# Complexer 2



Complexer 2 is a multi-stage dynamics processor, featuring three independently controlled dynamics processors, each with a choice of six different modes.

Each of the three processors can be configured as an upward or downward compressor, an upward or downward expander, a limiter, or a gate. Complexer 2 offers four different arrangements for processing: serial/parallel chaining, stereo, mid/side, and multiband.

Complexer 2 is a dynamics powerhouse, letting you take complete control of your track.

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# **Installing Complexer 2**

To install Complexer 2 on **Mac** or **Windows**, simply run the installer and follow the instructions. Once installed, Complexer 2 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

Complexer 2 requires the following system specifications:

| Windows  | Mac OSX   | Ubuntu   |
|--|---|--|
| - Windows 10+<br>- 64-bit VST/VST3/AAX<br>Compatible DAW | - MacOS 10.13+<br>- 64-bit VST/VST3/AAX/AU<br>Compatible DAW<br>- Intel or M1 Processor | - Ubuntu 18.04+<br>- 64-bit VST/VST3<br>Compatible DAW |

## **Registering Complexer 2**

The plugin will run in demo mode until a licence is entered and the software is restarted. In demo mode the plugin will not recall the state from a saved track, it will timeout after 30 minutes, and the saving of presets is unavailable. After you have purchased a licence, you will need to register the plugin, which will unlock the full, unrestricted version of the software. Any tracks you have saved with the demo version will now recall correctly.

Click the padlock icon in the top bar area of the plugin window. A window will display where you can enter your licence from the Venomode website user area. After you have entered your licence, the full version will unlock the next time you open your DAW. Ensure your licence exactly matches what is shown in the website. For convenience, you can click your licence in the website to copy it to your clipboard, and then paste it into the plugin. Your licence is the long string of text containing your name, email, and unique code, separated by three colons (:::).

# **Using Complexer 2**



## **1. Flow Section**

The flow section is where you can configure the way the 3 dynamics modules are processed. Each of the 3 processors will be shown here, with the type of processor shown in the centre. If a module has a colour, then it is enabled, and when it is grey, it is disabled. You can toggle the enablement by either right-clicking, or double-clicking. Each module can be drag-and-dropped into your preferred position. The currently selected module will be shown with a white outline and white text.

The 4 buttons at the bottom of the section allow you to choose from the different processing modes:

**Chain** - In chain mode, you can select from an array of diferent serial and parallel processing flows. The signal flows from left to right, optionally splitting in the middle.

**Mid/Side** - In this mode, you can select a different processor for the mid channel, the side channel, and the stereo signal. You can choose whether the signal processes the M/S before or after the stereo channel.

**Stereo** - In stereo mode, you can apply a different processor to the left channel, right channel, and stereo signal. You can choose whether the signal processes the L/R before or after the stereo channel.

**Multiband** - In multiband mode, each of the processors is split into its own adjustable frequency band. The crossover frequency of each band can be adjusted using the 2 sliders.

Some of the sections also feature additional controls:

**Mid/Side Order** - This determines the order of processing. in "All -> M/S" mode, then the "All" processor will be processed before the "Mid" and "Side" processors, and in "M/S -> All" mode, the "Mid" and "Side" processors are excecuted before the "All".

**Stereo Order** - This determines the order of processing. in "All -> L/R" mode, then the "All" processor will be processed before the "Left" and "Right" processors, and in "L/R - > All" mode, the "Left" and "Right" processors are excecuted before the "All".

**Multiband XOver Low & High** - These sliders select the frequency of the multiband crossovers. The "XOver Low" slider selects the frequency where the low and mid bands crossover, and the "XOver High" selects where the mid and high bands cross over.

## 2. Envelope Section

This section allows you to control the dynamic processor's detector. This will determine how the gain stage is applied over time.

**Sidechain** - Here you can enable whether to use an external sidechain or not. When enabled, the signal coming in via an external sidechain channel is used as the detector. This is often used to make space when another track is playing, for example the kick is often used as a sidechain signal in EDM.

**Sidechain Gain** - Apply a boost or cut to the sidechain signal before running through the processor. The sidechain option must be enabled to modify this value.

**RMS Window** - When the detector is either in RMS or Average mode, you can adjust the size of the window here. Shorter values behave like a peak detector, and longer values create a more even response.

**Style** - You can select either Digital mode, which features a fast and clean detection, or Analog, which uses a slower detection algorithm.

**Detector** - Choose from either Peak, RMS, or Average detection modes. Peak mode uses the peak signal to control the dynamics, and is perfect for use in limiting and fast transient responses. The RMS mode uses the root-mean-squared of the signal, and is generally smoother than Peak and more 'musical' sounding. It is often used with compressors to get a smoother sound. Average is similar to RMS, but it uses a more efficient, albeit less accurate, algorithm.

**Lookahead** - With lookahead, the processor looks ahead in time to see what is coming up. This is useful as it can see peaks before they happen and respond accordingly.

Attack - How fast the change in gain is applied.

**Hold** - How long the gain reduction stays after the signal drops below the threshold.

**Release** - How long it takes for the gain reduction to reduce back to normal after the signal drops back below the threshold.

## 3. Gain Stage

This section controls the gain stage of the dynamic processor, setting values such as the type of processor, and how much the gain is affected.

**Enabled** - The power icon in the top right sets whether the module is enabled or not. You can also right click on the module in the flow section to toggle.

**Type** - Select from 6 different processors: Upward compressor, Downward compressor, Gate, Limiter, Upward expander, and Downward expander.

**In Gain** - Apply a boost or cut to the signal before running through the processor. This also affects the envelope stage.

**Dry** - You can mix back in some of the dry signal using this slider.

**Out Gain** - Apply a boost or cut after the signal has run through the processor.

Threshold - The level at which the processor kicks in.

**Ratio** - Here you select how much the processor affects the gain above the threshold.

**Knee** - An adjustable knee allows you to smooth off the area around the threshold.

## 4. Graph

The graph shows the current reduction curve applied to the signal. The line shows the input->output response, and the dot on the line shows the incoming signal's position on the curve.

The level meters to the left show the incoming audio signal, and the level meters on the right show the signal after it has been processed. The single bar shows the level of attenuation. Each of the meters and graph share the value markers, which are shown in -dB.

## 5. Master Section

The processor controls the final output stage.

**Output** - Applies a final gain before outputting from the plugin.

**Limiter** - When enabled, a fast limiter set at 0dB is applied before the output. This is mainly used as a failsafe incase of unexpected peaks. For example, if you have a compressor with a high ratio, and then switch mode to an expander, the signal may go well above peaking, in which case the limiter will save your ears!

The level meters to the left show the incoming audio signal, and the level meters on the right show the signal after it has been processed by all the dynamics stages.

## 6. 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 padlock icon will open the registration window. Enter your licence code exactly as shown in your Venomode user area and click "Register". You can simply click the licence in your Venomode account to copy it to your clipboard. See the registering Complexer 2 section for more info.

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.

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