



# OPTIONAL MODULE OF THE VIDEUS FAMILY

# QoE / QoS ANALYZER

## AUTOMATIC CLIP IDENTIFICATION MODULE RADIO & TV MONITORING

## RADIO & TV MONITORING

The QoE / QoS module allows in-depth monitoring and alerting of broadcast signals. It supports multiple ingest formats for both radio and TV, analog or digital, including OTT.

For Transport Stream signals (IP, ASI, or DTT platforms like ATSC, DVB, ISDB-T), it monitors TR 101 290 standard alarms at all three levels. For ISDB-T, it supports the ARIB STD B10 standard.

For audio signals, it is compatible with loudness standards EBU R128 and ITU-R BS.1771-1 / 1771-3, configurable for both Europe and the Americas. It reports True Peak and alerts for loudness levels (Short Term, Integrated, Momentary, Loudness Range, and Program Peak). For video, it issues alarms for Black Video, Freeze, and Macroblocking.

Includes alarm history, graphical reports, visual indicators, email alerts, SNMP, and audible alarms.

OTT monitoring includes multiple renditions and bandwidth usage. The system emulates internet player playback.

It can be configured to monitor all renditions (qualities) or select only some to monitor bitrate or transport-level alarms. Bandwidth alarms for each rendition with customizable thresholds. Analyze bandwidth of renditions not being viewed.

**ANALYZE THE QUALITY OF EXPERIENCE AND QUALITY OF SERVICE FOR RADIO AND TV SIGNALS**

## FEATURES

- Fully web-based configuration, management, and operation
- Support for standards: TR 101 290, ARIB STD B10, EBU R128
- Video: freeze, black, macroblocking, abnormal luma
- Audio: low/high volume, true peak, audio freeze, audio compression failure
- Loudness meters
- All parameters configurable and adjustable
- Detection of service/signal loss
- Degraded signal detection
- Signal recording (original or lower quality for failure backup)
- PID distribution graphs
- MPEG2-TS integrity and RF signal monitoring received via DVB-S2 satellite standard
- OTT protocols supported: HLS (includes Akamai Token authentication), RTMP, RTMPT, RTMPE, RTMPS, MPEG-DASH
- m3u8 manifest support, multiple renditions
- Export reports in JSON, XML, CSV, XLS formats



### SENDING MAILS, HISTORICAL ALARMS

History of alarms, graphic reports, visuals, sending mails, SNMP, sound alarms



### LOUDNESS COMPLIANCE

Compatibility with the EBU R128 loudness standard and ITU-R BS.1771-1 / 1771-3, configurable for Europe and America



### 100% WEB OPERATION

The configuration and operation is 100% Web. HTML5 It does not require plugins. Compatible with all standard shippers in the market



### TRANSPORT STREAM MONITORING

Monitoring of alarms of the TR 101 290 standard in its 3 levels, for ISDBT it supports the standard of ARIB STD B10



### OTT MONITORING

Multiple renditions, bandwidth statistics. It emulates the reproduction of an internet player



### VIDEO CHECK

Video Black, Freeze

# ROUND ROBIN MONITORING

## Monitor multiple channels with a single input

The system is specifically designed for cable operators who need to monitor multiple signals cost-effectively. It scans analog (PAL, NTSC) and digital signals (automatically tuning via IR commands sent to the Set-Top Box).

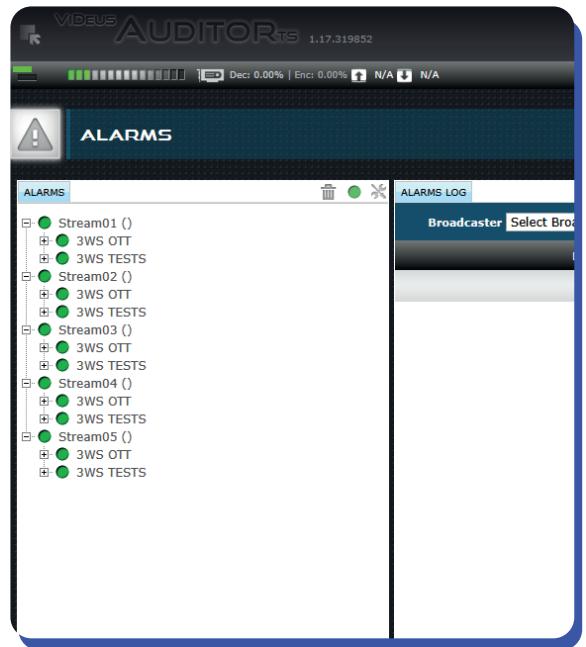
The module tunes into a channel, analyzes it for 30 seconds (configurable), and reports whether the signal is okay or contains errors such as no signal (audio/video), low/high volume, freeze, black screen, etc. The system continuously scans and supervises the grid.

Supports API integration with tuners such as DirecTV/SKY, enabling remote configuration via Ethernet. Also ready for interaction with RS232/422/485 or USB devices.

Monitor multiple channels with a single input.

IR (Infrared) Control

Automatic remote tuning of receivers and decoders.



## HOW IT WORKS

- The system can record the infrared signal emission configuration for each remote control button
- Supports multiple remotes
- When tuning a channel, it emits the infrared signal of the desired channel number as if a person was using the remote
- Only needs to record the 10 numeric buttons once
- Depending on the decoder, it may also control power on/off

**IR (Infrared) Control**  
**Automatic remote tuning**  
**of receivers and decoders.**



**3Way**

# PREVENTING POOR SIGNAL QUALITY

Prevent signal loss, image freezing, and audio failure.

Cable and IPTV operators, broadcasters, and satellite/TV networks can benefit from video logging, alarms, technical parameters, and their integration with the powerful multiviewers in the ViDeus product family.

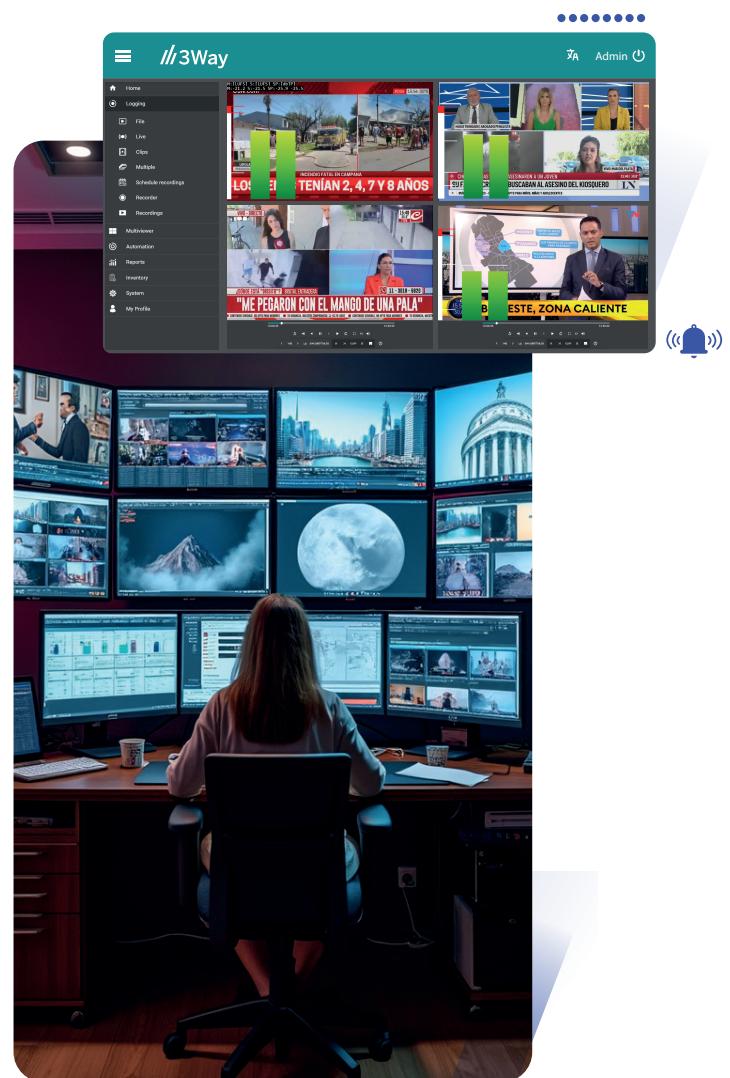
- Digital TV Head Ends
- Monitoring of Digital TV transmission sites (ISDB-Tb, ATSC, DVB)
- TV signal operators
- Satellite operators

For technical staff, it's a tool that monitors RF and MPEG2-TS parameters (depending on the version), providing alerts when reception falls outside acceptable parameters and logging data for forensic analysis. The system includes a complete SNMP MIB for easy parameter sharing.

In multi-channel networks, through an additional multiviewer, the system enables multiple signal monitoring with definable criteria and SNMP control. For commercial departments, it allows verification of aired commercials from any browser, including live viewing of transmitted signals at network-friendly qualities.

For content managers, it enables access to aired material for distribution over the network, reducing operational costs and meeting internal organizational needs.

**Minimize transmission site maintenance costs.**



3Way Solutions is a company dedicated to developing products and solutions for the broadcasting, cable, professional video, and government sectors, focusing on TV recording, content detection, media monitoring, legal copy, content repurposing, regulation compliance verification, and QoS/QoE monitoring.

**3Way**

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