



BACKTAP E

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What is inside

Twelve chapters. The first four are all you need to make sound; the rest is there for the day you want to know exactly what a control does.

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THE PEDALS

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01

Welcome

BACKTAPE is a sound-design pedalboard in one plugin: nineteen pedals, a brain that builds a chain from your own words, and a face with two knobs to play it.



WHAT IT IS

Finished sound from the sound you already have

Put it on a loop, a melody, a vocal, a bass or a drum break. BACKTAPE adds the layers, the movement, the space and the character that turn it into a record.

Words, not menus

Write what you hear in your head: `dark trap melody`, `boom bap flip`, `like it plays behind my house`, `vintage delay`, `no reverb`. The brain answers with a complete chain: the right pedals, in the right order, with their movement already designed.

Nineteen pedals

Saturation, tape machines and samplers, grains, re-cutting, delay, reverb, chorus, phaser, tremolo, filter, pitch, punch, a wall of sound, tuned resonators, a talkbox and vocoder, a harmonizer, a sample flipper, trap arps and 3D space. Five of them at a time, any of them twice.

It listens

BACKTAPE follows the tempo of your project and hears the key and the chord of what you play, live. Arps, bells, the vocoder and the glides land on the right notes without any setup.

Designed movement

Two LFOs, an envelope follower and an event signal on every pedal, plus a four-bar phrase and the MORPH. Threads tie them to any knob. Generate designs them for you: echoes that step back while the music plays, rooms that grow toward bar four.

Clean by design

Every non-linear stage is oversampled, the low end of your track is protected through the whole chain, the noise is always a real recording, and the latency never changes, so nothing clicks or jumps when you switch presets.

How to read this manual

- Names in capitals are controls: **DRIVE**, **MORPH**.
- Every knob has a second function, printed in brackets under its name on the pedal. Hold `Shift` to play it.
- Words in a box, like `dark trap`, are things you can type into Generate.

02

Getting started

Install it, load it on a track, and make a first sound in under a minute.

INSTALLATION

Install and find it in your DAW

BACKTAPE runs on Windows 10 and 11 (64-bit) as VST3 and CLAP.

Install

- 01
- Run the BACKTAPE installer and choose the formats you use: **VST3**, **CLAP** or both.
- 02
- If Windows shows **Windows protected your PC**, click **More info** and then **Run anyway**.
- 03
- Open your DAW and rescan your plugins. BACKTAPE is an effect: put it on an audio or instrument track, or on a bus.

Requirements

- Windows 10 or 11, 64-bit, a processor with AVX2.
- Microsoft Edge WebView2 Runtime. It is part of Windows 11 and of every up-to-date Windows 10.
- Any sample rate from 44.1 kHz and any buffer size.

Where your DAW finds it

- FL STUDIO
- Options, Manage plugins, Find installed plugins. BACKTAPE appears under Effects. If an older build was scanned before, turn on **Rescan previously verified plugins** first.
- ABLETON LIVE
- Preferences, Plug-ins: enable the VST3 system folder and rescan.
- OTHER HOSTS
- Reaper, Bitwig, Studio One, Cubase: rescan. VST3 and CLAP both appear where the host supports them.

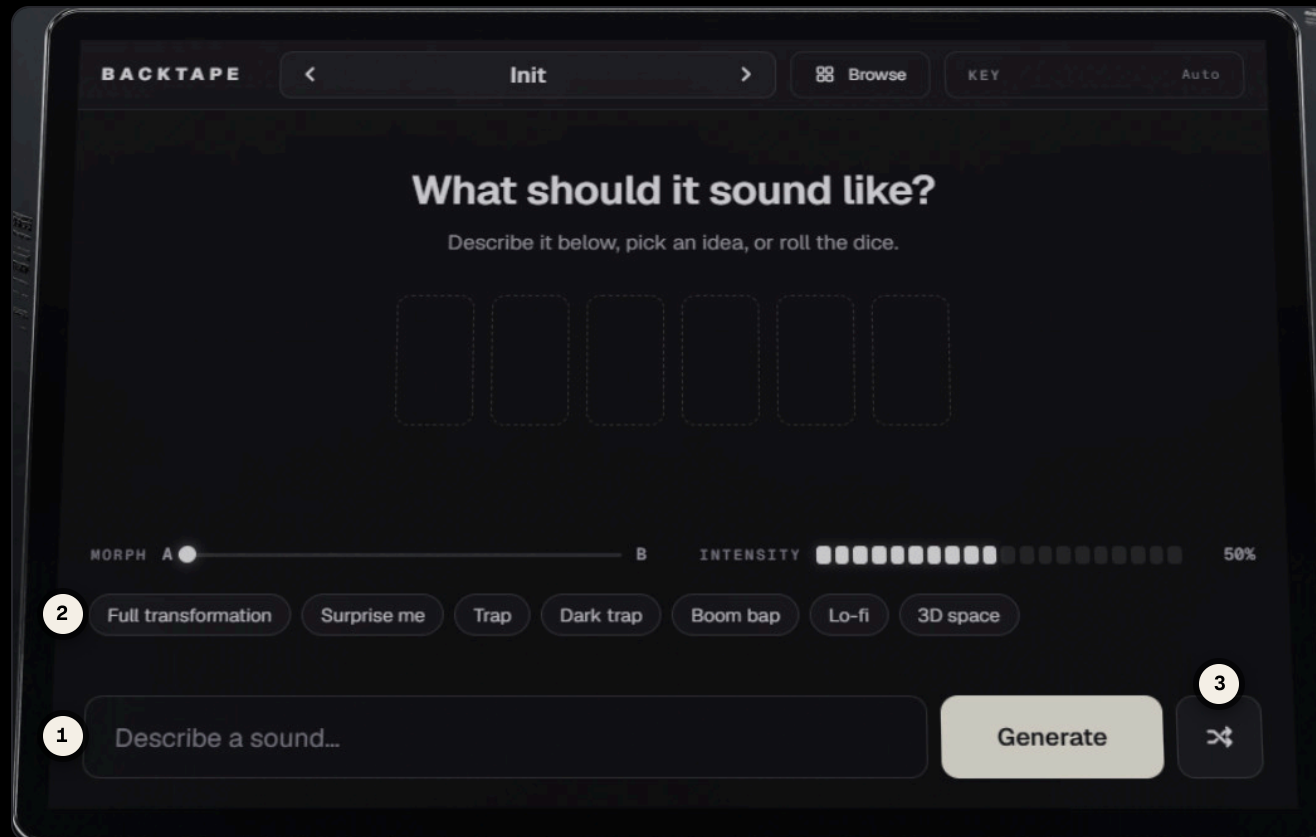
Where BACKTAPE keeps things

- PRESETS
- Documents / Labsick Empire / Backtape / Presets
- SETTINGS
- %APPDATA% / Labsick Empire / Backtape / settings.json remembers your zoom.
- SCREEN LOG
- %APPDATA% / Labsick Empire / Backtape / ui-log.txt, one line per opening. Support will ask for it if the screen ever fails to open.

QUICK START

Your first sound

An empty BACKTAPE asks one question. Everything else follows from your answer.



- 01 Put BACKTAPE on a track that has something playing: a loop, a melody, a vocal, a bass.
- 02 Type what it should sound like in **Describe a sound** and press **Enter** (1). Or click one of the ideas (2), or roll the dice (3).
- 03 Press play. The pedals appear on the screen and the name of the chain appears at the top.
- 04 Turn **INTENSITY**, the big knob on the right. The centre is the chain as it was designed; to the left it becomes a light touch, to the right it is pushed.
- 05 Turn **MORPH**, the big knob on the left, to travel to the second scene of the chain: more space, more of its main character.
- 06 Not quite it? Press **Generate** again. The same words give you the next chain of that idea, never the one you just heard.
- 07 When you want to see and play the pedals themselves, press **ADVANCED**.

03

The face

The instrument you play: a screen, two knobs, a switch and one button. Everything a session needs, with nothing to get lost in.

THE FACE

Everything on the front



- ① **Preset**
The name of the chain. The arrows step to the previous and next preset.
- ② **Browse**
Opens the preset browser.
- ③ **Key**
The chord BACKTAPE hears right now. Click to fix a key.
- ④ **The chain**
The pedals that are running, live. Click one to open it on the pedalboard.
- ⑤ **Morph read-out**
Where you are between scene A and scene B.
- ⑥ **Intensity read-out**
How much of the chain you hear. Half is the preset.
- ⑦ **Ideas**
One click writes the idea and generates it.
- ⑧ **Describe a sound**
Write anything, in English or Spanish, and press Enter.
- ⑨ **Generate**
Builds a chain from your words. Press again for the next one.
- ⑩ **Randomize**
A whole new idea, with no words.
- ⑪ **MORPH**
Glides the whole chain from scene A to scene B.
- ⑫ **INTENSITY**
From a light touch, through the preset, to pushed.
- ⑬ **POWER**
Off: your sound passes untouched, still in time.
- ⑭ **ADVANCED**
Flies to the pedalboard. **Face** brings you back.

THE FACE

Two knobs and a switch

MORPH

Every chain has two scenes. Scene A is the sound as it was built; scene B is where it can go: more space, more of its main character, sometimes another order of pedals. MORPH glides between them. Automate it in your DAW and a whole chain evolves across a section with one lane.

INTENSITY

One knob for *how much*. The centre is the preset exactly as designed. Turn left and every pedal steps back toward a light touch, until the chain is only a hint. Turn right and the chain is pushed: more drive, more depth, more mix, longer tails, always inside each pedal's musical range.

POWER

Turns the whole chain off. The sound passes untouched and stays aligned in time, so you can compare with one click and nothing jumps.

Zoom

The magnifier at the right of the header sets the size of the window from 75 to 200 %, never larger than your screen. BACKTAPE remembers the last size you chose.

04

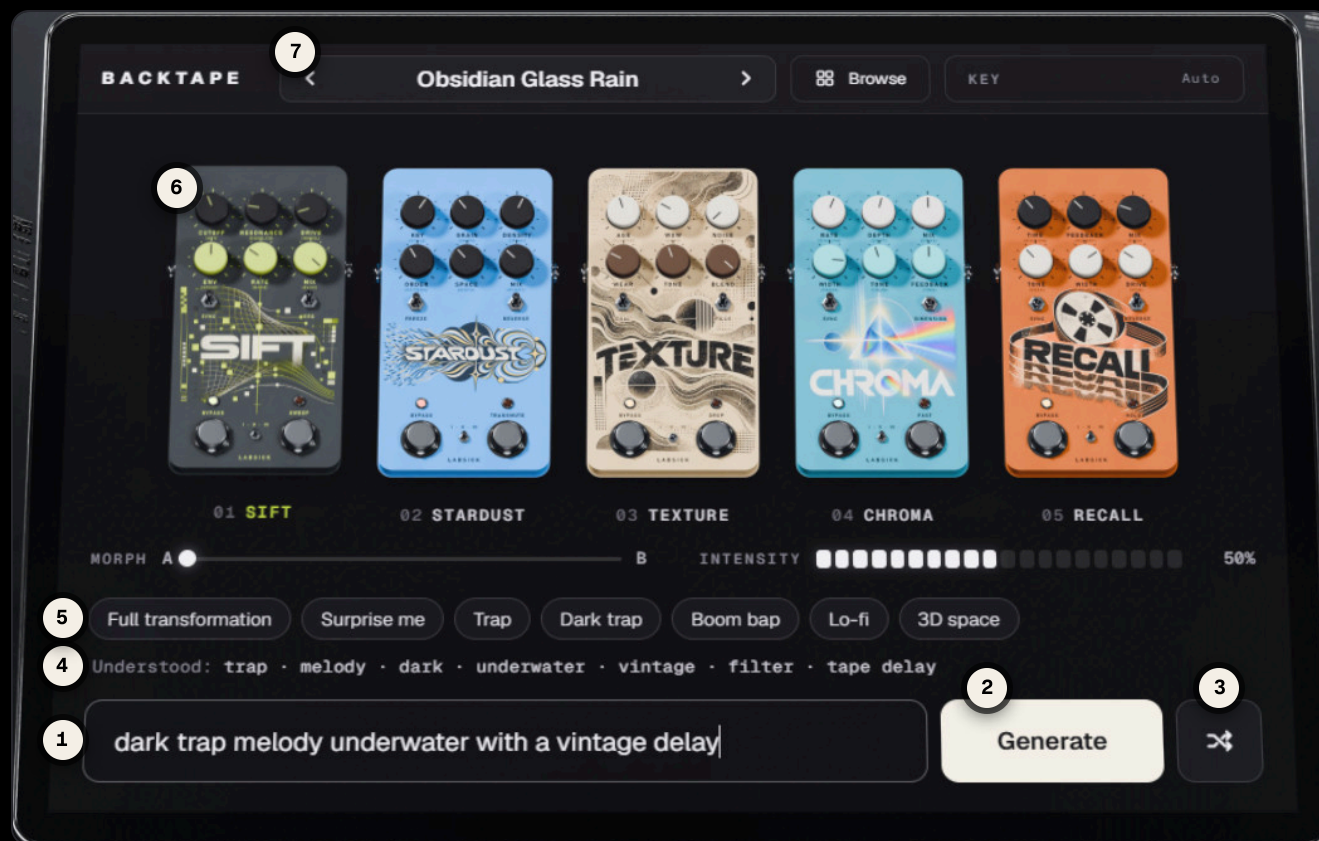
Generate

Describe a sound the way you would to another producer. BACKTAPE turns the description into a chain, and it works without an internet connection.

GENERATE

One box, any words

The same box lives on the face and in the header of the pedalboard. They are one and the same.



- 1 **Describe a sound**
Write in English or Spanish, in any order, with or without commas. Typing mistakes are corrected. Press **Enter** or Generate.
- 2 **Generate**
Builds the chain. Press it again with the same words and you get the next chain of that idea: another recipe of the family, other values, another name.
- 3 **Randomize**
No words at all: a complete idea drawn from the recipe book and from your own presets.
- 4 **Understood**
What BACKTAPE read in your words, so you always know why the chain is what it is. A word it does not know appears after **didn't catch**.
- 5 **Ideas**
Full transformation changes pitch or rhythm completely. **Surprise me** picks an expressive archetype. The others are genres: each press walks through that genre's family of chains.
- 6 **The chain**
Up to five pedals. Click one to open it on the pedalboard and see exactly what was set.
- 7 **The name**
Invented from what the chain does, never a copy of your words. Save it in the browser if you want to keep it.

HOW IT READS

What you can write

A sentence can mix all of these. BACKTAPE separates them and gives each its job.

What you are processing

Say the source if it matters: `melody` `piano` `guitar` `vocal` `drums` `kick` `808` `bass` `sample`. It decides what must be protected. A bass keeps its low end dry and mono, drums keep their punch and get no long reverb, a melody keeps its timing unless you ask for chops.

A genre

`trap` `dark trap` `drill` `boom bap` `lo-fi` `house` `techno` `dubstep` `drum and bass` `ambient` `cinematic` `synthwave` `hyperpop` `reggaeton` `jersey` `rnb` `hardstyle`. Each genre is a family of expert chains. Boom bap alone has an 12-BIT chain, an MPC chain, a wobbly one, a Dilla one, a vinyl one, a pitched one and a flip.

A destination

Write where the sound should go after **into**, **to** or **like** (**en, como**): `turn my bass into colour bass`, `kick to hardstyle kick`. The destination chooses the chain; the source keeps it safe.

An effect by its name

Ask for the effect and, if you want, its flavour:

`vintage delay` `tape echo` `ping pong` `dotted delay` `dark hall` `jet flanger` `analog chorus`. You can also name a pedal: `add frost`.

A place or an image

`underwater` `in the next room` `behind my house` `like an old radio` `in a cathedral` `to the stars`. Forty-five scenes, each with its own hand-built chain.

A feeling or a quality

`darker` `warm` `dusty` `dreamy` `aggressive` `nostalgic` `glassy` `wide` `lonely`. Thousands of words, sorted on thirty-eight axes of sound.

How much

`very` `super` `a little` `slightly` `no` `without` `less`: `very dark but not muffled`, `a little dusty`, `no reverb`.

EFFECTS

Effects by name

Name an effect and BACKTAPE puts the pedal that makes it in the chain, set the way you described it. On a chain that is already full it makes room for it.

Taking things out. no reverb, without delay, sin distorsion: the pedal leaves the chain and nothing puts it back. dry removes the room.

DELAY · ECHO	RECALL
REVERB · HALL · ROOM · PLATE	LUMEN
CHORUS · ENSEMBLE · FLANGER	CHROMA
PHASER · ROTARY · LESLIE	ORBIT
TREMOLO · GATE · PUMP	PULSAR
FILTER · LOW-PASS · WAH · ACID	SIFT
DISTORTION · SATURATION · FUZZ	CRUNCH
COMPRESSION · GLUE · PUNCH	SLAM
TAPE · CASSETTE · VINYL · SAMPLER	TEXTURE
PITCH · OCTAVE · SLOWED	REDSHIFT
HARMONIZER · DOUBLER · FIFTHS	FROST
GRAINS · GRANULAR · STRETCH	WARP

CHOPS · STUTTER · TAPE STOP	CORTE
FLIP · RE-ARRANGE · RESAMPLE	FLIPPER
VOCODER · TALKBOX · ROBOT	TALK
BELLS · MARIMBA · KALIMBA	RING
COLOUR BASS	RING · COLOR
CRYSTALS · REVERSE ECHOES	FROST
ARP · PLUCKS · SPARKLE	STARDUST
3D · BINAURAL · 8D	GRAVITY
WIDE · SUPERSAW · WALL	HORIZON
-2 CENTS · +3 ST · TO C MINOR	REDSHIFT

Flavours

Put one next to the effect and it changes how the pedal is set.

- tapevintageanalogdigitaldubping pong
- dottedtripletslapbacklongshortdarkbright
- reverse

SCENES

Places and images

Words that have nothing to do with music still describe a sound. Each of these forty-five scenes has its own chain, built by hand with physical values: the cutoff of a wall, the size of a cathedral, the band of a telephone. A scene keeps its own space, so no extra reverb is added on top. You can write them in many ways (debajo del agua , sounds like it comes through a wall) and mix them with a genre: trap underwater .

Underwater

TEXTURE › SIFT › CHROMA › LUMEN

Old radio

SIFT › TEXTURE › CRUNCH › SLAM

Cave

RECALL › LUMEN

Club

SLAM › HORIZON › LUMEN

Dream

TEXTURE › CHROMA › FROST › LUMEN

Psychedelic

ORBIT › CHROMA › RECALL › LUMEN

Fog

WARP › CHROMA › SIFT › LUMEN

Night drive

CHROMA › SIFT › RECALL › LUMEN

Toy

SIFT › RING › TEXTURE › LUMEN

Next room

SIFT › SLAM › LUMEN

Megaphone

SIFT › CRUNCH › RECALL

Tunnel

CHROMA › RECALL › LUMEN

Outer space

STARDUST › FROST › GRAVITY › RECALL › LUMEN

Nightmare

REDSHIFT › TEXTURE › FROST › LUMEN

Empty

SIFT › GRAVITY › RECALL › LUMEN

Ice

SIFT › RING › FROST › LUMEN

Golden hour

TEXTURE › CHROMA › RECALL › LUMEN

Up close

SLAM › GRAVITY

Behind the house

SIFT › GRAVITY › RECALL › LUMEN

Old film

SIFT › TEXTURE › CRUNCH › LUMEN

Stadium

SLAM › RECALL › LUMEN

Heaven

HORIZON › FROST › CHROMA › LUMEN

Memory

TEXTURE › CHROMA › SIFT › LUMEN

Rain

TEXTURE › SIFT › RECALL › LUMEN

Fire

TEXTURE › CRUNCH › SLAM › LUMEN

Robot

TALK › TEXTURE › RECALL › LUMEN

Broken

CORTE › TEXTURE › CRUNCH › RECALL

Far away

GRAVITY › SIFT › RECALL › LUMEN

Video game

TEXTURE › CRUNCH › RECALL

Bathroom

LUMEN

Hell

REDSHIFT › CRUNCH › SIFT › LUMEN

Slowed

REDSHIFT › TEXTURE › RECALL › LUMEN

Storm

CRUNCH › SLAM › RECALL › LUMEN

Desert

CRUNCH › PULSAR › RECALL › LUMEN

Alien

TALK › ORBIT › FROST › GRAVITY › LUMEN

Heartbeat

PULSAR › LUMEN

Telephone

SIFT › CRUNCH › SLAM

Cathedral

LUMEN

Small room

LUMEN

Ghost

TEXTURE › SIFT › FROST › LUMEN

Sped up

REDSHIFT › SLAM › LUMEN

Ocean

SIFT › ORBIT › HORIZON › LUMEN

Forest

TEXTURE › RECALL › LUMEN

Giant

REDSHIFT › CRUNCH › SLAM › LUMEN

Spinning

GRAVITY › LUMEN

MEANING

Feelings, materials, weather, eras

Behind the box there is a dictionary of several thousand words and phrases. Each one leans on a few of thirty-eight axes of sound, and a director turns the axes into pedals and values.

Emotions (sad, hopeful, angry), weather (rain, fog, storm), colours, materials (glass, velvet, metal), times of day and states (drunk, half asleep) all live here.

The axes

DARK · BRIGHT

The top end closes or opens: filters, tape tone, the tone of the echo and the room.

WARM · DIRTY · CRUSHED

From tube and tape saturation to hard distortion and low bit depth.

OLD · UNSTABLE · NOISY

Tape machines and samplers: wow, flutter, wear and a real recorded surface.

SPACIOUS · FAR · MUFFLED

Rooms, distance and walls: reverb, 3D distance, low-pass filters.

THIN · TELEPHONE · MONO

Band-limited and narrow, like a small speaker.

WIDE · WALL · CHORUS

Doubles, detuned voices, ensemble.

ECHO · REVERSED

Repeats, their rhythm and their direction.

MOVING · PULSING · PSYCHEDELIC

Phasers, tremolo, filters that breathe, slow LFOs.

CHOPPED · GRAINY

Re-cutting and granular clouds.

CRYSTAL · STARRY · METALLIC · LIQUID

Crystals, arps, tuned resonators, chorus.

VOCAL · 3D

A mouth on the sound; a sound that travels around you.

PUNCHY · SOFT · INTENSE · SUBTLE

How hard it hits and how far the whole chain goes.

RISING · FALLING

Pitch and builds that go up or down.

DRY · CLEAN

What to leave out.

Two ways it is used

With a genre, the axes **bend the genre's chain**:

trap **underwater** is still trap, heard through water. Without a genre they **build the chain** on their own, completed to four pedals with space, echo, chorus or tape as the words suggest.

Artists and eras

A name is a style hint, not a preset: **dilla** leans to boom bap and loose timing, **90s** to samplers and tape. Use them next to your own words.

THE RULES

What Generate always does

A chain from Generate is meant to sound finished. These rules are why.

It ends with space

Every chain ends in a reverb sized for the material, except on drums, kicks and basses, which keep their punch and their low end. Creative percussion gets a short room with its lows cut. A scene keeps the space it was built with.

The movement is designed

Never random. The echo and the room step back while the music plays and bloom in the gaps; pedals answer each other through their events; at most two slow LFOs breathe on colour knobs; the phrase builds toward bar four. Scene B is written too, so MORPH always has somewhere to go.

Pitch, exactly

Write the amount and REDSHIFT moves exactly that:

`-2 cents`, `baja dos tonos`, `+3 st`,

`transpose to C minor` (from the key on KEY). Surprise Me and Randomize change the pitch often.

It does not repeat itself

The same words bring the next chain of the family, and BACKTAPE remembers what it gave you between sessions, so yesterday's chain is not today's first answer.

Tails stay musical

A generated reverb never rings longer than about six seconds, and tuned resonators, echoes and reverb share one budget of tail, so a chain does not turn into a wash.

It learns your taste

Every preset you save becomes part of the library. When your words match the name or the tags of your own presets, Generate brings back those chains, varied.

When it does not catch a word

The line under the box says so: **didn't catch:** ... Say it another way, or describe the result you want to hear instead of the word.

05

The pedalboard

Press ADVANCED and the face opens into five slots, patch cables and every control of every pedal.

THE PEDALBOARD

Everything on the board



- ① **Face**
Back to the face.
- ② **Preset**
Click the name for the browser; arrows step through presets.
- ③ **Key**
The chord heard now; click to fix a key.
- ④ **Threads**
Shows the modulation threads and lets you draw new ones.
- ⑤ **A · B**
The scene you are editing.
- ⑥ **Morph**
The same MORPH as the face.
- ⑦ **Describe · Generate**
The same box as the face.
- ⑧ **Randomize**
A new idea with no words.
- ⑨ **Return**
Feeds the end of the chain back in. Drag the chip.
- ⑩ **A pedal**
Play it directly: knobs, switches, footswitches.
- ⑪ **Slot name**
Click the arrow to swap or remove the pedal.
- ⑫ **Route**
Click to switch Series and Parallel.
- ⑬ **Pedal dock**
The selected pedal: program, mode, Shift, exact values.
- ⑭ **Motion**
The four sources of the selected pedal.
- ⑮ **Master**
Meters, Mix, Output and the limiter.

PLAYING

Playing a pedal

The pedals behave like hardware. What you see printed on each one is what it does.

Knobs

DRAG	Up and down to turn. The name and the exact value appear above the knob.
SHIFT + DRAG	Plays the knob's second function, the name printed in brackets under it. The Shift button in the dock latches it.
ALT OR CTRL + DRAG	Fine adjustment.
MOUSE WHEEL	Small steps.
DOUBLE-CLICK	Back to the default.

Switches

The two small toggles under the knobs are on or off: click them. Their names are printed below each one.

I • II • III

The three-position switch between the footswitches chooses the mode of the pedal: three kinds of delay head, three reverb sizes, three numbers of saturation stages.

Footswitches

LEFT • BYPASS	The pedal on or off. Its LED shows the state. A bypassed pedal passes the sound untouched and stays aligned in time.
RIGHT • ACTION	The pedal's own gesture: Freeze, Hold, Drop, Flip, Swell... Tap to latch it, hold for momentary.

Programs

Some pedals hold several machines: TEXTURE, WARP, CORTE, RING. Their program is chosen with the arrows in the dock, under the pedal's name.

The dock

The panel at the bottom left always shows the selected pedal: its slot and route, its program, the mode switch, the Shift button and a read-out of all six knobs with their real units. Click a pedal's body to select it.

BUILDING

Building a chain by hand

Five slots, left to right. Any pedal may appear at most twice.

Choosing pedals

Click an empty slot, or the small arrow next to a pedal's name, to open the list of the nineteen. Pick one to place or replace; **Remove** empties the slot.

Changing the order

Drag a pedal sideways by its body and drop it between the others. The cables follow.

A good order

Sound flows from left to right. Start with what creates sound or re-cuts it, then pitch, then colour, then movement, and finish with echo and room.

- | | |
|--------------|--------------------------------------|
| 1 · CREATES | FLIPPER, CORTE, STARDUST, TALK, RING |
| 2 · PITCH | REDSHIFT, FROST |
| 3 · COLOUR | TEXTURE, CRUNCH, SIFT, SLAM |
| 4 · LAYERS | HORIZON, WARP |
| 5 · MOVEMENT | CHROMA, ORBIT, PULSAR, GRAVITY |
| 6 · SPACE | RECALL, then LUMEN last |

Breaking the order

The order is a tool, not a law. A reverb *before* CRUNCH is the crushed, gated room of old records. A delay before CORTE gets its echoes chopped with the loop. TEXTURE last puts the whole chain on tape.

The same pedal twice

Two RECALLs at different divisions make a pattern of echoes; a SIFT before and after a distortion shapes what is driven and then what is heard.

Scenes keep their own chain

Order, routes and the return belong to the scene. Scene B can be the same pedals in another order; MORPH switches at the halfway point.

Nothing clicks

When the chain changes, BACKTAPE fades the old one out, starts the new pedals empty and fades back in. It takes about a tenth of a second and you never hear a fragment of the previous sound.

06

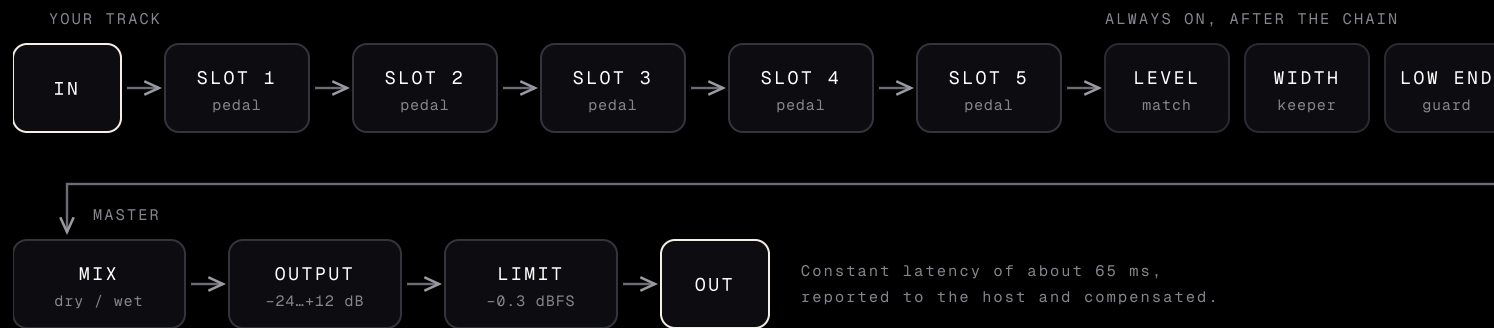
Signal and routing

Where the sound goes: through the slots, back through the return, and out through the master.

SIGNAL FLOW

From input to output

One path, always the same, and three guards at the end that you never have to think about.



The slots

Each slot processes the output of the one before it, unless its route says Parallel. Bypassed and empty slots pass the sound untouched.

Level match

Keeps the chain within a window of 0 to +2 dB above your input, correcting up to 6 dB either way. A chain is never louder just because it has more pedals.

Width keeper and low-end guard

The chain is never narrower than what you fed it, and whatever a pedal does, the low end below about 120 Hz reaches the output solid and centred.

Master

MIX blends the whole chain with your dry sound. **OUTPUT** trims the level, from -24 to +12 dB. **LIMIT** is a look-ahead safety limiter at -0.3 dBFS; leave it on. The **IN** and **OUT** meters show the level entering and leaving BACKTAPE.

ROUTES

Series and Parallel

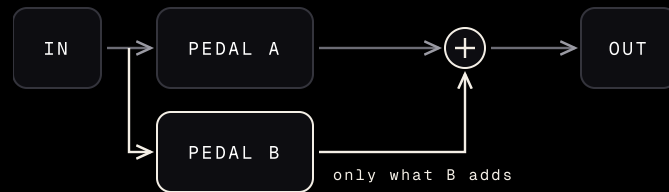
Under every slot there is a chip. Click it to switch the route of that slot.

SERIES



B processes what A gives it.

PARALLEL



B hears the same input as A. What it creates is laid on top.

Series

The default. The pedal receives what the previous pedal gives it and passes its own result on.

Parallel

The pedal listens to the *same input as the pedal before it*, and only what it creates is added on top of that pedal's output. The board draws it as a branch.

When to use Parallel

- **Parallel saturation on drums:** CRUNCH adds body while the transients of the dry hit stay intact.
- **Two readings of one melody:** bells from RING next to arps from STARDUST, both made from the clean melody instead of one feeding the other.
- **A reverb that ignores the delay:** LUMEN in parallel with RECALL keeps the room clear of echoes.

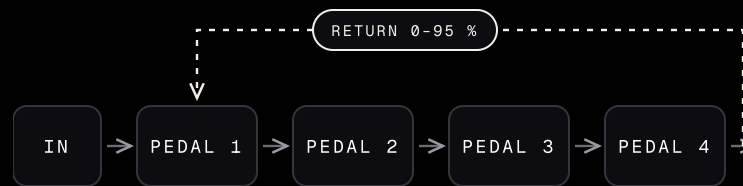
Good to know

Latencies are aligned for you, so a parallel pedal never phases against its neighbour. The first pedal of a chain has nothing to be parallel to: it is always in series.

RETURN

The return

A loop from the end of the chain back to its start. It is the difference between an effect and something that seems alive.



What the chain added comes back into an earlier pedal, filtered and bounded: it can never run away.

How to use it

The dashed line above the pedals is the return, and the arrow shows the pedal it feeds. Drag the **Return** chip up or down to set the amount, from 0 to 95 %. It needs at least two pedals.

What comes back

Only what the chain *added* to your sound: the echoes, the tail, the grains. Your dry sound is not sent round again, so nothing combs or doubles.

Why it is safe

The returned signal is filtered and held under the level of the loop itself by a smooth gain, not by a clipper. A reverb or a delay in the loop cannot run away, and the whole thing dies out naturally when the music stops.

Ideas

- **WARP then LUMEN, return at 20 %**: the reverb is cut into grains again and the cloud keeps evolving.
- **RECALL then GRAVITY**: every echo flies once more around your head.
- **FROST in Spiral then LUMEN, return at 15 %**: the room's own tail, climbing in octaves.

Scenes

Each scene has its own return amount, so MORPH can open the loop as you travel to scene B.

07

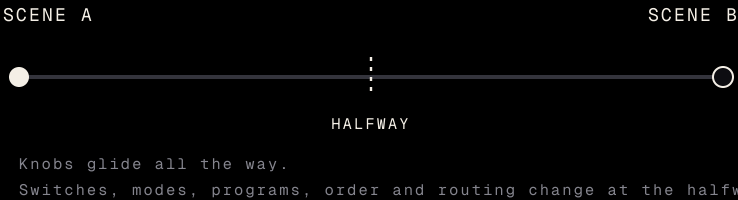
Scenes, Morph and Intensity

Two complete states of the chain, one control to travel between them, and one for how much of it all you hear.

SCENES

A and B

A preset is not one sound. It is two, and the road between them.



What a scene holds

Everything about the chain: every knob and its Shift function, every switch, mode and program, the order of the pedals, each slot's route and the return amount.

Editing a scene

Click **A** or **B** in the header. What you turn now is written to that scene. A new chain starts with both scenes equal; Generate always writes a scene B for you.

MORPH

Drag the slider in the header or turn the big knob on the face. Knobs glide; things that cannot glide switch in the middle. MORPH is a parameter in your DAW: draw one automation lane and the whole chain evolves.



INTENSITY and POWER

INTENSITY lives on the face and scales the whole chain without touching your scenes. POWER turns the chain off and passes your sound, aligned. Both are parameters in your DAW too.

MORPH as a source

MORPH is also a modulation source. A thread from MORPH to any knob adds an extra move on top of the scenes.

08

Motion

What makes a chain feel played instead of set: sources that move, and threads that tie them to knobs.

SOURCES

Six sources of movement

Four belong to each pedal. Two belong to the whole board.

LFO 1 and LFO 2

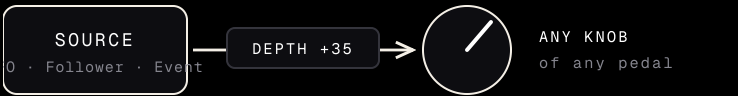
Two free shapes per pedal, on the tempo or in hertz, from very slow drifts to audio-rate wobble.

Follower

The loudness of what comes *into* that pedal, turned into a control signal. It is how an echo ducks under the music, or a filter opens on every hit.

Event

What the pedal itself is doing. Each pedal reports its own thing: CORTE its cuts, STARDUST its notes, GRAVITY its distance, LUMEN the energy of its tail, SLAM how hard it compresses. The pedal reference names each one.



A source moves nothing until a thread ties it to a knob.



PHRASE rises over four bars and starts again: a build that always

Phrase

A ramp that rises over four bars of your project and starts again. The header of the motion panel shows where you are: **Phrase 4 · Bar 1 / 4**. Several pedals also play a fill in bar four.

Morph

The position of MORPH, as a source.

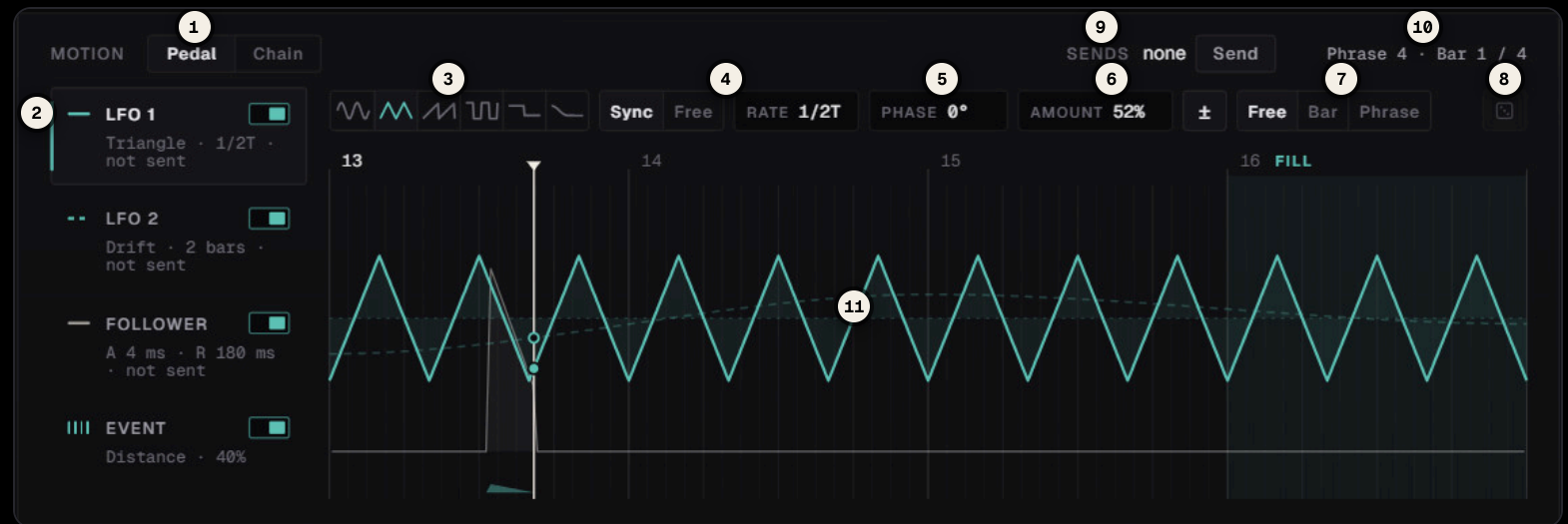
A source alone does nothing

It only sounds once a **thread** ties it to a knob. The small switch next to each source turns it off without deleting its threads.

THE EDITOR

The motion panel

Select a pedal and its four sources appear at the bottom of the board. Click a source to edit it.



- ① **Pedal · Chain**
This pedal's sources, or a live recording of every pedal's event.
- ② **The four sources**
Click to edit. The switch turns a source off.
- ③ **Shape**
Sine, Triangle, Ramp, Square, Steps (random steps) and Drift (smooth random).
- ④ **Sync · Rate**
On the tempo, from 8 bars to 1/32 with dotted and triplet values, or free from 0.02 to 20 Hz.

- ⑤ **Phase**
Where in its cycle the shape starts.
- ⑥ **Amount · ±**
How far it moves, and whether it swings both ways around the knob or only upward.
- ⑦ **Free · Bar · Phrase**
Lets the shape run, or restarts it on every bar or every four bars.
- ⑧ **New seed**
Another random pattern for Steps and Drift.

- ⑨ **Sends**
The knobs this source is tied to. **Send** lists the knobs of the pedal, with the suggested one marked, to tie it to one more.
- ⑩ **Phrase counter**
The phrase and the bar being played.
- ⑪ **The graph**
Four bars of the source, with the playhead. Drag sideways for phase, up and down for amount, wheel for rate; double-click resets.

FOLLOWER AND EVENT

Follower, Event and the chain view

The two sources that react to the sound itself.

Follower

- ATTACK** How fast it rises with the sound, 0.1 to 200 ms.
- RELEASE** How slowly it falls: 5 ms to 3 seconds, or a note value on the tempo.
- GAIN** How much signal the loudness produces.

On the graph, drag sideways for the release and up and down for the gain.

Event

- THRESHOLD** How much the pedal must do before the event counts.
- SMOOTH** Rounds the event, from 1 ms to 2 seconds: a click becomes a swell.

On the graph, drag up and down for the threshold and sideways for the smoothing.

LFO shapes



THE CHAIN VIEW: THE EVENT OF EVERY PEDAL, RECORDED LIVE OVER THE PHRASE

The Chain view

Click **Chain** at the top of the motion panel. Each row is one pedal's event, drawn as it happens over the four bars. It shows at a glance which pedals are active, when, and which events are worth sending somewhere.

LEDs

The left LED says the pedal is on. The right LED glows with the pedal's event, and lights fully while the action footswitch is engaged. In Threads mode the two LEDs are where you grab the Follower (left) and the Event (right).

THREADS

Threads

A thread carries a source to a knob. Press **Threads** in the header to see them all and to draw new ones. A chain holds up to sixteen.

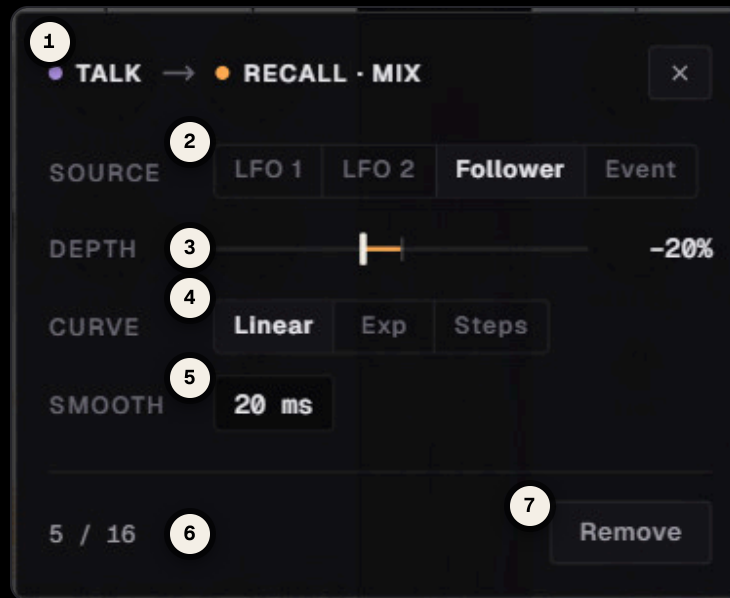


- ① **Phrase and Morph**
The two global sources. Drag from either onto a knob.
- ② **A thread**
Its label reads **source → knob, depth**. The colour is the colour of the pedal the source belongs to. Click the label to edit the thread.
- ③ **Left LED**
In Threads mode it is the pedal's **Follower**. Drag from it onto any knob of any pedal.
- ④ **Right LED**
The pedal's **Event**. Drag from it the same way.
- ⑤ **A destination**
A ring marks every knob that a thread moves. One knob can receive several threads; they add up.
- ⑥ **LFO threads**
LFOs are sent from the motion panel: select the LFO and press **Send**, or drag the source from the list onto a knob.

THREAD EDITOR

Editing a thread

Click the label of any thread.



What depth means

Depth is knob travel. At +35 the source can push the knob up to 35 % of its range above where you left it; at -35, below. Several threads on one knob add up, and the knob always stays inside its range.

- ① **From and to**
The pedal the source belongs to, and the pedal and knob it moves.
- ② **Source**
Which of the four sources of that pedal drives the thread: LFO 1, LFO 2, Follower or Event. A global thread chooses between Phrase and Morph.
- ③ **Depth**
From -100 to +100 %. Negative depth moves the knob the other way: that is how a Follower *ducks* something.
- ④ **Curve**
Linear follows the source. **Exp** stays low and rises late. **Steps** moves in stairs.
- ⑤ **Smooth**
Glides the movement, in milliseconds. Raise it when a fast source makes a knob jump.
- ⑥ **Count**
How many of the sixteen threads are in use.
- ⑦ **Remove**
Deletes this thread. The source stays.

RECIPES

Threads that always work

Five moves that make almost any chain sound more expensive. Generate uses them all.

Space that gets out of the way

Follower of the first pedal → RECALL **Mix** and LUMEN **Mix**, depth around -20. The echo and the room drop while the music plays and bloom in every gap.

Every cut throws an echo

CORTE Event → RECALL **Feedback**, depth +25. The repeats lengthen exactly where the loop is re-cut.

The farther, the wetter

GRAVITY Event → LUMEN **Mix**, depth +30. As the sound travels away from you it sinks into the room.

A build that resolves

Phrase → LUMEN **Decay** or SIFT **Cutoff**, depth +10. The chain opens toward bar four and falls back on the one.

Something that breathes

LFO 1, sine, two or four bars → the colour knob of a pedal: HORIZON **Width**, RECALL **Tone**, WARP **Filter**. Keep the depth small; slow and shallow sounds expensive.

Taste

- Two slow LFOs per chain are plenty.
- Do not send an LFO to a knob that changes notes (RING **Chord**, STARDUST **Order**): stepping harmony clicks.
- If a movement is audible as a movement, halve its depth.

09

Key, chords and MIDI

BACKTAPE hears the harmony of your track while it plays.
The tuned pedals build on it.

HARMONY

The KEY button

It shows the chord that is sounding now. No MIDI and no setup are needed.

How it listens

The detector separates the drums from the notes, follows the tuning of the sample even when it is not at concert pitch, and recognises ten shapes of chord. On a loop it learns the progression: from the second pass the chord changes arrive exactly on time.

Who uses it

- | | |
|----------|---|
| RING | rings the notes of the chord; COLOR moves a bass's harmonics onto them. |
| TALK | the vocoder sings the chord. |
| STARDUST | arps made of chord and scale notes. |
| FROST | KEY keeps its thirds and sixths in the scale. |
| FLIPPER | only moves a piece to a place with the same chord. |

Auto or fixed

Click **KEY**. **Auto** follows the audio. Choose a root and a scale to fix the key instead: Major, Minor, Dorian, Phrygian, Mixolydian, Harmonic minor, the two pentatonics and Blues. A saved preset remembers the key it was saved with.

A fixed key walks its chords

With a fixed key, RING's COLOR program plays a progression of the key, one chord per bar: i-VI-III-VII in minor, I-V-vi-IV in major.

MIDI

Route MIDI to BACKTAPE and the notes you hold replace what it hears. The KEY button reads **MIDI**. FROST plays the notes you hold as its voices, the vocoder sings your chord, RING with FOLLOW plays your notes.

In FL Studio

Open the wrapper settings of BACKTAPE, set a MIDI input port, and send notes to that port from a MIDI Out channel or a controller.

10

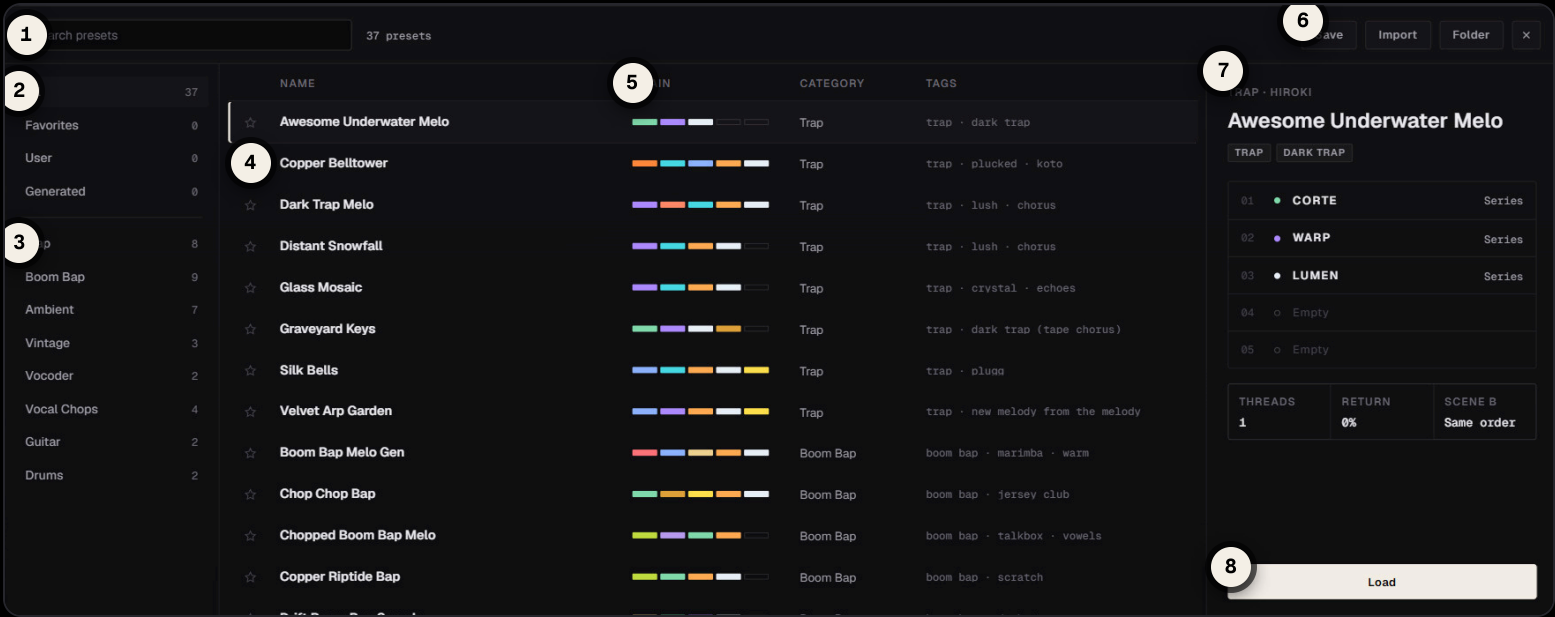
Presets

The official bank, everything you save, and what you generated in the session, in one browser.

BROWSER

The preset browser

Click the name of the preset in the header, or **Browse** on the face.



- 1 **Search**
Names, categories and tags.
- 2 **All · Favorites · User · Generated**
Generated holds the chains of this session until you save them.
- 3 **Categories**
Trap, Boom Bap, Ambient, Vintage, Vocoder, Vocal Chops, Guitar, Drums, plus your own.

- 4 **The list**
Click a preset to audition it; **double-click** to load it. The star marks a favourite.
- 5 **Chain**
One coloured bar per pedal, in order.
- 6 **Save · Import · Folder**
Save the current chain, bring in a preset file, open the folder.

- 7 **Details**
The pedals and their routes, the number of threads, the return and whether scene B has another order. Your own presets also show **Export** and **Remove**.
- 8 **Load**
Loads the preset and closes the browser.

SAVING

Saving and sharing

A preset is the whole document: both scenes, the routes, the return, every thread and the key.

Save

Press **Save** in the browser. Give the preset a name, a category (it becomes a folder), tags separated by commas, and your name as author.

Where they live

Presets are `.lbsckpreset` files in `Documents / Labsick Empire / Backtape / Presets`, one folder per category. **Folder** opens it. Back the folder up like any other part of your work.

Share

Export writes a preset anywhere you choose; **Import** brings one in. Send the file to another BACKTAPE user and it loads exactly as you saved it.

Remove

Remove moves a preset to the `_Removed` folder inside your presets. Nothing is ever deleted; move the file back to restore it.

Tags teach Generate

The name and the tags of your presets are the words Generate matches against. Tag a chain `dark trap, bells` and those words will bring it back, varied, when you type them.

In your project

Your DAW saves the complete state of BACKTAPE with the project, whether or not the chain was ever saved as a preset.

The nineteen

Two pages each: what the pedal is for, then every control. One layout for all: six knobs with a Shift function, two switches, a three-way mode, two footswitches.



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PEDAL 01 · SATURATION

CRUNCH

Saturation built like a chain of analog stages. One to three stages in series, eight curves you travel through continuously, a resonance that decides which part of the sound gets pushed, and a protected low end: the bass of your loop never goes through the distortion, so you get edge and harmonics without losing weight.

PLACE Middle · colour, after pitch and before movement and space.

MODES One, two or three stages in series. More stages is thicker and more compressed, not just louder.

ACTION **BOOST** · More drive while it is on.

EVENT How hard the stages are working.





CRUNCH · CONTROLS

1 DRIVE

How hard the stages are driven. The first half is gentle colour; the second half climbs fast.

SHIFT **BREATH**

The drive rides the loop's transients, so the saturation breathes with the groove.

4 CHARACTER

A resonance in front of the drive: it chooses which part of the sound is pushed hardest.

SHIFT **RESO**

How narrow that resonance is.

SWITCHES

Multiband · Splits the sound in bands so lows and highs saturate separately and the low end stays clean.

Tight · Raises the protected low band to 220 Hz: tighter, less bass in the distortion.

I · II · III

One, two or three stages in series. More stages is thicker and more compressed, not just louder.

2 SHAPE

Travels through eight curves: Tube, Tape, Fold, Soft, Hard, MPC, Rectify, Fuzz. Neighbours blend into each other.

SHIFT **BIAS**

Asymmetry of the curve. Off-centre adds even harmonics: warmer, more valve-like.

5 WIDTH

Stereo width of the harmonics CRUNCH creates. Your source keeps its own image.

SHIFT **SWAY**

Lets the focus band drift slowly from phrase to phrase.

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Boost (right) · More drive while it is on. Tap to latch, hold for momentary.

3 TONE

Low-pass after the stages, 400 Hz to 12 kHz.

SHIFT **FOCUS**

The frequency the CHARACTER resonance sits on, 80 Hz to 8 kHz.

6 BLEND

Saturated signal against clean signal.

SHIFT **SLIP**

Musical stumbles: at chosen places a cell repeats, chokes or drops out. Never on the first beat of a phrase.

EVENT

How hard the stages are working.

TRY THIS

Parallel CRUNCH on drums (route PARALLEL, BLEND high): body on top, transients untouched.

SHAPE on Tape with DRIVE low is glue; on MPC it is the sampler crunch of boom bap.

PEDAL 02 · TAPE MACHINE

TEXTURE

Eight machines in one box: reel-to-reel, cassette, VHS, vinyl and four classic samplers (12-BIT, SWING, WARM SAMPLER, LOFI SAMPLER), plus six vinyl programs that each play a different real record surface. Every machine has its own wow and flutter, its own losses and its own grit. The noise is always a real recording, and NOISE at zero is true silence.

PLACE	Middle · colour, after pitch and before movement and space.
MODES	Half speed, Normal, Double: the speed of the transport.
PROGRAMS	REEL · CASSETTE · VHS · VINYL · 12-BIT · SWING · WARM SAMPLER · LOFI SAMPLER · six VINYL surfaces (real recordings).
ACTION	DROP · Brakes the tape to a stop and restarts it in time.
EVENT	How much signal the medium is losing.





TEXTURE · CONTROLS

1 AGE

How worn the medium is: loss of highs, head bump, the saturation of tape or converters.

SHIFT FLUTTER

The fast speed wobble.

4 WEAR

Dropouts and damage, grouped in phrases like a real worn tape.

SHIFT DROPOUTS

How deep each dropout goes.

2 WOW

The slow speed wobble: the pitch drifts like a tired motor.

SHIFT SWAY

A slow random drift of the speed on top of the wow.

5 TONE

The top end of the machine. Fully open from 60 %.

SHIFT DIGITAL

Converter resolution: Off, 16, 14, 12, 10 or 8 bit.

3 NOISE

The machine's recorded surface: Off is silence, then from very quiet to clearly present.

SHIFT COLOR

Tilts the noise darker or brighter.

6 BLEND

How much of the machine's colour you hear. The transport (wow) stays, so a half blend never phases.

SHIFT SLIP

Musical stumbles: a cell repeats, chokes or drops out at chosen places.

SWITCHES

Dual · Left and right run on two separate transports: wider and looser.

Fills · The tape stretches in bar 4 of every phrase.

I · II · III

Half speed, Normal, Double: the speed of the transport.

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Drop (right) · Brakes the tape to a stop and restarts it in time. Tap to latch, hold for momentary.

EVENT

How much signal the medium is losing.

TRY THIS

WOW around 50 % on CASSETTE is the unstable lo-fi piano.

12-BIT with TONE at 55 % is the boom bap low-pass before you even add a filter.

PEDAL 03 · GRANULAR

WARP

A granular engine with three ways of playing. STREAM is a grain cloud born on the grid of your song: grains of what just played, from a whisper of a delay to a dense swarm. CLOUD plays long pieces of the last ten seconds, forwards or backwards, at their pitch or an octave away, crossing in pairs and spread across the stereo field. GROOVE is CLOUD cut on the beat from beats of the loop, so reversed and half-speed pieces stay in the pocket. Every grain is read through a band-limited reader and opens with an analog-style envelope: full, never thin, never brittle; grains born near a hit start just before it.

PLACE	After colour · layers made from the treated sound.
MODES	Stream, Cloud, Groove.
ACTION	HOLD · Freezes what it captured; the grains keep playing.
EVENT	How many grains are being born.





WARP · CONTROLS

1 SIZE

Length of each grain, 30 ms to 1.3 s (CLOUD: ½ to 2 s).

SHIFT POSITION

How far behind the grains read: off, or 2 beats down to ¼ of a beat.

4 FEEDBACK

STREAM: the grains feed back and octaves climb, each darker. CLOUD and GROOVE: an eighth-note echo.

SHIFT SHAPE

From the soft analog envelope to whole slices with short edges.

2 DENSITY

How often a grain is born: every 2 beats to every 3/16. In CLOUD and GROOVE, zero switches the pieces off.

SHIFT JITTER

Scatters the grains in time: from a gentle shimmer to anywhere in the last seconds.

5 FILTER

Low-pass below the centre, high-pass above, open in the middle; inside the feedback too.

SHIFT REVERSE

The share of grains that play backwards.

3 PITCH

The pitch of each grain: Unison, Detune, -12, +12, or unison with octaves now and then; in CLOUD and GROOVE each piece picks its own.

SHIFT WIDTH

Stereo spread of the grains (50 % is the reference).

6 MIX

Grains against the source, equal power: at 50 % both sit 3 dB down.

SHIFT SPACE

A small room of its own around the grains.

SWITCHES

Reverse · Every grain plays backwards.

Sync · SIZE in note values instead of time.

I · II · III

Stream, Cloud, Groove.

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Hold (right) · Freezes what it captured; the grains keep playing. Tap to latch, hold for momentary.

EVENT

How many grains are being born.

TRY THIS

STREAM, DENSITY 1/4, JITTER 60 %, Detune: the classic swarm; MIX 45 % keeps the loop underneath.

CLOUD, REVERSE all the way, PITCH +12, FEEDBACK 70 %: a halftime of reversed grains.

PEDAL 04 · RHYTHMIC RE-CUT

CORTE

Rhythmic re-cutting. CORTE keeps the last eight bars and, cell by cell, plays an earlier piece, repeats it, rolls it, stops or spins the tape, reverses it or plays it at half or double speed. Phrases go A, A', A, fill. Every cut is a crossfade, so nothing clicks.

PLACE	First · it creates or re-cuts the sound that the other pedals will treat.
MODES	The pattern lasts 1, 2 or 4 bars.
PROGRAMS	SHUFFLE · ROLLS · TAPE GAMES · SCRAMBLE · BOUNCE · MIRROR · GLITCH · HALF STEP.
ACTION	CHOP · Repeats the last piece while held, faster every bar.
EVENT	One impulse per cut, as strong as the jump.





CORTE • CONTROLS

1 TIME

Playback speed of the pieces: $\frac{1}{2}\times$, $\frac{3}{4}\times$, $1\times$, $1\frac{1}{2}\times$, $2\times$.

SHIFT **LENGTH**

Length of one cell, 1/32 to 1 bar.

4 SMOOTH

Length of the crossfade at every cut, 4 to 40 ms.

SHIFT **SWAY**

Humanises the grid.

SWITCHES

Preserve · Keeps the pitch when a piece changes speed.

Bar · The pattern repeats exactly every bar.

I · II · III

The pattern lasts 1, 2 or 4 bars.

2 GATE

A volume gate on its own grid.

SHIFT **GRID**

The gate's grid: 1/8, 1/16, 1/16T, 1/32.

5 SLIP

How often cells stumble and vary.

SHIFT **FILL**

How much the last bar of the phrase turns into a fill.

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Chop (right) · Repeats the last piece while held, faster every bar. Tap to latch, hold for momentary.

3 SWING

Swing of the grid.

SHIFT **SHIFT**

Offsets the grid by a sixteenth, an eighth or three sixteenths.

6 BLEND

Re-cut signal against the source.

SHIFT **TRIM**

Output trim, -12 to +6 dB.

EVENT

One impulse per cut, as strong as the jump.

TRY THIS

HALF STEP over 2 bars with SLIP low is the lean of a boom bap flip.

CORTE's Event into RECALL Feedback: every cut throws an echo.

PEDAL 05 · TAPE DELAY

RECALL

A delay with three heads. TAPE saturates, loses a little with every generation and wobbles. BBD narrows its bandwidth as the time grows and breathes like a bucket-brigade chip. DIGITAL is clean. When you change the time, TAPE and BBD move like a real head, with the pitch bend that implies.

PLACE	Last · the echo, then the room.
MODES	Tape, BBD, Digital.
ACTION	HOLD · Closes the input and keeps the loop turning.
EVENT	The level of the repeats.





RECALL · CONTROLS

1 TIME

With SYNC: a division from 1/32 to 2 bars.
Without: 5 ms to 4 seconds.

SHIFT **DIVISION**

Straight, dotted or triplet.

4 TONE

Tone of the repeats, 800 Hz to 12 kHz.

SHIFT **WEAR**

Generation loss: each repeat a little more worn.

2 FEEDBACK

How many repeats.

SHIFT **MEMORY**

How fast each repeat darkens and thins.

5 WIDTH

Stereo width of the repeats.

SHIFT **PING PONG**

The repeats bounce left and right.

3 MIX

Echoes against the source.

SHIFT **DUCK**

Lowers the repeats while the source plays, up to 24 dB: the echoes bloom in the gaps.

6 DRIVE

Saturation of the head.

SHIFT **WOW**

Wow and flutter on the repeats.

SWITCHES

Sync · TIME follows the host tempo.

Reverse · Each repeat plays backwards.

I · II · III

Tape, BBD, Digital.

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Hold (right) · Closes the input and keeps the loop turning. Tap to latch, hold for momentary.

EVENT

The level of the repeats.

TRY THIS

Dotted eighth, PING PONG up, DUCK at 35 %: the trap echo that never crowds the melody.

TAPE with WOW at 45 % and TONE low is a vintage echo.

PEDAL 06 · REVERB

LUMEN

A reverb from a small room to a hall to a cloud. Early reflections, diffusion, a pre-network where the energy builds after the hit (BLOOM) and a sixteen-line tail with slow modulation. SHIMMER adds an octave up inside the tail without grains.

PLACE	Last · the echo, then the room.
MODES	Room, Hall, Cloud.
ACTION	FREEZE · Holds the tail for as long as it is on, with the input closed.
EVENT	The energy of the tail.





LUMEN · CONTROLS

1 PRE-DELAY

Time before the reverb starts, 0 to 250 ms. More pre-delay keeps the source up front.

SHIFT **DIFFUSION**

How smeared the early part is.

4 TONE

Brightness of the tail, 1.5 to 18 kHz.

SHIFT **LOW CUT**

Keeps the lows out of the reverb, 20 to 800 Hz.

2 DECAY

Length of the tail, 0.25 to 25 seconds.

SHIFT **BLOOM**

The tail swells after the hit instead of starting at full level.

3 MIX

Reverb against the source.

SHIFT **DUCK**

Moves the tail out of the way while the source plays.

5 SIZE

Size of the space.

SHIFT **DENSITY**

How dense the tail is.

6 MOD

Slow movement inside the tail.

SHIFT **RATE**

Speed of that movement.

SWITCHES

Shimmer · An octave up inside the tail.

Duck · Turns the ducking on.

I · II · III

Room, Hall, Cloud.

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Freeze (right) · Holds the tail for as long as it is on, with the input closed. Tap to latch, hold for momentary.

EVENT

The energy of the tail.

TRY THIS

LOW CUT at 45 % keeps a bass or an 808 clean under the room.

Phrase into DECAY with a small depth: the room grows toward bar 4.

PEDAL 07 · CHORUS

CHROMA

Chorus, flanger and three-voice ensemble modelled on bucket-brigade circuits. CHROMA changes character, never tuning: its movement goes into the colour of the sound instead of bending the pitch, so it widens and thickens without sounding out of tune.

PLACE	Late · movement, just before the echo and the room.
MODES	Chorus, Flanger, Ensemble.
ACTION	FAST · Speeds the movement up while it is on.
EVENT	Where the movement is in its cycle.





CHROMA · CONTROLS

1 RATE

Speed of the movement, 0.05 to 10 Hz.

SHIFT **DIVISION**

The division used when SYNC is on.

4 WIDTH

Stereo width.

SHIFT **PHASE**

Phase between the left and right movement.

2 DEPTH

Depth of the movement.

SHIFT **DRIFT**

A slow wander, like a circuit warming up.

5 TONE

Brightness of the effect.

SHIFT **COLOR**

Tilts the colour darker or brighter.

3 MIX

Effect against the source.

SHIFT **DRIVE**

Drive of the chip, from clean to saturated.

6 FEEDBACK

Feedback, positive or negative. The centre is none.

SHIFT **TIME**

The base delay: short is flanger territory, long is chorus.

SWITCHES

Sync · RATE follows the tempo.

Dimension · A still, wide doubling with no movement of pitch at all.

I · II · III

Chorus, Flanger, Ensemble.

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Fast (right) · Speeds the movement up while it is on. Tap to latch, hold for momentary.

EVENT

Where the movement is in its cycle.

TRY THIS

DIMENSION on with MIX at 35 %: width with no wobble.

Flanger with FEEDBACK at 75 % and a very slow RATE is the jet.

PEDAL 08 · PHASER

ORBIT

A phaser with 4, 8 or 12 stages, swept through a curve like the JFETs of the classic pedals. It can run free, on the tempo, or pushed by the loudness of what you play.

PLACE	Late · movement, just before the echo and the room.
MODES	4, 8 or 12 stages.
ACTION	FAST · Speeds the sweep up while it is on.
EVENT	Where the sweep is.





ORBIT · CONTROLS

1 RATE

Speed of the sweep, 0.02 to 8 Hz.

SHIFT **DIVISION**

The division used when SYNC is on.

2 DEPTH

Depth of the sweep.

SHIFT **ENV**

How much the loudness pushes the sweep, up or down.

3 MIX

Effect against the source.

SHIFT **VINTAGE**

Adds the circuit: it compresses with level, the feedback saturates, a whisper of noise.

4 RESONANCE

Feedback: the phaser sings.

SHIFT **POLARITY**

Negative or positive feedback.

5 CENTER

Where the sweep sits, 100 Hz to 8 kHz.

SHIFT **RANGE**

How far it travels.

6 SPREAD

Phase between the left and right sweep.

SHIFT **ROTATE**

Keeps turning that phase: the sound rotates.

SWITCHES

Sync · RATE follows the tempo.

Env · The loudness drives the sweep.

I · II · III

4, 8 or 12 stages.

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Fast (right) · Speeds the sweep up while it is on. Tap to latch, hold for momentary.

EVENT

Where the sweep is.

TRY THIS

8 stages, RATE very slow, MIX at 50 %: psychedelia.

Before a reverb it makes the whole space move.

PEDAL 09 · TREMOLO

PULSAR

Tremolo, pulses, sixteen-step patterns and strobe, free or on the tempo. Its edges are always smooth, so it never clicks.

PLACE	Late · movement, just before the echo and the room.
MODES	Pulse, Pattern (16 steps with accents), Strobe.
ACTION	DOUBLE · Doubles the rate at the next pulse.
EVENT	One impulse per pulse.





PULSAR · CONTROLS

1 RATE

Speed, 0.1 to 20 Hz.

SHIFT **DIVISION**

The division used when SYNC is on, 1 bar to 1/32.

4 SPREAD

Offsets the right channel.

SHIFT **PAN**

Turns the pulse into an auto-pan.

2 DEPTH

How deep the volume moves.

SHIFT **SMOOTH**

Softness of the edges, 3 to 60 ms.

5 TONE

The pulse also opens and closes a filter.

SHIFT **SPLIT**

The crossover used by HARMONIC.

3 SHAPE

Travels from Sine to Triangle, Square, Ramp and Saw.

SHIFT **SKEW**

Skews the shape forward or backward.

6 MIX

Effect against the source.

SHIFT **SWING**

Delays every second pulse.

SWITCHES

Sync · RATE follows the tempo.

Harmonic · Lows and highs pulse in turn, like the old amp tremolos.

I · II · III

Pulse, Pattern (16 steps with accents), Strobe.

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Double (right) · Doubles the rate at the next pulse. Tap to latch, hold for momentary.

EVENT

One impulse per pulse.

TRY THIS

Ramp shape on 1/4 with soft edges is a sidechain pump.

Pattern mode over a pad is a trance gate.

PEDAL 10 · SPECTRAL SCAN

SIFT

A spectral scanner. SIFT lays a SHAPE across the whole spectrum, ten octaves from the deep lows to the air, and moves it with its own LFO in time with your song. FILTER keeps what the shape covers and cuts the rest. GATE keeps only what is loud enough. SMEAR cuts nothing and leaves the notes standing: inside the shape it lifts the air between them, with a short memory that draws every tail out, so a moving shape whips through the sound and leaves a trail.

PLACE Middle · colour, after pitch and before movement and space.

MODES Filter, Gate, Smear.

ACTION **FREEZE** · Holds the spectrum of this moment; the SHAPE keeps moving over it.

EVENT Where the SHAPE is.





SIFT · CONTROLS

1 PHASE

Where the SHAPE sits; turning it up carries it down towards the lows.

SHIFT SHAPE

The SHAPE: Bandpass, Lowpass, Highpass, Notch, Comb 4, Comb 8, Formant, Resonant, Ramp, or Key (teeth on the notes of the chord).

4 SMOOTH

Below the centre the edges of the SHAPE get sharper; above it they slope towards the highs, like a filter.

SHIFT WARP

Slow-fast or fast-slow inside each cycle. Up high, the shape waits and then whips.

2 STRENGTH

How deep FILTER cuts, how strict GATE is, how much air SMEAR lifts.

SHIFT RATE

LFO speed: 4 bars to 1/16 with SYNC (dotted, triplets), 0.05–13 Hz without.

5 MOTION

How far the LFO moves the SHAPE. At zero it stands still.

SHIFT SLEW

Smooths the LFO: steps and squares turn into glides.

3 SHIFT

Stretches or squeezes the SHAPE across the octaves.

SHIFT WAVE

The LFO wave: Sine, Triangle, Saw, Reverse saw, Square, Random, Stairs, Drift.

6 MIX

Scanned signal against the source.

SHIFT BASS

Keeps the lows of the source below 80 Hz untouched (no crossover).

SWITCHES

Sync · RATE in note values, locked to the song.

Invert · Turns the SHAPE inside out: what it covered is cut, the rest kept.

I · II · III

Filter, Gate, Smear.

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Freeze (right) · Holds the spectrum of this moment; the SHAPE keeps moving over it. Tap to latch, hold for momentary.

EVENT

Where the SHAPE is.

TRY THIS

SMEAR, Bandpass, PHASE 40 %, MOTION 40 %, a Saw on 1/2, WARP 88 %: the smear whip.

FILTER with Formant and a slow Sine at 10 % MOTION turns any loop into vowels.

PEDAL 11 · PITCH

REDSHIFT

The pitch pedal, and the only one that transposes your sound. Three engines: SPECTRAL keeps the timing and the formants, TAPE is varispeed like a record played slower or faster, CASCADE climbs or falls again with every repeat.

PLACE	Early · change the pitch before colour and space.
MODES	Spectral, Tape, Cascade.
ACTION	DIVE · Drops an octave like a turntable powering down, and comes back on release.
EVENT	The pitch right now.





REDSHIFT · CONTROLS

1 PITCH

The interval, ± 12 semitones.

SHIFT **FINE**

Fine tuning, ± 50 cents.

2 SLIDE

How long a pitch change takes to arrive, up to 2 seconds.

SHIFT **CURVE**

The shape of that slide: Linear, Ease, Exponential or Steps.

3 MIX

Shifted signal against the source. At 100 % it is a transposition; lower, it is a second voice.

SHIFT **TRANSIENTS**

Lets the original attacks through untransposed.

4 SPREAD

Two extra voices left and right.

SHIFT **DETUNE**

How far those voices drift, in cents.

5 TONE

Brightness of the shifted signal.

SHIFT **FORMANT**

Moves the formants with the pitch or against it.

6 FEEDBACK

In **CASCADE**, how many times it climbs again.

SHIFT **TIME**

The time between those passes.

SWITCHES

Octave · Adds a voice one octave above PITCH.

Glide · SLIDE is measured in bars.

I · II · III

Spectral, Tape, Cascade.

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Dive (right) · Drops an octave like a turntable powering down, and comes back on release. Tap to latch, hold for momentary.

EVENT

The pitch right now.

TRY THIS

TAPE at -4 with a hall after it is "slowed + reverb".

MIX at 40 % with PITCH at -12 adds a sub voice under a melody.

PEDAL 12 · PUNCH

SLAM

Punch and density. A transient shaper, then compression in one of three styles, an air shelf that opens on every hit, and lows that are compressed on their own and always mono.

PLACE	Middle · colour, after pitch and before movement and space.
MODES	OTT (multiband, up and down), Punch (a bus compressor for drums and melodies), FET (all buttons in: crushed on purpose).
ACTION	SMASH · Maximum compression while it is on.
EVENT	How much it is compressing.





SLAM · CONTROLS

1 PUNCH

Transient shaper: more attack to the right, softer to the left. The centre is none.

SHIFT **ATTACK**

Attack of the compressor, 0.5 to 30 ms.

4 AIR

A clean air shelf that opens a little more on every hit.

SHIFT **EXCITE**

Real harmonics above 3 kHz. Off by default.

2 DEPTH

Amount of compression.

SHIFT **UP/DOWN**

Balance between pushing loud parts down and lifting quiet parts up.

5 BODY

The lows, compressed on their own.

SHIFT **SUB**

Extra sub, up to +6 dB.

3 TIME

The compressor's timing.

SHIFT **RELEASE**

Fixed release, or automatic.

6 MIX

Processed signal against the source.

SHIFT **OUTPUT**

Output level, ±12 dB.

SWITCHES

Sync · Timing follows the tempo.

SC HPF · The compressor stops reacting to the lows.

I · II · III

OTT (multiband, up and down), Punch (a bus compressor for drums and melodies), FET (all buttons in: crushed on purpose).

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Smash (right) · Maximum compression while it is on. Tap to latch, hold for momentary.

EVENT

How much it is compressing.

TRY THIS

Punch mode with PUNCH at 70 % makes a drum loop knock.

FET with MIX at 50 % is parallel crush.

PEDAL 13 · WALL OF SOUND

HORIZON

The wall of sound. Up to seven detuned copies of your own sound and four doubles, spread wide and glued together, always at the original pitch. A thin sound becomes a wall that fills the spectrum without losing its centre.

PLACE After colour · layers made from the treated sound.

MODES Supersaw, Choir, Wall.

ACTION **SWELL** · The wall rises while it is on.

EVENT How wide the sound is.





HORIZON · CONTROLS

1 VOICES

How many voices, 1 to 7.

SHIFT **SPREAD**

How far apart they sit.

4 DOUBLE

Time doubles: thickness without touching pitch.

SHIFT **TIME**

How late the doubles are, 5 to 40 ms.

2 DETUNE

How detuned the voices are, up to 50 cents.

SHIFT **DRIFT**

Each voice wanders slowly on its own.

5 GLUE

A bus compressor that holds the wall together.

SHIFT **SAT**

Saturation of the wall.

3 WIDTH

Stereo width, up to 200 %.

SHIFT **MONO BASS**

Below this frequency everything stays in the centre.

6 MIX

Wall against the source.

SHIFT **STONE**

Darker or brighter.

SWITCHES

Still · The voices stop wandering.

Center · The centre stays solid and dry.

I · II · III

Supersaw, Choir, Wall.

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Swell (right) · The wall rises while it is on.
Tap to latch, hold for momentary.

EVENT

How wide the sound is.

TRY THIS

Choir mode on a vocal chop is a choir of that voice.

MONO BASS at 60 % keeps an 808 centred under a wide melody.

PEDAL 14 · TUNED RESONATOR

RING

Tuned resonators. Any hit or noise rings an instrument in the key of your song: strings, bars and bells, tubes. The notes come from the chord BACKTAPE hears, from the key, or from the MIDI you hold. Its second program, COLOR, is a colour-bass engine: it moves the harmonics of a bass onto the notes of the chord.

PLACE	First · it creates or re-cuts the sound that the other pedals will treat.
MODES	String, Bar, Tube.
PROGRAMS	RESONATOR · COLOR. In COLOR the same knobs read: Tune ± 50 cents, Register = lowest frequency treated, Voicing = highest, Decay "Snap only" at zero, Body = morph toward the input.
ACTION	RING OUT · The notes ring for as long as it is on.
EVENT	A note being struck.





RING · CONTROLS

1 TUNE

Transposes the resonators, ± 24 semitones.

SHIFT REGISTER

The octave they sit in.

4 MATERIAL

From wood (marimba) to metal bar (vibraphone) to bell to glass.

SHIFT BODY

Resonance of the body.

2 CHORD

The notes that ring: Root, Fifth, Chord, Triad, Seventh, Ninth, Cluster.

SHIFT VOICING

How the notes are spread.

5 SPREAD

Stereo spread of the notes.

SHIFT DETUNE

Thickens them.

3 DECAY

How long the notes ring, 50 ms to 12 seconds.

SHIFT DAMP

The highs die faster.

6 MIX

Resonators against the source.

SHIFT STRIKE

Lifts the attacks that excite the resonators.

SWITCHES

Inversions · The chord moves through its inversions.

Follow · Plays the MIDI notes you hold.

I · II · III

String, Bar, Tube.

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Ring out (right) · The notes ring for as long as it is on. Tap to latch, hold for momentary.

EVENT

A note being struck.

TRY THIS

Bar mode on Bell, MIX at 35 %: bells that follow your chords.

COLOR at 75 % on a growl bass: colour bass.

PEDAL 15 · TALKBOX

TALK

Any instrument speaks. FORMANT is five vowel filters, TALKBOX is a model of a mouth with your sound as the voice, VOCODER shapes a synth, noise or the input itself with the bands of your sound and sings the chord BACKTAPE hears.

PLACE	First · it creates or re-cuts the sound that the other pedals will treat.
MODES	Formant, Talkbox, Vocoder.
ACTION	SPEAK · A "wah-ow" over one beat.
EVENT	The vowel right now.





TALK · CONTROLS

1 VOWEL

The vowel: A, E, I, O, U.

SHIFT SEQUENCE

The sequence MOVE runs: A to U, Wow, Yeah, Open/close, Steps, Drift.

4 TALK

How much of the mouth you hear.

SHIFT CARRIER

What the vocoder plays: a synth, noise, or the input.

SWITCHES

Follow · The mouth opens with the loudness of the input.

Hold notes · The vocoder keeps its chord between notes.

I · II · III

Formant, Talkbox, Vocoder.

2 MOVE

Runs the vowel sequence.

SHIFT SYNC

Free, or on a division from 4 bars to 1/16.

5 ROBOT

The robotic quality of the vocoder.

SHIFT BANDS

Number of bands, 16 to 40.

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Speak (right) · A "wah-ow" over one beat. Tap to latch, hold for momentary.

3 FORMANT

Shifts the formants, ± 12 semitones.

SHIFT GENDER

Size of the mouth, from small to large.

6 MIX

Voice against the source.

SHIFT SIBILANCE

Keeps the consonants (s, t, sh) clear.

EVENT

The vowel right now.

TRY THIS

Vocoder with MIX at 60 % on a melody is a robot choir on its chords.

FOLLOW on with Formant mode is an auto-wah that talks.

PEDAL 16 · HARMONIZER

FROST

A harmonizer. FROST plays new voices beside your sound at any interval — a fifth, an octave up or down, a third that stays in the key — with the doubler, echoes that keep their interval, and the classic spiral where every repeat climbs again. Your sound itself never changes pitch (that is REDSHIFT).

PLACE	After colour · layers made from the treated sound.
MODES	Micro (the doubler: two voices a few cents apart, left and right), Harmony (two voices at their intervals), Spiral (every repeat climbs again).
ACTION	RUNAWAY · While held, the spiral feeds itself — bounded, it never explodes.
EVENT	The level of the voices.





FROST · CONTROLS

1 INTERVAL

The interval of voice A, from -24 to +24 semitones.

SHIFT **VOICE B**

Voice B: a second interval, or Off.

4 CHARACTER

Pro (the cleanest shift), Classic (the warm studio harmonizer) or Vintage (the first, grainy one).

SHIFT **REVERSE**

Plays the voices backwards.

2 DELAY

When the voices come in and how far apart the repeats are: 1 ms to 1.5 s, or a division with SYNC.

SHIFT **SPREAD**

Voice A to the left, voice B to the right.

5 FEEDBACK

The voices come back as echoes; in Spiral every repeat is shifted again and darker.

SHIFT **TONE**

Dark or thin repeats.

3 DETUNE

Detunes the voices a few cents apart, up to 50: the doubler.

SHIFT **DRIFT**

The voices wander slowly.

6 MIX

Voices against the source.

SHIFT **BASS**

Below this frequency the voices get nothing: the bass and the kick stay as they are.

SWITCHES

Sync · DELAY follows the tempo.

Key · Thirds, sixths and sevenths follow the song's key; fifths and octaves stay exact.

I · II · III

Micro (the doubler: two voices a few cents apart, left and right), Harmony (two voices at their intervals), Spiral (every repeat climbs again).

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Runaway (right) · While held, the spiral feeds itself — bounded, it never explodes. Tap to latch, hold for momentary.

EVENT

The level of the voices.

TRY THIS

Micro with DETUNE at 18 % (9 cents) and SPREAD up: a wide double on a vocal or a lead.

Harmony at +7 with Voice B at +12 and MIX at 40 %: the classic fifth-and-octave stack.

Hold MIDI notes and the voices play them, against C5.

PEDAL 17 · SAMPLE FLIPPER

FLIPPER

A sample flipper that cuts like a producer at an MPC, live: what stays in order is your loop as it plays, and the pieces it moves come from this bar or the two before, on the grid of your song: bars re-ordered, a beat repeated, the MPC stab, a stutter fill. It starts chopping in the second bar and follows a new loop at once. Harmony lock: a piece only goes where the loop itself has the same chord, so the flip always fits the bass and everything else in your track. Always in time and in key.

PLACE	First · it creates or re-cuts the sound that the other pedals will treat.
MODES	Soul (long pieces), Boom bap (beats, stabs, swing), Chop shop (eighths, stutters, reverses).
ACTION	FLIP · A new flip from the next bar. Hold it for a second to forget what it heard.
EVENT	A piece starting.





FLIPPER · CONTROLS

1 FLIP

How far the flip goes: In order, Phrases, Flipped, Wild.

SHIFT **VARIATION**

How much the flip changes between phrases.

4 GROOVE

Hand-played looseness.

SHIFT **SWING**

Swing of the fills, 50 to 75 %.

2 CHOPS

Size of the pieces: Long, Beats, Eighths.

SHIFT **SENSITIVITY**

How soft an attack still counts as a place to cut.

5 STYLE

The flavour of the moves: Soul, Boom bap, Trap, Lo-fi, Gospel.

SHIFT **PROGRESSION**

Off, or a new chord progression built from the loop's own half bars.

3 FILLS

How often a section ends in a fill: Off, every 16 bars, every 8.

SHIFT **STUTTER**

The fill's stutter: Auto (by mode), 1/8, 1/16, 1/32.

6 MIX

Flip against the source.

SHIFT **FILTER**

A low-pass on the flip: the filtered loop of soul records.

SWITCHES

Hold · Keeps the current flip.

Follow key · Progressions follow the detected key.

I · II · III

Soul (long pieces), Boom bap (beats, stabs, swing), Chop shop (eighths, stutters, reverses).

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Flip (right) · A new flip from the next bar. Hold it for a second to forget what it heard. Tap to latch, hold for momentary.

EVENT

A piece starting.

TRY THIS

Change the loop whenever you like: FLIPPER chops the new one from its second bar and never plays the old one.

With FLIP at zero the output is exactly your loop.

PEDAL 18 · TRAP ARPS

STARDUST

Trap arps made from your own sound. Every note of the arp is a grain of the music itself, moved to a note of the chord BACKTAPE hears and rung through a tuned comb so it sings like a pluck. Eight note orders, accents from trap patterns, and beats that rush from fast to super fast in time with the host.

PLACE	First · it creates or re-cuts the sound that the other pedals will treat.
MODES	Glass (bright), Gold (warm), Dust (triplet rolls on accents).
ACTION	TRANSMUTE · While held, the step halves and the notes turn pure: a roll on demand.
EVENT	A note starting.





STARDUST · CONTROLS

1 KEY

Transposes the arp, ± 12 semitones.

SHIFT **SCALE**

The notes it may use: Chord, Scale, Pentatonic, Root and fifth.

4 ORDER

Up, Down, Up-Down, Down-Up, Alternate, Thumb, Octaves, Random walk.

SHIFT **PATTERN**

At Hold one combination stays; turned up, every phrase draws a new one.

2 GRAIN

Length of each note.

SHIFT **SHAPE**

Pluck, Round or Soft attack.

3 DENSITY

The step: 1/8, 1/8T, 1/16, 1/16T, 1/32.

SHIFT **SPRAY**

How often a beat rushes to double speed.

5 SPACE

A short diffusion around the notes.

SHIFT **WIDTH**

How far left and right the notes are placed.

6 MIX

Arp against the source.

SHIFT **PURITY**

From the raw grain to a pure ringing note.

SWITCHES

Freeze · Stops listening and keeps playing what it holds.

Reverse · The grains play backwards.

I · II · III

Glass (bright), Gold (warm), Dust (triplet rolls on accents).

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Transmute (right) · While held, the step halves and the notes turn pure: a roll on demand. Tap to latch, hold for momentary.

EVENT

A note starting.

TRY THIS

Glass with MIX at 35 % over a dark melody is the "glass rain" of trap.

It goes silent the moment the music stops.

PEDAL 19 · 3D SPACE

GRAVITY

Sound that flies around you. Your sound becomes a point that travels on a path, in time with the song, with real Doppler, distance, the absorption of the air and a model of the head for headphones. It is gentle by default: a movement in front of you, not a sound thrown from side to side.

PLACE	Late · movement, just before the echo and the room.
MODES	Near, Far, Space (no walls, a long diffuse tail).
ACTION	FLYBY · One pass brushing your head, whatever the path.
EVENT	The distance right now.





GRAVITY · CONTROLS

1 PATH

The path: Orbit, Eight, Fall, Flyby, Random.

SHIFT **SHAPE**

How far it travels: from all around your head to gently in front.

4 DOPPLER

The pitch bend of a moving source.

SHIFT **AMOUNT**

Exaggerates it, up to four times.

2 SPEED

Speed, 0.05 to 4 Hz.

SHIFT **SYNC**

Free, or one lap every ½ bar to 8 bars.

3 DISTANCE

How far away the path is, 0.5 to 20 metres.

SHIFT **AIR**

How much the air dulls it with distance.

5 ROOM

Early reflections of a room around the path.

SHIFT **SIZE**

Size of that room, 3 to 30 metres.

6 MIX

Moving sound against the source.

SHIFT **HEAD**

Phones (a head model) or Speakers (mono-compatible).

SWITCHES

Elevation · The path rises above and below you.

Follow · The loudness pushes the movement.

I · II · III

Near, Far, Space (no walls, a long diffuse tail).

FOOTSWITCHES

Bypass (left) · The pedal on or off.

Flyby (right) · One pass brushing your head, whatever the path. Tap to latch, hold for momentary.

EVENT

The distance right now.

TRY THIS

GRAVITY's Event into LUMEN Mix: the farther the sound, the more room.

SHAPE at 20 % is the full lap around your head.

12

In your DAW

Automation, latency, the things that are meant to happen, and what to do when something is not right.

AUTOMATION

Automation and latency

BACKTAPE tells your host what every control is called and what it is set to.

Parameters

Each slot publishes its six knobs, their six Shift functions, the mode, the program, the switches and the footswitches. The host shows them with real names and real values: **S1 HORIZON Voices** = 6, **S2 PULSAR Division** = 1/16. The names follow the pedal that is in each slot.

The three you will automate most

MORPH The whole chain from scene A to scene B.

INTENSITY How much of the chain.

POWER The chain on or off, without a click.

Footswitches

The action footswitch of each slot is a parameter. Automate **FREEZE** on **LUMEN** at the end of a phrase, or **DROP** on **TEXTURE** into a break.

Latency

BACKTAPE reports one constant latency of about 65 ms and your host compensates for it. It is the same for every chain, so nothing shifts when you change presets or generate while the song plays. When you play an instrument live through it, monitor through a track without BACKTAPE.

Silent on stop, by design

FLIPPER, STARDUST and the noise of TEXTURE go silent the moment the transport stops. Reverb and echo tails ring out naturally.

Tempo

Everything synced follows the tempo and the bar position of the host: start playback on a bar line and phrases, fills and FLIPPER line up with your arrangement.

Rendering

An offline export is identical to what you hear. Buffer size and sample rate do not change the sound.

HELP

Troubleshooting

Most questions have one of these answers.

The window opens black or empty

BACKTAPE draws its screen with Microsoft Edge WebView2. Install or repair the **WebView2 Runtime** from Microsoft, then reopen the plugin. If it still fails, send `ui-log.txt` to support.

My DAW still shows an old version

In FL Studio: Options, Manage plugins, enable **Rescan previously verified plugins**, then Find installed plugins. In other hosts, clear the plugin cache and rescan.

It is too much

Lower **INTENSITY** first. Then the master **MIX**, or the Mix or Blend of the one pedal that dominates.

The reverb or the echo is too long

LUMEN **Decay** and RECALL **Feedback**. Or type what you want: `short reverb`, `no delay`.

High CPU

The granular, spectral and 3D pedals cost the most: WARP, REDSHIFT in Spectral mode, GRAVITY. Use fewer of them per instance, or bounce the track when the sound is right.

The tuned pedals play wrong notes

Give the detector a bar or two of music, or fix the key with the **KEY** button. Very dense or atonal material is better with a fixed key.

The return does nothing

It needs at least two pedals, and a chain that adds something to return: an echo, a room, grains.

A thread does not move the knob

Check that the source is switched on in the motion panel, that its Amount is above zero, and the depth of the thread.

QUICK REFERENCE

Every gesture on one page

Knobs

DRAG	Turn
SHIFT + DRAG	Second function
ALT / CTRL + DRAG	Fine
WHEEL	Small steps
DOUBLE-CLICK	Default

Pedals

CLICK THE BODY	Select
DRAG SIDEWAYS	Reorder
LEFT FOOTSWITCH	Bypass
RIGHT FOOTSWITCH	Action: tap latches, hold is momentary
I · II · III	Mode
ARROW BY THE NAME	Swap or remove

Chain

EMPTY SLOT	Add a pedal
ROUTE CHIP	Series / Parallel
RETURN CHIP	Drag for amount
A · B	Scene being edited
MORPH	Travel between scenes

Threads

THREADS BUTTON	Show and draw threads
DRAG FROM A LEFT LED	Follower to a knob
DRAG FROM A RIGHT LED	Event to a knob
DRAG FROM PHRASE / MORPH	Global source to a knob
SEND	LFO to a knob
CLICK A LABEL	Edit the thread

Motion graph

LFO	Sideways phase · up and down amount · wheel rate
FOLLOWER	Sideways release · up and down gain
EVENT	Up and down threshold · sideways smooth
DOUBLE-CLICK	Reset

Generate

ENTER	Generate
AGAIN	The next chain of the idea
DICE	Randomize
NO ... / WITHOUT ...	Leave an effect out

Browser

CLICK	Audition
DOUBLE-CLICK	Load
STAR	Favourite

BACKTAPE 1.0.0

Made to be played.

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Support

Updates, presets and help: labsickempire.com

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