# THICC

# Thick Hard Intestinal Casing Clipper



User Manual

# Introduction

This is a totally free plugin that I created because there's a noticeable lack of free saturation plugins with multiband/EQ functionalities and a mix knob. Also, a certain plugin that rhymes with Boxford Binflator costs \$30, which is too expensive for something I replicated in this plugin in about 3 seconds (Clip Mode, Big, Odd Harmonics).

This plugin is a 2-stage distortion plugin: saturation/clipping into soft clipping (controllable by the knee parameter). This plugin also features 2x oversampling and DC blocking enabled by default. I say "enabled by default," but they are unable to be disabled. No, this plugin isn't the only plugin that does oversampling and DC blocking without telling you. For example, a certain plugin that rhymes with Plack Pox HG-2 does the same, but they don't even mention it in the manual.

The rest of the manual will tell you what each parameter does. A few suggested settings can be found at the end.

# UI



Quick rundown:

- Numbers in boxes can be clicked to type into them.
- Words surrounded by a thin box with rounded corners are buttons.
- The volume display shows the peak level of the input (in red) and the output (in gray). "Toggle Display" will change the display to show the input minus the output (in red) from the top, and the peak level of the input (in gray).
- The numbers on the side of the volume display are in dBFS.

# Main Controls

-0	THICC	Saturation Mode	Leave Peaks	Toggle Display		
-1						
Т	HICC	Clip Mode	Hard Clip Peaks	Toggle Display		

#### Saturation Mode

This button switches between "Saturation" and "Clip" mode. Saturation Mode adds a static 0.4 bias to the signal before distortion happens.

#### Leave Peaks

This button switches between "Leave" and "Hard Clip" peaks. The distortion algorithm will additionally hard clip peaks over 0dBFS if the distortion output would have otherwise been over 0dBFS.

#### **Toggle Display**

This button toggles the volume display.

This knob increases the gain going into the distortion. After the distortion is applied, the signal will be reduced by the equivalent gain. Thus, "drive" will not increase the overall volume of the signal.

#### Gain

This knob increases the gain of the affected signal, but not the entire signal; it is applied before the other bands are added back in (if the EQ filters are on) and before the original signal is added back in (if the mix parameter is not 100%). It is the same as "Output Gain (pre-mix)" in the plugin's automation.

#### Soft

This knob changes the distortion algorithm to be closer or further away from hard clipping. Soft at 0% is pure hard clipping, and soft at 100% is no hard clipping. It is the same as "Softness" in the plugin's automation.

#### Knee

This knob changes the threshold where the soft clipping starts to be applied. 100% is the noise floor (i.e. the entire signal is soft clipped) and 0% is 0dbFS (i.e. nothing under 0dbFS is soft clipped).





#### Mix

This is a standard dry/wet mix slider. 100% is all distorted signal. 0% is all original signal. The slider itself has a skew factor applied to it so you can more easily fine-tune lower numbers. Numbers are in %.

#### In

This is a standard input gain slider. Gain is applied before the signal is split (for both dry/wet mix and EQ). Numbers are in dB. It is equivalent to "Input Gain" in the plugin's automation.

#### Out

This is a standard output gain slider. Gain is applied after the signal is summed (for both dry/wet mix and EQ). Numbers are in dB. It is equivalent to "Output Gain (post-mix)" in the plugin's automation.



### **Filter Controls**

This plugin features a high pass and a low pass filter. At the default states (20 Hz and 20kHz for the high pass and low pass knobs respectively), they are off. If the filters are moved, the plugin splits the incoming signal into multiple bands before the distortion is applied (and only applies the distortion to one band), and sums the signal after the distortion is applied.

One may set the high pass cutoff higher than the low pass cutoff. I don't know why one would do so, but I don't care enough to program something to stop it.



### **Character Controls**

The dropdown menu contains 4 options.

- 1. **Big**: this uses the same algorithm as a plugin that rhymes with Bonnox's Boxford Binflator. It's just the sine function.
- 2. **Thick**: this is like the standard distortion algorithm but thicker.
- 3. Fat: this is basically the original signal but fatter.
- 4. **Hot**: this is the soft clipping algorithm that everyone uses. Sometimes it's called "transistor saturation," sometimes it's called "analog-modeled soft clipping," sometimes it's called the hyperbolic tan function.

The "Harmonics"/"Saturation" button switches text depending on the selected mode ("Clip" or "Saturation").

- 1. **Odd Harmonics**: this is default clipping.
- 2. **Even Harmonics**: this does not distort the bottom (negative) half of the waveform, resulting in lots of even harmonics.
- 3. **Tube Saturation**: if other plugins get to call it tube saturation, and this plugin does the same thing as them, I also get to call it tube saturation. It's not tube saturation, but it sounds decent.
- 4. **Warm Saturation**: if you couldn't tell already, I have no idea how to name the saturation types. This is like "tube saturation" but less distorted.



# **Suggested Settings**

~	THIC		p Mode	Hard Clip Peaks	Toggle Display	Drive	Mix	In	Out
-0 -1 -2								Π	Π
-3						0.0dB			
-6						Gain			
-9									
,						Soft			
-12									
-15						0%			
						Knee			
		< High Pass		Cha	Odd				
	20 Hz	Low Pass >	20000 Hz	Hot 🗸	Harmonics	0%	100.0	0.0	0.0

#### Standard Clipper Plugin

Adjust "knee" to control the amount of soft clipping. 0% knee is hard clipping; anything higher is soft clipping. If you ever wanted a free soft clipper with a mix slider or multiple bands, this plugin has that.



# It Rhymes With Boxford Binflator

This is very similar to a certain other plugin (well, the distortion formula is the exact same), except this plugin has more controls and oversampling. Adjust drive and mix to taste.



### **Bright Vocals**

Makes your lead vocals pop out more.



#### Fat Drum Bus

Fattens up the drum bus nicely without making the high end too overbearing.



### Piano

Brightens up pianos to help them fit better into a mix.

	THICC	Saturation Mod	e Lea	ve Peaks	Toggle Display	Drive	Mix	In	Out
-0 -1 -2								Π	Π
-3						12.0dB			
-6						Gain			
-9						6.0dB			
-12						Soft			
-15						100%			
	<	High Pass		Char	acter	Knee			
				Big 🗸	Warm		100.0	0.0	0.0
	2000 Hz Lo	w Pass > 5000	) Hz		Saturation				

Thwacky Kick

Gives your kick some more *thwack*.