

# SEVEN DEGREES



**Operation**  
Mode: Ext  
Oct Dev: 0 Oct

**Voicing Options**  
Center Note: C3  
Add Bass:   
Omit 1 w/ 7:

**Note Volume**  
Bass: 100.0%  
Tonica: 100.0%  
3rd: 100.0%  
5th: 100.0%  
7th: 100.0%  
9th: 100.0%

**SCALE**  
D  
Major

**MODIFIERS**  
b # m i n m a j ° + - 5 + 5 d o m 7 7 m a j 7 - 9 9 + 9  
C1 Db1 Eb1 E1 F1 Gb1 G1 Ab1 A1 Bb1 B1 Db2 D2 Eb2

**CHORD**  
E-

C4	D4	E4	F4	G4	A4	B4			
I D	ii E m	iii Gb m	IV G	V A	vi B m	vii° Db °			
vii°/iii E °	vii°/vi G °	vii°/ii Eb °	vii°/V Gb °	vii°/IV F °	V/iii E	V/vi G	V/ii Eb	V/V Gb	V/IV F
C5	Db5	D5	Eb5	E5	F5	Gb5	G5	Ab5	A5

# User Manual



# Table of Contents

Introduction.....	3
What is Seven Degrees ?.....	3
What is it not ?.....	3
Requirements.....	3
Quick Guide.....	4
Extended Mode.....	4
Simple Mode.....	5
User Interface.....	6
Settings.....	7
Operation.....	7
Voicing Options.....	7
Volumes.....	8
Chords.....	9
SCALE.....	9
MODIFIERS.....	9
CHORD.....	10
Heat Map.....	10
Upper Heat Map box.....	10
Lower Heat Map box.....	11
Recording / Playback.....	11
Contact.....	12
Copyright and Disclaimer.....	12
Copyright.....	12
Disclaimer.....	12

# Introduction

## What is Seven Degrees ?

Seven Degrees is a tool that lets you navigate through the chords that belong to a selected scale and so, explore and create chord progressions pressing only one note on your physical MIDI keyboard. This way, you don't have to worry about how those chords are actually played and you can get quick and great results even if your piano skills leave a lot to be desired.

It provides possibilities to change key/gender, add chord coloring (like sevens,nines) and gives recommendations for the next possible chords through a heat map.

It is designed as a MIDI FX Plug-In that you can insert into the effects chain of a MIDI / Instrument track in your DAW. Obviously you'll need a (hopefully polyphonic) virtual instrument in the instrument track that produces the sounds (like an EXS24 with a Piano sound loaded, or any other instrument VST/AU).

## What is it not ?

It is neither a tool that makes a star composer of you, nor does it create chord progressions automatically. It is You who is the creative part in this game.

It does not come as a standalone software that includes a sound engine. You'll need to insert it as MIDI effect into an instrument track with a polyphonic virtual instrument attached to it.

## Requirements

- Windows or MacOS operating system.
- A DAW that can handle MIDI effects (like Logic Pro X, Cubase, Reaper...).
- A polyphonic virtual instrument attached to an instrument track in your DAW.
- Graphics with a resolution of at least 800x800 pixels.

Seven Degrees comes as...

- AU plug-in (Audio Unit) for Macs
- VST3 plug-in for Windows

...and is as of today reported to work with

- Logic Pro X on Macs
- Reaper 6.15 on Windows
- Should work with any DAW that can handle MIDI effect plug-ins.  
(Cubase Elements LE can't)

# Quick Guide

## Extended Mode

- trigger the 7 chords (degrees) belonging to the selected scale („Chords“; C4 to B4)
- trigger 10 alternative chords belonging to other scales („Alt. Chords; C5 to A5 )
- jump into a different scale („Key/Gender“; Bb2 to B3)
- add coloring (such as 7ths, 9ths, dim, aug,...) to the triggered chords( „Modifiers“; C1 to Eb2)

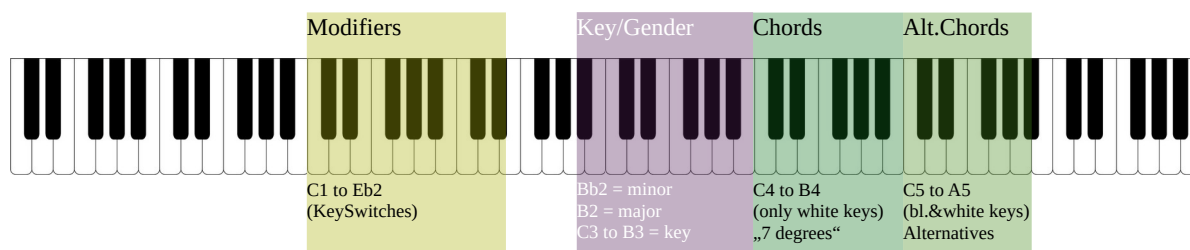
To trigger a chord, just press the corresponding note on the midi keyboard. It'll play until you release the note. The actual name of the chord will be shown in the CHORD section of the UI. Triggering chords is velocity sensitive, and depends on the settings that you make in the „Volumes“ section.

The HEATMAP section on the UI shows you which next chords you can choose from here. Good choices are highlighted in green, best choices in light green.

To jump into a different sale (change key and/or gender), just press Bb2 to B3 once. The new key and gender will be reflected on the UI (see „SCALE“).

You can also change key and gender in the UI, using the dropdown menus in the SCALE section.

To add coloring to a chord, press and hold one or more of the modifier notes (C1 to Eb2) and trigger chords. The selected chord colors will apply to triggered chords as long as you hold the modifier notes. The MODIFIERS section on the UI will show the pressed modifiers with highlighted LEDs.



### Modifiers MIDI implementation map:

<u>Midi Key</u>	<u>Info</u>	<u>Description</u>
C1	(b)	force the chord to be a half tone lower (flat)
Db1	(#)	force the chord to be a half tone higher (sharp)
Eb1	(min)	force the chord to be a minor chord
E1	(maj)	force the chord to be a major chord
F1	(°)	force the chord to be a diminished chord
Gb1	(+)	force the chord to be an augmented chord
G1	(-5)	force the fifth a half tone lower (b5)
Ab1	(+5)	force the fifth a half tone higher (#5)
A1	(dom7)	add a seventh and force it to be a dominant seventh
Bb1	(7)	add a seventh (natural 7, that belongs to the scale)
B1	(maj7)	add a seventh and force it to be a major seventh
Db2	(-9)	add a flat ninth (b9)
D2	(9)	add a ninth (natural 9, that belongs to the scale)
Eb2	(+9)	add a sharp 9 (#9)

## Simple Mode

- trigger the 7 chords (degrees) belonging to the selected scale („Chords“; C2 to B2)
- trigger 10 alternative chords belonging to other scales („Alt. Chords; C2 to A2 )
- play melodies along with the triggered chords („Melody“; from C3)

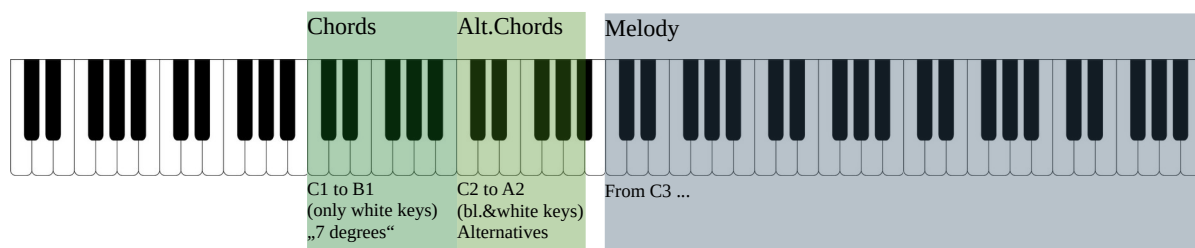
To trigger a chord, just press the corresponding note on the midi keyboard. It'll play until you release the note. The actual name of the chord will be shown in the CHORD section of the UI. Triggering chords is velocity sensitive, and depends on the settings that you make in the „Volumes“ section.

The HEATMAP section on the UI shows you which next chords you can choose from here. Good choices are highlighted in green, best choices in light green.

To play melodies along with triggered chords, just use the MIDI keyboard as usually (from C3 upwards)

### Notes:

- The melody section uses the same instrument/channel as the chords section does. If a melody note is identical to one of the currently sounding chord notes (concurrently), the note in the used virtual instrument will retrigger and will not be stopped until you release the chord.
- Key/Gender changes or chord coloring is not possible in this mode (would need a physical MIDI keyboard with several additional octaves, and this makes no sense).



# User Interface

Settings

Chords

Heat Map

**SEVEN DEGREES** ...by **PulpoAudio**

**Operation**  
Mode: Ext  
Oct Dev: 0 Oct

**Voicing Options**  
Center Note: C3  
Add Bass:   
Omit 1 w/ 7:

**Note Volume**  
Bass: 100.0%  
Tonica: 100.0%  
3rd: 100.0%  
5th: 100.0%  
7th: 100.0%  
9th: 100.0%

**SCALE**  
D  
Major

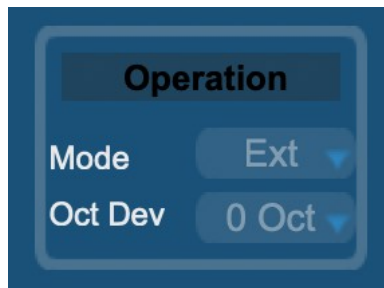
**MODIFIERS**  
b # min maj ° + -5 +5 dom7 7 maj7 -9 9 +9  
C1 Db1 Eb1 E1 F1 Gb1 G1 Ab1 A1 Bb1 B1 Db2 D2 Eb2

**CHORD**  
E-

C4	D4	E4	F4	G4	A4	B4
I D	ii E m	iii Gb m	IV G	V A	vi B m	vii° Db °
vii°/iii E °	vii°/vi G °	vii°/ii Eb °	vii°/IV Gb °	vii°/IV F °	V/iii E	V/vi G
V/ii Eb	V/V Gb	V/IV F	C5	Db5	D5	Eb5
E5	F5	Gb5	G5	Ab5	A5	

# Settings

## Operation



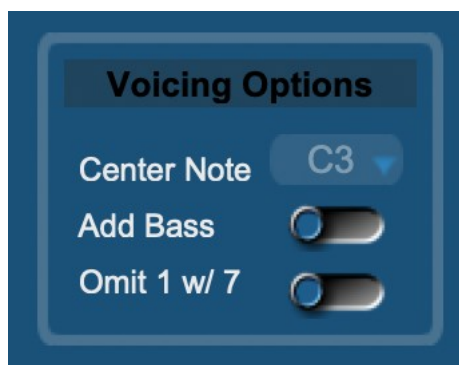
There are 2 operation modes available:

**„Ext“** (Extended): enables you to play chord progressions (MIDI keys C4 to A5),  
change key (MIDI keys C3..B3),  
change gender (MIDI keys Bb2=minor, B2=major),  
add colour to chord with modifiers (MIDI keys C1 to Eb1)

**„Simple“**: enables you to play chord progressions (MIDI keys C1 to A2),  
play free melody (MIDI keys from C3 upwards)

**Oct Dev** (Octave deviation) belongs to the „Simple“ operation mode and lets you shift the octave for melody playing (MIDI keys C3 upwards) up and down.

## Voicing Options

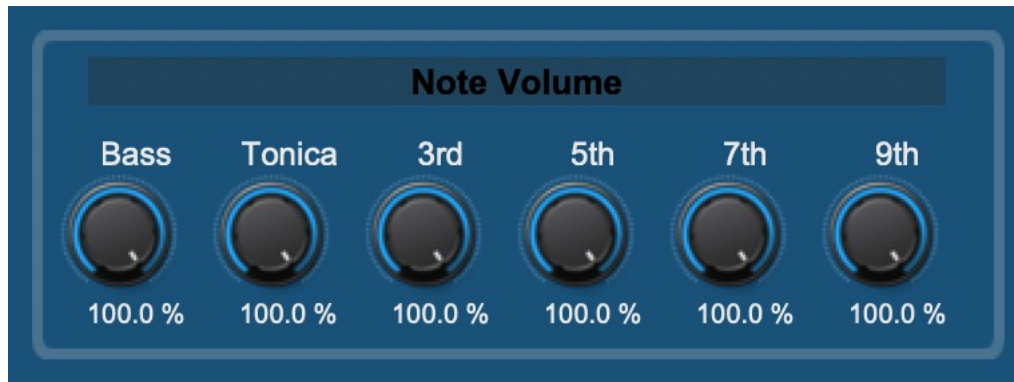


The chord voicing of SevenDegrees works like „as close around the Center Note as possible“. Don't expect any nice Jazz voicings here (spread across 2 octaves or so). It is very basic and you can make some basic adjustments here...

Center Note : Select the center note to which the chords are buildt around.  
C3 is default and a good starting point.

Add Bass : Add a bass note (tonica) one octave lower than where the chord is centered.  
Omit 1 w/7 : Keep the tonica silent when a seventh is added to the chords.  
This can make the chord sound a bit cleaner, especially when the 7 is added below the tonica.

## Volumes

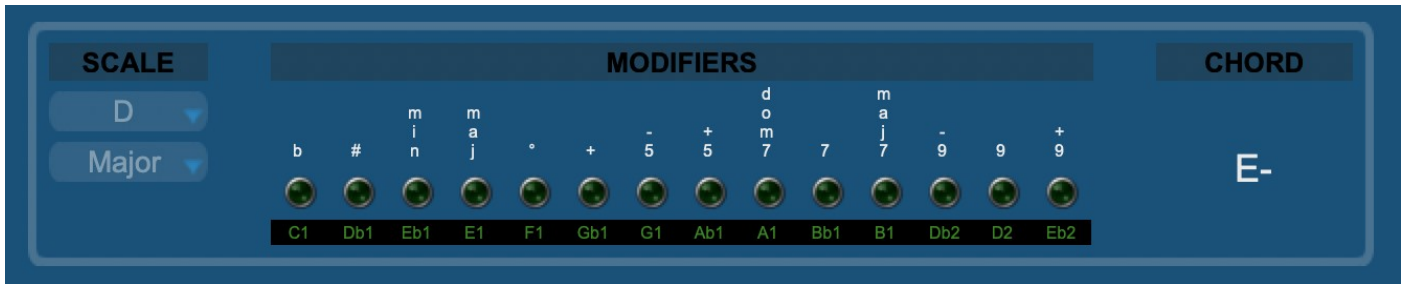


In this section you can adjust the volumes of the single notes of any chord. It may e.g. be that you want the sevenths or ninths to sound a bit more decent than the triad. In this case just lower the volumes of „Seventh“ and „Ninth“.

The resulting „volume“ will be the shown percentage of the actually pressed velocity.



# Chords



The Chords section contains 3 sub-sections:

## SCALE

Shows the selected key/scale.

All chords/progressions will be relative to the notes of this scale.

You can select a different key (C to B) and gender (major/minor) here, or you can trigger a scale change on the MIDI keyboard using:

- C3 to B3 (key)
- B2 (major), Bb2 (minor)

The combo boxes will reflect all changes made with the MIDI keyboard.

## MODIFIERS

The modifiers section is basically an array of LEDs that show you which chord modifiers you have pressed on your MIDI keyboard. You can not activate modifiers via mouse click on the UI !

Chord modifiers are available on the MIDI keyboard from C1 to Eb2, work as keyswitches and will apply to the chords that you play with C4 to A5, as long as(!) you hold the modifier keys.

The info above the LEDs indicates which kind of modifier belongs to the LED, the info below the LED indicates which note on the MIDI keyboard activates the modifier.

Modifiers MIDI implementation map:

<u>Midi Key</u>	<u>Info</u>	<u>Description</u>
C1	(b)	force the chord to be a half tone lower (flat)
Db1	(#)	force the chord to be a half tone higher (sharp)
Eb1	(min)	force the chord to be a minor chord
E1	(maj)	force the chord to be a major chord
F1	(°)	force the chord to be a diminished chord
Gb1	(+)	force the chord to be an augmented chord
G1	(-5)	force the fifth a half tone lower (b5)
Ab1	(+5)	force the fifth a half tone higher (#5)
A1	(dom7)	add a seventh and force it to be a dominant seventh
Bb1	(7)	add a seventh (natural 7, that belongs to the scale)
B1	(maj7)	add a seventh and force it to be a major seventh
Db2	(-9)	add a flat ninth (b9)
D2	(9)	add a ninth (natural 9, that belongs to the scale)
Eb2	(+9)	add a sharp 9 (#9)

Note:

although you can press more than notes in the modifiers range, there are some combinations, that will not work together. Obviously, you can't make a chord

- minor AND major,
- flat AND sharp,
- diminished AND augmented
- dom7 AND 7 AND maj7
- -9 AND 9 AND +9

## CHORD

In this section, the currently played chord will be displayed in plain text, like „ C maj7“.

## Heat Map



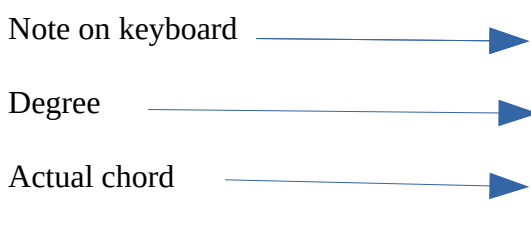
The Heat Map is basically showing you to which chord (degree) to go best from „here“ (here = the currently sounding chord).

- Blue boxes: possible but maybe not the best choice
- Green boxes: good choice according to popular chord progressions
- Light Green boxes: best choice

The Heat Map displays two lines of chords.

- The upper line contains the seven chords (seven degrees) belonging to the selected scale.
- The lower line contains ten alternative chords belonging to other scales.

## Upper Heat Map box



## Lower Heat Map box



(\*) In this particular example, the box means a 7th (diminished) degree of the second degree scale (relative to the current scale). So, if our selected scale is D major, its second degree is E minor. The resulting chord is 7th degree (dim) of E minor = Eb°

## Recording / Playback

You can, of course, record your chord progression performance into a MIDI track and play it later on.

Just keep in mind that performances recorded in Extended Mode won't work for Simple Mode during playback (and vice versa).

## Contact

Find us in the web: <http://www.pulpoaudio.com>

For support contact us by e-mail: [pulpo@pulpoaudio.com](mailto:pulpo@pulpoaudio.com)

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### Disclaimer

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