



Bass Sculptor

Created by Jatin Chowdhury with Impact Soundworks

INTRODUCTION

Bass Sculptor is a tool with a simple purpose: to help get your bass in shape. Whether it's fattening up weak drums, smoothing out a bass guitar recording, cleaning up mud, or tightening up a whole mix, this plugin gives you all the essential tools for managing low end in one convenient interface.

The plugin features four distinct sound modules working in harmony: a subharmonic generator, a stereo imager, a surgical EQ with adjustable band & highpass filter, and a bass compressor. Any component can be quickly toggled on and off, and each has just the right amount of tweakability: enough to shape your sound, without being overwhelming.

Plus, with clean, precise, and innovative DSP by Jatin Chowdhury, Bass Sculptor does exactly what it says in the name without stressing your CPU.

No matter what kind of music you create, Bass Sculptor and its versatile set of factory presets will help deliver an even cleaner, smoother, and all-around better final mix. Enjoy!

INSTALLATION

1. Install the **Pulse** application if you don't already have it. **Pulse** is a cross-platform desktop app that lets you download and install your libraries with blazing speed! You'll need to create an account here, but once you do, you can access your purchases from **any** developers using **Pulse**, anytime, from any computer.

<https://pulsedownloader.com/>

2. Once **Pulse** is installed, open it and enter your **Bass Sculptor** product code. The library will then be downloaded and the installer automatically run; follow the installer instructions to finish.

3. When the plugin is first opened, you will be prompted for an email and product code. **You must use the email address you used when ordering the plugin on the Impact Soundworks website!**

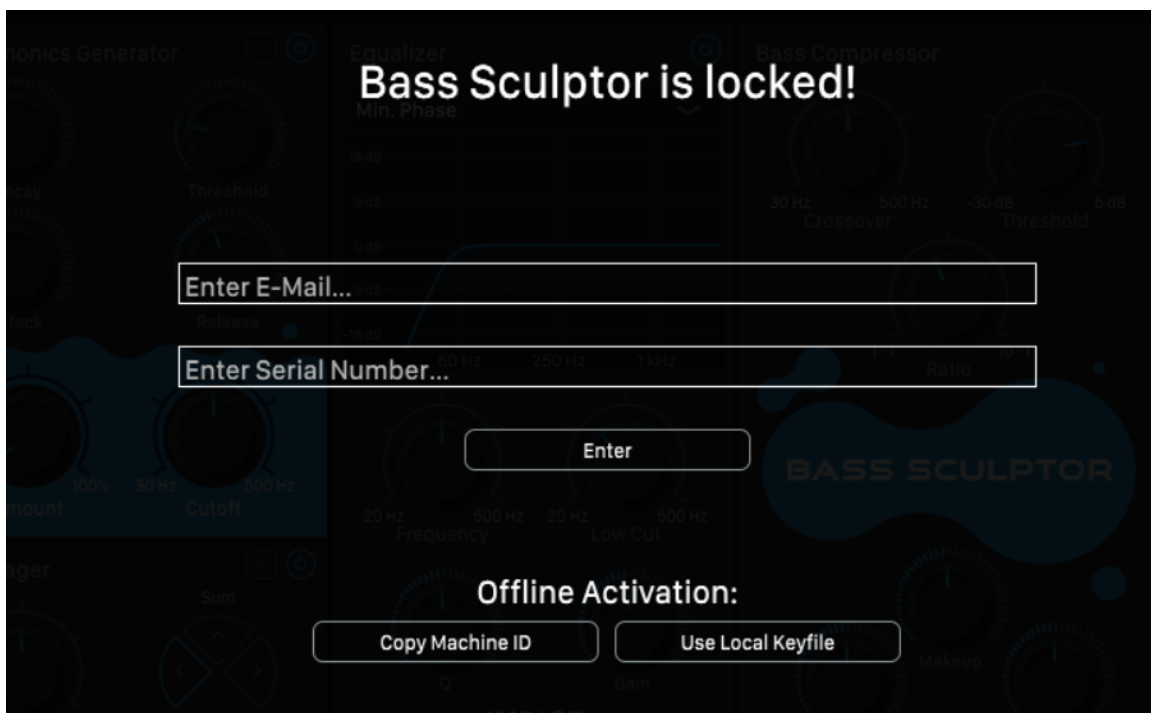
OFFLINE ACTIVATION

If you prefer not to connect your studio computer to the internet, it is still possible to activate & use Bass Sculptor. However, you will still need at least one internet-connected computer to proceed. For these instructions, we'll use the terms "Offline PC" and "Online PC".

Step 1: Follow the regular installation & activation steps on your Online PC

Step 2: Copy the plugin installer to your Offline PC, and install it on your Offline PC.

Step 3: Open the plugin on your Offline PC. Select the "Copy Machine ID" button, which will copy the Offline PC's unique machine ID to the clipboard. Paste this ID in a text file.



Step 4: On your Online PC, open the plugin and go to the settings menu. Select “Generate Keyfile”. You will be prompted to enter a machine ID; input the ID generated from the previous step.



Step 5: Transfer the generated keyfile to your Offline PC.

Step 6: On your Offline PC, in the Bass Sculptor plugin, select “Use Local Keyfile” and select the generated keyfile.

MOUSE AND KEY SHORTCUTS

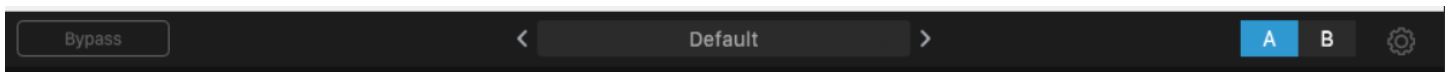
Hold Shift and **Drag** to “fine-tune” knob/slider values, moving them in small increments at a time.

Double-click on a control to reset it to its default value.

Hold Control and **Drag** on the “Crossover” control in either the Imager or Compressor section to move both at once (linked).

GLOBAL CONTROLS

At the top of the UI, you’ll see global controls that affect the entire plugin.



Bypass disables all plugin processing.

Effect presets can be accessed from the middle dropdown.

The **A/B** buttons will swap between two plugin states. This is very useful for comparing two presets or processing settings with a single click!

The **Gear** icon opens the settings menu:

- Show Tooltips enables help text when hovering over controls
- Resize GUI allows you to scale the entire UI to your preferred size
- About displays information about the plugin itself

PROCESSING MODULES

The four modules of **Bass Sculptor** operate in series, and any can be bypassed by clicking the power icon next to each.

Sub Generator -> Equalizer / Filter -> Compressor -> Imager



SUB GENERATOR

This module generates subharmonics one octave below the input signal. The results can be quite thick and chaotic depending on what you feed into it! Use the shaping controls below to get the perfect addition to your material.

Solo (S), when enabled, will solo **just** the generated content, so you can hear exactly what this module is doing.

Threshold determines the **minimum volume level** of signal where subharmonics will be generated. For example, if set to -10dB, any signal **below** -10dB will not generate subharmonics.

Cutoff sets the max frequency range to be used for subharmonic generation. For example, if set to 300hz, any frequencies 300hz or lower in the input signal will generate subharmonics.

Attack is attached to an internal envelope, which is triggered when the signal goes over the **Threshold**. This is the attack time of that envelope: how long it takes the subharmonic signal to go from 0% to maximum.

Decay is the **minimum time** that the subharmonics will be generated for (similar to “Hold” on some gate effects.)

Release is the release time of the internal envelope, and it is triggered when the signal dips **below** the **Threshold**.

Amount generates the relative volume of subharmonics generated.



BASS IMAGER

This module collapses the bass frequency range to mono, something that will generally result in much cleaner, tighter playback on a wide variety of sound systems, particularly club PAs and anything with a subwoofer.

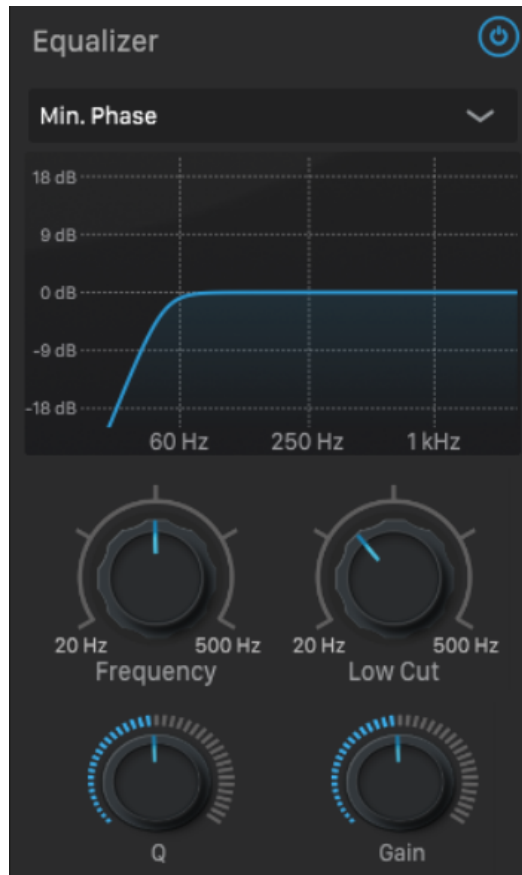
Solo (S), when enabled, will solo **just** the content being imaged, so you can hear exactly what this module is doing.

Crossover sets the max frequency range that the imager will process. For example, if set to 300hz, the imager will make everything below 300hz mono.

Processing Mode - Left creates the mono signal by centering the left channel and removing the right channel.

Processing Mode - Sum creates the mono signal by summing both channels. **NOTE:** This is a risky setting for a final render, because if you have any phase issues in your bass range, it may make your bass sound **weaker**. However, it is a very useful way of **checking** your mix for phase issues.

Processing Mode - Center creates the mono signal by taking the common content from the left and right channels, and discarding any unique left/right content.



BASS EQUALIZER & LOW CUT FILTER

This surgical module can operate in either minimum phase (low latency) mode, or linear phase (high latency, but no phase distortion) mode.

Frequency controls the frequency band that the bass equalizer will process.

Q is the width of the bass equalizer band.

Gain is the volume adjustment of the bass equalizer band.

Low Cut controls the frequency of the highpass (HP) filter, which is a steep 4th-order filter that can easily cut out rumble and low-end "junk".



BASS COMPRESSOR

Solo (S), when enabled, will solo **just** the bass frequencies below the **Crossover** point.

Crossover sets the max frequency range that the compressor will process. For example, if set to 300hz, the compressor will operate on everything 300hz and lower.

Threshold is the level at which dynamic processing begins. The compressor will act on all signal **ABOVE** this volume level.

Ratio sets the *amount* of compression applied. Higher ratios mean more compression is being applied.

Attack is the amount of time it takes to go from zero compression to full compression once the threshold is reached.

Release determines how long it takes to go from full compression to zero compression once the signal dips below the threshold.

USAGE TIPS

To get the most out of Bass Sculptor, we recommend starting with one of the included presets that best matches what you're using it for (e.g. enhancing a kick, doubling a guitar part, cleaning up a master, etc.)

With that in mind, and using the presets as a guide, here are some useful tips & techniques!

Avoid sub generation on the master

When using the subharmonic generator, *everything* that is below the frequency cutoff and above the threshold will be processed. Though Bass Sculptor can work great on a master mix, using the sub generator on a complex signal (like a master) may sound too chaotic. For best results, use the sub generator on individual instruments and tracks.

Disable modules you don't need

Bass Sculptor offers a lot of convenient features in a single UI, but you might not need all of them in every scenario. It's always a good idea to turn off effects you're not using, as even a relatively 'dry' or mild effect uses a bit of CPU, and can color the signal.

CREDITS

Programming & DSP: Jatin Chowdhury

Plugin Concept: Andrew Aversa

UI Design: Voger Design

TROUBLESHOOTING

Having trouble with Bass Sculptor? Use it in a project you want to tell us about? Drop us a line via our [Contact page](#) (but be sure to [read the FAQ](#) first!)

COPYRIGHT & LICENSE AGREEMENT

The following license is granted non-exclusively to all purchasers of our products. This version (updated December 4, 2017) supersedes any prior printed or digital versions of our license.

Overview

All sound recordings, performances, scripting and/or code contained in this product is the intellectual property of Impact Soundworks unless otherwise noted, and remain the property of Impact Soundworks after the product is purchased. When purchasing an Impact Soundworks product, you are purchasing a non-exclusive license to use, edit, perform, or otherwise utilize these recordings, performances, scripting and/or code for commercial and non-commercial purposes as defined below.

Authorized Users

Depending on the type of customer and usage scenario, authorized users of this license will vary. ALL purchases fall into category A or B.

A. Individual Purchase

This license is extended to customers who are purchasing as the primary user of the product, OR are purchasing on the behalf of another primary user (i.e. as a gift).

The licensee (primary user) MAY install the product on as many computer systems as he or she has access to. However, ONLY the licensee may use the product. No other users are authorized.

B. Corporate, Academic, Institutional Purchase

This license is extended to customers who are purchasing for a multi-user setting, such as a shared studio, networked workstation, computer lab, etc. In this case, the licensee is the institution and not any one user.

In contrast with individual purchases, an institutional license applies to ONE computer / workstation. All users of that workstation who belong to the purchasing institution (licensee) shall be considered authorized users.

However, at no point may multiple authorized users access one license simultaneously. Multiple licenses must be purchased if the product is to be used by multiple users simultaneously.

Scope of License

The licensee is entitled to the use and unlimited editing of the product within the scope of music production, performance, recording, and composition. This includes both non-commercial and commercial usage of all types, including, but not limited to, film scores, television scores, music libraries, video game soundtracks, digital and physical music releases, albums, compilations, etc. Exceptions to this scope are listed below.

The licensee **MAY NOT** use the product in the production of any other sample library or virtual instrument products.

The licensee **MAY NOT** sell individual sounds from a product in any context.

For clarity: The licensee **MAY** use sounds from the product to create individual sound effects (SFX) for use in film, TV, advertising, and video games. However, the licensee cannot sell these sounds individually via marketplace, stock music/stock audio site, etc.

Ownership, Resale, and Transfer

Redistributing, reselling, electronically transmitting, uploading, sharing, or renting the product in any way, shape, or form is prohibited by law. The licensee may create a physical backup copy of any digitally purchased and downloaded product. This backup copy is subject to the same limitations as the original copy of the product, and may not be transferred to any other individual for any reason.

Copyright © 2021 Impact Soundworks, LLC. All Rights Reserved.