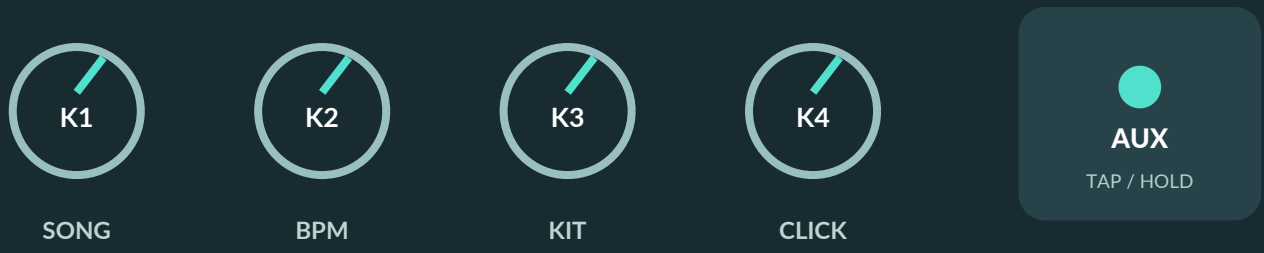
DRUM KEYS

A sample-based rhythm instrument with song sequencing and continuous motion recording.

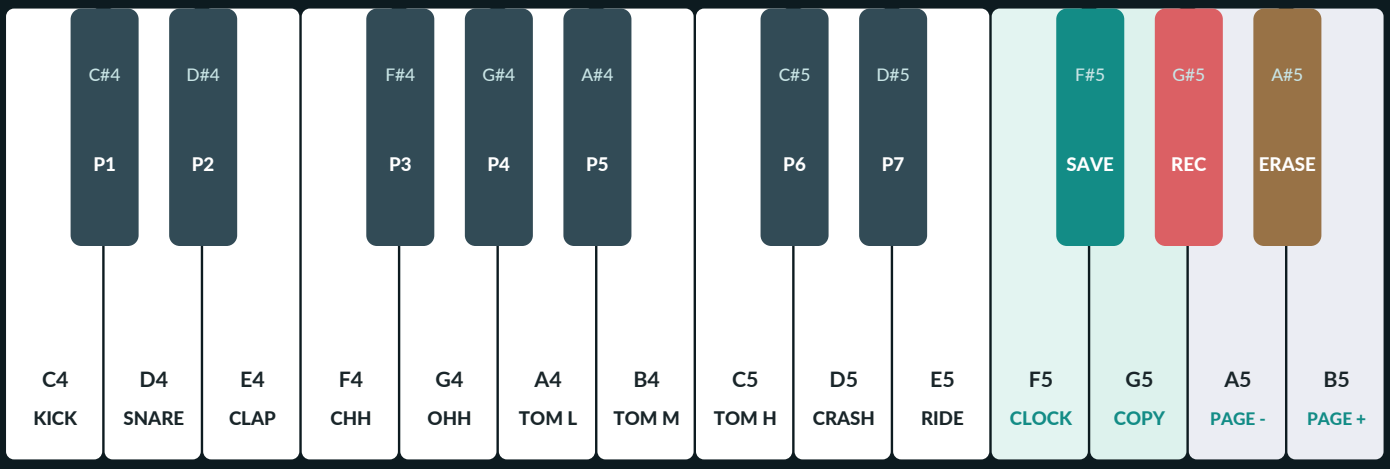
10 SAMPLE VOICES **70** PATTERNS **10** SONG MEMORIES

MAIN PAGE / HARDWARE CONTROLS



AUX tap = PLAY / STOP hold = PATTERN / SONG

COMPLETE 24-KEY MAP / MIDI 60-83



White: sound / function Dark: pattern 1-7 Color: save / rec / erase

START IN 20 SECONDS

1 Tap AUX to play. 2 Press G#5 to record. 3 Tap the drum keys. 4 Press F#5 to save.

Play. Record. Build patterns.

The keyboard is the sequencer interface: no external controller or computer is required.

QUICK START

01 SELECT

On MAIN, choose SONG 01-10 with K1. Use one of the first seven black keys to select a pattern.

02 PLAY

Tap AUX to start. Pattern changes made while playing are queued to the next bar.

03 RECORD

Press G#5 to enable REC. Play the ten white drum keys; hits are quantized to the 16-step grid.

04 SAVE

Press F#5. If the sequencer is playing, stop and wait for SAVED before leaving the patch.

LIVE EDITING

G5 + black pattern key	Copy current pattern: hits, motion curves and masks.
A#5 + white drum key	Erase that voice as the sequencer travels over its steps.
G#5	Toggle REC on / off, for hits and motion.
A5 / B5	Go to previous / next OLED page (wraps around).
AUX long press	Switch between PATTERN and SONG; playback follows the selected mode.

STATUS AT A GLANCE

- **GREEN** — PLAY
- **RED** — REC
- **YELLOW** — SONG
- **OFF** — STOP

Twelve pages, one instrument.

Use A5 and B5 to navigate in either direction. Navigation never interrupts SONG playback.

PAGE OVERVIEW

01 — **MAIN**
Song / tempo / kit / metronome

02-11 — **VOICE EDITORS**
Individual level, stereo pan and pitch

12 — **SONG**
Arrange patterns and repetitions

VOICE PAGES / 02-11

02 KICK	07 TOM LOW
03 SNARE	08 TOM MID
04 CLAP	09 TOM HIGH
05 CLOSED HAT	10 CRASH
06 OPEN HAT	11 RIDE

THE THREE CONTROLS

K1
VOLUME
Per-voice level

K2
PAN
Left / center / right

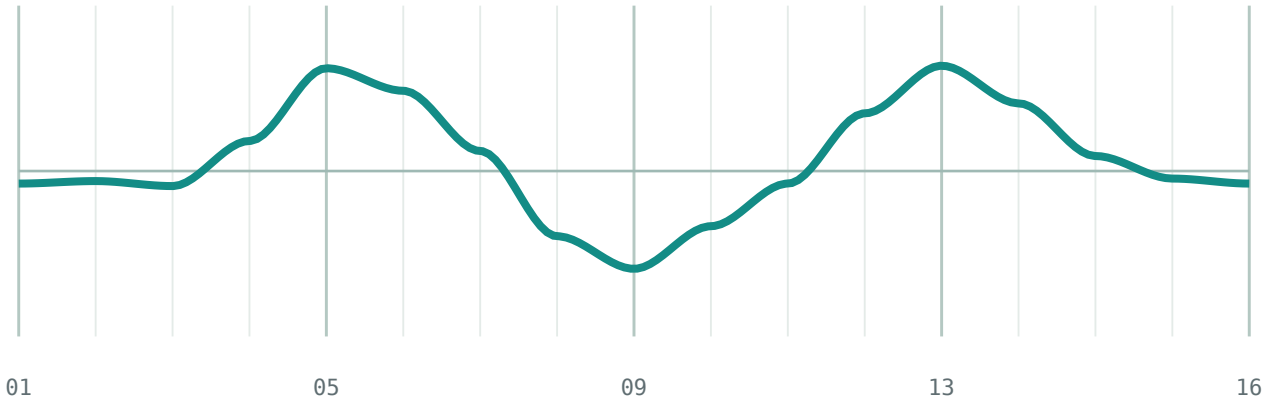
K3
PITCH
-24 to +24 semitones

K4 is unused on voice pages. Knobs are direct: moving one applies its value immediately.

Motion Recording

Capture what you play with the knobs - continuous, tempo-aligned automation rather than step locks.

EXAMPLE / SNARE PAN / ONE BAR



RECORD A MOVEMENT

1. **PLAY**
   Tap AUX. The timeline is driven by the selected clock.

2. **VOICE**
   Navigate to the instrument you want to automate.

3. **REC**
   Press G#5 and move K1, K2 or K3.

4. **LISTEN**
   Turn REC off. Motion repeats whenever that pattern plays.

ERASE MOTION, NOT HITS

On a voice page, hold A#5 (ERASE) and move K1, K2 or K3. Only that parameter's motion is removed for the current song and pattern; the base setting remains. AUT on the OLED indicates recorded motion.

From patterns to full songs.

Ten independent song memories; each contains seven 16-step patterns and a programmable chain.

SONG CHAIN EXAMPLE

POSITION 01	POSITION 02	POSITION 03	POSITION 04
P1	P3	P7	END
x04	x02	x08	loop

P1 x 4 bars > P3 x 2 bars > P7 x 8 bars > restart

PAGE 12 / SONG EDITOR

K1 POSITION

Select slot 01-32

K2 PATTERN

Choose P1-P7 or END

K3 REPEATS

Set 1-32 bars

K4 SONG

Select memory 01-10

PERFORMANCE RULES

Switch modes: hold AUX for approximately 700 ms. SONG MODE keeps playing even while you edit another page. The on-screen arrow follows the active song position during playback; when stopped, it indicates the position being edited.

Pattern copy: hold G5 and press the destination pattern key. The active source pattern (including its motion) is copied within the current song. The destination becomes independent.

Arrangement length: up to 32 positions per song; each can repeat for 1-32 bars. The first empty slot functions as END. Each song has its own seven patterns, making 70 independent patterns in total.

Clock sources & sample kits.

Integrate DRUM KEYS with a standalone setup, or use it as the master of its own rhythm.

THREE CLOCK MODES

INT
Internal BPM (MAIN / K2)

OSC
OSC over UDP port 9001

MIDI
USB-MIDI real-time clock

Press F5 to cycle INT > OSC > MIDI. Changing clock source stops playback. In external modes, the master supplies tempo and transport.

OSC / MIDI CLOCK PROTOCOL

OSC destination	Organelle IP, UDP 9001
OSC address	`/OSC_MIDI_0/MIDI`
Message	status, data1, data2 (integers)
Clock / transport	248 clock, 250 start, 251 continue, 252 stop

ADD A CUSTOM KIT

Create kits/kit3, kits/kit4, etc. Each kit needs the ten filenames below. Use mono PCM WAV, 44.1 kHz (16-bit recommended). Two kits are included.

- `kick.wav`
- `snare.wav`
- `cp.wav`
- `hhcl.wav`
- `hhop.wav`
- `tomlow.wav`
- `tommid.wav`
- `tomhigh.wav`
- `crash.wav`
- `cy.wav`

Update kits/kit-count.txt with the total (for example, 3;). Up to 32 kits can have independent base mix settings. Motion curves belong to patterns, so they follow you when you switch kits.

Save your work safely.

Songs, patterns, mix settings and motion curves are retained on disk and reloaded when the patch starts.

SAVE WORKFLOW

F#5
REQUEST SAVE

>

WAIT
PLAYING? STOP

>

SAVED
SAFE TO EXIT

If you press SAVE during PLAY, the screen can show WAIT. The motion bank is written after STOP, without disrupting the running clock. Do not close the patch or power down until SAVED appears. An ERROR indication means the Motion write was not confirmed.

KEEP THESE FIVE DATA FILES

`songs.txt`	10 song chains and repeat counts
`song-patterns.txt`	70 percussion patterns
`params.txt`	Base level / pan / pitch per kit
`motion.wav`	Motion values and validity masks
`motion-backup.wav`	Backup of the last successful Motion bank

IMPORTANT / THE MOTION WAV FILES ARE NOT DRUM SAMPLES

They are binary float data banks stored in a WAV container. Do not edit, resample, normalize or convert them in an audio editor. When updating DRUM KEYS, back up and transfer all five files to the new patch folder.

IF SOMETHING SEEMS WRONG

No sound: check PLAY, Organelle output volume and selected kit. No tempo response: INT uses K2; OSC/MIDI follow the external master. No automation: check REC, voice page and the AUT marker. Missing songs after update: restore the five data files from your backup.