## **One-Finger Chord Device**

by Andrew Kendall

February 15, 2020



Ableton Live MIDI device for non-piano players (like me) to noodle with chords. Beta version I guess – just an experimental thing; incomplete but useable.

It gives you the ability to play, with one finger, a bunch of typical, useable chords – and the individual minor scale notes – within four octaves of your MIDI keyboard.

By default it is based around the C (natural) minor scale insofar as the root note of all the chords is one of: C, Eb, F, G, Ab and Bb. As well as the C minor scale chords, there are also corresponding *major*, *minor 7th*, *add 9*, *sus 2* and *major 7th* chords. Thus, for the aforementioned six notes there are six flavours of chords.

Remember that the natural minor scale is the Aeolian mode; the tonal intervals from the root note are: tone, semitone, tone, tone, semitone, tone, tone. For example, the C minor scale:

C (t) D (st) Eb (t) F (t) G (st) Ab (t) Bb (t) C

The choice of chord groups was based purely on personal taste, inasmuch as I found that this collection of chords – all centered around a minor scale – can work well together. I've found it somewhat easier to break out of the typical chord progressions heard everywhere, eg. 1-4-5-6.

Note that the not-so-agreeable D diminished chord is excluded (following the pattern of the Circle Of Fifths). It was arbitrarily decided to also exclude *any* chord with a D root note – purely on the basis of limiting the scope of chords to the C minor scale.

Of course, you don't have to stick to the C minor scale. You can transpose to *any* minor scale. For the sake of simplicity, however, this document explains things in the context of the C minor.

In order to squeeze everything into a relatively small number of keys, the device completely perverts normal keyboard usage. However, it's designed purely for experimenting with harmonies so once you get used to the different layout, you are less concerned about key positions etc. It's more about just pressing the different keys, listening to the chords, and noting pleasant chord progressions when you discover them. Anything you compose can be recorded to plain MIDI notes in Ableton Live for you to alter as required.

## **Using The Device**

Drag the device to a channel and insert an instrument after it. It works best if your instrument is velocity-sensitive.

By default the chords play in a central region of the keyboard, typically C3 – B3, but they also include an additional bass root note an octave lower.

There are three modes available, all controlled by the *Auto Trnspos* control:

- 1. Values 0 31. All chords are played in conventional note order.
- 2. Values 32 63. A fixed transposition of notes occurs in certain chords in order to keep the chords playing in the same general octave region. Purely based on how it sounded when I created the device. But, hey, I might change it if I use it a lot. Feel free to delve into the device chains to tweak to your taste.
- 3. Values 64 127. Some automatic random transposition of the chord takes place, to add spontaneous flavour.

The **Base Vel On** control is to enable a set velocity for all notes. If this control is set to zero, it is switched off and the instrument will – if it is velocity-sensitive – play as loudly as you hit the keys. To enable it, set it to 1 or above, which enables the **Base Velocity** and **Rand Vel Amt** controls.

**Base Velocity**. When **Base Vel On** is enabled this determines the velocity of all notes. In conjunction with this use **Rand Vel Amt** to set an amount of random velocity variation either side of the value set with **Base Velocity**.

**Bass Only**, when set to any non-zero value, tells the device to play only the lower-octave root note of the chord. You can use this to mirror a bass line from your chord sequence, by having a separate channel with an instance of *OFC Minor Chord.adg* and a bass instrument; both your instrument channels will play the same MIDI clips.

The **Pitch** control is for setting the device to play in another key by transposing all notes.

At the upper end of the keyboard, just beyond the six chord groups, ie. beginning at C4, eight keys will play a minor scale. This area is for adding simple melodies to accompany your chord playing.

The keyboard diagram shows the seven zones for playing the different chord groups and the minor scale notes. As explained, this illustrates the chords and notes for the C minor scale. If you transpose to a different key, using the *Pitch* control, obviously the keys will play different chords and notes.

