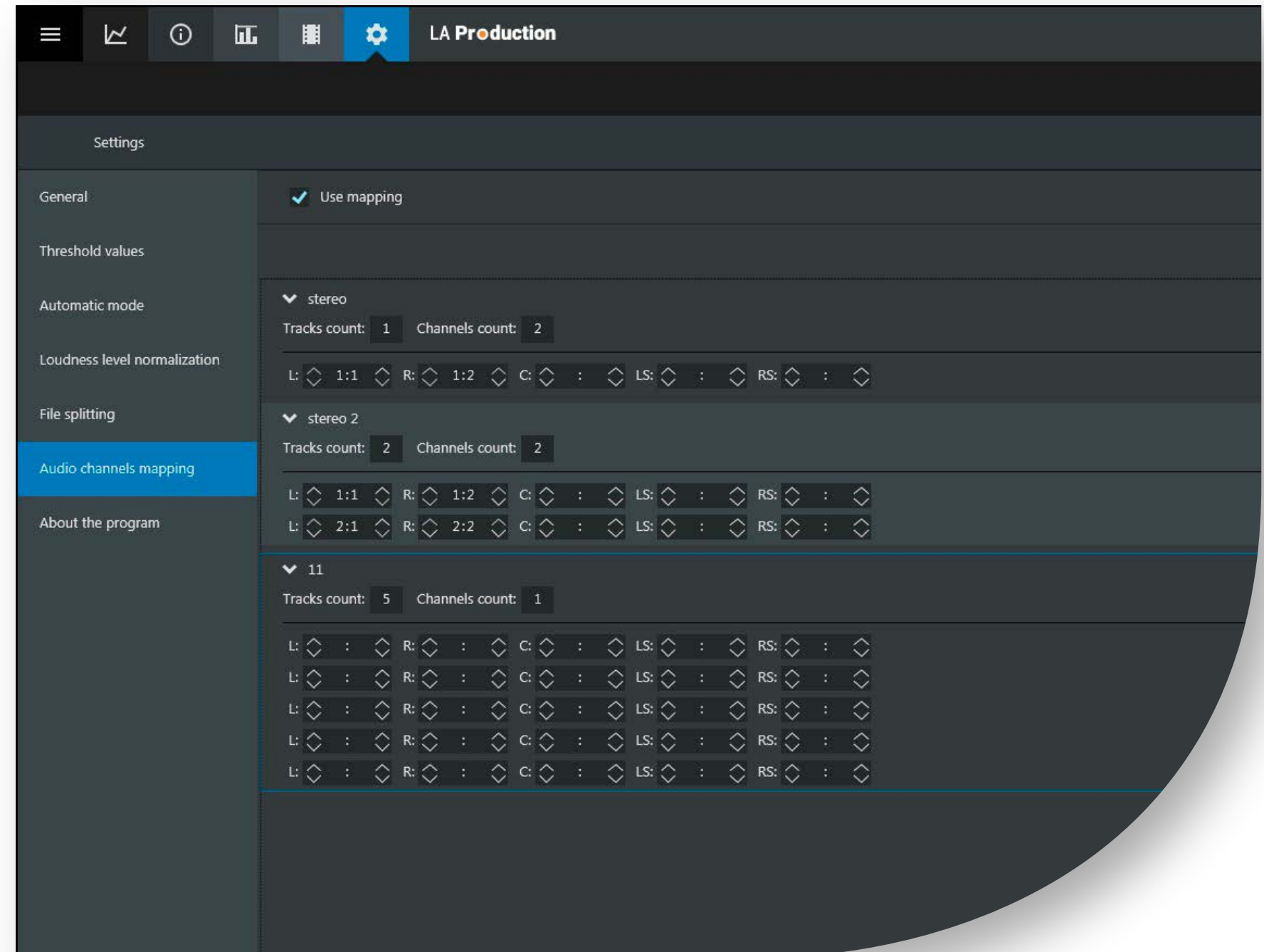
In case loudness discrepancies are revealed, Loudness Analyzer allows correcting audio level in accordance with the selected value



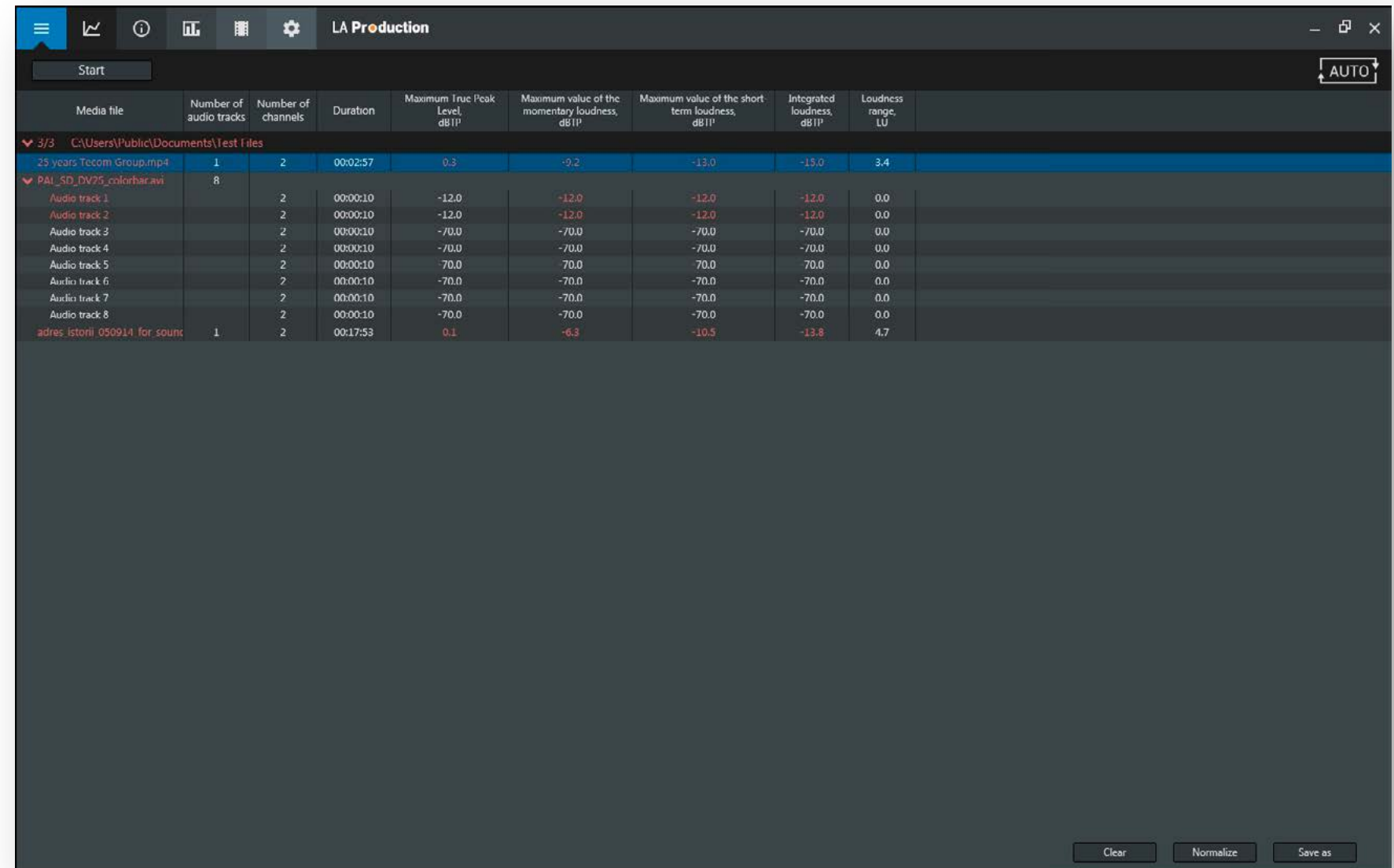
Video player allows the user to split videos into fragments and compare their loudness levels. It also might be used for the analysis of certain fragments of the compliance recording



Audio channel mapping allows for bringing together channels from different audio tracks and having all them analyzed and normalized as it has been predefined in mapping settings



In auto mode, files from selected folders are analyzed, and, if any deviations from predefined loudness values are identified, the app normalizes their loudness levels



| Media file | Number of audio tracks | Number of channels | Duration | Maximum True Peak Level, dBTP | Maximum value of the momentary loudness, dBTP | Maximum value of the short-term loudness, dBTP | Integrated loudness, dBTP | Loudness range, LU |
|--|------------------------|--------------------|----------|-------------------------------|---|--|---------------------------|--------------------|
| 3/3 C:\Users\Public\Documents\Test Files | | | | | | | | |
| 25 years Teccom Group.mp4 | 1 | 2 | 00:02:57 | 0.3 | -9.2 | -13.0 | -15.0 | 3.4 |
| PAI_SD_DV25_colorbar.avi | | | | | | | | |
| Audio track 1 | 2 | 2 | 00:00:10 | -12.0 | -12.0 | -12.0 | -12.0 | 0.0 |
| Audio track 2 | 2 | 2 | 00:00:10 | -12.0 | -12.0 | -12.0 | -12.0 | 0.0 |
| Audio track 3 | 2 | 2 | 00:00:10 | -70.0 | -70.0 | -70.0 | -70.0 | 0.0 |
| Audio track 4 | 2 | 2 | 00:00:10 | -70.0 | -70.0 | -70.0 | -70.0 | 0.0 |
| Audio track 5 | 2 | 2 | 00:00:10 | 70.0 | 70.0 | 70.0 | 70.0 | 0.0 |
| Audio track 6 | 2 | 2 | 00:00:10 | -70.0 | -70.0 | -70.0 | -70.0 | 0.0 |
| Audio track 7 | 2 | 2 | 00:00:10 | -70.0 | -70.0 | -70.0 | -70.0 | 0.0 |
| Audio track 8 | 2 | 2 | 00:00:10 | -70.0 | -70.0 | -70.0 | -70.0 | 0.0 |
| adres istorii 050914 for sound | 1 | 2 | 00:17:53 | 0.1 | -6.3 | -10.5 | -13.8 | 4.7 |

System requirements:

Processor: Intel Core i3

RAM: 4GB or higher

OS: Windows 7/8, 32/64bit

Supported formats:

Audio: .WAV

Video: .MXF .AVI .MOV

.MP4 .FLV .MPG



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