9670
LevelTrack Audio Loudness Control AGC Software

Use LevelTrack to Adjust Your Audio and Stay in Compliance

The LevelTrack™ Audio AGC option adds a user configurable audio level management system to Avenue signal processing modules. LevelTrack AGC corrects mismatched audio levels between different program sources or segments within a program. Errors of this type are regrettably common due to inconsistencies between different providers and program elements.

1770 and VU Loudness Algorithms

LevelTrack AGC provides two different approaches for adjusting audio levels: VU algorithms and the ITU-R1770 loudness algorithm.

LevelTrack allows you to run your audio against a 1770 LKFS target range. These loudness measurements and adjustments conform to the ITU-R1770 specification. Loudness is frequency dependent and is weighed based upon case studies that reveal how humans perceive sound and loudness. Dialnorm™ values correspond to 1770 algorithms and contribute to compliance requirements.
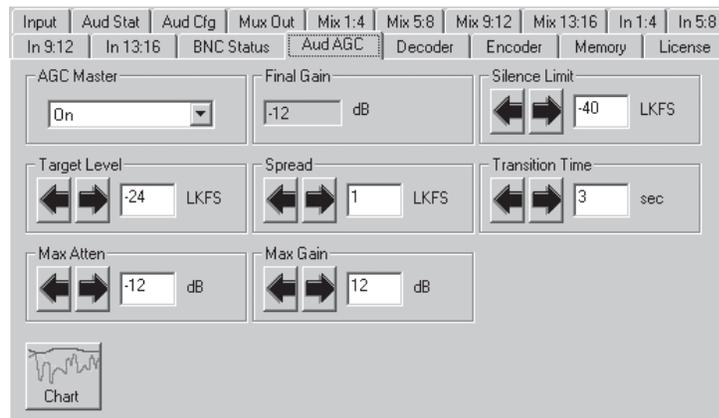
Alternately, VU algorithms may be used where audio levels are weighted with VU metering and measured in dBFS. The VU approach is particularly useful when calibrating and aligning equipment because it is a frequency independent method.
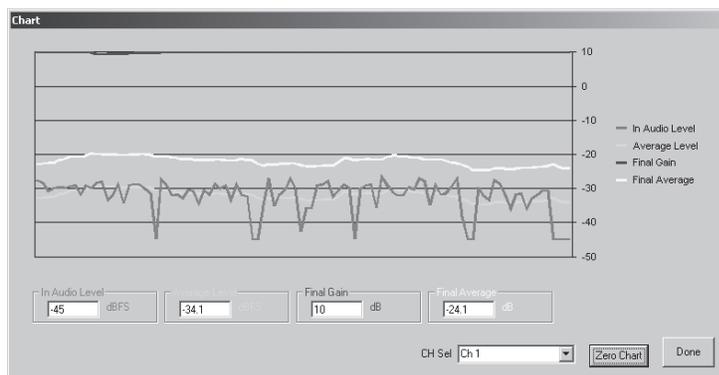
Parameters and Control

Range controls are provided for target level, spread, transition time, silence limit, and maximum gain and attenuation. This flexibility allows the operator to customize LevelTrack to suit the specific audio level challenges in a particular installation. All of these parameters can be easily adjusted through the Avenue Control System.

LevelTrack adjusts the levels for up to 16 audio channels. Based upon the history in each channel, gradual changes are applied to prevent the audio level from dropping below or exceeding user programmable thresholds. This automatic level control can be applied on an individual channel, stereo pair, or 5.1 surround grouping. By adjusting the overall level of the signal, rather than masking the errors with compression, LevelTrack does not upset the internal dynamics of the program material.

LevelTrack operates downstream of the manual audio level adjustments that are already provided in Avenue modules. This allows the automatic feature to assist the operator when needed by simply enabling the channel or grouping.

LevelTrack is controlled through Avenue PC where you can set your own audio automatic gain control target levels. Both 1770 algorithms and VU metering are provided.

The LevelTrack graph shows your audio input level and the final gain applied to the audio signals.

Avenue Modules that can be used with
LevelTrack AGC plus 1770 Algorithms

7555 HD/SD Video Processing Frame Synchronizer
7660 HD/SD Embedder, Disembedder and Data Inserter
9550 3G/HD/SD Video Processing Frame Synchronizer
9600 3G/HD/SD Embedder, Disembedder and Data Inserter

LevelTrack AGC Only

All of the below require 7610 or 8415
in order to use AGC (VU/dBfs only, no 1770 support)

7550 HD Legalizer
7600 HD/SD Embedder, Disembedder
7900 HD Up/Down/Cross Converter
7910 HD Upconverter and Cross Converter
7920 HD Downconverter
7930 HD Cross Converter
7940 SD Aspect Ratio Converter

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