Auburn Sounds Couture

Version 1.8.0

Level-independent Dynamics Processor

FOREWORD

Thank you for using AUBURN SOUNDS® COUTURE.

COUTURE's goal is **to give you exquisite control over your dynamics.** It solves a surprisingly huge range of mixing problems **with very low effort.** Once mastered, COUTURE can make any track fit in the mix.

Dynamics are key to competitive Electronic Music. Historically most dynamics processors were made to reduce the excessive dynamic range of recorded materials. For sources that are not recorded, or lower dynamic range, this might makes less sense than increasing dynamics to slam a limiter or clipper with **maximum punch.**

COUTURE works by emphasizing attacks while at the same time reducing releases, or vice-versa. The balanced gain compensation allows to **make dynamics decision without being fooled by loudness changes.**

COUTURE embeds a distortion unit working in tandem with the transient shaping. Saturation is a decision that affects dynamics, and thus it makes sense to **think about both saturation and dynamics at the same time.**

COUTURE processing is always **volume-independent.** You can change the input volume and the plug-in output will have the exact same gain reduction and distortion applied. Keep the freedom to change input gain without breaking your dynamics work.

You may use COUTURE to:

- Make individual drum tracks a lot **more dynamic** and punchier
- Remove the "click" out of a **kick drum** sample
- **Give glue** to a mix by emulating a tape machine
- **Give life** to leads and bass tracks
- And many other use cases of your own invention.

It is strongly recommended to **purchase the FULL EDITION** to get to know the real COUTURE and not its stripped down FREE EDITION.

INSTALLATION

First, unzip the content of the AUBURN SOUNDS COUTURE FREE (or FULL) archive.

For macOS users

Double-click on the `.pkg` **installer in the** `Mac/` **directory.**

- *You may need to reboot your Mac computer to see the new Audio Unit in hosts.*
- *If GateKeeper complains about the Developer being unidentified, try again with Right Click / "Open".*
- *If you can't open the ZIP, try moving it to your Desktop first.*

For Windows users

Double-click on the `.exe` **installer in the** `Windows/` **directory.**

- *When using the VST 2.4 format, you may have to enter the right VST 2.4 directory in order for your DAW to find the plug-in.*

For Linux users

Open the `Linux/` **directory.**

- **VST2:** Copy the LV2 plug-in (`.lv2` directory) in your LV2 directory.
- **VST3:** Copy the VST2 plug-in `Auburn Sounds Couture.so` in your VST2 directory.
- **LV2:** Copy the VST3 plug-in (`.vst3` directory) in your VST3 directory.

UPDATES

Upgrade to FULL

Purchasing a FULL upgrade on the Auburn Sounds website, or its resellers, always leads to the `https://itch.io` website.

After purchasing or registering an external purchase here, you need to download a new ZIP and **install it on top of the existing FREE plug-in.**

Your existing FREE sessions will keep working with the FULL product.

Getting newer versions

If you can't find links to your purchase, there are two possibilities:

- **Either you linked your purchase to an** `itch.io` **account.**
  Go to this page and login: `https://itch.io/my-purchases`

- **Or you did *not* link your purchase to an itch.io account.**
  Go to this page which can send you download links again:
  `https://itch.io/docs/buying/already-bought`

Should I fear broken sessions?

Session compatibility is broken with each **major** version change.

eg: Graillon 1.2 to Graillon 2.0

Session compatibility is preserved with each **minor** version change.

eg: Graillon 2.3 to 2.4

Because your host will see each major version as different plug-ins, you can't loose sessions by upgrading.

COMPATIBILITY

AUBURN SOUNDS COUTURE is available in various plug-in formats:

- VST2
- VST3
- Audio Unit v2
- AAX
- LV2

For the following Operating Systems (OS):

- Windows 7 or newer,
- macOS 10.12 or newer,
- Ubuntu 18.04 or newer

Our plug-ins have been tested with a wide variety of Digital Audio Workstations hosts (DAW). However if you find out your DAW isn't well supported, please report a bug at `contact@auburnsounds.com` .

Supported sampling rates range from 11025 Hz to 192 kHz.

CHANGELOG

Version 1.8

- **NEW** Support FLStudio plug-in format on Windows.
- **NEW** Archive contains a plug-in datasheet.
- Clicking on saturation controls now enables the saturation section.
- Fix CoreGraphics crash in macOS, triggered on resize or opening.
- Slightly nicer UI, some lights computed in linear RGB.
- Faster UI resize.
- Windows installer now asks to close DAW if plugin is open.

Version 1.7

- **Support for macOS Ventura and Sonoma.**
- **Support for AAX arm64 for native M1.**
- **NEW** User manual design.
- The macOS installer should not need Rosetta anymore.
- Linux: fix animation going too fast in some distributions.
- Fix sluggish controls in Ableton + VST3.
- UI is sharper and using less RAM.
- Fix Big Sur UI performance.
- Fix macOS mousewheel being extreme with some mouses.
- Fix Ardour + Monterey crash.
- Many resizing fixes.
- First UI opening is a bit faster.

Version 1.6

- **Resizeable UI.** Drag the bottom-right corner to resize the plug-in.
- Fix crash when closing OBS Studio.
- Now comes with a Windows desinstaller.
- Fix latency reporting with LV2 .
- "Clip" was renamed to "Range", which is more accurate.
- "Bass Amount" was renamed to "Bass Detect".

Version 1.5

- **Support for Apple Silicon and macOS 11.0 arm64.** The minimum macOS supported version is now 10.12.
- Fixed Linux X11 crash with multiple instances. Closing the second window while the first is opened would crash. This greatly enhances Linux stability.

- Fixed VST3 latency reporting, which was only correct for 44100 Hz.
- Fixed installer when the "Program Files" directory is localized.

Version 1.4

- Reduced CPU usage of the UI, especially on macOS and Linux.
- Fix Linux crashes and bugs (eg: when opening or closing the UI).
- Fix detection of VST3 by Bitwig on Linux.
- UI rendering is a bit more detailed.

Version 1.3

- **New:** Linux x86_64 support.
- **New:** Windows installer.
- Compatible with macOS 10.15 Catalina.
- Notarization.
- Added AUv2 Audio Component API, brings back GarageBand compatibility.
- Remove high CPU load on stop in AU, VST3, and AAX.
- Fix improper signing of macOS AAX binaries.
- Fix AU validation in Logic.

Version 1.2

- **New:** Dry Mix control.
- **New:** Variable oversampling (FULL Edition only).
- **New:** Envelope detection is now more precise with short attacks.
- Added VST3 format.
- Added Mac installer.
- Fix excessive long volume spikes at startup.
- Fix compatibility with hosts: Audio Hijack.
- 2x less CPU usage from an open UI.
- **Removed:** 32-bit support on macOS.

Version 1.1

- Add Pro Tools bypass support.
- Add compatibility with Open Broadcast Studio (fix VST2 client).
- Fix crash in Cubase and other hosts when reopening the interface.

Version 1.0

- Initial release.

PARAMETERS

Detector Settings

Flat / Human / Sybil

- "Flat" will treat all energy equally in the detector, regardless of their perceived loudness.
- "Sybil" allows to affect harsh frequencies .
- "Human" really means Equal Loudness, this will give the compression a very even feel.

Bass Detect

Turning this knob changes how much COUTURE's Transient Shaper reacts to bass.

Transient Shaper

Sharpen / Soften

- When turned to the right, attacks get emphasized and releases deemphasized.
- When turned to the left, releases get emphasized and attacks deemphasized.

x1 / x2 / x3

Affects the quantity of transient sharpening/softening.

Speed

Affects how long the effect applies after a transient.

Front/Back

Affects where in the transient the effect applies: start or sustain part of the note.

Off/20 Range

Limits possible gain change to +20 dB / -20 dB. This is useful for the most extreme settings who could have a dramatic effect on dynamics.

Output Section

Amount

Scales the whole effect 0 to 100%.

Wet Mix

Output gain for the processed effect.

Dry Mix

Amount of unchanged dry signal. Not affected by Amount.

Saturation Settings

On / Off

Enables saturation or not.

Drive

Quantity of saturation.

Shape

Selects between 6 types of saturation.

HP

HP is a 12dB/oct highpass filter. *Disabled if turned completely left.*

LP

LP is a 6dB/oct lowpass filter. Its cutoff frequency is affected by *Mood.*

Mood

Feeds crest factor of the input signal into the LP cutoff frequency.

Smooth

Softer gain change between and after the saturation, as it need to operate in a volume-independent manner. When turned to the left (default), this will preserve dynamics of the input.

Pre/Post

Whether the highpass and lowpass filter are before or after the saturation stage.

Oversampling

Quantity of oversampling.

DETAILS

Detection Circuit

COUTURE detects transients with a two-band, program-dependent, RMS detector design. The quality of this design sets COUTURE apart, in a league of its own amongst full-band processors.

Volume Independence

COUTURE has volume independent saturation. It is an innovative new effect, similar to FM modulation, that adds harmonic content independently of a threshold.

Stereo Support

COUTURE has 100% linked L/R behaviour. The envelope estimation will only break down for 100% antiphase signals, which should be a rare occurence.

Latency

COUTURE has a latency of about 14 milliseconds. This is because COUTURE heavily favours lack of phase distortion in the Gain Reduction stage, and also favors being always aligned with the transient event. Be sure to use a host with Plugin Delay Compensation (PDC) to keep proper timings.

CREDITS

COUTURE is a work of love and a few key people provided input so valuable, the product wouldn't exist without them.

Programming, UI, DSP

- Guillaume Piolat

Sound Design, Presets

- Simon Gallifet

QA

- Vas Fuller
- Denis Morin

We'd like to thanks Robert Randolph for the quality and depth of its beta-testing. COUTURE was made a much better plug-in thanks to Robert's input.

Thanks

Céline Alary, Campus Grenoble Radio, Charles Guillemet, Mickael Istria, Thierry Mastrosimone, Quentin Sabah, and everyone who hosted Auburn Sounds workforce. Thanks go to the D language community for their continuous help. Thanks also go to friends, family, and supporters who didn't make it to the list. Your support is invaluable in getting world-class products out of the door.

LEGAL INFORMATION

- Mac OS® and the Mac OS logo are registered trademarks of Apple Inc.
- Windows® and the Windows Logo are registered trademarks of Microsoft.
- AAX® is a registered trademark of Avid Technology.
- VST® is a registered trademark of Steinberg Media Technologies AG.

External Licences

Audio Unit

This software contains copyrighted material from Apple Inc.

```
Disclaimer: IMPORTANT: This Apple software is supplied to you by
Apple Inc. ("Apple") in consideration of your agreement to the
following terms, and your use, installation, modification or
redistribution of this Apple software constitutes acceptance of
these terms. If you do not agree with these terms, please do not
use, install, modify or redistribute this Apple software. In
consideration of your agreement to abide by the following terms,
and subject to these terms, Apple grants you a personal,
non-exclusive license, under Apple's copyrights in this original
Apple software (the "Apple Software"), to use, reproduce, modify
and redistribute the Apple Software, with or without
modifications, in source and/or binary forms; provided that if
you redistribute the Apple Software in its entirety and without
modifications, you must retain this notice and the following
text and disclaimers in all such redistributions of the Apple
Software. Neither the name, trademarks, service marks or logos
of Apple Inc. may be used to endorse or promote products derived
from the Apple Software without specific prior written
permission from Apple. Except as expressly stated in this
notice, no other rights or licenses, express or implied, are
granted by Apple herein, including but not limited to any patent
rights that may be infringed by your derivative works or by
other works in which the Apple Software may be incorporated. The
Apple Software is provided by Apple on an "AS IS" basis. APPLE
MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT
LIMITATION THE IMPLIED WARRANTIES OF NON-INFRINGEMENT,
MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, REGARDING
THE APPLE SOFTWARE OR ITS USE AND OPERATION ALONE OR IN
COMBINATION WITH YOUR PRODUCTS. IN NO EVENT SHALL APPLE BE
LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL
DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF
SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR
BUSINESS INTERRUPTION) ARISING IN ANY WAY OUT OF THE USE,
REPRODUCTION, MODIFICATION AND/OR DISTRIBUTION OF THE APPLE
SOFTWARE, HOWEVER CAUSED AND WHETHER UNDER THEORY OF CONTRACT,
TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE, EVEN
IF APPLE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
Copyright (C) 2014 Apple Inc. All Rights Reserved.
```

Destroy FX AU

This software contains copyrighted material from Sophia Poirier.

```
Destroy FX AU Utilities is a collection of helpful utility
functions for creating and hosting Audio Unit plugins. Copyright
(C) 2003-2008 Sophia Poirier All rights reserved. Redistribution
and use in source and binary forms, with or without
modification, are permitted provided that the following
conditions are met: * Redistributions of source code must retain
the above copyright notice, this list of conditions and the
following disclaimer. * Redistributions in binary form must
reproduce the above copyright notice, this list of conditions
and the following disclaimer in the documentation and/or other
materials provided with the distribution. * Neither the name of
Destroy FX nor the names of its contributors may be used to
endorse or promote products derived from this software without
specific prior written permission. THIS SOFTWARE IS PROVIDED BY
THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS
OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A
PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE
COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT,
INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF
SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR
BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF
LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF
THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
SUCH DAMAGE. To contact the author, please visit
http://destroyfx.org/ and use the contact form.
```

QOI (Quite OK Image format)

This software contains copyrighted material from Dominic Szablewski.