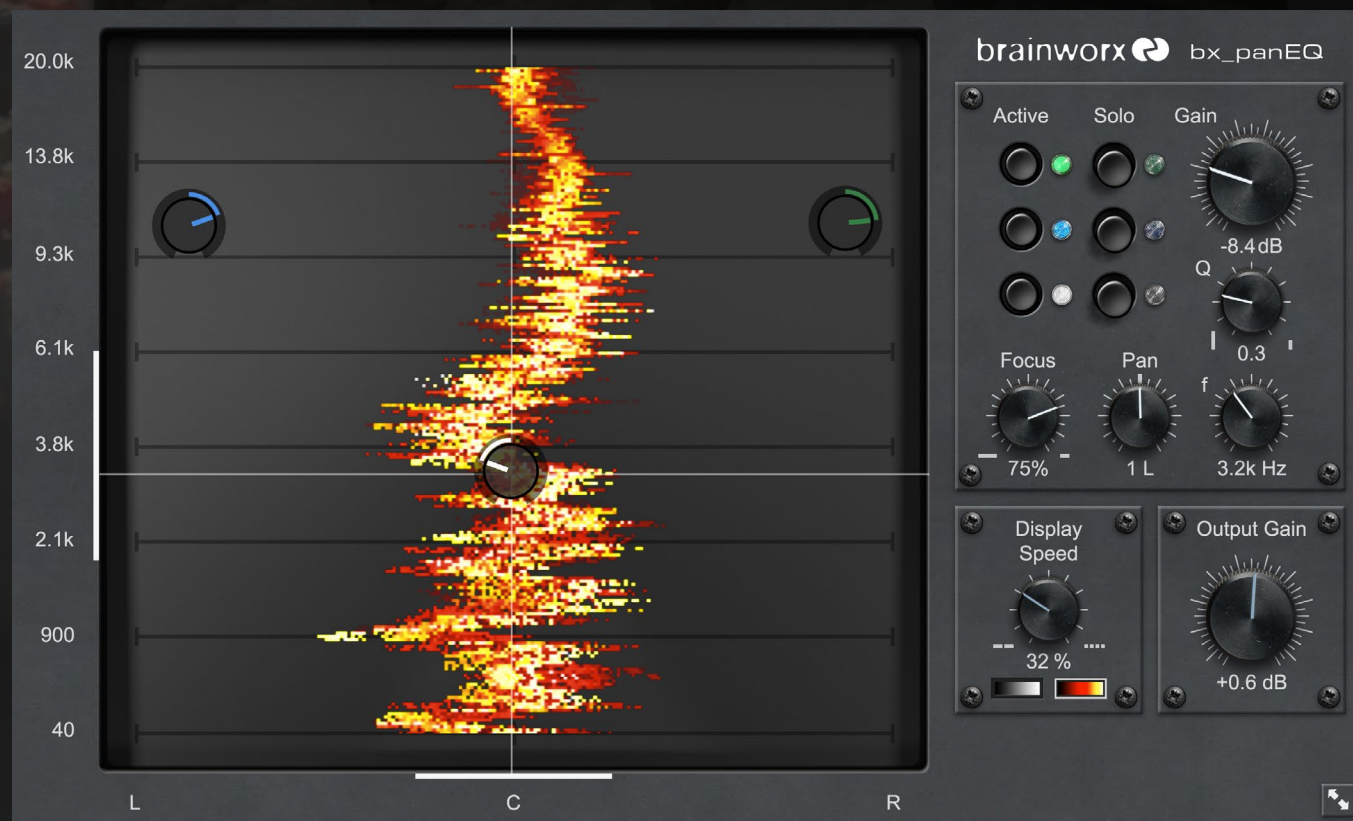


# brainworx



## bx\_panEQ

Plugin Manual

# Quick Start

## Install and Authorize your New Plugin:

- If you do not have an account, [register for free on the Plugin Alliance website](#)
- Double-click the .mpkg (Mac) or .exe (Win) file
- Follow the installation instructions
- Open the plugin in your DAW of choice and click on the interface to activate
- If your computer is connected to the internet, click the “I’m Online” button and enter your Plugin Alliance credentials on the following page

For offline activation instructions and additional information, please refer to the Activation Manual included in the installation folder of this plugin  
You may also follow this link to the [online version of the manual](#)

For more information, please visit: [www.plugin-alliance.com](http://www.plugin-alliance.com)

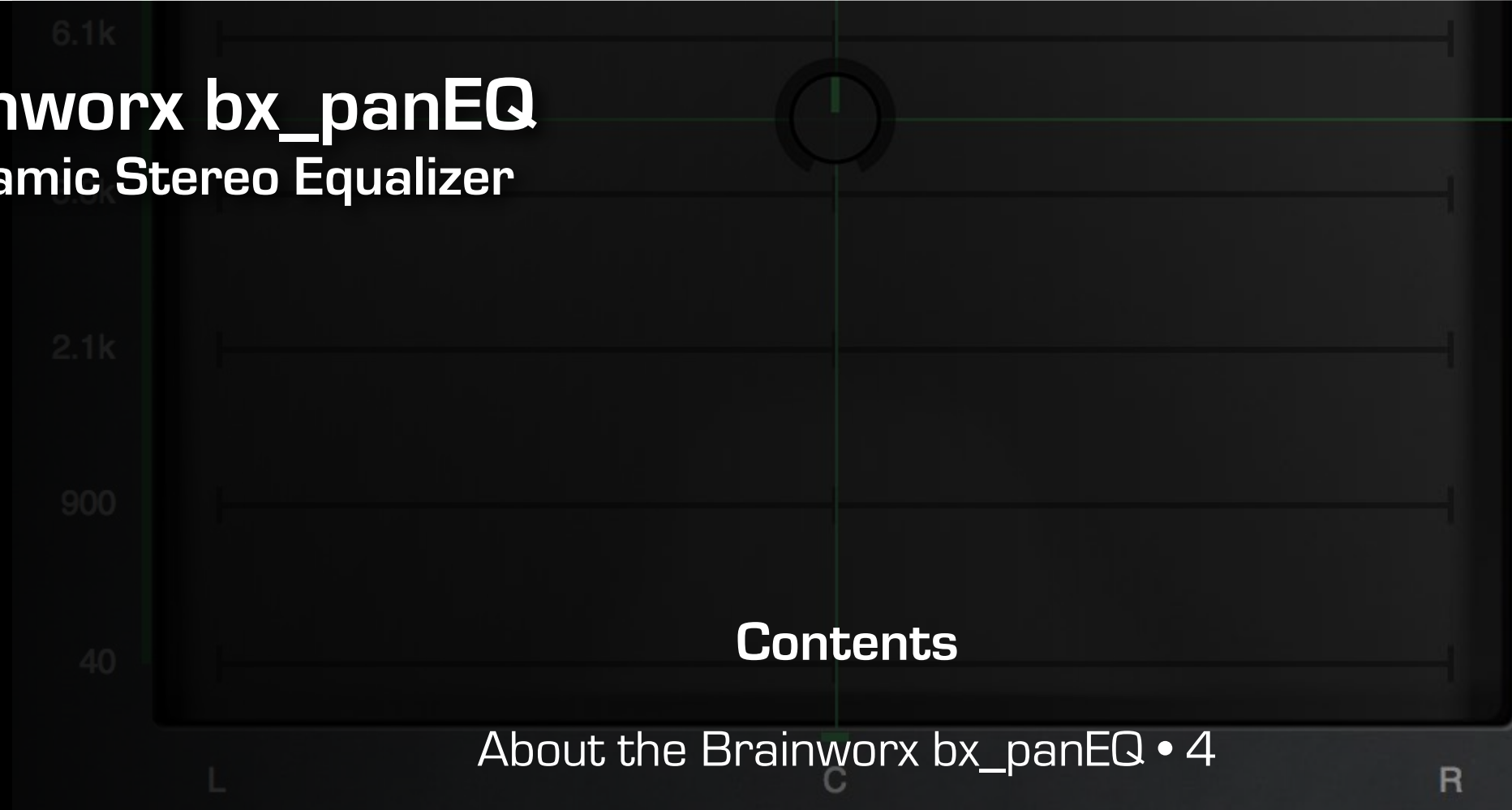
[System Requirements and supported Platforms](#)

For latest System requirements & Supported Platforms, please click the link above, and visit the [product list page](#) on the Plugin Alliance website to see particular details for your product.



# Brainworx bx\_panEQ

## Panoramic Stereo Equalizer



Focus 100 %  
Pan C  
Display Speed 0 %

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Developed under license by Brainworx GmbH Germany for Plugin Alliance LLC USA.



# About the Brainworx bx\_panEQ

## A Tectonic Shift in Equalization

Brainworx, the pioneering company that created the first Mid/Side equalizer plugin, has once again launched a game changer: bx\_panEQ. This revolutionary panoramic equalizer will forever change the way you sculpt stereo tracks.

Imagine EQ'ing a crash cymbal buried in a pre-recorded stereo mix without affecting instruments panned to other positions in the soundstage. Impossible? Not with bx\_panEQ! Its three fully parametric bell curve filters can each be panned anywhere in the mix's stereo field to adjust the timbre of embedded tracks with precision. No other plugin can do that!

A Focus control for each filter adjusts how wide its effect will be in the stereo panorama. The filters' API-style Proportional Q design pinpoints your EQ tweaks by raising the Q factor as gain is increased or decreased from 0 dB. A Panoramic Spectral Analyzer displays the amplitude of your EQ boosts and cuts across the stereo field and frequency spectrum in real time, intuitively guiding your hand.

The power unleashed by bx\_panEQ in mixing and mastering applications is profound. Stretch the width of a stereo acoustic guitar track by boosting progressively higher frequencies at pan positions from left to right. Reach into the stereo mix of a live concert to tame a boomy hard-panned guitar without affecting other slices of the stereo field. Mastering engineers can discretely equalize localized spectral imbalances to correct a lopsided mix. The applications are limitless.

bx\_panEQ. Point it. EQ it. Done.





# The bx\_panEQ Filter Section

## Familiar Controls, with a Twist

The filter controls of bx\_panEQ are straightforward in that most parameters will be familiar to anyone with experience using parametric equalizers. What makes the filter section unique is the ability for each band to affect any part of the stereo field's spectra, the effect of which is controlled by the Focus parameter. Using this parameter, you can adjust how *focused* your adjustments become across the panorama.

### Band Gain: continuous from -18 dB to +18 dB

Peaking filter gain; this parameter can also be modified by using the mouse wheel on the green drag knob within the monitor view.

### Band Frequency: continuous from 40 Hz to 20 kHz

Peaking filter center frequency; this parameter can also be modified by moving the green drag knob within the monitor view.

### Band Q: continuous from 0.1 to 15

Peaking filter Q, which determines the range of frequencies affected, or control over the Q, which is the ratio of the center frequency to the bandwidth. The filter Q (quality) influences the bandwidth, which gives the frequency range mainly affected by the filter. Choose a high Q value to filter within a small frequency range. A lower Q yields a wider filter band.

### Band Pan: continuous from 100 L to 100 R

Perceived position of the filter within the stereo panorama. This parameter can also be modified by moving the green drag knob within the monitor view.

### Band Focus: continuous from 0 % to 100 %

Perceived range of the filter position within the stereo panorama. This is a special parameter that is introduced to modify the EQ band effect within the stereo panorama. A small focus value yields a usual stereo filter that filters the left and the right channel identically. A high focus value gives a precise control over the area of stereo panorama in which the EQ band works.

### Band Solo: discrete 2 steps On/Off Button

This will audition the signal difference produced by the filter. Use it to get an impression of the changes made.

### Band Active: discrete 2 steps On/Off Button

Switches the peaking filter on and off.

### Output Gain: continuous from -∞ dB to +12 dB

Controls the general output gain of the plugin; use this if your signals are too hot after treatment, or need a little extra boost.



# The bx\_panEQ Visual Controls



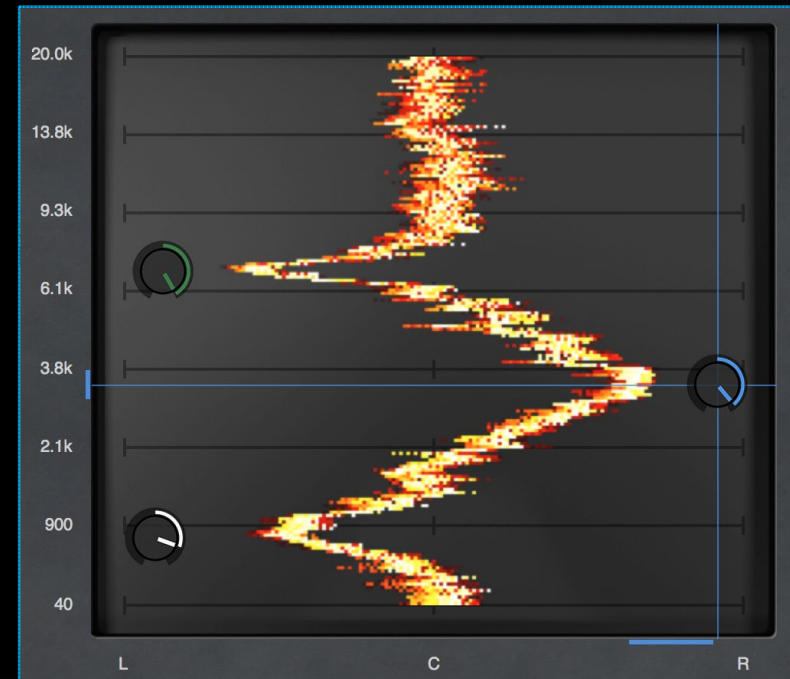
## The Spectral Analyzer

Use this in conjunction with the bx\_panEQ band controls to get an intuitive and accurate feel for the processing in your stereo field. The behavior can be controlled by the Display Speed and Color Map controls.

**Panoramic Spectral Analyzer:** Surface diagram

- Horizontal axis (balance): L to R
- Vertical axis (frequency): 40 Hz to 20 kHz
- Color (magnitude): -60 dB to 0 dB

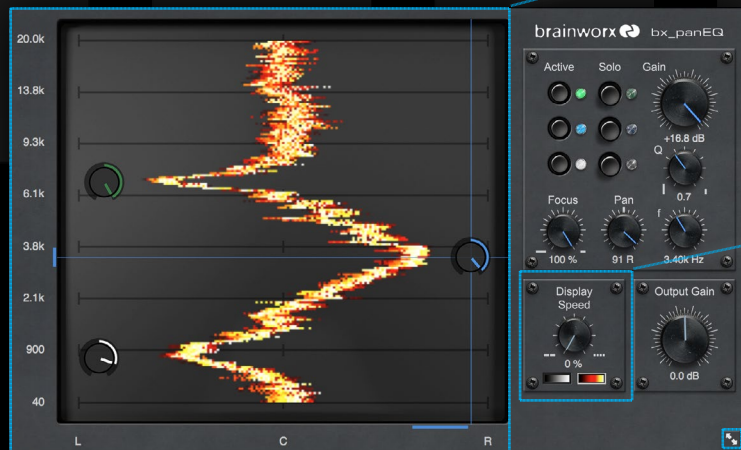
An intuitive spectral analyzer gives a comprehensive view on spectral characteristics within the stereo panorama. This 3-dimensional view shows the magnitude response within the stereo panorama. The amplitude magnitude values are encoded as colors. The color map is switchable between grayscale and hot color map [white, yellow, red, black]. The interpolation speed can be modified using the Display Speed control in the GUI.



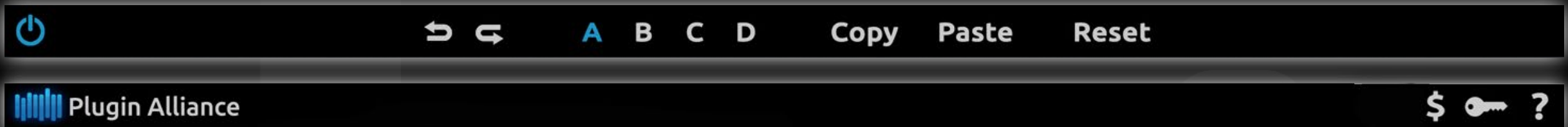
**Display Speed:** continuous from 0 % to 100 %  
Changes the interpolation speed of the panoramic spectrum analyzer. Slower speeds give a good indication of frequency response per-band-panorama, while faster responses give a sense of overall stereo width.

**Color Map Switcher:** discrete 2 steps Radio button  
Changes the color map of the panoramic spectrum analyzer.

**Frame Size Selector:** discrete 2 steps  
Can increase or decrease the size of the bx\_panEQ interface and therefore the size of the visible analyser section by dragging the selector.



# The bx\_panEQ Toolbars



## Plugin Settings Toolbar

### **BYPASS**

Bypasses processing done by the bx\_panEQ.

### **UNDO/REDO (Arrows)**

Up to 32 steps of parameter history.

### **Settings A / B / C / D**

Select banks of parameter settings; use the A/B/C/D settings to copy a complex channel setting and alter it slightly for different parts of your song, for example. These settings can be automated by your DAW system, so you can jump from setting A (in the verse) to setting B (in the chorus, for example).

### **COPY / PASTE / RESET**

Copy and Paste between setting banks, reset parameters of selected bank.

### **ABOUT**

Information about the development of the plugin.

## Plugin Alliance Toolbar

### **“KEY” ICON**

Opens the plugin Activation Dialog.

### **“?” ICON**

Opens a dialog through which one can access the plugin’s help documentation, online product page, or any available updates.

### **“\$” ICON (When Applicable)**

If you’ve purchased your plugin using the Plugin Alliance Installment Payments option, the “\$” icon, links to your account so you can make a payment on your Lease-License.

## Mouse/Keyboard Control

### **ALT or COMMAND (Mac) / CTRL (Win) + MOUSE CLICK**

reset any knob to its initial value (host dependent).

### **COMMAND (Mac), SHIFT, or CTRL (PC) + SCROLL WHEEL**

Allows for fine tuning of any knob (host dependent).

### **SCROLL WHEEL CONTROL**

place your mouse above any knob and turn the mouse wheel to increase/decrease values.

### **TYPING IN VALUES**

10.000 Hz can be typed in as “10k”, 12.000 Hz would be “12k”, etc.