

BDE

BIG DISTORTION ENGINE



BDE is an earth shattering distortion plugin featuring several distortion styles, complimentary effects, M/S and Frequency control over the distortion effect, along with the worlds first user definable dynamic preservation control function, allowing you to maintain the dynamic range of any signal while still applying a distortion effect.



GETTING STARTED

INSTALLATION & ACTIVATION

For **Installation & Activation** support, please consult the **Plugin Alliance** activation page:

<https://www.plugin-alliance.com/en/activation-manual.html>

LOGIC PRO

Choose an empty insert slot on one of your audio tracks, instrument tracks or buses and select BDE from the pop up menu. You will find BDE in **audio units > SwivelAudio > BDE**.

ABLETON LIVE

In session view, select the track you would like to place BDE on. At the left top of Ableton Live's interface, click on the plugin device browser icon. From the plugins list, **double-click Swivel Audio > BDE** or drag it onto a track.

PRO TOOLS

Choose an empty insert slot on one of your audio tracks, instrument tracks or buses and **select Swivel Audio > BDE from the pop up menu**.

CUBASE

Choose an empty insert slot, for example in the mixer, and **select Swivel Audio > BDE** from the menu that appears.

MAIN CONTROLS



1. **Input** – This is a simple input gain slider which is used to set the optimal volume of signal entering the distortion algorithm.

2. **Output** – This slider controls the output volume of your signal.

3. **Auto** – The Auto button links the input and output gain sliders allowing for easy level matching. Raise the volume of the input, and the output will lower by an equal amount, and vice versa.

4. **Detect** – Detect functions as an audio analysis tool to set the optimal level of signal entering the distortion algorithm. To use, click Detect and begin playback of your audio signal you wish to process with BDE. For best results, playback at the loudest portion of the audio signal you wish to process. You will notice the Detect button will pulse, signifying the plugin is analyzing the volume of your signal. You will also notice the Auto button engage during this process. After a few seconds click the Detect button once again and you will notice the input and output sliders adjust positions to ensure you are processing your distortion at the

optimal level, without impacting the apparent level of your signal. This is the first step that should be done before using BDE.

5. **Distortion Type** – This dropdown menu allows you to select between different distortion types, each offering a different sonic characteristic, some more aggressive, and some more subtle.

6. **Drive** – This knob is your distortion gain. It will push the amount of signal hitting the distortion threshold thereby increasing the amount of distortion present in your audio signal. It is best to use the earlier mentioned detect feature first before processing distortion on your audio signal.

7. **Range** – Range is an innovative feature in BDE, and allows the user to process distortion while maintaining the maximum dynamics of the audio signal. The dynamics of all signal above the Range dB value are maintained. The volume of any portion of signal below the dB value would raise in volume in conjunction with the value of the Drive knob. What this means

is, if you lower the Range value to -96dB, in effect you can apply distortion to something as quiet as a reverb tail, while still maintaining the relative volume of that signal. This is perfect for things like drum loops which may want a distortion tone, without augmenting the dynamics of the signal.

8. **Speed** – This slider adjusts the time in which the distortion dynamics react to level changes in the signal. This creates a wonderful sounding pumping effect, primarily on very dynamic signal such as drums. This can in some cases create an undesired sound depending on the characteristics of the audio you're processing.
9. **Speed On / Off** – This button allows you to toggle the Speed function on or off. It should be noted, by turning the Speed button on, the plugin latency will raise by roughly 100ms. If looking to record through BDE, Speed should always be turned off. For the DAW to adjust correctly to the change in latency, please stop playback and recording while switching the Speed function on or off.
10. **M/S On / Off** – When off, the M/S toggle switch directs BDE to process distortion classically, in either a stereo or mono fashion. When M/S is turned on, BDE will process the mid and sides of the signal. When engaged, you will notice the

input meter changes with the left side displaying the Mid portion of the signal, and the right side of the meter displaying the side portion of the signal.

11. **M/S Slider** – Adjust which portion of the signal BDE is processing. When centered, both Mid and Side are processed equally. When the slider is moved to the center, the Mid portion of signal is processed. When moved to the sides, the side signal is processed.
12. **Meters** – These are standard Input and Output meters. The white portion of the meter display represents the volume of the signal, while the blue portion of the input meter represents which portion of the signal is being affected by the distortion algorithm.
13. **Value Display** – The Value display window is a universal window displaying the value of most parameters throughout the plugin. When you hover over an adjustable parameter, you'll notice the setting is displayed. When adjusting a parameter the value will continue to be displayed until the mouse is no longer hovering over the parameter.
14. **Mix** – The mix knob introduces more dry signal as the value is lowered from the

default at 100%

15. **Compressor** – The compressor has a fixed threshold, and the Comp knob acts as a mix value between wet and dry signal. The compressor also has two settings, soft (S) and hard (H).
16. **Comp Pre/Post** – Adjust where in the signal chain the compressor sits. When Pre is selected, the audio signal will first pass through the compressor before hitting the distortion. When set to post, the compressor will effect the signal after the distortion.
17. **Down Sample** – This knob allows you to lower the sample rate of the signal exiting BDE.
18. **Bit Crush** - This knob allows you to lower the bit rate of the signal exiting BDE.
19. **FX Band** – The FX Band slider allows the user to choose which portion of the signal is being processed by the distortion algorithm. Everything in between the low and high crossovers will be processed by the Drive knob, and everything outside of those frequency bands will exit the distortion path as a clean signal. For best use of the FX Band, please first adjust your input level correctly by either using the detect function or using the the input slider manually.

20. **Color** – This Color slider is a gentle soft slope EQ, allowing you to darken or brighten the signal. This process occurs post-distortion.

21. **Filters** – The filter slider offers a high pass (HP) and low pass (LP) filter, giving the user some additional control over the sonic characteristics of the signal exiting the distortion path.

22. **Presets** – The Preset menu offers all of the typical functions one would expect from a preset menu. The sandwich menu allows you to save or recall presets. The second row of buttons are as follows: Undo, Redo, A/B audition, Copy A to B (or vice versa), and settings.

23. **Switch** – Instantly generates a randomized setting across the plugin. It's perfect for sparking inspiration when you're not sure what direction to take. Each press gives you a new, unique configuration to explore creative possibilities without overthinking.

USING BDE

BDE is an innovative distortion plugin featuring an industry first, dynamic preservation control (range). This allows the signal exiting BDE to maintain the exact same dynamic range as the signal entering the plugin.

The first thing that should be done when opening BDE is to run signal through the Detect function. This will allow the plugin to set the optimal gain level to maximize the distortion range. From here, experiment with the various distortion styles and the drive knob.

Double clicking on any parameter will set it back to its default state.

Both Shift and Command (Mac) or Shift and Control (Windows) enable fine tune functions. If you click one of those keys and drag any parameter, you'll be able to more finely dial in a setting, and if you hold both keys, you'll get even more precise adjustment.

DISTORTION STYLES

NUKE

Beware the fallout. Duck and cover.
Heavy symmetric saturation curve which dynamically steepens when increasing drive.

NAPALM

Burns the flesh off your recordings.
Heavy asymmetric saturation curve which dynamically steepens when increasing drive.

MORTAR

Blows to pieces even low volume signals.
Gain lift increases signal exponentially with drive which then hits the ceiling, distorting every fragment of your audio signal.

GRENADE

Like Mortar but with a higher threshold for destruction. Grenade is a level dependent exponential saturation curve.

MOLOTOV

Burns nicely on impact. Soft symmetric saturation, with enough drive to com-bust up your sounds.

CHERRY BOMB

Sweet destruction, if desired. Soft asymmetric saturation, that sounds great on synths.

SUPPORT

CONTACTING SUPPORT

If you need technical support visit the Plugin Alliance support page at: <https://support.plugin-alliance.com>

For sales related questions and contact the Swivel Audio team directly at: info@swivel-audio.com