

PolyGrab Synthesizer

Reference Manual v1.2

For Windows and Mac

Reference Manual By Techtronix

Techtronix

plugins, packs, kits, sounds and other resources for computer based audio production

Contact Support: dnbtechtronix@gmail.com

Copyright 2026 Techtronix. All rights reserved

The content of this manual is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Techtronix. Every effort has been made to ensure that the information in this manual is accurate. Techtronix assumes no responsibility or liability for any errors or inaccuracies that may appear in this book.

Ableton is a trademark of Ableton AG. Max for Live is a product developed by Ableton AG in cooperation with Cycling '74. Mac is a trademark of Apple Inc, registered in the U.S. and other countries. Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

Techtronix is not a partner of Ableton AG or Cycling'74.

This book has been inspired by the Ableton Live Reference Manual, with the aim of making it easier for Ableton Live users to read.

Contents

Main Information

1.1 Plugin Overview	4
1.2 System Requirements	5
1.3 Installation Instructions	5

Controls

2.1 Oscillators	6
2.2 FM	7
2.3 Envelopes.....	7
2.4 Filter.....	8
2.5 Chorus/Stereo.....	8
2.6 Distortion.....	9
2.7 Velocity/Pitchbend.....	9
2.8 Preset Operations.....	10
2.9 Push Banks.....	11
2.8 Notes	12

Main Information

1.1 Plugin Overview

Thank you for purchasing PolyGrab.

PolyGrab is a 16 Voice Polyphonic Synthesizer, Made For Ableton and Ableton Push Standalone.

Featuring 3 Oscillators with 5 shapes - Sine, Triangle, Saw, Square and Noise. Each oscillator can be finely detuned from eachother as well as detuned by semitones to create chords. Each Oscillator has its own gain control, allowing for a thick oscillator sound that just cant be achieved with 2 oscillator synthsizers.

There are two envelopes, one is dedicated to the main amp “volume” and the other is for the filter.

Both envelopes feature five second attack, decay and release times. This gives you ability to do massive chord stacks, or have notes ring out and cascade with ease. PolyGrabs envelopes are exponential giving it the ability to do plucky and percussive sounds

Polygrab features Frequency Modulation “FM” on all oscillators with three different sources Sine Saw And Noise. There is a speed and depth knob, as well as Pulse Width Modulation “PWM” on all oscialltors when square waves are selected.

Featuring a fully polyphonic state variable filter offering Lowpass, HighPass, Bandpass and Notch filters. All Filters have a resonance knob as well as the filter cutoff.

A lush chorus with depth and rate knob and feedback, allowing for a thick warm sound on a single oscillator.

There is also a five different distortion models knob, with pre amp gain for clipping the distortion circuit, and a post pre amp drive knob, aswell as a stereo spread knob for widening the stereo field of the sound.

PolyGrab is fully responsive to velocity, pitch bend and vibrato accessible by a modwheel or automation.

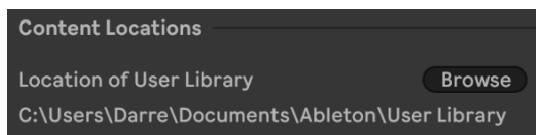
1.2 System requirements

- . Live version: 11 /12
- . Operating system: Windows, Mac

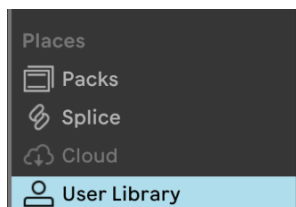
1.3 Installation instructions

Unzip the ZIP file and copy the plugin AMXD file to your User Library folder. There are two ways to find where your User Library is located:

Go to Preferences – Library – Location of User Library



Or [right-click] on the User Library in the Browser – Show in Explorer



Controls

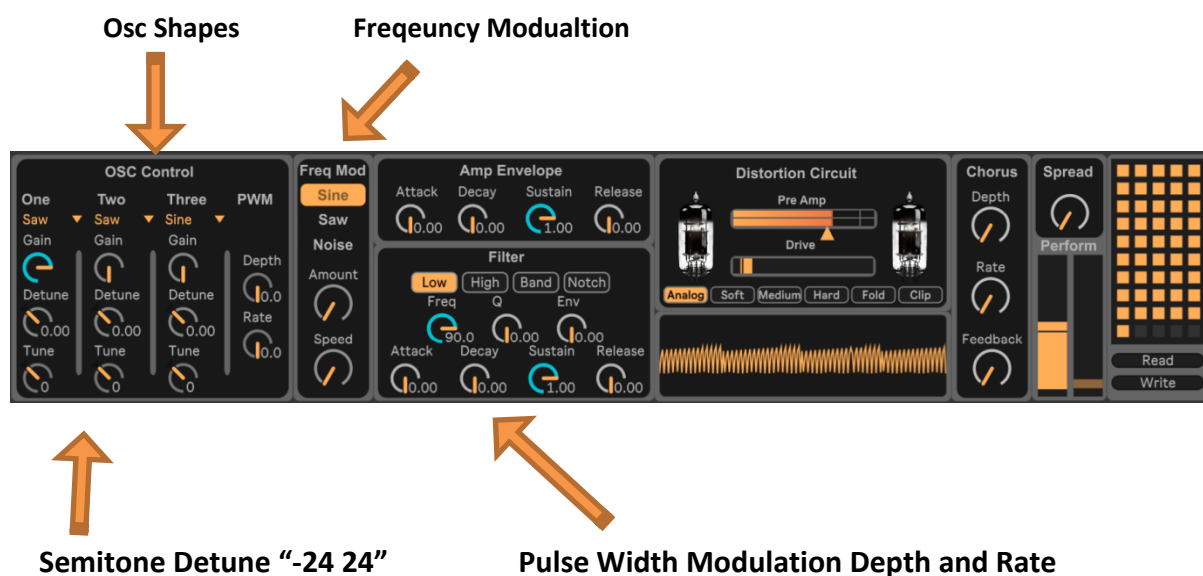
2.1 Oscillators

Featuring 3 Oscillators with 5 shapes - Sine, Triangle, Saw, Square and Noise.

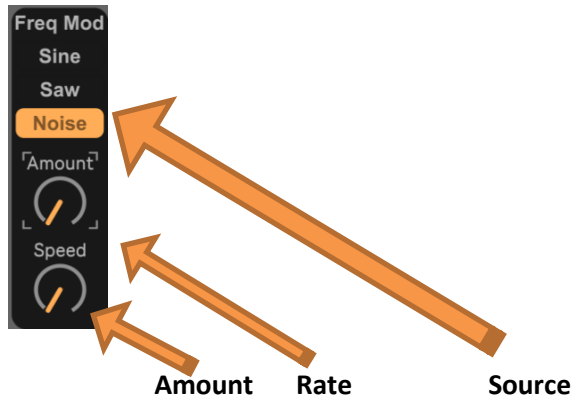
Each oscillator can be finely detuned from each other and has its own gain control, allowing for a thick oscillator sound that just cant be achieved with 2 oscillator synths.

Polygrab Also has a feature to detune the oscillators by semitones. Up to two octaves up and down which can be used to create chords from one key press or to have sub oscillators.

There is also PWM “Pulse Width Modulation” on the squares if selected and an FM Speed and amount knob, which will add subtle to harsh FM sound to all oscillators



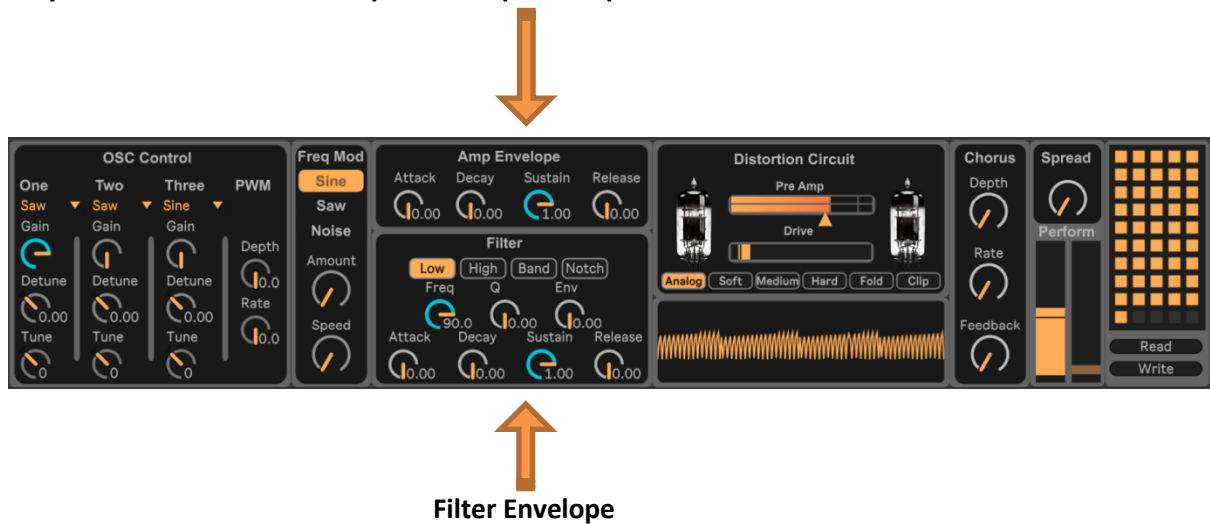
2.2 FM



Polygrab features Fm “frequency Modulation” on all Oscillators with a choice of different sources. Sine, Saw and Noise. There is also a Depth and Rate knob. This can also be used to achieve Jitter on the oscillators aswell as make metallic sounds and add texture.

2.3 Envelopes

PolyGrab features two envelopes **Amp Envelope**

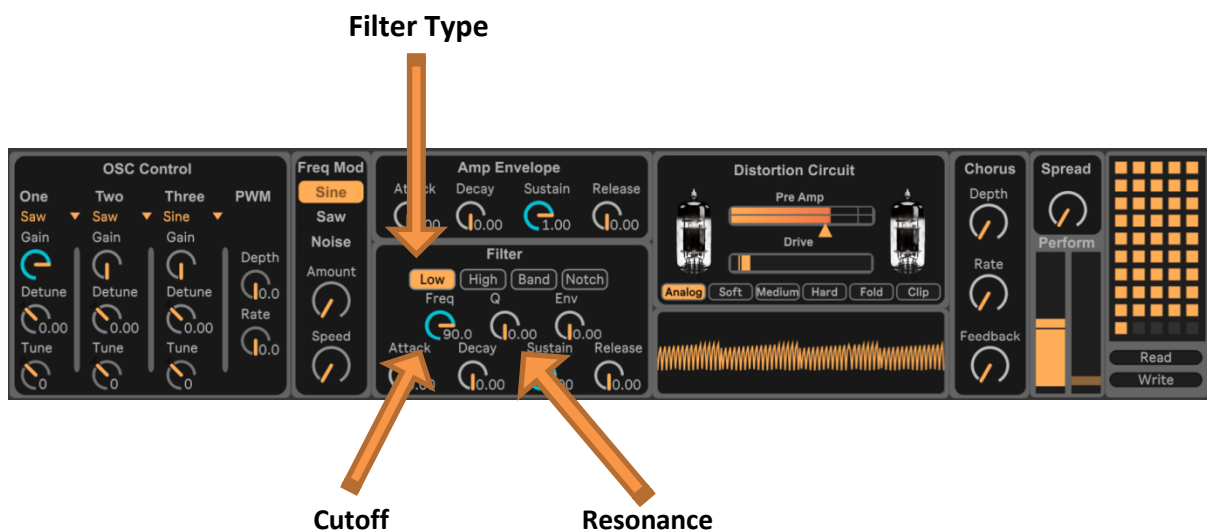


Both envelopes are exponential, allowing you to get percussive and plucky sounds. One is dedicated to the main amp “volume” and the other is for the filter.

Both envelopes feature five second attack, decay and release times. This gives you ability to do massive chord stacks, or have notes ring out and cascade with ease.

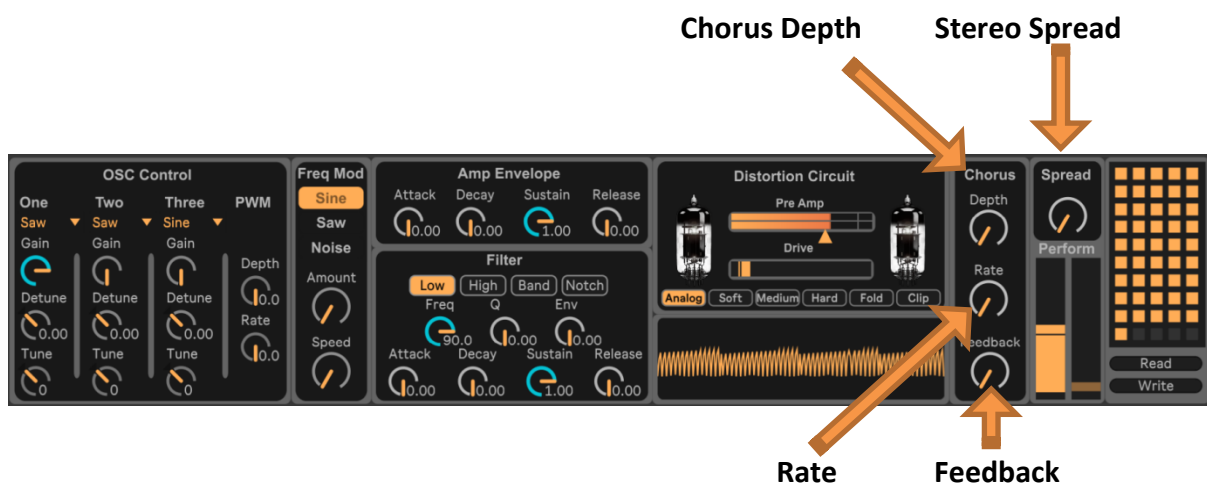
2.4 Filter

Polygrab features a fully polyphonic state variable filter offering Lowpass, HighPass, Bandpass and Notch filters. All Filters have a resonance and filter cutoff knob. There is also a filter depth knob for the filter envelope.

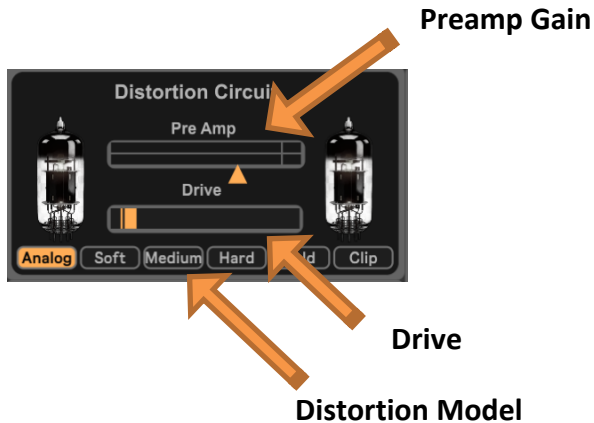


2.5 Chorus/Stereo

Featuring a lush chorus with a depth, rate and feedback knob. Allowing for a thick warm sound on a single oscillator. PolyGrab features a stereo widening knob which creates a lush wide effect using the Haas technique.



2.6 Distortion



Polygrab now features a Pre Amplifier Circuit, with 5 different models available

Analogue, Soft, Medium, Hard, Fold, Clip.

The Preamp gain slider is there for you to drive the signal into the distortion circuit before it is then driven.

For a clean signal you dont want drive and you dont want to hit the preamp too hard.

Conversly having the option for both, allows you push into the preamp hard and cause distortion and then take it further with the drive knob which will cause the valve tubes to light up and the sound to distort even more.

2.7 Velocity Pitchbend/Modwheel

PolyGrab is Fully Velocity Sensitive and has a pitchbend and modhwheel setup for both an external midi controller and onbaord for the mouse.

Pitchbend goes up and down One Octave, and snaps back to the middle when the mouse is let go.

Modwheel is set to vibrato for all voices and there is also a slider which can be saved with the preset.

2.8 Preset Operations

Polygrab Features a fully usable Preset System and comes with a bank of 45 presets to get you started, along with the ability to make and load your own banks.

Note. On Push standalone there is a number box for you to be able to change presets, this is not there on the Ableton version as it is not needed. Simply click a preset box and the sound will change.



Load Preset

Click a box to select a preset. It will instantly load and you can tweak away....

Save Preset

Hold Shift and press a box you wish to save to

Clear a Slot

Hold Alt and Shift

Loading Banks

In order to load a bank, simply click the load button and select your file.

In order to write a bank, simply click the write button and chose a place to save the file.

2.9 Push Banks

Bank 1	Bank 2	Bank 3	Bank 4	Bank 5
FILTER	AMP	OSC	TUNING/FM	EFFECTS/PRESET
1 Filter Cutoff	1 Osc 1 Gain	1 Osc 1 Detune	1 Osc 1 SemiTune	1 Distortion Type
2 Filter Res	2 Osc 2 Gain	2 Osc 2 Detune	2 Osc 2 SemiTune	2 Distortion Drive
3 Filter Env	3 Osc 3 Gain	3 Osc 3 Detune	3 Osc 3 SemiTune	3 PreAmp Gain
4 Filter Type	4 Stereo Width	4 Osc 1 Shape	4 Fm Speed	4 Chorus Amount
5 Filter Attack	5 Amp Attack	5 Osc 2 Shape	5 Fm Amount	5 Chorus Rate
6 Filter Decay	6 Amp Decay	6 Osc 3 Shape	6 Fm Mod Shape	6 Chorus Feedback
7 Filter Sustain	7 Amp Sustain	7 Pitchbend Depth	7 Pwm Depth	
8 Filter Release	8 Amp Release	8 Modwheel Depth	8 Pwm Rate	

3.0 Notes

PolyGrab will remember anything you do within a project including automation.

There is also a full undo history baked in so you can use it like you would any other native Ableton instrument and press command or control z at anytime to undo and redo things. It operates in the same way native Ableton devices do.

Featuring a very high end no compromise sound. PolyGrab has been highly optimized to work well with push 3 standalone and seamlessly on the computer. However due to the amount of calculations needed for a 16 voice synthesizer, I have provided an 8 Voice version. This can be hotswapped without losing your sound, if need be.

There is also a project included that contains a example song using multiple instances of PolyGrab.

PolyGrab uses complete float maths, all of its calculations are to decimal point accuracy. This makes sure there is no compromise in sound. There is no downsampling going on or anything that would degrade the sound in any way.

Made for lush chord stacks overlapping notes with intelligent voice management. Along with Monster Bass Patches, Strong leads and one note chords. Polygrab is highly versatile when it comes to sound design and is laid out in a way to make it intuitive to use.

You will also find Polygrab to be a monster when it comes to bass patches. Try detuning a couple of saws to make a reese sound turning up that clip!

Thanks again for the purchase of Polygrab, alot of time and care went into making this into what it is, without compromising on sound or workflow.