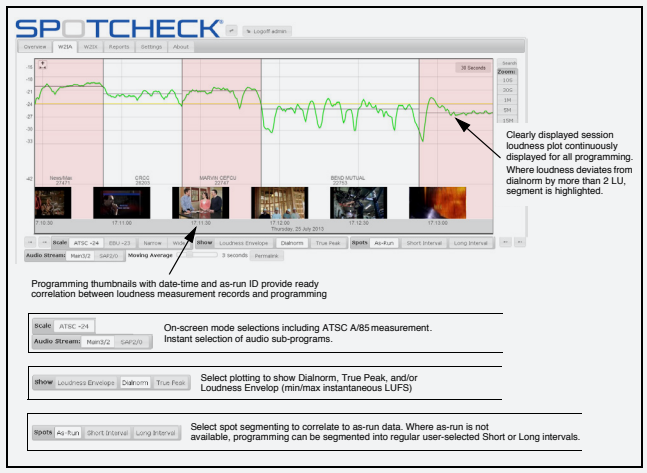
SPOTCHECK® ⟩⟩ TRANSPORT STREAM COMPLIANCE MONITOR

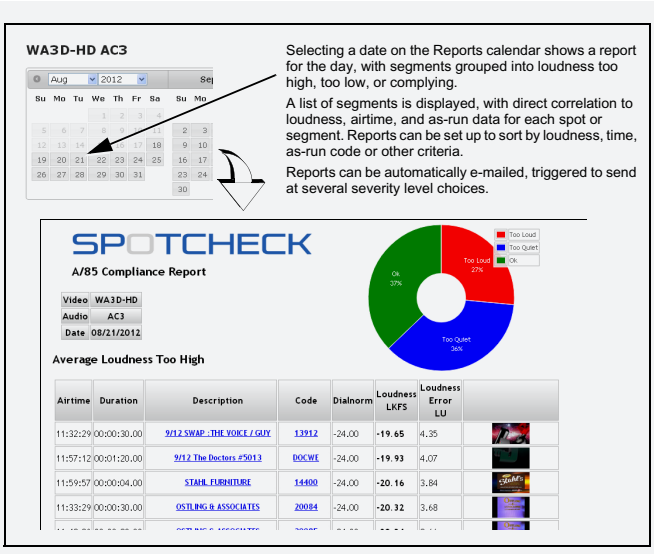
SpotCheck® provides easy to use, no-guesswork, automatic A/85 loudness measurement and access to all audio loudness records. Because SpotCheck® monitors an IP, ASI, or a transmitted over-the-air MPEG stream at the transmit (emission) encode point, SpotCheck® measures and logs loudness for all programming emanating from the facility.

Segments can be searched using date – time with the intuitive display of loudness plots along with date-time-stamped thumbnails of the actual corresponding programming, or can be queried and correlated with the facility as-run automation list. SpotCheck® readily pinpoints any segments that are out of CALM A/85 compliance, and conversely helps in documenting compliance should an erroneous complaint appear.

Options allow even more transport stream/programming analysis. Option QUALITYCHECK checks for the presence of CEA708/608 closed-captioning, as well as the string content text, and also can detect transport communication errors as well as frozen/black frame and audio silence, with Alert Manager sending these alerts to your designated personnel as simple e-mails. Option AIRCHECK provides easily managed lo-res proxy downloads of user-selected transport stream segments that can be sent and viewed over e-mail to recipients with common smart devices and media players.

Easy to use web user interface provides for easy setup and use. Requiring no breakout from the MPEG stream and not affecting the emission stream in any way, SpotCheck® provides an easily integrated, facility-based, superior solution for loudness records and compliance verification.





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SPOTCHECK® ⟩⟩ TRANSPORT STREAM COMPLIANCE MONITOR

⟩⟩ FEATURES

Automated 24/7 loudness measurement and logging for every programming segment sent as emission. Full CALM compliant logging and record access.

Easy data search by date/time range and as-run data allows rapid and no-hassle pinpointing to any programming segment

Support for sending loudness alert e-mails to multiple personnel. User-defined multiple-level severity escalation.

Straightforward display of actual loudness plot and clear OK/non-compliant tagging of programming segments – no tedious lists or spreadsheets to analyze

Full compatibility with MPTS and SPTS streams

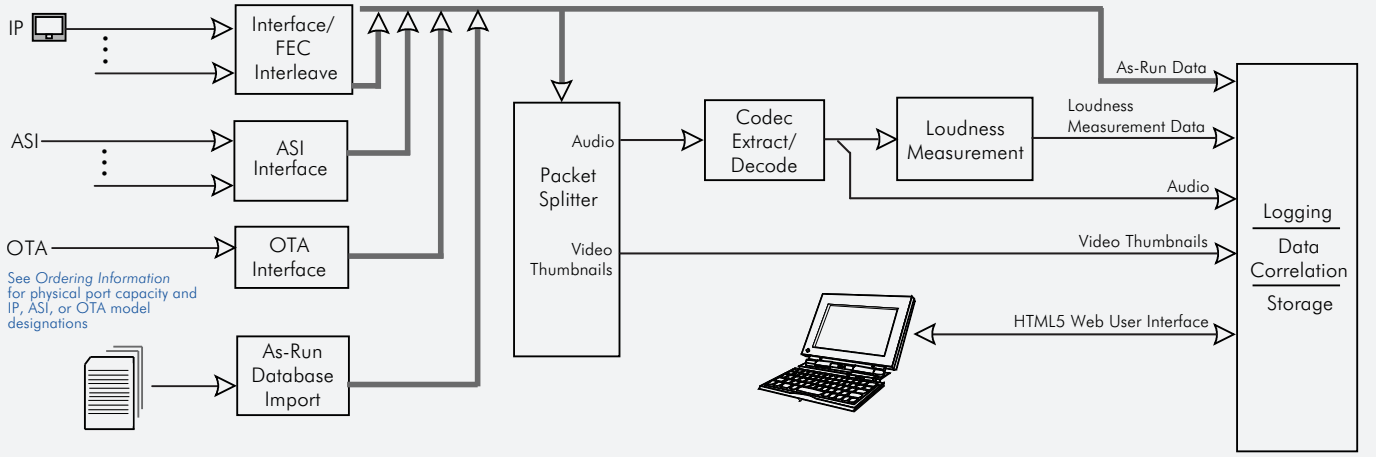
Direct GigE MPEG, ASI, or OTA interface. No complicated external breakout of signals.

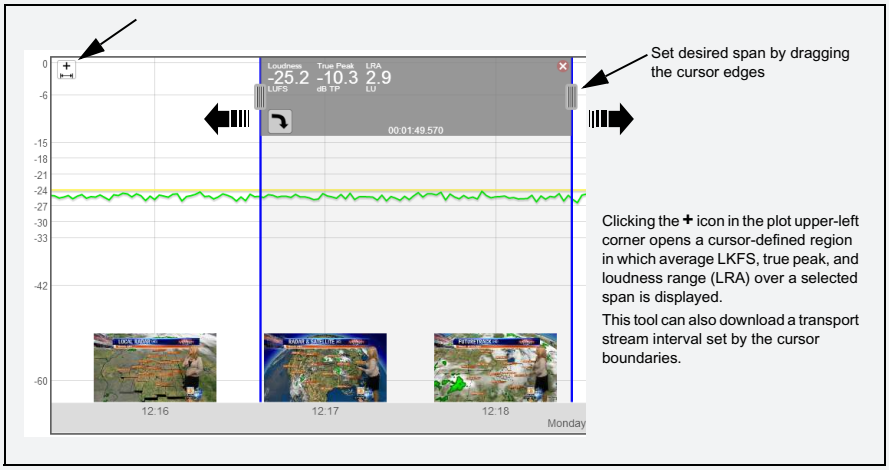
Automatically accounts for program loudness, dialnorm, and DRC effect on audio – no interpretation of readings or loudness metadata needed

Three year warranty with extension options available

Robust product support – upgrades and enhancements field-installed via firmware upload from our Support web page

Cobalt Support Network feature provides, where desired, a direct VPN connection between your SpotCheck unit and our engineering support





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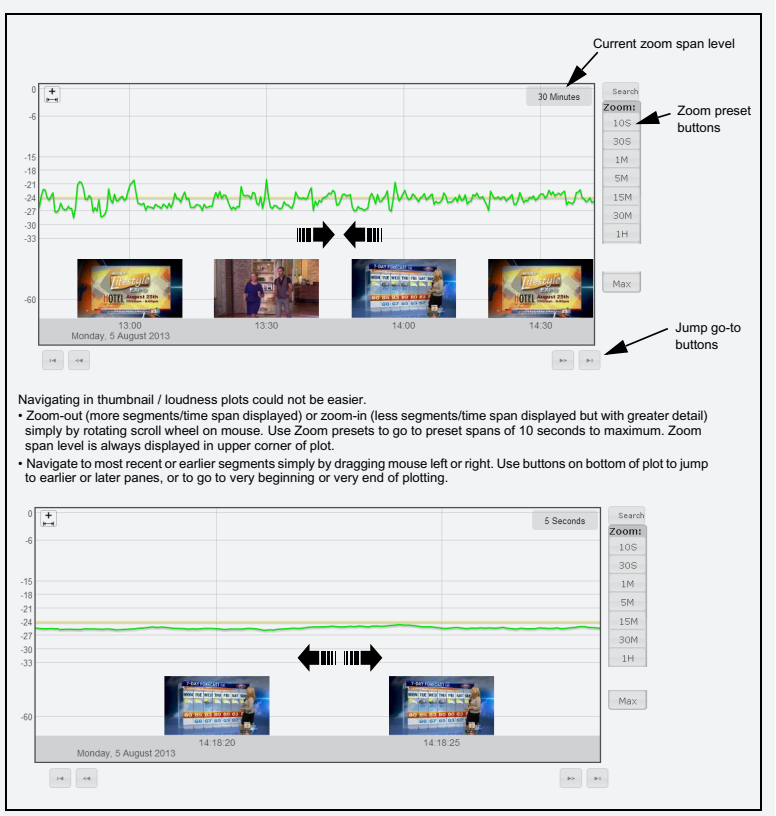
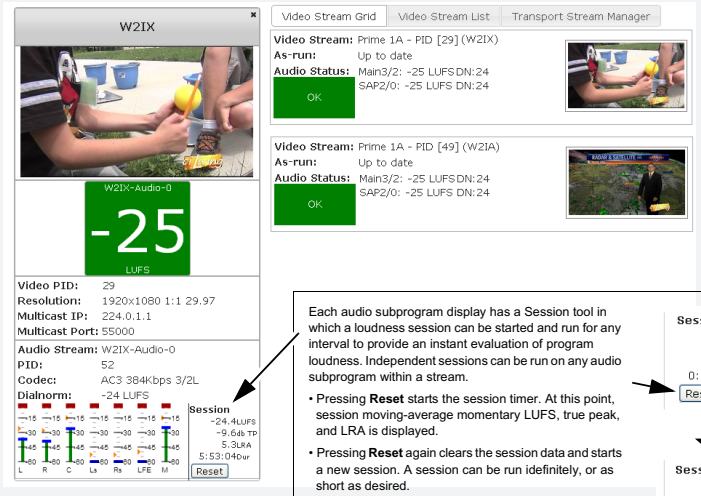


Navigating in thumbnail / loudness plots could not be easier.

- Zoom-out (more segments/time span displayed) or zoom-in (less segments/time span displayed but with greater detail) simply by rotating scroll wheel on mouse. Use Zoom presets to go to preset spans of 10 seconds to maximum. Zoom span level is always displayed in upper corner of plot.
- Navigate to most recent or earlier segments simply by dragging mouse left or right. Use buttons on bottom of plot to jump to earlier or later panes, or to go to very beginning or very end of plotting.

Transport Manager **Video Streams Grid** and **Video Streams List** show all programs and status/details within a transport stream. Clicking on a program opens a streaming thumbnail display showing status and real-time per-channel audio levels and details.



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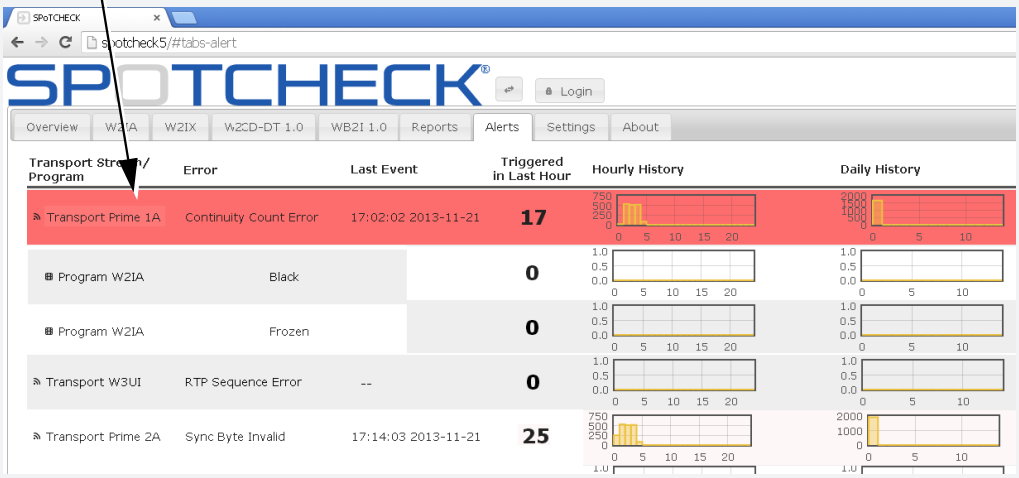
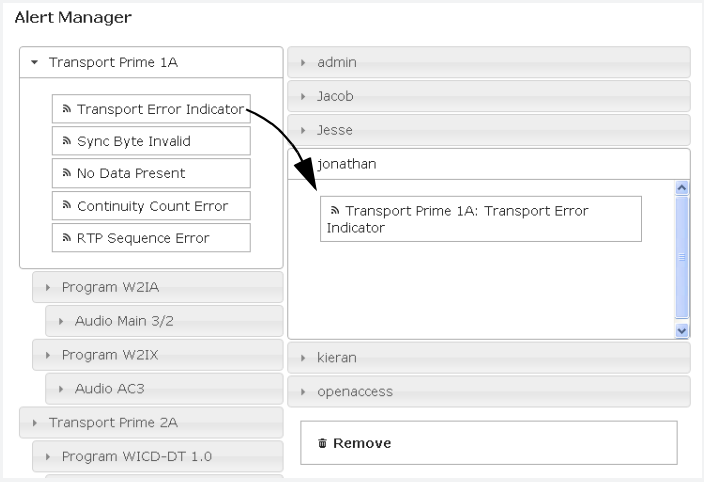
SPOTCHECK® ⟩⟩ TRANSPORT STREAM COMPLIANCE MONITOR

Option **QUALITYCHECK** detects transport communication errors as well as frozen/black frame and audio silence. It also checks for the presence of CEA708/608 closed-captioning.

At the moment an error occurs, the error display row highlights in red (then fades to the normal background color after a few seconds). This is useful for real-time monitoring and pinpointing troubleshooting of transport streams or programs experiencing problems.





QUALITYCHECK Alert Manager allows transport and program error notification to be forwarded as e-mail to SpotCheck users by simply dragging the error notification into the user's mailbox.

Presence of CEA708 and/or CEA608 packets is indicated by the yellow **(CC) 708** or **(CC) 608** bands just above the thumbnail images. Zooming in tighter displays the closed-captioning text (which can be copied and pasted into a text file if desired).

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SPOTCHECK® ⟩⟩ TRANSPORT STREAM COMPLIANCE MONITOR

⟩⟩ SPECIFICATIONS

Physical

SpotCheck-1000
- Power: 120/240 VAC, 50/60 Hz, 200 W (max)
- Size: 1RU
- Depth required: 24 in (61 cm) minimum

SpotCheck-2000
- Power: 120/240 VAC, 50/60 Hz, 350 W (max)
- Size: 1RU
- Depth required: 24 in (61 cm) minimum

Transport Interface

SpotCheck-IP:	GigE (1000 Base-T) via RJ-45
SpotCheck-ASI:	ASI, 75Ω BNC input
SpotCheck-OTA:	8VSB (RF), female F-connector input

See Ordering Information for port complements and other information.

Loudness Measurement

ATSC A/85 –24 LKFS

Formats Supported

Transport:	MPEG over IP or ASI, UDP, RTP, SMPTE 2022, FEC wrappers
Multicast:	Supports IPV4 multicast and IGMPv2 multicast management
Audio Codecs Supported:	Dolby® Digital (AC-3), Dolby® Digital Plus (E-AC-3)
Video Codecs Supported:	MPEG2
As-run import:	Imports as-run data from common automation systems via Windows Share or drop/drag into program as-run folders

Control/Monitor Interface

HTML5 web browser via dedicated 10/100/1000 Ethernet port.

Storage Capacity (per SpotCheck® Unit)

SpotCheck-1000, SpotCheck-2000
- 12 months

⟩⟩ ORDERING INFORMATION

SPOTCHECK®-1000-IP ATSC A/85 Compliance Monitor for IP Transport Streams. 1 Control IP Port, 1 Media IP Port. Includes one license of SPOTCHECK-LICENSE-AUDIO-FULL. Maximum capacity of four programs. 12-month analysis storage.

SPOTCHECK®-1000-ASI ATSC A/85 Compliance Monitor for ASI Transport Streams - 1 Control IP Port, 1 ASI Input Port. Includes one license of SPOTCHECK-LICENSE-AUDIO-FULL. Maximum capacity of four programs. 12-month analysis storage.

SPOTCHECK®-1000-OTA ATSC A/85 Compliance Monitor for OTA Transport Streams - 1 Control IP Port, 1 RF Input for over-the-air reception. Includes one license of SPOTCHECK-LICENSE-AUDIO-FULL. Maximum capacity of four programs. 12-month analysis storage.

SPOTCHECK®-2000 ATSC A/85 Compliance Monitor for IP Transport Streams - 1 Control IP Port, 5 Media IP Ports (ASI support available using option OPT-ASI; 1 ASI port max.). Includes four licenses of SPOTCHECK-LICENSE-AUDIO-FULL. Maximum capacity of 16 programs. 1RU. PSU redundancy. Dual power RAID hard drive configuration. 12-month analysis storage.

OPT-ASI Adds a 75Ω BNC ASI input and setup interface to any SpotCheck model.

OPT-OTA Adds an RF OTA input and setup interface to any SpotCheck model.

⟩⟩ ADDITIONAL PROGRAM LICENSES

SPOTCHECK®-LICENSE-AUDIO-FULL Complete program analysis for one program (1 video PID plus 2 audio PIDs). Each optional additional license adds complete analysis for one program.

SPOTCHECK®-LICENSE-AUDIO-LITE Program analysis for one program (1 video PID plus 1 audio PID), but omits As-Run support.

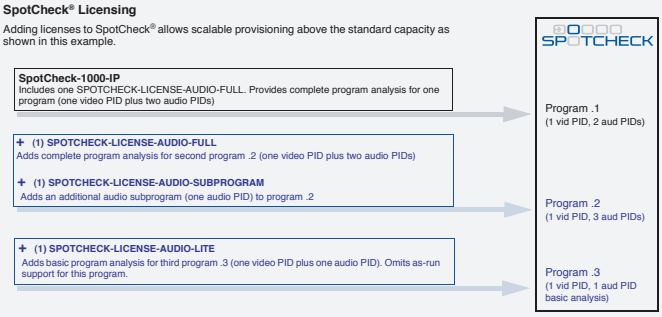
SPOTCHECK®-LICENSE-AUDIO-SUBPROGRAM Adds an additional audio subprogram (one audio PID, such as DVS or SAP) to a FULL or LITE program license. (Available only in conjunction with an already-provisioned SpotCheck®-LICENSE-AUDIO-FULL or SpotCheck®-LICENSE-AUDIO-LITE program license.)

SPOTCHECK®-LICENSE-QUALITYCHECK Adds CEA 708/608 presence detect and stream/program quality checks. (Option is available on a unit basis (one license (max.); adds QUALITYCHECK to entire unit, with all transport streams accommodated).

SPOTCHECK®-LICENSE-AIRCHECK Adds transport stream lo-res proxy download. (Option is available on a per-program basis).

SpotCheck® Licensing

Adding licenses to SpotCheck® allows scalable provisioning above the standard capacity as shown in this example.



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