

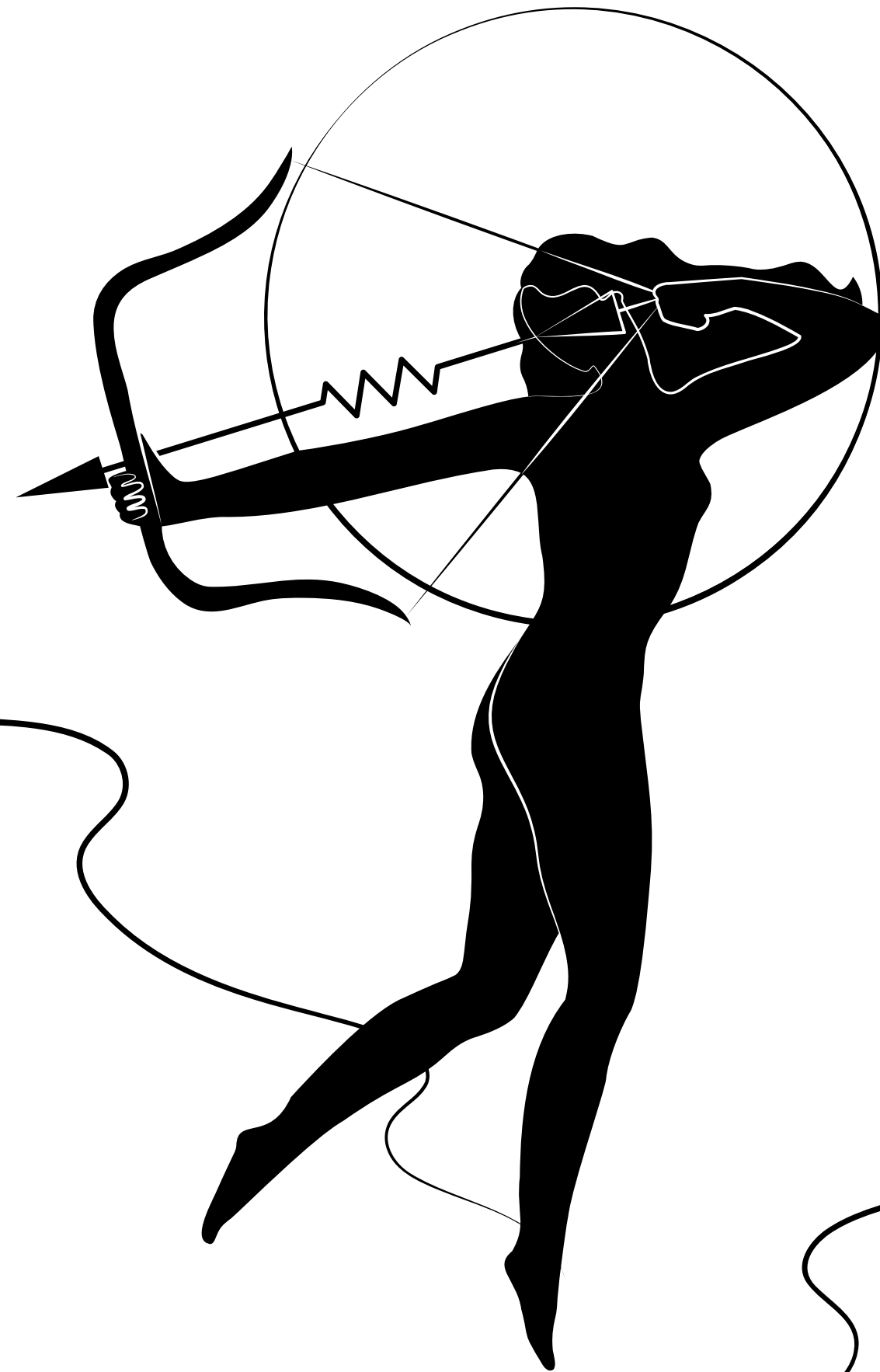
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# Product Manual

version 1.0.0

ARTEMIS  
6 VOICE ANALOG SYNTHESIZER

*Back in ancient times, Artemis was the goddess of the hunt and the wild, her silver bow always at the ready. Her arrows, swift and precise, never missed their mark. Though known for her mercy and justice, she was fiercely protective of the wilderness she called home. Mortals respected Artemis; those who honoured nature could seek her aid, while those who disrespected it faced swift retribution.*



*Even now, Artemis is said to roam the forests under the moon's silver light, her nymphs following close behind. Those who tread the wild lands with care may catch a glimpse of her silhouette—bow in hand, gliding silently through the woods.*

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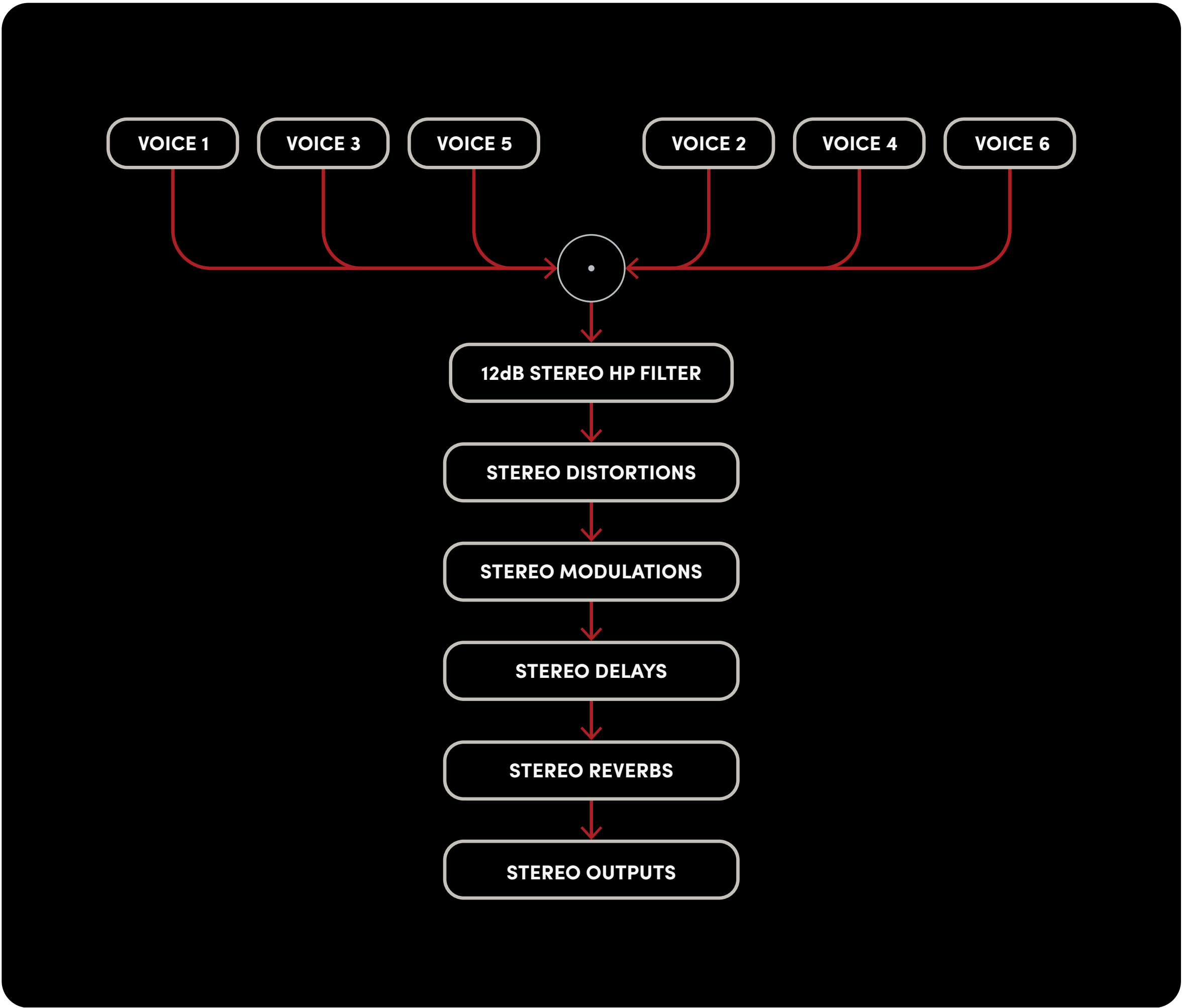
# 01 Colour Coding

To help you quickly match the panel controls with the instructions in this manual, we’ve used the following color coding system:

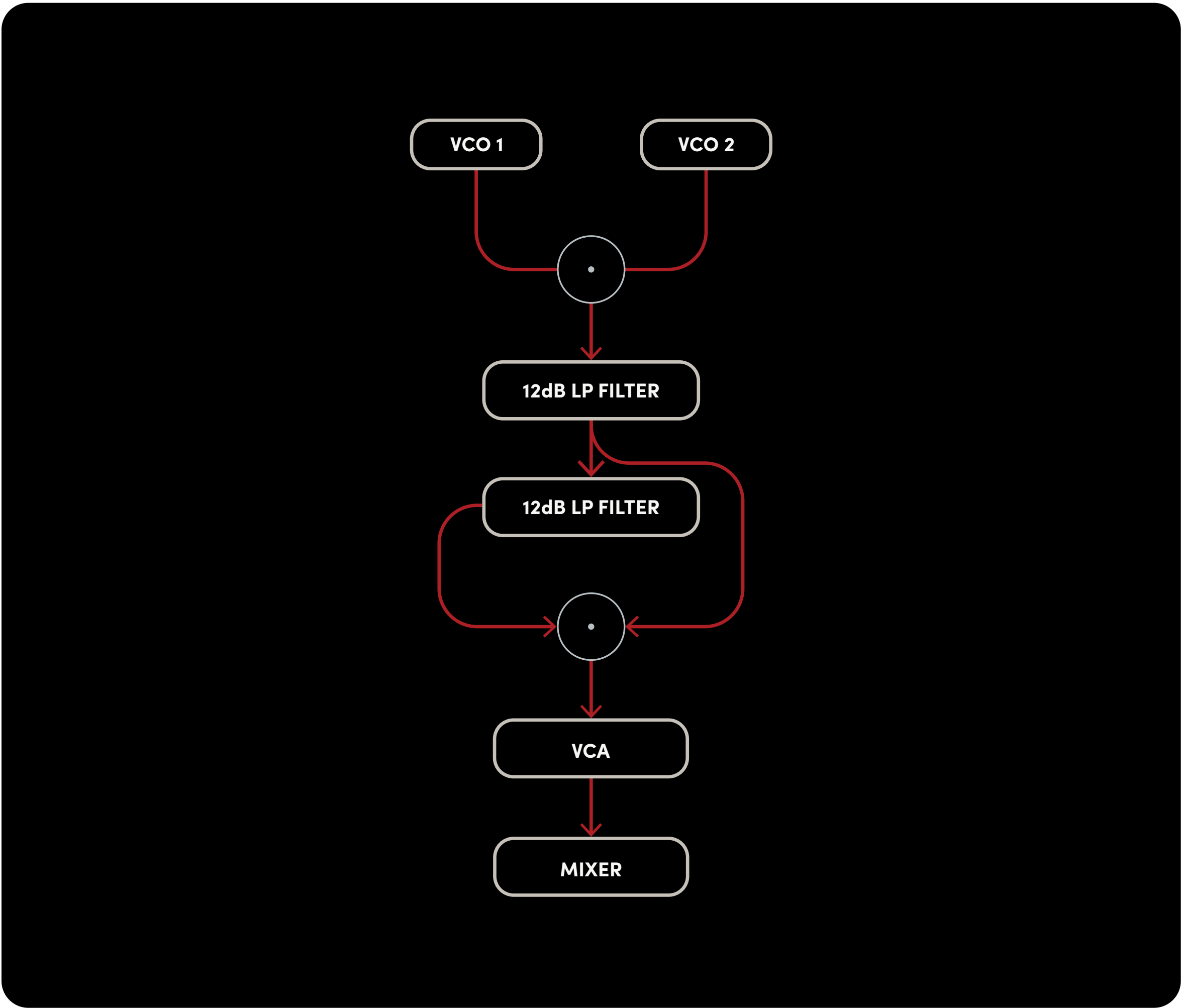
- |                     |   |   |
|---------------------|---|---|
| 1. <b>BUTTONS</b>   | — |  |
| 2. <b>ENCORDER</b>  | — |  |
| 3. <b>ON SCREEN</b> | — |  |
| 4. <b>KNOB</b>      | — |  |
| 5. <b>SLIDER</b>    | — |  |

***unleash*** the wild.

# 02 Signal Path

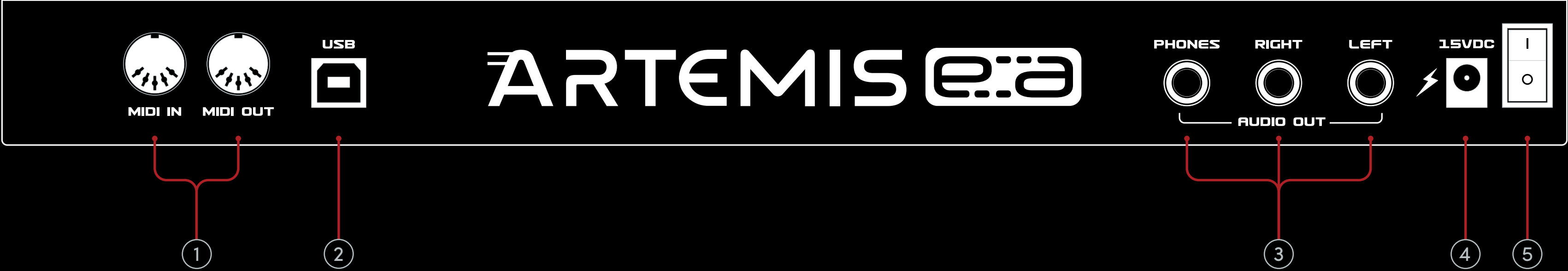


Device signal path



Voice signal path

# 03 Rear Panel Connections



- 1. **MIDI**  
IN/OUT MIDI DIN connector for receiving / transmitting MIDI messages from/to an external MIDI device.
- 2. **USB**  
This connector allows the Artemis to transmit and receive MIDI messages similar to when MIDI DIN is being used, but also allows firmware updates and preset backup or restore.
- 3. **AUDIO OUTPUTS**  
Left/Right: Unbalanced, ¼ inch audio outputs.  
Headphones: ¼ inch stereo headphone jack. This jack output has the same sound as the Left/Right outputs and its volume is controlled by the Master Level knob on the front panel.
- 4. **15VDC Power jack input**  
Please use only the provided power supply.
- 5. **Power ON/OFF Switch**

# 04 Starting with Artemis

①



▶ ■ ● MENU SAVE



**DIST MOD DELAY REV SEQ**

②



▶ ■ ● MENU SAVE



**DIST MOD DELAY REV SEQ**

③



▶ ■ ● MENU SAVE



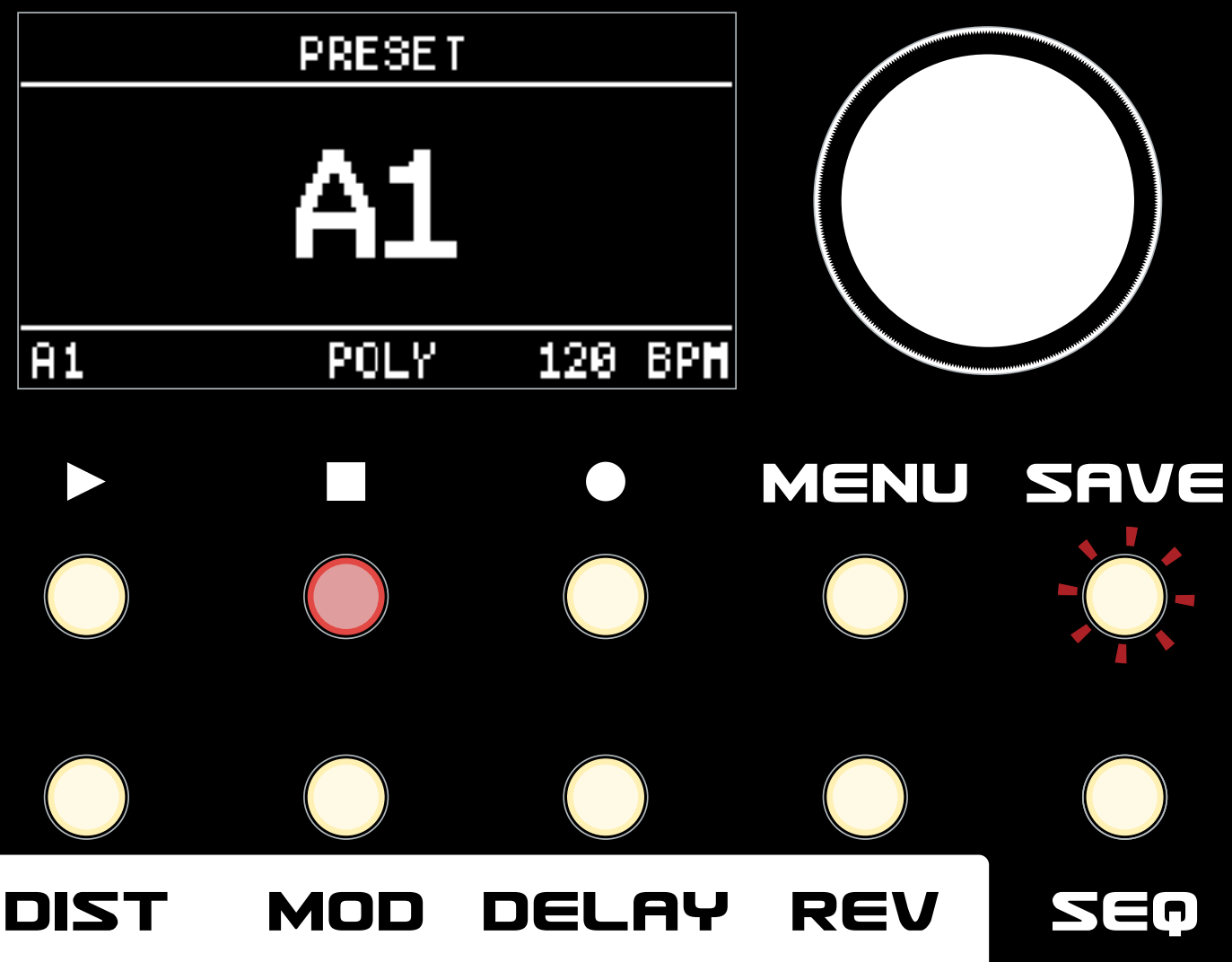
**DIST MOD DELAY REV SEQ**

## Selecting a Preset

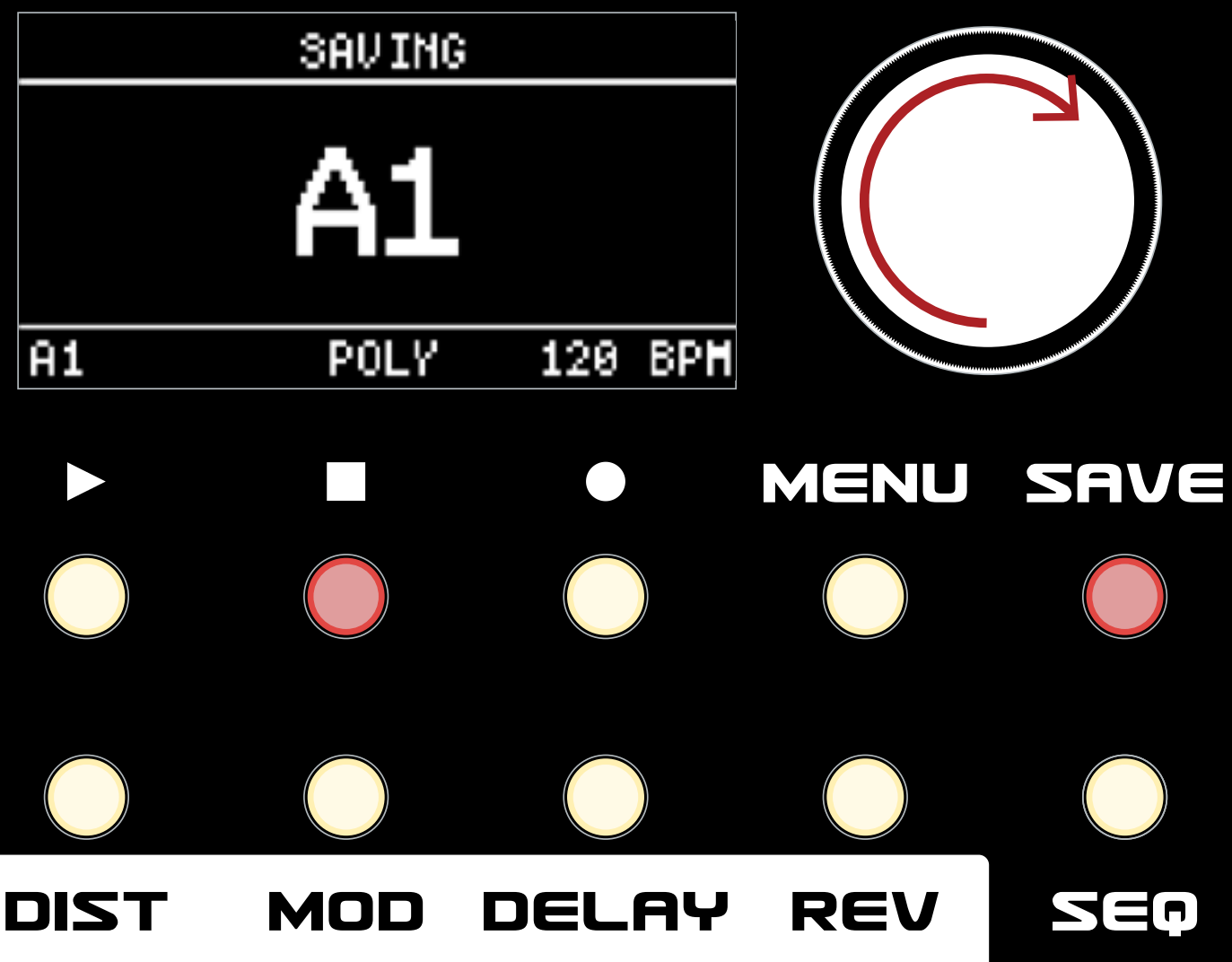
The Artemis offers a total of **512 Preset Slots** split in **8 banks** of **64 presets** each.

1. When the synthesizer is turned on, it enters automatically on the **Main** page.
2. On the Main page, rotating the **Encoder** cycles through the presets.
3. Pressing and holding down while rotating the **Encoder** it will cycle through the banks.

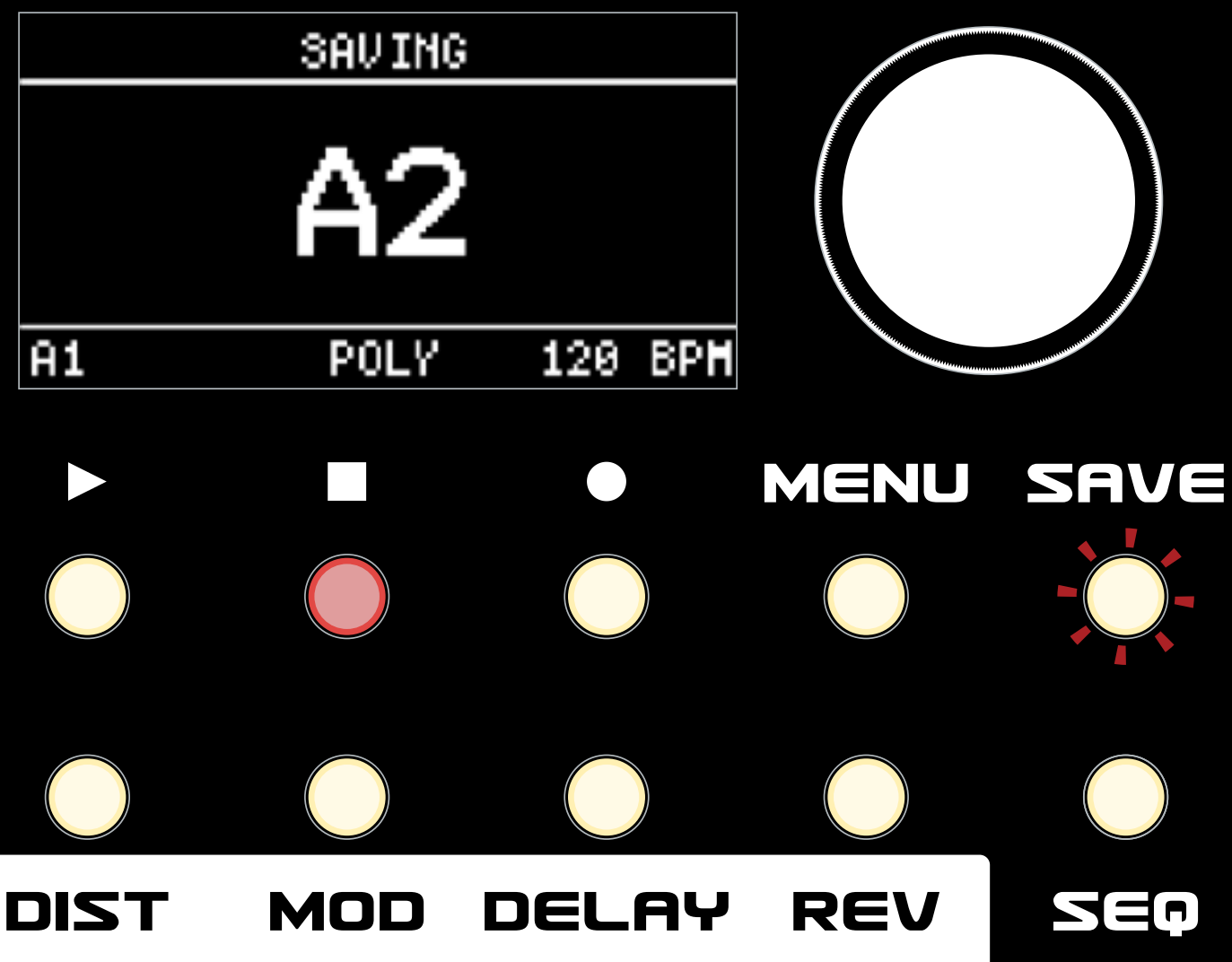
①






②



③

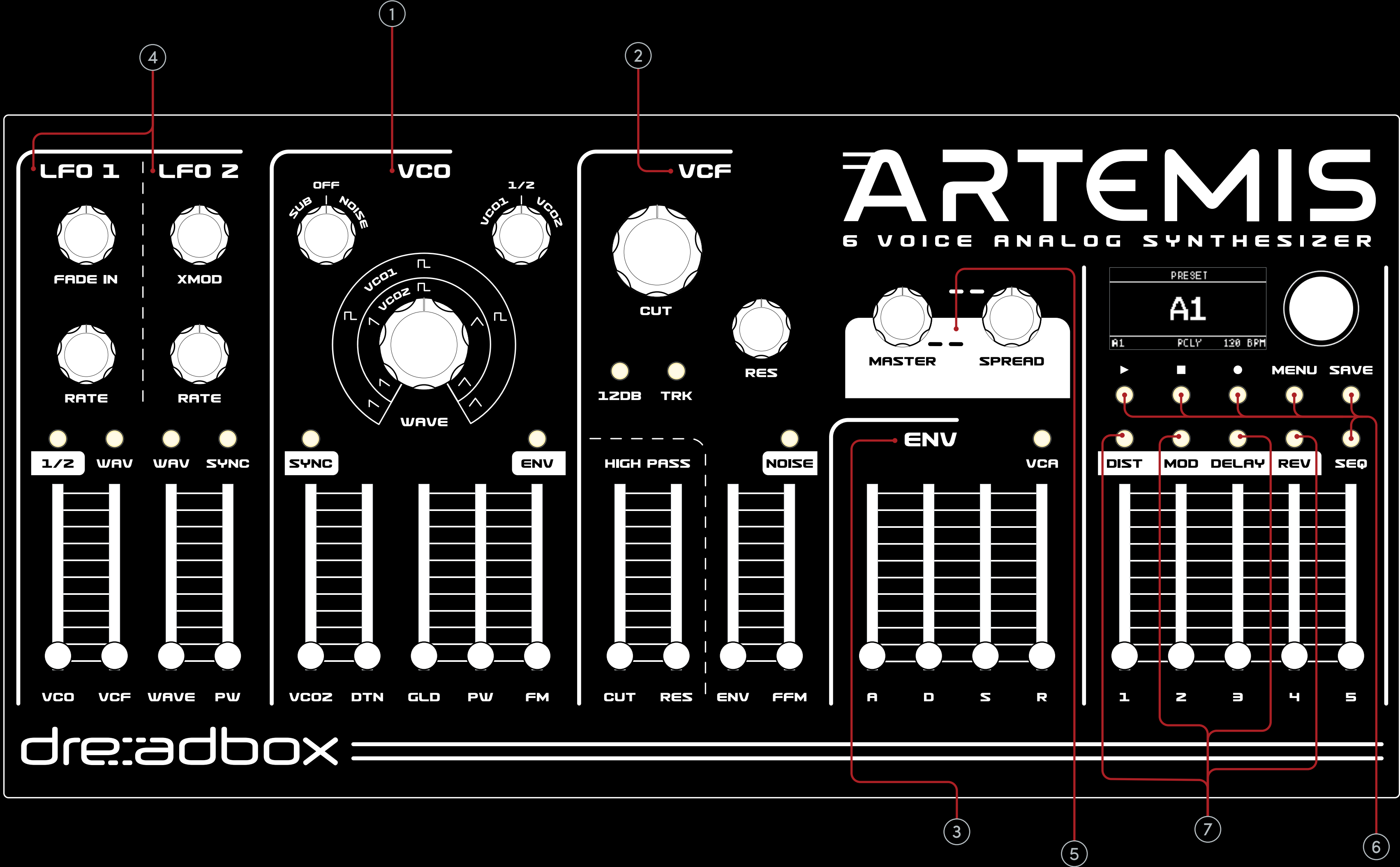


## Saving a Preset

1. Press the  Save button.
2. Use the  Encoder to choose your preferred slot number.
3. Press the  Save button again in order to save on the chosen slot.

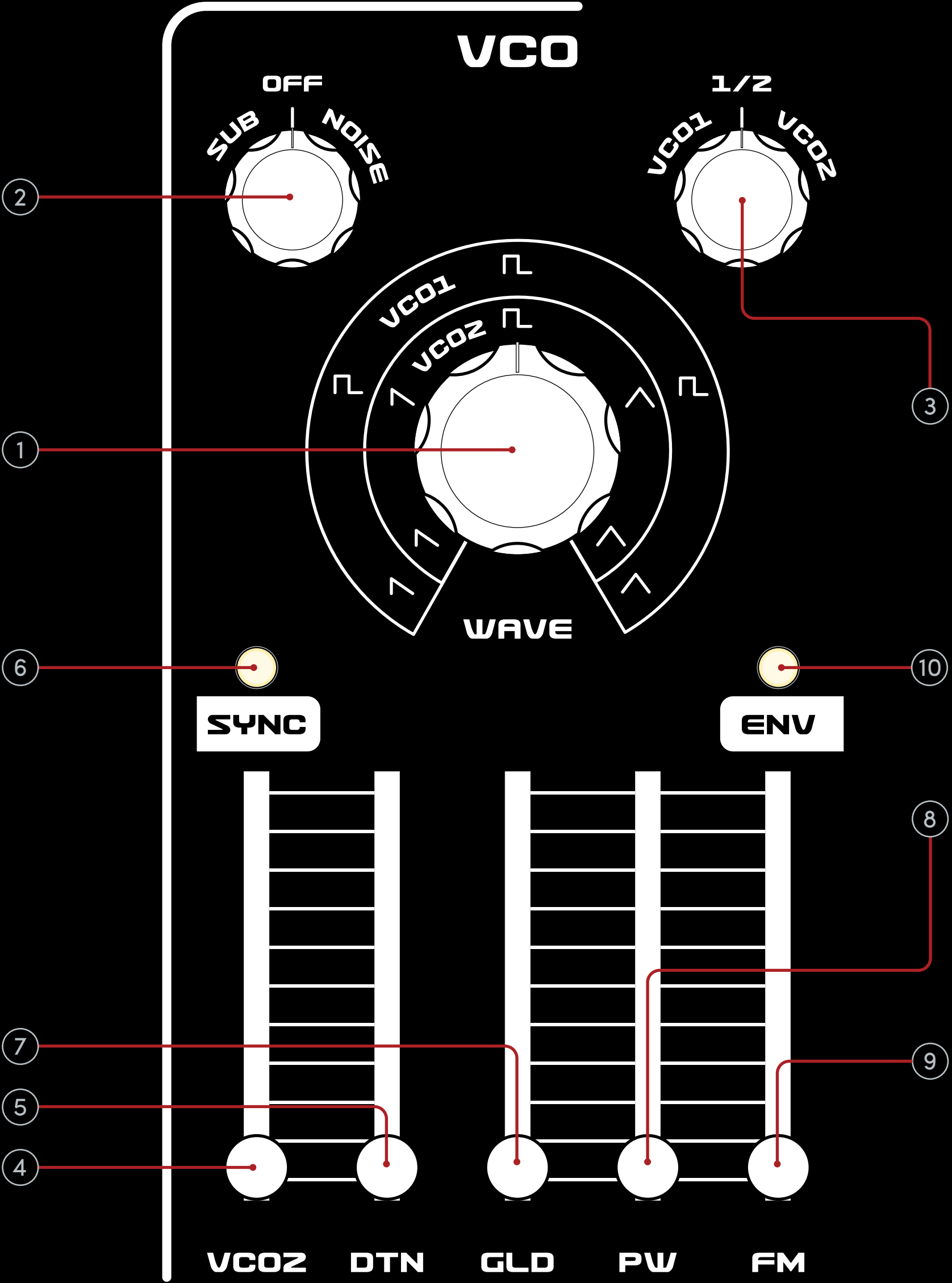
# 05 Panel Overview

- 1. VCO**  
2 x VCO with 3 waves via continuous waveshaping  
Hard Sync  
Thru-zero FM  
Sub Oscillator  
White Noise source
- 2. VCF**  
Resonant Low Pass Filter (12db or 24db)  
Resonant High Pass Filter (12db)  
Filter FM via VCO2 or Noise  
Precision Filter tracking
- 3. ENVELOPES**  
2 x ADSR Envelopes
- 4. LFOs**  
2 x LFOs per voice with 8 waveforms  
Sync and cross-modulation functions
- 5. MASTER OUT**  
OTA based VCAs  
Variable stereo panning
- 6. ARP/SEQ BUTTONS**  
Arpeggiator with 6 modes and probability function  
Polyphonic Sequencer with probability function
- 7. EFFECTS**  
4 Categories of Effects with various algorithms each

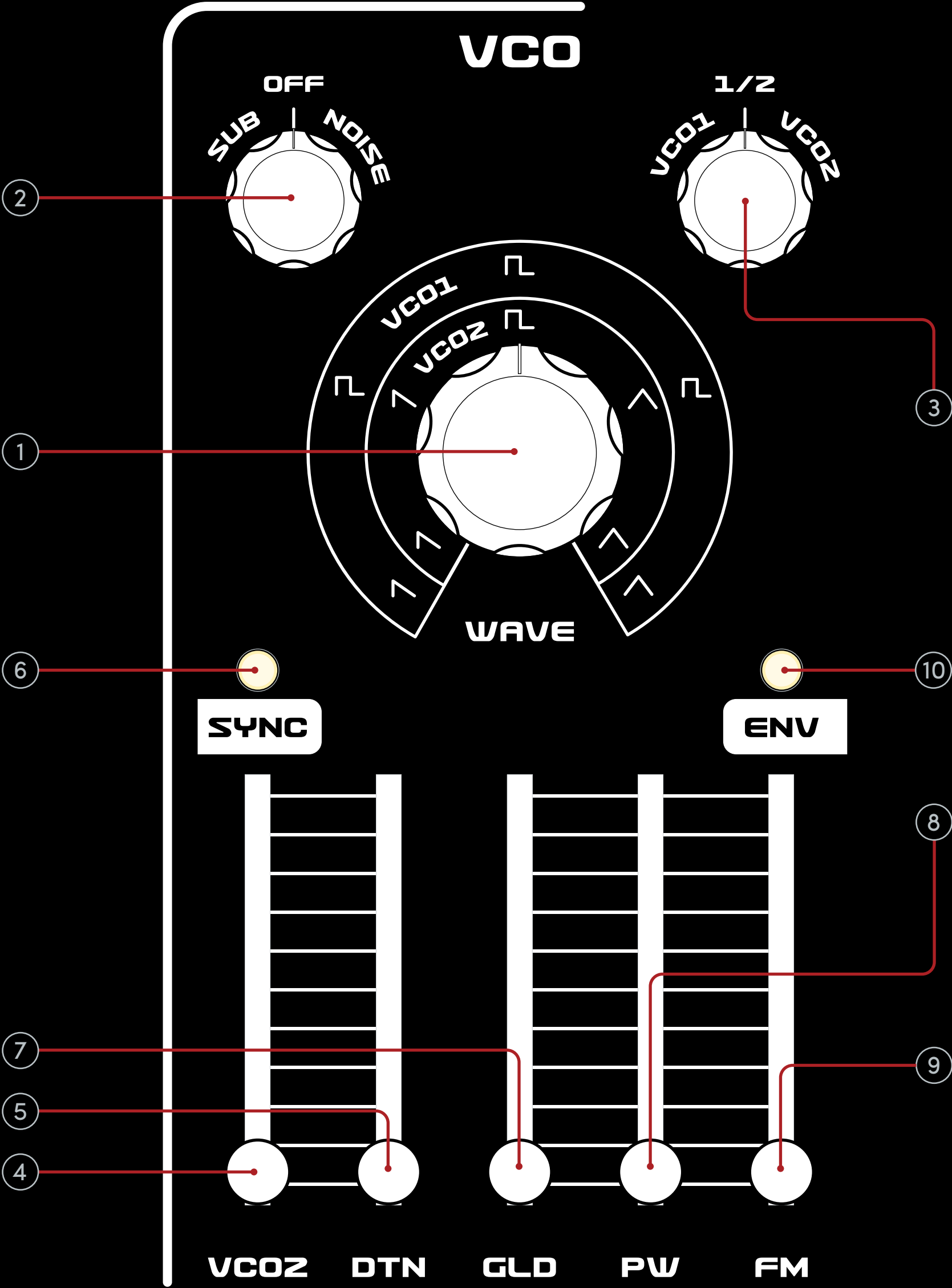


# 06 VCO

- 1. ■ WAVE**  
Controls continuously the waveform shape of the two VCOs. The positions between the waves blend from Sawtooth to Square to Triangle by giving control of each wave of both VCOs. As a result, interesting waveshaping combinations can be achieved with the use of just a single knob!
- 2. ■ SUB / NOISE Mixer**  
Mixes the levels of Sub oscillator and Noise source. Both levels are OFF in the middle position while achieving a maximum level towards the fully CCW or CW positions respectively.
- 3. ■ VCO 1 / VCO 2 Crossfader**  
Mixes the levels of Oscillator 1 and Oscillator 2. The knob is continuously blending the levels of the two oscillators with an equal 50/50 level at the middle position.
- 4. ■ VCO 2**  
Controls the pitch of oscillator 2. The pitch is quantized in semitones with a range of  $\pm 2$  octaves.
- 5. ■ DTN**  
Detune control for oscillator 2 and master detune for unison. It detunes the intervals between notes, from a slight to a dramatic effect, able to create some incredibly thick sounds.
- 6. ■ SYNC**  
Sync button activates Hard Sync. When in Hard Sync mode, VCO 2 wave cycle is forced to synchronize to the phase of the wave cycle of VCO 1. SYNC can achieve harmonically complex waveforms, especially when VCO 2 pitch is set higher than VCO 1 pitch.

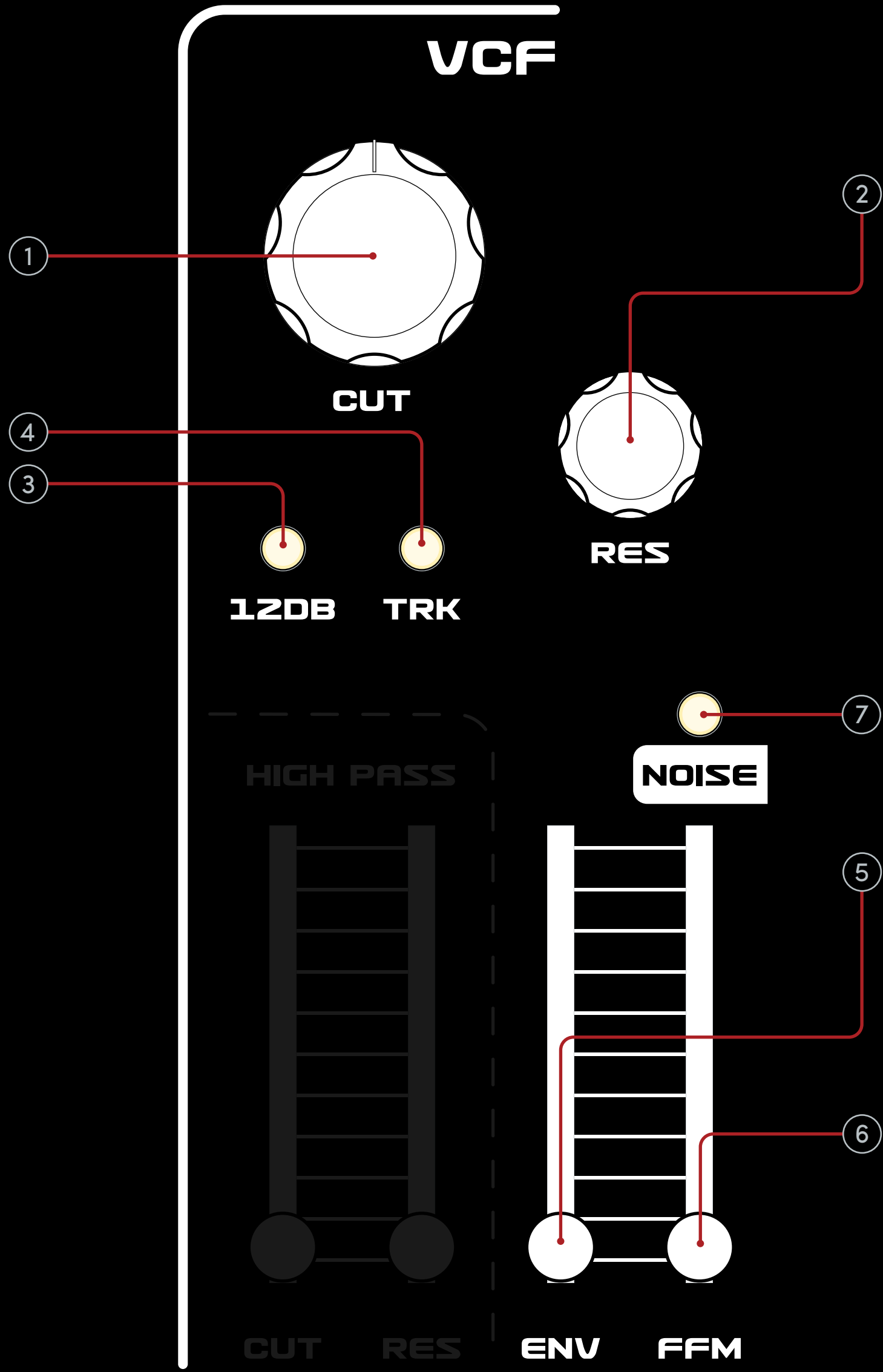


- 7. **GLD**  
Sets the Glide (portamento) amount for both Oscillators. Glide causes the pitch of a note to slide smoothly from the pitch of the previous note, to the new note that is pressed. Artemis supports polyphonic glide and will maintain the functionality across all play modes.
- 8. **PW**  
Sets the pulse-width of both oscillators. A symmetrical square waveform can be achieved when the PW slider is in zero position. The pulse of the square wave is getting narrower while the PW amount is increasing, making the oscillator sound disappear when the PW slider is in maximum position. This can be used as a trick to bypass the oscillators!
- 9. **FM**  
Sets the frequency modulation (FM) amount of VCO 2 to VCO 1. Artemis offers Thru-Zero FM modulation, a type of Linear FM which can produce deep and rich musical timbres while maintaining the pitch tracking.
- 10. **ENV**  
When the ENV button is activated, Envelope is controlling the FM amount. Instead of manually setting the FM amount, it can be modulated from the Envelope section with the FM slider setting the depth.

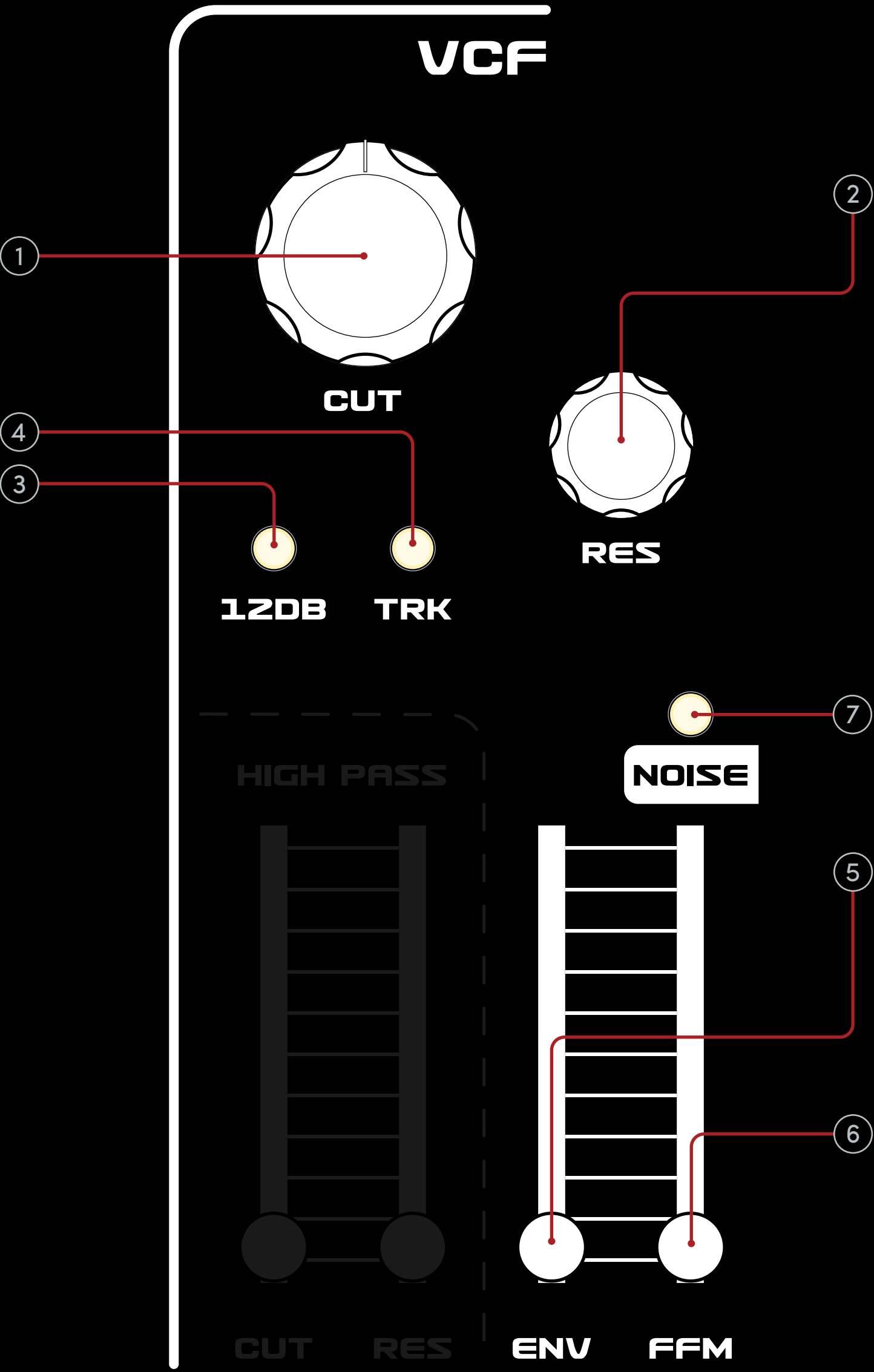


# 07 VCF

- 1. **CUT**  
Sets the Low Pass Filter's Cutoff frequency. Cutoff is the frequency, above which, the harmonic content of a sound is filtered out. The higher the Cutoff setting, the higher the frequencies that are allowed through the Filter, creating a brighter sound. Filter frequency range is from 20Hz to 20kHz.
- 2. **RES**  
Sets the amount of the Filter's Resonance. Resonance emphasizes the frequency area around the Cutoff frequency. At high Resonance settings, the Filter will self-oscillate and generate its own pitch, which is set by the Cutoff frequency.
- 3. **12DB**  
When activated the Low Pass Filter has a slope of 12db (2-pole) instead of the standard 24db (4-pole). The 12db filter attenuates the signal by 12 decibels per octave past the cutoff frequency. This results in a smoother cutoff response. In comparison, the 24db option has a steeper cutoff response.
- 4. **TRACK**  
Activates Filter key tracking, which is the modulation applied from the note played on the keyboard to the Filter's Cutoff frequency. By pressing the TRACK button, it cycles through 3 tracking amounts: Zero (LED OFF), Half (LED flashing), Full (LED ON). With Filter key tracking, the higher the notes are played, the brighter the sound will appear, which is a typical characteristic of acoustic instruments. When Full tracking is selected, by setting the Resonance at maximum, it will allow the Filter to be played as an Sine Oscillator and it will track notes.



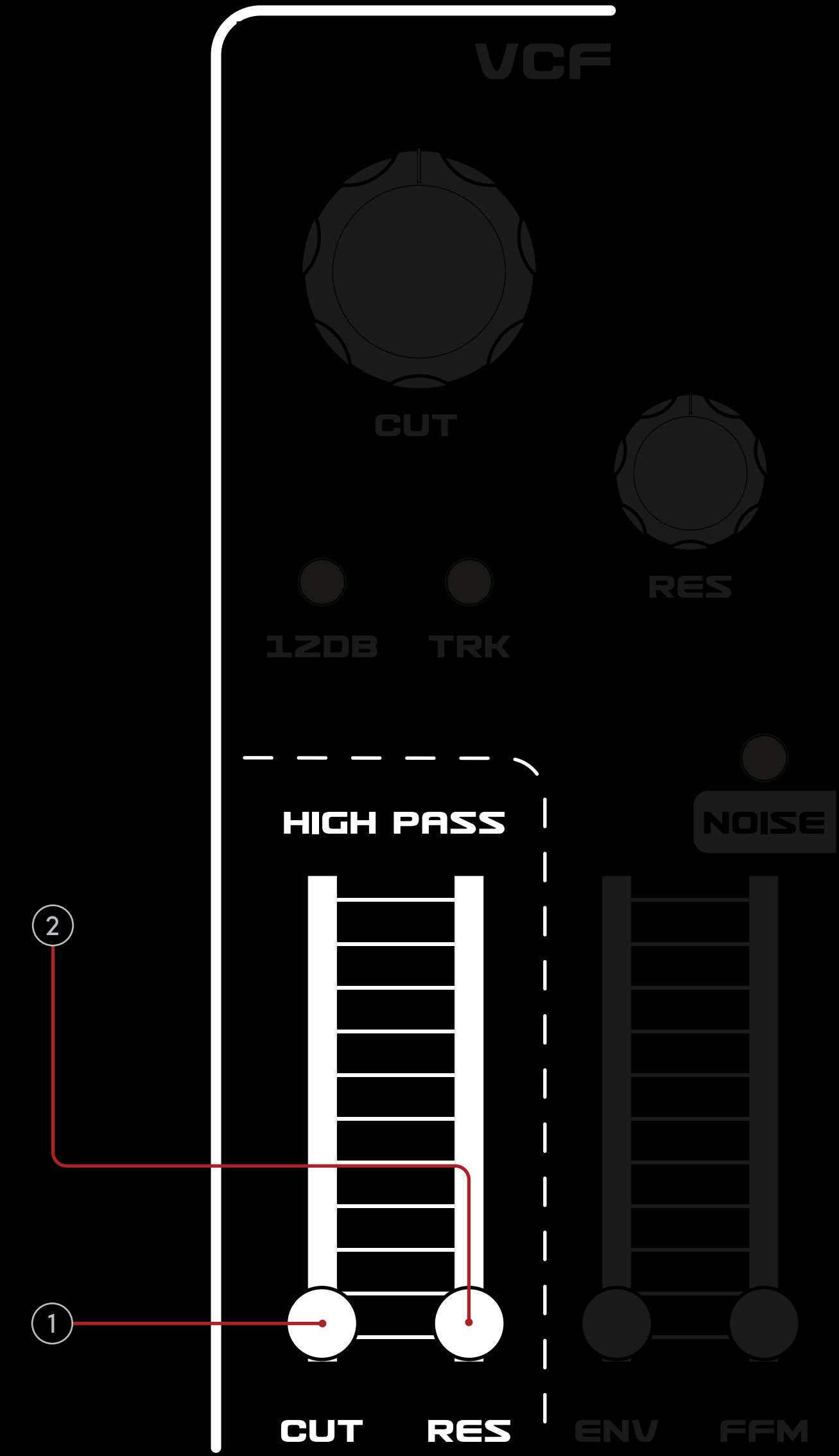
- 5. **ENV**  
Sets the amount of modulation from the Envelope to the Filter's Cutoff frequency.
- 6. **FFM**  
Sets the amount of frequency modulation (FM) of VCO 2 to the Cutoff frequency. The wave of VCO2 is the one set by the Wave knob and also the SUB/NOISE. This way it can create very complex modulations to the Cutoff frequency.
- 7. **NOISE**  
When activated, instead of VCO 2, the Noise is used as a source to apply FM to the Cutoff frequency.



# High Pass

⚠ *High Pass filter is at the end of the chain of the voices, offering extra control on the harmonic content of the sound.*

- 1. **CUT**  
Sets the High Pass Filter's Cutoff frequency.
- 2. **RES**  
Sets the amount of the Filter's Resonance.



# 08 ENVELOPE

1. **A (Attack Time)**

It is the time required for the Envelope to rise from zero to maximum level when a note is pressed. The higher the attack time, the longer it takes for the modulated target to rise from the initial value set.

2. **D (Decay Time)**

It is the time required for the Envelope to fall from its maximum level (end of Attack) to the Sustain Level. The higher the setting, the longer the Decay.

3. **S (Sustain Level)**

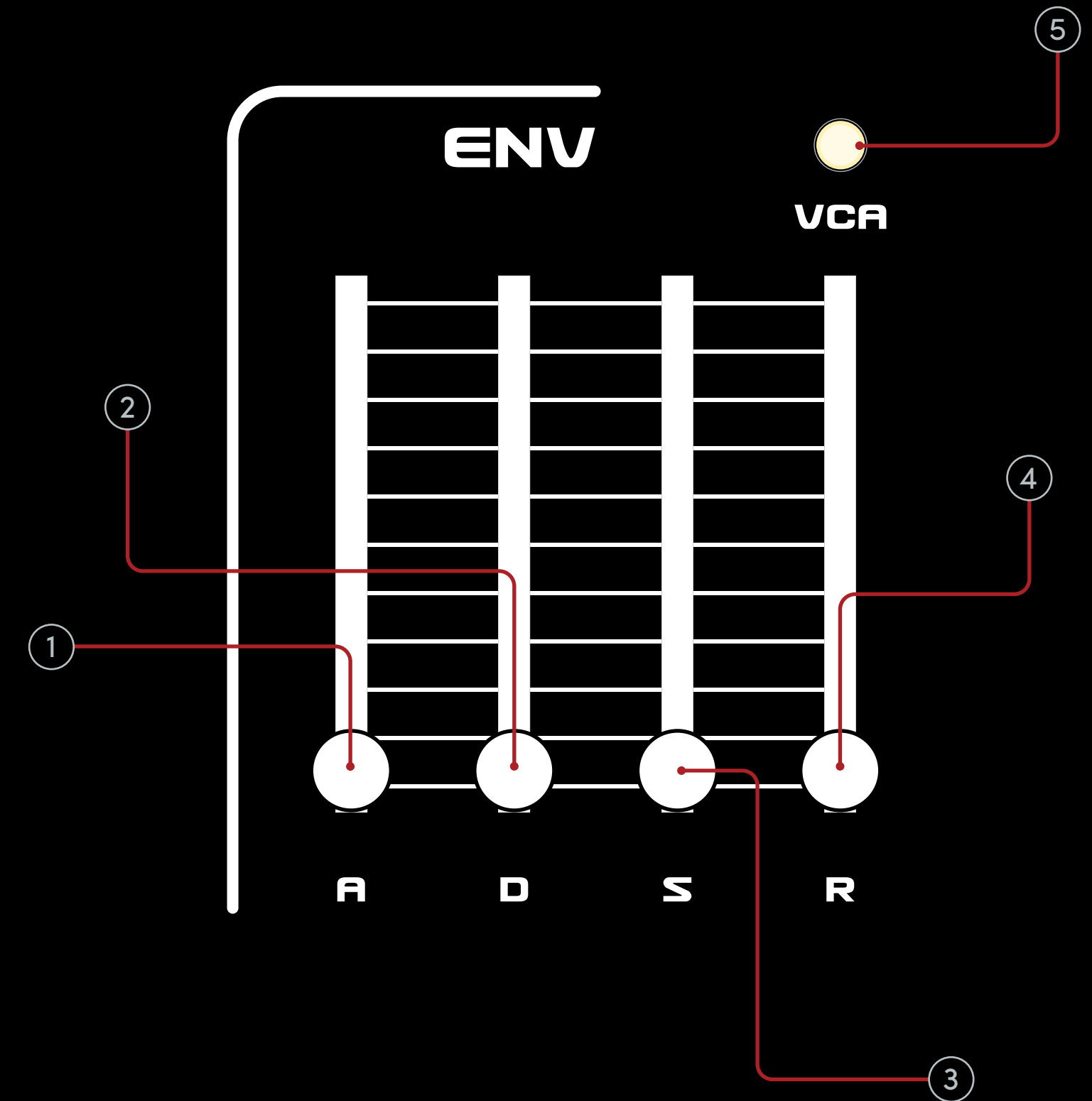
The modulated target will stay at this level as long as a note is held. When the Sustain is set at maximum, the Decay is having no effect.

4. **R (Release Time)**

It is the time required for the Envelope to fall from the Sustain Level to zero. This controls how quickly the modulated target returns to the initial value from the moment a note is released.

5. **VCA**

VCA button has three different settings. When OFF you are setting the Envelope which is the one that is modulating the Filter's Cutoff frequency and VCO FM amount. When ON you are on a different page that sets the Envelope that modulates the Amplitude. This Envelope controls the overall volume characteristics of the sound over time. By long pressing the VCA button till it starts flashing, one shared Envelope is used both for Filter's Cutoff frequency and VCA modulation.

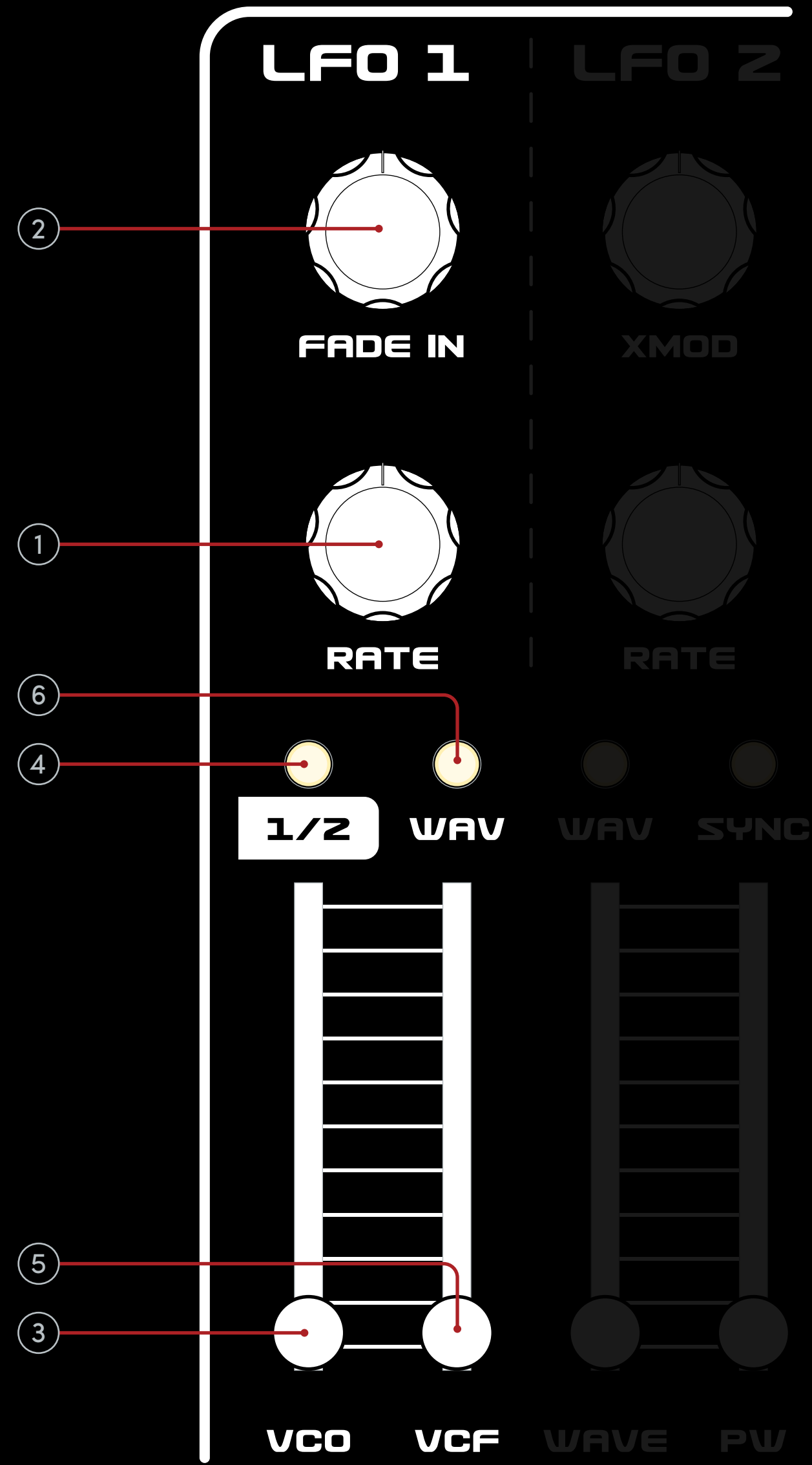


# 09 LFOs

# LFO 1

- 1. **RATE**  
Sets the speed of the LFO 1 from 10 seconds (0.1Hz) up to 25Hz.
- 2. **FADE IN**  
Sets the time that LFO 1 will take to fade in. When playing a note, Fade In will get triggered and the knob will control the time it needs to reach from zero amount to the maximum amount set.
- 3. **VCO**  
Sets the modulation amount of LFO 1 to the pitch of the oscillators.
- 4. **1/2**  
The 1/2 button controls if the LFO 1 modulation will be applied to the pitch of VCO 1(LED ON) or VCO 2(LED FLASHING) or both(OFF). It cycles through these three options.
- 5. **VCF**  
Sets the modulation amount of LFO 1 to the Low Pass Filter's Cutoff frequency.
- 6. **WAV**  
The WAV button will cycle through the following LFO 1 waveshapes: Sine, Triangle, Saw, Ramp, Square, Random, Env+ and Env-.

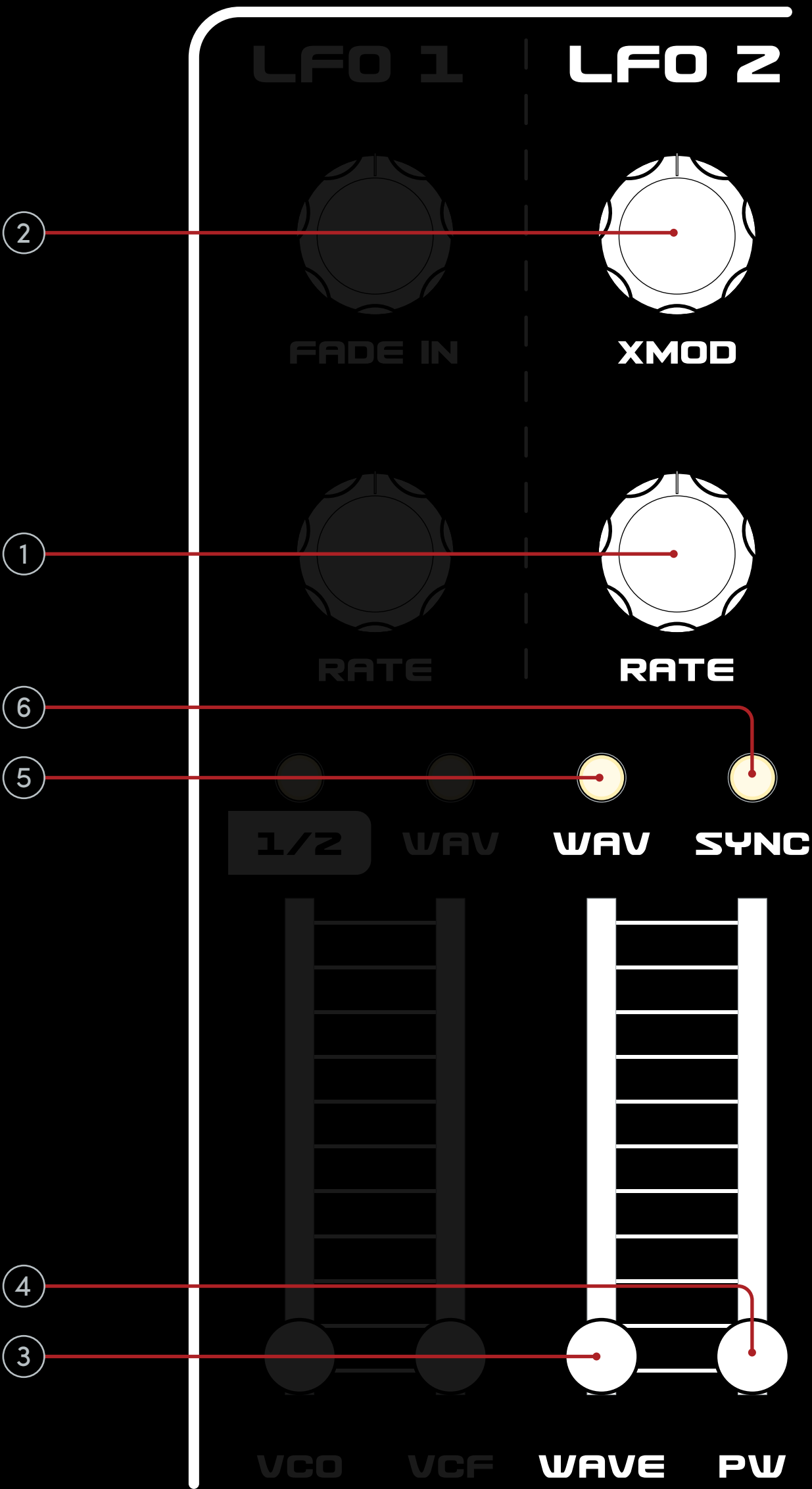
⚠ *Env+ will change the LFO to an Envelope. Everytime a key is pressed the LFO is triggered and it will make a single cycle. In this case Fade In controls the relation between rise and fall of the cycle while the Rate is controlling the time of the cycle. Env- is the inverted cycle of Env+. E.g In order to achieve a single cycle rise on VCO pitch use Env+ WAV, while achieving a drop on the pitch Env- should be used while achieving a drop on the pitch Env- should be used.*



# LFO 2

- 1. **RATE**  
Sets the speed of the LFO 2.
- 2. **XMOD**  
Sets the modulation amount of LFO 2 to LFO 1 Rate. This is a very useful and unique feature to achieve ratcheting effects and complex cascading rhythm patterns.
- 3. **WAVE**  
Sets the modulation amount of LFO 2 to the VCOs waveshape (Wave knob).
- 4. **PW**  
Sets the modulation amount of LFO 2 to the pulse-width of VCO 1 square wave.
- 5. **WAV**  
The WAV button will cycle through the following LFO 2 waveshapes: Sine, Triangle, Saw, Ramp, Square, Random, Env+ and Env-.

⚠ When one shot function Env+ or Env- are selected as a WAV on LFO2, Rate is controlling the time of the cycle which is always a falling cycle.

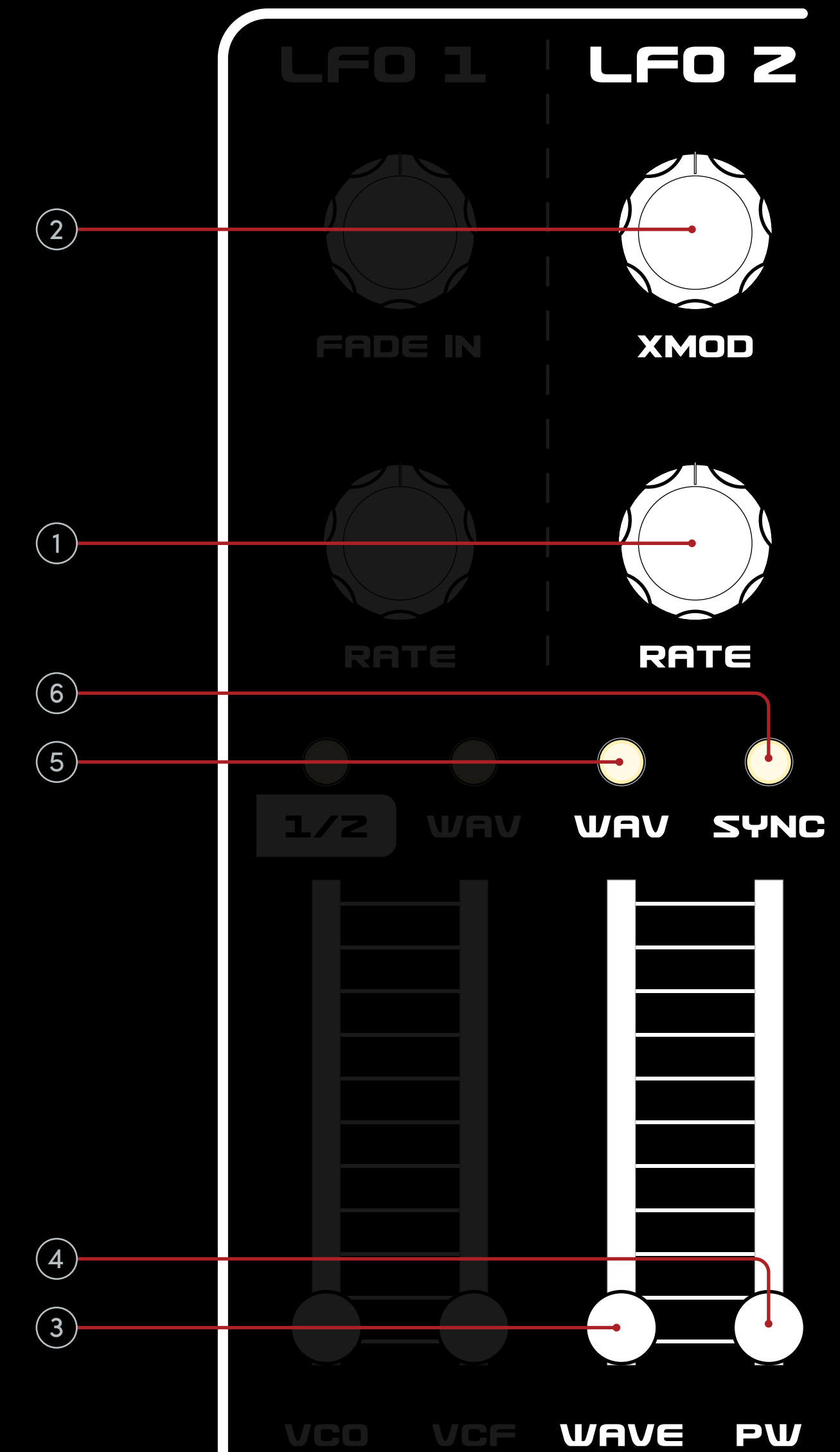


## 6. SYNC

Sync button allows the cycle of both LFOs to be synced.

The button cycles through the following options:

- **Free** - Free running LFO. No sync applied.
- **Key** - The LFO cycle will restart when a new note is played. As the LFOs are polyphonic, this will occur on each independent LFO. For example, if poly LFO is applied to the Filter's Cutoff frequency, playing notes in succession will create an arpeggio-like effect, which will follow the way the notes were played.
- **BPM** - The LFO's speed is synced to an external MIDI clock. The LFO Rate values have the following BPM divisions (Rate knob left of the center) and multiplications (Rate knob right of the center): 1, 1.5, 2, 3, 4, 6, 8, 12, 24.
- **KEY BPM** - The LFO's speed is synced to a MIDI clock, but also its cycle resets when a new note is played.



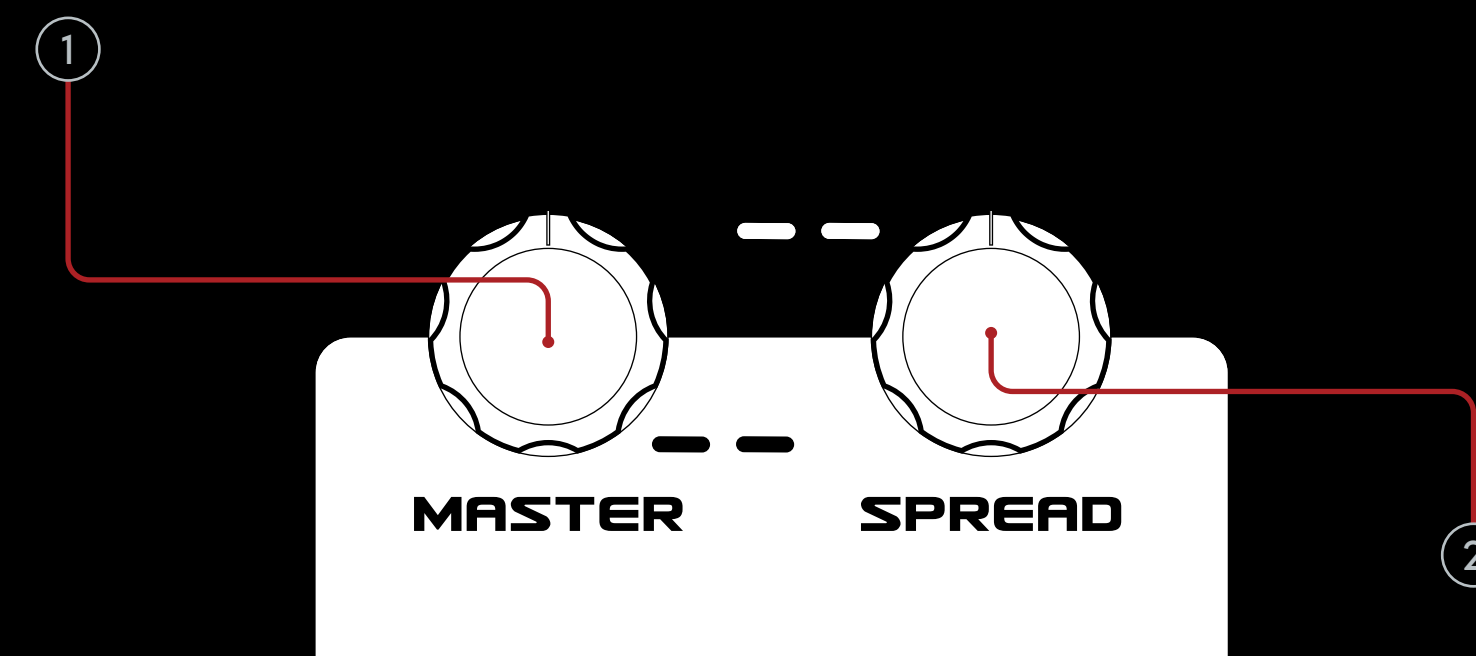
# 010 MASTER OUT Section

1. ■ **MASTER**

Controls the Master Level of the output signal.

2. ■ **SPREAD**

Controls the amount of the Stereo Spread by spreading the voices on the Stereo Spectrum. The voices are split to odd and even on the Stereo Spectrum. So, voices 1,3,5,7 are set to the left channel and voices 2,4,6,8 are set to the right channel. When SPREAD is set at zero all voices are mixed to both left and right channels.



# 011 BUTTONS

1. **PLAY BUTTON**

Pressing the PLAY button starts/pauses the clock of Artemis. The Play button flashes according to the Tempo rate. The Clock sets the Tempo of the Sequencer and Arpeggiator, as well as the Sync function of the LFOs.

2. **STOP BUTTON**

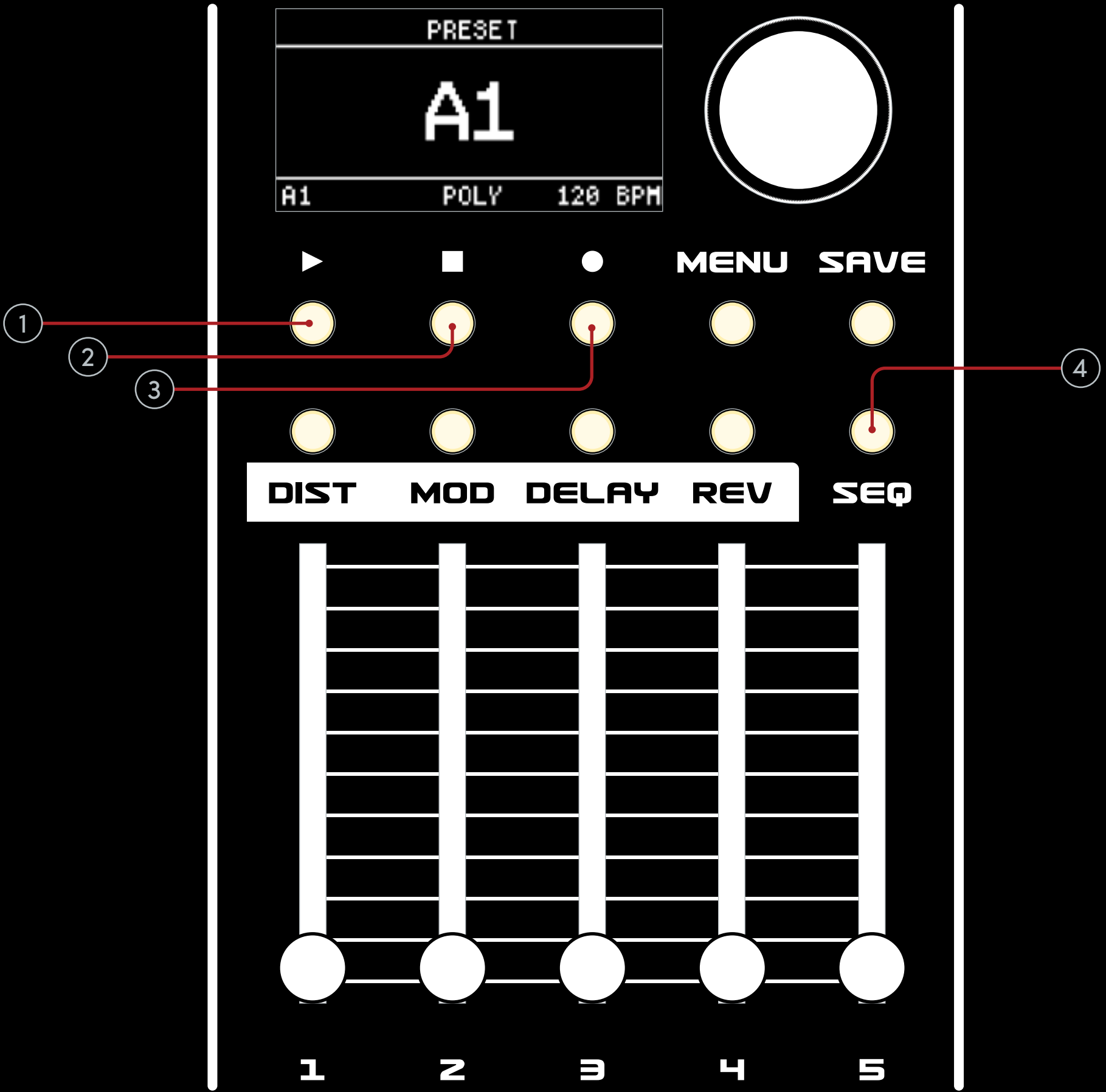
Pressing the STOP button stops the clock of Artemis. Pressing the STOP button twice resets the Sequencer to the first step as well as it clears any notes pressed (all notes off message).

3. **REC BUTTON**

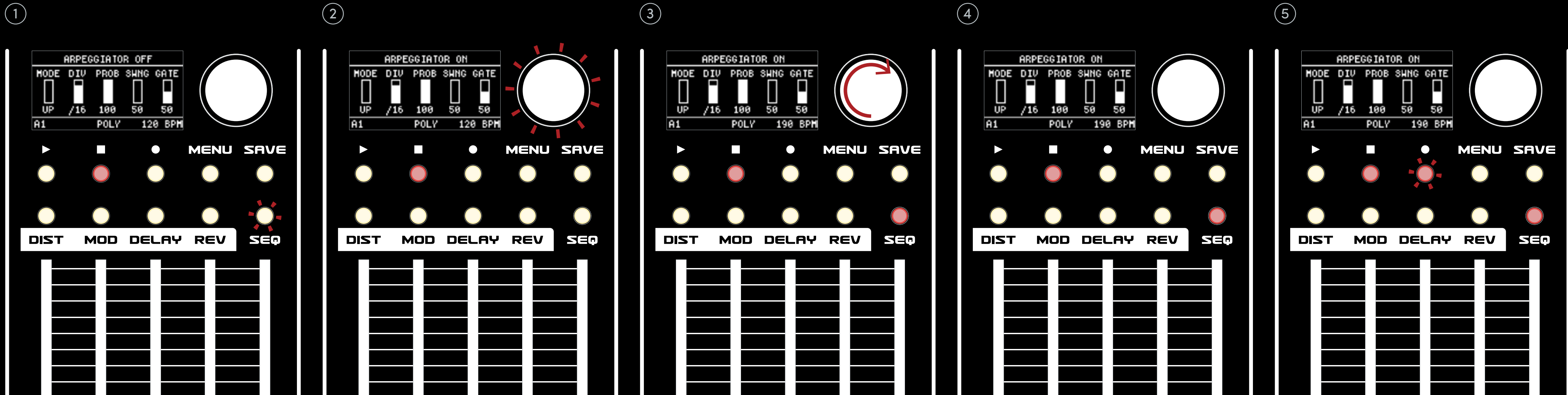
The REC button is active only when the Sequencer or the Arpeggiator is On. Pressing the REC button while being on any other page (e.g effects page) shows the REC page.






4. **SEQ BUTTON**

The SEQ button cycles between two sections, the Arpeggiator and the Sequencer. First press navigates to the active (ON) section, second press the inactive (OFF) section while a third section will navigate back to the main page.



# 012 ARPEGGIATOR

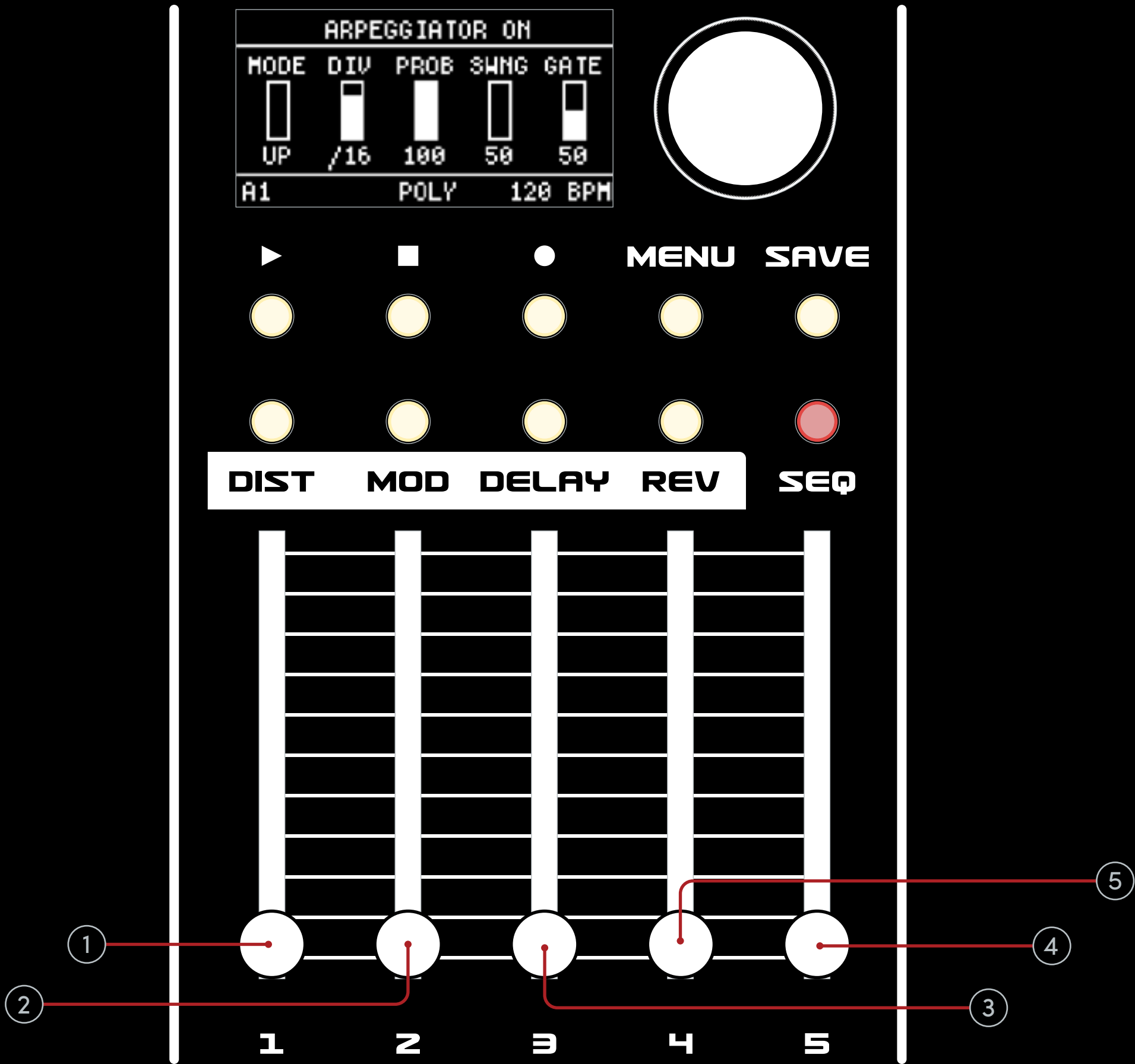


1. To access the  Arpeggiator page click the  SEQ button.
2. Pressing the  Encoder will turn on/off the Arpeggiator.
3. Rotating the  Encoder will set the tempo (BPM). When an external Midi clock is received, Arpeggiator will sync to that tempo (Clock Receive should be activated).
4. When Arpeggiator is On, while holding a chord on a keyboard, Artemis plays a pattern based on the individual notes held one after the other. While you hold down a chord, pressing and holding any additional notes will add those notes to the arpeggio. You can change notes and the arpeggiator will continue to play as long as at least one note is always held.
5. Pressing the  REC button while holding the keys will work as a hold function meaning that the arpeggiator will continue to play notes after releasing the keys.

# ARPEGGIATOR PARAMETERS

## MODE

1. Slider 1 is choosing between the following playback modes:
- **UP**  
Arpeggiator will play in order from the highest to the lowest note.
  - **DOWN**  
Arpeggiator will play in order from the highest to the lowest note.
  - **ORD**  
Arpeggiator will play notes in the order the keys were pressed.
  - **INC**  
Arpeggiator will play in order from the lowest to highest note, then from the highest to the lowest, repeating the high note and low note.
  - **EXC**  
Arpeggiator will play in order from the lowest to highest note, then from the highest to the lowest, without repeating the high note and low note.
  - **RND**  
Arpeggiator will play notes in random order.



**DIV**

2. Slider 2 adjusts the Time Division which allows to change the rhythmic relationship of the arpeggiator relative to the tempo.

You can set values like quarter notes ( /4 - one step per beat), eighth notes ( /8- two steps per beat) or Triplet values ( /2T, /4T,...).

**PROB**

3. Slider 3 adjusts the Arppegiator probability amount which is how likely it is that the held notes will play.

Probability values vary from 0% (none of the held notes will play) to 100% (all the held notes will play).

**SWNG**

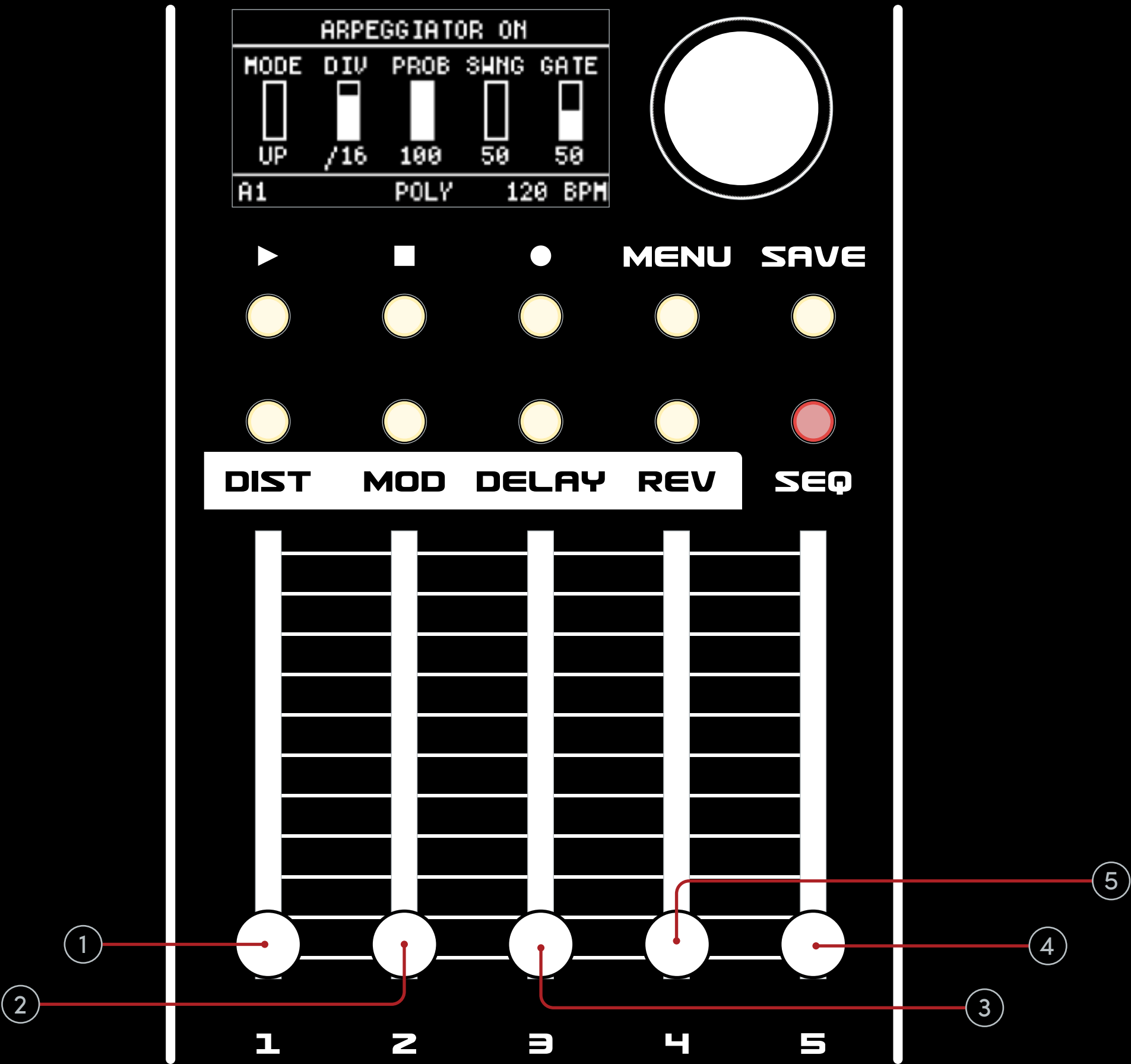
4. Slider 4 adjusts the Swing amount which adds a shuffle effect on the Arpeggiator by slightly delaying alternate notes.

Swing values vary from 50 (no swing, straight timing) to 75.

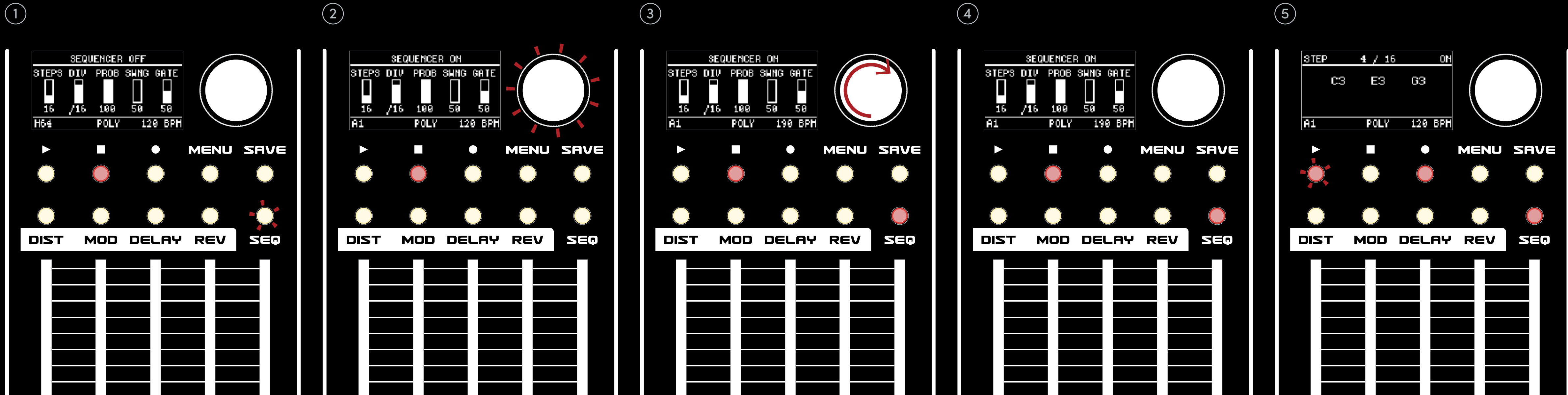
**GATE**

5. Slider 5 adjusts the Gate length of the notes.




Lower values will create a more staccato effect while higher values have a longer gate time.




# 013 SEQUENCER

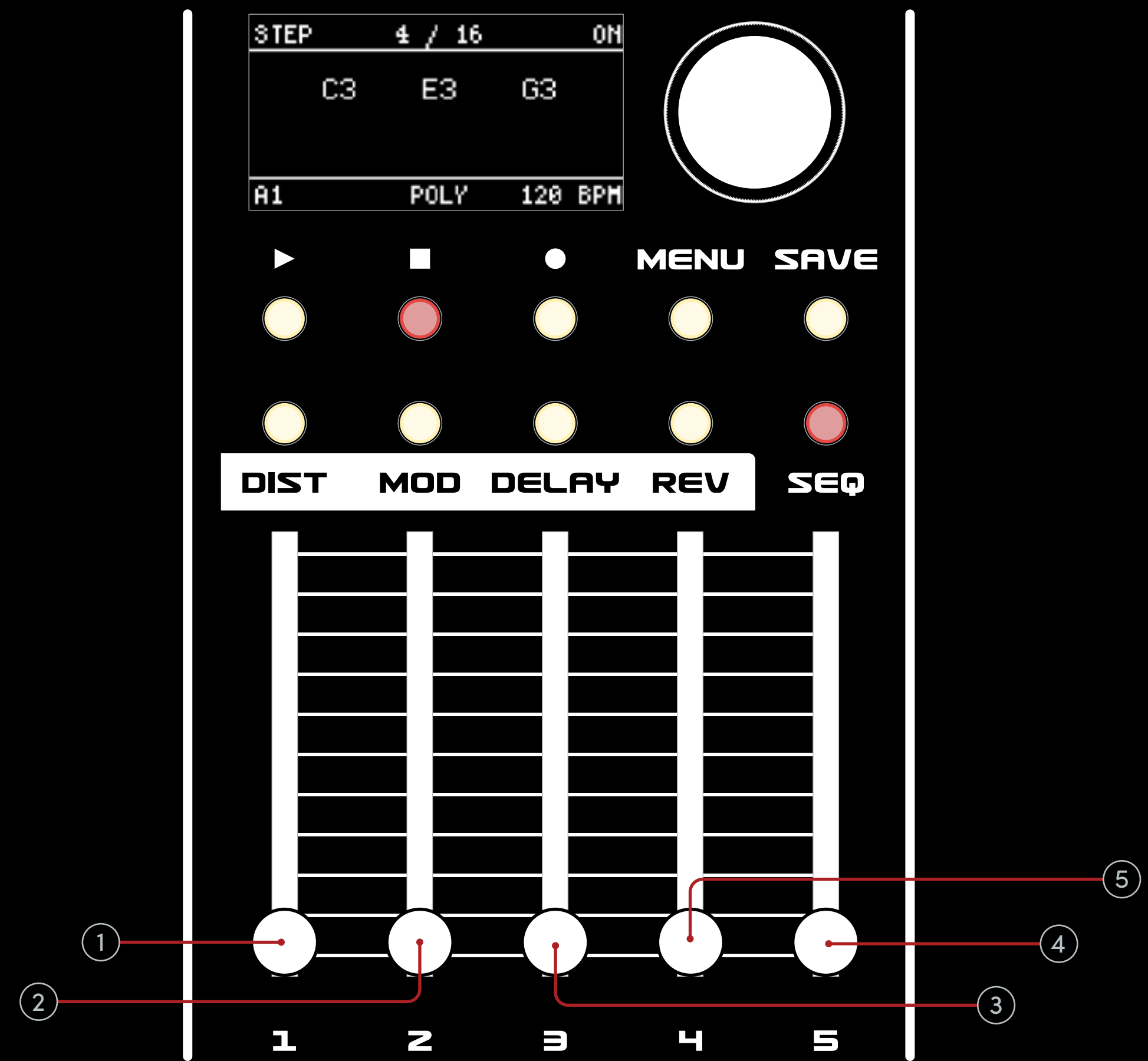


1. To access the Sequencer page click the SEQ button.
2. Pressing the Encoder will turn on/off the Sequencer.
3. Rotating the Encoder will set the tempo (BPM).
4. When an external Midi clock is received, Sequencer will sync to that tempo (Clock Receive should be activated).
5. When Sequencer is On, you can press the Rec button to enter the REC page and start recording a sequence. While you are on any page (e.g effect page), clicking the Rec navigates to the REC page . The sequencer step page shows in real time the state of each step (tie/rest) and the notes corresponding to each step. You can play and record up to 6 notes per step. When all the played notes will be released, the sequencer will progress on the next step. When the maximum of 6 notes played per step, any additional played notes will be ignored.

The  Encoder functions in REC mode when the sequencer is stopped ( Stop Button Lit) or running ( Play button flashing):

- When the sequencer is stopped, you can scroll through the steps by turning the encoder.
- If no notes are held on a keyboard:
  - \* Pressing and releasing the Encoder sets a rest on the current played step and it progresses to the next step while erasing any previously recorded notes.
  - \* Sequencer stopped: Pressing and holding down while turning the Encoder clockwise quickly sets rests on all the steps that you scroll through.
  - \* Sequencer running: Pressing and holding down the Encoder sets rests in all the played steps.
- If holding notes on a keyboard:
  - \* Sequencer stopped: Pressing the Encoder sets a tie and it progresses to the next step. If you turn the Encoder while holding notes it quickly sets ties to all the steps that you scroll through. Holding the Encoder down while you do so, sets the same notes in all steps scrolled through but they will play in staccato instead of tie.
  - \* Sequencer running: Pressing the Encoder records ties in all the steps played. Holding the Encoder down will set them to staccato instead of ties. This is a quick way to record a staccato chord in several steps instead of playing the same notes on each different step.

 When the clock is running the song position is shared across the presets which results in a smooth transition of the sequencer between presets. For example, when the sequencer is running on a 16 step length preset, change the preset while on the 8th step. The new loaded preset will start running from the 8th step instead of resetting to the 1st step in order to maintain song position.



# SEQUENCER PARAMETERS

## STEPS

1. Slider 1 selects the step length of the sequencer (1-64 steps). DIV

## DIV

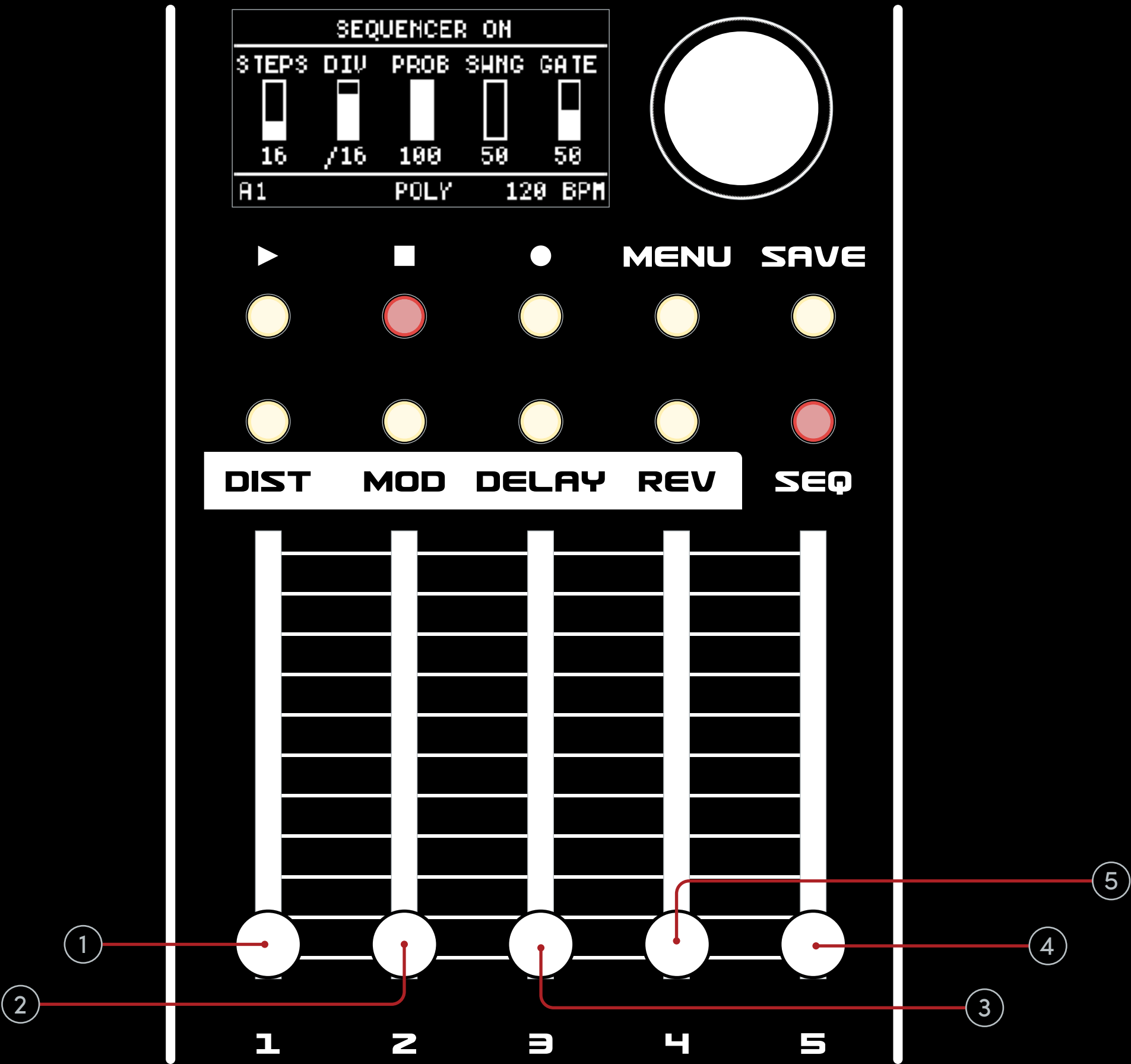
2. Slider 2 adjusts the Time Division which allows to change the rhythmic relationship of the sequencer relative to the tempo.

You can set values like quarter notes ( /4 – one step per beat), eighth notes ( /8- two steps per beat) or Triplet values ( /2T, /4T,...).


## PROB

3. Slider 3 adjusts the Sequencer probability amount which is how likely the recorded sequencer on each step will play.

Probability values vary from 0% (none of the recorded steps will play) to 100% (all the held notes will play).





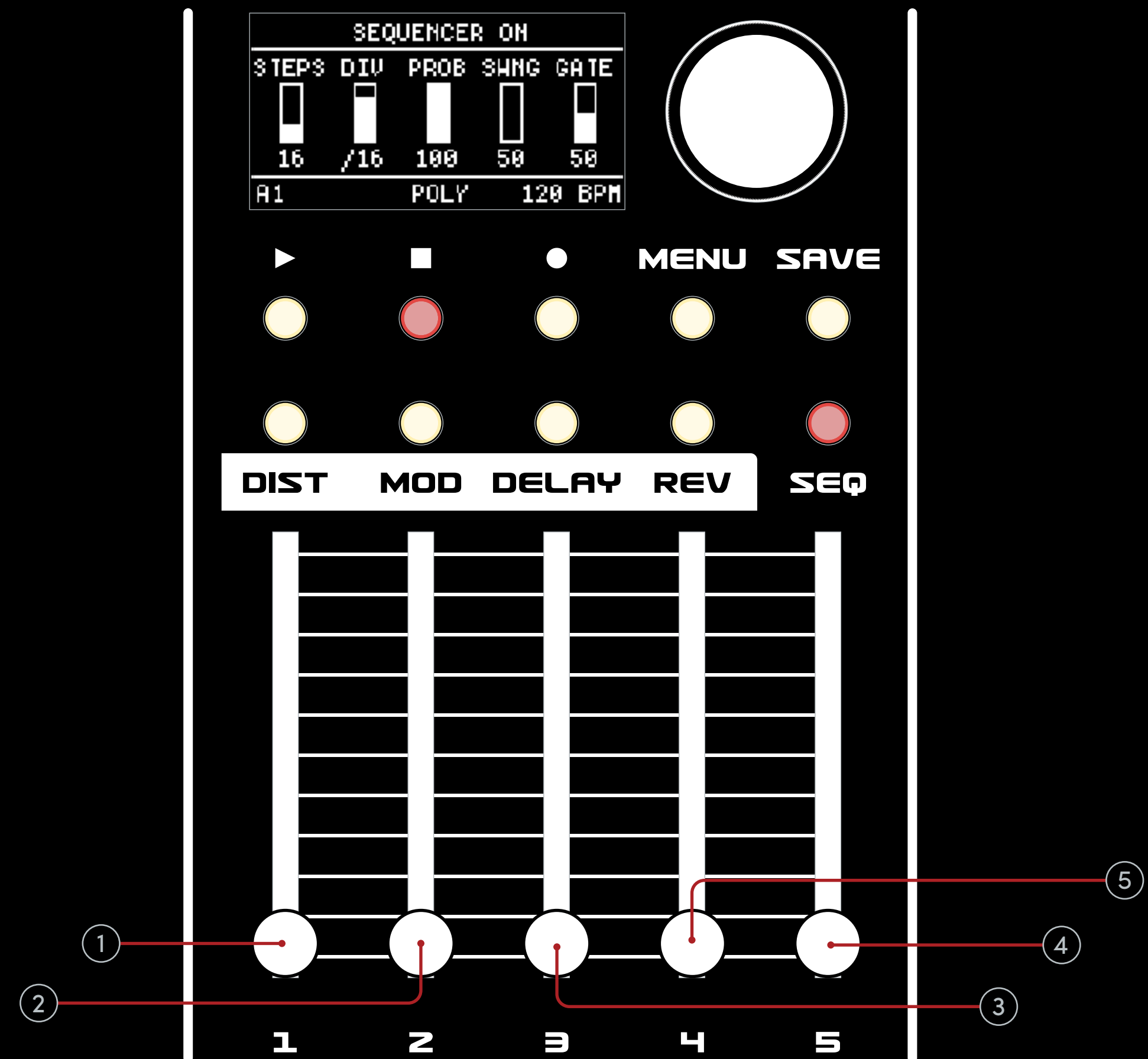
4.  Slider 4 adjusts the Swing amount which adds a shuffle effect on the Arpeggiator by slightly delaying alternate notes

Swing values vary from 50 (no swing, straight timing) to 75.


**GATE**



5.  Slider 5 adjusts the Gate length of the notes.

Lower values will create a more staccato effect while higher values have a longer gate time.

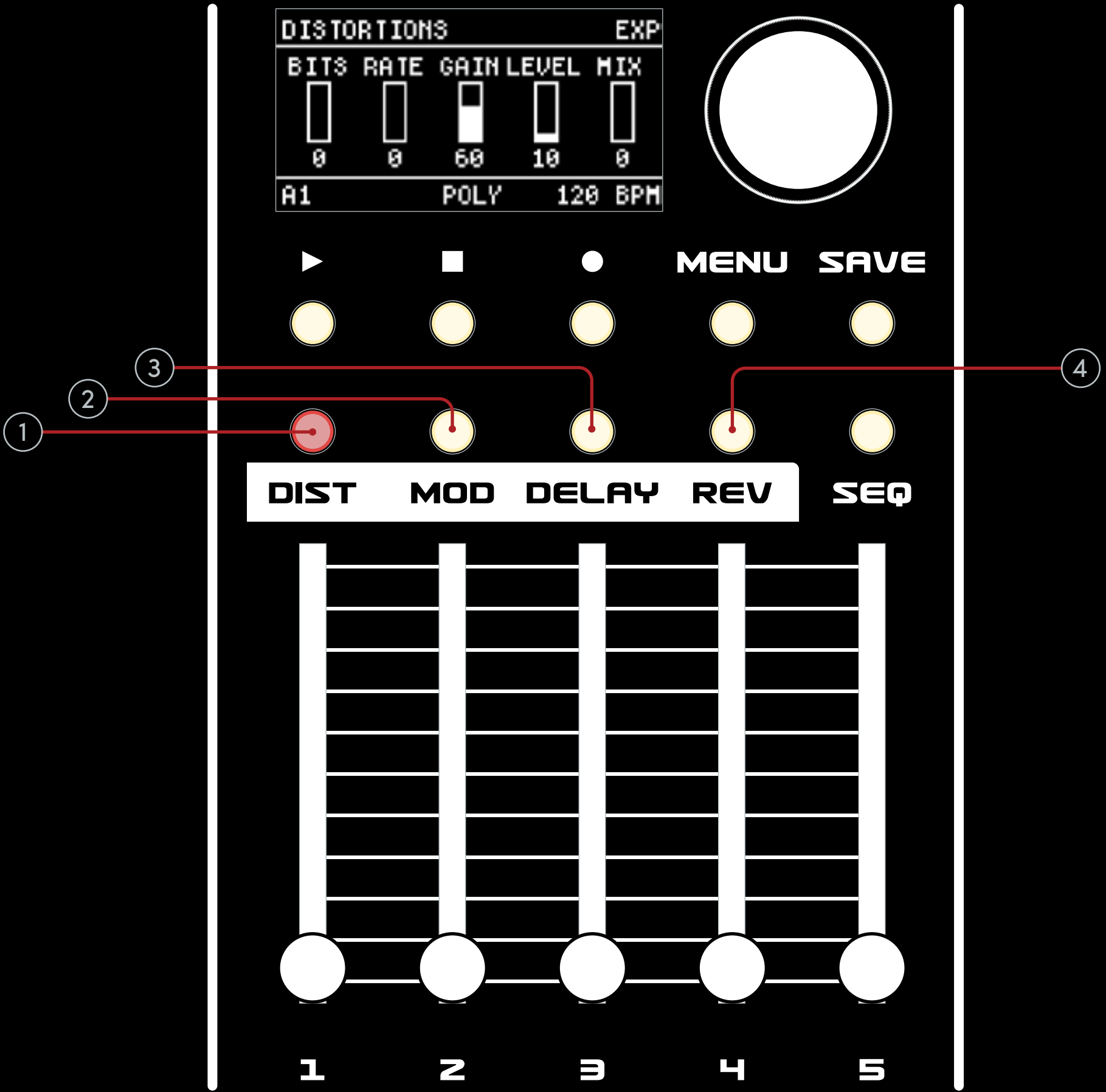


# 014 EFFECTS

Artemis offers **4 categories** of effects in series:

- 1. **Distortion** –  DIST
- 2. **Modulation** –  MOD
- 3. **Delay** –  DELAY
- 4. **Reverb** –  REV

You can access each effect page by pressing the relative effect button. The 5 sliders are used to set the parameters of each effect as seen on the screen. Turning the encoder will cycle through the different algorithms of each effect page.



# Distortion Effects

DIST page offers multiple distortion, overdrive, wavefolding and shredding algorithms with 2x oversampling, and additional bit depth and sample rate reduction to create digital aliasing and resolution artifacts.

## 1. Algorithms

Exponential, Parabolic, Sine Clip, S-Curve, Soft Clip, Hard Clip, Tri Clip, Tri Fold, Single Fold, Multi Fold, Sine Bend, Sine Fold, Sine Shred, Bin Shred, Sym Warp.

## 2. Parameters

- **BITS** — Amount of bit depth reduction.
- **RATE** — Amount of sample rate reduction.
- **GAIN** — Distortion gain/boost level.
- **LEVEL** — Distortion output level.
- **MIX** — Balance between Dry and Wet signal.

PARAMETERS

BITS

RATE

GAIN

LEVEL

MIX

DISTORTIONS

EXP

BITS

RATE

GAIN

LEVEL

MIX

0

0

60

10

0

A1

POLY

120 BPM

▶

■

●

MENU

SAVE

●

●

●

●

●

●

●

●

●

●

DIST

MOD

DELAY

REV

SEQ

1

2

3

4

5

DIST ALGORITHMS

EXPONENTIAL

PARABOLIC

SINE CLIP

S-CURVE

SOFT CLIP

HARD CLIP

TRI CLIP

TRI FOLD

SINGLE FOLD

MULTI FOLD

SINE BEND

SINE FOLD

SINE SHRED

BIN SHRED

SYM WARP

# Modulation Effects

## 1. Algorithms

Chorus, Ensemble, Tape Chorus, BBD Chorus, Flanger, BBD Flanger, Thru-Zero Flanger, Phaser, Barber-Pole Phaser, Double Notch, Pitch Shifter.

## 2. Parameters

PARAMETERS

1

2

MODULATIONS

CHORUS

DEPTH SPD FEED WIDTH MIX

65 50 20 50 0

A1 POLY 120 BPM

▶ ■ ●

MENU SAVE

DIST MOD DELAY REV SEQ

1 2 3 4 5

MOD ALGORITHMS

CHORUS

ENSEMBLE

TAPE CHORUS

BBD CHORUS

FLANGER

BBD FLANGER

THRU-ZERO FLANGER

PHASER

BARBER-POLE PHASER

DOUBLE NOTCH

PITCH SHIFTER

MOD ALGORITHMS	PARAMETERS
<div>CHORUS</div> <div>Classic single-voice chorus.</div>	
<div>ENSEMBLE</div> <div>Lush chorus with three detuned voices.</div>	
<div>TAPE CHORUS</div> <div>Creates pitch wobble inspired by tape machines.</div>	<ul style="list-style-type: none"><li>DPTH — Amount of time modulation by the LFO.</li></ul>
<div>BBD CHORUS</div> <div>Dark and warm Lo-Fi chorus built using variable sample rate technology.</div>	<ul style="list-style-type: none"><li>SPD — LFO frequency.</li></ul>
<div>FLANGER</div> <div>Classic flanger with positive or negative feedback.</div>	<ul style="list-style-type: none"><li>FEED — Feedback amount, increasing the effect’s intensity/resonance.</li></ul>
<div>BBD FLANGER</div> <div>Dark and warm Lo-Fi flanger built using variable sample rate technology.</div>	<ul style="list-style-type: none"><li>WDTH — LFO phase offset between left and right channels, creating stereo spread.</li></ul>
<div>THRU-ZERO FLANGER</div> <div>Dual-delay flanger with positive or negative feedback</div>	
<div>PHASER</div> <div>Classic 6-stage phaser.</div>	<ul style="list-style-type: none"><li>MIX — Balance between Dry and Wet signal.</li></ul>

MOD ALGORITHMS	PARAMETERS
<div><b>BARBER-POLE PHASER</b></div> <div>Ultra-smooth phaser with seemingly endless spectrum sweeps.</div>	<ul style="list-style-type: none"><li>• <b>SPD</b> — Phaser sweep frequency</li><li>• <b>FEED</b> — Feedback amount, increasing the effect’s intensity/resonance.</li><li>• <b>WDTH</b> — LFO phase offset between left and right channels, creating stereo spread.</li><li>• <b>MIX</b> — Balance between Dry and Wet signal.</li></ul>
<div><b>DOUBLE NOTCH</b></div> <div>Dynamic filter that creates two notches in the spectrum separated one octave apart.</div>	<ul style="list-style-type: none"><li>• <b>DPTH</b> — Amount of frequency modulation by the LFO.</li><li>• <b>SPD</b> — LFO frequency.</li><li>• <b>NTCH</b> — Width of the spectrum notches.</li><li>• <b>WDTH</b> — LFO phase offset between left and right channels, creating stereo spread.</li><li>• <b>MIX</b> — Balance between Dry and Wet signal</li></ul>
<div><b>PITCH SHIFTER</b></div> <div>Stereo pitch adjustment via variable-speed granular playback.</div>	<ul style="list-style-type: none"><li>• <b>L</b> — Semitone pitch shift for the left channel.</li><li>• <b>R</b> — Semitone pitch shift for the left channel.</li><li>• <b>FEED</b> — Feedback amount, increasing the effect’s intensity/resonance.</li><li>• <b>DAMP</b> — Variable low-pass filter (negative values) or high-pass filter (positive values); affects the feedback and creates a darker or brighter sound.</li><li>• <b>MIX</b> — Balance between Dry and Wet signal.</li></ul>

# Delay Effects

1. Algorithms

Stereo, Ping-Pong, BBD Delay, Random Repeater.

2. Parameters

PARAMETERS

1

2

DELAYS

STEREO

L

R

FEED

DAMP

MIX

50

50

65

-40

0

A1

POLY

120 BPM

▶

■

●

MENU

SAVE

DIST

MOD

DELAY

REV

SEQ

1

2

3

4

5

DELAY ALGORITHMS

STEREO

PING-PONG

BBD DELAY

RANDOM REPEATER

DELAY ALGORITHMS		PARAMETERS
<b>STEREO</b>  Classic delay with a variable low-pass or high-pass damping filter.		<ul style="list-style-type: none"><li>• <b>L</b> — Left channel delay time.</li><li>• <b>R</b> — Right channel delay time.</li><li>• <b>FEED</b> — Feedback amount, increasing the amount of delay repeats (tail length).</li><li>• <b>DAMP</b> — Variable low-pass filter (negative values) or high-pass filter (positive values); affects the feedback and creates a darker or brighter sound.</li><li>• <b>MIX</b> — Balance between Dry and Wet signal.</li></ul>
<b>PING-PONG</b>  Delay with alternating left-right or right-left playback and a variable damping filter.		<ul style="list-style-type: none"><li>• <b>TIME</b> — Delay time.</li><li>• <b>PAN</b> — Switches between left-right and right-left ping-pong mode.</li><li>• <b>FEED</b> — Feedback amount, increasing the amount of delay repeats (tail length).</li><li>• <b>DAMP</b> — Variable low-pass filter (negative values) or high-pass filter (positive values); affects the feedback and creates a darker or brighter sound.</li><li>• <b>MIX</b> — Balance between Dry and Wet signal.</li></ul>
<b>BBD DELAY</b>  Lo-Fi delay using variable sample rate technology, with built-in speed modulation.		<ul style="list-style-type: none"><li>• <b>TIME</b> — Delay time.</li><li>• <b>FEED</b> — Feedback amount, increasing the amount of delay repeats (tail length).</li><li>• <b>SPD</b> — LFO frequency.</li><li>• <b>DPTH</b> — Amount of delay time modulation by the LFO.</li><li>• <b>MIX</b> — Balance between Dry and Wet signal.</li></ul>
<b>RANDOM REPEATER</b>  Records and repeats small chunks of sound, with each cycle having random chunk size and number of repeats.		<ul style="list-style-type: none"><li>• <b>SIZE</b> — Average size of repeater chunks.</li><li>• <b>REP</b> — Average repeat count.</li><li>• <b>PROB</b> — Probability of each round of repeats.</li><li>• <b>EG</b> — Relative fade in/out time of the repeater envelope.</li><li>• <b>MIX</b> — Balance between Dry and Wet signal.</li></ul>

Reverb Effects

1. Algorithms

Small Reverb, Large Reverb, Huge Reverb, Cloud Reverb, Shimmer Reverb.

2. Parameters

PARAMETERS

1

2

REVERBS

LARGE

PRE SIZE FEED DAMP MIX

0 80 80 -20 0

A1 POLY 120 BPM

▶ ■ ● MENU SAVE

● ● ● ● ●

● ● ● ● ●

DIST MOD DELAY REV SEQ

1

2

3

4

5

REV ALGORITHMS

SMALL REVERB

LARGE REVERB

HUGE REVERB

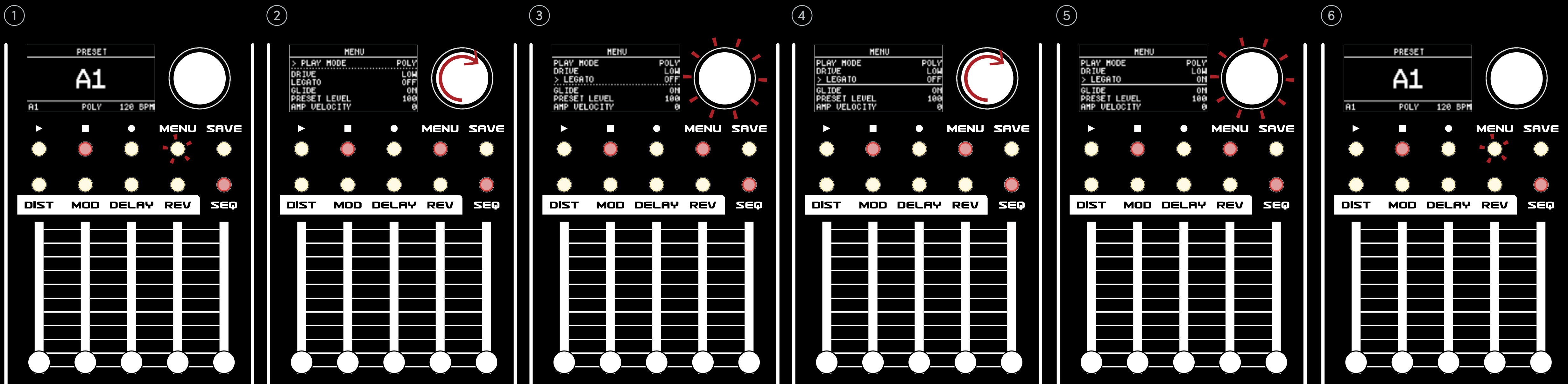
CLOUD REVERB

SHIMMER REVERB

REV ALGORITHMS	PARAMETERS
<div><b>SMALL REVERB</b></div> <div>Classic small stereo space model with variable low/high-pass damping.</div>	<ul style="list-style-type: none"><li><b>PRE</b> — Pre-delay time.</li><li><b>SIZE</b> — Relative scale of the virtual space.</li><li><b>FEED</b> — Reverb tail decay time.</li><li><b>DAMP</b> — Variable low-pass filter (negative values) or high-pass filter (positive values); affects the feedback and creates a darker or brighter sound.</li><li><b>MIX</b> — Balance between Dry and Wet signal.</li></ul>
<div><b>LARGE REVERB</b></div> <div>Classic large stereo space model with variable low/high-pass damping.</div>	<ul style="list-style-type: none"><li><b>SIZE</b> — Relative scale of the virtual space.</li><li><b>FEED</b> — Reverb tail decay time.</li><li><b>SPD</b> — LFO frequency.</li><li><b>DPTH</b> — Amount of time modulation by the LFO.</li><li><b>MIX</b> — Balance between Dry and Wet signal.</li></ul>
<div><b>HUGE REVERB</b></div> <div>Extra-large, dark stereo space model with variable chorus-style modulation.</div>	<ul style="list-style-type: none"><li><b>SIZE</b> — Relative scale of the virtual space.</li><li><b>FEED</b> — Reverb tail decay time.</li><li><b>SPD</b> — LFO frequency.</li><li><b>DPTH</b> — Amount of time modulation by the LFO.</li><li><b>MIX</b> — Balance between Dry and Wet signal.</li></ul>

REV ALGORITHMS		PARAMETERS
<div>CLOUD REVERB</div> <div>Records audio into a buffer and plays it back using multiple randomized, looping playheads; with optional reverse mode.</div>		<ul style="list-style-type: none"><li>• <b>TUNE</b> — Relative speed detune between grains.</li><li>• <b>SIZE</b> — Average grain size.</li><li>• <b>FEED</b> — Amount of input signal overdubbing the recording in the buffer.</li><li>• <b>GRAIN</b> — Amount of simultaneous playheads (negative values engage reverse playback).</li><li>• <b>MIX</b> — Balance between Dry and Wet signal.</li></ul>
<div>SHIMMER REVERB</div> <div>Lush, ethereal stereo delay that gradually pitch-shifts its tail up or down.</div>		<ul style="list-style-type: none"><li>• <b>TUNE</b> — Semitone amount of the shimmer pitch shifting.</li><li>• <b>SIZE</b> — Relative scale of the virtual space.</li><li>• <b>FEED</b> — Reverb tail decay time.</li><li>• <b>DAMP</b> — Variable low-pass filter (negative values) or high-pass filter (positive values); affects the feedback and creates a darker or brighter sound.</li><li>• <b>MIX</b> — Balance between Dry and Wet signal.</li></ul>

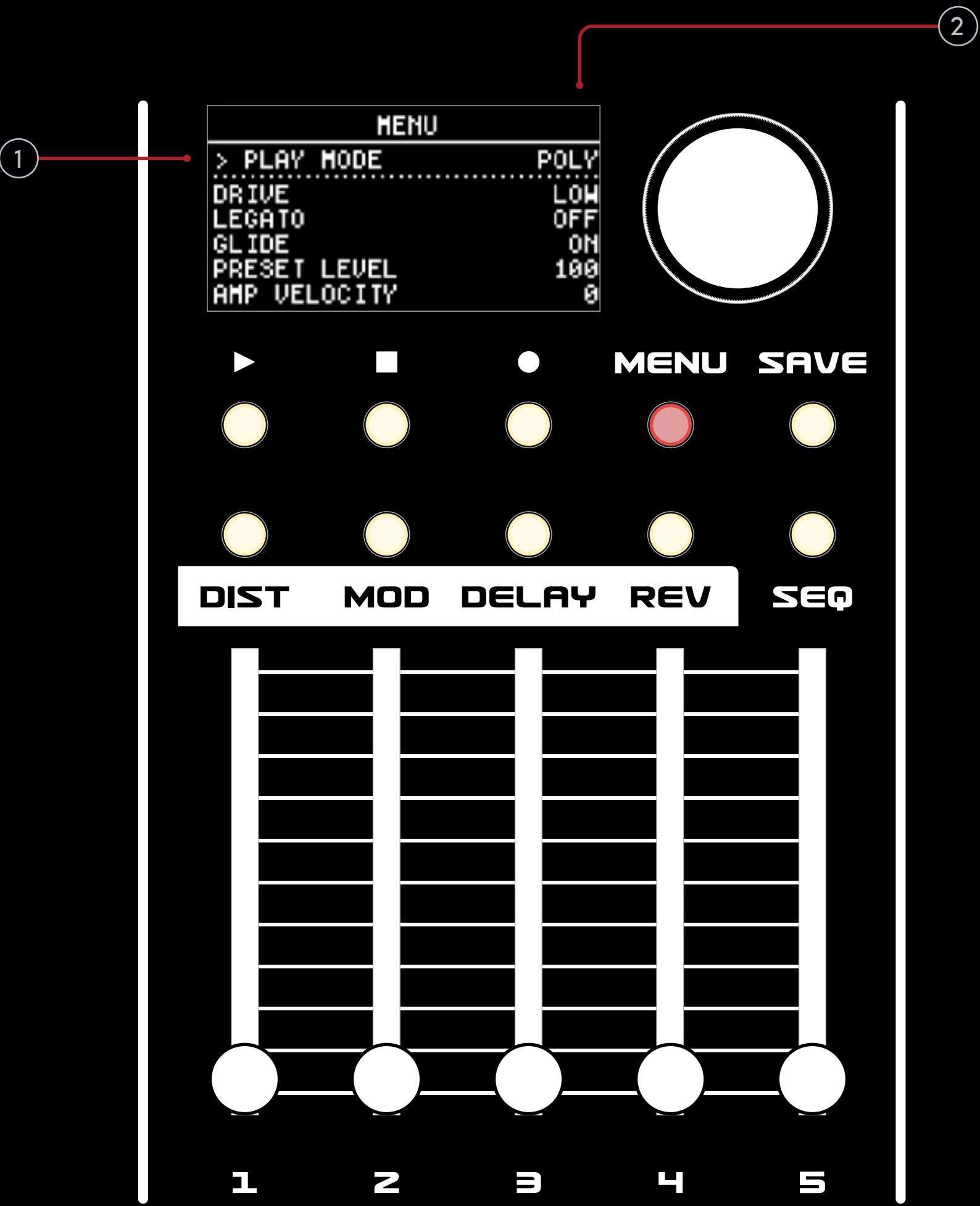
# 015 MENU PAGE



By entering the    MENU Page, you can access    additional Parameters of the Artemis as well as the    Global settings.

1. Press the    Menu button to enter the    MENU page.
2. Rotate the    Encoder to scroll through the Parameters, as seen on the screen.
3. Press the    Encoder to choose and edit one of the Parameters.
4. Rotate the    Encoder to scroll through the Values for the selected Parameter.
5. Press the    Encoder to select the Value.
6. Press the    Menu button to exit the MENU Page.

1. PARAMETERS	2. VALUE
PLAY MODE	POLY/ TRI/ DUO/ UNISON/ MONO
DRIVE	LOW/ MID/ HIGH/ OFF
LEGATO	ON/OFF
GLIDE	ON/AUTO
PRESET LEVEL	25 to 200
MODWHEEL	ADD (-100 to 100) / CLEAR
AFTERTOUCH	ADD/ CLEAR
VELOCITY	ADD/ CLEAR
CC74	ADD/ CLEAR



## ■ PLAY MODE

1. **POLY**  
In Polyphonic mode Artemis will act as a 6-voice polyphonic synthesizer. Up to 6 voices can be played at the same time.
2. **TRI**  
In Tri mode Artemis will act as a 3-voice polyphonic synthesizer. The 6 voices will be stacked together into 3 pairs of 2 voices in unison.
3. **DUO**  
In Duo mode Artemis will act as a 2-voice polyphonic synthesizer. The 6 voices will be stacked together into 2 pairs of 3 voices in unison.
4. **UNISON**  
In Unison mode Artemis will act as a monophonic synthesizer (one note can be played at a time) but all the 6 voices will be stacked into a single note creating a thick sound.
5. **MONO**  
In Mono mode Artemis will act as a monophonic synthesizer, playing only 1 voice at a time.

## ■ DRIVE

Drive will overdrive the Filter's input, will add more harmonics and will make the sound more aggressive by also changing the resonance character. There are 3 Drive amounts to choose from: Low, Mid and High. Selecting OFF will bypass the overdrive feature.

## ■ LEGATO

Turns ON/OFF Legato. When Legato is on, new notes will not re-trigger the Envelopes while other notes are already pressed.

## ■ GLIDE

Turns ON/AUTO Glide. When Glide is on, each new note will glide from the previous pressed note at the speed selected with the GLD slider. Selecting AUTO Glide effectively skips glide on the first note pressed after all notes have been released.

## ■ PRESET LEVEL

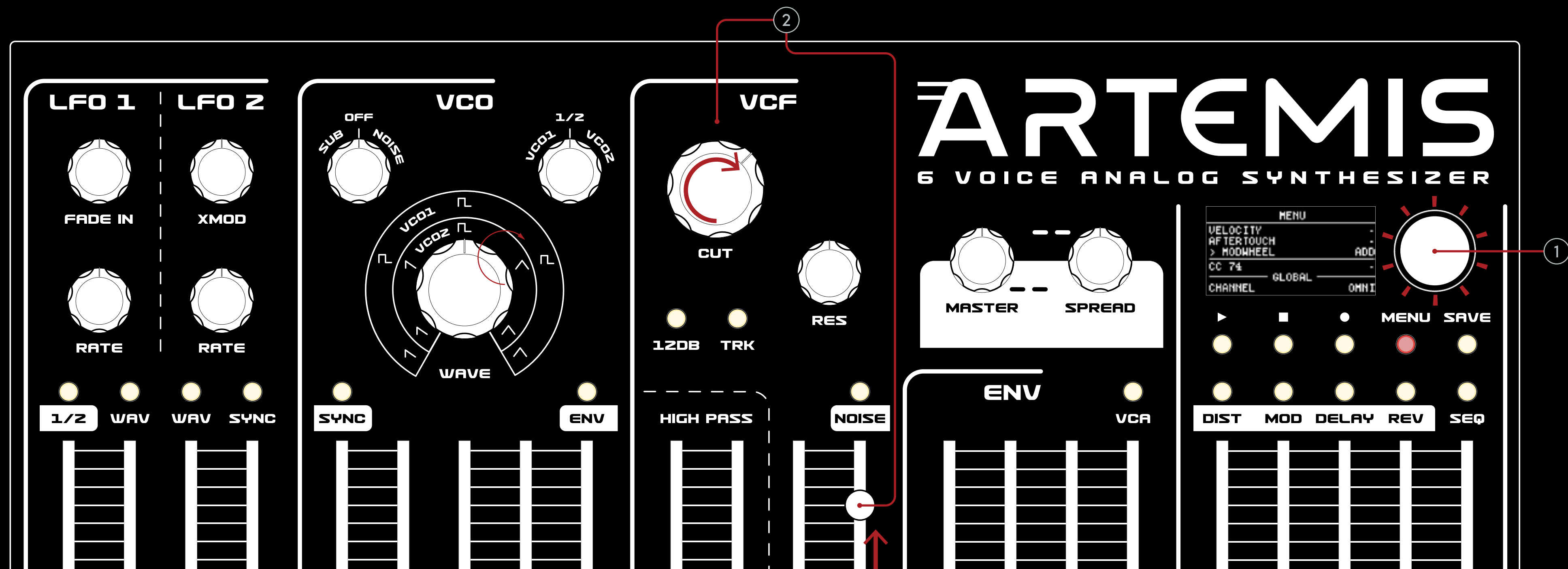
This parameter adds an extra Level control which can be saved on each preset.

## MODWHEEL

The ModWheel parameter allows the use of the modulation Wheel, in order to modulate any of the knobs or sliders of the front panel.

Select with the encoder the ModWheel parameter, and move to the ADD option. While on ADD option, move any knob or slider in order to assign it to the modulation Wheel. The modulation amount is set by the position of the knob or slider assigned with values ranging from -100 (negative modulation) to 100. Rotate the Encoder and press the CLEAR option if you want to clear all the ModWheel assigned parameters.

**⚠ You can also assign the five effects sliders to the modulation wheel.**  
To do so first press the effect button of your preference and then use the five sliders to set the parameters modulation amount. This means that you can add different values for the five sliders on each effect category. However, each slider modulation assignment is shared among all algorithms within the effect category, without making any distinction between the different slider parameters on each algorithm.



## ■ AFTERTOUCH

The Aftertouch parameter allows the use of the keyboard Aftertouch, in order to modulate any of the knobs or sliders of the front panel. Clearing or assigning a parameter and setting the modulation amount, works in the same way as the ModWheel parameter.

## ■ VELOCITY

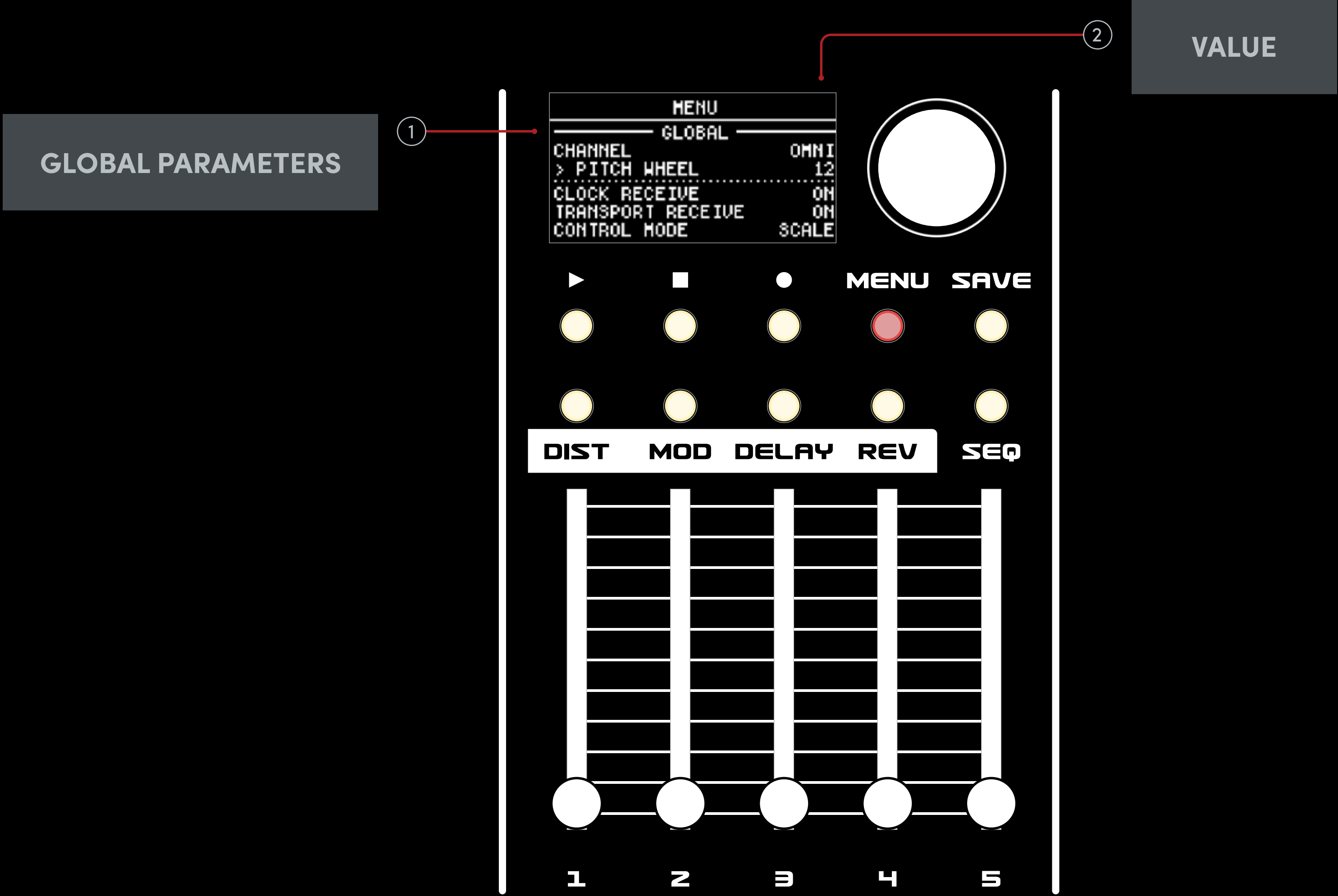
The Velocity parameter allows the use of the keyboard's velocity (playing dynamics), in order to modulate any of the knobs or sliders of the front panel. Clearing or assigning a parameter and setting the modulation amount, works in the same way as the ModWheel parameter.

## ■ CC74

CC74 can also be used and assigned to any parameter, offering further control e.g through an external MPE controller. Clearing or assigning a parameter and setting the modulation amount, works in the same way as the ModWheel parameter.

1. GLOBAL PARAMETERS	2. VALUE
CHANNEL	OMNI/ CH 1 to 16 / MPE
PITCH WHEEL	0 to 12 semitones
MPE ZONE	LOWER for channels 1/ UPPER for channel 16
MPE CHANNELS	1 to 15
MPE PITCH WHEEL	0 to 48 semitones
CLOCK RECEIVE	ON/ OFF
TRANSPORT RECEIVE	ON/OFF
CONTROL MODE	SCALE/ JUMP
FINE TUNE	-100 to 100 with a range of ±1 semitone

1. GLOBAL PARAMETERS	2. VALUE
TUNE	START/ ABORT
EXPORT	ACTIVE/ BANK A-H/ ABORT
FIRMWARE	current firmware version (1.0.0)/ UPDATE




## ■ CHANNEL

Selects the MIDI channel. The selection can be OMNI (responds to all MIDI channels) or 1 to 16 or MPE (activates the MPE support).


## ■ PITCH WHEEL

Adjusts the range of the Pitch Wheel from 0 to 12 semitones.

 *When using MPE this affects the amount of the pitch wheel sent through the control channel.*


## ■ MPE ZONE

Selects the ZONE of the MPE channels. LOWER for channels 1 or UPPER for channel 16.

 *This menu will only show up when MPE is selected on the CHANNEL menu.*


## ■ MPE CHANNELS

Selects the amount of CHANNELS that Artemis will respond to when set to MPE.

 *This menu will only show up when MPE is selected on the CHANNEL menu.*

## ■ MPE PITCH WHEEL

Adjusts the range of the Pitch Wheel from 0 to 48 semitones for MPE control.

 *This menu will only show up when MPE is selected on the CHANNEL menu.*

## ■ CLOCK RECEIVE

Turns ON/OFF the received external clock.

## ■ TRANSPORT RECEIVE

Turns ON/OFF external Transport controls (e.g play/stop/continue).

## ■ CONTROL MODE

Sets how the controls (knobs & sliders) of the front panel react when moved from their current saved positions. This affects all controls after a preset is loaded or imported and also the parameters on different pages e.g the 5 sliders per effect page.

- **SCALE**  
In Scale mode, changes of the control value are relative to the stored value. Increasing the slider/knob position will effectively add to the current value, decreasing the position will subtract from the current value. Reaching either end of the slider position will correspond to either the minimum or maximum value as appropriate.
- **JUMP**  
In Jump mode, tweaking a knob/slider, will force the control value to jump immediately from the stored value to the value set by the knob/slider.

## ■ FINE TUNE

Adjusts the Master Tune from -100 to 100 with a range of  $\pm 1$  semitone.

## ■ TUNE

Performs an Auto-tuning for the voices. Once you have selected the Start option, press the Encoder to start the Autotune procedure. Autotune will tune both the Oscillators and the Filters, for proper keyboard tracking. Select and press with Encoder the Abort option if you want to cancel the Auto-tune process.

## ■ EXPORT

Allows for presets to be exported and stored on your computer. You will need a software program such as SysEx Librarian for Mac, or Bome SendSX for Windows, in order to do so.

⚠ *Mind that this only works from the USB connection, not the MIDI DIN.*

- **ACTIVE** — Exports the current, active preset.
- **BANK A-H** — Selects the Bank to be exported.
- **ABORT** — Exit/Cancel export.

⚠ *All the presets being sent sequentially through a different sysex message and they are always accompanied by an identification message at the beginning of the message eg. Active preset export will send 2 messages and Bank export will send 65 messages.*

The exported presets can be imported back to the unit directly without the need of alterations or modifications.

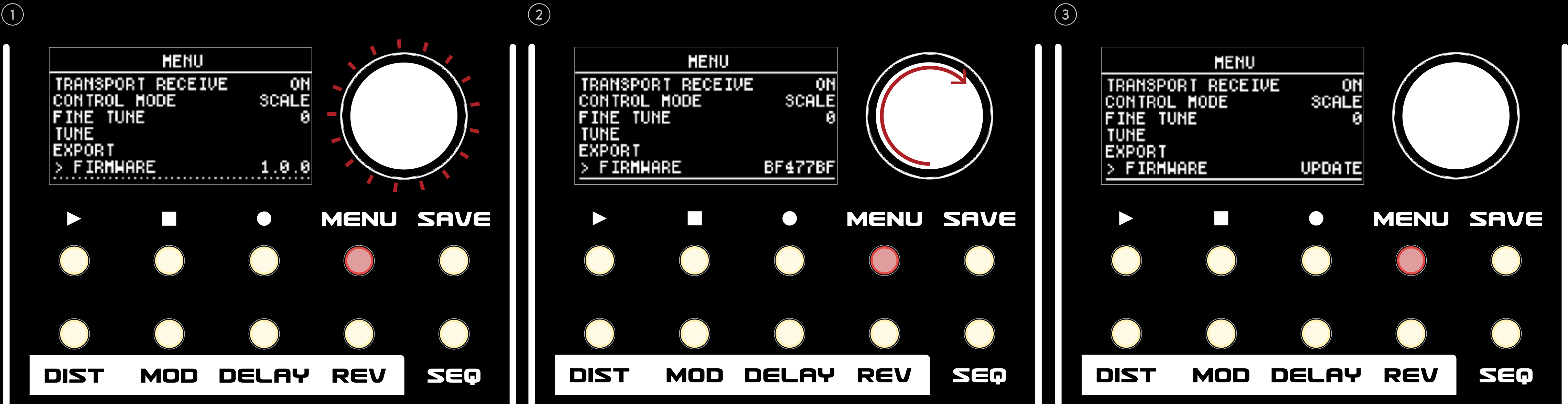
- **Importing a preset to the unit**, will load the imported preset values on top of the current loaded preset without saving it. This way it allows the user to hear the loaded preset and to save it if needed on any preset slot. This is also an easy way to record a preset to your DAW and then send it back to the unit while playing.
- **When importing a bank to the unit**, a message will appear on the screen, asking for confirmation and bank selection. For example if you want to move bank A to bank D location and vice versa, you should first export both banks to the computer and then import them to Artemis on the desired location as explained above.

**FIRMWARE**

The Firmware option shows the current firmware version.

Pressing the encoder on the Firmware option will show the internal versioning number of the firmware, while rotating the Encoder update option can be accessed. When selecting the update option the Artemis will enter the Bootloader so as to proceed with a firmware update. Firmware update process can be executed only through USB port and not the MIDI DIN port.

⚠ The Bootloader can alternatively be accessed by turning the Artemis on, while holding down the Encoder.





dre:adbox

[dreadbox-fx.com](https://dreadbox-fx.com)