Solution Brief



# Contribution Feed Compliance Monitoring for Audio Loudness and Closed Captions

Telestream iQ provides contribution feed monitoring, alarm logging, and reporting for Audio Loudness and Closed Captions that enables linear TV and OTT streaming service providers to comply with government regulations and requirements.

#### Introduction

Video service providers, multi-channel video programing (MVPD) and fast-growing Over-the-top (OTT) streaming services are responsible to ensure their services conform with regulatory compliance laws such as audio loudness and closed captions. Government regulators are seeing an increase in the number of complaints from consumers about excessively loud commercials. In many countries, broadcasters, cable, satellite, and IPTV service providers must provide closed captioning on all content. Government regulations enforce the existence of such closed captions on video frames for linear TV channels and Video on-Demand (VoD) contents.

Regulatory compliance laws continue to evolve. Recent legislations under consideration will increase the enforcement of audio loudness and broaden the scope to include OTT streaming services. The very first step in making sure a service provider can meet the regulatory compliance laws is to be able to monitor audio loudness and the existence of closed caption data on the contribution feed.

Both linear TV and OTT streaming services require tools to continuously monitor the video contribution feed in their workflow to ensure they meet regulatory compliance laws by identifying programs or commercials that are too loud or too quiet. They also need to identify the presence or absence of closed caption and ensure they are accurate and reliable.

Inspector LIVE and Sentry enable video service providers with the confidence to monitor video contribution feeds and ensure their video delivery service is meeting compliance laws. It provides monitoring, alarming, and reporting of Audio Loudness and Closed Caption data so that video service providers can have the knowledge needed to meet regulatory compliance requirements.



## Audio Loudness Monitoring

Audio Loudness monitoring is used to identify programs or commercials that are too loud or too quiet. Legislation such as the United States FCC's CALM Act (Commercial Advertisement Loudness Mitigation) requires providers to ensure that audio levels for commercials are not being delivered at greater volume than the programs surrounding them. Many other countries have similar laws.

Telestream iQ Inspector LIVE solution allows the user to configure a loudness high and/or low threshold. If the threshold is exceeded for the configurable amount of time, an alarm is logged. The Loudness Alarm Report (Figure 1) will show the video thumbnails and overlays exactly which thumbnails were present when the audio loudness alarm was triggered. In addition to being shown on the UI, this report is exportable to a PDF with thumbnails and audio level graphs.

### **Closed Caption Monitoring**

Closed Caption monitoring is used to identify the presence or absence of closed captions. With closed caption (CC) monitoring, Inspector LIVE will fully decode, extract, and save the CC text from the program data and store it for further reviewing using the Closed Caption Report. Reports can be run to view the CC compliance in terms of number of alarms, error count and error details, and warnings. In addition to CC text being fully decoded and displayed on the UI, the Closed Caption Details are exportable to a TSV file. The TSV file is limited to 100,000 records.

# Remote Storage of Alarming and Thumbnails

In many cases due to the compliance regulations, the service providers need to track and store historical data related to thumbnails, audio alarms or closed caption data. When Inspector LIVE is running on a VM, it enables remote storage of historical alarm data and thumbnails for up to 37 days. This feature is available on 25, 50, and 100 program Inspector VMs and can be used on different types of programs including SD, HD, and UHD.

# Key Benefits:

Telestream iQ offers several key benefits specific for compliance monitoring functionality that is available with Inspector LIVE:

- 7x24x365 monitoring, alarming, and reporting for audio loudness and closed caption
- Regulatory compliance checking including CALM Act compliance monitoring
- Detailed reporting and exporting of reports to support compliance complaints
- Support for many audio codecs formats including certification by Dolby Labs
- Up to 37 days of history including alarms and thumbnails of all monitored programs
- Extended functionality of storage appliance to VMs
- Simple to set up and use

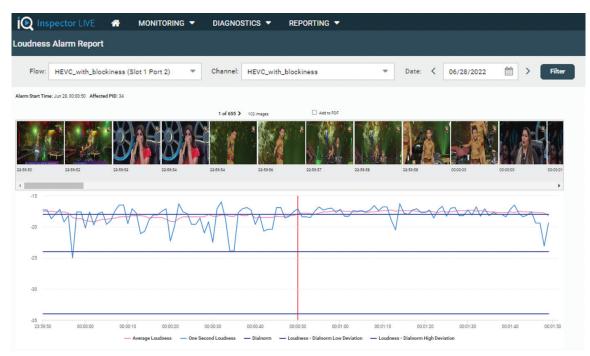


Figure 1: Inspector LIVE, Loudness Report



#### **CALM Modernization of 2022**

Initially the CALM Act was created for broadcasters, cable operators, and network television distributed by multi-channel video programming distributors, or MVPDs. But there is a new bill in congress to amend the CALM Act's regulation of television commercial loudness and extend it to streaming service. This new bill has been introduced because of recent, steadily rising, consumer complaints to the Federal Communication Commission (FCC) about excessively loud commercials related to OTT streaming platforms.

#### **Inspector LIVE**

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. As displayed in Figure 2, Inspector LIVE displays thumbnails of each program being monitored and provide a customizable, concise status of the current video and audio alarm state.

#### Sentry

Sentry is a high-density, all-purpose content monitoring solution incorporating both quality of experience (QoE) and quality of service (QoS) measurements. It is a comprehensive video and audio quality monitoring solution for advanced video networks.

By providing detailed root-cause information, Sentry allows service providers to resolve problems quickly and often before subscribers experience any quality deterioration or outage. It enables video providers to deliver services with optimum quality while reducing operational expenditures.

#### Learn More

To learn more about compliance monitoring visit Telestream iQ webpage <u>here</u>.

To learn more about Inspector LIVE click here.

To learn more about Sentry click here.

Ready to talk to us and see it in action? <u>Contact us today.</u>

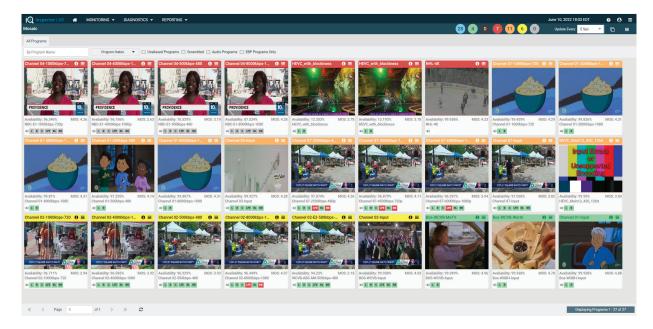


Figure 2: Inspector LIVE Mosaic



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