

# Meyer Devices MIDI Tools

**Stages** Pitches Patterns

Num. Stages **4**

Vel. Ramp ▾ 100 100 Swap

**Pattern** Pitch Velocity

0.82 [0.50] Jitter ▾ - 0 %

Duration 100 % Notes 8 [Q]

Register ●●●●●●●●

Advance Length

0 1 R 8

R x Length Clear

Pitch

Weights Range

Offset

Div 2 [Q] Proportional

1/16 1/4

Pitch Velocity

0.0 0.5 [Res]

Range +0 : +1

**Retrigs** Time Velocity

Sliders 1 ←→ Dir. →

Interval 1/16 ▾ Quantize

**Pitch** Velocity Chance

[Res] [Rand] [Abs] C3 ±12

Pattern

Mode **Note** Every 1

Density 5 Variant

Algo **Eucl.**

Modifier

Mute ▾

+Sd	Len.	Den.	Var.	Vel.
5	16	0		100
4	16	0		100
3	16	0		100
2	11	1		80
1	9	2		60
0	16	3		100

Note Algo Distribution

C1 **Eucl.** Fill ▾

Sliders 4 **Quantize**

Pitch Velocity

1.00 0.52 [Res]

Range +0 : [+5]

# Philip Meyer MIDI Tools

## Troubleshooting

Some Mac users who used the Live 12 Beta reported issues with getting the MIDI Tools to appear in Live, even though the devices were in the User Library. If this is you, you can try following the steps below.

**Note:** do this only if you know that your User Library settings are correct (see previous page)

Steps:

- Delete the files in ~/Library/Application Support/Ableton, but **not** the folder itself
- Delete the files in ~/Library/Preferences/Ableton, but **not** the folder itself

## Questions, Feedback, Ideas

Email me : [philip@inter-modal.com](mailto:philip@inter-modal.com)

Join Rhizomic Sequencing server on Discord: <https://bit.ly/rhizomic>

Follow me on Instagram: [https://www.instagram.com/p\\_\\_meyer/](https://www.instagram.com/p__meyer/)

YouTube: [https://www.youtube.com/@p\\_\\_meyer](https://www.youtube.com/@p__meyer)

# Philip Meyer MIDI Tools

## Thank you!

Thanks for downloading my MIDI Tools. I hope that lots of crazy music will be made with these devices, and would love to see what *you* make with them. See the next page of this document for info on how to get in touch.

Also, I respectfully ask that you not share the tool files directly to others without my consent. If you have a friend who would like to trial the tools before buying, let me know and I'd be happy to help make that possible

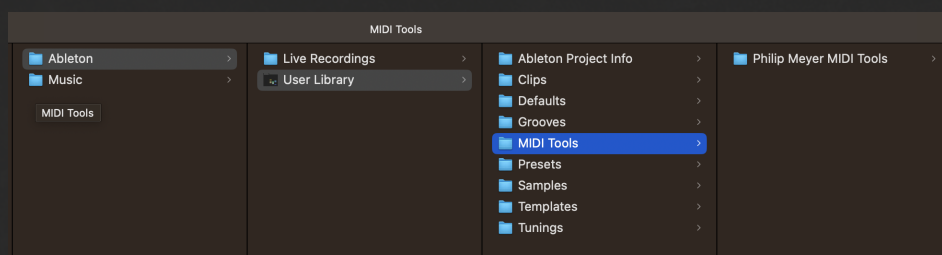
## Requirements

Ableton Live 12 Suite or Ableton Live 12 with a separate Max for Live license are required to use these devices.

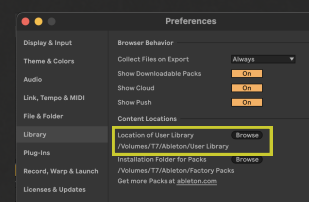
## Installation

To install MIDI Tools, simply drag the AMXD files into the MIDI Tools folder of your Ableton User Library. If there is no MIDI Tools folder, create one!

**Note:** Make sure that the Library you're using is the same one you've specified in your Live preferences, especially if your Library lives on an external drive.



Place the MIDI Tools in a folder called MIDI Tools inside your User Library

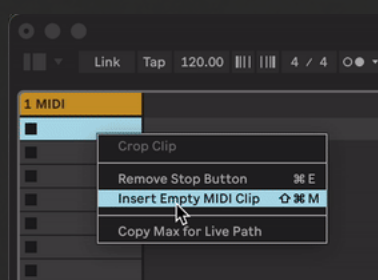


Make sure your Live Preferences are pointed at the correct User Library

## Usage

To use these devices, create a new MIDI clip or select an existing one. The devices will be visible in the MIDI clip tools panel.

Note that Transformers and Generators live in separate tabs.



Create a new MIDI clip or select an existing one to see MIDI Tools



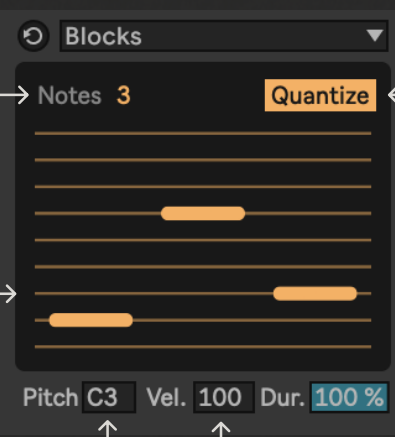
MIDI clip tools panel with the Blocks Generators (vertical view)



MIDI tools panel with the Blocks Generators (horizontal view)

# Blocks Generator

A generator proportionally divides a clip to make nested rhythms.



**Number of Notes**  
The number of notes that will be created. This changes the number of Blocks sliders

**Blocks**  
Sets the lengths of the notes that will be created. The notes will fill the selected range of the clip, and the lengths are set proportionally depending on the slider values.

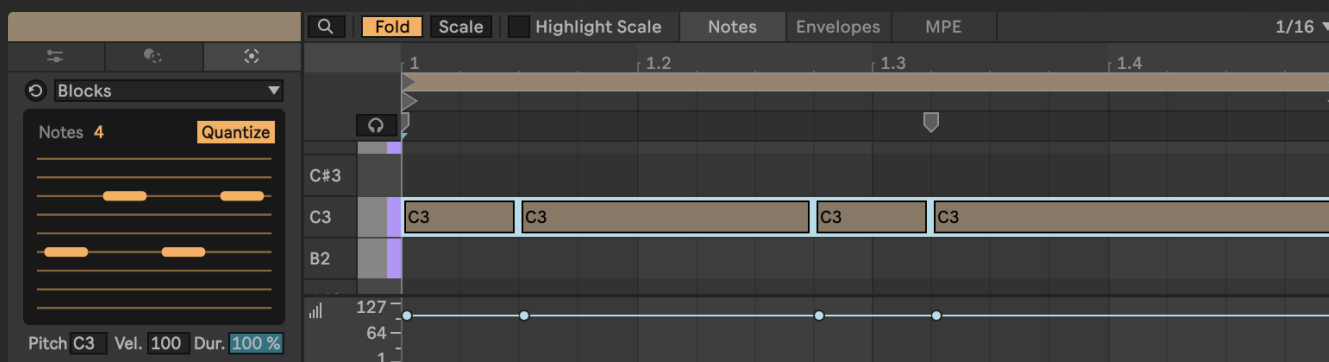
**Pitch**  
The pitch of the notes that will be generated.

**Velocity**  
The pitch of the notes that will be generated.

**Quantize**  
Quantizes the start position of the notes to the MIDI clip's grid

**Duration**  
Shifts the generated pitches up and down.

**Blocks** (Control Panel):  
Notes: 3  
Quantize (button)  
Pitch: C3  
Vel.: 100  
Dur.: 100 %



Moving the sliders in Blocks changes the relative spacing of the notes in the MIDI clip.

The screenshot shows a MIDI piano roll with a MIDI clip containing four notes, all labeled C3. The notes are positioned at approximately 1.0, 1.2, 1.3, and 1.4 on the time axis. The piano roll also shows a volume envelope and a velocity curve. The Blocks control panel is visible on the left, showing 4 notes and a quantize button.

# Turing Machine Generator

A generator based on the Music Thing Modular Turing Machine Eurorack sequencer module.

## Advance Section

Click these buttons to generate notes by adding one or more new bits to the shift register

- 0 adds an 'off' bit
- 1 adds an 'on' bit
- R adds a random bit (which is controlled by the Big Knob)
- R x Length is the same as clicking R Length number of times

## Big Knob

Determines how the new bits in the register are created. With the knob at the center 12 o'clock, the new bit's value will be random. Turning the knob right or left reduces the amount of randomness.

## Register Viewer

Displays the first 8 bits in the shift register. These are used to determine the pitch

## Length

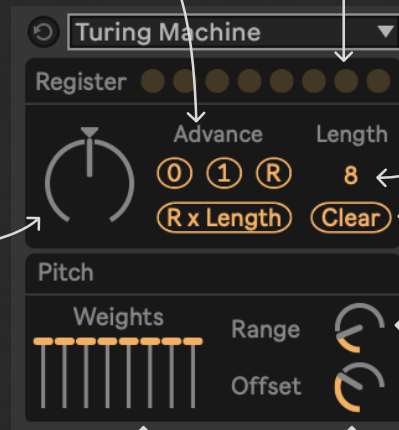
The number of bits to loop within the shift register

## Clear

Clear the internal shift register and any notes that this device created

## Pitch Range

Scales the overall range of the generated pitches.

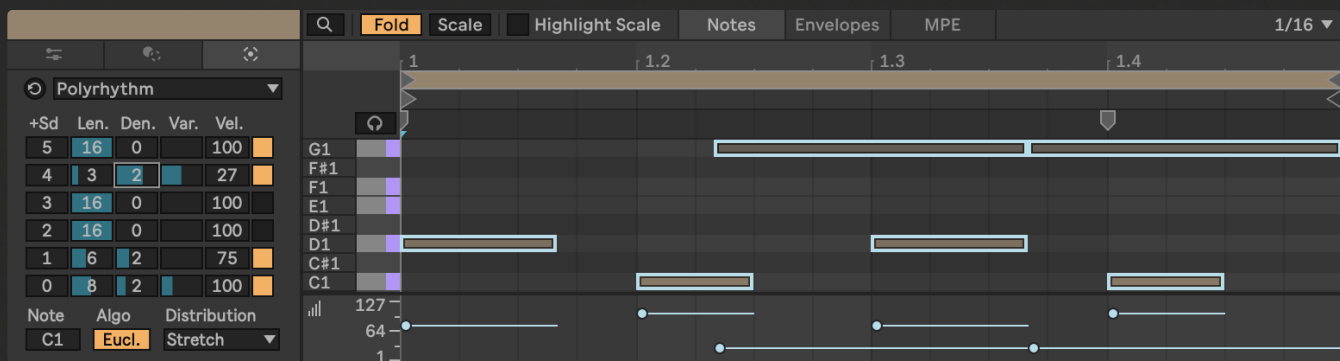


## Weights

Controls how the pitch is calculated from the bit values. In general, the greater the area under the sliders, the greater the pitch range will be.

## Pitch Offset

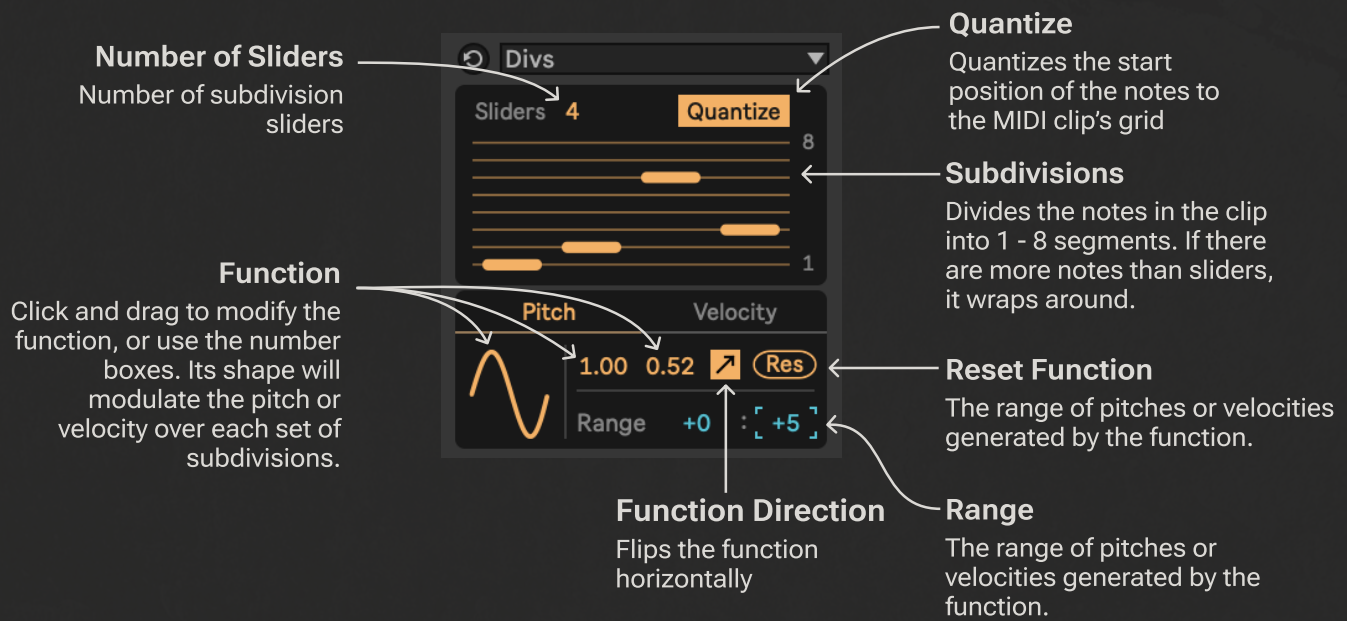
Shifts the generated pitches up and down.



Click the buttons in the Advance section to build the clip. Clicking 0, 1, or R will build the pattern 1 bit at a time. Clicking R x Length builds the entire pattern from Length bits.

# Divs Transformer

Subdivide a list of notes. Designed to be used in conjunction with Blocks to make nested rhythms.



**Number of Sliders**  
Number of subdivision sliders

**Function**  
Click and drag to modify the function, or use the number boxes. Its shape will modulate the pitch or velocity over each set of subdivisions.

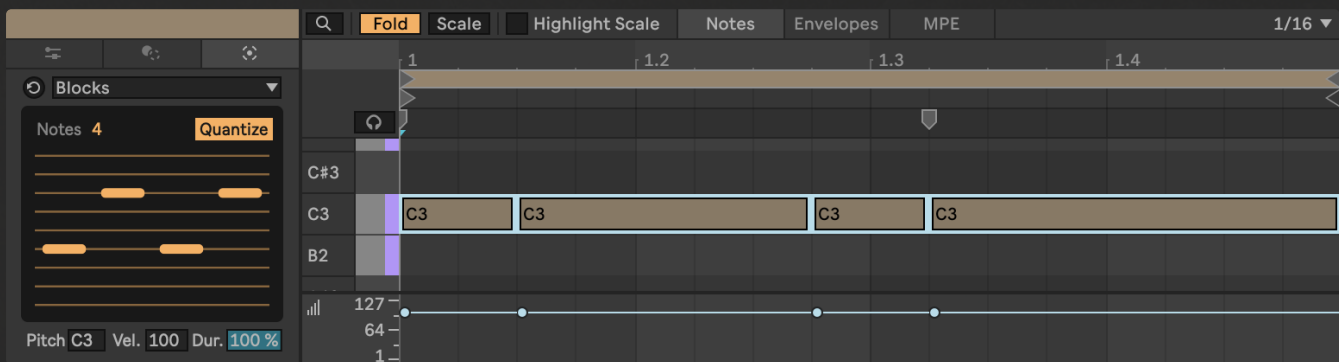
**Quantize**  
Quantizes the start position of the notes to the MIDI clip's grid

**Subdivisions**  
Divides the notes in the clip into 1 - 8 segments. If there are more notes than sliders, it wraps around.

**Reset Function**  
The range of pitches or velocities generated by the function.

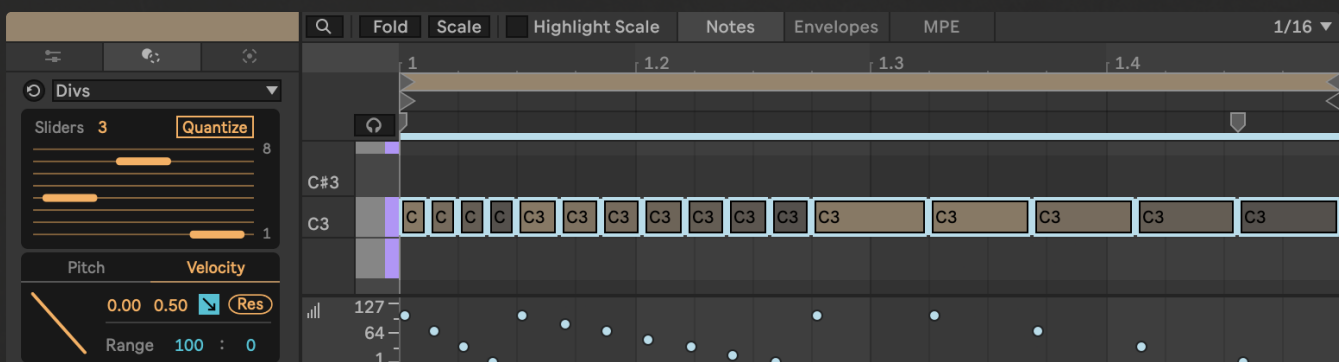
**Function Direction**  
Flips the function horizontally

**Range**  
The range of pitches or velocities generated by the function.



The screenshot shows a MIDI piano roll with a single note on the C3 staff. The note is divided into four equal segments. The control panel on the left shows the 'Blocks' section with 'Notes 4' and a 'Quantize' button. The piano roll has a time axis from 1 to 1.4.

We'll start with a pattern generated by blocks.



The screenshot shows the same MIDI piano roll, but now the 'Divs' section is active. The 'Sliders' are set to 3. The first, second, and fourth segments of the note are further divided into three smaller segments each. The third segment is not divided. The control panel shows a 'Pitch' function with a falling curve and a 'Velocity' function with a falling curve. The piano roll has a time axis from 1 to 1.4.

Next, we'll use three dividers to divide the first, second, and fourth note with a falling velocity. The third note is not divided because the third slider's value is 1.

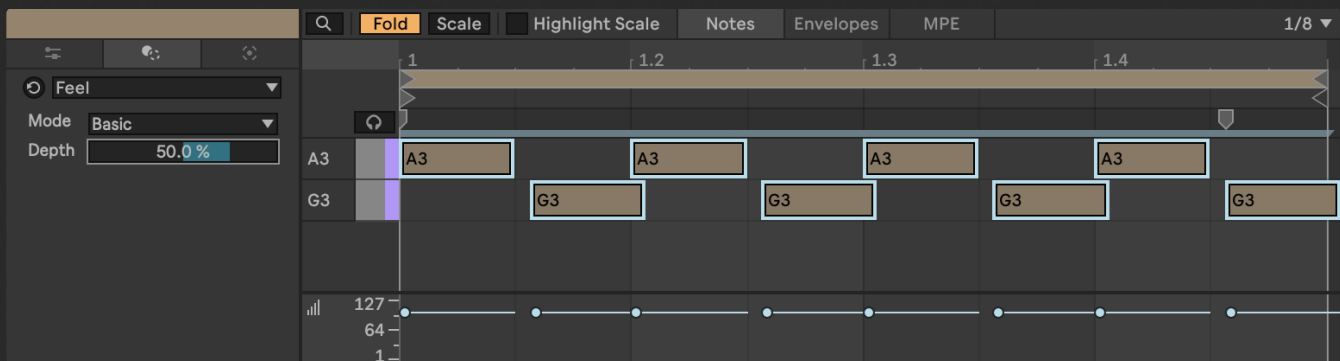
# Feel Transformer

A transformer for creating swing, grooves, and microtiming

**Swing Depth** → Amount of swing to apply to the pattern. Swing is applied using the clip's grid. Positive values shift every second note back, negative values shift them forward

**Mode** →

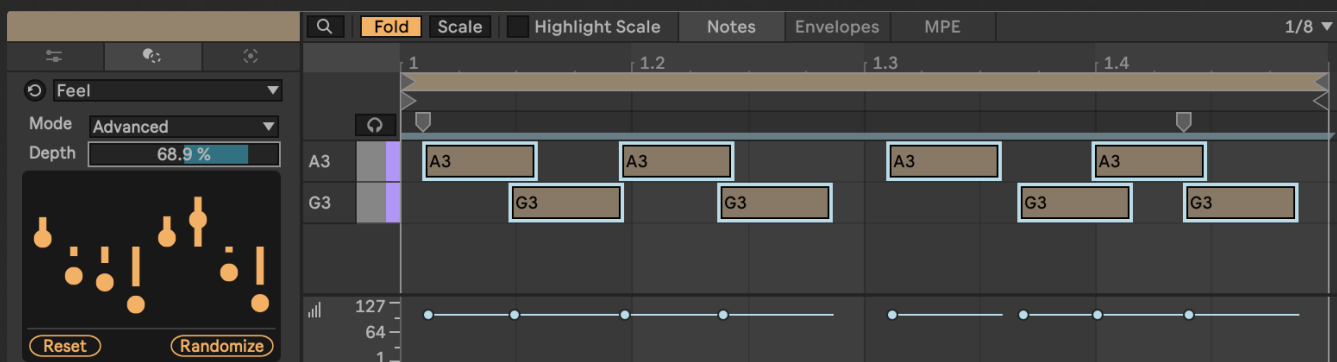
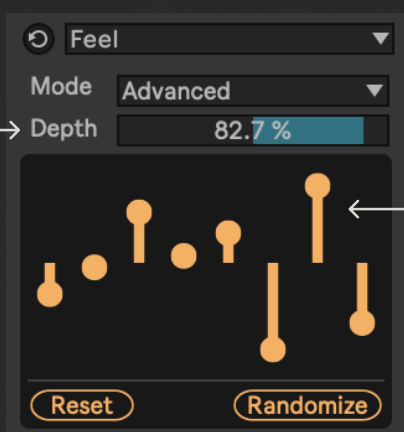
- Basic is the typical swing we all know and love.
- Advanced allows you to fine-tune the timing for each step in the grid independently.



Basic swing

**Depth** → Controls the extent to which the sliders shift the notes.

**Microtiming** → There's one slider for each grid line in the MIDI clip. Dragging the slider in the positive direction (upward) shifts the note back (to the right). The highlighted bars show the actual adjustment, after normalizing and applying Depth



Microtiming with advanced mode

# Pattern Transform Transformer

A multi-function transformer that uses a pattern to choose which notes to modify.

**Advance Mode**  
Determines whether the pattern's steps are determined by a count of notes (Note) or an interval the clip's grid (Grid)

**Pattern Density**  
Percentage of the steps in the pattern that are active

**Pattern Algorithm**  
Determines how the pattern is generated. Eucl. always distributes the events evenly. Omni is a more flexible algorithm.

**Every**  
Determines whether the pattern's steps are determined by a count of notes (Note) or an interval the clip's grid (Grid)

**Variant**  
Eucl. mode: rotates the pattern.  
Omni mode: selects from among all possible patterns for the density.

**Modifier**  
The algorithm that will be used to transform the selected notes

Here, we started with a 8th notes at a constant pitch of C3. Using Pattern Transform, we applied a Euclidean pattern and increased the pitch by 1 scale degree of any notes that fall into the active steps of the pattern.

## Modifiers

### Increment Modifiers

Adds or subtracts from the selected notes' pitch, velocity, or chance.

#### Accumulate

When enabled, adds Increment to a running total before adding to the attribute value

Modifier: Pitch +0  
Accum: Inf Uni Wrap

#### Increment

Amount to add

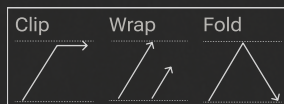
#### Iterations

Number of times to add to the accumulation total before clipping, wrapping, or folding.

Modifier: Velocity +1  
Accum: x4 Uni Wrap

#### Overflow Mode

Controls how values that cross the maximum or minimum are handled.



#### Polarity

Sets the maximum and minimum for the accumulation value.\*

- Uni : 0 ↔ Iterations x Increment
- Bi : -Iterations x Increment ↔ Iterations x Increment

\* When Accumulate is enabled and the Overflow Mode is Wrap or Fold.

### Mute Modifier

Deletes the selected notes.

Modifier: Mute

### Fuse Modifier

Joins the selected notes that fall within the pattern step

Modifier: Fuse

### Divide Modifier

Divides the selected notes.

Modifier: Divide 2  
Quant.

#### Divisions

Number of notes to divide the selected note into

#### Quantize

Quantizes the start position of the divisions to the MIDI clip's grid



# Condition Transform Transformer

A multi-function transformer that modifies certain notes according to a rule.

**Attribute**  
The attribute to the analyzed.

**Histogram**  
The graph shows the distribution of values across the selected attribute. Click and drag to highlight specific values and select notes to be transformed.

**Number of Values (View Only)**  
Total number of unique values in the range

**Modifier**  
The algorithm that will be used to transform the selected notes

In this example, we've used the Pitch attribute to select all of the notes that have the two highest pitches. Then, we subdivided them by 4.

## Modifiers

### Increment Modifiers

Adds or subtracts from the selected notes' pitch, velocity, or chance.

**Accumulate**  
When enabled, adds Increment to a running total before adding to the attribute value

**Increment**  
Amount to add

**Iterations**  
Number of times to add to the accumulation total before clipping, wrapping, or folding.

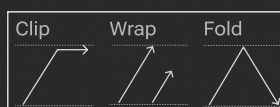
**Overflow Mode**  
Controls how values that cross the maximum or minimum are handled.

### Polarity

Sets the maximum and minimum for the accumulation value.\*

- Uni : 0 ↔ Iterations x Increment
- Bi : -Iterations x Increment ↔ Iterations x Increment

\* When Accumulate is enabled and the Overflow Mode is Wrap or Fold.



### Divide Modifier

Divides the selected notes.

**Divisions**  
Number of notes to divide the selected note into

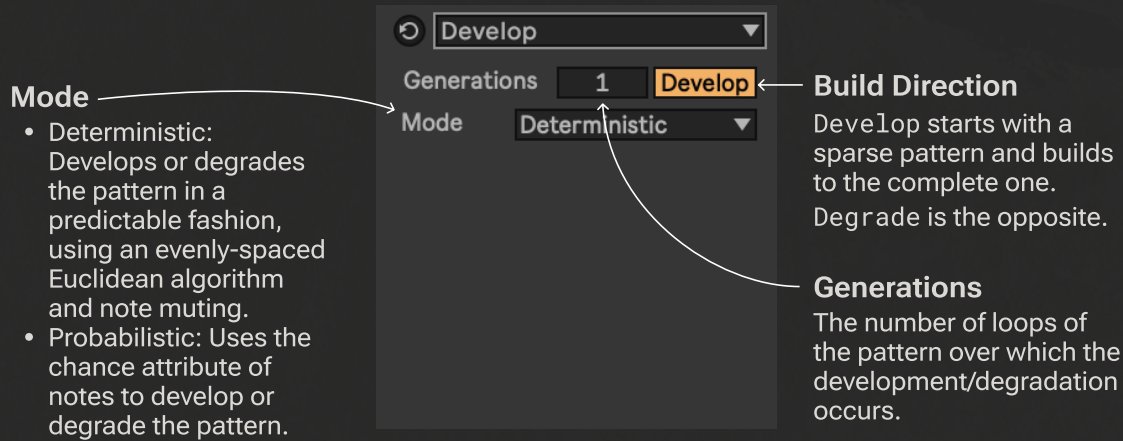
**Quantize**  
Quantizes the start position of the divisions to the MIDI clip's grid

### Mute Modifier

Deletes the selected notes.

# Develop Transformer

A transformer that can make a pattern gradually appear or fade away.



**Mode**

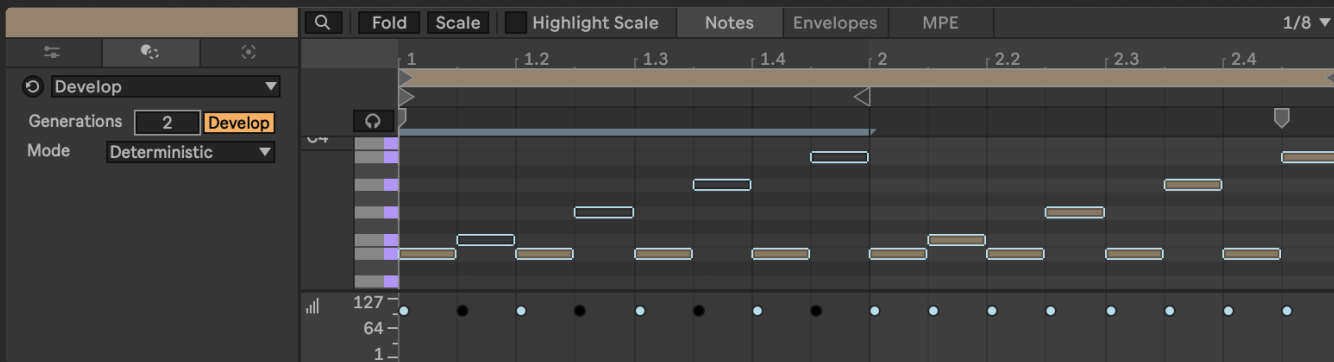
- Deterministic: Develops or degrades the pattern in a predictable fashion, using an evenly-spaced Euclidean algorithm and note muting.
- Probabilistic: Uses the chance attribute of notes to develop or degrade the pattern.

**Build Direction**

Develop starts with a sparse pattern and builds to the complete one. Degrade is the opposite.

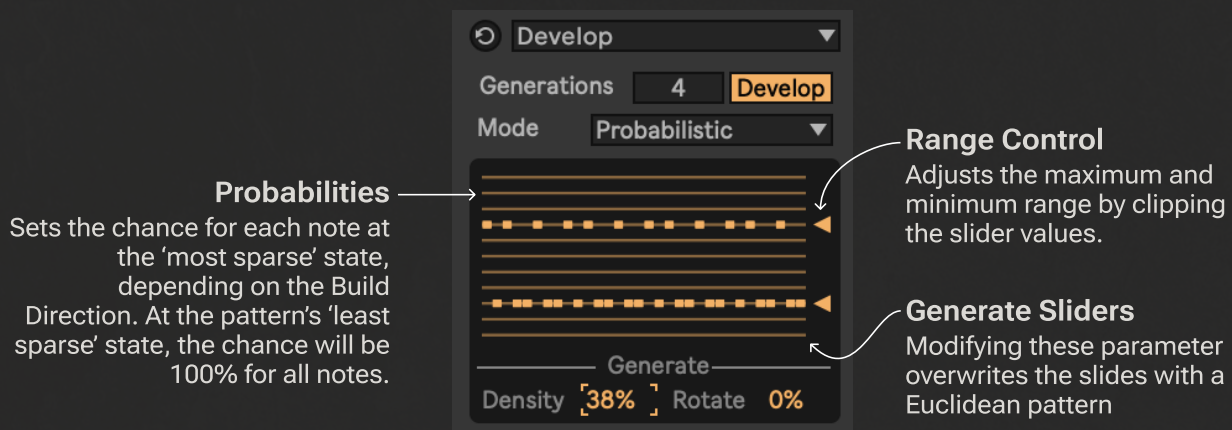
**Generations**

The number of loops of the pattern over which the development/degradation occurs.



The screenshot shows a software interface with a control panel on the left and a musical score on the right. The control panel is set to 'Develop' mode with 'Generations' set to 2 and 'Mode' set to 'Deterministic'. The musical score shows two staves. The top staff has a single note, and the bottom staff has a sequence of notes. The notes in the bottom staff are muted in an alternating pattern.

Deterministic mode. The second bar is the original pattern, which has been duplicated to the first bar, and every other note in the first bar has been muted.



**Probabilities**

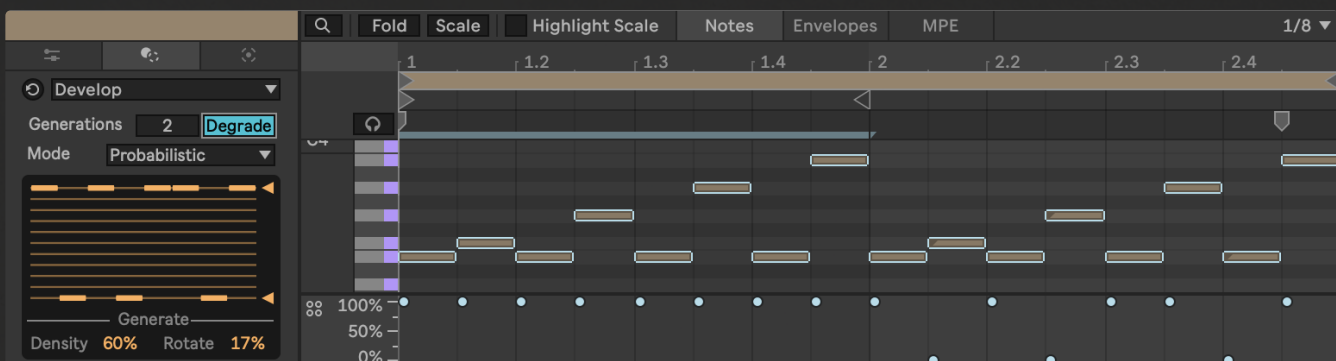
Sets the chance for each note at the 'most sparse' state, depending on the Build Direction. At the pattern's 'least sparse' state, the chance will be 100% for all notes.

**Range Control**

Adjusts the maximum and minimum range by clipping the slider values.

**Generate Sliders**

Modifying these parameter overwrites the slides with a Euclidean pattern

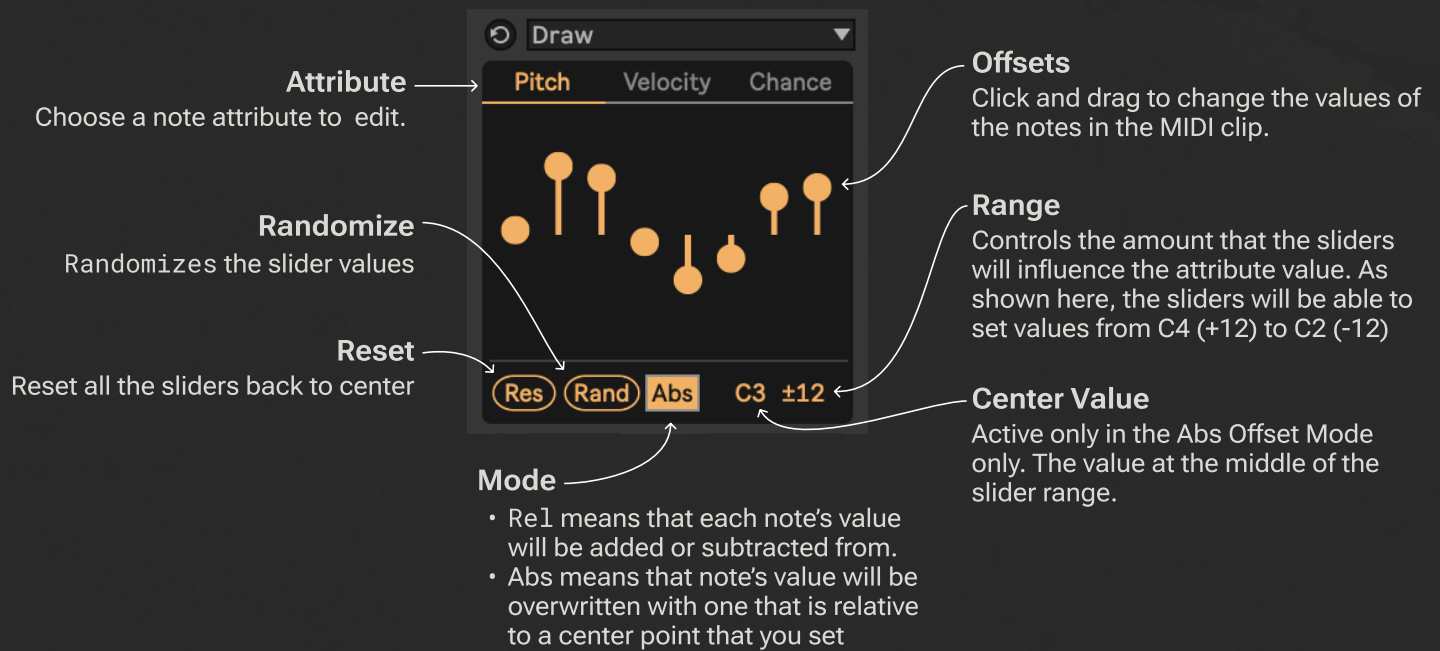


The screenshot shows the software interface with the control panel set to 'Develop' mode with 'Generations' set to 2 and 'Mode' set to 'Probabilistic'. The 'Build Direction' is set to 'Degrade'. The 'Generate' sliders are set to 'Density 60%' and 'Rotate 17%'. The musical score shows two staves. The top staff has a single note, and the bottom staff has a sequence of notes. The notes in the bottom staff are muted in a probabilistic pattern.

**Probabilistic mode.** Because the build direction is Degrade, the full pattern is the starting point, and the ending point is the same pattern with chance set by the sliders in the Develop device.

# Draw Transformer

Quickly manually edit note pitch, velocity, and chance.



**Attribute**  
Choose a note attribute to edit.

**Randomize**  
Randomizes the slider values

**Reset**  
Reset all the sliders back to center

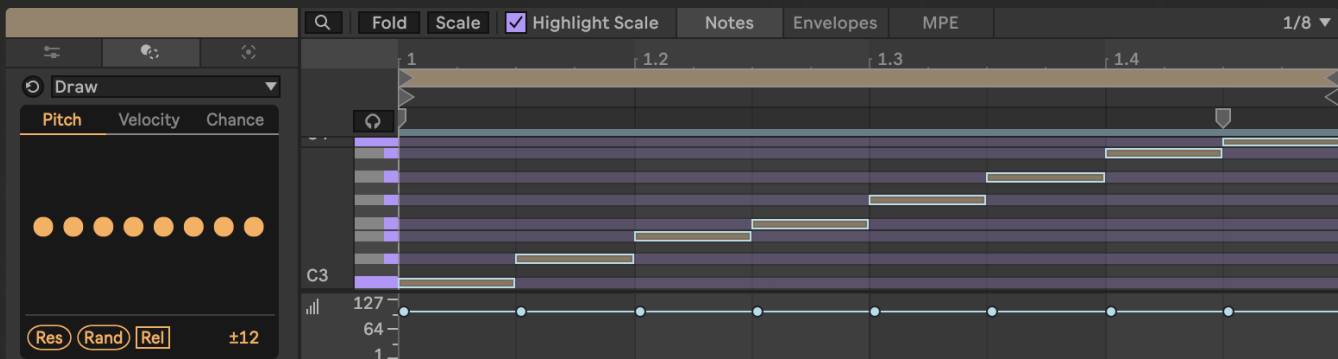
**Mode**

- Rel means that each note's value will be added or subtracted from.
- Abs means that note's value will be overwritten with one that is relative to a center point that you set

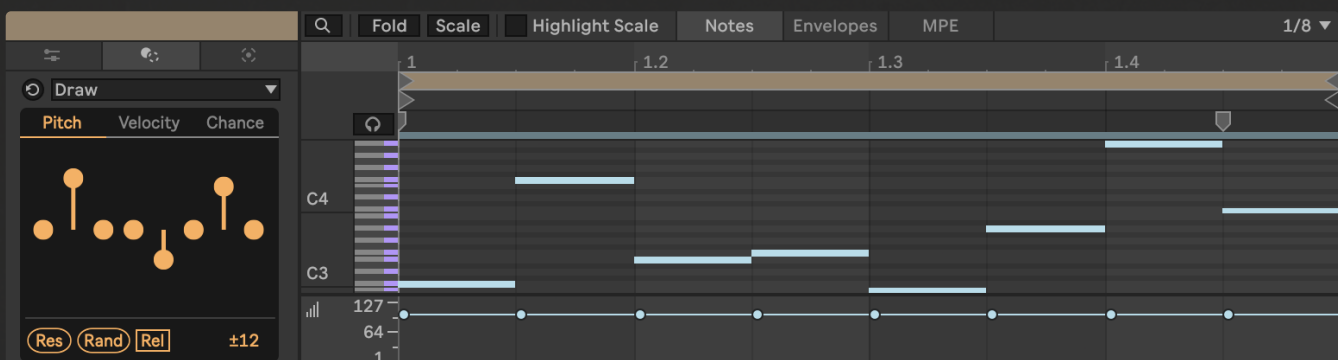
**Offsets**  
Click and drag to change the values of the notes in the MIDI clip.

**Range**  
Controls the amount that the sliders will influence the attribute value. As shown here, the sliders will be able to set values from C4 (+12) to C2 (-12)

**Center Value**  
Active only in the Abs Offset Mode only. The value at the middle of the slider range.



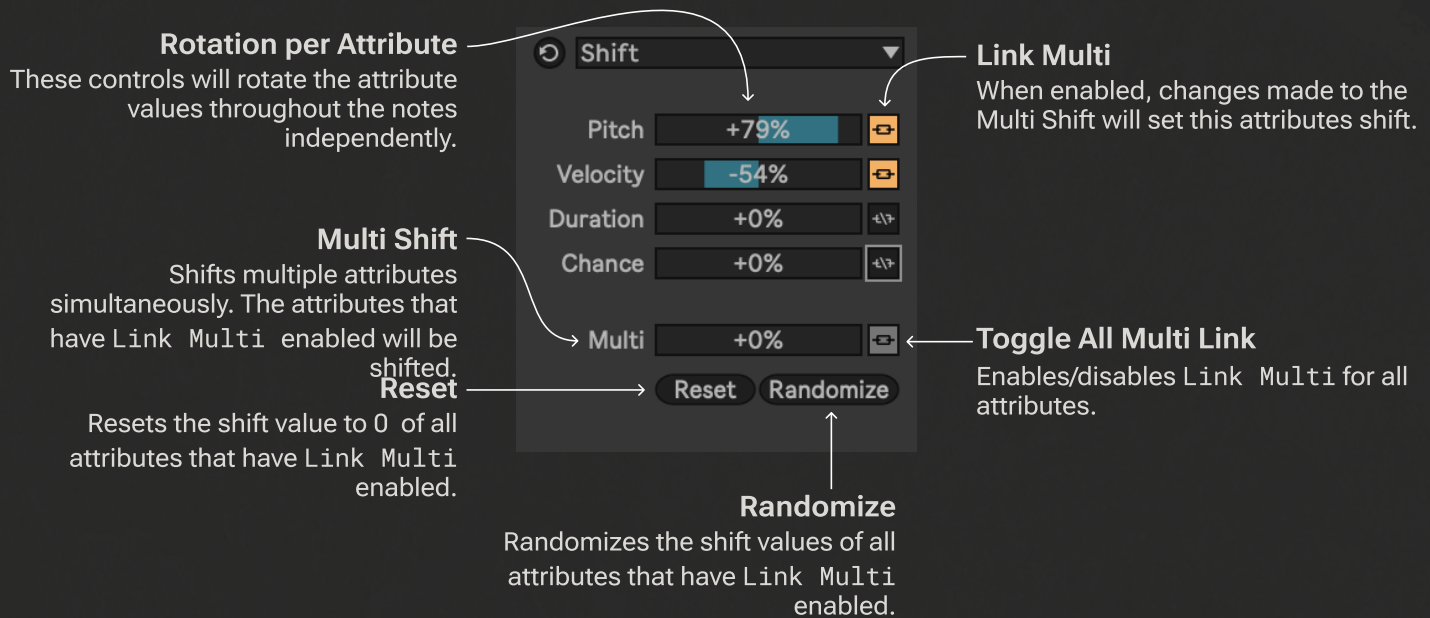
To start, we have a clip with a simple rising pitch. Next, we'll transform it with Draw.



Adjusting the sliders in Draw in Rel mode offsets the pitches of the notes relative to their original position.

# Shift Transformer

Create variation by shifting note attributes across notes.



**Rotation per Attribute**  
These controls will rotate the attribute values throughout the notes independently.

**Multi Shift**  
Shifts multiple attributes simultaneously. The attributes that have Link Multi enabled will be shifted.

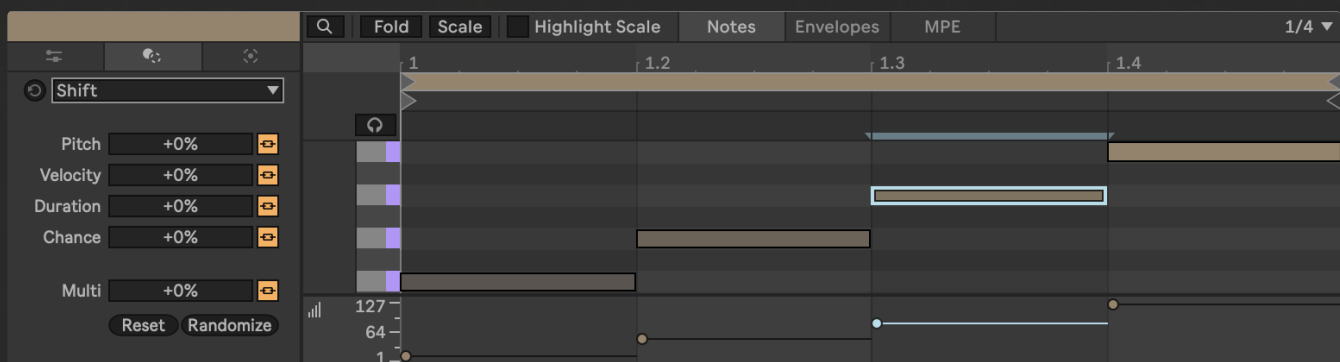
**Reset**  
Resets the shift value to 0 of all attributes that have Link Multi enabled.

**Randomize**  
Randomizes the shift values of all attributes that have Link Multi enabled.

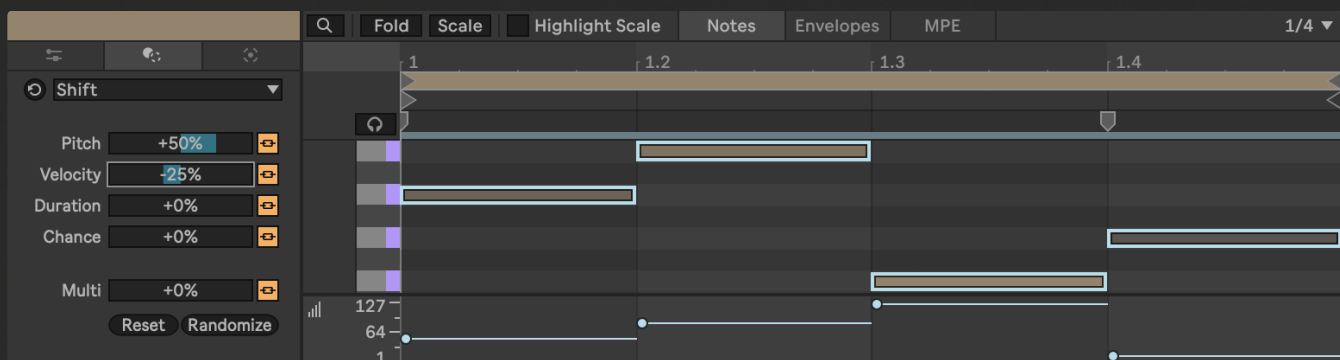
**Link Multi**  
When enabled, changes made to the Multi Shift will set this attributes shift.

**Toggle All Multi Link**  
Enables/disables Link Multi for all attributes.

The control panel shows a dropdown menu set to 'Shift', sliders for Pitch (+79%), Velocity (-54%), Duration (+0%), and Chance (+0%), a 'Multi' slider (+0%), and 'Reset' and 'Randomize' buttons.



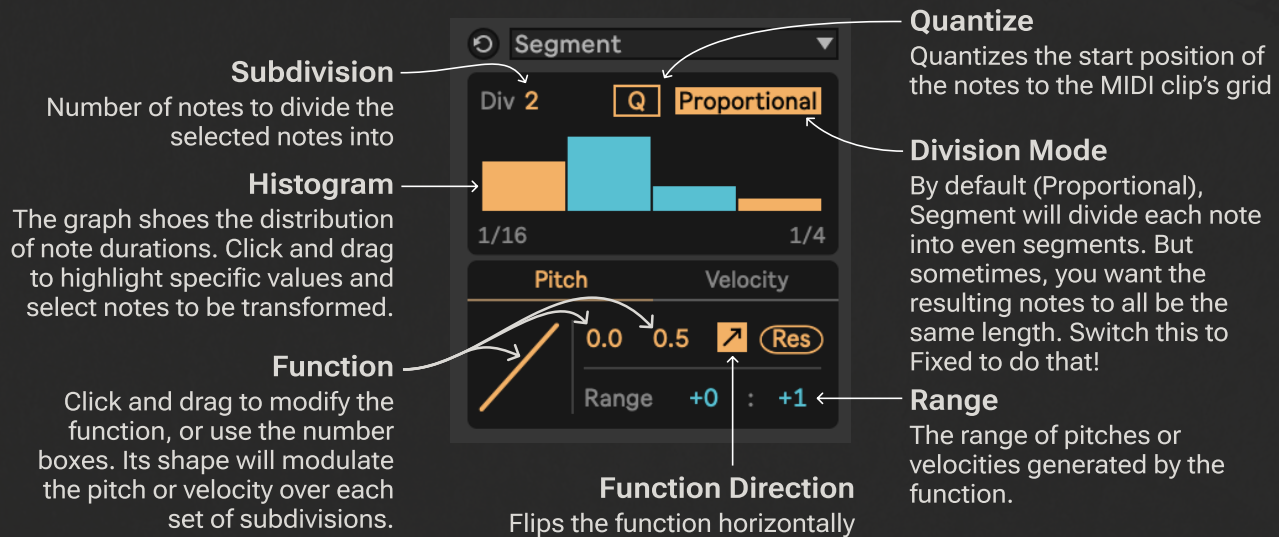
In this original, untransformed clip, we have both a rising pitch and a rising velocity.



Here, with the Pitch Rotation set to 25%, the pitches have shifted rightward and wrapped around, but the velocities have not. This is because each attribute can be shifted independently of the other attributes.

# Segment Transformer

Subdivide conditionally based on note duration.



**Subdivision**  
Number of notes to divide the selected notes into

**Histogram**  
The graph shows the distribution of note durations. Click and drag to highlight specific values and select notes to be transformed.

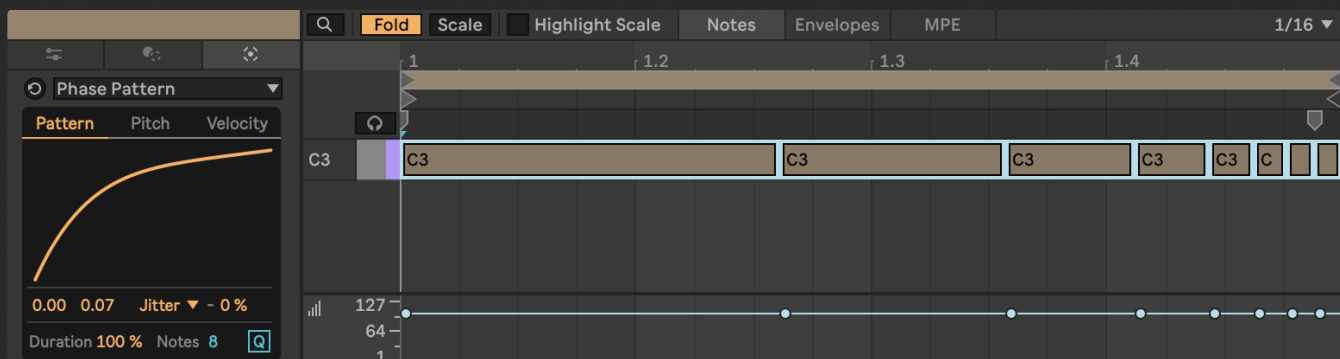
**Function**  
Click and drag to modify the function, or use the number boxes. Its shape will modulate the pitch or velocity over each set of subdivisions.

**Quantize**  
Quantizes the start position of the notes to the MIDI clip's grid

**Division Mode**  
By default (Proportional), Segment will divide each note into even segments. But sometimes, you want the resulting notes to all be the same length. Switch this to Fixed to do that!

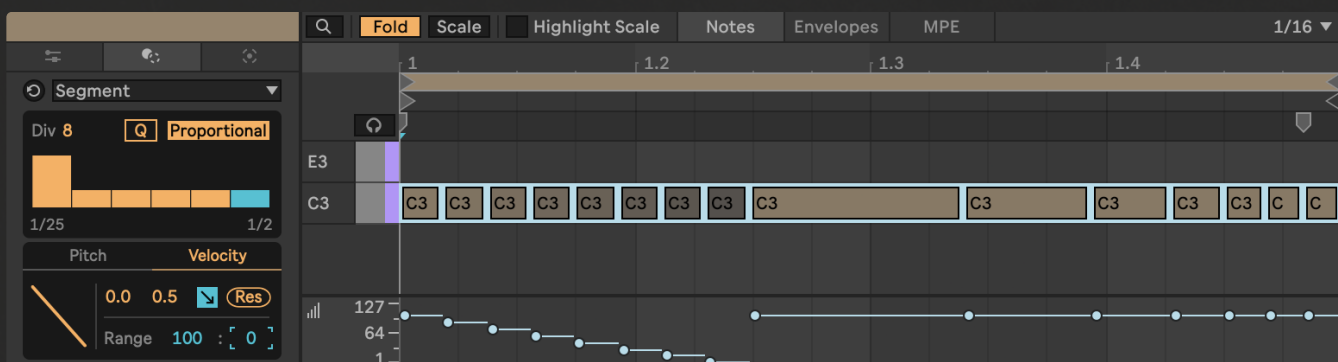
**Range**  
The range of pitches or velocities generated by the function.

**Function Direction**  
Flips the function horizontally



The screenshot shows a MIDI clip in a software interface. The left sidebar displays the 'Phase Pattern' settings, including a graph of a curve, 'Jitter - 0%', and 'Duration 100% Notes 8'. The main area shows a piano roll with a single note at C3. The note is divided into 8 segments, with the pitch increasing from C3 to C4 across the segments.

Here, we started with a 8th notes at a constant pitch of C3. Using Pattern Transform, we applied a Euclidean pattern and increased the pitch by 1 scale degree of any notes that fall into the active steps of the pattern.



The screenshot shows the same MIDI clip as before, but now the 'Segment' transformer is applied. The left sidebar shows 'Div 8', a histogram with one bar highlighted, and a velocity function graph. The piano roll shows the note at C3 divided into 8 segments, with the velocity of each segment decreasing from 127 to 1, creating an echo effect.

Then, we'll select the longest note by clicking on the histogram in Segment. Segment will divide only this note into 8 segments with a declining velocity, creating an echo effect.