

# Maximal 3 CM

v3.0.1



Maximal 3 CM is a loudness maximiser specially created for Computer Music, based on Maximal 3 by Venomode. It offers true-peak brickwall limiting and loudness metering, perfect for mixing and mastering.

# Installing Maximal 3 CM

To install Maximal 3 CM on **Mac** or **Windows**, simply run the installer and follow the instructions. Once installed, Maximal 3 CM will be ready to use the next time you open your DAW.

To install the plugin on **Linux**, simply extract the files and run the install.sh script. In your Terminal app, run the following commands:

```
cd ~/Downloads Change to your Downloads folder
mkdir tempinstaller Create a temporary folder to extract to
tar -C tempinstaller -zxvf PLUGIN.tar.gz Extract the bundle
bash tempinstaller/install.sh Run the installer script
rm -R tempinstaller/ Clean up the temp folder
```

Maximal 3 CM requires the following system specifications:

## Windows

- Windows 8/10
- 64-bit VST/VST3/AAX
- Compatible DAW

## Mac OSX

- MacOS 10.9+
- 64-bit VST/VST3/AAX/AU
- Compatible DAW
- Intel or M1 Processor

## Ubuntu

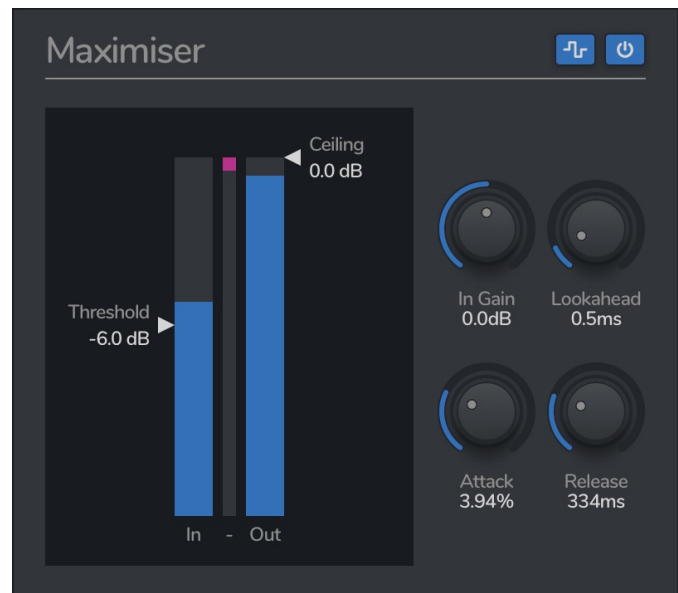
- Ubuntu 18.04+
- 64-bit VST/VST3
- Compatible DAW

# Using Maximal 3 CM

## 1. Maximiser

At the heart of Maximal 3 CM is the Maximiser - a true-peak brickwall limiter.

A limiter works by automatically adjusting the output gain to make sure that the signal never exceeds the **Threshold**. The Maximiser then applies a gain boost so that the maximum level is the **Ceiling**. For example, with a threshold of -3dB, and a ceiling of 0dB, the input will be limited so that no signal reaches above -3dB, and then a boost of 3dB is applied so the peak value reaches 0dB. This increases the overall level by 3dB.



You can hold the CTRL/CMD key to link the two sliders, so that adjusting the level of one affects the other by the same amount. This lets you use the maximiser as limiter, adjusting the threshold without affecting the overall level.

The **Lookahead** slider sets how far ahead in time the maximiser should look when calculating gain reduction. If there is no lookahead, then the limiter will react immediately to transients. This can cause distortion as the limiter almost acts like a clipper in this early stage. Increasing the lookahead allows the limiter some time to ramp to the desired gain reduction value.

Longer lookahead times will reduce the chances of aliasing and distortion, but the result may not be as loud, and transients may get smeared into the background a little. This is dependant on the other settings of the maximiser, but a small amount of lookahead generally has the best results.

The **In Gain** slider applies an increase or decrease gain to the input before any processing.

### Attack and Release

The **Attack** and **Release** knobs affect how the gain reduction is applied over time, and define the overall shape and response of the limiter.

You can think of Maximal's limiter as having two stages - a fast stage, followed by a slow stage. The fast stage is always active, and catches the peaks and transients. The slower release stage is affected by the attack and release knobs, and smooths out the gain reduction.

The release parameter is the time it takes for the gain reduction to return to zero after the signal has dropped back below the threshold. It is labelled in milliseconds, however this is only a guide as the source material will affect the overall release time.

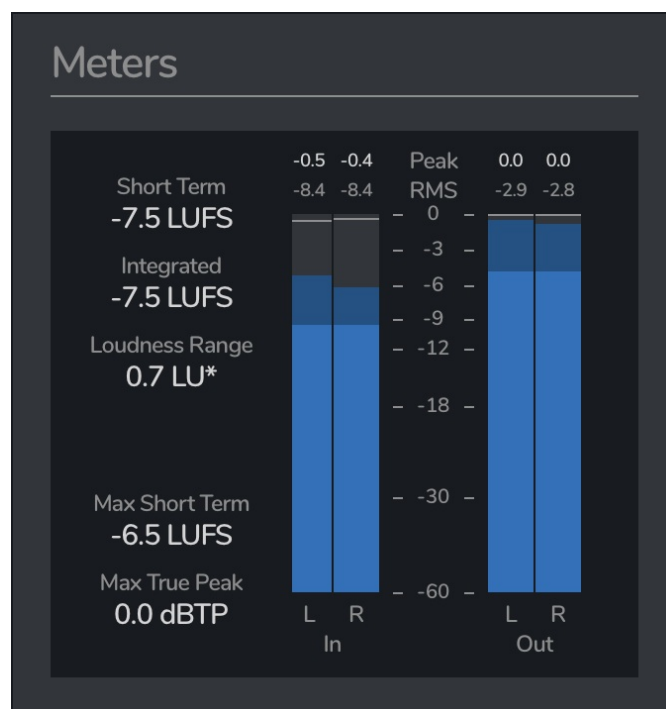
The attack parameter controls how long it takes for the 'release' stage to set in. When the attack is set to zero, the release stage starts straight away. When the attack is increased, it takes a little while for the release stage to kick in.

With a zero or very short attack there is less chance of distortion, however the limiting is more noticeable as the release stage holds onto the gain reduction after the initial transient. With a longer attack, the sound will be louder and clearer, but with more chance of distortion.

## 2. Meters

The metering section shows information about the overall loudness of your track. If you're targeting a broadcast standard such as EBU R128, you'll find this section invaluable to making your mixes the correct level, but for general music production, these are really only for reference.

You can see various LUFS values (short term, integrated, and maximum short term), the loudness range, and true peak values. There are also peak and RMS level meters, with the lighter bar showing RMS, the darker bar showing peak, and the line showing a peak hold. Above the meters are the maximum peak and RMS values. Clicking any of the values will reset all the meters.



## 3. Top Bar

The top bar is where you can manage the plugin. The middle section shows the currently selected preset, and if you open this list you can choose from all the factory and user presets. Clicking on the left and right arrow icons manually cycles to the previous or next preset. The save icon will open a window where you can save the current state of the plugin as a custom preset. Enter your preset name in this window and click save.

You can view this manual at any time by clicking the question mark button.

The cog icon will open a settings window where you can alter the GPU acceleration settings, GUI scale and theme. The update icon is two arrows in a circle. This button will activate when a new version is available for download.

The top right icon with a power button symbol will enable or disable the plugin.

# Terms

Maximal 3 CM and this manual are © 2022 Venomode.

No unauthorised copying, renting, hiring, distributing, lending, deconstructing, re-selling, or any other unintended use.

The following is a legal agreement between you, the end user (USER), and Venomode.

The enclosed software program (the SOFTWARE) is licensed by Venomode for use only on the terms set forth herein. Please read this license agreement. Installing the program indicates that you accept these terms.

## **License of registered Software:**

The full version of the SOFTWARE may be used only by the registered USER. It may not be copied and distributed to other users. Venomode can take legal actions against users, who distribute Venomode Software without permission.

## **License of unregistered Software:**

The evaluation version of the SOFTWARE ("DEMO VERSION") may be used by the USER for evaluation purposes. It may not be copied or distributed without prior written consent from Venomode.

## **Grant of License:**

Venomode grants to you the right to install the SOFTWARE on any and all of the computers owned by the USER, providing only one device is running the SOFTWARE at any time.

## **Copyright:**

The SOFTWARE is owned by Venomode and is protected by UK copyright laws and international treaty provisions. All data related to the SOFTWARE, including the manual, the installers and the serial numbers are property of Venomode. You are not allowed to distribute or modify them without written permission.

## **Privacy:**

Venomode assures to process only data which is technically necessary or which is intellectual belonging of Venomode. This software will only read, write or modify files which are property of Venomode or which are technically necessary to grant a proper operation of the software and the copy protection.

Venomode will not send, submit, distribute or sell any personal data from the user.

## **3rd party products:**

The user is not allowed to publish or sell commercial 3rd party products which are based on this product without written permission from Venomode.

## **License transfers (full version only):**

The license for this product can only be transferred to a new user with written permission from Venomode. After a finished transfer the old user must remove this program completely from his computers. The old user's license is withdrawn.

## **Copy protection:**

This product is copy protected. The user is not allowed to apply or distribute technologies or knowledge for circumventing the copy protection of Venomode products. Venomode products can refuse to operate if technologies for circumventing the copy protection (like cracks) are applied. This product can detect and deactivate technologies for circumventing the copy protection of Venomode products.

## **Copyright infringement:**

Venomode products use technology to protect against copyright infringement. In the case of significant signs of copyright infringement, Venomode can withdraw the USER license.

## **Reverse engineering:**

It is illegal to modify any intellectual property belonging to Venomode without written permission. This software is protected against reverse engineering. Venomode cannot be held responsible for damage or loss of data, hardware, music equipment, health or business profits which arises through an illegal modification.

**Severability clause:**

If a provision of this Agreement is or becomes illegal, invalid or unenforceable in any jurisdiction, that shall not affect:

1. the validity or enforceability in that jurisdiction of any other provision of this Agreement; or
2. the validity or enforceability in other jurisdictions of that or any other provision of this Agreement.

**Acceptance of this license agreement:**

By downloading and/or installing this SOFTWARE, the USER agrees to the terms of this LICENSE.

**Disclaimer of warranty and liability:**

THE SOFTWARE AND THE ACCOMPANYING FILES ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, VENOMODE DISCLAIMS ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF PERFORMANCE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NONINFRINGEMENT. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL VENOMODE BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION OR LOSS OF BUSINESS INFORMATION) ARISING OUT OF THE USE OF OR INABILITY TO USE THE SOFTWARE. VENOMODE CANNOT BE HELD LIABLE FOR DAMAGE OR LOSS TO YOUR HARDWARE, MUSIC EQUIPMENT, DATA, SOFTWARE OR HEALTH. YOU USE THIS SOFTWARE ON YOUR OWN RISK.