KleeNext

User Manual - Version 1.0

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1.1 Device Overview

KleeNext is a MIDI plugin that generates MIDI notes for melodic purposes. Inspired by a few Euro Rack trigger/gate sequencers, KleeNext takes the unique sequencer environment from the euro rack world and puts it into the DAW. The complex interaction of selected note combinations and the ratchet possibilities allows very little input to make dramatic changes to melodies while still maintaining continuity from one melody to the next.

KleeNexts' recommend use is for melody making and idea generating. Any favourable melody lines should be recorded and save via record to MIDI clip. This is the optimal way to save your work and edit your melodies for your own musical purposes. Because of the complexities of this interface, it is not optimised for Ableton Push. Parameters that can be mapped are available on the Push. But unfortunately full control is only available via the computer.

1.2 System Requirements

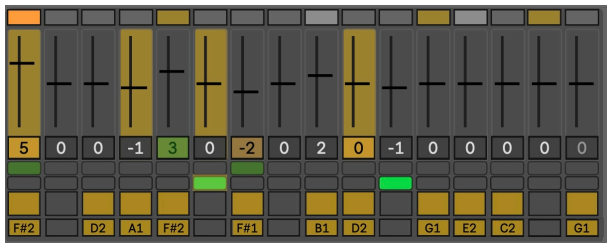
- Ableton Live 11 or 12.
- Max for Live (included with Live Suite).

1.2 Installation

- Double-click the installation file or drag it directly onto an open instance of Ableton Live.
- A dialogue box will appear with a notice and ask if you'd like to continue.
- Click Yes
- The device will now be installed under: Packs > KleeNext
- Drag the device onto a MIDI track that has an synth or other sound generating device in Live to begin triggering notes.

2.1 Device Structure

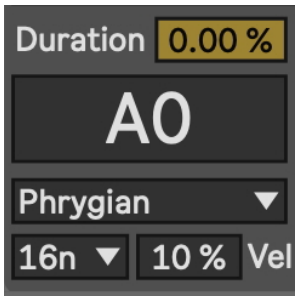
- This is the step sequencer controlled by sliders with numbers corresponding to the scale degree. Above are the bits that control triggering. Mutes and ratcheting are at the bottom.

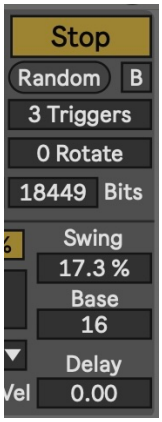


- This has more global control over the sliders and also designates the root note and scale length of the sliders

- Designates the amount of steps per measure. Can reset the sequencer, enable a 'drunk walk' to the sequencer and toggles between the 2 sequencer modes.

- Controls sequencer scale, duration, velocity variation and subdivision of the sequence in relation to the DAW. Displays current MIDI note being played.



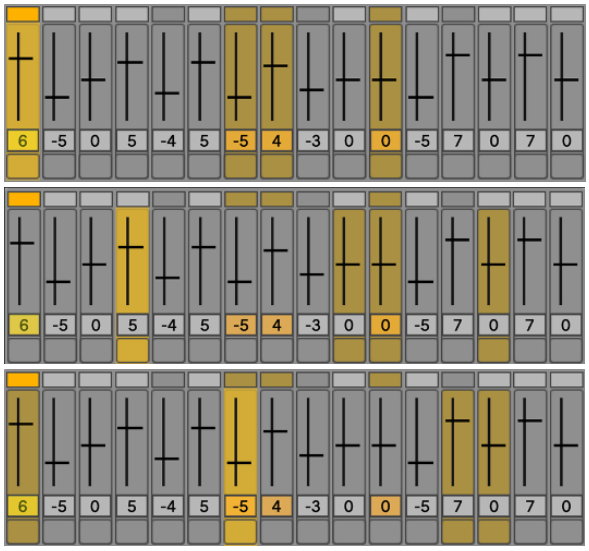


- Starts and Stops the sequence playing. Generates random bits based on the assigned number of triggers. Rotating the bits and finally a binary display of the bit selection. -/+ Swing with base function and delay which can speed up or down the sequence.

- Saving presets and retrieving presets.

3.1 Triggering Notes - Klee Mode

Here is where the melodies are inputed using sliders. Zero means no note is sounded. One is the root note of the scale and is determined by the dial Root. The scale dial controls how many notes are available to you on the slider. To understand how the sequencer works, we will talk about the Klee mode and then expand into the Next mode.



Pic 1

Pic 2

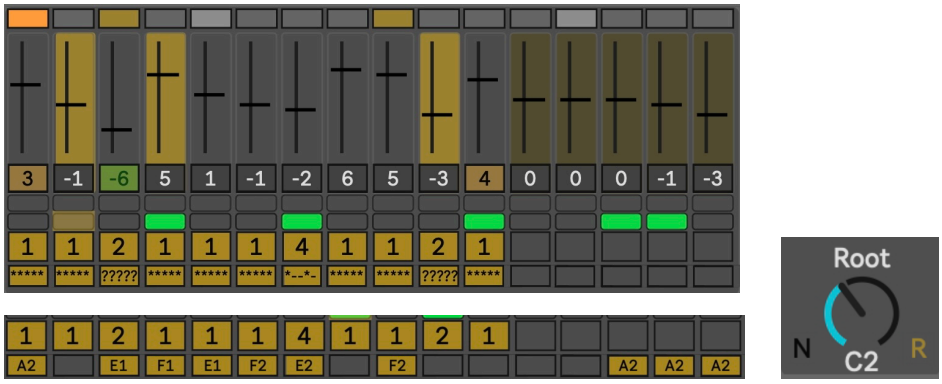
Pic 3

- **Bits** – Below are the boxes used to trigger notes. In the above picture (pic 1) we see that boxes 1, 7, 8, and 11 are assigned. How the sequencer works is as the light colored bar moves in time with the music it adds up the notes from the boxes assigned. So, in this example we see that in step one, note one is 6, note 7 is -5, note 8 is 4 and 11 has no note. The note played on step one will be the sum of all these notes (5). As the sequencer moves past step one and gets to step four (pic 2) the only note is the four step with 5. Moving to step seven (pic 3) the notes are -5, 7, and 6 equalling -4

Without changing any notes in the sequence, you can change the melody by changing the bits (number of notes triggered at a time)!

3.2 Triggering Notes - Next Mode

Now after understanding how the Klee system works, lets add more functionality by clicking on the Next mode. When toggling the Klee / Next button to Next as we see below, two more parameters are shown to us in the default mode. You can flip between the MIDI notes and the ratchet rhythms by clicking on the N button the to left of the Root Dial.



- Trigger Count (1-8) – Below the green mute buttons this number box sets how many triggers of the given note are sounded before moving to the next step. First we see step 7 with a gate of 4 steps. This means that the note in step 7 plays 4 times before moving to the next note.

- Ratchets – This toggles between seven different ratchet modes. Please note that the pattern changes the more steps are assigned. After the 5th step, the pattern repeats:

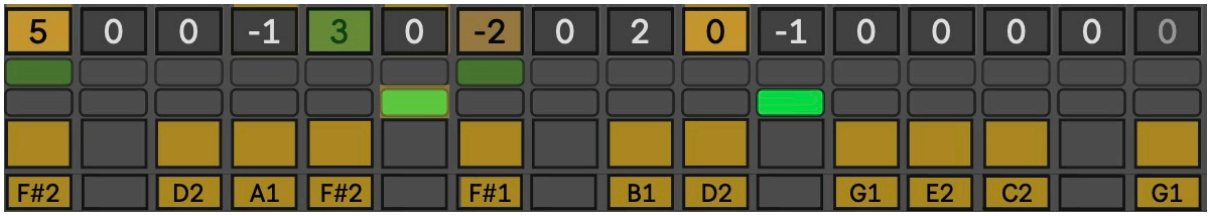
  Setting pattern (4) to 8 Steps will be:
  On, Off, On, Off, ***On, On****, Off, On*

  · 1) Off
  · 2) Note On then Off all other times
  · 3) Note On every time
  · 4) Note On, Off, On, Off, On
  · 5) Note On, Off, Off, On, Off
  · 6) Note On, Off, Off, Off, On
  · 7) Random pattern generated every measure

- ????? - When this is assigned the plugin will create a random pattern. This is set when engaged and never changes. If you'd like to have another pattern, just click on it again. You can also have the pattern change every bar by clicking on the R button to the right of the Root dial.

4.1 Muting Notes - Klee Mode

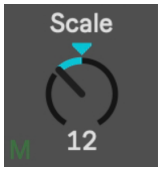
There are two ways to ‘manipulate' the notes created with he sliders. I say this because when you ‘mute’ one note it might effect another note in the sequence, changing its pitch or making no pitch at all. So there are two ways to mute notes. This gets a bit mind bending so I apologise if the manual is confusing. Please reference my walkthrough on YouTube to get the clearest explanation along with audio sonic understanding. I strongly suggest making the simplest pattern and getting familiar with the controls and what they do before making more complex patterns. Once you get the hang of how notes are displayed and how you can manipulate it, you will become quite fast at creating patterns you want and feel more in control of the plugin. But be warned, it does get dicey and part of the fun is that it gets quite complex really quickly!



- Master Mutes – The simplest to understand because it is applied at the end of the processing so it simply mutes notes and creates no ‘side effects’. This is the light, bright green button seen above. The note in brown at the bottom will no longer be visible (step 6 and 11 seen above). Steps 2 and 15 were naturally created.

- Klee Note Mute Selector - By clicking on the 5th step (3) note (seen above) it is displayed that that note effects 3 other notes in the sequence (seen in brown). This give you an understanding, even just a little bit, of what is controlling what. So in this example if you would like to not have the 5th step (3) note effect the 7th (-2) note and the 1st (5) note, the dark green boxes are engaged. Below you will see the note be updated to another value. Coarse there might be other notes effecting the note you are focusing on and simply scroll the number boxes to see them highlighted.

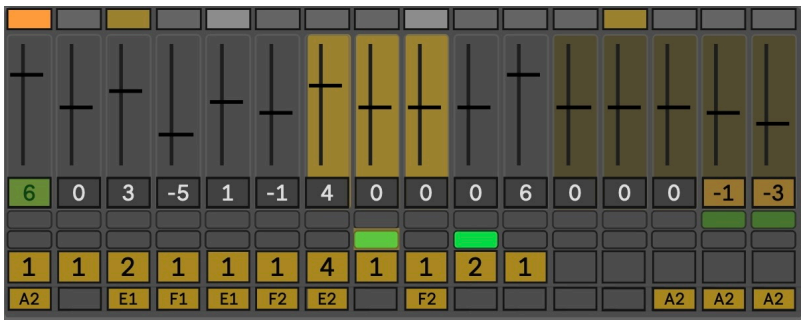
- Clearing mutes by clicking the M. If the M is green, there are mutes engaged. Black means no mutes are assigned.



4.2 Muting Notes - Next Mode

OK! So that was confusing but hold on to your hats cuz this is gonna get messy. The displays of all these parameters are a bit different, when needed, than Klee Mode and this is to make its as compact and simple as possible. But unfortunately it is complicated to understand what your seeing. Sometimes it seems wrong but unfortunately it is always right.

So Next uses ratcheting to control the progression of the steps. Because of the interaction of the notes in relation to other notes, the ratchet possibilities don't create small time divisions. So what's all this then. Lots to unpack. The default steps are always 16. When you assign step 3 to two steps, step 7 to 4 steps, and step 10 to 2 steps, the total is still 16. This helps quickly make patterns that maintain the traditional 16 step sequence. Using the Step dial you can make this pattern smaller if you wish. Because 5 steps were added to other steps, the last 5 steps are 'grayed out' to show that they are not being used.



- Next Master Mute Selector - Because this now has 2,4 and 2 steps on just one note (steps 3,7 and 10), the mutes are layed out in order so you can mute 2 of the 4 steps (steps 2 and 4 of the 4 steps) (seen above). The mutes correlate to the the 16 steps (or less) of the sequence. So the Master mutes do not correlate to the numbers or sliders but the MIDI notes at the very bottom. The green mute looks like it is muting the 2 steps on the 10th step but it is really the 4th ratchet of the 7th note.

- Next Note Mute Selector - So this is where is gets complicated. As you can see above the Bits are at position 1,3 and 13. BUT on the sequence tracking it has compressed to be one after another and not spaced the same way. This is because of the ratcheting. As you select a note to mute like in the Klee, you will see it have a different pattern, similar to the bits.

5.1 Global Sequencer Controls

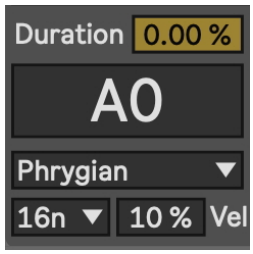
These affect all the sliders of the sequencer and are used to control all of them at once.

- Note Range - This controls range amount of random note generation. If the scale dial was set to 10 and the note range was set to 80%, notes would be between 1 and 8.
- Random - Is the amount of random notes created. So set to 50% means any 8 out of the 16 steps will generate notes.

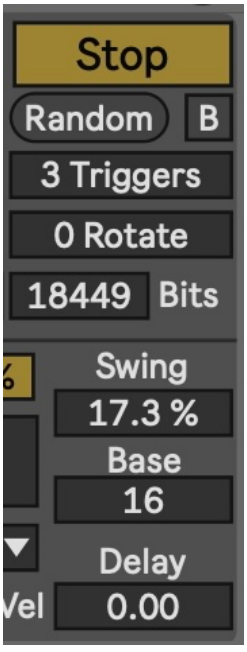
- Zero / Rand - Clears all notes / Creates random note values based on the previous parameters.
- Scale - Sets the amount of notes the sliders can access.
- Root - Selects the root note of the scale.
- M - When clicked, clears all note mutes. When green means there are mutes engaged. Black mean no mutes have been set.
- N - In Next Mode it can toggle between displaying the MIDI notes and the ratchet rhythms.
- R - When engaged creates new random patterns in the ????? ratchet after every bar.

- Klee / Next - Toggles between Klee and Next sequencer modes
- Steps - Sets the master amount of steps in your sequence.
- F / L - F means free mode and L will re-trigger the sequence from the beginning on the down beat of a new bar. This is helpful if you have odd numbered pattern.
- 0-100 - Is a drunk walk that is engaged more the higher the number.

6.1 Scales, Duration, and Random Bits



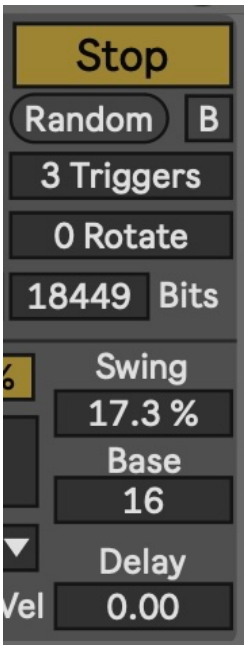
- Duration - Set at zero every note is the duration noted below the scale setting. Moving up to 100% the step duration will increase in sustain till it will ring out till the next note played. So the note duration will vary depending on when the next note is triggered. Going down to -100% will slowly decrease the note duration from the base duration at zero (16th), down to close to a pure trigger (128th).
- MIDI Note - Displays what note is currently being played.
- Scales - This is a list of 30 scales that can be used to map to the sequencer. If you would like to use anther form of scale creator, just put it in chromatic mode.
- 16n - This controls the tempo subdivision of the sequencer.
- Velocity - This is a probability/random velocity parameter that when set to 0% creates no variation. Set at 20% means that there is a 50% chance a note velocity will be between 127 and 101. Set at 50% means there is a 50% chance the velocity will be between 127 and 64.



- Stop / Start - Starts and stops the sequencer.
- Random - Generates a random placement of bits based on the number of Triggers supplied in the number box below the random button.
- B - When engaged will trigger random rotation of bits along with the random number of bits.
- Rotate - This rotates the Bits pattern forward or backward.
- Bits Display - This shows the binary number of the bit value used. You can input numbers into this field to call up a bit pattern.

6.1 Scales, Duration, and Random Bits (cont..)

- Swing - Sets the amount of Swing -/+ values. This is NOT linear. This helps make subtle changes to the rhythm.
- Base - Is the base division value of how swing is generated.
- Delay - This can place the sequencer ahead or behind the beat. This is NOT linear and it becomes more dramatic as the number gets closer to -/+ 100%.



7.1 Presets - Recall & Saving

- Clicking on the number designates where the preset will be saved. Click the box next to the highlighted number to save. A light will signify that number has a preset saved to it. Engage Recall and then click on any number to move between patterns saved patterns. The clear button is *disengaged* when In Recall mode to protect accidental erasure. To clear a preset, disengage the Recall button, click on the preset number and click clear. The light will go away and the preset bank has been cleared.

This is to mainly function as a quick way to toggle between similar patterns. Its always best to record your patterns to MIDI clips so you never have to worry about presets, finding them again and the possibility of the pattern being erased.

- Saving Presets in Ableton. Click on the save/floppy disk icon to save your preset configuration of KleeNext. Then give your preset an identifiable name for easy recall later.