Compressed Media Analyzer

CMA 1820

The CMA 1820 is the ideal solution for compressed media in-depth analysis and encoding compliance. It enables designers, engineers, system integrators and network operators to quickly and easily verify standards compliance, identify media interoperability issues, develop products around new CODECs and troubleshoot transmission issues.

With full support for HEVC/H.265, H.264, MPEG2 and VC-1 video along with AC-3, AAC and MPEG audio, the CMA 1820 is well-suited for use with all contemporary broadcast equipment. Support for the latest OTT/WebTV systems is now available with the OTT option and allows direct examination of manifest files and the corresponding segmented media. Other enhanced options such as closed caption, subtitle, SCTE35-DPI and PTS/DTS alignment analysis can provide even more benefit to the demanding user.

Whether it is used in conjunction with other Sencore analysis and monitoring equipment or on the laptop of a mobile professional, the CMA 1820 is the perfect tool for use with all next-generation digital video networks.

KEY FEATURES

- In-depth HEVC/H.265, H.264, MPEG2 and VC-1 video decoding and analysis (SD & HD)
- 4K/Ultra HD analysis support for HEVC/H.265 and H.264
- AAC, Dolby Digital (AC3), Dolby Digital Plus (AC3+), MPEG1 and MPEG2 audio decoding and analysis
- Multiple A/V container formats including TS, MXF, MP4 and those for OTT/Adaptive-Bitrate
- Intuitive and easy to use GUI
- A/V synchronization
- Syntax and dynamic buffer analysis
- Encoder Boundary Point (EBP) analysis for TS and OTT
- Graphical overlay of key measurement (Qp, MB type, MB size, motion vector)
- Extraction of A/V from containers and from IP (PCAP)
- File navigation based on video thumbnails
- Subtitle (DVB and EBU Teletext) analysis
- Closed caption analysis
- Digital Program Insertion (SCTE35) analysis

APPLICATIONS

- Quickly verify new encoder compliance before deployment, eliminating potential problems before they arise
- Intelligently solve interoperability issues between advanced CODECs
- Closed caption and AFD analysis and troubleshooting
- A/V lip-sync testing and validation on encoder output
- Find SCTE35-DPI timing and syntax issues before they impact revenue
- Inspection of new OTT/Adaptive-Bitrate media files and Encoder Boundary Points

SPECIFICATIONS

Compressed Media Analyzer CMA 1820

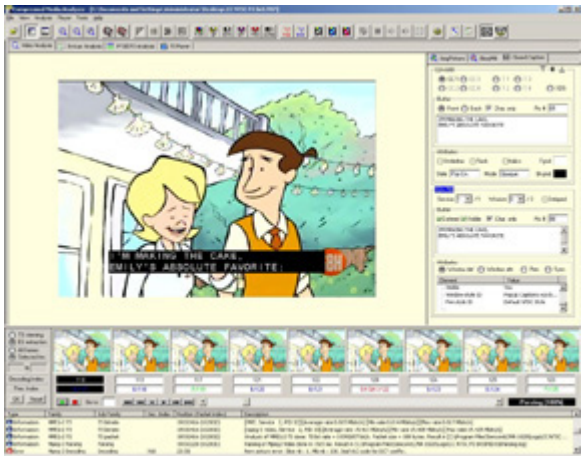
INPUT FILE

Containers:	MPEG2 TS, M3U8(HLS), TTS, MXF, ASF, Flash FLV, MP4, Fragmented MP4 (including smooth streaming), Quicktime, 3GP and PCAP
Raw Bytes:	HEVC/H.265, MPEG2 video, H.264, VC-1, MPEG audio, AAC, Dolby Digital (AC3), and Dolby Digital Plus (AC3+)

VIDEO ANALYSIS

HEVC/H.265:	Main, Main 10 and Main Still profiles at all levels. Max resolution 4096x2160
MPEG2 video:	Simple, Main, High and 4:2:2 profile at all levels. Max resolution 1920x1080
H.264:	Baseline, Main, Extended, High 4:2:0 8-bit profiles at all levels. Max resolution 3840x2160
VC-1:	Simple, Main and Advanced profiles at all levels. Max resolution 1920x1080

Video decoding
Main characteristics at a glance
Syntax display and conformance testing
Macroblock inspection (coefficient values, overlay)
Dynamic buffer analysis on H.264
Quick forward/backward navigation picture by picture
Motion vectors details and overlays



AUDIO ANALYSIS

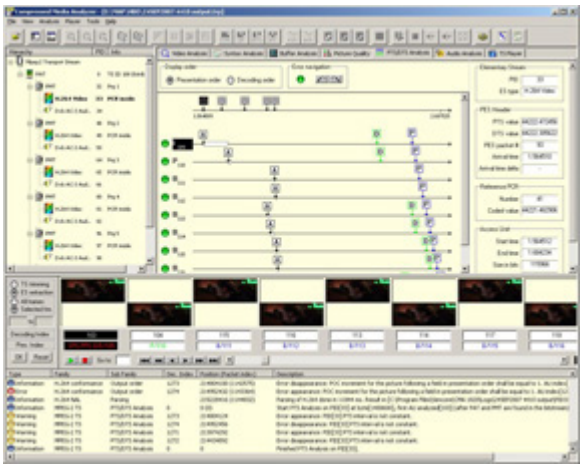
MPEG1 and MPEG2 at Layer I, II and III
Dolby Digital (AC3) and Dolby Digital Plus (AC3+)
All channels up to 5.1
AAC, HE-AACv1 and HE-AACv2
Audio decoding
Main characteristics at a glance
Audio waveform
A/V synchronization
ITU-R BS.1770-3, EBU R128 and ATSC A/85 loudness analysis, loudness range and max true peak level

CONTAINER ANALYSIS

TS trimming and ES extraction
TR 101 290 analysis
Built in MPEG-2 TS player
Container structure overview
PTS/DTS graphical analysis
HLS manifest analysis

ADDITIONAL FEATURES

Exportable logs
DVB subtitles and EBU Teletext subtitles analysis and decoding
Closed captions analysis and decoding (CEA-608, CEA-708 and SCTE20)
Web VTT Analysis and Decoding
Digital Program Insertion analysis including avails location and SCTE35 DPI message display
Live capture of IP traffic and video extraction

SYSTEM REQUIREMENTS

Intel Pentium 4 or higher
3GB RAM
Windows XP, Vista, 7, 8, 10 or 2003/2008 server