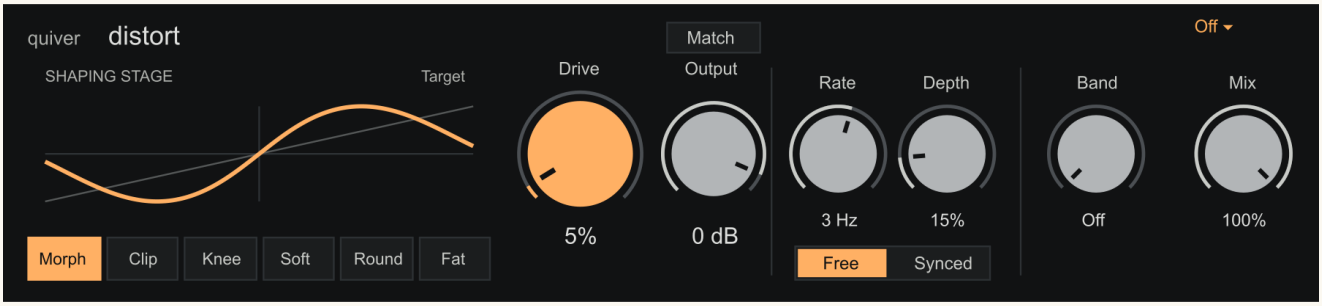
QUIVER MANUAL / MAX FOR LIVE

distort

Six saturation characters with rhythmic modulation and control over the clean low end.

Version 1.1.0



The complete control reference, practical how-tos and troubleshooting.

quiver.fm/manual/distort

Use the contents to find a section, or the PDF bookmarks to jump to a control.

Contents

Explore the interface 3

How distort adds colour 4

Quick start 5

Tone controls 5

Modulation controls 7

Quality and display 8

How-tos 9

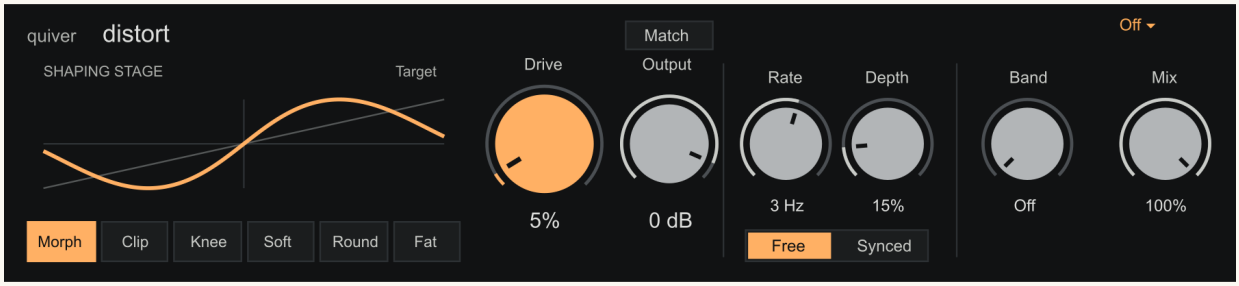
Push and Live 9

Troubleshooting 9

Explore the interface

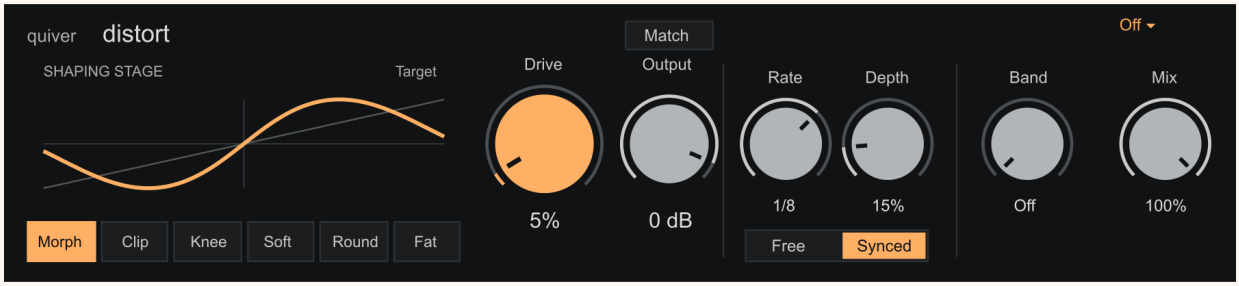
These views help you locate controls. The following reference explains their ranges, starting points and dependencies.

Free



Interface illustration.

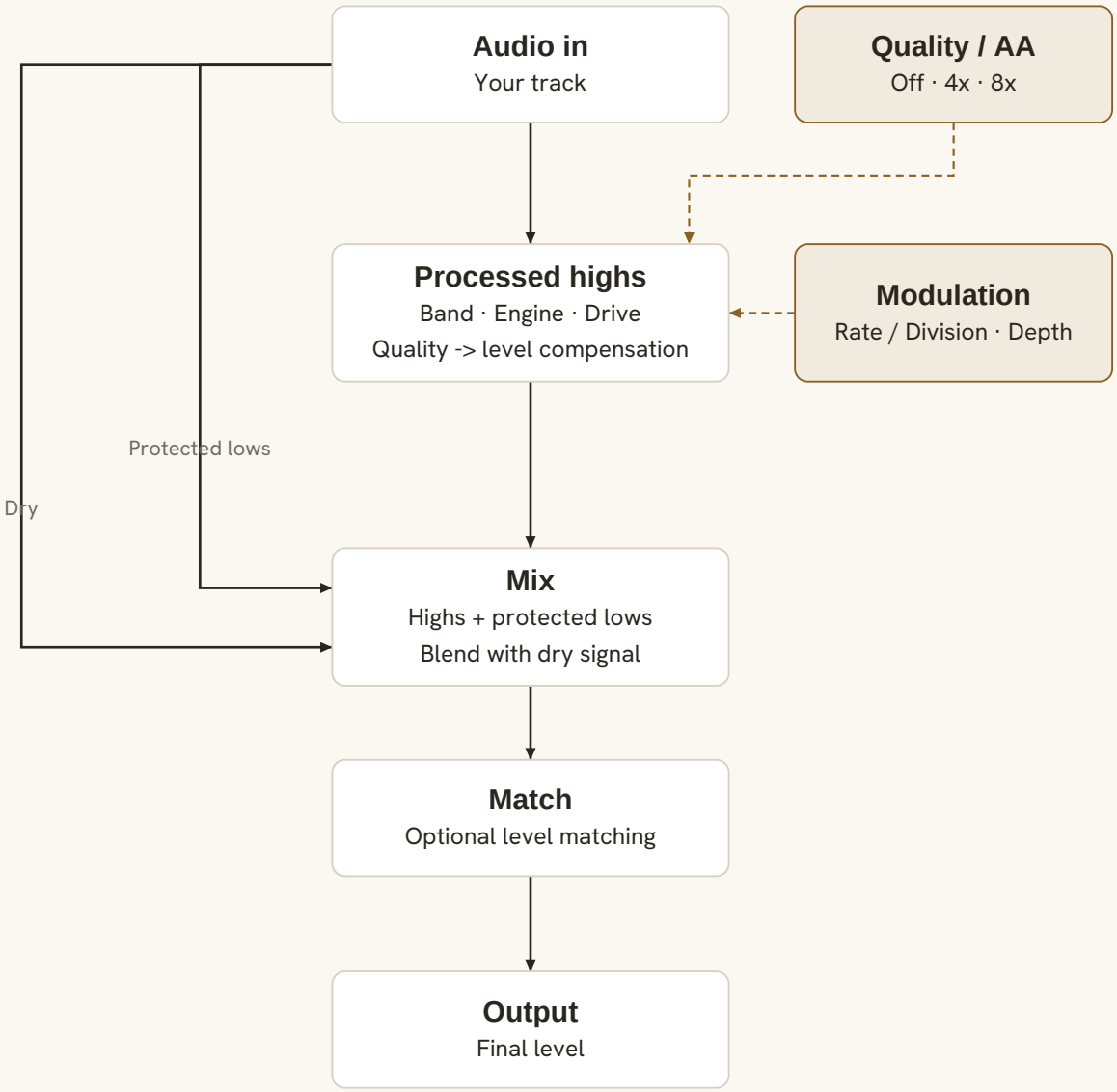
Synced



Interface illustration.

How distort adds colour

Engine and Drive shape the selected highs; fixed level compensation, Mix, Match and Output set the balance.



Solid lines carry audio. Dashed lines show control or analysis.

Reading the flow

At Band 0 Hz the whole signal is processed. Above 0 Hz, the protected low complement stays outside the distortion and its level compensation.

Fixed level compensation follows the controls, not the incoming audio. The dry Mix path also stays separate.

Match acts after Mix and before Output. Quality aligns the processed, protected-low, dry and Match-reference paths.

distort changes the character of audio with six distortion engines. Drive sets the starting color; Rate and Depth move it over time. Use Band to keep the low end clean, and Mix to blend the result with the original sound.

For installation and requirements, see Getting started.

Quick start

1. Load distort on an audio track, or after an instrument.
2. Play the sound you want to process.
3. Set Depth to 0% while choosing an Engine and Drive amount.
4. Adjust Output so you can compare at a similar listening level.
5. Raise Depth and adjust Rate to introduce movement.
6. Reduce Mix if you want some of the clean sound alongside it.

A fresh device starts on **Morph**, with **Drive 5%**, **Depth 15%**, **Free Rate 3 Hz**, **Band Off**, **Mix 100%** and **Output 0 dB**. The stored synced Division starts at **1/8**.

The response depends on the incoming signal. A louder input can sound more distorted at the same Drive setting.

Tone controls

Drive

Range	0-100%
Default / reset	Default: 5%
Starting point	Start at 5% with Depth at 0%, then raise Drive for more harmonics.

Sets the amount and character of saturation, from **0% to 100%**. Its effect depends on the selected engine; it is not a measurement of input gain in dB. The manual Drive setting also determines the engine's fixed level compensation.

Begin low, then turn it up while listening to the full track. For a steady setting, use Depth 0%.

On desktop, the central curve area also provides Drive dragging.

Engine

Range	Morph, Clip, Knee, Soft, Round, Fat
Default / reset	Default: Morph
Starting point	Start on Morph and compare Clip for a harder edge.

Chooses one of six characters:

- **Morph:** a symmetric, input-sensitive blend of soft saturation and sine shaping. Higher Drive bends the waveform further, while the incoming level changes the balance between the two responses.
- **Clip:** a hard-clipping character with a sharper edge.
- **Knee:** a softer transition into clipping.
- **Soft:** gradual bending and saturation.
- **Round:** a rounded onset of saturation.
- **Fat:** a strongly asymmetric character with prominent even harmonics.

Each engine includes fixed level compensation based on Engine and manual Drive. It does not follow the incoming audio or the modulation. Perceived level can still change with the sound and settings; use Output or optional Match when comparing.

Band

Range	Off (0 Hz), then 20 Hz-2 kHz
Default / reset	Default: Off
Starting point	Try 100-160 Hz on a bass to preserve its low fundamental.

At **0 Hz**, the whole signal is processed. Raise Band to preserve the lows and apply distortion above the chosen crossover, up to **2 kHz**. The active crossover range starts at 20 Hz. The protected lows also stay outside the engine's level compensation.

For bass or a drum bus, increase Band until the fundamental stays solid while the upper part gains color. The split is gradual, so the chosen frequency is a transition region rather than a sharp wall.

Mix

Range	0-100%
Default / reset	Default: 100%
Starting point	Try 50% for parallel color while retaining the original attack.

Blends **0% dry to 100% processed**. A lower Mix can preserve the original attack while adding the distorted texture behind it. Band and Mix work together: Band chooses which region is colored, while Mix sets how much of that coloring reaches the output.

Output

Range	-70 to +6 dB; minimum mutes
Default / reset	Default: 0 dB
Starting point	Reduce Output until the processed and bypassed levels are comparable.

Sets the final level, from **-70 to +6 dB**. Use it to leave headroom and compare the processed sound with bypass at a similar volume. A louder sound can seem more exciting even when the tonal change is not what the track needs.

Match

Range	Off or On
Default / reset	Default: Off
Starting point	Enable Match while comparing engines, then check the output peaks.

Optional automatic matching of average output level to input level. **Off** is the starting setting.

Match follows average level; it is not a peak limiter. Peaks can still rise, particularly with aggressive processing or a positive Output setting. Check the next device's input meter.

Modulation controls

Depth

Range	0-100%
Default / reset	Default: 15%
Starting point	Start at 0% for steady saturation; try 15% for movement.
Available when	Movement needs a Free Rate above 0 Hz or a synced Division other than Off.

Sets how far the modulation moves the distortion setting, from **0% to 100%**. At 0%, distort is a steady saturator. Increase Depth for audible changes in texture over each cycle.

Use a moderate Drive with a small Depth for movement that stays close to one character. A higher Depth makes the change more pronounced.

Sync

Range	Free or Synced
Default / reset	Default: Free
Starting point	Choose Synced and 1/4 Division for one motion cycle per beat.

Chooses **Free** or **Synced** timing. Free uses Rate in hertz. Synced uses a note Division that follows the Set's tempo and beat position.

Free Rate and synced Division keep separate settings, so switching modes does not require choosing the other mode's value again.

Synced keeps cycling at the selected tempo division while playback is stopped, so you can use it while playing an instrument live. Pressing Play aligns the modulation with the Set's beat. To stop the movement, choose Division Off or set Depth to 0%.

Rate

Range	0-300 Hz
Default / reset	Default: 3 Hz
Starting point	Try 0.5 Hz for a slow sweep.
Available when	Available in Free mode; 0 Hz parks modulation at manual Drive.

In Free mode, sets modulation speed from **0 to 300 Hz**. Most of the control's travel is given to slower rates. Slow values create sweeps; faster values move into rough, rapid texture changes.

At **0 Hz**, modulation stops at the manual Drive setting.

Division

Range	Off, 1 bar, 1/2, 1/4, 1/8, 1/16, 1/32
Default / reset	Default: 1/8
Starting point	Try 1/4 for a clear pulse.
Available when	Available in Synced mode; Off parks modulation at manual Drive.

In Synced mode, Division replaces Rate. Choose **Off, 1 bar, 1/2, 1/4, 1/8, 1/16 or 1/32**. Off stops modulation at the manual Drive setting. The other values set the duration of each cycle.

A quarter note creates one cycle per beat; a bar creates a slower sweep through the phrase.

Quality and display

Quality

Range	Off, 4x or 8x
Default / reset	Default: Off
Starting point	Compare Off with 4x on a bright, driven passage.
Available when	4x and 8x add 90 samples of latency; choose before the passage.

Chooses **Off, 4x or 8x** oversampling. Off is the starting setting and adds no processing delay. 4x and 8x reduce aliasing from the distortion and add **90 samples** of processing delay, with a matching compensation request to Live.

At extreme Drive settings, **4x has limits with Clip, Knee, Soft, Round and Fat**. Use **8x** for these more aggressive settings to reduce aliasing further.

Quality changes briefly fade the sound while processing switches. Choose it before recording or performing a passage. Higher quality requires more processing than Off.

Curve display

The central display shows the selected engine's transfer curve and its movement. It helps relate Drive and modulation to the changing shape. It is a view of the distortion response, rather than a recording of the input waveform.

How-tos

Add steady warmth to a synth

1. Set Depth to 0%, choose Morph and start with low Drive.
2. Raise Drive until the harmonics become useful in the mix.
3. Adjust Output or enable Match for a fair comparison with bypass.
4. Reduce Mix if the original sound needs more presence.

Give drums a repeating edge

Choose Synced timing and a 1/4 or 1/8 Division. Raise Depth gradually, then adjust Drive so the cycle moves between two useful colors. Raise Band if the kick's low end becomes too rough.

Distort the top of a bass

Raise Band to keep the low fundamental clean. Choose an Engine for the upper harmonics, then use Mix to place them behind the original. Check the result on the full bass part, including its lowest notes.

Compare the six engines

Set Depth to 0% so movement does not obscure the comparison. Keep the same source playing, switch Engine, and readjust Drive and Output for each one. Level compensation helps with comparison, but equal Drive percentages do not mean equal distortion or guarantee equal loudness on every sound.

Push and Live

The eight encoders are **Drive, Engine, Mix, Rate or Division, Sync, Depth, Band, Output**. After selecting the device, the two rightmost upper buttons provide **Quality** and **Match**.

The fourth encoder changes from Rate to Division when Sync changes. The remaining encoder positions stay the same.

Troubleshooting

I hear distortion but no movement

Raise Depth. In Free mode, check that Rate is above 0 Hz. In Synced mode, choose a Division other than Off. With a very quiet input or a small Depth, movement can be subtle.

The low end is becoming fuzzy

Raise Band to protect more of the bass, reduce Drive, or lower Mix. Band at 0 Hz deliberately processes the whole signal.

Match is on but peaks still clip

Match follows average level. Lower Output or the level entering the following device; Match does not guarantee a peak ceiling.

There is a brief dip when I change Quality

The device fades while switching processing modes. Set Quality before the passage rather than changing it during a held sound.

I hear unwanted high tones at extreme Drive

Choose Quality **8x**. The 4x mode can leave aliasing when Drive is pushed hard, particularly with the five engines listed under Quality. Reduce Drive if you need a cleaner result.

The same settings sound different on another recording

distort responds to the audio entering it. Input level and the source's frequency content change how the engine reacts. Adjust Drive while listening to that source.