Studio Media Encoding Systems

StreamZ™ StreamZHD™

StreamZ[™] and StreamZHD[™] are the most versatile professional encoding systems on the market, delivering high-performance, multi-format video ingest, encoding, transcoding and live streaming in comprehensive turnkey solutions that integrate easily into any professional environment. Combining the performance and quality advantages of hardware-based preprocessing with the flexibility of software codecs and a powerful yet easy-to-use user interface, StreamZ and StreamZHD encoders are ideal for creating and transforming content for today's expanding array of

network-based distribution platforms and file-based production workflows. From real-time encoding and streaming from live sources or decks to faster-than-real-time transcoding from existing media files, StreamZ and StreamZHD can dramatically increase your productivity and output media quality easily and cost-effectively.





Connecting Content to Opportunity

www.digital-rapids.com



Highlights

- Top-quality, multi-format video/audio ingest, encoding, transcoding and streaming
- Unmatched versatility encode to files or live streams from live sources or decks; transcode from existing media files
- Simultaneous output to multiple formats, resolutions and bitrates lets you optimize for each target audience or application
- Broad, expandable compression and file format support including adaptive bit rate delivery technologies
- Hardware-based preprocessing for optimal quality and bandwidth usage
- Comprehensive analog and digital input options
- Flexible software with extensive integration, automation and customization features

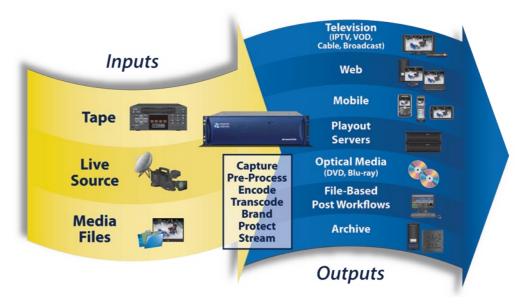






Encoding for Everything

Multi-platform content distribution and efficient multi-format workflows are necessities for content owners and producers striving to stay ahead in today's competitive media environment. Maximizing the value and reach of your content means dealing with an ever-increasing array of formats to support the network-enabled platforms and devices that have changed how audiences consume video. From encoding file-based deliverables to live streaming, Digital Rapids StreamZ and StreamZHD studio media encoding systems give you the power to efficiently repurpose your media at top quality in any format for any audience, anywhere.



StreamZ encoding systems feature a comprehensive range of input options for standard definition video sources, while the format-agile HD/SD StreamZHD expands the powerful and flexible features of StreamZ into the high definition domain.

Multiple Formats, One Easy Workflow

The StreamZ family supports standard and optional compression and container formats including AVC (a.k.a. H.264, MPEG-4 Part 10), VC-1 (Windows Media, Silverlight), Adobe® Flash® (H.264 or On2 VP6), MPEG-2, XDCAM HD, Avid DNxHD®, DVCPro, JPEG2000, Dolby® Digital and Digital Plus, QuickTime®, MXF, GXF, LXF, Omneon and many more, with a flexible architecture for easy future format expansion. Strict output compliance ensures broad compatibility with devices from PCs to set-top boxes. Dozens of file formats, including additional formats such as QuickTime-wrapped Apple® ProRes, can be used as sources for transcoding.

Source video can be encoded to files or streamed in multiple formats, resolutions and bit rates simultaneously in real time, giving you exceptional productivity while targeting multiple distribution channels or adaptive bit rate delivery. StreamZ and StreamZHD also offer the industry's highest performance and quality for live and on-demand adaptive streaming

technologies including Adobe® Flash® Dynamic Streaming, Apple® iPhone® and iPad™ HTTP Streaming (with integrated segmenting), and Microsoft® IIS Smooth Streaming (H.264 and VC-1).

StreamZHD can capture HD (1080i, 1080p and 720p) or SD video in its native format, or format convert it on-the-fly from HD to SD, SD to HD, or between HD resolutions.

Batch Encoding mode captures any input format to an uncompressed media file in real time and automatically transcodes it to multiple formats without user intervention, enabling easy encoding to even the most complex combinations of formats. Existing media files from differing resolutions, frame rates and sources can be transcoded to any other output format and concatenated if desired.



Hardware-Powered Quality...

To keep your audience engaged, looks really can be everything. The StreamZ family is renowned for its exceptional output quality, powered by the advanced video preprocessing capabilities of our purpose-built Flux hardware cards. Hardware-based preprocessing features (such as motion adaptive de-interlacing with pixel-level analysis) 'groom' the input signal to be more 'compression-friendly', resulting in superior visual quality and the most efficient use of bandwidth in the compressed output. Preprocessing in hardware also leaves greater CPU power available to encode more multi-format outputs simultaneously. Additional hardware features such as graphic overlay and video controls let you brand and refine your video.

...Driven By Superior Software

Encoding is more than just compression. StreamZ and StreamZHD systems include the powerful and flexible Stream FE™ software, providing you with a simple, consistent interface with a streamlined workflow from ingest through delivery. The Stream FE software lets you adjust compression settings and hardware pre-processing options as precisely as you want, with production-tested presets and a robust set of manual controls. Video and audio processing plug-ins such as graphic overlay, adaptive inverse telecine, color space conversion and audio mix-down can be applied, and output can be directed to a variety of options including archive files and live streams. The parameters associated with each encoding session can be saved in whole or in part, letting you recreate an entire project with a single click or reuse portions within other jobs. Productivity is increased, effort is reduced, and the cost of training is minimized.

Easy Workflow Integration

StreamZ and StreamZHD include a comprehensive set of tools for automation and easy integration into any environment. Features such as RS422 deck control, Closed Caption support, GPI triggers, standalone logging, e-mail notification, automated FTP delivery and DVD image creation help you automate and organize your workflow. Watch folder support can be combined with powerful template-based publishing to streamline your workflows, enabling automated encoding and publishing to websites, archives, FTP servers and more by simply dropping source content into a specified folder. Script commands can be inserted into ASF outputs to trigger downstream events such as advertising insertion or replacement. For ingest automation and live streaming management, the optional Digital Rapids Broadcast Manager® software provides centralized control, scheduling, management and failover for multiple StreamZ systems.

Optional Nexguard forensic watermarking by Civolution provides advanced content protection, while the Civolution Teletrax option embeds watermarks for content tracking and monitoring. YouTube Content ID and Vobile VideoDNA support generates 'fingerprints' to enable automatic identification of clips on the Web, enabling content owners and publishers to more effectively monitor, protect, manage and monetize their media online. Support for content access technologies such as Microsoft PlayReady ensures that high-value content is used only as specified by the content owner and only by authorized users.



External scripting and XML-based project files let you extend StreamZ functionality and customize how it works in your environment. For more advanced requirements, multiple levels of SDK – including a robust Web Services API – are available for integrating the Stream FE software tightly into your custom applications.

The StreamZ family has it all – quality, versatility, performance and reliability. StreamZ and StreamZHD – the ideal encoders for today's multi-platform media opportunities.

Want to add the power of StreamZ to an existing Windows workstation?

Flux™ board-and-software bundles combine powerful PCle® hardware with the Stream LE™ software in a "do-it yourself" configuration

Need portable live streaming?

TouchStream® appliances feature our acclaimed streaming quality in a fully self-contained form factor with an intuitive touch-screen interface.

Models and Inputs

StreamZ - Standard-definition StreamZ encoding systems are available in several models featuring a comprehensive range of analog (composite, S-video and component) and digital (SDI) input options. Dual-channel models support capture and encoding from two distinct input sources simultaneously.

StreamZHD - StreamZHD encoding systems support HD (1080i/1080p/720p) and SD (NTSC/PAL) inputs and are available in all-digital (SD/HD-SDI video with embedded audio) and digital-plus-analog (adding composite, S-video and SD/HD component analog video; balanced/unbalanced analog audio; and AES digital audio) configurations. StreamZHD models based on our new Flux hardware also feature dual-link HD-SDI and 3G-SDI video input compatibility.

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| Configurations | 54 |
| Form factor | StreamZ: 1RU, 2RU or 3RU rackmount chassis |
| | StreamZHD: 1RU or 3RU rackmount chassis |
| | Digital-Only Models: direct SDI connectivity |
| Video/audio input connectivity | Digital+Analog Models: breakout cable standard; 1RU breakout box optional |
| General Features and Format Support | |
| Capture/encode to files from live inputs | • |
| Capture/encode to files from deck with RS-422 control | • |
| Transcode from source media files | • |
| Live streaming | • |
| Archive to files during live streaming | • |
| Encoding formats Codec support is evolving constantly. Please see our web site | Standard: VC-1 (Microsoft Silverlight incl. IIS Smooth Streaming; Windows Media WMV), MPEG-2/1, QuickTime® (inc. MPEG-4, H.264, AAC), AVI, MP3 and more. (Apple ProRes import available with third-party QuickTime filters). Optional: Advanced H.264 (AVC, MPEG-4 Part 10), H.264 for Web (Adobe® Flash® incl. Dynamic Streaming; |
| for the latest format support information. | Microsoft IIS Smooth Streaming), On2 VP6, Dolby® Digital and Digital Plus, Dolby Pulse (AAC), JPEG2000, iPhone®/iPad™ H.264 with integrated segmenting, XDCAM HD, Avid DNxHD®, MXF, GXF, LXF, Omneon, DVCPRO, 3GPP, RED (import only) and more. |
| VBI capture with Closed Caption support | • |
| SDI ancillary data capture (608/708 Closed Captioning, time code) | • |
| Motion adaptive de-interlacing Aspect ratio conversion, cropping, scaling | <u>:</u> |
| Proc amp controls, gamma correction | • |
| Graphic overlay | • |
| stream FE Software Features | |
| Easy-to-use interface with unlimited customizable, reusable encoding profiles | • |
| Simultaneous output to multiple codecs, resolutions and bitrates | • |
| Programmable event triggers (GPI, duration, custom keys) | • |
| Batch Encoding (real-time capture with auto transcode) | • |
| Video and audio processing plug-ins (graphic and video overlay, adaptive | |
| inverse telecine, Closed-to-Open Captions, color space conversion, audio track mix-down and more) with support for third-party plug-ins | • |
| E-mail notifications and automated FTP distribution | • |
| Watch Folder support for automated media file transcoding | • |
| Automated template-based publishing | • |
| Integration with Digital Rapids Transcode Manager and Digital Rapids Broadcast Manager (each sold separately) | • |
| Forensic watermarking for content protection (Nexguard by Civolution) and tracking/monitoring (Teletrax) | o |
| YouTube Content ID reference file (fingerprint) generation | 0 |
| Vobile VideoDNA fingerprint generation | • |
| SCTE 35 insertion (Cueing Messages for ad insertion) | 0 |



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Please see our website for additional details. For more software features, please see the separate Stream Software Comparison.