

Dynamic Split Processor

DynaQ V2



OWNERS MANUAL





DynaQ V2

Owners Manual

Version 2.6



Prolog

Thank you for purchasing **DynaQ**.

DynaQ is the first plugin that supports a technique that we call **Dynamic Split Processing**.

This makes it unique among all other dynamic EQs.

We are sure, you will enjoy our plugin the same way we enjoyed developing it. From the conceptional idea to the final plugin.

In this manual, you will find some very useful information and handy tips to get the best out of **DynaQ**.

Don't forget to take a look at the shortcut section to speed up your workflow!

Visit our YouTube Channel for more information, helpful tips and sound examples:

<https://www.youtube.com/channel/UCyz21jxVBfTptZfxKB5pybQ>

Your Masterlab Audio Team.





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Minimum requirements

Windows 7 or MacOS 11
VST2, VST3, AU or AAX Native
compatible Host Software

New Features DynaQ v2.6

Spectral Analyser separate for Above and Below

Optical feedback which part of the signal is split.

Oversampling 2x, 4x, 8x, 16x

Reduces Anti-Aliasing, especially when using Saturation

Changes from v2.0 to v2.5

Two new **Saturation Modes** can be selected via toggle switch in the above and below sections independently.

TAPE simulates a smooth tape saturation, giving the signal a softer touch while increasing its density.

TUBE add euphonic overtones to your recording, bringing them more up front and enhancing dynamics.

FET is the original **DynaQ** saturation for more aggressive saturation and distortion.

LookAhead Delay:

The new LookAhead Delay parameter found next to the External/Internal Sidechain parameter gives **DynaQ** a chance to look into the “future”! ;-)

LookAhead enables **DynaQ** to catch every, no matter how fast, transient.

The wide range of 100ms gives you new creative possibilities to shape you signal moving it between the above and below sections.

Apple Silicon M CPUs and Windows 11 compatible:

DynaQ is running on all major platforms up to macOS Sequoia and Windows 11.

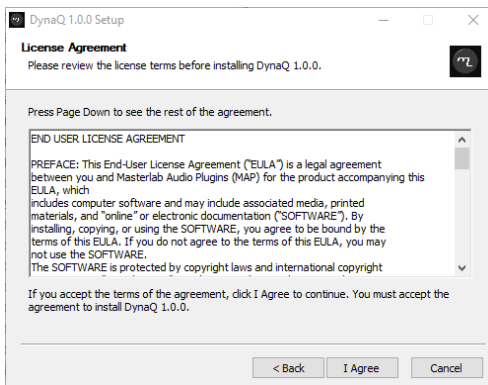
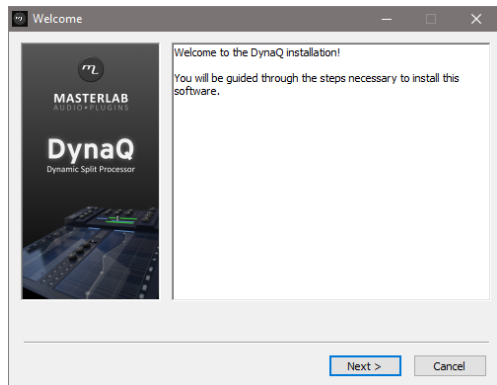
Installation

Windows Installation

After downloading the **DynaQ** installer for Windows, please double click the zip file, start the installer and follow the steps Below:

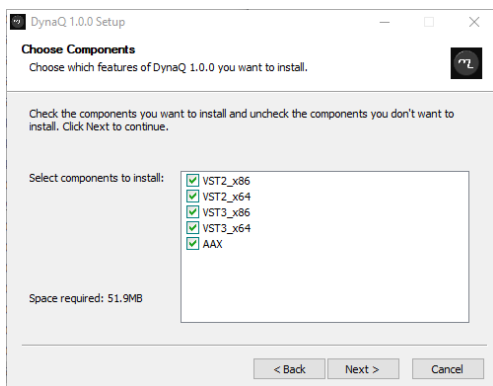
Welcome Screen

Please confirm the welcome page with “Next”.



License Agreement

Please read and confirm the license agreement with “I Agree”.

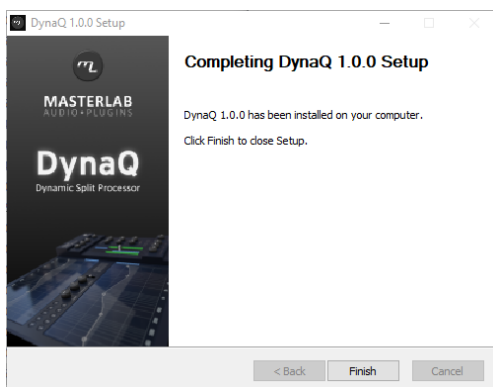
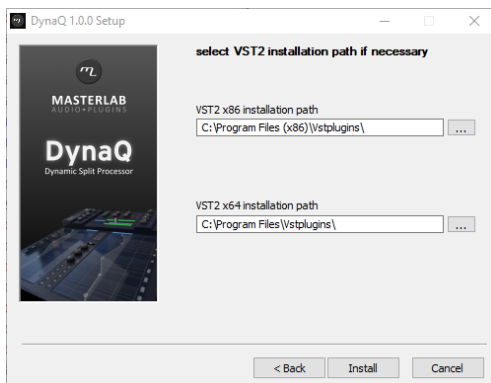


Plugin Format

Please choose your desired plugin format. Be aware that it is recommended not to mix different plugin formats of **DynaQ** within one DAW project.

Plugin Path

On this page, you can change the path for the VST2 plugins, to match your VST plugin folder. (Leave it to default, if you are not sure)



Installation Complete

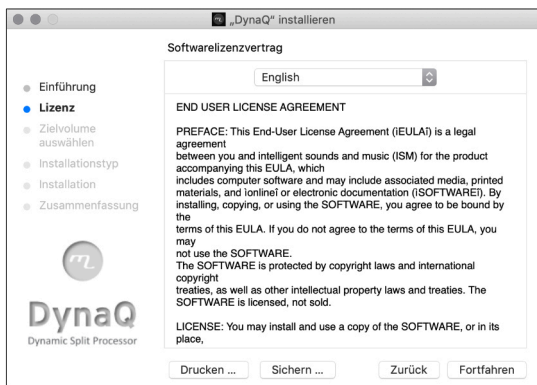
Congratulations on reaching this page; **DynaQ** has been successfully installed on your system. Please follow the next steps for activating your DynaQ license on your machine(s).

MacOS Installation

After downloading the **DynaQ** installer for the appropriate MacOS version please unzip the installer archive, click the “DynaQ.pkg” or “DynaQ.mpkg” file with the right mouse button (or cmd mouse click) and choose “open”.

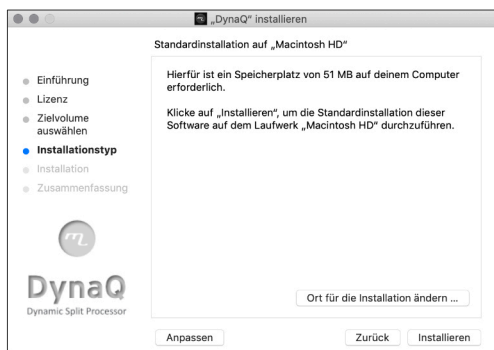
Welcome Screen

Please press “Next” and you will be guided through the installation process.



License Agreement

Please read and confirm the license agreement with “Continue”.

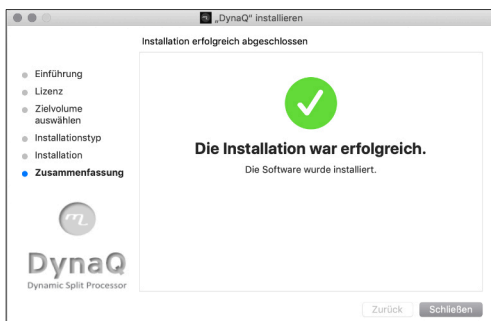


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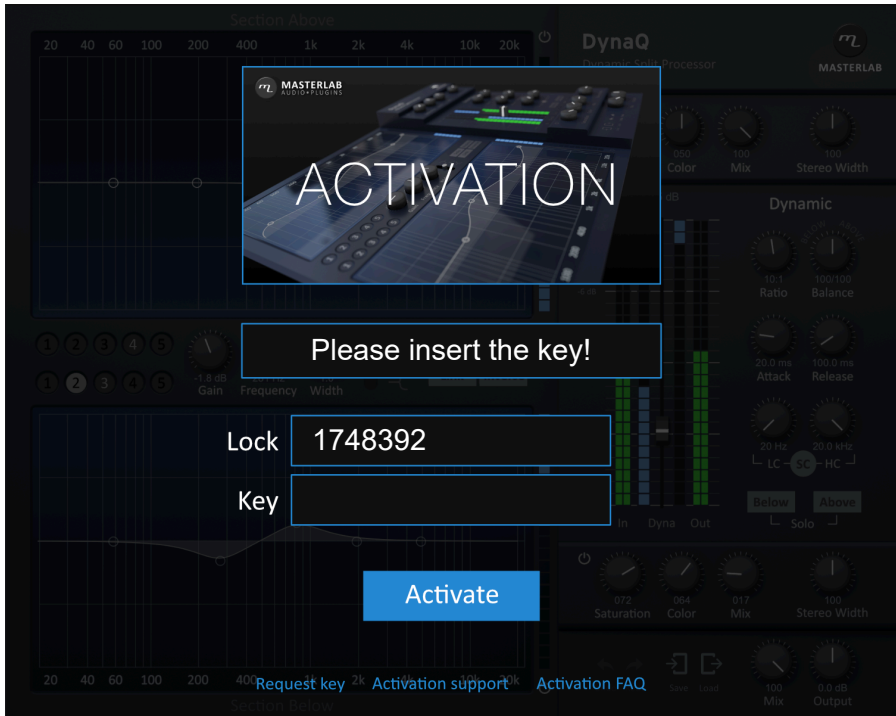


*If you install the DynaQ Audio Unit on macOS High Sierra or later, please **restart** your computer after installation. Otherwise, **DynaQ** cannot be found by your DAW.*

Activation

DynaQ comes with its own activation system.

Once you open **DynaQ** for the first time, it will come up with the activation dialog, showing you the “Lock”.



Please go to our [online activation](#), use the lock and your customer email address for obtaining an activation code. Once the Key has been placed, please press “Activate”, restart your DAW and enjoy **DynaQ**.



The Idea

Filtering and sound shaping is essential when it comes to balance out recordings, the placement of signals in a mix or doing creative sound design.

However, what might be great for the loud part of the signal is not necessarily good for the quiet part and the vice versa. Dynamic EQs are helping us for quite a while and are doing a great job on dynamic selective filtering.

On the other hand, dynamic EQs can be a little bit difficult to understand, especially when it comes to Below and Above the dynamic threshold of the processing and it is also hard to deal with complex filter curves.

Therefore we invented a completely new, but very simple, approach to dynamic selective processing.

This not only allows to add complex filtering curves very fast, but also analog-style saturation and stereo widening.

We call it: **Dynamic Split Processing**

Case Scenarios

- Removing unwanted rumble in drums
- Reducing proximity effect of too closely recorded vocals without destroying the foundation of louder notes
- Processing specific elements of drums like snare and kick by using the sidechain filter
- Bringing not optimal recorded signals or sounds back to life
- Adding analog sparkle to the floor (Below) without crushing transients
- Creating beautiful stereo widening, just on floor or transients
- Shaping and tweaking transients



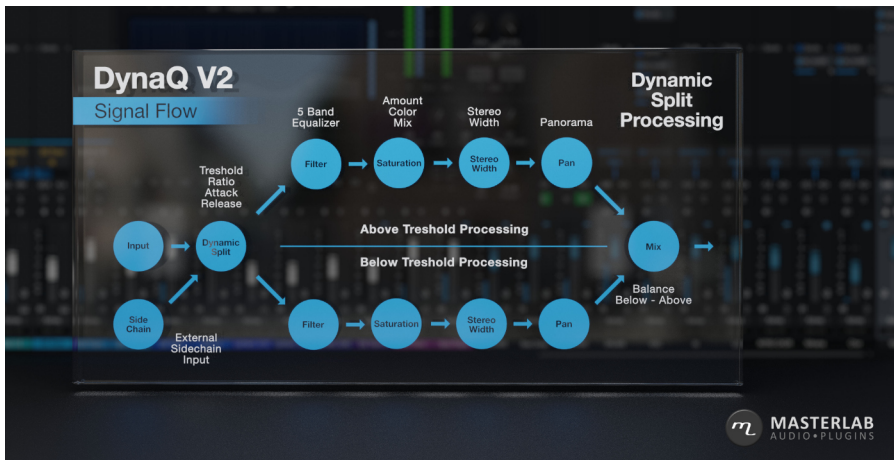
The Concept

Unlike other dynamic filters, **DynaQ** comes with a complete new approach on dynamic filtering.

Instead of delivering several dynamic EQ bands, each with a complete set of dynamic controls, **DynaQ** simply splits the signal into Below and Above dynamic split point, which then can be processed independently.

Mixing back the Below and the Above signal restores the original signal with its dynamic range, but with individually processed changes.

That makes **DynaQ** not only a dynamic filter, but also a dynamic selective saturator with precise controls over the dynamic splitting point.





The User Interface

We spent quite some time on making the user interface as clear and self-explaining as possible. However, there are some hidden features and shortcuts to speed up your workflow, so read this manual carefully in order to get the very best out of **DynaQ**.

General Knob Features

All Knobs share the same control features. By pressing a controller key on your keyboard when turning a knob, you will get a different control behavior and you can return to the default value:

Fine Tune

shift

Circular Control

alt

Default

cmd/ctrl

**Synchronous parameter change in
Above and Below sections**

right mouse
click control

Keyboard entry:

Parameter values can be inserted as text on all parameters, except Balance (Below/Above).

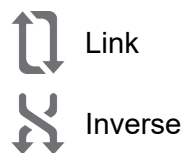


The EQ Section holds the separate EQ graphs for the Above and the Below Section. Between these two graphs the EQ Band Controls are located.

1 EQ Band Selector

The **EQ Selector** Buttons selects and displays the corresponding EQ band. The EQ Graph shows the selected band by highlighting the blue handle. The Selector Buttons can also be used for:

Solo	shift
Active	cmd/ctrl
Link	alt + cmd/ctrl
Inverse	alt + shift



2 EQ Band Controls

The main EQ controls for the active filter band: **Frequency**, **Gain** and **Q**. For fine tuning use: Shift & Mouse (Drag & Wheel)

3 EQ Type

Switch filter types via toggle switch, **Low-Shelf**, **Bell** and **High-Shelf**.

4 EQ Band Status Controls

The “**Solo**” button switches the selected band to solo. Turning “**Active**” off switches the band into bypass mode. It might be useful to link one or more bands from Below and the Above filter. “**Link**” generates a simple link, while “**Inverse**” inverses the gain parameter.

5 Above EQ Global on/off and VU

The VUs display the level that is passing through the Above and Below Sections. At the top or the bottom of the VUs, you will find the EQ On/Off button, that bypasses the complete EQ in this Section. Cmd/Ctrl & Click on the On/Off Buttons reset the complete EQ back to flat.

6 Below EQ Global on/off and VU

The Below VU displays the level that is passing through the Below threshold section. On the bottom of the VU, you will find the EQ bypass, that bypasses the whole Below filter section.

7 DynaQ About

The **DynaQ** logo button shows the “about” page.

8 Bypass Switch

Masterlab logo **Bypass** switch,
for switching the whole plugin into bypass mode.

9 & 11 Above and Below Saturation, Stereo Width and Pan

Each Section has an analog style **Saturation** stage with 3 different saturation modes. The Controls are: **Saturation** (Intensity), Mode (**TAPE**, **TUBE**, **FET**), **Color** (Tilt Filter at 1 kHz) and **Mix**.

The **Stereo Width** lets you adjust the Stereo Width from Mono (0%) to Super Stereo (200%).

The **Pan** control moves the sections output in the stereo field.

Note: On stereo signals it acts more like a Balance control.

Right mouse click & drag will adjust the parameters in both Sections

10 Dynamic Section

The **Dynamic Section** contains all controls for the Dynamic Split Process. The Dynamic Section splits the input signal into 2 parts, a part Above and a part Below the Dyna Threshold. Ratio, Attack, Release and Sidechain settings determine the Dynamic Splitting Point.

To understand how DynaQ works, imagine the Dyna Control Fader defining a verge where a decision takes place: What parts of the signal will show up in the Above Section and what parts are kept in the Below Section. The Dynamic Split depends heavily on the settings of the Attack, Release, Ratio and Sidechain parameters. With the signal being split into these 2 parts, it is now possible to process these in the Above and the Below Section separately. Use different EQ, Saturation and/or Stereo Width settings for low level and/or high level parts of your audio.

Please note

If the EQs, Saturation, Width or Balance are not in use, the output signal will be identical to the input signal, no matter what the settings for Attack, Release, Ratio or Sidechain are.

Dyna

The **Dyna** parameter defines the verge where the signal is being affected by the Above processing, according to your Ratio, Attack, Release and Sidechain filter setting.

Ratio

Like in most other compressors, the **Ratio** parameter controls how extreme the signal is being affected, once it reached the threshold level. With a lower number you will have a subtle effect, with higher number more drastic behavior.

Balance

The **Balance** parameter controls the Balance between the processed Above and Below Sections when being recombined. This parameter is very important to compensate for volume changes after processing, and can also be used to change the dynamic behavior of the signal. Turning balance to “Above” enhances the dynamics, while turning it to “Below” leads to decreased dynamics ..

Attack & Release

These well known parameters are found in almost any dynamic processor. In the case of DynaQ, **Attack** defines how fast the signal is being sent to the Above Section, once it reaches the Dyna verge.

Release defines how fast the signal is returning to the Below Section, once it falls Below the Dyna verge. For capturing even the fastest transients, DynaQ is equipped with a unique detection algorithm that is very snappy, it can lead to distortion on some signals if the settings for Attack and Release are set to very short values.

Sidechain Filters

The **Sidechain** Section consists of 2 48 dB Low- and Highcut filters for tweaking the dynamic control signal. These filters are essential for isolating a specific element like a kick or snare from more complex material. "SC" solos these filters. The filters are also visible in the EQ Graph windows.

Above and Below Solo

This function switches the Above or Below Section into **Solo Mode**. Soloing the Sections is very useful for fine tuning the Dyna setting, Both sections together will have a smooth transition. Using just one Section can be used for creative results.

The Metering Section

In shows the Input Signal Level.

Dyna, the meter on the left side of the fader shows the Control Signal Level for the Dynamic Split. On the right side of fader the Dynamic Split Amount is visualized.

Out shows the Output Signal Level.

12 Look Ahead & Sidechain

The **Look Ahead** option introduces an internal latency of 100ms which enables **DynaQ** to "see" up front what kind of signal will be fed into the **Sidechain**.

The **Sidechain** section controls the signal being fed into the dynamic section, where the dynamic split point is determined inside **DynaQ**. The On/Off switches the external sidechain input. With the sidechain control you can Mix the internal with the external signal being fed to the sidechain.

Depending in your daw you will also need to switch on the sidechaining and route a signal for it to work properly.

Please note

Sidechain is not yet implemented in VST2 and AAX versions

13 Mix and Output

The **Mix** control allows for sample-accurate blending between the original signal and the processed DynaQ signal. This is very useful if you want to use DynaQ for parallel dynamic processing. (Set the Balance control in the Dynamic Section to Below only). The **Output** helps compensate level-changes created by the processing.

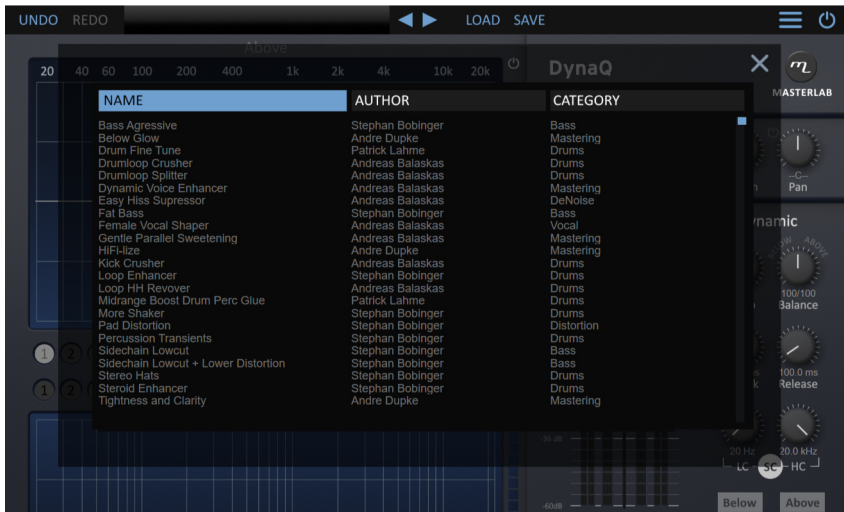
14 Top Bar



Undo/Redo performs as usual.

The **Arrows** will load Presets from your Preset List forwards and backwards.

Load opens the Preset Browser.



Clicking the column names will sort the alphabetically.

Preset folder locations on Windows:

User Presets: C:\Users\[username]\Documents\Masterlab\DynaQ

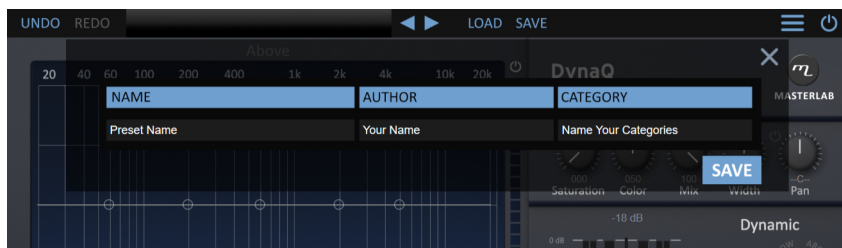
Factory Presets: C:\Program Files\Common Files\DynaQ\Presets

Preset folder locations on macOS:

User Presets: /Users/[Username]/Documents/Masterlab/DynaQ

Factory Presets: /Library/audio/Presets/DynaQ

Save opens a Save Preset dialog.



Hamburger Icon

opens the **Settings Menu** for **Oversampling**, **Spectrum**, **Zoom** and **Tool Tip** settings.



Oversampling: Oversampling increases the internal Samplingrate of the processing, reducing artifacts like Aliasing drastically. Using higher modes, e.g. 16x, increases CPU load and is only recommended in absolutely high end applications.

Spectrum: Settings for the Spectrum Analysers in the Above and Below Sections.

Tilt filter for a better optical representation of higher frequencies.

Gain boost +12 or +24 dB for low level signals.

Zoom: Ranges from 75% to 200%

Mouse Over or “Tool Tip”: On/Off, shown at the bottom.



Bypass switching the whole plugin into bypass mode.

15 Tool Tips & Shortcuts

We tried to make DynaQ as ergonomic as possible and coded plenty of useful shortcuts into the UI.

Hovering the mouse pointer over a certain function will show the tool tips at the bottom of the UI.

Especially in the EQ windows, using the EQ handles in combination with the different keyboard modifiers, give you fast and full control over all the filter functions with just one mouse click.

Tool Tips help you find all available mouse actions possible.

16 Multiple Outputs

DynaQ now has 5 stereo output pairs.

If your daw supports multiple outs you are able to route 5 different signals to 5 different outputs.





Notes:



Dynamic Split Processor

DynaQ V2

