



JMultiviewer



SDI, HD-SDI, HDMI, Composite, IP, HTTP,
UDP, RTP, RTSP, RTMP, HLS, NDI™
Multi-View and Monitoring



OVERVIEW

JMultiViewer is an intelligent solution for video and audio preview and monitoring. Both real-time network input and file-based inputs are supported. Seeking preview in file mode. Adding and removing channels on the fly. Audio real-time volume level preview for up to 32 audio mono channels. Hardware accelerated decoding and analysis of HEVC, AVC and MPEG-2 streams. Detailed audio and video streams format information. Audio, video and signal quality multiview monitoring, logging and e-mail notification.

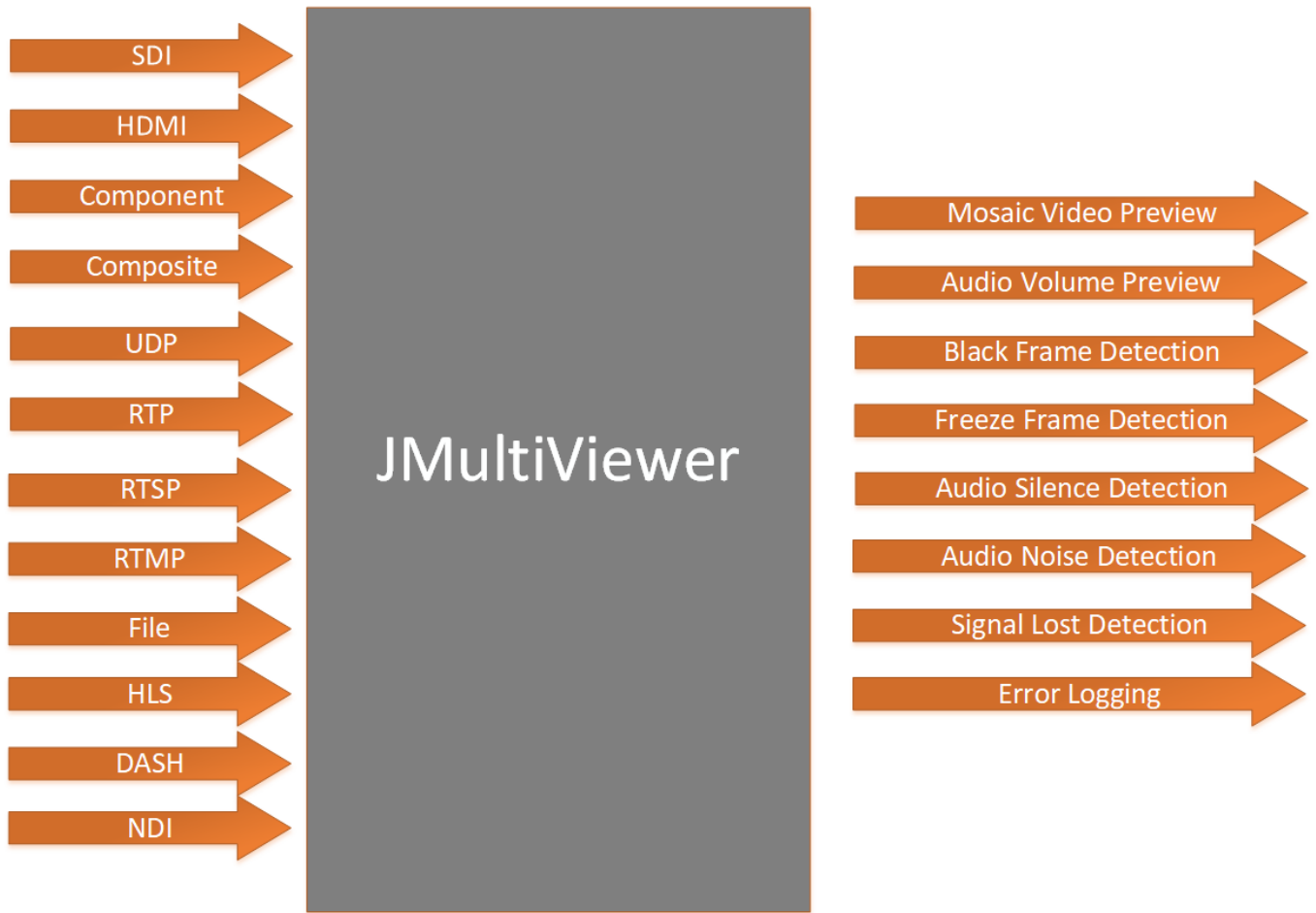
PRODUCT FEATURES

- Powerful and easy to use multi viewer solution
- Input interfaces: SD-SDI, HD-SDI, 6G-SDI, 12G-SDI, HDMI, Composite, Component, IP, HTTP, UDP, RTP, RTSP, NDI™
- Simultaneous file source, IP stream based and file-based source, and hardware input device source
- Containers supported: MPEG Transport Stream, MPEG Program Stream, MP4, MXF, AVI, WMV
- Multi-program Transport Stream support
- Video Compressions Supported: HEVC/H.265, AVC/H.264, MPEG-1/2, DV, WMV
- Audio Compressions Supported: PCM, MPEG Audio Layer I/II/III, AAC, WMA

- On-the-fly playlist editing
- Audio volume metering and control
- Multi-audio support and control
- Seek per-stream control with frame accurate seeking
- Programs, channels, stream list and detailed information, system clock.
- Video Black and Freeze frame detection
- Audio Silence and Noise detection
- Network signal lost detection
- System logging, e-mail errors notification and configuration presets
- Video accelerated decoding and monitoring of HEVC, AVC and MPEG-2



INPUTS & OUTPUTS





NATIVELY SUPPORTED MEDIA FORMATS

MULTIPLEX	VIDEO	AUDIO
AVC HD	HEVC/H.265 Video	AAC Audio
MPEG-1	AVC/H.264 Video	MPEG Audio Layer I
MPEG-2 Program & Transport Stream	MPEG-4 Video	MPEG Audio Layer II
MOV & MP4	MPEG-1/2 Video	MPEG Audio Layer III
MXF Generic	DVSD Video	WAV Audio
Sony XDCAM & XAVC	DV CPRO 25/50/100(DV HD)	PCM
Panasonic P2	WMV	WMA
ASF & WMV	JPEG 2000 & MJPEG	
AVI		

SUPPORTED INPUT & OUTPUT FORMATS

Input & Output Formats	<ul style="list-style-type: none"> • PAL 720x576 @ 50i 4:3/16:9 • NTSC 720x486 @ 59.94i 4:3/16:9 • HD720 50p, 59.94p, 60p • HD1080 23.98p, 24p, 25p, 29.97p, 30p, 50i, 50p, 59.94.i, 59.94p, 60i, 60p • 2K Resolution 2048x1556 23.97, 24, 25 • 4K Resolution 3840x20160 23.97, 24, 25 • 3D Full Sbs 720 50p, 59.94p, 60p • 3D Full Sbs 1080 23.98p, 24p, 25p, 29.97p, 30p, 50i, 59.94i, 60i • 3D Full TnB 720 50p, 59.94p, 60p • 3D Full TnB 1080 23.98p, 24p, 25p, 29.97p, 30p, 50i, 59.94i, 60i • 3D Sbs 720 50p, 59.94p, 60p • 3D Sbs 1080 23.98p, 24p, 25p, 29.97p, 30p, 50i, 50p, 59.94i, 59.94p, 60i, 60p • 3D TnB 720 50p, 59.94p, 60p • 3D TnB 1080 23.98p, 24p, 25p, 29.97p, 30p, 50p, 59.94p, 60p
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VIDEO CODECS & FEATURES

<p>MPEG Video Decoding</p>	<ul style="list-style-type: none"> • MPEG-2 (ISO/IEC 13818-2), MPEG-1 (ISO/IEC 11172-2) and ATSC streams • Profiles: Simple, Main, High, 422 and Multi-View • Levels: Low, Main, High 1440 and High • Chroma Formats: 4:2:0 and 4:2:2 • Bitrate: Up to 300 Mbps • SubFormats: MPEG-1, MPEG-1 VideoCD, MPEG-1 DVD, MPEG-2, MPEG-2 SVCD, MPEG-2 DVD, MPEG-2 DVB, MPEG-2 MicroMV, MPEG-1/2 DVHS, Cablelabs MPEG-2, MPEG-2 HD DVD, MPEG-2 HDV HD1, MPEG-2 HDV HD2, BluRay Disk, MPEG-2 ATSC, MPEG D10-25, MPEG D10-30, MPEG D10-40, MPEG D10-50, XDCAM IMX, XDCAM IMX MPEG-2 4:2:2P @ ML (25 MBit), XDCAM IMX MPEG-2 4:2:2P @ ML (30 MBit), XDCAM IMX MPEG-2 4:2:2P @ ML (40 MBit), XDCAM IMX MPEG-2 4:2:2P @ ML (50 MBit), XDCAM HD, XDCAM HD MP@H-14 4:2:0 1440x1080 (25 Mbit CBR), XDCAM HD MP@HL 4:2:0 1440x1080 (17.5 Mbit VBR), XDCAM HD MP@HL 4:2:0 1440x1080 (17.5 Mbit VBR), XDCAM HD MP@HL 4:2:0 1440x1080 (35 Mbit VBR), XDCAM HD MP@H-14 4:2:0 1440x540 (12.5 Mbit CBR), XDCAM HD MP@HL 4:2:0 1440x540 (8.75 Mbit VBR), XDCAM HD MP@HL 4:2:0 1440x540 (17.5 Mbit VBR), XDCAM HD MP@HL 4:2:0 1280x720 (35 Mbit VBR), XDCAM HD 422P@HL 4:2:2 1920x1080 (50 Mbit CBR), XDCAM HD 422P@HL 4:2:2 1280x720 (50 Mbit CBR), XDCAM EX, XDCAM EX MP@HL 4:2:0 1920x1080 (35 Mbit VBR), XDCAM EX MP@H-14 4:2:0 1440x1080 (25 Mbit CBR), XDCAM EX MP@HL 4:2:0 1280x720 (35 Mbit VBR)
<p>AVC/H.264 Video Decoding</p>	<ul style="list-style-type: none"> • H.264/AVC Decoding, compliant with ISO/IEC 14496 part 10 AVC / ITU-T H.264 • Profiles: Baseline, Main, High, High 422 and 444 • Chroma: 4:2:0, 4:2:2, 4:4:4 • AVC Intra: AVC-Intra Class 50, Class 100 and Class 200/AVC-Ultra(AVC-I 200), XAVC Intra • Bit support: 8-, 10- and 12-bit • 4k decoding offering support for AVC Ultra, AVC-Intra, XAVC and 4k 4:4:4 streams • CABAC/CAVLC • I, P and B slices • Weighted prediction • Low Delay flag • Field pictures • Assembler (SIMD) optimizations • SubFormats: SVCD, D1, High, DVD, BluRay SD, BluRay HD, Sony PSP, Apple iPod, AVCHD, AVCHD 2.0, OneSeg, 3GP, Silverlight, UltraViolet Portable Definition, UltraViolet Standard Definition, UltraViolet High Definition, DASH 264, Panasonic AVC-LongG 4:2:2 Classes G50 (50 Mbps), Panasonic AVC-LongG 4:2:2 Classes G25 (25 Mbps), Panasonic AVC-LongG 4:2:0 Classes G12 (12 Mbps), Panasonic AVC-LongG 4:2:0 Classes G6 (6 Mbps), H.264 intra frame coding (Class 200), SONY XAVC Long GOP 4K Profile for M4 and XD Style, SONY XAVC Long GOP HD Profile for M4 Style, SONY XAVC Long GOP HD Profile for XD Style, SONY XAVC HD Intra VBR Profile for M4 Style, SONY XAVC HD Intra CBG Profile Class 50 for XD Style, SONY XAVC HD Intra CBG Profile Class 100 for XD Style, SONY XAVC HD Intra CBG Profile Class 200 for XD Style, SONY XAVC 4K Intra CBG Class 100 for XD Style, SONY XAVC 4K Intra CBG Class 300 for XD Style, SONY XAVC 4K Intra CBG Class 480 for XD Style, SONY XAVC 4K Intra VBR Class 100 for XD Style, SONY XAVC 4K Intra VBR Class 300 for XD Style, SONY XAVC 4K Intra VBR Class 480 for XD Style



VIDEO CODECS & FEATURES

HEVC/H.265 Video Decoding	<ul style="list-style-type: none"> • H.265/HEVC Decoding, compliant with ISO/IEC 23008-2 / ITU-T H.265 • Main (8-bit) and Main 10 (10-bit) Profile support (HM 14.x compliant) • DivX HEVC decoding support up to 4K • Switchable Wavefront Parallel Processing (WPP) • Sample Adaptive Offset (SAO) • Deblocking filter • Tiles & Slices support • PCM Coding • CABAC optimizations • I, P and B frames • Weighted prediction • Support for HEVC streams that use Scaling Matrices / Lists • Coding unit up to 64x64 • Transform unit up to 32x32 • Transquant Bypass • Multi-core & multi-threading support • Assembler (SIMD) optimizations
JPEG2000 Video Decoding	<ul style="list-style-type: none"> • JPEG2000 video (ISO/IEC 15444-1) • Decoding of 5/3 and 9/7 JPEG2000 formats, YUV, 444, 422 chroma formats, up to 12 bit component depth • Alpha channel decoding and overlay • SMP extension, SIMD optimization, DCI standard compliance
DV, DVCPRO & DVCPRO HD Video Decoding	<ul style="list-style-type: none"> • DV 25 MBit (IEC-61834) • DVCPRO 25/50 Mbit (SMPTE 314M) • DVCPRO HD in 720 50/60p and 1080 50/60i (SMPTE 370M) • Chroma Format 4:2:0, 4:2:2, 4:1:1 • 4:3 and 16:9 aspect
MPEG-4 Video Decoding	<ul style="list-style-type: none"> • ISO/IEC 14496-2 and ITU-T Recommendation H.263 video stream decoding • Simple and Advanced Simple profiles support • Full-resolution, full-quality decoding/playback (high precision arithmetic, quarter-pel motion compensation, post-process) • Optimized for the most efficient CPU usage - takes advantage of MMX™ and SSE™ extensions when available • High definition video decoding • Chroma Format 4:2:0



AUDIO CODECS & FEATURES

AAC Audio Decoding	<ul style="list-style-type: none"> • MPEG-2 (ISO/IEC 13818-7) and MPEG-4 (ISO/IEC 14496-3) AAC audio • Main, Low Complexity and SBR audio object types • CBR and VBR • Bitrate: 6 Kbps - 1024 Kbps
MPEG Audio Decoding	<ul style="list-style-type: none"> • MPEG-1, MPEG-2, MPEG-2.5, LPCM, AES3 • Layer I, II and III • Bitrate: 64 Kbps - 384 Kbps

MULTIPLEX & FEATURES

MPEG-2	<ul style="list-style-type: none"> • MPEG-2 Transport Streams (ISO/IEC 13818-1) • MPEG-2 Program Streams (ISO/IEC 13818-1) • MPEG-1 System Streams (ISO/IEC 11172-1) • SubFormats: VCD, SVCD, DVD, DVD-MPEG1, DVB, MMV, ATSC-T, ATSC-C, HDV HD1, HDV HD2, AVCHD, BluRay, CABLELABS, SegOne, ATT, SegOne, Network Digital Television (DTV)
MP4	<ul style="list-style-type: none"> • MPEG-4 System Streams (ISO/IEC 14496-14) • 3GPP2 System Streams (3GPP TS 26.234) • SubFormats: MP4 Standard, ISMA, Sony PSP, iPod, iPhone, iPad, QuickTime, Flash, Sony P.M.C., Fragmented MP4
MXF	<ul style="list-style-type: none"> • Generic MXF - Op-1a, Op-1b, Op-Atom • Sony XDCAM HD for optical disc or SxS - Op-1a • Sony XDCAM DV for optical disc or SxS(DVCAM) - Op-1a • Sony XDCAM IMX for optical disc or SxS - Op-1a • Sony XAVC AVC-Intra and AVC-LongGOP - Op-1a • Panasonic P2 DVCPRO - Op-Atom • Panasonic P2 AVC-Intra - Op-Atom • Panasonic P2 AVC-LongGOP - Op-1b • D-Cinema(SMPTE 429-3,4), unencrypted - Op-Atom • DCI 2K, DCI 4K
AVI	<ul style="list-style-type: none"> • Type 1 • Type 2 • ODML
ASF	<ul style="list-style-type: none"> • ASF • WMV • WMA



SUPPORTED HARDWARE

Supported hardware devices	<ul style="list-style-type: none">• Intensity Pro 4K• Intensity Shuttle• DeckLink 4K Extreme• DeckLink 4K Pro• DeckLink Studio 4K• DeckLink SDI 4K• DeckLink Mini Recorder 4K	<ul style="list-style-type: none">• DeckLink Duo 2• DeckLink Quad 2• DeckLink Mini Recorder• DeckLink HD Extreme• DeckLink Duo• Multibridge Eclipse• UltraStudio Pro
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SYSTEM REQUIREMENTS

System requirements	<ul style="list-style-type: none">• OS: Microsoft Windows XP SP3, Vista, 7, 8, 8.1, 10• CPU: Intel i7 (for HD video), i3, Quad or Duo (for SD video)• RAM: DDR3 4GB or more• Video card: DirectX 9 compatible• Motherboard: Gigabyte GA-Z77X-UD5H motherboard or similar• Hard drive: 250 GB SSD or RAID
Minimum system requirements	<ul style="list-style-type: none">• OS: Microsoft Windows XP SP3, Vista, 7, 8, 8.1, 10• CPU: Pentium 3 class CPU• RAM: 512 MB• Video card: DirectX 9 compatible• Hard drive: 500 MB

TECHNOLOGY PARTNERS

