

Trinnov SmartMeter V3

TimeCode-aware Loudness Measurement

Software Option



Optimised

Despite Post-Production and Broadcast QC workflows often require numerous rollbacks and time jumps, most real-time loudness meters require continuous project measurements to obtain consistent loudness values.

Loudness

SmartMeter V3 brings the ultimate solution to this issue by **Synchronizing Loudness measurement to timecode**. Every loudness and true peak values of a session are constantly **recorded and time stamped**, allowing their calculation at any time. Mixing engineers and Broadcast operators no longer have to manually pause, resume or even start measurements over.

Workflows

Combined with the four integrated loudness meters, **Multi-Loudness Management**, dynamic alerts display, **alerts profiling**, **SNMP Traps**, **detailed reporting**, scrolling modes, **session save and recall**, this **unique Timecode-aware** feature turns Trinnov SmartMeter V3 into the most comprehensive and powerful loudness metering solution available on the market. QC monitoring has never been so fast and effective.



EBU-R128 Compliant

Trinnov SmartMeter V3

TimeCode-aware Metering Toolkit

Timecode-aware Loudness

Trinnov's approach to Loudness

Loudness metering is about to be adopted by most broadcast companies and post-production studios around the world as the new standard. However, real-time Loudness calculation still constraints mixing engineers and Broadcast operators to achieve a continuous project playback, without stops nor rollbacks to keep relevant loudness values. This method can be time-consuming when only a few areas of a mix require to be modified to stay fully compliant with the recommended level, as it requires to start the whole project measurement over.

Trinnov definitely solves this equation by slaving Loudness measurements to the incoming Time-code. This unique and elemental feature is making realtime loudness metering more effective and intuitive, and is therefore helping users to save a precious time in their everyday's workflows.

Time Code Synchronization

The Integrated Loudness and LRA measurements both rely on a constant knowledge of the entire program content. Trinnov SmartMeter v3 records and time stamps every loudness and true peak values throughout the session, allowing their calculation at any time and therefore continuously providing consistent loudness measurements all along different mixing stages. Operators no longer have to manually pause, resume or even start measurements over.

Multiple Sources

The SmartMeter V3 supports multiple software sources with individual measurement and input format. The number of sources is only limited by the number of physical inputs and the processing power of the platform. Industry standards from mono to 7.1 are supported as well as custom formats up to 24 channels.

Session Recall

Thanks to the Time Code synchronisation, measurements actually remain consistent with all the other elements of the project. As for video, audio or console automation, Trinnov implemented sessions recall. The whole project, including every sources measurements, alerts and user settings can be saved and recalled to resume mixing in another room and/or at a different time.

Advanced Profiling

Session-specific thresholds can be chosen from the standard alert profiles (EBU R128, ATSC A/85, CST RT17, ARIB TR B32...) or user-defined to comply with delivery requirements of most organisations and companies.

Dynamic Alert Display

Overrunning the session thresholds trigger visual alerts and real-time logging. Alerts and logs are updated as the mix is adjusted. The alerts table can be filtered to display the alerts of a specific source and/or type of alert. Users are notified about LTC drops and therefore potential measurement errors. Alerts can also be transmitted to a server as SNMP traps.

Detailed Reporting

Complete PDF reports are saved with the session, providing project informations, the compliance status of each source with regards to the selected alert profile and the list of alerts with their respective time codes.

Custom Layouts

The Multiview-Mode is a customizable display for MC Processors that gives the user great flexibility on how to arrange and access any of the 15 instruments and/or menus on a 4x4 split interface optimized for touch screens. Except for the DRC module, every instruments can have up to four independant instances simultaneously displayed.

Comprehensive Loudness Metering Suite

The SmartMeter V3 includes a comprehensive set of Loudness meters implementing the latest ITU-R BS.1770-2 standards, complying with the EBU R128 recommendations and USA CALM Act Requirements. Integrated, Short-Term and Momentary Loudness are displayed in every instrument as well as the Loudness Range and Maximum True Peak. Can be expanded to 16 analog I/O and 16 AES I/O.



Loudness Timeline

The Loudness Timeline is a loudness history graph presenting a graphical view of Short-Term Loudness over time. The user can set different color areas, select one of three scrolling modes, zoom in/out and browse the graph through the entire project. Gated areas are highlighted as the measurement is paused.



Loudness Meter

The Loudness Meter combines meters and numeric values to represent every relevant measurements of a project. The Loudness Meter constantly gives up-to-date Maximum Momentary, Short Term and True Peak values that have been measured during the project with their respective Time Codes.



Loudness Overview

The Loudness Overview allows to display loudness measurements for up to 5 independent sources in a single window. Up to 4 Overview instances can be displayed in the Multiview interface, providing up to 20 sources monitoring.



Loudness Statistics

The Loudness Statistics shows the distribution of short term loudness values throughout the program in real-time. A range selection tool in the histogram highlights the corresponding regions in the Timeline. Mixed with the representation of the gated areas, this function is highly effective to target critical areas of the mix. The options enables Loudness Range to be displayed over the histogram.

Peak-Meters and Analyzers



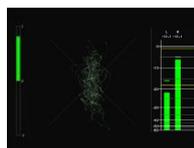
True Peak, SPPM, QPPM and Real-time Analyzer

- TPM (EBU R128): shows waveforms true peak values.
- Sample PPM: shows only sample peak values, not the true waveform peaks.
- QPPM (DIN 45406): shows true peak level only if it exceeds a certain duration.
- RTA: 1/3rd octave real-time analyzer with source and channel selection.



Surround Analyzer

Controls multichannel audio signals amplitude and inter-channels correlation meters.



Vectorscope

2-channel Lissajou curves including L/R correlation and L/R True Peak Meter.

Available Hardware Configurations Options

The SmartMeter V3 is a software Module, designed to be hosted by Trinnov Processor platforms. Different AES and/or Analog hardware platforms are available, providing from 4 to 16 simultaneous channels, while MADI platforms can provide up to 64 simultaneous channels..



ST2-Pro-MT: 4 AES I/O + 4 Analog I/O processor platform.
2U rackmount chassis.

PRC2-AES8-MT: 8 AES I/O Processor platform with 3x8 input channels switching (3x Sub D25). 2U rackmount chassis.

PRC2-AES16-MT: 16 AES I/O Processor platform with 1x8 + 1x16 input channels switching (2x Sub D25). 2U rackmount chassis.

PRC-MADI-MT: 64 MADI I/O Processor platform.
4U rackmount chassis

Available Software configurations



SmartMeter Bundle 4:
4-channel or 8-channel Smart Meter module.



SmartMeter Bundle 8:
4-channel or 8-channel Smart Meter module.



SmartMeter Input Channel:
Adds one more Metering Input Channel to a 4 or 8-channels Smart Meter module.

Available Accessories

17" touchscreens



12" touchscreens
8" touchscreens



USB Volume Knobs



Request a demo from a Trinnov partner near you

www.trinnov.com

