

LEAPWING DYNONE

AUDIO

MANUAL V2.0

LEAPWING DYNONE
AUDIO

IN +12 +6 0 -3 -6 -12 -24 -48 -INF -INF +6.9 dB +4.1 dBFS -4.5 LUFS

LF ~16.0 Hz~ UQ +12 +6 0 -3 -6 -12 -24 -48 -INF -INF +8.2 dB

LMF ~80.0 Hz~ UQ +12 +6 0 -3 -6 -12 -24 -48 -INF -INF +8.0 dB

MF ~4.0 kHz~ UQ +12 +6 0 -3 -6 -12 -24 -48 -INF -INF +5.5 dB

HMF ~11 kHz~ UQ +12 +6 0 -3 -6 -12 -24 -48 -INF -INF +9.2 dB

HF +12 +6 0 -3 -6 -12 -24 -48 -INF -INF +2.1 dB

OUT +12 +6 0 -3 -6 -12 -24 -48 -INF -INF -5.6 dB +5.8 dBFS -2.0 LUFS

CONTROLS

GLOBAL LF LMF MF HMF HF SETTINGS

PARALLEL COMPRESSION

CHANNEL LINK: MULTI-MONO STEREO

DETECTION: RMS PEAK

WEIGHTING: SINGLE-BAND ALL-BAND

CONTENTS

Chapter 1 - Introduction	3	4.3.1 Crossover Filters	8
1.1 Welcome	3	4.3.2 Band Auto Gain	8
1.2 Product Overview	3	Chapter 5 - Installation locations	9
Chapter 2 - Authentication	5	Chapter 6 - Contact Us	9
Chapter 3 - Main Interface	5		
3.1 IN and OUT Faders	5		
3.1.1 Faders	5		
3.1.2 Metering	5		
3.1.3 Shortcuts:	5		
3.2 The 5 Band Faders	5		
3.2.1 Faders	5		
3.2.2 Metering	5		
3.2.3 Link	6		
3.2.4 Shortcuts	6		
3.3 Bypass	6		
3.4 Undo/Redo	6		
3.5 A/B Comparison	6		
3.6 Presets	6		
3.7 Info menu	7		
Chapter 4 - "Controls" - the Expert interface	7		
4.1 Global tab	7		
4.1.1 Parallel compression	7		
4.1.2 Channel Linking	7		
4.1.3 Detection	7		
4.1.4 Weighting	7		
4.2 The 5 Band Tabs	8		
4.2.1 Threshold	8		
4.2.2 Ratio	8		
4.2.3 Attack	8		
4.2.4 Release	8		
4.3 Settings Tab	8		

CHAPTER 1 – INTRODUCTION

1.1 Welcome

Thank you for choosing Leapwing Audio. In order to get the most out of your Leapwing Audio plugin, please take the time to read through this manual.

1.2 Product Overview

DynOne is a multiband parallel processor featuring newly developed algorithms and lters for a state of the art processing that lifts up low level detail rather than squashing the dynamics of your material. Multiband Parallel Processing is ideal for classical music, acoustic music, voice, lm, broadcast and other situations where low-level subtleties tend to get lost. On top of that, the multiband processing allows you to shape the tone of your material by adjusting the level of each band individually, without sacrificing the original dynamics within the music.

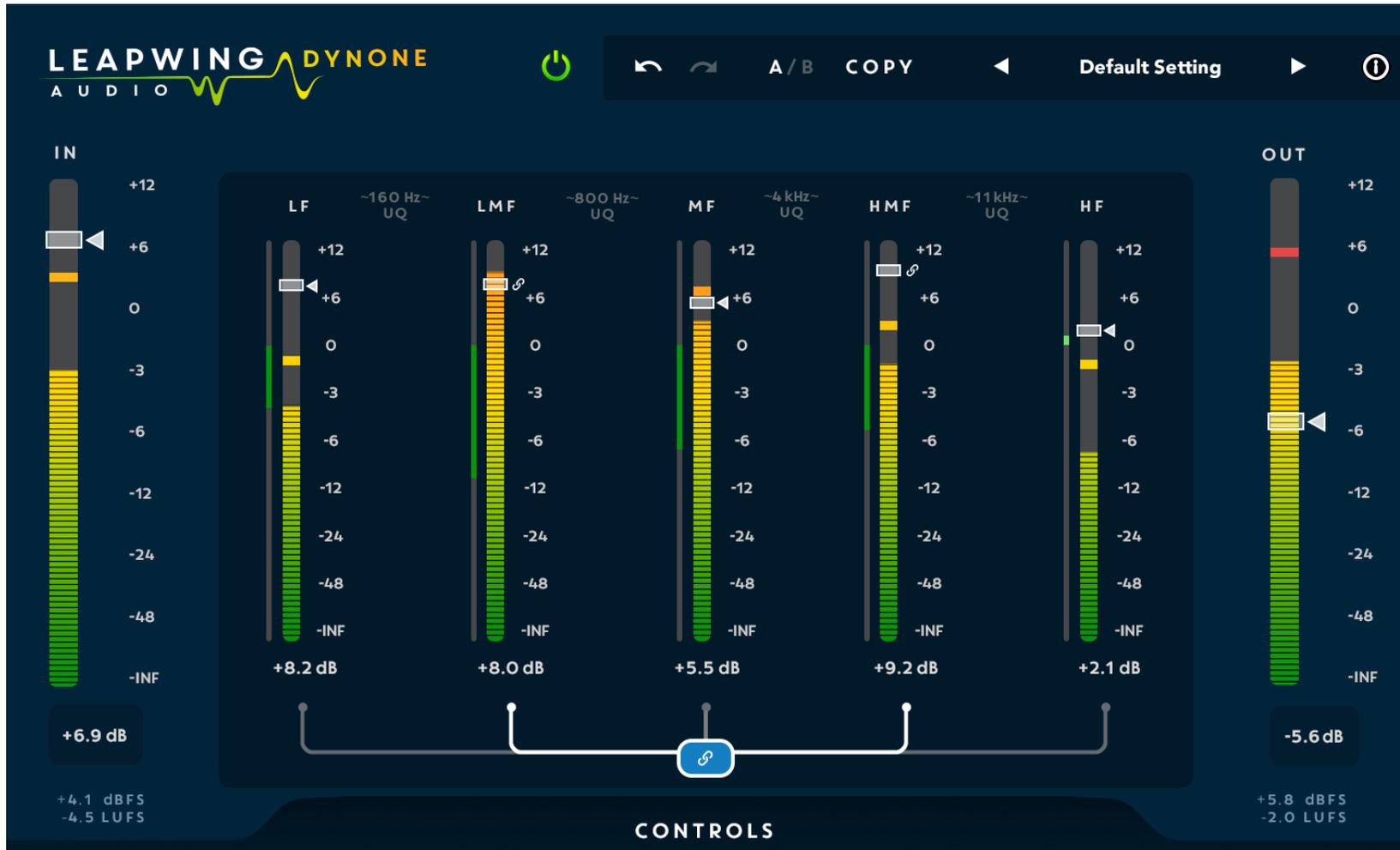
The algorithm features normal and parallel compression, and the controls section opens up possibilities to fine-tune channel linking, RMS/peak control in the detection circuit, single/all-band weighting, and program dependent dynamics processing for each band.

On single sources DynOne can punch up a kick or a snare drum. Normal mode leads to good results on other pop/rock sources for compression and spectral control - for instance with vocal, sax, guitar, bass etc.

While working in parallel mode on a full mix and using the program dependent attack and release times (min and max) and more advanced controls such as RMS / Peak detection, or single/ all-band weighting, you can shape the tonal balance of your music and make a fuller, more in your face and present sounding mix while keeping the transients and overall dynamics of your track untouched.

Features:

- 5 bands with custom-built gentle crossovers at 160Hz, 800Hz, 4kHz and 11kHz for compressing or expanding each band separately
- Choose between Ultra Quality or Low Latency filters
- Per-band adjustable threshold, ratio, attack (min/max), release (min/max)
- Intelligent algorithm for program dependent attack and release control
- Stereo link control
- Variable RMS/ peak detection
- Variable envelope weighting, from single-band to all-band
- K-weighted loudness metering
- Beautiful Retina interface with unique design, focused on the optimal workflow
- Available as 64-bit plugins:
 - VST - VST3 - AAX - AU
 - on macOS (10.10 and higher)
 - Windows 8 and 10



CHAPTER 2 – AUTHENTICATION

When opening the plugin for the first time, you will be asked to enter your email address and serial number to authenticate the plugin. The email address should be the same one as you used to create your online Leapwing user account. The serial number has been sent to you via email after your purchase, and can also be found in your Leapwing account page.

<https://www.leapwingaudio.com/my-account/>

On the Leapwing account page, you are able to manage the Hardware ID (computer) connected to your license key. If you want to move the license to another computer you own, you can do this by deleting the current Hardware ID, and activating the license on the other computer.

CHAPTER 3 – MAIN INTERFACE

3.1 IN and OUT Faders

3.1.1 Faders

IN: Input gain control.

The IN slider controls the level of the signal that enters the dynamics processor. It's a very powerful control, since you can increase or decrease the amount of compression or expansion that occurs without changing the threshold. As a starting point, keep the IN slider at 0.0 dB (unity gain).

Range: [-inf dB ... +12 dB] ; default = 0 dB

OUT: Output gain control.

The OUT slider controls the level of the output signal of the plugin. It can be used for gain staging your plugins chain. This level does not affect the dynamics processing.

Range: [-inf dB ... +12 dB] ; default = 0 dB

3.1.2 Metering

The main meter and the readout beneath it show both the peak of the signal and its K-weighted short-term loudness. When you cmd-click or ctrl-click on the OUT meter readout, it flips into Delta mode. This shows you the difference between OUT and IN loudness so you can more easily match loudness levels.

3.1.3 Shortcuts:

-You can drag the IN and OUT faders in opposite directions by holding the Shift key while you move one of these 2 faders.

3.2 The 5 Band Faders

3.2.1 Faders

These 5 faders are level controls for the amount of compressed signal for each filter band that gets mixed into the plugin's output signal.

Range: [-inf dB ... +12 dB] ; default = -inf dB

LF: Low frequency band. Lowpass filter with a cut-off at 160 Hz.

LMF: Low-Mid frequency band. Bandpass filter with a cut-off at 160 Hz and 800 Hz.

MF: Mid frequency band. Bandpass filter with a cut-off at 800 Hz and 4 kHz.

HMF: High-Mid frequency band. Bandpass filter with a cut-off at 4 kHz and 11 kHz.

HF: High frequency band. Highpass filter with a cut-off at 11 kHz.

All crossover filters have very gentle slopes that are optimized to minimize any artifacts around the crossover frequencies.

3.2.2 Metering

The main meter represents the level of the compressed signal. The left side meter indicates the gain reduction in the compressor (dark green) or upward expansion (light green).

3.2.3 Link

Links band faders for ease of use. Default state is 'All faders linked'. By Ctrl-clicking on faders you can create a linked subgroup. When the Link button is active, Ctrl-clicking a fader will remove it from the group. When Link is not active, Ctrl-clicking will result in the creation of a subgroup which holds that single fader. Further Ctrl-clicking on faders will add or remove them from the group. Visual feedback to show the state of the subgroup is given by the color of the 'tentacles' emitting from the Link button and small 'link' icons next to the faders and in the Controls tabs. Unlinking and linking again by pressing the Link button will reset the subgroup.

3.2.4 Shortcuts

- Shift-click to solo toggle a fader.
- Shift-click again to un-solo.
- Alt-Shift-click on a fader will un-solo all faders.
- Ctrl-click to add or remove a fader from a linked subgroup.

3.3 Bypass

Full bypass switch that maintains the plugin latency.

3.4 Undo/Redo

Undo/Redo arrows are located in the left side of the top bar. Basic undo/redo functionality applies to all parameters in the plugin, apart from changing presets. When changing a preset, the undo/redo history will be cleared.

3.5 A/B Comparison

AB comparison can be used to quickly store 2 different sets of parameters, and toggle between them to evaluate them in detail. At initialisation, both A and B are set to the same "Default Setting" state. When you start making changes to parameters, they will be stored under A, while B keeps the values from before changes started. A is highlighted to show it is active. Now you can toggle between state A and B by clicking the A/B button. When A is active, changes are stored under A; When B is active, changed are stored under B. Clicking the Copy button will reset both A and B states to the current active set of parameters.

3.6 Presets

DynOne comes with a list of divers presets, a dropdown menu is accessible by clicking on the preset name. You can also cycle through them by clicking the left and right arrows. It is also possible to save your own presets; use the "Save as.." option for this. User presets will be automatically added to the list in the dropdown menu. It is possible to make your own subfolders in the preset folder, they will be displayed in the dropdown menu as subcategories. Important: Only preset files stored in the default preset folder are loaded in the menu.

Location of preset files:

- macOS: /Users/<username>/Library/Audio/Presets/Leapwing Audio/DynOne
- Windows: C:\Users\<username>\Documents\Leapwing Audio\DynOne

3.7 Info menu

Hidden behind the (i) button is a convenient list of following information:

- Version number of the plugin
- License Info: See Chapter 2 - Authentication
- Check for updates..
- Website: link to www.leapwingaudio.com
- Manual: link to the local pdf file

CHAPTER 4 – "CONTROLS" – THE EXPERT INTERFACE

Pressing the Controls button at the bottom of the main UI gives access to internal parameters of the dynamics processing. All expert control parameters are organized under 7 tabs; the Global tab, 5 Band tabs and the Settings tab.

4.1 Global tab

4.1.1 Parallel compression

This is a fundamental control that changes between two different ways of using DynOne. Please familiarize yourself with the virtues of each individual mode.

The checkbox enables parallel compression, which essentially creates a mix of the original and the compressed signal. When parallel compression is disabled, the normal mode – or regular multiband compression - is active.

Parallel Mode

In Parallel Mode, the multiband compressed signal can be added to the original signal by adjusting the gain of each band separately or all together, by linking all the bands.

When Band gains are all 0.0 dB, the full compressed signal is being added to the original material. By playing with the input gain and the 5 band level faders it is possible to create every possible level balance of original and compressed signal.

Normal Mode

The Normal Mode is a five-band compressor or upward expander, where material over or under a certain threshold will be more and more affected by the compressor.

In Normal Mode the original signal is not mixed in. So the output of DynOne in this mode is a mix of the 5 compressed frequency bands.

4.1.2 Channel Linking

The compression-expansion can be applied either to L and R independently, to the Stereo signal, or anything in between. The Channel Link slider controls the link percentage between the gain envelopes of each channel.

Range: [0 (multi-mono) ... 100 (stereo link)] Default = 0 (multi-mono)

4.1.3 Detection

The Detection slider controls the gain envelope circuit and its sensitivity to peaks in the program material. This is a continuous slider going from RMS-style detection all the way to Peak mode.

Range: [0 (RMS) ... 100 (Peak)] Default = 0 (RMS)

4.1.4 Weighting

You have the possibility to shape the compression sidechain input for each frequency band as a weighted combination of the 5 frequency bands. The sidechain can be the single band itself by placing the slider to the left, or for the full bandwidth signal to the right. Settings in between are a gradually increasing, weighted sum of the frequency bands, whereby neighboring bands have a bigger influence than the ones further away.

Range for Weighting: [0 (single-band) ... 100 (all-band)] Default = 50

4.2 The 5 Band Tabs

Every frequency band has its own compressor/expander settings and they are grouped per frequency band under 5 tabs.

4.2.1 Threshold

The threshold determines at which level the compression/ expansion will start.

Range: [-60 dB ... 0 dB] Default = -40 dB

4.2.2 Ratio

Compressor/Expander ratio. A ratio bigger than 1:1 results in compression of the audio signal. A ratio smaller than 1:1 will result in expansion.

Range: [0.80 ... 20.00] Default = 3.00 (3:1)

4.2.3 Attack

The attack decides how fast the signal goes into compression or expansion, after it has passed the threshold. Pay close attention to the transients of the music while adjusting this. The min value is used for signals that are more transient in nature (have a higher CREST factor) while max values are used for more sustained signals (with a lower CREST factor).

Range: Min: [0 ... 800 ms] Min Default = 300 ms Max: [0 ... 800 ms] Max Default = 400 ms

4.2.4 Release

The release time decides how fast the signal goes back to its normal level after compression or expansion. Short release times can result in some pumping of the music. The min value is used when signals that are more transient in nature (have a higher CREST factor) while max values are used for more sustained signals (with a lower CREST factor).

Range: Min: [5 ... 800 ms] Min Default = 300 ms Max: [5 ... 800 ms] Max Default = 400 ms

4.3 Settings Tab

4.3.1 Crossover Filters

You can choose between 2 types of crossover filters.

Ultra Quality is the default setting and also exactly the same filters as used in DynOne v1. These are specially designed linear crossover filters that result in zero negative summing; there are no audible artefacts around the crossover frequencies.

Select these filters if only the highest sound quality is good enough. They do require a bit more CPU power.

Low Latency is a new option. These filters have been designed with a similar philosophy as the Ultra Quality filters, but have a very low latency of less than 2 milliseconds.

Select these filters if you need a low processing latency and lower cpu usage.

Ideal for usage in Broadcast or Live mixing scenarios due to its low latency. If CPU usage is a concern, like for example in plug-in heavy mixes, we also recommend using this mode.

4.3.2 Band Auto Gain

The 5 bands have a default auto gain function that compensates for the Threshold and Ratio settings. This will boost the individual bands a bit if low Threshold values and high Ratios are being used. If you want to be in total control of band levels, you can easily switch off Band Auto Gain in the Settings tab.

CHAPTER 5 - INSTALLATION LOCATIONS

After running the DynOne installer with default folder paths, you will find the different plugin formats in the following locations:

macOS:

AAX - /Library/Application Support/Avid/Audio/Plug-Ins

VST - /Library/Audio/Plug-Ins/VST

VST3 - /Library/Audio/Plug-Ins/VST3

AU - /Library/Audio/Plug-Ins/Components

Windows:

AAX - C:\Program Files\Common Files\Avid\Audio\Plug-Ins

VST - C:\Program Files\Steinberg\VstPlugins

VST3 - C:\Program Files\Common Files\VST3

CHAPTER 6 - CONTACT US

In case you have any questions, don't hesitate to contact us at

support@leapwingaudio.com

www.leapwingaudio.com