MINNETONKA AUDIO™
THE TELOS ALLIANCE®

AudioTools™
Loudness Control for
ProMedia™ CARBON

Loudness plug-in for Harmonic's ProMedia™ Carbon platform

Loudness Control

The AudioTools Loudness Control for Harmonic ProMedia™ Carbon plug-in adds versatile and convenient loudness control to Harmonic's file-based ProMedia™ Carbon transcoding software. The plug-in provides comprehensive loudness measurement and flexible loudness adjustment using the same technology that powers Minnetonka Audio's AudioTools Server - the worldwide benchmark for file–based loudness control.

All Standards Supported

AudioTools Loudness Control for Harmonic ProMedia™ Carbon is compliant with all current

standards and delivers your choice of loudness adjustment actions to cover all essential metrics, quantifying Programme Loudness along with Maximum True Peak Level. EBU and CALM–specific profiles are provided to address all international regulations. Measurement results are formatted as XML, making them available to ProMedia™ Carbon for logging and subsequent reporting. The XML results are also compatible with the visualization and reporting application from Videomenthe and with other XML tools.

More than Stereo

AudioTools Loudness Control for Harmonic ProMedia™ Carbon handles mono, stereo and multichannel PCM configurations up to 24 channels, including 4 custom program configuration profiles. By processing all programs in one pass, users save time prepping material, whether it's a simple stereo or multi-program configuration.

Recommended Practice

EBU and ATSC recommended practices discourage the use of preset compression and peak limiting for loudness control in file–based environments. The AudioTools Loudness Control for Harmonic ProMedia™ Carbon plug-in intelligently applies loudness adjustment to the incoming essence to reach the desired target Program Loudness value. Loudness adjustment can be performed in accordance with EBU R 128 and, as with the measurement module, mono, stereo and multichannel PCM configurations can be processed with target values set for Program Loudness according to ITU-R BS.1770-3. If the loudness level deviates from the Target Loudness Value, adjustment is applied, and Maximum True Peak Level can be limited to previously specified target levels.

Harmonic users now have a comprehensive solution that amplifies the capabilities of ProMedia™ Carbon — an adaptable AudioTools plug-in to measure and maintain loudness on your already familiar Harmonic ProMedia™ Carbon platform. AudioTools Loudness Control for Harmonic ProMedia™ Carbon can be added to an existing video transcoding process, providing loudness control functionality to a large variety of video and container formats on the fly. AudioTools Loudness Control for Harmonic ProMedia™ Carbon is also supported in Harmonic WFS environments allowing users to create machine groups from a collection of authorized nodes.
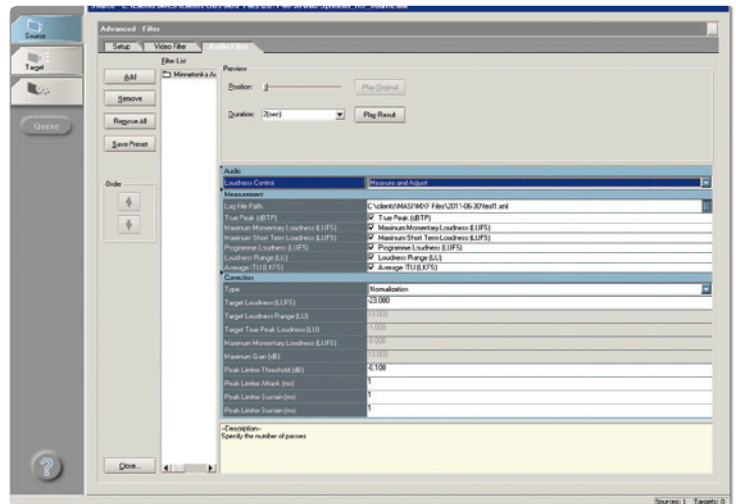
Measurement

- Supports ITU-R BS.1770-3, EBU R 128 and other international standards & practices
- Is in accordance with the Commercial Advertisement Loudness Mitigation (CALM) Act and ATSC's Recommended Practice A/85: Techniques for Establishing and Maintaining Audio Loudness for Digital Television.

Measures:

- Programme Loudness
- Maximum Momentary Loudness
- Maximum Short Term Loudness
- Loudness Range
- Maximum True Peak Level
- Sample Peak Level

Measurement results are formatted as XML in a log file, & for use in 3rd party applications, such as the Videomethe plotter. In addition to overall loudness measurement results, maximum overall values are reported as well as measured loudness parameters throughout the file.

Adjustment

- AudioTools Loudness Control for Harmonic ProMedia™ Carbon applies loudness adjustment to the incoming essence to reach the desired target Programme Loudness and control the Maximum True Peak
- Loudness adjustment is performed in accordance with EBU R 128, A/85 & BS.1770-3
- Mono, stereo and multichannel PCM configurations can be processed - up to 24 channels
- All programs within an asset are processed in a single pass
- Target values can be set for all adjustable parameters

AudioTools Loudness Control for Harmonic ProMedia™ Carbon can be activated on a single machine using a license file or moved from machine to machine with a user-supplied USB. On a single host or node, AudioTools Loudness Control for Harmonic ProMedia™ Carbon can be used as multiple instances for parallel processes.