P-VOX USER MANUAL

P-Vox is Hans Volt’s take on the Formanta Polivoks, written for the M-VAVE FM-1. It has two generators, a low-pass / band-pass filter, Bass Support, and a modulator, plus a set of extras that were not on the original instrument: drums, a sequencer, an arpeggiator, delay, reverb, and a Perform window.

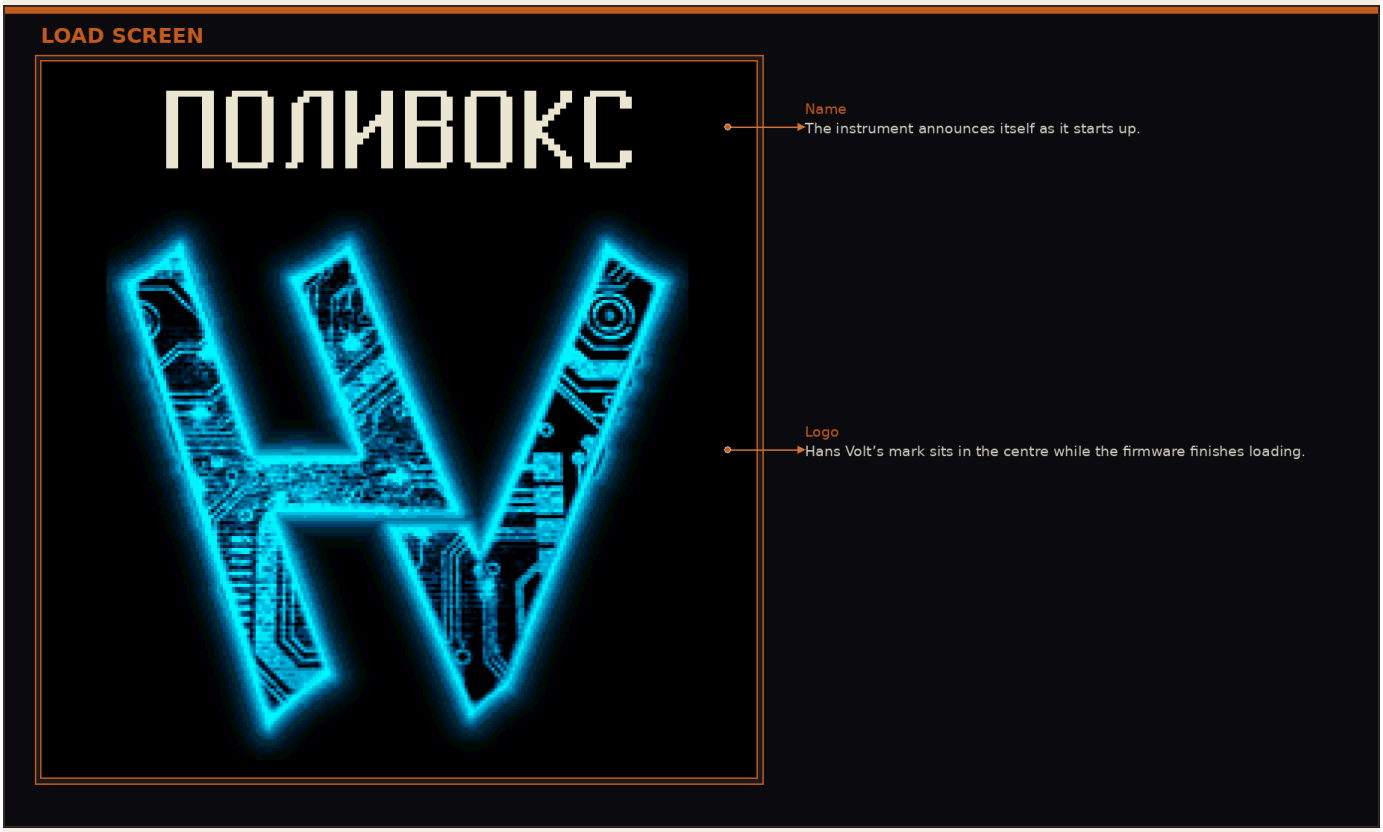
This manual shows every window as it appears on the 240×240 screen. English is the default language. Each picture is a screenshot with a short caption for every control.

CONTENTS

1. Load screen
2. Navigation
3. Language
4. Generator I
5. Generator II
6. Filter
7. Filter envelope
8. Bass Support
9. Effects
10. Presets
11. Sequencer
12. Arpeggiator
13. Perform
14. Drum packs
15. MIDI
16. Credits

1. LOAD SCREEN

After you install the firmware on your FM-1, the instrument starts with this screen, then opens the last sound you used.



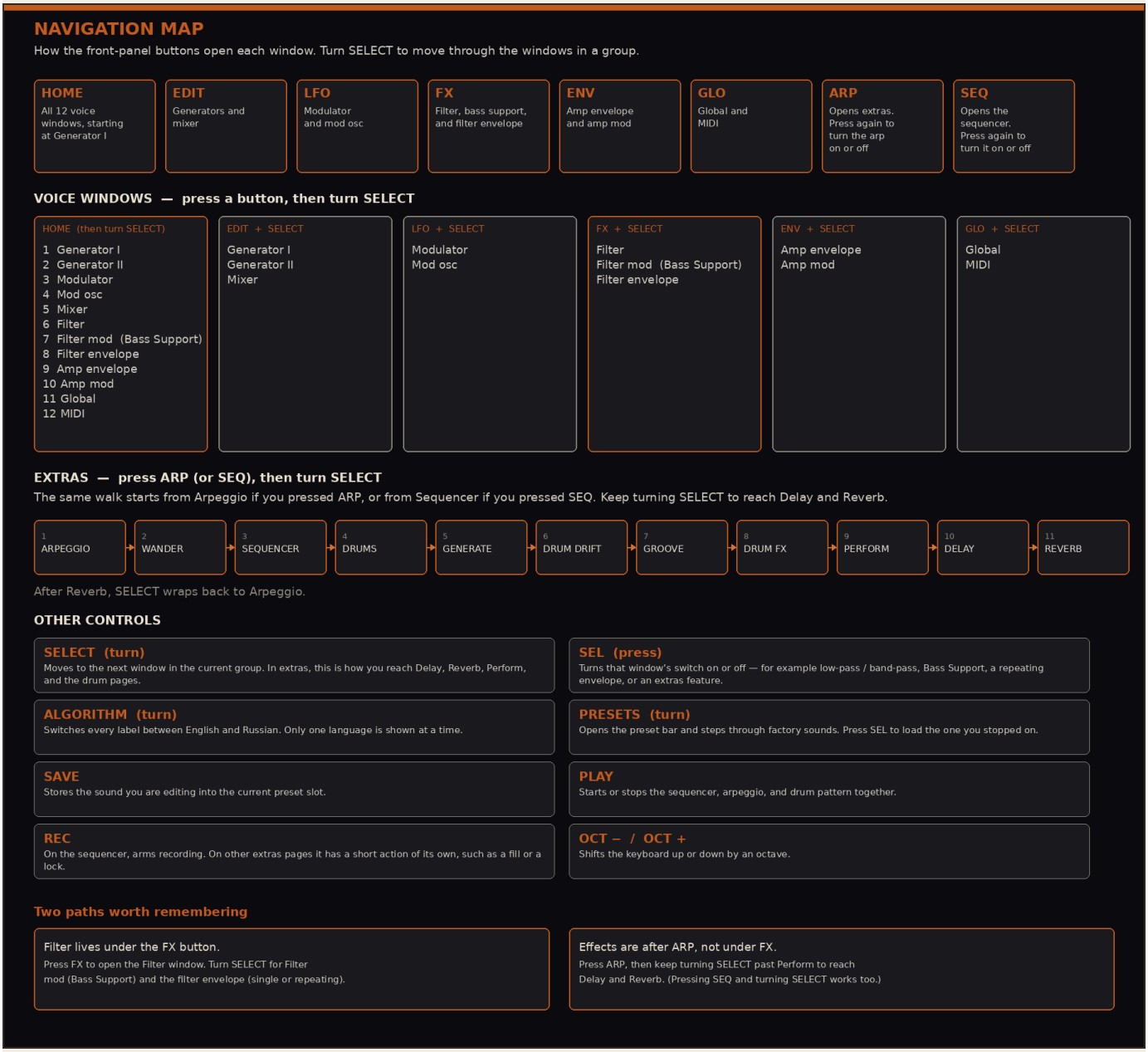
Load screen, with callouts for the name and the logo.

2. NAVIGATION

The front-panel buttons open groups of windows. Turn SELECT to move through the windows in the group you just opened. Press SEL to turn that window's switch on or off.

Two paths are easy to miss:

- **The filter lives under the FX button.** Press FX to open the Filter window. Turn SELECT once for Filter mod (Bass Support), and once more for the filter envelope.
- **Delay and Reverb are not under FX.** Press ARP, then keep turning SELECT past Perform to reach Delay and Reverb. Pressing SEQ and turning SELECT works the same way, starting from the sequencer.



Navigation map of the front-panel buttons, voice windows, extras walk, and other controls.

Extras, step by step

Press ARP to open the first extras window, then turn SELECT one click at a time. Press SEQ instead if you want to start on the sequencer. After Reverb, SELECT wraps back to Arpeggio.



Step-by-step extras walk from Arpeggio to Reverb.

How to reach every window

WINDOW	HOW TO OPEN IT
Load screen	Shown at start-up
Generator I	Press EDIT, or press HOME
Generator II	Press EDIT, then turn SELECT once
Mixer	Press EDIT, then turn SELECT twice
Modulator	Press LFO
Mod osc	Press LFO, then turn SELECT once
Filter	Press FX
Filter mod (Bass Support)	Press FX, then turn SELECT once
Filter envelope	Press FX, then turn SELECT twice
Amp envelope	Press ENV
Amp mod	Press ENV, then turn SELECT once

WINDOW	HOW TO OPEN IT
Global	Press GLO
MIDI	Press GLO, then turn SELECT once
Arpeggio	Press ARP
Wander	Press ARP, then turn SELECT once
Sequencer	Press SEQ, or press ARP and turn SELECT to Sequencer
Drums	Press ARP, then turn SELECT to Drums
Generate	Next window in the extras walk after Drums
Drum Drift	Next after Generate
Groove	Next after Drum Drift
Drum FX	Next after Groove
Perform	Press ARP, then turn SELECT to Perform — two steps before Delay
Delay	Press ARP, then keep turning SELECT to Delay
Reverb	Press ARP, then turn SELECT one step past Delay
Language	Turn the ALGORITHM knob on any window
Presets	Turn the PRESETS knob on any window

HOME walks all twelve voice windows in order, starting at Generator I: Generator I, Generator II, Modulator, Mod osc, Mixer, Filter, Filter mod, Filter envelope, Amp envelope, Amp mod, Global, and MIDI.

Other voice windows

A few voice windows are not given their own chapter, but they are part of the same instrument.

- **Mixer** (EDIT, then turn SELECT twice) sets the level of each generator and the noise.
- **Modulator** (LFO) is the low-frequency modulator. The next window, Mod osc, is its companion page.
- **Amp envelope** (ENV) shapes the loudness of a note. Like the filter envelope, it can run once or repeat. Amp mod is the next window.
- **Global** (GLO) holds overall tune, level, glide, and the one-voice / two-voice switch. MIDI is the next window.

Other panel controls

- **SELECT** (turn) moves to the next window in the current group.
- **SEL** (press) turns that window’s switch on or off.
- **ALGORITHM** (turn) switches every label between English and Russian.
- **PRESETS** (turn) opens the preset bar. Press SEL to load the sound you stopped on.

- **SAVE** stores the sound you are editing into the current preset slot.
- **PLAY** starts or stops the sequencer, arpeggio, and drum pattern together.
- **REC** arms recording on the sequencer. On other extras pages it has a short action of its own, such as a fill or a lock.
- **OCT −** and **OCT +** shift the keyboard up or down by an octave.

3. LANGUAGE

Turn the ALGORITHM knob to switch every label on the screen between English and Russian. Only one language is shown at a time. This manual uses the English view.



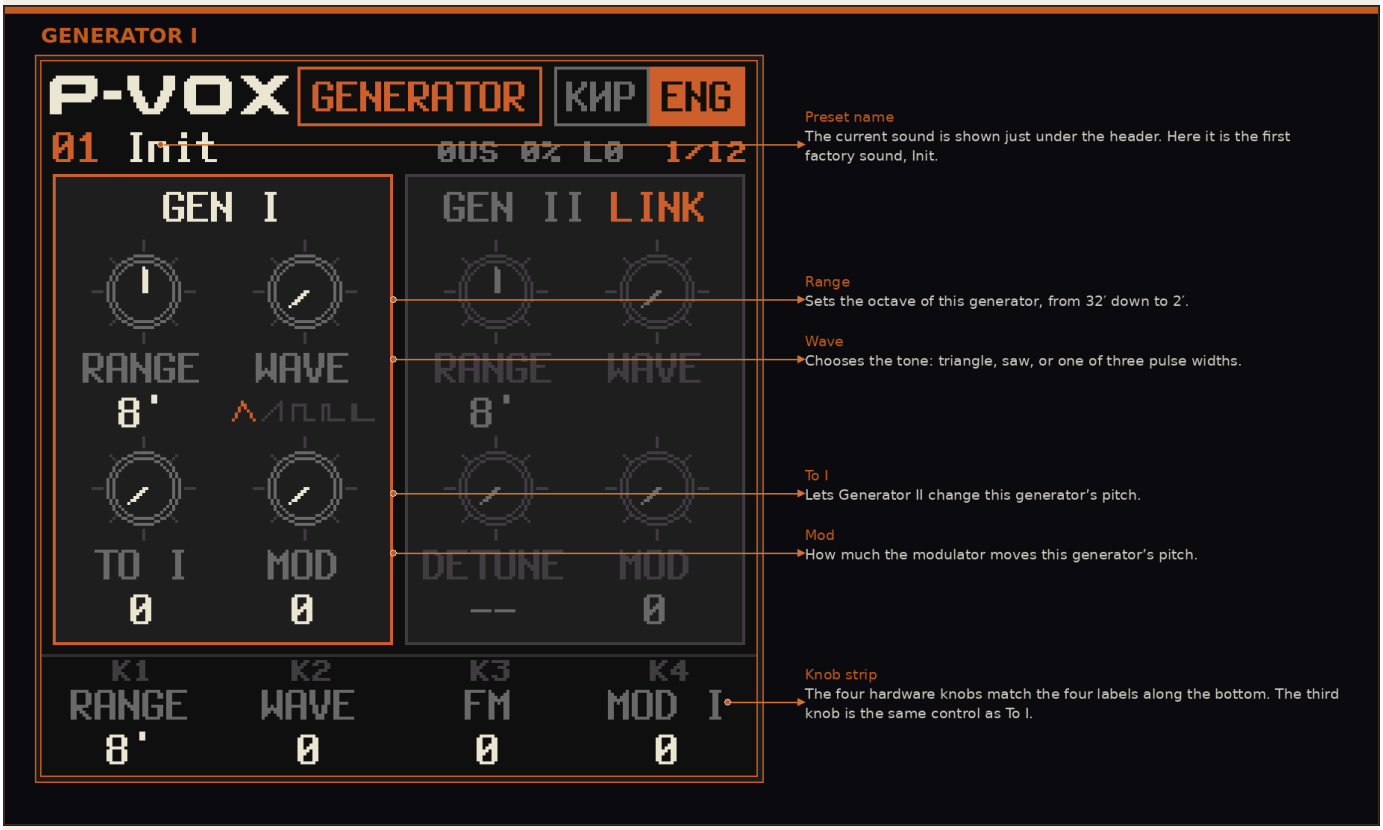
The same Generator I window in English and in Russian.

4. GENERATOR I

Press EDIT, or press HOME, to open Generator I. This is the first sound source.

Range sets the octave, from 32′ down to 2′. Wave chooses the tone: triangle, saw, or one of three pulse widths. To I lets Generator II change this generator’s pitch. Mod sets how much the modulator moves that pitch.

The four hardware knobs always match the four labels along the bottom of the screen.



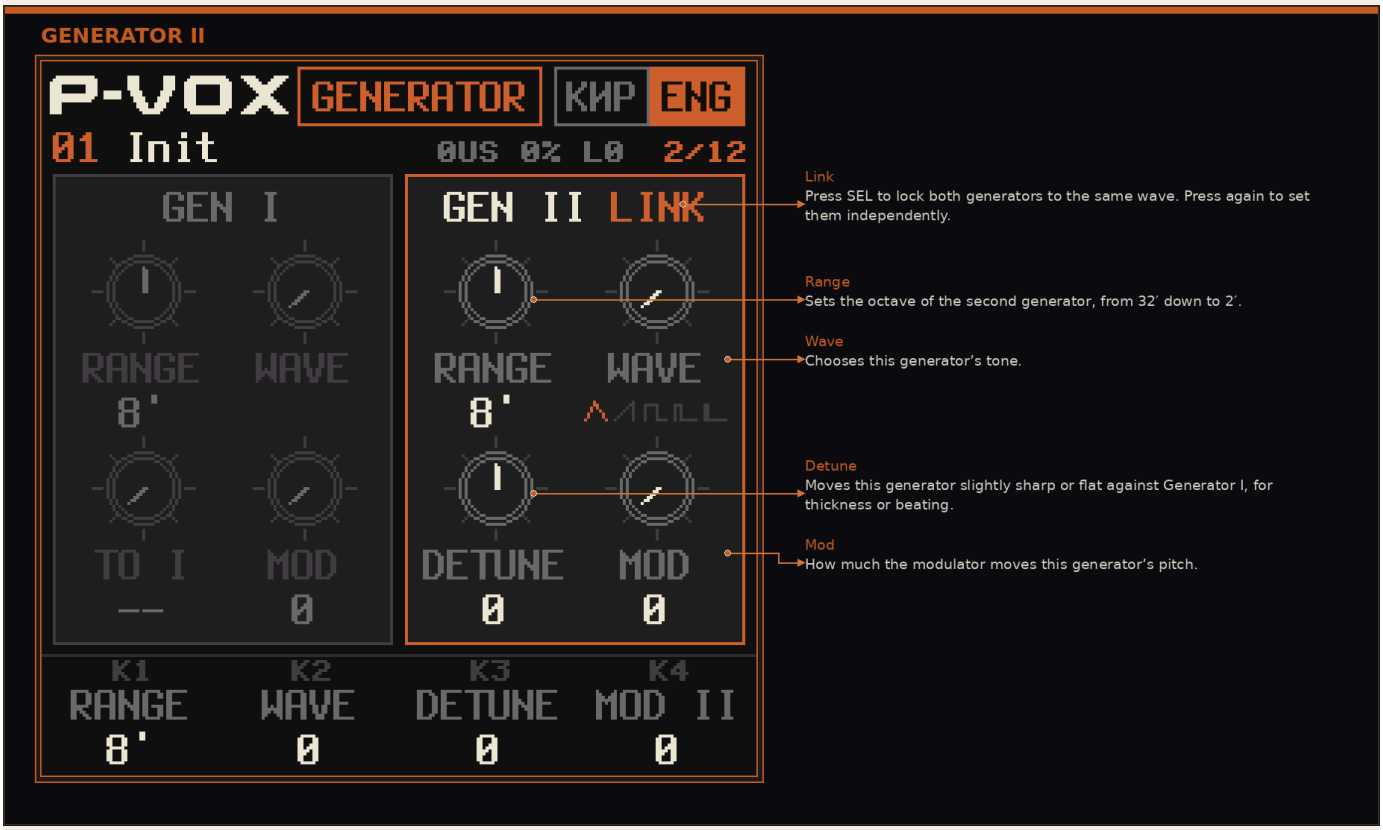
Generator I window with callouts for Range, Wave, To I, Mod, and the knob strip.

5. GENERATOR II

From Generator I, turn SELECT once. The right-hand panel is highlighted.

Range, Wave, and Mod work the same way as on Generator I. Detune moves this generator slightly sharp or flat against Generator I, for thickness or beating.

Press SEL to turn Link on. Both generators then use the same wave. Press SEL again to set the waves independently.



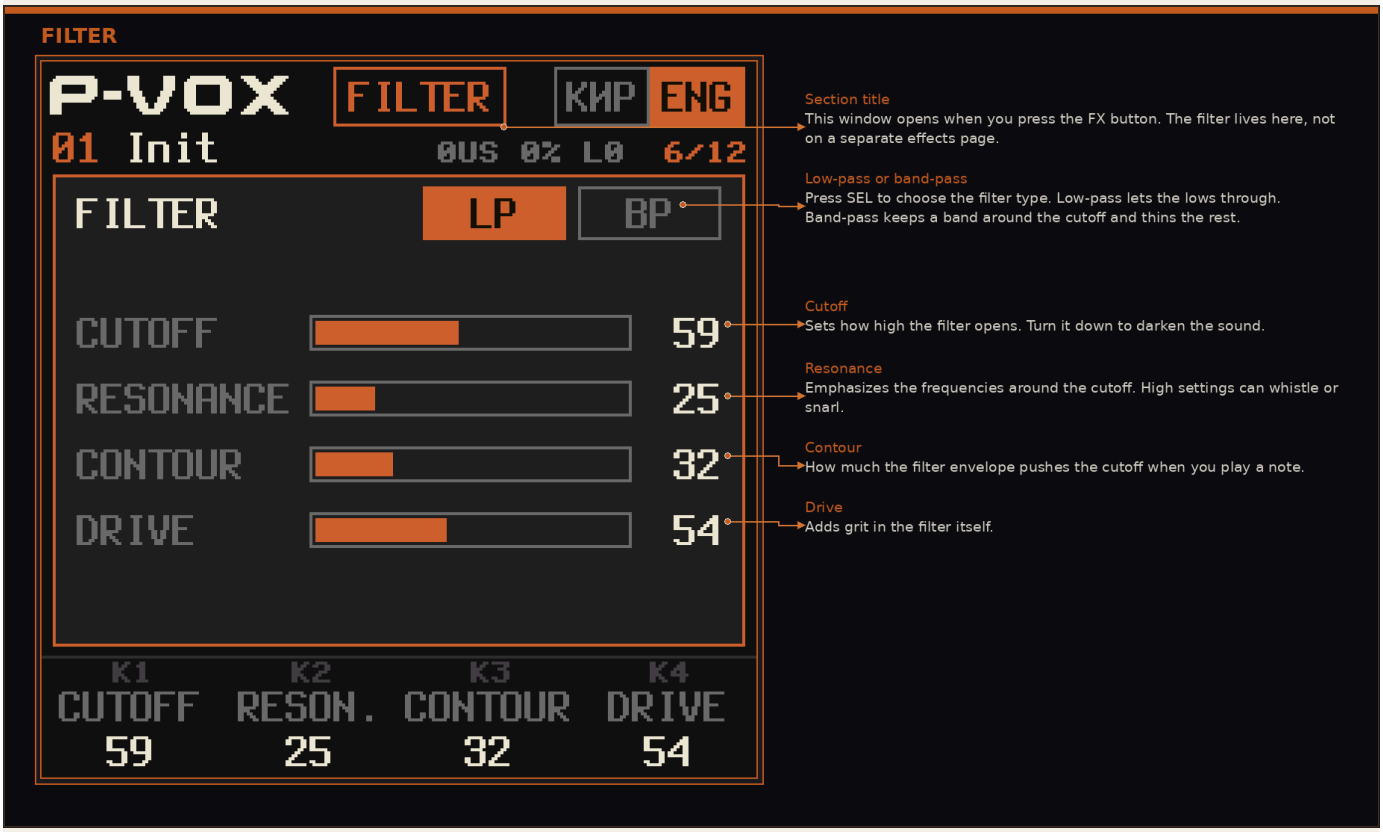
Generator II window with callouts for Link, Range, Wave, Detune, and Mod.

6. FILTER

Press the FX button. The filter lives here — not on the Delay or Reverb pages.

Press SEL to choose low-pass or band-pass. Low-pass lets the lows through and cuts the highs as you close the cutoff. Band-pass keeps a band around the cutoff and thins the rest.

Cutoff sets how high the filter opens. Resonance emphasizes the frequencies around that point. Contour sets how much the filter envelope pushes the cutoff when you play a note. Drive adds grit in the filter itself.



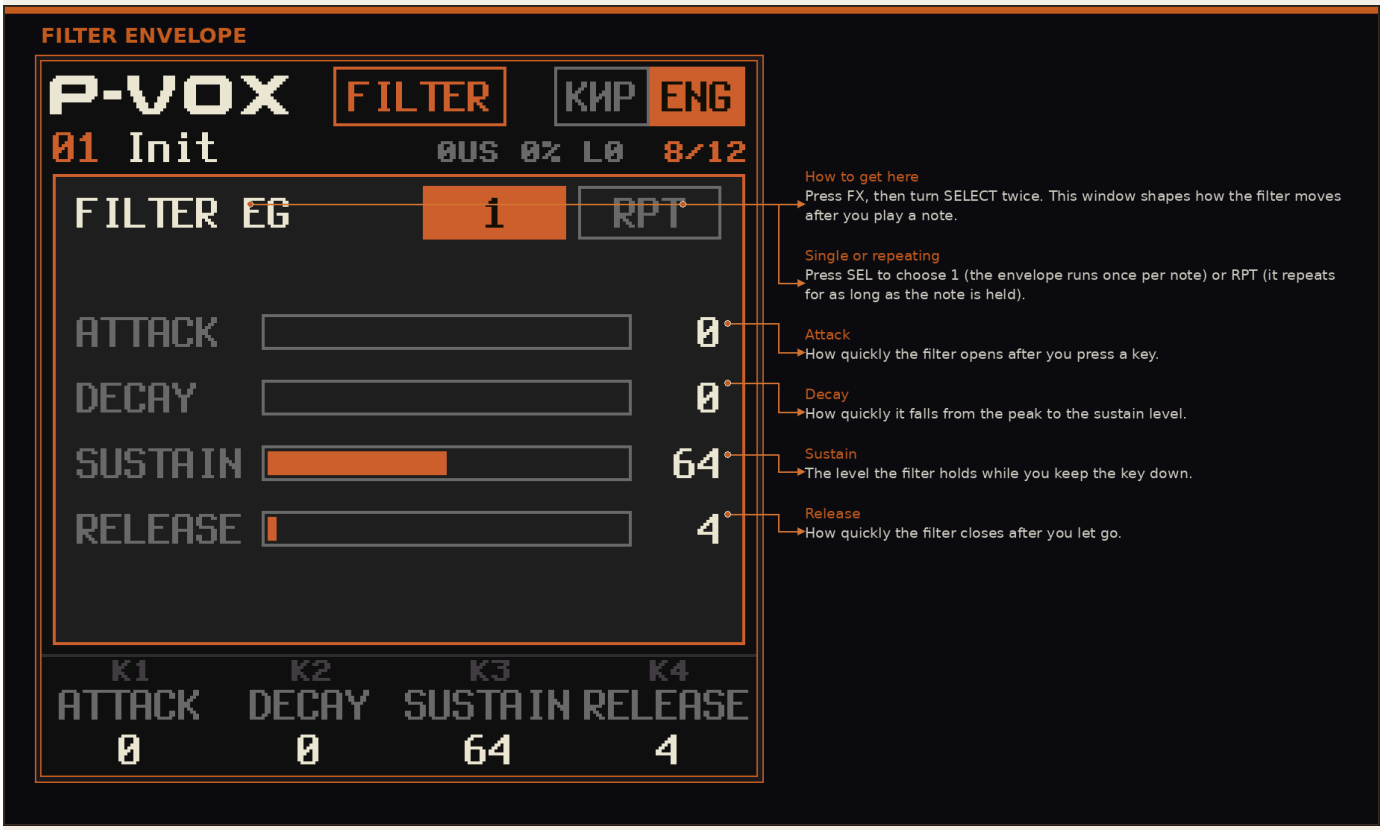
Filter window with callouts for low-pass / band-pass, Cutoff, Resonance, Contour, and Drive.

7. FILTER ENVELOPE

Press FX, then turn SELECT twice.

This window shapes how the filter moves after you play a note. Attack, Decay, Sustain, and Release are the four stages.

Press SEL to choose **1** (the envelope runs once per note) or **RPT** (it repeats for as long as the note is held).



Filter envelope window with callouts for the single / repeating switch and the four stages.

8. BASS SUPPORT

Press FX, then turn SELECT once. This is the Filter mod window, where Bass Support lives.

From mod sets how much the modulator sweeps the filter cutoff. Velocity sets how much harder playing opens the filter.

When Bass Support is on, a copy of the low end is kept and blended back after the filter, so the bass stays solid even as you close the cutoff. Press SEL to turn it off.



Filter mod window with callouts for From mod, Velocity, and Bass Support.

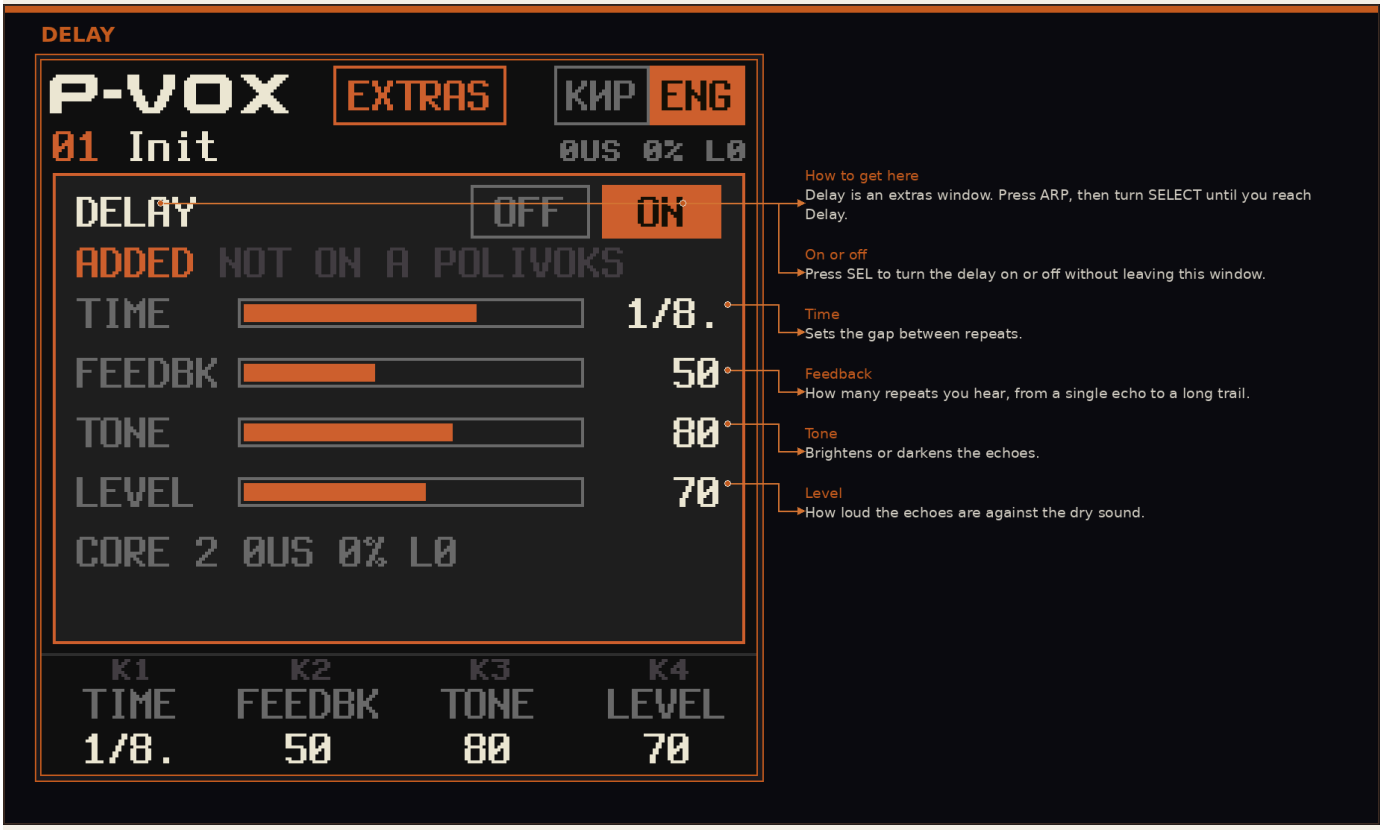
9. EFFECTS

Delay and Reverb are extras windows. They are not under the FX button.

Press ARP, then keep turning SELECT until Delay appears. One more click opens Reverb. Press SEL to turn either effect on or off.

Delay

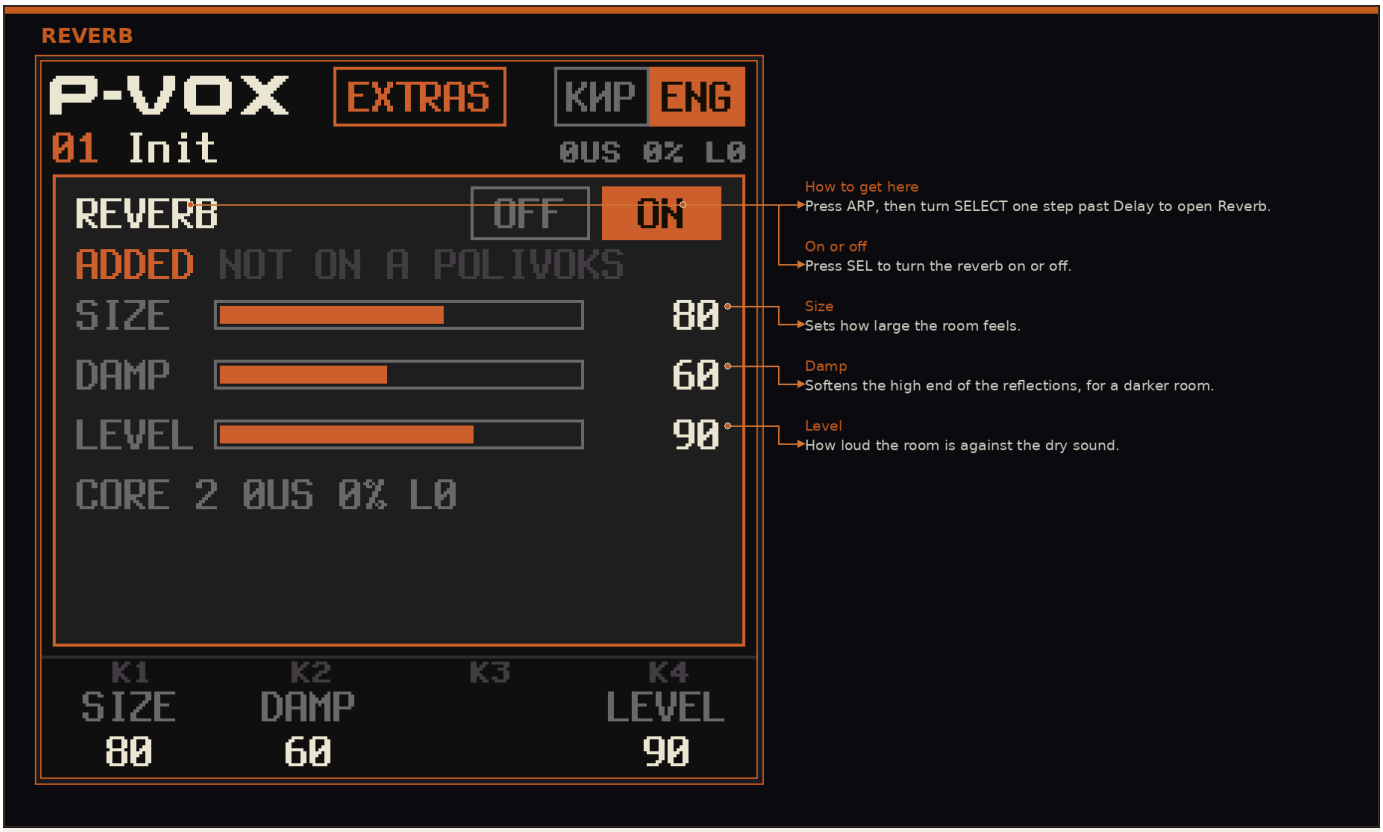
Time sets the gap between repeats. Feedback sets how many repeats you hear. Tone brightens or darkens the echoes. Level sets how loud they are against the dry sound.



Delay window with callouts for Time, Feedback, Tone, and Level.

Reverb

Size sets how large the room feels. Damp softens the high end of the reflections. Level sets how loud the room is against the dry sound.

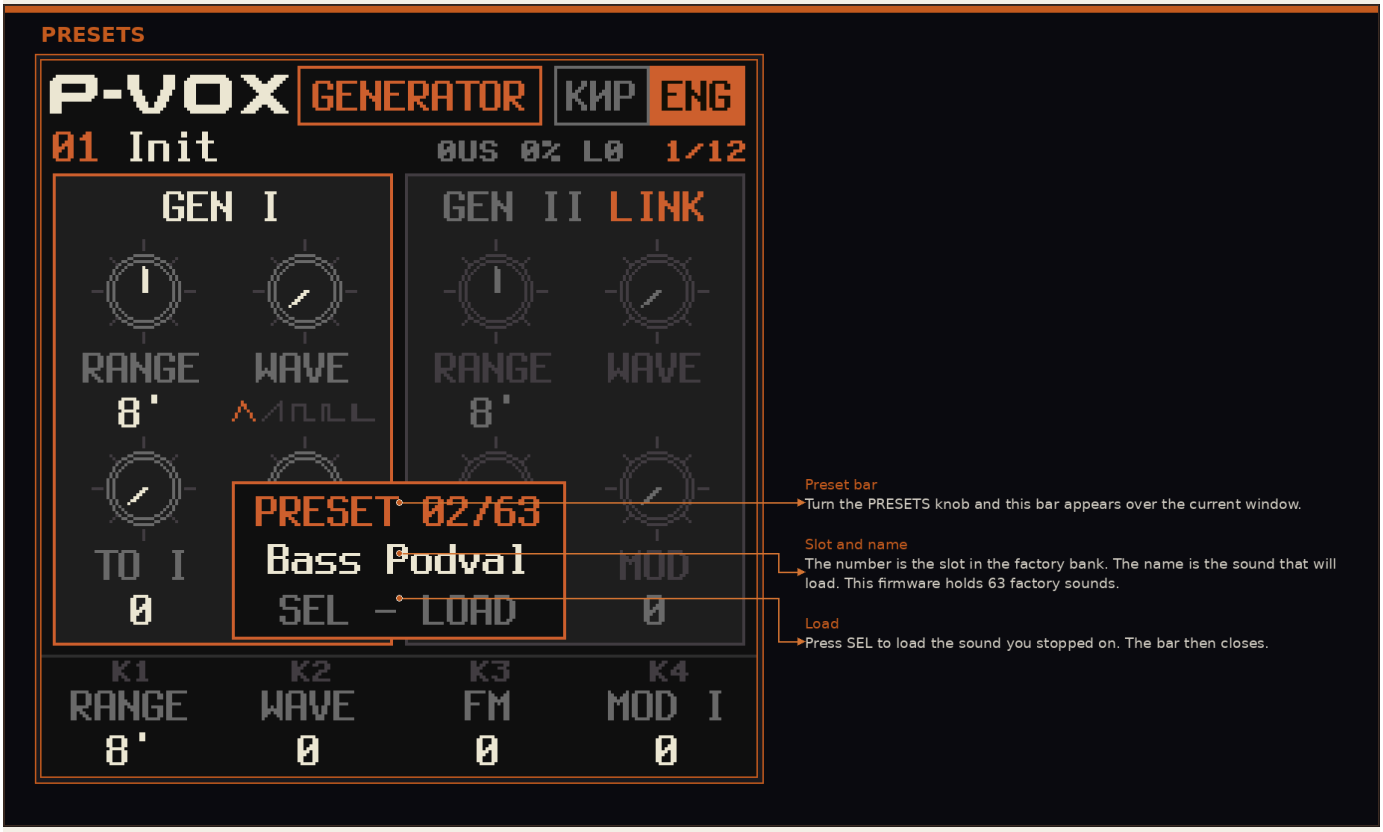


Reverb window with callouts for Size, Damp, and Level.

10. PRESETS

Turn the PRESETS knob on any window. A bar appears over the current view, showing the slot number, the sound name, and a reminder to press SEL to load.

This firmware holds 63 factory sounds. Press SEL to load the one you stopped on. The bar then closes. Press SAVE to store the sound you are editing into the current slot.



Preset bar showing slot 02 of 63, Bass Podval, and the load reminder.

Factory sounds

#	NAME	#	NAME	#	NAME
01	Init	22	Брасс Мягкий	43	Snare
02	Bass Podval	23	Organ Pulse	44	Hat
03	Бас Завод	24	Clavi	45	Zap
04	Sub Bass	25	Pluck	46	Repeat Pulse
05	Acid Polik	26	Щипок	47	Повтор Бас
06	Pulse Bass	27	Harpsi	48	Терция
07	FM Growl	28	Marimba-ish	49	Robot FM
08	Резина	29	Bell FM	50	Космос
09	Bass Pluck	30	Duo Keys	51	Howl Lead

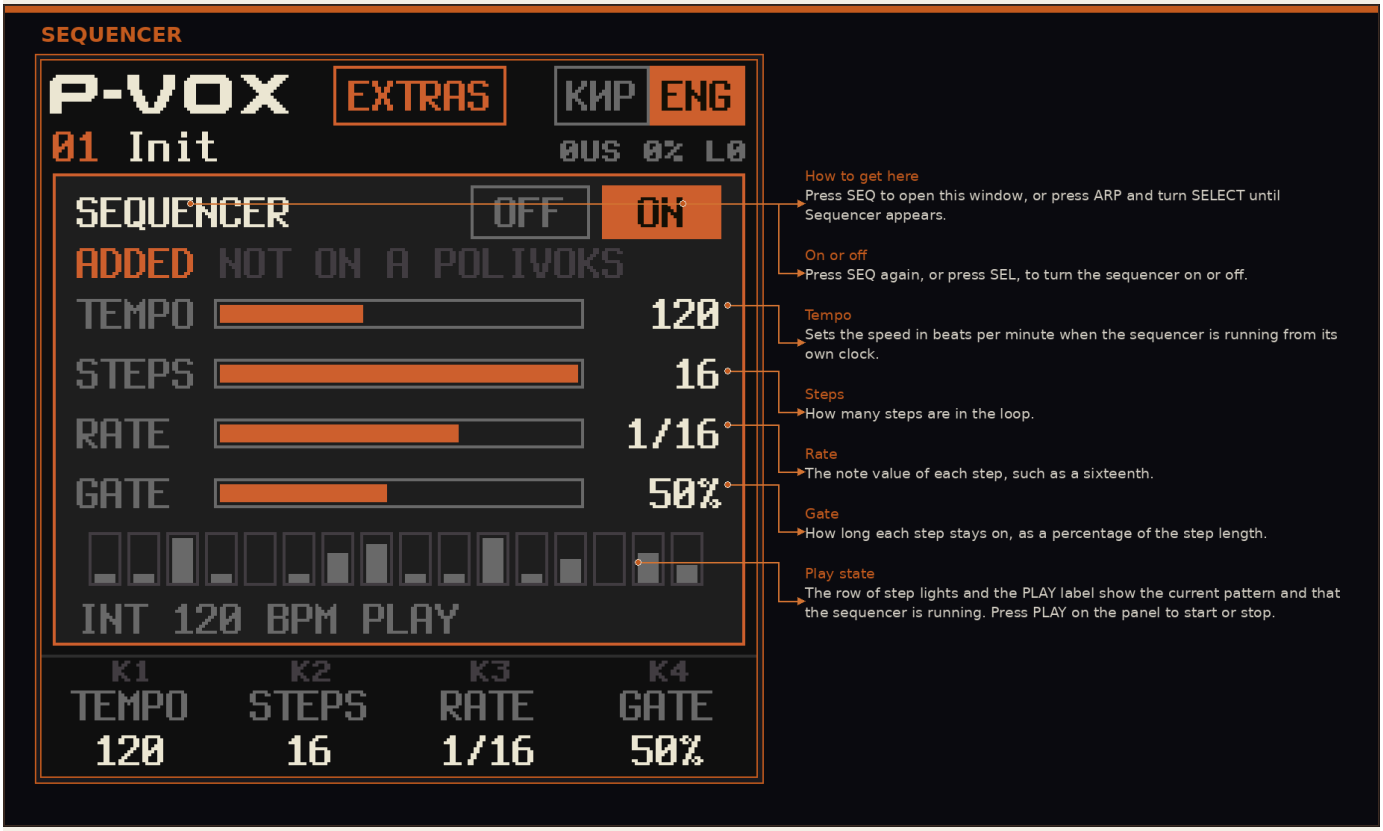
#	NAME	#	NAME	#	NAME
10	Duo Bass	31	Slow Pad	52	BP Рык
11	Saw Lead	32	Струнные	53	FM Snarl
12	Square Lead	33	Choir-ish	54	Шум Взрыв
13	Глиссандо	34	Sweep Pad	55	Drive Bass
14	Sync-ish FM	35	Glass Pad	56	F Repeat
15	Thin Pulse	36	Swell	57	Duo Howl
16	Cosmos Lead	37	Wah LFO	58	Тревога
17	Солист	38	Tremolo	59	Foundry
18	Duo Lead	39	Сирена	60	Acid Scream
19	Screamer	40	Sample Hold	61	Chaos FM
20	Whistle	41	Noise Wind	62	Монстр
21	Brass 1	42	Kick	63	SH Chaos

11. SEQUENCER

Press SEQ to open the sequencer, or press ARP and turn SELECT until Sequencer appears. Press SEQ again, or press SEL, to turn it on or off. Press PLAY on the panel to start or stop.

Tempo sets the speed when the sequencer is running from its own clock. Steps sets how many steps are in the loop. Rate is the note value of each step. Gate is how long each step stays on.

The row of step lights shows the current pattern. The status line reports the clock and whether the sequencer is playing.

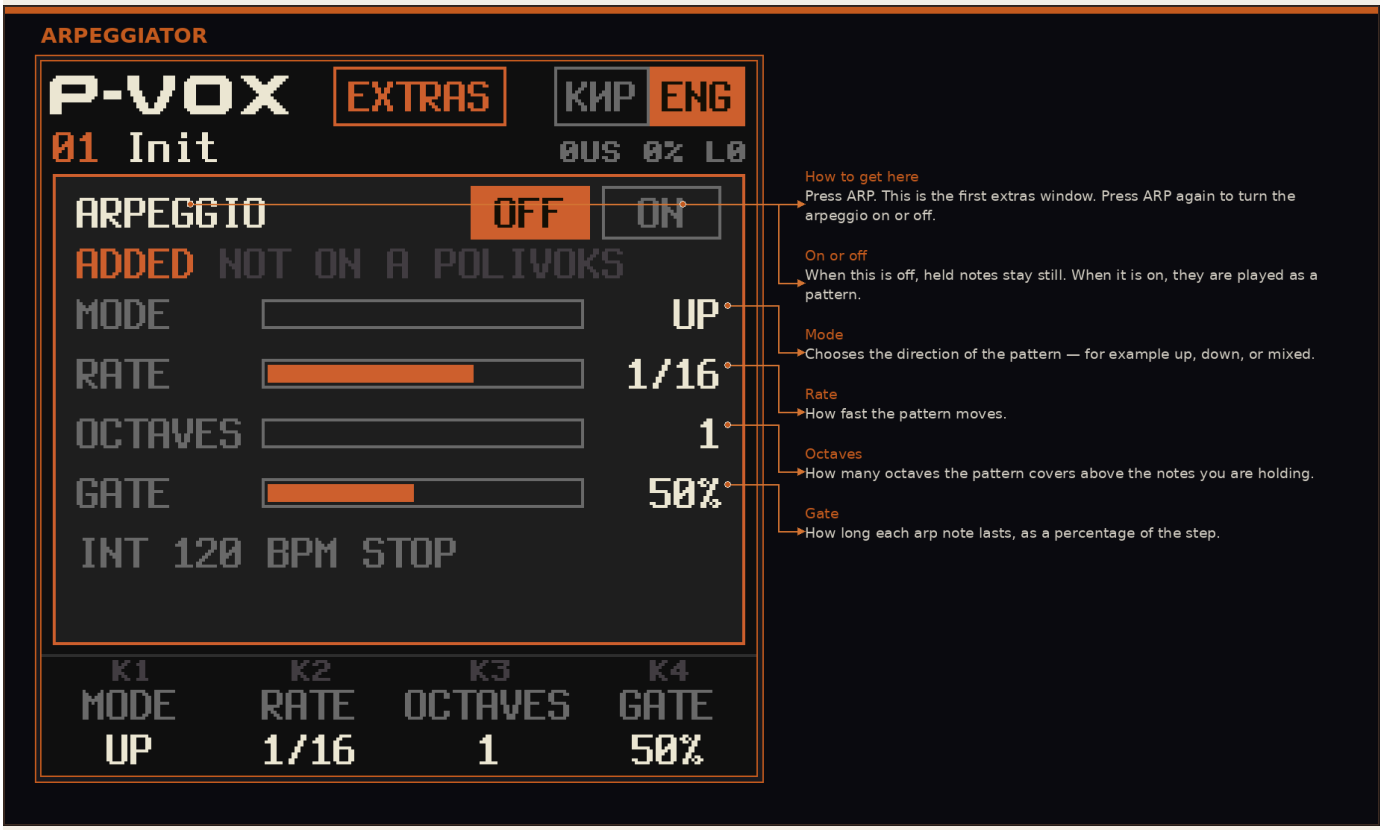


Sequencer window with callouts for Tempo, Steps, Rate, Gate, and the play state.

12. ARPEGGIATOR

Press ARP. This is the first extras window. Press ARP a second time to turn the arpeggio on or off.

When it is on, held notes are played as a pattern. Mode chooses the direction — for example up, down, or mixed. Rate sets how fast the pattern moves. Octaves sets how many octaves it covers above the notes you are holding. Gate sets how long each note lasts.



Arpeggio window with callouts for Mode, Rate, Octaves, and Gate.

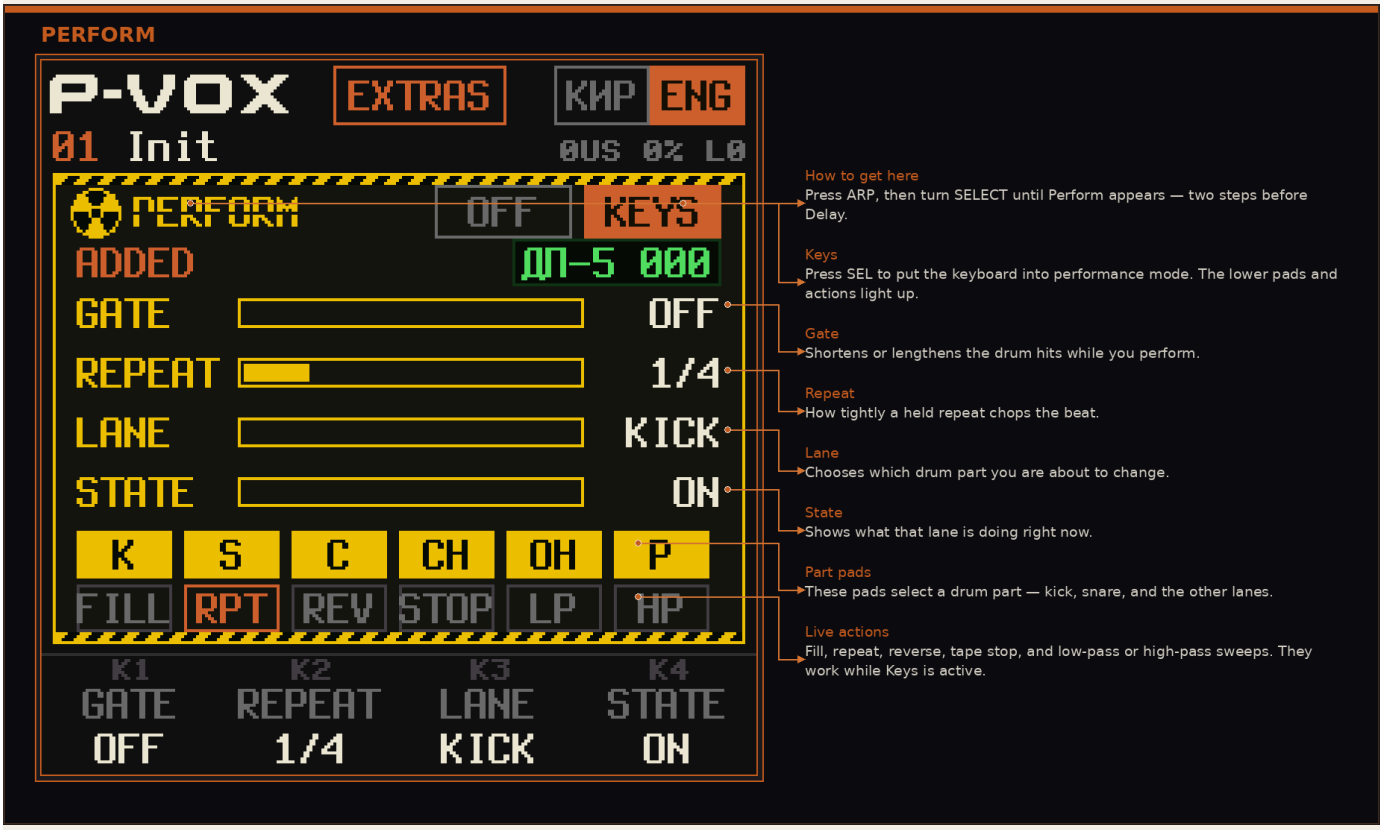
13. PERFORM

Press ARP, then turn SELECT until Perform appears — two steps before Delay.

Press SEL so the switch reads Keys. The keyboard then becomes a performance surface.

Gate shortens or lengthens the drum hits while you play. Repeat sets how tightly a held repeat chops the beat. Lane chooses which drum part you are about to change. State shows what that lane is doing.

The row of pads selects a drum part. The lower row is live actions: fill, repeat, reverse, tape stop, and low-pass or high-pass sweeps.



Perform window with callouts for Keys, Gate, Repeat, Lane, State, the part pads, and the live actions.

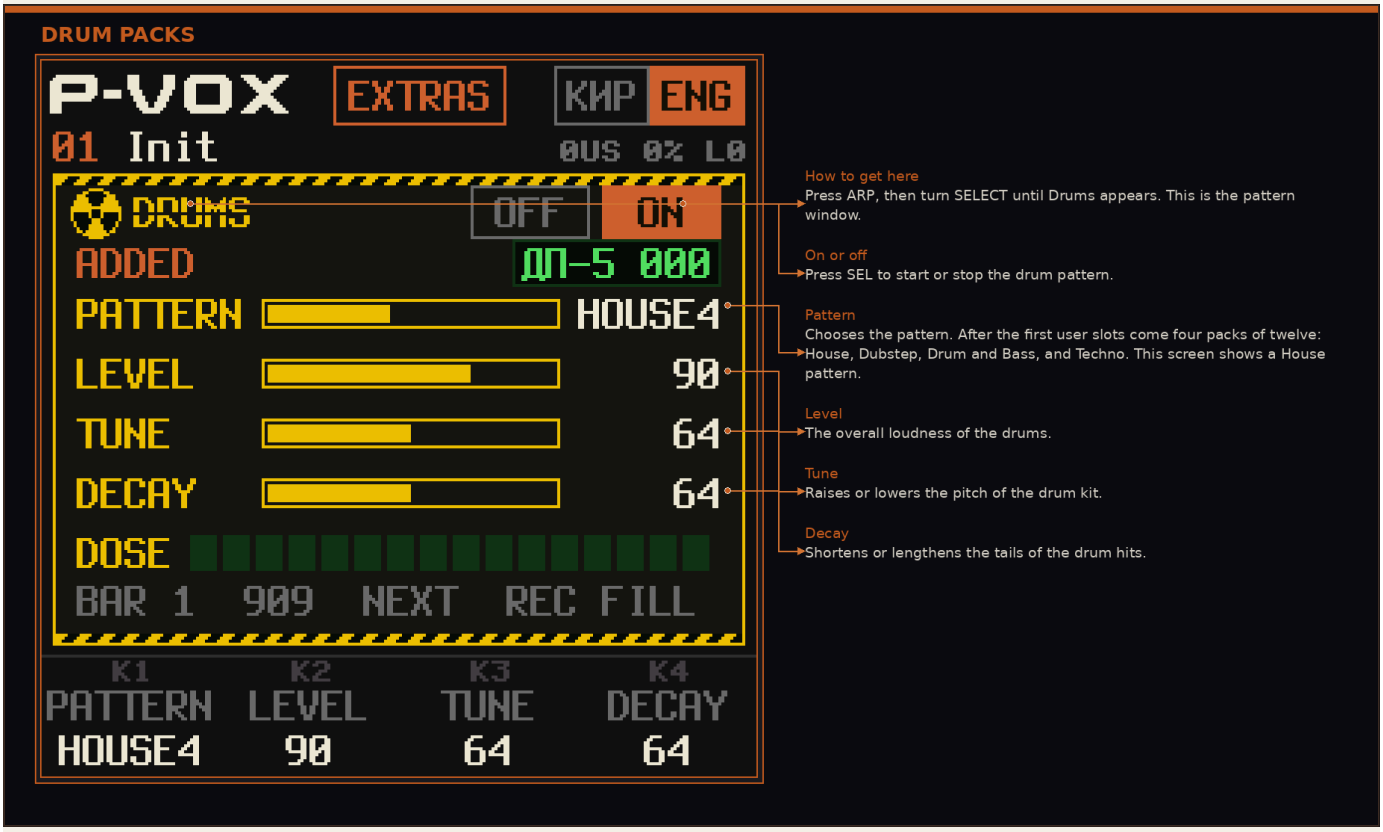
14. DRUM PACKS

Press ARP, then turn SELECT until Drums appears. This is the pattern window. Press SEL to start or stop the pattern.

Pattern chooses what plays. After the first user slots come four packs of twelve patterns each:

PACK	PATTERN NAMES	TEMPO
House	HOUSE1–HOUSE12	126 BPM
Dubstep	DUBST1–DUBST12	140 BPM
Drum and Bass	DNB1–DNB12	174 BPM
Techno	TECHNO1–TECHNO12	130 BPM

Level is the overall loudness of the drums. Tune raises or lowers the pitch of the kit. Decay shortens or lengthens the tails of the hits. The screen below shows a House pattern selected.



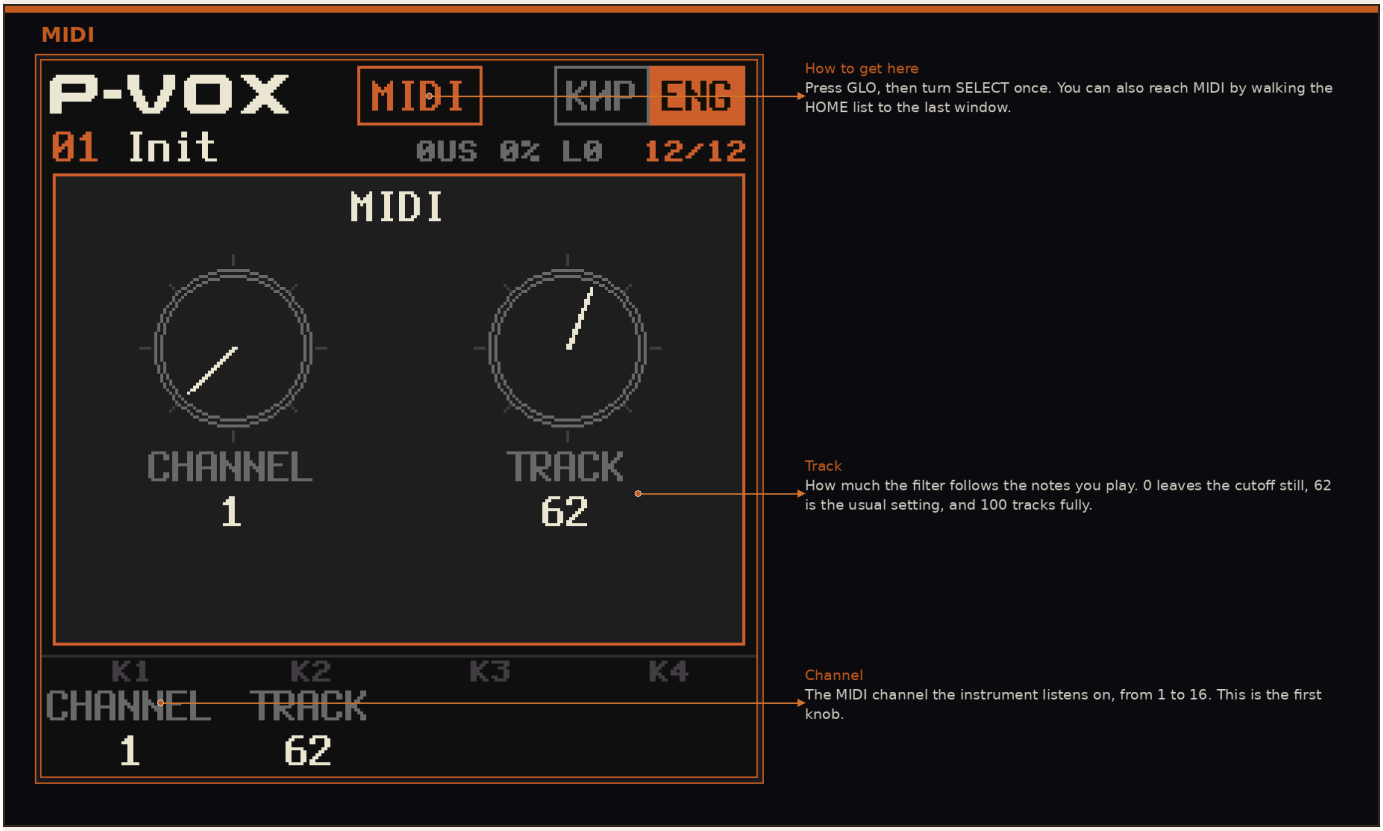
Drums window with a House pattern selected, and callouts for Pattern, Level, Tune, and Decay.

15. MIDI

Press GLO, then turn SELECT once. You can also reach this window by walking the HOME list to the end.

Channel is the MIDI channel the instrument listens on, from 1 to 16. Track sets how much the filter follows the notes you play: 0 leaves the cutoff still, 62 is the usual setting, and 100 tracks fully.

Notes, control changes, and other channel messages must arrive on the selected channel. Clock and start/stop messages are heard on any channel.



MIDI window with callouts for Channel and Track.

Control changes

These are the control-change numbers the instrument responds to. For on/off controls, values 0–63 are off and 64–127 are on.

CC	WHAT IT DOES
1	Filter modulation (From mod)
5	Glide rate
7	Level
16	Drive
64	Hold

CC	WHAT IT DOES
65	Glide on or off
70	Contour
71	Resonance
74	Cutoff
72	Amp release
73	Amp attack
75	Amp decay
79	Amp sustain
76	Modulator rate
77	To I (Generator II into Generator I’s pitch)
78	Noise
85	Band-pass (off is low-pass)
86	Bass Support on or off
92	Amp modulation
94	Detune
102	Filter attack
103	Filter decay
104	Filter sustain
105	Filter release

Stereo

This firmware does not include a stereo-spread window.

16. CREDITS

P-Vox was created by Hans Volt, after the Formanta Polivoks.