

# Z/IPSTREAM A/XE STREAMING ENCODER+PROCESSOR

BIG PERFORMANCE — SMALL PRICE



## OVERVIEW

The premier web streaming software application that processes and encodes. Combines superior Omnia audio processing with the Fraunhofer MP3 and AAC codecs for high quality live Internet streaming. For file-based processing and encoding, see Z/IPStream F/XE. For a hardware based solution, see the Z/IPStream R/1.

## ADVANTAGES

- Genuine Omnia Processing
- Software only, no special cards required
- Runs as a Windows service in the background. No need to log in.
- Managed from anywhere through a web browser, locally or across the Internet.
- Each license = one stereo input. The user can add each license to the same PC or separate PCs.
- Each program input can be processed and encoded in multiple ways, and sent to multiple servers simultaneously
- Processed audio can also be sent to a local sound device for monitoring.

### PLUS:

- High-performance, low memory footprint, native application
- Can operate with Virtual Audio Cable driver, allowing A/XE to accept audio from a playout system or other applications on the same PC.
- All configuration information is stored in a single XML file for simple configuration backup/restore.

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### SYSTEM REQUIREMENTS

- Windows XP or later with 20MB of free disk space
- Microsoft .NET client framework 4.0
- Internet access

### CODECS

MP3, AAC, HE-AAC, HE-AAC v2.

The highest quality codecs from Fraunhofer

### STREAMING SERVERS SUPPORTED

- ShoutCAST-compatible servers, including ShoutCAST v2
- Icecast
- Adobe Flash Media server
- Wowza server
- Live365
- Windows Media Server

### Metadata

Accepts metadata from a variety of sources and uses it to “tag” the audio stream. This information is then sent to the media server and (eventually) displayed to the user (in a player-specific manner). Metadata can be accepted over TCP/IP and UDP, or from text files. A/XE can accept just about any format, from simple, line-based messages to XML messages and anything in between. We include a set of metadata filters (small scripts, using the Lua scripting language) which can be further edited and customized by the user.

## FAQS

### How do I configure Z/IPStream A/XE?:

Since A/XE works as a service in the background, it has no visible user interface (as a standard application would). A/XE can be configured and managed through a web browser from any computer that can reach the A/XE PC. In order to display audio meters and a rich graphical interface, A/XE’s management console uses a Microsoft browser plug-in called Silverlight. If your PC does not have Silverlight installed, you will be prompted to do so the first time you access the A/XE with your browser.

### Can I use Z/IPStream A/XE for audio processing without encoding the audio?

Yes, A/XE can be configured to process the audio then send the processed audio to a sound card or to another application on the same PC without needing to encode the audio.

### What formats can A/XE use for encoding?

A/XE can encode audio to MP3 (8kbps, 11025 Hz, mono to 320kbps, 44100 Hz, stereo) and AAC. Low complexity AAC (AAC-LC) and high efficiency AAC (HE-AAC) are both supported. AAC has been standardized under both MPEG-2 and MPEG-4. The format most commonly used is MPEG-4 AAC-LC. Often this is called just ‘AAC’. HE-AAC adds Spectral Band Replication to AAC and it is sometimes called AAC+ (sometimes seen as ‘aacPlus’ or ‘AAC-plus’). There is also an HE-AAC v2 format which adds parametric stereo optimizations to HE-AAC. Sometimes this is called AAC+ v2 or Enhanced AAC+.

### What servers can A/XE feed?

A/XE can directly feed SHOUTcast-style servers (SHOUTcast, Icecast, Steamcast, etc.). The Wowza server is also supported for streaming to Flash clients. MP3 encoded streams can also be sent to Windows Media server. Adobe Media Server is NOT supported at this time. We are considering this for a future version.

### Can I use A/XE with a third-party encoder?

Yes, using the Virtual Audio Cable (VAC) driver A/XE can send the processed audio to other application on the same PC. A/XE would send the audio to one end of the VAC driver and the third-party encoder would read the audio from the other end of the same VAC driver.

### What is the Virtual Audio Cable driver?

The Virtual Audio Cable driver, included with A/XE, simulates a sound card and allows the audio to be sent from the output side of the driver to the input side. This forms a “patch cable” that applications can use to pass audio from one to another. Multiple cables can be configured at the same time.

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### **Do I have to be a programmer to create my own metadata filters?**

No. A/XE includes a number of filters that you may be able to use as provided or adapt for your use. You may also check the A/XE product page for additional filter downloads or contact Telos support for assistance.

### **I have an Axia system installed. How can I get my Livewire audio into A/XE?**

A/XE includes a copy of the IP-Audio driver. This allows you to receive audio from and send audio to Livewire devices over the network without the need for a physical audio card.

### **Where are the Presets, Metadata Filters and Logs stored?**

The processing presets, metadata filters and log files are stored in subdirectories in the application data directory. This directory resides in the Microsoft® recommended location. This location is different for different version of Windows.

### **Can I change the settings in Options.xml manually?**

We do not recommend editing Options.xml manually. If this becomes necessary for some reason then make sure to stop the A/XE service before editing the file. Restart the A/XE service once the changes to Options.xml are saved back to the file. The same procedure can be used to restore Options.xml from a backup file: stop the A/XE service, restore Options.xml and restart the A/XE service.

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