Build & Chop — User Manual (v1.0.5)

Peakroom Audio · **Build & Chop** (instrument) + **Build & Chop FX** (audio effect) · AU / VST3 on macOS (Apple Silicon + Intel); VST3 and optional Standalone on Windows 10/11 64-bit

Build & Chop turns one-shots into build-ups, chopped grooves, melodic sequences and sidechain movement — in one instrument. Load a sound, pick a preset, press play in your DAW.

Editions: this manual also covers **Peakroom Build** and **Peakroom Chop**. Build focuses on build-up lanes and hit/rate patterns; it does not include the rhythmic sequencer/arpeggiator, MIDI melody, MIDI Only or SIDECHAIN page. Skip those sections when using Build. **Chop** (from 1.0.3) is an **audio effect** for your own tracks — see §8b-2. Build and Chop installers contain plugins, not a standalone app.

---

1. Quick start

1. Put **Build & Chop** on a MIDI / instrument track.
2. Load a sound in the slot (top left): drag a WAV in, click **LIBRARY** or pick a built-in one.
3. Pick a preset with **< >** next to the preset name (or click the name for the list).
4. Press play in the DAW. The build follows the song position (see *Trigger*, §9).
5. Happy with it? Drag **DRAG BUILD TO DAW** onto an audio track (or click it to save a WAV).

Song stopped? Play any MIDI note — the build plays from its start while the note is held.

---

2. The pages

Page	What it is for
BUILD	Sounds, pattern / length, the lane editor (all automation lines), chop rows, hits, knobs, BOMBER
PATTERN	The hit grid (add / remove / lengthen hits), rate pattern, rhythmic sequencer
LFO	Lane LFO (one per lane) and the MOD LFO
MOD	Three free LFOs, each pushing one target (HP, LP, reverb, echo, width, pan, volume, pitch, chop, BOMBER, echo feedback, reverb decay)
FX	Reverb, echo, width, bands, compressor, limiter
SIDECHAIN	Volume shaper (pump / gate), one or three bands
SETUP	BOMBER targets, Trigger mode, host build, tempo, grid offset

---

3. Lanes and the DRY/WET line

Every effect has its **own lane** (its own line over the length of the build): Pitch, HP, LP, Reverb, Echo, Vol, Width, Pan, LFO Depth, LFO Rate, Hit Rate, BOMBER.

- The dot on each lane chip (and **ON** above the editor, key **0**) switches the lane on / off. Off = the effect rests (pitch / pan centred, volume 0 dB).
- **DRY/WET** line (key **M**, off by default): switched on, it is a true *dry / wet* of every lane that is on — at the bottom every lane rests at its neutral value (LP open, Vol 0 dB, pitch / pan / width centred: the sound plays as it is), at the top every lane plays its full line. Switched off, every lane plays only its own line. The BOMBER lane is never scaled by it. Host parameter 2 (*Dry/Wet*) does the same from a macro or controller.
- The knob under each lane sets how far the lane goes. The knobs start at **100 %**, so the line *is* the amount: top = 100 %, bottom = 0.
- **HP / LP** use the whole filter: the LP line at the bottom (or the HP line at the top) closes the filter completely — silence. Only the line goes all the way; BOMBER and MOD push a filter as far as before (LP 400 Hz / HP 8 kHz) and never mute it on their own. Presets and projects made before 1.0.2 sound as they did.
- **Right click a knob** for its settings: Pitch → bend range, pitch mode for all sounds (Repitch / Warp / Formant), glide; Reverb → type, decay; Echo → type, time, feedback; Width → Stereo (M/S) / Haas / Chorus / Dimension. Every menu also has *stretch line to 0–100 %*, *flip* and *reset*.
- **Pitch** knob = how much of the bend range the Pitch line uses (shown in semitones). The bend range itself is on the FX page (or right click the Pitch knob).
- **Vol lane**: the top is 0 dB, the Vol knob sets the level just above the bottom, and the very bottom of the line is **silence** — on / off shapes on the Vol lane gate the sound.
- **Width lane**: the middle leaves the stereo image as it is, the top widens, the bottom is mono.
- **Hit Rate lane**: the line *is* the speed of the hits (1/8 … 1/32) — draw a rise for a classic snare roll.
- The editor shows only the selected lane (no faint copies of the other lanes).
- **INIT** (first entry in the preset list) = every line flat, no effects: the sound or the track plays as it is — start from scratch here.

Editing a line

Tools above the editor: **POINTS** (default), **DRAW** (key **B**), **STEP**, **LFO**.

Action	Result
Click	Add a point
Drag a point	Move it
Right-click / double-click a point	Delete it
Drag the round handle in a segment	Bend the curve
Drag on empty space	Select points
Shift + drag	Fine move
Cmd + drag	Off the grid

Action	Result
Cmd + A / Delete	Select all / delete selected
Cmd + C / Cmd + V	Copy / paste the line
Cmd + Z / Shift + Cmd + Z	Undo / redo

SHAPES opens ready-made lines as tiles; one click puts the shape on the selected lane (**< >** step through them). The grid menu (1 bar … 1/32) sets the snap and draws its lines in the editor. On the Hit Rate / LFO Rate lanes a shape runs between *Rate From* and *Rate To*.

Right click on empty space (lane editor and SIDECHAIN): Shape, **Flip Vertical**, **Flip Horizontal**, **Mirror** (there and back), **Double / Half Speed**, **Shift Left / Right** (one beat; one 1/16 on the sidechain), **Stretch to 0–100 %**, My lines, save, copy / paste.

The same point editing works on the small **Hit Rate** lane (PATTERN page) and on the **SIDECHAIN** shape. The small expand icon (top-right of the rate lane) or a double-click on empty space opens that lane big in the BUILD editor.

---

4. Hits, long hits and chops

Big window (1.0.5): the expand icon on the rate pattern (or BIG on the rhythmic sequencer) opens a resizable window: every hit as a note you can add, move, stretch or shorten by its right edge (right click = delete, Cmd = off the grid), with snap and zoom; the rhythmic sequencer roll sits under it.

Hit envelope (1.0.5, PATTERN page, bottom left): Dry/Wet + Attack / Decay / Sustain / Release on every hit. Dry/Wet 0% (default) = the hits play as they are; turn it up to shape each hit (a hit is open for its drawn length, or about half of its step).

- **PATTERN** page grid: left-click adds a hit, right-click deletes (hold right and drag to erase), drag a hit's right edge to make it longer.
- **ONE LONG HIT (PADS)**: one hit held for the whole build — a pad plays through; chop it with the chop rows. With the slot's **Loop** switch on, a one-shot shorter than the hit repeats with a crossfade until the hit ends. With **Loop** off, the one-shot plays once; a long hit does not make it repeat automatically. **PAD** turns Loop on and creates one long hit.
- **Chop rows** (BUILD page, under the lane): REPEAT, PITCH (-12 / +12), REVERSE, DECAY / MUTE / RELEASE / SWELL, TAPE. Left-click adds, right-click deletes, drag a right edge to lengthen. The dot at the start of a row switches the row on / off.
- **End Fill**: an event in the last bar (tape stop, +12 / -12, 1/32 roll, stutter, reverse, break).
- **Swing** (PATTERN page, under the paint grid): the off-beat 1/16 (or 1/8) hits move late.

The sound slot

Lock (top right of the slots): off = every preset brings a one-shot that fits it (snare for rolls, keys for melodic, percussion for afro …), so browsing never sounds the same. Drop or load your own file and the sounds lock on by

themselves — presets then keep your sound. Click Lock again to let presets choose.

- Melodic built-in one-shots show their note or chord after the name (*Square Arp C*, *Piano Chord Minor Am*, *Vox Ah A*), so you can match them to your track's key; drums and FX have none.
- **< >** next to LIBRARY step through the sounds (built-ins, or the other files in the folder of your own sample).
- **Att** = fade in, **Decay** = the one-shot fades to silence in this time (top = off), **Rel** = fades the end of the one-shot (shorten *Length* to hear it) and every hit that is cut.

Rhythmic sequencer (PATTERN page)

A piano roll (root = C3) that gives every hit a pitch. **STEPS / MIDI** switch in one click:

- **STEPS**: one note per 1/16 step (only steps with a hit can be set). Click a row to place the note, drag it up / down or sideways to another step, right click = back to the root. **Sequence** menu = ready-made melodies, **Steps** = how many steps repeat.
- **MIDI**: free notes over 1–8 bars. Click = new note, drag = move, drag the right edge = length, right / double click = delete, Cmd = off the grid. A hit only sounds inside a note (with its pitch) and every note start plays — so a melody plays as written. **Melody** menu = ready-made melodies, **IMPORT** (or drop a .mid on the roll) = your own MIDI.
- **< >** move the whole sequence one step, **DRAG MIDI** drags it into the DAW as a MIDI clip, **BIG** opens the roll over the whole page.

---

5. BOMBER

A performance knob. Tick targets on **SETUP** and set what each reaches with the knob at 0 % and 100 %. Automate the knob in your DAW for live transitions, or switch on the **BOMBER lane** to draw the knob over the build.

---

6. LFOs

Lane LFO (left side of the LFO page)

Every lane can carry its **own LFO** on top of its line — a reverb that breathes, a pitch that wobbles, a filter that pumps.

- Pick the lane (menu or lane chip), click a tile (Sine 1/4, Gate 1/8, Pump …) or set Shape, Rate, Depth. **Sync** = rate in note values; off = free Hz.
- **From > To**: the LFO rate glides over the build — *From* at the start, *To* at the end (e.g. 1/4 → 1/32 for a riser that speeds up). **Curve** shapes the glide: *late* stays slow and rushes at the end, *early* speeds up at once.
- Turning Rate / Depth switches the LFO on; changes show on the line at once, even while playing.
- **COPY / PASTE** an LFO between lanes; **BAKE** draws it into the line (then edit the points).
- The **LFO ~** button above the lane editor switches the selected lane's LFO on / off.

MOD LFO (right side of the LFO page)

One extra LFO that moves the **whole sound** after the lanes:

- **Target**: *Volume* (tremolo / gate), *Filter* (low-pass wobble) or *Pan* (auto-pan).
- **Depth**: how strong. Draw the **LFO DEPTH** lane to decide *where* in the build it is on and how deep (e.g. off for 6 bars, then fading in).
- **Rate From / Rate To**: the speed at the start and at the end — it follows the MASTER line, so a build can go 1/8 → 1/32. Draw the **LFO RATE** lane instead for your own speed curve.
- **Sync** off = free Hz up to 2 kHz: above ~30 Hz the LFO becomes audio-rate and changes the tone itself (growl / ring-mod "stretch" effects).

Lane LFO = one effect moves. MOD LFO = the whole output moves.

MOD page

Three more LFOs. Each has **On**, **Target**, **Shape**, **Sync**, **Rate** and a **Depth** from –100 % to +100 % (+ = more of the effect, – = less; double-click = 0). They work on top of the lanes, knobs and BOMBER — e.g. *HP Sweep* 1/8 for a pumping filter, *Pan* 1 bar, *Reverb* random.

Every control in Build & Chop that is a knob, switch or menu — including lane on / off, the DRY/WET switch, every lane LFO and the MOD LFOs — can be **automated in your DAW**.

---

7. Sidechain

A volume shaper that repeats on the song grid (ShaperBox-style).

- **Sidechain On**, then click a classic shape on the left (pumps, ducks, gates).
- Edit the curve: **POINTS** (default), **DRAW**, **LINE**, **STEP**; **SHAPES** puts a line shape into one cycle.
- **Rate**: how long one cycle is (1/16 … 2 bars, triplets), synced to the song.
- **Multiband**: one curve per band (LOW / MID / HIGH) with split frequencies; **COPY TO BANDS**.
- **Follows the master line**: no pump at the start of the build, full pump at the drop.
- **SAVE** keeps your shape (Music / Build & Chop / Sidechain).

---

8. FX

Reverb (type, decay, tone, pre-delay), echo (type, time, feedback, tone), width (Stereo M/S, Haas, Chorus, Dimension) — each can be limited to bands. The Pitch **Bend Range** sits next to the tape stop. *Preview (no DAW)* on the BUILD page plays the build inside the plugin without the DAW running (handy for trying presets). Glue compressor and look-ahead limiter keep builds level (meters at the top).

8b. Build & Chop FX (the audio-effect version)

Put **Build & Chop FX** on any audio track, bus or the master. The track itself is the sound: pitch (lane, BOMBER, MOD, ±12 glitch rows), filters, reverb, echo, width, chops and sidechain all work on it, and **HIT RATE** opens and closes the track in rhythm (the hit strip shows *TRACK GATE*). There are no one-shot slots and no PATTERN page. **Build Runs** (FX page): *Loop (every N bars)* — the default since 1.0.4, the effect keeps running all song; *Once from Start Bar* — the build plays once from that bar, afterwards only the sidechain keeps working and the track plays clean; *When Build On is switched on* — automate Build On in the DAW. When a build ends, reverb and echo tails ring out and the track crossfades back clean (no click). The sidechain keeps pumping after the build at full depth (1.0.3: with *Follows the master line* on it used to fade out after the build).

Which preset am I on? The preset bar shows a lit dot and *n / total*; in the preset list the current preset and its category carry a dot and a tick.

8b-2. Peakroom Chop (audio effect, 1.0.3)

Put **Chop** on any audio track, bus or group: the track passes through and Chop chops it, synced to the song. There is no build (no lanes, BOMBER, glitch/tape rows, LFO or MOD page) and no hit patterns. Three pages:

- **CHOP** — everything on one page:
- **Sidechain** (top): *Sidechain On*, one-click classic shapes, draw your own (POINTS / DRAW / LINE / STEP), Rate (cycle length), Multiband (Low / Mid / High) and Amount.
- **Chop** (bottom left): Length (the loop the rate line and rhythm repeat over), Swing, **RATE GATE ON**, **Dry/Wet** (0% = your track untouched) and the gate envelope **Attack / Decay / Sustain / Release** (every hit: attack to full, decay to the sustain level while it is open, release after it closes).
- **Rate gate**: the rate line opens and closes the track (POINTS to draw, FLAT 1/8 to reset, Sync or free speed).
- **Rhythm**: STEPS or MIDI. Each step / note pitches the track (C3 = untouched); the rhythm also gates it. **DRAG MIDI** writes the rhythm into your DAW as a MIDI clip, **IMPORT** loads a .mid.
- **BIG** (or the expand icon on the rate gate) opens a big window: the gate hits as notes, like a MIDI clip — click = note, drag = move, drag the right edge = longer / shorter, right click or double click = delete, Cmd = off the grid, snap and zoom, FILL / CLEAR / BACK TO RATE LINE — and the rhythm roll under it.
- **FX** — reverb and echo (amount, decay/feedback, tone, bands), compressor, limiter, input.
- **SETUP** — grid offset, theme and the rest of the global options.

With the DAW stopped the track plays through as it is (INIT = no effect at all). Chop's presets are the groove chops, rhythm sequences and classic sidechain / gate shapes.

8c. MIDI learn and DAW automation

Every control is a host parameter (automate it in the DAW). Right click a control → **MIDI Learn**, then move a knob on your controller; **Clear MIDI** removes it. The mapping is saved with the project. Parameter 1 = BOMBER, parameter 2 = Dry/Wet, so a controller's instant mapping takes them first.

8d. MIDI Only, DRAG PATTERN TO YOUR MIDI and pads

- **DRAG PATTERN TO YOUR MIDI** (the box left of the lane editor): drag it onto a MIDI track in your DAW — the pattern of the build length becomes C3 notes (each hit up to the next one; **ONE LONG HIT** = one long note).
- **MIDI Only (C3)** (under Preview): your MIDI notes play the one-shots — each note starts the sound, its release ends it (slot *Rel*; with *Loop* on the sound holds as long as the note). **C3** = the one-shot's own pitch, other notes transpose. The pattern is off: its menu, lock, the PATTERN page, the hit row and the drag box disappear and come back when MIDI Only is switched off. Lanes, glitches and effects still run with the song, tails ring on. Typical use: drag the pattern to a MIDI track, switch MIDI Only on, then edit the notes in your DAW.
- **Drop a .mid file on the plugin**: its notes become the pattern (note lengths kept, a short clip repeats).
- **One-shot fades**: drag the dot at the top of a white line in the waveform — fade in (Attack), fade out (Release).
- **Loop / PAD**: Loop keeps the one-shot looping (crossfaded) until the next hit; **PAD** = Loop + one long hit.
- **Drop Gap → Tail**: in the gap only the dry stops; reverb and echo keep ringing into the drop.

---

9. Trigger (SETUP) — where the build runs

Mode	Behaviour
Synced (default)	Lanes, hits and sidechain are where the song is — start playback anywhere and everything is already in place (a long hit that started earlier plays from the middle).
MIDI Trigger	Each MIDI note restarts the build and the sidechain cycle. Nothing runs before the first note.
Audio Trigger	Each hit on the plugin's **sidechain input** above **Audio Threshold** restarts the build (route a kick in: Ableton → Sidechain / Audio From).

Grid Offset: shift the build from –8 to +8 bars (or a few beats) on your song grid so it lands on your drop. The same setting is **Start** next to Length on the BUILD page. Stopping the transport fades every sound out at once.

---

10. Presets and your files

- The bar shows the preset's name; open the list to see which one you are on (ticked, with its category).
- **SAVE** (Cmd + S) stores a preset in *Music / Build & Chop / Presets /* .
- Lines, patterns, chops and sidechain shapes you save go to *Lines / Patterns / Chops / Sidechain*.
- **LOCK** keeps chosen parts (length, pattern, sounds, chops, sidechain, FX) while you browse presets or press **RND**.
- Changed a preset? Build & Chop asks before you leave it.
- Bounces from **DRAG BUILD TO DAW** go to *Music / Build & Chop / Bounces*.

---

11. Level safety

Every one-shot is level-matched on load, stacked layers share the level, a leveler and compressor keep the build steady, and the limiter only catches stray peaks (ceiling –1 dB by default).

---

12. Demo, license and activation

The download is the demo and the full version in one. Until it is activated:

- after every 7 seconds of sound the sound stops for about a second and a beep plays (silence stays silent and does not count),
- a large **DEMO** mark sits over the window,
- saving presets, lines, patterns, chops and sidechain shapes, **DRAG BUILD TO DAW** and **DRAG MIDI** are switched off. Everything else works, so you can try every preset.

Activate: obtain a valid purchase or evaluation **license key** from Peakroom Audio or an authorised seller. Ordering and licence-delivery instructions are provided at peakroomaudio.com when purchasing is available. For evaluation access, contact support@peakroomaudio.com; the public demo is not an unrestricted review licence. In the plugin press **ACTIVATE** (top left), enter the e-mail associated with the licence and the key. Each license works on **up to 4 computers**:

License	Unlocks
Build & Chop (all in one)	Build & Chop, Build & Chop FX, Peakroom Build and Peakroom Chop
Peakroom Build	Peakroom Build only
Peakroom Chop	Peakroom Chop only

The activation needs the internet once; after that the plugin works offline and checks in every 14 days (60 days without internet are fine).

New computer? Click **LICENSED** → *Deactivate this computer* on the old one, or free it on peakroomaudio.com/account (sign in with the same e-mail).

---

13. System requirements

- macOS 11 or later, Apple Silicon and Intel: AU and VST3. Installer: *Build-and-Chop-1.0.5-macOS.pkg* (plugins go to /Library/Audio/Plug-Ins).
- Windows 10 / 11 64-bit: VST3 and optional Standalone. Installer: *Build-and-Chop-1.0.5-Windows-Setup.exe* (plugins go to C:\Program Files\Common Files\VST3).
- Any DAW that hosts AU or VST3 instruments / effects (tested in Ableton Live).
- Support: support@peakroomaudio.com