

Unified advanced audio processing solution for loudness control, Dolby & QC

In response to public opinion, governments worldwide have passed legislation mandating audio loudness control. Telestream and Minnetonka have partnered to offer a comprehensive, unified loudness control option within the Vantage enterprise-class, server-based video workflow design and automation framework.

Minnetonka's audio software, AudioTools Connector, integrates within the Vantage file-based framework to support fundamental loudness control workflows and custom, predefined workflows for broadcasters. The AudioTools Connector allows Vantage to drive audio processing workflows and jobs directly from the Vantage workflow designer.

Comprehensive Loudness Control

- Support EBU R 128, CALM Act, DPP and other international loudness specifications
- Best-in-class, standards-based audio measurement, processing & loudness control
- Adaptation of highly dynamic or theatrical content for broadcast
- Focused functionality for processing only audio
- Simple user interface for quick loudness job configuration
- Easy integration with existing automated Telestream video workflows
- Faster than real time operation
- Flexible, extensible XML job-ready automation
- Support for multiple delivery formats, including PCM & Dolby E
- Flexible container handling of MXF and QuickTime files by Vantage sending audio only, or pointing AudioTools Server to the file for extraction and wrapping
- Logging & reporting to ensure documented compliance

How it Works

Vantage and AudioTools Server (ATS) are installed as two separate and complete products. The AudioTools Connector for Vantage combines the full functionality of both Vantage and ATS – and offers two ways of operating ATS directly from within Vantage Workflow Designer:

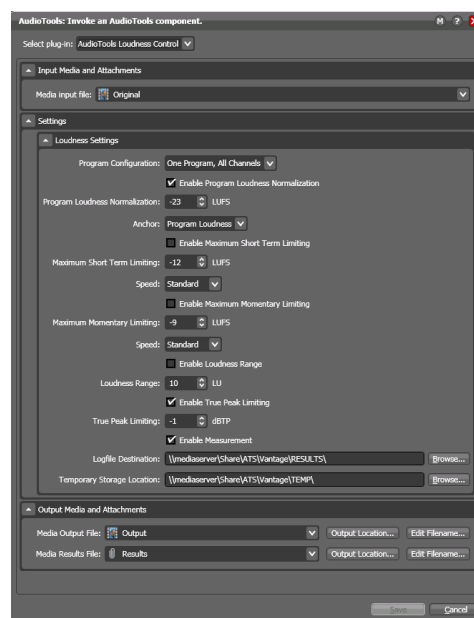
- A simple user interface selects Loudness Adjustment Types and enters target requirements for various loudness parameters
- The user can call any custom predefined AudioTools Server workflow from AudioTools Server

AudioTools measures and simultaneously adjusts momentary, short term and program loudness, along with loudness range and maximum true peak levels. A key feature of ATS is the exclusive Movie Adaptation – loudness processing that intelligently adjusts a dynamic range of theatrical audio mix for broadcast.

Loudness and More

By combining Vantage, the benchmark in transcoding and video workflow automation, coupled with AudioTools Server, the most versatile audio processing platform, best-in-class processing for audio and video are now possible. In addition, custom workflows can call upon ATS' entire repertoire and can be as complex and specific as required.

- Loudness Control** – Loudness control requirements vary from country to country. By combining AudioTools Server with Telestream Vantage, broadcasters and content producers can now adjust additional loudness parameters including adjustment of theatrical content for broadcast and VOD/OTT. ATS also provides processing for controlling dynamics, enhancing dialogue intelligibility, or automating all of the above using conditional automation. Complete R 128, A/85, and all other Loudness Control along with Maximum Short Term and Maximum Momentary Limiting are available, as well as archiving of before/after loudness measurements.
- Dolby E Automation** – AudioTools Server is also a universal platform for encoding, decoding and transcoding to and from Dolby E. Modules for Quality Control and Dolby E Conforming can detect and repair Dolby E encoded assets. Dolby E Automation can be combined with all other AudioTools Server functionality. Dolby E profiles are often used in this use case and can even include using other Dolby branded solutions. All profiles are available through the AudioTools Connector for Vantage.

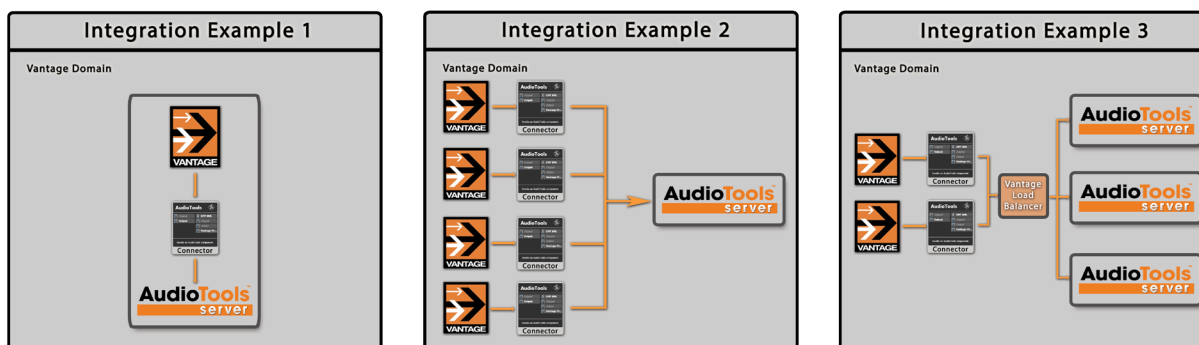


Simple User Interface

- Other use cases** – Other use cases include automated channel assignment detection based on the audio content, pitch shift & time twist, a frame rate toolbox, channel management, various watermarking technologies, audio restoration and many more. Unlimited individual profiles are possible. AudioTools Server also supports industry standard external audio plug-ins. These plug-ins (VST) can be used in our flexible XML scripting language.

About Minnetonka and AudioTools Server

Minnetonka is an award-winning solutions provider for motion picture, video, broadcast, game, and optical disc production. Minnetonka Audio Software creates essential technology for the world's top media professionals. Its revolutionary AudioTools Server is the file-based software alternative to hardware program optimizers, bringing expert audio automation to existing media production infrastructures. Their AudioTools Server, SurCode, and discWelder product lines support the full array of audio codecs, file types and standards for CD, DVD, Blu-ray™, broadcast, and digital television. The company is a leading provider of OEM audio solutions as well as file-based QC and loudness control. Spanning more than two decades of operation, the Minnetonka, MN-based company has a subsidiary in Germany and an international network of distributors and channel partners who share its commitment to quality and service.



Integration Example 1: An AudioTools Server and Telestream Vantage installed on the same machine

Integration Example 2: Multiple Vantage nodes sending jobs and workflows to a single AudioTools Server system.

Integration Example 3: Multiple Vantage nodes load balancing jobs and workflows to multiple AudioTools Server systems.

About Telestream and Vantage

Telestream provides world-class live and on-demand digital video tools and workflow solutions that allow consumers and businesses to transform video on the desktop and across the enterprise. Many of the world's most demanding media and entertainment companies – as well as a growing number of users in a broad range of business environments – rely on Telestream products to streamline operations, reach broader audiences and generate more revenue from their media. Telestream products span the entire digital media lifecycle, including video capture and ingest; live and on-demand encoding and transcoding; captioning; playback and inspection, delivery, and live streaming; as well as automation and orchestration of the entire workflow.

Vantage combines media ingest, transcoding, metadata processing, and analysis into a single, unified workflow framework. Utilizing the latest technologies, Vantage transcoding products deliver pristine quality and exceptional processing speeds. Vantage also offers a comprehensive workflow design, automation and management tool that can direct a range of video and audio processing tasks, using either Telestream media processing tools or third-party software and hardware. Vantage integrates with all the major broadcast servers, edit systems, streaming servers, cable VOD (video on demand) servers and storage area networks (SANs).

For more information:

Visit Minnetonka at: www.minnetonkaaudio.com

Visit Telestream at: www.telestream.net