JELSTUDIO's "Polly Molly", version 20240211



Polly Molly is a 36-note poly-rhythmic midi-sequencer. It is for LIVE performance or song/sound-creation use.

The output from Polly Molly needs to be fed to a midi-capable sound-generator (Such as a hardware-synth or soft-synth, preferably a polyphonic) as there is no internal audio-generator in Polly Molly.

For more musical-oriented use, as opposed to sound-effects, it is advised to use some type of 'midi-note to midi-chord' generator between Polly Molly and your sound-generator synth.

Polly Molly can play up to 36 individual user-chosen notes simultaneously on 1 single midi-channel.

Technically it is a 32/64 bit VST2 audio-effect plugin mainly for DAWs and sound/video-editors on Windows, but it can also be used in a LIVE VST-host (for example with LIVE stage-performance audio, or with music/TV home-stereo audio)

Some of Polly Molly's key-points:

- Polly Molly can play up to 36 individual user-chosen notes simultaneously on 1 single midi-channel.
- Zero latency (for LIVE use)
- Midi-output only (No internal audio-generator)
- GUI layout is optimized for 'peripheral vision overview' (When looking at the center of the GUI; the main displays can be read at a glance with peripheral vision) based on human factors design guidelines issued by the FAA and DoD for aviation-display designers.
- For Windows 7, 8, 10, (11 is not tested)
- Zip with .dll (no .exe installation)
- No DRM (Such as PhoneHome, iLok, etc)

Order of Polly Molly's internal signal-routing:

No input | Sequencer Stage → Any-channel midi output

Usage (how to operate):

TL;DR (Minimum required reading)

- #1: Add Polly Molly to your plugin-chain.
- #2: Route its midi-out to a midi-synth (Just as you usually do in your NLE/DAW)
- #3: Start PLAY on your NLE/DAW (Or click the "LIVE MODE" button on the lower-left of the GUI)
- #4: Choose one of the 10 presets or use left mouse-button click to adjust the 36 notes to your liking (The notes are on the right-side of the GUI)
- #5: Deep experimentation is key to getting useful results from Polly Molly.

Now follows more in-depth info:

GUI

User-control is left and right mouse-button.

Left column, top to bottom:

(This section is mainly intended for LIVE-performance use, but some functions can also be useful during song-creation)

"Title and Logo", always ON (This is NOT a user-button but a display only) The plugin's title-name.

The 'breathing logo' will 'breathe' (brightness will continuously rise and fall slowly) to show that the plugin is running and not stopped or 'crashed'.

The link to the website (jelstudio.dk) (not clickable).

The date the plugin was last edited (YYYYMMDD)

"RESET DISC SYNC", no visible light in button when pressed, left mouse-button. Be careful* when left-clicking this button as it realigns the sequencer's 36 note-lanes instantly in realtime.

*It will no longer be in correct sync with the beat-pattern of the NLE/DAW

"ALL NOTES ON", yellow light when ALL 36 notes are un-muted and will trigger midi, left mouse-button.

Clicking this button will un-mute any muted note-lane of the sequencer's 36 note-lanes instantly in realtime (A muted note-lane is a blue color on the note-lane display, more on this later)

"ALL NOTES OFF", yellow light when ALL 36 notes are muted and will NOT trigger midi, left mouse-button.

"ALL NOTES WHITE", yellow light when ALL 'white'* notes are un-muted and will trigger midi, left mouse-button.

*This is only compatible with preset number 1, as only this preset has 'white' and 'black' notes placed so they match up with the keyboard-layout on the note-lane display.

"ALL NOTES BLACK", yellow light when ALL 'black'* notes are un-muted and will trigger midi, left mouse-button.

*This is only compatible with preset number 1, as only this preset has notes placed so they match up with the keyboard-layout on the note-lane display.

"LIVE MODE", yellow light when active, left mouse-button.

Use this mode to play the sequencer without playing the NLE/DAW.

The sequencer will play non-stop when this button is active (BPM can be controlled on the BPM slider just above this button, left mouse to slide speed up and down, right mouse to reset speed to 120 BPM (Speed-reset is instant, not gradual))

"NLE SYNC", yellow light when active, left mouse-button.

Use this mode to lock the sequencer to the NLE/DAW's internal BPM so beat-pattern sync is maintained.

Press PLAY or RECORD on the NLE/DAW to trigger the sequencer.

Middle, top to bottom:

"Disc-stack / Note-lanes", always ON, left mouse-button.

There are 36 'note-lanes', or 'discs' (As this plugin simulates a physical machine with rotating discs sending CV-signals upon each completed rotation), with the trigger-point located at the far left side (The beginning of the line)

Each line shows one note sliding from the left to the right and triggering every time it re-starts at the left side.

The entire stack is color-coded in a traditional keyboard-layout. Bright red lines are 'white' keys and dark-red lines are 'black' keys (These do not represent actual 'white' or 'black' notes being played, except for when using preset-1)

There is also a color-code per octave, with the top and bottom octave being greenish and the middle octave being blueish (These do not represent actual octaves in terms of the note-values being played, except for when using preset-1)

To mute or un-mute a note-lane; left mouse-button click it. The lane will have a blue color when muted.

"Top lane / Bottom lane", yellow light when active, left mouse-button.

This is the BPM-governor and shows if the top or bottom note-lane is following the beat-pattern or BPM. All other note-lanes will either trail behind or race ahead of the leading note.

"Faster / Slower", yellow light when active, left mouse-button.

This shows if the non-governed note-lanes are slower or faster than the leading note. The speed-progression always extend linearly from the governed note to the last note.

"Speed divider", yellow light when active, left mouse-button.

This shows the speed-division relative to the BPM. 'Quarter' is the slowest setting and is useful for more ambient types of music.

The time it takes for the pattern to make a full rotation (A full rotation is when all notes re-align again, which will happen periodically during un-interrupted play) is chosen here. At 120BPM the pattern will take 2 minutes at 'double', 4 minutes at 'normal', 8 minutes at 'half', and 16 minutes at 'quarter'.

"Patterns", yellow light when active, left mouse-button.

These are 10 built-in static presets which can be used as starting-points for the user to set their own note-choices or used as-is.

Preset-1 is a note-by-note rolling of 3 octaves. Preset-10 is the E-minor scale. The presets in between are various random note-progressions with no adherence to any musical scale.

"Note length", yellow light when active, left mouse-button.

This shows how long a single note will trigger for (Similar to how long a key is held when playing a keyboard)

"BPM", red light when active, blue when in-active, left mouse-button to set BPM, right mouse-button to reset BPM instantly to 120BPM.

This is only used when playing the sequencer in its LIVE-mode (When the NLE/DAW is stopped)

The BPM is chosen by sliding up or down the line. A static yellow marker indicates where 120BPM is located and a dynamic white marker indicates the current BPM.

"Orange LCD screen", always ON.

This screen currently shows which notes belong to each scale in major and minor. The first letter is the scale, then a colon, then the notes belonging to that scale. C is C major, Cm is C minor, etc.

Not all scales are included, but some common ones.

In version 1 of this plugin this screen has no other uses, but it may or may not get augmented with more info later.

"LIVE / NLE", bright light when active.

This shows if the sequencer is running freely in LIVE mode or is slaved to an NLE/DAW. The one that lights up is the active one. The user-controls for these 2 modes are the 2 buttons on the far left bottom of the plugin GUI.

Right side, top to bottom:

"Note-selections", always ON, left mouse-button.

There are 36 'note-lanes' where each note can be individually set by left-mouse clicking and sliding up or down the line.

The line is blue when the note is muted and green when un-muted.

The line shows note-key number in each of the 3 octaves (0-12 repeating 3 times), note-key letter and octave (-2 - 8), midi-note number (0-127)

The mouse-controls:

Main window:

(See above under each button)

Technical concept (in general terms):

Polly Molly is designed to mimic a physical CV-trigger sequencer using rotating discs to time each note-trigger individually.

One disc acts as the time-keeping governor and all other discs spin successively either faster or slower relative to this. This produces a so-called poly-rhythm, consisting of 36 individual time-variations that periodically re-aligns with their initial configuration.

Each time a disc has made 1 rotation, it triggers a CV-signal (In this case a midi-note at max velocity)

Since each disc rotates at a slightly different speed, relative to all the other discs in the constellation, the result is a constantly evolving pattern that repeats if given enough time to progress.

Tips and tricks:

For musical uses it can be beneficial to route Polly Molly into a plugin that orders notes into chords.

You can also record the midi-out and quantize it later to get a slightly different noteprogression (Sometimes more musically sounding than the direct midi-output from Polly Molly which is not beat-matched to other notes than the governor-note)

Another fun thing can be to record a midi-pattern with the NLE/DAW set to a BPM-setting, then after recording; change the BPM to a different setting and play back BOTH the recorded midi-pattern and the output from Polly Molly simultaneously, as this will create 2 different pattern-progressions.

The reason for this is that Polly Molly is designed to NOT precisely double or half with the BPM-setting of the NLE/DAW being doubled or halved (But the recorded midipattern will be;))

For ambient music or sound-sculpting using 'Quarter' and '1/1' notes can work well.

The notes, and most other settings, can be set/modified while playing, making Polly Molly useful for LIVE improvisation.

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Email*: jelstudio@hotmail.com

Twitter (No longer used): https://twitter.com/JELSTUDIO

Facebook* (personal to Jacob Larsen): https://www.facebook.com/jacoblarsen.248

Reddit: https://www.reddit.com/user/JELSTUDIO/

*If you receive 'weird nonsense' email/facebook-messages (like, for example, invitations to play Facebook games) from this account, it is NOT sent by JELSTUDIO! Feel free to use Reddit/Facebook for communication instead of email if preferred (Not via PM though, because I rarely check those, but as comments to posts or via the @ on facebook)

Purchase link: http://sites.fastspring.com/jelstudio/product/pollymolly (JELSTUDIO does not get your credit-card info, or other payment-details, only your email and your name and address, as Fastspring is legally handling the sales-part on behalf of JELSTUDIO)

And, as a final note, a personal plug to my own music :) : https://soundcloud.com/jelstudio
https://open.spotify.com/artist/210gyn2gnEkN53dfU7YCP1

Thank you. jacob.