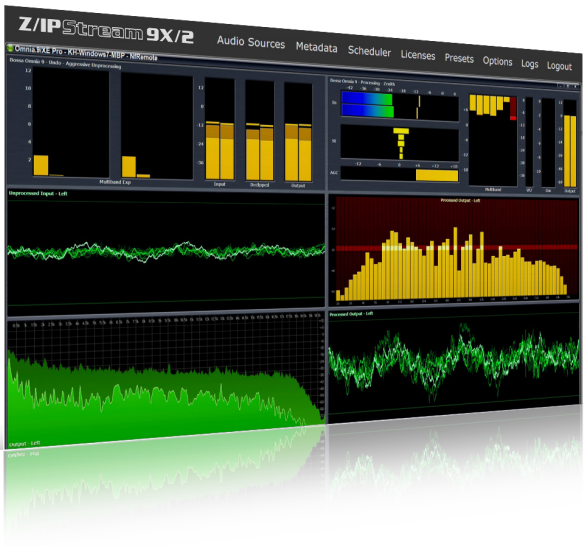
Z/IPSTREAM X/2
Z/IPSTREAM 9X/2

THE FUTURE IS STREAMING. THE FUTURE IS HERE.



OVERVIEW

WiFi and Internet connections are available everywhere these days — and so is streaming audio. Already, many are using their smartphone as a 21st century transistor radio. Soon, the connected car will make it easier than ever to listen to high-quality streamed audio on the move. These are big changes in listening habits, but don't worry: Z/IPStream X/2 and 9X/2 are here to help.

Z/IPStream X/2 is the new third-generation streaming software from The Telos Alliance; a new combined audio processing/streaming platform designed for broadcasters who understand that streaming audio quality and reliability are just as important as terrestrial transmission. Z/IPStream X/2 gives you the power to fine-tune your streams for clear, clean, audio output — no matter the bit rate, codec or delivery platform.

Z/IPStream 9X/2 is the ultimate version of the X/2, adding acclaimed Omnia.9 processing to your internet stream, complete with Omnia's exclusive 'Undo' technology, Solar Plexus technology, the full Omnia Audio Tool Box, and much more. Z/IPStream 9X/2 delivers an incredible amount of sonic power and control to your Internet stream. Z/IPStream X/2 and Z/IPStream 9X/2 also stand above the rest with the new Adaptive Streaming technology. With Adaptive Streaming, the connection between streaming server and listener is automatically managed, dynamically adjusting bit-rate and audio quality to maintain a solid connection with the best possible audio — regardless of Wi-Fi limitations or Internet behavior.

FEATURES

- Genuine, high-quality audio codecs from Fraunhofer IIS (the inventors of MP3), including MP3, AAC-LC, HE-AAC v1, and HE-AAC v2.
- Adaptive Streaming technology automatically compensates for variations in listeners' connection strength and bandwidth.
- Processes and encodes streaming audio for multiple platforms and bit-rates simultaneously.
- Includes multiband processing from Omnia Audio
- Need even more processing power? Upgrade to Z/IPStream 9X/2, with up to seven bands of multiband AGC and limiting plus Undo — revolutionary technology that can restore poorly-mastered audio to clarity and brilliance.
- Sophisticated software routines enable you to prepare and correct for streaming complications such as programming blackouts, Metadata insertion, variable listener environments, and more.
- Flexible audio sourcing accepts input from sound cards, RTP and Livewire™ AoIP connection.
- Unprecedented level of control: use the built-in HTML5 web interface, or fine-tune even further using the REST API.
- Cloud-Ready: Z/IPStream X/2 and 9X/2 may be hosted and run using your cloud-based server.
- Built-in SNMP and email notification of system events.

IN DEPTH

Adaptive Streaming

Adaptive Streaming is a stream delivery method that allows media players to switch bitrates when network conditions change. Z/IPStream X/2 and 9X/2 support Microsoft's Smooth Streaming technology, encoding the same stream at multiple bitrates and keeping audio packets sample-aligned. Adaptive Streaming ensures that your listeners are automatically receiving the optimal quality and consistency based on the strength of their connection.

Z/IPStream 9X/2: Full Omnia.9 Audio Processing

In addition to its standard, potent Omnia Audio multi-band audio processor, Z/IPStream X/2 can be upgraded to Z/IPStream 9X/2, which includes Omnia.9 audio processing by Leif Claesson. Z/IPStream 9X/2 includes exclusive 'Undo' Technology, which removes distortion while simultaneously re-creating audio peaks lost to the poor mastering techniques common in today's contemporary music. The impact of 'Undo' is stunning, and not only can it be heard, but it can also be seen on the variety of audio analysis tools that are included in the full Omnia toolbox. Oscilloscopes, RTA's, FFT's, Full Spectrum Analyzers, and all of the additional instrumentation help to remove the guess work from audio processing. Now you can back your intuition with the facts. 'Solar Plexus' is also included, the Omnia bass enhancement algorithm that delivers incredibly full, impactful and natural sounding low-end. You can use the 6-band parametric EQ or, for CPU-constrained environments, switch to the 3-band audio processor. With Z/IPStream 9X/2, you have absolutely everything you need to find, perfect and establish your stream's signature sound.

Audio Replacement/Blanking

It is not uncommon for certain programming to be blacked out or contractually restricted from streaming online. Z/IPStream X/2 and 9X/2 make quick work of programming blackouts by enabling you to replace restricted material with content from a separate audio source, or audio from files. You have full control over the switch points and the duration, and the switch points are sample-accurate when using AES67 for input.

Stream Synchronization

Stream synchronization is essential when implementing resilient streaming. Using Stream Synchronization, separate encoder instances (running on different PCs and even at different locations) are able to synchronize so that bitstreams generated by all instances are identical. This enables resilient streaming deployment through redundancy. If one encoder goes down (or is taken down for maintenance), the other encoder(s) continue to generate the appropriate stream, with no interruptions to service. AES67 input and Smooth Streaming for output are required to use Stream Synchronization.

Direct Livewire, AES67 and RTP Audio Input

Z/IPStream X/2 and 9X/2 work seamlessly with native Livewire audio sources, and can also accept AES67 input and RTP unicast sources.

SNMP Alarms

Z/IPStream X/2 and 9X/2 can be monitored via SNMP, a feature particularly important for large-scale deployments. SNMP monitoring gives you peace of mind that your stream is fully functional, and if anything does go wrong, SNMP alarms will detect and immediately inform you of any problems. Z/IPStream X/2 and 9X/2 also support email notification alerts.

REST API

In addition to an HTML5 web interface, Z/IPStream X/2 and 9X/2 provide full programmatic control over its functions. Customers can use the REST API for configuration, monitoring, or dynamic control. REST is a web standard that can be used with the majority of scripting or programming languages from JavaScript to Python, Ruby and more. Z/IPStream X/2 and 9X/2 give you complete control of your stream through a variety of differing interfaces.

Cloud-Ready

Z/IPStream X/2 and 9X/2 is a software-only application that's cloud-ready. Z/IPStream X/2 is designed to run in the background as a Windows service, and its HTML5 web interface makes remote configuration a breeze from PCs, Macs, tablets or even smart phones. The remote application for access to Omnia 9's advanced metering and processing options requires a Windows OS. The REST API is ready to handle any additional custom control or monitoring requirements. Whether off-site or on, Z/IPStream X/2 and 9X/2 give you the flexibility to set up your stream in whichever way is best suited for your needs.

SPECIFICATIONS

- Windows 7 or later OS, 32-bit or 64-bit version
- 1 gigahertz (GHz) or faster 32-bit (x86) or 64-bit (x64) processor
- 1 gigabyte (GB) RAM (32-bit) or 2 GB RAM (64-bit)
- 200 MB free disk space required for installation
- Additional disk space is used for logging
- Internet access
- Administrative privileges required during installation
- Web browser required for configuration and management
- Only stereo AES67 input is supported

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