



MDMX Modern Distortion Modules

Screamer, Overdrive, Fuzz



User Guide

Waves Modern Distortion Modules

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Introduction

Thank you for choosing Waves! In order to get the most out of your new Waves plugin, please take a moment to read this user guide.

To install software and manage your licenses, you need to have a free Waves account. Sign up at www.waves.com. With a Waves account you can keep track of your products, renew your Waves Update Plan, participate in bonus programs, and keep up to date with important information.

We suggest that you become familiar with the Waves Support pages: www.waves.com/support. There are technical articles about installation, troubleshooting, specifications, and more. Plus, you'll find company contact information and Waves Support news.

Waves MDMX Distortion Modules

Waves Modern Distortion Modules (MDMX) is a toolkit that includes three separate plugins: Screamer, Overdrive, and Fuzz. It's designed for musicians, engineers, and producers who need top-notch distortion and overdrive effects for instruments or mix busses. These three plugins run the gamut of distortion effects, from subtle to scorching.

- **MDMX Fuzz** is the most aggressive MDMX plugin. It can track the distortion signal in octaves, apply dynamics and octaves ahead of the distortion processor, and color the distorted signal. Bottom line: a big, in-your-face distortion effect that lets you go as far as you want.
- **MDMX Overdrive** is similar to MDMX Fuzz, but with less coloring. Like Fuzz, it can do a number on an instrument, but Overdrive is generally a bit gentle.
- **MDMX Screamer** is a straight-ahead overdrive generator. It generates subtle to strong overdrive, while holding on to the sound of the instrument or track.



Each of these three plugins is described in its own section of this user guide.

MDMX stereo components give you the choice of distorting the entire stereo signal, or the center or sides. This provides great control when fitting an instrument into a mix and it lets you change the way a sound relates with the space around it.

There are other Waves plugins that use distortion as a creative tool or to weave a sound into a mix:

- **Berzerk** is a wide-open distortion tool that lets you build effects from scratch. It combines distortion, dynamics, feedback, and distortion character control with a random generator. It's made for engineers, producers, and sound designers.
- To bring a “too clean” track to life, add a bit of precise distortion with the **Abbey Road Saturator** plugin. The effect might go unnoticed, but the instrument or track will have more sparkle and will sit better in the mix. Saturator is not shy; when called upon, it can also add real attitude to an instrument.

Using MDMX Presets

Each MDMX plugin comes with an assortment of factory presets. In many cases, you'll find just the right effect by loading a preset. Sometimes you'll load a preset as a starting point and then make adjustments to achieve what you're after. Starting with a preset has two advantages:

- **It's fast.** We've already done most of the work needed to produce a specific sound. Begin with a preset whose name sounds like what you're looking for and tweak a few controls. That might be all you need.
- **It's a good way to learn.** Load a few presets and see how the controls are set for each one. Pay attention to how the different settings influence the sound. Do this a few times and you'll understand what the controls do and how the sections work together.

Each module has a section in this user guide called “Using Presets.” It shows you how we address some common distortion and overdrive issues using that tool. You can, of course, design an effect from scratch, without using a preset. Once you like the sound you've created, you can save the settings as a preset.

Use the bar at the top of the plugin to save and load presets, compare settings, undo and redo steps, and resize the plugin. To learn more, click the icon at the upper-right corner of the window and open the WaveSystem Guide.



MDMX: Fuzz

Waves MDMX Fuzz is a distortion tool with an attitude. It can provide a huge amount of distortion with a surprising amount of control. Its distortion shaper, synthesized octaves effects, dynamics and EQ sections, and M/S processing let you take distortion as far as you like without completely losing touch with the soul of the instrument.

In general, signal flow is: Input->Dynamics->Gain->EQ->Output. The Dynamics section loops back to the Gain section.

Components

There are two MDMX Fuzz components: mono and stereo.



Mono Component



Stereo Component

The mono and stereo components are the same, except for the number of channels. Note that the mono component does not have a Stereo Mode select. Both components use very little CPU, even when up-sampling.



Getting Started

Using MDMX Fuzz Presets

In many cases, you'll find just the right Fuzz effect by loading a factory preset whose name makes sense, based on what you want to accomplish. More often than not, you'll need to load a few presets until you find one that's a good match, and then adjust the controls to your liking. Save the settings as a user preset. Here are three Fuzz factory presets that help you find your way when you're creating a distortion effect. All three use the octave up/down control to brighten, thicken, or increase the disorder of a track.

PRESET: OCTAVE UP

Issue: You want to brighten or add excitement to the source

Particular to Fuzz is the up and down octave generator that lets you quickly add and mix octaves to the distortion. When a distortion signal is too dark, add sparkle as a part of the distortion, rather than with the EQ section, which is after the distortion in the signal flow. Try both, the result is quite different.

Move the metal button in the octave pad to change the mix. The further to the right, the more jagged the effect.

PRESET: OCTAVE DOWN

Issue: You want to thicken the sound without making it too dark.

As with Octave Up, this preset is all about the Octave pad. Here, however, we want to add weight. By mixing in some of the generated octave down signal, we can add bottom end while maintaining transparency. Move the Octave button left and right to explore the effect on the low frequencies. Alternatively, adjust the low shelf in the EQ section. As you increase the low frequency, the sound is thicker. These are two very different effects.

PRESET: OCTAVE BOTH

Issue: You want to add disorder to the track without altogether losing its personality.

This preset is, in essence, a collision of the last two examples. It combines the sizzle of Octave Up with the weight of Octave Down. The result is a bit nutty, especially if the left and right channels of the input are significantly different.



Getting Started from Scratch

You may choose to forgo presets and build your own Fuzz effect from scratch. Open the plugin and start turning knobs. It's very likely that you'll do just fine on your own, but we suggest that you first get to know the plugin by following these steps.

INPUT SECTION

Adjust the **Input** level. A LED above the input knob indicates peak level. In the stereo component, the **Mode** switch lets you select which part of the sound image to distort: mid, sides, or entire stereo image. If you're focusing the distortion effect on the mid or sides, use the small input control to adjust that level relative to the overall input level. There's also a low-cut filter that you can use to reduce rumble in the input signal or to change the character of the distortion.

GAIN SECTION

Use the **Gain** knob to adjust the amount of generated fuzz. Choose between two basic shapes: A or B. The selected waveform is shown on the right. Use the round control on the left to adjust the synthesized one-octave-up and one-octave-down signals.

DYNAMICS SECTION

Control dynamics of the signal sent to the Gain section. Choose between a compressor (**Punch**) or a gain rider (**Rider**). **Blend** is the mix between the input signal and the processed dynamics signal going to the distortion generator.

EQ SECTION

Adjust the tone of the signal from the distortion generator. The EQ feed directly to the Output section.

OUTPUT SECTION

Mix is a wet/dry balance between input and processed signal, **Output** sets the output of the plugin, and **Temperature** controls the overall color of the output signal. Make sure not to clip the signal that's returning to the DAW.

If you don't like the way things are going, it's probably better to start over than to keep fixing your fixes. Choose "Fuzz Full Reset" in the Load menu to return all controls to their factory reset values. Once you're happy with the sound, create a user preset in the WaveSystem Toolbar.



Interface and Controls

Processing Sections



- 1 **Input** sets input level from the DAW.
- 2 **Gain** controls the character and amount of fuzz generated. It includes a one-octave-up and one-octave-down generator whose signal you can combine with the distortion.
- 3 **Dynamics** (center) controls the dynamic processing of the signal sent to the Gain section.
- 4 **EQ** provides four-band equalization, post-Gain and post-Dynamics.
- 5 **Output** sets the level of the return to the host. It also lets you define the temperature of the output sound and control the dry/wet mix.



Controls

Input Section



INPUT GAIN

Controls plugin input level. The input level can have a dramatic effect on the behavior of the plugin. Experiment, too, with the level of the signal being sent *from* the DAW.

The small light next to the Input knob indicates input peak level. Green generally indicates a healthy level. An occasional red flash is unlikely to create unwanted internal clipping, but reduce input gain if the peak is consistently red.

Range: -24 dB to +24 dB

Default: 0 dB

LOW CUT

Controls the amount of low-shelf attenuation before the signal is sent to the distortion generator. Higher settings tend to deliver more clarity. Lower settings typically yield a warmer sound.

Range: Off, -12 dB, -24 dB

Default: Off

Tip: You can largely prevent low frequencies from being distorted without losing low frequency power. Select a -24 dB low cut and then add back some of the lows using the low shelf in the EQ section. Input is pre-distortion, while EQ is post-distortion, so the lows are removed before processing and added back later. This helps prevent the very bottom of the input signal from mudding the distortion, plus, it's a different sound.



MODE

Sets how a stereo signal be processed:

- In **Stereo** mode, both channels of a stereo signal are processed, so the middle is processed in the same manner as the sides.
- In **M** mode, the middle of the stereo image is distorted. The sides are not processed.
- In **S** mode, the sides of the stereo image are distorted. The middle is not processed.

MID OR SIDE MODE INPUT LEVEL CONTROL

When the Input section is set to Middle or Side, this knob controls the input level of the M or S signal, independent of the plugin input. A letter following “Input” identifies whether M or S is being controlled. When Stereo input is selected, this control is grayed out.

Range: -24 dB to +24 dB

Default: 0 dB



Gain Section

The Gain section is where distortion is generated.



GAIN

Controls the amount of fuzz distortion.

Range: -24 dB to +16 dB

OCTAVE

The distortion generator creates signals one octave above and one octave below the input signal. This mimics analogue octave devices, and by design, does not precisely track pitch. These signals can be mixed with the primary distortion signal.

Use the round control on the left side to adjust the mix of these octave signals. Move the silver ball side to side to control the mix of the octaves; move up and down to add more or less of the total octave signal.

TYPE

There are two basic models of fuzz generation, which are built around different waveform shapes. The effect varies depending on other settings. But in most cases, this control strongly influences the basic sound.

Range: A or B

WAVEFORM DISPLAY

The display on the right shows the waveform as defined by the Type selection. It changes as the Gain control is adjusted, but it maintains its basic shape. The waveform is also influenced by activity in the Dynamics section.

HD ON/OFF

Engages x8 up-sampling of the distortion signal. With low resolution files, low and high frequency parts of a signal tend to collapse, and the effect can be perceived as too edgy and narrow. Up-sampling provides more room for processing and can result in a more pleasant, wider sound. When HD is Off, you will likely get a grittier sound.

This effect is very program-dependent, so in certain cases you may not hear a difference.



Dynamics Section

The dynamics section controls the dynamic characteristics of the signal sent to the Gain section. There are two dynamics processing modes: Punch and Rider. When one mode is selected, the other mode's control is inactive.



Punch mode is a fixed-ratio compressor with the three increasingly aggressive presets (comprised of knee, attack, and release settings).
Range: Mild, Moderate, Extreme
Default: Mild



Rider mode controls which parts of the signal will be sent to the Gain section for distortion processing. At high threshold settings, only the loudest peaks will be sent. As threshold is lowered, more of the lower-level signal is sent to the distortion generator.

THRESHOLD (Rider mode only)

Range: 0 to 100

Default: 100

BLEND

This is the balance between the dynamics section and the output of the overdrive generator.

Range: 0 (no dynamics) to 100 (full dynamics)

Default: 0



EQ Section

The EQ section is a four-band equalizer that applies an EQ after the distortion generator and dynamics processor. It feeds directly to the Output section.



There are four fixed-frequency bands:

Low: low shelf, fixed frequency

Low Mid: bell filter with three frequency settings (A, B, C)

High Mid: bell filter with three frequency settings (A, B, C)

High: high shelf, fixed frequency

Gain range for all bands: -12 dB to +12 dB

Default gain for all bands: 0 dB

Output Section

The Output section is the end of the plugin's chain, so its three controls are post-distortion, post-dynamics, and post-EQ.

TEMPERATURE

Controls the warmth of the output signal. Higher settings are darker and fatter and can appear as more distant. Lower settings are usually more present, with more "sparkle." The EQ section and the Temperature control do not have the same effect on the final sound, so experiment with both.

Range: 0 to 100, Default: 50

MIX

Controls the balance between the processed signal and the dry signal.

Range: 0 to 100, Default: 0

OUTPUT

Sets the output level of the plugin.

Range: -24 dB to 24 dB. Default: 0 dB



MDMX: Screamer

MDMX Screamer is all about overdrive, the kind of the overdrive sound that you hear when an amp is oversaturated. It can sound very fat and round and it's not particularly spikey. It's well suited for helping an instrument stand out in a mix or giving it a bit more attitude. Screamer is simple, yet surprisingly flexible. There are controls for input gain, overdrive amount and boost, overall tone, and output, which give you the tools you need to produce rich, complex overdrive effects.

Components

There are two Screamer components: mono and stereo.



MONO COMPONENT



STEREO COMPONENT

The components are identical except for the number of channels. Note that the mono component does not have a Stereo Mode select control.



Getting Started

Using MDMX Screamer Presets

Screamer doesn't have a lot of controls, so you will most likely learn it through trial and error. Nonetheless, presets give you a head start and make for more trial and less error.

Here are two presets that use Screamer to change the weight of an instrument or track.

PRESET: FAT

Issue: The source is thin and shrill.

This preset opens with most of the controls in their default position—it's all about Tone and Gain. Since you want to warm up the source, keep Tone at or near its lowest setting. As you turn the knob clockwise, the sound thins out—probably not what you're after here. Spend a moment with the Gain control. Backing off on the Gain by a tiny amount will likely give you more body.

PRESET: MORE!

Issue: The effect is good, but there's not enough gain.

Like its cousin Fat, this preset opens with most of the controls in their default position. The three controls that concern us here are Gain, Boost, and Tone. Boost provides 6 dB of overall boost on top of a midrange boost. Adjust the Gain until you find a good balance between saturation effect and weight. Similarly, use Tone to find a color that does what you need but doesn't add unnecessary thickness.



Getting Started from Scratch

You can, of course, skip the presets and head straight for the controls. Open the plugin, start turning knobs, and see where it takes you. That usually works pretty well. We suggest, however, that you first get to know the plugin by following these steps. It's a pretty logical way to work, and it helps you to isolate what each section is doing.

INPUT SECTION

Use the **Input** knob to adjust overall input level. Peak input level is shown on the adjacent LED. An occasional red blink will likely not indicate trouble, but continuous red can cause gain problems down the line. The M, S, and ST buttons let you select which part of the stereo image to process: mid, sides, or the entire stereo image. If you're focusing the overdrive effect on the mid or sides, use the second input control to adjust that level.

SHAPER SECTION

Use the **Gain** knob to adjust the amount of overdrive introduced to the signal. **Boost** adds 6 dB of gain and a mid-frequency boost to the overdrive signal. Adjust the **Tone** control to set the bass/treble control, as on a hi-fi. This changes the color at the core of the sound in the overtone generator.

OUTPUT SECTION

Adjust the acoustic characteristics of the sound with the **Temperature** control. This control is not the same as the Tone control. It's more subtle and has a greater effect on the "air" around the sound. Experiment with both of these controls. Finally, adjust the wet/dry **Mix** and set the **Output** level. When the output LED is constantly red, you are hitting the output limiter too hard.

If you don't like the way things are going, it's probably better to start over than to keep fixing your fixes. Choose "Screamer Full Reset" in the Load menu to return all controls to their factory reset values. It's a good idea to save your settings as a preset before resetting the plugin. Who knows, maybe you were right after all.



Interface and Controls

Processing Sections



1 Input

- Sets input level from the host
- Determines Stereo mode
- Controls relative gain of the mid or sides with respect to the input signal

2 Gain

- Governs the amount of generated overdrive
- Controls tone of the generated signal
- Enables HD-generated signal for smoother low-level low and high frequencies

3 Output

- Controls overall color or the output signal
- Wet/dry output mix
- Controls output level and limiter strength



Controls

Input Section

INPUT CONTROL

Controls input gain. Experiment, too, with the level of the signal being sent from the DAW.

Range: -24 dB to +24 dB

Default: 0 dB

MODE SWITCH (M, S, ST)

Sets how a stereo signal will be processed:

- In **Stereo** mode, the entire stereo image is processed, so the middle of the image is processed in the same manner as the sides.
- In **M** mode, the middle of the stereo image is distorted. The sides are not processed.
- In **S** mode, the sides of the stereo image are distorted. The middle is not processed.

This lets you choose between an overall distortion or an effect that focuses or defocuses the middle of the image. Processing only S or M helps an instrument to “pop out” or “sit” better in a mix without excessive EQ or dynamic processing.

Default: ST

MID OR SIDE MODE INPUT LEVEL CONTROL

This is a separate, dedicated input level control for the mid or side signals. The control is not active when the ST Mode is selected.

Range: -24 dB to +24 dB

Default: 0 dB

Shaper Section

GAIN

Controls the amount of overdrive generated by the processor.

Range: 0 dB to +16 dB

BOOST

Adds 6 dB of overall gain plus 6 dB of mid frequency gain. It adds saturation to the signal.

Range: on or off, Default: off



TONE

Changes the treble/bass color of the overdrive signal as it's being processed. This changes the color of the distortion itself, so has a big influence on the “core sound.”

Range: 0–100

Default: 50

HD ON/OFF

(On) enables x8 up-sampling of the output signal.

With low-resolution files, low and high frequency parts of a signal tend to collapse, and compression can be perceived as edgy.

Up-sampling provides more room to these parts of the signal and can result in a more pleasant sound.

When HD is Off, you can usually get a grittier sound.

Range: On or Off

Output Section

TEMPERATURE

Adjusts the overall color and feeling of the output of the plugin. Higher settings generally result in a roomier, darker, and smother sound. Lower settings usually provide more presence and more articulation.

Range: 0–100

Default: 50

MIX

Controls the balance between overdrive processing and the dry signal.

Range: 0 (all dry signal) to 100 (all processed signal)

Default: 100

OUTPUT

Sets the output gain of the plugin. The LED shows peak output level. A red light means that the signal is activating the output limiter (-0.9 dB), so if the LED is constantly red, reduce the output gain. Excessive limiting will change the texture of the output audio. This is not necessarily bad, but you should be aware of it.



MDMX: Overdrive

Waves MDMX Overdrive is a tool that can add a subtle—or not so subtle—edge to an instrument. It's a soft clipper that enhances an instrument rather than making it sound like something altogether different. It also helps an instrument stand out in a mix without necessarily raising the gain or calling too much attention to itself. Used more aggressively, it introduces a pronounced overdrive effect. It has a strong character: its sound is fat, and it's suited for producers and musicians who need a simple way to create a strong effect.

Components

There are two Overdrive components: mono and stereo.



Mono Component



Stereo Component

The components are identical except for the number of channels. Note that the mono component does not have a Stereo Mode (ST/M/S) select switch.



Getting Started

Using MDMX Overdrive Presets

TYPE A AND TYPE B OVERDRIVE

These presets showcase the two basic overdrive types, but there's more going on than just flipping a switch.

PRESET: TYPE A

Issue: You want your bass line to be richer and more dynamic.

Input: -12 dB low cut, ST mode

Gain section: Gain 12, Overdrive Type A (left).

Dynamics section: Rider mode, but with moderate threshold and blend off, the section is doing very little.

EQ: moderate low pass and high pass filters, low-mid set to widest Q

Output: Temperature set to 68.5.

The Type switch is, of course, at the heart of the preset, but a few other controls are affecting the sound.

- The **-12 dB low cut** sharpens the bottom of the signal going to the Overdrive processor. This helps make the bass a bit more articulate. The boost in the low pass in the EQ section brings back some of these lows, without using them for overdrive generation.
- A relatively warm output keeps the bass natural sounding.

Experiment with the Gain and Input controls to adjust the effect.

PRESET: TYPE B

Issue: You want your lead synth to be richer and more dynamic.

Input: Low cut off, ST mode

Gain section: Gain 13, Overdrive Type A (right)

Dynamics section: Rider mode, but with moderate threshold and blend off, the section is doing very little.

EQ: moderate low pass and high pass filters, low-mid set to narrowest Q, mid-high a bit higher than Type A

Output: Temperature set to 31.5



Aside from the Type B mode, this preset is governed by the EQ and Temperature and settings. Experiment with those. Note that there is no input low cut, so the entire signal is processed. The relatively cold Temperature setting keep the synth sharp.

PRESET: LOWCUT

Issue: The loop is boomy and lacks definition.

Input: Low cut -24 dB, ST mode

Gain section: Gain 13.5, Overdrive Type A (left)

Dynamics section: Rider mode, but with moderate threshold and blend off, the section is doing very little.

EQ: low pass to max, other bands moderate; high mid set to widest Q

Output: Temperature set to 85

This preset is about keeping the low-frequency muck out of the processing without losing the bottom end. The input low cut at -24 dB assures a clean bottom; the 12 dB low boost in the EQ section brings back the life. The High Mid boost keeps the life in the track.

PRESET: COMPRESSOR

Issue: The overdrive is not dynamic enough.

This is very similar to Low Cut, but it adds Punch from the Dynamics section. Blend is set to maximum, so all of the Punch dynamics are heard.

The input low cut at -24 dB assures a clean bottom for processing; the 12 dB low boost in the EQ section brings back the life.



Starting from Scratch

You may choose to forgo presets and build an effect from scratch. You can, of course, insert Overdrive and right away start turning knobs and see where it takes you—you'll probably do just fine. If, however, you prefer a more orderly way of getting to know the plugin, we suggest that you start in the order shown below, based on the color-coded sections. This ought to give you a good idea of how the sections work together.

INPUT SECTION

Adjust **Input** level. Increasing or decreasing the level will influence the behavior of the entire plugin. A **low-cut** filter lets you clean up low-frequency rumble before signal enters the distortion processor. Use the **Mode** switch to select on which part of the stereo signal to focus the processing: mid, sides, or entire stereo image. Use the small input knob to adjust the M and S levels with respect to the whole signal.

SHAPER SECTION

Use the large **Gain** knob to adjust the amount of overdrive. The **Type** switch offers two very different overdrive models. Try both of them.

DYNAMICS SECTION

Use to control the dynamics of the overdrive signal. There are two modes. **Rider** works like a gate but is more subtle and **Punch** is a compressor with three modes. **Blend** mixes the input signal with the processed dynamics signal going to the distortion generator. When Blend is turned totally counterclockwise, the dynamics section is bypassed.

EQ SECTION

Use the **EQ** section to adjust the tone, after distortion, of the distorted signal. Low and mid bands each have three frequency options.

OUTPUT SECTION

Adjust the acoustic characteristics of the sound with the **Temperature** control. Finally, adjust the wet/dry **Mix** and set the **Output** level using the small LED, which becomes red when the signal returning to the DAW is too hot.



Interface and Controls

Processing Sections



- 1 Input** sets input level from the DAW, provides a low-cut filter, and establishes the stereo mode.
- 2 Shaper/Gain** determines the type and amount of overdrive processing.
- 3 Dynamics** controls the processing of the overdrive signal.
- 4 EQ** provides Low/Mid/High EQ bands for the plugin output.
- 5 Output** sets the level and wet/dry mix of the return to the host. It also lets you adjust the color of the overall sound.



Controls

Input Section



INPUT CONTROL

Controls input level from the DAW. The peak level light provides feedback about input level. A green light reflects a healthy input peak level. A few red peaks will probably not cause problems, but constant red means that you need to reduce the input. While setting up your input level, experiment with the level of the signal being sent from the DAW itself. Controlling the input level externally or internally will affect the behavior of the plugin in different ways.

Range: -24 dB to +24 dB

Default: 0 dB

LOW CUT

Controls the amount of low frequency roll off before the signal is sent to the overdrive generator. It prevents heavy low frequency sounds from making the distortion effect feel inarticulate or goopy. You can make up much of this lost LF using the EQ section, which is post-distortion.

The three-position switch controls the slope of the shelf.

Range: off, -12 dB, -24 dB

Default: Off

STEREO MODE (STEREO COMPONENT ONLY)

Sets how a stereo signal will be processed:

- In **Stereo** mode, the entire stereo image is processed, so the middle is processed in the same manner as the sides.
- In **M** mode, the middle of the stereo image is distorted. The sides are not processed.
- In **S** mode, the sides of the stereo image are distorted. The middle is not processed.

Selectively processing different parts of the stereo image helps you better place the overdrive signal within the mix and to achieve a desired sound with less overall processing.



MID OR SIDE MODE INPUT LEVEL CONTROL

When the Input section is set to Mid or Side, this knob controls the input level of the M or S signal, independent of the plugin input. A letter following “Input” identifies whether M or S is being controlled. When Stereo input is selected, this control is grayed out.

Range: -24 dB to +24 dB

Default: 0 dB

Shaper Section



GAIN

Controls the amount of overdrive introduced to the signal.

Range: 0 dB to 16 dB

TYPE

There are two models for generating overdrive, built around different waveform shapes. The effect varies depending on other settings, but in most cases, this control strongly influences the basic sound. Try the both of them.

WAVEFORM

The display next to the Gain knob illustrates the waveform associated with the selected Type.

HD ON/OFF

(On) enables x8 up-sampling of the output signal. With low resolution files, low and high frequency parts of a signal tend to collapse, and compression can be perceived as edgy. Up-sampling provides more room to these parts of the signal and can result in a more pleasant sound. When HQ is Off, you can get a grittier sound in low-level signals.



Dynamics Section

This section applies dynamics processing of the signal sent to the Shaper for distortion generation. While it clearly has an impact on the output sound, this dynamics processing is not a direct part of the audio path. Use the Mode Select switch at the top of the section to choose between compression or signal riding.



MODE SELECT

There are two dynamics processing modes: Punch and Rider. When one mode is selected, the other mode's control is inactive.

- Punch** mode is a fixed-ratio compressor with an adjustable knee and release times.
 Range: Mild, Moderate, Extreme
 Default: Mild
- Rider** mode is a gain rider that is similar to a gate, but smoother and more sophisticated. At very high Threshold settings, most low-level material in the overdrive signal is attenuated. As you lower the threshold, the low-level material strengthens. Near the Threshold, there's a delicate balance between the full signal and the low-level elements.
 Threshold range: 0–100
 Default: 100

BLEND

This is the balance between the dynamics section and the output of the overdrive generator. It controls the selected dynamics process (Punch or Rider).

Turn the Blend control all the way counterclockwise to bypass the Dynamics section.



EQ Section

The EQ section is a four-band equalizer that applies an EQ after the overdrive generator and dynamics processor, before the output section.



There are four fixed-frequency bands:

Low: low shelf

Low Mid: bell filter with three frequency settings (A, B, C)

High Mid: bell filter with three frequency settings (A, B, C)

High: high shelf

Each band has a gain control knob.

Gain range for all bands: -12 dB to +12 dB

Default gain for all bands: 0 dB



Output Section

The Output section is the end of the plugin's chain.



TEMPERATURE

Adjusts the overall color and feeling of the output of the plugin. Higher settings (clockwise) generally result in a boxier, darker, and smother sound. Lower settings usually provide more presence and greater high-frequency articulation.

Range: 0–100

Default: 50

Mix

Controls the balance between overdrive processing and the dry signal.

Range: 0 (all dry signal) to 100 (all processed signal)

OUTPUT

Sets output level of the plugin. The light indicates output clips. An occasional red blink will not likely result in unwanted distortion, but when the light is consistently red, reduce output level.

