

# ModalFlux

Random MIDI Generator with Scale & Mode Quantization

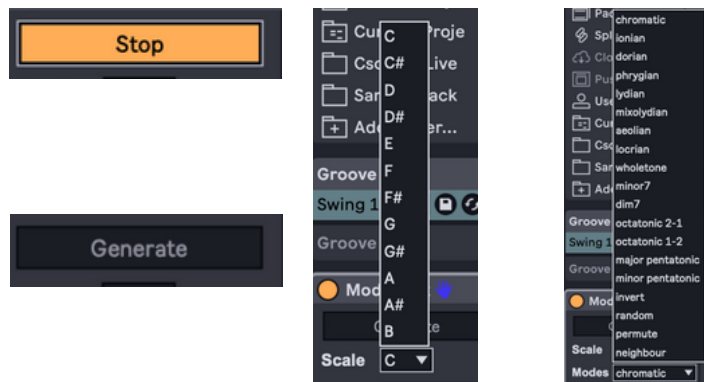
Built with: Max for Live

Peishan Li

[Project Google Drive Link](#)

## Introduction

ModalFlux is a Max for Live MIDI effect for random MIDI generation capable of producing musical melodies, rhythms, and motifs automatically. ModalFlux outputs MIDI only. It can drive any instrument placed after it on the same track.



The main interface of ModalFlux contains four key sections:

- **Generate & Stop Button**—Pressing “Generate”/“Stop” starts/stops the random system.
- **Scale Selection**—The Scale menu selects the root key. All generated notes will be mapped into the selected key.
- **Mode Selection**—Choose the musical mode from the dropdown menu.
- **Three Independent Generators**—High/Mid/Low

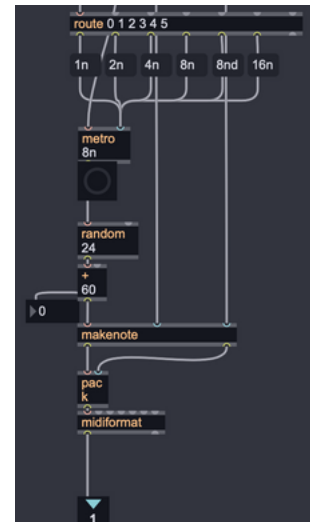
## Generative Control Parameters

- **Note Durations**—Each range includes duration buttons: 1, 2, 4, 8, 16 = straight note durations; 8n = dotted 8th
- **Velocity and Length**—Velocity sets how hard you hit the key. Length determines the variability of note duration.

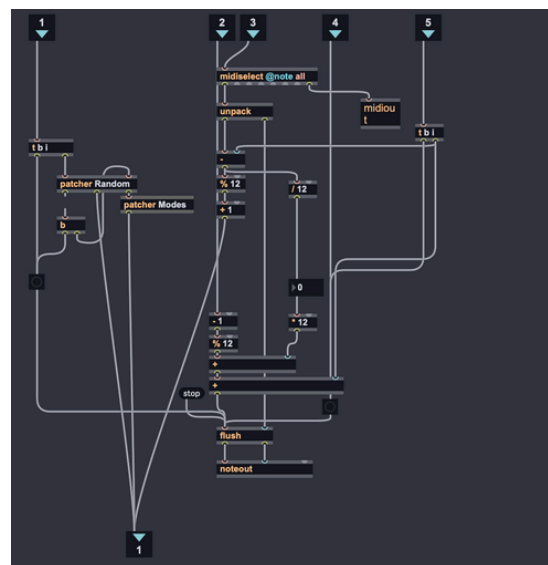
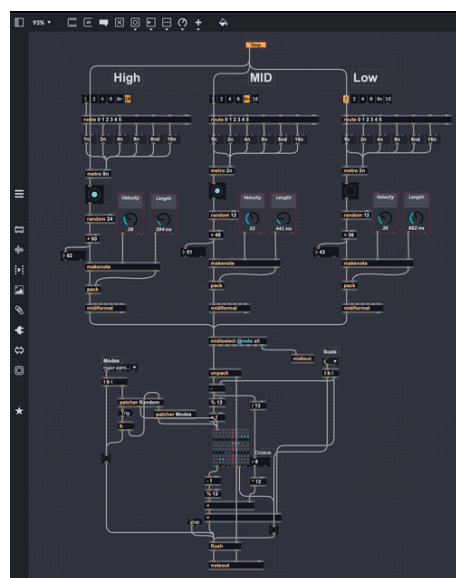
### High / Mid / Low Generators

Each section runs its own metro — random — makenote — midiformat chain.

They independently generate rhythmic triggers and notes within different pitch ranges.



## Max Patch Overview



### Mode / Scale Quantizer

Incoming notes are filtered and converted into pitch classes, then checked against the selected scale and mode.

Any out-of-scale notes are corrected to the nearest valid scale degree before being rebuilt and sent to the MIDI output.

ModalFlux combines randomness with tonal control.

Its three-range structure, duration selections, adjustable parameters, and scale/mode quantization make it a powerful tool for musical and generative composition.

### Usage Guide Video:

<https://drive.google.com/file/d/1ULzLvqtywvBto1FjM0FFZCzMQrjJz6W/view?usp=sharing>

### Download ModalFlux:

[https://drive.google.com/file/d/1s0IsObY2\\_pimzs7hBvxb21o\\_phrOf\\_k/view?usp=sharing](https://drive.google.com/file/d/1s0IsObY2_pimzs7hBvxb21o_phrOf_k/view?usp=sharing)