COBALT

LOUDNESS METER SOFTWARE OPTION

Cobalt's Loudness Meter software works with the award-winning OGCP-9000 Remote Control Panel and our new WinOGCP Desktop Virtual Control Panel to provide a flexible, complete solution for ingest or on-air loudness metering, assessment, and records. An intuitive touch screen control interface offers simple "pushbutton" session start and stop along with clear-cut clear pass/fail loudness assessment for QC operators.
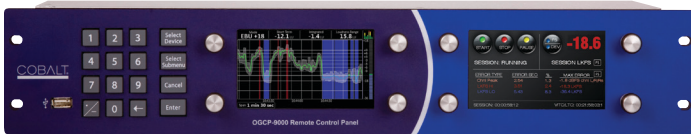
OGCP-9000 REMOTE CONTROL PANEL WITH +LM

True peak level detection, error tracking and logging, and other detailed criteria offer detailed assessments and logging for admin/engineering. Configurable automatically triggered sessions and report generation (timecode range, signal level-based, and automatic daily session start/stop/restart) provide for automation-based session and records generation to help document compliance with loudness regulations.
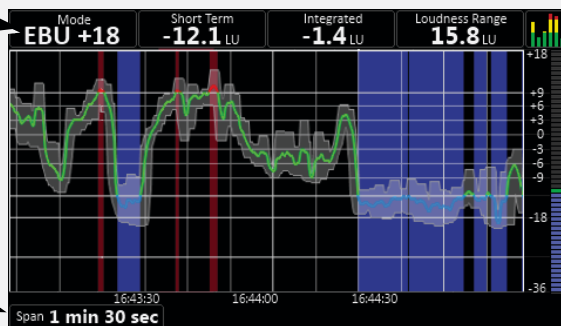
Easy to use, yet comprehensive, the option ensures thorough audio level and loudness assessment, and is ITU BS.1770, ATSC A/85, and EBU R128 compliant. Because cards forward the audio measurement data to the control panel over your plant's Ethernet network, the control panel does not need co-location or insertion within the video/audio stream.

The Audio Loudness Meter software works with Fusion3G® and most 9000 series COMPASS® cards. The software can be ordered with product purchase, or purchased for cards already installed and activated using a downloadable feature key (no need to remove or replace cards).

Loudness Metering graphing display mode shows a historical plot of loudness over a selectable time span from 45 seconds to 24 hours. Where loudness deviates from user-configurable thresholds, these conditions are clearly displayed by a red background or blue background (respectively indicating over-level or under-level intervals).
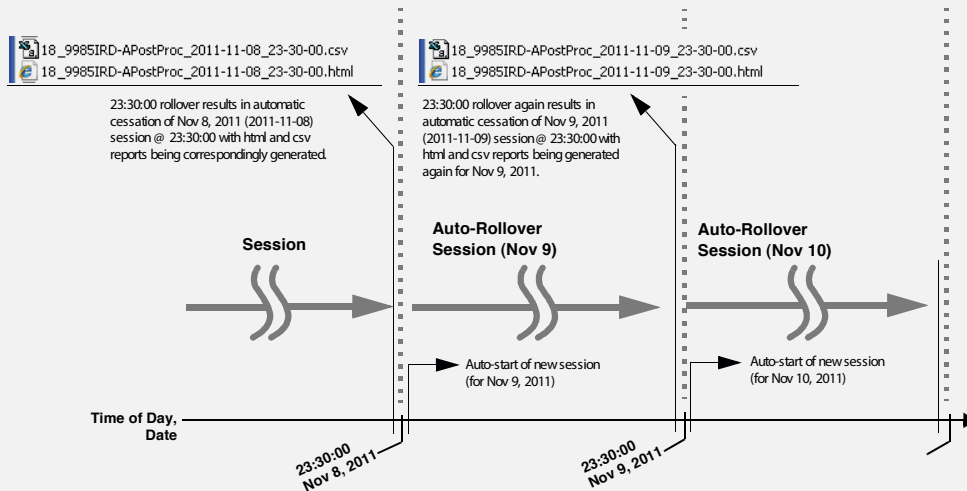
Multiple user-selectable loudness metering modes:
• EBU +18
• EBU +9
• A/85
• Custom

Instantaneous loudness level and PPM confidence displays

User-adjustable **Span** sets the "look-back" time span displayed ("live" plot always starts on the right margin)

Sessions can be set to stop (wrap-up and close session) and then immediately restart (start a new session) at a specified time within the 24-hour day. This allows for very orderly, consistent reports that are automatically generated on a daily basis, with each report subsequently having identical start /stop times and durations. The automatically generated log files (generated in both .csv and .html formats) can serve as records to document compliance with loudness regulations. The session rollover is fully automatic with no intervention required.

18_9985IRD-APostProc_2011-11-08_23-30-00.csv
18_9985IRD-APostProc_2011-11-08_23-30-00.html

18_9985IRD-APostProc_2011-11-09_23-30-00.csv
18_9985IRD-APostProc_2011-11-09_23-30-00.html

23:30:00 rollover results in automatic cessation of Nov 8, 2011 (2011-11-08) session @ 23:30:00 with html and csv reports being correspondingly generated.

23:30:00 rollover again results in automatic cessation of Nov 9, 2011 (2011-11-09) session @ 23:30:00 with html and csv reports being generated again for Nov 9, 2011.

Session

Auto-Rollover Session (Nov 9)

Auto-Rollover Session (Nov 10)

Auto-start of new session (for Nov 9, 2011)

Auto-start of new session (for Nov 10, 2011)

Time of Day, Date

23:30:00 Nov 8, 2011

23:30:00 Nov 9, 2011

LOUDNESS METER SOFTWARE OPTION

›› FEATURES

ITU BS.1770, ATSC A/85, and EBU R128 compliant

Intuitive user interface with touch screen control

Eight channel PPM metering

Comprehensive error tracking and logging

Automated session generation via daily rollover stop/re-start, timecode range, and signal-level threshold triggering

Accommodates any combination of audio sources handled by host card: embedded, AES, analog, or decoded Dolby® E, Dolby Digital, or Dolby Digital Plus

True peak level detection

Loudness error analysis suitable for live, post production and ingest environments

Flexible monitoring modes include configurable dBFS bar graph meters, loudness displays and error thresholds

Detailed web-browser session log reports with CSV raw data output available

Pre/post metering allows comparison of card pre and post loudness-processed streams (available on 9086 and all Fusion3G® cards)

Session	
Loudness Meter ID:	9985 IRD-A Post Proc
Start Date and Time	12/16/2011 14:29:41
End Date and Time	12/17/2011 14:29:50

Session	
Average: -24.8 LUFS / 2.2 Δ from target	
Calculated Recommendation:	ACCEPT

The Loudness Meter generates a report (in both .html and .csv formats) whenever a session is manually or automatically conducted.

Shown here is a summary example of a generated session report. Loudness metering and log reports can be set up to flag numerous loudness-related data (the most basic being loudness exceeding a threshold delta (Δ) from the target LU value as shown here).

To further assist in ready assessment of a report, these configurable deltas can be used to unambiguously tag a session as ACCEPT or REJECT.

If any errors exceeding user-defined thresholds occur, these errors are listed in a detailed log.

In a session where errors were logged, the **Error Log** displays a list of the errors, along with error type and session/timecode correlation, and offending channel(s) where applicable.

Error Log

Error No.	T session Error Start	T timecode Error Start	T time of day Error Start	Error Duration (sec:tenths)	Error Type	LUFS	L	R	C	Ls	Rs
1	00:00:03.5	02:28:58.15	16:46:21	00:00:03.3	HIGH	-15.5	-65.9	-64.6	-11.7	< -150	-30.9	-25.4
2	00:00:08.8	02:29:03.28	16:46:26	00:00:00.9	PK	—	—	—	-0.20	—	—	—
3	00:00:09.0	02:29:04.02	16:46:26	00:00:10.6	HIGH	-6.8	-66.1	-64.5	-4.1	< -150	-30.9	-25.4

›› SPECIFICATIONS

Standards
ITU BS.1770, ATSC A/85, and EBU R128

LKFS Scale Range
0 to -70 LKFS

Audio Input
8-Ch confidence monitoring
5-Ch (L, R, C, Ls, Rs) LKFS assessment per ITU 1770 and ATSC A/85 and EBU R128
Accommodates embedded, AES, analog decoded Dolby®E or AC-3 audio per host card

dBFS Scale Range
0 to -70 dBFS; absolute or configurable relative

Averaging
Simultaneous session (infinite) and short-term; configurable short-term averaging period

›› ORDERING INFORMATION

+LM-P Audio Loudness Metering Software Co-License for OGCP-9000 or WinOGCP

+LM-C Audio Loudness Metering Software Card Co-License. Pre/post metering available only with 9086 and all Fusion3G® cards.

To allow you to provision loudness metering on a card-by-card and panel-by-panel basis suiting your needs, host cards and control panels use individual co-licenses. **Co-licenses are required on both the host card(s) and Control Panel(s)**, with card +LM-C co-licenses and panel +LM-P co-licenses comprising the overall option.

Example

2 cards each with a
+LM-C co-license

1 Control Panel with
a **+LM-P** co-license
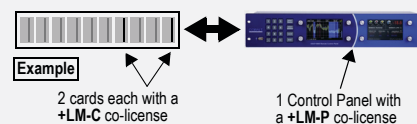
OGCP-9000 2RU Remote Control Panel for Fusion3G®/COMPASS® Cards (Specify country of destination for power cord)

WINOGCP Virtual Desktop-based Remote Control Application for Fusion3G®/COMPASS® Cards

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