Korde Sequencer

Operation Manual

Version 1.2.2



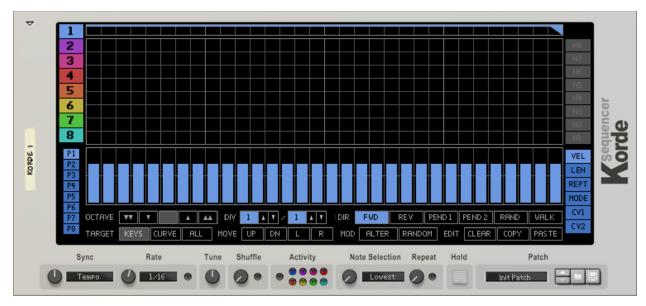


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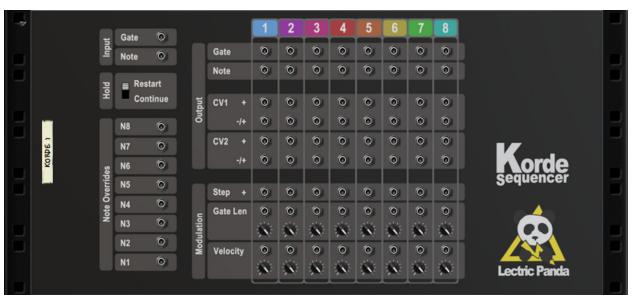
Velocity

Introduction

Korde is an 8 voice arpeggiator sequencer hybrid. You get a classic matrix style editor where each row is dynamically assigned a note as its played.



Front Panel



Back Panel

Quick Start

Connections

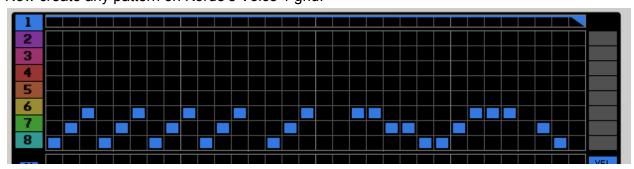
First create an instance of any device that accepts CV Gate and CV Note input on its back panel. Stock Reason synths (Subtractor, Malstrom, Thor) all accept CV input. Next create an instance of Korde. Then, connect Korde's Voice 1 Gate and Note output to the input of the first device via the back panel.



Korde Voice 1 connected to Thor's Gate and CV Input.

Pattern

Now create any pattern on Korde's Voice 1 grid.

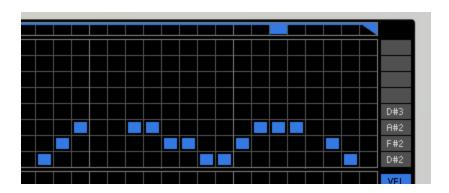


Playing

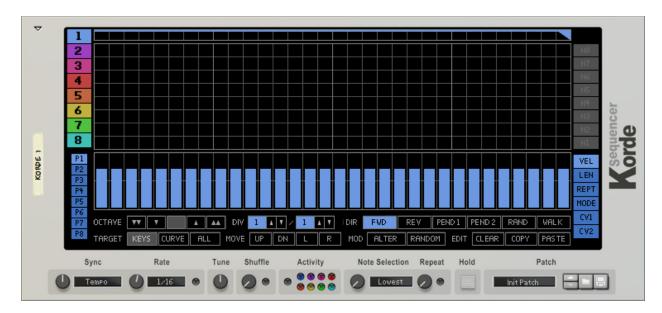
Now make sure Korde has keyboard focus on the main sequencer.



Play some notes into Korde. You should see Korde start running, the notes on the right hand side of the grid populate, and hear thor playing notes.



Front Panel



Sync & Rate



The Sync and Rate parameters determine Korde's note timing. The Sync parameter has three options:

- Free sets a specific rate in notes per second (Hertz).
- **Tempo** will synchronize Korde to the tempo of the song. The sequence will start from the beginning on the first key down, regardless of song position. The rate is set in standard note divisions from 1/1 to 1/128.
- **Transport** will hard lock to the songs play position. The sequence will start from the position that aligns with the current song position. The rate is set in standard note divisions from 1/1 to 1/128.

Tune



The tune parameter allows for a global adjustment of the CV output notes for all eight voices. The allowable scale ranges from -24 semitones to +24 semitones.

Shuffle



The shuffle parameter with introduce a shuffle into the playback. The light indicates the shuffle is active. Shuffle can only be active in **Tempo** and **Transport** sync modes, with any of the rates from 1/16 to 1/128.

Activity



The activity area shows incoming notes and outgoing CV gate events. The incoming light is white and on the left side. The outgoing CV gate events on the right are colored to correspond to the voice.

Hold & Sustain

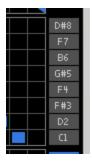


Enables Hold / Sustain. Incoming notes are sustained and the sequence plays until all notes have been released and another new note plays. Playback behavior when another new note arrives are controlled by the **Hold Retrigger** switch on the back panel. This feature is also enabled via the Sustain performance parameter (Midi controller 64).

Note Selection & Repeat



The Note Selection and Repeat parameters decide how incoming notes get distributed to the rows on the grid. All notes are distributed on the grid from bottom to top. The bottom is row 1, and the top is row 8.



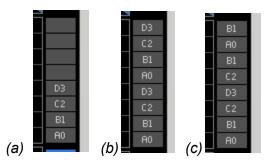
Row 1 with a C1 and Row 8 with D#8.

The Note Selection parameter has the following options:

- The **Lowest** note will be placed on Row 1 with each higher note filling upwards.
- The **Highest** note will be placed on Row 1 with each lower note filling upwards.
- The **First** note played will be placed on Row 1 with each later note filling upwards.
- The **Last** note played will be placed on Row 1 with each earlier note filling upwards.

The Repeat parameter has the following options:

- Off will disable any repeat function.
- Repeat will fill the unused rows up by repeating the played notes in order.
- Mirror will fill the unused rows up by cycling up and back down the played notes.



Repeat parameters with notes A0,B1,C2,D3. (a) Off. (b) Repeat. (c) Mirror.

Voice Selection



This selects which of the eight voices are being edited. Each Voice has its own output section on the back panel with a corresponding number and color.

Pattern Selection



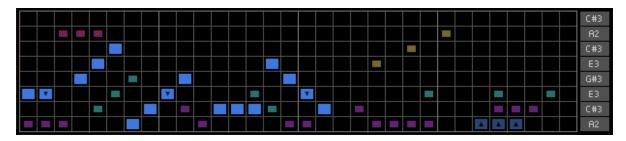
This selects which pattern is being edited and currently played for the voice. Each Voice has 8 patterns to select from. Each pattern has its own length, note grid, cv curves, rate multiplier, and direction.

Length and Play Position



The pattern length is designated by the step with the triangle. Clicking the grid will set the pattern length. The moving square indicator is the current play position of the pattern.

Grid & Note View

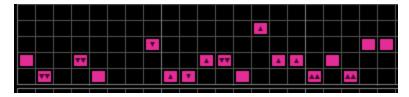


This is a the main drawable grid for a pattern. Each row corresponds to the note on the right hand side note view. Click to draw a note on the grid. When the play position is on a given column, the current note for that row will be emitted from the voices note and gate CV.

Octave Selection



This sets the octave of the notes to be drawn on the grid. The range is -2 octaves to +2 octaves. Each step on the grid can have its own octave modifier.



A Grid showing steps with different octave modifiers.

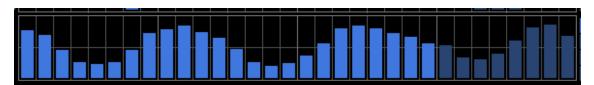
Curve Selection



This selects the curve to be editing. The following curves are available:

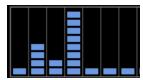
- **VEL** (Note Velocity) the level of the Gate CV output.
- **LEN** (Gate Length) the duration of the Gate CV output.
- **REPT** (Repeat) the steps from 1-8 times.
- **MODE** (Repeat Mode) selects how to repeat.
- **CV1** A general purpose CV curve to modulate other devices.
- CV2 A second general CV curve to modulate other devices.

Curve Editor



Clicking and drawing on the curve editor will modify the values for the curve that is selected. The **VEL** (Note Velocity) curve CV range is 0.0 to 1.0. The **LEN** (Gate Length) curve's range is 0% to 100% of the note duration. A **LEN** value of 100% will cause the gate CV to stay on and cause legato sliding. **CV1** and **CV2** has a range of both 0.0 to 1.0 (unipolar) and -1.0 to 1.0 (bipolar), depending on which output on the back panel is chosen. For the bipolar output, the middle horizontal line equals a CV value of 0.0.

The **REPT** curve selects a stepped number of times to repeat / multiply the base step duration from 1-8. The behavior of the repeats is selected with **MODE** curve.



REPT curve with 1,4,2,8,1,1,1 step repeats.

The Repeat **MODE** curve will selects how the **REPT** curve is interpreted. There are currently 4 modes supported.

First Step Sends on the first repeated step, the remaining steps are off.	Repeat Sends on each repeated step.
Whole Multiples a single step duration by the number of repeats.	Ratchet Subdivides a single step by the number of repeats creating a rapid pulsing effect.

Pattern Rate Division



An extra modifier to the rate that is per pattern. Sets the fraction of step off the global rate. Numerator and Divisor can be set from 1 to 128.

Global Rate	DIV	Pattern Rate
1/1	1/16	1/16
1/1	1/4	1/4
1/16	1/2	1/32
1/16	4/1	1/4
1/16	2/3	1/16T
1/16	2/6	1/32T
1/16	7/3	7/48

Pattern Rate Division Examples

Pattern Direction



Sets the direction of the pattern. The following direction options are available:

- FWD (Forward) Loops the pattern from first step to last step
- **REV** (Reverse) Loops the pattern from last step to first step
- **PEND1** (Pendulum 1) Loops the pattern from first step to last step, then last step to first step. The first and last steps will play twice.
- **PEND2** (Pendulum 2) Loops the pattern from first step to last step, then 2nd last step to 2nd to first step. The first and last steps will play once.
- RAND (Random) Steps played in a random order.
- **WALK** (Random Walk) will randomly chose to step backward, stay and retrigger, or step forward with a bias for forward movement.

Note: CV Step modulation via the back panel will override the direction setting and set the position directly.

Tools

Tool Target



Sets the target that the rest of the tools will operate on:

- KEYS tools will affect only the notes
- **CURVE** tools will affect only the selected curve
- ALL tools will affect both notes and curve and sometimes the whole pattern as noted in the sections below.

Move Tools



Movement tools will allow the patterns to be shifted **Up**, **Down**, **Left**, or **Right**. Notes will wrap around when moving up or down. Curves will not wrap around when moving up or down. Operates on the notes and the selected curve depending on the target selection.

Modification Tools



Modification tools will only affect the area that is currently within the pattern length. Items outside the pattern length will not be modified. **Random** will set all the values to a random number. The **Octave Selection** will also be used to determine the level of random octave modifiers to use on the notes. Setting an Octave Selection to +1 or -1 will cause the random pattern to have -1/+1 octave modifiers. **Alter** will shuffle the values that are already contained in the pattern. Operates on the notes and the selected curve depending on the target selection.

Edit Tools



The Clear, Copy, Paste tools behave differently based on what Tool Target is selected.

Clear

With **KEYS** selected, clears out the notes from the grid. With **CURVE** selected, clears out the currently selected curve. With **ALL** selected, resets the entire pattern including length, rate, direction, notes, and all curves.

Copy

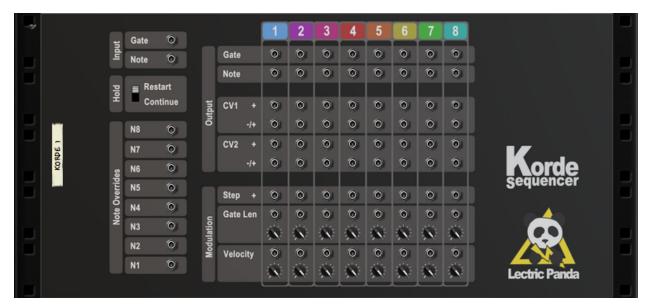
With **KEYS** selected, copies the notes from the grid. With **CURVE** selected, copies the currently selected curve. With **ALL** selected, copies the entire pattern including length, rate, direction, notes, and all curves.

Paste

With **KEYS** selected, pastes the notes to grid. With **CURVE** selected, pastes to the currently selected curve. With **ALL** selected, pastes the entire pattern including length, rate, direction, notes, and all curves.

Note: Behavior is undefined if you copy from one **Tool Target** selected and then paste with another. An example would be copying from all then pasting to a curve.

Back Panel



Each of the 8 voices has its own section that is numbered and color coded to match the Voice Selection on the front panel.

Input Gate & Note



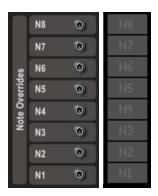
Lets Korde be driven by CV devices such as the Matrix, AutoTheory, AutoArp, ChordSet.

Hold Retrigger



Determines the behavior of the sequencer playback when **Hold / Sustain** is active. In **Tempo** and **Free** Sync modes, **Restart** will restart the sequencer from the start position each time the first note of a chord is played. **Continue** will not reset the sequencer, instead playback will keep going without interruption. In **Transport** Sync mode, this parameter is ignored because playback is always synced to the transport position.

Note Overrides



Dedicated CV inputs that will override the note value for each row in the sequencer.

Output Gate & Note



Each voice has a gate and note out. The Gate is the on/off/level signal. The Note is the pitch. Sound sources usually have these in the rear panel as an input.



Korde Voice 1 connected to Thor's Gate and CV Input.

Output CV1 & CV2



Each voice also has two general purpose CV curves for modulating other devices. Both CV1 and CV2 have unipolar (Marked with a +) and bipolar (Marked with an -/+) outputs.

Modulation

Step



The Step input is a unipolar CV control. This controls the playing step for the voice. The CV range of 0.0-1.0 is mapped to the steps inside the length of the pattern. So if you have a pattern of length 4, a CV value in the range of 0.50 to 0.75 would correspond to step 3.

Gate Len



The Gate Length Modulation is a bipolar CV input that sums with the pattern gate length of every step. The range is -100% to 100%.

Velocity



The Velocity Modulation is a bipolar CV input that sums with the velocity of every step in the pattern. The range is -1.0 to 1.0.