

VEGA Audio



Comprehensive Audio Analysis to Reduce Debug Cycle

With Dolby certified AC-3 analysis

Addressing the needs of media professionals to debug and optimize audio products, Interra's Vega Audio provides detailed analysis of audio streams.

Reducing development costs and increasing productivity, Vega Audio enables media professionals to quickly bring to market high quality and standard compliant audio products.

Vega Audio is an ideal tool to:

- Verify an audio stream's compliance with the defined standard
- Debug an encoded audio stream
- Evaluate and compare the performance and quality of audio compression/decompression tools
- Check interoperability issues

Vega Audio is a part of Interra's Vega family of Analyzers, which includes: Vega H264, Vega VC1, and Vega MPEG2.

Standards Supported

Audio: AAC, AMR, Dolby AC-3, MP3, PCM, LPCM

System Streams: MPEG-2 Transport/Program, MPEG-1 Systems, MP4, and 3GPP, 3GPP2

Runs on Windows 2000, XP

Key Product Benefits

- Extensible architecture to support other audio and system formats
- Powerful debug capabilities to analyze data blocks
- Quick forward/backward navigation
- Detailed display of coded information along with quick-to-capture summary information: spectrum, output, frame statistics
- Cross-reference feature that links error messages to error points in the stream
- Customized trace output to find out syntax-by-syntax data values
- Messages in XML format for ease of distribution
- Extraction of audio from system streams for future debugging purposes
- Facility to store analyzed data for future reference
- Facility to playback audio streams

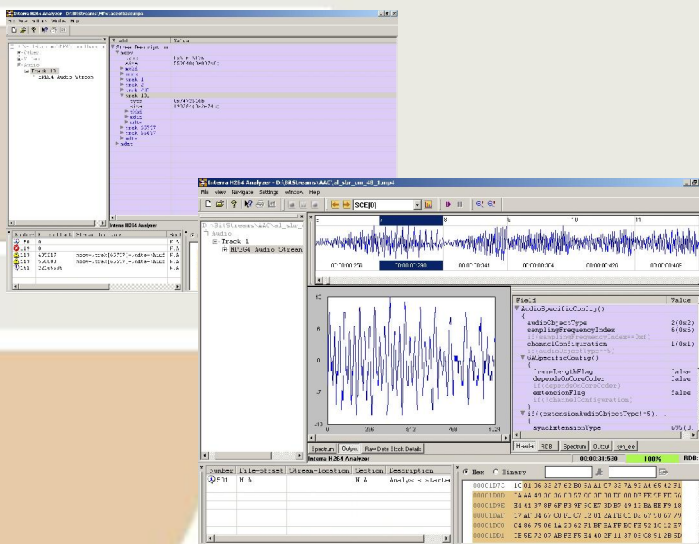
Potential Users

Media Product Developers and Designers working with technologies, such as:

- Audio CODEC
- Semiconductor devices
- Mobile Multimedia
- Audio Conferencing
- Broadcast and Network Monitoring

Media Content Providers and Enablers, such as:

- Network Operators
- Cable TV, TV, Video, and Movie companies



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Standard-specific Highlights

AAC Audio

- Supports AAC, AAC+Ver1, and AAC+Ver2 profiles
- Supports LC, Main, and SBR Audio Object Types
- Supports all channel elements: SCE, CPE, LFE, and CCE
- Supports all sampling rates: 8 KHz – 96 KHz
- Displays ADIF headers, ADTS, Audio Specific Config Headers, and PCE
- For all RDBs, displays ICS info, spectral data, pulse data, scale factors, sections, and output data
- Dumps .wav files for all channel elements

AMR Audio

- Supports SPEECH_GOOD, SPEECH_BAD, SID_FIRST or SID_UPDATE, and SID_BAD
- Supports AMR modes: 4,75 kbit/s - 12,2 kbit/s
- Supports AMRDTX, representing the discontinuous frames
- Supports AMR narrowband streams
- Displays LPC values, Excitation Vector, Fixed Codebook Vector

Dolby AC-3

- Analysis certified by Dolby
- Fully supports Dolby AC-3
- Supports up to 5.1 channels
- Supports tools, such as Synchronization & Error Detection, Decoupling, and Dynamic Range Compressions, Intra-Stream 'acmod' change and Downmixing

MP3

- Supports 2 channels: mono and stereo
- Supports layers 1, 2, and 3
- Supports Sampling Frequencies 16, 22.05, 24, 32, 44.1, and 48 KHz

LPCM

- Complete support to LPCM
- Displays ICS, wave headers, output values

MP4/3GPP/3GPP2/AVC File Formats

- Displays file hierarchy and tracks in a tree view
- Displays atom/descriptor list cross-linked with the hex/binary view
- Provides facility to analyze the selected individual audio track from the tree view

MPEG-2 Transport/Program/PES

- Supports detailed analysis of audio stream carried over MPEG-2 Transport /Program/PES/DVD VOB
- Displays hierarchy in a tree view
- Displays Transport Packet Header, PES Packet Header, and PSI fields
- Displays Program Pack Header, PES Packet Header and PSMaP fields

Input Formats & Standards Supported

Audio

- AAC (ISO/IEC 14496-3 sub part 1 and 4, Amendment 1, Annex C and D)
- Dolby AC-3 (A/52, A/52A)
- AMR (3GPP TS 26.101 V5.0.0)
- MP3 (11172-3 and 13818-3)
- LPCM (WAVE PCM sound file format)

System Layer

- MP4/AVC (ISO 14496-1, ISO 14496-12, ISO 14496-14, ISO 14496-15)
- 3GPP (TS 26.244 V6.0.0), 3GPP2 (C.S0050-0 V1.0)
- MPEG-2 Transport/Program (ISO/IEC 13818-1 and ISO/IEC 13818-1:2000/Final Draft Amendment 3)
- MPEG-1 Systems (ISO/IEC 11172-1)
- DVD VOB (DVD Specifications for Read Only Disc/Part 3: Video Specifications Version 1.0)

Availability

Available as an executable and also as an SDK

Recommended System Configuration

- 2-3 GHz CPU
- Windows 2000 or XP
- 1 GB RAM
- 20 GB or more hard disk capacity
- 15" or larger SVGA display (1024x768)

Also available:

Vega H264, Vega MPEG2, and Vega VC1 analyzers

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