



# Inspector LIVE

# Real-Time, High Capacity Content Quality Monitoring and Analysis

Gain peace of mind in knowing you are delivering an optimal video experience to your viewers. Inspector LIVE provides the industry's most comprehensive digital content monitoring and visual inspection solution for production grade video assurance in live networks. It simultaneously measures, decodes and captures thumbnail images every second for hundreds of programs, allowing video providers to correlate metrics and alarmed events to a visual representation of the content. Inspector LIVE is designed to detect content impairments and transport problems and produce actionable information to address issues before they impact the viewing experience.

Inspector LIVE is a versatile acquisition element that combines both quality of experience (QoE) and quality of service (QoS) measurements, offering the visibility necessary to understand the status of the video services for both linear TV and adaptive bitrate (ABR) streaming delivery networks. Modular by design, Inspector LIVE offers video providers the ability for customization based on their unique requirements.

## **Key Benefits**

- Measure video quality "on-the-fly", before your content is delivered through the network.
- Minimize customer service calls and "truck rolls"
- Continuously evaluate the health and performance of your encoding/transcoding resources
- · Reduce cost and risk of regulatory compliance

#### **Key Features**

- Simultaneous 24/7 QoE & QoS monitoring and analysis
- Non-reference MOS-like scoring metric that relates directly to viewer perception
- Detects, decodes, displays and logs the encoded High Dynamic Range (HDR), Standard Dynamic Range (SDR) and Wide Color Gamut (WCG) parameters
- Measure & monitor Audio Loudness ITU-R BS.1770
- ABR Encoder Boundary Point decode and IDR Alignment visualization and alarming
- SCTE-35 monitoring, detection, decode and alarming
- Regulatory compliance checking including CALM Act compliance monitoring
- Closed caption monitoring, alarming and reporting
- Text track reporting
- SI/PSI/PSIP decode, inspection and monitoring
- Comprehensive GOP and FES monitoring & analysis
- · Customizable alarming and triggering
- UTF-8 character encoding for naming purposes
- Flexible video capture for analysis of events before, during and after issues occur
- Open API for user access to the Inspector metrics and information



"Reliable non-reference quality scoring is the 'holy grail' of the video content preparation community. This technology, integrated in the Inspector product, can significantly reduce the time it takes to evaluate, select and configure encoders and opens the door to real-time quality grading in live networks."

- Jan Ozer, compressionist, streamingmedia.com contributing editor, and founder of streaminglearningcenter.com

#### **ABR Monitoring for Multiscreen /OTT**

In an adaptive streaming network, a single video program is transcoded into many bit rate variants, so that the player can adjust the playback to network performance. This bit rate "shifting" can occur often, as the content is being played. If the shifts do not go smoothly, playback issues can occur. All of these bit rates versions must be properly "aligned" with each other for smooth shifts. Video remnants can also be introduced during segmentation, making it necessary to monitor both QoS and QoE at the network edge as well as in the head end/origin. But this additional technical risk can be managed. Inspector LIVE's advanced adaptive streaming video monitoring capability provides Encoder Boundary Point monitoring and IDR alignment verification to ensure that bitrate switches occur smoothly.



### **Linear TV Monitoring**

Inspector LIVE validates content at the ingress points of the network and provides QoS & QoE monitoring and analysis to ensure the video quality before it goes into the distribution network.

Moreover, compliance reporting is made simple by scheduling Closed Caption reports to execute automatically at regular intervals.

#### **Technical Specifications**

- Scales up to 600 programs
- Resolution support up to UHD levels
- Video Codecs: MPEG-1, MPEG-2, AVC/H.264, HEVC/H.265
- Audio Codecs: MPEG-1, MPEG-2, AC3, E-AC3, AAC
- AVC/H.264 4:2:0 8-bit, 4:2:2 10-bit
- HEVC/H.265 Main 8-bit, Main 10 8 & 10-bit
- Full I, P and B frame decode with per-GoP thumbnail capture every I-frame for all programs
- MPEG2 TS SI/PSI/PSIP
- Audio Loudness (BS-1770-1 and BS-1770-3)
- Dolby audio monitoring: Dolby Digital (AC-3) and Dolby
- Digital+ (E-AC-3) including detection of ATMOS objects
- RFC 4445 Media Delivery Index (MDI)
- TR 101-290, Priorities 1, 2 and 3
- SCTE 168-6 201 0 Errored Seconds, Availability
- 1E11 and FF24 and later support
- Storage of thumbnails and performance data for future reference
- Northbound SNMP interface for integration into other NMS/OSS architectures
- Available in appliance-based, virtual and cloudbased packages



HEAD END

Inspector LIVE gives you the visibility you need to succeed in today's rapidly evolving video landscape

