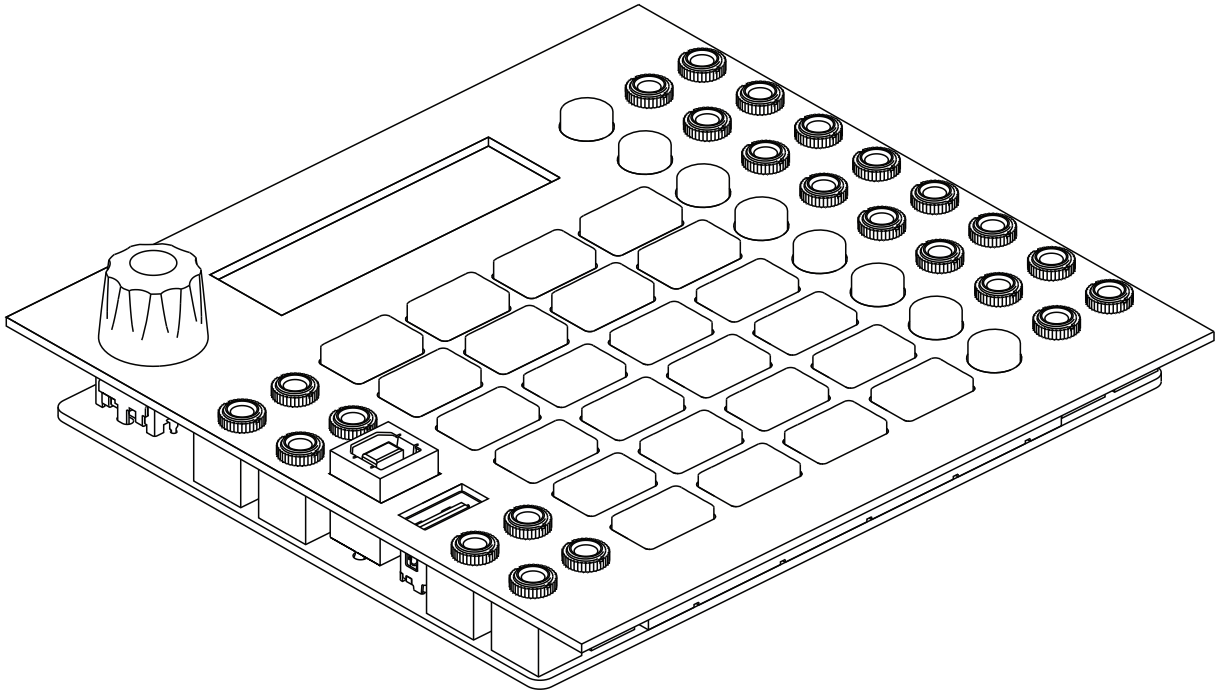
HermCd+ MANUAL

8–track sequencer & interface for your eurorack system

16 tracks, 16 patterns per track –
8 dynamic effects per track –
Polyphonic piano roll & automation editor –
High recording resolution – ModMatrix with attenuverters –
Polymorphic layouts – 4 assignable CV inputs –
Boosted connectivity with CV/Gate and midi –
Synchronized project swap – Solid timing precison.

engineered by Squarp instruments



Found a typo? Is something confusing, or wrong?

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 Please consider the environment before printing this document.

This manual was updated on May 07, 2025.
Latest firmware at the time of writing: hemordplusOS 2.10, released on May 7, 2025

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1. Basics

1.1. Sequencer workflow

Each of the 8 voices of Hermod+ (CV/Gate outputs) is controlled by a track.

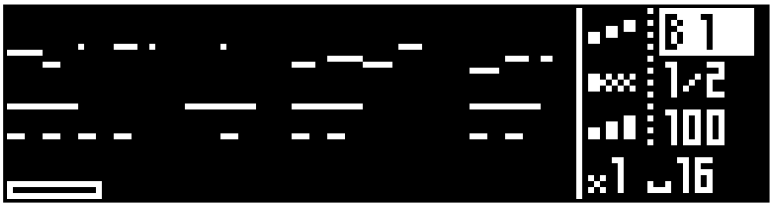
A track can be configured to control more than 1 voice, for polyphonic use or for velocity and aftertouch playback. A track can also be used as a "modulation" track, to allow recording and playback of CV and CC messages automation.

A project includes up to 16 tracks. Each of these tracks contains :
— 16 patterns, which are arrangements of notes, gates and modulations,
— an effect rack, with up to 8 effects,
— a modMatrix, to control effect parameters using CV or CC.

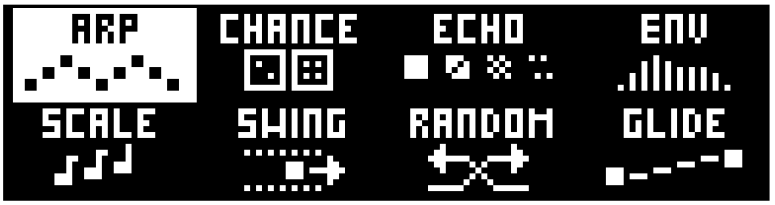
An unlimited number of Hermod+ projects can be stored on the SD card. They can be saved and loaded without stopping the playback, for seamless project transitions.

The user interface of Hermod+ is designed around 4 main modes :

Mode **step** — Inspect and edit patterns : add or edit notes, gates and modulation. Set the length of the current pattern. Generate randomized events.

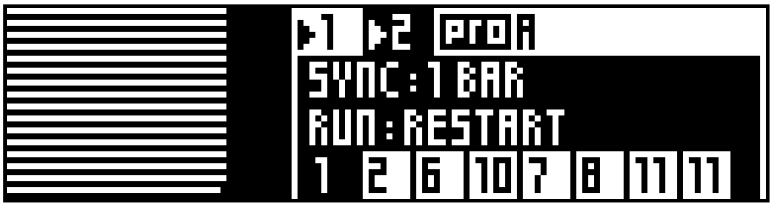


Mode **effects** — Add effects, configure their parameters, mute/unmute effects, use the modMatrix to set up effect modulations.

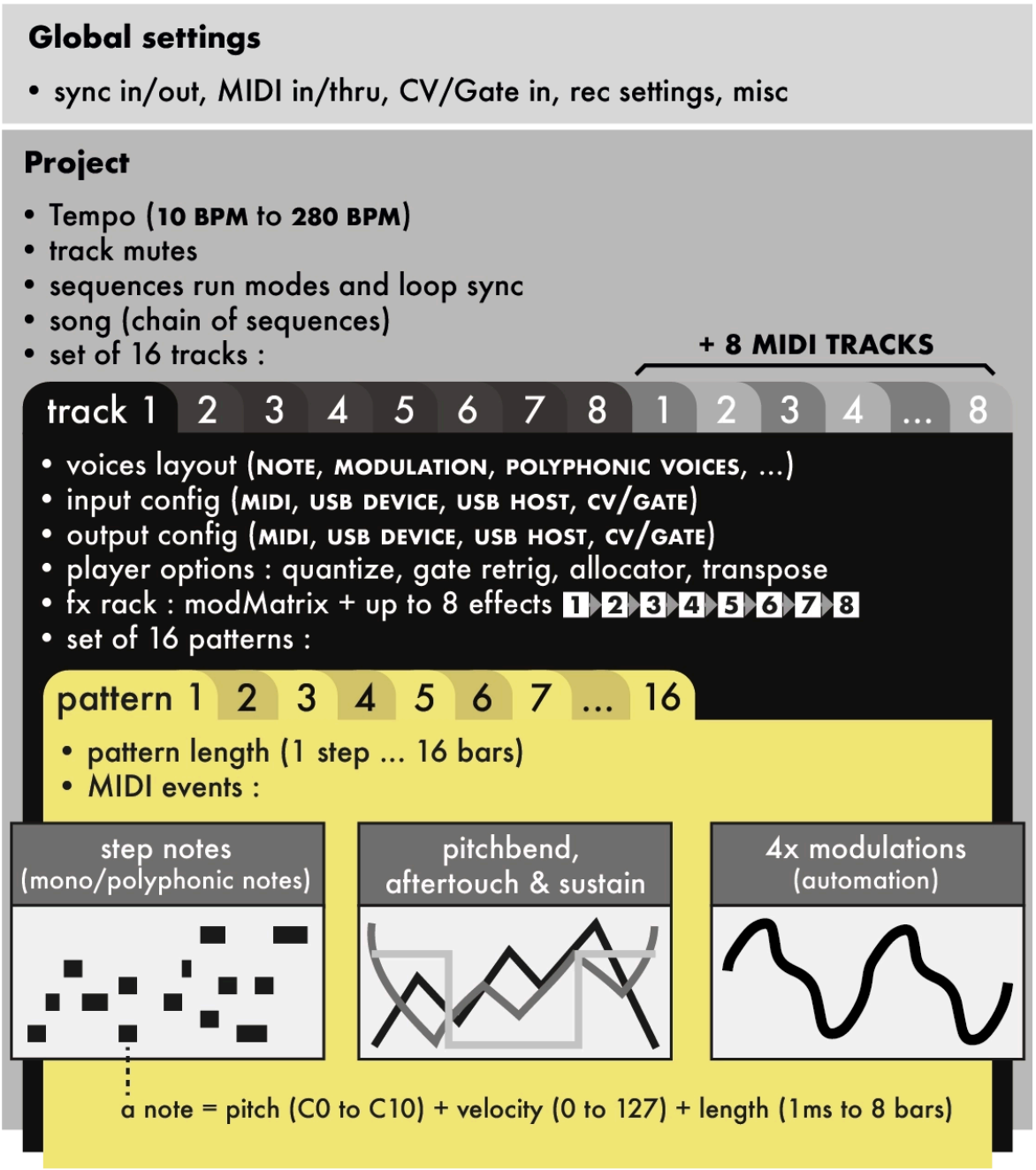


Mode **track** — Mute/unmute tracks, set up voices layout, enter global settings.

Mode **seq** — Set the currently playing sequence on the fly, change playback style between sequences, program a chain of sequence, access the save/load menu.



1.2. Hermod+ architecture



1.3. Wire up

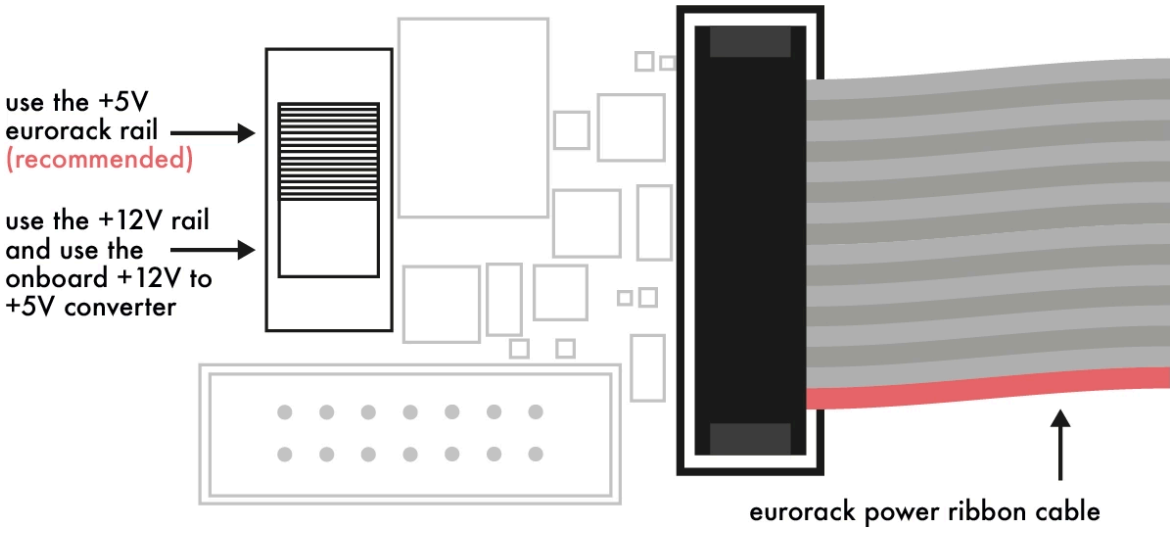
Connect Hermod+ to your eurorack system power with the supplied ribbon cable.

Most eurorack power supplies have a dedicated +5V rail (in addition to the +12V and –12V rails).

• If your power supply delivers +5V, we recommend to place the « 5V switch » in the top position, in order to use the +5V rail for the digital circuitry of Hermod+.
Make sure the +5V rail can supply 820mA minimum for powering Hermod+ (and add +500mA maximum when attaching a controller on USB host).

• If your power supply does not deliver +5V, you may place the switch in the lower position.
Make sure the +12V rail can supply 400mA for powering Hermod+ (and add +220mA maximum when attaching a controller on USB host).

This switch is located on the back of Hermod+ :



Note In any case, Hermod+ will not be damaged if you use the top position and your power supply does not deliver the +5V. It will simply not power up.

1.4. Selecting a track

In **track** mode, Scroll to choose the selected track.

— Access **CV/GATE** tracks 1 to 8 on the first page.
— Access **MIDI** tracks 1 to 8 on the second page.

For faster track selection, press the corresponding track selection switch ⚪.

1.5. Play/Stop

To start the sequencer, Press play ▷.

Press play ▷ again to stop the sequencer and return to the beginning of the sequence.

1.6. On Air mode

At any time, hold **step** and Press ○ to enter the 'On Air' mode, turning the 16–pad matrix into a chromatic keyboard, that you can perform to play and record notes.

1.7. Live recording

Press rec ○ while playing to capture a live performance (notes, pitchbend, aftertouch, sustain, modulation) coming either from an external MIDI instrument or controller, a computer or a modular system sending CV/Gate. Recording inputs is possible at any time, in every mode.

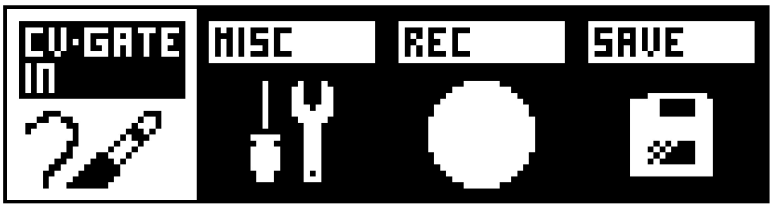
Tip By default, events will be recorded on the currently selected track. You can enable multitrack recording (all your MIDI/CV routed tracks will be recorded at the same time) in the record settings, accessed by holding ○.

Tip Hold **X** and press ○ enables hard recording : previously recorded notes will be overwritten (no overdub).

1.8. How to record CV

Recording and playing back CV on a track is very simple!

Press **track**, then press Press **Y** to enter Hermod+ settings. Select **CV-GATE IN** in the menu:



New! The former **ACTIVE TRACK** setting has been divided into two separate settings:

ACTIVE TRACK NOTE – CV/GATE AB CV/GATE CD
Route a CV/Gate pair to the currently selected track. The recorded CV/Gate will be converted and quantized into a MIDI note for Hermod+ (C0 to C10).

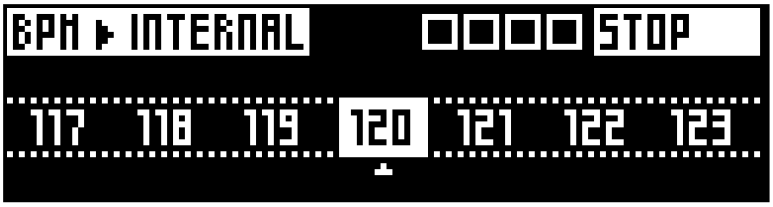
ACTIVE TRACK MOD – CV A CV B CV C CV D
Route a CV input to the modulation of the currently selected track. The CV input will be unquantized, enabling high-definition recording at 16-bit resolution.

The same CV input cannot be assigned to both a CV/Gate note and a CV modulation simultaneously.

Note **ACTIVE TRACK** is a global setting. To configure CV/Gate inputs on a per-track basis (and maybe perform multitrack recording), you can use track-specific settings. Hold a track button ● and select **INPUTS** to access the track's input configuration.

1.9. Project tempo

Hold play ▷ to enter the BPM menu.

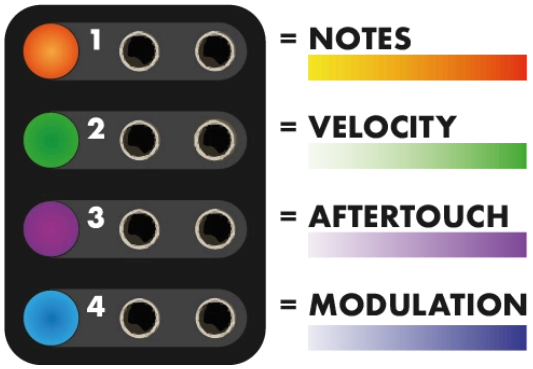


Scroll the encoder to change the BPM, or Press rec ○ repeatedly to tap the tempo.

Enter the **SYNC INPUT** settings to synchronize Hermod+ with a MIDI, USB or analog clock.

1.10. CV/Gate voices

The color of the backlit track switches ● help visualize the voices layouts, and the CV/Gate output values:



← By default, each track is set to 1 voice = notes = CV pitch + gate output.

Please refer to the ***track*** *chapter to change track layouts (assign voices to output mono or poly notes, velocities, aftertouch, modulations and/or gates).*

1.11. Reset and Clock outputs

In addition to the 8 pairs of CV/Gate, Hermod+ adds two dedicated gate outputs for transport :

- Reset : outputs a trigger when Hermod+ starts playing.
- Clock : outputs a synchronized clock.

Note The behavior of these outputs can be configured in the **SYNC OUTPUT** settings.

1.12. Calibration

Calibrating Hermod+ can improve the factory accuracy of the analog inputs/outputs. For this operation, a voltmeter is required.

First, power on Hermod+ while pressing **X** to start calibrating the CV outputs. Follow the steps on screen and use a voltmeter (and a patch cable) to measure and finetune each of the 8 CV outputs. At the end (or at any time) press **X** to save the calibration settings on the SD card.

Tip You can use the track selection switches to quickly select the voice to calibrate.

The CV inputs can now be auto-calibrated, using the previously calibrated CV outputs of voice 1. Power on Hermod+ while pressing **Y**, and follow the steps on screen. At the end, the calibration is done and saved automatically.

1.13. USB device and host

Both ports are plug-and-play (USB Class Compliant) and act as MIDI inputs/outputs :

USB device ⟷ link a computer (or any MIDI equipment fitted with an USB host port)

USB host ⟷ link a MIDI controller or synthesizer (or any MIDI equipment fitted with an USB device port) – if necessary, this port will supply 5V power to the attached device

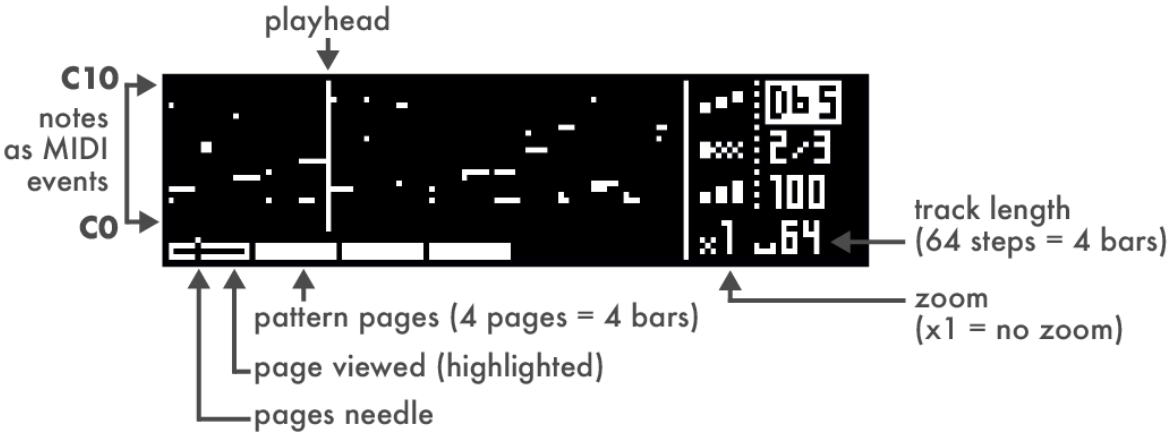
2. Step mode

2.1. Overview

Press **step** to enter this mode. This is where you can edit notes, modulations, gate events or live recordings.

Notes (or modulation events) of the current page are shown both on the screen and the 16 pads.

Under the piano roll, the bottom bar shows the number of bars in the current pattern, the currently viewed page, and the track playhead:



Tip By default, the currently viewed page is following the playhead. Changing pages with **X** and **Y** will temporarily deactivate this behavior. To reactivate it, simply leave **step** mode and enter it again. You can also disable this option for good in the MISC settings.

2.2. Pattern length, zoom and navigation

Hold **Y** and turn the encoder to set the pattern length, from 16 (1 bar) to 256 steps (16 bars).
When increasing the length, new pages will be available to display.

Tip Hold **Y** and press the encoder while scrolling for finer resolution (17 = 1 bar + 1/16 note, 18 = 1 bar + 2/16, ...)

Hold **X** and turn the encoder to set the zoom value.

Zoom in for precise editing, zoom out to get a global view. This will affect the number of pages.

Tip It is possible to set a zoom of 2/3 to easily create triplets.

Briefly press **Y** (left) or **X** (right) to select the page to display. The number of pages depends on the pattern length and the zoom value.

2.3. Adding and deleting notes

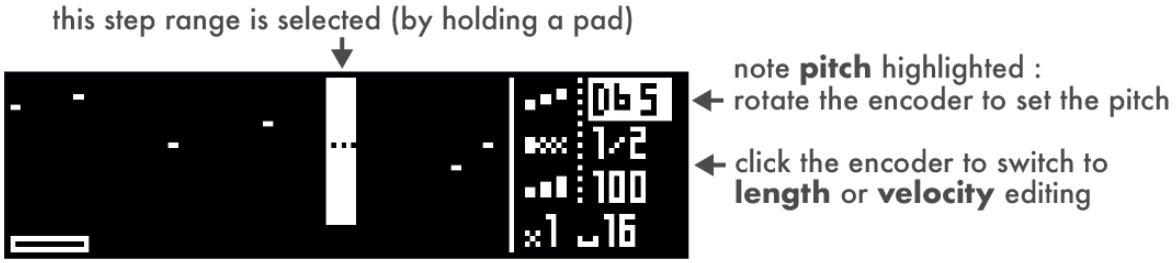
On a note track, patterns are polyphonic and grid-free. It is therefore possible to add chords, superpose notes, record off–grid events, program complex grooves and compose intricate harmonies.

Each note event has 3 parameters: **pitch**, **length** and **velocity**. Pitch goes from note C0 to C10 (CV out –5V to 5V). Length is the duration of the note. Velocity is used when the track outputs MIDI, or when the track layout has a VELOCITY voice, which will output note velocities as control voltages.

To add or delete a note, simply **Press** the corresponding step ▦ (pad 1 to 16). A note will be added with the parameter values displayed on screen.

To set the **pitch** parameter before adding a note, simply **Scroll** the encoder.

To add a note with a new **length** or **velocity**: **Hold** a step, click the encoder to select a parameter to edit (pitch, length, velocity) and **Scroll** the encoder to set it to the desired value.



2.4. Editing notes

Editing a note works exactly the same way: **Hold** the step where the note lies, and edit its parameters to modify the note in real time.

If several notes are on the same step, they will be edited simultaneously.

Holding an existing step will overwrite the default values of the note parameters (pitch, length, velocity) with the parameters of the selected note.

Tip **Hold** multiple steps (instead of a single step) to select a larger range to edit.

Tip **Hold** a step to quickly copy its content. Then, **Press** any other step to paste it.

Tip **Hold** a step and **Press** a track selection switch to quickly set the note length, from 1 step to 8 steps.

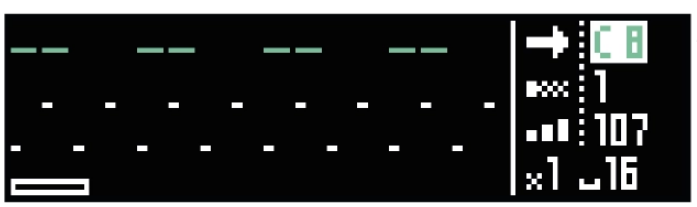
2.5. Row editing

Row editing is a handy way to find a particular note in a pattern, to program chords, and to create drum patterns.

By default, the 16 pads show every notes contained in a particular step. For example, if a chord is present on the first step (pad 1), editing this step will edit the entire chord.

It is also possible to only display notes of a given pitch on the 16 pads. Hold **step** and scroll right to enter **ROW** editing. An arrow (➡) will appear next to the pitch parameter.

Adding, editing and removing notes is achieved the same way as in default mode.



note **C8** selected :
only these notes will be available for editing on the 16-pads

To exit **ROW** editing, hold step and scroll left. Next to the selected note, ▪▪▪ (logo notes) will reappear.

Tip **Press** **step** repeatedly to cycle through the notes already used in the pattern.

2.6. Note learn

Step mode greatly benefits from the use of an external MIDI controller. A keyboard can be used to set the current pitch (and velocity) before adding a note, and even learn a chord. Play a note or a chord with the external controller, and press a step to add it to the pattern:

Tip Enter the 'On Air' mode to turn the 16–pad matrix into a chromatic keyboard. Thanks to this Hermod+ integrated keyboard, you can play notes or chords, and they will be learn when you go back to **step** mode.
Click here for more information.

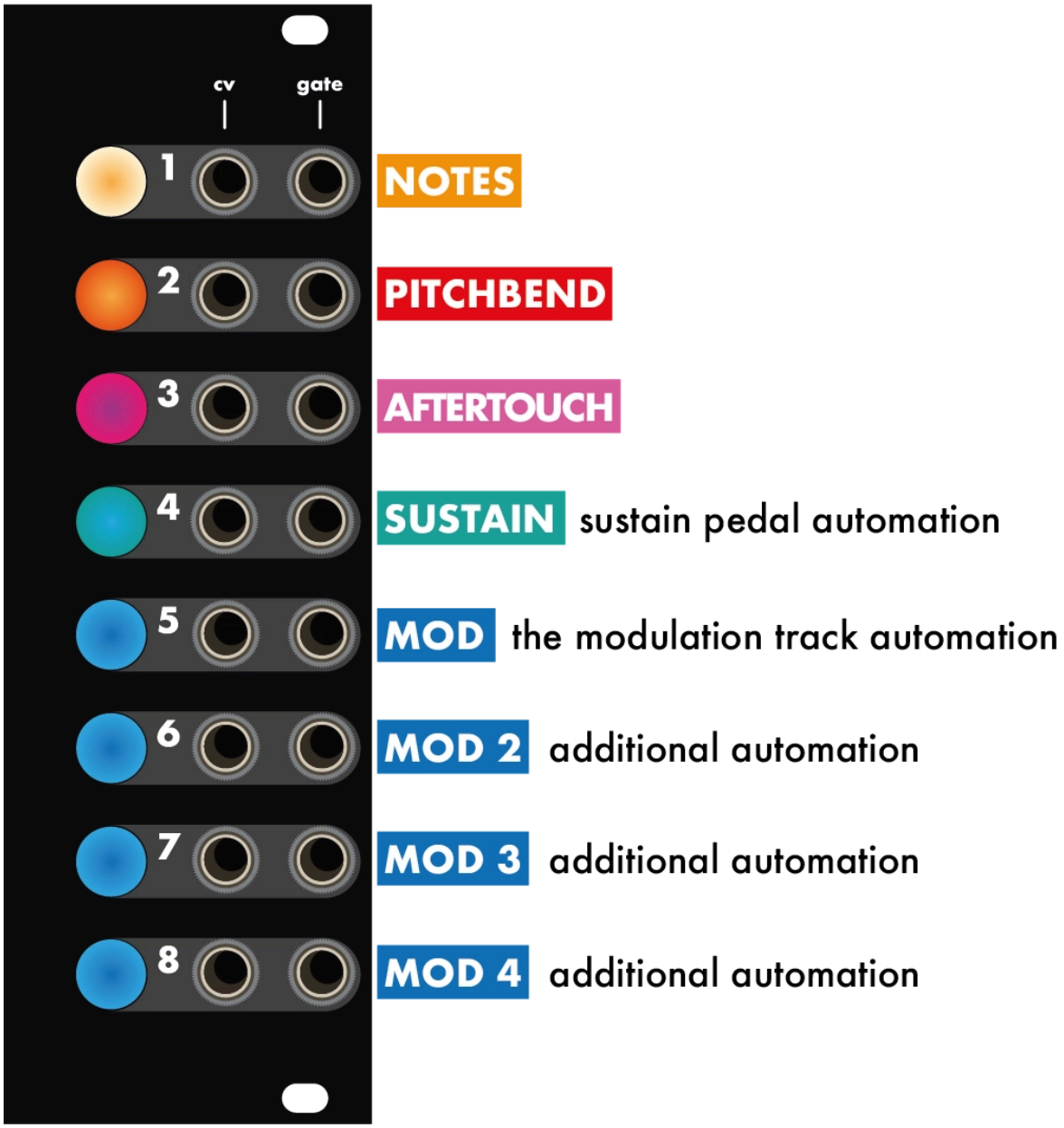
2.7. Edit any type of event (Analyser mode)

All event types are accessible and editable directly from the **step** mode.

New! You can fine-tune or create complex automation from scratch for your Eurorack system or MIDI synthesizers.

Hold **step** and **Press** one of the track buttons to access the event types. Each track button color corresponds to a specific event type.

The available event types in the Analyser are:



The selected event has access to the usual **step** mode features, including selection and editing, random generator, copy/paste, erase and generate shortcuts, pattern rotate, change the page, set the zoom and the track length.

For example, select the **PITCHBEND** event type and use the 16–pad matrix and the encoder to create a pitchbend automation for your pattern:

Tip After selecting an automation, Hold **step** and Press **X** to delete it, or Hold **step** and Press **Y** to randomize it.

Note **PITCHBEND** automation can be sent to MIDI outputs. When using the CV/Gate **MONO** tracks, this automation will affect the CV output (CV = quantized note pitch + pitchbend).

Note **AFTERTOUCH** and **MOD** automation can also be sent to MIDI outputs. When using CV/Gate tracks and a voice linked to these event types (thanks to layouts), the automation will be sent to the CV outputs.

Note **SUSTAIN** cannot output CV or MIDI, but can be used to hold notes when **APPLY SUSTAIN** is enable.

Note **MOD2**, **MOD3** and **MOD4** cannot output CV, but they can be used as modulation sources in the ModMatrix and they can output MIDI CC messages. If you have connected the **xp32** expander, it's possible to output these automation to the CV outputs.

2.8. Edit a 1–voice modulation track

To create a **MOD** track layout (**1 VOICE ▸ MODULATION** layout), refer to the **TRACK LAYOUTS** section.

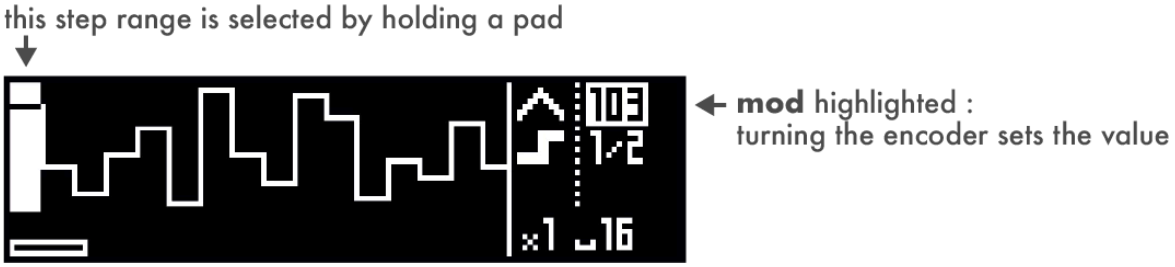
Note Layouts are available only on the 8 **CV/GATE** tracks and not on the 8 **MIDI** tracks.

In a **MOD** track pattern, tthere is no piano-roll. Instead, two types of events can be edited: mod value and gate .

Press **step** to cycle through those event types.

CREATE AND EDIT MODULATIONS

— Scroll the encoder to set the mod value
— Press a step to add or delete a mod event
— Hold a step and scroll to offset the mod value of this step



CREATE AND EDIT GATES

— Scroll the encoder to set the gate length
— Press a step to add or delete a gate event.
— Hold a step and scroll to edit the gate length of this step.

2.9. Edit a 2–voice (or more) track

To create a multi-voices layout, refer to the **TRACK LAYOUTS** section.

Note Layouts are available only on the 8 **CV/GATE** tracks and not on the 8 **MIDI** tracks.

Once the layout is created, selecting a voice in **step** mode allows you to edit notes in the piano-roll view, as well as automation and gates if they are part of the layout.

For example, consider the **3 VOICES ▸ MONO + AFTERTOUCH + MODULATION** layout:

• Selecting the first voice with the corresponding track button will display the piano-roll view, as this voice is linked to notes (**MONO** CV/Gate output):

• Selecting the second or third voice with the corresponding track button will display the **AFTC** or **MOD** automation, as these voice CV outputs are linked to aftertouch and modulation respectively. Similar to the Analyser mode, you can edit the automation events:

• To edit the gate events for this voice output, Press the track button again. This will open the **GATE** view, where you can add, remove, and fine-tune gate events:

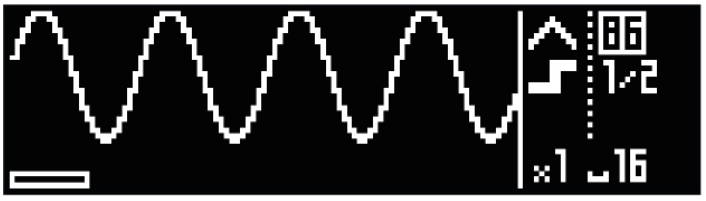
Note When using a polyphonic layout, such as the **3 VOICES ▸ POLY** layout, all 3 voices are linked exclusively to CV/Gate notes. This layout does not include CV automation or extra gates. Selecting any of the 3 corresponding track buttons will display the same piano-roll view.

2.10. Recording notes and modulations

Another way to program patterns is to **Press** rec ○ while playing to capture a live performance.

On a **MOD** track, a CV input (or a MIDI CC input) will be used to create the events.

On a **NOTE** track, a CV/Gate input (or a MIDI note input) will be used. Those inputs are configured in the **TRACK CONFIGURATION** menu.



a sine wave modulation recorded from a CV input onto a mod track

OVERDUB RECORDING

Overdub recording is active by default. Arm the recording by pressing rec ○, press play ▷ to start recording. It is also possible to press rec ○ while the pattern is already playing.

The recording will start overdubbing after the first loop, so you can continue to add notes to the pattern.

HARD RECORDING

Hard recording will overwrite any previously recorded note while recording the new incoming events.

Hold **X** and press ○ to arm the hard recording, press ▷ to start recording.

MULTITRACK RECORDING

Multitrack recording allows you to record simultaneously on every MIDI or CV/Gate routed tracks.

Hold **X** + **Y** and press ○ to arm the mutlitrack recording, press ▷ to start recording.

LOOPER RECORDING

Looper recording will keep adding incoming events to the pattern until ○ or ▷ is pressed again. The new length of the pattern will be set as soon as the recording stops.

Hold **Y** and press ○ to arm the looper recording, press ▷ to start recording.

Tip Activate the **PUNCH IN** option (found in SETTINGS > REC) to make Hermod+ wait for the first incoming note to start recording.

2.11. Pattern edit menu

Press the encoder in **step** mode to access the pattern edit menu, including the usual copy, paste and delete functions. It is also possible to copy the current page, and delete only the pitchbend, the aftertouch, the modulation, or the sustain.

Tip Hold **step** and Press **X** to delete the selected event type from the current active pattern. If you are displaying notes, only the note data will be erased.

Tip Hold and turn the encoder to rotate all the notes or modulations in a pattern. It will move all the events left/right, in time increments related to the zoom level.

2.12. Generator

Hermod+ boasts a powerful pattern randomizer: the Generator. This algorithm generates random notes (or modulations) in accordance to its parameters, which can be found under **PATTERN EDIT MENU > GENERATOR SETTINGS** (quantize grid, note density, pitch range, length range and velocity range).

To generate a new pattern, enter **PATTERN EDIT MENU > GENERATOR** and select **RANDOMIZE**. Rather than generating a entire new pattern, randomization can be applied to individual parameters of existing notes, such as pitch, length or velocity.

Tip Use a **SCALE** effect to quantize the randomized notes and get a musical pattern.

Tip Hold **step** and Press **Y** to delete and randomize the entire pattern.

Note In a modulation track, you can randomize separatly the mod values and gates . The event type selected will be the one to be randomized. Press **step** to cycle through those event types.

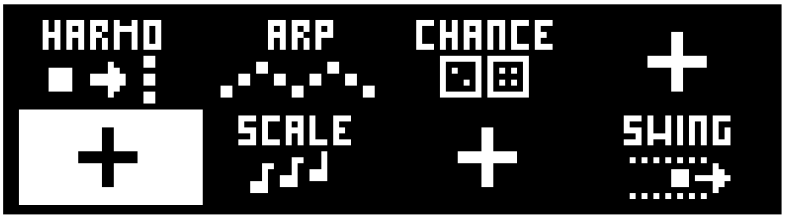
Note In a **NOTE** track, if **ROW** editing is enabled, the generator will randomize notes only on the selected row.

3. Effects

3.1. Overview

Each track can have up to 8 effects. Notes played on an external controller or recorded in a pattern are processed and sent to the outputs in real–time by the effect engines. All the effects are non-destructive, and can handle polyphony.

The position of an effect in the chain is very important: an Harmonizer placed after an Arpeggiator will not sound like an Arpeggiator placed after an Harmonizer. Please note that it is possible to add multiple effects of the same engine on the same track (e.g. chaining two arpeggiators).



Every effect parameter can be edited in real-time via CC message and CV inputs, thanks to the modMatrix.
Press **Y** in **effects** mode to access the modMatrix.

3.2. Effect list

ARPEGGIATOR generates looping arpeggiated patterns from incoming notes.

CHANCE plays or skips a note based on probability, in order to add variations to drum patterns and melodies.

ECHO creates copies of incoming notes, simulating an audio delay effect by using velocity MIDI data to decrease volume.

ENVELOPE generates an AHDSR envelope (attack/hold/decay/sustain/release) triggered every time a note comes through it.

EUCLID generates rich polymetric rhythmic patterns.

FILTER filters out a range of notes or modulation values.

LFO generates different types of high resolution waveforms.

GLIDE interpolates note pitch.

HARMONIZER turns single notes into chords.

NOTE TO CC transforms notes and velocities into CC messages.

MOD TO NOTE transforms modulation into notes.

RANDOM randomly alters notes velocity/pitch/octave.

RATCHET truncates an incoming note into multiple notes.

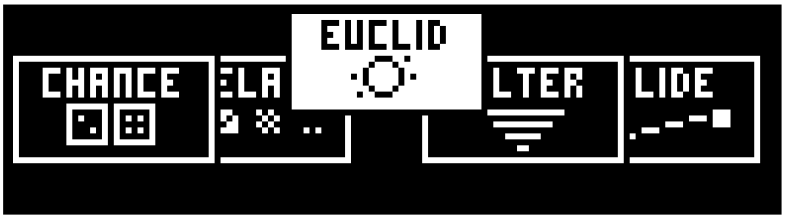
SCALE quantizes incoming notes to a given scale.

SWING shifts the positions of incoming notes to produce groove variations.

3.3. Basic actions

ADD AN EFFECT

To add an effect, Select an empty effect slot ➕ by scrolling with the encoder, then Press the encoder to enter the effect selection menu:

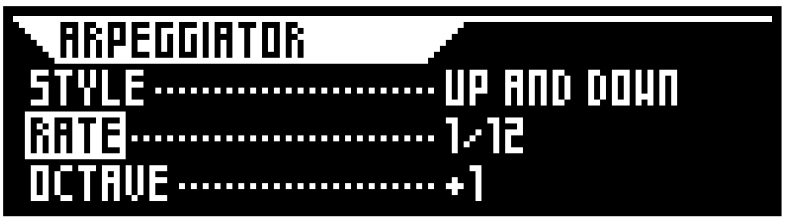


Select the desired effect and Press the encoder to confirm.

Tip Hold an empty effect pad ▦ to quickly select this slot and enter the "add effect" menu.

EDIT AN EFFECT

Select an effect and Press the encoder to enter the effect's parameters menu:



Select an effect and Hold the encoder to enter the effect's contextual menu, which includes actions such as **EDIT**, **COPY**, **DELETE**, ...

To paste an effect in an empty slot ➕ : Select the slot and Hold the encoder to access the contextual menu. You can then select the **PASTE** option. You can also paste effects from tracks to tracks.

Tip Hold an existing effect pad ▦ to quickly select this slot and enter the "edit effect" menu.

Tip While being in the "edit effect" menu, simply Press a pad to quit this menu.

3.4. Mute/unmute effects

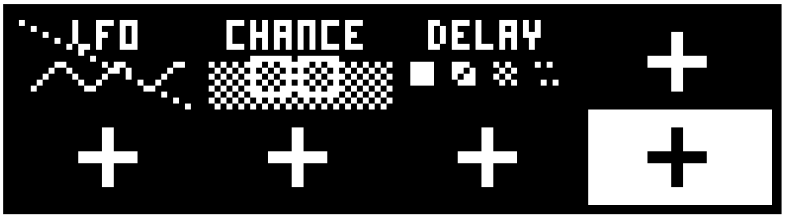
There are two types of mute states in Hermod+ :

PATTERN MUTE

Press a pad ▦ to mute/unmute the corresponding effect locally. As this effect will only be muted in the current sequence, this action is a pattern mute.

GLOBAL MUTE

Hold **effects** and Press a pad ▦ to mute/unmute the corresponding effect globally. In this case, the effect will be muted across all sequences.



*FX 1 is muted globally (**GLOBAL MUTE**), FX 2 is muted locally (**PATTERN MUTE**) and FX 3 is enabled.*

Tip Effects with a destination (i.e. ENV or LFO) will send out the default value before muting.

3.5. Pattern values

While a track can hold only one effect rack, it is possible to set specific values for effect parameters at a pattern level.

Once an effect has been added in the FX rack, **Press** the encoder to access its parameters.

To set a pattern value for a parameter, **Scroll** to highlight it and **Hold** the encoder to toggle between global value (shared by all patterns) or pattern value (this pattern only).

*The **OCTAVE** parameter is set to **+1**, only in the pattern 2. Other patterns can hold different values.*

3.6. ModMatrix

The modulation matrix allows you to control effect parameters using various sources, such as:

— CV inputs (**A**, **B**, **C** or **D**)
— MIDI Control Messages inputs (**CC1** to **CC119**)
— New! Recorded automation (**MOD**, **MOD2**, **MOD3**, **MOD4**)

To enter the ModMatrix, make sure you are in **effects** mode and Press **Y**.

There are 4 slots of modulations available per track. To Select a slot, Press the corresponding pad:

... and use the encoder to set the source and the destination value:

Set the "source" input (a midi CC or a CV input) with the encoder. This input will control the assigned parameter.

Set the "effect parameter" to be controlled.

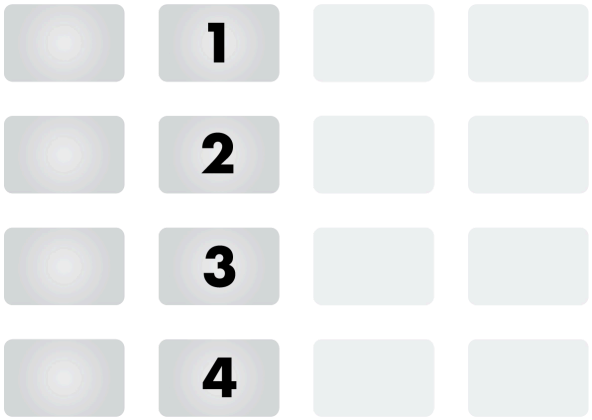
Note The modMatrix does not directly control the effect parameters, but it adds an offset to these parameters. So you can still perform with the FX parameters in the **effects** mode, while modulating them with a CV or CC input.

Tip By default, CV inputs ranges from **-5V to +5V**, but other ranges are available from the **CV/GATE** section of the settings menu.

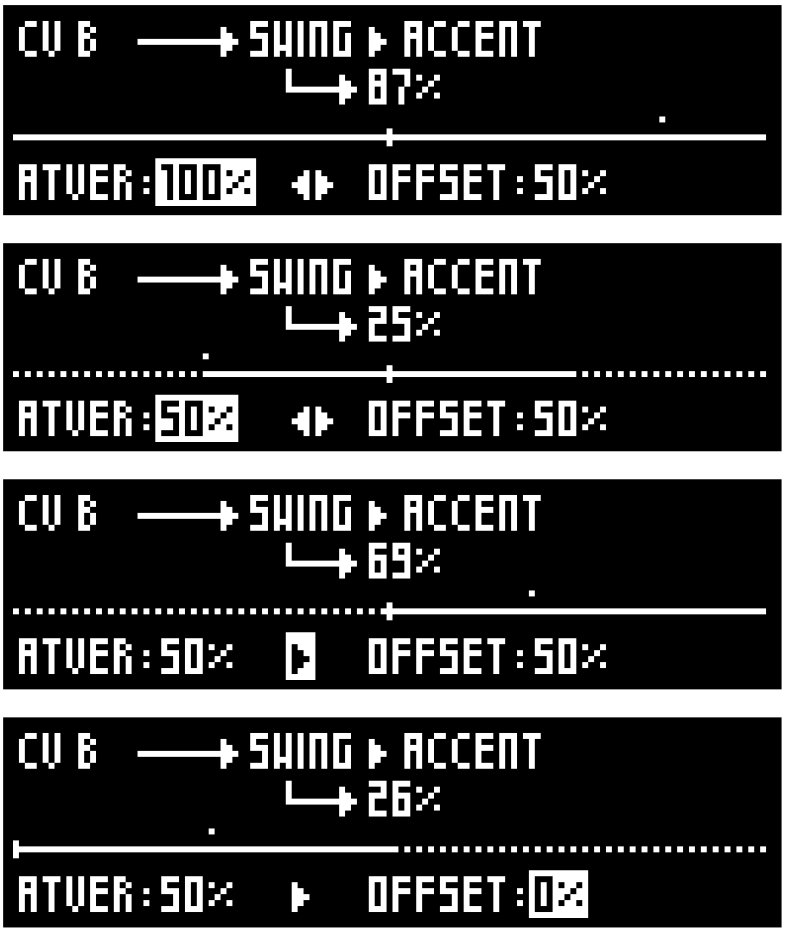
3.7. ModMatrix attenuverter/offset

Each routed modulation input is going through an attenuverter/offset stage before being sent to its destination.

To access this mode, if the modulation is created, **Press** the corresponding pad:



You can use the encoder to fine tune:
• the **ATTENUVERTER**, from **-100%** to **100%**. It can attenuate the source signal, and even invert it when the value is negative.
• the **POLARITY**, useful to increase/decrease (⟷) or to increase only (→) the destination FX parameter.
• the **OFFSET**, adjusting the default effect parameter value, when no source is applied.



The horizontal dotted line displays the full modulation range available.
The horizontal line displays the final working range of your destination (that you can fine tune with the above parameters). The dot will move according to the source value.
When the input source varies, you will see the destination parameter value change in real time (and the little dot will move around the working range).

3.8. Arpeggiator

Generates looping arpeggiated patterns from incoming notes.

STYLE ORDER UP ... SILENCE 1 OUT OF 3
Direction of the arpeggiated pattern. ORDER will play notes in the order they were played. UP plays the pattern from the lowest note to hightest. RANDOM will play notes in a random order.

RATE 1/1 ... 1/64
Speed of the pattern. A rate of 1/4 will play a note of the arppegio every beat.

OCTAVE -5 ... 0 ... +5
To create octaves progression. If OCTAVE=1 the arpeggiator will play the original pattern, followed by the same pattern one octave higher. If OCTAVE=-2 the arpeggiator will play the original pattern, followed by the same pattern one octave lower, followed by the same pattern two octaves lower.

GATE 0% ... 200%
Determines the note lengths. The maximum value depends on the rate value.

HUMANIZE 0% ... 100%
Adds some randomness to the velocity and gate length.

RE-TRIG – NOTE 8BARS ... 1BAR 1/2 ... 1/16
When active, the arpeggiated pattern will restart upon the set interval, or on every added note.

REPEAT – x1 ... x16
If enabled, the arpeggiated pattern will loop only for the defined amount of cycles.

3.9. Chance

Plays or skips a note based on probability, in order to add variations to drum patterns and melodies.

CHANCE 0% ... 100%
If ”0%”, the note will never be played. If ”50%”, the note has a fifty-fifty chance to be played. If ”99%”, the note will almost always be played.

LOT – BAR BEAT 1/8 1/16 1/24 1/32
When OFF, each note will "roll a die" to either play or not. When active, rather than evaluate each note individually, the Chance effect groups notes in time intervals, and "rolls a die" for that interval. Either the full interval plays, or it does not.

CHANCE = VELOCITY – ON
When active, the note will have a probability of being played proportional to its velocity (0-127). Very handy for programming different per note probability.

SYNC – BAR BEAT 1/8 1/12 1/16 1/24 1/32
Adds a unique probability per time division. If sync = ”1/4”, all notes that fall precisely on a quarter note will have a special probability of being played, determined by the next parameter, "sync chance".

SYNC CHANCE 0% ... 100%
The probability of a synced note to be played. For example, if sync = ”1/4” and sync chance = ”100%”, all beat notes will be played.

3.10. Echo

Creates copies of incoming notes, simulating an audio delay effect by using the velocity data to decrease volume.

TIME 1/1 ... 1/64
Amount of time between the original notes and the delayed notes.

REPEAT 0 1 ... 16
Number of delayed notes.

FADE VELOCITY – LINEAR EXPONENTIAL LOGARITHMIC
Enables the MIDI velocity decrease, from the original note to the last delayed note. This fade out can be linear, exponential or logarithmic.

FADE GATE – LINEAR EXPONENTIAL LOGARITHMIC
Enables the gate length decrease, from the original note to the last delayed note. This fade out can be linear, exponential or logarithmic.

FADE PITCH UP – +1 +60
Enables a pitchshifting, up to the desired amount of transposition (for example, +12 will make the last delayed note one octave higher).

FADE PITCH DOWN – –1 –60
Enables a pitchshifting, down to the desired amount of transposition (for example, –18 will make the last delayed note 18 semitones lower).

Tip When using both **FADE PITCH UP** and **FADE PITCH DOWN**, the first delayed note will be pitched up, the next one will be pitched down, and so on...

3.11. Envelope

AHDSR envelope, with variable curvature per section, which can be assigned to any destination. It is triggered every time a note comes through it.

ATTACK 0% ... 100%
Determines how quickly your destination will reach its maximum value before entering the Hold phase.

HOLD 0% ... 100%
Holds the attack value at its maximum for a specified time before decay phase. Its default value is set to 0% as hold time is optional.

DECAY 0% ... 100%
The decay phase determines the length of the drop from the peak level to the sustain level of a sound.

SUSTAIN LEVEL 0% ... 100%
Level of the steady state (note ON), until the key is released.

RELEASE 0% ... 100%
The final phase determines the speed at which a sound ends from the moment you release the key.

DEPTH 0% ... 100%
Scales the ENV.

OFFSET -100% ... 100%
Offsets the entire AHDSR curve.

CURVE A (ATTACK) LOG -100% ... EXP 100%
Changes the shape - logarithmic or exponential - of the attack curve.

CURVE D (DECAY) LOG -100% ... EXP 100%
Changes the shape - logarithmic or exponential - of the decay curve.

CURVE R (RELEASE) LOG -100% ... EXP 100%

Changes the shape - logarithmic or exponential - of the release curve.

SIDECHAIN ALL C0 ... B9

When set to **ALL**, any MIDI note-on message will restart the envelope. When set to a specific note, only note-on messages of the selected note will restart the envelope.

Tip When the destination is set to **VELOCITY**, and the **SIDECHAIN** is set to a specific note, the sidechain note will not be affected by the envelope. A use case for this is ducking drums when the kick-drum hits, but leaving the kick drum at its full velocity.

MODE GATE ON WAIT AHD TRIG

GATE ON is the 'traditional' behaviour of envelope generators. A note-off message of the sidechain note will immediately short-circuit the envelope to its release stage, regardless of the current stage.

When set to **TRIG**, note-off messages are ignored, and the envelope always goes through the Attack, Hold, Decay and Release stages, but always skips the Sustain stage. This results in a consistent timing of the envelope regardless of the length of the sidechain note, making this option particularly suited to trigger envelopes with short notes, or trigs.

When set to **WAIT AHD**, the envelope will have to *wait for the Attack, Hold and Decay stages to complete* before ever going into the Release stage. In other words, short-circuiting to the Release stage may not happen during either of the Attack, Hold, or Decay stages. This ensures a minimum guaranteed time of the envelope, but the Sustain stage is not *always* skipped. This hybrid behaviour is similar to **TRIG** mode when triggered by short gates, but similar to **GATE ON** mode when triggered by longer gates.

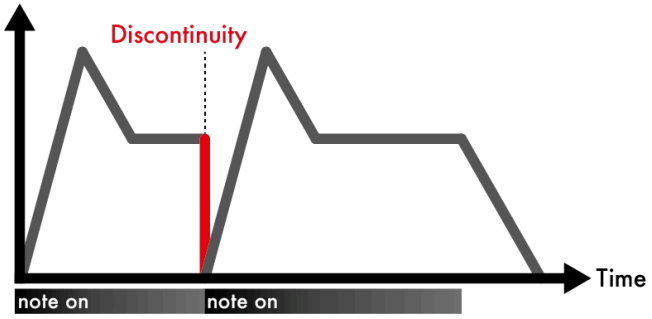
DESTINATION MOD MOD2 MOD3 MOD4 PITCHBEND AFTERTOUCH CC0 CC1 ... CC119

Selects the CV or MIDI destination of the envelope.

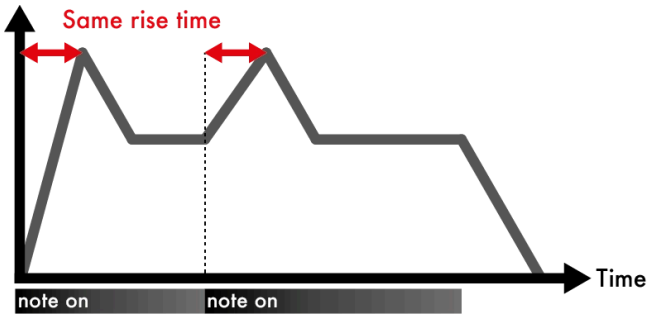
Tip When using **DESTINATION** = **MOD**, set the track layout **2 VOICES ▸ MONO + MODULATION** : the ADSR signal will be sent on the modulation CV voice (the second voice).

RETRIG ATTACK FROM ZERO EQUAL TIME EQUAL SLOPE

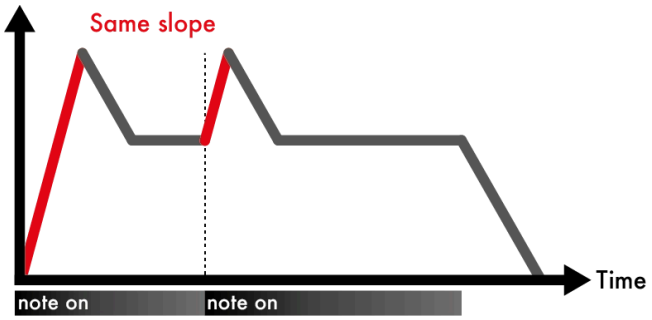
Changes the behaviour of the attack stage when retrigging the envelope.



RETRIG ATTACK: From Zero



RETRIG ATTACK: Equal Time



RETRIG ATTACK: Equal Slope

Tip When muting, deleting, or changing the destination of the envelope, the "default value" is sent. For an envelope, the default value is the value of the **OFFSET** parameter.

Word of caution

> Hermod+ was not designed to be an audio-rate signal generator, so the envelope might not be as smooth as dedicated EG modules.
>
> Using it as volume control on a VCA *might* result in "zipper noise", if the VCA has a fast enough response time.
>
> Early hardware revisions of Hermod+ may be more susceptible to this, as their hardware antialiasing filter had a higher cutoff frequency. Newer hardware revisions (REV3 and newer) and the xp32 greatly mitigate the issue by using a lower cutoff frequency.
>
> The issue may be mitigated by processing the envelope through either
>
> - A slew limiter.
> - A low pass filter with a cutoff frequency of around 1.5kHz~2kHz. Even a passive RC lowpass filter could do the trick, for example with a series resistor of 1kOhms, and a parallel capacitor of 100nF.

3.12. Euclid

Generates rich polymetric rhythmic patterns.

NOTE INPUT C0 ... C10

When set to "IN", Euclid will use the incoming notes. For example, if you hold the C, E, and G notes, Euclid will play a major C chord in the chosen rhythm. Alternatively, you can choose to ignore the input, and generate a euclidean rhythm with a fixed note, while incoming notes will be passed on to the next effect, untouched. Adding multiple Euclid effects on the same rack (with different notes) is an easy way to generate complex polymetric rhythms.

STEPS 1 ... 32

Sets the length of the euclidean pattern in steps.

FILLS 1 ... 32

Sets the amount of filled steps among the total number of steps.

RATE 1/1 ... 1/64
Determines the rate at which the euclidean pattern will be played.

GATE LENGTH 0% ... 100%
Sets the gate length of played notes.

ROTATE 0 ... 31
Shifts the computed euclidean pattern.

MOD AMOUNT 0% ... 100%
Alternatively increases and shortens the length of played notes, taking into account the 'gate length' parameter.

MOD SPEED 1/64 ... 128/1
Sets the speed of the length modulation.

3.13. Filter

Filters out a range of notes or modulation values.

NOTE VAL MIN / NOTE VAL MAX C0 ... C10
If "VAL MIN" < "VAL MAX", sets the range of notes that will pass through. If "VAL MIN" > "VAL MAX", sets the range of notes that will be blocked.

MOD VAL MIN / MOD VAL MAX 0 ... 127
Similarly to notes, CC messages falling in the defined range can either be passed through, or blocked.

3.14. Glide

Interpolates note pitch.

GLIDE TYPE NONE LINEAR EXPONENTIAL SMOOTH
Sets the glide curve type.

GLIDE TIME 0ms ... 2500ms
Duration of the glide in milliseconds.

3.15. Harmonizer

Creates a chord from a single note input.

ORIGIN – ON
When ON, passes the incoming MIDI notes through, adding the generated chord notes. When OFF, drops the incoming notes, and only outputs the harmonized notes.

HARMO 1 ... 4 -24 ... – ... +24
Sets a note to add to the incoming note to form the chord, in relative semitones.

3.16. LFO

Generate different types of high resolution waveforms.

WAVEFORM SINE TRIANGLE RAMP SQUARE RAND
Selects the waveform of the LFO.

DESTINATION MOD MOD2 MOD3 MOD4 PITCHBEND AFTERTOUCH
Selects the CV or MIDI destination of the LFO.
Tip When using **DESTINATION** = **MOD**, set the track layout **2 VOICES ▸ MONO + MODULATION** : the LFO signal will be sent on the modulation CV voice (the second voice).

SYNC – ON
Selects whether to tie the waveform period to the BPM of the project or not.

SYNC RATE 1/64 ... 128/1
Selects the synchronized rate of the LFO.

UNSYNC RATE 0% ... 100%
Increases the frequency exponentially, from 0.1 Hz to 1kHz approximately.

RANGE -100% ... 100%
Sets the amplitude of the LFO. Negative values invert the waveform.

OFFSET -100% ... 0% ... 100%
Adjusts the central value of the LFO, shifting its range.

PHASE -180° ... 180°
Shifts the starting phase of the LFO.

Tip Incoming messages are used to further offset the LFO, on top of the **OFFSET** parameter. For example, if the LFO is used to modulate the pitchbend for a vibrato effect, the pitch wheel of an input controller will still work and offset the LFO.

Tip When muting, deleting, or changing the destination of the LFO, the "default value" is sent. For an LFO, the default value is the current center value, as computed from the **OFFSET** parameter, and previously received messages.

3.17. Mod to note

Creates notes from incoming CC/CV modulations. It uses the CC/CV values coming from the input ports, or from the internal player.

SAMPLE RATE SAMPLE/HOLD 1/64 ... 1/1
If **SAMPLE/HOLD** is selected, inputed modulation will be "captured" when a note ON is received (from an input port or from the internal player) and a note will be outputed (its gate length will follow the note duration).
If a quantize value is selected (e.g. **1/16**), this parameter will set the interval between two captures of the modulation signal value, in sync with the BPM.

NOTE MIN C0 ... C10
Defines the lowest note that will be generated by the modulation.

NOTE MAX C0 ... C10
Defines the highest note that will be generated by the modulation.

PASS MOD OFF ON
If **ON**, the incoming modulation will be passed through. If disabled, only the resulting note will be output.

Note This effect is designed to be used on a **MONO (NOTE)** track, as it will generate monophonic notes.

Note This effect will generate notes only if Hermod+ is playing.

3.18. Note to CC

Transforms notes and velocities into CC messages.

CC DESTINATION 0 ... 119
Sets the CC that will be sent.

CC VALUE NOTE VELOCITY NOTE ON/OFF
Determines the note parameter that will be transformed into a CC value. If 'Note Velocity' is selected, the resulting CC will have the value of the incoming note velocity. If 'Note On/Off', the CC will be set to 127 upon a note ON, and reset upon a note OFF.

CC MIN VALUE 0 ... 127
Sets the minimum value that the CC can take.

PASS NOTES OFF ON
If **ON**, the incoming note will be passed through. If disabled, only the resulting CC will be output.

3.19. Randomizer

Randomly alters notes velocity/pitch/octave.

NOTE– / NOTE+ 0 ... 12
Increases the random pitch range downwards and upwards respectively.
For example, an incoming note of 60 (C5) with NOTE– = 1 and NOTE+ = 4 will be randomly transposed to a pitch value between 59 (B4) and 64 (E5).

OCTAVE– / OCTAVE+ 0 ... 5
Increases the random octave range downwards and upwards respectively. When active, notes will randomly be transposed up or down by octaves, within the selected range.

VELO– / VELO+ 0% ... 100%
Increases the random velocity range downwards and upwards respectively.

LENGTH 0% ... 100%
Increases the range of incoming notes lengths by delaying their NOTE OFF messages. At 100%, lengths will be randomly increased up to a whole note (4x 1/4 notes = a bar in 4/4).

CHANCE 0% ... 100%
Per note probability of randomization of the active parameters.

3.20. Ratchet

Truncates an incoming note into multiple notes.

RATE 1/64 ... 1/1
Sets the output rate of ratcheted notes.

GATE LENGTH 0% ... 100%
Sets the length of ratcheted notes.

MOD AMOUNT 0% ... 100%
Alternatively increases and shortens the length of played notes, taking into account the 'gate length' parameter.

MOD SPEED 1/64 ... 128/1
Sets the speed of the length modulation.

3.21. Scale

Quantizes incoming notes to a given scale.

COLOR MAJOR MINOR ... INTERVALS
Divides the scales into families.

SCALE MAJOR PENTA M ... CHROMATIC
Sets the scale that will be the reference for quantizing pitch values for incoming notes.

KEY C ... B
Sets the root note of the selected scale.

STICK UP DOWN FILTER ALGO1 ALGO2
When an incoming note is out of scale, determines how an out of scale incoming note will be corrected.

For example, if selected scale is C Maj, an incoming out of scale note C# will be processed like:

- Down : C# scaled to C
- Up : C# scaled to D
- Filter : C# is ignored (not played)
- Odd up : C# scaled to D (odd midi note numbers are scaled up, even numbers are scaled down)
- Odd down : C# scaled to C (odd midi note numbers are scaled down, even numbers are scaled up)

TRSP -36 ... +36
Transposes the note before correction.

3.22. Swing

Shifts the positions of incoming notes to produce rhythmic variations.

GROOVE 0% ... 50% ... 100%
Percentage of swing.
50% has no effect on notes position.
51% to 100% will delay the off–grid notes position.
49% to 0% will delay the on–grid notes position.

SYNC 1/1 ... 1/24
Swing quantisation grid. 1/16 is the classic value.

ACCENT 0% ... 100%
Amount of velocity accent. Emphasizes the off–beat notes when under 50%, and the on–beat notes when above 50%.

HUMAN 0% ... 100%
Slightly randomizes the position of swung notes (humanizer).

4. Track mode

4.1. Overview

In this mode, you can manage the mute states, voice layouts, and settings for each of the 16 tracks on Hermod+.

Track patterns can include various events such as notes, CV and CC modulations, gates, pitchbend, and aftertouch data.

These patterns act as variations of the same track across different sequences. Switching sequences provides a fresh pattern while maintaining the same track.

CV/GATE TRACKS

TR1 to TR8 are the CV/Gate tracks (which can also output MIDI events).

Press one of the 8 track selection switches ⚪ to Select the corresponding track.

MIDI TRACK

8 additional tracks are dedicated to output MIDI only.

To toggle between **CV/GATE** and **MIDI** tracks, either Scroll the encoder or Press **track**.

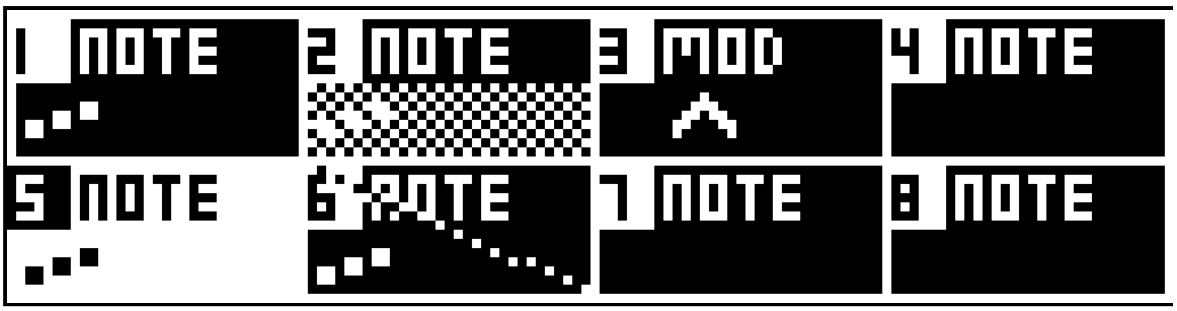
The screen will show **TR1 MIDI to TR8 MIDI** : Press one of the 8 track selection switches ⚪ to select a MIDI track.

4.2. Mute/unmute tracks

There are two types of mute states in Hermod+ :

— **PATTERN MUTE** : Press a pad ▦ to mute or unmute the corresponding track locally. This action applies only to the current sequence, making it a pattern mute.

— **GLOBAL MUTE** : Hold **track** and Press a pad ▦ to mute or unmute the corresponding track globally. This will mute the track across all sequences.



Tracks 1, 2, 5 and 6 contain notes. Track 3 contains modulation. Track 2 is muted and track 6 is globally muted. Tracks 4, 7 and 8 are empty.

New! Starting from Hermod+Os 2.10, each track can be configured to either be muted post-FX or to only mute the sequenced events, using the **MUTE AFFECTS INPUT** setting. For more information, please refer to the *Track configuration – Player* section ***below.***

4.3. Track edit menu

Press the encoder in **track** mode to access the edit menu of the currently selected track.

You will be able to **COPY** the selected track. Simply select another track and enter its edit menu to **PASTE** it.

Tip It is possible to copy/paste tracks across projects.

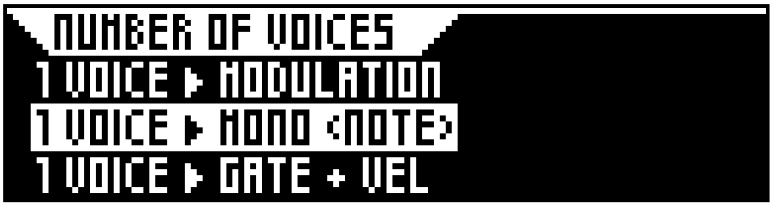
To empty everything in a track, including notes, modulation events and effects, use the **CLEAR** option.

4.4. Track layouts

The first 8 tracks of Hermod+ can use one or more CV/Gate voices to output monophonic or polyphonic CV/Gate notes, velocity, aftertouch, modulation automation, etc...

Those tracks are using 'polymorphic' layouts: they can be configured in various ways to match your eurorack needs.

To set a track layout:



- Scroll the encoder to select the track to configure.
- Press **X** to start the configurator.
- Select the number of voices that the track will control.
- Select one of the predefined layout for those voices.

Note The list of predefined layouts varies with the number of voices that are still available after the current track. For example, only **1-VOICE** layouts will be available on track 8.

4.5. Track layouts – Examples

Some examples of basic track layouts:

1 VOICE ▸ MONO (NOTE)
This is the default layout. It will output CV/Gate notes on a single voice. Use it to control monophonic eurorack modules.

1 VOICE ▸ MODULATION
This layout is used to create **MOD** tracks. The CV output will output a modulation signal, and the Gate output will output an additional gate. Use it to control CV modulation inputs, like a filter cutoff frequency.
Tip A modulation voice can output the **MOD** automation recorded in the pattern, and can also output a received MIDI Control Change converted to CV.

Some examples of advanced track layouts:

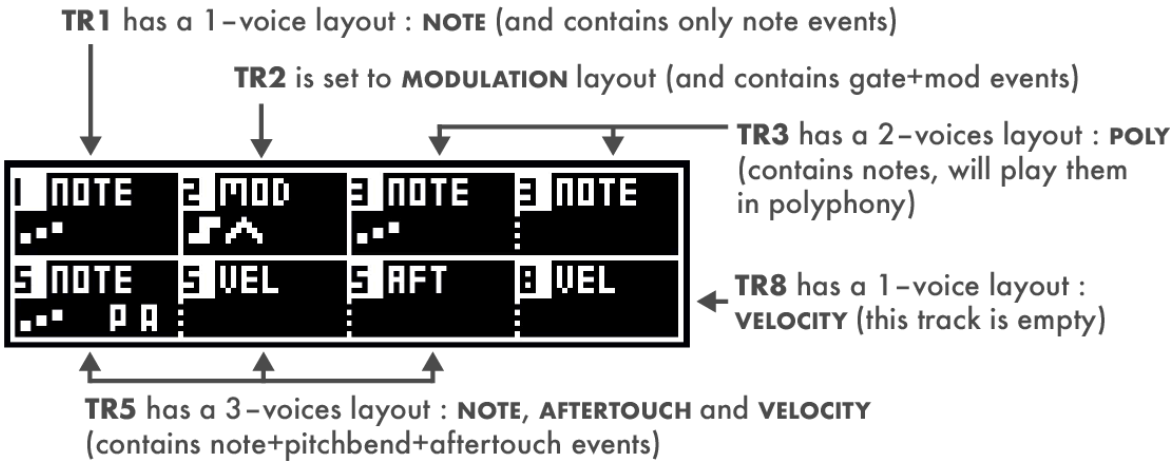
2 VOICES ▸ MONO + MODULATION
This layout combine monophonic CV/Gate on the first voice, and the modulation (+ a gate output) on the second voice.
Tip On a track, add an **ENVELOPE** effect (with destination = **MOD**). The ADSR signal (trigged by notes) will be sent on the second voice (modulation).

3 VOICES ▸ MONO + VEL + AFTERTOUCH

With this layout, the track will control 3 voices. The first CV/Gate voice will output notes. The second and the third voices will output velocity and aftertouch respectively.

4 VOICES ▸ POLY

With this layout, the track will control 4 voices. The notes contained in the track will be dispatched on 4 CV/Gate outputs. The order in which the voices will output notes can be set in the **POLY ALLOCATOR**.



Note More information on **POLY ALLOCATOR** and voice stealing algorithms **HERE**.

Tip When a track uses a voice for modulation, velocity or aftertouch, it is still possible to use the gate output of this voice to control drum modules, or to use it as an additional clock/pulse source.

Layouts illustration examples available at the end of **THIS PAGE**

4.6. Track layouts – Polyphony Allocators

Polyphony allocation (also known as voice stealing) is the process by which a track assigns each new note to an available voice.

These algorithms are used exclusively for **POLY** layouts. The purpose of voice allocation is to ensure that each note is musically handled and that the number of notes played simultaneously does not exceed the maximum number of available voices.

There are several voice allocation algorithms available. The default algorithm **POLYLRU** is the most versatile and is suitable for most use cases.

— **POLYLRU** (least recently used) : Allocates new notes to the voice that has been silent for the longest time. This ensures that all voices get an equal chance to play, maintaining balanced usage.

— **POLY** : A simple and efficient allocation algorithm. Unlike **POLYLRU**, it can replay the same note on the same voice (if available). This allows the same note to consistently use the same synthesizer voice.

— **FIRST** : Assigns notes sequentially: the first note goes to voice 1, the second to voice 2, and so on. If the number of notes exceeds the voice capacity, additional notes will not be played. This approach is straightforward but limits overflow handling.

— **CYCLIC** : Utilizes a "round robin" approach. Each new note is assigned to the next available voice in a circular order. For example, the first note is played on voice 1, the second on voice 2, and so on. Once all voices are in use, the allocation restarts with voice 1 if it becomes available.

— **RANDOM** : Assigns notes to any available voice at random, providing a less predictable but sometimes creatively interesting allocation method.

4.7. Track transpose

The transpose track is a single track which leads the transposition of one or several other tracks. This role is always devoted to **TR8 MIDI**.

Hold one of the 8 track selection switches ⚪ to access its configuration menu.

Under the **PLAYER** menu, Scroll and Press the encoder to enable the **TRANSPOSE** option.

Enabling this parameter on **TR8 MIDI** will make it the **TRANSPOSE LEADER**, as displayed in the menu.

Enabling this parameter on any other track will make it follow the current pitch of the **TRANSPOSE LEADER** track in real-time.

Note **TR8 MIDI** can be used as any other track : you can play notes with an external controller, write notes in the piano roll and use MIDI effects.

4.8. Track configuration – Player

Hold one of the 8 track selection switches ● to access its configuration menu.

Scroll and Press the encoder to access the **PLAYER** configuration. This section allows you to configure the most generic track options.

QUANTIZE OFF 1/32 ... 1/4
Enables the track timing quantization. The value sets the grid on which notes will be quantized. The quantize operation is non-destructive, so it can be modified at any time without overwriting positions of original notes.

APPLY SUSTAIN OFF ON
When enabled, sustain pedal messages (MIDI CC64) will directly affect the output notes. When the sustain pedal CC is high (pedal is pressed), all note-off events will be held.

TRANSPOSE OFF ON
When enabled, the current track can be transposed by **TR8 MIDI** (**TRSP**).

MUTE AFFECTS INPUT NO YES
When set to "YES", the track is muted after the effects chain. When set to "NO", only the sequenced data is muted, but live inputs and generative effects are still active.

4.9. Track configuration – Inputs

Hold one of the 8 track selection switches ● to access its configuration menu.

Scroll and Press the encoder to access the **INPUTS** configuration. This section allows you to configure how the track will respond to incoming MIDI and CV/Gate events.

Note Each configured track will always receive its assigned MIDI and CV/Gate events, even if the track is not selected. You can also adjust active track settings in the **SETTINGS** menu under **MIDI INPUT**.

Note To record multiple tracks simultaneously, enable the **MULTITRACK** mode (Hold ○ to access the recording settings).

INPUT PORT – MIDI USB DEVICE USB HOST
Sets the MIDI input port of the current track.

INPUT CHANNEL CH01 ... CH16
Sets the MIDI input channel of the above **INPUT PORT**.

INPUT MIDI MOD CC0 ... CC119
Sets the incoming CC message the track will use to record modulation events. By default, this is set to CC1, the standard "modulation wheel" CC message.

INPUT NOTE – CV/GATE AB CV/GATE CD
Sets the CV/Gate inputs of a track (on a **MONO** or **POLY** track, you can use a CV/Gate pair to record incoming notes).

INPUT MOD – CV A CV B CV C CV D
Assigns a CV input for recording **MOD** (modulation). Select which CV input (A, B, C, or D) will be routed to the modulation destination for this track.

TRIG GENERATOR – GATE A GATE B GATE C GATE D
The random generator trigger can be assigned to any of the 4 CV inputs (used as Gate inputs). Each trigger generates an entirely new pattern.

TRIG GENERATOR [PITCH, LENGTH, VELOCITY, MOD] – GATE A GATE B GATE C GATE D
These special random generator triggers can be assigned to any of the 4 analog inputs. Each trigger will modify the pattern (pitch, velocity, note lengths, modulation).

4.10. Track configuration – MIDI Out

Hold one of the 8 track selection switches ● to access its configuration menu.

Scroll and Press the encoder to access the **OUTPUTS** configuration. This section allows you to configure how the track will output its events.

OUTPUT PORT – MIDI USB DEVICE USB HOST ALL PORTS

Sets the MIDI output port of the current track.

OUTPUT CHANNEL CH01 ... CH16

Sets the output channel of the previously defined MIDI output port.

DESTINATION MOD – CC0 CC1 ... CC119 PC

Sets the MIDI destination of the current track's modulation (**MOD**) events. **CC1** is the standard "modulation wheel" CC message. You can also set **PROGRAM CHANGE** if you want to change the presets of your MIDI external synthesizer with the **MOD** automation.

DESTINATION MOD2 – CC0 CC1 ... CC119 PC

Functions the same as **DESTINATION MOD** but applies to **MOD2** automation.

DESTINATION MOD3 – CC0 CC1 ... CC119 PC

Functions the same as **DESTINATION MOD** but applies to **MOD3** automation.

DESTINATION MOD4 – CC0 CC1 ... CC119 PC

Functions the same as **DESTINATION MOD** but applies to **MOD4** automation.

DESTINATION PITCH PITCHBEND CC0 ... CC119

Sets the MIDI destination of the current track's pitchbend events.

DESTINATION AFTR AFTERTOUCH CC0 ... CH16

Sets the MIDI destination of the current track's aftertouch events.

4.11. Track configuration – CV Out

Hold one of the 8 track selection switches ⚪ to access its configuration menu.

Scroll and Press the encoder to access the **CV** configuration. This section allows you to configure the CV parameters of the selected track.

Note **TR1 MIDI** to **TR8 MIDI** won't give you access to the CV OUT section because they are MIDI tracks.

GATE RETRIG – ON
If two notes are overlapping, sets if the gate is retrigged upon a new note.

ALLOCATOR POLY FIRST POLYLRU CYCLIC RANDOM
Choose voice stealing allocator algorithm. This will affect the way polyphony is handled.
More information on poly allocator **HERE** .

OUTPUT STANDARD V/OCTAVE 1.2V/OCTAVE HZ/V
Pitch information is most often expressed as a control voltage using the **V/OCTAVE** standard. It is used by Eurorack modules and most other modular systems.
However some synthesizers require the use of other standards to respond correctly.
The **1.2V/OCTAVE** standard is mainly used by Buchla-compatible systems, while the **HZ/V** standard is an older standard used by the Korg MS series and the Yamaha CS series, among others.

	V/OCTAVE	HZ/V
C0	- 5 V	+ 0.0312 V
C1	- 4 V	+ 0.0625 V
C2	- 3 V	+ 0.125 V
C3	- 2 V	+ 0.25 V
C4	- 1 V	+ 0.5 V
C5	+ 0 V	+ 1 V
C6	+ 1 V	+ 2 V
C7	+ 2 V	+ 4 V
Eb7	+ 2.25 V	+ 4.75 V
C8	+ 3 V	out of range
C9	+ 4 V	out of range
C10	+ 5 V	out of range

Comparison of the available notes in the Volt-per-octave standard and the Hertz-per-Volt standard

CV OUT FINETUNE -100 ... 0 ... 100

This parameter can be used to finely detune your CV voice output. This does not replace the calibration procedure, which is described **HERE** .

CV OUT BEND RANGE +- 1 SEMITONE ... +- 5 OCTAVES

Sets the output voltage range for incoming pitchbend events.

CV RANGE MIN -5V ... 5V

Sets the lowest voltage that CV can output on this voice.

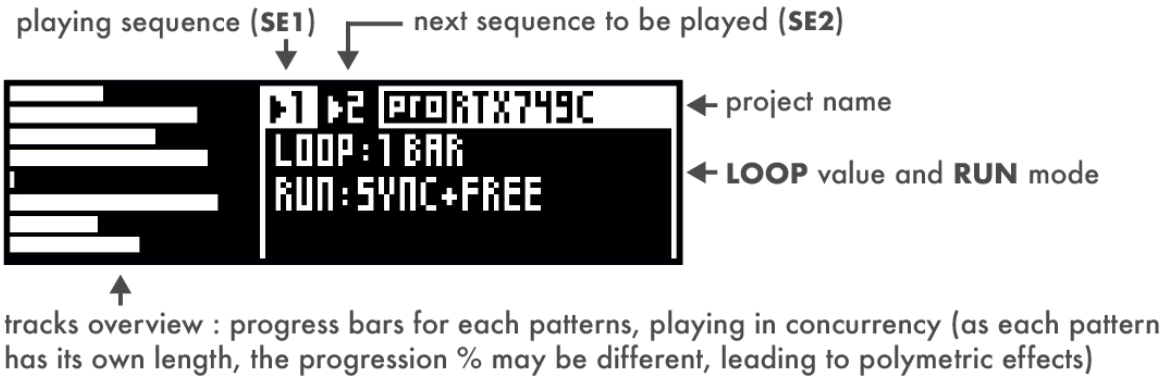
CV RANGE MAX -5V ... 5V

Sets the highest voltage that CV can output on this voice.

5. Sequence mode

5.1. Overview

In this mode, you will be able to arrange the patterns you have created in sequences. Those sequences can be launched in sync, or chained to create songs.



5.2. Sequences and patterns

In Hermod+, a sequence represents a collection of 16 patterns (**P1** to **P16**). These patterns are variations of the same track.
For example, **SEQ1** holds all the **P1** of the 16 tracks.

Selecting **SEQ2** would give you 16 fresh empty patterns for all of your tracks, allowing you to write a new section for your song.

Here is a brief summary of the actions that involve patterns in other modes of Hermod+ :

- Representation of the global architecture : **LINK**
- Mute/unmute tracks (pattern level) : **LINK**
- Mute/unmute effects (pattern level) : **LINK**
- Set pattern values of effects parameters : **LINK**

5.3. Chain sequences

Sequences can be chained together to form a "song".

To queue the different sequences that composes your song, hold **X** and Press one of the 16 pads.

To erase the queue, Press **X** briefly.

After Pressing play, the entire song will play in a loop, according to the **RUN** and **SYNC** parameters.

a song chain of 8 sequences, **SE1** is currently playing. All tracks are playing patterns **1** together in a loop, for a duration of **LOOP = 1 BAR**

5.4. Sync values

To launch a new sequence, Press the corresponding **1...16** pad.
If the sequencer is already playing, the selected sequence will be launched after a certain duration, defined by the **SYNC** value.

Hold **X** and Rotate the encoder to set the **SYNC** value :

MODULO: The queued sequence will wait for the resynchronization of all sequences (least common multiple of all pattern lengths) to start.

1...16 + X BARS: The queued sequence will be launched after the set number of bars.
Tip When setting the **SYNC** value, Pressing the encoder while Scrolling allows for extra step level precision.

SHORTEST / LONGEST TRACK: The queued sequence will be launched upon the next reset of the shortest/longest track of the project.

SAME AS TR X: The queued sequence will be launched when the selected track resets.
Tip This is very useful to quickly set odd loops, and allows for step level precision.

5.5. Run modes

The **RUN** mode defines the behavior of your sequence changes.

Hold **Y** and Rotate the encoder to Select the **RUN** mode :

— **SYNC/INSTANT**: Determines if sequences are launched in sync, or instantly upon Pressing.

— **RESTART/FREE**: Determines if sequences will be forced to restart upon launch, or if they will simply continue to play from their current position.

5.6. Sequence edit menu

Press the encoder in **seq** mode to access the edit menu of the currently selected sequence.

You will be able to **COPY** the selected sequence. Simply select another sequence and enter its edit menu to **PASTE** it. To empty a sequence and its pattern content, use the **CLEAR** option.

5.7. Project Save Load

Hermod+ can load a project in the background, without stopping the playback, which really helps to create seamless transitions in your performances.

While in **seq** mode, Press the encoder and Select **PROJECT SAVE LOAD** :

- **SAVE :** saves the current project.
- **SAVE AS :** saves with a new name.
- **NEW :** creates an empty project with default settings.
- **LOAD :** loads a project from the SD card. This is also where you will be able to **DELETE** your projects.

Note After loading a project, the project you were working on will continue to play, without interrupting your performance. A popup will appear, asking you to swap the project in sync (at the end of the bar). You can choose to update the BPM of Hermod+ with the loaded project (press **Y**) or to keep the previous BPM (press **X**).

Tip You can also access the **SAVE/LOAD** menu by pressing **seq** two times.

6. On Air

6.1. Overview

The 'On Air' mode turns the 16–pad matrix into a chromatic keyboard, that you can perform to play notes.

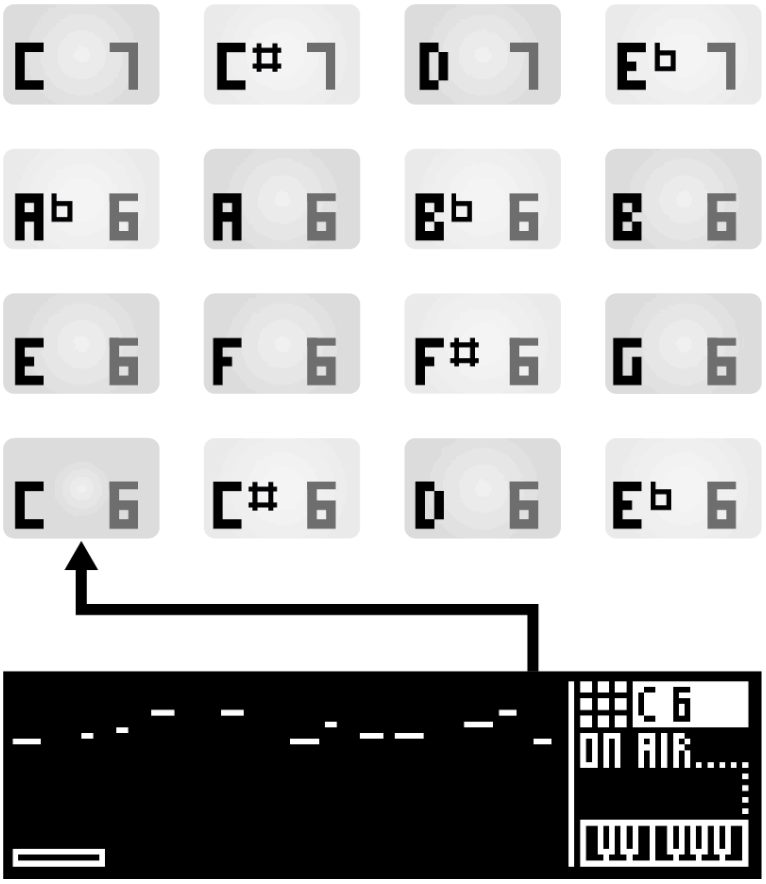
It's a great tool if you don't have an external MIDI keyboard controller with you.

To access this mode, hold **step** and Press O.

To quit this mode, press **step** or any other mode button.

6.2. On Air — Note layout

If you enable the mode 'On Air' on a NOTE track, the 16–pad will act as a chromatic note keyboard:



Thanks to the encoder, you can set the first note of this keyboard (for example C6 in the example above).

It's possible to play mono notes or polyphonic chords.
Press ○ to record your performance.

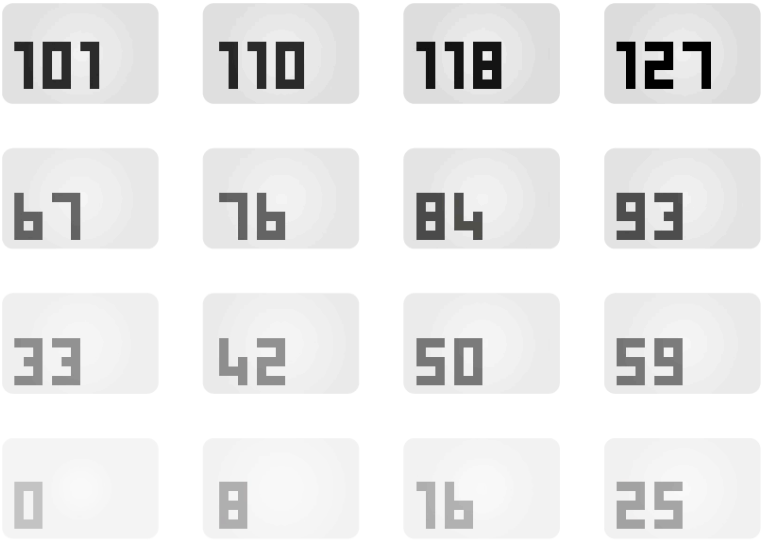
Tip Press **X** or **Y** to change the octave of the keyboard first note (C4, C5, C6, ...).

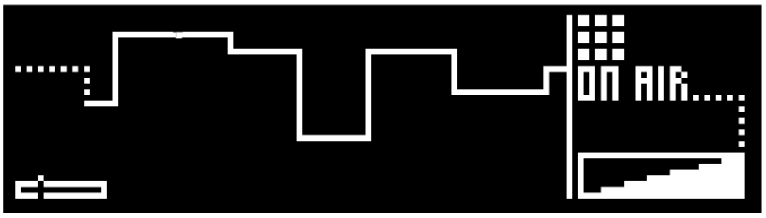
Tip Add a Scale effect to perform notes on a quantized scale and avoid "wrong" notes, and add an Arpeggiator for turning your performed chord into arpeggios!

When performing a note or a chord, this keyboard will "learn" the current note (or chord) for the **step** mode. For example, you can play a chord of 3 notes, then enter the **step** mode and add this chord on the step pads to edit your pattern:

6.3. On Air — Mod layout

When enabled on a MOD track, the 16–pad will act as a XY modulation controller:





Pressing one of these pads will play the associated modulation value. Recording is possible when O is enable.

7. Settings

7.1. Overview

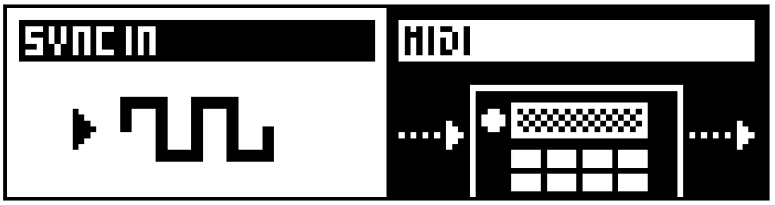
To access the global settings menu, enter **track** mode and Press **Y**.

The settings are organized in several submenus :

- **SYNC IN/OUT :** global options regarding clock signals.
- **MIDI IN/THRU :** global routing of MIDI signals.
- **CV/GATE IN :** global settings related to CV/Gate inputs.
- **MISC :** various internal parameters of Hermod+.
- **MONITOR :** representation of incoming CV voltages.
- **REC :** recording options.
- **SAVE :** to store the settings into the SD card.
- **INFO :** OS version and CPU/RAM usage.

Note Those settings are global, stored in the SD card and loaded during startup, and will be used for all projects. For your project **TRACK CONFIGURATION**, please refer to **THIS** section.

7.2. Sync input



CLOCK SOURCE INTERNAL MIDI DEVICE HOST CV A CV B CV C CV D

By default, Hermod+ will use its internal clock (to be the synchronisation leader). But it is possible to follow a MIDI/USB/analog incoming clock, to synchronize it with an other device.

Tip When using **CV A** to **CV D**, Hermod+ is synchronized in a "step advance" (trigger) style. The setting **CV CLOCK DIV** let you choose how much ppqn the sequencer will run for one input trig. Please note that you also need to set the tempo thanks to the BPM mode, allowing a great flexibility. For example, if you want to sync Hermod+ with an external eurorack sequencer analog clock, running at 140bpm and sending a gate each 1/16, you need to set **CV CLOCK DIV = 1/16** and set Hermod+ tempo to 140. If you want the BPM to automatically follow this clock input, please also use the parameter **CV BPM** (described below).

CV RESET – CV A CV B CV C CV D AUTO

When a Gate (high level, rising edge) is received on the selected CV input, Hermod+ will instantly stop the player and reset all effects of its project. Then, the player will be waiting for the next CV clock to start from the beginning. If a clock gate and a reset gate are received at the same time, Hermod+ will restart (stop and play) instantly.

Tip When using AUTO, none of the CV inputs will be used to reset and stop the player. But if **CLOCK SOURCE = CV IN**, Hermod+ will automatically reset its player when not receiving an incoming CV clock for more than 2 seconds. This setting will also allow the player to automatically start the player when an incoming clock is received.

Note This reset input should be compatible with most modules outputting a RESET trigger on START or on STOP. It can also be compatible with modules outputting a RUN level when playing.

CV PLAY ENABLE – CV A CV B CV C CV D

When the selected input is high, the sequencer will be playing. When low, Hermod+ will be stopped. In other words, it lets you control the « play/stop pad » of Hermod+ with a gate level. You can set this setting together with **CLOCK SOURCE = INTERNAL** and you will still be able to use the « play/stop pad » of Hermod+.

CV REC ENABLE – CV A CV B CV C CV D

Use an incoming gate to enable/disable the recording.

CV BPM – CV A CV B CV C CV D

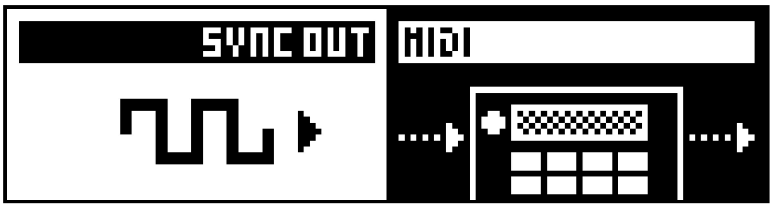
Use an incoming gate (clock) to refresh the internal BPM value based on pulses averaging. This settings works together with **CV CLOCK DIV** (that lets you configure the clock division).

CV CLOCK DIV 1/96 1/48 1/32 1/16 1/8 1/4 1/2 1/1 (1 BAR)

When **CLOCK SOURCE = CV** and/or when **CV BPM** is used, sets the expected speed of the incoming clock.

Note This parameter is displaying 2 different units, meaning the same thing. The first one is the time division (e.g. 1/16) : it's the expected rate of the clock. The second one is the **PPQN** (e.g. 4ppqn) : it's the expected number of pulses per quarter note.

7.3. Sync output



MIDI – CLOCK+TRANSPORT ONLY CLOCK ONLY TRANSPORT
Sets if a clock should be transmitted on the MIDI port, and if start/stop (transport) messages should be transmitted as well.

USB DEVICE – CLOCK+TRANSPORT ONLY CLOCK ONLY TRANSPORT
Sets if a clock should be transmitted on the DEVICE port, and if start/stop (transport) messages should be transmitted as well.

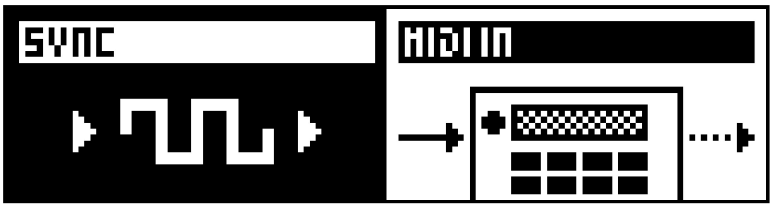
USB HOST – CLOCK+TRANSPORT ONLY CLOCK ONLY TRANSPORT
Sets if a clock should be transmitted on the HOST port, and if start/stop (transport) messages should be transmitted as well.

CLOCK ON STOP – SEND
Always sends the MIDI clock even when the player is stopped.

RESET OUT MODE RESET ON PLAY RESET ON STOP SEQ CHANGE RUN STOP 1/96 ... 128 BARS
The dedicated reset output can be configured to :
RESET ON PLAY Trigger this gate at the start of playback.
RESET ON STOP Trigger this gate at the end of playback.
SEQ CHANGE Trigger this gate at any sequence change.
RUN This gate will be high only when playing.
STOP This gate will be high only when not playing.
1/96 .. 128 BARS Defines a rate for using this output as a secondary clock output generator.

CLOCK OUT RATE 1/96 1/48 1/32 1/16 1/8 1/4 1/2 1/1
Sets the speed/resolution of the dedicated clock gate output.

7.4. MIDI input



ACTIVE TRACK PORT – MIDI DEVICE HOST ALL
Routes the MIDI messages of the selected port to the currently selected track, regardless of the track's input parameters.

ACTIVE TRACK CHANNEL CH01 ... CH16
Routes the MIDI messages of the selected channel to the active track regardless of the track's input parameters.

NOTES IGNORE ACCEPT
Accepts or ignores the incoming notes MIDI event.

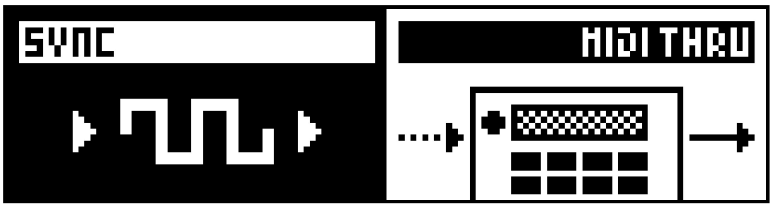
CC MESSAGES IGNORE ACCEPT
Accepts or ignores the incoming control-change MIDI event.

PITCHBEND IGNORE ACCEPT
Accepts or ignores the incoming pitchbend MIDI event.

AFTERTOUCH IGNORE ACCEPT
Accepts or ignores the incoming aftertouch (pressure) MIDI event.

PROG CHANGE SEQ CH01 ... CH16
Enables an incoming MIDI Program Change to select the playing sequence **(SE1 to SE16)**.

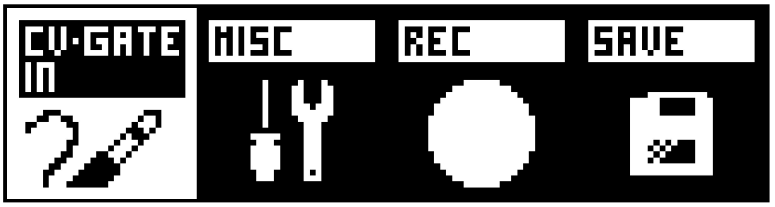
7.5. MIDI thru



MIDI/HOST/DEVICE > MIDI/HOST/DEVICE OFF ON

Allows for incoming MIDI data to be directly copied to the selected output port.

7.6. CV/Gate input



CV IN DETECTION OFF ON

When Hermod+ is recording a modulation, the CV input will be recorded only if a change is detected, in order to save memory space.

ACTIVE TRACK NOTE – CV/GATE AB CV/GATE CD

Route a CV/Gate pair to the currently selected track.

ACTIVE TRACK MOD – CV A CV B CV C CV D

Route a CV input to the currently selected track modulation.

CV A RANGE –5V > +5V 0V > +5V –2,5V > +2,5V -1V > +1V

Converts the incoming CV input signal levels to Hermod's standards.

CV B RANGE –5V > +5V 0V > +5V –2,5V > +2,5V -1V > +1V

Converts the incoming CV input signal levels to Hermod's standards.

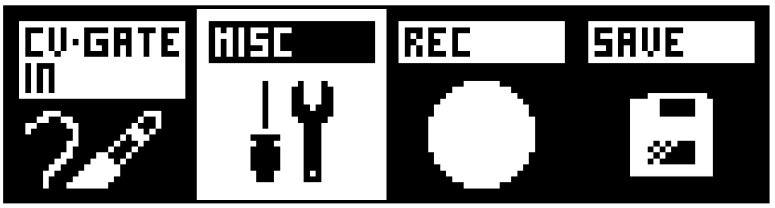
CV C RANGE –5V > +5V 0V > +5V –2,5V > +2,5V -1V > +1V

Converts the incoming CV input signal levels to Hermod's standards.

CV D RANGE `-5V > +5V` `0V > +5V` `-2,5V > +2,5V` `-1V > +1V`
Converts the incoming CV input signal levels to Hermod's standards.

GATE CAPTURE `0ms` `1ms` `...` `20ms`
This setting adds a delay between the Gate ON signal and the moment Hermod+ captures the CV input voltage. Some external modules or controllers may have a slow "slew rate," meaning their CV output takes a short time to stabilize after a gate is triggered. Since Hermod+ can respond to gates instantly, it might capture an unstable CV value, leading to inconsistent note recording. Adjust this setting to fine-tune the delay, ensuring Hermod+ waits just long enough to capture an accurate and stable CV value.

7.7. Miscellaneous



AUTOLOAD `ON` `OFF`
Automatically loads the last saved or loaded project at startup.

Tip You can temporarily skip autoload by Pressing **step** button at startup.

LED BRIGHTNESS `0%` `...` `200%`
Adjusts leds brightness level.

HOLD TIME `FASTER` `FAST` `NORMAL` `SLOW` `EXTRA SLOW`
Changes the time for a button press to be registered as a Hold action.

SMART OVERDUB `OFF` `ON`
This feature allows for replacing recorded notes only when incoming notes are received. While recording, if nothing is played, the existing notes will remain. As soon as a new note is received, it will start to overwrite existing notes.

SMART OVERDUB TIME `1` `...` `100`
Sets the time threshold for the smart overdub. After the set time, the player will stop overwriting existing notes.

FOLLOW PLAYHEAD ON OFF

Allows the piano roll to display the currently played section of the pattern automatically. When enabled, this behavior can be temporarily disabled by Pressing **X** or **Y** while in **step** mode.

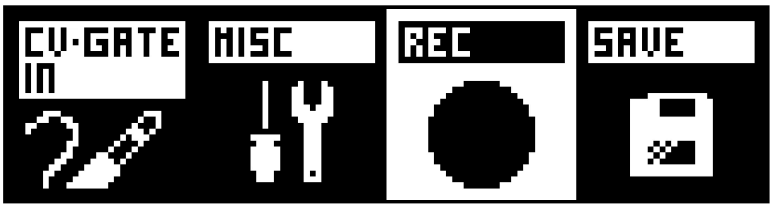
MUTE BY DEFAULT PATTERN GLOBAL

Mute a track or effect at the pattern level or the track level.

POPUP TRACK SELECT ON OFF

In **step** mode, a small popup displays the track number you just selected.

7.8. Recording



Hold O to enter the record settings. Alternatively, these settings can be accessed via the global settings menu.

Note These particular settings will be saved along with your global settings : Press **track**, then Press **Y** to enter global settings and select SAVE.

MULTITRACK ON OFF

When the multitrack recording is enabled, up to 16 routed tracks (via midi in, usb in, CV/Gate in, ...) can be recorded simultaneously.

LOOPER ON OFF

When the looper recording is enabled, you can capture your performance as if you were using a looper pedal. The length of the recording track is not predefined, but will be determined at the moment the recording stops.
First, Press O to arm the recording and Press ▷ to start it.
Press O to end the recording. The track length will be set, and the track will begin looping.

HARD REC ON OFF

When hard recording is enabled, the previously recorded notes will be erased upon a new recording.

PUNCH IN OFF ON

When the recording is armed (REC button is lit), allows for the recording to listen to inputs and start recording upon the first incoming note.

Note This option works on incoming notes only, it has no effect when recording on a MODULATION track layout.

SHORTCUT X NOTHING HARD REC MULTITRACK LOOPER PUNCH IN

Defines the action linked to the **X** + O shortcut.

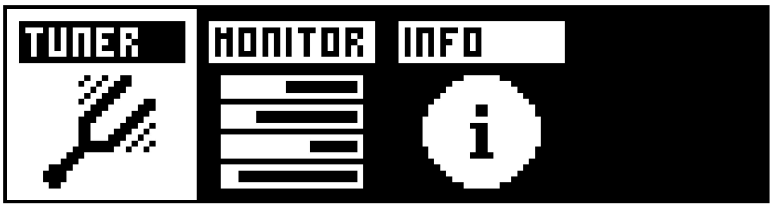
SHORTCUT Y NOTHING HARD REC MULTITRACK LOOPER PUNCH IN

Defines the action linked to the **Y** + O shortcut.

SHORTCUT X+Y NOTHING HARD REC MULTITRACK LOOPER PUNCH IN

Defines the action linked to the **X** + **Y** + O shortcut.

7.9. Tuner



This feature enables tuning an oscillator connected to any of the four CV inputs. The tuner algorithm is reliable even for complex and varying waveforms, and operates within a range from E0 to E6 (≈20 Hz to ≈1400 Hz).

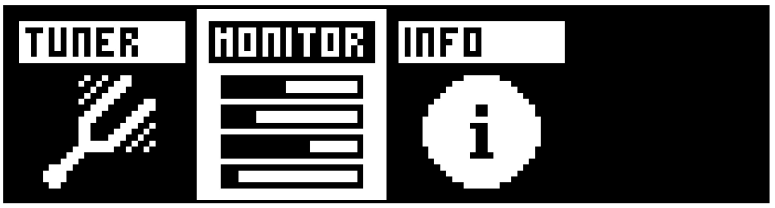
Turn the encoder to choose the monitored CV input (CV A to CV D).

The top section shows the detected note and its error in cents. When the oscillator is in tune, the indicator aligns with the tuning fork icon at the center:

The lower right displays the tuner's confidence level (0% to 100%).

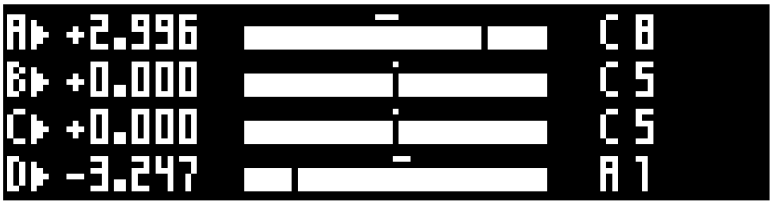
Note If the tuner cannot detect a frequency, it will disable itself and display "unclear signal". If the detected note is outside the operating range, the tuner will disable itself and display "out of range".

7.10. Monitor



CV IN MONITOR

The left side of the screen displays the captured voltages of the four CV inputs (A, B, C, D) from -5.000V to +5.000V.



The right side displays the corresponding V/octave note, from C0 to C10.

On the center, the large vumeter bar represents the voltage of the input (-5V to +5V).

The horizontal line starting in the middle shows the fine pitch (-50% to +50%) of the according V/octave note. If you see a dot on the middle, that means the voltage captured is perfectly equal to the V/octave note (fine pitch = 0%).

JITTER MONITOR (ADVANCED USERS)

Scroll the encoder to the right to access this tool, which allows you to scan incoming clock signals, detect their BPM, and measure their jitter.

Clock jitter refers to small, unwanted variations in the timing of clock pulses. These inconsistencies happen when pulses don't arrive at perfectly even intervals, creating a subtle "wobble" in timing. This can make rhythmic content feel less tight — especially in rhythm-heavy music.

We use the Jitter Monitor internally to test and optimize the real-time performance of our instruments. You can also use it to test the quality of external clocks coming from MIDI gear, eurorack modules, DAWs (via USB) or any other sync sources.

To monitor a clock, connect a source to one of the following inputs:

- **MIDI IN**
- **USB HOST (USB-A)**
- **USB DEVICE (USB-B)**
- **CV IN A** (for analog gate clocks)

Once a valid clock is detected, Hermod+ will automatically:

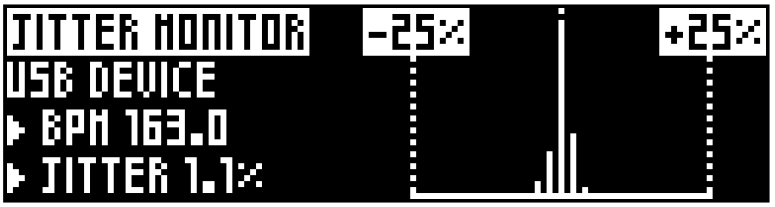
- Identify and display the clock source
- Show the averaged BPM, calculated from the last 48 clocks
- Show the averaged jitter percentage (e.g. 1.3%)

Note a jitter value of 1.3% means that, on average, each clock pulse arrives 1.3% earlier or later than it ideally should.

On the right side of the screen, a graph displays the distribution of jitter values:

- X-axis = jitter from -25% to +25% (center = 0% = ideal)
- Y-axis = number of clock pulses falling into each jitter percentage range (1 pixel = 1 clock)

If the center vertical bar is full and others are empty, your clock signal is very stable.



Input clock is USB device, detected tempo is 163.0 BPM, averaged jitter is 1.1%. The graph is showing that most of the clocks are perfeclty in time, about 12 clocks are received with a jitter of ±2%, and about 3 clocks are received with a jitter of ±4%.

Tip to convert jitter(%) in seconds, you can use this formula:

- MIDI clock interval(ms) = 60000ms * (BPM / 24ppqn)
- Jitter(ms) = Jitter(%) * MIDI clock interval(ms)
- With BPM=120 and jitter(%)=15%, Jitter(ms) = 20.83ms * 0.15 = 3.12ms

Note jitter above approximately 3–5 ms can be noticeable to trained ears, particularly in rhythmic/percussive music.

Tip MIDI and USB clocks always use a standard resolution of 24 PPQN (Pulses Per Quarter Note). Gate clocks (like Eurorack analog clocks) may use different rates depending on the source device. In this Jitter Monitor mode, the default resolution for

CV IN A is set to 1/16 notes (4 PPQN). To change this rate, hold X and turn the menu encoder.

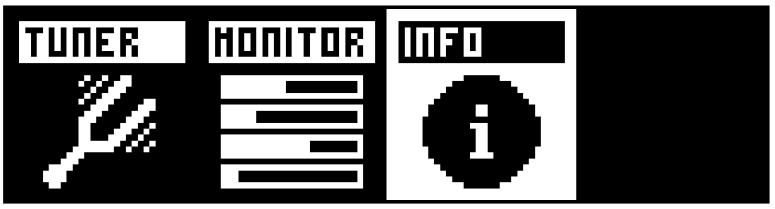
MIDI IN MONITOR

Scroll the encoder to the right to enter this mode, which displays incoming MIDI events (received on the MIDI TRS, the USB host and the USB device ports).

Only the following MIDI events will be displayed:
- note ON,
- note OFF,
- CC messages (0 to 119),
- Program Change,
- Channel Aftertouch,
- Pitchbend,
- Real Time Message (Clock, Start, Stop).

Note To prevent the MIDI monitor from being flooded by Clock messages, only the first Clock message is displayed (the first Clock is the one received just after the Start message, which starts the playback).

7.11. Info



Displays Hermod+Os version, the CPU load, and the RAM usage (0% to 100%, for both notes events and mod/pitchbend/aftertouch/sustain events).

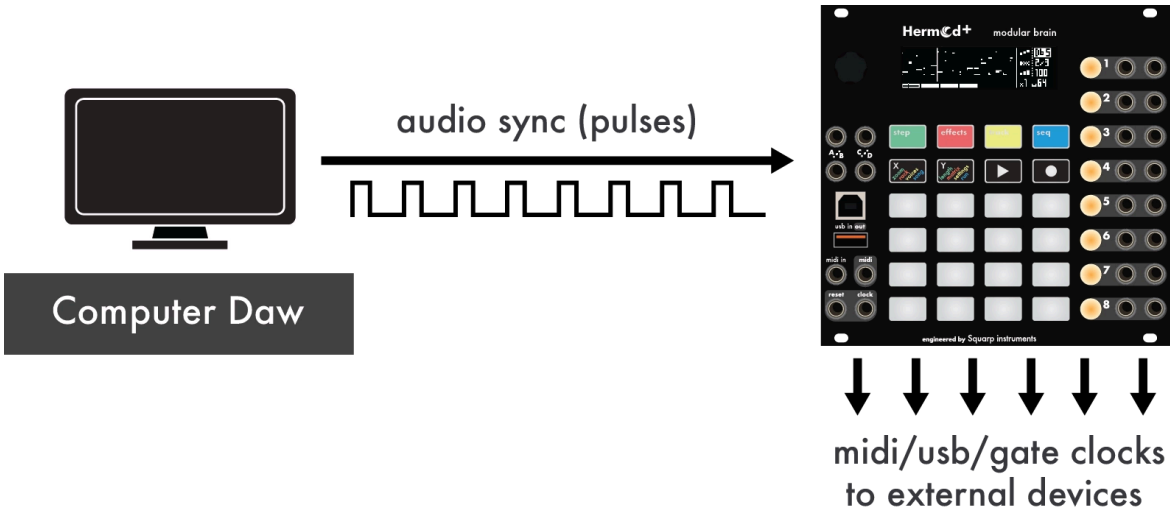
7.12. Audio synchronization from a DAW : enable sample-rate precision

If you need a perfect synchronization of Hermod+ to your computer DAW, it can be done thanks to an incoming audio signal.

Indeed, DAWs often generate jitters and delays on the computer USB midi output, due to the weak real-time architecture of computers OS.

For rock solid synchronization, it's advised to use a dedicated audio output of your computer (sending a clock output signal), if possible using a soundcard with multiple audio ports. Hermod+ will receive this accurate analog sync signal on one of its CV input, and will relies on it to synchronize its tempo and play/stop features.

This way, you don't have to use a "audio sync to midi" device to connect Hermod+ with your DAW.



How to enable audio synchronization :

- On your DAW, create a track playing (in a loop) this 1-bar 120BPM audio file (warp it so it will follow your DAW BPM)
- ... or use a synchronization plugin to gererate a sync signal, like the Ableton CV Tools "CV Clock Out"
- Output this audio "clock" signal on a separated port (for example by using a soundcard)
- Make sure the volume of this output is set to maximum level
- Use an audio cable to connect the computer audio output to Hermod+ CV input 1
- Configure Hermod+ **SYNC IN** > **CLOCK SOURCE** = **CV IN A** (or **B C D**)

• Configure Hermod+ **SYNC IN** > **CV RESET** = **AUTO** (so Hermod+ will automatically play when receiving a signal, and will stop no signal is detected)
• Configure Hermod+ **SYNC IN** > **CV CLOCK DIV** (**1/64** when using the audio file)
• Set the same BPM for Hermod+ and your DAW
• Start playing your DAW : Hermod+ will receive the sync signal and will immediately start to play, with zero jitter.

Note do not use any usb midi sync between your DAW and Hermod+.

Tip if your computer audio output does not deliver a volume high enough to trig the Hermod+ input clock detection, you can configure Hermod+ **CV/GATE** > **CV A RANGE** = **-1V > +1V**

8. Shortcuts

8.1. In any mode

SELECT A TRACK : Press any track switch ⚪ to select the associated track

LAUNCH A SEQUENCE : seq + matrix pad launches the associated sequence

ON AIR MODE : Hold step and press O to use the 16–pad matrix as a chromatic keyboard.

RESTART : Hold seq Press ▷ to restart (stop/play) the player of every patterns.

BPM SETTINGS : Hold O to enter the BPM settings (Press rec O to exit).

BYPASS AUTOLOAD : Hold step at startup to directly load a new project.

Tip Temporarily access to each of the main modes by Holding its button.

8.2. Step mode – basics

RECORD

Hold O to access the record settings. Alternatively, these settings can be accessed via the global settings menu.

This menu gives access to customizable shortcuts for each of the following options.

HARD REC : By default, Hold X and press O to enable hard recording.

LOOPER : By default, Hold Y and Press O to enable looper recording.

MULTITRACK REC : By default, Hold X + Y and Press O to enable a multitrack recording.

EDIT

ROTATE : Press and Hold the encoder. Then Scroll to rotate all notes or modulation events in a pattern.

ZOOM : Hold **X** and Scroll to change the track zoom.

PRECISE LENGTH : Hold **Y** and Scroll to change the track length. Hold the encoder while scrolling to change the track length in 1/16th note increments.

DOUBLE/HALVE LENGTH : Hold **X** + **Y** and Scroll the encoder to double/halve the track length.

QUICK STEP LENGTH : Hold a pad and press a track switch to set a the note length value, from 1/2 step (TR1 ⚪) to 7 steps (TR8 ⚪).

8.3. Step mode – advanced

ROW EDIT

Hold **step** and Rotate the encoder to enter this edition mode.

More information on row editing is available **HERE** .

ANALYZER

By default, a **NOTE** track displays notes on with a piano-roll view. It's possible to display and edit automation events recorded on a track.

Hold **step** and:
Press track button 1 ⚪ to access **NOTES**
Press track button 2 ⚪ to access **PITCHBEND**
Press track button 3 ⚪ to access **AFTERTOUCH**
Press track button 4 ⚪ to access **SUSTAIN**
Press track button 5 ⚪ to access **MOD** (modulation)
Press track button 6 ⚪ to access **MOD2** New!
Press track button 7 ⚪ to access **MOD3** New!
Press track button 8 ⚪ to access **MOD4** New!

ERASE / GENERATE

QUICK ERASE : Hold **step** and Press **X** to delete all events of the displayed type in the current track pattern. For example notes or Pitchbend.

QUICK RANDOMIZER : Hold **step** and Press **Y** to randomize the currently displayed event type in pattern.

8.4. Step mode – edit notes

Those actions are valid for **NOTE** layouts :

EDIT A NOTE : Hold the matrix pad where the note lies. Then Rotate the encoder to modify the note parameters. To switch between **PITCH**, **LENGTH** and **VELOCITY**, Press the encoder.

Tip Hold multiple matrix pads to edit several contiguous notes at a time.

FAST SCROLL : When Holding a step and editing a value, Rotate the encoder while Pressing it to enable fast Scroll. If the value type is the note pitch (C0 to C10), notes will be transposed in octave increments.

8.5. Step mode – edit modulations/gates

Those actions are valid for **MODULATION** layouts :

MOD/GATE SWAP : Press **step** to toggle between the MOD and GATE edition. You can also Hold **step** and Rotate the encoder to perform this action.

EDIT A CURVE : Hold the matrix pad where the modulation event lies. Then Rotate the encoder to modify the value of this event.

EDIT A GATE : Hold the matrix pad where the gate event lies. Then Rotate the encoder to modify the length of this gate.

8.6. Effects mode

ADD NEW FX : Hold an empty effect pad to quickly select this slot and enter the "add effect" menu.

EDIT FX : Hold an existing effect pad to quickly select this slot and enter the "edit effect" menu.

PATTERN FX MUTE : Press a matrix pad to mute the corresponding effect in this pattern only.

GLOBAL FX MUTE : Hold **effects** and Press a matrix pad to mute the corresponding effect across all patterns.

MODMATRIX : Press **Y** to enter the modMatrix.

MODMATRIX ATTENUVERTER/OFFSET : Press matrix pads **2**, **6**, **10** or **14** to enter the modMatrix options (if modMatrix source and the destination are set on the selected lane).

8.7. Track mode

PATTERN MUTE : Press a matrix pad to mute this track at a pattern level.

GLOBAL MUTE : Hold **track** and Press a matrix pad to mute this track across all patterns.

8.8. Seq mode

PRECISE LENGTH EDITING : While Holding **X** , Hold the encoder while Rotate to change the loop length in 16th note increments.

DUPLICATE A SEQUENCE : Hold the matrix pad holding the active sequence and Press an empty pad. This action is synchronised with the player.