# **ST1 V2**

## Stereo Tool



MANUAL TBProAudio 2022

## 1 Introduction

**ST1** is a simple tool that lets you control the width and the panorama of a stereo audio signal. It includes a mono-to-stereo function, a stereo field enhancer, a rich panning knob that includes spectral panning, and a bass-focus feature. The phase and correlation meter visually monitors the panning position and stereo width.

### 2 Features

**ST1** offers following features:

- Phase meter
- Correlation meter
- Adjustable mono to stereo converter
- Variable stereo width
- Automatable pan knob with variable pan law and many comfort functions
- Spectral panning
- Bass focus
- Preset management
- Many useful presets
- Large and easy to use GUI
- 64-bit internal processing
- Very low CPU usage
- GUI scale

## 3 Overview

## ST1 by TBProAudio



## www.tb-software.com

#### Preset Menu:

This control manages presets of ST1.

#### Phase and Correlation Meter:

This view shows the phase distribution and stereo signal correlation of the output signal. Clicking and up/down dragging with the left mouse button zooms the display. Clicking and left/right dragging with the left mouse button adjusts glow timing.

#### Mono to Stereo:

This processor spreads the signal width by delaying the left channel by a maximum of 2 milliseconds from the right channel.

#### Stereo Width:

This processor enhances the stereo width by manipulating the mid/side signal (M/S). Strength below 100% reduces stereo width, above 100% increases stereo width.

#### Bass Focus:

This processor handles the side signal with a high pass filter (filter frequency is defined by XOver parameter) and improves the center position of the lower frequencies.

#### Pan Knob:

This processor positions the signal in the stereo field. It offers automatability and most suitable pan laws.



#### Pan Knob:

Pan the signal from left (-100%) to right (+100%). Even "over pan" is possible (-/+120%).

#### Pan Law:

Linear/0.0/-2.5/-3.0/-4.5/-6.0db.

#### Speed:

Defines panning speed, which is relevant for panning automation.

#### Swap Pan Position:

Changes pan position from e.g. -50% to +50%

#### Fixed Pan Position:

Click on one of the several predefined pan positions.

#### Spectral Pan:

This processor divides the spectrum in two bands (split frequency is defined by XOver parameter) and restricts the panning to the upper frequency band. This avoids wasting energy in the low band of the side channel and improves stereo perception under headphones.

## 4 Minimum System Requirements

- Windows 7, OpenGL 2 GFX card
- Mac OS X 10.11, Metal GFX card
- SSE2 CPU
- Win: 32/64 Bit VST, 32/64 Bit VST3, 32/64 Bit AAX
- OS X: 64 Bit VST, 64 Bit VST3, 64 Bit AU, 64 Bit AAX
- Tested with: Cockos Reaper, Steinberg Cubase/Nuendo/Wavelab 6+, FL Studio 12+, PT2018+, Reason 9.5+, Studio One, Ableton Live
- For latest information please visit www.tbproaudio.de

## 5 Demo mode versus Registered mode

In demo mode (without activation) the plugin mutes audio every 90 seconds for a short period. This could be circumvented by clicking on the "TBProAudio" logo within 90 seconds.

## 6 Registration/Activation

The plugins needs to be registered/activated to remove demo restrictions. Please go to

www.tb-proaudio.de to purchase the activation key. After purchase you will receive an email from TBProAudio with either the (zipped) activation key file or the activation key in text form. Go to the plugin menu->Activate plugin. Please follow the steps described here: <a href="https://www.tbproaudio.de/support/productactivation">https://www.tbproaudio.de/support/productactivation</a>. After successful activation the key symbol shown in the GUI appears in golden colour.

### 7 Conclusion

So finally if you have any questions or suggestions please let us know.

Your team from TBProAudio :-)