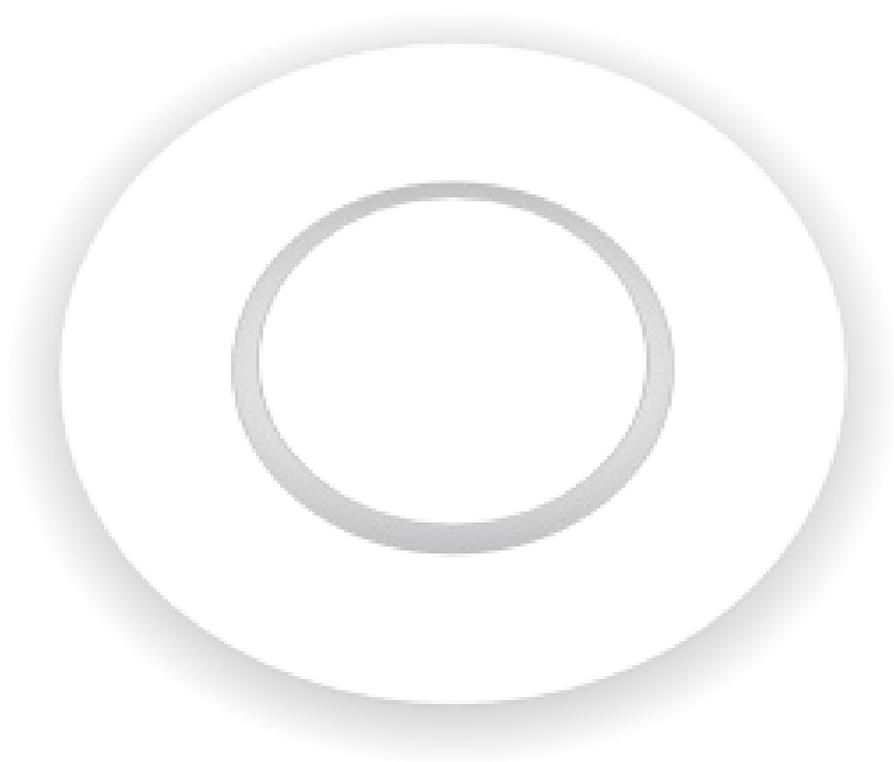


# DSP Trigger

FREE Edition

**MANUAL**



# Table of Contents

<b>Introduction</b>	<b>2</b>
Features	2
<b>Getting Started</b>	<b>3</b>
<b>Connecting Your Drum Pad</b>	<b>3</b>
Single Zone	3
Dual Zone	3
<b>Setting up DSP Trigger in your VST Host</b>	<b>3</b>
<b>About latency</b>	<b>3</b>
<b>Using The Plugin</b>	<b>4</b>
<b>DSP Trigger Controls</b>	<b>4</b>
CALIBRATE (1)	4
SAVE AS DEFAULT (2)	4
RESET (3)	4
GAIN SCALER (4)	4
VU METER (5)	5
FLIP PHASE BUTTON (6)	5
SWAP BUTTON (7)	5
<b>Articulation Controls</b>	<b>5</b>
<b>Support</b>	<b>5</b>

## Introduction

DSP Trigger FREE is a software based audio to MIDI converter. Unlike similar products on the market, DSP Trigger is specifically designed to be used with drum pads and as such provides much more accurate triggering than can be achieved using standard audio to MIDI converters.

DSP Trigger FREE is a feature limited edition of DSP Trigger. For more information about the full version look [here](#).

## Features

Here is a quick list of some of DSP Trigger FREE features:

- multiple articulations for a single zone
- both sensitive and dynamic
- extremely fast and accurate triggering
- advanced controls for velocity curve shaping
- multiple articulations
- low CPU usage

## Getting Started

### Connecting Your Drum Pad

Your drum pad should be connected to your audio interface through a line-in. The output from your drum pad should not be run through a preamp first even if you find that the signal is weak.

Depending on whether your drum pad is dual or single zone, you will need to use a different cable to connect it to your audio interface

#### Single Zone

If your pad is single zone, then you should connect it to your audio interface with a standard 1/4" mono patch cord.



*Patch a single zone pad with a mono patch cord.*

Do not connect a dual zone pad with a mono cable! Connecting a dual zone snare using a mono patch cord will not work properly as the mono cable will be fed both zones. This results in cancellation and poor performance from DSP Trigger.

#### Dual Zone

If your pad is dual zone, then you need to connect it to your audio interface with a stereo patch cord so that each zone is on a separate channel. Probably the easiest way to patch your dual zone pad into your system is using a set of adaptors similar to the one shown here:



Because DSP Trigger FREE edition only supports single zone mode, so you need only connect the 'HEAD' zone of your pad. The second zone will not be used. Dual zone pads are only fully supported in the full version.

### Setting up DSP Trigger in your VST Host

DSP Trigger generates MIDI only. It does not produce any sound. In order to hear sounds, the MIDI from DSP Trigger needs to be routed to a VSTi such as BFD or Drum Superior.

This works in different ways with different hosts. For more information on routing MIDI, check your host's manual. Here are a few other resources.

[How to setup DSP Trigger in Reaper \(Youtube\)](#)

[How to setup DSP Trigger in Sonar](#)

### About latency

Try to have your sample setting as low as possible without pops and clicks. On my system using a firewire interface, I can run at 48k and 128 samples without any issues. Those of you using PCI / PCIe interfaces will likely be able to get even lower latencies.

## Using The Plugin



### DSP Trigger Controls

#### **CALIBRATE (1)**

The CALIBRATE LED is used to calibrate your pad for use with DSP Trigger. Because every drum pad and every audio interface is different, DSP Trigger has a calibration function that normalizes the signal coming from your pad. Simply click on the CALIBRATE LED, and play some very high velocity hits on the center of the pad as well as high velocity hits on the lower rim portion of the pad.

You may safely leave the calibrate function activated or turn it off to ensure that settings are locked in. Keep in mind that every time you re-enable the CALIBRATE LED, the previous calibrating settings are lost.

#### **SAVE AS DEFAULT (2)**

When you click this LED, the current settings are stored to disc. When you start a new instance of the plugin, these settings will automatically be imported. Pressing MAKE DEFAULT always overwrites the previous settings. The file can be located in the Windows application data folder in the sub-directory Audiofront\dspTrigger.

#### **RESET (3)**

This returns all controls to their *original* default values. This is useful for overriding and or overwriting calibration settings that were stored by the SAVE AS DEFAULT function.

#### **GAIN SCALER (4)**

Most high-end audio interface use +4dBV type inputs. These types of inputs have about 4x more headroom than -10dBu inputs. To compensate for this difference, DSP Trigger uses a GAIN SCALER knob to normalize the input. This knob should not typically be adjusted by the user. Instead it should be adjusted using the CALIBRATE function. Look [here](#) for more information.

## **VU METER (5)**

The Vu meter gives you an idea of how hot your signal is. After calibrating DSP Trigger, your hardest hits should be registering all the way at the top. If the GAIN SCALER is at max and your hardest hits don't register at the top, this indicates that the signal going into DSP Trigger is not hot enough. If you don't see the VU meter move at all, this indicates that the plugin isn't getting any signal. This usually means that you need to arm the track or turn on the monitor button.

## **FLIP PHASE BUTTON (6)**

DSP Trigger uses phase information to help distinguish between HIT and SIDESTICK articulations. If you are finding that DSP Trigger is outputting side stick articulations when it should be outputting hit articulations, chances are that you need to flip the phase of the incoming signal by turning on this button.

## **SWAP BUTTON (7)**

The SWAP button simply swaps the Left and Right channels. If you have DSP Trigger setup on a mono track or are using a mono input, then this will have no effect.

## **Articulation Controls**



DSP Trigger FREE edition supports two articulations (Hit and Sidestick). Each articulation has a power button, MIN and MAX sliders, a CURVE knob, and an input box to set the MIDI NOTE that is outputted.

Together these controls allow you to fine tune the output produced by DSP Trigger. The MIN and MAX controls specify the lowest and highest velocity notes that can be output. The CURVE knob controls the velocity curve. The articulation's display provides a graphical representation of the overall velocity curve.

NOTE is the MIDI note number that the articulation should output. Valid numbers are 1-128. If you enter invalid input, the control will be reset to the previous assignment.

## **Support**

I'm interested in making the highest quality products. If you find any bugs or have any suggestions on how to improve this program, please feel free to contact me.

Website <http://www.audiofront.net/dspTrigger.php>

Email [yehtuna@gmail.com](mailto:yehtuna@gmail.com)

Forums <http://www.audiofront.net/forums/index.php>

FAQ <http://www.audiofront.net/FAQ.php>