



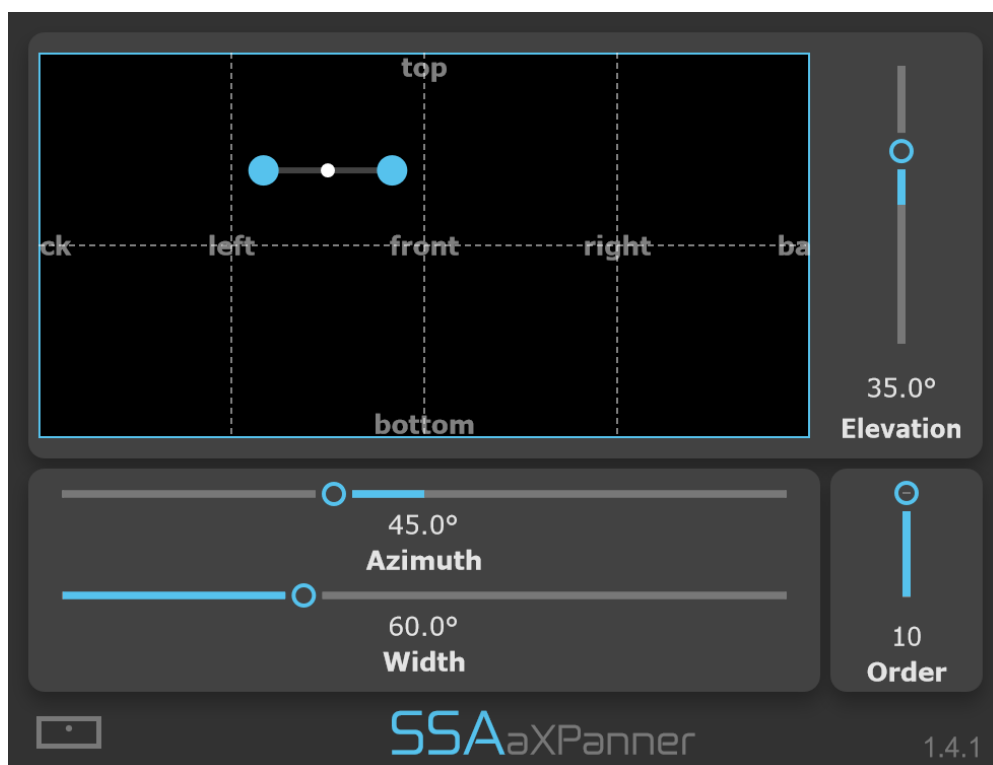
aXPanner

a1Panner/a3Panner/aXPanner

Mono & stereo to Ambisonics encoder plugin

v. 1.4.1

User Manual



Peter Stitt – peter@ssa-plugins.com
<https://www.ssa-plugins.com>

Requirements

To use the **aXPanner** you must have a program or DAW capable of handling plugins with the required number of audio channels without applying any additional processing.

Installation

1. Download the .zip file from your account on <https://www.ssa-plugins.com>
2. Unzip the folder and run the installer to place the contents in the default VST3/AU/AAX folder on your computer.
3. Open your DAW and rescan for new plugins
4. Add the plugin to a new track that can handle multichannel audio. For example, in Pro Tools | Ultimate this will require you to create an Ambisonic track/buss.
5. If required, make sure your computer is connected to the internet, enter the serial number emailed to you to activate the plugin.

To uninstall simply delete the plugin files from your computer. On Windows you can uninstall from Add/Remove Programs.

Parameters

The **aXPanner** plugins have the following parameters that can be adjusted from the user interface:

- **Source azimuth:** the angle of the sound around the listener. 0° is to the front of the listener, 90° is to the left, -90° is to the right and $\pm 180^{\circ}$ is to the back.
- **Source elevation:** the angle of the sound above or below the level of the listener's ears. $+90^{\circ}$ is above and -90° is below.
- **Source width:** For a mono input this parameter places two copies of the incoming mono signal left and right of the selected source position. For a stereo input the left and right input channels are panned to the left and right respectively. The maximum width is 180° , which means that the two sources are on opposite horizontal sides.

The **a3Panner** and **aXPanner** also include an Order control for up to third and seventh order encoding respectively.

Usage Notes

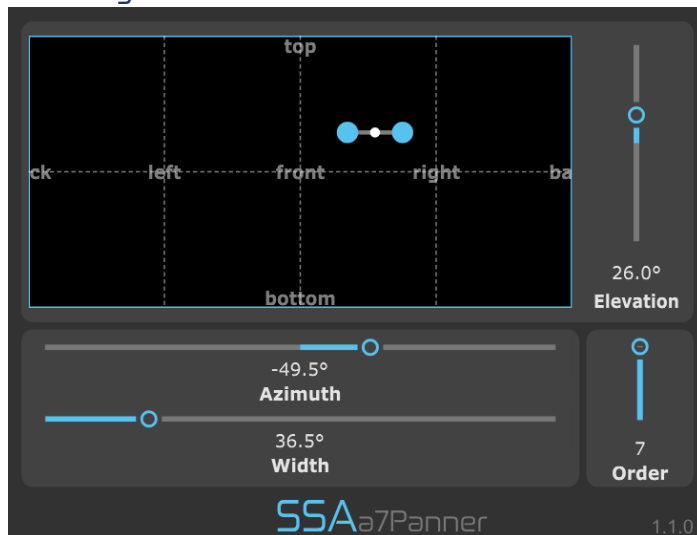
The **aXPanner** outputs SN3D/ACN (AmbiX) format Ambisonics as used by Google for YouTube 360.

User Interface

The plugin parameters can be controlled using the **Azimuth**, **Elevation** and **Width** sliders on the interface. Alternatively, the source position can be adjusted using the main display. There are two different kinds of display that can be accessed by *right-clicking* inside the main rectangle. The two are **Top-down** and **Rectangular**.

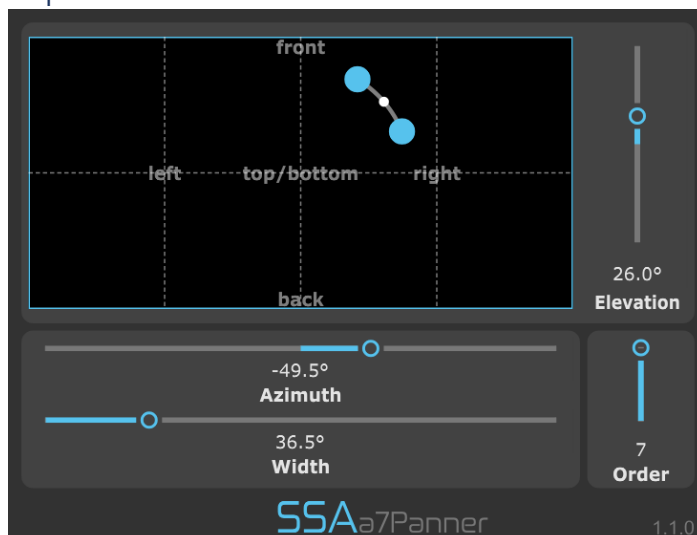
In both views, **Width** can be controlled by holding **ctrl** dragging vertically: up to increase the width and down to decrease it.

Rectangular Interface:



Using this mode, the azimuth of the source is controlled by moving to the left and right. The elevation is controlled using up and down movements. If you continue to drag beyond the left or right edges of the display, the source position will wrap back round to the other side.

Top-Down Interface:



With the top-down mode, the azimuth of the sound source is controlled by clicking. The angle is that of the click position relative to the centre of the display. Elevation is controlled by holding **shift** while clicking and moving vertically (up for increased elevation, down for decreased).

Pop-out Panner

Clicking on the rectangle on the bottom left of the interface will open a pop-out panner window that can be used to align with, for example, a 360 video. It also displays the positions and names of the other aXPanner instances currently active. You can control any instance of aXPanner from this window.

Right-clicking on the pop-out panner button allows you to adjust:

- The colour and transparency of the window.
- The colour of the marker used in the display. If none is specified it will try to use the track colour set in your DAW.
- To toggle between the equirectangular view and the top-down view.



VST is a trademark of Steinberg Media Technologies GmbH, registered in Europe and other countries.